A G E N D A

BOARD MEETING
SAN JOAQUIN COUNTY EMPLOYEES RETIREMENT ASSOCIATION
BOARD OF RETIREMENT
FRIDAY, JUNE 4, 2021
AT 9:00 AM
Location: Via Zoom

In accordance with current state and local emergency proclamations and orders, this Board Meeting will be held virtually via Zoom Client.

The public may only attend the meeting by (1) clicking here https://us02web.zoom.us/j/89794531415 and following the prompts to enter your name and email, or (2) calling (669) 219-2599 or (669) 900-9128 and entering Meeting ID **89794531415#.**

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 APPROVAL OF MINUTES

3.01 Approval of the minutes for the Board Meeting of May 7, 2021 4

3.02 Approval of the minutes for the Audit Committee Meeting of May 20, 2021 8

3.03 Board to approve minutes

4.0 PUBLIC COMMENT

4.01 Follow the steps below to address the Board of Retirement. Speakers are limited to three minutes, and are expected to be civil and courteous.

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.”

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.

11.0 CORRESPONDENCE

11.01 Letters Received

11.02 Letters Sent

11.03 Market Commentary/Newsletters/Articles

01 Meketa Inflation: Is It Coming and Should We Care May 2021 267

12.0 COMMENTS

12.01 Comments from the Board of Retirement

13.0 CLOSED SESSION

**13.01 PURCHASE OR SALE OF PENSION FUND INVESTMENTS
CALIFORNIA GOVERNMENT CODE SECTION 54956.81**

**13.02 PERSONNEL MATTERS
CALIFORNIA GOVERNMENT CODE SECTION 54957
EMPLOYEE DISABILITY RETIREMENT APPLICATION(S) (1)**

01 Consent Items

a Christopher Bruno
Chief Public Defender Investigator
Service-Connected Disability

**13.03 CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION
CALIFORNIA GOVERNMENT CODE SECTION 54956.9(d)(4)
Initiation of Litigation - 1 Case**

14.0 CALENDAR

14.01 Administrative Committee Meeting June 9, 2021, at 2:00 PM

14.02 Board Meeting July 9, 2021, at 9:00 AM

15.0 ADJOURNMENT

M I N U T E S

BOARD MEETING
SAN JOAQUIN COUNTY EMPLOYEES RETIREMENT ASSOCIATION
BOARD OF RETIREMENT
FRIDAY, MAY 7, 2021
AT 9:00 AM
Location: Via Zoom

1.0 ROLL CALL

1.01 **MEMBERS PRESENT**: Phonxay Keokham, Emily Nicholas, Jennifer Goodman, Michael Duffy, Katherine Miller (in at 9:02 a.m.), Chanda Bassett, Adrian Van Houten, Margo Praus (out at 11:57 a.m.), 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, Information Systems Analyst II Jordan Regevig, and Administrative Secretary Kendra Fenner

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 APPROVAL OF MINUTES

3.01 Approval of the minutes for the Board Meeting of April 9, 2021

3.02 **The Board voted unanimously (9-0) to approve the Minutes of the Board Meeting of April 9, 2021. (Motion: Goodman; Second: Bassett)**

4.0 PUBLIC COMMENT

4.01 Retired member J.C. Weydert stated the Ventura related increases to benefits and their impact on funding has been difficult to sustain. He is happy we were able to sort out Tier 2b.

4.02 Adele Campos of San Joaquin County Management Association asked for clarification on base pay.

5.0 CONSENT ITEMS

5.01 Service Retirement (65)

5.02 **The Board voted unanimously (9-0) to approve the Consent Items. (Motion: Van Houten; Second: McCray)**

6.0 PENSIONABLE COMPENSATION FOR FUTURE MEMBERS - TIER 2B PROPOSAL

6.01 CEO to provide educational presentation

6.02 Resolution 2021-05-01 “Pensionable Compensation for Future SJCERA Members”

6.03 **The Board voted unanimously (9-0) to adopt Resolution 2021-05-01 (Motion: Keokham; Second: Miller)**

7.0 RETURN TO IN-PERSON BOARD MEETINGS

7.01 Board agreed to revisit in-person meetings in three months unless the State Emergency Order is lifted prior to that time and requires other measures

8.0 CONSULTANT REPORTS PRESENTED BY DAVID SANCEWICH OF MEKETA INVESTMENT GROUP

8.01 Monthly Investment Performance Updates

01 Receive and File Manager Performance Flash Report - March 2021

02 Receive and File Economic and Market Update - March 2021

8.02 Private Equity Review

8.03 Board accepted and filed reports

9.0 STAFF REPORTS

9.01 Legislative Summary Report

9.02 Trustee and Executive Staff Travel

01 Conferences and Events Schedule for 2021

02 Summary of Pending Trustee and Executive Staff Travel

03 Summary of Completed Trustee and Executive Staff Travel

9.03 CEO Report

In addition to the CEO report, CEO Shick stated the Board has one General member and two Retired member seats up for election. Two, possibly three, individuals have applied for the eighth seat. Staff has completed their review of the Cybersecurity Auditing Services Proposals and will provide the Audit committee with their recommendation. Staff will work with the Administrative Committee to select a Strategic Planning partner. The new Terminal Illness or Death of an Employee employer notice has been distributed and posted on the website. Lastly, CEO Shick pointed out two articles indicating public funds are beginning to invest in block chain technology.

9.04 Board accepted and filed reports

10.0 CORRESPONDENCE

10.01 Letters Received

10.02 Letters Sent

10.03 Market Commentary/Newsletters/Articles

01 MEKETA Understanding China: an economic and investment perspective March 2021

02 BUSINESS INSURANCE Travelers unit must indemnify county retirement association April 2021

03 NCPERS The Monitor April 2021

04 NEWS ALERT SJC Begins Core Fixed-Income Mgr. Search April 2021

05 Pensions & Investments Investors inching closer to joining the fray April 2021

06 Pensions & Investments Two Virginia pension funds warm up to blockchain technology investments April 2021

11.0 COMMENTS

11.01 Trustee Duffy advised it is a great time for block chain technology education.

11.02 Trustee McCray suggested revisiting presentation by Mark Yusko from Morgan Creek on block chain technology investments.

11.03 Trustee Keokham congratulated former Assistant County Administrator Jerry Becker on his retirement.

12.0 CLOSED SESSION

THE CHAIR CONVENED CLOSED SESSION AT 11:42 A.M. AND ADJOURNED THE CLOSED SESSION AND RECONVENED THE OPEN SESSION AT 12:05 P.M.

12.01 PURCHASE OR SALE OF PENSION FUND INVESTMENTS
CALIFORNIA GOVERNMENT CODE SECTION 54956.81

12.02 PERSONNEL MATTERS
CALIFORNIA GOVERNMENT CODE SECTION 54957
EMPLOYEE DISABILITY RETIREMENT APPLICATION(S) (2)

01 Disability Retirement Consent (2)

Counsel reported that in Closed Session the Board took the following action on personnel matters:

a Cory Davis
Correctional Officer
Service-Connected Disability

The Board voted unanimously (9-0) to accept the findings and recommendation of the Administrative Law Judge and deny the application for a Service-Connected Disability Retirement. (Motion: McCray; Second: Keokham)

b Jody Mortenson
Office Assistant Specialist
Service-Connected Disability

The Board voted unanimously (9-0) to accept the findings and recommendation of the Administrative Law Judge and deny the application for a Service-Connected Disability Retirement. (Motion: McCray; Second: Keokham)

12.03 CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION
CALIFORNIA GOVERNMENT CODE SECTION 54956.9(d)(4)
Initiation of Litigation - 1 Case

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

13.0 REPORT OF CLOSED SESSIONS

13.01 On May 8, 2020, the Board unanimously authorized the CEO to sign the necessary documents and further approve Resolution 2020-10-01 titled “Stellex Capital Partners II” and committed to invest $50 million in the fund.

14.0 CALENDAR

14.01 Audit Committee Meeting May 20, 2021, at 10:00 AM

14.02 Board Meeting June 4, 2021, at 9:00 AM

15.0 ADJOURNMENT

15.01 There being no further business the meeting was adjourned at 12:07 p.m. The Board took a break from 11:15 a.m. until 11:23 a.m.

Respectfully Submitted:

____
Michael Restuccia, Chair

Attest:

____
Raymond McCray, Secretary

San Joaquin County Employees Retirement Association

M I N U T E S

AUDIT COMMITTEE MEETING
SAN JOAQUIN COUNTY EMPLOYEES RETIREMENT ASSOCIATION
BOARD OF RETIREMENT
THURSDAY, MAY 20, 2021
AT 10:00 AM
Location: Via Zoom

1.0 ROLL CALL

1.01 **MEMBERS PRESENT**: Raymond McCray, Michael Restuccia, Adrian Van Houten and Michael Duffy presiding

STAFF PRESENT: Chief Executive Officer Johanna Shick, Assistant Chief Executive Officer Kathy Herman, Financial Officer Carmen Murillo, Information Systems Manager, Adnan Khan, Management Analyst III Greg Frank, and Administrative Secretary, Kendra Fenner

OTHERS PRESENT: Deputy County Counsel Jason Morrish, and Lindsey McGuire and Colin Lo of Brown Armstrong Accountancy Corporation

2.0 PUBLIC COMMENT

2.01 There was no public comment.

3.0 2020 AUDIT EXIT CONFERENCE

3.01 Presentation of Audit Results by CPAs Lindsey McGuire and Colin Lo of Brown Armstrong Accountancy Corporation

3.02 Draft Conclusion of Audit and Internal Control Reports

3.03 Draft Annual Financial Report

3.04 Ms. McGuire will present the reports to the Audit Committee for review and discussion

3.05 **The Committee voted unanimously (4-0) to approve the Audited Financial Reports. (Motion: Restuccia; Second: Van Houten)**

4.0 EXECUTIVE SESSION

4.01 The Committee concluded, after consulting with the auditor, there was nothing to discuss in Executive Session. No Executive Session was held.

5.0 REVIEW OF AUDIT COMMITTEE CHARTER

5.01 Proposed revisions to Audit Committee Charter - Mark-up

5.02 Proposed revisions to Audit Committee Charter - Clean

5.03 Committee to review and give direction to staff as necessary, or formulate a recommendation to the full Board.

5.04 **The Committee voted unanimously (4-0) to approve the revisions to the Audit Committee Charter. (Motion: Van Houten; Second: McCray)**

6.0 CYBERSECURITY AUDIT SERVICES - PROPOSED CONTRACT AWARD

6.01 Committee to discuss and give direction to staff as appropriate.

6.02 The Committee voted unanimously (4-0) to award the Cybersecurity Contract to Linea Secure, pending successful contract negotiation. (Motion: Restuccia; Second: Van Houten)

7.0 COMMENTS

7.01 Comments from the Committee

01 Trustee Duffy thanked Ms. McGuire and the staff at Brown Armstrong. He also thanked the SJCERA staff for their work on the Cybersecurity Contract Award. He sees this as a great direction for the organization and will have great benefit.

02 Trustee Restuccia thanked staff. He appreciates the hard work that was put into the Cybersecurity Contract Award.

8.0 ADJOURNMENT

8.01 There being no further business, the meeting was adjourned at 10:28 a.m.

Respectfully Submitted:

____
Michael Duffy, Audit Committee Chair

5.01 Service Retirement — Consent

01 MICHAEL T BIAGINI — Deputy Public Guardian II, Conservator Services

Member Type: General
Years of Service: 25y 09m 04d
Retirement Date: 4/1/2021

02 ALMA E CELAYA — Special District Class Code, Tracy Public Cemetery District

Member Type: General
Years of Service: 28y 11m 12d
Retirement Date: 3/27/2021

03 MIYUKI F COIRIN — Deferred Member, N/A

Member Type: General
Years of Service: 05y 00m 16d
Retirement Date: 4/28/2021

04 CRYSTAL E COMPTON — Senior Office Assistant, Child Support Svs

Member Type: General
Years of Service: 28y 08m 21d
Retirement Date: 4/1/2021

05 LYDIA G DINGMAN — Senior Office Assistant, Assessor

Member Type: General
Years of Service: 19y 05m 14d
Retirement Date: 3/31/2021

06 JAMES L FLOHRSCHUTZ — Business Services Manager, Courts

Member Type: General
Years of Service: 22y 09m 19d
Retirement Date: 4/1/2021

07 LARRY F GODINHO — Deferred Member, N/A

Member Type: General
Years of Service: 08y 08m 08d
Retirement Date: 5/1/2021
Comments: Outgoing reciprocity and concurrent retirement with CalPERS.

