



San Joaquin County Employees Retirement Association

A G E N D A

BOARD MEETING SAN JOAQUIN COUNTY EMPLOYEES RETIREMENT ASSOCIATION BOARD OF RETIREMENT FRIDAY, DECEMBER 10, 2021

9:00 AM

Location: SJCERA Board Room, 6 S. El Dorado Street, Suite 400, Stockton, California.
Virtual: Via Zoom

In accordance with Government Code Section 54953(e), this Board Meeting will be held virtually via Zoom Client. Limited in-person attendance in the SJCERA Board Room will also be permitted.

The public may attend the meeting (1) in person, (2) by clicking here <https://us02web.zoom.us/j/88405214043> and following the prompts to enter your name and email, or (3) calling (669) 219-2599 or (669) 900-9128 and entering Meeting ID [88405214043#](https://us02web.zoom.us/j/88405214043).

In order to accommodate appropriate COVID-19 protocols and social distancing, no more than ten (10) members of the public will be allowed in the Board Room during the Board Meeting. Attendees who are not vaccinated must wear appropriate face coverings. Face coverings are encouraged, but not required, for attendees who are vaccinated.

Persons who require disability-related accommodations should contact SJCERA at (209) 468-9950 or KendraF@sjcera.org at least forty-eight (48) hours prior to the scheduled meeting time.

1.0 ROLL CALL

2.0 PLEDGE OF ALLEGIANCE

3.0 MEETING MINUTES

- | | |
|--|----|
| 3.01 Minutes for the Special Board Meeting of November 4, 2021 | 5 |
| 3.02 Minutes for the Board Meeting of November 5, 2021 | 7 |
| 3.03 Minutes for the Special Board Meeting of November 17, 2021 | 11 |
| 3.04 Minutes for the Administrative Committee Meeting of November 17, 2021 | 13 |
| 3.05 Minutes for the Audit Committee Meeting of December 3, 2021 | 14 |
| 3.06 Board to consider and take possible action on minutes | |

4.0 PUBLIC COMMENT

- 4.01 The public is welcome to address the Board during this time on matters within the Board's jurisdiction, following the steps listed below. Speakers are limited to three minutes, and are expected to be civil and courteous. Public comment on items listed on the agenda may be heard at this time, or when the item is called, at the discretion of the Chair.

If joining via Zoom, Public Comment can be made in the following ways:

PC or Mac: select "Participants" in the toolbar at the bottom of your screen, then select the option to raise or lower your hand.

Mobile Device: select the “More” option in the toolbar at the bottom of your screen, then select the option to raise or lower your hand.

Tablet: select the icon labeled “Participants,” typically located at the top right of your screen, then select the hand icon next to your device in the Participants column.

If dialing in from a phone for audio only, dial *9 to “raise your hand.”

If attending in person, members of the public are encouraged to complete a Public Comment form, which can be found near the entry to the Board Room.

Except as otherwise permitted by the Ralph M. Brown Act (California Government Code Sections 54950 et seq.), no deliberation, discussion or action may be taken by the Board on items not listed on the agenda. Members of the Board may, but are not required to: (1) briefly respond to statements made or questions posed by persons addressing the Board; (2) ask a brief question for clarification; or (3) refer the matter to staff for further information.

5.0 CONSENT ITEMS

5.01	Service Retirement (12)	15
5.02	General (2)	
01	Retired Member Returning to Active Membership (1)	17
02	2022 Administrative Budget	23
a	2022 Budget Summary	26
b	2022 Administrative Budget Adjustments	50
c	Resolution 2021-12-01 titled “Annual Administrative Budget for 2022”	53
d	Board to consider and take possible action on 2022 Budget and adopt Resolution 2021-12-01	
5.03	Board to consider and take possible action on consent calendar items	

6.0 STRATEGIC PLAN UPDATE

6.01	Presentation by Amy McDuffee and Catherine Jackson of Mosaic Governance Advisors	
01	Draft Strategic Plan	54
02	Sample Action Plan	67
6.02	Board to discuss and give direction to staff and consultants as appropriate	

7.0 BLOCKCHAIN TECHNOLOGY EDUCATION SESSION

7.01	Presentation by Kinjal Shah of Blockchain Capital	71
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8.0 CONSULTANT REPORTS PRESENTED BY DAVID SANCEWICH OF MEKETA INVESTMENT GROUP

8.01	Quarterly Reports from Investment Consultant for Period Ended September 30, 2021	
01	Quarterly Report	82
02	Manager Certification Report	178
03	Manager Review Schedule	201
8.02	Monthly Investment Performance Updates	

01 Manager Performance Flash Report - October 2021	202
02 Capital Markets Outlook and Risk Metrics - November 2021	207
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9.01 Memo from Meketa Investment Group	241
9.02 Board to discuss and give direction to staff as appropriate	
10.0 CONTINUATION OF TELECONFERENCING REQUIREMENTS	
10.01 Resolution 2021-12-02 titled "Authorization to Continue Teleconferencing for Board and Committee Meetings Pursuant to Government Code Section 54953"	244
10.02 Board to consider and take possible action on proposed resolution	
11.0 STAFF REPORTS	
11.01 Legislative Summary Report - None; No changes since 11/2021	
11.02 Trustee and Executive Staff Travel	
01 Conferences and Events Schedule for 2021-22	248
02 Summary of Pending Trustee and Executive Staff Travel - none	
03 Summary of Completed Trustee and Executive Staff Travel	249
11.03 CEO Report	250
11.04 Report from Committee(s)	
01 Committee Chair and staff will provide a brief summary of the outcome of the:	
a Administrative Committee Meeting - November 17, 2021	
b Audit Committee Meeting - December 3, 2021	
11.05 Board to receive and file reports, and approve new travel requests as necessary	
12.0 CORRESPONDENCE	
12.01 Letters Received	
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12.03 Market Commentary/Newsletters/Articles	
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13.0 COMMENTS	
13.01 Comments from the Board of Retirement	
14.0 CLOSED SESSION	
14.01 Personnel Matters	
California Government Code Section 54957	
Employee Disability Retirement Application(s) (1)	
14.02 Personnel Matters	
California Government Code Section 54957	

01 Public Employee Appointment

Title: Assistant Retirement Administrator (Assistant Chief Executive Officer)

15.0 CALENDAR

15.01 Board Meeting January 21, 2022, at 9:00 AM

16.0 ADJOURNMENT



San Joaquin County Employees Retirement Association

MINUTES

**SPECIAL MEETING
SAN JOAQUIN COUNTY EMPLOYEES RETIREMENT ASSOCIATION
BOARD OF RETIREMENT
THURSDAY, NOVEMBER 4, 2021
AT 10:00 AM**

Location: Robert J. Cabral
Agricultural Center
2101 E. Earhart Ave, Suite 100

1.0 ROLL CALL

1.01 MEMBERS PRESENT: Phonxay Keokham (in at 11:29 AM), Emily Nicholas, Jennifer Goodman, Michael Duffy, Katherine Miller (in at 10:20 AM), Chanda Bassett, JC Weydert, Stephan Moore, Raymond McCray, and Michael Restuccia presiding

MEMBERS ABSENT: None

STAFF PRESENT: Chief Executive Officer Johanna Shick, Assistant Chief Executive Officer Kathy Herman, Retirement Investment Officer Paris Ba, Management Analyst III Greg Frank, Financial Officer Carmen Murillo and Department Information Systems Manager Adnan Khan

OTHERS PRESENT: Deputy County Counsel Jason Morrish, Amy McDuffee and Catherine Jackson of Mosaic Governance

2.0 PLEDGE OF ALLEGIANCE

2.01 Led by JC Weydert

3.0 PUBLIC COMMENT

3.01 There was no public comment

4.0 WELCOME AND INTRODUCTION OF PARTICIPANTS

4.01 CEO Shick made introductory remarks and trustees and staff introduced themselves.

5.0 STRATEGIC PLANNING PROCESS OVERVIEW AND SESSION OBJECTIVES

5.01 Presentation by Amy McDuffee and Catherine Jackson of Mosaic Governance Advisors

6.0 CONSULTANT PANEL: ASSESSING THE EXTERNAL LANDSCAPE

6.01 Presentation by Graham Schmidt, Cheiron, David Sancewich, Meketa Investment Group, Ashley Dunning, Nossaman, LLC

6.02 Board discussed and provided feedback regarding SJCERA's external landscape

7.0 RESEARCH SUMMARY

7.01 Presentation by Amy McDuffee and Catherine Jackson of Mosaic Governance Advisors

7.02 Board discussed and provided feedback regarding Mosaic's research summary

8.0 THE FUTURE VISION: SJCERA 2031

8.01 Board discussed and provided feedback regarding SJCERA's future state, Mission Statement, and Core Values

9.0 REVIEW DRAFT STRENGTHS, WEAKNESSES, OPPORTUNITIES, THREATS (SWOT) ANALYSIS

9.01 Presentation by Amy McDuffee and Catherine Jackson of Mosaic Governance Advisors

9.02 Board discussed and provided feedback on the draft SWOT analysis

10.0 DISCUSSION OF CRITICAL THEMES

10.01 Presentation by Amy McDuffee and Catherine Jackson of Mosaic Governance Advisors

10.02 Board discussed and provided feedback on critical themes

11.0 COMMENTS

11.01 Comments and Closing Remarks from Mosaic Governance Advisors

01 Ms. McDuffee stated she will present a draft strategic plan, including mission, vision and core values at the December 10, 2021 Board meeting.

11.02 Comments from the Board of Retirement

01 Trustee Weydert expressed interest in the blended discount rate concept mentioned during the Consultant Panel (Item 6.0)

12.0 CALENDAR

12.01 Board Meeting November 5, 2021, at 9:00 AM

12.02 Special Board Meeting, November 17, 2021, at 1:00 PM

12.03 Administrative Committee Meeting November 17, 2021, at 1:05 PM

12.04 Board Meeting December 10, 2021, at 9:00 AM

13.0 ADJOURNMENT

13.01 There being no further business the meeting was adjourned at 1:37 PM.

Respectfully Submitted:

Michael Restuccia, Chair

Attest:

Raymond McCray, Secretary



San Joaquin County Employees Retirement Association

MINUTES

**BOARD MEETING
SAN JOAQUIN COUNTY EMPLOYEES RETIREMENT ASSOCIATION
BOARD OF RETIREMENT
FRIDAY, NOVEMBER 5, 2021
AT 9:00 AM**

Location: In-Person: SJCERA Board Room
6 S. El Dorado Street, Suite 400 Stockton, CA
Virtual: Via Zoom

1.0 ROLL CALL

1.01 MEMBERS PRESENT: Phonxay Keokham, Emily Nicholas (in at 9:02 AM, out at 11:30 AM), Jennifer Goodman, Michael Duffy, Katherine Miller (out at 11:55 AM), Chanda Bassett, JC Weydert (break from 11:25 AM - 11:30 AM), Steve Moore, Raymond McCray, and Michael Restuccia presiding

MEMBERS ABSENT: None

STAFF PRESENT: Chief Executive Officer Johanna Shick, Assistant Chief Executive Officer Kathy Herman, Retirement Investment Officer Paris Ba, Financial Officer Carmen Murillo, Management Analyst III Greg Frank, Department Information Systems Analyst II Lolo Garza, and Information Systems Manager Adnan Khan

OTHERS PRESENT: Deputy County Counsel Jason Morrish, David Sancewich of Meketa Investment Group

2.0 PLEDGE OF ALLEGIANCE

2.01 Led by Michael Restuccia

3.0 MEETING MINUTES

3.01 Minutes for the Board Meeting of October 6, 2021

3.02 Minutes for the Special Board Meeting of October 7, 2021

3.03 The Board voted (9-0) to approve the minutes of the Board meeting of October 6, 2021 and the Special Board meeting of October 7, 2021. (Motion: McCray; Second: Bassett)

4.0 PUBLIC COMMENT

4.01 Brian Currell and Rich Rogers, co-owners of IGI and their business partner, Roman Battan, each made statements regarding the lack of progress the attorneys are making on contract negotiations and the lack of time to implement Tier 2b and 1099 processes. IGI has released their attorney and have asked to meet directly with CEO Shick and ACEO Herman to resolve the issues.

5.0 CONSENT ITEMS

5.01 Service Retirement (8)

5.02 Retired Member Returning to Active Membership (2)

5.03 The Board voted unanimously (9-0) to approve the Consent Calendar Items. (Motion: Keokham; Second: Goodman)

6.0 PRIVATE EQUITY MANAGER PRESENTATIONS

6.01 Lightspeed presentation

6.02 Ocean Avenue presentation

NOTE: Agenda Item 14.0 was taken next out of order

7.0 CONSULTANT REPORTS PRESENTED BY DAVID SANCEWICH OF MEKETA INVESTMENT GROUP

7.01 Monthly Investment Performance Updates

- 01 Manager Performance Flash Report - September 2021
- 02 Capital Markets Outlook and Risk Metrics - October 2021

7.02 Roundtable Summary

- 01 Memo from Meketa
- 02 Roundtable Evaluation Results

7.03 Board received and filed reports

8.0 EVALUATION OF CONSULTANTS

8.01 Consulting Actuary

8.02 Investment Consultant

8.03 Board received and filed reports

9.0 AUTHORIZATION TO CONTINUE TELECONFERENCING

9.01 Resolution 2021-11-01 titled "Authorization to Continue Teleconferencing for Board and Committee Meetings Pursuant to Government Code Section 54953"

9.02 The Board voted (5-2) to adopt Resolution 2021-11-01 to authorize teleconferencing for Board and Committee meetings pursuant to Government Code Section 54953. (Motion: McCray; Second: Keokham; Ayes: Goodman, Duffy, Restuccia; Nays: Bassett, Weydert)

10.0 STAFF REPORTS

10.01 Legislative Summary Report

10.02 Trustee and Executive Staff Travel

- 01 Conferences and Events Schedule for 2021-22
- 02 Summary of Pending Trustee and Executive Staff Travel
- 03 Summary of Completed Trustee and Executive Staff Travel
 - a Public Pension Funding Forum
 - b NCPERS FALL Conference
- 04 Board discussed the Trustee and Executive Staff Travel Policy and asked staff to bring a recommendation to the June 2022 Administrative Committee meeting regarding 1) adding potential cost guidelines, 2) researching the history of due diligence trustee travel and 3) providing guidelines to new trustees regarding which events to attend and in what order.

10.03 CEO Report

In addition to the written report, CEO Shick 1) welcomed SJCERA's newest employee Vickie Monegas, 2) stated the ACEO recruitment is open and closes November 19, and 3) emailed Trustees the RPESJC Newsletter that contains two articles relating to SJCERA.

01 SJCERA's UAL History

11.0 SACRS BUSINESS MEETING

11.01 SACRS Business Meeting Packet - November 12, 2021

11.02 **The Board voted unanimously (7-0) to direct the voting delegates to approve the action items on SACRS' Business Meeting Agenda for November 12, 2021. (Motion: McCray; Second: Keokham)**

12.0 CORRESPONDENCE

12.01 Letters Received

12.02 Letters Sent

12.03 Market Commentary/Newsletters/Articles

01 NCPERS Monitor October 2021

02 American Academy of Actuaries Don't Put the Cart Before the Horse July 2020

13.0 COMMENTS

13.01 Comments from the Board of Retirement

01 Trustee McCray thanked staff for their work on the UAL report and asked for clarification of the 2.6% reported as fund expenses.

02 Trustees Restuccia and Weydert thanked everyone for their involvement in the November 4 Strategic Planning Special Board meeting.

14.0 CLOSED SESSION

THE CHAIR CONVENED CLOSED SESSION AT 10:35 A.M. AND ADJOURNED THE CLOSED SESSION AND RECONVENED THE OPEN SESSION AT 11:55 P.M.

14.01 Purchase or Sale of Pension Fund Investments
California Government Code Section 54956.81

14.02 Personnel Matters
California Government Code Section 54957
Employee Disability Retirement Application(s) (1)

01 Consent Items

a Luis Navarro
Sr. Solid Waste Recovery Worker
Nonservice-Connected Disability

The Board voted unanimously (6-0) to grant the application for a nonservice-connected disability retirement. (Motion: Keokham; Second: Goodman)

14.03 Conference with legal counsel - Existing Litigation
California Government Code Section 94956.9(d)(1)

01 *Allum, et al. v. San Joaquin County Employees' Retirement Association et al.*
Third District Court of Appeal Case No. C091768; and
San Joaquin County Superior Court Case No. STK-CV-UBC-2017-10696

15.0 CALENDAR

15.01 Special Board Meeting November 17, 2021, at 1:00 PM

15.02 Administrative Committee Meeting November 17, 2021, immediately following Board meeting

15.03 Board Meeting December 10, 2021, at 9:00 AM

16.0 ADJOURNMENT

16.01 There being no further business the meeting was adjourned at 12:42 PM.

Respectfully Submitted:

Michael Restuccia, Chair

Attest:

Raymond McCray, Secretary



San Joaquin County Employees Retirement Association

MINUTES

SPECIAL MEETING SAN JOAQUIN COUNTY EMPLOYEES RETIREMENT ASSOCIATION BOARD OF RETIREMENT WEDNESDAY, NOVEMBER 17, 2021

AT 1:09 PM

Location: SJCERA Board Room, 6 S. El Dorado Street, Suite 400, Stockton, California
Virtual: Via Zoom

1.0 ROLL CALL

- 1.01 MEMBERS PRESENT:** Michael Restuccia (in at 1:12 PM), Emily Nicholas, Jennifer Goodman, Katherine Miller, Chanda Bassett, Stephan Moore (in at 1:11 PM), Raymond McCray (in at 1:15 PM), and Phonxay Keokham presiding
MEMBERS ABSENT: Duffy, Weydert
STAFF PRESENT: Chief Executive Officer Johanna Shick, Assistant Chief Executive Officer Kathy Herman, Management Analyst III Greg Frank, and Department Information Systems Analyst II Lolo Garza
OTHERS PRESENT: Deputy County Counsel Jason Morrish

Immediately following Roll Call, the Board voted unanimously (5-0) to appoint Phonxay Keokham as Chair Pro Tem. (Motion: Goodman; Second: Miller.) The Chair Pro Tem presided over the entire meeting.

2.0 PLEDGE OF ALLEGIANCE

- 2.01** Led by Jennifer Goodman

3.0 PUBLIC COMMENT

- 3.01** There was no public comment

4.0 AUTHORIZATION TO CONTINUE TELECONFERENCING

- 4.01** Resolution 2021-11-02 titled "Authorization to Continue Teleconferencing for Board and Committee Meetings Pursuant to Government Code Section 54953(e)"
4.02 **The Board voted (7-1) to adopt Resolution 2021-11-02 to authorize teleconferencing for Board and Committee meetings pursuant to Government Code Section 54953. (Motion: Miller; Second: Restuccia; Ayes: Keokham, Nicholas, Goodman, Moore, McCray; Nays: Bassett)**

5.0 CALENDAR

- 5.01** Administrative Committee Meeting November 17, 2021, immediately following the Special Board meeting
5.02 Audit Committee Meeting November 19, 2021, at 11 AM
5.03 Board Meeting December 10, 2021, at 9:00 AM

6.0 ADJOURNMENT

6.01 There being no further business the meeting was adjourned at 1:20 PM.

Respectfully Submitted:

Phonxay Keokham, Chair Pro Tem

Attest:

Raymond McCray, Secretary



San Joaquin County Employees Retirement Association

MINUTES

ADMINISTRATIVE COMMITTEE MEETING SAN JOAQUIN COUNTY EMPLOYEES RETIREMENT ASSOCIATION BOARD OF RETIREMENT WEDNESDAY, NOVEMBER 17, 2021

AT 1:22 PM

Location: SJCERA Board Room, 6 S. El Dorado Street, Suite 400, Stockton, California
Virtual: Via Zoom

1.0 ROLL CALL

1.01 MEMBERS PRESENT: Chanda Bassett, Phonxay Keokham, Raymond McCray, and Jennifer Goodman presiding

MEMBERS ABSENT: None

STAFF PRESENT: Chief Executive Officer Johanna Shick, Assistant Chief Executive Officer Kathy Herman, Information Systems Manager Adnan Khan, Department Information Systems Analyst II Lolo Garza, and Management Analyst III Greg Frank

OTHERS PRESENT: Deputy County Counsel Jason Morrish

2.0 PUBLIC COMMENT

2.01 None

3.0 2022 ADMINISTRATIVE BUDGET

3.01 Proposed 2022 Budget Summary

3.02 Proposed 2022 Administrative Budget Adjustments

3.03 The Committee reviewed, provided edits to the budget, and voted unanimously (4-0) to recommend the Board of Retirement approve the proposed 2022 Administrative Budget with edits. (Motion: Bassett; Second: Keokham)

4.0 COMMENTS

4.01 Trustee Bassett suggested staff research credit cards with no annual fee.

4.02 Trustee Goodman and Keokham recommended clarifying budgeted versus allocated in the materials brought to the full Board.

5.0 ADJOURNMENT

5.01 There being no further business, the meeting was adjourned at 1:43 p.m.

Respectfully Submitted:

Jennifer Goodman, Committee Chairperson



San Joaquin County Employees Retirement Association

MINUTES

AUDIT COMMITTEE MEETING SAN JOAQUIN COUNTY EMPLOYEES RETIREMENT ASSOCIATION BOARD OF RETIREMENT FRIDAY, DECEMBER 3, 2021

AT 10:02 AM

Location: SJCERA Board Room, 6 S. El Dorado Street, Suite 400, Stockton, California
Virtual: Via Zoom

1.0 ROLL CALL

- 1.01 MEMBERS PRESENT:** Raymond McCray, Michael Restuccia, Phonxay Keokham, and Michael Duffy presiding
STAFF PRESENT: Chief Executive Officer Johanna Shick, Assistant Chief Executive Officer Kathy Herman, Information Systems Manager Adnan Khan, Management Analyst III Greg Frank, and Administrative Secretary Kendra Fenner
OTHERS PRESENT: Deputy County Counsel Jason Morrish, and Peter Dewar and Jason Todd of Linea Secure

2.0 PUBLIC COMMENT

- 2.01** There was no public comment.

3.0 CLOSED SESSION

THE CHAIR CONVENED CLOSED SESSION AT 10:03 A.M. AND ADJOURNED THE CLOSED SESSION AND RECONVENED THE OPEN SESSION AT 11:36 A.M.

3.01 THREAT TO PUBLIC SERVICES OR FACILITIES

CALIFORNIA GOVERNMENT CODE SECTION 54957

Consultation with: President Peter Dewar and Director Jason Todd, both of Linea Secure, and Information Systems Manager Adnan Khan

- 01 Counsel noted there was nothing to report from closed session regarding this subject.

4.0 COMMENTS

- 4.01** Trustee Duffy thanked staff and Linea Secure for their work on this project.

5.0 ADJOURNMENT

- 5.01** There being no further business, the meeting was adjourned at 11:40 a.m.

Respectfully Submitted:

Michael Duffy, Audit Committee Chair



San Joaquin County Employees Retirement Association

PUBLIC

December 2021

5.01 Service Retirement

Consent

01 JANICE E ANTOLIN

Member Type: General
Years of Service: 31y 10m 08d
Retirement Date: 9/25/2021

Paralegal II
DA-Consumer Fraud-Prop 64

02 MICHAEL S ARBOCO

Member Type: General
Years of Service: 21y 02m 21d
Retirement Date: 10/23/2021

Transfer Truck Driver
SW-Lovelace Transfer Op

03 JOHN S BACAY

Member Type: General
Years of Service: 04y 09m 02d
Retirement Date: 10/13/2021
Comments: General Retirement after DRO split account

EEO Program Manager
Human Resources

04 ROSA L CARRILLO

Member Type: General
Years of Service: 20y 02m 29d
Retirement Date: 10/2/2021

Housekeeping Service Worker
Hosp Environmental Services

05 SARAH J DICKERSON

Member Type: General
Years of Service: 22y 06m 06d
Retirement Date: 10/23/2021

Legal Process Clerk III
Court-Court Oper-Traffic Court

06 DAVID G ENNES

Member Type: Safety
Years of Service: 06y 10m 06d
Retirement Date: 10/3/2021

Fire Fighter
LMF District

07 JOHN L FUNDERBURG

Member Type: General
Years of Service: 18y 09m 26d
Retirement Date: 12/23/2021

Principal Planner
Community Development Services

08 LAVONDA K HAWELU

Member Type: General
Years of Service: 36y 11m 13d
Retirement Date: 9/26/2021

Child Support Officer II
Child Support Svs

09 RACHELLE A JACHALKE

Member Type: General
Years of Service: 12y 08m 18d
Retirement Date: 10/10/2021

Accounting Technician I
Sheriff-AS-Management Services



San Joaquin County Employees Retirement Association

PUBLIC

December 2021

10 JEFFREY E KARMANN

Equipment Operator Foreman
Public Works-Road Main Central

Member Type: General
Years of Service: 10y 02m 10d
Retirement Date: 10/12/2021

11 KEELING P MAGUIN

Probation Officer III
Probation - Adult

Member Type: Safety
Years of Service: 20y 00m 05d
Retirement Date: 10/16/2021

12 DENISE PFEIFER

Senior Office Assistant
HSA - Clerical Support

Member Type: General
Years of Service: 07y 01m 06d
Retirement Date: 10/1/2021



Board of Retirement Meeting

San Joaquin County Employees' Retirement Association

Agenda Item 5.02-01

December 10, 2021

SUBJECT: Retired Member Returning to Active Membership

SUBMITTED FOR: X CONSENT ACTION INFORMATION

RECOMMENDATION

Approve the Application to Return to Active Membership for Tonya Mallory following Board of Retirement approval.

PURPOSE

To provide an opportunity for a Retired member to return to Active membership.

DISCUSSION

San Joaquin County has made a conditional offer of full-time benefited employment to Tonya Mallory. Ms. Mallory is currently a Retired member of SJCERA and wishes to return to Active Membership.

Government Code Sections 31680.4 and 31680.5 allow for a retiree to suspend their retirement, and return to work full time in an SJCERA-covered position as an Active member.

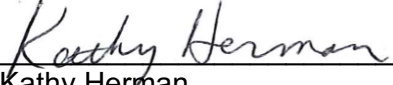
Pursuant to statute, (a) the member must apply to the Board of Retirement for reinstatement (b) the Board of Retirement must determine, based on medical examination that the member is not incapacitated for the duties assigned of the position and (c) the other conditions for membership (working in a full-time, permanent position with San Joaquin County or another SJCERA-participating employer) must be met.

The member's Application to Return to Active Membership, the signed Medical Evaluation form, and the Job Description are provided for the Board's review. Based on the information on these documents, staff recommends approving Ms. Mallory's return to Active membership.

If approved to re-enter Active membership, the employment may begin on the first day of the pay period following this meeting. Ms. Mallory will be a Tier 2 member for this period of employment, and the retirement benefit payments will be suspended. When Ms. Mallory retires again, the original retirement benefit (increased by any cost-of-living adjustments), will resume and the additional benefit (based on the second period of employment) will be paid to as a separate benefit.

ATTACHMENT

Application to Return to Active Membership
Job Description


Kathy Herman
Assistant Chief Executive Officer



San Joaquin County Employees' Retirement Association

Return to Active Membership Application for Retired Members

INSTRUCTIONS

Submit this form if you are a Retired SJCERA Member and have received a conditional offer of employment from the County of San Joaquin (or other participating employer) into a position that is eligible for SJCERA Membership. Department of Human Resources must complete the last section of this form.

MEMBER INFORMATION

Full Name <i>Tonyz Eileen Mallory</i>	Employee ID [REDACTED]	E-mail <i>tonniemallory@yahoo.com</i>
Department <i>EEDD</i>	Original Retirement Date <i>5/24/21</i>	Date of Re-employment <i>12/27/21</i>

MEMBER ACKNOWLEDGMENT

I hereby apply for reinstatement as an Active Member of SJCERA. I understand the Board of Retirement will determine my eligibility for Membership based on the position for which I am hired, my application and whether the pre-employment medical examination results indicate that I am not incapacitated for the duties assigned to me.

I understand my retirement benefit will be suspended on the effective date of my re-employment and will resume only when I subsequently terminate employment. I also understand that I must return any overpayment of my retirement benefit made to me after the effective date of my re-employment.

Member's Signature

Tonyz Mallory

Date

10/26/21

HUMAN RESOURCES AUTHORIZATION

NOTE: THIS SECTION MUST BE COMPLETED BY A HR REPRESENTATIVE

I certify that the Member named above has successfully completed a pre-employment medical exam and (is) (is not) incapacitated for the duties assigned to him/her.

HR Representative's Full Name

Rachel Novetzke

Telephone Number

(209) 468-3370

HR Representative's Title

Principal Personnel Analyst

E-mail

rnovetzke@sjgo2.org

HR Representative's Signature

[Signature]

Date

11-16-21



HT Family Physicians Inc.

77 W. March Lane, Suite A
Stockton, CA 95207

Phone: (209) 477-5552

Fax: (209) 477-5553

999 S. Fairmont Ave., Suite 215
Lodi, CA 95240

Phone: (209) 400-2040

Fax: (209) 400-2050

Raissa M. Hill, D.O.

San Tso, D.O.

Clyde Y. Wong, M.D.

Richelle G. Marasigan, D.O.

Dylia Pereira Narvaez, M.D.

Elizabeth A. Ross FNPC

November 15, 2021

Re: Tonya Mallory
[REDACTED]

To Whom It May Concern,

This letter is written on behalf of my patient, Tonya Mallory. I have reviewed the job description. She is able to perform the essential duties of the position. She is fit to work without restriction.

Sincerely,

Richelle G. Marasigan, DO

DEPUTY DIRECTOR – EMPLOYMENT AND TRAINING**DEFINITION**

Under general direction, assists the Director of Employment and Economic Development in the management of the Employment and Economic Development Department (EEDD) by directing an assigned group of employment and training related functions; and does related or other work as required.

CLASS CHARACTERISTICS

The Deputy Director – Employment and Training is a single-position, at-will class that is exempt from the San Joaquin County Civil Service system. The incumbent is primarily responsible for planning, leading, developing, managing, and administering a variety of employment, training and economic development EEDD programs and assisting the Director in the overall management and administration of the department. The incumbent may act in the absence of the Director. The incumbent is expected to model a strong work ethic and leadership skills, including accountability for oneself and others, and to help ensure that all assigned programs and operations are in compliance with state, federal, and local requirements, regulations, and policies.

TYPICAL DUTIES

This specification is a general guideline for the class. The statements below are not restrictive, and the responsibilities and duties assigned to a position in this class may expand beyond those identified in this specification.

1. Plans, organizes and directs the development, delivery and monitoring of employment, training, and related programs and services for the EEDD, including program planning, program development, program monitoring, client assessment and training, and a variety of administrative support services aimed at employment and training and related programs; performs assignments and activities in an effective and efficient manner; assists with the management of other EEDD programs and operations as assigned; exercises good judgment and makes sound decisions in managing assigned areas and functions.
2. Through subordinate managers and/or supervisors, directs the work and activities of staff; selects and assigns employees; evaluates employee performance; reviews and takes action on disciplinary matters; develops personnel policies and standards of performance; promotes staff development programs; serves as a key resource for staff.
3. Develops, recommends, and implements departmental policies and procedures; analyzes and interprets existing and proposed federal, state and local legislation, policies, procedures, and other directives to determine impact on operations; recommends policies and procedures that are relevant and are in compliance with department, federal, state, and local regulations; interprets policies and procedures to staff and ensures their appropriate implementation.

4. Develops, prepares, and recommends program proposals and budgets; directs and/or conducts program evaluation and assessment studies; analyzes fiscal information and recommends cost efficiency options.
5. Represents the department at meetings and conferences; prepares meeting agendas for and participates on various advisory boards, committees, task forces, and other teams; establishes, develops and maintains cooperative and collaborative working relationships with federal, state, and county officials, other counties, community groups, external agencies, and the public; makes presentations; meets and confers with various agents to negotiate effective solutions to difficult problems; helps coordinate the provision of departmental services as assigned.
6. Directs the collection and analysis of data; prepares correspondence and marketing materials pertaining to employment and training services; prepares or supervises the preparation of periodic reports relevant to assigned activities for the Director, department management, and others; prepares Board of Supervisors' reports and related documents; makes presentations to groups and individuals, including boards and commissions.
7. Makes effective use of technology to improve systems and processes.
8. Acts in the absence of the Director as assigned.

DESIRABLE QUALIFICATIONS

Education: Graduation from an accredited four-year college or university with a major in business administration, public administration, social sciences, or a closely-related field.

Experience: Six years of increasingly responsible managerial experience in the development, implementation and administration of employment and training-related programs.

REQUIRED QUALIFICATIONS

License: Possession of a valid California driver's license.

Knowledge of: Principles and practices of administration, including effective organization, administration, personnel, management, and staff training; principles and methods of employment preparation and training; career, vocational and employment counseling and interviewing techniques; typical barriers to employment; principles and practices of public relations and human behavior; general principles of accounting, budgeting, and fiscal management; diverse social and cultural backgrounds; local, state and federal legislation and regulations relevant to department programs; basic computer and modern office automation technology and computer software programs relevant to department operations and business management.

Ability to: Plan, direct and coordinate employment and training services and related staff activities in a cost-effective manner, while ensuring excellent customer service; provide appropriate and effective leadership and management of diverse staff teams, including subordinate managers and supervisors; work collaboratively with staff, clients, and pertinent

stakeholders to achieve successful outcomes; exercise good judgment and make sound managerial decisions; exercise analytical and critical thinking to evaluate complex problems and recommend appropriate solutions; understand, interpret, and apply legal codes, regulations, and rules pertaining to program operations; analyze and implement program mandates and work within federal, state, or other types of regulatory systems; formulate and present short- and long-range plans; identify community resources and programs which can assist people seeking employment; operate computers and related software and recommend the development and utilization of effective automated systems; prepare and administer annual budgets and financial and statistical records; communicate effectively, both orally and in writing, with persons from diverse social and cultural backgrounds; establish and maintain effective working relationships with other departments and agencies, employees, advocacy groups, and the general public.

Mental and Physical Requirements: **Mobility**—frequent sitting for long periods, walking; occasional standing, pushing, pulling, bending, squatting, climbing stairs; frequent operation of a data entry device; **Lifting**—frequently 5 pounds or less; occasionally 5 to 30 pounds; **Visual**—constant good overall vision and reading/close-up work; frequent color perception and use of eye/hand coordination; occasional use of depth perception and peripheral vision; **Hearing/Talking**—frequent hearing of normal speech, hearing/talking on the telephone, talking in person; **Dexterity**—frequent use of normal dexterity; frequent writing and repetitive motion; **Emotional/Psychological**—frequent decision making, concentration, and public contact; **Special Requirements**—occasional working nights and weekends; **Environmental**—occasional exposure to varied weather conditions.

Adopted: 12/5/06

Amended by BOS: 9/23/14



Board of Retirement Meeting

San Joaquin County Employees' Retirement Association

Agenda Item 5.02-02

December 10, 2021

**SUBJECT: SJCERA 2022 Proposed Administrative Budget
January 1 through December 31, 2022**

SUBMITTED FOR: X CONSENT ACTION INFORMATION

RECOMMENDATION

The Administrative Committee recommends the Board approve (1) the proposed 2022 Administrative Budget and (2) discontinuing the practice of budgeting a \$3 million provision for contingencies.

Staff will bring a mid-year budget adjustment in 2022 for the Pension Administration System (PAS), once the selected vendor and costs are known.

PURPOSE

To establish an administrative budget for calendar year 2022.

DISCUSSION

Discontinuation of the \$3 Million Contingency Provision

The practice of budgeting a \$3 million provision for contingencies has been a source of confusion and is unnecessary. It has never been a separate reserve. It is a budgeting convenience, in the event of an emergency, that would allow the Auditor-Controller's Office to continue processing invoices if SJCERA were to exceed its administrative budget. The contingency has never been used and SJCERA typically runs well under budget. Instead, staff suggests doing a budget adjustment if one were required due to an emergency.

2021 Projected/Actual Expenses

The 2021 projected expenses of \$4,224,703 include actual expenditures through September 2021 and projected expenditures through year-end. The 2021 projected expenses are 6.9 percent (\$314,276) less than the 2021 budget of \$4,538,979. Salaries and benefit savings of \$210,749 make up 67.1 percent of the difference. The remaining savings is primarily from the Professional and Specialized Services (\$58,212).

The 2021 projected expenses are expected to exceed the 2020 actuals by 10.2 percent. See the "5 Year Trend Analysis" for additional details.

2022 Budget Compared to 2021 Projected/Actual Expenses

The 2022 budget is 22 percent (\$929,507) greater than the 2021 projected expenses. The primary changes reflected in the proposed 2022 budget, as compared to 2021 projected expenses, follow.

Salaries and Benefits

The 2022 proposed Salaries and Benefits budget increased \$338,721 (11.6 percent) and the primary drivers are as follows:

- Increase of \$184,637 in salaries as follows:
 - Vacant positions filled, ACEO salary range increase and step increases for staff (\$108,303)
 - Hiring an additional Retirement Services Technician to accommodate the increased workload from the multi-year PAS Implementation Project (\$47,176)
 - Double-filling the ACEO position for two months (\$29,158)
- Increase of \$81,205 in Retirement – Employer Share for increased contribution rates and vacant positions being filled
- Increase of \$34,902 in Vacation Sell Back due to the anticipated retirement of two employees

It should be noted although SJCERA has a total of 24 positions it could fill (“allocated” positions), it is staff’s intent to only fill 21 positions. SJCERA’s current and past practice is to budget salaries based upon only actual positions to be filled, excluding unfilled, allocated positions, which aligns our budget with our plans for the year. At the same time, we retain the unfunded, allocated positions in order to preserve flexibility when we need to restructure or reorganize.

Services and Supplies

The 2022 budget for Services and Supplies is \$465,225 higher than the 2021 projected expenses. The primary drivers are as follows:

- Increase of \$372,767 in Professional Services as follows:
 - Increase of \$220,00 for PAS contract help
 - Increase of \$107,570 for IG consultant and Core 37 upgrade
 - Increase of \$81,829 for disability processing
 - Increase of \$56,250 for disaster recovery professional services
 - Decrease of \$157,884 for writing the PAS RFP
- Increase of \$33,864 in Travel / Training budget to 65% of pre-COVID travel costs

Fixed Assets

The 2022 budget for PC Equipment and Upgrades is \$125,560 higher than the 2021 projected expenses primarily due to the Windows virtual server and the disaster recovery projects.

Administrative Budget Adjustments

Government Code section 31580.2 excludes from the administrative expense limit, expenditures for “computer software, computer hardware and computer technology consulting services in support of these computer products.” Other excluded expenditures consist of the cost for SJCERA’s administration of the retiree health plan eligibility, enrollment, and premium collection and remittance. This cost is reimbursed through the administrative fee incorporated into the premium renewal rates for retiree health, dental, and vision plans for each plan year. The administrative fees received for the retiree health plan, offset a portion of salary expense.

The excluded expenditures adjustment to the budget for 2022 is shown on the Proposed 2022 Administrative Budget Summary (Attachment I). Detail for these adjustments is presented on the 2022 Budget Adjustments (Attachment II). These adjustments total \$784,103, resulting in an adjusted 2022 Budget of \$4,370,196.

Costs outside of the administrative budget count as a direct charge to the fund and include: investment management fees, investment consulting services, master custody fees, actuarial services, and legal services.

Statutory Administrative Expense Limit

Government Code section 31580.2 limits the administrative budget to 0.21 percent of the Accrued Actuarial Liability (AAL).

The proposed 2022 Adjusted Budget (less exclusions) of \$4,370,196 is 0.084 percent of SJCERA’s AAL as determined by the actuary in our January 1, 2021 valuation. This is less than half of the amount allowed by statute. Even if the excluded items were included, the proposed 2022 Total Budget of \$5,154,209 is still less than half at 0.099 percent.

The 2021 Adjusted Budget was 0.08 percent of the AAL determined by the actuary as of January 1, 2020. Actual expenses for 2021 will be measured against the AAL as of January 1, 2022, which will be reported by the actuary in Fall 2022.

ATTACHMENTS

Attachment I - Proposed 2022 Administrative Budget Summary

Attachment II - 2022 Budget Adjustments



JOHANNA SHICK
Chief Executive Officer



GREG FRANK
Management Analyst III

ATTACHMENT I

SJCERA

Proposed Administrative Budget Summary

2022

As presented to the Board of Retirement on December 10, 2021

SJCERA ADMINISTRATIVE BUDGET SUMMARY

January - December 2022

Allocated Positions:

	2021 Allocated	2021 Actual	2022 Budget	2022 Allocated
Chief Executive Officer	1	1	1	1
Asst. Chief Executive Officer	1	1	1	1
Retirement Investment Officer	1	1	1	1
Departmental Info System Mngr	1	1	1	1
Retirement Financial Officer	1	1	1	1
Management Analyst III	1	1	1	1
Retirement Benefits Supervisor	1	1	1	1
Accountant III	1	1	1	1
Retirement Services Officer	2	1	1	2
Retirement Services Associate	2	2	2	2
Retirement Services/Technician	4	3	5	5
Information Systems Analyst II	1	1	1	1
Information Systems Specialist II	1	1	1	1
Accounting Technician I/II	1	1	1	1
Administrative Secretary	1	1	1	1
Communications Position	1	1	1	1
Jr. Admin Asst.	1	0	0	1
Senior / Office Assistant	2	1	0	1
Total Allocated Positions:	24	20	21	24

	2021 Approved Budget	2021 Projected Actuals	2022 Total Budget	2022 Adjustments	2022 Adjusted Budget (Less Exclusions)
<u>Salaries and Benefits:</u>					
6001000000 Salaries & Wages - Regular	\$ 1,740,702	\$ 1,644,165	\$ 1,828,802		
6001100000 Salaries - Cafeteria	110,251	91,355	96,919		
6001200000 Salaries - Car Allowance	7,020	7,020	7,020		
6001210000 Admin Benefits (Vacation sell back)	22,320	17,000	51,902		
6010100000 Unemployment Comp Insurance	2,624	387	1,380		
6020000000 Retirement - Employer Share	784,440	737,717	818,922		
6020600000 Health Insurance for Retirees - SLB	30,000	22,548	30,000		
6030000000 Social Security-OASDI	104,932	98,178	110,640		
6030100000 Social Security-Medicare	26,774	23,979	28,272		
6040000000 Life Insurance	1,250	1,147	1,313		
6050000000 Health Insurance	288,000	259,790	272,000		
6070000000 Dental Insurance	8,800	7,551	8,075		
6080000000 Vision Care	1,520	1,072	1,360		
6003000001 Overtime	0	5,976	0		
Subtotal:	\$ 3,128,633	\$ 2,917,884	\$ 3,256,606	\$ (76,675) *	\$ 3,179,930

<u>Services & Supplies:</u>					
6201000000 Office Expense	\$ 19,750	\$ 12,878	\$ 16,000		\$ 16,000
6202000000 SJC Mail Serv & Postage	14,500	16,155	14,500		14,500
6203000000 Office Exp-Subscriptns & Periodicals	1,500	1,483	1,600		1,600
6206000000 Telephone	22,500	14,125	15,500		15,500
6209000000 Membership Dues	7,750	7,268	7,750		7,750
6211000000 Maintenance - Equipment	8,500	10,977	8,500		8,500
6217000000 Travel / Training	43,500	23,636	57,500	(12,250)	45,250
6220000000 Professional and Specialized Services	749,665	691,453	1,064,708	(425,038)	639,670
6223000000 Publications and Legal Notices	0	0	0		0
6226016000 Software and Related Licenses	98,000	99,439	116,300	(116,300)	0
6243000000 Food	4,350	3,122	4,950		4,950
6264000000 Rent - Structure & Grounds	215,019	214,019	220,114		220,114
6269000000 Small Tools & Instruments	0	0	0		0
6295220700 Information Syst Div-Indirect Chrgs	10,000	4,524	8,000		8,000
6295232000 Insurance - Workers Compensation	6,000	5,500	6,000		6,000
6295236000 Insurance - Liability & Fiduciary	100,312	117,550	131,450		131,450
6295999900 County Wide - Indirect Cost Chrgs	70,000	50,000	65,000		65,000
Subtotal:	\$ 1,371,346	\$ 1,272,129	\$ 1,737,872	\$ (553,588)	\$ 1,184,284

		2021 Approved Budget	2021 Projected Actuals	2022 Total Budget	2022 Adjustments	2022 Adjusted Budget (Less Exclusions)
<u>Fixed Assets:</u>						
6451000000	Equipment & Furniture	\$ 11,500	\$10,500	\$ 6,500		\$ 6,500
6453310100	P.C. Equipment & Upgrades	27,500	24,190	153,750	\$ (153,750)	0
	Subtotal:	\$ 39,000	\$ 34,690	\$ 160,250	\$ (153,750)	\$ 6,500
Administrative Budget Sub-Total:		\$ 4,538,979	\$ 4,224,703	\$ 5,154,728	\$ (784,013)	\$ 4,370,715
Total Admin Limit is 0.21% of Actuarial Accrued Liability						
(AAL): \$5,207,669,301 x 0.21% = \$10,936,106		\$ 10,936,106	\$ 10,936,106	\$ 10,936,106		\$ 10,936,106
(as of 1/1/21)		0.087%	0.081%	0.099%		0.084%
<u>Provision for Contingencies</u>						
6701000000	Board Policy to Hold Contingencies	\$ 3,000,000		\$ -		\$ -
Total Administrative Budget		\$ 7,538,979		\$ 5,154,728		\$ 4,370,715
				0.099%		0.084%

SJCERA ADMINISTRATIVE ACTUALS
5 Year Trend Analysis

	2017	% Inc	2018	% Inc	2019	% Inc	2020	% Inc	Projected 2021	% Inc
Salaries	1,378,482		1,564,429		1,532,974		1,620,868		1,650,142	
Cafeteria Allowance	110,918		113,935		98,878		101,260		91,355	
Car Allow	6,480		7,020		7,020		7,020		7,020	
Vacation Buyback	7,577		13,635		15,675		17,149		17,000	
Unemployment Ins	3,004		2,301		2,233		1,163		387	
Retirement	560,799		627,166		643,589		716,829		737,717	
Health Ins(Retirees)	17,103		21,193		25,688		28,848		22,548	
SS OASDI	79,126		87,957		86,156		93,630		98,178	
SS Medicare	20,117		22,866		22,119		23,995		23,979	
Life Insurance	929		1,053		1,102		1,101		1,147	
Health Insurance	176,328		213,005		253,971		261,209		259,790	
Dental Insurance	6,550		6,873		7,762		7,139		7,551	
Vision Care	874		936		1,329		1,018		1,072	
Salaries & Benefits	2,368,286	-0.5%	2,682,368	13.3%	2,698,496	0.6%	2,881,229	6.8%	2,917,884	1.3%
Office Expense	25,953		20,324		22,285		14,090		12,878	
SJC Mail Service	15,065		13,741		14,365		14,105		16,155	
Office Exp-Subs	4,625		5,051		2,087		1,816		1,483	
Telephone	14,395		18,147		20,678		19,824		14,125	
Memberships	8,005		7,899		6,935		6,845		7,268	
Maint – Equip	815		13,134		3,812		6,806		10,977	
Rents-Copy Mach	14,445		15,100		0		0		0	
Travel \ Training	48,537		49,808		46,102		40,966		23,636	
Prof Serv	553,239		502,520		377,760		347,926		691,453	
Public & Notices	32		0		0		0		0	
Software & Lic	98,850		103,124		29,262		156,274		99,439	
Food	11,248		7,236		5,503		1,450		3,122	
Rent	264,869		234,401		203,827		208,923		214,019	
Tools & Instru	0		0		0		0		0	
ISD-Indirect Chrgs	0		0		0		0		4,524	
Insurance – WC	5,213		5,523		4,483		4,947		5,500	
Insurance – Liab/Fid	64,324		73,636		82,614		85,847		117,550	
County – Ind Costs	27,394		72,393		58,748		38,421		50,000	
Service & Supplies	1,157,011	-12.5%	1,142,037	-1.3%	878,460	-23.1%	948,239	7.9%	1,272,129	34.2%
Equip & Furn	2,308		49,115		0		0		10500	
P.C. Equip & Upgrade	16,866		15,187		69,019		4,564		24,190	
Fixed Assets	19,174	331.2%	64,302	235.4%	69,019	7.3%	4,564	-93.4%	34,690	660.0%
Total Actuals	3,544,470	-4.4%	3,888,707	9.7%	3,645,975	-6.2%	3,834,032	5.2%	4,224,703	10.2%

POSITION TITLE	Incumbent	Union Code/Tier	SALARY	CAR	CAFETERIA	DEFERRED COMP	VAC CASH OUT	UN- EMPLOY- MENT	RETIREMENT	SLB (ACTIVES)	OASDI	MEDICARE	LIFE INS	HEALTH	DENTAL	VISION	EARNINGS	BENEFITS	TAX	TOTAL POSITION COST
				ALLOW/ Parking																
Chief Executive Officer	Johanna Shick	A / T1	222,704.99	7,020.00	24,022.96	11,486.25	12,848.36	199.95	120,048.32	N/A	8,797.80	3,865.65	62.50				278,082.56	120,110.82	12,863.39	411,056.78
Asst CEO (2 Months)	Kathy Herman	B / T1	29,158.13		4,003.83	583.16	29,438.50	46.95	28,188.99	N/A	3,917.38	907.71	62.50				63,183.62	28,251.49	4,872.04	96,307.15
NEW Asst CEO		B / T1	160,000.00		24,022.96	3,200.00	4,615.20	141.48	84,943.76	N/A	8,797.80	2,735.25	62.50				191,838.16	85,007.26	11,674.53	288,519.96
Retirement Investment Officer	Paris Ba	B / T2	106,033.20		24,022.96	2,120.66	0.00	97.54	40,950.02	N/A	8,194.96	1,885.81	62.50				132,176.82	41,012.52	10,178.32	183,367.67
Retirement Financial Officer	Carmen Murillo	C / T1	104,325.73			1,043.26		78.24	46,977.88	N/A	6,532.88	1,512.72	62.50	16,000.00	475.00	80.00	105,368.99	63,595.38	8,123.84	177,088.21
Dept Info Systems Manager	Adnan Khan	C / T1	131,489.07			1,314.89		98.62	59,209.53	N/A	8,233.85	1,906.59	62.50	16,000.00	475.00	80.00	132,803.96	75,827.03	10,239.05	218,870.05
Mgmt Analyst III	Greg Frank	C / T1	109,766.80			1,097.67		82.33	49,427.99	N/A	6,873.60	1,591.62	62.50	16,000.00	475.00	80.00	110,864.47	66,045.49	8,547.54	185,457.50
Retirement Serv Supervisor	Marta Gonzalez	R / T1	82,696.64					62.02	37,238.30	N/A	5,127.19	1,199.10	62.50	16,000.00	475.00	80.00	82,696.64	53,855.80	6,388.32	142,940.75
Accountant III	Eve Cavender	F / T2	83,506.18					62.63	37,602.83	N/A	5,177.38	1,210.84	62.50	16,000.00	475.00	80.00	83,506.18	54,220.33	6,450.85	144,177.36
Retirement Services Officer	Melinda De Oliveira	F / T0	78,754.62					59.07	35,463.21	N/A	4,882.79	1,141.94	62.50	16,000.00	475.00	80.00	78,754.62	52,080.71	6,083.79	136,919.13
Dept Info Sys Spec II	Jordon Regevig	F / T1	67,679.82					50.76	30,476.22	N/A	4,196.15	981.36	62.50	16,000.00	475.00	80.00	67,679.82	47,093.72	5,228.27	120,001.81
Dept Info Sys Analyst II	Eulogio Garza	E / T2	95,968.40					71.98	37,063.00	N/A	5,950.04	1,391.54	62.50	16,000.00	475.00	80.00	95,968.40	53,680.50	7,413.56	157,062.46
Retirement Services Assoc	Ron Banez	F / T2	62,645.76					46.98	24,193.79	N/A	3,884.04	908.36	62.50	16,000.00	475.00	80.00	62,645.76	40,811.29	4,839.38	108,296.44
Retirement Serv Tech (underfill RSO)	Andrea Bonilla	F / T2	61,701.12					46.28	27,784.01	N/A	3,825.47	894.67	62.50	16,000.00	475.00	80.00	61,701.12	44,401.51	4,766.41	110,869.05
Retirement Technician	Bethany Vavzincak	G / T2	47,175.65					35.38	21,243.19	N/A	2,924.89	684.05	62.50	16,000.00	475.00	80.00	47,175.65	37,860.69	3,644.32	88,680.66
Retirement Services/Tech	Vacant	G	47,175.65					35.38	18,219.24	N/A	2,924.89	684.05	62.50	16,000.00	475.00	80.00	47,175.65	34,836.74	3,644.32	85,656.70
Retirement Payroll Tech	Mary Johnson	G / T1	53,547.96				5,000.00	43.91	26,364.15	N/A	3,629.97	848.95	62.50	16,000.00	475.00	80.00	58,547.96	42,981.65	4,522.83	106,052.44
Retirement Technician	Kathleen Goodwin	G / T1	53,547.96					40.16	24,112.65	N/A	3,319.97	776.45	62.50	16,000.00	475.00	80.00	53,547.96	40,730.15	4,136.58	98,414.69
Accounting Tech II	Marissa Smith	G / T1	60,192.29					45.14	27,104.59	N/A	3,731.92	872.79	62.50	16,000.00	475.00	80.00	60,192.29	43,722.09	4,649.85	108,564.23
Administrative Secretary	Kendra Fenner	G / T2	47,156.72					35.37	18,211.93	N/A	2,923.72	683.77	62.50	16,000.00	475.00	80.00	47,156.72	34,829.43	3,642.86	85,629.00
Retirement Services/Tech (PAS)	Vacant	G	47,175.65							N/A	2,924.89	684.05					47,175.65	-	3,608.94	50,784.59
Communications Officer	Vacant	G	62,400.00						24,098.88	N/A	3,868.80	904.80	62.50	16,000.00	475.00	80.00	62,400.00	40,716.38	4,773.60	107,889.98
Retirement Board - Pd Memb - PerMtg			14,000.00														14,000.00	-	-	14,000.00
Retiree SLB										30,000.00							-	30,000.00	-	30,000.00

	1,828,802.33	7,020.00	76,072.71	20,845.89	51,902.06	1,380.17	818,922.46	30,000.00	110,640.38	28,272.06	1,312.50	272,000.00	8,075.00	1,360.00	1,984,643.00	1,131,670.96	140,292.61	3,256,606.57	-
SALARIES & WAGES-REGULAR	1,828,802.33																		41.18
SALARIES-CAFETERIA	96,918.60																		
SALARIES-CAR ALLOWANCE	7,020.00																		
ADMINISTRATION BENEFITS	51,902.06																		
SALARIES-LEAVE TIME PAYOFF	-																		
UNEMPLOYMENT COMP INSURANCE	1,380.17																		
RETIREMENT-EMPLOYER SHARE	818,922.46																		
HLTH INSUR FOR RETIREES-SLB (ACTIVE 'EES)	30,000.00																		
SALARIES/BENES - EXTRA HELP	-																		
SOCIAL SECURITY-OASDI	110,640.38																		
SOCIAL SECURITY-MEDICARE	28,272.06																		
LIFE INSURANCE	1,312.50																		
HEALTH INSURANCE	272,000.00																		
DENTAL INSURANCE	8,075.00																		
VISION CARE	1,360.00																		
OVERTIME	-																		
TOTAL	3,256,605.57																		

SJCERA
2022 BUDGET
Services & Supplies

Office Expense – General

6201000000

Item	Comments	2021 Budget	2021 Estimated/Actual	2022 Proposed
Office Supplies & Printing Services	Office Max, Bus Cards, ID Badges, etc.	17,500.00	10,717.65	13,650.00
	Boise orders; Co Purchasing; etc.			
	Death Certificates, People Finders,			
	1099R & envelope printing;			
	Annual Statement			
	Printing; etc			
Document Destruction	Shred It	2,250.00	2,159.95	2,350.00
TOTAL:		\$ 19,750.00	\$ 12,877.60	\$ 16,000.00

5 yr Average

19,106

SJCERA
2022 BUDGET
Services & Supplies

Office Expense - Postage

6202000000

Item	Comments	2021 Budget	2021 Estimated/Actual	2022 Proposed
Postage	Member mass mailings	\$ 14,500.00	\$ 16,154.57	\$ 14,500.00
	Office, Health Plan, Special Mailings, returned mail			
	Federal Express			
	County Support (Mailroom)			
TOTAL:		\$ 14,500.00	\$ 16,154.57	\$ 14,500.00

5 yr Average

14,686

Office Expense - Subscriptions & Periodicals	6203000000
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5 yr Average	3,012
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6206000000

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SJCERA
2022 BUDGET
Services & Supplies

Membership Dues

6209000000

Item	Comments	2021 Budget	2021 Estimated/Actual	2022 Proposed
SACRS	Annual Dues	\$ 4,250.00	\$ 4,000.00	\$ 4,250.00
CALAPRS	Annual Dues	2,250.00	2,000.00	2,250.00
Miscellaneous Membership Dues	Includes:	1,250.00	1,268.46	1,250.00
	NCPERS			
	GFOA			
	Pub Pensions Forum			
	American Express Annual Fee			
TOTAL:		\$ 7,750.00	\$ 7,268.46	\$ 7,750.00

5 yr Average

7,391

SJCERA
2022 BUDGET
Services & Supplies

Maintenance - Equipment *

621100000

Item	Comments	2021 Budget	2021 Estimated/Actual	2022 Proposed
Comfort Air	Air Cond - Computer Rm	\$ 1,500.00	\$ 381.00	\$ 1,500.00
Sound Equip	Meeting & Control Room Equip	2,500.00	6,500.00	2,500.00
Misc Equipment Maintenance including:	Door Locks (Digital)	500.00	385.00	500.00
	Scanner Maint / Warranty			
	Alarm System Maint			
	Time Stamp Machine			
	Durst (office equip)			
	HP Tape Drive			
	TP Wireless Link			
Copier		\$ 4,000.00	\$ 3,711.03	\$ 4,000.00
TOTAL:		\$ 8,500.00	\$ 10,977.03	\$ 8,500.00

5 yr Average

7,109

*This category not entirely based on estimated-actual as repair/maintenance of equipment cannot always be anticipated

SJCERA
2022 BUDGET
Services & Supplies

Travel / Training

6217000000

Item	Comments	2021 Budget	2021 Estimated/Actual	2022 Proposed
SACRS	Spring/Fall Conf & Registration Fee	22,000.00	12,420.00	25,000.00
CALAPRS	General Assembly & Registration Fee	1,000.00	750.00	9,000.00
Mileage Reimbursement	Trustee mileage	1,250.00	350.00	1,250.00
Staff Training/Conferences	Non-investment related; roundtables, mileage, etc.	\$ 7,000.00	\$ 8,916.00	\$ 10,000.00
Subtotal	\$45,250.00			
Trustee Training / Investment Manager Meetings	SACRS/UC Berkeley; IREI, Pension Bridges, Annual Manager Meetings	12,250.00	1,200.00	12,250.00
*Investment Subtotal	\$12,250.00			
TOTAL:		\$ 43,500.00	\$ 23,636.00	\$ 57,500.00

5 yr Average

41,810

* See "ADJUSTMENTS" worksheet - these are excluded from statutory limit

SJCERA
2022 BUDGET
Services & Supplies

Professional & Specialized Services

6220000000

Item	Comments	2021 Budget	2021 Estimated/Actual	2022 Proposed
Disability Processing	Hearing Officer Fees	\$200,000.00	\$ 118,170.94	\$ 200,000.00
	Medical Examinations			
	Applicant Med Mileage Reimb			
	Court Reporter, Copy Services			
PAS RFP	Linea (added mid-year)	150,000.00	213,482.00	55,598.00
Project Management	Contract help	0.00	0.00	220,000.00
Office Layout		10,000.00	0.00	10,000.00
<i>Moved to Equip & Furniture (2021)</i>	<i>Purchase of Office Chairs</i>	<i>(10,000.00)</i>		
Brown Armstrong	Annual Financial Audit	60,670.00	60,670.00	60,670.00
	<i>Note: Extending contract through 2022 for same price</i>			
Registrar of Voters	Member Elections - Elected Safety	22,000.00	11,500.00	12,000.00
NT Retiree Payroll	Treasury Passport/Inserts	92,500.00	94,576.15	97,500.00
IRON Mountain	Back-up tapes/Escrow Acct	2,000.00	1,720.00	2,000.00
Verizon & Mobile Service	Internet Service & iPads	20,500.00	17,233.15	20,500.00
Mindwrap	Workflow setup and training	10,000.00	0.00	10,000.00
Computer Link	Mac hardware	2,500.00	120.00	1,500.00
IG, Inc.	IT Contractor/Consultants	80,000.00	0.00	80,000.00
IG, Inc.	Core 37 Upgrade	23,820.00	68,325.00	95,895.00
ISD Network Support	Network Consultant	3,500.00	3,380.13	3,500.00
Disaster Recovery	Professional services	0.00	0.00	56,250.00
Cyber Network/Direct Defense	IT Security Audit	50,000.00	68,515.00	85,000.00
Web Hosting	In Motion Web Hosting	175.00	179.88	200.00
Website Development	Web content mgmt	15,000.00	23,450.00	37,095.00
Publication Design & Videos	CAFR/PAFR/Annual Strmts/Fact Sheets/Video	10,000.00	6,050.00	10,000.00
Misc. Professional Svcs	Alamo Burglar Alarm	7,000.00	4,080.27	7,000.00
	Sound System Rental			
	Dropbox, GFO Cert			
TOTAL:		\$749,665.00	\$ 691,452.51	\$ 1,064,708.00

5 yr Average

494,580

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SJCERA
2022 BUDGET
Services & Supplies

Publications & Legal Notices

6223000000

Item	Comments	2021 Budget	2021 Estimated/Actual	2022 Proposed
Publications or legal notice	Want-ads	\$0.00	\$0.00	\$0.00
	Brown Act compliance manual			
	Newspaper legal notices			
TOTAL:		\$ -	\$ -	\$ -

SJCERA
2022 BUDGET
Services & Supplies

Software and Related Licenses

6226016000

Item	Comments	2021 Budget	2021 Estimated/Actual	2022 Proposed
Mindwrap	Optix Maintenance	\$ 18,000.00	\$ 16,557.00	\$ 18,000.00
IGI	Renewals	70,000.00	70,000.00	70,000.00
CDWG	Palo Alto Firewall (3yr-2023)	0.00	0.00	0.00
Filemaker	Client license renewal (2yr)	0.00	0.00	15,000.00
Other Software Support/License		10,000.00	12,882.20	13,300.00
	Vicomsoft			
	IT Solutions/Kerio License			
	Anti-Virus Protection			
	Software Support:			
	MS Office 2012			
	Intuit Online			
	Adobe Creative Suite			
	VMware			
	Comodo			
	Adobe Acrobat			
	Proofpoint			
	Other Software Licenses			
TOTAL:		\$ 98,000.00	\$ 99,439.20	\$116,300.00

5 yr Average 97,390

6264000000

6269000000

0

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SJCERA
2022 BUDGET
Services & Supplies

Information System Division Direct Charge

6295220700

Item	Comments	2021 Budget	2021 Estimated/Actual	2022 Proposed
ISD Services	Interface connections, maint.	\$10,000.00	\$ 4,524.11	\$8,000.00
TOTAL:		\$ 10,000.00	\$4,524.11	\$8,000.00

5 yr Average

905

SJCERA
2022 BUDGET
Services & Supplies

Insurance - Worker's Compensation

6295232000

Item	Comments	2021 Budget	2021 Estimated/Actual	2022 Proposed
County Worker's Comp		\$ 6,000.00	\$ 5,500.00	\$ 6,000.00
TOTAL:		\$ 6,000.00	\$ 5,500.00	\$ 6,000.00

5 yr Average

5,133

6295999900

6451000000

SJCERA
2022 BUDGET
Fixed Assets

PC Equipment & Upgrades

6453310100

Item	Comments	2021 Budget	2021 Estimated/Actual	2022 Proposed
Disaster Recovery	Options & Pre-requisitions	5,000.00	4,599.00	18,750.00
Workstation Upgrades	New staff computers (2023)	0.00	0.00	0.00
Server Infrastructure	Windows Virtual Server	0.00	0.00	95,000.00
Back-up system upgrade	Baracuda server upgrade	0.00	0.00	7,500.00
Server Room Hardware	KVM switch	5,000.00	4,628.61	5,000.00
Wireless bridge upgrade	Core switch replacement and wireless bridge	0.00	3,189.44	0.00
Legacy data archive equip	Microfiche	7,500.00	0.00	7,500.00
Other	Hardware as needed	10,000.00	11,772.81	20,000.00
	iPad, APC batteries			
	Maint kit, adapters,			
	Monitors, Wifi upgrade			
	Extron conference bridge			
TOTAL:		\$27,500.00	\$24,189.86	\$153,750.00

5 yr Average

25,965

SJCERA

Administrative Budget Adjustments

2022

As presented to the Board of Retirement on December 10, 2021

SJCERA
2022 BUDGET

ADJUSTMENTS

	Comments	2021	2021 Estimated/Actual	2022 Proposed	
SALARIES & BENEFITS:					
Adjustment for Retiree Health, 3/4 of one FTE for Payroll Tech				76,675.17	\$76,675
Investment Related - DUE DILIGENCE / TRAINING:					
Trustee Training & Conf	UC Berkeley, Investment Conferences (IREI, Pension Bridges)	12,250.00	1,200.00	12,250.00	
Information Technology Related (various budget items):					
PAS RFP	Linea (added mid-year)	150,000.00	213,482.00	55,598.00	
IG, Inc.	IT Contractor/Consultants	80,000.00	0.00	80,000.00	
IG, Inc.	Core 37 Upgrade	23,820.00	68,325.00	95,895.00	
Website Development		15,000.00	23,450.00	37,095.00	
Computer Link & Web Host	Mac hardware & In Motion	2,500.00	120.00	1,700.00	
Mindwrap	Workflow setup and training	10,000.00	0.00	10,000.00	
ISD Network Support	IT Security Audit	3,500.00	3,380.13	3,500.00	
Mindwrap	Optix Maintenance	18,000.00	16,557.00	18,000.00	
Disaster Recovery	Professional services	0.00	0.00	56,250.00	
Cyber Network Defense		50,000.00	68,515.00	85,000.00	
Filemaker	Client license renewal (2yr)	0.00	0.00	15,000.00	
IGI	Core 37 yearly maintenance	70,000.00	70,000.00	70,000.00	
Other Software Support/License		10,000.00	12,882.20	13,300.00	\$553,588
FIXED ASSETS:					
Information Technology Related:					
Disaster Recovery		5,000.00	4,599.00	18,750.00	
Server Infrastructure	Windows Virtual Server	0.00	0.00	95,000.00	
Back-up system upgrade	Baracuda server upgrade	0.00	0.00	7,500.00	
Server Room Hardware	KVM Switch	5,000.00	4,628.61	5,000.00	
Legacy data archive equip	Microfiche	7,500.00	0.00	7,500.00	
Other	Recovery	10,000.00	11,772.81	20,000.00	\$153,750
TOTAL ADJUSTMENTS					\$784,013
FUND EXPENSES (Not Part of Administrative Budget)					
Ted Cabral	Disability Counsel		5,000.00		
Vivian Shultz	Disability Counsel		30,641.52		
County Counsel	Counsel to the Board		138,959.42		
Rimon Law	Investment Counsel		66,016.67		
Buchalter/Reed & Smith	Tax Counsel		10,111.00		
Cheiron	Actuarial Services		108,397.99		
Nossaman	Fiduciary Counsel		270,461.16		
Northern Trust	Custodial Fees		118,279.00		
Meketa	Investment Consultant		334,166.67		
Investment Management Fees*			15,396,837.00		
TOTAL:			16,977,782.17		

*Investment Management fees - some are deducted from SJCERA account balances, some are paid by SJCERA pursuant to invoices. All are direct charged to the fund and are not part of the Administrative Budget.