08 DARWIN D HALLOCK — Deferred Member, N/A

Member Type: General
Years of Service: 03y 09m 24d
Retirement Date: 5/4/2021
Comments: Outgoing reciprocity and concurrent retirement with CalPERS.

09 EMILY C HERRERA — Legal Process Supervisor, Courts

Member Type: General
Years of Service: 29y 00m 10d
Retirement Date: 4/24/2021

San Joaquin County Employees Retirement Association

June 2021

10 **MELLORIE KELLOGG** Senior Office Assistant
Public Works

Member Type: General
Years of Service: 14y 07m 00d
Retirement Date: 3/30/2021

11 **THOMAS K LO** Social Worker II
HSA - Services Staff

Member Type: General
Years of Service: 25y 01m 27d
Retirement Date: 4/1/2021

12 **SUSAN Y MERCADO** Accounting Technician II
Treasurer-Tax Collector

Member Type: General
Years of Service: 30y 07m 17d
Retirement Date: 4/9/2021

13 **GENE T NEELY** Fire Chief
Lathrop Manteca Fire District

Member Type: Safety
Years of Service: 23y 10m 10d
Retirement Date: 4/24/2021

14 **JAIME NUNEZ** Chief Mental Health Clinician
Mental Health-Childrens Srvc

Member Type: General
Years of Service: 08y 09m 25d
Retirement Date: 2/26/2021

15 **VERONICA C PEHL** Program Manager
Public Health

Member Type: General
Years of Service: 11y 10m 05d
Retirement Date: 3/30/2021

16 **SELINA V SALAS** Senior Office Assistant
Human Resources

Member Type: General
Years of Service: 23y 01m 18d
Retirement Date: 3/27/2021

17 **ELEANOR Y SAN-SOLIS** Employment Training Spec II
Employment - Economic Developm

Member Type: General
Years of Service: 22y 02m 24d
Retirement Date: 3/31/2021

18 **RACHEL TORRES** Therapy Services Manager
Hosp Speech Therapy

Member Type: General
Years of Service: 33y 07m 05d
Retirement Date: 4/1/2021

19 **MARK A ULM**

EEDD Facilities Coordinator
Employment - Economic Developm

Member Type: General
Years of Service: 27y 03m 06d
Retirement Date: 3/31/2021

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

REPORT TO THE BOARD OF RETIREMENT AND AUDIT COMMITTEE

FOR THE YEAR ENDED DECEMBER 31, 2020

SAN JOAQUIN COUNTY EMPLOYEES'
RETIREMENT ASSOCIATION
FOR THE YEAR ENDED DECEMBER 31, 2020

TABLE OF CONTENTS

BROWN ARMSTRONG
CERTIFIED PUBLIC ACCOUNTANTS

BAKERSFIELD OFFICE
(MAIN OFFICE)
4200 TRUXTUN AVENUE
SUITE 300
BAKERSFIELD, CA 93309
TEL 661.324.4971
FAX 661.324.4997
EMAIL info@bacpas.com

FRESNO OFFICE
10 RIVER PARK PLACE EAST
SUITE 208
FRESNO, CA 93720
TEL 559.476.3592

STOCKTON OFFICE
1919 GRAND CANAL BLVD
SUITE C6
STOCKTON, CA 95207
TEL 888.565.1040

WWW.BACPAS.COM

BROWN ARMSTRONG
Certified Public Accountants

REQUIRED COMMUNICATION AT THE CONCLUSION OF AN AUDIT TO THE BOARD OF RETIREMENT AND AUDIT COMMITTEE IN ACCORDANCE WITH PROFESSIONAL STANDARDS (SAS 114)

To the Members of the Board of Retirement and Audit Committee of
San Joaquin County Employees' Retirement Association
Stockton, California

We have audited the basic financial statements and other information (financial statements) of the San Joaquin County Employees' Retirement Association (SJCERA) as of and for the year ended December 31, 2020, and have issued our report thereon dated May 25, 2021. Professional standards require that we provide you with information about our responsibilities under auditing standards generally accepted in the United States of America and *Government Auditing Standards*, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our engagement letter to you dated December 10, 2020. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Matters

Qualitative Aspects of Accounting Practices
Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by SJCERA are described in Note 3, Summary of Significant Accounting Policies – Pension Plan, to the financial statements. No new accounting policies were adopted and the application of existing policies was not changed during the year ended December 31, 2020. We noted no transactions entered into by SJCERA during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting the financial statements were:

- Management's estimates of the fair value of investments and the money-weighted rate of return are derived by various methods as described in Note 3, Summary of Significant Accounting Policies – Pension Plan, Note 4, Cash and Investments, and Note 5, Derivative Financial Instruments, to the financial statements. We evaluated the key factors and assumptions used to develop the estimates of the fair value of investments and the money-weighted rate of return in determining that they are reasonable in relation to the financial statements taken as a whole.

- Management's estimates of the contribution amounts and net pension liability are based on an actuarially-presumed interest rate and assumptions recommended by an independent actuary and adopted by the Board of Retirement and involve estimates of the values of reported amounts and probabilities about the occurrence of future events, as detailed in Note 6, Contributions Required and Contributions Made, and Note 8, Net Pension Liability and Significant Assumptions. We evaluated the key factors and assumptions used to develop the estimates of the contribution amounts and net pension liability in determining that they are reasonable in relation to the financial statements taken as a whole.

Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. The most sensitive disclosures affecting the financial statements were:

- The disclosures for cash and investments and derivative financial instruments in Notes 4 and 5 to the financial statements, respectively, were derived from SJCERA's investment policy. Management's estimate of the fair value of investments was derived by various methods as detailed in the notes.

- The disclosures related to the funding policies, funded status, funding progress, and actuarial methods and assumptions in Note 6 and Note 8 were derived from actuarial valuations, which involve estimates of the value of reported amounts and probabilities about the occurrence of the future events far into the future.

The financial statement disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit
We encountered no significant difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements
Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. Management has corrected all such misstatements. In addition, none of the misstatements detected as a result of audit procedures and corrected by management were material, either individually or in the aggregate, to SJCERA's financial statements taken as a whole.

Disagreements with Management
For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the purpose financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations
We have requested certain representations from management that are included in the management representation letter dated May 25, 2021.

Management Consultations with Other Independent Accountants
In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to SJCERA's financial statements, or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues
We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as SJCERA's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters
We applied certain limited procedures to the Management's Discussion and Analysis, Schedule of Changes in Net Pension Liability and Related Ratios, Schedule of Contributions from the Employers and Other Contributing Sources – Defined Benefit Pension Plan, and Schedule of Investment Returns, which are required supplementary information (RSI) that supplement the basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

We were engaged to report on the Schedule of Administrative Expenses, Schedule of Investment Expenses, and Schedule of Payments to Consultants, which accompany the financial statements but are not RSI. With respect to this other supplementary information, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the other supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

We were not engaged to report on the introduction, investment, actuarial, and statistical sections, which accompany the financial statements but are not RSI. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Restriction on Use

This information is intended solely for the information and use of the Board of Retirement, Audit Committee, and management of SJCERA and is not intended to be, and should not be, used by anyone other than these specified parties.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION
Brown Armstrong
Accountancy Corporation

Bakersfield, California
May 25, 2021

BROWN
ARMSTRONG
CERTIFIED
PUBLIC
ACCOUNTANTS

BAKERSFIELD OFFICE
(MAIN OFFICE)
4200 TRUXTUN AVENUE
SUITE 300
BAKERSFIELD, CA 93309
TEL 661.324.4971
FAX 661.324.4997
EMAIL info@bacpas.com

FRESNO OFFICE
10 RIVER PARK PLACE EAST
SUITE 208
FRESNO, CA 93720
TEL 559.476.3592

STOCKTON OFFICE
1919 GRAND CANAL BLVD
SUITE C6
STOCKTON, CA 95207
TEL 888.565.1040

WWW.BACPAS.COM

BROWN ARMSTRONG
Certified Public Accountants

INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

To the Members of the Board of Retirement and Audit Committee of
San Joaquin County Employees' Retirement Association
Stockton, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the basic financial statements of the San Joaquin County Employees' Retirement Association (SJCERA), as of and for the year ended December 31, 2020, and the related notes to the basic financial statements, which collectively comprise SJCERA's basic financial statements and other information (financial statements), and have issued our report thereon dated May 25, 2021.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered SJCERA's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of SJCERA's internal control. Accordingly, we do not express an opinion on the effectiveness of SJCERA's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of SJCERA's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. We did identify a certain deficiency in internal control, described in the accompanying schedule of findings as item 2020-01, that we consider to be a significant deficiency.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether SJCERA's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of SJCERA's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering SJCERA's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
May 25, 2021

Schedule of Findings

2020-001 – Investment Adjustment

During our audit procedures over investments, we determined that the net appreciation and fair value of one investment account was overstated by $9.4 million. This occurred due to timing of management turnover and lack of management reconciliation and oversight.

Recommendation

We recommend that management uphold the controls in place for investment reconciliations for all investments such that every investment's fair value is properly recorded and each investment is properly reconciled to the custodian and investment manager's statements. We also suggest that each investment reconciliation be performed by one individual and reviewed by another management.

Management Response

Management agrees with the recommendation.

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

ANNUAL FINANCIAL REPORT
WITH
INDEPENDENT AUDITOR'S REPORT

FOR THE YEAR ENDED
DECEMBER 31, 2020

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
FOR THE YEAR ENDED DECEMBER 31, 2020

TABLE OF CONTENTS

BROWN ARMSTRONG

CERTIFIED PUBLIC ACCOUNTANTS

BAKERSFIELD OFFICE
(MAIN OFFICE)

4200 TRUXTUN AVENUE
SUITE 300
BAKERSFIELD, CA 93309
TEL 661.324.4971
FAX 661.324.4997
EMAIL info@bacpas.com

FRESNO OFFICE

10 RIVER PARK PLACE EAST
SUITE 208
FRESNO, CA 93720
TEL 559.476.3592

STOCKTON OFFICE

1919 GRAND CANAL BLVD
SUITE C6
STOCKTON, CA 95207
TEL 888.565.1040

WWW.BACPAS.COM

BROWN ARMSTRONG
Certified Public Accountants

INDEPENDENT AUDITOR'S REPORT

To the Members of the Board of Retirement and Audit Committee of
San Joaquin County Employees' Retirement Association
Stockton, California

Report on the Financial Statements and Other Information

We have audited the accompanying Statement of Fiduciary Net Position of the San Joaquin County Employees' Retirement Association (SJCERA) as of December 31, 2020, the related Statement of Changes in Fiduciary Net Position for the year then ended, and the related notes to the financial statements, which collectively comprise SJCERA's basic financial statements as listed in the table of contents. We have also audited the Schedule of Cost Sharing Employer Allocations and the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (specified column totals) as of and for the year ended December 31, 2020, listed as other information in the table of contents.

Management's Responsibility for the Financial Statements and Other Information

SJCERA's management is responsible for the preparation and fair presentation of these financial statements and other information in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements and other information that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements and other information based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements and other information are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements and other information. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements and other information, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to SJCERA's preparation and fair presentation of the financial statements and other information in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of SJCERA's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements and other information.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the basic financial statements and other information referred to above present fairly, in all material respects, the Fiduciary Net Position of SJCERA as of December 31, 2020; the changes in the Fiduciary Net Position for the year then ended; the Schedule of Cost Sharing Employer Allocations; and the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (specified column totals) as of and for the year ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and required supplementary information (RSI), as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the management's discussion and analysis and RSI in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise SJCERA's basic financial statements. The other supplementary information, as listed in the table of contents, is presented for purposes of additional analysis and is not a required part of the basic financial statements.

The other supplementary information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Report on Summarized Comparative Information

We have previously audited SJCERA's December 31, 2019 financial statements, and our report dated May 26, 2020, expressed an unmodified opinion on those audited financial statements. In our opinion, the summarized comparative information presented herein as of and for the year ended December 31, 2019, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated May 25, 2021, on our consideration of SJCERA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of SJCERA's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering SJCERA's internal control over financial reporting and compliance.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
May 25, 2021

MANAGEMENT’S DISCUSSION AND ANALYSIS

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
MANAGEMENT'S DISCUSSION AND ANALYSIS
DECEMBER 31, 2020

Introduction

Management's Discussion and Analysis (MD&A) presents the overview and analysis of the financial activities of the San Joaquin County Employees' Retirement Association (SJCERA or the Plan) for the year ended December 31, 2020. This MD&A presents SJCERA's overall financial position and the results of its operations, in conjunction with SJCERA's financial statements and notes.