2021 RETIREE HEALTH ADMINISTRATION ADJUSTMENT

	Health	Dental	Vision	Total
2020 Members *	1,329	1,198	1,643	4,170
<i>Amt per Mem</i>	<i>4.10</i>	<i>0.75</i>	<i>0.32</i>	<i>5.17</i>
Rate Increase (%)	17.8%	17.2%	18.5%	17.8%
Monthly Total	5,449	899	526	6,873
Annual Total	65,387	10,782	6,309	82,478

2021 Direct Overhead (3/4 FTE of Payroll Tech)	<u>77,970</u>
	3.6%

Variance	<u><u>4,508</u></u>
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*Based on October Payroll Numbers (includes special districts)

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2022 RETIREE HEALTH ADMINISTRATION ADJUSTMENT

	Health	Dental	Vision	Total
2021 Members *	1,430	1,320	1,731	4,481
<i>Amt per Mem</i>	<i>4.10</i>	<i>0.75</i>	<i>0.32</i>	<i>5.17</i>
Rate Increase (%)	0.0%	0.0%	0.0%	0.0%
Monthly Total	5,863	990	554	7,407
Annual Total	70,356	11,880	6,647	88,883

2021 Direct Overhead (3/4 FTE of Payroll Tech)	<u>76,675</u>
	-1.7%

Variance	<u><u>12,208</u></u>
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*Based on October Payroll Numbers (includes special districts)



**San Joaquin County Employees'
Retirement Association**

**Board of Retirement
Resolution**

RESOLUTION TITLE: ANNUAL ADMINISTRATIVE BUDGET FOR 2022

RESOLUTION NO.: 2021-12-01

WHEREAS, the Board of Retirement has the authority, pursuant to California Government Code Section 31580.2, to establish a budget to meet the administrative needs of the retirement system; and

WHEREAS, effective January 1, 2011, California Government Code section 31580.2 limits the funding for administrative budgets to 0.21 percent of actuarial accrued liability of the retirement system; and

WHEREAS, the 2022 Total Budget totals \$5,154,728 and is 0.099 percent of the actuarial accrued liability (AAL) as reported by the Board's retained actuary in the annual actuarial valuation as of January 1, 2021; and

WHEREAS, the 2022 Adjusted Budget totals \$4,370,715 and is 0.084 percent of the AAL.

NOW, THEREFORE, BE IT RESOLVED that the Board approves the 2022 Administrative Budget, shown as "Attachment I" and made a part of this resolution and directs the Chief Executive Officer to implement this budget.

PASSED AND APPROVED by the Board of Retirement of the San Joaquin County Employees' Retirement Association on the 10th day of December, 2021.

AYES:

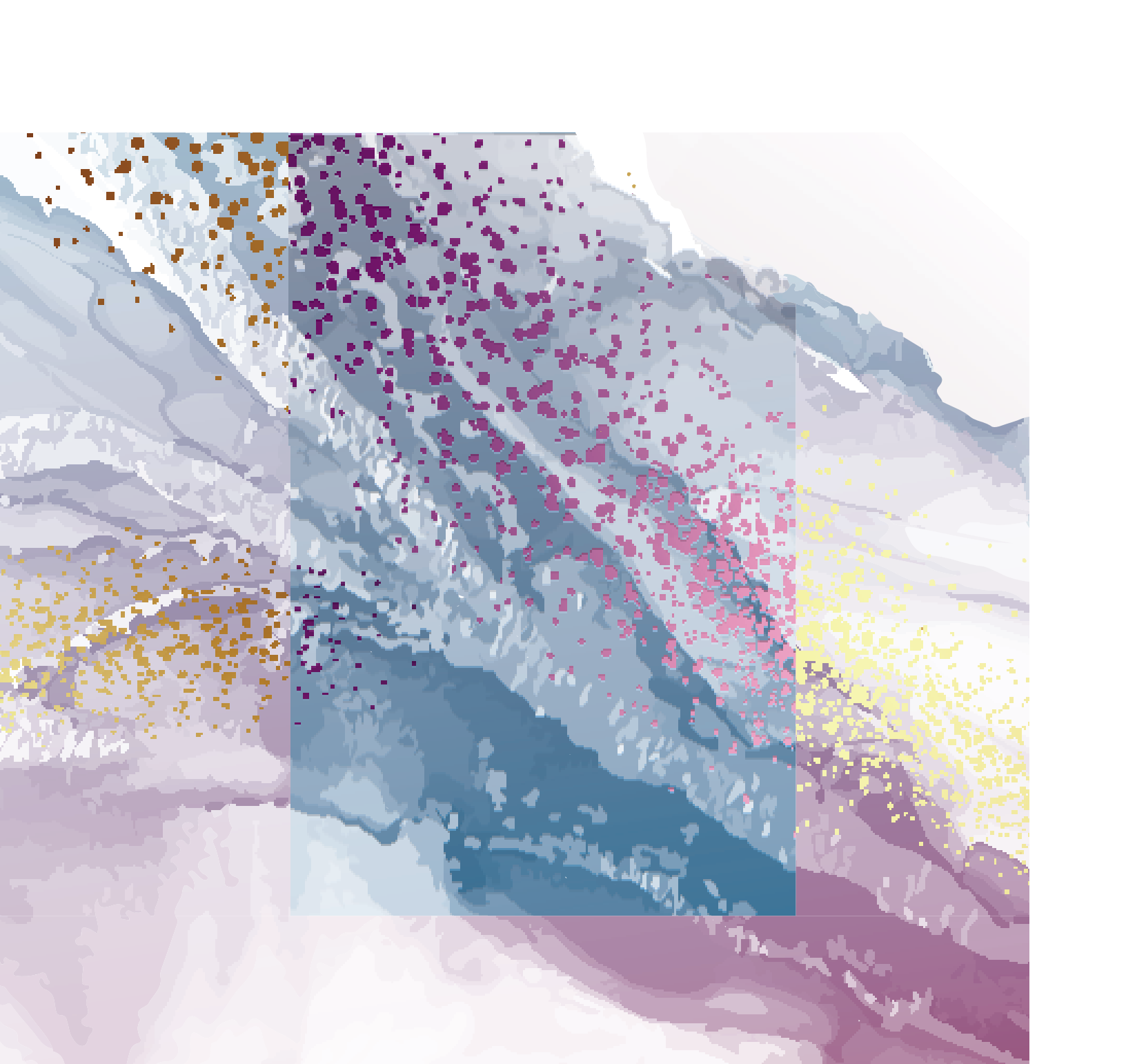
NOES:

ABSENT:

ABSTAIN:

MICHAEL RESTUCCIA, Chair

RAYMOND McCRAY, Secretary



2022 – 2026 STRATEGIC PLAN

San Joaquin County Employees' Retirement Association

Date of Adoption

INTRODUCTION

Creating New Foundations for Our Future

In 1946, the San Joaquin County Board of Supervisors established the San Joaquin County Employees' Retirement Association ("SJCERA") to provide retirement, disability, and death benefits to the employees of the County and other participating employers ("Special Districts") that provide valuable services to residents of San Joaquin County. Today, after 75 years, SJCERA is proud to serve as an essential element to the retirement security of San Joaquin County and participating Special District public servants and their beneficiaries and an integral part of the local economy.

Although SJCERA is known by its members for its professional, knowledgeable, and responsive customer service, the environment in which it operates is complex and rapidly changing. The COVID-19 pandemic has unlocked new ways of working and communicating that the world is only beginning to understand. Service expectations among members and employers are multi-faceted, complexity in the investment markets is increasing, and the need to accurately, efficiently, and securely manage and process data and information is critical to our ongoing operations and the confidence of all stakeholders. At the same time, upholding continued strong financial management and funding discipline of the Retirement Plan is critical.

It is with this set of circumstances that the SJCERA Board of Retirement ("Board") and its management staff ("Leadership Team") embarked on a collaborative process to develop a five-year strategic plan for the years 2022 through 2026. Critical steps in the process included the following activities:

- Gathering and analyzing sentiment from SJCERA stakeholders including representatives of participating employers, all SJCERA staff, members and beneficiaries, and select consultants to the Board,

About the Cover Art

Just as the SJCERA pension is the backbone for a secure retirement for its members and beneficiaries, the San Joaquin River has a long history of supporting a vibrant San Joaquin Valley.

The cover art for the 2022-2026 SJCERA Strategic Plan reflects an impressionist interpretation of the San Joaquin River at the time of California's gold rush.

Since that time, the San Joaquin Valley has grown into a modern and highly technological agricultural industry, and the River continues to play a vital role both anchoring the community and connecting it to other counties. Together, the people and riverscape are essential to supporting the residents and businesses that call San Joaquin home.

Artist Credit: @2021, Abbie Kozik Design, LLC, *Watercolor River*

- Conducting a comprehensive assessment of SJCERA's internal and external operating environment, including strengths, weaknesses, opportunities, and threats,
- Developing a 10-year future vision of a successful SJCERA,
- Identifying significant priorities and critical themes that required a strategic response from SJCERA, and
- Engaging in discussion on issues vital to the SJCERA's continued long-term viability.

Through the work completed by the Board and Leadership Team, SJCERA developed a framework for its strategic plan ("Strategic Plan"). In doing so, SJCERA is balancing its high-performance expectations today with its future aspirations.

The SJCERA Strategic Plan reflects the first five years of a ten-year journey to strengthen the long-term financial health of the Retirement Plan, modernize operations, and align people and resources with the ten-year vision. The Strategic Plan reflects what the Board and staff collectively aspire to achieve on behalf of members and beneficiaries and aligns the strategic choices made today and over the next five years.

The Strategic Plan enables SJCERA to transition to a modern operating model, leveraging new technologies to enhance service productivity, accuracy, and efficiency. During the transition, SJCERA commits to continuing its focus on core operations - collecting contributions, administering benefits, paying pensions, and investing assets – while putting people first. SJCERA has significantly benefited from consistency in its knowledgeable and committed Board and professional and caring staff, and a successful transition is dependent upon them.

In aligning SJCERA's strategy with its future vision, a foundation is set for SJCERA to operate for the next decade and beyond. By 2026, SJCERA will be administering the Retirement Plan and delivering services in a modern way. SJCERA expects to work collaboratively with its stakeholders during its transition. On behalf of everyone involved in the strategic planning process, the Board and Leadership Team invite you to review SJCERA's Strategic Plan on the following pages and join us in partnership through this journey.

MISSION

- Administering pensions to provide members a secure retirement income.

VISION

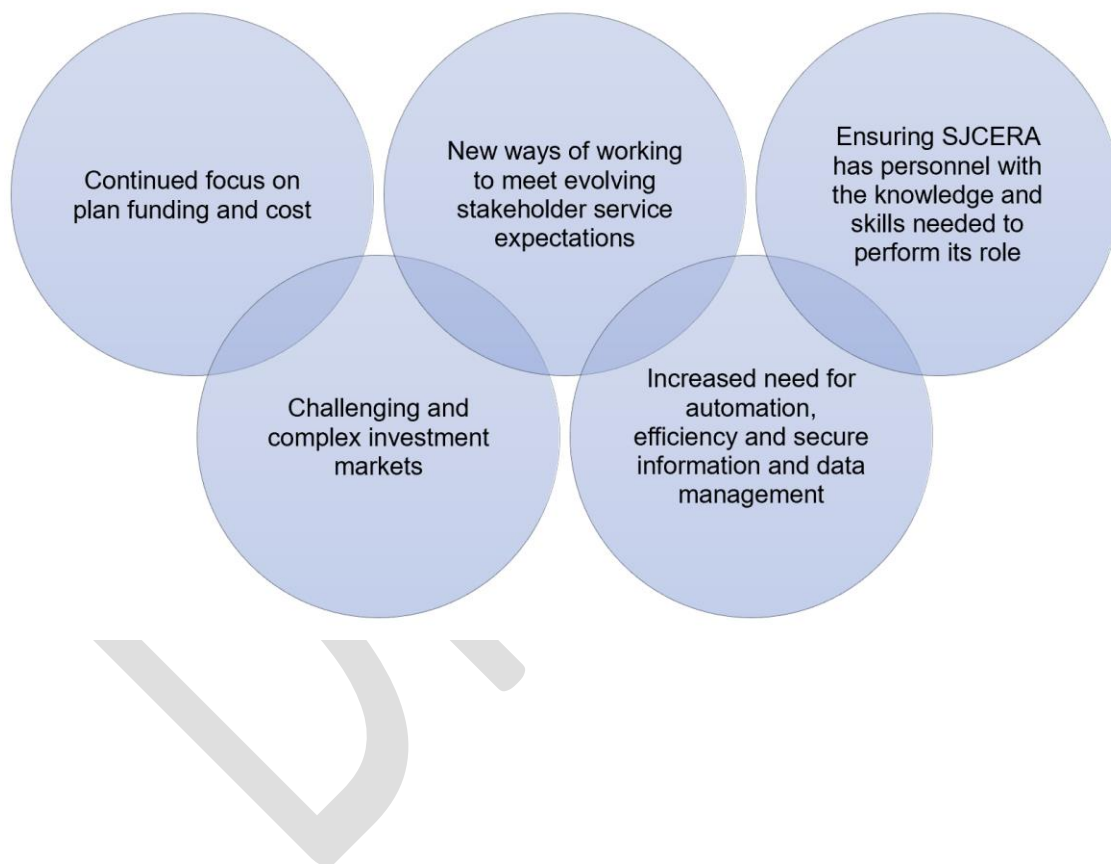
- Your trusted partner delivering modern retirement services with care.

VALUES

- **Integrity** – We honor our commitments and can be trusted to do the right thing.
- **Service** – Being respectful and helpful is at the heart of who we are.
- **Accountability** – We take pride in our work and continuously improve ourselves.

ISSUES ON THE HORIZON

As part of the strategic planning process, SJCERA scanned its internal and external operating environments. Strengths, weaknesses, opportunities, and threats on the immediate and near-term horizon were identified. As a result, SJCERA believes five significant and interconnected priorities will most impact the Retirement Plan, operations, and its membership and, therefore, deserve a focused response. The priorities are summarized in the following illustration.



STRATEGIC GOALS

SJCERA's approach to addressing the issues on its immediate and near-term horizon requires a committed focus to advancing the following three areas:

GOAL 1

Strengthen the long-term financial health of the Retirement Plan.

GOAL 2

Modernize the operations infrastructure.

GOAL 3

Align resources and organizational capabilities.

Further information on how SJCERA intends to make progress toward these Goals in the coming five years and what success under the Strategic Plan will look like under a ten-year vision for each is delineated on the following pages.

GOAL 1

Strengthen the long-term financial health of the Retirement Plan.

Objectives

- A. Evaluate the appropriateness of actuarial assumptions.
- B. Review and confirm or refresh asset allocation.
- C. Determine the future vision for the investment program operating model.
- D. Optimize the investment manager lineup.
- E. Explore alternative approaches to addressing risk through plan design.
- F. Define emerging governance issues.

What will success look like?

SJCERA's approach to delivering on these objectives will be successful if meaningful progress toward the following performance aspirations is realized within the first five years of SJCERA's ten-year vision.

1. The Retirement Plan is at least 80% funded in its progression on its longer-term path to full-funding.
2. The Board's appropriately balanced risk posture supports benefit payments.
3. Retirement Plan actuarial assumptions are reasonable and appropriate.

4. Portfolio costs are prudently managed.
5. SJCERA’s views on environmental, social, and governance (ESG) matters, including diversity, equity, and inclusion, is defined for the organization and investment portfolio.

Key actions to be taken each year to further this Goal are defined through SJCERA’s Annual Action Plan set by the Chief Executive Officer.

GOAL 2

Modernize the operations infrastructure.

Objectives

- A. Implement the Pension Administration System (PAS).
- B. Enhance the member experience.
- C. Improve technology for business operations.
- D. Improve the employer experience.

What will success look like?

SJCERA's approach to delivering on these objectives will be successful if meaningful progress toward the following performance aspirations is realized within the first five years of SJCERA's ten-year vision.

1. SJCERA is known for its self-service innovation, automation, accuracy, and efficiency.
2. The PAS has been successfully implemented; members, employers, and SJCERA staff all embrace and benefit from the PAS.
3. Members and employers enjoyed a professional service experience from SJCERA throughout the transition to the PAS.
4. The disaster recovery and business continuity plan and practices reflect contemporary practices.

5. Appropriate security measures have been implemented and are maintained to industry standards to protect SJCERA confidential information.
6. SJCERA has leveraged online learning and implemented fully automated online benefit and account management tools for members.
7. SJCERA staff is viewed by employer human resources and payroll representatives as a valuable partner and a problem-solver.
8. SJCERA's Board of Retirement, Leadership Team, and staff are proud of their collective achievements.
9. SJCERA's member education and accessible member information results in engaged, educated, and retirement-ready members and satisfied employers.
10. Stakeholder relationships are healthy and productive.

Key actions to be taken each year to further this Goal are defined through SJCERA's Annual Action Plan set by the Chief Executive Officer.

GOAL 3

Align resources and organizational capabilities.

Objectives

- A. Develop and implement a workforce planning process.
- B. Enhance education and development across all levels of the organization.
- C. Implement practices to support Board continuity and evolution.
- D. Create a foundation of performance metrics and measurements.

What will success look like?

SJCERA's approach to delivering on these objectives will be successful if meaningful progress toward the following performance aspirations is realized within the first five years of SJCERA's ten-year vision.

1. The Board maintains its focus at the policy level.
2. The Board's collegial, diverse culture and institutional knowledge is upheld.
3. SJCERA is a vision-centric, focused organization with clear, well-defined goals and objectives.

4. The Leadership Team sets high standards and empowers staff to take ownership of responsibilities in alignment with the SJCERA mission.
5. SJCERA's succession planning efforts create continuity for both the Board and Leadership Team, and personnel changes at all levels are addressed seamlessly.
6. SJCERA's professional staff are adaptable to the changing work environment; they are proud to work at SJCERA.
7. Members, employers, and the County Board of Supervisors understand and value SJCERA's role and benefits.

Key actions to be taken each year to further this Goal are defined through SJCERA's annual action plan set by the Chief Executive Officer.

CONCLUSION

The next five years reflect a pivotal time in SJCERA's journey as a pension administrator. In committing to this five-year Strategic Plan, SJCERA is setting a foundation from which to operate for the next decade and beyond. The Strategic Plan reflects a prudent response to the issues on SCJERA's immediate and near-term horizon.

SJCERA takes pride in the decades of service it has delivered to its members and beneficiaries and is inspired to build upon this history to realize its future vision.

DRAFT



Sample Actions to Consider for Annual Action Plans – Years 2022 - 2026

San Joaquin County Employees' Retirement Association

Overview

The 2022-26 Strategic Plan sets forth the Goals and Objectives to be accomplished to realize a future vision of success for SJCERA. To implement the Strategic Plan, the CEO creates Annual Action Plans in advance of each year. The Annual Action Plans identify specific tasks the organization intends to undertake and accomplish during a given year.

During SJCERA's strategic planning process, specific initiatives were identified by the Board, the Leadership Team, or the Board's consultants as items of interest to be reviewed within the timeframe covered by 2022-2026 Strategic Plan. While they did not rise to the level of a multi-year Goal or Objective, they do reflect a specific action that can or should be taken to accomplish a Goal or Objective.

The initiatives are listed on the following pages underneath the Goal or Objective they represent. These reflect a sample of possible actions that the CEO could schedule to be accomplished through an Annual Action Plan.

Goal 1. Strengthen the long-term financial health of the Retirement Plan.

Strategic Plan Objective	Possible Annual Action Plans for the CEO to Consider
A. Evaluate the appropriateness of actuarial assumptions.	<ul style="list-style-type: none">• Study the appropriateness of key actuarial assumptions.• Understand the impact of COVID on actuarial assumptions.• Consider alternative strategies to create a blended discount rate.
B. Review and confirm or refresh asset allocation.	<ul style="list-style-type: none">• Understand the proper level of risk needed to meet the actuarial assumed rate of return.• Explore different asset classes and investment opportunities.• Review fixed income and other asset classes.• Conduct a pacing study of private markets assets.
C. Determine the future vision for the investment program operating model.	<ul style="list-style-type: none">• Review the staffing model to determine the best way to support SJCERA's asset allocation model and assumptions.• Determine the appropriate use of internal and external management.



Sample Actions to Consider for Annual Action Plans – Years 2022 - 2026

San Joaquin County Employees' Retirement Association

D. Optimize the investment manager lineup.	<ul style="list-style-type: none"> • Conduct a review of current managers and mandates to align with asset allocation. • Conduct a review of investment costs to identify opportunities where costs can be rationalized.
E. Explore alternative approaches to addressing risk through plan design.	<ul style="list-style-type: none"> • Explore the concepts and peer use of contingency reserves, variable benefits, and other benefit structures.
F. Define emerging governance issues.	<ul style="list-style-type: none"> • Study the changing role of ESG risks and opportunities in investment management and codify the Board's consensus view within the Investment Policy Statement. • Define and align SJ-CERA's view of Diversity, Equity and Inclusion across the organization and the investment portfolio. • Review the current position on proxy voting and develop a policy, if necessary.

Goal 2. Modernize the operations infrastructure.

Strategic Plan Objective	Possible Annual Action Plans for the CEO to Consider
A. Implement the Pension Administration System (PAS).	<ul style="list-style-type: none"> • Understand implementation risks and how to best mitigate them. • Select a vendor and implement the Pension Administration System. • Validate data, contributions, payments, and calculations • Implement workflow automation.



Sample Actions to Consider for Annual Action Plans – Years 2022 - 2026

San Joaquin County Employees' Retirement Association

	<ul style="list-style-type: none"> Understand the benefits correction process (should historical errors be uncovered through PAS implementation.)
B. Enhance the member experience.	<ul style="list-style-type: none"> Implement a mixture of service modalities to align to member preferences (e.g., in-person, hybrid, self-service). Automate member education through self-service and improve the digital experience. Communicate with members earlier in their career about retirement planning. Enhance retirement and benefit education materials and offerings for members.
G. Improve technology for business operations.	<ul style="list-style-type: none"> Evaluate and address inefficient business processes before applying technology automation (e.g., annual verification process). Enhance cybersecurity and disaster recovery plans; conduct periodic and regular table-top exercises and testing. Explore opportunities to collaborate with peer systems and leverage work products in support of business operations (e.g., general member educational content about retirement savings, etc.)
H. Improve the employer experience.	<ul style="list-style-type: none"> Partner together to solve technology or data issues. Enhance employer communication and education. Implement a mixture of service modalities to align with employer preferences (e.g., in-person, hybrid, self-service).



Sample Actions to Consider for Annual Action Plans – Years 2022 - 2026

San Joaquin County Employees' Retirement Association

Goal 3. Align resources and organizational capabilities.

Strategic Plan Objective	Possible Annual Action Plans for the CEO to Consider
A. Develop and implement a workforce planning process.	<ul style="list-style-type: none"> • Evaluate SJCERA current and anticipated staffing needs and volume, identify gaps and strategies to close them. • Consider how SJCERA's classification structure enables career development/promotional opportunities. • Understand and leverage insights learned through the pandemic.
B. Enhance education and development across all levels of the organization.	<ul style="list-style-type: none"> • Enhance staff training for new and existing staff, and cross-training. • Train service staff to consistently provide more complete contextual information to promote member understanding.
C. Implement practices to support Board continuity and evolution.	<ul style="list-style-type: none"> • Explore enhancing appointed Trustee qualifications through required training for individuals seeking appointment through the Board of Supervisors to the SJCERA Board. • Enhance Trustee education on the broader set of administrative and investment practices of U.S. and international peers.
D. Create a foundation of performance metrics and measurements.	<ul style="list-style-type: none"> • Identify and align the Board's and Staff's definition of an outstanding service culture. • Identify critical positions and conduct a succession risk assessment. • Establish organization-wide performance metrics and measurements. • Develop and implement an exit interview process of SJCERA staff to gain insights.

Intro to Blockchain

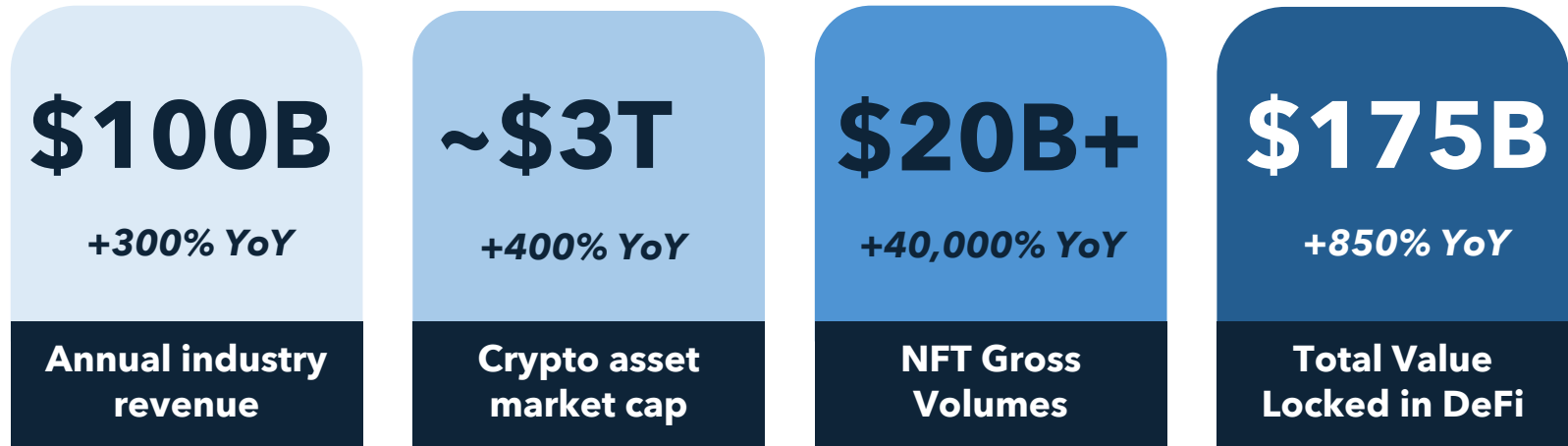
Blockchain Capital
Kinjal Shah

Blockchain Capital

Firm

- Venture capital firm established in 2013 to invest in the emerging Blockchain technology industry
- Industry pioneer; first dedicated blockchain venture fund
- Founded by Bart Stephens and Brad Stephens
 - Worked together for ~20 years as fund managers in both public and private markets
 - Proven track record investing in disruptive technologies
- \$1.5B AUM in 150+ investments across 5 funds
- Robust infrastructure with team of 19, 11 investment professionals
- Extensive domain experience and technical expertise
- Investor base of Institutions and Silicon Valley thought leaders

2021: a mainstream moment



Industry participation from...

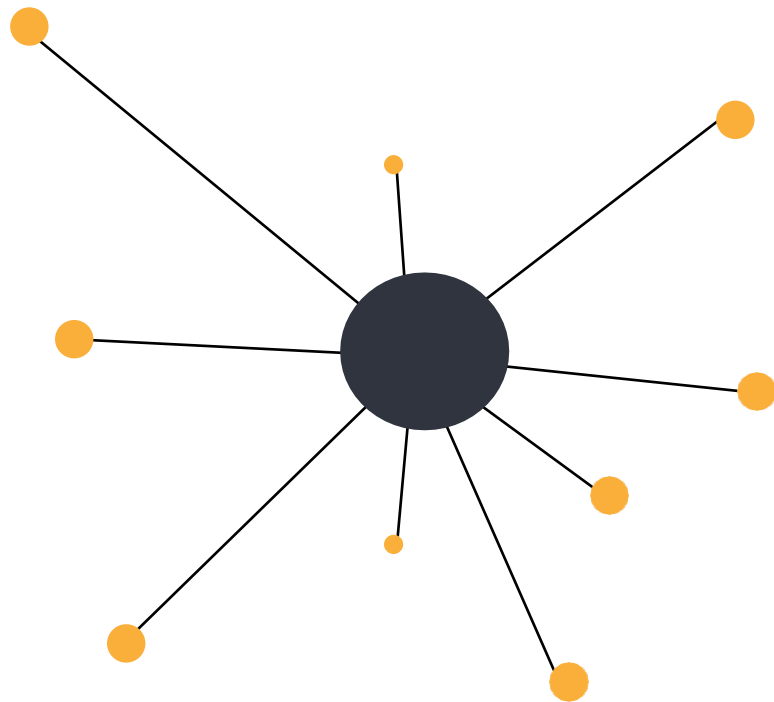


What is blockchain technology?

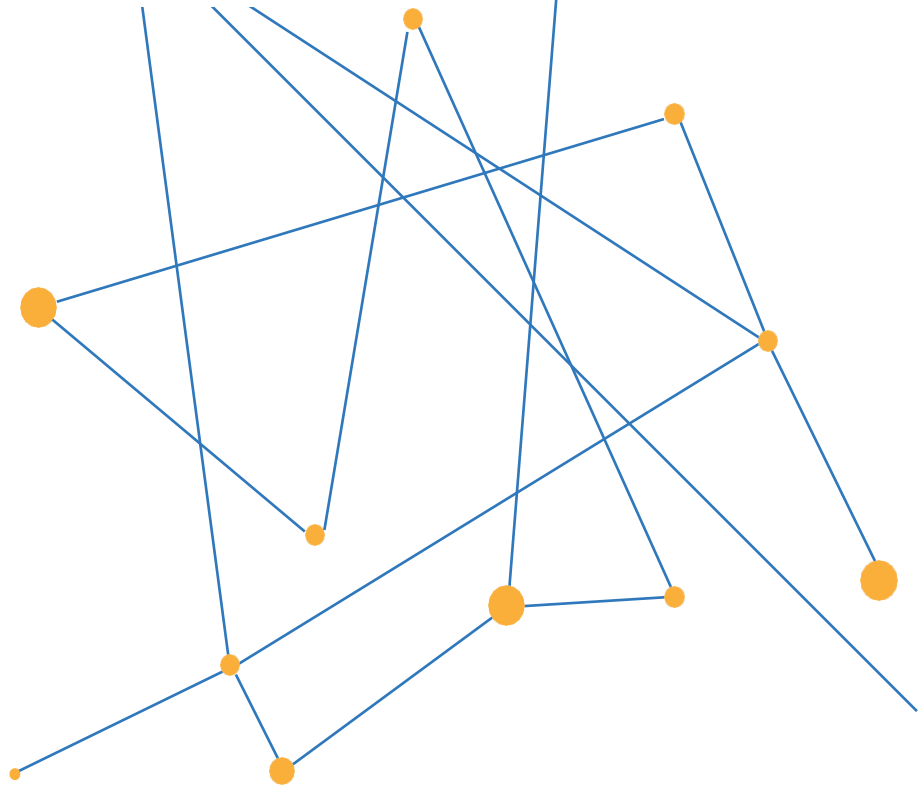
Closed Software
Corporate Owned Networks
Centralized

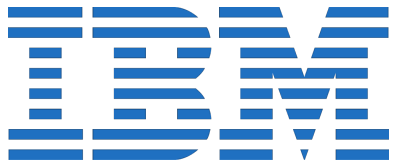


ORACLE®



Open Source Software
User Owned Networks
Decentralized





Distributed Ledger Technology (DLT)



Public Blockchains



Private, permissioned chains

Restricted Access

"Intranet"

Open, permissionless chains

Anyone Can Access

"Internet"

Digital Assets

Tokenized Traditional Assets

Stablecoins

 diem

 USD Coin

 PAXOS

Other Assets (e.g., real estate, art)



Crypto Assets

Crypto Commodities



Smart Contract Platform



DeFi

 UMA

 MAKER

 Compound



Blockchain impacts multiple sectors...



CRYPTO ASSETS



DECENTRALIZED FINANCE



FINANCIAL INFRASTRUCTURE



GAMING



ENTERPRISE SERVICES / DATA



PAYMENTS / COMMERCE



ENERGY



SUPPLY CHAIN



IDENTITY

Transitioning from web2 to web3

FINANCE

SOCIAL

GAMING

MARKETPLACES

INFRASTRUCTURE

 lendingtree



 unity

Etsy

aws

From users to owners





 STARDUST

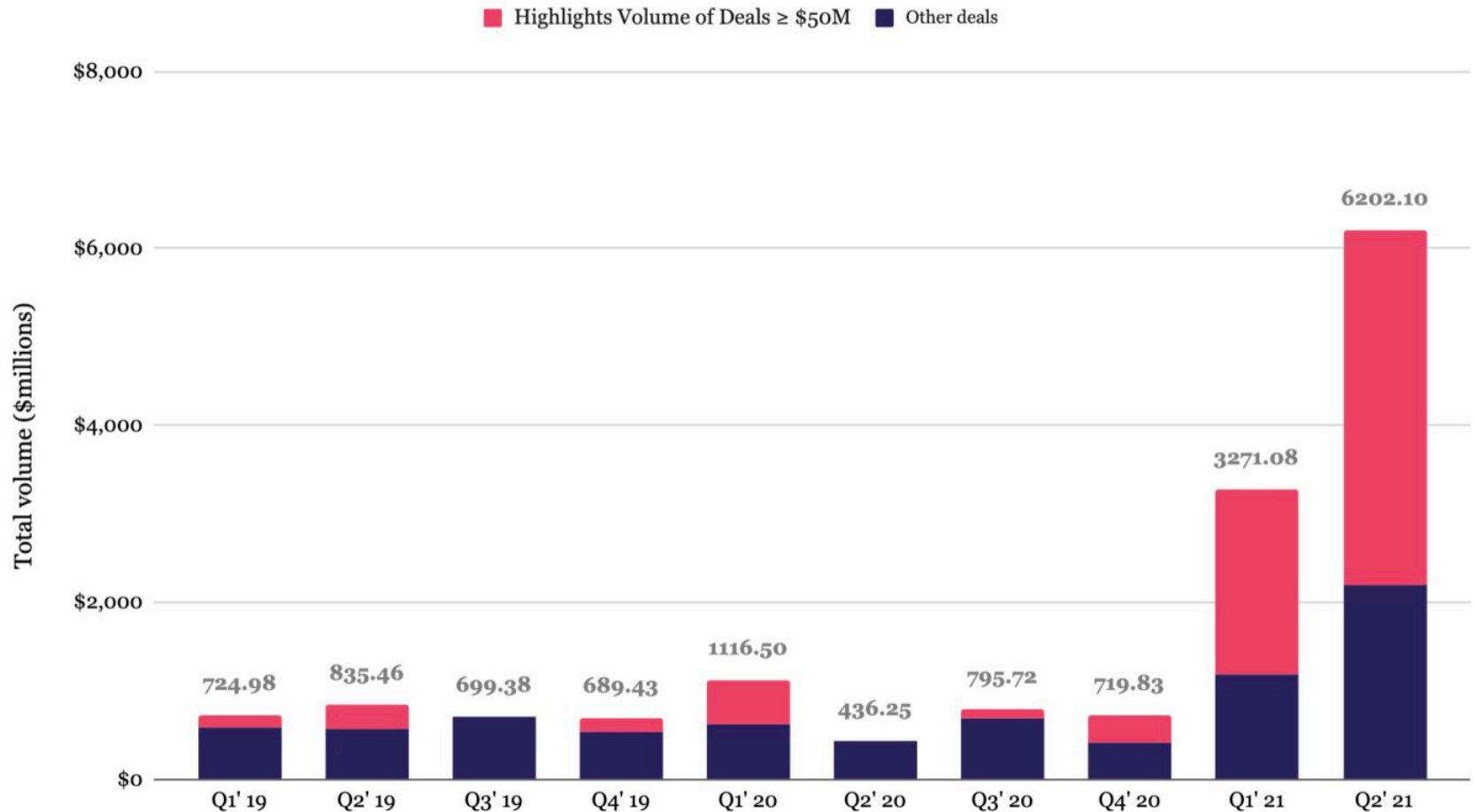
 OpenSea

 ARWEAVE

Crypto venture funding 3x'd YoY

THE BLOCK | Research

Crypto/Blockchain Venture Funding by Quarter: Q1' 19 - Q2' 21



Thank You

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San Joaquin County Employees' Retirement Association (SJCERA)

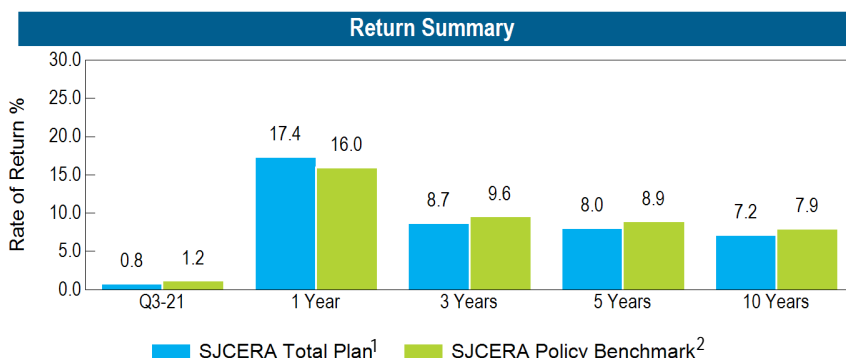
Q3 2021

Quarterly Report

1. Introduction
2. Portfolio Review
3. Real Estate Program
4. Capital Markets Outlook & Risk Metrics
5. The World Markets Third Quarter of 2021
6. Disclaimer, Glossary, and Notes

Introduction

Introduction | As of September 30, 2021



Summary of Cash Flows		
	Third Quarter	One Year
Beginning Market Value	\$3,809,830,770	\$3,244,486,466
Net Cash Flow	-\$508,582	\$23,740,591
Net Investment Change	\$30,653,111	\$571,748,243
Ending Market Value	\$3,839,975,299	\$3,839,975,299

Introduction

The SJCERA Total Portfolio had an aggregate value of \$3.8 billion as of September 30, 2021. During the latest quarter, the Total Portfolio increased in value by \$30.1 million, and over the one-year period, the Total Portfolio increased by \$548.0 million. The increase over the quarter and one-year periods was primarily due to positive investment returns. The IMF is forecasting U.S. growth in 2021 of 6.0% with a quarter-over-quarter (annualized) decrease of 4.7% in the third quarter of 2021 (2.0% growth in 3Q vs. 6.7% in 2Q). The IMF also forecasts global GDP to increase by 5.9% for 2021. Over the last year, global risk assets produced significant returns, largely driven by record fiscal and monetary policy stimulus and positive developments with the efficacy of the COVID-19 vaccine. In the third quarter of 2021, commodities produced strong returns largely driven by inflation proving to be stickier than the initial "transitory" consensus. Shorter-dated rates have been largely unmoved given Fed policy, while longer-dated rates rose slightly in September but remain below their recent peak in March 2021. Equity markets broadly declined in September with the US and China trailing other markets. Gridlock in Washington and continued supply chain issues weighed on US equities while government intervention and Evergrande weighed on markets in China. In the third quarter, the dollar appreciated modestly as US interest rates once again rose.

Returns for US stocks, as measured by the Russell 1000, and US Treasuries, as measured by the Barclays Long US Government bond index, for the third quarter of 2021 were 0.2% and 0.5%, respectively. Commodities were up 6.6% for the quarter, as measured by the Bloomberg Commodity Index and global equity returns, as measured by the MSCI ACWI IMI, were down -1.1% for the quarter ended September 30, 2021.

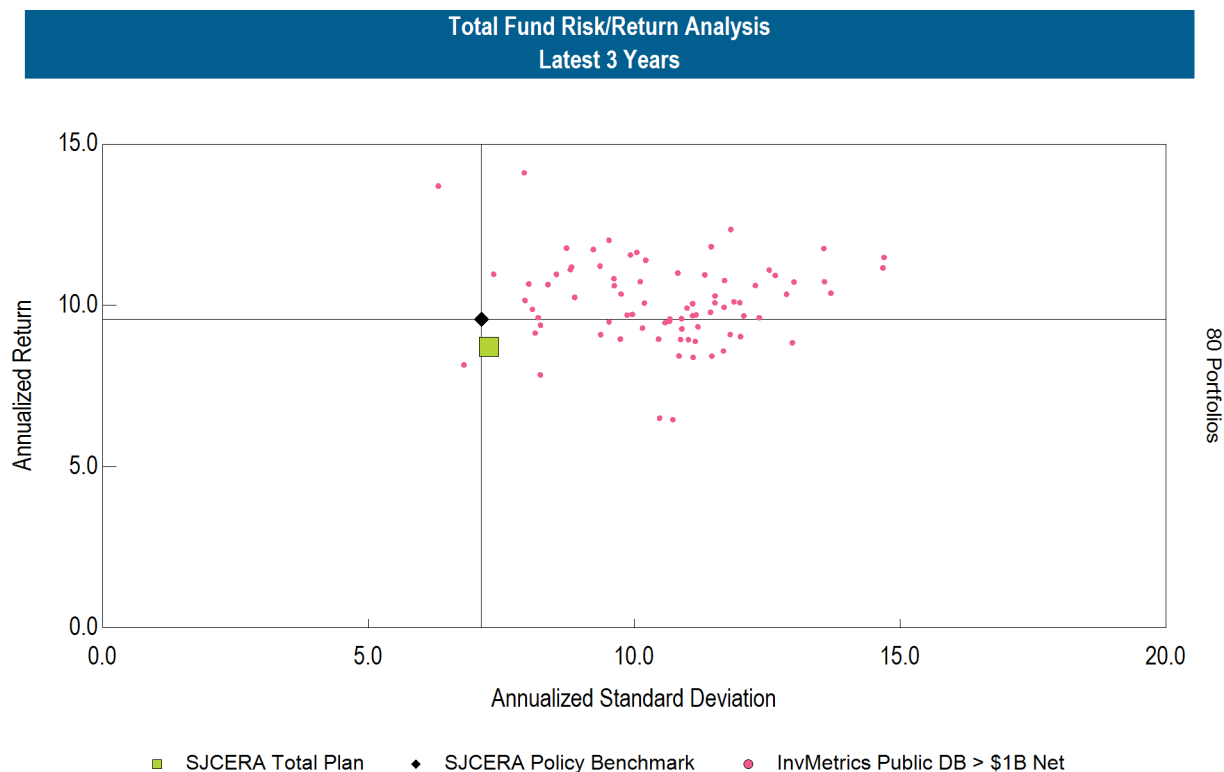
Recent Investment Performance

The Total Portfolio outperformed the policy benchmark for the 1-year period by 1.4% and the Median Public Fund for the quarter by 0.6%. Over the quarter, 3-, 5-, 10-, 15-, 20-, and 25-year periods, the portfolio trailed its benchmark by (0.4%), (0.9%), (0.9%), (0.7%), (1.2%), (0.5%), and (0.2%), respectively, and trailed the Median Public Fund by for the 1-, 3-, 5-, 10-, 15-, 20-, and 25-year periods by (3.8%), (1.4%), (1.9%), (2.4%), (2.1%), (1.1%), and (1.7%), respectively. However, the portfolio earned higher risk adjusted returns, as measured by the Sharpe Ratio, than the Median Public Fund over the 1-, 3-, 5-, and 10-year time periods.

	QTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs	25 Yrs
SJCERA Total Plan - Net	0.8	17.4	8.7	8.0	7.2	4.7	6.2	6.7
SJCERA Total Plan - Gross	0.9	18.0	9.3	8.8	8.0	5.5	6.8	7.2
<i>SJCERA Policy Benchmark</i>	<i>1.2</i>	<i>16.0</i>	<i>9.6</i>	<i>8.9</i>	<i>7.9</i>	<i>5.9</i>	<i>6.7</i>	<i>6.9</i>
Over/Under (vs. Net)	-0.4	1.4	-0.9	-0.9	-0.7	-1.2	-0.5	-0.2
<i>InvMetrics Public DB > \$1B Net Median</i>	<i>0.2</i>	<i>21.2</i>	<i>10.1</i>	<i>9.9</i>	<i>9.6</i>	<i>6.8</i>	<i>7.3</i>	<i>7.4</i>

¹ Investment Metrics Total Fund Public Universe >\$1 Billion, net of fees.

² Policy Benchmark composition is listed in the Appendix.

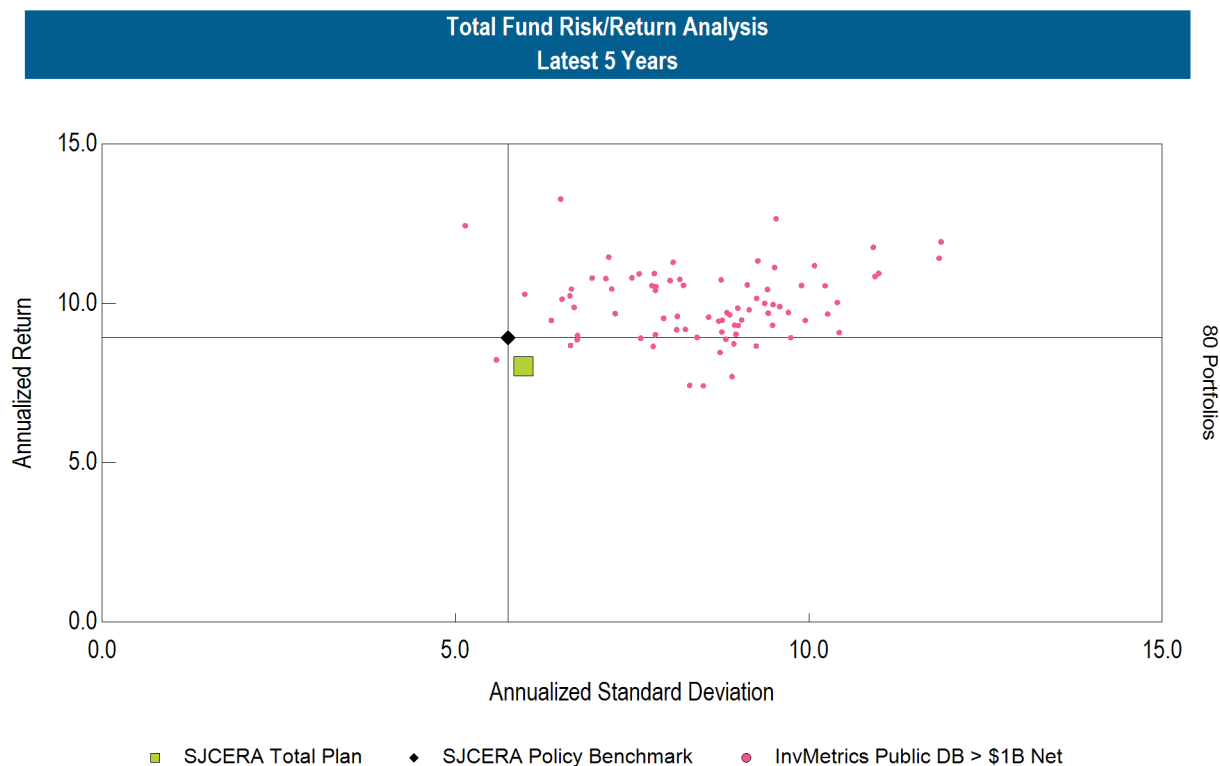


	Anlzd Return ¹	Anlzd Standard Deviation	Sharpe Ratio ²
SJCERA Total Plan	8.71%	7.26%	1.06
SJCERA Policy Benchmark	9.57%	7.13%	1.20
InvMetrics Public DB > \$1B Net Median ³	10.07%	10.77%	0.81

¹Returns are net of fees.

²Computed as annualized return less the risk free rate, divided by the annualized standard deviation.

³Investment Metrics Total Fund Public Universe >\$1 Billion, net of fees.



	Anlzd Return ¹	Anlzd Standard Deviation	Sharpe Ratio ²
SJCERA Total Plan	8.03%	5.96%	1.16
SJCERA Policy Benchmark	8.92%	5.75%	1.36
InvMetrics Public DB > \$1B Net Median ³	9.86%	8.75%	0.98

¹Returns are net of fees.

²Computed as annualized return less the risk free rate, divided by the annualized standard deviation.

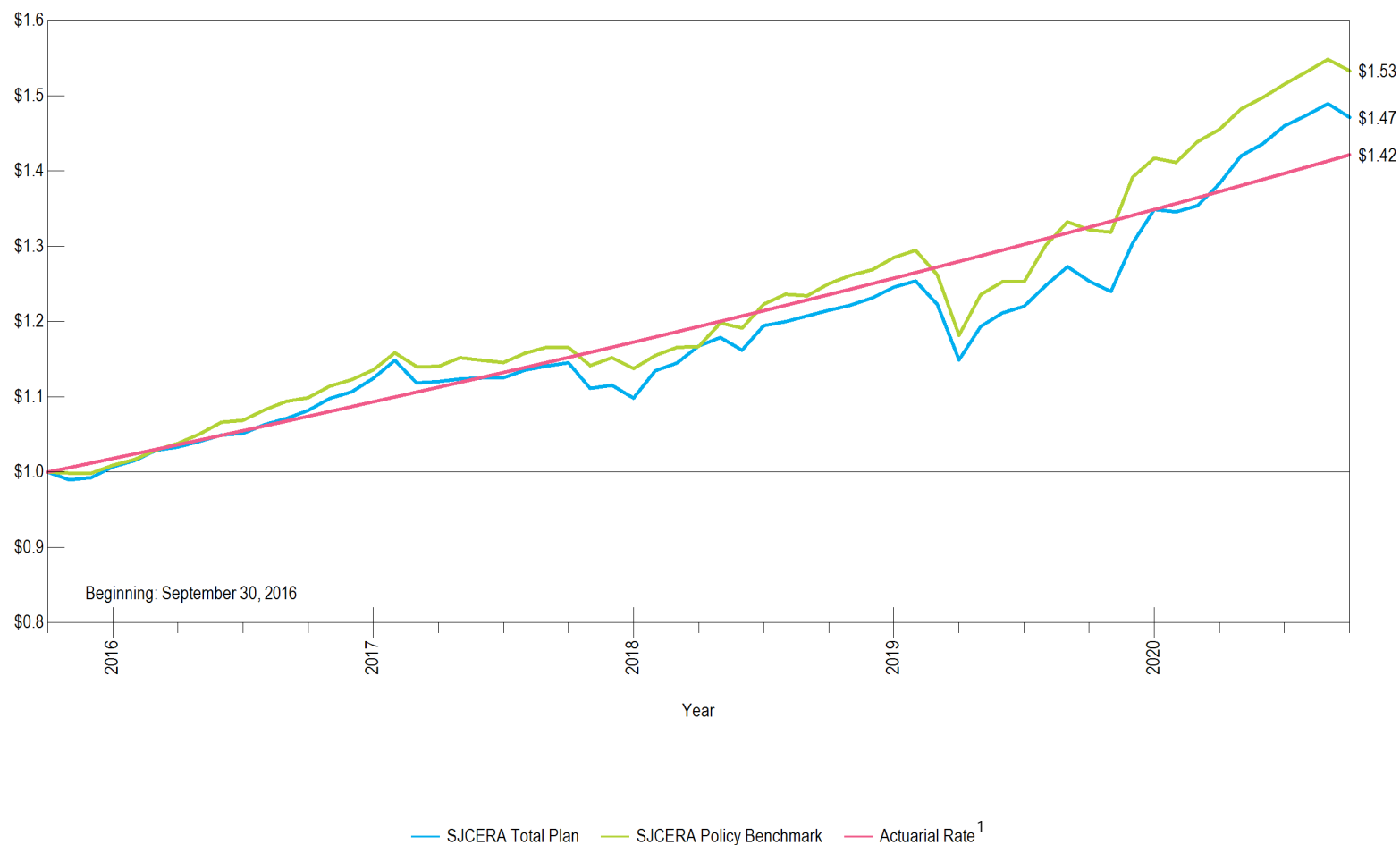
³Investment Metrics Total Fund Public Universe >\$1 Billion, net of fees.

Risk-Adjusted Return vs Peers ²				
	1 Yr	3 Yrs	5 Yrs	10 Yrs
SJCERA Total Plan - Net	17.4	8.7	8.0	7.2
Risk Adjusted Median ¹	17.1	6.8	6.7	7.0
Excess Return	0.3	1.9	1.3	0.1

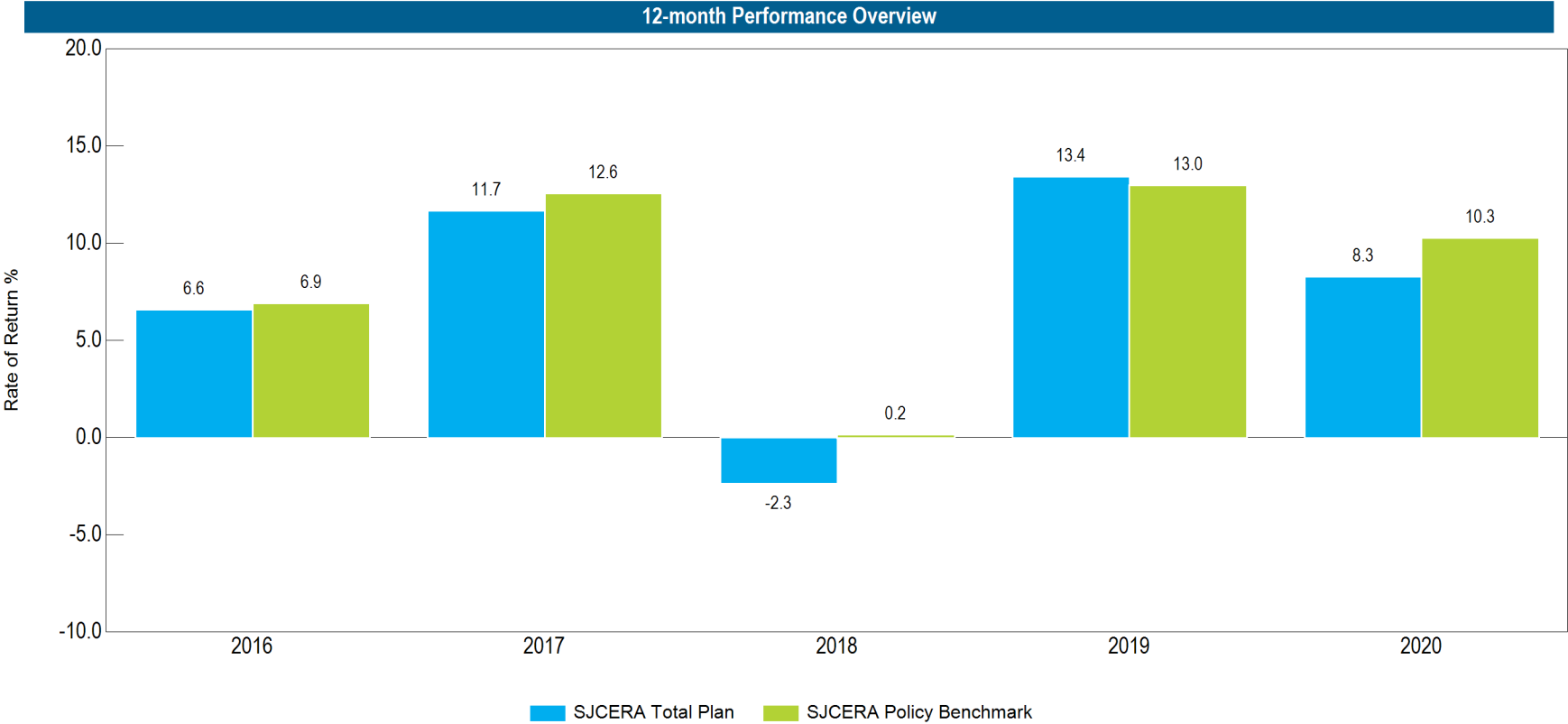
¹ Investment Metrics Total Fund Public Universe >\$1 Billion, net of fees.

² Policy Benchmark composition is listed in the Appendix.

Growth of a Dollar - Latest 5 Years



¹7.0% Actuarial Rate from 1/1/2020 to present. 7.25% Actuarial Rate from 1/1/2018 to 12/31/2019. 7.4% Actuarial Rate from 8/1/2016-12/31/2017. 7.5% Actuarial Rate from 1/1/2012-7/31/2016; previously 8.0%



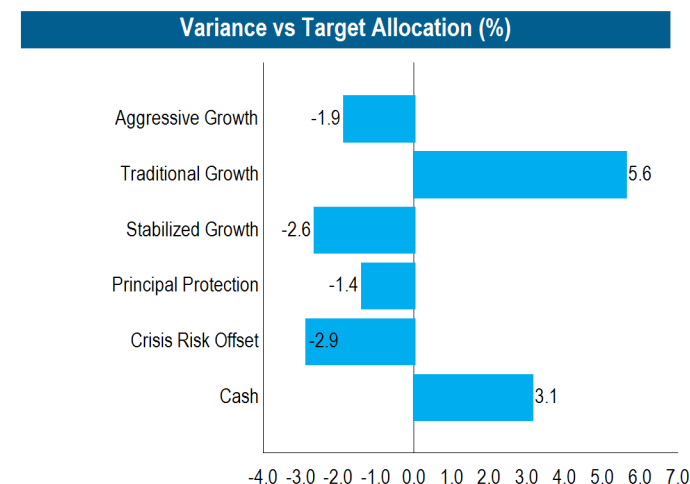
12-month absolute results have been positive over four of the last five calendar year periods, net of fees. The SJCERA Total Portfolio outperformed the policy target benchmark during one of these five periods, net of fees.

Portfolio Review

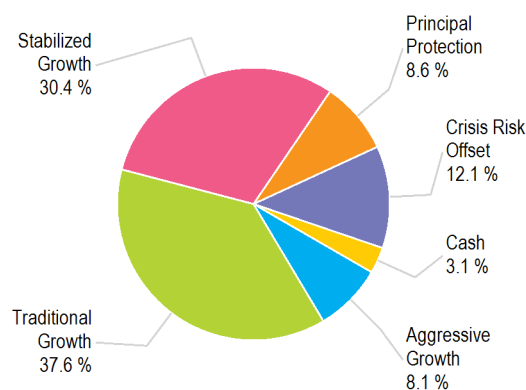
Asset Allocation | As of September 30, 2021

Asset Allocation vs. Target				
	Current ¹	Current	Policy	Difference*
Broad Growth	\$2,922,964,254	76.1%	75.0%	1.1%
Aggressive Growth	\$312,731,062	8.1%	10.0%	-1.9%
Traditional Growth	\$1,443,914,059	37.6%	32.0%	5.6%
Stabilized Growth	\$1,166,319,133	30.4%	33.0%	-2.6%
Diversified Growth	\$797,235,011	20.8%	25.0%	-4.2%
Principal Protection	\$331,131,423	8.6%	10.0%	-1.4%
Crisis Risk Offset	\$466,103,587	12.1%	15.0%	-2.9%
Cash²	\$119,776,035	3.1%	0.0%	3.1%
Cash	\$119,776,035	3.1%	0.0%	3.1%
Total	\$3,839,975,299	100.0%	100.0%	

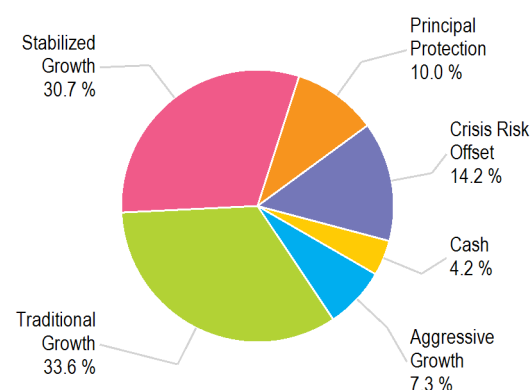
*Difference between Policy and Current Allocation



As of September 30, 2021



As of September 30, 2020



¹ Market values may not add up due to rounding.

² Cash asset allocation includes Parametric Overlay.

Asset Class Performance Net-of-Fees | As of September 30, 2021

	Market Value ¹ (\$)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
SJCERA Total Plan	3,839,975,299	100.0	0.8	17.4	8.7	8.0	7.2
<i>SJCERA Policy Benchmark²</i>			<i>1.2</i>	<i>16.0</i>	<i>9.6</i>	<i>8.9</i>	<i>7.9</i>
Broad Growth	2,922,964,254	76.1	1.0	23.0	9.9	9.9	8.6
Aggressive Growth Lag	312,731,062	8.1	8.2	37.8	14.5	13.6	11.6
<i>Aggressive Growth Blend³</i>			<i>6.0</i>	<i>29.5</i>	<i>12.7</i>	<i>11.2</i>	<i>10.1</i>
Traditional Growth	1,443,914,059	37.6	-0.6	30.3	10.1	11.9	11.2
<i>MSCI ACWI IMI Net</i>			<i>-1.1</i>	<i>28.9</i>	<i>13.5</i>	<i>14.0</i>	<i>12.6</i>
Stabilized Growth	1,166,319,133	30.4	1.3	11.6	8.3	6.9	4.5
<i>SJCERA Stabilized Growth Benchmark</i>			<i>0.5</i>	<i>2.5</i>	<i>1.8</i>	<i>1.9</i>	<i>2.1</i>
Diversifying Strategies	797,235,011	20.8	0.2	1.4	4.4	2.6	4.0
Principal Protection	331,131,423	8.6	0.2	2.2	3.9	3.3	4.4
<i>Bloomberg US Aggregate TR</i>			<i>0.1</i>	<i>-0.9</i>	<i>5.4</i>	<i>2.9</i>	<i>3.0</i>
Crisis Risk Offset Asset Class	466,103,587	12.1	0.2	0.8	4.5	2.1	4.3
<i>CRO Benchmark⁴</i>			<i>1.3</i>	<i>3.1</i>	<i>6.9</i>	<i>3.7</i>	<i>4.5</i>
Cash and Misc Asset Class	70,467,083	1.8	0.0	0.1	0.9	0.9	0.5
<i>ICE BofA 91 Days T-Bills TR</i>			<i>0.0</i>	<i>0.1</i>	<i>1.2</i>	<i>1.2</i>	<i>0.6</i>

¹ Market values may not add up due to rounding.

² Policy Benchmark composition is listed in the Appendix.

³ Aggressive Growth Blend; footnote should be 50% MSCI ACWI +2% Lag, 50% NCREIF ODCE + 1% ** Add 4 - Stabilized Growth Benchmark; footnote should be 10% ICE 3 month US TBill + 4%, 17% 50% BB High Yield/50% S&P Lev Loans, 6% NCREIF ODCE + 1% Lag

⁴ (1/3) BC Long Duration Treasuries, (1/3) BTOP50 Index, (1/3) 5% Annual.

Asset Class Performance Net-of-Fees | As of September 30, 2021

	Market Value ¹ (\$)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Aggressive Growth Lag²	312,731,062	100.0	8.2	37.8	14.5	13.6	11.6
<i>Aggressive Growth Blend</i>			6.0	29.5	12.7	11.2	10.1
Blackrock Global Energy and Power Lag ²	19,582,066	6.3	1.6	4.6	--	--	--
<i>MSCI ACWI +2% Blend</i>			8.0	42.6	--	--	--
Morgan Creek III Lag ²	8,096,284	2.6	-0.8	13.0	-5.6	2.5	--
<i>MSCI ACWI +2% Blend</i>			8.0	42.6	16.4	13.4	--
Morgan Creek V Lag ²	9,453,588	3.0	3.8	29.7	13.6	12.6	--
<i>MSCI ACWI +2% Blend</i>			8.0	42.6	16.4	13.4	--
Morgan Creek VI Lag ²	26,703,319	8.5	12.3	43.6	21.4	18.1	--
<i>MSCI ACWI +2% Blend</i>			8.0	42.6	16.4	13.4	--
Ocean Avenue II Lag ²	36,204,179	11.6	10.7	99.9	30.5	28.6	--
<i>MSCI ACWI +2% Blend</i>			8.0	42.6	16.4	13.4	--
Ocean Avenue III Lag ²	59,100,795	18.9	6.9	39.1	24.6	24.9	--
<i>MSCI ACWI +2% Blend</i>			8.0	42.6	16.4	13.4	--
Ocean Avenue IV Lag ²	35,617,418	11.4	8.8	48.7	--	--	--
<i>MSCI ACWI +2% Lag</i>			8.0	42.6	--	--	--
Non-Core Real Assets Lag ^{2,3}	113,067,213	36.2	10.4	24.9	7.3	7.1	8.6
<i>NCREIF ODCE +1% lag (blend)</i>			3.9	8.2	5.6	6.7	9.6
Stellax Capital Partners II Lag ²	4,906,200	1.6	--	--	--	--	--
<i>MSCI ACWI +2% Lag</i>			--	--	--	--	--

¹Market values may not add up due to rounding.

²Lagged 1 quarter.

³Trailing Non-Core real estate performance includes returns provided by prior real estate consultant from inception through Q419.

Aggressive Growth

During the latest three-month period ending September 30, 2021, three of SJCERA's seven aggressive growth portfolios outperformed their MSCI ACWI +2% Blended benchmark. Non-core real assets also outperformed. Please note that returns data for this asset class are lagged one quarter and the benchmark returned 42.6% for the trailing 1-year period.

BlackRock Global Energy and Power, a recently added fund with a focus on infrastructure, underperformed its target benchmark over the quarter and 1-year periods by (6.4%) and (38.0%), respectively.

Morgan Creek III produced a quarterly return of (0.8%), underperforming its benchmark by (8.8%). The manager also underperformed the benchmark over the 1-, 3- and 5-year periods by (29.6%), (22.0%) and (10.9%), respectively.

Morgan Creek V underperformed its benchmark over the quarter, 1-, 3- and 5-year periods by (4.2%), (12.9%), (2.8%) and (0.8%), respectively.

Morgan Creek VI outperformed for the quarter, 1-, 3- and 5-year periods by 4.3%, 1.0%, 5.0% and 4.7%, respectively.

Ocean Avenue II, a Private Equity Buyout fund-of-funds manager, outperformed its benchmark for the quarter, 1-, 3- and 5-year periods by 4.7%, 47.9%, 14.1% and 15.2%, respectively.

Ocean Avenue III, a Private Equity Buyout fund-of-funds manager, trailed its benchmark for the quarter and 1-year periods by (1.1%) and (2.5%), respectively. It outperformed for the 3- and 5-year periods by 8.2% and 11.5%, respectively.

Ocean Avenue IV outperformed its benchmark for the quarter and 1-year time periods by 0.8% and 6.1%, respectively.

Non-Core Private Real Assets underperformed its NCREIF ODCE +1% benchmark over the 10-year period by (1.0%). The sub-asset class outperformed its benchmark over the quarter, 1-, 3- and 5-year time periods by 6.5%, 16.7%, 1.7% and 0.4%, respectively.

Stellex II, the newest manager in the asset class, was funded during the quarter and does not have returns data.

Asset Class Performance Net-of-Fees | As of September 30, 2021

	Market Value ¹ (\$)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Traditional Growth	1,443,914,059	100.0	-0.6	30.3	10.1	11.9	11.2
<i>MSCI ACWI IMI Net</i>			<i>-1.1</i>	<i>28.9</i>	<i>13.5</i>	<i>14.0</i>	<i>12.6</i>
SJCERA Transition	3,324	0.0					
Northern Trust MSCI World	1,252,070,583	86.7	-0.2	30.4	--	--	--
<i>MSCI World IMI Net USD</i>			<i>-0.2</i>	<i>30.1</i>	<i>--</i>	<i>--</i>	<i>--</i>
PIMCO RAE Emerging Markets	78,767,232	5.5	-3.9	46.6	7.7	9.3	6.2
<i>MSCI Emerging Markets Gross</i>			<i>-8.0</i>	<i>18.6</i>	<i>9.0</i>	<i>9.6</i>	<i>6.5</i>
GQG Active Emerging Markets	65,201,766	4.5	-5.2	14.4	--	--	--
<i>MSCI Emerging Markets</i>			<i>-8.1</i>	<i>18.2</i>	<i>--</i>	<i>--</i>	<i>--</i>
Invesco REIT	47,871,153	3.3	0.8	28.5	9.9	7.3	11.1
<i>FTSE NAREIT Equity REIT</i>			<i>1.0</i>	<i>37.4</i>	<i>10.0</i>	<i>6.8</i>	<i>11.3</i>

¹Market values may not add up due to rounding.

Traditional Growth

During the latest three-month period ending September 30, 2021, the traditional growth asset class outperformed its MSCI ACWI IMI benchmark by 0.5% with all four managers matching or outperforming their benchmarks.

Northern Trust MSCI World, the Plan's new Passive Global Equity manager, matched its benchmark over the past quarter and outperformed it by 0.3% over the trailing 1-year period.

PIMCO RAE Fundamental - Emerging, one of SJCERA's Active Emerging Markets Equity manager, outperformed its MSCI Emerging Markets Index benchmark over the quarter and 1-year time periods by 4.1% and 28.0%, respectively, and underperformed its benchmark over the 3-, 5- and 10-year periods by (1.3%), (0.3%) and (0.3%), respectively.

GQG, the Plan's new Active Emerging Markets Equity manager, was opened during the third quarter of 2020. It outperformed its MSCI Emerging Markets benchmark by 2.9% for the quarter and underperformed by (3.8%) for the trailing 1-year period.

Invesco, the Plan's Core US REIT manager, underperformed the FTSE NAREIT Equity REIT Index for the quarter, 1-, 3- and 10-year periods by (0.2%), (8.9%), (0.1%) and (0.2%) respectively, and outperformed its benchmark over the 5-year period by 0.5%.

Asset Class Performance Net-of-Fees | As of September 30, 2021

	Market Value ¹ (\$)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Stabilized Growth	1,166,319,133	100.0	1.3	11.6	8.3	6.9	4.5
<i>SJCERA Stabilized Growth Benchmark²</i>			<i>0.5</i>	<i>2.5</i>	<i>1.8</i>	<i>1.9</i>	<i>2.1</i>
Risk Parity Asset Class	435,017,455	37.3	0.6	15.8	10.7	7.6	3.6
<i>ICE BofAML 3mo US TBill+4%</i>			<i>1.0</i>	<i>4.1</i>	<i>5.2</i>	<i>5.2</i>	<i>4.7</i>
Bridgewater All Weather	213,248,121	18.3	1.1	15.9	9.3	7.4	--
<i>Bridgewater All Weather (blend)</i>			<i>1.0</i>	<i>4.1</i>	<i>5.2</i>	<i>5.2</i>	--
PanAgora Diversified Risk Multi Asset	221,769,334	19.0	0.1	15.7	12.0	7.9	--
<i>ICE BofAML 3mo US TBill+4%</i>			<i>1.0</i>	<i>4.1</i>	<i>5.2</i>	<i>5.2</i>	--
Liquid Credit	237,148,539	20.3	0.2	7.5	4.2	4.1	4.0
<i>50% Bloomberg US HY/50% S&P LSTA Lev Loan</i>			<i>1.0</i>	<i>9.8</i>	<i>5.5</i>	<i>5.6</i>	<i>6.2</i>
Neuberger Berman	106,503,310	9.1	0.3	8.1	--	--	--
<i>33% ICEBofAMLUSHY /33%JPMEMBI Global Div /33% S&P LSTA LevLoan</i>			<i>0.4</i>	<i>8.0</i>	--	--	--
Stone Harbor Absolute Return	130,645,229	11.2	0.2	7.0	3.7	3.6	3.7
<i>ICE BofA-ML LIBOR</i>			<i>0.0</i>	<i>0.2</i>	<i>1.5</i>	<i>1.4</i>	<i>0.9</i>
Private Credit Lag	319,638,267	27.4	1.7	8.2	3.3	3.2	4.4
<i>Custom Credit Benchmark</i>			<i>2.1</i>	<i>13.5</i>	<i>5.9</i>	<i>6.2</i>	<i>5.5</i>
Blackrock Direct Lending Lag	37,377,435	3.2	0.9	10.4	--	--	--
<i>CPI + 6% BLK Blend</i>			<i>4.1</i>	<i>14.6</i>	--	--	--
Crestline Opportunity II Lag	20,377,954	1.7	5.1	15.5	1.0	4.4	--
<i>Credit Blend CPI +6%</i>			<i>4.1</i>	<i>11.7</i>	<i>8.7</i>	<i>8.9</i>	--
Davidson Kempner Long-Term Distressed Opportunities Fund V, L.P. Lag	24,176,345	2.1	5.4	--	--	--	--
<i>Credit Blend CPI +6%</i>			<i>4.1</i>	--	--	--	--

¹ Market values may not add up due to rounding.

² Stabilized Growth Benchmark Change to: 10% ICE 3 month US TBill + 4%, 17% 50% BB High Yield/50% S&P Lev Loans, 6% NCREIF ODCE + 1% Lag

Asset Class Performance Net-of-Fees | As of September 30, 2021

	Market Value ¹ (\$)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
HPS European Asset Value II, LP Lag	18,601,819	1.6	1.3	14.7	--	--	--
<i>Credit Blend CPI +6%</i>			4.1	11.7	--	--	--
Medley Opportunity II Lag	10,229,923	0.9	0.1	0.8	-10.5	-6.5	--
<i>Credit Blend CPI +6%</i>			4.1	11.7	8.7	8.9	--
Mesa West III Lag	36,476	0.0	3.7	-8.2	-0.7	3.4	--
<i>Credit Blend CPI +6%</i>			4.1	11.7	8.7	8.9	--
Mesa West IV Lag	29,344,469	2.5	1.9	6.6	7.6	--	--
<i>Credit Blend CPI +6%</i>			4.1	11.7	8.7	--	--
Oaktree Middle-Market Direct Lending Lag	31,908,345	2.7	2.9	18.4	14.3	--	--
<i>CPI + 6% Oaktree Blend</i>			4.1	18.6	10.4	--	--
Raven Opportunity II Lag	9,331,766	0.8	-4.5	-2.5	-5.4	-4.3	--
<i>Credit Blend CPI +6%</i>			4.1	11.7	8.7	8.9	--
Raven Opportunity III Lag	48,132,680	4.1	1.8	10.1	6.9	4.3	--
<i>Credit Blend CPI +6%</i>			4.1	11.7	8.7	8.9	--
White Oak Summit Peer Lag	41,619,121	3.6	0.7	5.9	5.8	6.9	--
<i>Credit Blend CPI +6%</i>			4.1	11.7	8.7	8.9	--
White Oak Yield Spectrum Master V Lag	48,501,934	4.2	0.5	3.3	--	--	--
<i>Credit Blend CPI +6%</i>			4.1	11.7	--	--	--
Private Core Real Assets Lag	174,514,873	15.0	3.6	13.3	9.5	10.4	12.7
<i>NCREIF ODCE +1% lag (blend)</i> ²			3.9	8.2	5.6	6.7	9.6

¹Market values may not add up due to rounding.

²NCREIF ODCE Net + 1% 10/1/2012-present. NCREIF Property Index previously.

Stabilized Growth

During the latest three-month period ending September 30, 2021, four of SJCERA's sixteen Stabilized Growth managers outperformed their benchmarks while the other twelve managers underperformed. Several managers in this asset class are in the process of investing capital and may underperform as assets are invested (typically known as the J-curve effect). Also, private core real assets outperformed its benchmark for the quarter.

Bridgewater All Weather, one of the Plan's Risk Parity managers, outperformed its benchmark over the quarter, 1-, 3- and 5-year periods by 0.1%, 11.8%, 4.1% and 2.2%, respectively.

PanAgora DRMA, one of the Plan's Risk Parity managers, underperformed its T-Bill +4% benchmark over the quarter by (0.9%) but outperformed its benchmark over the trailing 1-, 3- and 5-year periods by 11.6%, 6.8% and 2.7%, respectively.

Neuberger Berman, one of the Plan's Liquid Credit managers, underperformed its benchmark for the quarter by (0.1%) and outperformed for the 1-year period by 0.1%.

Stone Harbor, the Plan's Absolute Return Fixed Income manager, outperformed the ICE BofAML LIBOR index over the quarter, 1-, 3-, 5- and 10-year periods by 0.2%, 6.8%, 2.2%, 2.2% and 2.8%, respectively.

BlackRock Direct Lending, one of the Plan's newer Private Credit manager, underperformed its CPI +6% benchmark by for the quarter and 1-year periods (3.2%) and (4.2%), respectively.

Crestline Opportunity II, the Plan's Credit, Niche Alternatives and Hedge Fund Secondaries manager, trailed its benchmark over the 3- and 5-year periods by (6.7%) and (4.5%), respectively, but outperformed for the quarter and 1-year periods by 1.0% and 3.8%, respectively.

Davidson Kempner, the Plan's newest Private Credit manager, was opened during the fourth quarter of 2020 and outperformed its CPI +6% annual benchmark by 1.3% over the past quarter.

HPS EU, one of the Plan's newer Direct Lending manager, was opened during the third quarter of 2020 and outperformed its CPI +6% benchmark for the 1-year period by 3.0% but underperformed for the quarter by (2.8%).

Stabilized Growth (Continued)

Medley Opportunity II, one of the Plan's Direct Lending managers, underperformed its CPI +6% annual return target over the quarter, 1-, 3- and 5-year time periods by (4.0%), (10.3%), (19.2%) and (15.4%), respectively.

Mesa West RE Income III, one of the Plan's Commercial Mortgage managers, produced a positive quarterly return of 3.7%, underperforming its CPI +6% annual benchmark by (0.4%). It also underperformed its benchmark over the 1-, 3- and 5-year periods by (19.9%), (9.4%) and (5.5%), respectively.

Mesa West RE Income IV, one of the Plan's Commercial Mortgage managers, produced a quarterly return of 1.9%, underperforming its CPI +6% annual benchmark by (2.2%). Over the 1- and 3-year periods, the fund underperformed its benchmark by (5.1%) and (1.1%), respectively.

Oaktree, a Middle-Market Direct Lending manager, underperformed its MSCI ACWI +2% Blended benchmark for the quarter and 1-year time periods by (1.2%) and (0.2%), respectively, and outperformed over the 1-year period by 3.9%.

Raven Capital II, one of the Plan's Direct Lending managers, produced a negative quarterly return of (4.5%) and trailed its target over the quarter, 1-, 3- and 5-year periods by (8.6%), (14.2%), (14.1%) and (13.2%), respectively.

Raven Capital III underperformed its CPI +6% annual target over the quarter, 1-, 3- and 5-year periods by (2.3%), (1.6%), (1.8%), and (4.6%), respectively.

White Oak Summit Peer, one of the Plan's Direct Lending managers, underperformed its CPI +6% index over the quarter, 1-, 3- and 5-year periods by (3.4%), (5.8%), (2.9%) and (3.0%), respectively.

White Oak Yield Spectrum Master V trailed its CPI +6% benchmark over both the quarter and 1-year periods by (3.6%) and (8.4%), respectively.

Private Core Private Real Estate, investing in Core Real Assets, outperformed its NCREIF ODCE +1% benchmark over the trailing 1-, 3-, 5- and 10-year time periods by 5.1%, 3.9%, 3.7% and 3.1%, respectively, but underperformed for the quarter by (0.3%).

Asset Class Performance Net-of-Fees | As of September 30, 2021

	Market Value ¹ (\$)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Principal Protection	331,131,423	100.0	0.2	2.2	3.9	3.3	4.4
<i>Bloomberg US Aggregate TR</i>			<i>0.1</i>	<i>-0.9</i>	<i>5.4</i>	<i>2.9</i>	<i>3.0</i>
Dodge & Cox Fixed Income	217,414,749	65.7	0.1	2.0	6.3	4.4	4.6
<i>Bloomberg US Aggregate TR</i>			<i>0.1</i>	<i>-0.9</i>	<i>5.4</i>	<i>2.9</i>	<i>3.0</i>
DoubleLine	113,716,674	34.3	0.4	2.8	4.4	3.5	--
<i>Bloomberg US Aggregate TR</i>			<i>0.1</i>	<i>-0.9</i>	<i>5.4</i>	<i>2.9</i>	<i>--</i>

¹Market values may not add up due to rounding.

Principal Protection

During the latest three-month period ending September 30, 2021, both of SJCERA's Principal Protection managers matched or exceeded their Bloomberg US Aggregate Index benchmark.

Dodge & Cox, the Plan's Core Fixed Income manager, earned a quarterly return of 0.1%, matching its benchmark and outperformed over the 1-, 3-, 5- and 10-year periods by 2.9%, 0.9%, 1.5%, and 1.6%, respectively.

DoubleLine, the Plan's Mortgage-Backed Securities manager, provided a quarterly return of 0.4%, outperforming its benchmark by 0.3%. The manager also outperformed its benchmark over the 1- and 5-year time periods by 3.7% and 0.6%, respectively, but underperformed its benchmark over the 3-year time period by (1.0%).

Asset Class Performance Net-of-Fees | As of September 30, 2021

	Market Value ¹ (\$)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Crisis Risk Offset Asset Class	466,103,587	100.0	0.2	0.8	4.5	2.1	4.3
<i>CRO Benchmark²</i>			<i>1.3</i>	<i>3.1</i>	<i>6.9</i>	<i>3.7</i>	<i>4.5</i>
Long Duration	151,953,242	32.6	0.4	-9.4	8.8	3.1	--
<i>Bloomberg US Treasury Long TR</i>			<i>0.5</i>	<i>-10.3</i>	<i>9.2</i>	<i>3.3</i>	<i>--</i>
Dodge & Cox Long Duration	151,953,242	32.6	0.4	-9.4	8.8	3.1	--
<i>Bloomberg US Treasury Long TR</i>			<i>0.5</i>	<i>-10.3</i>	<i>9.2</i>	<i>3.3</i>	<i>--</i>
Systematic Trend Following	189,271,619	40.6	-1.1	23.0	4.3	0.0	5.3
<i>BTOP 50 (blend)</i>			<i>2.2</i>	<i>15.5</i>	<i>6.0</i>	<i>2.4</i>	<i>3.5</i>
Graham Tactical Trend	90,095,240	19.3	-2.3	12.8	3.3	0.8	--
<i>SG Trend</i>			<i>2.9</i>	<i>19.9</i>	<i>6.8</i>	<i>3.1</i>	<i>--</i>
Mount Lucas	99,176,379	21.3	0.0	34.1	5.0	-1.3	4.7
<i>BTOP 50 (blend)</i>			<i>2.2</i>	<i>15.5</i>	<i>6.0</i>	<i>2.4</i>	<i>3.5</i>
Alternative Risk Premium	124,878,727	26.8	1.9	-11.3	-1.5	1.2	1.3
<i>5% Annual (blend)</i>			<i>1.2</i>	<i>5.0</i>	<i>5.0</i>	<i>5.0</i>	<i>7.5</i>
AQR Style Premia	29,330,745	6.3	2.2	15.4	-9.6	-4.6	--
<i>5% Annual</i>			<i>1.2</i>	<i>5.0</i>	<i>5.0</i>	<i>5.0</i>	<i>--</i>
Lombard Odier	59,993,117	12.9	0.1	-10.8	--	--	--
<i>5% Annual</i>			<i>1.2</i>	<i>5.0</i>	<i>--</i>	<i>--</i>	<i>--</i>
P/E Diversified Global Macro	35,554,865	7.6	5.1	-26.2	-3.7	-1.7	--
<i>5% Annual</i>			<i>1.2</i>	<i>5.0</i>	<i>5.0</i>	<i>5.0</i>	<i>--</i>

¹ Market values may not add up due to rounding.

² (1/3) BB Long Duration Treasuries, (1/3) BTOP50 Index, (1/3) 5% Annual.

Crisis Risk Offset

During the latest three-month period ending September 30, 2021, two of SJCERA's six Crisis Risk Offset managers outperformed their respective benchmarks.

Dodge & Cox Long Duration produced a quarterly return of 0.4%, underperforming the Bloomberg US Long Duration Treasuries by (0.1%). The manager outperformed the benchmark over the 1-year time period by 0.9% but underperformed its over the 3- and 5-year periods by (0.4%) and (0.2%), respectively.

Graham, one of the Plan's Systematic Trend Following managers, had a negative quarterly return of (2.3%), underperforming the SG Trend Index by (5.2%). The fund also underperformed its benchmark over the trailing 1-, 3- and 5-year periods by (7.1%), (3.5%), and (2.3%), respectively.

Mount Lucas, one of the Plan's Systematic Trend Following managers, produced flat quarterly returns, underperforming the Barclays BTOP 50 Index by (2.2%). The fund led its benchmark over the 1- and 10-year periods by 18.6% and 1.2%, respectively, but underperformed for the 3- and 5-year periods by (1.0%) and (3.7%), respectively.

AQR, one of the Plan's Alternative Risk Premium managers, posted positive returns and outperformed its 5% Annual target for the quarter and 1-year periods by 1.0% and 10.4%, respectively. It posted negative returns for the trailing 3- and 5-year periods and underperformed its benchmark for these periods by (14.6%) and (9.6%), respectively.

Lombard Odier, an Alternative Risk Premium manager, earned a quarterly return of 0.1%, underperforming its 5% Annual target (1.1%). The manager also underperformed its benchmark for the 1-year period by (15.8%).

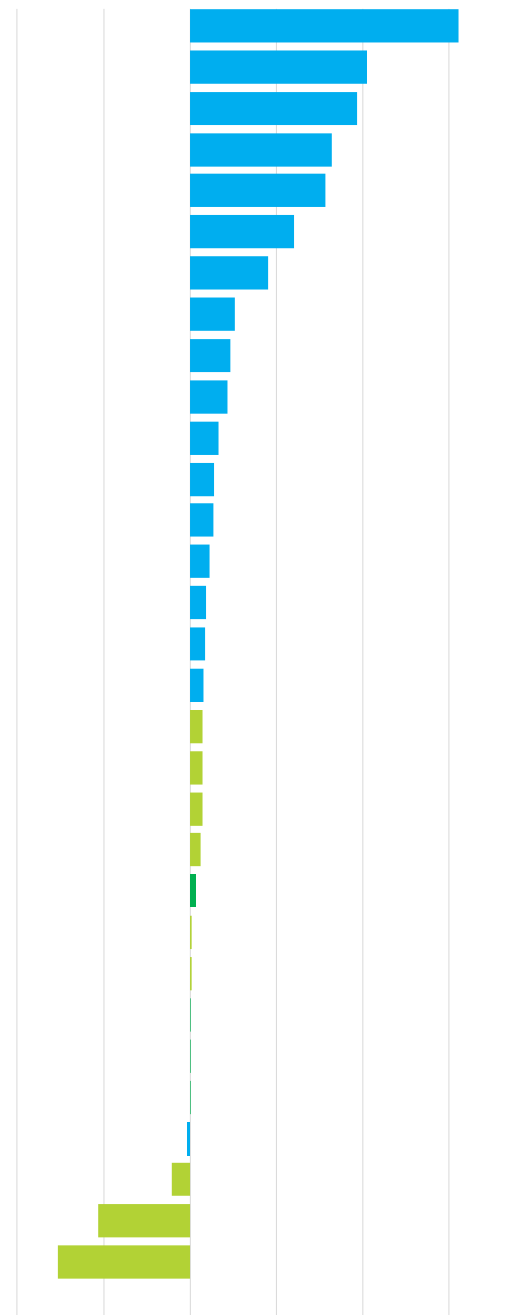
P/E Diversified, one of the Plan's Alternative Risk Premium managers, outperformed its 5% Annual target for the quarter by 3.9%. It underperformed its benchmark for the 1-, 3- and 5-year time periods by (31.2%), (8.7%) and (6.7%), respectively.

Manager Commentary

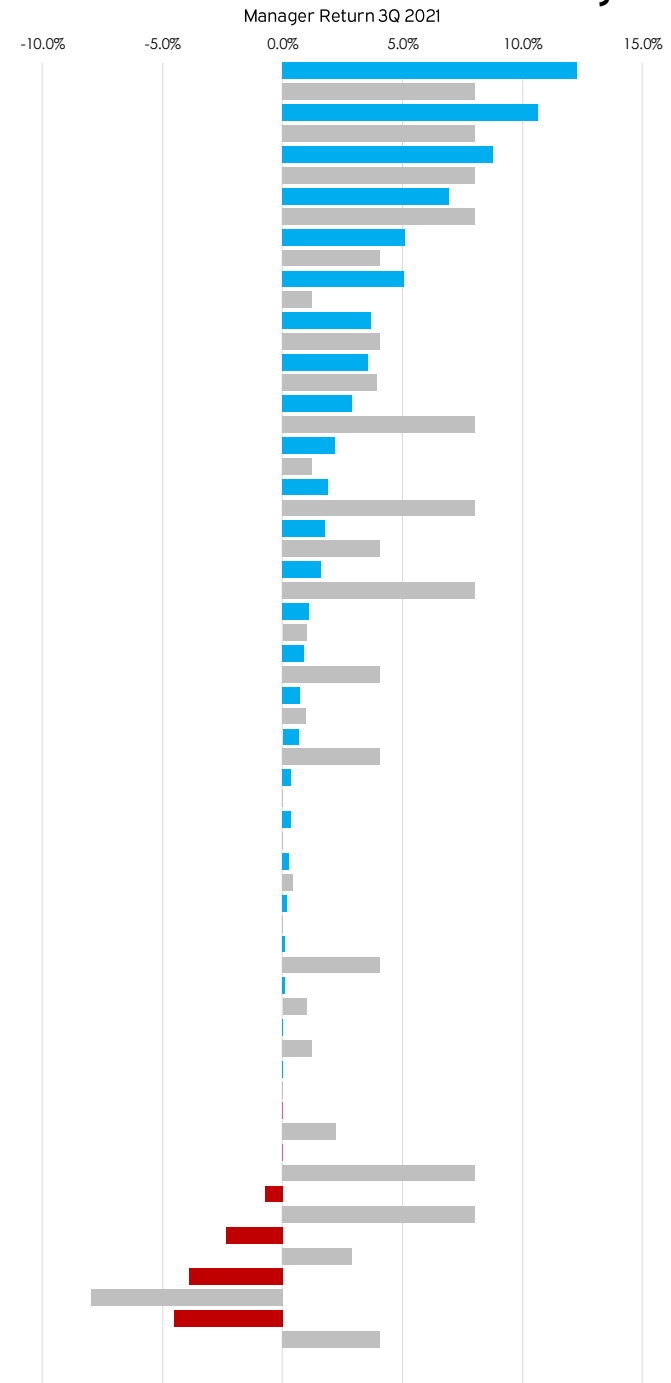
Manager/Mandate	Manager Return	Benchmark Return	Dollar Impact 2,193,635,795	Benchmark Added Value	Manager BNAV 2,193,635,795
9/30/2021					
SJCERA Total	2.5%	2.7%			
Policy Benchmark					
Private Core Real Estate					
Private Real Estate Benchmark	3.6%	3.9%	6,214,475		174,514,873
Ocean Avenue III	6.9%	8.0%	4,094,503		59,100,795
MSCI ACWI +2% Blend					
Ocean Avenue II	10.7%	8.0%	3,858,279		36,204,179
MSCI ACWI +2% Blend					
Morgan Creek VI	12.3%	8.0%	3,275,963		26,703,319
MSCI ACWI +2% Blend					
Ocean Avenue IV	8.8%	8.0%	3,135,045		35,617,418
MSCI ACWI +2% Blend					
Bridgewater All Weather	11%	10%	2,399,041		213,248,121
T-bill + 4%					
P/E Diversified Global Macro	5.1%	12%	1,803,698		35,554,865
5% Annual					
Crestline Opportunity II	5.1%	4.1%	1,040,091		20,377,954
CPI + 6% Annual					
Oaktree	2.9%	8.0%	930,766		31,908,345
MSCI ACWI +2% Blend					
Raven III	18%	4.1%	865,907		48,132,680
CPI + 6% Annual					
AQR	2.2%	12%	649,969		29,330,745
5% Annual					
Mesa West IV	1.9%	8.0%	556,958		29,344,469
CPI + 6% Annual					
Dodge & Cox Long Duration	0.4%	0.1%	545,512		151,953,242
BB US Long Duration Treasuries					
DoubleLine	0.4%	0.1%	446,907		113,716,674
BB Aggregate					
Invesco REIT	0.8%	1.0%	359,991		47,871,153
FTSE NAREIT Index					
BlackRock Direct Lending	0.9%	4.1%	341,630		37,377,435
CPI + 6% Annual					
BlackRock Global Energy & Power	1.6%	8.0%	314,684		19,582,066
MSCI ACWI +2% Blend					
PanAgora Diversified Risk Multi Asset	0.1%	1.0%	281,647		221,769,334
T-bill + 4%					
Neuberger Berman	0.3%	0.4%	280,104		106,503,310
Global Credit Hybrid					
White Oak Summit Peer	0.7%	4.1%	276,351		41,619,121
CPI + 6% Annual					
Stone Harbor Absolute Return	0.2%	0.0%	237,774		130,645,229
3-Month Libor TR USD					
Dodge & Cox Fixed Income	0.1%	0.1%	115,230		217,414,749
BB Aggregate					
Lombard Odier	0.1%	12%	34,196		59,993,117
5% Annual					
Mount Lucas	0.0%	2.2%	32,728		99,176,379
BTOP 50					
Medley Opportunity II	0.1%	4.1%	13,606		10,229,923
CPI + 6% Annual					
Mesa West III	3.7%	4.1%	1,347		36,476
CPI + 6% Annual					
Morgan Creek V	0.0%	8.0%	945		9,453,588
MSCI ACWI +2% Blend					
Morgan Creek III	-0.8%	8.0%	(61,289)		8,096,284
MSCI ACWI +2% Blend					
Raven II	-4.5%	4.1%	(422,916)		9,331,766
CPI + 6% Annual					
Graham Tactical Trend	-2.3%	2.9%	(2115,532)		90,060,954
SG Trend Index					
PIMCO RAE Emerging Markets	-3.9%	-8.0%	(3,067,196)		78,767,232
MSCI Emerging Markets					
Total Portfolio MV as of 9/30/2021			3,839,975,299		

Dollar Impact 3Q 2021 (\$000)

(4,000,000) (2,000,000) 0 2,000,000 4,000,000 6,000,000 8,000,000



Manager/Mandate	Manager Return	Benchmark Return	Dollar Impact	Benchmark Added Value	Manager BNAV
	9/30/2021		2,193,635,795		2,193,635,795
SJCERA Total	2.5%	2.7%			
Policy Benchmark					
Morgan Creek VI	12.3%	8.0%	3,275,963		26,703,319
MSCI ACWI +2% Blend					
Ocean Avenue II	10.7%	8.0%	3,858,279		36,204,179
MSCI ACWI +2% Blend					
Ocean Avenue IV	8.8%	8.0%	3,135,045		35,617,418
MSCI ACWI +2% Blend					
Ocean Avenue III	6.9%	8.0%	4,094,503		59,100,795
MSCI ACWI +2% Blend					
Crestline Opportunity II	5.1%	4.1%	1,040,091		20,377,954
CPI + 6% Annual					
P/E Diversified Global Macro	5.1%	12%	1,803,698		35,554,865
5% Annual					
Mesa West III	3.7%	4.1%	1,347		36,476
CPI + 6% Annual					
Private Core Real Estate	3.6%	3.9%	6,214,475		174,514,873
Private Real Estate Benchmark					
Oaktree	2.9%	8.0%	930,766		31,908,345
MSCI ACWI +2% Blend					
AQR	2.2%	12%	649,969		29,330,745
5% Annual					
Mesa West IV	1.9%	8.0%	556,958		29,344,469
CPI + 6% Annual					
Raven III	1.8%	4.1%	865,907		48,132,680
CPI + 6% Annual					
BlackRock Global Energy & Power	1.6%	8.0%	314,684		19,582,066
MSCI ACWI +2% Blend					
Bridgewater All Weather	1.1%	10%	2,399,041		213,248,121
T-bill + 4%					
BlackRock Direct Lending	0.9%	4.1%	341,630		37,377,435
CPI + 6% Annual					
Invesco REIT	0.8%	10%	359,991		47,871,153
FTSE NAREIT Index					
White Oak Summit Peer	0.7%	4.1%	276,351		41,619,121
CPI + 6% Annual					
DoubleLine	0.4%	0.1%	446,907		113,716,674
BB Aggregate					
Dodge & Cox Long Duration	0.4%	0.1%	545,512		151,953,242
BB US Long Duration Treasuries					
Neuberger Berman	0.3%	0.4%	280,104		106,503,310
Global Credit Hybrid					
Stone Harbor Absolute Return	0.2%	0.0%	237,774		130,645,229
3-Month Libor TR USD					
Medley Opportunity II	0.1%	4.1%	13,606		10,229,923
CPI + 6% Annual					
PanAgora Diversified Risk Multi Asset	0.1%	10%	281,647		221,769,334
T-bill + 4%					
Lombard Odier	0.1%	12%	34,196		59,993,117
5% Annual					
Dodge & Cox Fixed Income	0.1%	0.1%	115,230		217,414,749
BB Aggregate					
Mount Lucas	0.0%	2.2%	32,728		99,176,379
BTOP 50					
Morgan Creek V	0.0%	8.0%	945		9,453,588
MSCI ACWI +2% Blend					
Morgan Creek III	-0.8%	8.0%	(61,289)		8,096,284
MSCI ACWI +2% Blend					
Graham Tactical Trend	-2.3%	2.9%	(211,532)		90,060,954
SG Trend Index					
PIMCO RAE Emerging Markets	-3.9%	-8.0%	(3,067,196)		78,767,232
MSCI Emerging Markets					
Raven II	-4.5%	4.1%	(422,916)		9,331,766
CPI + 6% Annual					
Total Portfolio MV as of 9/30/2021			3,839,975,299		



Manager Commentary

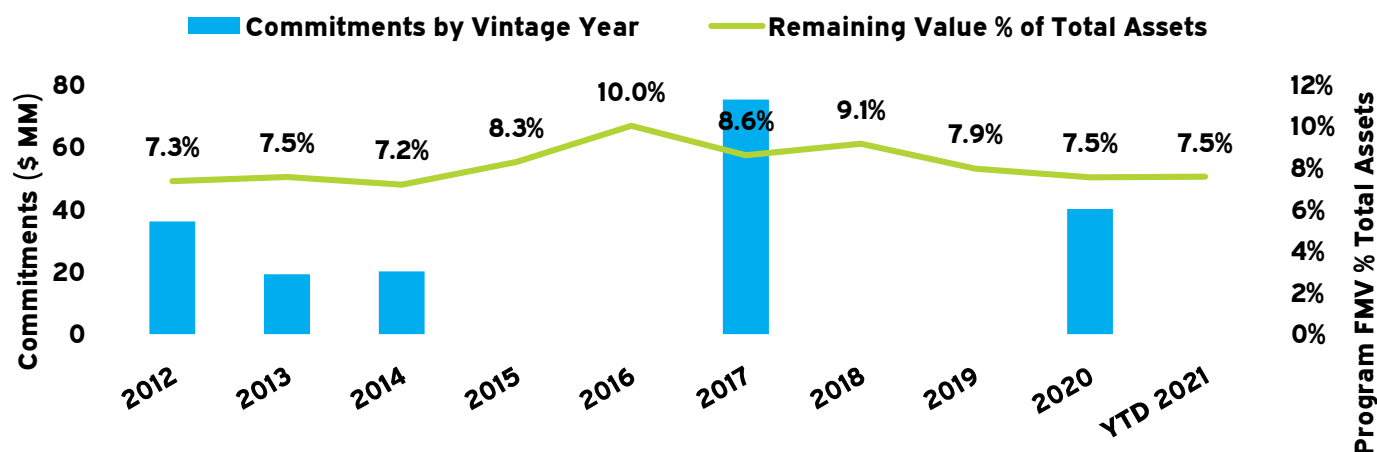
Real Estate Program

September 30, 2021

1. Overview
2. Program Activity
 - Commitments
 - Cash Flows
 - Significant Events
3. Performance Analysis
 - By Strategy and Vintage
 - Across Time Periods
 - Net Changes in Value
 - Time-Weighted Performance
 - Fund Performance: Sorted by Vintage and Strategy
4. Diversification Fund Level
 - Strategy
 - Vintage
 - Geographic Focus
5. Market Analysis
6. End Notes & Disclosures

Introduction

The Retirement Association's target allocation towards real estate assets is 10-12%. As of March 31, 2021, the Retirement Association had invested with eighteen real estate managers (three private open-end and fifteen private closed-end). The aggregate reported value of the Retirement Association's real estate investments was \$274.1 million.



Program Status

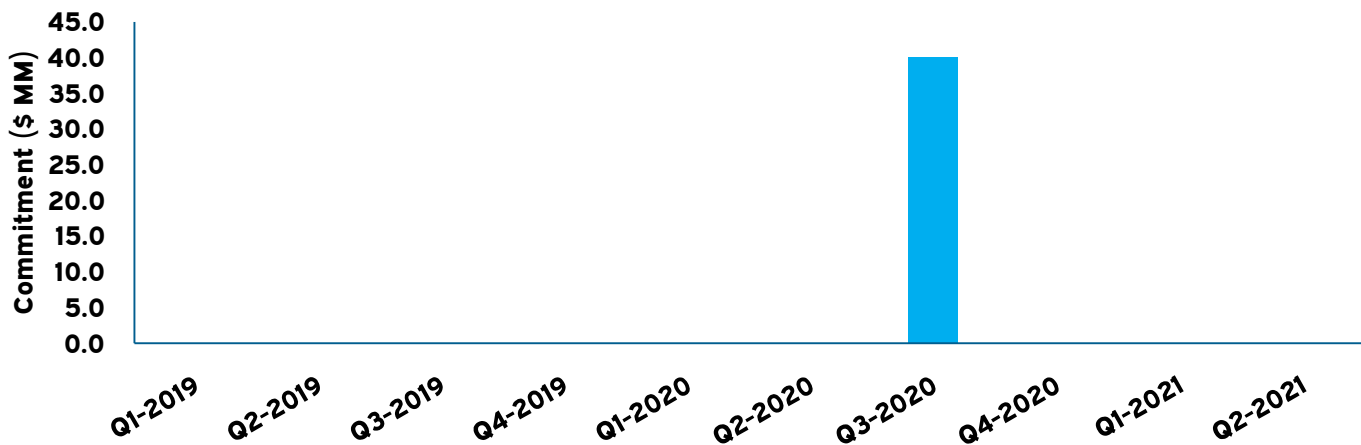
No. of Investments	18
Committed (\$ MM)	501.6
Contributed (\$ MM)	429.8
Distributed (\$ MM)	319.4
Remaining Value (\$ MM)	287.6

Performance Since Inception

	Program	Peer Universe
DPI	0.74x	0.88x
TVPI	1.41x	1.31x
IRR	6.6%	6.5%

Commitments

Recent Quarterly Commitments



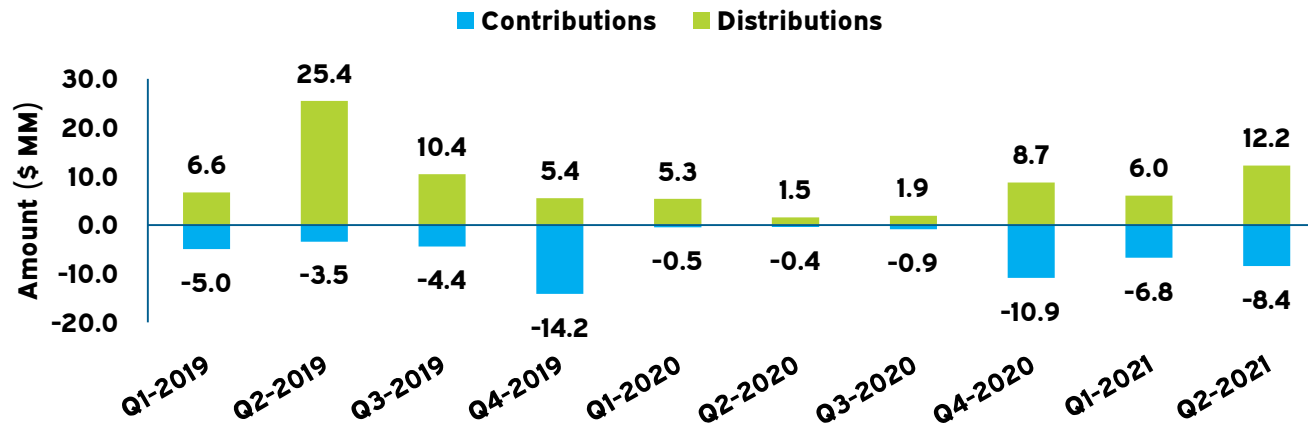
Commitments This Quarter

Fund	Strategy	Region	Amount (MM)
------	----------	--------	-------------

None to report.

Cash Flows

Recent Quarterly Cash Flows



Largest Contributions This Quarter

Fund	Vintage	Strategy	Region	Amount (\$MM)
Greenfield VIII	2017	Opportunistic	North America	6.55
Berkeley V	2020	Value-Added	North America	1.19
Prologis Logistics	1970	Core	North America	0.69

Largest Distributions This Quarter

Fund	Vintage	Strategy	Region	Amount (\$MM)
Greenfield VIII	2017	Opportunistic	North America	6.34
Stockbridge RE III	2017	Value-Added	North America	2.06
AG Core Plus IV	2014	Value-Added	North America	1.50

Significant Events

- During the second quarter, Berkeley Partners Value Industrial Fund V closed nine acquisitions, totaling \$82.4 million and nearly 770,000 square feet. Of the new investments, three are located in Massachusetts, three in Georgia, two in Texas, and one in Pennsylvania. To date, the Fund has called 25.0% of capital to finance investments.
- In April 2021, Stockbridge Real Estate Value Fund III closed on the disposition of 23 Sycamore, an industrial property in Boston, for a gross sale price of \$25.8 million, as well as the disposition of the multifamily land parcel at Barrett Pavilion in Kennesaw, Georgia for a sale price of \$8.6 million. During the second quarter, Stockbridge Real Estate Value Fund III distributed \$16.4 million to its Limited Partners, primarily funded from the sale of 23 Sycamore and operating cash flows.
- During the second quarter, AG Core Plus Realty Fund IV completed two dispositions. In June, the Fund sold 1720 El Camino, a medical office building in Burlingame, CA, for \$64.4 million. Additionally, in late June, the Fund closed on the sale of Falcon Landing Apartments, a 198-unit multifamily property located in Las Vegas, NV.
- During the second quarter, Greenfield Acquisition Partners VIII (Grandview I) closed on the acquisition of three new investments: I-75 Logistics Center, a 165-acre industrial development site in Pasco County, Florida, Forney Industrial Center, a 47-acre land site in Forney, Texas, and the Cottages at Ravinia, a 148-unit single-family build-for-rent development site in Port St. Lucie, Florida. Accordingly, the Fund called \$32 million from investors to fund these new deals, as well as existing investments. The Fund also had one disposition during the quarter through the sale of 7600 Assateague, resulting in a distribution of \$28.67 million to the Limited Partners.

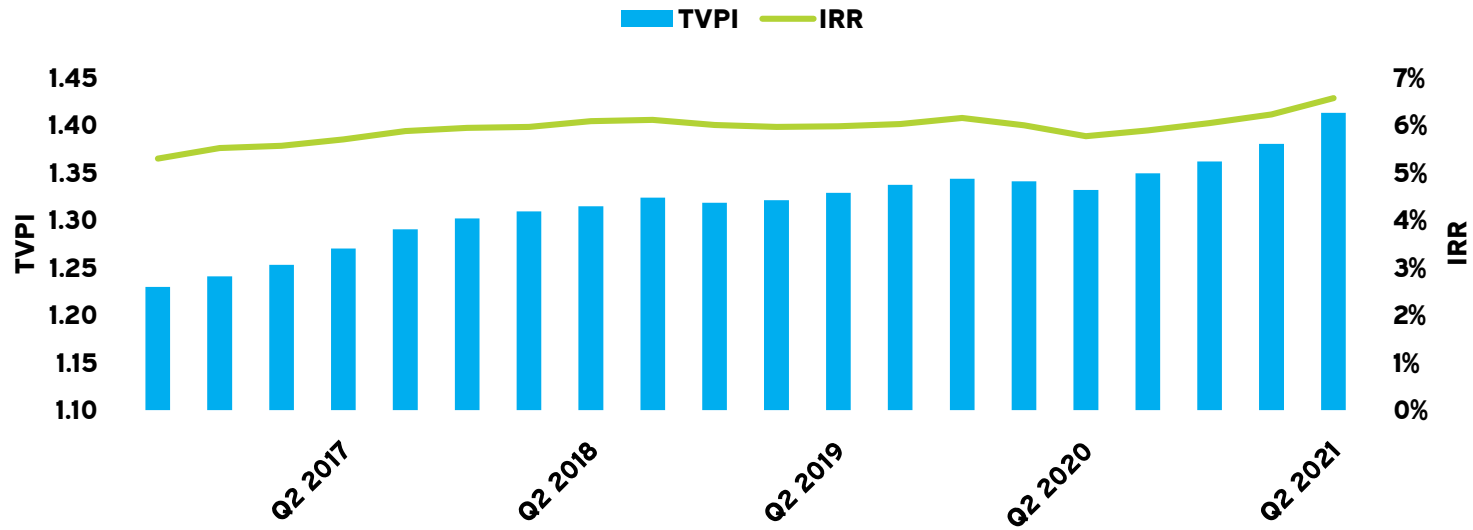
By Strategy

Group	Number	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	Exposure (\$ MM)	DPI (X)	TVPI (X)	IRR (%)
Core	3	120.5	123.5	0.0	27.2	174.5	174.5	0.22	1.63	6.8
Opportunistic	9	204.1	180.3	24.7	198.0	41.2	65.9	1.10	1.33	5.5
Value-Added	6	177.0	126.0	52.7	94.3	71.9	124.5	0.75	1.32	8.8
Total	18	501.6	429.8	77.4	319.4	287.6	364.9	0.74	1.41	6.6

By Vintage

Group	Number	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	Exposure (\$ MM)	DPI (X)	TVPI (X)	IRR (%)
Open-end	3	120.5	123.5	0.0	27.2	174.5	174.5	0.22	1.63	6.8
2005	2	45.0	44.5	0.0	37.6	2.1	2.1	0.85	0.89	-1.5
2007	4	96.0	84.0	12.0	114.9	5.8	17.8	1.37	1.44	7.3
2011	2	50.0	38.3	11.7	47.2	4.0	15.7	1.23	1.34	9.6
2012	2	36.0	33.8	3.0	48.8	0.3	3.3	1.45	1.46	12.6
2013	1	19.1	18.3	0.8	21.0	9.7	10.5	1.15	1.68	13.4
2014	1	20.0	19.0	1.8	6.6	18.6	20.3	0.34	1.32	8.4
2017	2	75.0	58.4	18.1	16.1	61.5	79.6	0.28	1.33	16.0
2020	1	40.0	10.2	30.0	0.1	11.1	41.1	0.01	1.10	NM
Total	18	501.6	429.8	77.4	319.4	287.6	364.9	0.74	1.41	6.6

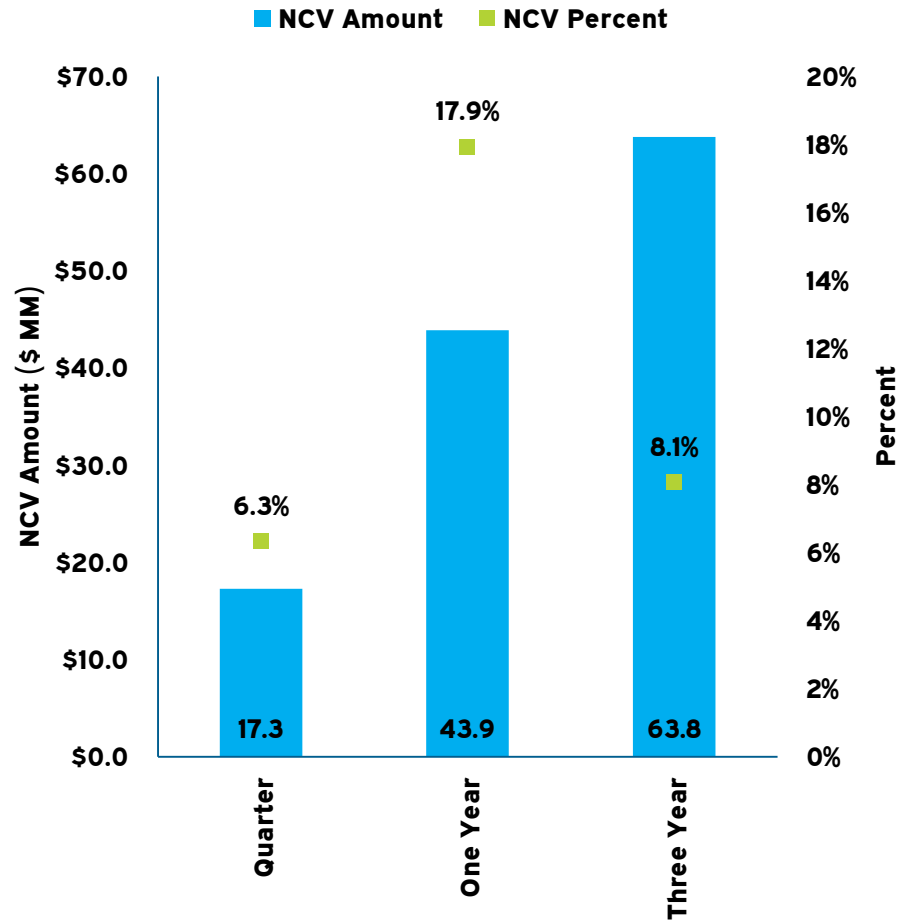
Since Inception Performance Over Time



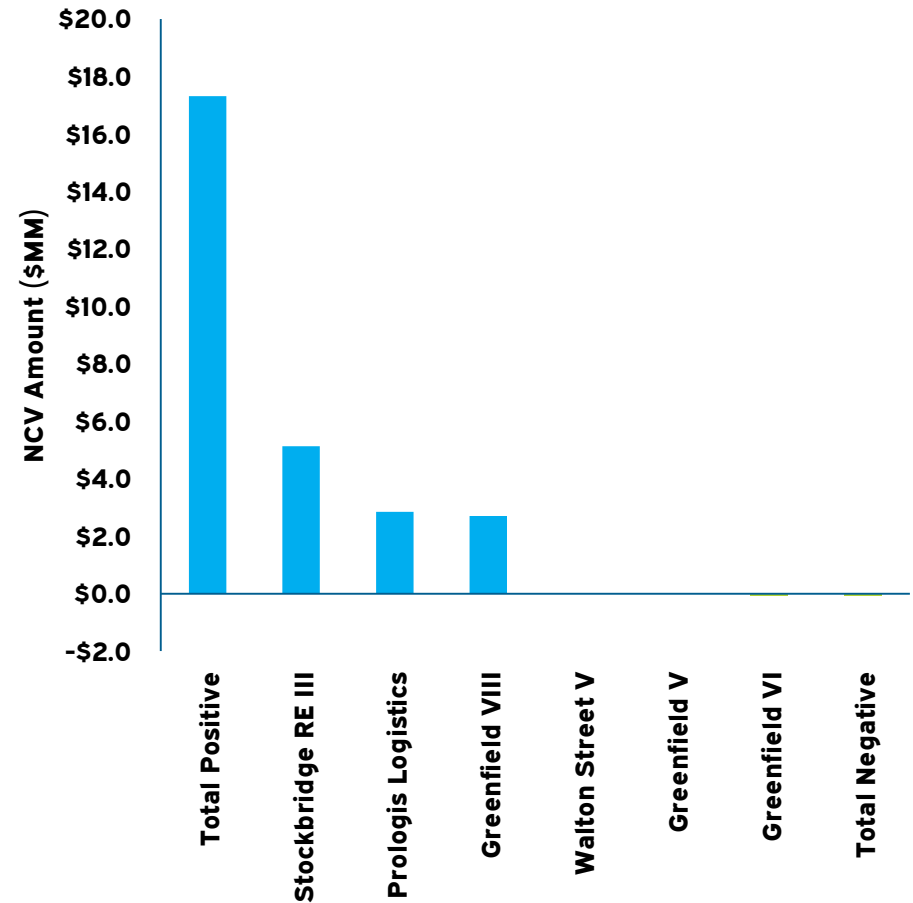
Horizon IRRs

	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)	Since Inception (%)
Aggregate Portfolio	17.8	8.3	8.7	10.3	6.6
Public Market Equivalent	34.8	8.3	5.1	8.7	8.7

Periodic NCV



1 Quarter Drivers Of NCV





San Joaquin County Employees' Retirement Association Real Estate Program

Performance Analysis | As of June 30, 2021

Fund Performance: Sorted By Vintage And Strategy

By Investment	Vintage	Strategy	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	TVPI (X)	Peer TVPI (X)	IRR (%)	Peer IRR (%)
Principal US	Open-end	Core	25.0	25.0	0.0	0.0	36.4	1.46	NM	7.0	NM
Prologis Logistics	Open-end	Core	50.5	53.5	0.0	18.9	85.6	1.96	NM	6.9	NM
RREEF America II	Open-end	Core	45.0	45.0	0.0	8.3	52.5	1.35	NM	6.6	NM
Miller GLocal Fund V	2005	Opportunistic	15.0	14.5	0.0	17.6	0.0	1.21	1.02	3.3	0.4
Walton Street V	2005	Opportunistic	30.0	30.0	0.0	20.1	2.1	0.74	1.02	-3.3	0.4
Greenfield V	2007	Opportunistic	30.0	29.6	0.4	40.4	0.2	1.37	1.18	8.3	3.2
Miller Global VI	2007	Opportunistic	30.0	21.1	8.9	32.3	0.6	1.56	1.18	7.6	3.2
Walton Street VI	2007	Opportunistic	15.0	13.3	1.7	15.2	5.0	1.52	1.18	7.9	3.2
Colony Realty III	2007	Value-Added	21.0	20.0	1.0	26.9	0.0	1.35	1.18	5.3	3.2
Greenfield VI	2011	Opportunistic	20.0	19.2	0.8	26.2	0.1	1.37	1.48	9.6	11.9
Almanac Realty VI	2011	Value-Added	30.0	19.1	10.9	21.0	3.9	1.31	1.48	9.5	11.9
Miller Global VII	2012	Opportunistic	15.0	12.0	3.0	15.9	0.3	1.35	1.45	14.8	10.7
Colony Realty IV	2012	Value-Added	21.0	21.7	0.0	32.9	0.0	1.51	1.45	11.9	10.7
Greenfield VII	2013	Opportunistic	19.1	18.3	0.8	21.0	9.7	1.68	1.34	13.4	9.4
AG Core Plus IV	2014	Value-Added	20.0	19.0	1.8	6.6	18.6	1.32	1.37	8.4	9.9



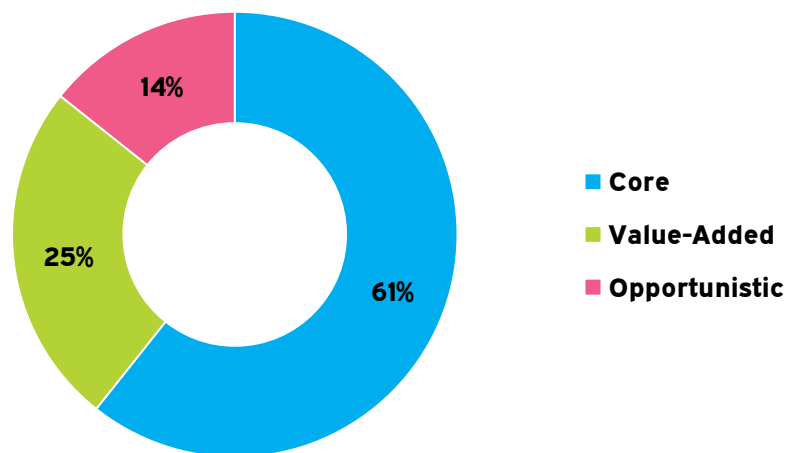
San Joaquin County Employees' Retirement Association Real Estate Program

Performance Analysis | As of June 30, 2021

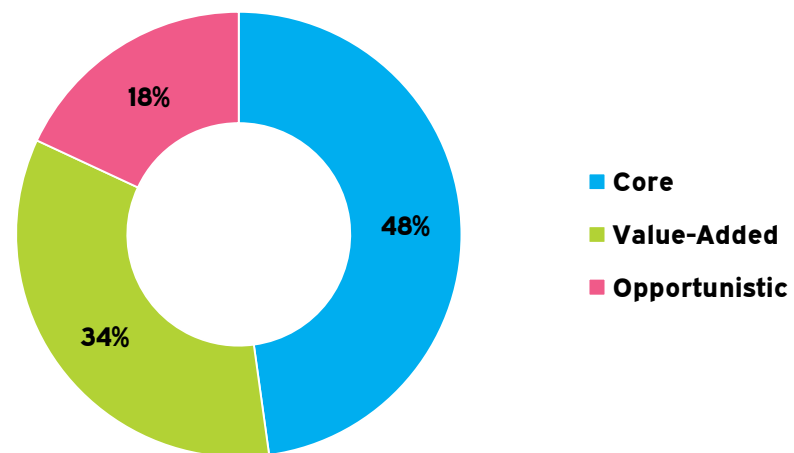
By Investment	Vintage	Strategy	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	TVPI (X)	Peer TVPI (X)	IRR (%)	Peer IRR (%)
Greenfield VIII	2017	Opportunistic	30.0	22.4	9.1	9.3	23.2	1.46	1.26	21.3	11.8
Stockbridge RE III	2017	Value-Added	45.0	36.0	9.0	6.8	38.2	1.25	1.26	12.4	11.8
Berkeley V	2020	Value-Added	40.0	10.2	30.0	0.1	11.1	1.10	1.05	NM	NM
Total			501.6	429.8	77.4	319.4	287.6	1.41	1.31	6.6	6.5

By Strategy

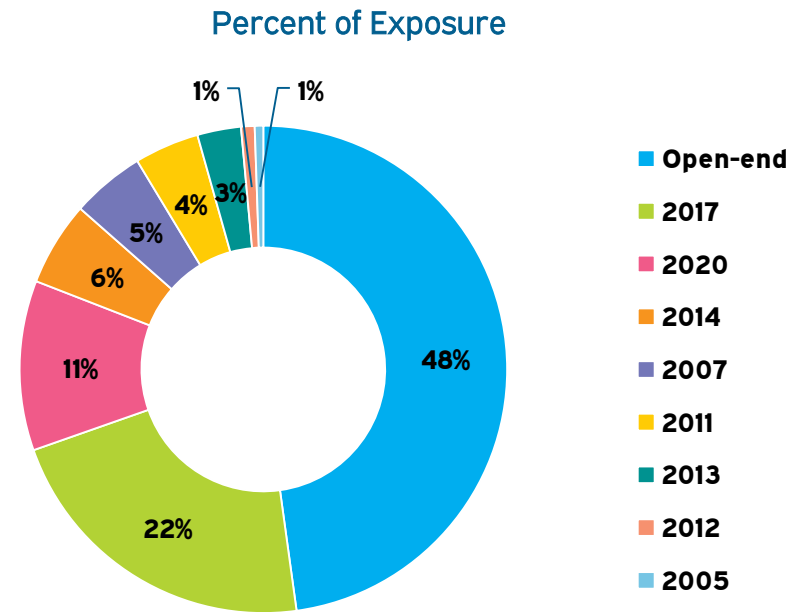
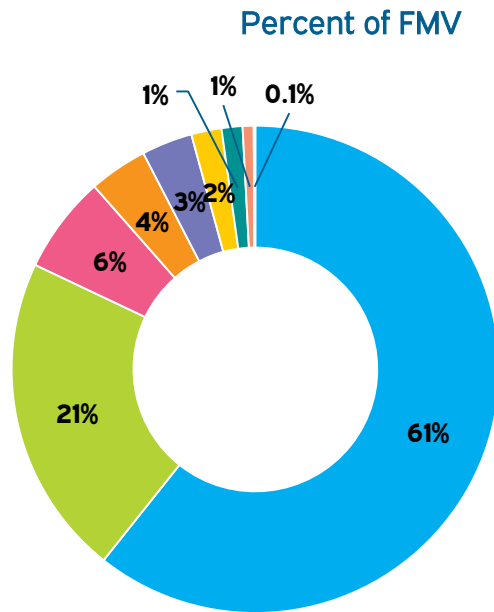
Percent of FMV



Percent of Exposure



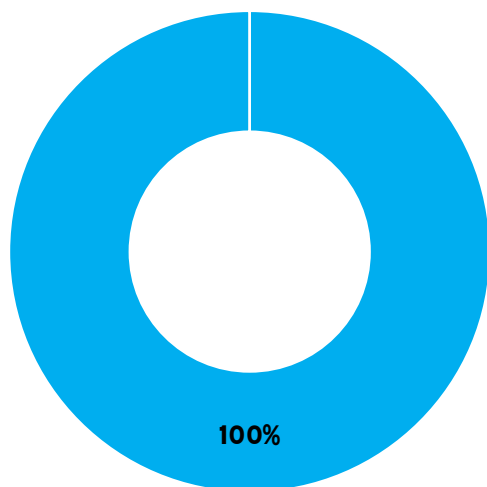
By Vintage



By Geographic Focus

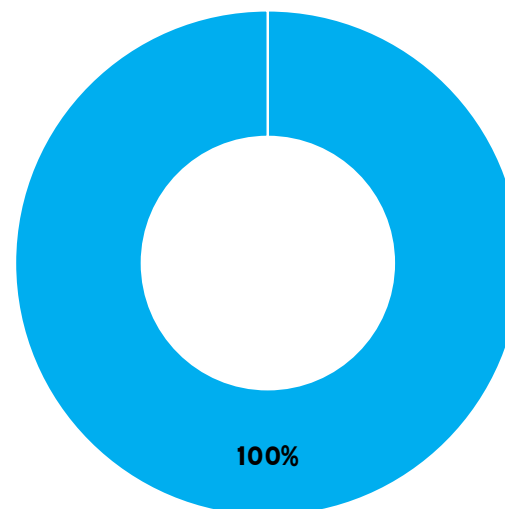
Percent of FMV

■ North America



Percent of Exposure

■ North America



Below are details on specific terminology and calculation methodologies used throughout this report:

Committed	The original commitment amount made to a given fund. Some funds may be denominated in non-USD currencies, and such commitment amounts represent the sum of fund contributions translated to USD at their daily conversion rates plus the unfunded balance translated at the rate as of the date of this report.
Contributed	The amount of capital called by a fund manager against the commitment amount. Contributions may be used for new or follow-on investments, fees, and expenses, as outlined in each fund's limited partnership agreement. Some capital distributions from funds may reduce contributed capital balances. Some funds may be denominated in non-USD currencies, and such aggregate contributions represent the sum of each fund contribution translated to USD at its daily conversion rate.
Distributed	The amount of capital returned from a fund manager for returns of invested capital, profits, interest, and other investment related income. Some distributions may be subject to re-investment, as outlined in each fund's limited partnership agreement. Some funds may be denominated in non-USD currencies, and such aggregate distributions represent the sum of each fund distribution translated to USD at its daily conversion rate.
DPI	Acronym for "Distributed-to-Paid-In", which is a performance measurement for Private Market investments. The performance calculation equals Distributed divided by Contributed. DPIs for funds and groupings of funds are net of all fund fees and expenses as reported to by fund managers to Meketa.
Exposure	Represents the sum of the investor's Unfunded and Remaining Value.
IRR	Acronym for "Internal Rate of Return", which is a performance measurement for Private Market investments. IRRs are calculated by Meketa based on daily cash flows and Remaining Values as of the date of this report. IRRs for funds and groupings of funds are net of all fund fees and expenses as reported by fund managers to Meketa.
NCV	Acronym for "Net Change in Value", which is a performance measurement for Private Market investments. The performance calculation equals the appreciation or depreciation over a time period neutralized for the impact of cash flows that occurred during the time period.
NM	Acronym for "Not Meaningful", which indicates that a performance calculation is based on data over too short a timeframe to yet be meaningful or not yet possible due to inadequate data. Meketa begins reporting IRR calculations for investments once they have reached more than two years since first capital call. NM is also used within this report in uncommon cases where the manager has reported a negative Remaining Value for an investment.

Peer Universe

The performance for a set of comparable private market funds. The peer returns used in this report are provided by Thomson ONE, based on data from Cambridge Associates as of the date of this report. Program-level peer universe performance represents the pooled return for a set of funds of corresponding vintages and strategies across all regions globally. Fund-level peer performance represents the median return for a set of funds of the same vintage and the program's set of corresponding strategies across all regions globally. Data sets that include less than five funds display performance as "NM". Meketa utilizes the following Thomson ONE strategies for peer universes:

Infrastructure: Infrastructure

Natural Resources: Private Equity Energy, Upstream Energy & Royalties, and Timber

Private Debt: Subordinated Capital, Credit Opportunities, Senior Debt, and Control-Oriented Distressed

Private Equity (including Private Debt): Venture Capital, Growth Equity, Buyout, Subordinated Capital, Credit Opportunities, Senior Debt, and Control-Oriented Distressed

Private Equity (excluding Private Debt): Venture Capital, Growth Equity, and Buyout

Real Assets (excluding Real Estate): Infrastructure, Private Equity Energy, Upstream Energy & Royalties, and Timber

Real Assets (including Real Estate): Infrastructure, Private Equity Energy, Upstream Energy & Royalties, Timber, and Real Estate

Real Estate: Real Estate

Public Market Equivalent ("PME")

A calculation methodology that seeks to compare the performance of a portfolio of private market investments with public market indices. The figures presented in this report are based on the PME+ framework, which represents a net IRR value based on the actual timing and size of the private market program's daily cash flows and the daily appreciation or depreciation of an equivalent public market index. Meketa utilizes the following indices for private market program PME+ calculations:

Infrastructure: Dow Jones Brookfield Global Infrastructure Index

Natural Resources: S&P Global Natural Resources Index

Private Debt: Barclays Capital U.S. Corporate High Yield Bond Index

Private Equity: MSCI ACWI Investable Market Index

Real Assets (excluding Real Estate): Equal blend of Dow Jones Brookfield Global Infrastructure Index and S&P Global Natural Resources Index

	<p>Real Assets (including Real Estate): Equal blend of Dow Jones Brookfield Global Infrastructure Index, S&P Global Natural Resources Index, and Dow Jones U.S. Select Real Estate Securities Index</p> <p>Real Estate: Dow Jones U.S. Select Real Estate Securities Index</p>
<p>Remaining Value</p>	<p>The investor's value as reported by a fund manager on the investor's capital account statement. All investor values in this report are as of the date of this report, unless otherwise noted. Some funds may be denominated in non-USD currencies, and such remaining values represent the fund's local currency value translated to USD at the rate as of the date of this report.</p>
<p>TVPI</p>	<p>Acronym for "Total Value-to-Paid-In", which is a performance measurement for Private Market investments. The performance calculations represents Distributed plus Remaining Value, then divided by Contributed. TVPIs for funds and groupings of funds are net of all fund fees and expenses as reported to by fund managers to Meketa.</p>
<p>Unfunded</p>	<p>The remaining balance of capital that a fund manager has yet to call against a commitment amount. Meketa updates unfunded balances for funds to reflect all information provided by fund managers provided in their cash flow notices. Some funds may be denominated in non-USD currencies, and such unfunded balances represent the fund's local currency unfunded balance translated to USD at the rate as of the date of this report.</p>



San Joaquin County Employees' Retirement Association Real Estate Program

Disclaimer | As of June 30, 2021

The material contained in this report is confidential and may not be reproduced, disclosed, or distributed, in whole or in part, to any person or entity other than the intended recipient. The data are provided for informational purposes only, may not be complete, and cannot be relied upon for any purpose other than for discussion.

Meketa Investment Group has prepared this report on the basis of sources believed to be reliable. The data are based on matters as they are known as of the date of preparation of the report, and not as of any future date, and will not be updated or otherwise revised to reflect information that subsequently becomes available.

If we manage your assets on a discretionary basis, please contact us if there are any changes in your financial situation or investment objectives, or if you want to impose any reasonable restrictions on our management of your account or reasonably modify existing restrictions.

In general, the valuation numbers presented in this report are prepared by the custodian bank for listed securities, and by the fund manager or appropriate General Partner in the case of unlisted securities. The data used in the market comparison sections of this report are sourced from various databases. These data are continuously updated and are subject to change.

This report does not contain all the information necessary to fully evaluate the potential risks of any of the investments described herein. Because of inherent uncertainties involved in the valuations of investments that are not publicly traded, any estimated fair values shown in this report may differ significantly from the values that would have been used had a ready market for the underlying securities existed, and the differences could be material.

This document may contain certain forward-looking statements, forecasts, estimates, projections, and opinions ("Forward Statements"). No representation is made or will be made that any Forward Statements will be achieved or will prove to be correct. A number of factors, in addition to any risk factors stated in this material, could cause actual future results to vary materially from the Forward Statements. No representation is given that the assumptions disclosed in this document upon which Forward Statements may be based are reasonable. There can be no assurance that the investment strategy or objective of any fund or investment will be achieved, or that the client will receive a return of the amount invested.

In some cases Meketa Investment Group assists the client in handling capital calls or asset transfers among investment managers. In these cases we do not make any representations as to the managers' use of the funds, but do confirm that the capital called or transferred is within the amounts authorized by the client.

Because there is no readily accessible market for private markets assets (companies and partnerships), the values placed on private markets assets are calculated by General Partners using conservative and industry standard pricing procedures. Annually, an independent auditor reviews the pricing procedures employed by the General Partner of each partnership.

The values of companies and partnerships are audited at year-end, and are not audited at other quarter-end periods. While financial information may be audited, there is some discretion as to the method employed to price private companies and, therefore, private markets partnerships. At all times, Meketa Investment Group expects General Partners to utilize conservative and industry standard pricing procedures, and requires the General Partners to disclose those procedures in their reports. However, because of the inherent uncertainty of valuation, these estimated values may differ from the values that would be used if a ready market for the investments existed, and the differences could be significant.

Capital Markets Outlook & Risk Metrics

As of October 31, 2021

Capital Markets Outlook

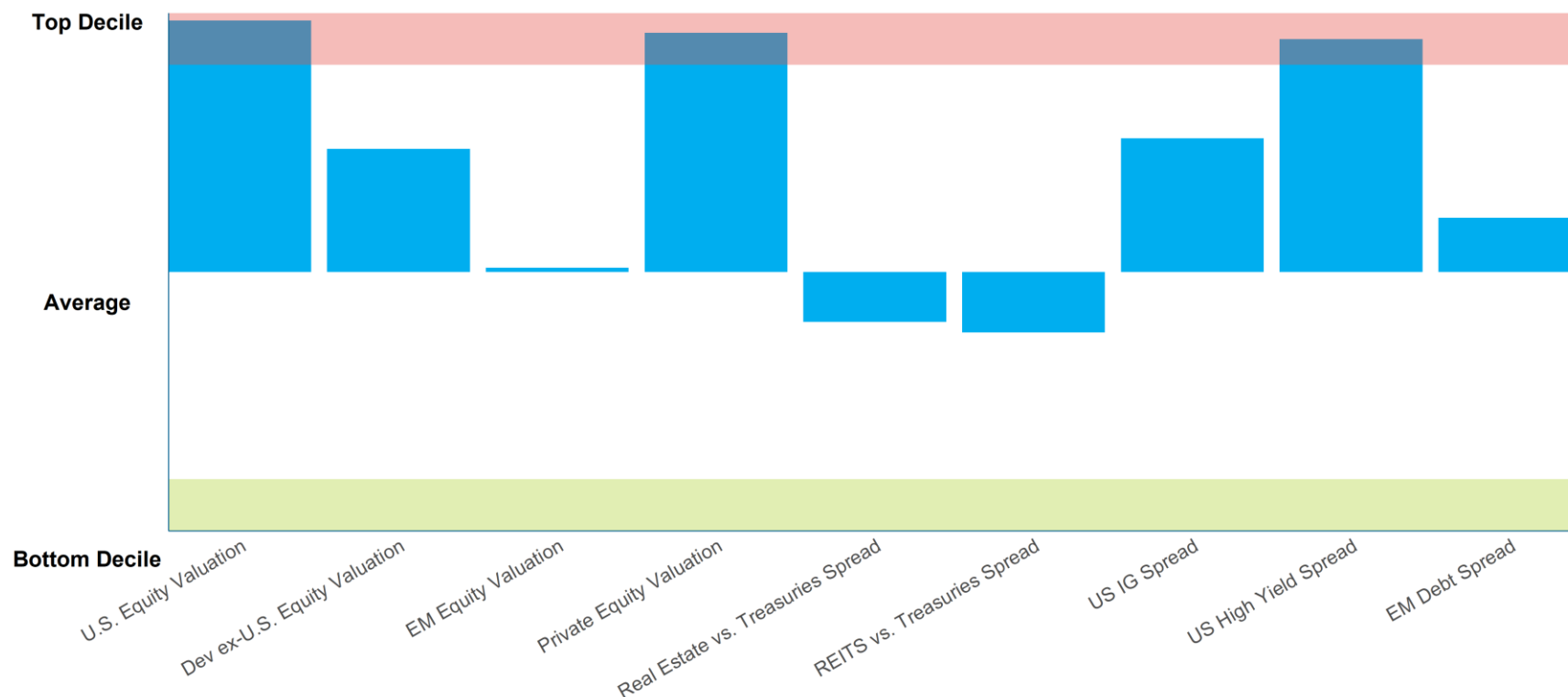
Markets

- After a difficult September, global equity markets posted positive returns in October even as global supply chain disruptions and robust consumer demand drove inflation higher. Significant financial entities (e.g., IMF) are analyzing the potential for mounting inflationary forces to disrupt the outlook for the global recovery.
- Global equity markets posted returns generally between 1% and 9% in the month of October, with US equities outperforming non-US equities.
- Reversing September's outperformance, US value stocks lagged growth stocks across all market capitalizations in October. For example, the Russell 1000 Growth index returned 8.7% in the month, versus the Russell 1000 Value index's return of 5.1%.
- China's equity markets recovered in October and returned 3.2%, outperforming the MSCI Emerging Markets index which returned 1.0%.
- Bond markets saw mixed returns as rising inflation expectations dampened returns. The Bloomberg US Aggregate index returning 0.0%, while TIPS generated positive returns with the Bloomberg TIPS index return 1.1%.
- The Bloomberg US Long Government Bond index returned 1.8% as the market adjusted long-term inflation risks lower.