Financial Highlights

- SJCERA's fiduciary net position increased by $302.4 million, or 9.32 percent, to $3.5 billion as of December 31, 2020.

- SJCERA's funding objective is to meet long-term benefit obligations through contributions and investment income. As of January 1, 2020, the date of the last actuarial valuation, the funded ratio for the actuarial liability was approximately 64.3 percent. In general, this indicates that for every dollar of benefits liability, SJCERA has about 64 cents. The portion of the pension liability attributable to inactive members (retired or deferred) is fully funded by plan assets. (Note 8c provides a more detailed explanation of recent changes in funded ratio.)

- Revenues for the year were $558.4 million, a decrease of $86.2 million from the prior year. The decrease was mainly caused by the decrease in net investment gains/(loss) compared to the prior year.

- Expenses for the year were $256.1 million, an increase of $14.8 million, or 6.1 percent, from the prior year's $241.3 million. This increase was primarily due to the $14.5 million increase in pension benefit payments to retirees.

Overview of Financial Statements

The SJCERA 2020 financial statements, notes to the financial statements, required supplementary information, other supplementary information, and other information were prepared in accordance with the accounting principles and reporting standards prescribed by the Governmental Accounting Standards Board (GASB). The following discussion and analysis are intended to serve as an introduction and overview of SJCERA's financial reporting components.

The **Statement of Fiduciary Net Position** is the financial statement that presents the major categories of assets and liabilities and their related values. It represents the resources available for future benefit payments to retirees and beneficiaries and the current liabilities owed as of December 31, 2020, with comparative totals as of December 31, 2019.

The **Statement of Changes in Fiduciary Net Position** is the financial statement that provides an income statement presentation of annual additions to and deductions from the Plan for the year ended December 31, 2020, with comparative totals as of December 31, 2019.

The **Notes to the Basic Financial Statements** provide additional information that is essential to a full understanding of the data provided in the audited financial statements.

The **Required Supplementary Information** provides the Schedule of Changes in Net Pension Liability and Related Ratios, Schedule of Contributions from the Employers and Other Contributing Sources, Schedule of Investment Returns, and Notes to Required Supplementary Information.

The **Other Supplementary Information** includes a Schedule of Administrative Expenses, Schedule of Investment Expenses, and Schedule of Payments to Consultants.

The **Other Information** includes two schedules pertaining to GASB Statement No. 68: the Schedule of Cost Sharing Employer Allocations and the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan.

Defined Benefit Pension Plan Financial Analysis

As of December 31, 2020, SJCERA's Fiduciary Net Position was $3.5 billion, an increase of $302.4 million. Employer and member contributions were $281.3 million, and a net investment gain of $277.0 million, which were offset by benefits payments and administrative expenses of $256.1 million. Over time, increases and decreases in fiduciary net position are one of the indicators of whether SJCERA's financial situation is improving or deteriorating. Additional factors, such as market conditions, also need to be considered in assessing SJCERA's overall financial situation.

The table below compares SJCERA's fiduciary net position as of December 31, 2020 and 2019.

SJCERA Fiduciary Net Position

	2020	2019	Increase (Decrease) Amount	Percent Change
Cash and Receivables	$ 244,626,021	$ 135,994,035	$ 108,631,986	79.88%
Investments	3,389,474,004	3,158,399,420	231,074,584	7.32%
Other Assets	276,901	261,827	15,074	5.76%
Total Assets	3,634,376,926	3,294,655,282	339,721,644	10.31%
Total Liabilities	87,664,677	50,293,455	37,371,222	74.31%
Total Fiduciary Net Position Restricted for Pension Benefits	$ 3,546,712,249	$ 3,244,361,827	$ 302,350,422	9.32%

Revenues – Additions to Fiduciary Net Position

The reserves needed to finance the retiree benefits are accumulated through the collection of employer and member contributions and through earnings on investments. The additions for the year ended December 31, 2020, totaled $558.4 million. Net investment gains totaled $277.0 million. The overall year 2020 revenues decreased by $86.2 million from that of the prior year, primarily due to less investment gains.

In 2020, the County of San Joaquin (County) and Superior Court paid additional contributions to decrease their proportionate share of the unfunded actuarial liability (UAL). Employer contributions increased by $15.2 million, or 6.7 percent, over the prior year, and member contributions increased by $2.5 million, or 6.5 percent, over the prior year. The County and the majority of its members equally share the normal cost of pre-funding post-retirement cost-of-living adjustments. Some members also pay 114% or 133% of the basic member contribution rate, which reduces the employers' Normal Cost portion of the required contribution. Employers pay all of the required UAL amortization payment.

Expenses – Deductions from Fiduciary Net Position

SJCERA's primary expenses are the payment of benefits to retirees and beneficiaries, the refund of contributions to former members, and the administrative costs. Expenses for the year 2020 totaled $256.1 million, an increase of 6.1 percent over 2019. The increase is primarily attributed to the annual cost-of-living adjustment to retirees' benefit payments and the growth in the number and average amount of benefits paid to retirees.

The table below compares SJCERA's Changes in Fiduciary Net Position.

Changes in Fiduciary Net Position	2020	2019	Increase (Decrease) Amount	Percent Change
Additions				
Employer Contributions	$ 240,700,988	$ 225,528,756	$ 15,172,232	6.73%
Member Contributions	40,568,995	38,098,688	2,470,307	6.48%
Net Investment Income (Loss) and Miscellaneous Income	276,996,530	380,674,528	(103,677,998)	-27.24%
Transfer from Healthcare Custodial Fund	172,041	299,014	(126,973)	-42.46%
Total Additions	558,438,554	644,600,986	(86,162,432)	-13.37%
Deductions				
Retirement Benefit Payments	247,254,985	232,736,441	14,518,544	6.24%
Death Benefits	808,150	668,768	139,382	20.84%
Refund of Contributions	3,488,542	2,944,863	543,679	18.46%
Administrative and Other Expenses	4,536,455	4,931,163	(394,708)	-8.00%
Total Deductions	256,088,132	241,281,235	14,806,897	6.14%
Net Increase (Decrease)	302,350,422	403,319,751	(100,969,329)	25.03%
Fiduciary Net Position Restricted for Pension Benefits				
Beginning of Year	3,244,361,827	2,841,042,076	403,319,751	14.20%
End of Year	$ 3,546,712,249	$ 3,244,361,827	$ 302,350,422	9.32%

Plan Administration
SJCERA membership

The table below provides comparative SJCERA membership data for the last two years. Total membership as of December 31, 2020, was 14,882, an increase of 342 members, or 2.4 percent, compared to December 31, 2019.

SJCERA Membership
As of December 31, 2020 and 2019

Category	2020	2019	Increase (Decrease) Amount	Percent Change
Active Members	6,417	6,424	(7)	-0.11%
Retired Members	6,352	6,208	144	2.32%
Deferred Members	2,113	1,908	205	10.74%
Total Membership	14,882	14,540	342	2.35%

Administrative Expenses

The County Employees Retirement Law of 1937 (CERL) Section 31580.2 limits the Administrative Expense to twenty-one hundredths of one percent (0.21 percent) of the accrued actuarial liability (AAL) of the system.

The table below provides comparison of the actual administrative expenses for the fiscal years ended 2020 and 2019. The AAL was used to calculate the statutory budget amount. SJCERA's administrative expenses were well below the limit imposed by CERL for both years.

Compliance With Statutory Limitation Administrative Expenses As of December 31, 2020 and 2019 (Dollars in Thousands)				
		2020		**2019**
Basis for Budget Calculation (Accrued Actuarial Liability):				
Actual Administrative Expenses	$	3,740	$	3,448
Accrued Actuarial Liability as Basis for Budget Calculation*		4,721,287		4,496,976
Administrative Expenses as a Percentage of:				
The Basis for Budget Calculation		0.08%		0.08%
Limit per CERL		0.21%		0.21%

* Based on valuations dated January 1, 2019 and January 1, 2018, respectively.

Actuarial Valuations

SJCERA engages an independent actuarial firm, Cheiron, Inc., to perform an annual actuarial valuation to monitor its funding and funding integrity. The valuation assesses the magnitude of SJCERA's benefit commitments, in comparison with the assets expected to be available to support those commitments. In 2019, an Actuarial Experience Study was performed covering experience from January 1, 2016 through December 31, 2018. As a result of the experience study, there were changes in demographic assumptions and no changes in the economic assumptions. The most recent annual actuarial valuation as of January 1, 2020, contains a detailed discussion of the funding requirements. This valuation is used for funding purposes and establishing employer and member contributions rates. As of the January 1, 2020 actuarial valuation, the AAL was $5.01 billion and the Actuarial Value of Assets was $3.23 billion, resulting in a UAL of $1.79 billion. The funded ratio decreased from 64.5 percent last year to 64.3 percent on an actuarial value of assets basis. Using the market value of assets as of the valuation date, the funded ratio increased from 60.2 percent to 64.7 percent.

For the year ended December 31, 2020, a GASB Statement No. 67/68 report was prepared by Cheiron, Inc., to provide accounting and financial disclosure information. In order to accommodate the annual reporting requirements of our plan sponsors in a timely manner, the valuation was prepared using the January 1, 2020 valuation as the basis for calculating the total pension liability (TPL) and projected to December 31, 2020. Based on this actuarial valuation, the TPL was $5.2 billion compared to a fiduciary net position of $3.5 billion, resulting in the employers' net pension liability (NPL) of $1.7 billion and a fiduciary net position as a percentage of TPL of 67.9 percent. The NPL as a percentage of covered payroll was 364.17 percent. Please see the Note 8 for more details.

Reporting SJCERA's Fiduciary Responsibilities

SJCERA's Board of Retirement and staff are fiduciaries for the pension plan. Accordingly, SJCERA is responsible for ensuring that the assets reported in the statements are used for the intended purpose of paying retirement benefits to the eligible members and beneficiaries.

Contacting SJCERA's Management

This financial report is designed to provide the Board of Retirement, the membership, taxpayers, and investment managers with a general overview of SJCERA's finances and to show SJCERA's accountability for the money it receives. Any questions about this report, or need for additional financial information, can be addressed to SJCERA, 6 South El Dorado Street, Suite 400, Stockton, California 95202.

Respectfully Submitted,

Carmen Murillo
Financial Officer
May 25, 2021

BASIC FINANCIAL STATEMENTS

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
STATEMENT OF FIDUCIARY NET POSITION
AS OF DECEMBER 31, 2020 (WITH COMPARATIVE TOTALS)

	2020		2019	
	Defined Benefit Pension Plan	Post-Employment Healthcare Custodial Fund	Defined Benefit Pension Plan	Post-Employment Healthcare Custodial Fund
Assets				
Cash and Short-Term Investments				
Cash and Cash Equivalents	$ 146,456,177	$ -	$ 72,762,977	$ 76,175
Cash Collateral - Securities Lending	83,589,197	-	46,038,227	-
Total Cash and Short-Term Investments	230,045,374	-	118,801,204	76,175
Receivables				
Investment Income Receivables	3,400,405	-	5,847,455	-
Contributions Receivables	10,074,285	-	8,187,026	-
Securities Sold, Not Received	1,065,084	-	3,111,902	-
Miscellaneous Receivables	40,873	-	46,448	-
Total Receivables	14,580,647	-	17,192,831	-
Investments, at Fair Value				
Stable Fixed Income	322,514,912	-	318,806,931	-
Credit	479,100,892	-	408,015,328	-
Global Public Equity	1,258,623,730	-	1,089,461,379	-
Private Appreciation	456,340,240	-	415,332,040	-
Risk Parity	409,233,403	-	408,546,978	-
Crisis Risk Offset	463,660,827	-	518,236,764	-
Total Investments, at Fair Value	3,389,474,004	-	3,158,399,420	-
Other Assets				
Prepaid Expenses	140,655	-	82,030	-
Equipment and Fixtures, Net	136,246	-	179,797	-
Total Other Assets	276,901	-	261,827	-
Total Assets	3,634,376,926	-	3,294,655,282	76,175
Liabilities				
Cash Overdraft	-	23,676	-	-
Securities Lending - Cash Collateral	83,589,197	-	46,038,227	-
Securities Purchased, Not Paid	2,986,539	-	3,402,003	-
Accrued Expenses and Other Payables	1,076,401	-	762,190	-
Securities Lending Interest and Other Payables	12,540	-	91,035	-
Total Liabilities	87,664,677	23,676	50,293,455	-
Fiduciary Net Position Restricted for Pension and Post-Employment Healthcare Benefits	$ 3,546,712,249	$ (23,676)	$ 3,244,361,827	$ 76,175

The accompanying notes are an integral part of these financial statements.