Capital Markets Outlook

- Global and US REITS posted strong positive returns in the month of October with the MSCI US REITS index returning 7.7%, and the FTSE NAREIT Equity Index returning 7.6%.
- Natural resource equities outperformed the broad commodity index with the S&P Global Natural Resource index returning 4.8%, while the Bloomberg Commodity index returned 2.6% for the month.
- US headline inflation for September reached 5.4% year-on-year, largely driven by higher energy costs, which rose 24.8% year-on-year, while core inflation (CPI ex. food and energy) rose 4% year-on-year.
- Energy prices continued to rise in October. In China, flooding and high natural gas prices have prompted energy rationing schemes and higher energy costs for manufacturers. In Europe, natural gas prices have driven power costs higher and pushed inflation to multi-decade highs.
- In October, the US Senate agreed to fund a temporary extension of the debt ceiling for \$480 billion.
- In China, the potential default of mega-real estate company, Evergrande, put a strain on markets. Investors worry whether a potential default will be limited to just Evergrande's creditors or if its troubles are a symptom of a broader real estate and economic downturn in China.
- Vaccine efficacy remains uncertain as some countries enact targeted booster programs, while Delta variant cases appear to be falling in the US and Europe. Meanwhile, China has reinstated some targeted local lockdowns in response to COVID outbreaks.

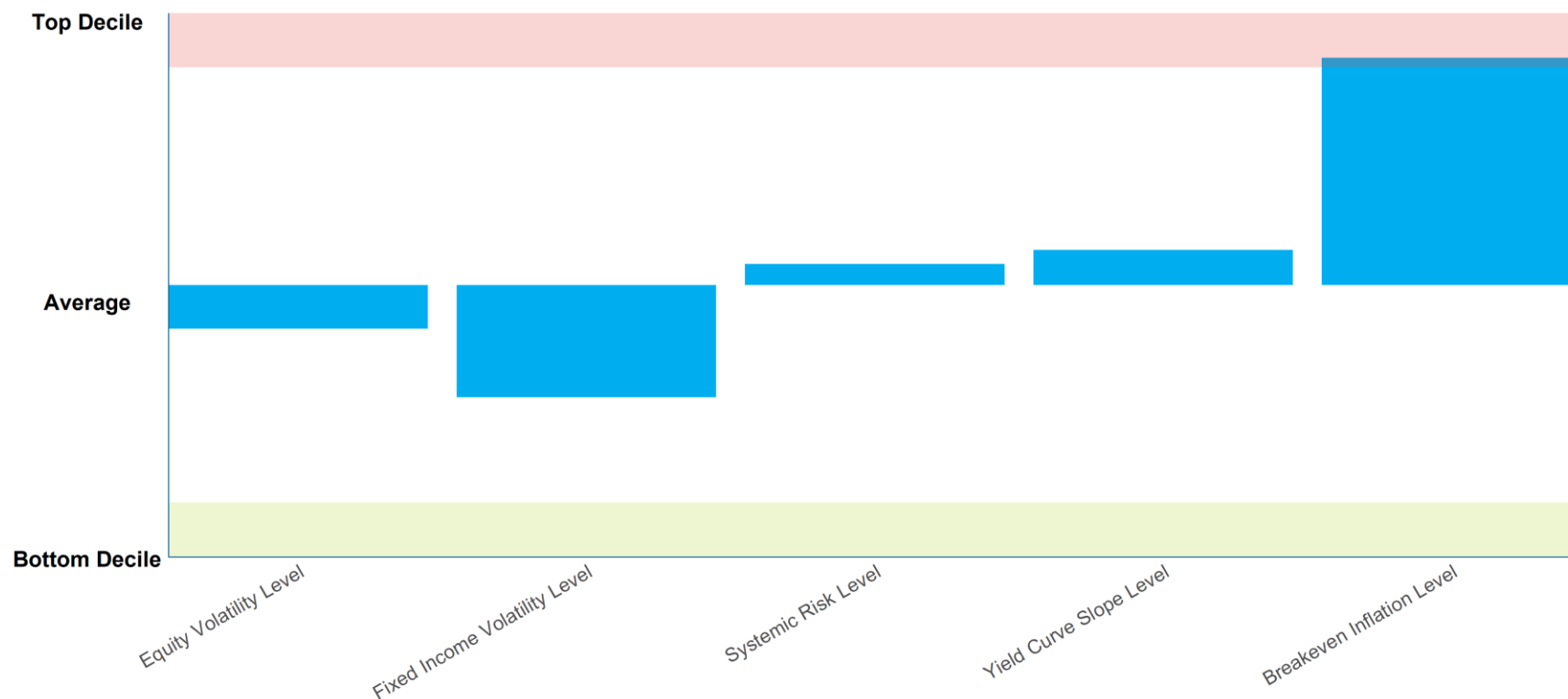
Risk Overview/Dashboard (1) (As of October 31, 2021)¹



- Dashboard (1) summarizes the current state of the different valuation metrics per asset class relative to their own history.

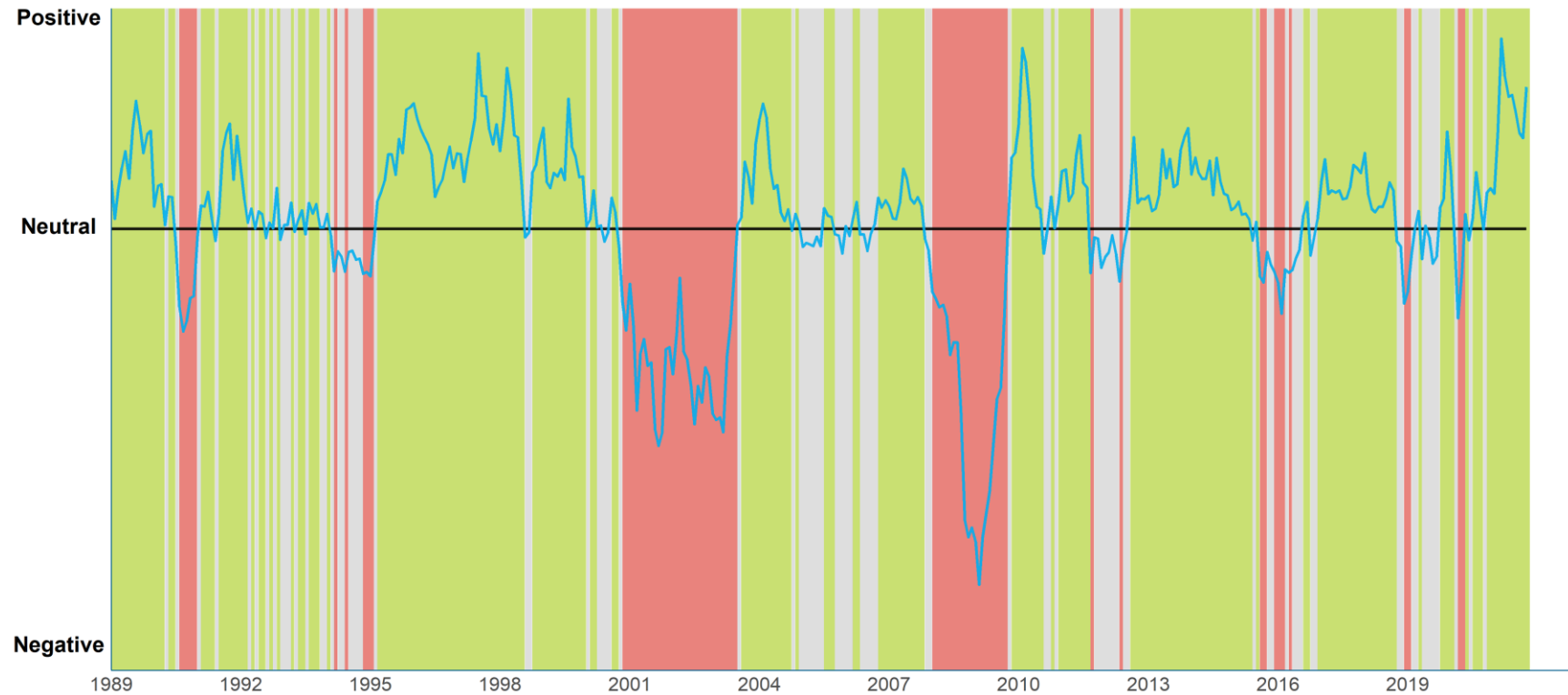
¹ With the exception of Private Equity Valuation, that is YTD as of December 31, 2020.

Risk Overview/Dashboard (2) (As of October 31, 2021)

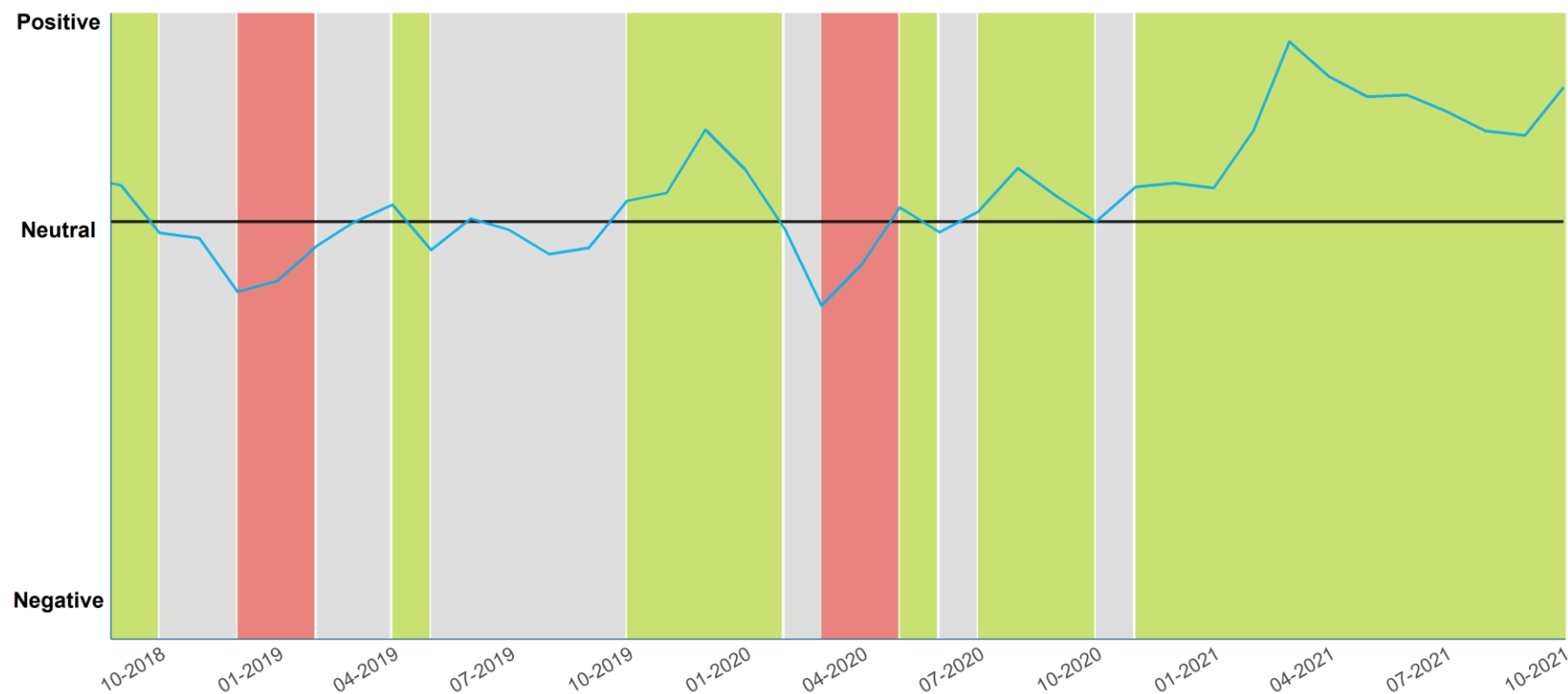


- Dashboard (2) shows how the current level of each indicator compares to its respective history.

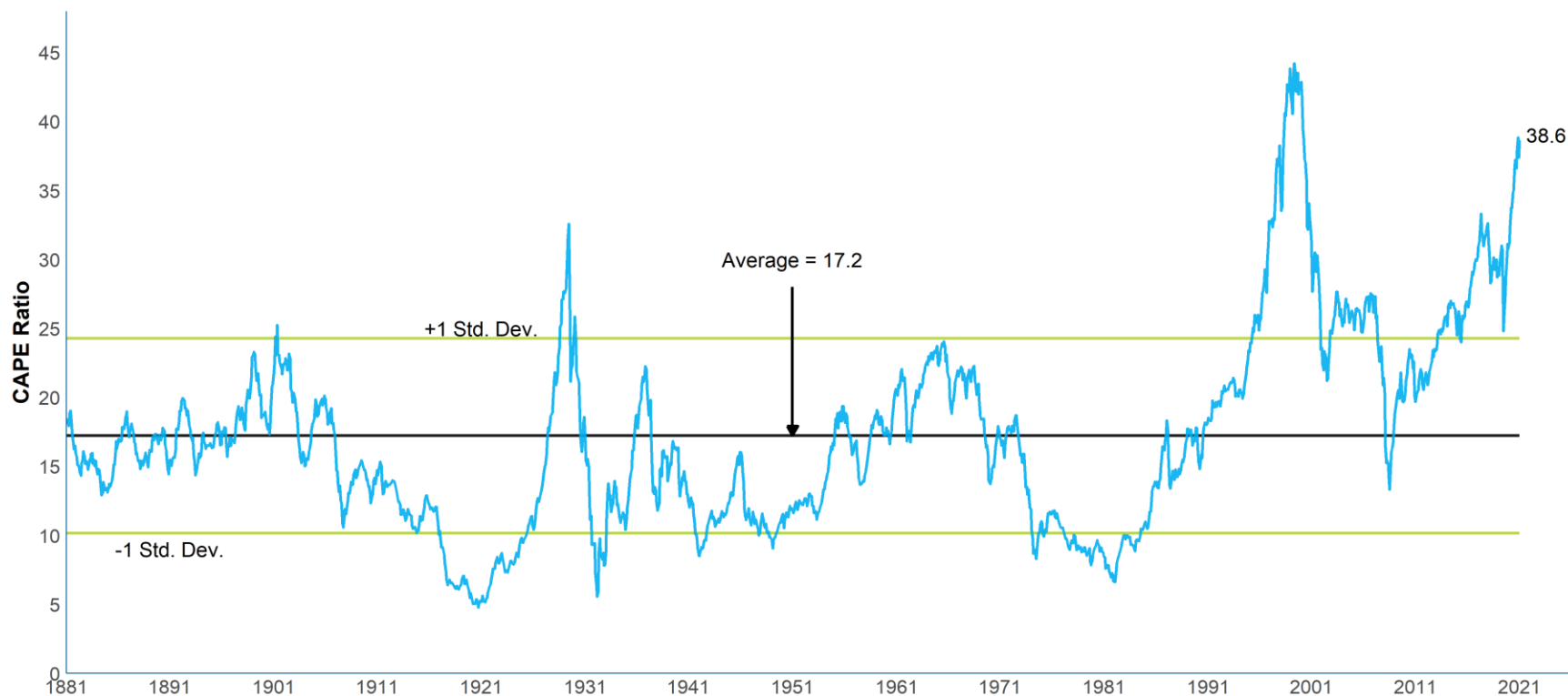
Market Sentiment Indicator (All History)
(As of October 31, 2021)



Market Sentiment Indicator (Last Three Years)
(As of October 31, 2021)



US Equity Cyclically Adjusted P/E¹ (As of October 31, 2021)



- This chart details one valuation metric for US equities. A higher (lower) figure indicates more expensive (cheaper) valuation relative to history.

¹ US Equity Cyclically Adjusted P/E on S&P 500 Index. Source: Robert Shiller, Yale University, and Meketa Investment Group.

Small Cap P/E vs. Large Cap P/E¹ (As of October 31, 2021)



- This chart compares the relative attractiveness of small cap US equities vs. large cap US equities on a valuation basis. A higher (lower) figure indicates that large cap (small cap) is more attractive.

¹ Small Cap P/E (Russell 2000 Index) vs. Large Cap P/E (Russell 1000 Index) - Source: Russell Investments. Earnings figures represent 12-month "as reported" earnings.

Growth P/E vs. Value P/E¹ (As of October 31, 2021)



- This chart compares the relative attractiveness of US growth equities vs. US value equities on a valuation basis. A higher (lower) figure indicates that value (growth) is more attractive.

¹ Growth P/E (Russell 3000 Growth Index) vs. Value (Russell 3000 Value Index) P/E - Source: Bloomberg, MSCI, and Meketa Investment Group. Earnings figures represent 12-month "as reported" earnings.

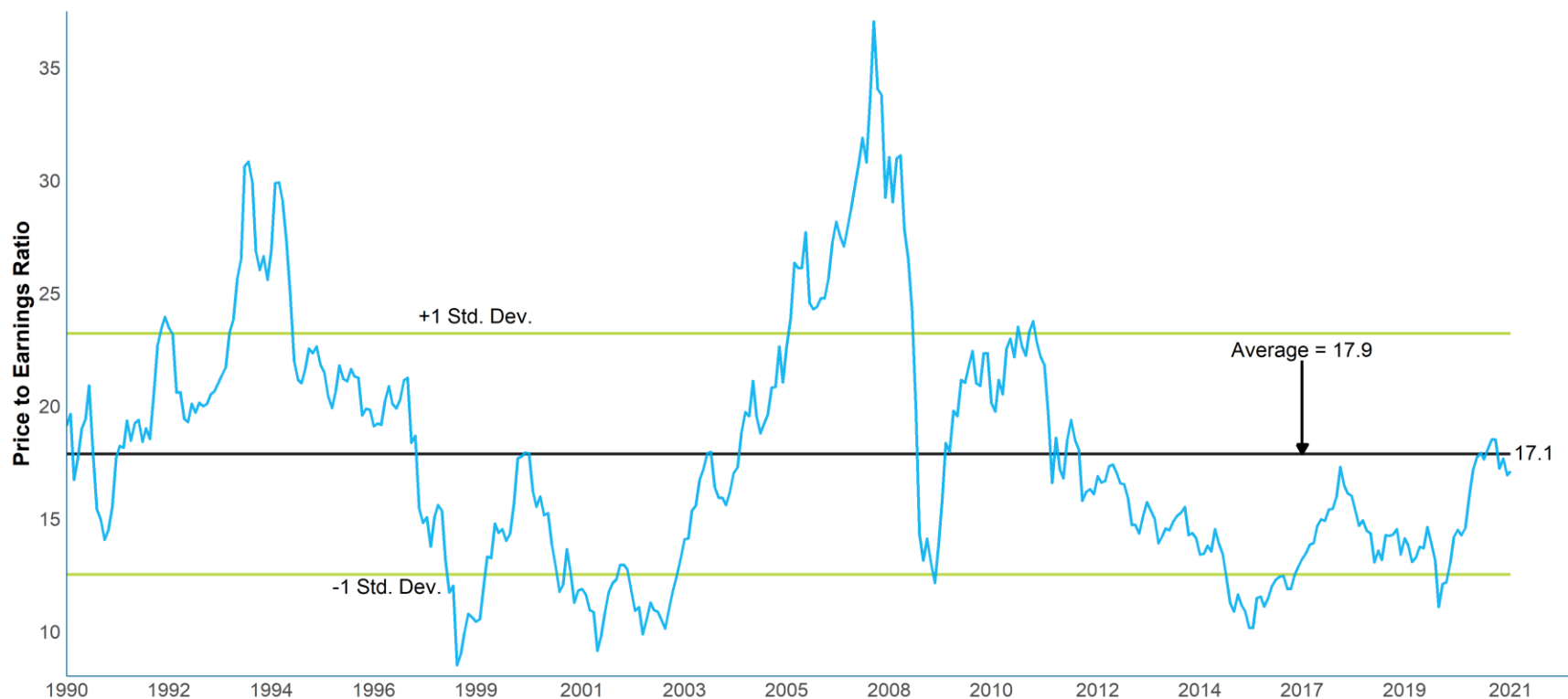
Developed International Equity Cyclically Adjusted P/E¹ (As of October 31, 2021)



- This chart details one valuation metric for developed international equities. A higher (lower) figure indicates more expensive (cheaper) valuation relative to history.

¹ Developed International Equity (MSCI EAFE Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years.

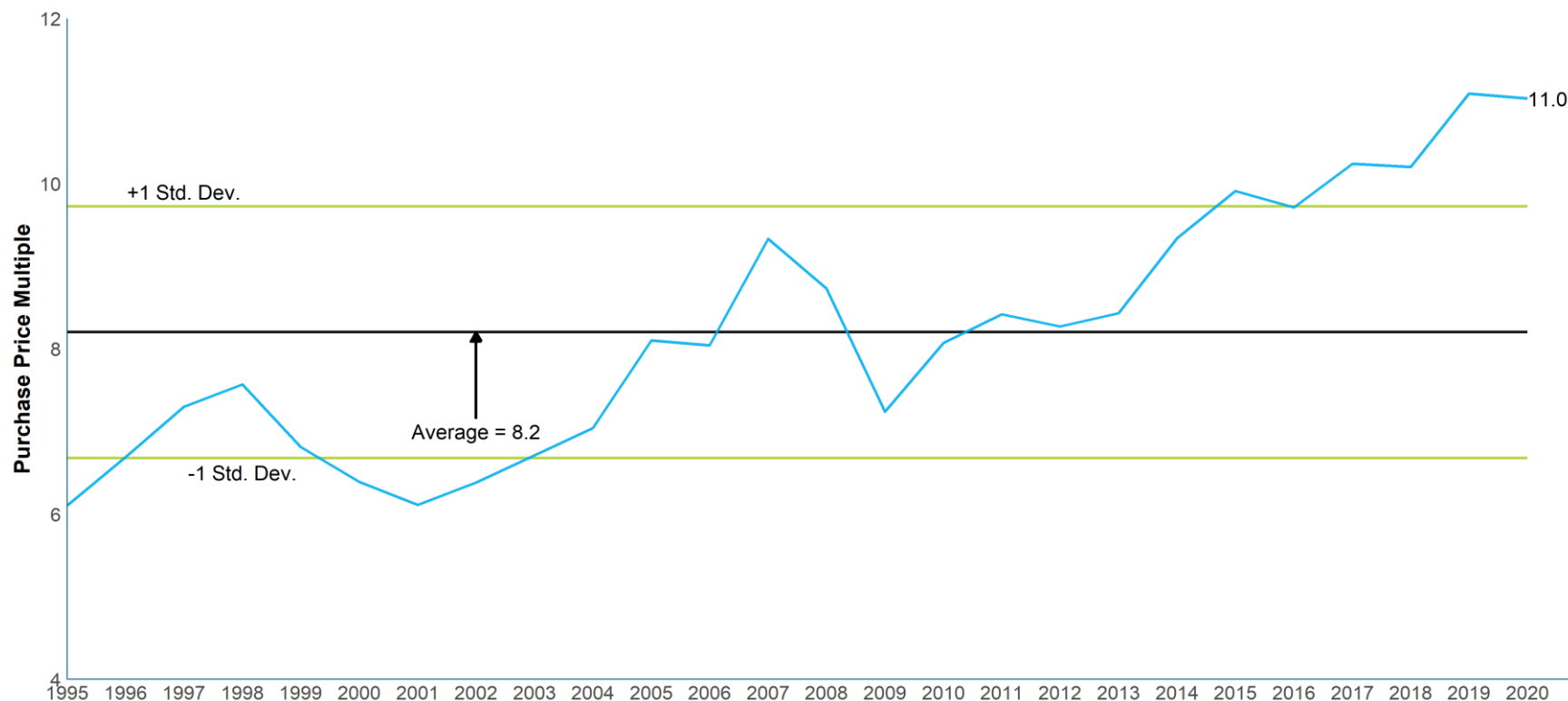
Emerging Market Equity Cyclically Adjusted P/E¹ (As of October 31, 2021)



- This chart details one valuation metric for emerging markets equities. A higher (lower) figure indicates more expensive (cheaper) valuation relative to history.

¹ Emerging Market Equity (MSCI Emerging Markets Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years.

Private Equity Multiples¹ (As of February 28, 2021)²

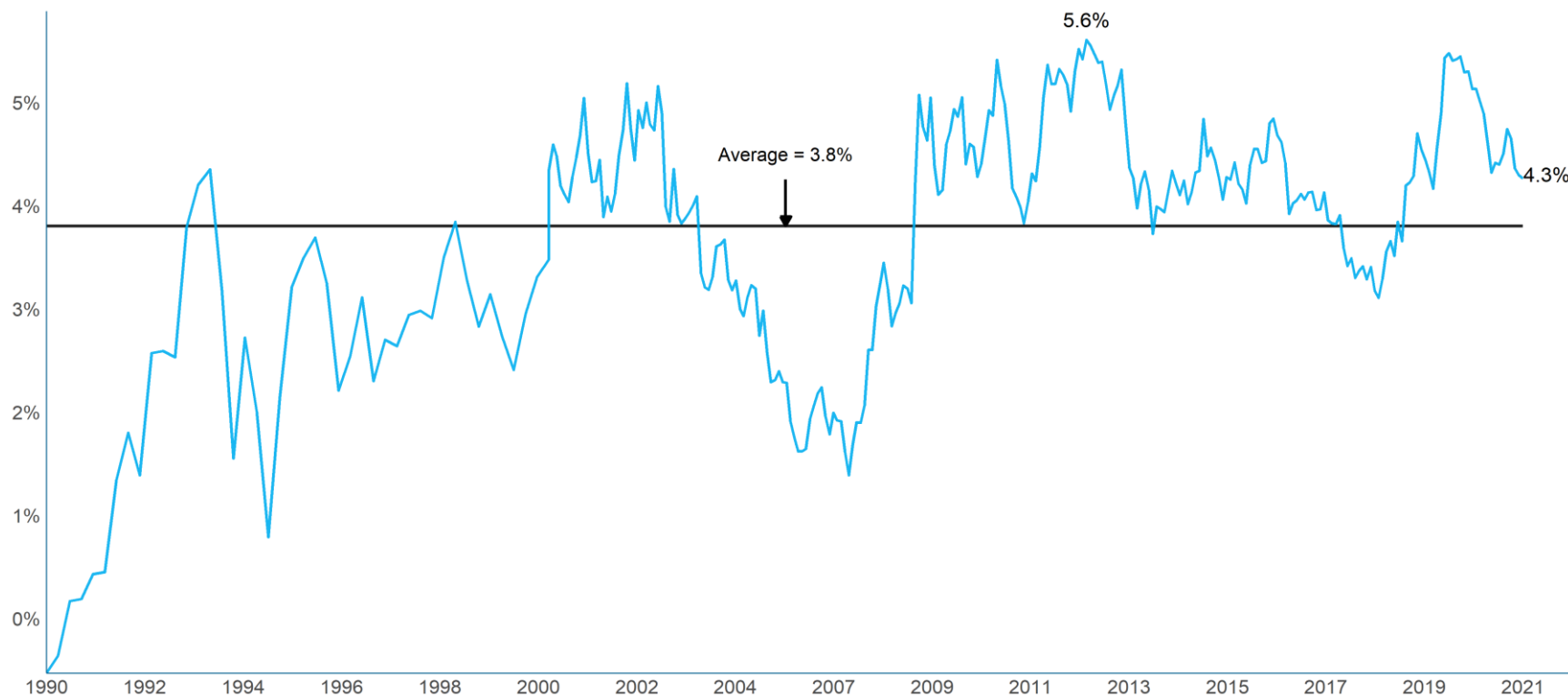


- This chart details one valuation metric for the private equity market. A higher (lower) figure indicates more expensive (cheaper) valuation relative to history.

¹ Private Equity Multiples – Source: S&P LCD Average EBITDA Multiples Paid in All LBOs.

² Annual Data, as of December 31, 2020

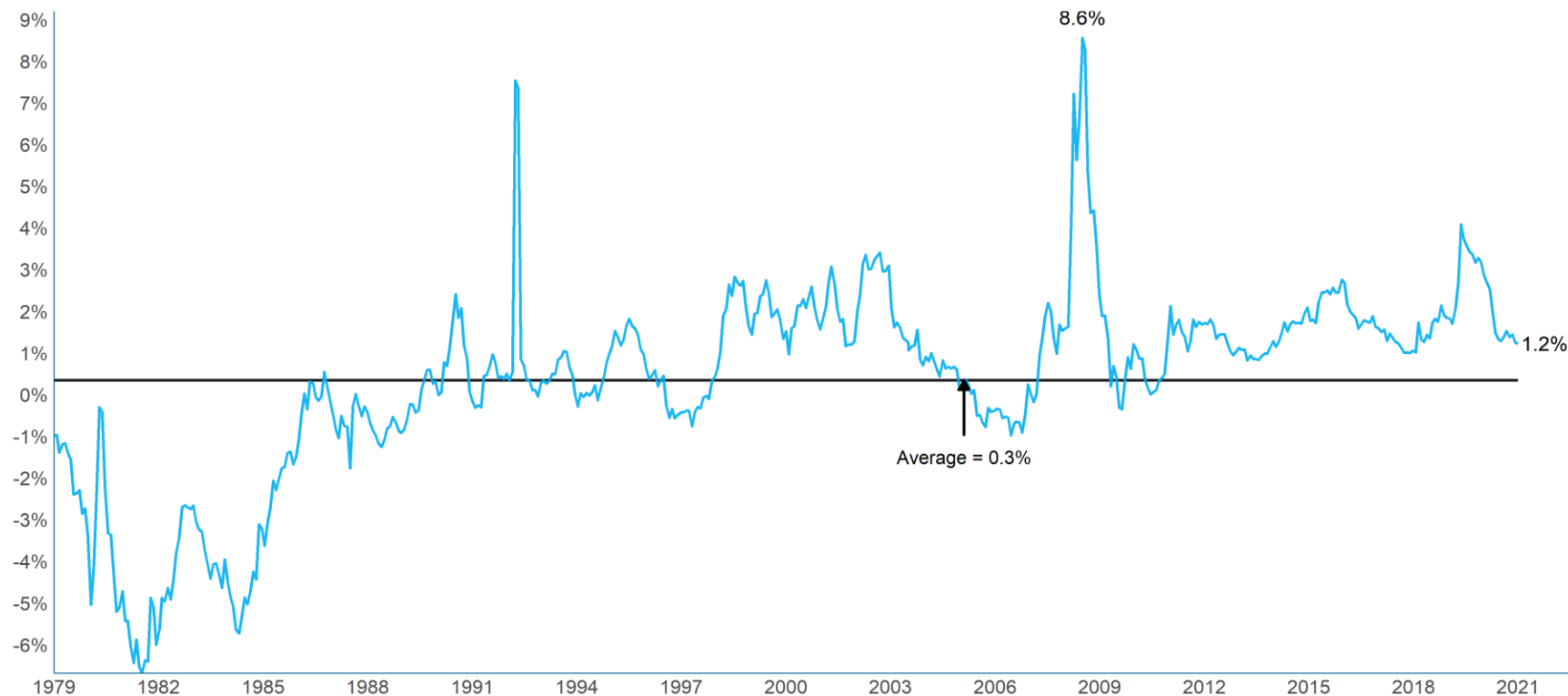
Core Real Estate Spread vs. Ten-Year Treasury¹ (As of October 31, 2021)



- This chart details one valuation metric for the private core real estate market. A higher (lower) figure indicates cheaper (more expensive) valuation.

¹ Core Real Estate Spread vs. Ten-Year Treasury – Source: Real Capital Analytics, US Treasury, Bloomberg, and Meketa Investment Group. Core Real Estate is proxied by weighted sector transaction-based indices from Real Capital Analytics and Meketa Investment Group.

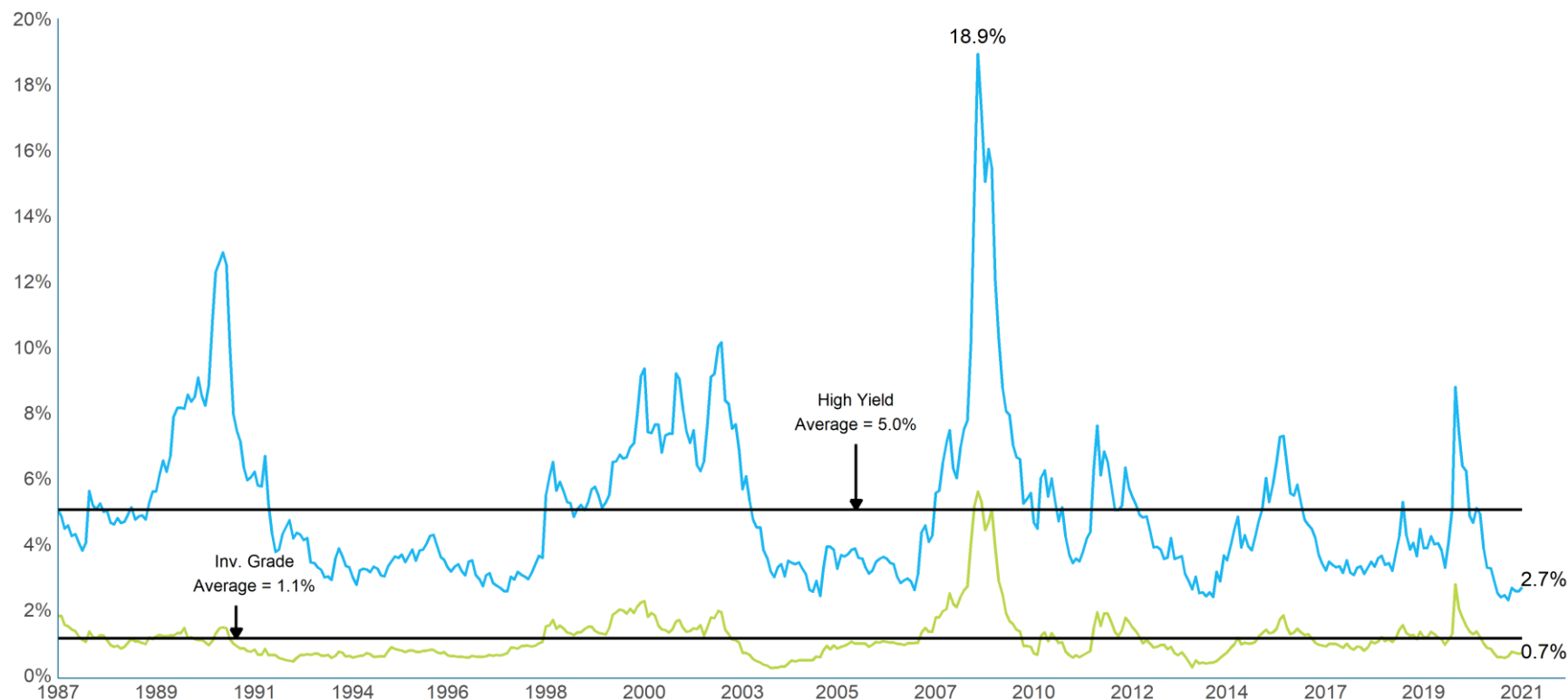
REITs Dividend Yield Spread vs. Ten-Year Treasury¹ (As of October 31, 2021)



- This chart details one valuation metric for the public REITs market. A higher (lower) figure indicates cheaper (more expensive) valuation.

¹ REITs Dividend Yield Spread vs. Ten-Year Treasury – Source: NAREIT, US Treasury. REITs are proxied by the yield for the NAREIT Equity Index.

Credit Spreads¹ (As of October 31, 2021)



- This chart details one valuation metric for the US credit markets. A higher (lower) figure indicates cheaper (more expensive) valuation relative to history.

¹ Credit Spreads – Source: Barclays Capital. High Yield is proxied by the Barclays High Yield Index and Investment Grade Corporates are proxied by the Barclays US Corporate Investment Grade Index. Spread is calculated as the difference between the Yield to Worst of the respective index and the 10-Year US Treasury yield.

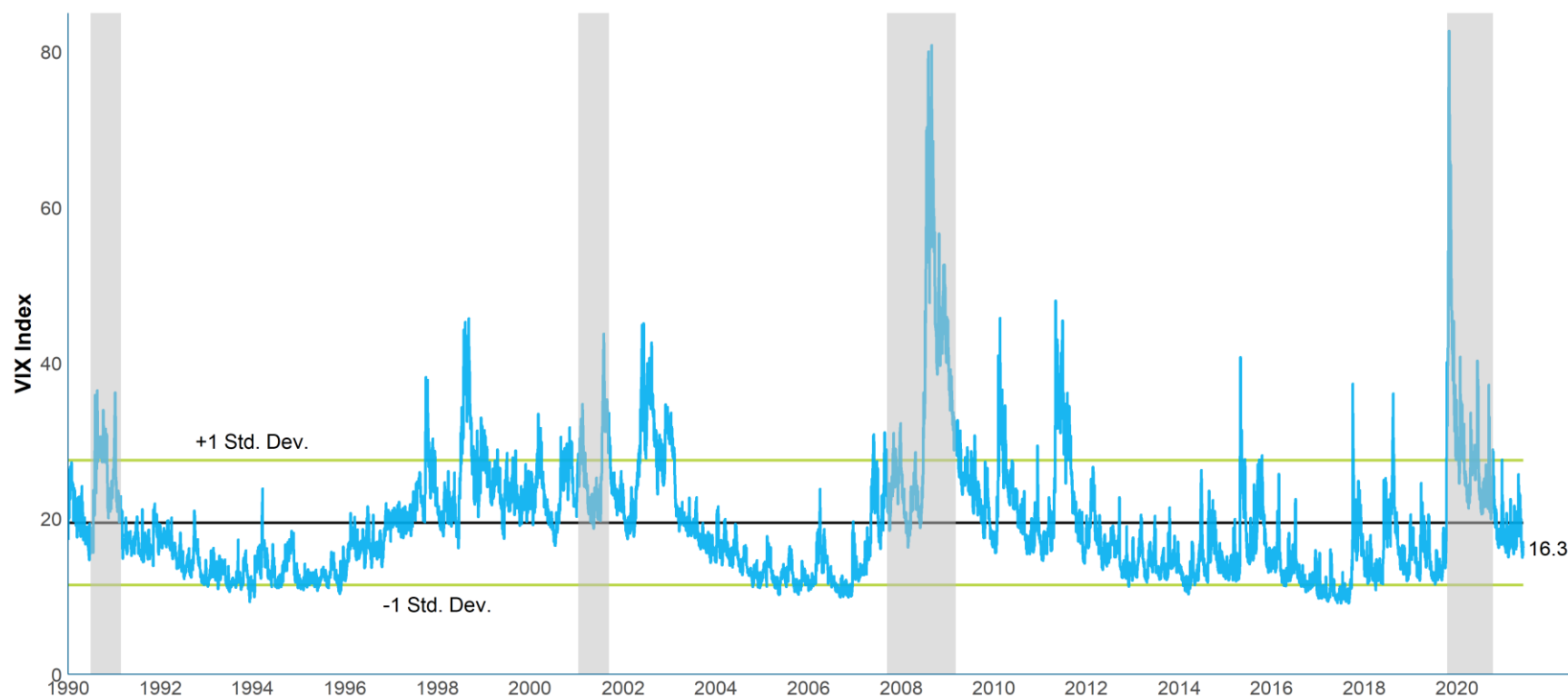
Emerging Market Debt Spreads¹ (As of October 31, 2021)



- This chart details one valuation metric for the EM debt markets. A higher (lower) figure indicates cheaper (more expensive) valuation relative to history.

¹ EM Spreads – Source: Bloomberg. Option Adjusted Spread (OAS) for the Bloomberg Barclays EM USD Aggregate Index.

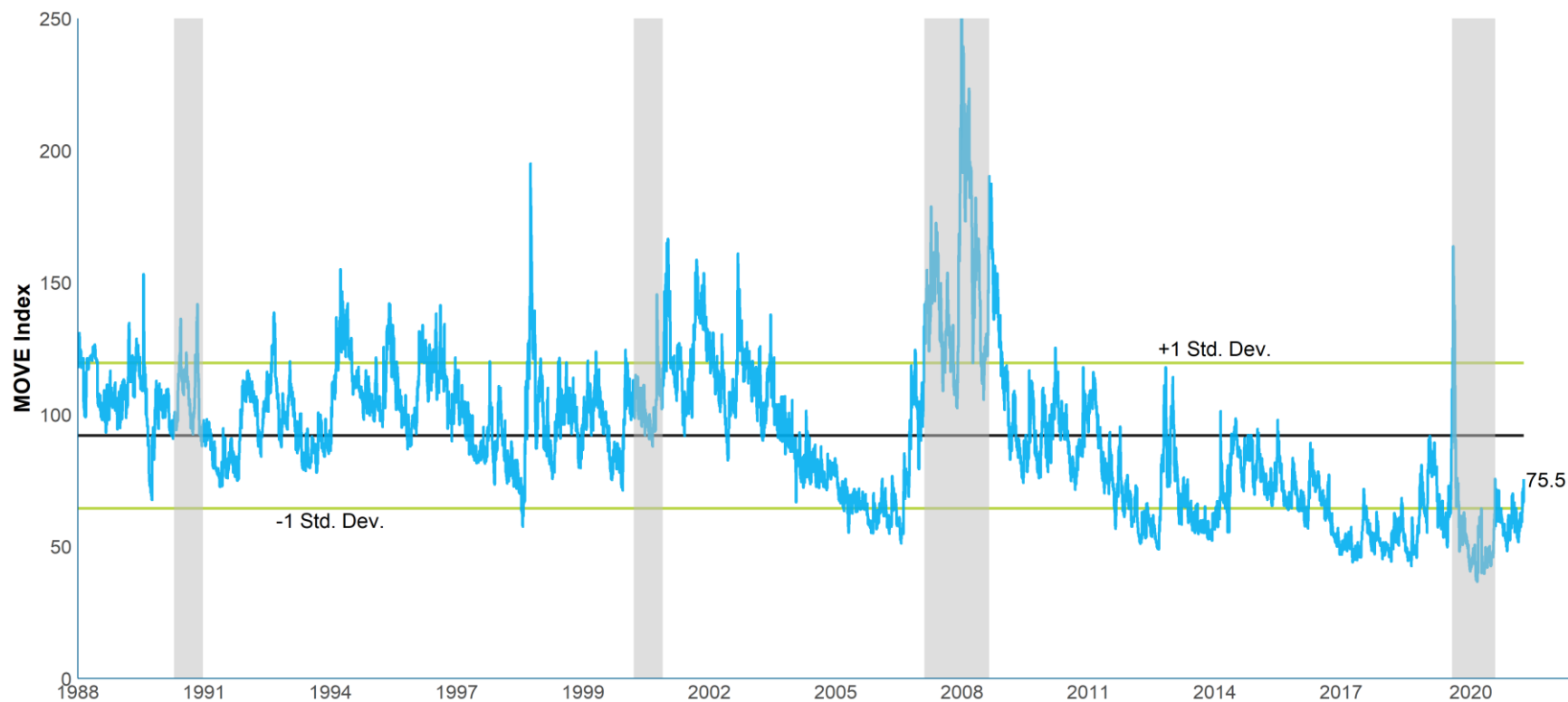
Equity Volatility¹ (As of October 31, 2021)



- This chart details historical implied equity market volatility. This metric tends to increase during times of stress/fear and while declining during more benign periods.

¹ Equity Volatility – Source: Bloomberg, and Meketa Investment Group. Equity Volatility proxied by VIX Index, a Measure of implied option volatility for US equity markets.

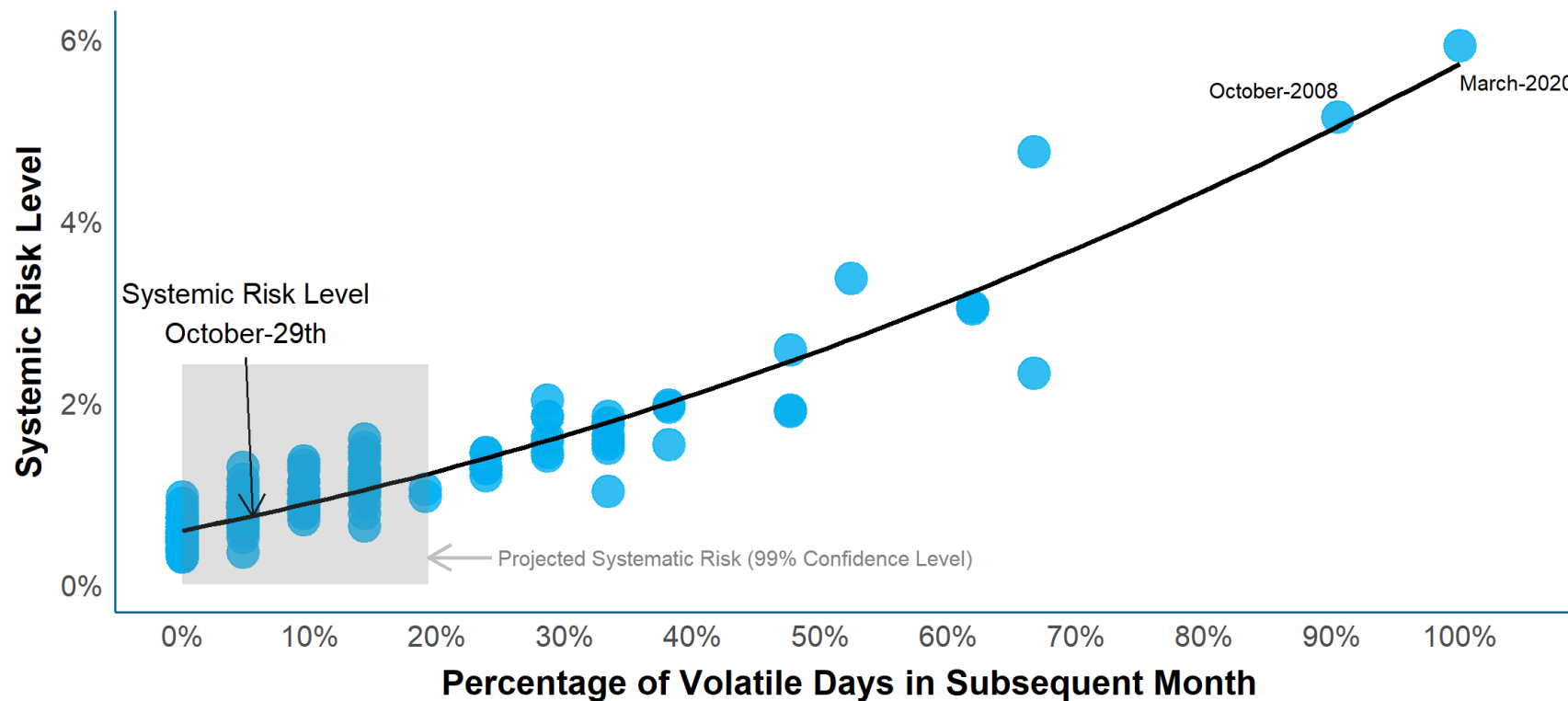
Fixed Income Volatility¹ (As of October 31, 2021)



- This chart details historical implied fixed income market volatility. This metric tends to increase during times of stress/fear and while declining during more benign periods.

¹ Fixed Income Volatility – Source: Bloomberg, and Meketa Investment Group. Fixed Income Volatility proxied by MOVE Index, a Measure of implied option volatility for US Treasury markets.

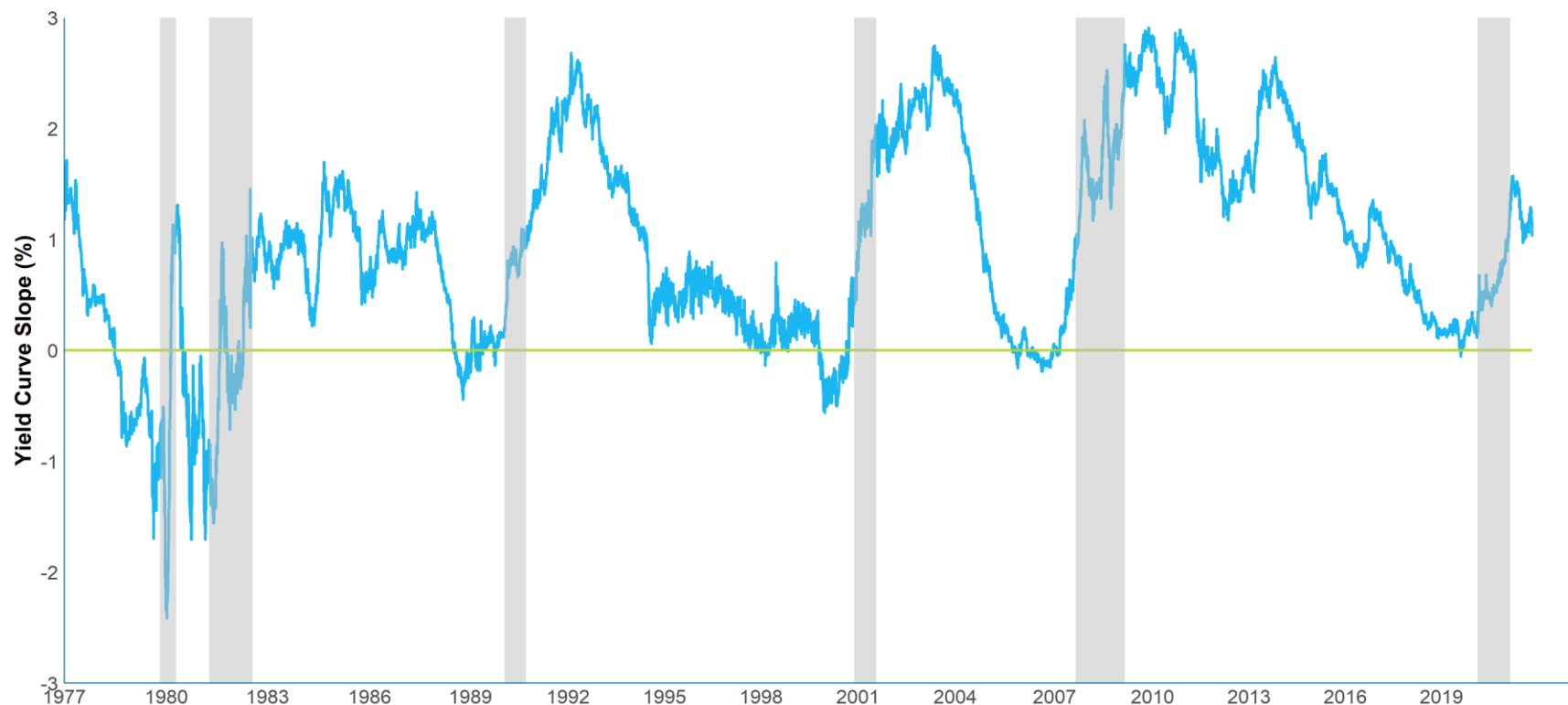
Systemic Risk and Volatile Market Days¹ (As of October 31, 2021)



- Systemic Risk is a measure of 'System-wide' risk, which indicates herding type behavior.

¹ Source: Meketa Investment Group. Volatile days are defined as the top 10 percent of realized turbulence, which is a multivariate distance between asset returns.

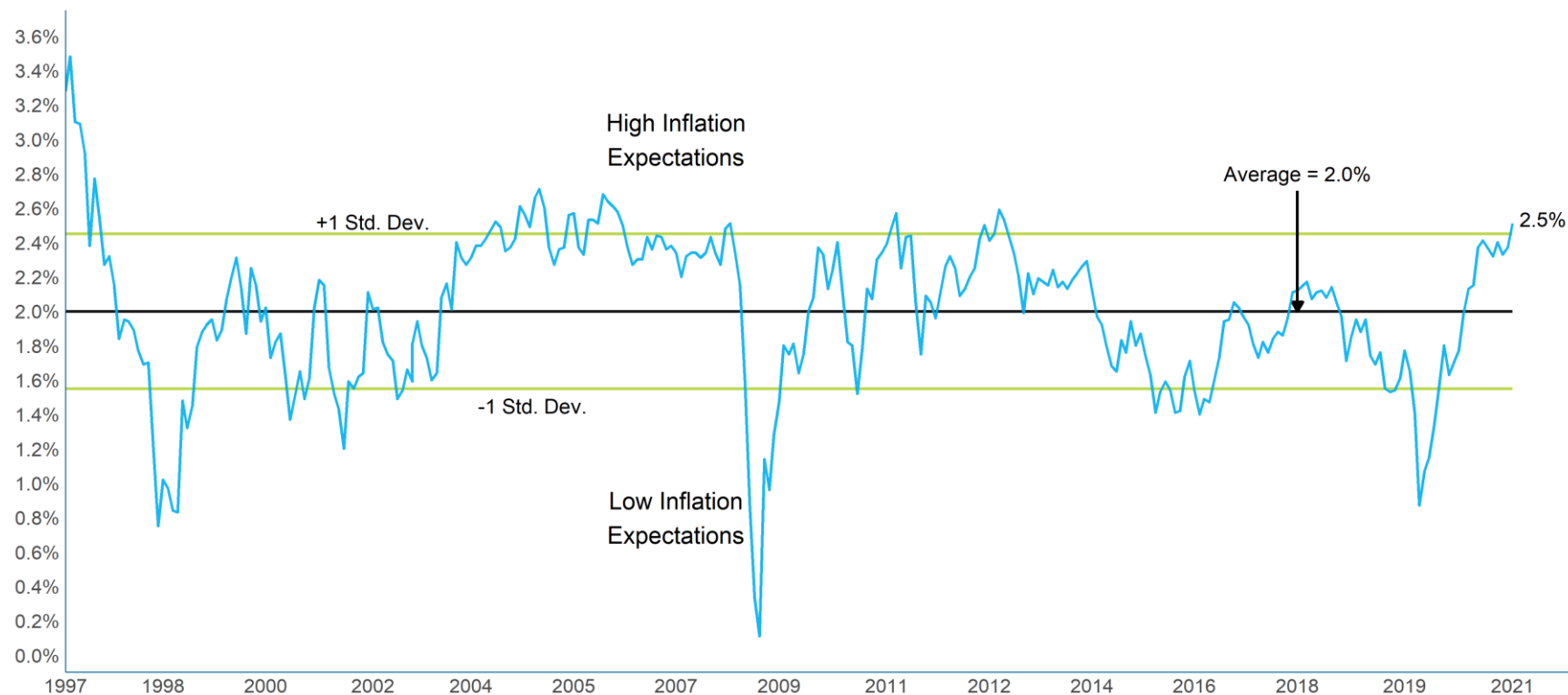
Yield Curve Slope (Ten Minus Two)¹
(As of October 31, 2021)



- This chart details the historical difference in yields between ten-year and two-year US Treasury bonds/notes. A higher (lower) figure indicates a steeper (flatter) yield curve slope.

¹ Yield Curve Slope (Ten Minus Two) – Source: Bloomberg, and Meketa Investment Group. Yield curve slope is calculated as the difference between the 10-Year US Treasury Yield and 2-Year US Treasury Yield.

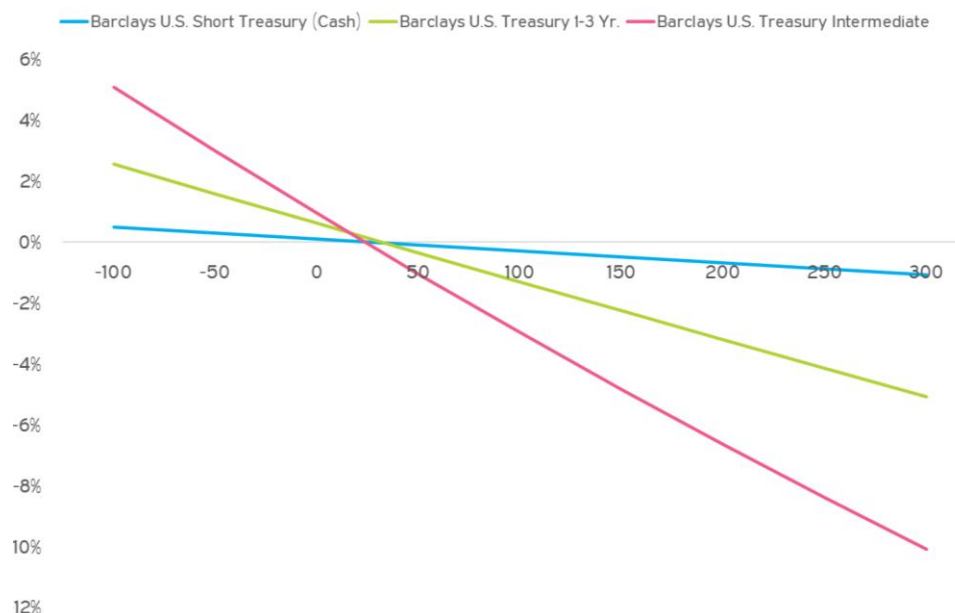
Ten-Year Breakeven Inflation¹ (As of October 31, 2021)



- This chart details the difference between nominal and inflation-adjusted US Treasury bonds. A higher (lower) figure indicates higher (lower) inflation expectations.

¹ Ten-Year Breakeven Inflation – Source: US Treasury and Federal Reserve. Inflation is measured by the Consumer Price Index (CPI-U NSA).

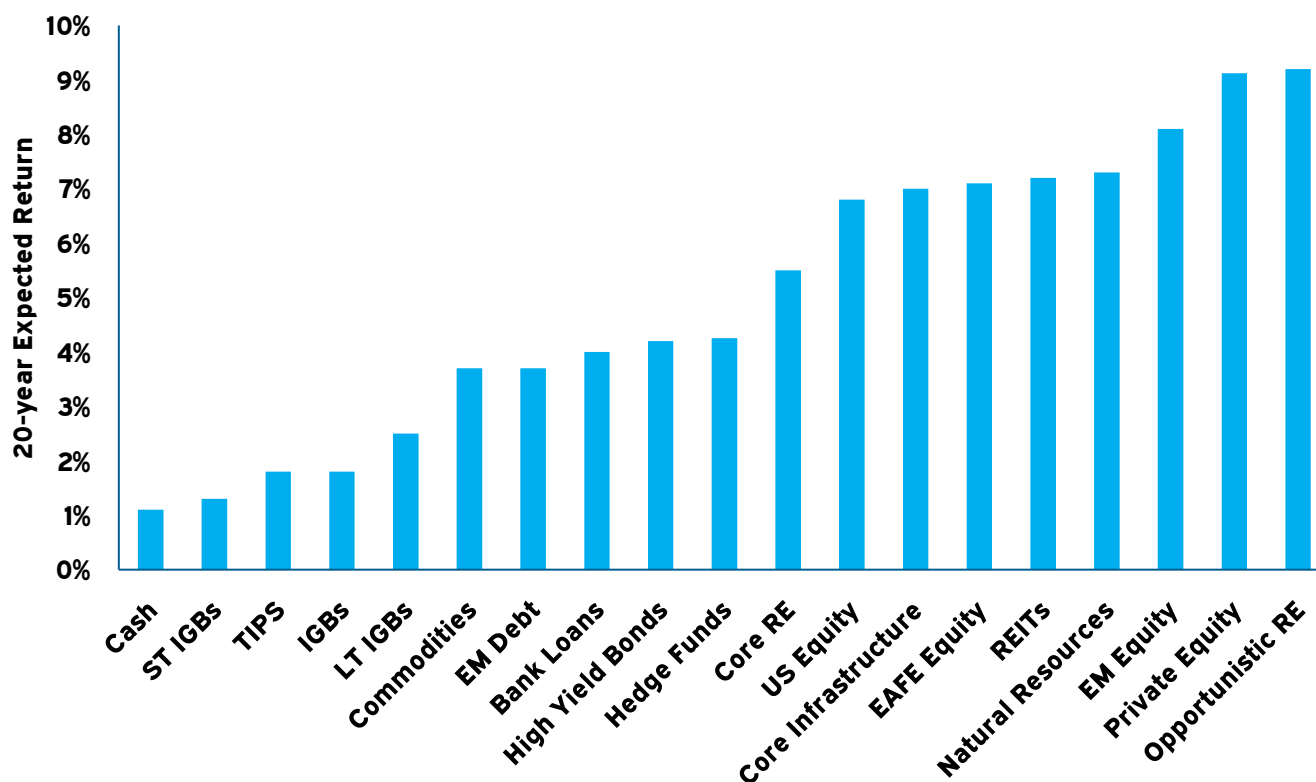
Total Return Given Changes in Interest Rates (bps)¹ (As of October 31, 2021)



	Total Return for Given Changes in Interest Rates (bps)									Statistics	
	-100	-50	0	50	100	150	200	250	300	Duration	YTW
Barclays US Short Treasury (Cash)	0.5%	0.3%	0.1%	-0.1%	-0.3%	-0.5%	-0.7%	-0.9%	-1.1%	0.39	0.08%
Barclays US Treasury 1-3 Yr.	2.5%	1.6%	0.6%	-0.4%	-1.3%	-2.3%	-3.2%	-4.2%	-5.1%	1.93	0.60%
Barclays US Treasury Intermediate	5.1%	3.0%	0.9%	-1.1%	-3.0%	-4.8%	-6.7%	-8.4%	-10.1%	4.03	0.93%
Barclays US Treasury Long	22.7%	11.8%	1.9%	-6.8%	-14.5%	-21.1%	-26.7%	-31.2%	-34.6%	18.59	1.94%

¹ Data represents the expected total return from a given change in interest rates (shown in basis points) over a 12-month period assuming a parallel shift in rates. Source: Bloomberg, and Meketa Investment Group.

Long-Term Outlook – 20-Year Annualized Expected Returns¹



- This chart details Meketa’s long-term forward-looking expectations for total returns across asset classes.

¹ Source: Meketa Investment Group’s 2021 Annual Asset Study.

Appendix

Data Sources and Explanations¹

- US Equity Cyclically Adjusted P/E on S&P 500 Index – Source: Robert Shiller and Yale University.
- Small Cap P/E (Russell 2000 Index) vs. Large Cap P/E (Russell 1000 Index) – Source: Russell Investments. Earnings figures represent 12-month “as reported” earnings.
- Growth P/E (Russell 3000 Growth Index) vs. Value (Russell 3000 Value Index) P/E – Source: Bloomberg, MSCI, and Meketa Investment Group. Earnings figures represent 12-month “as reported” earnings.
- Developed International Equity (MSCI EAFE) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years.
- Emerging Market Equity (MSCI Emerging Markets Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years.
- Private Equity Multiples – Source: S&P LCD Average EBITDA Multiples Paid in All LBOs.
- Core Real Estate Spread vs. Ten-Year Treasury – Source: Real Capital Analytics, US Treasury, Bloomberg, and Meketa Investment Group. Core Real Estate is proxied by weighted sector transaction-based indices from Real Capital Analytics and Meketa Investment Group.

¹ All Data as of October 31, 2021 unless otherwise noted.

Appendix

Data Sources and Explanations¹

- REITs Dividend Yield Spread vs. Ten-Year Treasury – Source: NAREIT, US Treasury. REITs are proxied by the yield for the NAREIT Equity Index.
- Credit Spreads – Source: Barclays Capital. High Yield is proxied by the Barclays High Yield Index and Investment Grade Corporates are proxied by the Barclays US Corporate Investment Grade Index.
 - Spread is calculated as the difference between the Yield to Worst of the respective index and the 10-Year Treasury Yield.
- EM Debt Spreads – Source: Bloomberg, and Meketa Investment Group. Option Adjusted Spread (OAS) for the Bloomberg Barclays EM USD Aggregate Index.
- Equity Volatility – Source: Bloomberg, and Meketa Investment Group. Equity Volatility proxied by VIX Index, a Measure of implied option volatility for US equity markets.
- Fixed Income Volatility – Source: Bloomberg, and Meketa Investment Group. Equity Volatility proxied by MOVE Index, a Measure of implied option volatility for US Treasury markets.
- Systemic Risk and Volatile Market Days – Source: Meketa Investment Group. Volatile days are defined as the top 10 percent of realized turbulence, which is a multivariate distance between asset returns.
- Systemic Risk, which measures risk across markets, is important because the more contagion of risk that exists between assets, the more likely it is that markets will experience volatile periods.

¹ All Data as of October 31, 2021 unless otherwise noted.

Appendix

Data Sources and Explanations¹

- Yield Curve Slope (Ten Minus Two) – Source: Bloomberg, and Meketa Investment Group. Yield curve slope is calculated as the difference between the 10-Year US Treasury Yield and 2-Year US Treasury Yield.
- Ten-Year Breakeven Inflation – Source: US Treasury and Federal Reserve. Inflation is measured by the Consumer Price Index (CPI-U NSA).

¹ All Data as of October 31, 2021 unless otherwise noted.

Meketa Market Sentiment Indicator

Explanation, Construction and Q&A

Meketa has created the MIG Market Sentiment Indicator (MIG-MSI) to complement our valuation-focused Risk Metrics. This measure of sentiment is meant to capture significant and persistent shifts in long-lived market trends of economic growth risk, either towards a risk-seeking trend or a risk-aversion trend.

This appendix explores:

- What is the Meketa Market Sentiment Indicator?
- How do I read the indicator graph?
- How is the Meketa Market Sentiment Indicator constructed?
- What do changes in the indicator mean?

Meketa has created a market sentiment indicator for monthly publication (the MIG-MSI – see below) to complement Meketa's Risk Metrics.

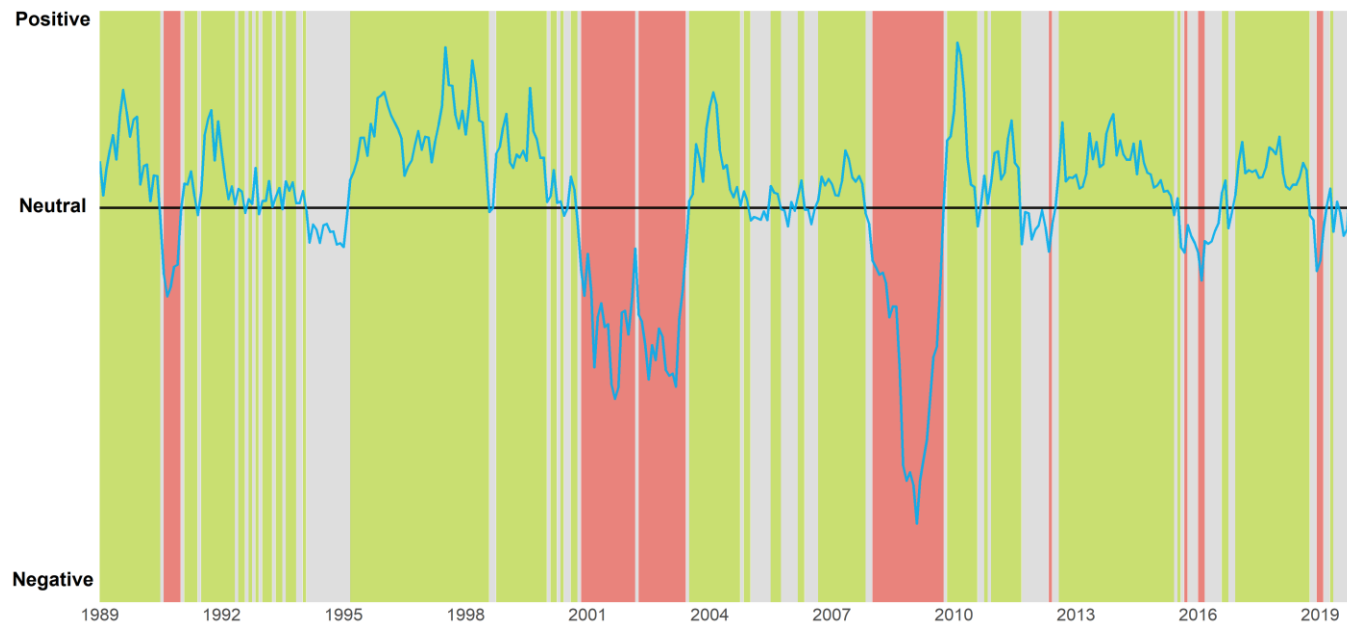
- Meketa's Risk Metrics, which rely significantly on standard market measures of relative valuation, often provide valid early signals of increasing long-term risk levels in the global investment markets. However, as is the case with numerous valuation measures, the Risk Metrics may convey such risk concerns long before a market correction take place. The MIG-MSI helps to address this early-warning bias by measuring whether the markets are beginning to acknowledge key Risk Metrics trends, and / or indicating non-valuation based concerns. Once the MIG-MSI indicates that the market sentiment has shifted, it is our belief that investors should consider significant action, particularly if confirmed by the Risk Metrics. Importantly, Meketa believes the Risk Metrics and MIG-MSI should always be used in conjunction with one another and never in isolation. The questions and answers below highlight and discuss the basic underpinnings of the Meketa MIG-MSI:

What is the Meketa Market Sentiment Indicator (MIG-MSI)?

- The MIG-MSI is a measure meant to gauge the market's sentiment regarding economic growth risk. Growth risk cuts across most financial assets and is the largest risk exposure that most portfolios bear. The MIG-MSI takes into account the momentum (trend over time, positive or negative) of the economic growth risk exposure of publicly traded stocks and bonds, as a signal of the future direction of growth risk returns; either positive (risk seeking market sentiment), or negative (risk averse market sentiment).

How do I read the Meketa Market Sentiment Indicator graph?

- Simply put, the MIG-MSI is a color-coded indicator that signals the market's sentiment regarding economic growth risk. It is read left to right chronologically. A green indicator on the MIG-MSI indicates that the market's sentiment towards growth risk is positive. A gray indicator indicates that the market's sentiment towards growth risk is neutral or inconclusive. A red indicator indicates that the market's sentiment towards growth risk is negative. The black line on the graph is the level of the MIG-MSI. The degree of the signal above or below the neutral reading is an indication the signal's current strength.
- Momentum as we are defining it is the use of the past behavior of a series as a predictor of its future behavior.



How is the Meketa Market Sentiment Indicator (MIG-MSI) Constructed?

- The MIG-MSI is constructed from two sub-elements representing investor sentiment in stocks and bonds:
 - Stock return momentum: Return momentum for the S&P 500 Equity Index (trailing 12-months).
 - Bond yield spread momentum: Momentum of bond yield spreads (excess of the measured bond yield over the identical duration US Treasury bond yield) for corporate bonds (trailing 12-months) for both investment grade bonds (75% weight) and high yield bonds (25% weight).
 - Both measures are converted to Z-scores and then combined to get an “apples to apples” comparison without the need of re-scaling.
- The black line reading on the graph is calculated as the average of the stock return momentum measure and the bonds spread momentum measure¹. The color reading on the graph is determined as follows:
 - If both stock return momentum and bond spread momentum are positive = GREEN (positive).
 - If one of the momentum indicators is positive, and the other negative = GRAY (inconclusive).
 - If both stock return momentum and bond spread momentum are negative = RED (negative).

¹ Momentum as we are defining it is the use of the past behavior of a series as a predictor of its future behavior.

“Time Series Momentum” Moskowitz, Ooi, Pedersen, August 2010. <http://pages.stern.nyu.edu/~lpederse/papers/TimeSeriesMomentum.pdf>

What does the Meketa Market Sentiment Indicator (MIG-MSI) mean? Why might it be useful?

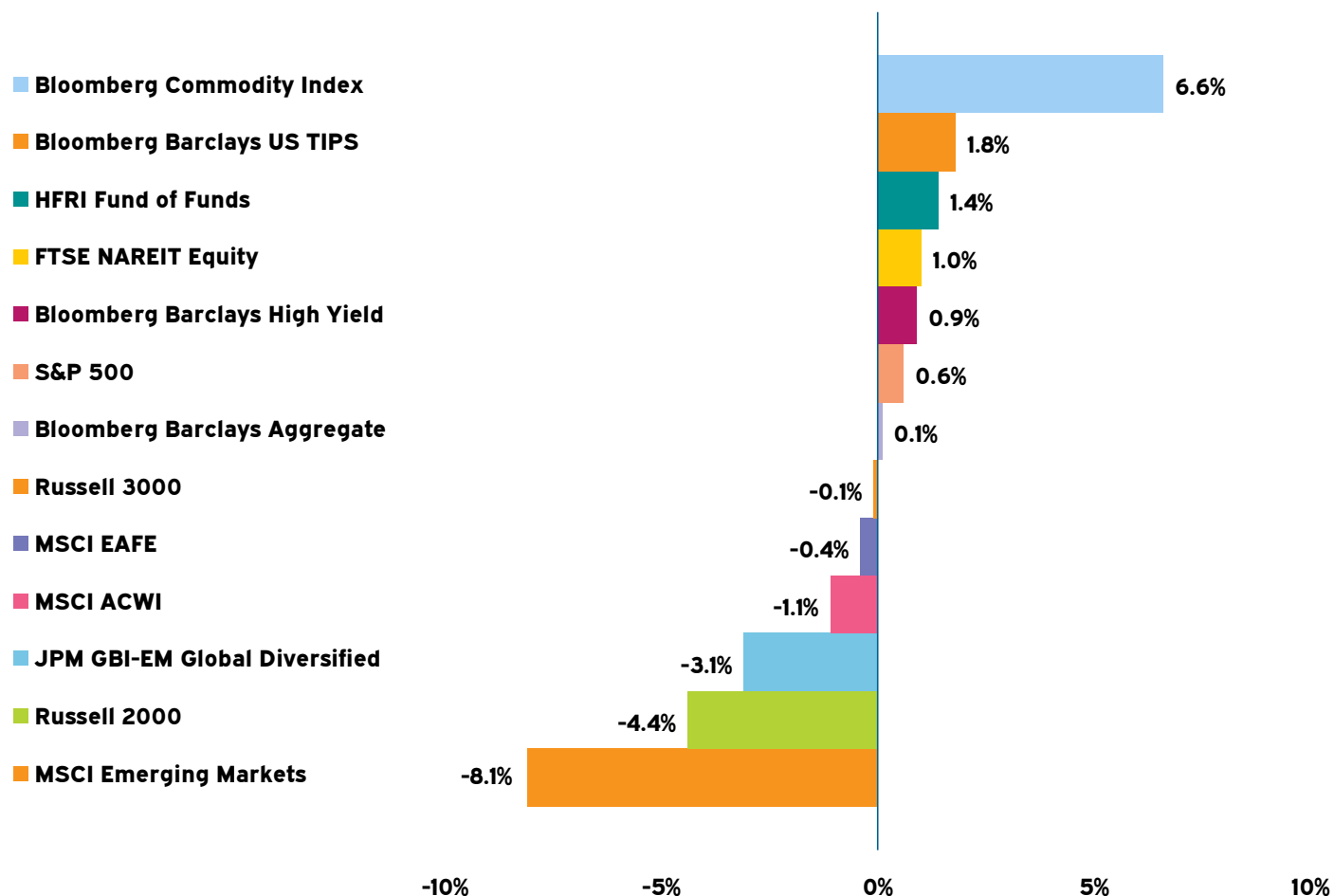
- There is strong evidence that time series momentum is significant and persistent. In particular, across an extensive array of asset classes, the sign of the trailing 12-month return (positive or negative) is indicative of future returns (positive or negative) over the next 12-month period. The MIG-MSI is constructed to measure this momentum in stocks and corporate bond spreads. A reading of green or red is agreement of both the equity and bond measures, indicating that it is likely that this trend (positive or negative) will continue over the next 12 months. When the measures disagree, the indicator turns gray. A gray reading does not necessarily mean a new trend is occurring, as the indicator may move back to green, or into the red from there. The level of the reading (black line) and the number of months at the red or green reading, gives the user additional information on which to form an opinion, and potentially take action.

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The World Markets Third Quarter of 2021

The World Markets¹ Third Quarter of 2021



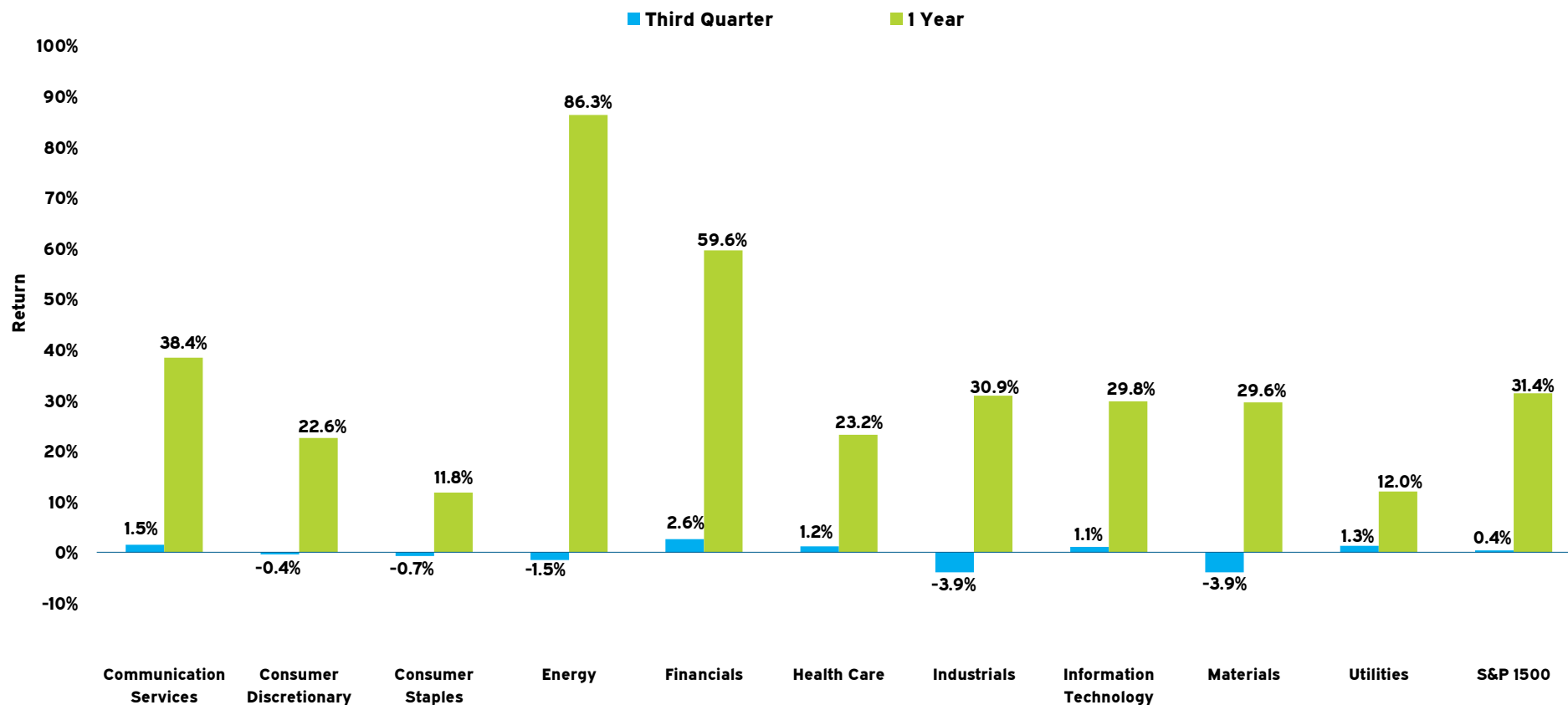
¹ Source: InvestorForce.

Index Returns¹

	3Q21 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
Domestic Equity						
S&P 500	0.6	15.9	30.0	16.0	16.9	16.6
Russell 3000	-0.1	15.0	31.9	16.0	16.9	16.6
Russell 1000	0.2	15.2	31.0	16.4	17.1	16.8
Russell 1000 Growth	1.2	14.3	27.3	22.0	22.8	19.7
Russell 1000 Value	-0.8	16.1	35.0	10.1	10.9	13.5
Russell MidCap	-0.9	15.2	38.1	14.2	14.4	15.5
Russell MidCap Growth	-0.8	9.6	30.4	19.1	19.3	17.5
Russell MidCap Value	-1.0	18.2	42.4	10.3	10.6	13.9
Russell 2000	-4.4	12.4	47.7	10.5	13.4	14.6
Russell 2000 Growth	-5.7	2.8	33.3	11.7	15.3	15.7
Russell 2000 Value	-3.0	22.9	63.9	8.6	11.0	13.2
Foreign Equity						
MSCI ACWI (ex. US)	-3.0	5.9	23.9	8.0	8.9	7.5
MSCI EAFE	-0.4	8.3	25.7	7.6	8.8	8.1
MSCI EAFE (Local Currency)	1.3	14.2	27.2	7.2	9.0	10.1
MSCI EAFE Small Cap	0.9	10.0	29.0	9.0	10.4	10.7
MSCI Emerging Markets	-8.1	-1.2	18.2	8.6	9.2	6.1
MSCI Emerging Markets (Local Currency)	-6.7	0.7	16.9	9.5	10.4	8.7
Fixed Income						
Bloomberg Barclays Universal	0.1	-1.1	0.2	5.6	3.3	3.5
Bloomberg Barclays Aggregate	0.1	-1.6	-0.9	5.4	2.9	3.0
Bloomberg Barclays US TIPS	1.8	3.5	5.2	7.4	4.3	3.1
Bloomberg Barclays High Yield	0.9	4.5	11.3	6.9	6.5	7.4
JPM GBI-EM Global Diversified	-3.1	-6.4	2.6	3.7	2.1	1.1
Other						
FTSE NAREIT Equity	1.0	23.1	37.4	10.0	6.8	11.3
Bloomberg Commodity Index	6.6	29.1	42.3	6.9	4.5	-2.7
HFRI Fund of Funds	1.4	6.4	15.0	6.7	5.9	4.5

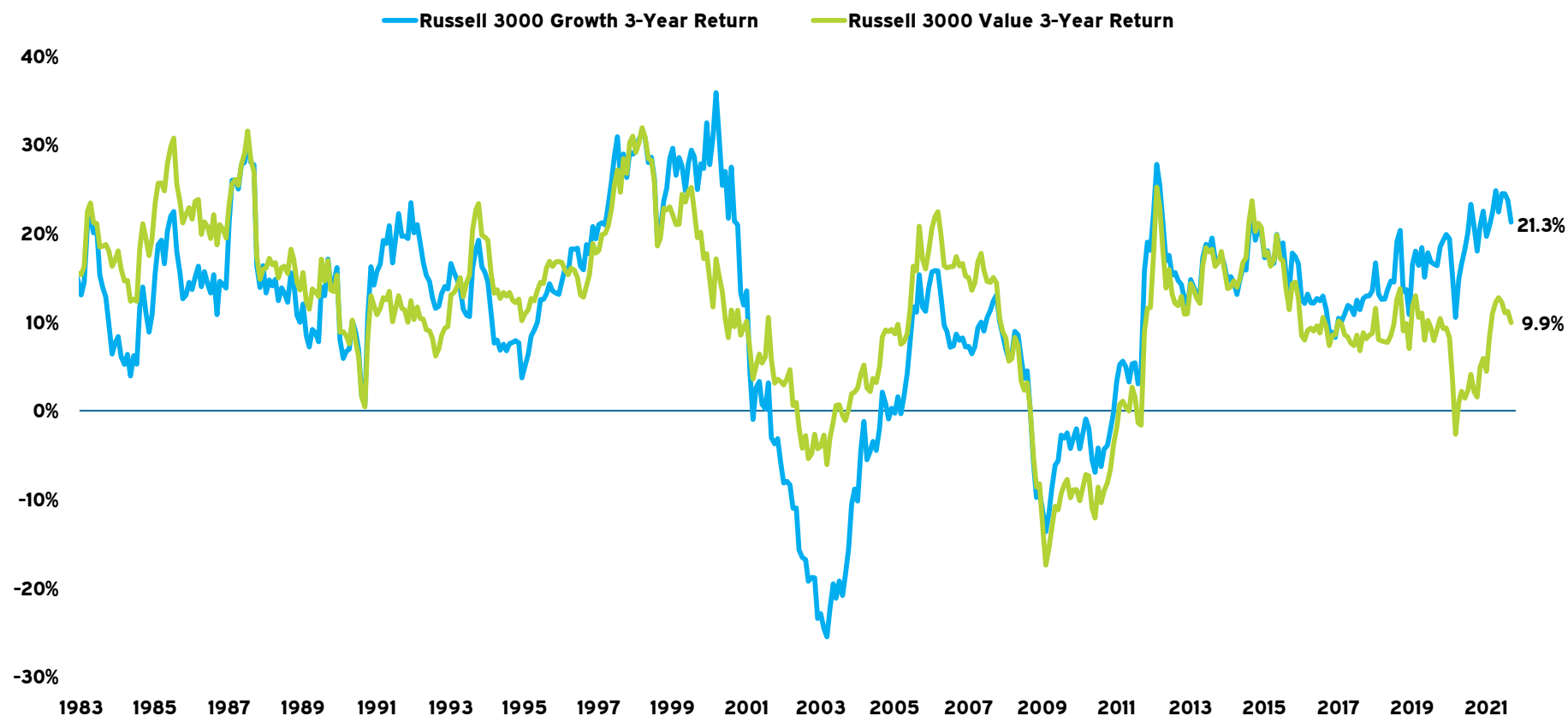
¹ Source: InvestorForce.

S&P Sector Returns¹



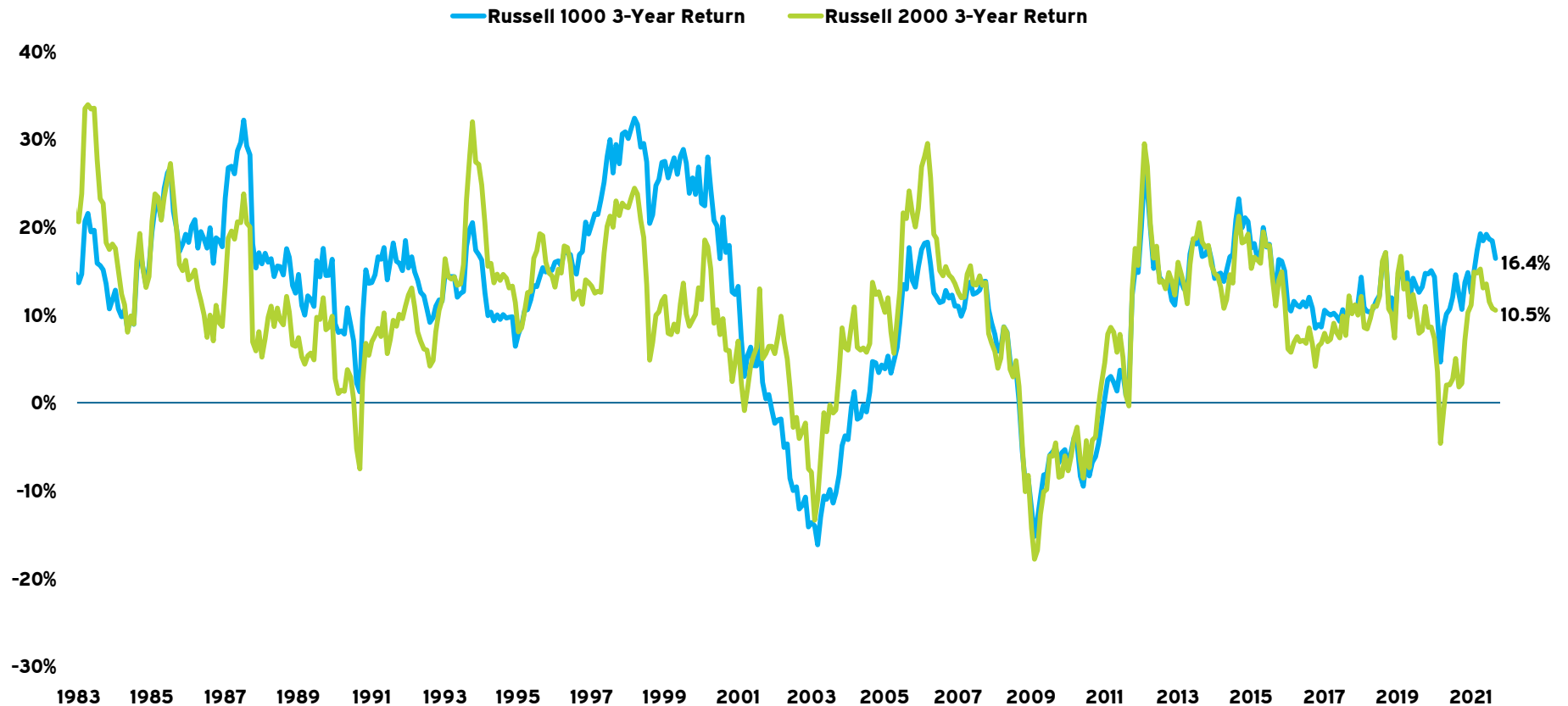
¹ Source: InvestorForce. Represents S&P 1500 (All Cap) data.

Growth and Value Rolling Three Year Returns¹



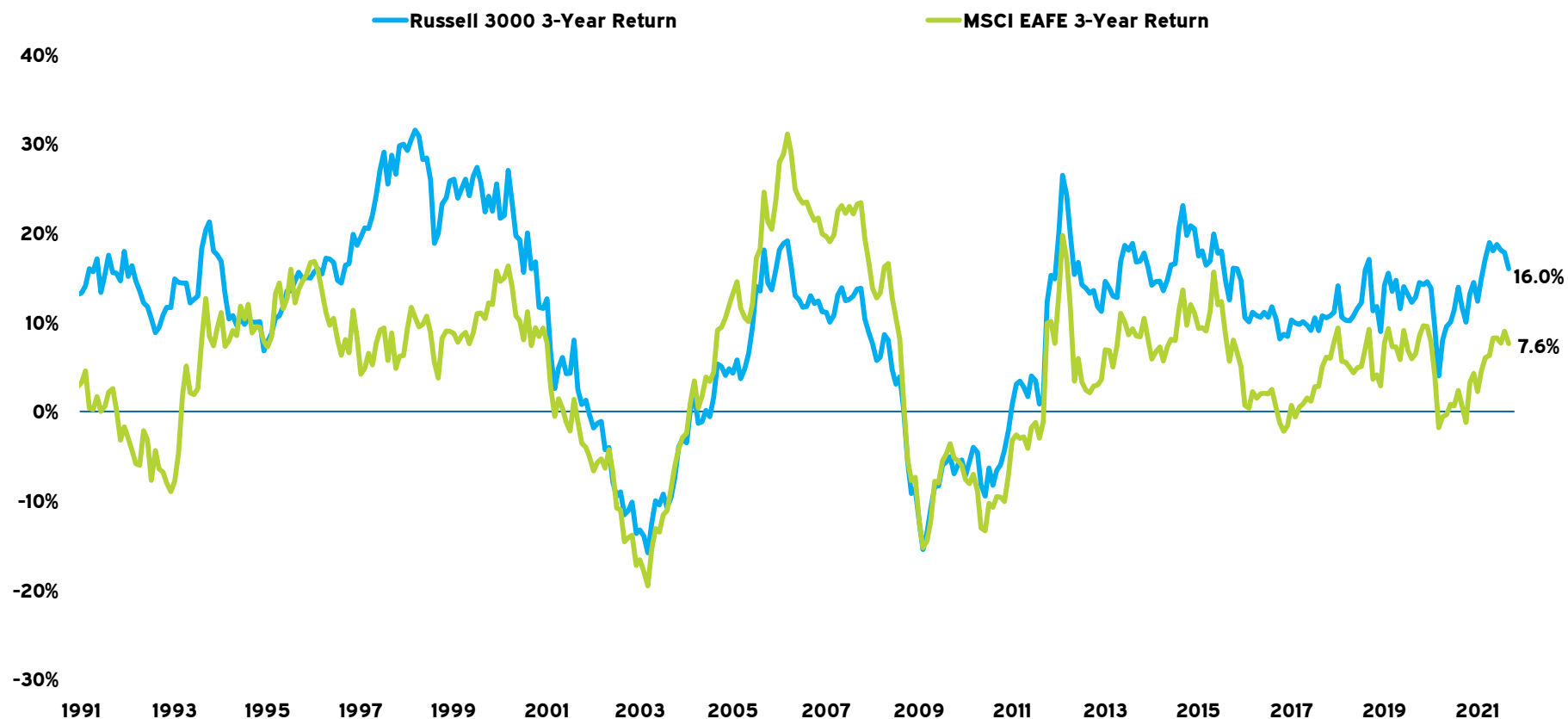
¹ Source: InvestorForce.

Large Cap (Russell 1000) and Small Cap (Russell 2000) Rolling Three Year Returns¹



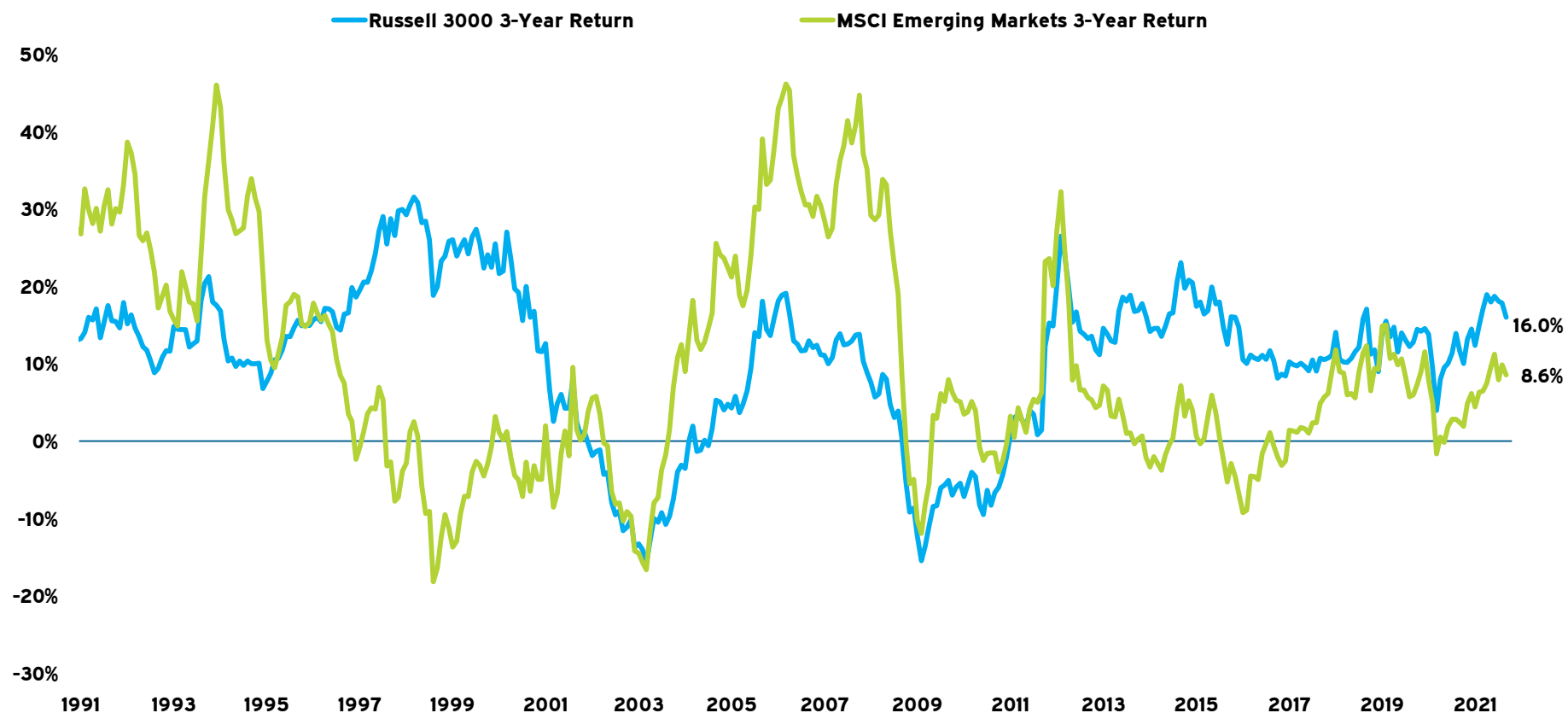
¹ Source: InvestorForce.

US and Developed Market Foreign Equity Rolling Three-Year Returns¹



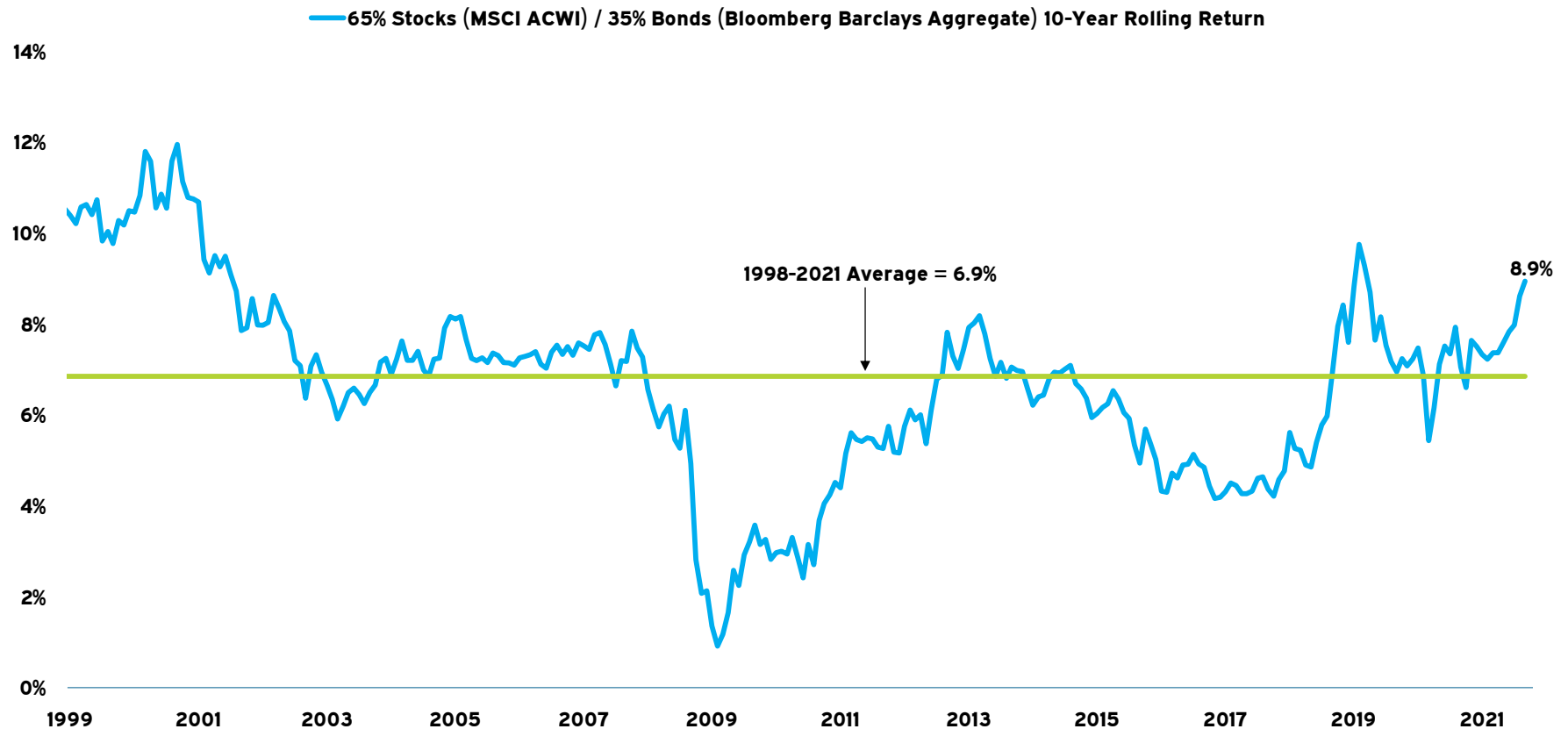
¹ Source: InvestorForce.

US and Emerging Market Equity Rolling Three-Year Returns¹



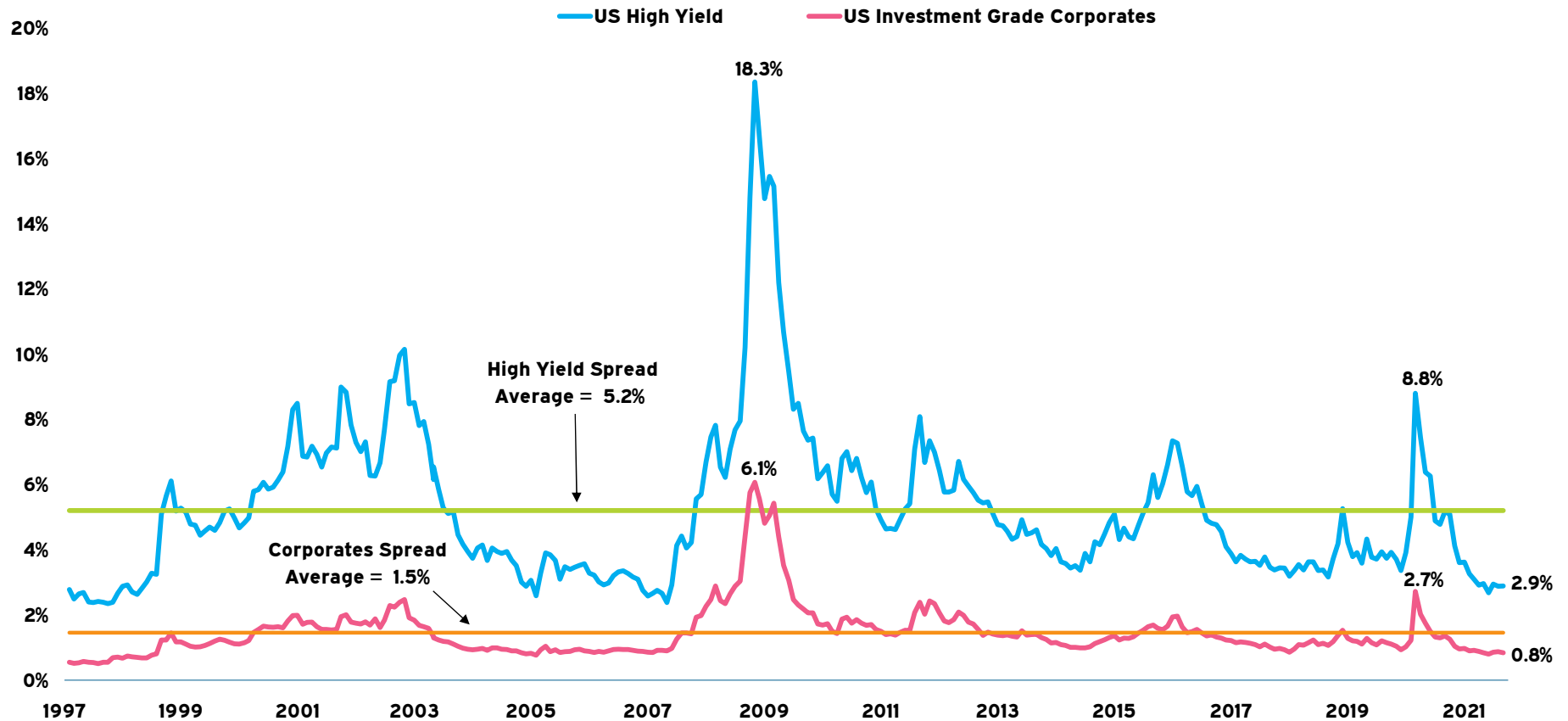
¹ Source: InvestorForce.

Rolling Ten-Year Returns: 65% Stocks and 35% Bonds¹



¹ Source: InvestorForce.

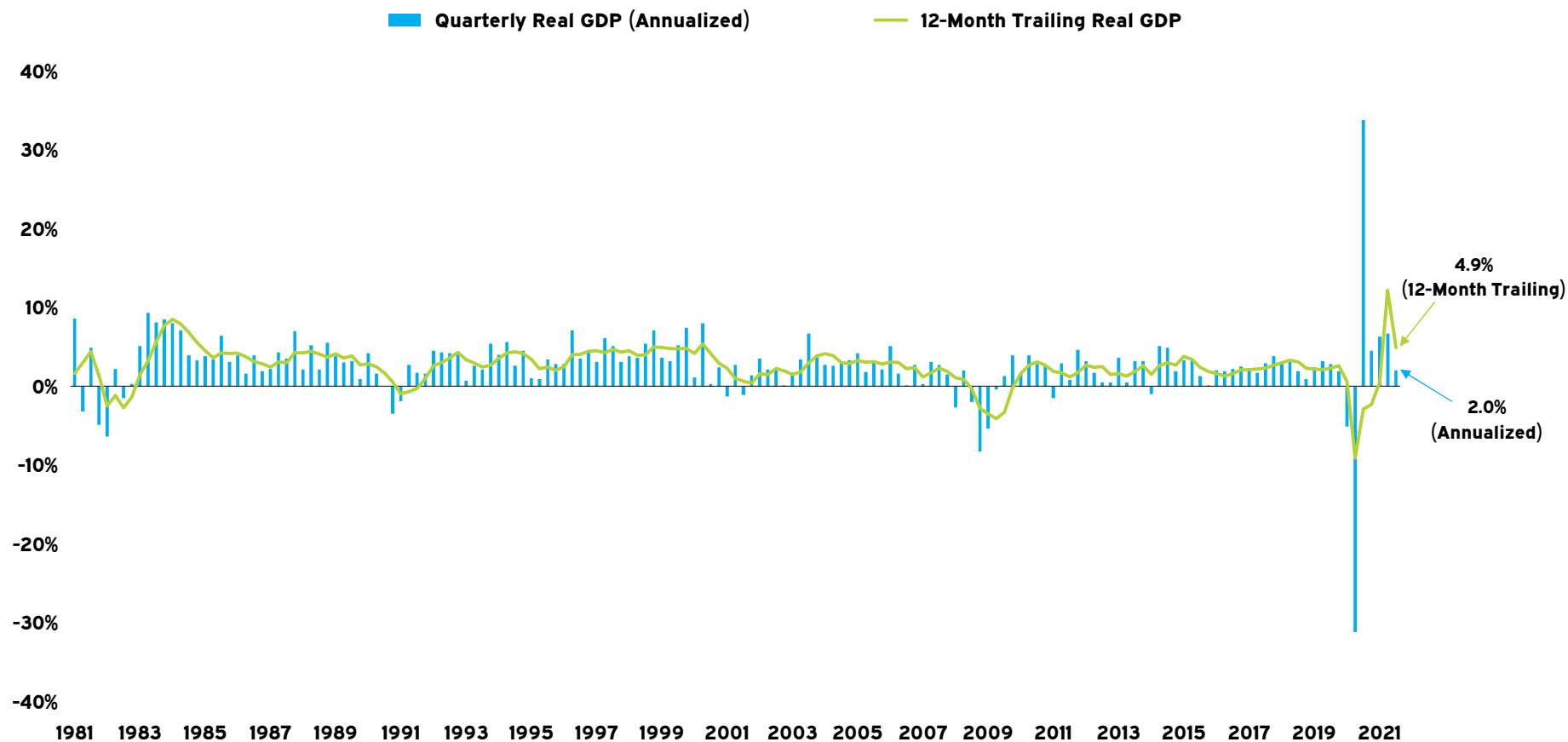
Credit Spreads vs. US Treasury Bonds^{1,2}



¹ Source: Barclays Live. Data represents the OAS.

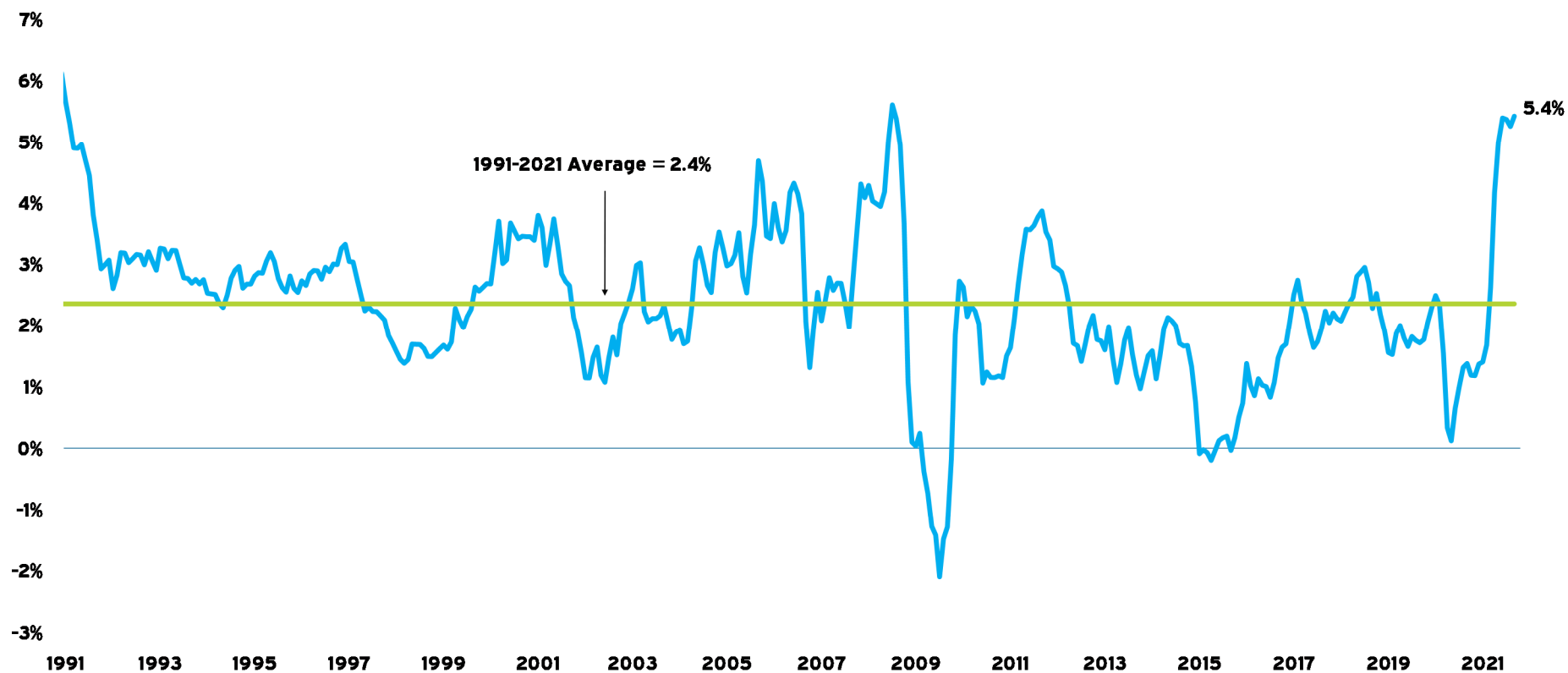
² The median high yield spread was 4.7% from 1997-2021.

US Real Gross Domestic Product (GDP) Growth¹



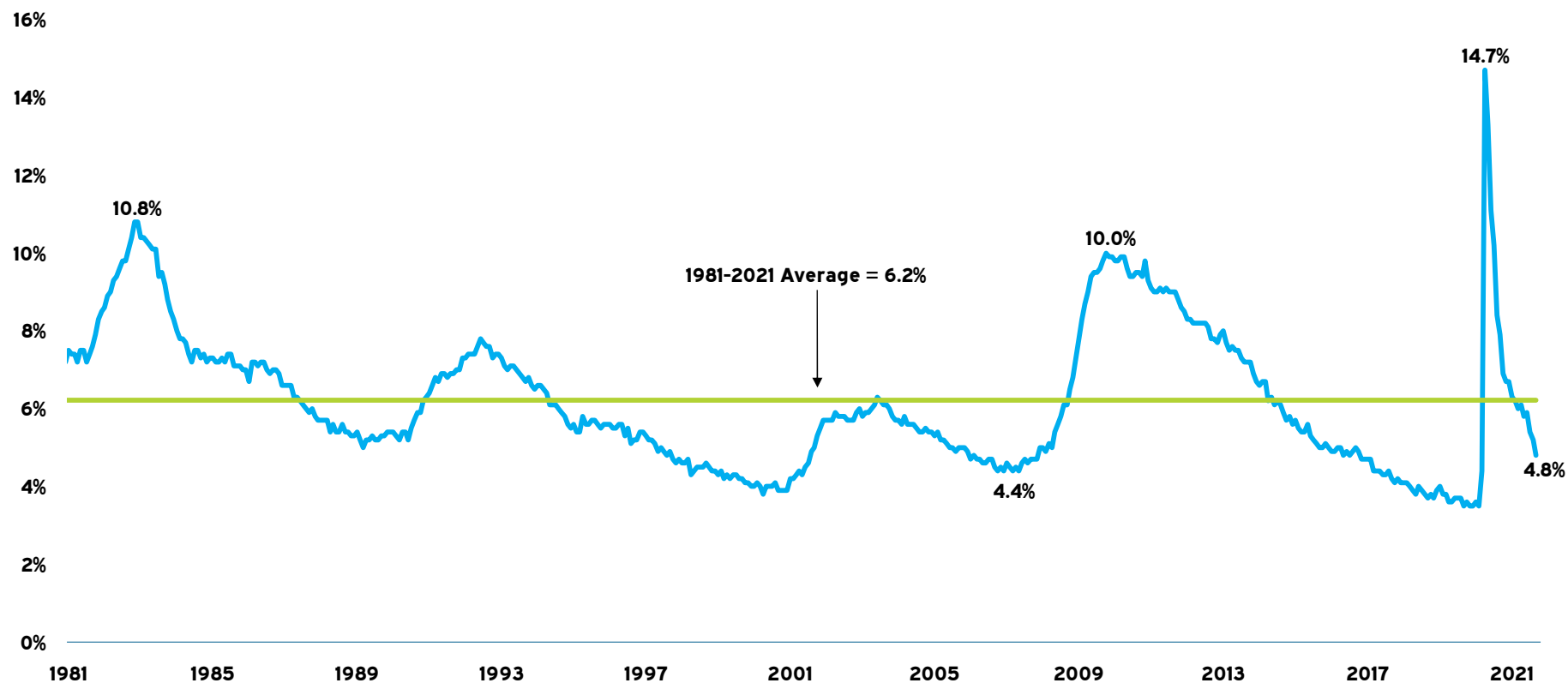
¹ Source: Bureau of Economic Analysis. Data is as of Q3 2021 and represents the first estimate.

US Inflation (CPI) Trailing Twelve Months¹



¹ Source: Bureau of Labor Statistics. Data is non-seasonally adjusted CPI, which may be volatile in the short-term. Data is as of September 30, 2021.

US Unemployment¹



¹ Source: Bureau of Labor Statistics. Data is as of September 30, 2021.

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PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

Credit Risk: Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security).

Duration: Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

Information Ratio: This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

Jensen's Alpha: A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk. $\text{Portfolio Return} - [\text{Risk Free Rate} + \text{Beta} * (\text{market return} - \text{Risk Free Rate})]$.

Market Capitalization: For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

Market Weighted: Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

Maturity: The date on which a loan, bond, mortgage, or other debt/security becomes due and is to be paid off.

Prepayment Risk: The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

Price-Book Value (P/B) Ratio: The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

Price-Earnings (P/E) Ratio: A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about its future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

Quality Rating: The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

Sharpe Ratio: A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

STIF Account: Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

Standard Deviation: A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

Style: The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

Tracking Error: A divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark, as defined by the difference in standard deviation.

Yield to Maturity: The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a “basis book.” For example, a 5% bond pays \$5 a year interest on each \$100 par value. To figure its current yield, divide \$5 by \$95—the market price of the bond—and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay \$100 for the bond that can be bought now for \$95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

$$\frac{5\% \text{ (discount)}}{5 \text{ (yrs. to maturity)}} = 1\% \text{ pro rata, plus } 5.26\% \text{ (current yield)} = 6.26\% \text{ (yield to maturity)}$$

Yield to Worst: The lowest potential yield that can be received on a bond without the issuer actually defaulting. The yield to worst is calculated by making worst-case scenario assumptions on the issue by calculating the returns that would be received if provisions, including prepayment, call, or sinking fund, are used by the issuer.

NCREIF Property Index (NPI): Measures unleveraged investment performance of a very large pool of individual commercial real estate properties acquired in the private market by tax-exempt institutional investors for investment purposes only. The NPI index is capitalization-weighted for a quarterly time series composite total rate of return.

NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE): Measures the investment performance of 28 open-end commingled funds pursuing a core investment strategy that reflects funds' leverage and cash positions. The NFI-ODCE index is equal-weighted and is reported gross and net of fees for a quarterly time series composite total rate of return.

Sources: Investment Terminology, International Foundation of Employee Benefit Plans, 1999.
The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991

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Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.

MEMORANDUM

TO: SJCERA Board of Retirement
FROM: Meketa Investment Group
DATE: December 10, 2021
RE: SJCERA Manager Certification Update: 3Q 2021 Overview and Responses

Summary of Responses

Meketa reviewed the SJCERA Quarterly Manager Certification Updates for the quarter ending September 30, 2021, from all funded managers. *In Meketa's opinion, the manager information reported for the quarter presents no significant concerns to the SJCERA portfolio.* Meketa's opinion is based on the written responses and on Meketa's conversations with managers that reported senior investment personnel or management departures.

The managers' responses indicate that¹:

- All funded managers reported:
 - Registered Investment Advisor in Good Standing, or are exempt,
 - Compliance with Plan Investment Policy,
 - Compliance with SJCERA's Manager Guidelines, or N/A,
 - Reconciliation against the custodian, or N/A,
 - Compliance with own internal risk management policies and procedures, and
 - Delivered current ADV, SSAE-16 or equivalent Annual Financial Audits, as available.
- Seven managers reported litigation or regulatory investigation information: Almanac, Angelo Gordon, BlackRock, HPS, Medley, PIMCO, and Principal.
- Eight managers reported investment team changes: Almanac, Angelo Gordon, Crestline, Dodge & Cox, GQG, Medley, Stellex, and Walton Street.
- Twelve managers reported material management changes: Almanac, GQG, Mesa West, Morgan Creek, Neuberger Berman, Northern Trust, Oaktree, PanAgora, Parametric, PIMCO, Stellex, Stockbridge, and White Oak.
- Five managers reported material business changes: Dodge & Cox, Medley, Parametric, Stockbridge, and Stone Harbor.
- Bridgewater and Graham chose not to provide responses to the SJCERA compliance questionnaire and directed Meketa to a standard quarterly business or compliance updates.

¹ Managers' responses to footnoted ("**") questions begin on page 6.

SJCERA Overview of Investment Mgr. Compliance Report

Manager	Sub-Segment	Q1 RIA in Good Standing	Q2 Complied with Plan IPS	Q3 Complied w/ Mgr. Guidelines	Q4 Reconciled With Custodian	Q5 Litigation	Q6 Investment Personnel Changes	Q7 Mgmt. Changes	Q8 Material Business Changes	Q9 Complied Internal Risk Mgmt.	Q10 Sent Fncl Stmnts
Aggressive Growth											
BlackRock	Global Infrastructure	Yes	Yes	Yes	N/A*	Yes*	No	No	No	Yes	Yes
Ocean Avenue	PE Buyout FOF	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes
Morgan Creek	Multi-Strat FOF	Yes	Yes	Yes	N/A*	No	No	Yes*	No	Yes	Yes
Stellex Capital II	Multi-Strat FOF	Yes	Yes	Yes	Yes	No	Yes*	Yes*	No	Yes	Yes
AG Core Plus	Pvt. Non-core RE	Yes	Yes	Yes	N/A*	Yes*	Yes*	No	No	Yes	Yes
Almanac Realty	Pvt. Non-core RE	Yes	Yes	Yes	N/A*	Yes*	Yes*	Yes*	No	Yes	Yes
Greenfield	Pvt. Non-core RE	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes
Miller Global	Pvt. Non-core RE	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes
Stockbridge	Pvt. Non-core RE	Yes	Yes	Yes	Yes	No	No	Yes*	Yes*	Yes	Yes
Walton Street	Pvt. Non-core RE	Yes	Yes	Yes	N/A*	No	Yes*	No	No	Yes	Yes
Traditional Growth											
Northern Trust	All Cap Global	Yes	Yes	Yes	Yes	No*	No	Yes*	No	Yes	Yes
GQG	Emerging Mkts.	Yes	Yes	Yes	Yes	No	Yes*	Yes*	No*	Yes	Yes
PIMCO	Emerging Mkts.	Yes	Yes	Yes	Yes	Yes*	No	Yes*	No	Yes	Yes
Invesco	REITS	Yes	Yes	Yes	Yes	No	No*	No	No	Yes	Yes
Stabilized Growth											
Bridgewater**	Risk Parity	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PanAgora	Risk Parity	Yes	Yes	Yes	Yes	No	No	Yes*	No	Yes	Yes
Neuberger Berman	Opp. Credit	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes
Stone Harbor	Abs. Return	Yes	Yes	Yes	Yes	No	No	No	Yes*	Yes	Yes
Stone Harbor	Bank Loans	Yes	Yes	Yes	Yes	No	No	No	Yes*	Yes	Yes
BlackRock	Direct Lending	Yes	Yes	Yes	N/A*	Yes*	No	No	No	Yes	Yes
Crestline	Opportunistic	Yes	Yes	Yes	N/A*	No	Yes*	No	No	Yes	Yes
Davidson Kempner	Opportunistic	Yes	Yes	Yes	Yes	No*	No*	No	No*	Yes	Yes
Medley	Direct Lending	Yes	Yes	Yes	Yes	Yes*	Yes*	No	Yes*	No	No
Mesa West	Comm. Mortgage	Yes	Yes	Yes	Yes	No	No	Yes*	No	Yes	Yes
Oaktree	Leveraged Direct	Yes	Yes	Yes	Yes	No*	No	Yes*	No	Yes	Yes
HPS	Direct Lending	Yes	Yes	Yes	Yes	Yes*	No	No	No	Yes	Yes
Raven Capital	Direct Lending	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes
White Oak	Direct Lending	Yes	Yes	Yes	Yes	No*	No	Yes*	No	Yes	Yes
Berkeley Partners	Value Add RE	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes
Principal	Pvt. Core RE	Yes	Yes	Yes	N/A*	Yes*	No	No*	No	Yes	Yes
Prologis Targeted U.S.	Pvt. Core RE	No*	Yes	Yes	Yes	No*	No	No	No	Yes	Yes
RREEF / DWS	Pvt. Core RE	Yes	Yes	Yes	N/A*	No	Yes	No	No	Yes	Yes

SJCERA Overview of Investment Mgr. Compliance Report (continued)

Manager	Sub-Segment	Q1 RIA in Good Standing	Q2 Complied with Plan IPS	Q3 Complied w/ Mgr. Guidelines	Q4 Reconciled With Custodian	Q5 Litigation	Q6 Investment Personnel Changes	Q7 Mgmt. Changes	Q8 Material Business Changes	Q9 Complied Internal Risk Mgmt.	Q10 Sent Fncl Stmnts
Principal Protection											
Dodge & Cox	Core Fixed Income	Yes	Yes	Yes	Yes	No	Yes*	No	Yes*	Yes	Yes
DoubleLine	MBS	Yes	Yes	N/A*	Yes	No	No	No	No	N/A*	Yes
Crisis Risk Offset™											
Dodge & Cox	Long Duration	Yes	Yes	Yes	Yes	No	Yes*	No	Yes*	Yes	Yes
Mount Lucas	Syst. Trend Following	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes
Graham**	Syst. Trend Following	Yes	Yes	Yes	Yes	No	No	No*	No	Yes	Yes
AQR	Alt. Risk Premia	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes
PE Investments	Alt. Risk Premia	Yes	Yes	Yes	Yes	No*	No	No	No	Yes	Yes
Lombard Odier	Alt. Risk Premia	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes
Overlay											
Parametric	PIOS Overlay Prgm	Yes	Yes	Yes	Yes	No*	No	Yes*	Yes*	Yes	Yes
Consultant											
Meketa	Consultant	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes

* Detailed written response provided below.

** Bridgewater and Graham chose not to provide responses to the SJCERA compliance questionnaire and instead directed Meketa to a standard quarterly business update.

*** Manager declined to provide *written* responses.

Performance Information through September 30, 2021								
Manager	Sub-Segment	Inception Date	Status	Benchmark	Ann. Excess (bps)		Peer Ranking	
					3 Yrs	5 Yrs	3 Yrs	5 Yrs
Aggressive Growth								
BlackRock	Global Infrastructure	7/2019	Good Standing	MSCI ACWI +2%	n/a	n/a	n/a	n/a
Ocean Avenue II ¹	PE Buyout FOF	5/2013	Good Standing	MSCI ACWI +2%	1,414	1,524	n/a	n/a
Ocean Avenue III ¹	PE Buyout FOF	4/2016	Good Standing	MSCI ACWI +2%	820	1,153	n/a	n/a
Ocean Avenue IV	PE Buyout FOF	12/2019	Good Standing	MSCI ACWI +2%	n/a	n/a	n/a	n/a
Morgan Creek III ¹	Multi-Strat FOF	2/2015	Good Standing	MSCI ACWI +2%	-2,198	-1,086	n/a	n/a
Morgan Creek V ¹	Multi-Strat FOF	6/2013	Good Standing	MSCI ACWI +2%	-276	-76	n/a	n/a
Morgan Creek VI ¹	Multi-Strat FOF	2/2015	Good Standing	MSCI ACWI +2%	505	479	n/a	n/a
Stellex Capital II	Multi-Strat FOF	7/2021	Good Standing	MSCI ACWI +2%	n/a	n/a	n/a	n/a
AG Core Plus IV ³	Pvt. Non-core RE	2014	Good Standing	Private RE Benchmark	70	-50	n/a	n/a
Almanac Realty VI ³	Pvt. Non-core RE	2011	Good Standing	Private RE Benchmark	-1,920	-1,410	n/a	n/a
Greenfield V ³	Pvt. Non-core RE	2007	Good Standing	Private RE Benchmark	-1,980	-1,320	n/a	n/a
Greenfield VI ³	Pvt. Non-core RE	2011	Good Standing	Private RE Benchmark	-5,170	-4,030	n/a	n/a
Greenfield VII ³	Pvt. Non-core RE	2013	Good Standing	Private RE Benchmark	620	460	n/a	n/a
Grandview ³	Pvt. Non-core RE	2018	Good Standing	Private RE Benchmark	1,900	n/a	n/a	n/a
Miller Global VI ³	Pvt. Non-core RE	2007	Good Standing	Private RE Benchmark	-2,830	-1,840	n/a	n/a
Miller Global VII ³	Pvt. Non-core RE	2012	Good Standing	Private RE Benchmark	-1,050	-750	n/a	n/a
Stockbridge III ³	Pvt. Non-core RE	2017	Good Standing	Private RE Benchmark	270	n/a	n/a	n/a
Walton Street V ³	Pvt. Non-core RE	2005	Good Standing	Private RE Benchmark	-2,190	-1,830	n/a	n/a
Walton Street VI ³	Pvt. Non-core RE	2007	Good Standing	Private RE Benchmark	-980	-960	n/a	n/a
Traditional Growth								
Northern Trust	All Cap Global	10/2020	Good Standing	MSCI ACWI IMI	n/a	n/a	n/a	n/a
GQG	Emerging Mkts.	8/2020	Good Standing	MSCI Emerging Markets	n/a	n/a	n/a	n/a
PIMCO	Emerging Mkts.	4/2007	Good Standing	MSCI Emerging Markets	-124	-33	82	71
Invesco	REITS	8/2004	Good Standing	FTSE EPRA/NAREIT ex-US Equity	-7	44	89	85
Stabilized Growth								
Bridgewater ²	Risk Parity	3/2012	Good Standing	Bridgewater All Weather Blend	409	218	n/a	n/a
PanAgora	Risk Parity	4/2016	Good Standing	T-Bill +4%	676	266	n/a	n/a
Neuberger Berman ¹	Opp. Credit	2/2019	Good Standing	33% HY Const./33% S&P LSTA LL/ 33% JPMEMBI Gbl Div.	n/a	n/a	n/a	n/a
Stone Harbor ¹	Abs. Return	4/2008	Good Standing	3-Month Libor	223	219	n/a	n/a
BlackRock	Direct Lending	05/2020	Good Standing	Custom Credit Benchmark	n/a	n/a	n/a	n/a
Crestline ¹	Opportunistic	11/2013	Good Standing	CPI +6%	-764	-446	n/a	n/a

¹ Data is lagged 1 quarter.

² Bridgewater and Graham chose not to provide responses to the SJCERA compliance questionnaire and instead directed Meketa to a standard quarterly business update.

³ Annual Excess returns for Private Non-Core Real Estate are as of 6/30/2021, lagged 1 quarter.

Performance Information through September 30, 2021								
Manager	Sub-Segment	Inception Date	Status	Benchmark	Ann. Excess (bps)		Peer Ranking	
					3 Yrs	5 Yrs	3 Yrs	5 Yrs
Davidson Kempner ¹	Opportunistic	10/2020	Good Standing	CPI +6%	n/a	n/a	n/a	n/a
Stabilized Growth (continued)								
Medley ¹	Direct Lending	7/2012	Good Standing	CPI +6%	-1,916	-1,538	n/a	n/a
Mesa West III ¹	Comm. Mortgage	9/2013	Good Standing	CPI +6%	-941	-545	n/a	n/a
Mesa West IV ¹	Comm. Mortgage	3/2017	Good Standing	CPI +6%	-104	n/a	n/a	n/a
Oaktree ¹	Leveraged Direct	3/2018	Good Standing	MSCI ACWI +2%	391	n/a	n/a	n/a
HPS	Direct Lending	8/2020	Good Standing	CPI +6%	n/a	n/a	n/a	n/a
Raven Capital II ¹	Direct Lending	8/2014	Good Standing	CPI +6%	-1,407	-1,317	n/a	n/a
Raven Capital III ¹	Direct Lending	8/2015	Good Standing	CPI +6%	-174	-459	n/a	n/a
White Oak ¹	Direct Lending	3/2016	Good Standing	CPI +6%	-291	-197	n/a	n/a
White Oak ¹	Direct Lending	3/2020	Good Standing	CPI +6%	n/a	n/a	n/a	n/a
Principal ³	Pvt. Core RE	10/2015	Good Standing	Private RE Benchmark	-260	-280	n/a	n/a
Prologis Targeted US ³	Pvt. Core RE	9/2007	Good Standing	Private RE Benchmark	630	680	n/a	n/a
DWS / RREEF ³	Pvt. Core RE	4/2016	Good Standing	Private RE Benchmark	-250	n/a	n/a	n/a
Principal Protection								
Dodge & Cox	Core Fixed Income	10/1990	Good Standing	BB Aggregate Bond	95	146	23	6
DoubleLine	MBS	2/2012	Good Standing	BB Aggregate Bond	-98	59	68	1
Crisis Risk Offset¹								
Dodge & Cox	Long Duration	2/2016	Good Standing	BB US Long Duration Treasury	-45	-20	n/a	n/a
Mount Lucas	Sys. Trend Following	1/2005	Good Standing	BTOP50 Index	-346	-231	n/a	n/a
Graham ²	Sys. Trend Following	4/2016	Good Standing	SG Trend	-97	-364	n/a	n/a
AQR	Alt. Risk Premia	5/2016	Good Standing	5% Annual	-1,465	-963	n/a	n/a
P/E Investments	Alt. Risk Premia	7/2016	Good Standing	5% Annual	-868	-668	n/a	n/a
Lombard Odier	Alt. Risk Premia	1/2019	Good Standing	5% Annual	n/a	n/a	n/a	n/a
Other								
Northern Trust	Govt. Short Term	1/1995	Good Standing	US T-Bills	-27	-25	n/a	n/a
Parametric	Long Duration	1/2020	Good Standing	n/a	n/a	n/a	n/a	n/a

¹ Data is lagged 1 quarter.

² Bridgewater and Graham chose not to provide responses to the SJCERA compliance questionnaire and instead directed Meketa to a standard quarterly business update.

Manager Responses to Highlighted Questions

This section includes the verbatim text of the manager's response to any highlighted questions to provide more detail to the table above.

Almanac Custodian Reconciliation

No. The Fund relies on the audit exception to the Custody Rule by providing audited financials within 120 days.

Almanac Litigation

From time to time, Neuberger Berman and its employees are the subject of, or parties to examinations, inquiries and investigations conducted by US federal and state regulatory and other law enforcement authorities, non-US regulatory and other law enforcement authorities and self-regulatory organizations, including, but not limited to, the Securities and Exchange Commission ("SEC"), Financial Industry Regulatory Authority ("FINRA"), the National Futures Association ("NFA"), and the Municipal Securities Rulemaking Board (the "MSRB"). Neuberger Berman routinely cooperates freely with such examinations, inquiries and investigations. Neuberger Berman is also involved, from time to time, in civil legal proceedings and arbitration proceedings concerning matters arising in connection with the conduct of its business. Neuberger Berman believes that none of these matters either individually or taken together, will have a material adverse impact on the firm's business. All material proceedings in which there has been a final determination against any of Neuberger Berman's US registered investment advisers or its broker-dealer are disclosed in such affiliate's Form ADV Part 1 (if a registered investment adviser), Form BD (if a registered broker-dealer) or NFA Basic (if a CFTC registrant), each of which is publicly available through the SEC at <http://www.adviserinfo.sec.gov>, FINRA at <http://www.finra.org>, or the NFA at www.nfa.futures.org, respectively.

With regard to current litigation related specifically to Almanac Realty Investors, on September 14, 2020, an action was filed in Wisconsin state court (the "Wisconsin Action") related to Vanta Commercial Properties, LLC, formerly T. Wall Properties L.L.C. ("Vanta"), a former portfolio investment (exited in November 2017) of Almanac Realty Securities V, L.P. ("ARS V"), a private fund managed by NBAA, the successor in interest to Almanac Realty Investors, LLC ("ARI"). The plaintiffs in that action (the "Wisconsin Plaintiffs") allege nine "Counts"—all of which arise out of or relate to operating agreement of Vanta – and name ARS V, ARI and other entities and individuals associated with Almanac as defendants. The principal allegations are that the defendants engaged in a "Scheme," involving Vanta's officers and directors, to liquidate Vanta's real estate holdings without the approval of the board of directors required under the operating agreement. Defendants believe the lawsuit is without merit and are vigorously defending the action, including by bringing suit in Delaware Court of Chancery (the "Delaware Action") to enjoin the Wisconsin Plaintiffs from pursuing the Wisconsin Action. The Wisconsin Plaintiffs agreed to a voluntary stay of the Wisconsin Action pending the resolution of the Delaware Action, which the Wisconsin court entered on December 2, 2020.

ARS V (among others) filed the Delaware Action on October 30, 2020, seeking to enjoin the Wisconsin Plaintiffs from pursuing the Wisconsin Action in its entirety in view of an exclusive and mandatory forum-selection provision contained in the Vanta operating agreement. On April 22, 2021 via letter opinion, the Court of Chancery granted the motion of ARS V (and the other Delaware plaintiffs) to permanently enjoin the Wisconsin Plaintiffs from pursuing eight of the nine Counts in the Wisconsin Action; the Court

Manager Responses to Highlighted Questions (continued)

later denied the motion as to the one remaining Count via letter opinion on May 19, 2021, and entered a final order as to both letter opinions on May 26, 2021 (the “Final Order”). On June 22, 2021, the defendants in the Delaware Action (i.e., the Wisconsin Plaintiffs) filed a notice of appeal from the Final Order to the extent it enjoined them from pursuing eight Counts in the Wisconsin Action. The appeal of the Delaware Action remains pending. The Wisconsin Action remains stayed.

Almanac Investment Personnel Changes

During the quarter, Almanac hired Grace Liang (Associate), Sebastian Ruder Sanchez (Associate), Fernando Soto (Analyst) and Andrew Hurowitz (Analyst) to the investment team. All of the employees mentioned are responsible for conducting securities and sector analysis, valuation and transaction execution for the ARS Funds.

Almanac Management Level Changes

During the quarter, Almanac hired Manuela Cattaneo, General Counsel – Almanac, as the replacement for Jennifer Cattier, who was the previous General Counsel – Almanac and departed in June 2021.

Angelo Gordon Custodian Reconciliation

N/A – this Fund does not have a custodian.

Angelo Gordon Litigation

Please see attached summary of current litigation. We do not believe the attached lawsuits present material liability for the Firm of any of its funds or accounts.

Summary of Angelo, Gordon Related Litigation

As of June 10, 2021

As of the date above, Angelo, Gordon & Co., L.P. (the “firm”) is a named party in the following pending proceedings:

In 2012, the firm and a firm affiliate were named as defendants in a New York lawsuit regarding the 2004 acquisition of Culligan Soft Water Company (“Culligan”) by the private equity firm Clayton Dubilier & Rice LLC (“CDR”). The firm and its affiliate were named as defendants in connection with their 2010 purchase of portions of Culligan’s debt. This is a derivative action by Culligan’s minority shareholders to recover the funds which they allege CDR removed from the Company through the issuance of illegal dividends and payments in management and consulting fees, director fees and other compensation to itself and its affiliates which were paid for in part by the refinancing of Culligan’s debt.

In 2019, a former employee of AG filed suit against the firm in Illinois state court alleging negligent supervision and breach of contract. In 2020, the court dismissed the case for want of prosecution; however, the court subsequently reinstated the case.

As of the date above, funds or entities managed by the firm are named parties the following pending litigation:

Manager Responses to Highlighted Questions (continued)

In 2017, certain of the firm's affiliated funds, along with other noteholders and deal parties, filed a motion to intervene in a Delaware matter in which plaintiff and the purported owner of the trusts entered into a consent judgment that would subject the trusts to various fines, penalties and oversight and permit the purported owners to obtain more control over the assets and cashflow of the trusts.

In 2020, an AG entity filed a suit against the defendants seeking the return of deposits in connection with the defendants' default on several purchase and sale agreements.

In 2020, certain AG entities were named as defendants in a Massachusetts personal injury lawsuit relating to an incident at a real estate portfolio property in Newton, Massachusetts.

In 2011, certain of the firm's affiliated funds, along with other third-party holders, were named in litigation relating to the return of interest payments on bonds.

In 2021, an AG entity was named as a defendant in a New York lawsuit seeking reimbursement of certain due diligence costs and management fees.