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED DECEMBER 31, 2020 (WITH COMPARATIVE TOTALS)

	2020		2019	
	Defined Benefit Pension Plan	Post-Employment Healthcare Custodial Fund	Defined Benefit Pension Plan	Post-Employment Healthcare Custodial Fund
Additions				
Contributions				
Employer Contributions	$ 240,700,988	$ -	$ 225,528,756	$ -
Member Contributions	40,568,995	-	38,098,688	-
Employer Contributions to Healthcare Benefits	-	3,863,817	-	4,400,805
Total Contributions	281,269,983	3,863,817	263,627,444	4,400,805
Net Investment Income (Loss)				
Net Appreciation (Depreciation) in Fair Value of Investments	256,770,057	-	345,001,380	-
Interest	20,997,097	-	34,070,170	-
Dividends	5,563,699	-	6,958,776	-
Real Estate Income, Net	11,223,598	-	13,540,096	-
Investment Expenses	(18,016,050)	-	(19,363,548)	-
Miscellaneous Investment Income	2,390	-	54,974	-
Net Investment Income (Loss), Before Securities Lending Income	276,540,791	-	380,261,848	-
Securities Lending Income				
Earnings	581,476	-	2,186,019	-
Rebates	(165,250)	-	(1,734,932)	-
Fees	(103,839)	-	(112,594)	-
Net Securities Lending Income	312,387	-	338,493	-
Total Net Investment Income (Loss)	276,853,178	-	380,600,341	-
Miscellaneous Income	143,352	-	74,187	-
Transfer Between Plans	172,041	-	299,014	-
Total Additions	558,438,554	3,863,817	644,600,986	4,400,805
Deductions				
Benefit Payments	247,254,985	3,791,627	232,736,441	4,035,890
Death Benefits	808,150	-	668,768	-
Refunds of Member Contributions	3,488,542	-	2,944,863	-
Administrative Expenses				
General Administrative Expenses	3,739,745	-	3,448,181	-
Other Expenses				
Information Technology Expenses	197,080	-	260,169	-
Actuary Fees	123,800	-	226,652	-
Fund Legal Fees	475,830	-	996,161	-
Total Administrative and Other Expenses	4,536,455	-	4,931,163	-
Transfer Between Plans	-	172,041	-	299,014
Total Deductions	256,088,132	3,963,668	241,281,235	4,334,904
Changes in Fiduciary Net Position	302,350,422	(99,851)	403,319,751	65,901
Fiduciary Net Position Restricted for Pension and Post-Employment Healthcare Benefits				
Beginning of Year	3,244,361,827	76,175	2,841,042,076	10,274
End of Year	$ 3,546,712,249	$ (23,676)	$ 3,244,361,827	$ 76,175

The accompanying notes are an integral part of these financial statements.

The San Joaquin County Employees' Retirement Association (SJCERA) is the public employee retirement system established by the County of San Joaquin (County) and is administered by the Board of Retirement of SJCERA (Board) to provide retirement, disability, and survivor benefits under the County Employees Retirement Law of 1937 (CERL) for the employees of the County and certain special districts within the County. SJCERA also administers the Post-Employment Healthcare Custodial Fund. Although the assets of the plans (defined benefit pension and post-employment healthcare) are commingled for investment purposes, each plan's assets may be used only for the payment of benefits to eligible members and beneficiaries of that plan, in accordance with the terms of the plan. A description of the Post-Employment Healthcare Custodial Fund is located in Note 2. All notes to the financial statements apply to both plans unless indicated otherwise.

NOTE 1 – DEFINED BENEFIT PENSION PLAN DESCRIPTION

a. General Description

SJCERA is a public retirement system established by the San Joaquin County Board of Supervisors effective June 28, 1946, under the provisions of the CERL and the Public Employees' Pension Reform Act of 2013 (PEPRA). SJCERA is administered by the Board. Pursuant to Government Code Sections 31520.1 and 31520.5, the Board consists of nine regular members, one alternate retired member, and under certain circumstances an alternate safety member. Four members and the alternate member(s) are elected by SJCERA's members, four are appointed by the County Board of Supervisors, and the County Treasurer is an ex-officio member. Board members serve for a term of three years, except for the County Treasurer who is a permanent member. The Board members as of December 31, 2020, were as follows:

Michael Restuccia, Chair	Jennifer Goodman
Michael Duffy, Vice Chair	Katherine Miller
Raymond McCray, Secretary	Margo Praus
Phonxay Keokham	Adrian Van Houten
Chanda Bassett	Emily Nicholas

SJCERA is a multiple-employer retirement system covering the County and the SJC Historical Society and Museum, Local Agency Formation Commission (LAFCO), Lathrop-Manteca Rural Fire Protection District, San Joaquin County Law Library, SJC Mosquito and Vector Control District, Mountain House Community Services District, SJC Superior Court, Tracy Public Cemetery District, and the Waterloo-Morada Rural Fire Protection District. All employees appointed to full-time, permanent positions with a SJCERA participating employer become SJCERA members. Persons who commence covered employment at age 60 or older may irrevocably elect to waive membership in SJCERA. Public Health, a division of the County's Healthcare Services Department, became a participant of SJCERA effective June 27, 1993. Prior to that date, they were members of the California Public Employees' Retirement System (CalPERS). The elected officials of the County may request to become members of SJCERA. All benefits vest after attaining five years of service credit.

SJCERA has two benefit tiers:

- Tier 1 - Hired into public service before January 1, 2013
- Tier 2 - Hired into public service for the first time on or after January 1, 2013

NOTE 1 – DEFINED BENEFIT PENSION PLAN DESCRIPTION (Continued)

a. General Description (Continued)

There are two membership types:

1. **Safety Member** – Permanent employees engaged in the performance of active law enforcement, including probation officers and fire suppression employees, are considered Safety Members and are not generally covered by Social Security.

2. **General Member** – All other eligible employees not classified as Safety Members are considered General Members and are covered by Social Security.

Membership Summary

SJCERA's membership as of December 31, 2020, is presented below.

Year 2020	Retirees		Beneficiaries		Active		Deferred		Total	
	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2
General	4,552	32	658	-	2,479	3,103	1,180	726	8,869	3,861
Safety	897	2	211	-	499	336	166	41	1,773	379
Total	5,449	34	869	-	2,978	3,439	1,346	767	10,642	4,240

b. Plan Benefits

Eligibility for Retirement

Tier 1:

A Tier 1 member may retire for service at age 50 or older with five years of service credit, and at least ten years have elapsed since the date of membership. A General, Tier 1 member may retire at any age with 30 or more years of service credit. A Safety, Tier 1 member may retire at any age with 20 or more years of service credit.

Tier 2:

A Tier 2 member may retire for service with five or more years of service credit upon attaining the minimum retirement age: Age 52 for General, Tier 2 members, and Age 50 for Safety, Tier 2 members.

Any member of SJCERA, regardless of benefit tier, may retire at age 70 with no minimum service credit requirement.

Retirement Benefit

The monthly benefit amount at retirement depends upon the type of membership, years of retirement service credit, final average compensation, age at retirement, and the benefit option elected by the member.

Tier 1:

For Tier 1 members, final average compensation for purposes of computing a retirement allowance is the average monthly salary for the highest twelve consecutive months of employment. In addition to base salary, final average compensation may include other items defined as compensation earnable for retirement purposes.

NOTE 1 – DEFINED BENEFIT PENSION PLAN DESCRIPTION (Continued)

b. Plan Benefits (Continued)

Retirement Benefit (Continued)

The benefit formula for General, Tier 1 members is 2.6 percent of final average compensation for each year of service credit at age 62. The formula for Safety, Tier 1 members is 3.0 percent of final average compensation for each year of service credit at age 50 effective January 1, 2001. Members who retired prior to April 1, 1982, with 15 years or more of County service, receive an additional $50 monthly supplement commencing at age 65. Members who retired on or after April 1, 1982, but before January 1, 2001, receive a supplemental monthly benefit of $10 per year of service up to 30 years. This "Post 1982" supplemental benefit is payable if sufficient funds exist.

Federal law limits the annual compensation that may be used to calculate retirement benefits (applicable to persons who became SJCERA members on or after January 1, 1996), and the maximum annual benefit payable by SJCERA to any retired member. For 2020, the annual compensation limit under Internal Revenue Code Section 401(a)(17) is $285,000 and the annual benefit limit under Internal Revenue Code Section 415(b) is $230,000. Retired members whose statutory benefits from SJCERA would exceed the annual benefit limitation are eligible for the County's Replacement Benefit Plan.

Tier 2:

For Tier 2 members, final average compensation for purposes of computing a retirement allowance is the average monthly salary for the highest 36 consecutive months of employment. In addition to base salary, final average compensation may include other items defined as pensionable compensation.

The benefit formula for General, Tier 2 members is 2.5 percent of final compensation for each year of service credit at age 67. The formula for Safety, Tier 2 members is 2.7 percent of final compensation for each year of service credit at age 57. PEPRA specifies the maximum annual compensation that may be used to calculate retirement benefits. The limits are adjusted annually based on changes in the Consumer Price Index (CPI). For 2020, the Tier 2 annual compensation limit is $126,291 for those included in the Federal Social Security System and $151,549 for those not included.

Cost-of-Living Adjustment (COLA)

For both Tier 1 and Tier 2 members, monthly allowances are eligible for an annual COLA based on the change in the CPI for the San Francisco-Oakland-Hayward (previously San Fransisco-Oakland-San Jose) area for the previous calendar year, up to a maximum of 3.0 percent. The Bureau of Labor Statistics does not publish a CPI for San Joaquin County. When the CPI exceeds 3.0 percent in any year, the difference between the actual change in CPI (rounded to the nearest one-half percent) and the 3.0 percent ceiling is "accumulated" for future years when the change is less than 3.0 percent. The plan's actuary has determined that the CPI increased by 3.18 percent in 2019, resulting in the maximum COLA of 3.0 percent, effective in April 2020. Under the statutory requirements of the CERL, this change is rounded to the nearest half percent. Members received an increase in benefits of 3.0 percent in 2020, based on the changes in the CPI. Members' accumulated carry-over balances as of April 1, 2020, will remain the same as they were on April 1, 2019.

Terminated Members' Deferred Retirement Benefit and Withdrawal of Contributions

A member leaving employment with at least five years of service credit becomes eligible for a retirement benefit once they meet the minimum service retirement age and have not withdrawn their accumulated member contributions.

Members who terminate employment with fewer than five years of service credit may leave their accumulated contributions on deposit until they become eligible for a retirement benefit at age 70. Contributions left on deposit with SJCERA continue to accrue interest.

NOTE 1 – DEFINED BENEFIT PENSION PLAN DESCRIPTION (Continued)

b. Plan Benefits (Continued)

Terminated Members' Deferred Retirement Benefit and Withdrawal of Contributions (Continued)

Upon termination of employment, members may withdraw their member contributions plus interest. Employer-paid contributions are not refundable. Members who take a refund of contributions become ineligible for future SJCERA retirement benefits.

Death Benefits

The beneficiary of an actively employed member who dies prior to attaining five years of credited service is refunded the member's accumulated contributions, with interest, and receives one month's salary for each full year of service, up to a maximum of six months' salary.

If the death occurs after five years of credited service and is not the result of a service-related injury or disease, the surviving spouse or minor children may elect to receive a lump sum benefit of the retirement contributions including interest and one month's salary for each full year of service up to six months' salary; 60 percent of the retirement allowance the deceased member would have received if they had retired with a nonservice-connected disability retirement benefit on the date of death; or a lump sum payment of six months' salary and a reduced monthly retirement benefit. The monthly allowance to minor children is discontinued once they marry or reach age 18 (age 22 if a full-time student).

The beneficiary of a deferred member receives the member's contributions plus accumulated interest.

Upon the death of a retiree, the beneficiary receives a retirement benefit as determined by the benefit option elected by the member at the time of retirement. In addition, the beneficiary also receives a $5,000 death benefit, which is paid from retirement reserves.

NOTE 2 – POST-EMPLOYMENT HEALTHCARE CUSTODIAL FUND

The Post-Employment Healthcare Custodial Fund accounts for assets held as an agent on behalf of others. The funds held within the Post-Employment Healthcare Custodial Fund do not meet the definition of a qualifying Other Post-Employment Benefits (OPEB) Trust under Governmental Accounting Standards Board (GASB) Statement No. 74. This fund is custodial in nature and does not measure the results of operations. GASB Statement No. 84, "Fiduciary Activities," was implemented in 2019. The Post-Employment Healthcare Fund is classified as a Custodial Fund.

The Post-Employment Healthcare Custodial Fund is used as a clearing account for cash flows from employers to fund Sick Leave Bank Benefits for their eligible retired members on a pay-as-you-go basis, and for cash flows out for payment of Sick Leave Bank Benefits. The Sick Leave Bank Benefit allows accumulated unused and un-cashed sick leave to be converted to a Sick Leave Bank upon retirement at a rate of $27.65 per hour. Retired or deferred members who were employed prior to August 27, 2001, are eligible for Sick Leave Bank Benefits. In 2007, the San Joaquin County Superior Court (Court) extended eligibility for Sick Leave Bank Benefits to Court employees hired on or after August 27, 2001. Employers fund the Sick Leave Bank Benefits and employees are not required to contribute to the plan.

Sick Leave Bank Benefits may be used to pay for employer-sponsored group health, dental, and vision care insurance premiums and/or reimbursement of Medicare Part B premiums for the eligible members, their spouses, and dependents. When a retiree's Sick Leave Bank is depleted, the retiree assumes responsibility for payment of health, dental, and vision care insurance premiums.

SJCERA allocates the investments held at December 31, 2020, between the Defined Benefit Pension Plan and the Post-Employment Healthcare Custodial Fund based on the internal records of the respective accounts at December 31, 2020.

NOTE 3 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – PENSION PLAN

a. Basis of Accounting

SJCERA's financial statements are presented on the accrual basis of accounting. Employer and member contributions that should have been made in the calendar year based on the actuarially determined contribution rates or amounts are recognized as revenues of that calendar year. Contributions receivable pursuant to an installment contract are also recognized in full in the year in which the contract is made. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

b. Reporting Entity

SJCERA, governed by the Board, an independent government entity. SJCERA's annual financial statements are included in the County's financial reports as a pension trust fund.

c. Cash Equivalents

SJCERA's cash and short-term investments are managed by The Northern Trust Company (NT) and the County Treasurer.

The Northern Trust Company (NT)

Cash not required for daily operations is deposited with NT, SJCERA's master custodian for investment securities. NT pools cash from its clients pending permanent investment in its Short-Term Investment Fund (STIF). The cash in the STIF account is invested in high-grade money market instruments with very short maturities, such as bonds, notes, and other evidence of indebtedness, in accordance with SJCERA's investment policy.

The cash collateral received under the securities lending program is invested by NT through its securities lending collateral fund, which is created solely for the investment of cash collateral.

County Treasurer

Cash necessary for SJCERA's daily operations is pooled with other County funds for short-term investment by the County Treasurer. The County is responsible for the control and safekeeping of all instruments of title and for all investment of the pooled funds.

NOTE 3 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – PENSION PLAN (Continued)

d. Method Used to Value Investments

Investments are carried at fair value. Fair values for investments are derived by various methods as indicated in the following table.

Investments	Source
Publicly traded stocks and bonds, and issues of the U.S. Government and its agencies	Most recent sales price as of the fiscal year-end. International securities reflect currency exchange rates in effect at December 31, 2020.
Mortgages	Equivalent pricing to comparable Government National Mortgage Association (GNMA).
Real estate equity funds	Fair market value as provided by real estate fund manager.
Real estate title holding corporations and limited liability companies	Fair market value of the investment as provided by fund managers, unless an alternative value has been determined by the Board per SJCERA's Real Estate Investment Policy and reviewed by SJCERA's Investment Consultant.
Private equity	Fair market value as provided by the investment manager and reviewed by SJCERA's Investment Consultant.
Private placement bonds	Face value of the security subject to designated conditions such as sales restrictions or limited marketability.

e. Capital Assets

Capital assets, mainly leasehold improvements, furniture, and equipment, acquired by SJCERA are capitalized at cost. Depreciable capital assets are depreciated using the straight-line method over estimated useful lives of three to seven years for computer equipment, furniture, and other equipment. Leasehold improvements are amortized over the life of the lease. Depreciation expenses of the capital assets are included in general administrative expenses.

The change in capital assets owned for the year ended December 31, 2020, is presented below:

	Balance December 31, 2019	Additions	Deletions	Balance December 31, 2020
Original Cost	$ 1,656,720	$ 27,640	$ -	$ 1,684,360
Accumulated Depreciation and Amortization	(1,476,923)	(71,191)	-	(1,548,114)
Net Book Value	$ 179,797	$ (43,551)	$ -	$ 136,246

Depreciation and amortization expense for the year ended December 31, 2020, was $71,191.

NOTE 3 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – PENSION PLAN (Continued)

f. Operating Lease

SJCERA leases office facilities on the fourth floor of 6 S. El Dorado Street in Stockton. In June 2018 SJCERA signed a new 12-year lease with significantly reduced rent. The lease specifies the rate for each year of the term. Total rent expense for the current year was $208,923. The terms of the lease expire at the end of June 2030.

The table below presents SJCERA's future projected rent expense based on the remaining term of the lease agreement is $2,238,278.

Year Ended December 31	Total Remaining
2021	$ 214,019
2022	219,114
2023	224,210
2024	229,306
2025	234,401
Thereafter	1,117,228
	$ 2,238,278

g. Receivables

Receivables consist primarily of interest, dividends, investments in transition (traded but not yet settled), and contributions owed by participating employers. Contributions receivable pursuant to an installment contract between the member and SJCERA for purchase of service credit are recognized in full in the year in which the contract is made.

h. Use of Estimates in the Preparation of Financial Statements

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make certain estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

i. Implementation of New GASB Pronouncements

The Governmental Accounting Standards Board (GASB) releases new accounting and financial reporting standards which may have a significant impact on SJCERA's financial reporting process. SJCERA implemented the following standard in 2020:

GASB Statement No. 95 – In May 2020, GASB issued Statement No. 95, *Postponement of the Effective Dates of Certain Authoritative Guidance.* The objective of this statement is to provide temporary relief to government stakeholders in light of the COVID-19 pandemic by postponing the implementation date of future GASB pronouncements. The effective dates for GASB Statement Nos. 84, 89, 90, 91, 92, and 93 were postponed by one year for SJCERA. The effective date for GASB Statement No. 87 was postponed by 18 months for SJCERA.

NOTE 4 – CASH AND INVESTMENTS

a. Investment in Securities Lending Program

SJCERA participates in NT's pooled securities lending program. Under the agreement, NT is authorized to lend the SJCERA securities that it holds to certain SJCERA-approved borrowers. NT does not have the ability to pledge or sell collateral securities unless a borrower default occurs.

NOTE 4 – <u>CASH AND INVESTMENTS</u> (Continued)

a. Investment in Securities Lending Program (Continued)

All loans are fully collateralized with either cash, securities issued or fully guaranteed by the U.S. government, or irrevocable bank letters of credit. All collateral is held or invested by NT. The term or maturity of the securities loaned is generally matched with the term or maturity of the investment of the cash collateral. U.S. securities are loaned with collateral valued at 102 percent of the fair value of the securities plus any accrued interest. Non-U.S. securities are loaned with collateral valued at 105 percent of the fair value of the securities plus any accrued interest.

As of December 31, 2020, SJCERA had the following securities out on loan.

	Fair Value of Securities Lent	Cash Collateral Value	Non-Cash Collateral Value
U.S. Equities	$ 6,480,436	$ 4,445,007	$ 2,234,099
U.S. Debt Securities	119,614,338	78,905,842	43,461,396
Total U.S. Securities	126,094,774	83,350,849	45,695,495
Non-U.S. Equities	5,314,459	-	5,659,714
Non-U.S. Debt Securities	54,601,088	238,348	57,961,882
Total Non-U.S. Securities	59,915,547	238,348	63,621,596
Total	$ 186,010,321	$ 83,589,197	$ 109,317,091

The cash collateral is reported on the financial statements as an asset and as a liability of SJCERA. Securities lending transactions collateralized by letters of credit or by securities that SJCERA does not have the ability to pledge or sell unless the borrower defaults are not be reported as assets and liabilities in accordance with GASB Statement No. 28. The potential risks involved in the securities lending program include borrower bankruptcy, collateral deficiencies, settlement problems, corporate actions, dividends, and interest. SJCERA's pro-rata share of net income derived from NT's pooled securities lending transactions in 2020 was $581,476. As of December 31, 2020, there was no credit risk exposure to borrowers because the collateral exceeded the amount borrowed. The securities on loan at year-end were $186 million and the collateral received for those securities on loan was $193 million.

b. Cash and Short-Term Investments

The carrying value of cash and short-term investments as of December 31, 2020, consists of the following.

	Amount
Cash and Cash Equivalents - Custodian	$ 146,198,749
Cash and Cash Equivalents - County Treasury	233,752
Total Cash and Cash Equivalents	146,432,501
Cash Collateral - Securities Lending - Custodian	83,589,197
Total Cash and Short-Term Investments	$ 230,021,698

NOTE 4 – CASH AND INVESTMENTS (Continued)

c. Long-Term Investments

SJCERA owned the following long-term investments as of December 31, 2020.

	Fair Value
Investments-Categorized	
Stable Fixed Income	$ 322,514,912
Credit	479,100,892
Global Public Equities	1,258,623,730
Private Appreciation	456,340,240
Risk Parity	409,233,403
Crisis Risk Offset (CRO)	463,660,827
Total Investments-Categorized	3,389,474,004
Investments-Not Categorized	
Investments Held by Broker-Dealers Under Securities Loans	
U.S. Equities	4,445,007
U.S. Debt Securities	78,905,842
Non-U.S. Debt Securities	238,348
Total Investments Held by Broker-Dealers Under Securities Loans	83,589,197
Total Investments	$ 3,473,063,201

GASB Statement No. 40, *Deposits and Investments Risk Disclosures,* established and modified disclosure requirements related to the following:

- Credit risk
- Custodial credit risk
- Concentration of credit risk
- Interest rate risk
- Foreign currency risk

NOTE 4 – CASH AND INVESTMENTS (Continued)

c. Long-Term Investments (Continued)

Credit Risk – Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. SJCERA's investment policy seeks to maintain a diversified portfolio of fixed income instruments in order to obtain the highest total return for the fund at an acceptable level of risk within the asset class. To control such risk, credit quality guidelines have been established for the separately managed accounts. The following table depicts the value of the investments exposed to those risks and the corresponding credit ratings from Standard & Poor's (S&P) as of December 31, 2020.

Quality Ratings	Fair Value
AAA	$ 173,054,029
AA	7,679,276
A	21,351,376
BAA	69,232,970
BA	25,377,862
B	12,456,190
CAA	7,687,211
CA	11,467,722
C	92,250
Not Rated	309,467,902
Subtotal	637,866,788
U.S. Government Agencies - Implied AAA (FNMA, FHLB, FHLMC, FFCB, SLMA, Other)	163,749,016
Total Investments in Fixed Income Securities	$ 801,615,804

Custodial Credit Risk – The custodial credit risk represents the risk that, in the event of the failure of the counterparty of a transaction, SJCERA will not be able to recover the value of deposits and investments or collateral securities that are in the possession of an outside party.

Deposits

The deposits with the County Treasurer are uninsured but secured by public funds of the pledging banks. The pool's investments, all held in the County's name, are short-term and include U.S. Treasury Bills, certain Federal agencies' instruments, bankers' acceptances, "prime" commercial paper, certificates of deposit, repurchase agreements, and the State Treasurer's Local Agency Investment Fund.

The cash deposits with NT are uninsured and uncollateralized. All underlying investments in the commingled STIF account are not registered in SJCERA's name.