In 2021, an AG entity was named as defendant in an interpleader action brought by the Trustee of a CDO. Trustee initiated the interpleader action for the purpose of adjudicating the rights of the interpleader defendants, which include certain of the firm's funds.

The above lawsuits do not present material liability for the firm or any of its funds or accounts.

Angelo Gordon Investment Personnel Change

There were no departures on the US real estate team during Q3 2021.

In August 2021, an analyst joined the US Real Estate team in the NY office.

BlackRock Custodian Reconciliation

N/A

BlackRock Litigation

As a global investment manager, BlackRock, Inc., and its various subsidiaries including BTC may be subject to regulatory oversight in numerous jurisdictions including examinations and various requests for information. BTC's regulators routinely provide it with comment letters at the conclusion of these examinations in which they request that BTC correct or modify certain of its practices. In all such instances, BTC has addressed, or is working to address, these requests to ensure that it continues to operate in compliance with applicable laws, statutes and regulations.

BFM also receives subpoenas or requests for information in connection with regulatory inquiries and/or investigations by its various regulators, some of which are ongoing. None of these matters has had or is expected to have any adverse impact on BFM's ability to manage its clients' assets. Please refer to BlackRock's Form ADV and SEC disclosures for additional information on regulatory matters concerning BFM or BlackRock as a whole. The recent fines related to BlackRock, Inc. or BFM's investment advisory responsibilities are set forth below. These matters do not include fines paid to non-US regulators relating to the late filing of issuer-specific holdings reports.

Manager Responses to Highlighted Questions (continued)

On 8 March 2012, BlackRock Institutional Trust Company, N.A. ("BTC") entered into an Offer of Settlement (the "Agreement") with the CFTC and consented to the entry of an Order, which makes findings and imposes remedial sanctions against BTC. Without admitting or denying wrongdoing, BTC agreed to the imposition of a \$250,000 penalty and the entry of the Order to resolve allegations by the CFTC that two trades by BTC violated Section 4c(a)(1) of the Commodity Exchange Act and CFTC Regulation 1.38(a). BTC also agreed to refrain from any further violations of the above-mentioned statutory provisions. The CFTC did not allege that any clients of BTC, BlackRock or any related affiliate were harmed in any way in the execution of these two trades.

On 11 September 2012, the UK Financial Services Authority ("FSA") issued a Final Notice against BlackRock Investment Management (UK) Limited ("BIMUK"), following a settlement agreement reached between the FSA and BIMUK. The FSA found that BIMUK had breached certain provisions of the FSA's Client Money Rules and Principles, during the period 1 October 2006 to 31 March 2010, by not having trust letters in place for client money placed on money market deposit and not having adequate systems and controls for the identification and protection of client money in this respect. BIMUK agreed to a settlement payment of GBP 9,533,100 for the breach, which it had self-reported to the FSA in April 2010. The FSA final order acknowledged that no client of BIMUK (or BlackRock or any related affiliate) suffered any harm and that BIMUK had remedied the situation and put in place robust systems and controls relating to client money protection.

On 3 October 2012, BlackRock Financial Management Inc. ("BFM") reached an agreement with the U.S. Department of Labor ("DOL") to reimburse clients \$2,661,513 in connection with certain trades the DOL alleged violated Title I of the Employee Retirement Income Security Act ("ERISA"). BFM also agreed to pay to the DOL a \$266,151 penalty.

On 8 January 2014, BlackRock, Inc. reached a settlement with the New York Attorney General's office ("AG") pursuant to which the AG found BlackRock's use of analyst surveys violated New York's Martin Act and Executive Law. The settlement did not involve the payment of any fine or other penalty although BlackRock paid \$400,000 to cover the AG's costs of investigation. BlackRock neither admitted nor denied the allegations, but agreed to stop using analyst surveys.

On 8 May 2014, the primary Italian securities regulator ("CONSOB") fined BlackRock Investment Management (UK) Limited ("BIMUK") 150,000 EURO (approximately \$205,826 USD) for negligent market manipulation. The fine was based on BIMUK's filing, on behalf of the BlackRock group of companies, a large shareholder report regarding its holdings in Unicredit S.p.A. to CONSOB in December 2011, which turned out to be incorrect.

On 16 September 2014, BlackRock Institutional Trust Company, N.A. entered into an agreement with the SEC to resolve allegations relating to three alleged violations of an SEC regulation prohibiting short sales of an equity security during the restricted period preceding a public offering. The three trades at issue occurred in 2010 and 2011. As part of the approximately \$1.7 million settlement, BTC agreed to disgorge profits from each of the violations and to pay interest and a civil penalty. BTC also agreed to cease and desist from any future violations of the rule in question.

Manager Responses to Highlighted Questions (continued)

On 20 April 2015, BlackRock Advisors, LLC (“BAL”) reached a settlement with the Securities and Exchange Commission (“SEC”) regarding BlackRock’s handling of a former portfolio manager’s personal investments and involvement in a family business, Rice Energy LP and related entities. As part of the settlement, BAL agreed to pay a \$12 million penalty and retained an independent compliance consultant to review BlackRock’s policies and procedures regarding the outside activities of BlackRock’s employees. There was neither an allegation by the SEC of any loss to any BlackRock investors, nor did this settlement have any adverse impact on BlackRock’s ability to manage its clients’ funds.

On 17 January 2017, BlackRock, Inc. reached an agreement with the SEC resolving a matter regarding a provision in an old version of BlackRock’s form employee separation agreement that the SEC believed violated Dodd Frank’s whistleblower provisions. The settlement with the SEC included a \$340,000 payment and BlackRock agreed it would not include the provision in future agreements.

On 25 April 2017, BlackRock Fund Advisors (“BFA”) reached an agreement with the SEC resolving a matter regarding whether one BFA-managed ETF (the iShares MSCI Russia Capped ETF) was covered by certain exemptive relief the SEC previously granted BFA and other iShares funds. BFA, which did not admit or deny any of the SEC’s findings, agreed to resolve the matter for a civil monetary penalty of \$1.5 million.

BlackRock, Inc. and its various subsidiaries, including BFM, also have been subject to certain business litigation that has arisen in the normal course of their business. Our litigation has included a variety of claims, some of which are investment-related. None of BlackRock’s prior litigation has had, and none of its pending litigation currently is expected to have, an adverse impact on BlackRock’s ability to manage client accounts.

In past years, BlackRock has acquired organizations that provide investment-related services, including, but not limited to, State Street Research & Management Company, Merrill Lynch Investment Managers, the fund of funds business of Quellos Group, LLC, and Barclays Global Investors. This response does not address any regulatory or litigation matters that arose out of conduct within the acquired organizations prior to their acquisition by BlackRock. It also does not address regulatory or litigation matters unrelated to BlackRock or BTC’s investment management responsibilities.

Crestline Reconciliation with Custodian

The investment is not held at a custodian. SJCERA’s investment is administered and reconciled by the Fund’s independent administrator: SEI Global Services, Inc.

Crestline Investment Personnel Changes

- Mark Kirim was hired on 7/19/2021 as Vice President for the investment team and is responsible for valuation and asset management.
- Annabelle Kim was hired on 9/13/2021 as an Analyst for the investment team and is responsible for underwriting and asset valuation.
- Josh Witczak, Senior Analyst responsible for underwriting and asset management, departed the investment team on 7/10/2021. His responsibilities were assumed by Abby Kizer, Analyst.

Manager Responses to Highlighted Questions (continued)

- Chris Weber, Vice President responsible for sourcing, underwriting and asset management, departed the investment team on 9/1/2021. His responsibilities were assumed by Wes Davidson, Vice President.
- Daniel Shaheen, Analyst responsible for underwriting and asset management, departed the investment team on 9/1/2021. His responsibilities were assumed by Annabelle Kim, Analyst.

Davidson Kempner Litigation

During Q3, Davidson Kempner was contacted by SEC to perform routine exam on 9/23/21 and examining the period from 1/1/2020 through 7/31/2021.

Davidson Kempner Investment Personnel Changes

No senior level or material changes during YTD 2021. Q3 and Q4 of 2020 had one portfolio manager change in each quarter. One managing director, trader, is planning to retire at year end. Will know if any new partners in Q4 investor letter. Have 13 partners today.

Davidson Kempner Management Level Changes

No, however the Firm opened a new office in Shenzhen, China that currently has four people working there.

Davidson Kempner Material Business Changes

No, however the Firm opened a new office in Shenzhen, China that currently has four people working there.

Dodge & Cox Investment Personnel Changes

Turnover

Dodge & Cox has experienced an extremely low level of personnel turnover throughout our history. There were three additions to the investment team this quarter, and no departures. Please see the following for the additions to our investment team:

- Christopher Perez, Global Industry Analyst joined 3Q21
- Tory H. Sims, ESG Integration Analyst, was internally promoted in 3Q21
- Jake B. Zhang, Fixed Income Analyst, was internally promoted 3Q21

Please see Exhibit A – Experienced, Integrated, and Stable Investment Team and Exhibit B – Employee Update – Investment Professionals for more information.

Dodge & Cox Material Business Changes

In January 2021, we filed an effective registration statement for the Dodge & Cox Emerging Markets Stock Fund, which we opened to investors in May 2021. This new Fund draws on the knowledge and expertise of our integrated investment team has built from covering the emerging markets universe over the years for our Global and International Stock Funds and our Global Bond Fund.

Manager Responses to Highlighted Questions (continued)

In April 2021, Dodge & Cox established an indirect wholly-owned subsidiary in Shanghai, Dodge & Cox Investment Consulting (Shanghai) Co., Ltd (道实投资咨询(上海)有限公司) to supplement the firm's research capabilities in China. Our local research office officially opened in the third quarter of 2021 with one of our global industry analysts relocating to Shanghai to conduct research and to oversee our China office team. Over time, we believe a local presence will provide even more direct access to company management teams, enable us to foster relationships with Chinese regulators, and, ultimately, build brand recognition for Dodge & Cox.

DoubleLine Compliance with Manager Guidelines

DoubleLine does not have its own guidelines for the account, but DoubleLine does impose broader portfolio compliance restrictions on all of its accounts based on situations such as information wall restricted lists or conflicts of interest that can arise or apply.

DoubleLine Compliance with Internal Risk Procedures

DoubleLine does not maintain internal 'risk management' policies and procedures. DoubleLine does maintain a number of policies and procedures as it relates to its' business as an investment company and a registered investment advisor. To that extent, DoubleLine monitors adherence to these policies and procedures at various intervals throughout the year on an as needed basis. Any exceptions to these policies and procedures are addressed, remediated and mitigated as soon as practicable. To that extent DoubleLine does not believe there are any exceptions to note as an ongoing concern.

DWS / RREEF Custodian Reconciliation

N/A. The Fund does not provide custodial services. Shares of the fund are uncertificated.

GQG Investment Personnel Changes

Yes.

- In 3Q 2021, GQG added two (2) Investment Analysts and one (1) Trader to the Investment team.
- In 3Q 2021, one (1) Trader departed the firm whose responsibilities were assumed by the broader Trading Team.

*As a matter of policy, we do not comment on the reason for an individual employee's departure. As a growing firm, we are extremely thoughtful in our hiring process and spend considerable time on building our team with a focus on character and culture. We feel we have been quite successful in this effort, with very few exceptions. When an employment relationship with GQG transitions, we are supportive of former employees in finding other opportunities.

GQG Management Level Changes

Yes.

- Effective Q3 2021, Melodie Zakaluk, Chief Operating Officer, transitioned to the Chief Financial Officer position.

Manager Responses to Highlighted Questions (continued)

- Effective Q3 2021, Gary Bachman, Chief Financial Officer, transitioned to become Managing Director, Strategic Initiatives.
- In Q3 2021, Charles Falck was hired as Chief Operating Officer.

GQG Material Business Changes

No, there have been no changes to the business of GQG Partners LLC in 3Q21, however, as of October 26, 2021, GQG Partners Inc., of which GQG Partners LLC is a wholly owned subsidiary, has listed approximately 20% of the company on the Australian Stock Exchange (ASX).

Graham Management Level Changes

GCM experienced no changes to key personnel during the Reference Period.

GCM recently announced that James Medeiros, who previously headed the Investor Relations department for 12 years and had been Graham's CEO since 2019, will be leaving the firm at the end of the year to pursue other opportunities. Brian Douglas, who has been Graham's COO since 2019 and with the firm for more than 17 years in a variety of leadership roles, is Graham's new CEO effective October 8, 2021.

HPS Litigation

Yes, however, to our knowledge, there is not any litigation or governmental regulatory proceedings involving the Firm that HPS believes will have a material adverse effect upon the Firm.

HPS Investment Personnel Changes

Yes. There was one hire of a Vice President on the dedicated European Asset Value team during the second quarter of 2021. There have been no departures on the dedicated European Asset Value team during the second quarter of 2021.

Invesco Investment Personnel Changes

As of the calendar quarter ended September 30, 2021, there were no changes to the Investment Team. Subsequent to this date, Joe Rodriguez, co-CIO of the Listed Real Assets business, expressed his intent to retire from the firm effective August 1, 2022 after 38 years in the industry, including 31 years with Invesco. Senior Portfolio Manager and co-CIO, Darin Turner Darin will be named CIO of the Listed Real Assets business effective August 1, 2022. Joe will remain as co-CIO and he will focus on ensuring a smooth transition of full leadership responsibilities to Darin before departing the firm.

Medley Litigation

The SEC regulatory matter disclosed in the certification for Q1 2021 remains open and the SEC's investigative work continues. MDLY and Medley LLC have responded to additional information requests from the SEC.

Manager Responses to Highlighted Questions (continued)

Medley Investment Personnel Changes

Yes. During Q3 one managing director and one associate from the investment team departed from Medley. The managing director focused on underwriting new investment opportunities and the associate focused on the management of existing investments. Their responsibilities have been transferred to other employees.

Medley Material Business Changes

Yes. As previously discussed with Meketa/SJCERA on the phone during the first quarter and in our last quarter's response, we would reference the Medley LLC Chapter 11 bankruptcy filing. The bankruptcy plan and wind-down was approved by the court and became effective on October 18, 2021.

Mesa West Management Level Changes

In August 2021, Marisa Deutsch joined our team as Head of Legal.

Morgan Creek Custodian Reconciliation

N/A this is not a separate account.

Morgan Creek Management Level Changes

We had a change to our Chief Compliance Officer during the quarter, with Will Bacon replacing Robin Butler. While not involved directly with the portfolio(s), the CCO is responsible for developing the policies and procedures designed to ensure compliance with all applicable laws and regulations, including securities laws, as well as monitoring compliance with those policies and procedures and handling other day to day compliance issues. In addition, the CCO acts as a liaison with outside fund counsel.

Prior to joining Morgan Creek, Will Bacon was Corporate Counsel and Deputy Compliance Officer at IFC Core Investment Management where he oversaw the firm's SEC registration as an investment adviser and monitored all compliance-related policies and procedures. Before IFC, Mr. Bacon held the positions of Senior Compliance Officer at Credit Suisse and Product Director at Hatteras Funds. He previously worked at financial services firms in New York which is where he began his career as an associate in foreign exchanges sales at Deutsche Bank. Mr. Bacon received a Bachelor of Science in Business Administration and a Juris Doctor from the University of North Carolina at Chapel Hill. He currently serves on the Board of Directors of Rosemyr Corporation.

Northern Trust Litigation

As one of the world's largest asset managers, NTI is occasionally named as a defendant in asset management-related litigation. NTI is not currently party to any litigation that has had (or will have) a material effect on its ability to perform services for its clients. At this time, there are no significant pending cases.

Furthermore, NTI occasionally receives requests for information from government and regulatory agencies. NTI frequently does not know if such requests are related to a formal government or regulatory investigations or, assuming an investigation is underway, whether NTI is a target of such investigation or simply thought to be in possession of information pertinent to such investigation. NTI is not currently involved in any government

Manager Responses to Highlighted Questions (continued)

or regulatory investigation or proceeding that would have a material impact on its ability to provide advisory services to its clients.

Northern Trust Management Level Changes

Yes. As a result of the constantly changing landscape of asset management, we believe the occasional organizational changes are a natural progression and necessary in order to adapt to new market and regulatory environments.

- September; Angelo Manioudakis was appointed the new Chief Investment Officer effective September 27, 2021. Angelo reports directly to Shundrawn Thomas, President of Northern Trust Asset Management and serves on the Asset Management Executive Committee. As CIO, Angelo is responsible for investment performance, process, and philosophy, and leading our global team of investment professionals. He also chairs the Investment Policy Committee, which sets investment policy for all Northern Trust groups in all asset classes.

Oaktree Litigation

As a leading global investment manager, Oaktree and its affiliates, investment professionals, and portfolio companies are routinely involved in litigation in the ordinary course of their business and investing activities. In some cases, Oaktree or its officers are simply named as additional defendants in litigation arising out of the business activities of portfolio companies, such as landlord/tenant disputes and personal injury claims brought against entities owned by Oaktree's real estate funds. Other claims involve Oaktree and its professionals more directly, such as bankruptcy or restructuring disputes arising out of the investment activities of Oaktree's distressed debt and control investing funds. In addition, Oaktree is subject to the authority of a number of U.S. and non-U.S. regulators, including the U.S. Securities and Exchange Commission ("SEC") and the Financial Industry Regulatory Authority ("FINRA"), and those authorities regularly conduct examinations of Oaktree and make other inquiries. No litigation or regulatory action to date has had a material adverse financial impact upon Oaktree or any of the funds it manages and Oaktree is not aware of any pending litigation or regulatory enforcement action that might reasonably be expected to have such an effect.

Oaktree Investment Personnel Changes

In June 2021, Jerilyn Castillo McAniff was appointed as Oaktree's Head of Diversity and Inclusion. Prior to this appointment, Ms. McAniff spent 13 years on our U.S. High Yield Bond investment team, including a period as Co-Director of Research. She has served as co-head of Oaktree's Diversity & Inclusion Council since 2017.

PanAgora Management Level Changes

-As previously communicated, Lou Iglesias, PanAgora's Chief Compliance Officer (CCO), retired in March 2021. Following Mr. Iglesias' retirement, Jason Ketchen (Managing Director, General Counsel and impending Chief Operating Officer) served as PanAgora's interim CCO. Following a thorough diligence and interview process, PanAgora has hired Marc Volpe to serve as PanAgora's CCO. Mr. Volpe has over 24 years of industry experience in the financial sector and joined the firm at the end of September 2021.

Manager Responses to Highlighted Questions (continued)

Parametric Litigation

Parametric is part of Morgan Stanley Investment Management, the asset management division of Morgan Stanley. The distinct investment brands of Eaton Vance Management, Parametric, Atlanta Capital and Calvert, have from time to time, been plaintiffs or defendants in various lawsuits and arbitrations that are incidental to their businesses and are or were handled in the ordinary course of business. From time to time, Parametric and its affiliates are subject to periodic audits, regulatory and governmental examinations, information-gathering requests, investigations, and proceedings both formal and informal which have the potential to result in findings, conclusions, recommendations or various forms of sanction. Parametric believes that these actions have not and will not have a material adverse effect on its consolidated financial condition, liquidity, results of operations or the ability to manage client assets.

Parametric Management Level Changes

There were no changes to key personnel during the second quarter.

Changes during the third quarter:

Effective September 7th, 2021, Randall Hegarty, Chief Compliance Officer, changed roles and accepted the newly created senior leadership position of Chief Operating Officer, Investments at Parametric. Randall now reports to Tom Lee, Chief Investment Officer, Equities and Derivatives, with a dotted line to Ranjit Kapila, COO. Cindy Kim and Ben Hammes succeeded Randall and serve as Co-CCOs, with Cindy responsible for Equities and Fixed Income and Ben for Derivatives. They report to Rick Froio, the CCO for Eaton Vance. The Compliance Team continues to be dedicated to Parametric and report up through Tom Torrisi, a Managing Director and Chief Compliance Officer at Morgan Stanley Investment Management.

Randall's move reflects Parametric's growth and the resulting opportunities it is creating. The firm will continue to adjust the organization to better target the most exciting areas of investment management – innovative strategies that truly benefit its clients.

Rey Santodomingo, Managing Director, Investment Strategy, Tax Managed Equities, left the firm on July 9, 2021. Parametric's team-based approach to investment management made for a smooth transition of Reys' responsibilities to other investment team members.

Parametric Material Business Changes

Effective September 7th, 2021, Randall Hegarty, Chief Compliance Officer, changed roles and accepted the newly created senior leadership position of Chief Operating Officer, Investments at Parametric. Randall now reports to Tom Lee, Chief Investment Officer, Equities and Derivatives, with a dotted line to Ranjit Kapila, COO. Cindy Kim and Ben Hammes succeeded Randall and serve as Co-CCOs, with Cindy responsible for Equities and Fixed Income and Ben for Derivatives. They report to Rick Froio, the CCO for Eaton Vance. The Compliance Team continues to be dedicated to Parametric and report

Manager Responses to Highlighted Questions (continued)

up through Tom Torrisi, a Managing Director and Chief Compliance Officer at Morgan Stanley Investment Management.

Randall's move reflects Parametric's growth and the resulting opportunities it is creating. The firm will continue to adjust the organization to better target the most exciting areas of investment management – innovative strategies that truly benefit its clients.

PE Investments Litigation

The firm was subject to a routine NFA examination during the period. The resulting letters are included herewith.

PIMCO Litigation

During the period, PIMCO has not been the subject of any lawsuit or regulatory proceeding that could reasonably be expected to have had a material adverse effect on PIMCO's ability to provide investment management services.

Notwithstanding the foregoing, PIMCO notes the following litigation matters:

On April 18, 2018, PIMCO and PIMCO Investments LLC were named in a complaint filed in the US Virgin Islands. In addition to PIMCO and PI, the complaint names certain BlackRock entities as defendants (together, the "Defendants"). The complaint alleges, among other things, that the Defendants engaged in a coordinated effort designed to damage the business operations of Ocwen, the mortgage servicing company, which had certain business relationships with Altisource Asset Management Corporation, both companies in which the plaintiffs hold equity interests. On August 8, 2018, the plaintiffs filed an amended complaint. The substance of the allegations in the amended complaint are the same as the original complaint. PIMCO believes the claims are without merit and intends to vigorously defend the matter.

On September 24, 2019, a lawsuit was filed against PIMCO, PIMCO Investments LLC and two PIMCO employees in Orange County Superior Court by a current PIMCO employee. The lawsuit alleges, among other things, discrimination and unequal pay based on gender, race, and disability status. The complaint also alleges fraud in connection with a flexible work request and other employment opportunities. The allegations in the complaint are not accurate and PIMCO will demonstrate that she was treated and compensated fairly.

On December 17, 2019, PIMCO was named as a defendant in a lawsuit filed in Louisiana state court. The lawsuit was filed by creditors to a Midwest-based agriculture company, the majority equity holders of which are two PIMCO-managed private funds. We believe that the claims asserted are without merit and expect the case to be defended vigorously.

On August 3, 2020, three PIMCO employees, who served as directors of a Florida-headquartered company, were named in a complaint filed in Florida state court by the company's prior controlling equity owner. The complaint was amended on August 31, 2020 to also name PIMCO as a defendant. The complaint alleges claims for tortious interference of contract, aiding and abetting breach of

Manager Responses to Highlighted Questions (continued)

fiduciary duty, and defamation, related to a Stockholders Agreement, to which the Plaintiff and a subsidiary of a PIMCO-managed private fund are parties. PIMCO is not a party to the Stockholders Agreement and believes the claims are without merit and intends to defend the case vigorously.

On November 18, 2020, a lawsuit was filed against PIMCO and several PIMCO employees in Orange County Superior Court by two current PIMCO employees. The lawsuit alleges, among other things, discrimination and unequal pay based on gender and disability status, and retaliation. On February 18, 2021, an amended complaint was filed, adding three additional plaintiffs, including one current employee and two former employees. The allegations in the complaint are not accurate and PIMCO will demonstrate that the employees were treated and compensated fairly.

On September 22, 2021, PIMCO was named as a defendant in an amended complaint filed in the Southern District of New York. Wells Fargo, as trustee, filed the action related to the sale of defaulted securities by a CDO. Certain PIMCO-managed funds own the CDO's senior notes and, as such, PIMCO – in its capacity as investment manager – has been named as a defendant in the interpleader action to represent the interests of the senior noteholders. The complaint contains no allegations of wrongdoing by PIMCO or any PIMCO-managed investment vehicle.

With respect to regulatory matters, as a registered investment adviser, PIMCO is in frequent contact with its regulators. Please note however, that as a general practice, PIMCO does not comment on pending regulatory matters.

PIMCO Management Level Changes

Gained - PIMCO Investment Professionals

Date	Name	Title	Department	Office
Sep-21	Paul-James White	Executive Vice President	Portfolio Management	Newport Beach
Sep-21	Jaynathi Gandhi	Senior Vice President	Account Management - Client Service	New York
Sep-21	Mathieu Clavel	Managing Director	Portfolio Management	London
Aug-21	Pragya Dutt	Senior Vice President	Portfolio Management	London
Aug-21	Robert Scott	Executive Vice President	Portfolio Management	London
Aug-21	Imran Ahmed	Executive Vice President	Product Strategy Group	New York
Jul-21	Geoff White	Senior Vice President	Portfolio Management	London
Jul-21	Lee Dineen	Senior Vice President	Account Management – Business Development	London

Manager Responses to Highlighted Questions (continued)

Lost - PIMCO Investment Professionals

Date	Name	Title	Department	Years at PIMCO	Reason	Office
Sep-21	Olivia Albrecht	Executive Vice President	Product Strategy Group	9	Other*	Newpor
Aug-21	Kristion Mierau	Senior Vice President	Account Management – Client Service	23	Other*	Munich
Aug-21	Ken Kanai	Senior Vice President	Account Management – Client Service	8	Other*	Tokyo
Aug-21	Daniel Huk	Senior Vice President	Account Management – Client Service	10	Other*	Munich
Aug-21	Vito Gala	Senior Vice President	Analysts	2	Other*	Newport Beach
Aug-21	Sarah Buchanan	Senior Vice President	Account Management – Client Service	11	Other*	New York
Aug-21	Laura Graff	Senior Vice President	Product Strategy Group	7	Other*	Newport Beach
Jul-21	Isaac Meng	Senior Vice President	Portfolio Management	10	Other*	Hong Kong
Jul-21	Michael Murphy	Executive Vice President	Analysts	2	Other*	London
Jul-21	Pierre-Julien Jandrain	Senior Vice President	Analysts	6	Other*	Singapore
Jul-21	Antonios Sangvinatsos	Senior Vice President	Analysts	9	Other*	Newport Beach
Jul-21	Ryan Murphy	Senior Vice President	Product Strategy Group	12	Other*	Newport Beach
Jul-21	Luke Farrell	Senior Vice President	Portfolio Management	3	Other*	Newport Beach
Jun-21	Jennifer Durham	Managing Director	Business Management	20	Other*	Newport Beach

*PIMCO deems any reason for departure outside of a transfer to a PIMCO affiliate as confidential information.

Principal Custodian Reconciliation

Not applicable. The Principal US Property Account is a commingled account. Attached is the September 30th monthly statement. We do not receive reports from their custodian to reconcile.

Principal Litigation

Given the size and scope of our operations we are occasionally involved in litigation, both as a defendant and as a plaintiff. However, management does not believe that any pending litigation will have a material adverse effect on our business, financial position or net income. Please see our public filings for details.

Manager Responses to Highlighted Questions (continued)

Also, regulatory bodies, such as the SEC, the Financial Industry Regulatory Authority, the Department of Labor and other regulatory bodies regularly make routine inquiries and conduct examinations or investigations concerning our compliance with, among other things, securities laws, ERISA and laws governing the activities of investment advisors. While the outcome of any regulatory matter cannot be predicted, management does not believe that any regulatory matter will have a material adverse effect on our business, financial position or our ability to fully perform our duties to clients.

Principal Management Level Changes

Principal Real Estate Investors has experienced limited turnover of its senior management and staff.

Prologis Registered Investment Advisor Status

No. Investment advisors are required to register with the SEC as a Registered Investment Advisor (“RIA”) if they are in the business of providing advice or issuing reports or analyses regarding securities. The SEC has stated that direct interests in real estate are not securities. Prologis’ vehicles invest in real estate directly. For example, USLF does not invest in the stock of other real estate companies or in other public or private funds that own real estate – USLF invests in real estate directly. Because USLF invests in real estate directly and because the SEC has stated that direct real estate investments are not securities, we have with the advice of external legal counsel determined that Prologis is not required to register as an RIA.

The ultimate parent company of Prologis is Prologis, Inc. which is a publicly traded company on the NYSE. As a publicly traded company, Prologis is subject to SEC reporting and the corporate governance and legal requirements applicable to other US public companies. In addition, the general partner of USLF is Prologis, L.P., which is the operating subsidiary through which Prologis Inc. carries out the vast majority of its operations. Prologis, L.P. is large and well-capitalized.

Prologis Custodian Reconciliation

Not applicable.

Prologis Litigation

Prologis, Inc. is a publicly traded company with global operations. In the normal course of business, from time to time, Prologis may be involved in legal actions and environmental matters relating to the ownership and operations of its properties. Management does not expect that the liabilities, if any, that may ultimately result from such legal actions would have a material adverse effect on the financial position, results of operations or cash flows of Prologis. Except as has been previously disclosed in public filings, as of September 30, 2021, there were no material pending legal proceedings to which Prologis is a party or of which any of its properties is the subject, the determination of which Prologis anticipates would have a material adverse effect upon its financial condition and results of operations.

Stellex Investment Personnel Changes

Yes. In Q3 2021 Irina Krasik joined the Stellex Investment team as a principal and is responsible for sourcing investment opportunities for the strategy.

Manager Responses to Highlighted Questions (continued)

Stellex Management Level Changes

Yes. Tracy Sigal, the prior Chief Compliance Officer transitioned away from the firm in Q2 2021. Tony Braddock, who was previously the Chief Compliance Officer prior to Ms. Sigal being promoted from Director of Compliance to Chief Compliance Officer in Spring 2020, filled in as interim Chief Compliance Officer. In Q3 2021, Amanda Bailey joined Stellex as the Chief Compliance Officer and Associate General Counsel and is responsible for the compliance program.

Stockbridge Management Level Changes

Andrew Knox, Senior Vice President of Client Service and Marketing, has been added to the firm's Investment Committee as a permanent voting member on all transactions. The firm's partners voted to add Andrew on July 6, 2021. He will begin his official Investment Committee duties immediately. All other eight Investment Committee members remain unchanged. Please see below for Andrew Knox's biography.

Andrew Knox, Senior Vice President of Client Service and Marketing:

Andrew Knox joined Stockbridge in 2012 and serves as a Senior Vice President, leading the firm's Client Service and Marketing team. As Senior Vice President for Stockbridge CVA, Mr. Knox focuses on capital raising, new business development and client service.

Prior to joining Stockbridge, Mr. Knox served as an Acquisitions Associate for Preferred Real Estate Funds, LLC, where he led acquisitions efforts and established partnerships and joint venture opportunities on commercial property throughout the Southeastern United States.

Mr. Knox has also served as a Brokerage Associate for Ackerman and Co, where he specialized in landlord and tenant representation.

Mr. Knox received a B.A. in Communication from Wake Forest University.

Stockbridge Material Business Changes

Yes, please reference the attached press release on the recent transaction involving Stockbridge Capital Group's repurchase of CITIC's shares. Please note, this ownership repurchase will have no impact on the governance or investments of Stockbridge Capital Group's affiliated investment advisor, Core and Value Advisors, LLC.

Stone Harbor Material Business Changes

As previously mentioned, on June 28, 2021, Stone Harbor announced that it has entered into a definitive agreement to become an affiliate investment boutique of Virtus Investment Partners (NASDAQ: VRTS), a publicly traded multi-boutique investment management company. We expect this agreement to close by the end of 2021 and look forward to providing more information with you.

Manager Responses to Highlighted Questions (continued)

Walton Street Custodian Reconciliation

SJCERA is invested in commingled funds and not a separate account. As the Funds are invested solely in real estate and real estate related investments, reconciliation to a custodian is not applicable.

Walton Street Investment Personnel Changes

Yes, Walton Street has been one departures (Principal and above) in the Chicago office during the quarter. Please see details in the table below.

Title	Department	Start Date	Leave Date	Tenure	Industry Experience
Senior Advisor	Acquisitions	7/1/1970	8/27/2021	26	53

White Oak Litigation

There is no present or pending regulatory action or litigation brought by or against the firm or any of its principals or investment professionals other than routine regulatory examinations and legal proceedings in connection with the normal course of originating and managing a portfolio of direct loans. Routine proceedings against borrowers, including the Financing Affiliates (as such term is defined in Part 2A of Form ADV), occur from time to time in the normal course.

One client made an arbitration demand based upon a fee issue and that demand was filed July 31, 2018. The arbitrator issued an interim partial decision on November 30, 2020. After both parties sought clarification and modification of the partial award, the arbitrator merely reaffirmed the partial decision without further clarification by email dated February 25, 2021. A further hearing on damages was held on June 17, 2021. White Oak continues to believe that the client's claims are without merit and will vigorously pursue all available remedies.

On October 20, 2021, White Oak filed an opposition to the client's petition to confirm the final award and moved to vacate the arbitration award in part. White Oak's litigation counsel (i.e., Sidley Austin) has argued to the Court that the client's petition to confirm mischaracterizes the Arbitrator's final award and is misleading. Both Sidley Austin and the law firm that represented White Oak in the arbitration proceeding (Holland & Knight) believe that White Oak has a strong argument in support of vacating the Final Award in part and in opposing the client's petition to enforce the Final Award.

White Oak Management Level Changes

Yes. Senior professional departures are listed below (MD and above), and do not include personnel changes of our affiliates.

1. Leavers:

- a. Jon Moll, Managing Director, Client Solutions

2. Additions:

- a. Erica Johnson, Managing Director, Client Solutions
- b. Jon Patty, Managing Director, Originations & Underwriting

DISCLOSURES:

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SJCERA Quarterly Manager Review Schedule

Manager	Strategic Class	Sub-Segment	Under Review	Last Rvw	Next Rvw	Most Recent Visit to Meketa/SJCERA	Mgr. Meeting with SJCERA	Mgr. Location
Angelo Gordon	Aggressive Growth	Value Added Real Estate						New York, NY
Almanac Reality VI	Aggressive Growth	Value Added Real Estate						New York, NY
AQR	Diversifying Strategies	Alternative Risk Premia	Apr-19	Jul-19		4/21/2020		Stamford, CT
BlackRock	Stabilized Growth, PC	Direct Lending				3/18/2019*		San Francisco, CA
BlackRock	Aggressive Growth	Infrastructure				3/18/2019*	8/22/2019	New York, NY
Berkeley Partners	Aggressive Growth	Private Real Estate				10/16/2020	8/14/2020	San Francisco, CA
Bridgewater (AW)	Stabilized Growth, RP	Risk Parity				7/29/2020	10/6/2017	Westport, CT
Crestline	Stabilized Growth, PC	Opportunistic				7/22/2020	6/7/2019	Fort Worth, TX
Davidson Kempner	Stabilized Growth, PC	Opportunistic			Oct-21	8/11/2020		New York, NY
Dodge & Cox	Diversifying Strategies, PP	Core Fixed Income		Dec-20	Oct-21	6/3/2020		San Francisco, CA
Dodge & Cox	Diversifying Strategies, CRO	Long Duration				6/3/2020		San Francisco, CA
DoubleLine	Diversifying Strategies, PP	MBS		Mar-21		11/29/2018*		Los Angeles, CA
GQG	Traditional Growth	Emerging Markets				10/16/2020		San Francisco, CA
Graham	Diversifying Strategies, CRO	Systematic Trend Following				7/23/2020		Rowayton, CT
Greenfield/Grandview V, VI, VII	Aggressive Growth	Opportunistic Real Estate			Oct-21			Greenwich, CT
HPS EU	Stabilized Growth, PC	Direct Lending		Mar-20		8/3/2017*		New York, NY
Invesco	Traditional Growth	REITs, Core US			Oct-21	5/6/2020*		Atlanta, GA
Lombard	Diversifying Strategies	Alternative Risk Premia				10/19/2020		New York, NY
Medley	Stabilized Growth, PC	Direct Lending		Jul-21	Feb-22	3/12/2015		San Francisco/New York
Mesa West III & IV	Stabilized Growth, PC	Comm. Mortgage			Oct-21	8/22/2019	8/22/2019	Los Angeles, CA
Miller Global VI, VII	Aggressive Growth	Opportunistic Real Estate						Denver, CO
Morgan Creek III, V, & VI	Aggressive Growth	Multi-Strat FOF		May-18	Oct-21	8/22/2019	8/22/2019	Chapel Hill, NC
Mount Lucas	Diversifying Strategies, CRO	Systematic Trend Following		May-18		3/17/2020	2/12/2021	Newton, PA
Northern Trust	Traditional Growth	MSCI World IMI						Chicago, IL
Northern Trust	Cash	Collective Govt. Short Term						Chicago, IL
Neuberger Berman	Stabilized Growth, LC	Global Credit		May-19	Oct-21	10/20/2020		Chicago, IL
Oaktree	Stabilized Growth, PC	Leveraged Direct Lending				11/6/2020		New York, NY
Ocean Avenue	Aggressive Growth	PE Buyout FOF		Jan-19	Oct-21			Santa Monica, CA
P/E Diversified	Diversifying Strategies	Alternative Risk Premia		May-21	Oct-21	2/17/2020		Boston, MA
PanAgora	Stabilized Growth, RP	Risk Parity		Mar-18		4/7/2020*		Boston, MA
Parametric	Cash	Cash Overlay				10/27/2020*		Minneapolis, MN
PIMCO (RAE)	Traditional Growth	Emerging Markets				7/23/2020*	8/22/2019	Newport Beach, CA
Principal US	Stabilized Growth, RE	Core Real Estate						Des Moines, IA
Prologis	Stabilized Growth, RE	Core Real Estate						San Francisco, CA
Raven II & III	Stabilized Growth, PC	Direct Lending		Apr-18			2/23/2018	New York, NY
RREEF America II	Stabilized Growth, RE	Core Real Estate						Kansas City, MO
Stellex Capital	Aggressive Growth	Private Equity			Oct-21		5/8/2020	New York, NY
Stockbridge RE III	Aggressive Growth	Value Added Real Estate						San Francisco, CA
Stone Harbor	Stabilized Growth, LC	Absolute Return		Feb-20	Oct-21	9/29/2020*	2/3/2021	New York, NY
Walton Street	Aggressive Growth	Opportunistic Real Estate						Chicago, IL
White Oak Summit Peer	Stabilized Growth, PC	Direct Lending				7/24/2020		San Francisco, CA
White Oak Yield Spectrum	Stabilized Growth, PC	Direct Lending		Feb-19		7/24/2020	6/7/2019	San Francisco, CA

*General Meketa Review LC = Liquid Credit; PC = Private Credit; PP = Principal Protection; CRO = Crisis Risk Offset; RP = Risk Parity;

Managers Approved - Waiting to be funded

Terminated Managers

			Date Terminated	
KBI	Global Equity	Global Equity -Terminated	2016	Dublin, Ireland
Bridgewater	Risk Parity	Real Assets - Terminated	2016	Westport, CT
Parametric	Risk Parity	Risk Parity - Terminated	2016	Minneapolis, MN
Legato	Global Equity	Small Cap Growth -Terminated	2017	San Francisco, CA
Marinus	Credit	Credit HF - Terminated	2018	Westport, CT
Bridgewater	Crisis Risk Offset	Pure Alpha - Terminated	2019	Westport, CT
Stone Harbor	Credit	Bank Loans - Temrinated	2019	New York, NY
Prima	Principal Protection	Commercial MBS - Terminated	2020	Scarsdale, NY
BlackRock x4	Global Equity	US Equity x2; Non-US Developed; Non-US REIT -Terminated	2020	San Francisco, CA
Capital Prospects	Global Equity	Global Equity -Terminated	2020	Stamford, CT
PIMCO (RAFI)	Global Equity	Global Equity -Terminated	2020	Newport Beach, CA

Preliminary Monthly Flash Report (Net)'

October 2021

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San Joaquin County Employees' Retirement Association (SJCERA)

Preliminary Monthly Flash Report (Net)¹

October 2021

	Commitment (\$000)	Sub-Segment	Market Value	Physical % of Total	Policy Target %	1-Mo	3-Mos	YTD	1-Yr	3-Yrs	5-Yrs	SI Return	SI Date
Opportunistic Private Real Estate (continued)													
Walton Street V ³	\$30,000	Opportunistic Pvt. RE	\$ 2,071,307	0.1%		0.5	0.5	1.4	-3.2	-13.8	-8.8	-4.2	Nov-06
NCREIF ODCE + 1% Lag Blend						2.9	2.9	5.0	5.6	8.1	9.5	7.3	
Difference:						-2.4	-2.4	-3.6	-8.8	-21.9	-18.3	-11.5	
Walton Street VI ³	\$15,000	Opportunistic Pvt. RE	\$ 4,919,114	0.1%		4.8	4.8	4.0	4.6	-1.7	-0.1	7.0	Jul-09
NCREIF ODCE + 1% Lag Blend						2.9	2.9	5.0	5.6	8.1	9.5	8.4	
Difference:						1.9	1.9	-1.0	-1.0	-9.8	-9.6	-1.4	
Value-Added Private Real Estate													
AG Core Plus IV ³	\$20,000	Value-Added Pvt. RE	\$ 19,298,414	0.5%		4.2	4.2	6.5	12.7	8.8	9.0	5.3	Sep-15
NCREIF ODCE + 1% Lag Blend						2.9	2.9	5.0	5.6	8.1	9.5	11.1	
Difference:						1.3	1.3	1.5	7.1	0.7	-0.5	-5.8	
Almanac Realty VI ³	\$30,000	Value-Added Pvt. RE	\$ 3,609,976	0.1%		8.8	8.8	9.9	3.4	-11.1	-4.6	22.4	Feb-13
NCREIF ODCE + 1% Lag Blend						2.9	2.9	5.0	5.6	8.1	9.5	12.7	
Difference:						5.9	5.9	4.9	-2.2	-19.2	-14.1	9.7	
Berkeley Partners Fund V, LP	\$40,000	Value-Added Pvt. RE	\$ 9,285,074	0.2%		6.7	6.7	11.7	--	--	--	19.2	Aug-20
NCREIF ODCE + 1% Lag Blend						2.9	2.9	5.0	--	--	--	10.0	
Difference:						3.8	3.8	6.7	--	--	--	9.2	
Stockbridge RE III ³	\$45,000	Value-Added Pvt. RE	\$ 35,179,678	0.9%		15.0	15.0	20.1	29.7	10.8	--	8.3	Jul-18
NCREIF ODCE + 1% Lag Blend						2.9	2.9	5.0	5.6	8.1	--	9.0	
Difference:						12.1	12.1	15.1	24.1	2.7	--	-0.7	
Traditional Growth ²			\$ 1,517,917,059	38.6%	32.0%	5.1	3.3	18.7	40.1	14.9	13.4	9.7	Jan-95
MSCI ACWI IMI Net						4.9	3.2	16.8	38.2	18.3	15.5	8.5	
Difference:						0.2	0.1	1.9	1.9	-3.4	-2.1	1.2	
Global Equity			\$ 1,467,058,500	37.3%									
Northern Trust MSCI World IMI		All Cap Global	\$ 1,322,232,801	33.6%		5.6	3.8	19.5	--	--	--	27.9	Sep-20
MSCI World IMI Net						5.4	3.7	19.2	--	--	--	27.4	
Difference:						0.2	0.1	0.3	--	--	--	0.5	
SJCERA Transition		All Cap Global	\$ 3,319	0.0%		NM	NM	NM	--	--	--	NM	Jul-20
Emerging Markets			\$ 144,822,380										
GQG Active Emerging Markets		Emerging Markets	\$ 66,298,211	1.7%		1.7	1.3	0.4	12.8	--	--	15.0	Aug-20
MSCI Emerging Markets Index Net						1.0	-0.5	-0.3	17.0	--	--	15.7	
Difference:						0.7	1.8	0.7	-4.2	--	--	-0.7	
PIMCO RAE Fundamental Emerging Markets		Emerging Markets	\$ 78,524,169	2.0%		-0.3	-1.9	15.7	46.5	10.5	8.4	5.5	Apr-07
MSCI Emerging Markets Index						1.0	-0.4	0.0	17.3	12.7	9.8	4.9	
Difference:						-1.3	-1.5	15.7	29.2	-2.2	-1.4	0.6	
REITS			\$ 50,858,559	1.3%									
Invesco All Equity REIT		Core US REIT	\$ 50,858,559	1.3%		6.2	2.7	30.5	40.7	13.4	9.7	9.6	Aug-04
FTSE NAREIT Equity Index						7.6	3.7	32.5	51.8	13.9	9.7	9.5	
Difference:						-1.4	-1.0	-2.0	-11.1	-0.5	0.0	0.1	

¹Returns are preliminary and are finalized during each quarterly reporting cycle. Monthly returns since previous quarter are provided by the managers. Market values are provided by Northern Trust.

²MSCI ACWI IMI Net as of 4/1/2020, MSCI ACWI Gross prior.

³Manager returns are as of 9/30/21, and lagged 1 quarter. Since Inception date reflects one quarter lag.

NM = Returns not meaningful

San Joaquin County Employees' Retirement Association (SJCERA)

Preliminary Monthly Flash Report (Net)¹

October 2021

Commitment (\$000)	Sub-Segment	Market Value	Physical % of Total	Policy Target %	1-Mo	3-Mos	YTD	1-Yr	3-Yrs	5-Yrs	SI Return	SI Date
Stabilized Growth		\$ 1,178,490,859	30.0%	33.0%	0.5	0.5	6.7	12.7	9.0	7.2	4.1	Jan-05
Risk Parity		\$ 441,042,774	11.2%		1.4	-1.4	7.8	19.0	12.6	8.5	5.3	
<i>T-Bill +4%</i>					0.3	1.0	3.4	4.1	5.2	5.2	4.6	
Difference:					1.1	-2.4	4.4	14.9	7.4	3.3	0.7	
Bridgewater All Weather		\$ 216,237,169	5.5%		1.4	-1.2	8.6	18.9	10.9	8.0	5.9	Mar-12
<i>T-Bill +4%</i>					0.3	1.0	3.4	4.1	5.2	5.2	5.5	
Difference:					1.1	-2.2	5.2	14.8	5.7	2.8	0.4	
PanAgora Diversified Risk Multi-Asset		\$ 224,805,605	5.7%		1.4	-1.5	7.0	19.1	14.3	9.0	9.0	Apr-16
<i>T-Bill +4%</i>					0.3	1.0	3.4	4.1	5.2	5.2	5.1	
Difference:					1.1	-2.5	3.6	15.0	9.1	3.8	3.9	
Liquid Credit		\$ 237,277,443	6.0%		0.1	0.3	2.5	7.1	4.4	4.0	2.3	Oct-06
<i>50% BB High Yield, 50% S&P/LSTA Leveraged Loans</i>					0.0	0.9	4.5	9.5	5.8	5.4	5.9	
Difference:					0.1	-0.6	-2.0	-2.4	-1.4	-1.4	-3.6	
Neuberger Berman		\$ 106,390,967	2.7%		-0.1	-0.1	2.2	7.7	--	--	5.6	Feb-19
<i>33% ICE BofA HY Constrained, 33% S&P/LSTA LL, 33% JPM EMBI Gbl Div.</i>					0.0	0.2	2.6	7.8	--	--	5.7	
Difference:					-0.1	-0.3	-0.4	-0.1	--	--	-0.1	
Stone Harbor Absolute Return		\$ 130,886,476	3.3%		0.2	0.7	2.6	6.7	4.0	3.5	3.0	Oct-06
<i>3-Month Libor Total Return</i>					0.0	0.0	0.2	0.2	1.4	1.4	1.4	
Difference:					0.2	0.7	2.4	6.5	2.6	2.1	1.6	
Private Credit Lag²		\$ 326,067,893	8.3%		2.8	2.8	4.6	5.9	3.2	3.2	3.4	
<i>50% BB High Yield, 50% S&P/LSTA Leveraged Loans</i>					0.1	1.3	6.5	22.2	5.5	6.7	6.0	
Difference:					2.7	1.5	-1.9	-16.3	-2.3	-3.5	-2.6	
BlackRock Direct Lending Lag³		\$100,000	Direct Lending	\$ 40,994,496	1.0%	0.9	0.9	0.9	---	---	9.6	May-20
<i>CPI +6% Annual Blend⁵</i>					1.4	4.1	4.1		---	---	17.6	
Difference:					-0.5	-3.2	-3.2		---	---	-8.0	
Mesa West RE Income III Lag³		\$45,000	Comm. Mortgage	\$ 36,476	0.0%	3.7	3.7	-7.8	-8.2	-0.7	3.4	Sep-13
<i>CPI +6% Annual Blend⁴</i>					1.4	4.1	9.0	11.7	8.7	8.9	11.4	
Difference:					2.3	-0.4	-16.8	-19.9	-9.4	-5.5	-8.0	
Mesa West RE Income IV Lag³		\$75,000	Comm. Mortgage	\$ 29,344,469	0.7%	1.9	1.9	5.1	6.6	7.6	7.4	Mar-17
<i>CPI +6% Annual Blend⁴</i>					1.4	4.1	9.0	11.7	8.7	--	8.9	
Difference:					0.5	-2.2	-3.9	-5.1	-1.1	--	-1.5	
Crestline Opportunity II Lag³		\$45,000	Opportunistic	\$ 20,377,954	0.5%	5.1	5.1	13.6	15.5	1.0	5.3	Nov-13
<i>CPI +6% Annual Blend⁴</i>					1.4	4.1	9.0	11.7	8.7	8.9	8.9	
Difference:					3.7	1.0	4.6	3.8	-7.7	-4.5	-3.6	
Davidson Kempner Distr Opp V Lag³		\$50,000	Opportunistic	\$ 27,193,588	0.0%	5.4	--	--	--	--	49.5	Mar-18
<i>CPI +6% Annual Blend⁴</i>					1.4	--	--	--	--	--	11.7	
Difference:					4.0	--	--	--	--	--	37.8	
Oaktree Lag		\$50,000	Leveraged Direct	\$ 31,908,345	0.8%	2.9	2.9	11.8	18.4	--	10.6	Mar-18
<i>CPI +6% Annual Blend⁶</i>					1.4	4.1	9.0	18.6	--	--	9.1	
Difference:					1.5	-1.2	2.8	-0.2	--	--	1.5	
HPS EU Asset Value II Lag³		\$50,000	Direct Lending	\$ 18,601,819	0.5%	1.3	1.3	--	--	--	-0.9	Aug-14
<i>CPI +6% Annual Blend⁴</i>					1.4	4.1	--	--	--	--	11.4	
Difference:					-0.1	-2.8	--	--	--	--	-12.3	
Raven Opportunity II Lag³		\$45,000	Direct Lending	\$ 9,331,766	0.2%	-4.5	-4.5	-3.6	-2.5	-5.4	-4.3	Aug-14
<i>CPI +6% Annual Blend⁴</i>					1.4	4.1	9.0	11.7	8.7	8.9	8.9	
Difference:					-5.9	-8.6	-12.6	-14.2	-14.1	-13.2	-13.7	
Raven Opportunity III Lag³		\$50,000	Direct Lending	\$ 48,132,680	1.2%	1.8	1.8	6.5	10.1	6.9	2.6	Nov-15
<i>CPI +6% Annual Blend⁴</i>					1.4	4.1	9.0	11.7	8.7	--	8.9	
Difference:					0.4	-2.3	-2.5	-1.6	-1.8	--	-6.3	

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² Total class returns are as of 9/30/21, and lagged 1 quarter.

³ Manager returns are as of 9/30/21, and lagged 1 quarter. Since Inception date reflects one quarter lag.

⁴ 9% Annual until 7/1/2018 then CPI +6% Annual thereafter.

⁵ 50% Bloomberg High Yield/50% S&P Leveraged Loan until 12/31/20 then CPI +6% Annual thereafter. Benchmark lagged one quarter.

⁶ MSCI ACWI + 2% until 12/31/20 then CPI +6% Annual thereafter. Benchmark lagged one quarter

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Commitment (\$000)	Sub-Segment	Market Value	Physical % of Total	Policy Target %	1-Mo	3-Mos	YTD	1-Yr	3-Yrs	5-Yrs	SI Return	SI Date
Private Credit Lag (continued)												
Medley Opportunity II Lag³	<i>Direct Lending</i>	\$ 10,229,923	0.3%		0.1	0.1	11.8	0.8	-10.5	-6.5	-1.0	Jul-12
<i>CPI +6% Annual Blend⁴</i>					1.4	4.1	9.0	11.7	8.7	8.9	8.9	
Difference:					-1.3	-4.0	2.8	-10.9	-19.2	-15.4	-9.9	
White Oak Summit Peer Fund Lag³	<i>Direct Lending</i>	\$ 41,414,443	1.1%		0.7	0.7	4.1	5.9	5.8	--	6.9	Mar-16
<i>CPI +6% Annual Blend⁴</i>					1.4	4.1	9.0	11.7	8.7	--	8.9	
Difference:					-0.7	-3.4	-4.9	-5.8	-2.9	--	-2.0	
White Oak Yield Spectrum Master V Lag³	<i>Direct Lending</i>	\$ 48,501,934	1.2%		0.5	0.5	---	---	---	--	-0.3	Mar-20
<i>CPI +6% Annual Blend⁴</i>					1.4	4.1	---	---	---	--	9.7	
Difference:					-0.9	-3.6	---	---	---	--	-10.0	
Principal US³	<i>Core Pvt. RE</i>	\$ 35,153,936	0.9%		3.7	3.7	6.2	8.0	5.5	6.7	7.5	Jan-16
<i>NCREIF ODCE + 1% Lag Blend</i>					2.9	2.9	5.0	5.6	8.1	9.5	10.4	
Difference:					0.8	0.8	1.2	2.4	-2.6	-2.8	-2.9	
Prologis Logistics³	<i>Core Pvt. RE</i>	\$ 82,714,166	2.1%		3.4	3.4	9.0	20.6	14.4	16.3	7.0	Dec-07
<i>NCREIF ODCE + 1% Lag Blend</i>					2.9	2.9	5.0	5.6	8.1	9.5	8.8	
Difference:					0.5	0.5	4.0	15.0	6.3	6.8	-1.8	
RREEF America II³	<i>Core Pvt. RE</i>	\$ 51,087,248	1.3%		3.7	3.7	5.7	6.5	5.6	6.5	7.0	Jul-16
<i>NCREIF ODCE + 1% Lag Blend</i>					2.9	2.9	5.0	5.6	8.1	9.5	10.0	
Difference:					0.8	0.8	0.7	0.9	-2.5	--	-3.0	
Diversifying Strategies		\$ 794,875,152	20.2%	25.0%	-0.3	-0.6	1.0	1.7	4.3	2.6	6.4	Oct-90
Principal Protection												
<i>BB Aggregate Bond Index</i>		\$ 330,642,123	8.4%	10.0%	-0.1	-0.8	0.1	2.2	4.0	3.3	6.3	Oct-90
Difference:					0.0	-1.1	-1.6	-0.5	5.6	3.1	5.9	
					-0.1	0.3	1.7	2.7	-1.8	0.2	0.4	
Dodge & Cox	<i>Core Fixed Income</i>	\$ 216,830,233	5.5%		-0.3	-1.1	-0.8	1.8	6.5	4.4	7.1	Oct-90
<i>BB Aggregate Bond Index</i>					0.0	-1.1	-1.6	-0.5	5.6	3.1	5.9	
Difference:					-0.3	0.0	0.8	2.3	0.9	1.3	1.2	
DoubleLine Capital	<i>MBS</i>	\$ 113,811,890	2.9%		0.1	-0.1	1.9	3.1	4.5	3.5	4.9	Feb-12
<i>BB Aggregate Bond Index</i>					0.0	-1.1	-1.6	-0.5	5.6	3.1	2.9	
Difference:					0.1	1.0	3.5	3.6	-1.1	0.4	2.0	

¹ Returns are preliminary and are finalized during each quarterly reporting cycle. Monthly returns since previous quarter are provided by the managers. Market values are provided by Northern Trust.

² Total class returns are as of 9/30/21, and lagged 1 quarter.

³ Manager returns are as of 9/30/21, and lagged 1 quarter. Since Inception date reflects one quarter lag.

⁴ 9% Annual until 7/1/2018 then CPI +6% Annual thereafter.

San Joaquin County Employees' Retirement Association (SJCERA)

Preliminary Monthly Flash Report (Net)¹

October 2021

Commitment (\$000)	Sub-Segment	Market Value	Physical % of Total	Policy Target %	1-Mo	3-Mos	YTD	1-Yr	3-Yrs	5-Yrs	SI Return	SI Date
Crisis Risk Offset		\$ 464,233,029	11.8%	15.0%	-0.4	-0.5	1.6	1.3	4.3	2.2	6.4	Jan-05
<i>CRO Custom Benchmark²</i>					1.8	1.3	3.3	5.9	8.2	4.5	5.5	
Difference:					-2.2	-1.8	-1.7	-4.6	-3.9	-2.3	0.9	
Long Duration		\$ 153,969,461	3.9%		1.3	-1.7	-5.6	-5.5	10.2	4.2	3.8	
<i>BB US Long Duration Treasuries</i>					1.9	-1.3	-5.8	-5.8	11.0	4.6	4.8	
Difference:					-0.6	-0.4	0.2	0.3	-0.8	-0.4	-1.0	
Dodge & Cox Long Duration	Long Duration	\$ 153,969,461	3.9%		1.3	-1.7	-5.6	-5.5	10.2	4.2	3.8	Feb-16
<i>BB US Long Duration Treasuries</i>					1.9	-1.3	-5.8	-5.8	11.0	4.6	4.8	
Difference:					-0.6	-0.4	0.2	0.3	-0.8	-0.4	-1.0	
Systematic Trend Following		\$ 192,006,517	4.9%		1.4	2.8	12.4	23.0	5.8	1.5	8.4	
<i>BTOP50 Index</i>					3.2	4.0	11.7	19.5	7.8	3.4	4.7	
Difference:					-1.8	-1.2	0.7	3.5	-2.0	-1.9	3.7	
Mt. Lucas Managed Futures - Cash	Systematic Trend Following	\$ 100,652,026	2.6%		1.5	4.7	19.5	31.1	6.3	0.3	8.0	Jan-05
<i>BTOP50 Index</i>					3.2	4.0	11.7	19.5	7.8	3.4	4.7	
Difference:					-1.7	0.7	7.8	11.6	-1.5	-3.1	3.3	
Graham Tactical Trend	Systematic Trend Following	\$ 91,354,491	2.3%		1.4	0.8	5.5	15.2	5.1	2.2	1.0	Apr-16
<i>SG Trend Index</i>					3.1	5.5	14.0	22.9	9.5	4.6	2.4	
Difference:					-1.7	-4.7	-8.5	-7.7	-4.4	-2.4	-1.4	
Alternative Risk Premia		\$ 118,257,051	3.0%		-5.3	-4.1	-3.9	-15.2	-5.1	-1.0	6.6	
<i>5% Annual</i>					0.4	1.2	4.2	5.0	5.0	5.0	6.3	
Difference:					-5.7	-5.3	-8.1	-20.2	-10.1	-6.0	0.3	
AQR Style Premia	Alternative Risk Premia	\$ 26,640,125	0.7%		-9.2	-9.4	9.3	10.6	-11.4	-6.8	-6.2	May-16
<i>5% Annual</i>					0.4	1.2	4.2	5.0	5.0	5.0	5.0	
Difference:					-9.6	-10.6	5.1	5.6	-16.4	-11.8	-11.2	
PE Diversified Global Macro	Alternative Risk Premia	\$ 34,141,883	0.9%		-4.0	2.0	-8.4	-32.6	-8.6	-2.7	-3.5	Jun-16
<i>5% Annual</i>					0.4	1.2	4.2	5.0	5.0	5.0	5.0	
Difference:					-4.4	0.8	-12.6	-37.6	-13.6	-7.7	-8.5	
Lombard Odier	Alternative Risk Premia	\$ 57,475,043	1.5%		-4.2	-4.8	-6.4	-11.1	--	--	-4.8	Jan-19
<i>5% Annual</i>					0.4	1.2	4.2	5.0	--	--	5.0	
Difference:					-4.6	-6.0	-10.6	-16.1	--	--	-9.8	
Cash³		\$ 79,036,676	2.0%	0.0%	0.0	0.0	0.1	0.1	0.8	0.9	2.4	Sep-94
<i>US T-Bills</i>					0.0	0.0	0.0	0.1	1.1	1.2	2.4	
Difference:					0.0	0.0	0.1	0.0	-0.3	-0.3	0.0	
Northern Trust STIF	Collective Govt. Short Term	\$ 90,410,317	2.3%		0.0	0.0	0.1	0.1	0.9	0.9	2.6	Jan-95
<i>US T-Bills</i>					0.0	0.0	0.0	0.1	1.1	1.2	2.4	
Difference:					0.0	0.0	0.1	0.0	-0.2	-0.3	0.2	
Parametric Overlay⁴	Cash Overlay	\$ 54,040,926	1.4%		0.0	0.0	0.0	0.0	--	--	0.0	Jan-20

¹Returns are preliminary and are finalized during each quarterly reporting cycle. Monthly returns since previous quarter are provided by the managers. Market values are provided by Northern Trust.

²Benchmark is (1/3) BB Long Duration Treasuries, (1/3) BTOP50 Index, (1/3) 5% Annual.

³Includes lagged cash.

⁴Given daily cash movement returns may vary from those shown above.

Capital Markets Outlook & Risk Metrics

As of October 31, 2021

Capital Markets Outlook

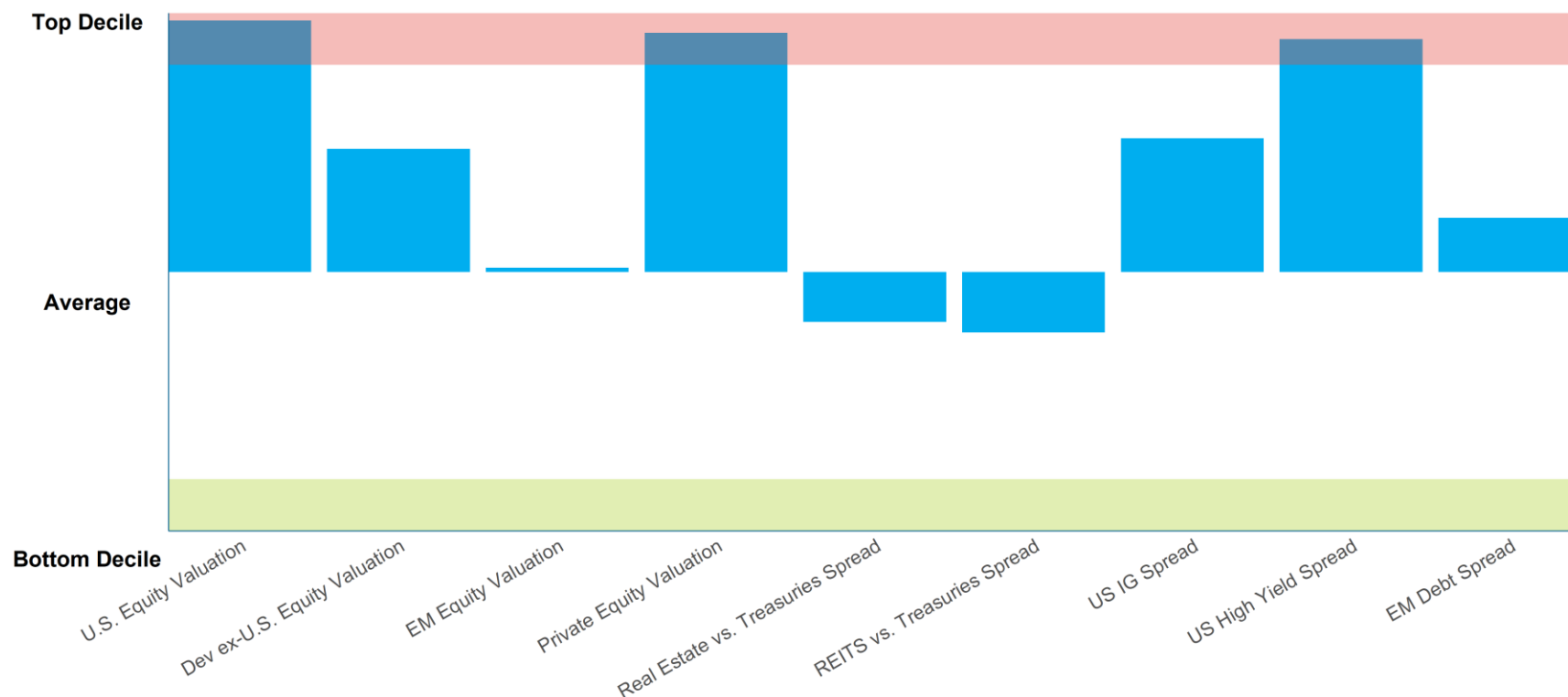
Markets

- After a difficult September, global equity markets posted positive returns in October even as global supply chain disruptions and robust consumer demand drove inflation higher. Significant financial entities (e.g., IMF) are analyzing the potential for mounting inflationary forces to disrupt the outlook for the global recovery.
- Global equity markets posted returns generally between 1% and 9% in the month of October, with US equities outperforming non-US equities.
- Reversing September's outperformance, US value stocks lagged growth stocks across all market capitalizations in October. For example, the Russell 1000 Growth index returned 8.7% in the month, versus the Russell 1000 Value index's return of 5.1%.
- China's equity markets recovered in October and returned 3.2%, outperforming the MSCI Emerging Markets index which returned 1.0%.
- Bond markets saw mixed returns as rising inflation expectations dampened returns. The Bloomberg US Aggregate index returning 0.0%, while TIPS generated positive returns with the Bloomberg TIPS index return 1.1%.
- The Bloomberg US Long Government Bond index returned 1.8% as the market adjusted long-term inflation risks lower.

Capital Markets Outlook

- Global and US REITS posted strong positive returns in the month of October with the MSCI US REITS index returning 7.7%, and the FTSE NAREIT Equity Index returning 7.6%.
- Natural resource equities outperformed the broad commodity index with the S&P Global Natural Resource index returning 4.8%, while the Bloomberg Commodity index returned 2.6% for the month.
- US headline inflation for September reached 5.4% year-on-year, largely driven by higher energy costs, which rose 24.8% year-on-year, while core inflation (CPI ex. food and energy) rose 4% year-on-year.
- Energy prices continued to rise in October. In China, flooding and high natural gas prices have prompted energy rationing schemes and higher energy costs for manufacturers. In Europe, natural gas prices have driven power costs higher and pushed inflation to multi-decade highs.
- In October, the US Senate agreed to fund a temporary extension of the debt ceiling for \$480 billion.
- In China, the potential default of mega-real estate company, Evergrande, put a strain on markets. Investors worry whether a potential default will be limited to just Evergrande's creditors or if its troubles are a symptom of a broader real estate and economic downturn in China.
- Vaccine efficacy remains uncertain as some countries enact targeted booster programs, while Delta variant cases appear to be falling in the US and Europe. Meanwhile, China has reinstated some targeted local lockdowns in response to COVID outbreaks.

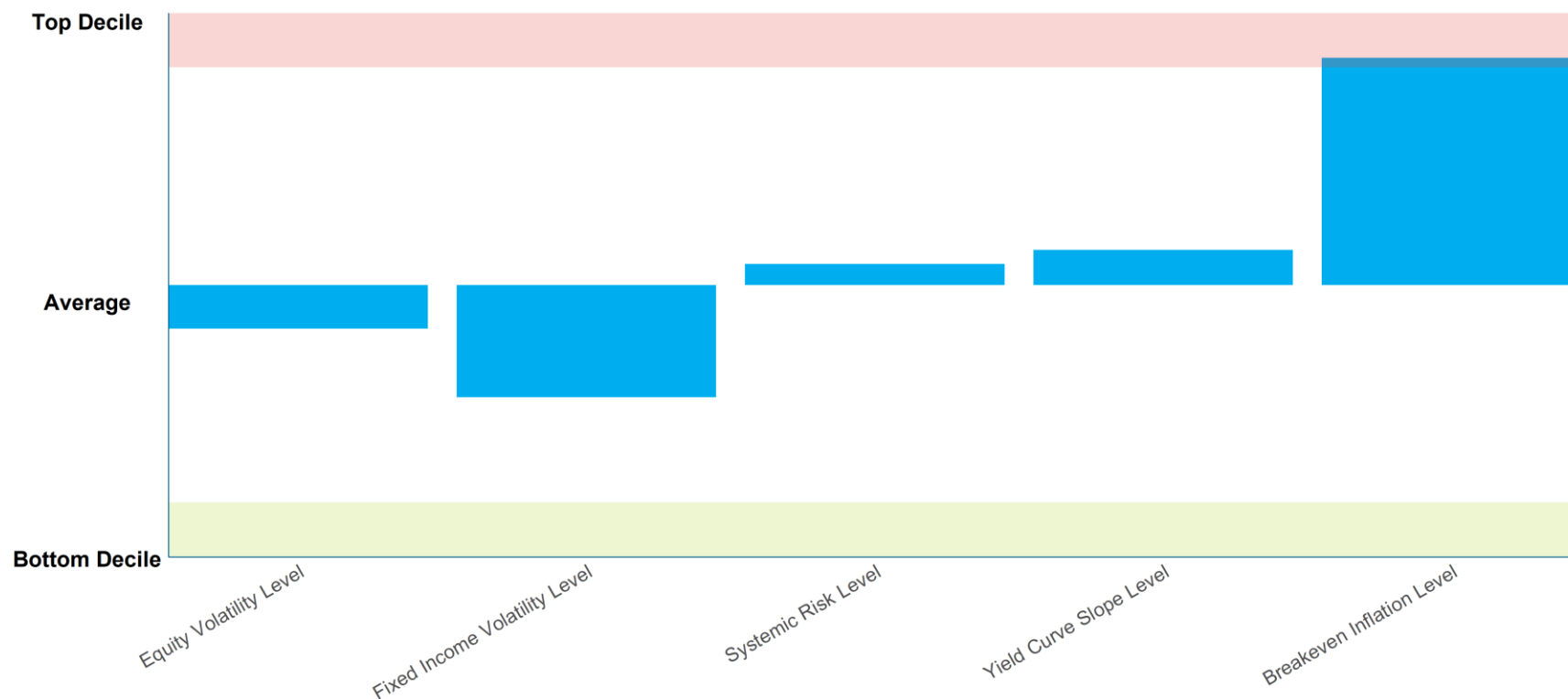
Risk Overview/Dashboard (1) (As of October 31, 2021)¹



- Dashboard (1) summarizes the current state of the different valuation metrics per asset class relative to their own history.

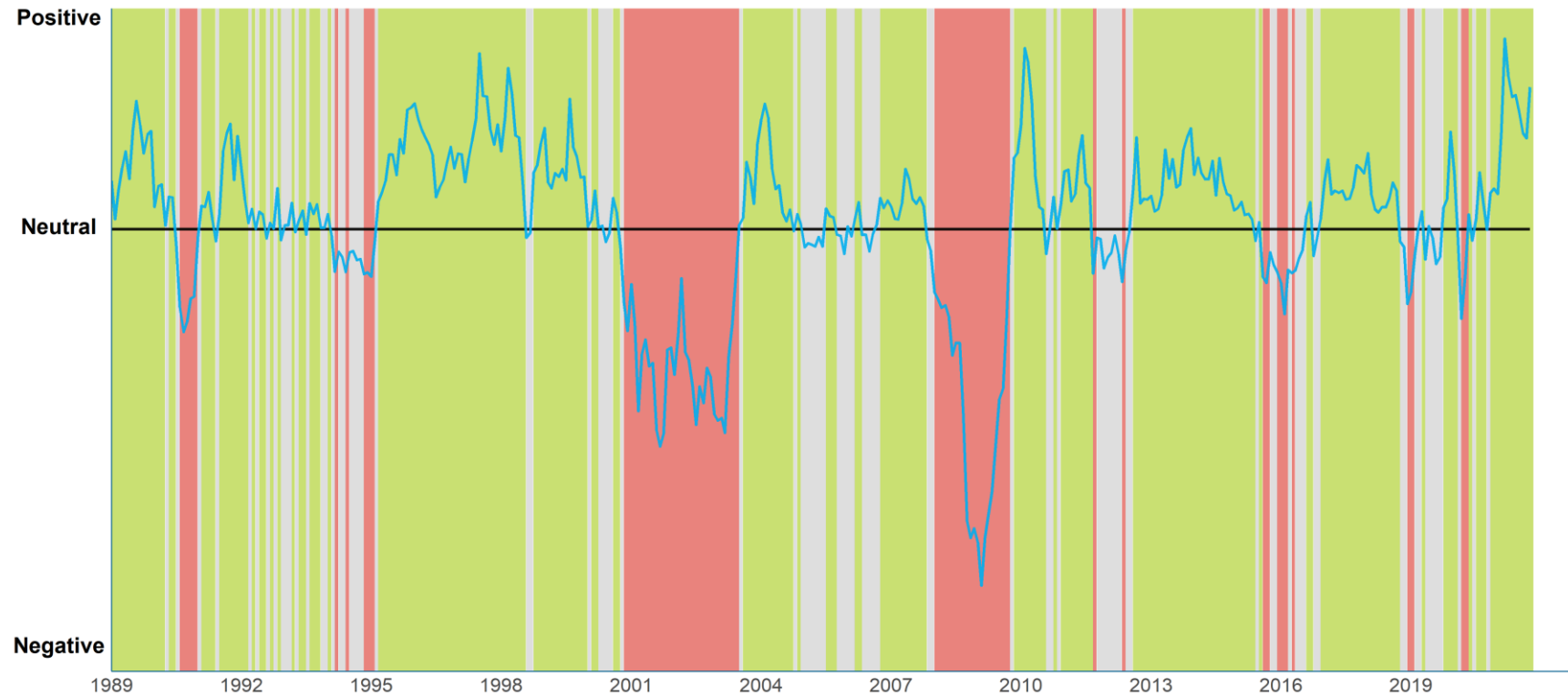
¹ With the exception of Private Equity Valuation, that is YTD as of December 31, 2020.

Risk Overview/Dashboard (2) (As of October 31, 2021)

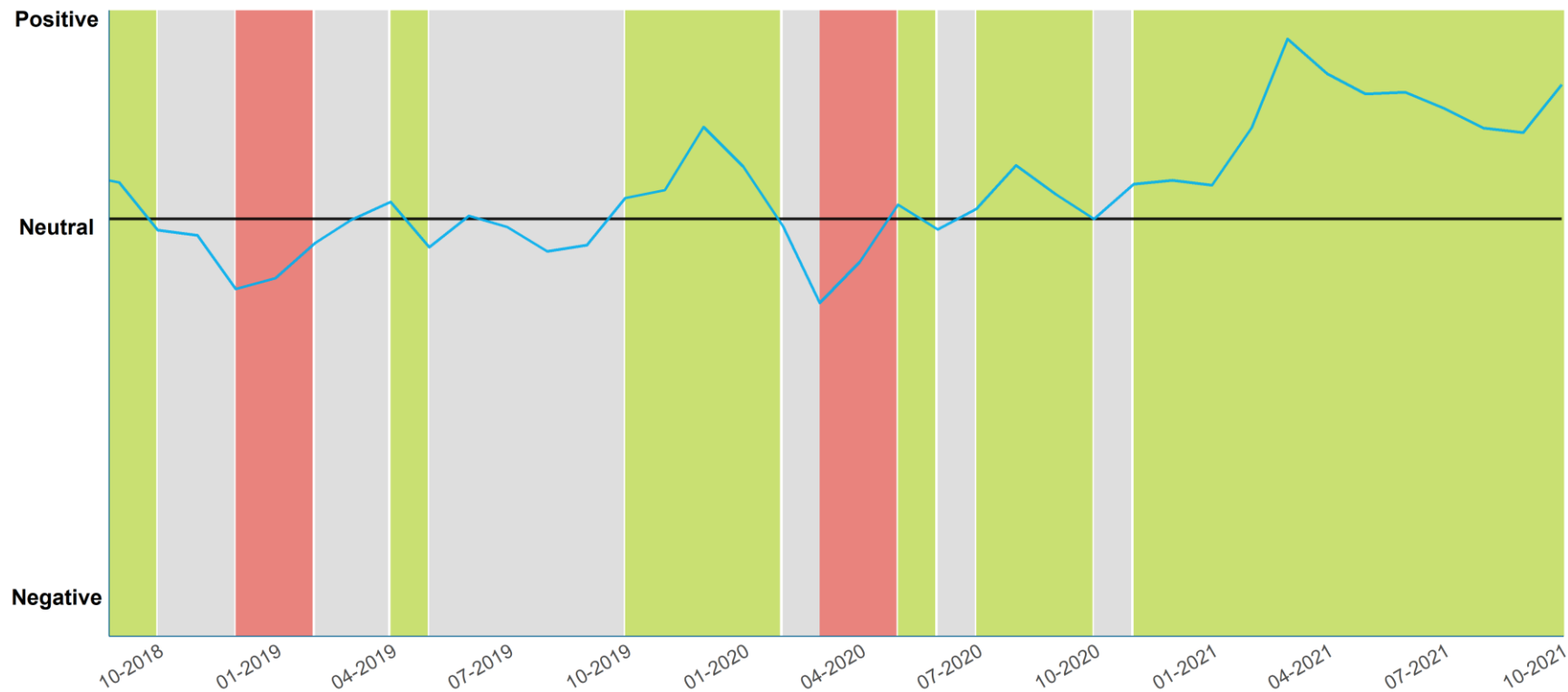


- Dashboard (2) shows how the current level of each indicator compares to its respective history.

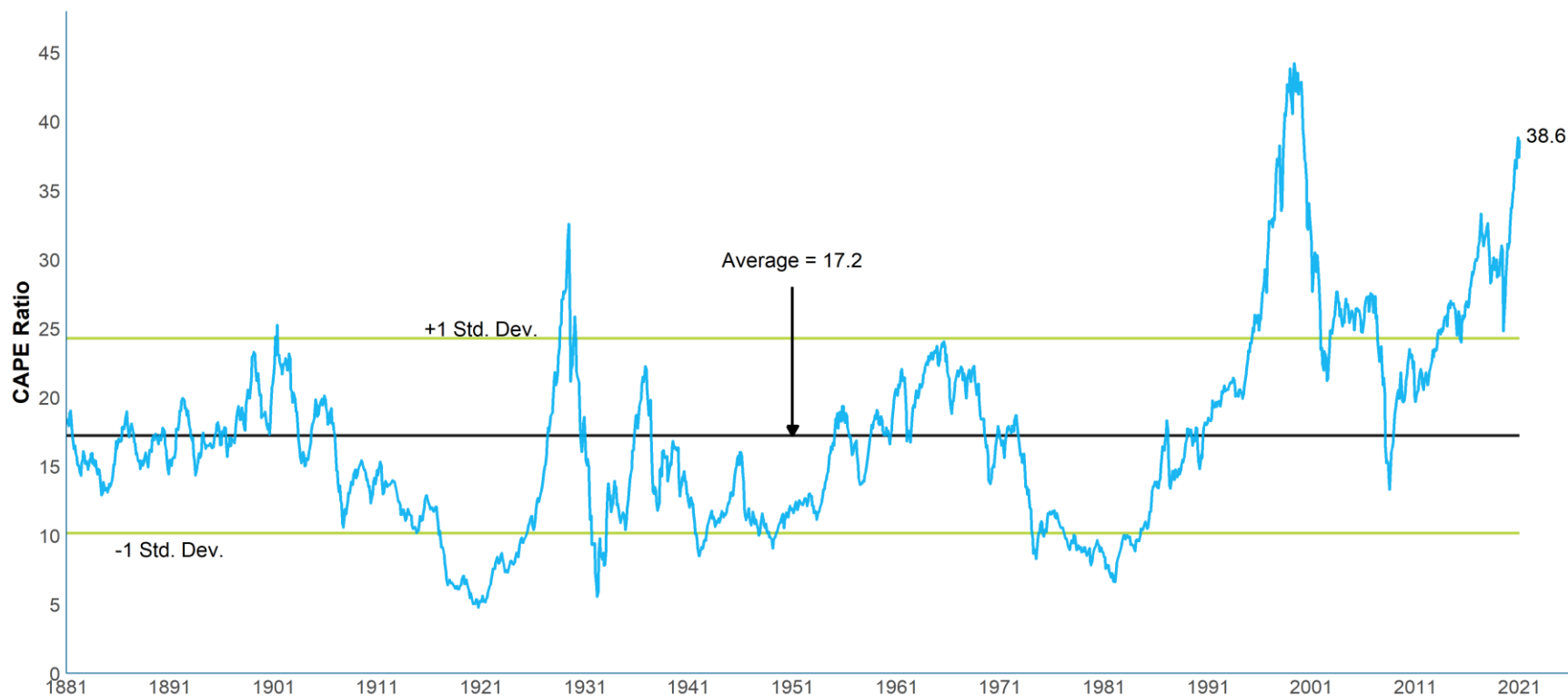
Market Sentiment Indicator (All History)
(As of October 31, 2021)



Market Sentiment Indicator (Last Three Years)
(As of October 31, 2021)



US Equity Cyclically Adjusted P/E¹ (As of October 31, 2021)



- This chart details one valuation metric for US equities. A higher (lower) figure indicates more expensive (cheaper) valuation relative to history.

¹ US Equity Cyclically Adjusted P/E on S&P 500 Index. Source: Robert Shiller, Yale University, and Meketa Investment Group.

Small Cap P/E vs. Large Cap P/E¹ (As of October 31, 2021)



- This chart compares the relative attractiveness of small cap US equities vs. large cap US equities on a valuation basis. A higher (lower) figure indicates that large cap (small cap) is more attractive.

¹ Small Cap P/E (Russell 2000 Index) vs. Large Cap P/E (Russell 1000 Index) - Source: Russell Investments. Earnings figures represent 12-month "as reported" earnings.

Growth P/E vs. Value P/E¹ (As of October 31, 2021)



- This chart compares the relative attractiveness of US growth equities vs. US value equities on a valuation basis. A higher (lower) figure indicates that value (growth) is more attractive.

¹ Growth P/E (Russell 3000 Growth Index) vs. Value (Russell 3000 Value Index) P/E - Source: Bloomberg, MSCI, and Meketa Investment Group. Earnings figures represent 12-month "as reported" earnings.

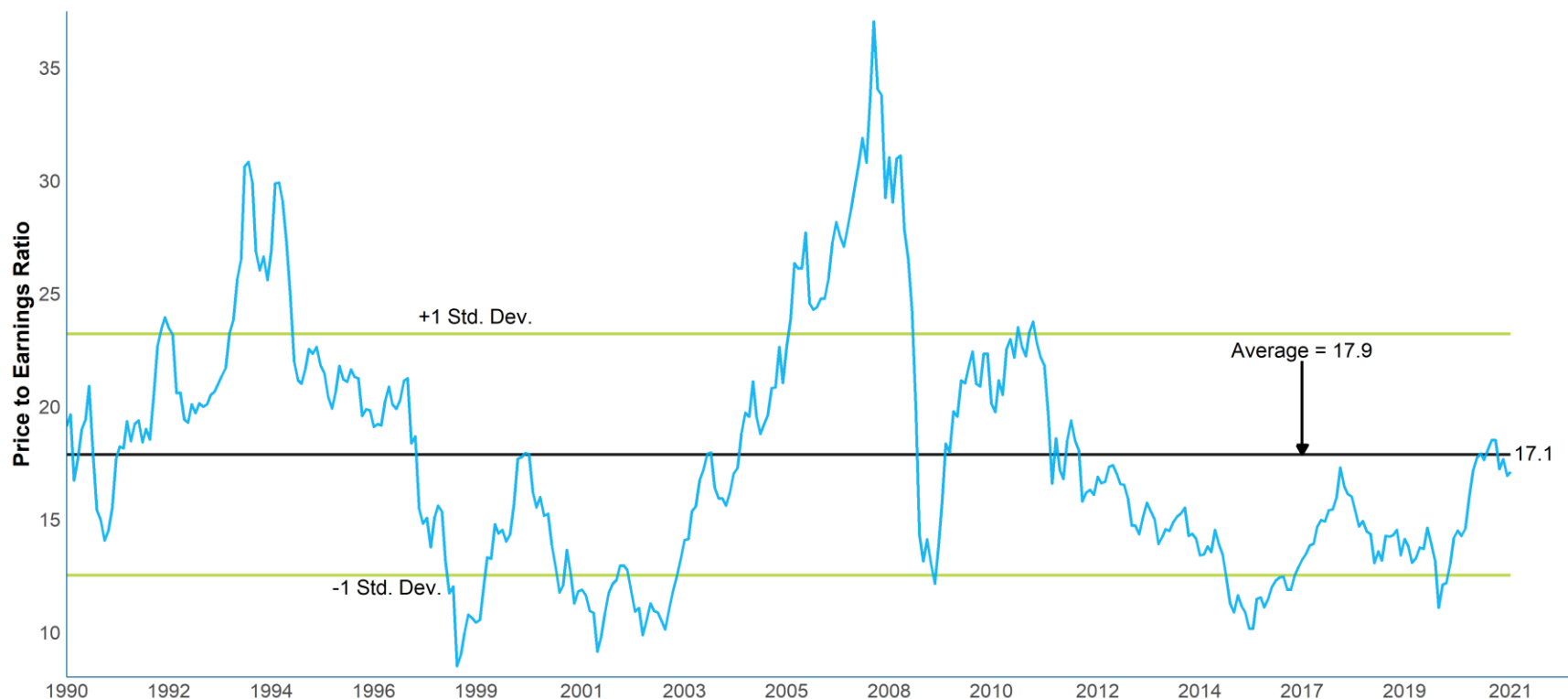
Developed International Equity Cyclically Adjusted P/E¹ (As of October 31, 2021)



- This chart details one valuation metric for developed international equities. A higher (lower) figure indicates more expensive (cheaper) valuation relative to history.

¹ Developed International Equity (MSCI EAFE Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years.

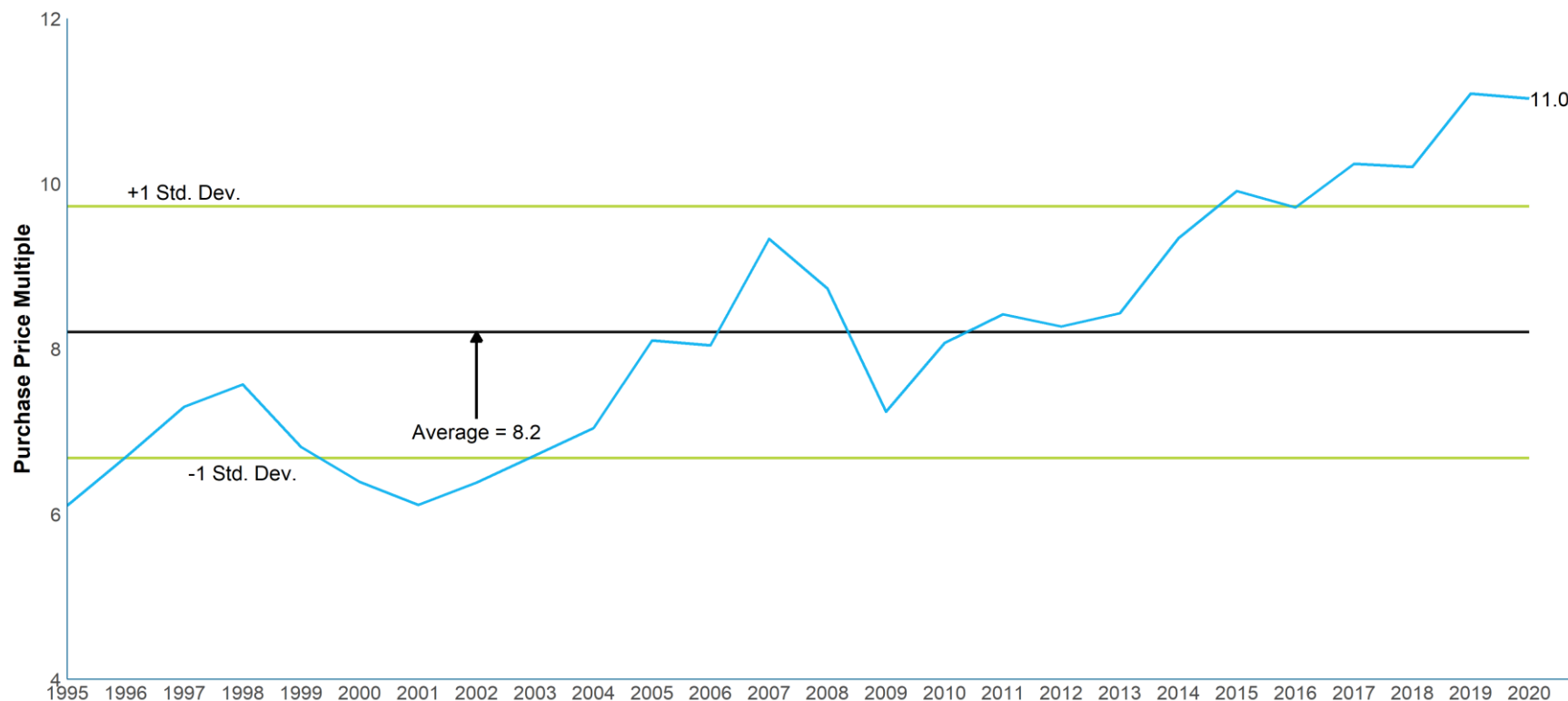
Emerging Market Equity Cyclically Adjusted P/E¹ (As of October 31, 2021)



- This chart details one valuation metric for emerging markets equities. A higher (lower) figure indicates more expensive (cheaper) valuation relative to history.

¹ Emerging Market Equity (MSCI Emerging Markets Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years.

Private Equity Multiples¹ (As of February 28, 2021)²

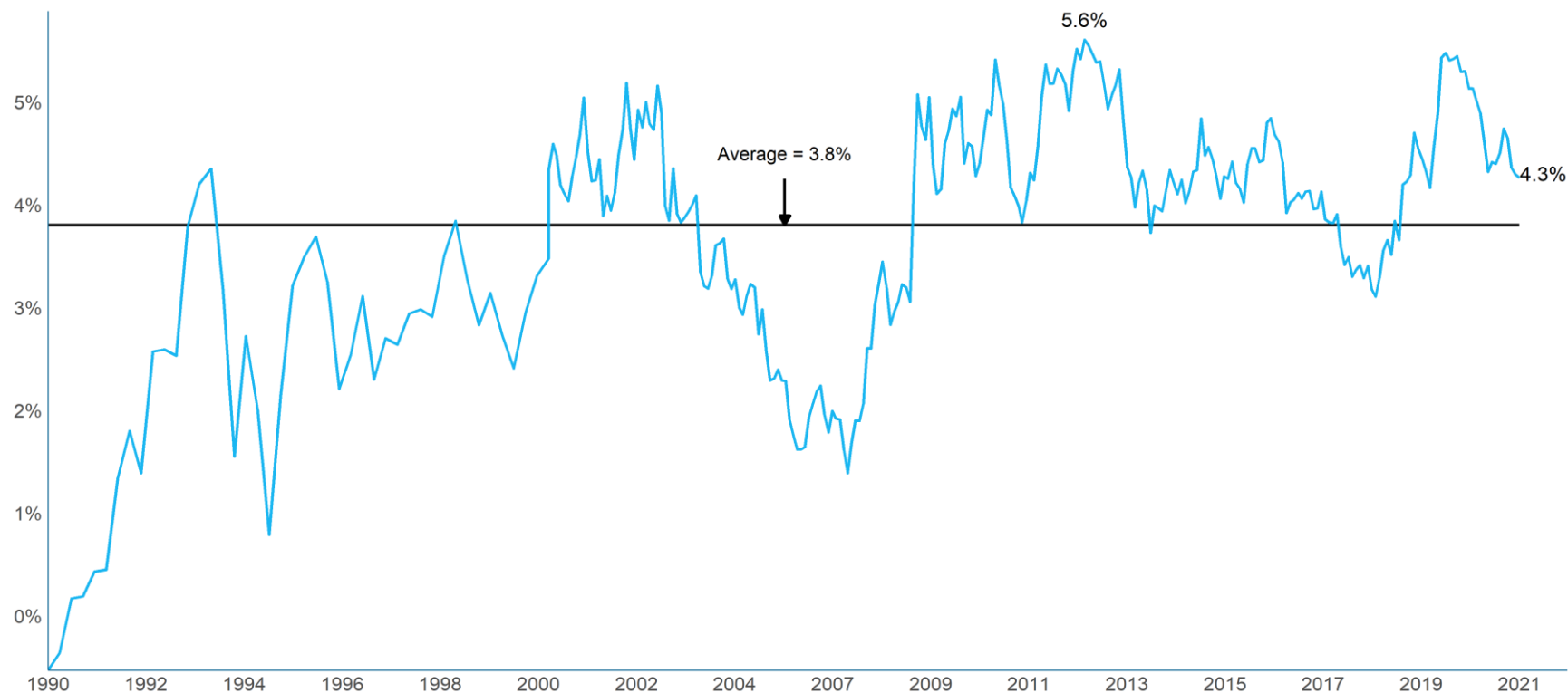


- This chart details one valuation metric for the private equity market. A higher (lower) figure indicates more expensive (cheaper) valuation relative to history.

¹ Private Equity Multiples – Source: S&P LCD Average EBITDA Multiples Paid in All LBOs.

² Annual Data, as of December 31, 2020

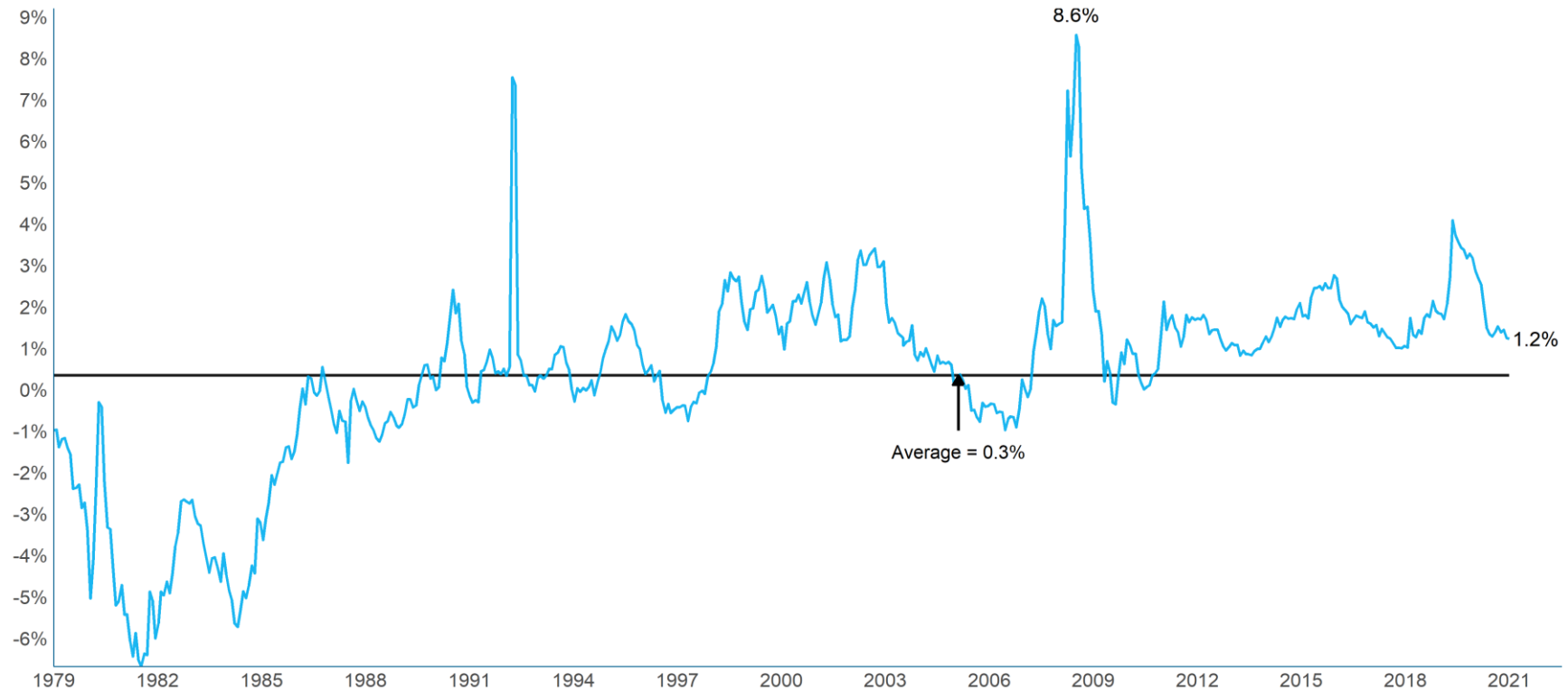
Core Real Estate Spread vs. Ten-Year Treasury¹ (As of October 31, 2021)



- This chart details one valuation metric for the private core real estate market. A higher (lower) figure indicates cheaper (more expensive) valuation.

¹ Core Real Estate Spread vs. Ten-Year Treasury – Source: Real Capital Analytics, US Treasury, Bloomberg, and Meketa Investment Group. Core Real Estate is proxied by weighted sector transaction-based indices from Real Capital Analytics and Meketa Investment Group.

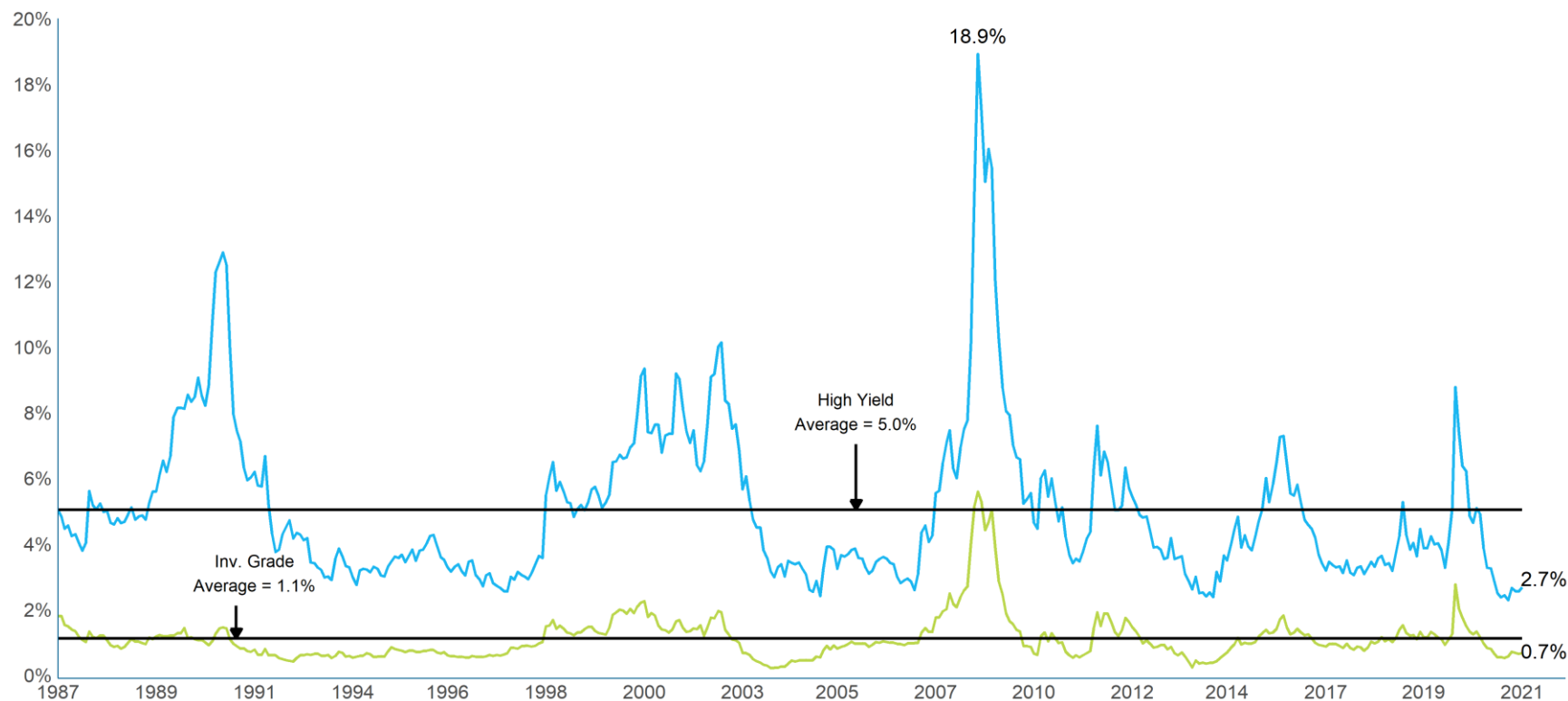
REITs Dividend Yield Spread vs. Ten-Year Treasury¹ (As of October 31, 2021)



- This chart details one valuation metric for the public REITs market. A higher (lower) figure indicates cheaper (more expensive) valuation.

¹ REITs Dividend Yield Spread vs. Ten-Year Treasury – Source: NAREIT, US Treasury. REITs are proxied by the yield for the NAREIT Equity Index.

Credit Spreads¹ (As of October 31, 2021)



- This chart details one valuation metric for the US credit markets. A higher (lower) figure indicates cheaper (more expensive) valuation relative to history.

¹ Credit Spreads – Source: Barclays Capital. High Yield is proxied by the Barclays High Yield Index and Investment Grade Corporates are proxied by the Barclays US Corporate Investment Grade Index. Spread is calculated as the difference between the Yield to Worst of the respective index and the 10-Year US Treasury yield.

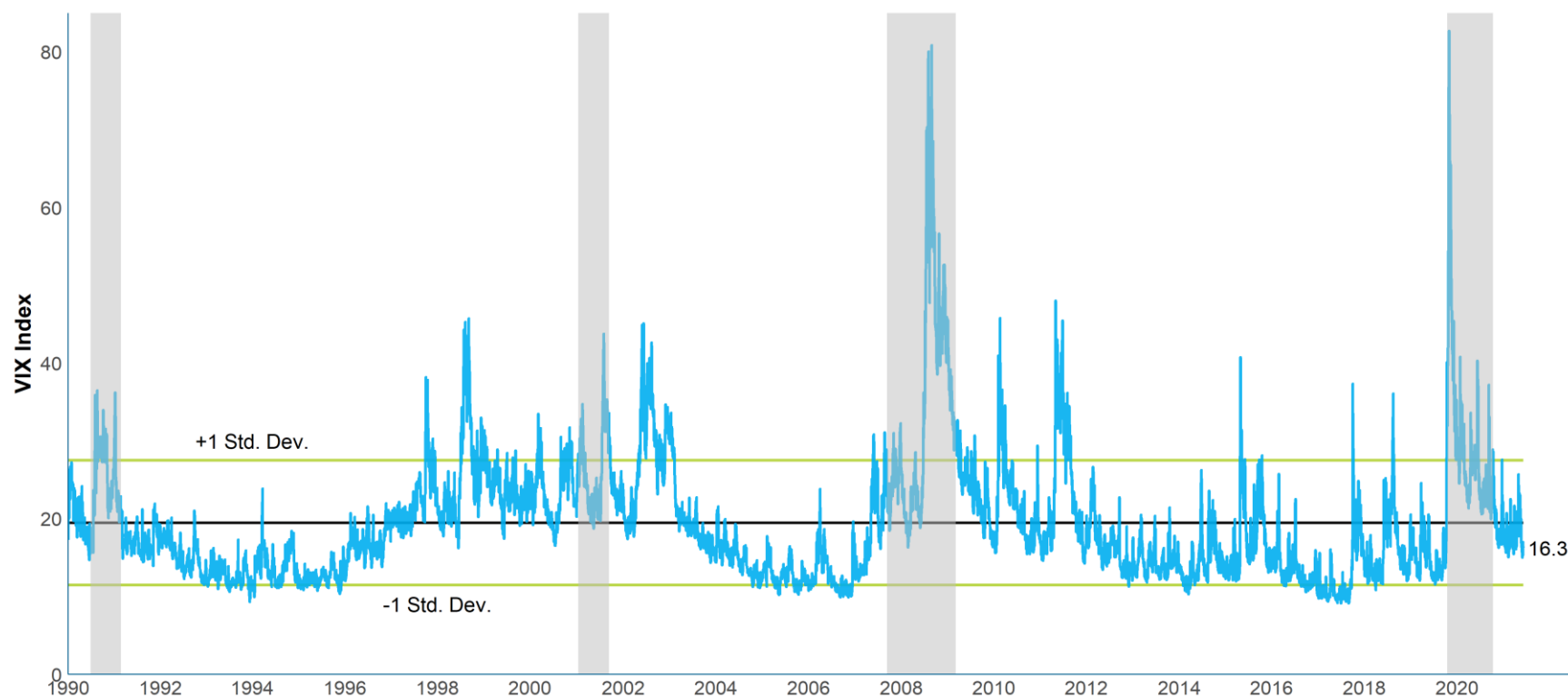
Emerging Market Debt Spreads¹ (As of October 31, 2021)



- This chart details one valuation metric for the EM debt markets. A higher (lower) figure indicates cheaper (more expensive) valuation relative to history.

¹ EM Spreads – Source: Bloomberg. Option Adjusted Spread (OAS) for the Bloomberg Barclays EM USD Aggregate Index.

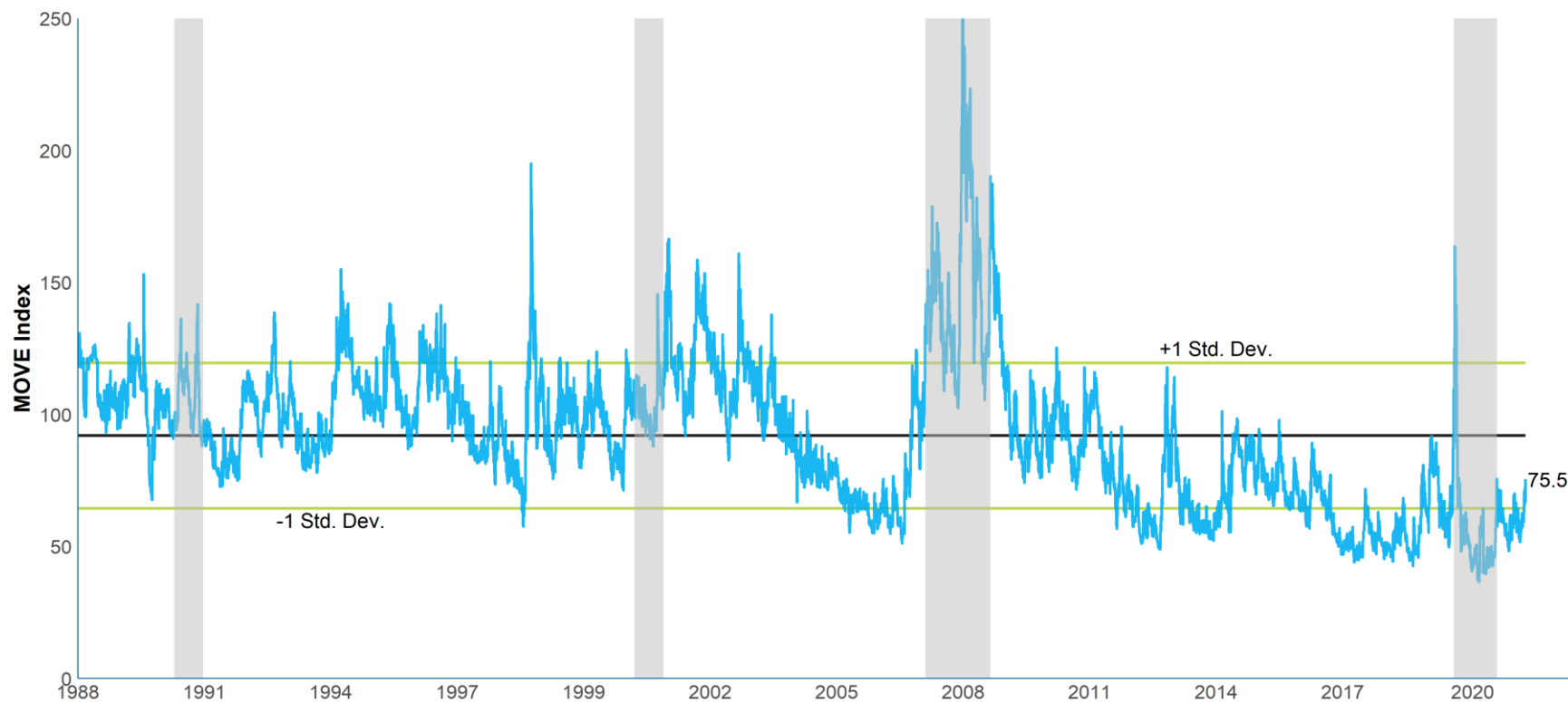
Equity Volatility¹ (As of October 31, 2021)



- This chart details historical implied equity market volatility. This metric tends to increase during times of stress/fear and while declining during more benign periods.

¹ Equity Volatility – Source: Bloomberg, and Meketa Investment Group. Equity Volatility proxied by VIX Index, a Measure of implied option volatility for US equity markets.

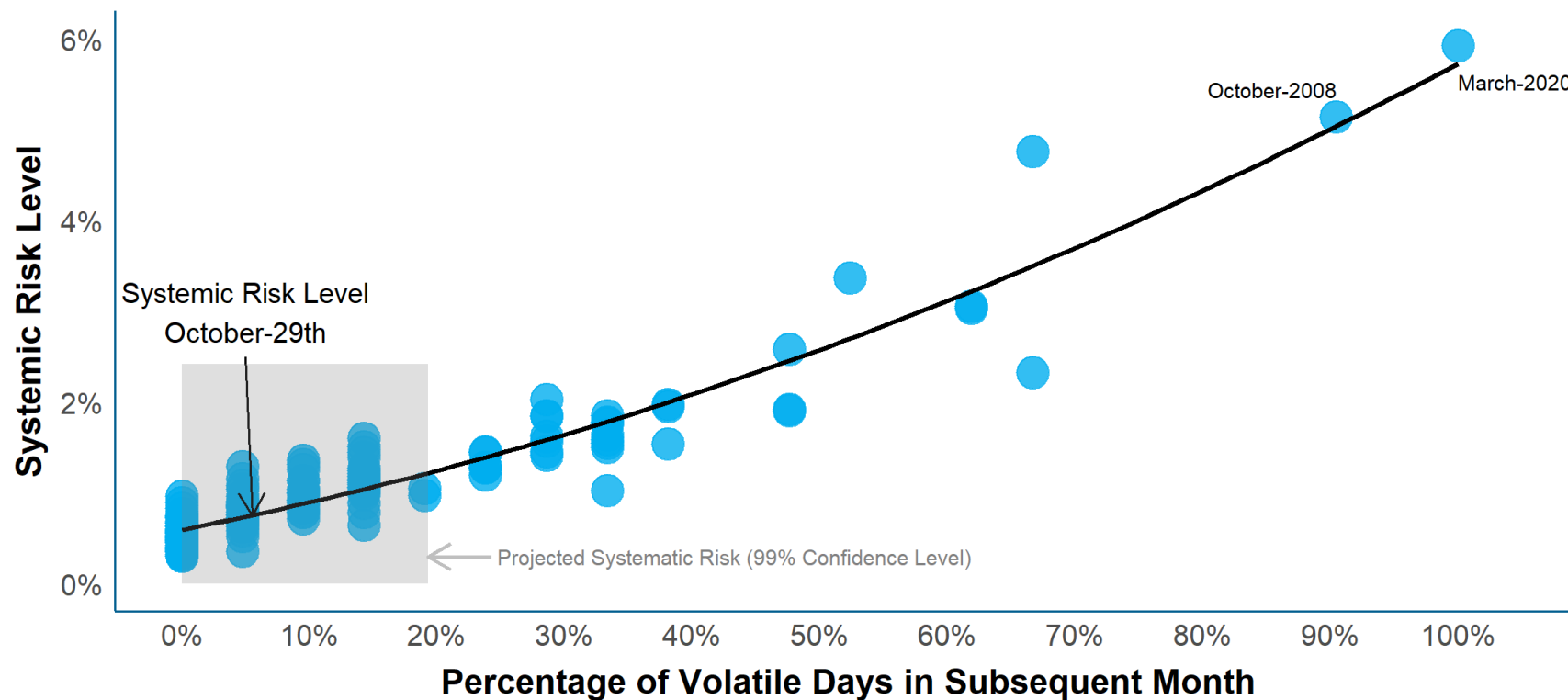
Fixed Income Volatility¹ (As of October 31, 2021)



- This chart details historical implied fixed income market volatility. This metric tends to increase during times of stress/fear and while declining during more benign periods.

¹ Fixed Income Volatility – Source: Bloomberg, and Meketa Investment Group. Fixed Income Volatility proxied by MOVE Index, a Measure of implied option volatility for US Treasury markets.

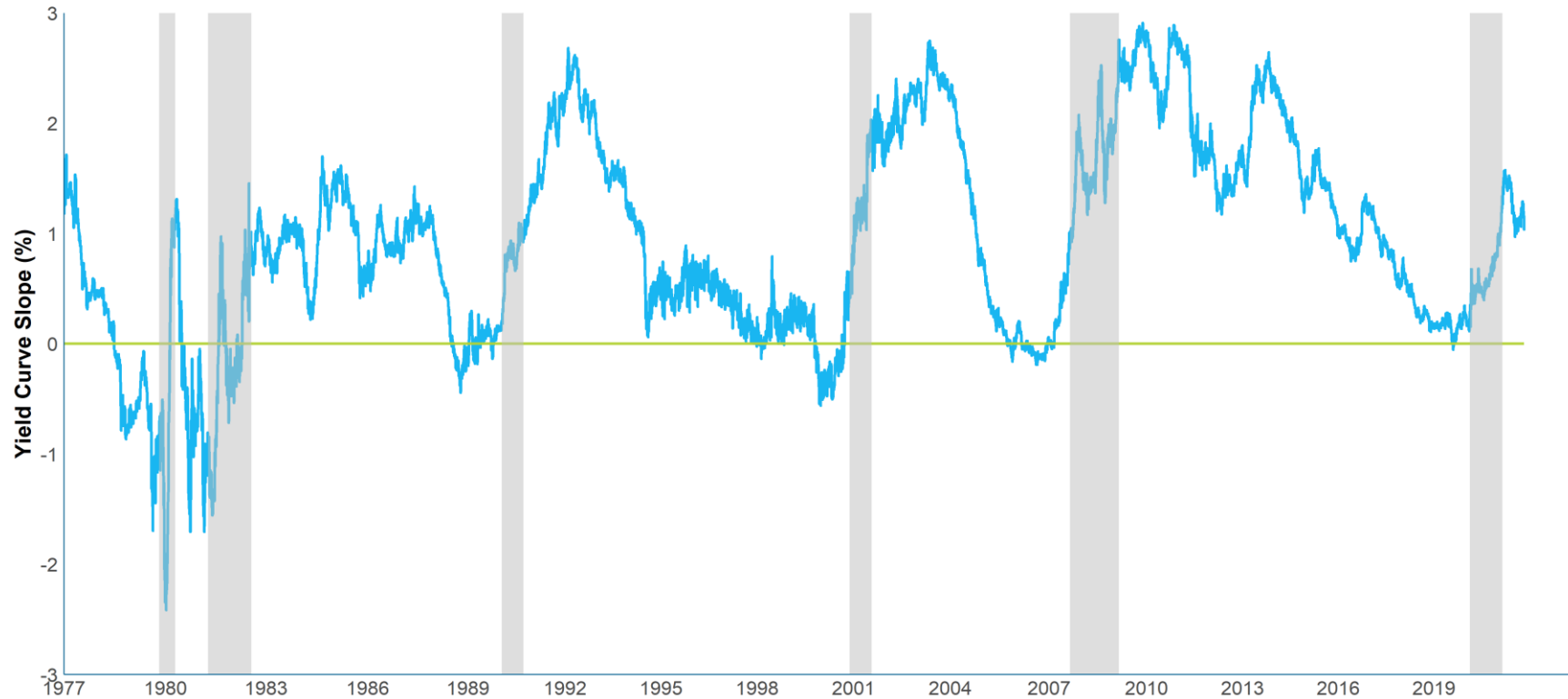
Systemic Risk and Volatile Market Days¹ (As of October 31, 2021)



- Systemic Risk is a measure of 'System-wide' risk, which indicates herding type behavior.

¹ Source: Meketa Investment Group. Volatile days are defined as the top 10 percent of realized turbulence, which is a multivariate distance between asset returns.

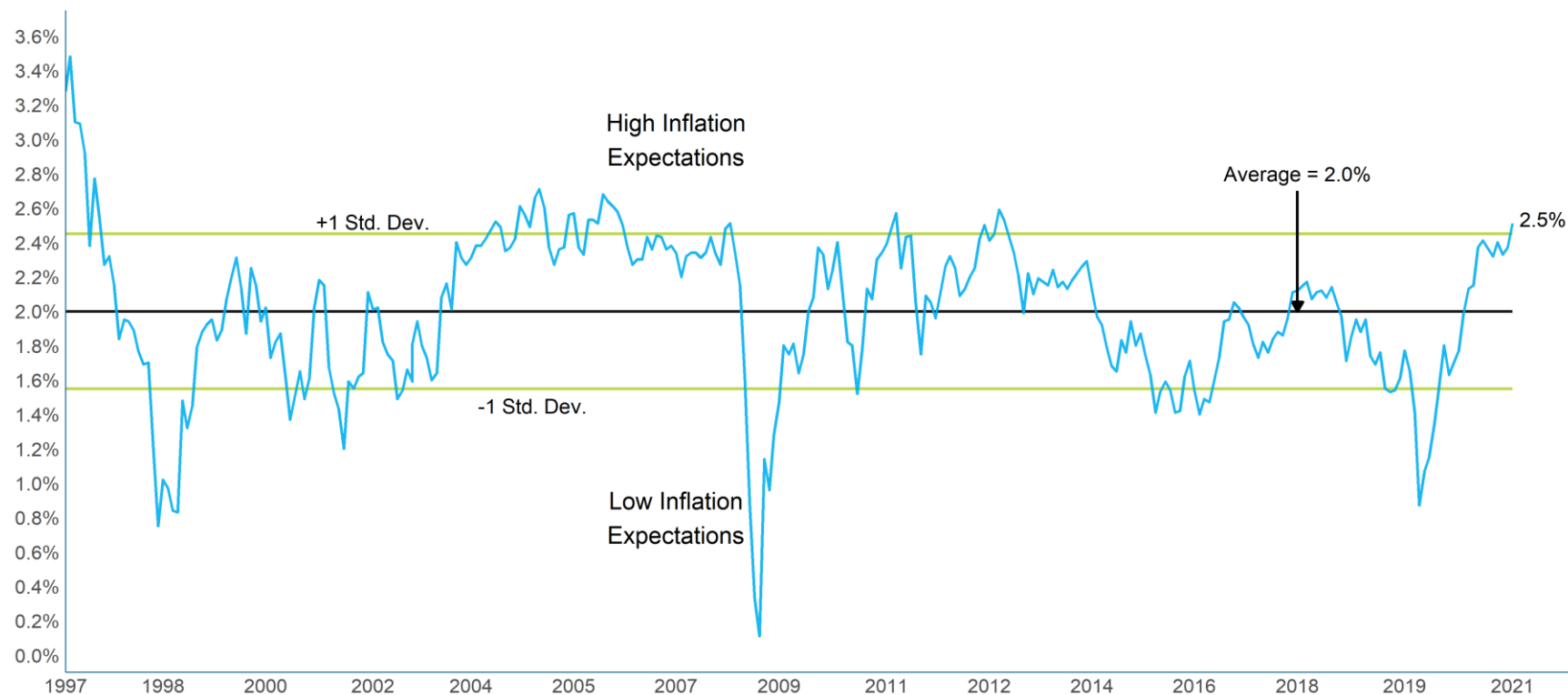
Yield Curve Slope (Ten Minus Two)¹
(As of October 31, 2021)



- This chart details the historical difference in yields between ten-year and two-year US Treasury bonds/notes. A higher (lower) figure indicates a steeper (flatter) yield curve slope.

¹ Yield Curve Slope (Ten Minus Two) – Source: Bloomberg, and Meketa Investment Group. Yield curve slope is calculated as the difference between the 10-Year US Treasury Yield and 2-Year US Treasury Yield.

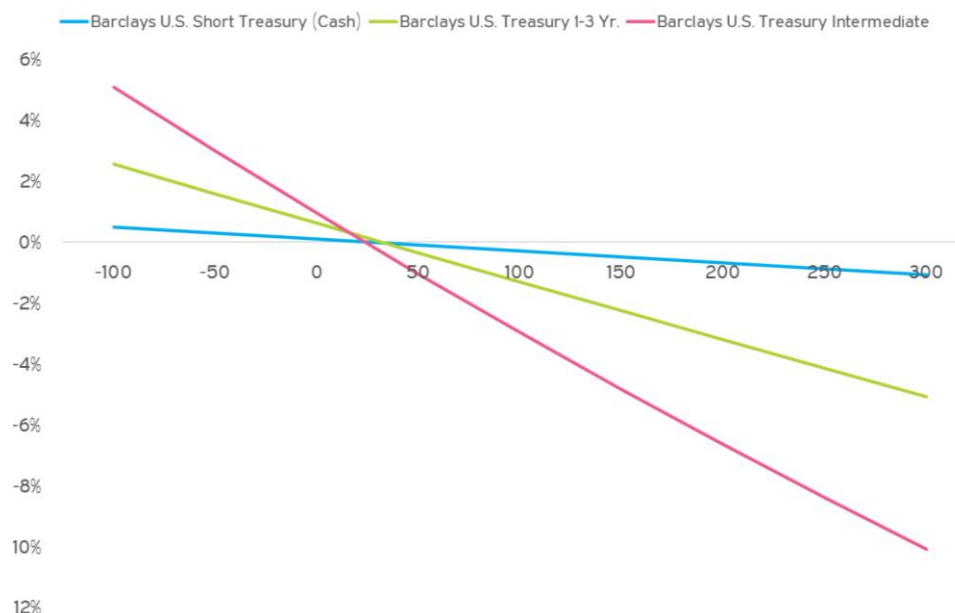
Ten-Year Breakeven Inflation¹ (As of October 31, 2021)



- This chart details the difference between nominal and inflation-adjusted US Treasury bonds. A higher (lower) figure indicates higher (lower) inflation expectations.

¹ Ten-Year Breakeven Inflation – Source: US Treasury and Federal Reserve. Inflation is measured by the Consumer Price Index (CPI-U NSA).

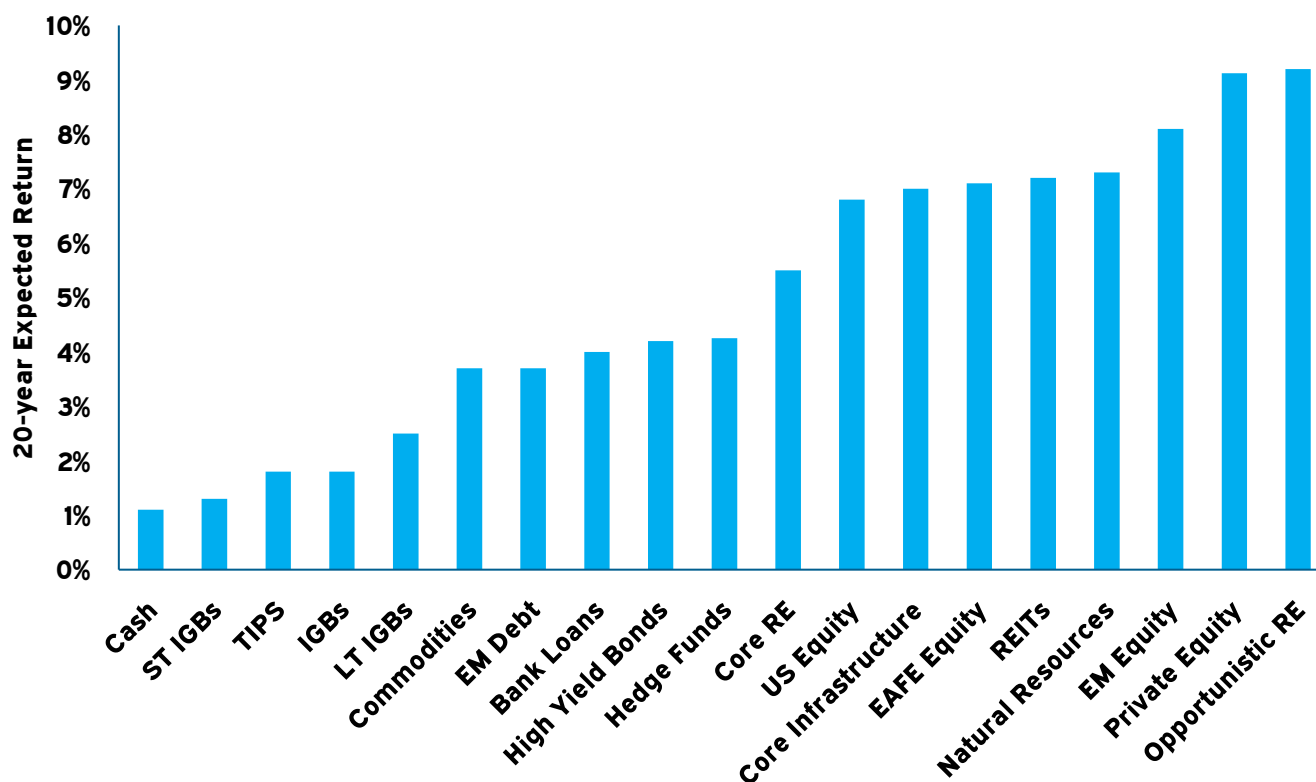
Total Return Given Changes in Interest Rates (bps)¹ (As of October 31, 2021)



	Total Return for Given Changes in Interest Rates (bps)									Statistics	
	-100	-50	0	50	100	150	200	250	300	Duration	YTW
Barclays US Short Treasury (Cash)	0.5%	0.3%	0.1%	-0.1%	-0.3%	-0.5%	-0.7%	-0.9%	-1.1%	0.39	0.08%
Barclays US Treasury 1-3 Yr.	2.5%	1.6%	0.6%	-0.4%	-1.3%	-2.3%	-3.2%	-4.2%	-5.1%	1.93	0.60%
Barclays US Treasury Intermediate	5.1%	3.0%	0.9%	-1.1%	-3.0%	-4.8%	-6.7%	-8.4%	-10.1%	4.03	0.93%
Barclays US Treasury Long	22.7%	11.8%	1.9%	-6.8%	-14.5%	-21.1%	-26.7%	-31.2%	-34.6%	18.59	1.94%

¹ Data represents the expected total return from a given change in interest rates (shown in basis points) over a 12-month period assuming a parallel shift in rates. Source: Bloomberg, and Meketa Investment Group.

Long-Term Outlook – 20-Year Annualized Expected Returns¹



- This chart details Meketa's long-term forward-looking expectations for total returns across asset classes.

¹ Source: Meketa Investment Group's 2021 Annual Asset Study.

Appendix

Data Sources and Explanations¹

- US Equity Cyclically Adjusted P/E on S&P 500 Index – Source: Robert Shiller and Yale University.
- Small Cap P/E (Russell 2000 Index) vs. Large Cap P/E (Russell 1000 Index) – Source: Russell Investments. Earnings figures represent 12-month “as reported” earnings.
- Growth P/E (Russell 3000 Growth Index) vs. Value (Russell 3000 Value Index) P/E – Source: Bloomberg, MSCI, and Meketa Investment Group. Earnings figures represent 12-month “as reported” earnings.
- Developed International Equity (MSCI EAFE) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years.
- Emerging Market Equity (MSCI Emerging Markets Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years.
- Private Equity Multiples – Source: S&P LCD Average EBITDA Multiples Paid in All LBOs.
- Core Real Estate Spread vs. Ten-Year Treasury – Source: Real Capital Analytics, US Treasury, Bloomberg, and Meketa Investment Group. Core Real Estate is proxied by weighted sector transaction-based indices from Real Capital Analytics and Meketa Investment Group.

¹ All Data as of October 31, 2021 unless otherwise noted.

Appendix

Data Sources and Explanations¹

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- Equity Volatility – Source: Bloomberg, and Meketa Investment Group. Equity Volatility proxied by VIX Index, a Measure of implied option volatility for US equity markets.
- Fixed Income Volatility – Source: Bloomberg, and Meketa Investment Group. Equity Volatility proxied by MOVE Index, a Measure of implied option volatility for US Treasury markets.
- Systemic Risk and Volatile Market Days – Source: Meketa Investment Group. Volatile days are defined as the top 10 percent of realized turbulence, which is a multivariate distance between asset returns.
- Systemic Risk, which measures risk across markets, is important because the more contagion of risk that exists between assets, the more likely it is that markets will experience volatile periods.

¹ All Data as of October 31, 2021 unless otherwise noted.

Appendix

Data Sources and Explanations¹

- Yield Curve Slope (Ten Minus Two) – Source: Bloomberg, and Meketa Investment Group. Yield curve slope is calculated as the difference between the 10-Year US Treasury Yield and 2-Year US Treasury Yield.
- Ten-Year Breakeven Inflation – Source: US Treasury and Federal Reserve. Inflation is measured by the Consumer Price Index (CPI-U NSA).

¹ All Data as of October 31, 2021 unless otherwise noted.

Meketa Market Sentiment Indicator

Explanation, Construction and Q&A

Meketa has created the MIG Market Sentiment Indicator (MIG-MSI) to complement our valuation-focused Risk Metrics. This measure of sentiment is meant to capture significant and persistent shifts in long-lived market trends of economic growth risk, either towards a risk-seeking trend or a risk-aversion trend.

This appendix explores:

- What is the Meketa Market Sentiment Indicator?
- How do I read the indicator graph?
- How is the Meketa Market Sentiment Indicator constructed?
- What do changes in the indicator mean?

Meketa has created a market sentiment indicator for monthly publication (the MIG-MSI – see below) to complement Meketa's Risk Metrics.

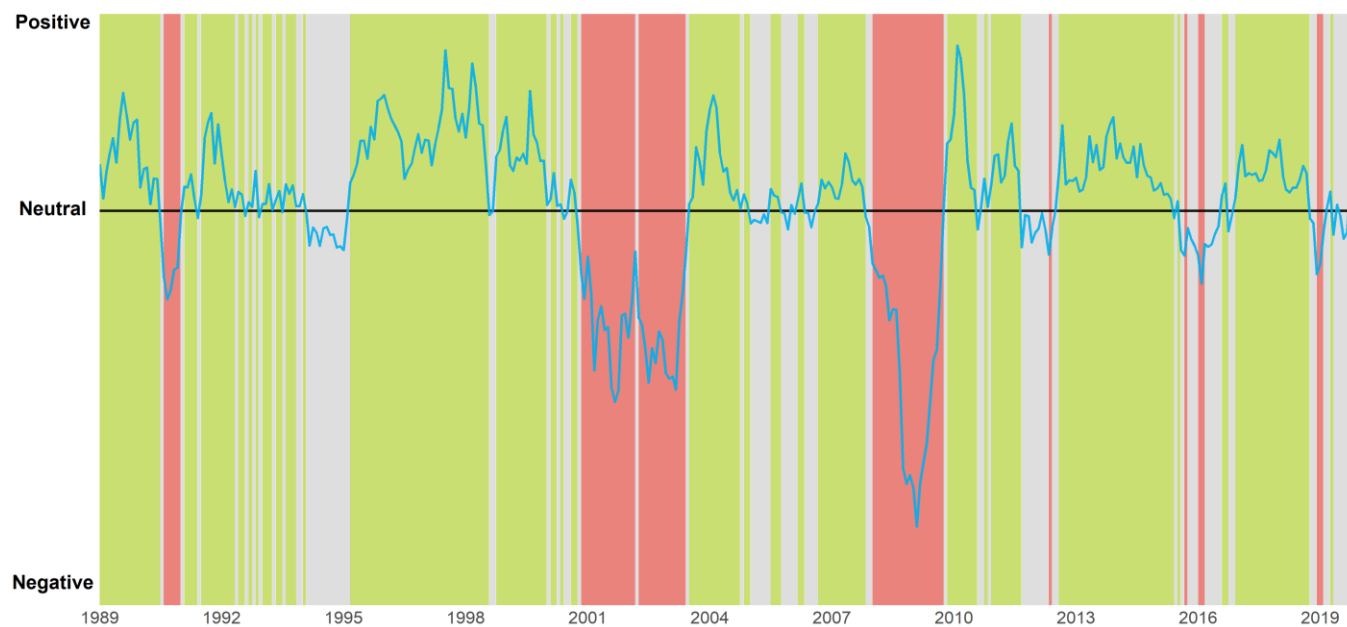
- Meketa's Risk Metrics, which rely significantly on standard market measures of relative valuation, often provide valid early signals of increasing long-term risk levels in the global investment markets. However, as is the case with numerous valuation measures, the Risk Metrics may convey such risk concerns long before a market correction take place. The MIG-MSI helps to address this early-warning bias by measuring whether the markets are beginning to acknowledge key Risk Metrics trends, and / or indicating non-valuation based concerns. Once the MIG-MSI indicates that the market sentiment has shifted, it is our belief that investors should consider significant action, particularly if confirmed by the Risk Metrics. Importantly, Meketa believes the Risk Metrics and MIG-MSI should always be used in conjunction with one another and never in isolation. The questions and answers below highlight and discuss the basic underpinnings of the Meketa MIG-MSI:

What is the Meketa Market Sentiment Indicator (MIG-MSI)?

- The MIG-MSI is a measure meant to gauge the market's sentiment regarding economic growth risk. Growth risk cuts across most financial assets and is the largest risk exposure that most portfolios bear. The MIG-MSI takes into account the momentum (trend over time, positive or negative) of the economic growth risk exposure of publicly traded stocks and bonds, as a signal of the future direction of growth risk returns; either positive (risk seeking market sentiment), or negative (risk averse market sentiment).

How do I read the Meketa Market Sentiment Indicator graph?

- Simply put, the MIG-MSI is a color-coded indicator that signals the market's sentiment regarding economic growth risk. It is read left to right chronologically. A green indicator on the MIG-MSI indicates that the market's sentiment towards growth risk is positive. A gray indicator indicates that the market's sentiment towards growth risk is neutral or inconclusive. A red indicator indicates that the market's sentiment towards growth risk is negative. The black line on the graph is the level of the MIG-MSI. The degree of the signal above or below the neutral reading is an indication the signal's current strength.
- Momentum as we are defining it is the use of the past behavior of a series as a predictor of its future behavior.



How is the Meketa Market Sentiment Indicator (MIG-MSI) Constructed?

- The MIG-MSI is constructed from two sub-elements representing investor sentiment in stocks and bonds:
 - Stock return momentum: Return momentum for the S&P 500 Equity Index (trailing 12-months).
 - Bond yield spread momentum: Momentum of bond yield spreads (excess of the measured bond yield over the identical duration US Treasury bond yield) for corporate bonds (trailing 12-months) for both investment grade bonds (75% weight) and high yield bonds (25% weight).
 - Both measures are converted to Z-scores and then combined to get an “apples to apples” comparison without the need of re-scaling.
- The black line reading on the graph is calculated as the average of the stock return momentum measure and the bonds spread momentum measure¹. The color reading on the graph is determined as follows:
 - If both stock return momentum and bond spread momentum are positive = GREEN (positive).
 - If one of the momentum indicators is positive, and the other negative = GRAY (inconclusive).
 - If both stock return momentum and bond spread momentum are negative = RED (negative).

¹ Momentum as we are defining it is the use of the past behavior of a series as a predictor of its future behavior.

“Time Series Momentum” Moskowitz, Ooi, Pedersen, August 2010. <http://pages.stern.nyu.edu/~lpederse/papers/TimeSeriesMomentum.pdf>

What does the Meketa Market Sentiment Indicator (MIG-MSI) mean? Why might it be useful?

- There is strong evidence that time series momentum is significant and persistent. In particular, across an extensive array of asset classes, the sign of the trailing 12-month return (positive or negative) is indicative of future returns (positive or negative) over the next 12-month period. The MIG-MSI is constructed to measure this momentum in stocks and corporate bond spreads. A reading of green or red is agreement of both the equity and bond measures, indicating that it is likely that this trend (positive or negative) will continue over the next 12 months. When the measures disagree, the indicator turns gray. A gray reading does not necessarily mean a new trend is occurring, as the indicator may move back to green, or into the red from there. The level of the reading (black line) and the number of months at the red or green reading, gives the user additional information on which to form an opinion, and potentially take action.

Disclaimer Information

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MEMORANDUM

TO: SJCERA Board of Retirement
FROM: Meketa Investment Group
DATE: December 10, 2021
RE: Proposed 2022 Strategic Investment Plan

Approximately once a year, Meketa outlines the projects on which we expect to work closely with SJCERA to complete over the next 12+ months. The Proposed 2022 Investment Program Plan, presented as Table 1 on the following page, identifies the major strategic projects and expected completion dates planned for 2022. The biggest project is the asset liability study that is expected to start during the 1Q2022 and in conjunction with the plan's actuary Cheiron. In addition, Meketa will be educating the SJCERA Board on investment topics throughout the year. Meketa will also work with the Staff and Board to complete more routine tasks and projects inherent in the management of an institutional investment portfolio. Meketa welcomes any suggestions and/or modifications to the proposed projects and/or timeline.