Investment

Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in SJCERA's name, and held by the counterparty. SJCERA's investment securities are not exposed to custodial credit risk because all securities are held by SJCERA's custodial bank in SJCERA's name, or by other qualified third party administrator trust accounts.

NOTE 4 – CASH AND INVESTMENTS (Continued)

c. Long-Term Investments (Continued)

Concentration of Credit Risk – This risk represents the potential loss attributable to the magnitude of SJCERA's investments in a single issuer. As of December 31, 2020, for separately managed investment accounts, SJCERA did not hold any investments within any one issuer that would represent five percent (5%) or more of plan fiduciary net position.

Interest Rate Risk – Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Duration is a measure of the price sensitivity of a fixed income portfolio to changes in interest rates. It is calculated as the weighted average time to receive a bond's coupon and principal payments. The longer the duration of a portfolio, the greater its price sensitivity to changes in interest rates.

As of December 31, 2020, SJCERA had the following interest rate sensitive investments.

Investment Type	Fair Value	Weighted Average Maturity-Years
U.S. Government and Agency Instruments:		
U.S. Government Mortgages	$ 71,614,289	23.85
U.S. Government Bonds	199,354,457	18.48
Government-Issued Commercial Mortgage-Backed	1,518,236	14.58
Municipal/Revenue Bonds	2,013,772	15.46
Agency	4,080,392	15.56
Short-Term Bills and Notes	63,497,621	0.09
Total U.S. Government and Agency Instruments	342,078,767	
Corporate Securities:		
Asset Backed Securities	30,903,544	16.78
Collateralized Bonds	2,000	25.53
Commercial Mortgage-Backed	17,608,470	16.03
Corporate Bonds	126,072,158	14.35
Corporate Convertible Bonds	1,324,196	29.02
Non-Government Backed Collateralized Mortgage Obligations (CMOs)	41,422,387	19.81
Total Corporate Securities	217,332,755	
Real Estate Financing	242,204,282	
Total Fixed Income Securities	$ 801,615,804	

Foreign Currency Risk – Foreign currency risk is the risk that changes in exchange rates may adversely affect the fair value of an investment. SJCERA's external non-U.S. equity and fixed income investment managers may invest in international securities in accordance with their investment guidelines pertaining to these types of investments.

Currency hedging on an unleveraged basis is permitted by non-U.S. equity managers as a strategy to protect against losses due to currency translations (defensive hedging). However, it is expected that the primary sources of added value for non-U.S. equity investment managers will be stock and country selection, with currency management focused on limiting losses due to fluctuations in currency values. Managers may purchase or sell currency on a spot basis to accommodate securities settlements.

NOTE 4 – CASH AND INVESTMENTS (Continued)

c. Long-Term Investments (Continued)

Managers may invest in developed market currencies and emerging market currencies in accordance with their investment guidelines. Permitted derivative instruments are currency spots, currency forward contracts (deliverable or non-deliverable), currency futures, options on currency forwards or futures, and currency swaps. Other investments, contracts, or positions that, in the managers' judgment, are of similar purpose and character and equal credit quality and marketability to any of the investments above, are also permissible.

SJCERA's exposure to foreign currency risk in U.S. dollars as of December 31, 2020, follows.

Currency	Fair Value
British Pound Sterling	$ 4
Canadian Dollar	659,190
Euro Currency	104,840
Total	$ 764,034

d. Fair Value Measurement

In accordance with GASB Statement No. 72, fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The statement establishes a fair value hierarchy based on three types of input to develop the fair value measurements for investments. The level is determined based on the lowest level of input significant to the measurement in its entirety. Assets and liabilities measured at fair value are classified into one of the following categories:

Fair Value Hierarchy

Level 1 – reflects unadjusted quoted prices in active markets for identical assets or liabilities accessible on the measurement date. Observable markets include exchange markets, dealer markets, and brokered markets.

Level 2 – reflects similar observable inputs other than quoted market prices. It includes quoted prices for similar assets in active markets or quoted prices for identical or similar assets in inactive markets.

Level 3 – reflects prices based on unobservable sources. They should be used only when relevant Level 1 and Level 2 inputs are unavailable.

NOTE 4 – CASH AND INVESTMENTS (Continued)

d. Fair Value Measurement (Continued)

The following table presents fair value measurements as December 31, 2020.

Investments by Fair Value Level	Total Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Equities				
Common Stocks	$ 38,322,657	$ 38,316,813	$ 5,844	$ -
Preferred Stocks	1,063,050	1,063,050	-	-
Total Equities	**39,385,707**	**39,379,863**	**5,844**	**-**
Fixed Income				
Asset Backed Securities	30,903,544	-	30,903,544	-
Collateralized Bonds	2,000	-	2,000	-
Commercial Mortgage-Backed	17,608,470	-	17,608,470	-
Corporate Bonds	126,072,158	-	126,072,158	-
Corporate Convertible Bonds	1,324,196	-	1,324,196	-
Funds - Corporate Bonds	55,681,347	-	55,681,347	-
Funds - Government Bonds	16,240,336	-	16,240,336	-
Funds - Fixed Income ETF	4,257,534	4,257,534	-	-
Government Issued Commercial Mortgage-Backed	1,518,236	-	1,518,236	-
Government Agencies	4,080,392	-	4,080,392	-
Government Bonds	199,354,457	-	199,354,457	-
Government Mortgage-Backed Securities	71,614,289	-	71,614,289	-
Municipal/Provincial Bonds	2,013,772	-	2,013,772	-
Non-Government Backed CMOs	41,422,387	-	41,422,387	-
Other Fixed income	103,307,517	-	-	103,307,517
Total Fixed Income	**675,400,635**	**4,257,534**	**567,835,584**	**103,307,517**
Other Assets				
Short-Term Bills and Notes	63,964,064	466,443	63,497,621	-
Futures Contracts	4,333,069	-	4,333,069	-
Option Contracts	5,413,749	-	5,413,749	-
Swaps	357,450	-	357,450	-
Total Other Assets	**74,068,332**	**466,443**	**73,601,889**	**-**
Collateral from Securities Lending	**83,589,197**	**-**	**83,589,197**	**-**
Total Investments by Fair Value Level	**872,443,871**	**$ 44,103,840**	**$ 725,032,514**	**$ 103,307,517**
Investments Measured at the Net Asset Value (NAV)				
Global Equities Funds	1,154,322,184			
Emerging Markets Global Equity	66,032,133			
Fixed Income Funds	184,220,344			
Private Credit	45,534,919			
Risk Parity Funds	409,233,402			
Multi-Strategy Funds	220,141,833			
Hedge Funds - Fixed Income	19,764,224			
Private Equity Funds	227,255,138			
Private Real Estate Funds	274,115,153			
Total Investments Measured at NAV	**2,600,619,330**			
Total Investments	**$ 3,473,063,201**			

Investments Measured at the Net Asset Value (NAV)

SJCERA measures certain investments that do not have a readily determinable fair value, such as hedge funds, commingled funds, and private equity funds, using NAV as a practical expedient. The SJCERA investments valued at NAV are the majority holdings for SJCERA portfolio. The following table presents the unfunded commitments, redemption frequency (if currently eligible), and the redemption notice period for SJCERA investments measured at NAV.

NOTE 4 – CASH AND INVESTMENTS (Continued)

d. Fair Value Measurement (Continued)

The following table presents the investments measured at NAV as December 31, 2020:

Investments Measured at NAV	Fair Value	Unfunded Commitment	Redemption Frequency If Currently Eligible	Redemption Notice Period
Global Equities Funds	$ 1,154,322,184	$ -	Daily, Weekly, Semi-Monthly, Monthly	1-30 days
Emerging Markets Global Equity	66,032,133	-	Weekly	T-4 Days
Fixed Income Funds	184,220,344	7,025,971	Daily, Not Eligible	1 day
Private Credit	45,534,919	195,124,301	Not Applicable	Not Applicable
Risk Parity Funds	409,233,402	-	Monthly	5-15 days
Multi-Strategy Funds	220,141,833	-	Daily, Weekly, Semi-Monthly, Monthly	0-15 days
Hedge Funds - Fixed Income	19,764,224	12,717,985	Daily, Quarterly, Not Eligible	0-60 days
Private Equity Funds	227,255,138	115,082,095	Not Eligible	Not Applicable
Private Real Estate Funds	274,115,153	84,715,326	Quarterly, Not Eligible	5-90 Days, Not Applicable
Total Investments Measured at NAV	$ 2,600,619,330	$ 414,665,678		

Global Equities Funds - Assets within these funds represent shares of ownership in U.S. and international corporations, including publicly traded common stocks, American and Global Depository Receipts, as well as Real Estate Investment Trusts (REITS).

Emerging Markets Global Equity - Assets within this segment represent a diversified portfolio seeking to identify growing countries and the companies that complement our core Equity holdings.

Fixed Income Funds - Funds within this segment represent debt instruments of corporations, government or agencies characterized by a fixed or variable interest rate and stated maturity date, including marketable bonds.

Private Credit - Assets within this segment are defined by non-bank lending where the debt is not issued or traded on the public markets.

Risk Parity Funds - Funds within this segment represent portfolios that seek to balance the risk characteristics of assets across multiple segments. These portfolios generally invest in equities, bonds, and commodities among other assets.

Multi-Strategy Hedge Funds - Funds within this segment can involve holding both long and short positions in securities instead of traditional long-only investments in publicly traded investments. Portfolios also may utilize derivatives or hedging strategies as well. Multi-Strategy managers utilized various investment segments to invest, including but not limited to, equities, bonds, currency, and commodities.

Fixed Income Hedge Funds - Funds within this segment can involve holding both long and short positions in securities instead of traditional long-only investments in publicly traded investments. Portfolios also may utilize derivatives or hedging strategies as well. These investment funds generally focus on opportunities within fixed income markets.

Private Equity Funds - These funds are illiquid allocations that invest primarily in buyout funds, venture capital, and debt/special situations. These funds are not eligible for redemption and investment periods are generally between five and 15 years.

NOTE 4 – CASH AND INVESTMENTS (Continued)

d. Fair Value Measurement (Continued)

Private Real Estate Funds - These funds are defined as those investments that are unleveraged or leveraged positions in real property. The portfolio may pursue direct privately held partnership interests, fund-of-funds interests, and direct holdings for its real estate allocation.

e. Summary of Investment Policy

The CERL vests the Board with exclusive control over SJCERA's investment portfolio. The Board established investment policies in accordance with applicable local, State, and Federal laws. The Board members exercise authority and control over the management of SJCERA's assets by setting policy, which the staff executes either internally or through the use of external prudent experts. The Board provides oversight and guidance subject to the following basic fiduciary responsibilities:

- Solely in the interest of, and for the exclusive purpose of, providing economic benefits to participants and their beneficiaries.

- With the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character with like objectives.

- Diversify the investments of the plans so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances, it is clearly prudent not to do so. Diversification is applicable to the deployment of the assets as a whole.

f. Target Asset Allocation

The Board completed an asset-liability study during 2019, facilitated by its investment consultant, Meketa Investment Group, and its consulting actuary, Cheiron, Inc. A key aspect of the study was the Board's consensus on how it defines risk and determining its tolerance for risk, which plays a significant role in the selection of the policy mix of assets that comprise the strategic asset allocation for the investment program.

On September 13, 2019, the Board adopted a revised strategic asset allocation policy for SJCERA's investments. On October 11, 2019, the Board adopted an Implementation Plan which describes how the new strategic allocation is to be implemented. The Implementation Plan uses an "evolving policy" framework which allows the portfolio to be adjusted over time, with a target completion deadline of June 30, 2021. The plan also notes that SJCERA will move faster, depending on market conditions.

The strategic asset allocation is expected to improve the likelihood of the plan accomplishing its primary financial objective: to earn a long-term return that, coupled with projected contributions, is projected to be sufficient to attain full funding in the long-term while avoiding substantial deterioration in funded status along the way.