The investment projects completed in 2021 are presented in Table 2 on page 3. Most of the work that Meketa conducted directly with the Board in 2021 consisted of making changes to the SJCERA portfolio as a result of the asset allocation study conducted in 2019. In collaboration with SJCERA Staff, Meketa will be working on the 2022 roundtable. Additionally, Meketa will continue to conduct on-site reviews and manager due diligence with the SJCERA Board.

Table 1: Proposed 2022 Investment Program Plan

Task	Expected Completion	Comments	Status Update
Priority Projects			
2022 Capital Market Assumptions	1Q2022	Return and risk expectations given the 2022capital market outlook.	
Asset Liability Review	1Q-3Q 2022	In conjunction with SJCERA's actuary, conduct an asset liability study	
Private Equity Manager Search	2022	Potential changes as a result of Private Equity review	
Policy Benchmark Review	1Q2022	Review of the policy and asset class benchmarks	
Real Estate Market and portfolio review	2Q2022	Review of the Real Estate class and evaluation of current managers and weightings.	
Capital Markets - Portfolio Risk Review	1Q 2022	Discussion and review of SJCERA portfolio with 2022Meketa capital market assumptions	
Real Estate Manager search	2022	Potential changes as a result of Private Equity review	
CRO Asset Class Review	2022	Education, review and potential changes to the Trend Following, Risk Premia and Long Duration components.	
Investment Policy Review	2022	Review and update of the Strategic Asset allocation policy. Potential changes as a result of the Asset Liability study and an update of language regarding cash	
Other Projects			
Educational Topics (Inflation, Blockchain)	2022	Various educational topics for the SJCERA Board (DB plan outlook, etc.)	
Review of SJCERA Fees	2Q2022	Manager rankings and ILPA fee report	
SJCERA Annual Investment Roundtable	October 2022	Meketa will work with Board and Staff to develop a theme for this year's event	
2022 Pacing study	2-3Q2022	Updated pacing study for commitments of private investments, including Infrastructure, Private Equity and Private Credit	
Private Credit Manager Search	2022	Possible search for a Private Credit manager	
SJCERA Manager Due Diligence Review	2022	Ongoing manager due diligence with Board presentations and Meketa on-sites; status report quarterly.	In Progress

Table 2: Investment Projects Completed in 2021

Task	Expected Completion	Comments	Status Update
Priority Projects			
2021 Capital Market Assumptions	1-2Q2021	Return and risk expectations given the 2021 capital market outlook.	Completed
Private Equity Review	1Q2021-2Q2021	Review the Private Equity class and evaluate current manager line-up and weightings	Completed
Private Equity Manager Search	2021	Potential changes as a result of Private Equity review	Completed
Policy Benchmark Review	1Q2021	Review of the policy and asset class benchmarks	Completed
Real Estate Market and portfolio review	2Q2021	Review of the Real Estate class and evaluation of current managers and weightings.	Completed
Capital Markets - Portfolio Risk Review	1Q 2021	Discussion and review of SJCERA portfolio with 2021 Meketa capital market assumptions	Completed
Principal Protection review and search	2021	Review of the Principal Protection class and manager search	Completed
Other Projects			
Educational Topics	2021	Various educational topics for the SJCERA Board (DB plan outlook, etc.)	Completed
Review of SJCERA Fees	2Q2021	Manager rankings and ILPA fee report	Completed
SJCERA Annual Investment Roundtable	October 2021	Meketa will work with Board and Staff to develop a theme for this year's event	Completed
2021 Pacing study	2-3Q2021	Updated pacing study for commitments of private investments, including Infrastructure, Private Equity and Private Credit	Completed
SJCERA Manager Due Diligence Review	2021	Ongoing manager due diligence with Board presentations and Meketa on-sites; status report quarterly.	In Progress



Board of Retirement Meeting

San Joaquin County Employees' Retirement Association

Agenda Item 10.01

December 10, 2021

**SUBJECT: CONTINUATION OF TELECONFERENCING REQUIREMENTS
FOR BOARD AND COMMITTEE MEETINGS PURSUANT TO
GOVERNMENT CODE SECTION 54953(e)**

SUBMITTED FOR: ___ CONSENT X ACTION ___ INFORMATION

RECOMMENDATION

Staff recommends that the Board reconsider the circumstances of the state of emergency related to the COVID-19 pandemic and either: (1) adopt a resolution authorizing the continuation of teleconferencing for Board and Committee meetings pursuant to Government Code Section 54953(e), due to the continuing state of emergency related to the COVID-19 pandemic and existing public health recommendations for social distancing; or (2) direct staff to resume in-person meetings in January 2022.

PURPOSE

Since October 6, 2021, SJCERA has adopted resolutions under Government Code Section 54953(e) due to the COVID-19 pandemic, allowing Board and Committee meetings to be conducted virtually without compliance with the standard teleconferencing requirements of Section 54953(b)(3). In order to continue meeting in this manner, the Board must make certain findings regarding the state of emergency every 30 days. The most recent resolution, adopted at a special meeting of the Board on November 17, 2021, will expire on December 17, 2021. The Board must decide whether to make the findings necessary to continue meeting virtually as it has since April 2020 or to resume in-person meetings subject to normal Brown Act rules.

DISCUSSION

"Virtual" Meetings

By virtue of the resolution adopted on November 17, 2021, the Board and its Committees may meet virtually without compliance with the standard teleconferencing requirements of the Brown Act through December 17, 2021. At any point, should the Board decline to make the findings required under Section 54953(e)(3) within 30 days of its last resolution to continue these meetings – that it has reconsidered the state of emergency and either the state of emergency continues to directly impact the ability of the Board to meet in person or state or local officials continue to impose or recommend social distancing measures – any subsequent meetings must be conducted in-person and will be subject to normal

teleconferencing requirements (absent a change in circumstances during a proclaimed state of emergency meriting further consideration).

"In-Person" Meetings

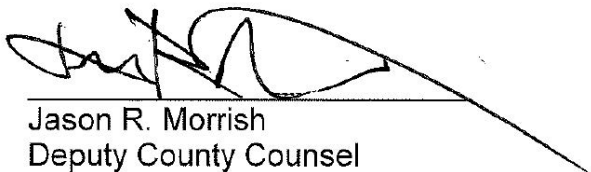
If the Board desires a return to regular in-person meetings, teleconferencing would be permitted as it was prior to the adoption of Assembly Bill 361 in September 2021. Should any trustee desire to utilize audio or video teleconferencing, the following accommodations will be required:

- Each teleconference location must be identified in the notice and agenda of the meeting
- The agenda must be posted at each teleconference location (main entrances and specific locations)
- Each teleconference location must be accessible to the public
- The agenda must provide the opportunity for members of the public to address the Board at each teleconference location
- Teleconferencing may be used for all purposes during the meeting
- All votes must be taken by roll call
- At least a quorum of the Board must participate from teleconference locations within the County

Regardless of the number of Trustees attending in person, Staff believes that the Board can meet safely in chambers with appropriate masking and/or social distancing accommodations, and that members of the public would be able to attend and participate in-person (also with appropriate masking and/or social distancing accommodations) or virtually via Zoom.

ATTACHMENT

None.



Jason R. Morrish
Deputy County Counsel



**San Joaquin County Employees'
Retirement Association**

**Board of Retirement
Resolution**

**RESOLUTION TITLE: AUTHORIZATION TO CONTINUE TELECONFERENCING
FOR BOARD AND COMMITTEE MEETINGS PURSUANT TO
GOVERNMENT CODE SECTION 54953(e)**

RESOLUTION NO.: 2021-12-02

WHEREAS, San Joaquin County Ordinance 485 established the San Joaquin County Employees' Retirement Association (SJCERA) as a public sector defined benefit retirement system pursuant to the County Employees' Retirement Law of 1937 (California Government Code Title 3, Division 4, Part 3, Chapter 3 and 3.9, Sections 31450-31899.10), effective June 28, 1946; and

WHEREAS, SJCERA is committed to preserving and encouraging open and public access to and participation in meetings of the Board and its standing committees, as required by the Ralph M. Brown Act (Government Code Sections 54950-54963); and

WHEREAS, Government Code Section 54953(e)(1) provides for the use of teleconferencing by members of a legislative body without compliance with the requirements of Government Code Section 54953(b)(3), subject to certain conditions; and

WHEREAS, on October 6, 2021, the Board adopted Resolution 2021-10-02, finding that the existing state of emergency for COVID-19 continued to impact the ability of the Board to meet safely in person, and that state or local officials continued to impose or recommend measures to promote social distancing; and

WHEREAS, on November 5, 2021, the Board adopted Resolution 2021-11-01, finding that the Board had reconsidered the circumstances of the state of emergency, that the state of emergency continued to directly impact the ability of the Board, members and staff to meet safely in person, and that state or local officials continued to impose or recommend measures to promote social distancing.

WHEREAS, on November 17, 2021, the Board adopted Resolution 2021-11-02, finding that the Board had reconsidered the circumstances of the state of emergency, that the state of emergency continued to directly impact the ability of the Board, members and staff to meet safely in person, and that state or local officials continued to impose or recommend measures to promote social distancing.

WHEREAS, while conducting public meetings using teleconferencing pursuant to Government Code Section 54953(e), SJCERA will comply with the requirements of Government Code Section 54953(e)(2) regarding notice, access, participation and protection of statutory and constitutional rights of the public; and

NOW, THEREFORE, BE IT RESOLVED that:

1. The recitals set forth above are true and correct and incorporated into this Resolution by reference.

2. The Board has again reconsidered the circumstances of the state of emergency due to the COVID-19 pandemic and finds that the state of emergency continues to directly impact the ability of the Board, members and staff to meet safely in person and/or that state or local officials continue to impose or recommend measures to promote social distancing.

3. SJCERA's Chief Executive Officer (or designee) and legislative bodies of SJCERA are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution, including conducting open and public meetings in accordance with Government Code Section 54953(e) and other applicable provisions of the Brown Act.

4. This Resolution shall take effect immediately upon its adoption and shall be effective through January 9, 2022, unless the Board makes a finding by majority vote on or before that date in accordance with Government Code Section 54953(e)(3) to continue to teleconference without compliance with Government Code Section 54953(b)(3).

PASSED AND APPROVED by the Board of Retirement of the San Joaquin County Employees' Retirement Association on the 10th day of December 2021.

AYES:

NOES:

ABSENT:

ABSTAIN:

MICHAEL RESTUCCIA, Chair

Attest:

RAYMOND McCRAY, Secretary

2022 CONFERENCES AND EVENTS SCHEDULE 2022

<u>EVENT DATES 2022</u>		EVENT TITLE	EVENT SPONSOR	LOCATION	REG.	WEBLINK	EST. BOARD EDUCATION HOURS
BEGIN	END				FEE	FOR MORE INFO	
Mar 5	Mar 8	General Assembly 2022	CALAPRS	TBD	\$150	calaprs.org	10.5*
Mar 30	Apr 1	Advanced Principles of Pension Governance for Trustees	CALAPRS	Los Angeles, CA	\$500	calaprs.org	9 hrs*
May 10	May 13	SACRS Spring Conference	SACRS	Rancho Mirage, CA	\$120	sacrs.org	11 hrs*
Nov 8	Nov 11	SACRS Fall Conference	SACRS	Long Beach, CA	\$120	sacrs.org	11 hrs*

* Estimates based on prior agendas

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

SUMMARY OF COMPLETED TRUSTEE AND EXECUTIVE STAFF TRAVEL


Event Dates 2021	Sponsor / Event Description	Location	Traveler(s)	Estimated Cost	Actual Cost	Event Report Filed
Jan 27	Meketa Fourth Quarter 2020 Market Review	Webinar	Nicholas, Praus	N/A	N/A	N/A
Feb 2 - 3	NCPERS FALL Conference	Webinar	Shick, Herman, Ba	\$900	\$900	N/A
Feb 11	CALAPRS Administrators' Roundtable	Webinar	Shick	\$50	\$50	N/A
Feb 19	CALAPRS Attorneys' Roundtable	Webinar	Morrish	\$50	\$50	N/A
Feb 23 - 25	2021 Pension Bridge ESG Summit Virtual Conference	Virtual Conference	Keokham	N/A	N/A	N/A
Mar 8 - 9	CALAPRS General Assembly	Webinar	Shick, Bassett, Nicholas	\$850	\$850	N/A
May 11 - 14	SACRS Spring Conference	Virtual Conference	Keokham, Morrish, McCray, Restuccia, Shick	\$120	N/A	N/A
May 28	CALAPRS Attorneys' Roundtable	Webinar	Morrish	\$50	\$50	N/A
Jun 22 - 23	Moody's Commercial Real Estate Analysis Foundations	Virtual Conference	Ba	\$1,946	\$1,946	9/10/21
Jun 25	CALAPRS Administrators' Roundtable	Webinar	Shick	\$50	\$50	N/A
Jul 27 - 29	Private Equity Exclusive 2021	Virtual Conference	Ba	N/A	N/A	9/10/21
Aug 22 - 26	NCPERS Public Pension Funding Forum	New York, NY	Shick	\$2,500	\$2,263	11/5/21
Sep 17	Attorneys Round Table	Webinar	Morrish	\$50	\$50	N/A
Sep 26 - 28	2021 NCPERS Fall Conference	Scottsdale, AZ	Shick	\$2,340	\$1,737	11/5/21
Sep 28 - 30	Virtual Principles of Pension Governance for Trustees	Virtual Conference	Goodman, Moore, Weydert	\$1,500	\$1,500	N/A
Nov 9 - 12	SACRS Fall Conference	Hollywood, CA	Bassett, Keokham, Goodman, Moore, Morrish, Nicholas	\$11,500	pending	N/A



San Joaquin County Employees' Retirement Association

December 3, 2021

TO: Board of Retirement

FROM: Johanna Shick 
Chief Executive Officer

SUBJECT: Chief Executive Officer Report

Strengthen Fund Stability

Mosquito District Adopts 2% COLA for Tier 2b. At their November 16 meeting, the Mosquito and Vector Control District (MVCD) Board voted to adopt a maximum 2 percent Cost of Living Adjustment (COLA), as provided by Government Code 31676.01, for Tier 2b members effective January 1, 2022.

Currently, monthly benefits paid by SJCERA are eligible for an annual COLA rounded to the nearest half percent, not to exceed a maximum of 3 percent. For Tier 2b members working at the MVCD, the maximum limit will be 2 percent. When the COLA exceeds the maximum 2 percent in any year, the difference will be accumulated in the "COLA bank". This will affect our communications, the CORE '37 system, our valuation, and many other items. The most immediate issue will be updating our communications so this new population of members has correct information.

Management Analyst Greg Frank, Administrative Secretary Kendra Fenner, Information Systems Manager Adnan Khan, Benefits Supervisor Marta Gonzalez, Financial Officer Carmen Murillo, and ACEO Kathy Herman are meeting to discuss the steps necessary to implement these changes.

County representatives indicated they do not plan to pursue a 2 percent COLA for Tier 2b at this time.

White Oak Litigation Update. As you may recall, a client initiated an arbitration to challenge whether White Oak had followed the "most favored nation" (MFN) provision related to fees and made certain other legal claims related to the client's investment management agreement with White Oak on July 31, 2018. On August 4, 2021, the arbitrator rejected the client's claims that White Oak had not complied with its MFN covenants. On October 8, 2021, the client filed a petition to recoup the attorneys' fees, costs, management fees and prejudgment interests. White Oak vigorously disagrees with the client's interpretation of the arbitration and has filed an opposition against the client on October 20, 2021. White Oak and its counsel believe they have a strong argument to have a favorable final arbitration result.

Leverage Technology to Improve Accuracy and Efficiency

Implement Year 1 of Five-Year Technology Plan.

Improve Website Architecture and Functionality. Administrative Secretary Kendra Fenner and IT Systems Specialist II Jordan Regevig completed the review of the website's content inventory. Rolling Orange took the content inventory and laid out a proposed site map. Staff has recommended a few minor changes and will submit the site map to executive management for review.

Develop and Issue RFP for New PAS Vendor

The initial requirements sessions have been completed, resulting in approximately 24 separate requirements documents (some of which include requirements for multiple, related processes) that will be included in the RFP. Retirement Services Associate, Ron Banez, assigns the appropriate subject

matter experts (SMEs) to review each requirements document. The review team for each process (consisting of Ron and the SMEs) meets daily with Linea to finalize their assigned document(s).

In addition to Ron, the team of SMEs includes Member Services Supervisor, Marta Gonzalez; Member Services Officer, Melinda DeOliveira; Retirement Services Associate, Andrea Bonilla; Finance Officer, Carmen Murillo; Investment Accountant, Eve Cavender; Accounting Technician II, Marissa Smith; Information Systems Manager, Adnan Khan; Information Systems Analyst II, Lolo Garza; Information Systems Specialist II, Jordan Regevig; and Assistant Chief Executive Officer, Kathy Herman. In addition, Legal Counsel has submitted a draft contract that will also be included as part of the RFP.

Project Milestone/Phase	Start Date	Finish Date
Planning and Project Team Establishment	8/10/21	8/19/21
Project management start-up activities	8/10/21	9/3/21
Kick-off	8/19/21	8/19/21
Requirements	9/16/21	12/16/21
Operational Needs Assessment	9/16/21	10/22/21
Process Analysis	9/16/21	12/16/21
Requirements Documentation	9/16/21	12/16/21
Procurement	12/10/21	3/30/22
Develop and Publish PAS RFP	12/10/21	1/13/22
Develop and Publish Data Integrity & Conversion RFP	12/10/21	1/13/22
Review responses	1/28/22	3/2/22
Interview and selection period	3/8/22	3/17/22
Contract negotiation and completion	3/23/22	3/30/22

As shown in the Project Mileston chart, the project is on schedule, and we expect to publish the RFPs in January.

Manage Risk

Conduct Cyber-Security Audit. The audit report was generally positive and was presented to the Audit Committee in closed session on December 3. Adnan Khan and Lolo Garza have taken several steps to further strengthen SJCERA's cyber-security posture. The report will be provided to the full Board as part of the January closed session materials.

Implement Alameda Decision. As a result of the Alameda decision, SJCERA is returning member contributions and interest on stand-by pay, correctional briefing pay, and employer contributions to deferred compensation for affected time periods to approximately 1,350 people. SJCERA has now returned contributions and interest to approximately 930 active members, approximately 150 deferred members and another 64 members who retired after July 30, 2020. Approximately 20 members completely withdrew their contributions during this same period of time, so they received their return of overpaid contributions as part of their refund. The *Alameda* implementation team (Andrea Bonilla, Marta Gonzalez, Melinda DeOliveira, Ron Banez, Marissa Smith, Carmen Murillo and Kathy Herman) will continue to analyze and process the remaining records, throughout December and January.

Assess Disaster Recovery Procedures and Identify Opportunities for Improvement. Management Analyst III Greg Frank, Information Systems Manager Adnan Khan, and ACEO Kathy Herman held multiple meetings assessing the disaster recovery procedures and identifying opportunities for improvement. The actions from those meetings have been implemented as follows:

- Added the Disaster Recovery Plan to the Continuity of Operations Plan (COOP) in the Executive Summary and as Attachment #5
- Updated the following documents in Attachment #3 of the COOP: Board Emergency Contacts, Employer and Labor Representative Contact Lists, SJCERA's Emergency List, and the Third-Party Suppliers
- Added "Update COOP Plan" to SJCERA's Annual Work Plan Schedule document
- Obtained a fully executed EDI Disaster Recovery Agreement with Northern Trust

Next steps include:

- Obtaining CEO final approval
- Placing approved COOP (that includes the Disaster Recovery Plan) in DropBox
- Notifying staff and trustees

Deliver Excellent Service and Support to StakeholdersProvide Stakeholder Communication and Education.

Member Communications. The final seminar for 2021 was held virtually on December 3. The three-hour “About to Retire” webinar, for those with two years or less until retirement, includes presentations on SJCERA Benefits, San Joaquin County Health Care Benefits, Deferred Compensation and the Retired Public Employees of San Joaquin County (RPESJC) organization. SJCERA sent all active members an email blast announcing the seminar. A copy of the email is attached.

Throughout the year, Retirement Services Officer Melinda DeOliveira and Retirement Services Associate, Ron Banez reached more than 2,500 members through the SJCERA-sponsored virtual webinars (approximately 1,000 members), and the County-sponsored New Employee Orientation (approximately 1,500 members). Six seminars are currently scheduled for 2022. Enrollment for members and a guest is free. Members may register by visiting the Retirement Planning/Seminars page within the Active Members section of www.sjcera.org.

Employer Communications. Staff has completed our assessment of the proper membership classification (General or Safety) for the proposed Airport Security Coordinator position at Stockton Metropolitan Airport. Government Code Section 31469.3 defines Safety members as “[a]ny person employed by a county ...district or court...within such a county, whose principal duties consist of active law enforcement active fire suppression as described in Section 31470.2 and 31470.4....” Section 31470.2 lists the following positions as eligible for Safety membership: “All Sheriffs, undersheriffs, chief deputies sheriff, jailers, turnkeys, deputies sheriff, bailiffs, constables, deputies constable, motorcycle officers, aircraft pilots, heads and assistant heads of all divisions of the office of the sheriff, detectives and investigators in the office of the district attorney, marshals...and all regularly appointed deputy marshals....” Section 31470.4 includes fire-suppression related positions (such as county fire wardens and firefighters) as eligible for Safety membership. Case law (Ames v. Board of Retirement and Neeley v. Board of Retirement) provide insight on “active law enforcement”, including that active law enforcement implies hazardous activities that place employees in contact with prisoners on a regular basis and the hazards or risk of injury resulting from regular prisoner contact. With San Joaquin County, Safety positions that are not associated with fire suppression have generally required Peace Officer Standards and Training (POST) certification. Previously, the airport had an Airport Operations Coordinator position that required a certificate of completion for peace officer training, and was classified as a Safety position. The new position, Airport Security Coordinator, does not require peace officer training, is not one of the positions statutes define as eligible for Safety membership and, as such, is properly classified as a General position. Staff has informed Airport Director, Russell Stark, of this determination.

Provide Excellent Customer Service.

Customer Feedback. December started on a high note! On December 1, I received a phone call from a member singing staff’s praises. He noted that SJCERA has a good crew and we run a tight ship. In particular, he wanted to let me know what a pleasure it’s been working with Kathleen Goodwin the last few days. He reported Kathleen is easy to reach by phone, is very helpful and, when she made a tiny mistake, she called him back, told him about it, apologized and took care of it. This same member also gave Ron Banez shout out as someone who “always does a nice job”. Typically, customers call when they are upset; the fact that this member took the extra time and effort to let me know what a great experience he’d had is especially meaningful.

Medicare Part B Reimbursement. Each year retirees receive information about the Medicare Part B Reimbursement program. To comply with IRS guidelines, SJCERA must verify members’ Medicare Part B information annually. Retirement Technician, Kathleen Goodwin (with coaching from Accounting Technician II Marissa Smith), spearheaded the project to mail Medicare Part B reimbursement information to eligible members on November 19. Forms and proof of premium documentation received by SJCERA on or before January 3 will be reflected on the benefit paid to members on February 1 (which is payment for the month of January). Forms received after January 3 will be reimbursed prospectively.

Deliver Operations Timely and Accurately. It takes a team to process the retiree payroll each month. Mary Chris Johnson and Kathleen Goodwin with help from Melinda DeOliveira and Marissa Smith are keeping busy taking care of our retirees and ensuring payroll is ready to be processed on time each month. In addition to the constant changes and updates required for tax withholding, health insurance, addresses and direct deposits each month, the acquisition of Banco Bilbao Vizcaya Argentaria (BBVA) USA by the PNC Financial Services Group, Inc., changed the routing and account numbers, causing a number of retirees' direct deposits to be rejected. We are monitoring this closely to minimize any disruption of benefit payments to affected retirees. In light of this experience, I reached out to FCCU representatives to inquire if the merger between Financial Center Credit Union and Valley Strong Credit Union could result in similar issues. More will be known in early 2022.

Maintain a High-Performing Workforce

Hire Well-Qualified Staff.

Retirement Technician. Vickie Monegas joined the SJCERA team on November 8 as our newest Retirement Technician. Vickie comes to us with 15 years of experience in Human Resources, payroll and customer service. Vickie will be cross-trained in all aspects of the benefits side of our business. Welcome aboard, Vickie! We are so happy to have you.

Assistant CEO. Interviews for the ACEO position will be held on December 8. In our bylaws, the Board delegated the selection and appointment of this position to the CEO with the caveat that the selection and appointment information be submitted to the Board for its concurrence and approval. I will provide that to the Board in closed session at either the December 10 or January 21 Board meeting.

Employee of the Month. Congratulations to everyone for being named employees of the month. This month the entire staff was recognized as employees of the month for their hard work on the Pension Administration System and website projects, Medicare Part B mailing, Cyber Security Audit, Linea requirements meetings and so much more. Staff has made extraordinary progress on all fronts and are busily working on various tasks that will yield even more results coming in the New Year.

Year End Celebration. On December 15, SJCERA staff will gather for our annual End-of-Year Celebration to reflect on our accomplishments and appreciate each other. Staff will enjoy ice breaker activities, an ugly sweater contest, gift exchange and lunch provided by Bud's Seafood.

Modify SJCERA Job Descriptions for Career Paths to Meet Organizational Needs. Over several years, four distinctly separate retirement specific positions were created to provide member services and payroll functionality. SJCERA is requesting updates to align these positions' job descriptions and minimum qualifications. This review will ensure the duties are still relevant, create backup, career paths and training opportunities, and also strengthen SJCERA's overall continuity of operations.

Managing Emerging Organizational Needs

Assess Need to Issue RFPs for example for Various Vendors/Services. In response to our Investment Counsel RFP, Management Analyst III Greg Frank received proposals from a number of qualified law firms. The Evaluation Team (Greg, Paris, Jason, and Johanna) are in the process of scoring the proposals with the intent of having a fully executed contract by year end.

Tier 2b Implementation. County Payroll and County Human Resources have sent their second Tier 2b payroll test file and Department Information Systems Manager Adnan Khan is using it to identify the programming changes needed in our current pension administration system in order to successfully load and integrate Tier 2b data when it arrives in January. Greg Frank and Adnan Khan met with the Courts and their payroll vendor, ADP, on November 24 to discuss the requirements for their transmittal file.

Identify and Begin Implementing a 2022 Strategic Planning Process. At the December 10, 2021 Board meeting our Strategic Planning Consultants will present SJCERA's draft five-year strategic plan. This represents the culmination of months of collaboration and analysis of input received from staff, SJCERA leadership, employers, customers, trustees, and key consultants. The Board may either approve the plan in December or request changes, which would be brought back to the Board for final approval in January.

Annual Trustee Education Report. Government Code Section 31522.8 requires Board members to complete 24-hours of education every two years. Your annual trustee education hours will be emailed to you for your review after the December Board meeting. Please provide any edits to Greg Frank no later than December 23. The 2021 Annual Board Education Compliance Report will be on the January meeting for your approval and then posted to SJCERA's website.

Facility. I spoke with General Services Director, Marcia Cunningham, regarding the County's purchase of our office building. She assured me it is not the County's intent to ask SJCERA to move. They expect the sale to close by the end of December and conduct tenant improvement work over the next 18 to 24 months. The District Attorney's Office staff are expected to move into the building upon completion of the tenant improvements. Ms. Cunningham agreed to include SJCERA in those tenant improvement discussions that affect the whole building or that could affect SJCERA in some way.

Conclusion

As I reflect back over the year, 2021 has been very busy. SJCERA is fortunate to have a strong team of dedicated employees who rose to the occasion and ably met every challenge. Much like in Dr. Seuss's book, *Horton Hears a Who*, where it took the efforts of every Who in Whoville to be heard, it took the efforts of each one of us to successfully cross this year's finish line. I couldn't be prouder of our progress and the team effort. It's been an outstanding (and strenuous) year, but together we made it! Impressive!



Subject: [EXT] Preparing for Retirement Seminar
Date: Monday, November 29, 2021 at 11:38:18 AM Pacific Standard Time
From: ISD Service Desk [ISD]
To: ISD Service Desk [ISD]
Attachments: image001.png

Sent on behalf of Johanna Shick, Chief Executive Officer, SJCERA:
(Sent to all County Employees)

Preparing for Retirement – Are you two years or less from retirement? This three-hour seminar is for you!

DECEMBER 3, 2021– 1:00 P.M. virtual presentation explaining your SJCERA retirement benefit, San Joaquin County Health Care Benefits and MORE.

Click here to **register for the [December 3, 2021 seminar](#)** or visit the [Active Members - Seminars page](#) to register for events offered on other dates

You will receive the Zoom link via email immediately after you complete your registration. Save the email with the Zoom link to access the seminar via your computer or mobile device. This virtual seminar is for those full-time civil service County employees and employees of SJCERA's other participating employers that are two years or less from retirement. This seminar is about 3 hours long and includes practical information intended to assist you as you prepare for your retirement.

Representatives will present information and be available to answer questions on the following:

- SJCERA Benefits
- San Joaquin County Health Care Benefits
- 457 Deferred Compensation
- Retired Employees Association

Thank you,



ISD Service Desk
Information Systems Division
San Joaquin County
209-953-HELP (4357)

Proposed Federal Rule on ESG Investments

By Tony Roda



When we last left the see-saw regulatory battle over the use of environmental, social, and governance (ESG) factors in making investment decisions for pension plans, there had been a few major developments:

- The issuance of a controversial regulation in the waning days of the Trump Administration;
- A pronouncement by the Biden Administration in March 2021 saying that pending its review of that regulation the Department of Labor (DOL) would not pursue any enforcement actions related to it; and,
- President Biden's Executive Order (EO) in May directing DOL to consider publishing a proposed rule to suspend, revise, or rescind the Trump Administration's rule.

Most recently, in response to the EO, the Biden Administration's DOL on October 14 published a new proposed rule on the fiduciary duties of loyalty and prudence by pension plan fiduciaries under the federal Employee Retirement Income Security Act (ERISA) when considering plan investments and investment alternatives. Once finalized, this regulation will completely replace the Trump

Administration's rule. Comments to the proposed rule must be submitted on or before December 13, 2021. The regulation is likely to be finalized in the first half of 2022.

While release of the proposed rule continues the regulatory see-saw, there is hope that this will prove to be a more durable regulation. With that goal in mind, the Biden Administration is moving early in its four-year term to put the rule in place. This means that the rule will have a fairly lengthy period of time to become rooted in the law and part of the every day investment practices of fiduciaries. In addition, the use of ESG factors in today's investment marketplace is already prevalent and is likely only to grow in coming years.

While state and local governmental plans are not governed by ERISA, state and local policymakers and plan fiduciaries often look to the ERISA rules when drafting their fiduciary guidelines. According to DOL's fact sheet, the proposed rules "...empower plan fiduciaries...by making it clear that fiduciaries may consider climate change and other environmental, social, and governance (ESG) factors when they make investment decisions and when they exercise shareholder rights, including voting on shareholder resolutions and board nominations."

[CONTINUED ON PAGE 6](#)



A Time for Reflection and Thanksgiving

The days are getting shorter, and the nights are getting cooler. Finally, autumn is here, the season of change and meditation. In the U.S., Thanksgiving is just ahead, which makes now a natural time to count our blessings.

The past several years have been tumultuous for all of us. COVID-19 has wreaked havoc with the normal patterns of everyday life. Politics have been extraordinarily divisive. The impact of climate change is growing more evident and reminding us that the planet we inhabit is fragile.

Yet look around. There are signs of hope everywhere and reasons to be grateful for what we have and what we have accomplished. So I'd like to take a moment to tell you what I'm thankful for.

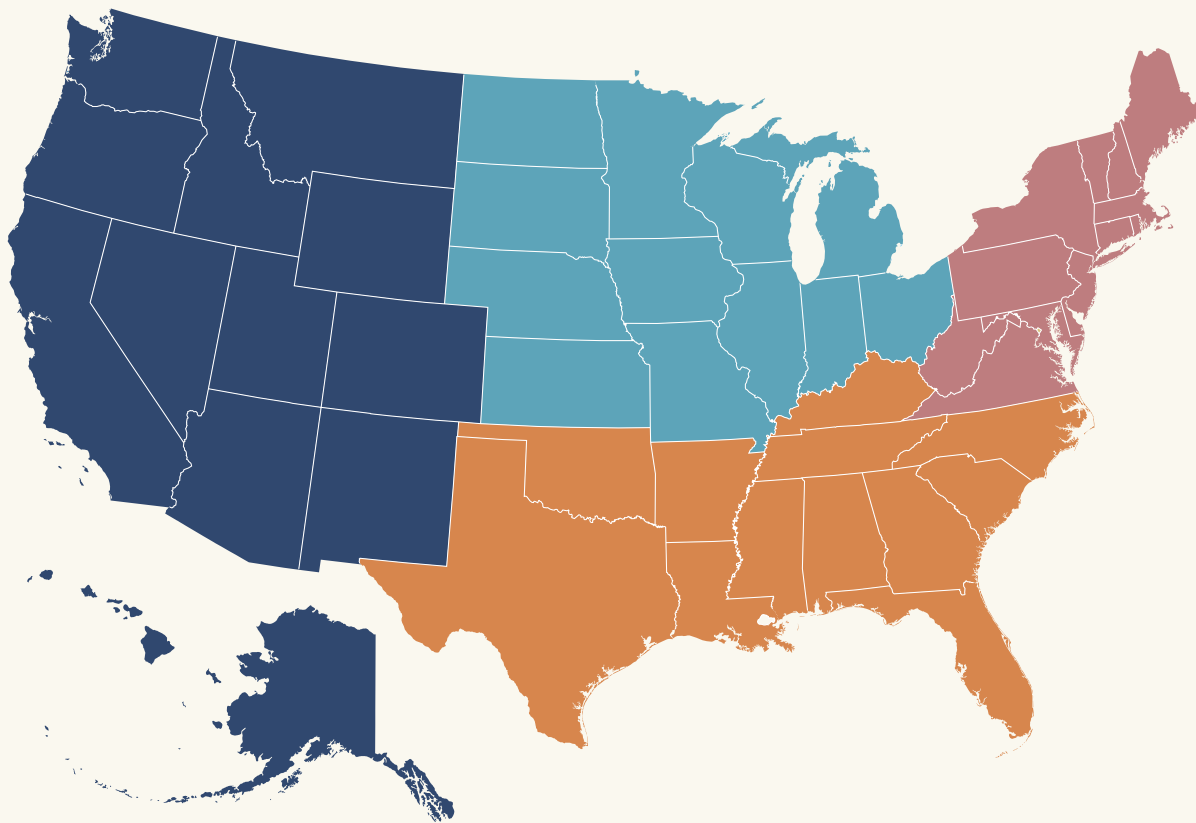


There are signs of hope everywhere and reasons to be grateful for what we have and what we have accomplished.

- **Gatherings.** Public pension systems are a community with a common interest in ensuring that public servants have a secure financial future. Being able to come together, talk, and share our concerns, insights, and ideas is something we've all missed terribly, and it's great to be able to meet face-to-face again. Of course, we have to be meticulously careful and adhere to local, state, and federal guidelines. And there isn't anyone who likes wearing a mask or having their temperature checked. But I'm grateful to everyone who has come to NCPERS educational events because they play a crucial role in keeping NCPERS members informed and effective both on the job and as advocates for public pensions.
- **Setting Records.** The fiscal year that concluded in June was a banner year for many public pension systems, with annualized investment returns in the 20%+ range. And while it certainly isn't fair, we've taken our share of lumps for the impact of the market's gyrations on portfolios. We've all spent a lot of time explaining that public pensions are long-term investments and that we're not generally not *trying* to beat the S&P 500 because long-term portfolios don't simply consist of stocks. But of course, we know that the markets will continue to do what they've always done—they'll go up, and they'll go down, and

CONTINUED ON PAGE 5

This month, we will highlight Connecticut, Wisconsin, North Carolina and California.



NORTHEAST: Connecticut



Fitch Ratings upgraded the city of New Haven's outlook to "Positive" from "Stable," citing increased annual pension fund contributions as a factor. The move came as Fitch assigned a 'BBB' rating to the new issuance of New Haven's general obligation bonds in advance of a \$92 million sale.

Fitch noted that the city reduced its rate of return assumptions to 7.25%, a move it called "prudent." However, the discount rate reduction pushed the city's actuarially determined contribution to pensions to \$83 million, a 23% increase.

"Progress has been made in controlling growth in long-term liabilities through pension reform efforts and recent changes to

employee and retiree health insurance benefits," the Fitch report said.

New Haven Mayor Justin Elicker said the rating shows the city is moving in the right direction as it works to improve its finances, the *New Haven Register* reported.

"It affirms that we're in a position to shore up the city's financial position and that's a result of a combination of factors," including reducing "some of the structural issues in our city budget, such as reducing the investment rate of return in the assumptions for our pension investments," Elicker told the *Register*.

Over the past year and a half, Elicker said, his administration was worked to limit new debt, increase annual pension contributions, and increase so-called PILOT funding. PILOT is the state's payment in lieu of taxes program, and the funds are state reimbursements to municipalities for tax-exempt properties.

[CONTINUED ON PAGE 7](#)

UNEVEN DISTRIBUTION CONTINUED FROM PAGE 1

“Absent any policy changes, middle-class families will be left behind in retirement,” the data analysis said. It noted that middle-class Baby Boomers had median financial assets of \$51,700 in 2019.

“Assuming all of their financial assets are for retirement, which may not be the case, that would translate to an annual income of about \$2,000. In this case, many families would see a reduction in their standard of living,” the data analysis said.

Median financial assets for Generation X were \$39,000, and for Millennials, the median stood at \$7,800. The report notes that Generation X was the first generation to mostly enter the workforce after a massive shift from pensions to 401(k)s in the private sector.

The data analysis was published in the form of an infographic, “[The Middle Class Owns Few Financial Assets](#).” The analysis complements an earlier NIRS research report, “[Stark Inequality: Financial Asset Inequality Undermines Retirement Security](#),” which showed that the top 25 percent by net worth of Millennials, Generation X, and Baby Boomers owned three-quarters or more of their generation’s financial assets. All the data cited measure financial asset ownership by households, not individuals.

The “Stark Inequality” report, published in August, examined financial asset ownership according to net worth, generation, and

race. It showed that inequality in the ownership of financial assets has deepened over time. For example, the top 5% of Baby Boomers by net worth owned a greater percentage of that generation’s financial assets in 2019 (58%) than in 2004 (52%).

The report also found that financial asset ownership is highly concentrated among white households in all three generations. In 2019, white households owned three-quarters or more of their generation’s financial assets. The report found that ownership is especially concentrated among white households in the top 25 percent of net worth.

“The erosion of pensions in the private sector has coincided with a rise in inequality and a greater squeeze on the middle class,” the report said. “The great risk shift has been particularly pronounced in the retirement space.”

NIRS said potential solutions include strengthening and expanding Social Security, protecting pensions, increasing access to savings-based plans for low-income workers, and reforming retirement tax incentives.

The NIRS report and data analysis were based upon the Federal Reserve’s Survey of Consumer Finances data. ♦

EXECUTIVE DIRECTORS CORNER CONTINUED FROM PAGE 3

portfolios will need to be balanced, rebalanced, and hedged. So, our focus remains on long-term performance. But let’s allow ourselves to bask for just a minute. It was very satisfying—and a tribute to the steady leadership of investment managers and pension trustees—to have stellar financial performance in the fiscal year 2021.

- **Staying United.** Through thick and thin, the team at NCPERS has enjoyed the support and encouragement of our members. When we couldn’t meet face to face, you turned out for video chats and webinars. You worked with us to ensure that we could continue to deliver what you need in terms of advocacy, education, and research. We all found creative new ways to interact with our lawmakers and regulators to hold board and committee meetings. My team in Washington and I are all deeply grateful.

In this season of Thanksgiving, it’s worth remembering that encouraging and practicing gratitude makes us all not only better people but better leaders.

Fostering a culture of appreciation in the workplace is well worth doing. As we move into November, I challenge us all—myself included—to take time to do little things that make a difference. Send thank-you notes. Keep a list of things you’re grateful for. Let people know you’ve seen their willingness, enthusiasm, and commitment.

I appreciate all of you and wish you a happy, healthy, and safe Thanksgiving. ♦

A major criticism of the Trump Administration's rule was that it would unnecessarily and inappropriately chill the use of ESG factors in making investment decisions. Under the Trump rule, in order to justify using non-pecuniary factors in reaching an investment decision the fiduciaries would have to document: (i) why pecuniary factors were not sufficient to select the investment; (ii) how the selected investment compares to alternative investments, including factors such as portfolio diversification, asset liquidity, cash flow, and projected return relative to plan funding objectives, and (iii) how the chosen non-pecuniary factors are consistent with the interests of participants and beneficiaries in their retirement income or financial benefits under the plan.

In stark contrast to the Trump Administration's special documentation mandate, the Biden Administration states that, "... the Department...is concerned that singling out this one category of investment actions for a special documentation requirement may, in practice, chill investments based on climate change or other ESG factors, even when those factors are directly relevant to the financial merits of the investment decision..."

At its core the Biden Administration's proposed rule would require fiduciaries to consider, "The projected return of the portfolio relative to the funding objectives of the plan, which may often require an evaluation of the economic effects of climate change and other environmental, social, or governance factors on the particular investment or investment course of action." (Emphasis added.) The quote above is taken directly from the language of the proposed rule. It takes us right to the brink of being a sweeping requirement that in order to meet the fiduciary duty of prudence a fiduciary must consider ESG factors in all investment decisions. However, by using the word "may" the proposed rule preserves the discretion of plan fiduciaries to decide when ESG factors are likely to impact projected returns and, therefore, should be evaluated as part of the investment decision. The rule also states that, "The weight given to any factor by a fiduciary should appropriately reflect a prudent assessment of its impact on risk-return."

DOL's proposed rule also provides examples of ESG factors that depending on the specific facts and circumstances may be material to the risk-return analysis. The examples include: Environment (called "Climate change-related factors" in the proposed rule) – a corporation's exposure to the real and potential economic effects of climate change including exposure to the physical and transitional risks of climate change and the positive or negative effect of Government regulations and policies to mitigate climate change; Governance – board composition, executive compensation, transparency and accountability in corporate decision-making, avoidance of criminal liability, compliance with labor, employment, environmental, tax, and other laws and regulations; and Social (called "Workplace practices" in the proposed rule) – the corporation's progress on workforce diversity, inclusion, and other drivers of employee hiring, promotion, and retention, its investment in training to develop workforce skills, equal employment opportunity, and labor relations.

Plan trustees and other fiduciaries must pay close attention to the regulatory framework surrounding the use of ESG factors in investment decisions. For further information please find the text of the proposed rule [here](#). ♦

[Tony Roda](#) is a partner at the Washington, D.C. law and lobbying firm [Williams & Jensen](#), where he specializes in federal legislative and regulatory issues affecting state and local governmental pension plans. He represents NCPERS and statewide, county, and municipal pension plans in California, Colorado, Georgia, Kentucky, Ohio, Tennessee, and Texas. He has an undergraduate degree in government and politics from the University of Maryland, J.D. from Catholic University of America, and LL.M (tax law) from Georgetown University.

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AROUND THE REGIONS CONTINUED FROM PAGE 4

MIDWEST: Wisconsin



A final report by the Mayor's Task Force on the City of Milwaukee's Pension System identified 12 ideas Mayor Tom Barrett should consider to address financial challenges related to the city pension plan. Barrett empaneled the 17-member task force in June with the mission of addressing financial challenges stemming from the city's

Employees' Retirement System. He said at the time that the budgetary impact of managing the pension systems' growing costs was approaching \$140 million annually, an amount he called "simply unsustainable."

Among the ideas offered by the task force: Closing the city pension plan to new entrants and having them instead join the state's retirement program; creating a new design and benefits structure for new entrants; and reducing city services and staffing.

The last point had no support on the task force, the report noted. However, the task force calculated Milwaukee could have to lay off 1,300 employees—24% of its municipal workers—between 2023 and 2025 to pay the city's annual pension contribution if changes aren't made to funding requirements, according to a report from a pension task force.

"This concept was put forward with the full knowledge that it is undesirable but may become a reality without changes to pension funding requirements or increased revenue capacity," the report said. "The task force sees these reductions as an absolute worst-case scenario, but members saw value in having a more detailed understanding of where and how these budget reductions would be made to sustain significant increases in pension funding requirements starting in 2023."

When he launched the task force, Barrett noted that his administration has worked over the past ten years to manage the growing costs of the city's pension system through benefit adjustments, contribution smoothing, and new revenue options. "To date, nothing has sufficiently addressed the problem," he said.

According to the task force's report, meeting the current projections for pension funding increases requires an additional \$77 million per year from 2023 to 2027.

The task force said one way the city could pay for its pension contributions would be to implement a local 0.5% sales tax, which would generate an additional \$43.7 million in annual revenue. It also said that at 1.5%, or \$1.50 per \$100 in taxable sales, the tax could raise \$131 million per year.

"That amount would be more than enough to provide both reliefs from current pension funding costs as well as additional funding for property tax reductions, economic development, and even city service expansions," the report said.

SOUTH: North Carolina



When North Carolina is running an \$8 billion budget surplus, the Teachers' and State Employees' Retirement System is seeking a 2% cost of living adjustment (COLA) on pensions. However, the state system is not linked to the cost of living, and the legislature has not approved a significant boost in about 12 years.

The budget proposal put forth by Governor Roy Cooper, a Democrat, proposed a 2% raise plus a 2% bonus. However, pending House budget legislation would provide only the 2% bonus over two years, and the Senate would provide no adjustment at all.

The state pension system serves 234,000 members with an average pension of around \$21,000.

In an interview aired on WRAL-TV in Raleigh, House Speaker Tim Moore, a Republican, voiced support for some adjustment, though he stopped short of endorsing a COLA. "Whether it's a bonus or an increase, I think we ought to do something," he said, acknowledging that inflation has reduced retirees' spending power.

While a bonus would be welcome, it wouldn't help maintain pension values long term, Richard Rogers, executive director of the North Carolina Retired Government Employees' Association, told WRAL. "Inflation is real," he said, adding that state retirees' pension checks have lost so much ground to inflation in recent years that they're getting only 84 cents to the dollar.

CONTINUED ON PAGE 8

[AROUND THE REGIONS CONTINUED FROM PAGE 7](#)

“They’re living on fixed incomes, and the reality is they’re trying to make decisions between health care, food, and living,” Rogers said in the WRAL interview. He added that a bonus would be welcome, but it wouldn’t help maintain pension values in the long run.

WEST: California



The California Public Employees Retirement System announced that two union-backed candidates won election to its board of administration.

CalPERS declared David Miller and Jose Luis Pacheco have preliminarily won the two member-at-large seats on the board.

However, the results are unofficial until they are formally certified by the California Secretary of State; approval is expected in November. Their four-year terms begin January 16, 2022.

Miller, an environmental scientist at the California Department of Toxic Substances Control, received 73% of the votes cast and defeated his challenger. He has been a member-at-large representative on the CalPERS Board since 2018.

Pacheco, a SharePoint developer and administrator with the San Jose-Evergreen Community College District, received 62% of votes cast and unseated the incumbent, Margaret Brown. He is vice-chair of the Santa Clara County Federal Credit Union and president of California School Employees Association Chapter 363.

The 13-member CalPERS Board sets a retirement and health benefits policy on behalf of California public employers and their active and retired employees. The board also oversees the asset allocation of the pension fund’s investments. Under the California Constitution, the CalPERS Board has exclusive authority to administer the CalPERS Fund. ♦

Don't Miss NCPERS' Social Media



The Voice for Public Pensions



Calendar of Events 2022

May

Trustee Educational Seminar (TEDS)

May 21 – 22
Washington, DC

Program for Advanced Trustee Studies (PATS)

May 21 – 22
Washington, DC

NCPERS Accredited Fiduciary (NAF) Program

May 21 – 22
Washington, DC

Annual Conference & Exhibition (ACE)

May 22 – 25
Washington, DC

October

Public Safety Conference

October 25 – 28
Nashville, TN

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Second Vice President

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Fire Classification
Dan Givens
Emmit Kane

Educational Classification
David Kazansky

Protective Classification
Peter Carozza, Jr.
Ronald Saathoff

Canadian Classification
Frank Ramagnano



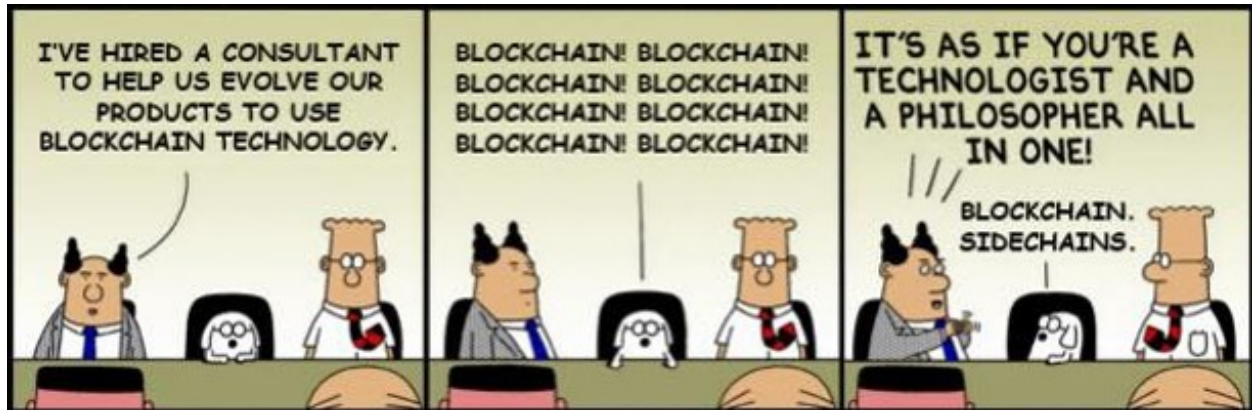
The Voice for Public Pensions

The Monitor is published by the National Conference on Public Employee Retirement Systems.
Website: www.NCPERS.org • E-mail: amanda@ncpers.org

What's a blockchain, anyway?

by [Peter Van Valkenburgh](#) April 25, 2017

“Blockchain” has become a buzzword in the technology and financial industries. It is often cited as a panacea for all manner business and governance problems. “Blockchain’s” popularity may be an encouraging sign for innovation, but it has also resulted in the word coming to mean too many things to too many people, and—ultimately—almost nothing at all.



The word “blockchain” is like the word “vehicle” in that they both describe a broad class of technology. But unlike the word “blockchain” no one ever asks you, “Hey, how do you feel about *vehicle*?” or excitedly exclaims, “I’ve got it! We can solve this problem with *vehicle*.” And while you and I might talk about “vehicle technology,” even that would be a strangely abstract conversation. We should probably talk about cars, trains, boats, or rocketships, depending on what it is about vehicles that we are interested in. And “blockchain” is the same. There is no “The Blockchain” any more than there is “The Vehicle,” and the category “blockchain technology” is almost hopelessly broad.

There’s one thing that we definitely know *is* blockchain technology, and that’s Bitcoin. We know this for sure because the word was originally invented to name and describe the distributed ledger of bitcoin transactions that is created by the Bitcoin network. But since the invention of Bitcoin in 2008, there have been several individuals, companies, consortia, and nonprofits who have created new networks or software tools that borrow something from Bitcoin—maybe directly borrowing code from Bitcoin’s reference client or maybe just building on technological or game-theoretical ideas that Bitcoin’s emergence uncovered. You’ve probably heard about some of these technologies and companies or seen their logos.



Aside from being in some way inspired by Bitcoin what do all of these technologies have in common? Is there anything we can say is *always* true about a blockchain technology? Yes.

All blockchains have...

All blockchain technologies should have three constituent parts: peer-to-peer networking, consensus mechanisms, and (yes) blockchains, A.K.A. *hash-linked data structures*. You might be wondering why we call them blockchain technologies if the blockchain is just one of three essential parts. It probably just comes down to good branding. Ever since Napster and BitTorrent, the general public has unfortunately come to associate peer-to-peer networks with piracy and copyright infringement. “Consensus mechanism” sounds very academic and a little too hard to explain a little too much of a mouthful to be a good brand. But “blockchain,” well that sounds interesting and new. It almost rolls off the tongue; at least compared to, say, “cryptography” which sounds like it happens in the basement of a church.

But understanding each of those three constituent parts makes blockchain technology suddenly easier to understand. And that’s because we can write a simple one sentence explanation about how the three parts achieve a useful result:

Connected computers reach agreement over shared data.

That’s what a blockchain technology should do; it should allow ***connected computers*** to ***reach agreement*** over ***shared data***. And each part of that sentence corresponds to our three constituent technologies.

Connected Computers. The computers are connected in a peer-to-peer network. If your computer is a part of a blockchain network it is talking directly to other computers on that network, not through a central server owned by a corporation or other central party.

Reach Agreement. Agreement between all of the connected computers is facilitated by using a consensus mechanism. That means that there are rules written in software that the connected computers run, and those rules help ensure that all the computers on the network stay in sync and agree with each other.

Shared Data. And the thing they all agree on is this shared data called a blockchain. “Blockchain” just means the data is in a specific format (just like you can imagine data in the form of a word document or data in the form of a image file). The blockchain format simply makes data easy for machines to verify the consistency of a long and growing log of data. Later data entries must always reference earlier entries, creating a linked chain of data. Any attempt to alter an early entry will necessitate altering every subsequent entry, otherwise digital signatures embedded in the data will reveal a mismatch. Specifically how that all works is beyond the scope of this backgrounder, but it mostly has to do with the science of cryptography and digital signatures. Some people might tell you that this makes blockchains “immutable,” that’s not really accurate. The blockchain data structure will make alterations evident, but if the people running the connected computers choose to accept or ignore the alterations then they will remain.



Connected computers...



...reach agreement over...



...shared data.

Bitcoin as illustration.

Explaining how this all works in Bitcoin provides a helpful example.

So, what are the *connected computers* in the Bitcoin blockchain technology? They are any devices on the Internet running Bitcoin-compatible software. That software could be a wallet app or it could be software for “mining” bitcoin. If, for example, you run a Bitcoin software wallet on your phone, then whenever you send or receive Bitcoin transactions your phone will be talking directly to any other nearby computers that are running Bitcoin software; it’s peer-to-peer. Some people are uncomfortable running important software on their personal devices and that’s reasonable because if you are not careful when you run that software, you could accidentally lose your bitcoins. So some people might use a Bitcoin wallet that is created and maintained by a company. In this case, the wallet app on your smartphone will talk to a server that the company maintains, and it’s that server that connects to the peer-to-peer network on your behalf.

What about the *consensus mechanism* in Bitcoin? Well, as with any consensus mechanism, it’s a series of rules written in computer code. To be compatible with the Bitcoin network any software you run on your Internet-connected device must follow these rules. If your software is modified to try and break the rules, then the messages it sends on the Internet will be ignored by all the other computers running honest, rule-obeying Bitcoin software.

There are a bunch of rules in the Bitcoin consensus mechanism, but we can highlight two of them here and transcribe them roughly from computer code into natural language:

1. Nobody can send bitcoins that they have not first received from someone else or a coinbase transaction.
2. Every 10 minutes one of the connected computers will be selected to choose the order of valid transactions for that period; that computer can write itself a coinbase transaction.

That first rule is pretty self-explanatory. It’s a rule against counterfeiting. The only exception is when someone sends themselves brand new bitcoins (known as a coinbase transaction) according to the network’s rules for new money creation. The second one isn’t very hard to understand either once we have some context.

Recall that the connected computers are talking directly to one another, and keep in mind that those computers could be anywhere in the world because it all works on top of the global Internet.

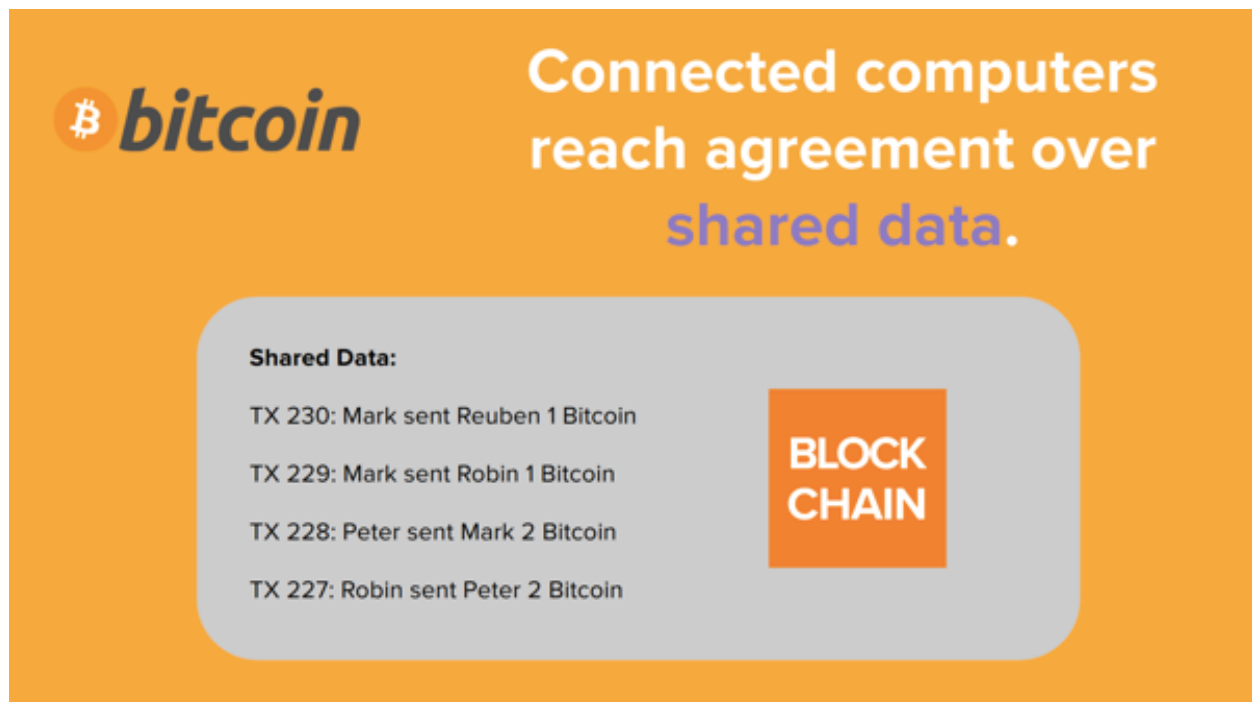
If some computers are in, for example, China, and others are in the U.S., it’s likely they will get out of sync because messages about transactions will originate in different parts of the world and propagate across the Internet at different rates. A connected computer in China might think the most recent transactions came in this order: A, B, C. While a computer in the U.S. may have seen them come in the reverse order C, B, A. How do we make sure all the computers agree on the order? Well, as rule 2 specifies, every 10 minutes one computer will be chosen to state the authoritative order of transactions for that period of time, and then another will be chosen, and so

on. In computer science this arrangement is called a repeated leader election, but unlike a normal political election the periodic leader is simply chosen at random.

Notice also that our rule 2 specifies that the leader can only give the order of *valid* transactions. If the chosen leader tried to include a transaction where they gave themselves millions of counterfeit bitcoins, then they would have broken rule one. Their scammy messages are simply ignored by the rest of the computers as per the rules of the consensus mechanism.

The chosen leader can, however, write themselves a coinbase transaction that will reward them for their honest work in maintaining the network. This transaction creates new bitcoins out of thin air as a reward, but it must match a predefined money creation schedule (you can't just choose the size of your reward). That money creation schedule is just another rule within the Bitcoin consensus mechanism software.

Finally, there's Bitcoin's shared data, its blockchain. This is just a list of all Bitcoin transactions that have occurred since the network started in 2009. Here's a stylized illustration:



Of course the real Bitcoin blockchain has many more transactions in it, millions since the network started. Also, the transactions don't have human-readable names in them like the illustration above suggests. Instead, the sender and recipient are represented by what's called a public address. It's a pseudorandom but unique string of letters and numbers that is generated locally on the smartphone or computer of a particular Bitcoin user. It looks like this, 1CPwNACt62wts2yGbz1vUuqeGD58SzzeAL, and the user's device will also generate a matching secret key (another pseudorandom but unique string of numbers and letters) that must be used to sign transactions spending funds from that address. Think of it like a password. All in

all, however, the blockchain is pretty simple in that sense, it's just a list of transactions between addresses that's presented in a way that makes it easy for computers to verify the data.

How various blockchain technologies may differ.

What about other, non-Bitcoin blockchain technologies? Well they all follow the same design pattern. They will have peer-to-peer networking, a consensus mechanism, and a blockchain, and they will enable *connected computers* to *reach agreement over shared data*.

There are two things that can differ from Bitcoin, however. The shared data may be different, and the consensus mechanism may be engineered with different design choices.

Here's how the data can differ. Instead of being a list of bitcoin transactions, the shared data could be votes in an election, or identity credentials (think of it like a tokenized driver's license or proof of a credit score). Or the data could be the current state of a running computation. In other words the data could be related to a global computer that anyone is allowed to write and read data from; that's one way to describe [Ethereum](#), another open blockchain network inspired by Bitcoin.

The consensus mechanism could also be different than Bitcoin's. These differences aren't necessarily good or bad; remember that "blockchain" is like "vehicle." Sometimes you might need a boat, other times a rocketship. Not all vehicles are good for all use cases.

There are three big design choices that might make the consensus mechanism different from Bitcoin's. These tradeoffs and choices merit a much longer discussion, but here's a basic overview:

1. **Open or Closed?** Does the consensus mechanism allow anyone to join and participate, or is participation limited to identified parties on the network who were previously provisioned with an access credential by a company, consortium, or other central party that is creating or implementing the blockchain technology? In other words is it an open network (like the Internet) or a closed or permissioned network (like a company intranet)?
2. **Private or Transparent?** Does the consensus mechanism privilege data privacy above data transparency and auditability? Or vice versa? To some extent this is an iron trade-off. Recall that all the computers must reach agreement on the shared data. If the data was private to a handful of individuals then only those individuals on the network would be able to verify and agree on the data. There may be a way around this tradeoff in consensus design thanks to some new research into "zero-knowledge proofs," and the launch of a new privacy-protecting public network called [Zcash](#).
3. **Edge or Center?** Does the consensus mechanism put security at the edge of the network or at the center. Open blockchain networks like Bitcoin have consensus mechanisms that push the responsibility for security to the edge, to the individual computers owned and controlled by users. So if you receive bitcoins on your smartphone using a software wallet, for example, your device is the only device on the whole network that can now spend those bitcoins. Without the secret key generated on your phone, the bitcoins can

never move. This is in sharp contrast to pre-Bitcoin electronic payment systems where an intermediary like a credit card company could step in and reverse a transaction or move funds out of your account without needing you to take any action with your card or banking app. Having security at the edge may be a disadvantage for someone who loses their phone and failed make a backup of their credentials, but it's also an advantage system-wide because there's no longer a central party who could be hacked or be dishonest and thereby put *everyone's* money or data at risk. Permissioned blockchain technologies retain some power at the center of the network because—at the very least—there will be one party who is relied upon to identity permitted member computers and provision them with an access credential.

Those are the primary possible differences between blockchain technologies. There's still plenty of room for elaboration, details, and future possibilities, but hopefully you've got a better handle on the fundamental architecture of these exciting new tools. Just remember, blockchain technology means that *connected computers reach agreement over shared data*.

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Commentary: Simplicity in investing matters

Ian Toner



Photo: Brad Kevelin
Ian Toner

Almost every article written by an investor today begins with a list of lamentations: valuations are high, spreads are tight, interest rates are low, funding ratios are challenged, inflation (or sometimes deflation) is just over the horizon, private markets are suffering from too much dry powder, our waistlines are larger, our hairlines are higher and there is no longer any easy money to be made in the market.

These articles almost inevitably then move into a discussion of how the particular investment strategy being proposed by the investor will solve all of these problems. The precise solution varies based on the author's employer, but there is a fairly common element in many of the proposed solutions: they tend to rely on complexity as an important part of the path to achieving targeted returns. That complexity might involve, for example, extensive derivative use, allocations to illiquid vehicles, hiring a large number of specialist asset managers, extensive use of customized benchmarks or the introduction of asymmetric risk into portfolios — and this is by no means a complete list.

Today, I'll take a different approach. Rather than simply shaking my fist at the sky hoping that will improve returns, I want to focus on this too-common reach for complexity as the solution to investment problems and to suggest that instead we should strive, wherever possible, for simplicity. Or rather for as much simplicity as possible — but no more. Think of it this way: The simplest possible portfolio is just cash, but you can only do that when you are fully funded and have no chance of missing your goals. If you're not there, you need to get more complicated —

adding asset classes as you go, adding active management, adding more complicated or abstruse asset management and asset classes. Each time you're doing that you should be thinking "Do I need to do this; am I sure I know what I'm doing; do I have the governance in place to do this?"

Now, it's important to note that complexity has an important role in what we all do. The firm where I work has many highly sophisticated investors as clients, with deep and expert investment staff and the capability to really dig into and understand the implications of complexity in their portfolios. Working with them on that process is an important part of what we and our competitors do. But it's important to note that being able to understand and manage complexity is different from assuming that complexity will provide investment solutions that will solve every problem when capital markets are unpromising — and that is often the feeling that you can get when you hear the latest investment strategy being described and proposed as the solution to investor challenges.

The important point to remember is that complexity is rarely a benefit in itself and is often precisely the opposite. Complex solutions are harder to understand and the ways they are likely to behave in different circumstances can be hard to model. Complicated solutions can, in fact, solve some investment problems, but investors need to be able to very clearly define the particular problem being solved, and then be able to perform effective analysis to confirm that the proposed solution does in fact solve that problem. An example is adding derivative-based strategies to the portfolio. That can be helpful in a number of ways — helping change the shape of your returns, protecting against downside, adjusting your risk exposure — but you have to be sure you understand the exposures you are putting into the portfolio and that you can measure what success and failure look like.

What complexity tends to be bad at doing is solving the big building block problems of portfolio management.

What are those big building block problems? There are three of them. First, interest rates are very low: this means that bonds no longer provide much of the free protection against downside that they previously did. It also creates the second and third problems: that valuations of risk assets are generally high (due to low discount rates) and therefore expected returns from those asset classes are generally low, and that the present value of liabilities are also generally high (for the same reason).

Wind the clock back 30 years and those three big basic building blocks of portfolio math look much more congenial: rates were much higher, valuations had a way to run and liabilities had a smaller present value. As the markets have moved from this (delightful) state of affairs to the one we are all in today they (the markets) have, of course, allowed market participants to point to the positive return outcomes those market moves have generated as evidence of the investor's genius.

Complex solutions can help with some of the challenges this environment poses — but generally the help they can provide will be in particular areas of the portfolio rather than changing the big characteristics of the portfolio as a whole. And ensuring that the complex solution does what it is supposed to do requires investment skill and resources. Adding a well constructed hedge fund

portfolio, for example, might help drive better risk adjusted return — and in some cases may even provide a boost to total return – but doing so requires skill in both manager selection and portfolio construction, as well as the ability to provide ongoing oversight of the portfolio and the understanding to know when to adjust exposures. That governance structure is key to success.

I suspect it is better to think about complexity in the same way as we often think about illiquidity. The idea of the "illiquidity premium" is a poor way of thinking about illiquidity, and in the same way the idea of a "complexity premium" is foolish. Both illiquidity and complexity have their place in portfolios — but they are both risks, rather than sources of return. Both illiquid and complex portfolios can produce good outcomes — illiquid portfolios, managed skillfully can produce excellent returns, while complex portfolios can produce tailored outcomes — but they can both also produce real challenges that can threaten the chance of the investor achieving their goals.

This analogy works well in another dimension. Illiquid portfolios need good governance — there needs to be good initial due diligence, and good ongoing implementation, with many eyes watching how the portfolio is developing, and with a focus on what can go wrong, with plans in place to identify when that is happening and to forestall it.

Just as when considering illiquidity, investors should think hard about adopting complexity as a core part of their portfolio. For larger, deeper staffed and more sophisticated investors there may be opportunities that involve complexity that can help shape returns, dampen risks or build more attractive properties into the portfolio — but for many investors the potential downside is greater than the potential upside. Complexity carries a burden of time and potential trouble, and it carries both opacity and (usually) higher fees.

And that is where we can usefully focus at the end of the day. Complex solutions are often sold not bought, and are often more expensive than tried-and-true, more simple solutions. The best approach is for investors to ensure that they know what the complexity included in their portfolio is there for, and what success and failure look like, and what good governance looks like in the context of that complexity. Focusing to make sure that the portfolio is as simple as it can be for the goals they want to achieve — but no simpler — can help investors ensure that every fee dollar is well spent, and that the probability of unpleasant surprises is reduced. Simple is often better.

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