NOTE 4 – CASH AND INVESTMENTS (Continued)

f. Target Asset Allocation (Continued)

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
CURRENT ASSET ALLOCATION POLICY

Asset Class	Policy Allocation Percentage	Purpose	Main Risk Exposures
Aggressive Growth	10.00%	Return	Growth
Traditional Growth	32.00%	Return	Growth, Currency
Risk Parity	10.00%	Balanced Return	Growth, Interest Rates, Inflation
Credit	17.00%	Income, Growth	Growth
Core Real Assets	6.00%	Income, Growth	Growth, Interest Rates
Principal Protection	10.00%	Income, Stability	Interest Rates
Crisis Risk Offset (CRO)	15.00%	Return and Liquidity during a Growth Crisis	Interest Rates, Variables based on Trends, Alternative Factor Risks
	100.00%		

NOTE 5 – DERIVATIVE FINANCIAL INSTRUMENTS

The Board has authorized certain investment managers to invest in, or otherwise enter into, transactions involving derivative financial instruments when such transactions are consistent with the investment objectives established for a specific investment manager's assignment. A professional investment consultant is employed to monitor and review each investment manager's securities and derivative position as well as the manager's performance relative to established benchmark rates of return and risk measures. Derivative activities must be evaluated within the context of the overall portfolio performance and cannot be evaluated in isolation.

Investment derivatives involve the following types of risks.

Market Risk: Market risk is the risk of change in value of an instrument in response to changes in a market price or index. While all investments are subject to market risk, derivatives often have a higher degree of market risk than other types of investment instruments. Values of cash securities containing derivative features are often more susceptible to market risk than other types of fixed income securities because the amounts and/or timing of their scheduled cash flows may fluctuate under changing market conditions, according to their contractual terms. For other types of derivatives, amounts of contractual cash flows may be either positive or negative depending upon prevailing market conditions relative to the reference prices or rates, and thus the values of such instruments may be positive or negative, despite the fact that little or no cash is initially exchanged to enter into such contacts.

NOTE 5 – DERIVATIVE FINANCIAL INSTRUMENTS (Continued)

Credit Risk: Credit risk of cash securities containing derivative features is based upon the credit worthiness of the issuers of such securities. It includes the risk that counterparties to contracts will not perform and/or the public exchange will not meet its obligation to assume this counterparty risk. Exchange traded derivatives are generally considered to be of lower credit risk than over-the-counter derivatives due to the exchange's margin requirements. The derivative investments are exchange traded, and credit risk is limited to the clearing corporation. As of December 31, 2020, collateral for derivatives was $8.4 million. This represents the maximum loss that would be recognized at the reporting date if all counterparties failed to perform as contracted.

The following Credit Risk Analysis schedule discloses the counterparty credit ratings of SJCERA's derivative investments as December 31, 2020.

Credit Risk Analysis
As of December 31, 2020

	S&P Credit Rating	
Derivative Type	**Not Rated**	**Total Fair Value**
Swap Agreements	$ (65,369)	$ (65,369)
Total	$ (65,369)	$ (65,369)

Interest Rate Risk: Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Interest rate swaps are an example of an investment that has a fair value that is highly sensitive to interest rate changes. SJCERA is exposed to interest rate risk in the form of futures contracts and option contracts in the following global government bond markets.

Interest Rate Risk
As of December 31, 2020

Global Bonds	**Futures Contracts**	**Option Contracts**
Canadian Government Bond	$ 19,668,486	$ -
Long Gilt	10,374,340	-
Japanese Government Bond	(17,652,287)	-
Euro Bond	19,738,566	-
U.S. Ten Year Notes	19,192,859	-
Eurodollars	-	81,950
Total	$ 51,321,964	$ 81,950

NOTE 5 – DERIVATIVE FINANCIAL INSTRUMENTS (Continued)

SJCERA measures derivative interest rate risk using duration with varying maturities of less than three months to more than 10 years. At December 31, 2020, SJCERA had the following investment derivative interest rate risks.

Interest Rate Risk Analysis
As of December 31, 2020
(Dollars in Thousands)

Derivative Type	Notional Value	Fair Value	< 3 Months	3 to 6 Months	6 to 12 Months	1 to 5 Years	5 to 10 Years	10+ Years
Futures Contracts	$ 5,821	$ -	$ 5,821	$ -	$ -	$ -	$ -	$ -
Swap Agreements	-	656	-	(65)	-	721	-	-
Credit Contracts	-	(300)	-		-	(300)	-	-
Total	$ 5,821	$ 356	$ 5,821	$ (65)	$ -	$ 421	$ -	$ -

Foreign Currency Risk: Foreign currency risk is the risk that changes in currency exchange rates will adversely affect the fair value of an investment. Currency forward contracts represent foreign exchange contracts that are used to control currency exposure and facilitate the settlement of international security purchase and sale transactions. As of December 31, 2020, SJCERA had the derivative foreign currency exposures listed in the table below.

FOREIGN CURRENCY RISK ANALYSIS
As of December 31, 2020

Currency	Futures Contracts	Equity Contracts	Options Contracts
Australian Dollar	$ 12,782,000	$ -	$ -
Canadian Dollar	14,101,200	2,422,841	-
Euro Currency	12,552,150	-	147,675
British Pound Sterling	12,463,838	-	154,094
Japanese Yen	12,353,475	-	-
Swiss Franc	12,454,200	-	-
Total	$ 76,706,863	$ 2,422,841	$ 301,769

Derivatives are carried as assets when the fair value is positive, and as liabilities when the fair value is negative. Gains and losses from derivatives are included in net investment income (loss). For financial reporting purposes, all SJCERA derivatives are classified as investment derivatives.

Derivative financial instruments held by SJCERA from time to time consist of the following.

Futures Contracts

A futures contract represents an agreement to buy (long position) or sell (short position) an underlying asset at a specified future date for a specified price. Payment for the transaction is delayed until a future date, which is referred to as the settlement or expiration date. Futures contracts are standardized contracts traded on organized exchanges.

Option Contracts

An option contract is a type of derivative security in which a buyer (purchaser) has the right, but not the obligation, to buy or sell a specified amount of an underlying security at a fixed price by exercising the option before its expiration date. The seller (writer) has an obligation to buy or sell the underlying security if the buyer decides to exercise the option.

NOTE 5 – <u>DERIVATIVE FINANCIAL INSTRUMENTS</u> (Continued)

Swap Agreements

A swap is an agreement between two or more parties to exchange a sequence of cash flows over a period of time in the future. No principal is exchanged at the beginning of the swap. The cash flows the counterparties exchange are tied to a “notional” amount. A swap agreement specifies the time period over which the periodic payments will be exchanged. The fair value represents the gains or losses as of the prior marking-to-market.

All investment derivative positions are included as part of investments at fair value on the Statement of Fiduciary Net Position. All changes in fair value are reported as part of net appreciation/(depreciation) in fair value of investments in the Statement of Changes in Fiduciary Net Position. Investment information was provided either by SJCERA’s investment managers or SJCERA’s custodian bank. The Investment Derivatives schedule below is classified by type and reports the fair value balances and notional amounts of derivatives outstanding as of and for the year ended December 31, 2020.

Investment Derivatives
As of December 31, 2020

Derivative Type	**Notional Amount**	**Fair Value**
Futures Contracts	$ 163,441,710	$ 4,333,069
Option Contracts	2,925,301	5,413,749
Swap Agreements	-	357,450
Total	$ 166,367,011	$ 10,104,268

NOTE 6 – <u>CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE</u>

<u>Defined Benefit Pension Plan</u>

The funding objective of the plan is to establish contribution rates that, together with investment earnings, will provide sufficient assets to pay all benefits under the plan. The County and participating employers are required to contribute a percentage of their annual covered payroll at actuarially determined rates. Actuarial valuations involve estimates and make assumptions about the probability of events far into the future, therefore, actuarially determined rates are subject to continual revision as results are compared to past expectations and new estimates are made about the future.

<u>Employer Contributions</u>

For 2020, the required employer contribution rates including normal cost and amortization of the unfunded actuarial liability (UAL) were determined by using the valuation report as of January 1, 2019.

In 2020, the County made additional $21,504,251 contributions. San Joaquin County Superior Court made additional $585,000 contributions to decrease its share of the UAL. These additional annual contributions decrease only that individual employer’s share of the UAL and not the liability for other entities participating in SJCERA.

NOTE 6 – CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE (Continued)

Employer Contributions (Continued)

The total market value of the additional contributions, including prior year amounts and accumulated with interest at the plan's actual rate of return, was $94,333,794 as of December 31, 2020. These assets are included in the calculation of the UAL and funded ratio. However, under the funding policy with respect to these reserves requested by the contributors and approved by the Board, these assets are not currently included in the calculation of the employer contribution rates.

EMPLOYER RETIREMENT CONTRIBUTION RATES		**2020** (Per 1/1/2019 Valuation)	
Expressed as a Percentage of Active Member Payroll	Normal Cost	UAL Amortization	Total
TIER 1			
For General Members:			
Paying Basic Rate Only *(G.C. 31621.3)*	19.18%	28.10%	47.28%
Paying Basic Rate with COLA Cost Share	16.41%	28.10%	44.51%
Paying 114% of Basic Rate with COLA Cost Share	15.88%	28.10%	43.98%
For Safety Members:			
Paying Basic Rate Only *(G.C. 31639.5)*	31.69%	55.83%	87.52%
Paying Basic Rate with COLA Cost Share	26.94%	55.83%	82.77%
Paying 133% of Basic Rate with COLA Cost Share	25.41%	55.83%	81.24%
Composite Total for General and Safety Combined:			
Paying Basic Rate Only *(G.C. 31621.3)*	21.51%	33.21%	54.72%
Paying Basic Rate with COLA Cost Share	18.37%	33.21%	51.58%
Paying 114%/133% of Basic Rate with COLA Cost Share	17.65%	33.21%	50.86%
TIER 2			
For General Members:	9.47%	28.10%	37.57%
For Safety Members:	14.67%	55.83%	70.50%
Composite Total for General and Safety Combined:	10.03%	30.97%	41.00%

The composite employer contribution rates (for General and Safety Members combined) expressed as a percentage, or range of percentages, of covered payroll for the past seven years are as follows:

Contribution Year	Tier 1	Tier 2
2020	50.86% - 54.72%	41.00%
2019	48.09% - 51.81%	38.60%
2018	45.18% - 48.75%	35.80%
2017	44.31% - 47.91%	34.48%
2016	42.06% - 45.58%	31.95%
2015	39.84% - 43.06%	30.34%
2014	36.59% - 38.93%	29.43%

NOTE 6 – CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE (Continued)

Member Contributions

Member contributions are deducted from the member's salary on a biweekly basis.

Tier 1 member contribution rates are calculated by the actuary using the Entry Age Normal Funding Method (Cost Method). Most Tier 1 members pay one-half of the cost of pre-funding post-retirement COLAs, and some pay an additional percentage of the basic member contribution rate, which reduces the employers' normal cost. Tier 2 members pay a single contribution rate adjusted annually. The required contribution rates are expressed as a percentage of covered payroll. The 2020 contribution rates were determined using the actuarial valuation performed as of January 1, 2019.

Tier 1 members pay contributions based upon their membership category, General or Safety, and age at entry into membership. General Tier 1 members employed before March 7, 1973, and all Safety Tier 1 members stop paying member contributions when they have 30 years of service, but continue to accrue retirement service credit for subsequent active employment subject to membership.

Tier 2 members pay contributions based upon their membership category equal to one-half of the normal cost of the applicable benefits.

In 2020, member contributions totaled $40,568,995 and employer contributions totaled $240,700,988. Member contributions increased by $2.47 million, or 6.48 percent, over the prior year, and employer contributions increased by $15.2 million, or 6.73 percent, over the prior year.

NOTE 7 – FIDUCIARY NET POSITION RESTRICTED FOR PENSION BENEFITS

As required by the CERL and the Board's policy, the following reserves from Fiduciary Net Position Restricted for Pension Benefits must be established and used to account for the members', employers', and retirees' contributions. The Unappropriated Earnings Reserve was insufficient to fully credit all reserves interest earnings at the 7.00 percent assumption rate. In addition, there were no excess earnings to fund the Contingency Reserve in 2020.

a. Active and Deferred Members' Reserve

This reserve represents the cumulative contributions made by active members, net of refunds to the members, plus the investment earnings credited to the reserve at assumption rates determined by the actuary.

b. Employer Advance Reserves

This reserves represent the cumulative contributions made by the County and participating employers. Interest earnings are credited semi-annually to the reserves at the assumption rate determined by the actuary if sufficient unappropriated earnings reserve funds exist.

c. County Additional 5% Contributions Reserve

This reserve represents the additional contributions in excess of actuarially determined contributions paid by the County in order to decrease its share of the UAL.

d. Retired Members' Reserves

These reserves are established to account for the unpaid retirees' pension benefits. Upon a member's retirement, the member's accumulated contributions are transferred from the Active and Deferred Members' Reserve account to the Retired Members' Annuity Reserve account. In addition, the actuarially determined amount of the member's vested interest is transferred from the Employer Advance Reserves account to the Retired Members' Pension Reserve account.

NOTE 7 – FIDUCIARY NET POSITION RESTRICTED FOR PENSION BENEFITS (Continued)

d. Retired Members' Reserves (Continued)

The Retired Members' Reserve account at December 31, 2020, includes the authorized "Purchasing Power" benefit reserve and additional pension benefits specified in the pre-April 1, 1982 class-action lawsuit settlement agreement. These benefits are explained in Note 1b. In accordance with the Statement of Reserve Policy, the post-April 1, 1982 Settlement Reserve is a Special Reserve, which is not included in valuation assets.

e. Contingency Reserve

Earnings of the retirement fund during any year in excess of the total interest credited to contributions and reserves during the year remain in the fund as a reserve against deficiencies in interest earnings in other years, losses on investments, and other contingencies. The CERL provides that when the contingency reserve exceeds one percent of total assets, the retirement board may transfer all or any part of the surplus as specified in Government Code Section 31592.2. In June 2017, the Board amended the Reserve Policy, lowering the Contingency Reserve target from three percent to one percent of total assets. The Contingency Reserve is 0 percent of the fair value of total assets at December 31, 2020.

f. Market Stabilization Designation Reserve

This "designation" account is used to further minimize the impact of the fluctuations in the fair value of the investments owned by SJCERA. It represents the difference between the actuarial value of assets and the fair value of assets at year-end. It is the balance of deferred earnings and losses created by a five-year smoothing of actual gains and losses compared to the assumed investment rate of return.

g. Unappropriated Earnings Reserve

The Unappropriated Earnings Reserve (UER) is used to accumulate investment income earned by SJCERA, net of the investment expenses and SJCERA's administration cost. From this unappropriated earnings account, interest is credited to various reserve accounts. In addition, at the Board's discretion and subject to the settlement agreement in 2001, this account may also be used, from time to time, to stabilize the County's and the special districts' actuarially determined contributions, and to fund the market stabilization and contingency reserves accounts.

h. Class Action Settlement – Post 4/1/82 Reserve

The Class Action Settlement – Post 4/1/82 Reserve designates the fund that pays the Post-82 Class Action Settlement allowances for the lifetime of the members and beneficiaries, who retired between April 1, 1982, and December 31, 2000, to the extent sufficient funds are available.

i. Mosquito and Vector Control District Additional Contributions Reserve

This reserve represents the additional contributions in excess of actuarially determined contributions paid by the MVCD in order to decrease its share of the UAL.

j. Superior Court Additional Contribution Reserve

This reserve represents the additional contributions in excess of actuarially determined contributions paid by the Superior Court in order to decrease its share of the UAL.

NOTE 7 – FIDUCIARY NET POSITION RESTRICTED FOR PENSION BENEFITS (Continued)

k. Summary of Reserves

A summary of reserved and designated net position at December 31, 2020, is as follows.

Reserves:	
Active and Deferred Members	$ 432,960,500
Employer Advance	1,735,539,237
County Additional 5% Contributions	94,779,593
MVCD Additional Contributions	173,374
Court Additional Contributions	2,187,072
Retired Members	1,214,247,124
Class Action Settlement - Post-4/1/82	70,425
Market Stabilization Designation	66,754,924
Total Reserves	$ 3,546,712,249

NOTE 8 – NET PENSION LIABILITY AND SIGNIFICANT ASSUMPTIONS

a. Net Pension Liability of Employers

SJCERA is a cost sharing, multiple-employer pension plan with a reporting date of December 31, 2020. Measurements as of the reporting date are based on the fair value of assets as of December 31, 2020, and the total pension liability as of the valuation date, January 1, 2020, projected to December 31, 2020. There were no significant events between the valuation date and the measurement date, so the updated procedures consisted of updated actuarial assumptions, plus the addition of service cost and interest cost offset by benefit payments.

The net pension liability was measured as of December 31, 2020, and determined based upon rolling forward the total pension liability from the actuarial valuation as of January 1, 2020. The net pension liability (i.e., the pension plan's liability determined in accordance with GASB Statement No. 67 less the fiduciary net position) is shown below.

Employers' Net Pension Liability (GASB Statement No. 67)

As of December 31, 2020 (Dollars in Millions)		
Total Pension Liability	$	5,223
Plan Fiduciary Net Position		3,547
Employers' Net Pension Liability	$	1,676
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability		67.9%

b. Actuarial Methods and Significant Assumptions

SJCERA retains an independent actuarial firm to conduct actuarial valuations of the pension plan, monitor SJCERA's funding status, and establish the contribution rate requirements for the pension plan. Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events into the future. Examples include assumptions about future employment, mortality, and cost trends. Actuarially determined amounts are subject to continual review or modification as actual results are compared with past expectations and new estimates are made about the future. Projections of benefits for financial reporting purposes are based on the plan and include the types of benefits provided at the time of each valuation and the

b. Actuarial Methods and Significant Assumptions (Continued)

historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in accrued actuarial liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations. The total pension liability was determined by an actuarial valuation as of January 1, 2020, using the following actuarial assumptions applied to all prior periods included in the measurement in accordance with the requirements of GASB Statement No. 67.

In the January 1, 2020 actuarial valuation, the Entry Age Normal Funding Method (Cost Method) was used. The actuarial assumptions include a 7.00 percent investment rate of return, annual inflation rate of 2.75 percent per year, and projected salary increases at 3.00 percent per year for the year ended 2020. The actuarial value of the plan's assets was based on a five-year smoothing of actual versus expected returns.

In 2015, the SJCERA Board changed the funding policy to amortize any unexpected changes in the UAL over a period of 15 years as a level percent of pay, with new amortization layers each year. The 2008 Extraordinary Actuarial Loss, which is amortized over a closed 30-year period, has 19 years remaining. The remaining UAL as of December 31, 2014, which is amortized over a closed 19-year period, has 13 years remaining. The new additions to the UAL on and after January 1, 2014, are amortized over 15 years. The single amortization period for these streams of payments is 15 years as of January 1, 2020. The amortization period for each UAL layer will decrease each year.

The total pension liability for the pension plan was determined by an actuarial valuation as of January 1, 2020, and accepted actuarial procedures were applied to project the total pension liability to December 31, 2020. Key methods and assumptions used in the latest actuarial valuations as of January 1, 2020, follow.

NOTE 8 – NET PENSION LIABILITY AND SIGNIFICANT ASSUMPTIONS (Continued)

b. Actuarial Methods and Significant Assumptions (Continued)

Key methods and assumptions used in the latest actuarial valuations are presented below:

Valuation Date	January 1, 2020
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll with Separate Amortization Periods for Extraordinary Actuarial Gains or Losses
Remaining Amortization Period	2008 Extraordinary Actuarial Loss - 19 years Remaining UAL as of January 1, 2014 - 13 years Subsequent Unexpected Changes in UAL after January 1, 2014 - 15 years Single Equivalent Period as of January 1, 2020 - 15 years
Asset Valuation Method	Smoothed Actuarial Value (5 years) 80% - 120% Asset Corridor
Actuarial Assumptions:	
Discount Rate	7.00%, Net of Pension Plan Investment Expenses, Including Inflation
Projected Salary Increases	3.00%, Plus Service-Based Rates
General Inflation Rate	2.75%
Cost-of Living Adjustments	2.60% Per Year Assumed
Healthy Mortality	Mortality rates for General active members are based on the sex distinct Public General 2010 Above-Median Income Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2018, and a partial credibility adjustment of 1.05 for females and no adjustment for males. Mortality rates for Safety active members are based on the sex distinct Public Safety 2010 Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2018, and a partial credibility adjustment of 0.98 for males and 1.06 for females. 10% of Safety member active deaths are assumed to occur in the line of duty. Mortality rates for healthy General annuitants and General beneficiaries are based on the sex distinct Public General 2010 Above-Median Income Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2018, and a partial credibility adjustment of 1.04 for females and no adjustment for males. Mortality rates for Safety annuitants and Safety beneficiaries are based on the sex distinct Public Safety 2010 Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2018, and a partial credibility adjustment of 1.02 for males and 1.05 for females.
Disabled Mortality	Mortality rates for General disabled annuitants are based on the sex distinct Public General Disabled Annuitant 2010 Mortality Table, with a generational mortality improvements projected from 2010 using Projection Scale MP-2018, with a partial credibility adjustment of 1.04 for males and 1.07 for females. Mortality rates for Safety disabled annuitants are based on the sex distinct Public Safety Disabled Annuitant 2010 Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2018, with a partial credibility adjustment of 1.04 for males and 0.98 for females.

NOTE 8 – NET PENSION LIABILITY AND SIGNIFICANT ASSUMPTIONS (Continued)

c. Funded Status and Funding Progress

The annual actuarial valuation determines the progress made in accumulating sufficient assets to pay benefits when due. As of January 1, 2020, the pension plan's accrued actuarial liabilities were $5.01 billion and the actuarial value of assets was $3.23 billion, resulting in UAL of $1.79 billion. The funded status (ratio) of actuarial value of assets over accrued actuarial liabilities was 64.3 percent.

As of the January 1, 2020 actuarial valuation, the funded status decreased to 64.3 percent from 64.5 percent. In addition, for January 1, 2020, the discount rate assumption decreased from 7.25% to 7.00%, projected salary increased decreased from 3.15% to 3.00%, and the general inflation rate decreased by 2.90% to 2.75%. No other assumption changes were made.

SJCERA's Funding Policy provides for regular employer and member contributions at actuarially determined rates, expressed as percentages of annual covered payroll. Contributions required and contributions made are explained in Note 6.

d. Asset Allocation Policy and Expected Long-Term Rate of Return by Asset Class

The allocation of investment assets within SJCERA's portfolio is approved by the Board. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the defined benefit pension plans. The long-term expected rate of return on defined benefit pension plan investment assets was determined using a building-block method in which best estimate ranges of expected future real rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adjusted for inflation. The following table displays the Board-approved asset allocation policy for 2020 and the long-term expected real rates of return.

Asset Class	Target Allocation	Arithmetic Long-Term Expected Real Rate of Return
Aggressive Growth	10.00%	8.60%
Traditional Growth	32.00%	5.20%
Stabilized Growth	33.00%	3.10%
Principal Protection	10.00%	-0.65%
Crisis Risk Offset (CRO)	15.00%	1.05%
Cash	0.00%	-1.10%
Total	100.00%	

At its December 2020 meeting, the Board approved a new long-term strategic asset allocation policy. The new policy modifies the percentage target allocations in the following way.

- Global Public Equities: Increase from 30.0% to 32.0%
- Stable Fixed Income: Remains at 10.0%
- Credit: Increase from 14.0% to 17.0%
- Risk Parity: Decrease from 14.0% to 10.0%
- Private Appreciation: Increase from 12.0% to 16.0%
- Crisis Risk Offset (CRO): Decrease from 20.0% to 15.0%
- Short Term Investments/Cash/Cash Equivalents: Remains at 0.0%

At the October 2019 meeting, the Board approved an Implementation Plan which indicates how the new long-term asset allocation is to be phased in over time.

NOTE 8 – NET PENSION LIABILITY AND SIGNIFICANT ASSUMPTIONS (Continued)

e. Discount Rate

The discount rate used to measure the total pension liability was 7.00 percent as of December 31, 2020. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs of future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the fiduciary net position was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability as of December 31, 2020.

f. Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The table below presents the net pension liability of SJCERA as of December 31, 2020, calculated using the discount rate of 7.00 percent, as well as what SJCERA's net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate.

	1% Decrease (6.00%)	**Current Discount Rate (7.00%)**	**1% Increase (8.00%)**
Total Pension Liability	$ 5,932,153,821	$ 5,223,573,968	$ 4,642,279,774
Pension Plan Fiduciary Net Position	3,546,712,249	3,546,712,249	3,546,712,249
Collective Net Pension Liability	$ 2,385,441,572	$ 1,676,861,719	$ 1,095,567,525
Fiduciary Net Position as a Percentage of the Total Pension Liability	59.8%	67.9%	76.4%

g. Rate of Return

For the year ended December 31, 2020, the annual money-weighted rate of return on investments, net of investment expense, was 2.23 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

NOTE 9 – INVESTMENT EXPENSES

Investment expenses include fees paid for investment management services, investment consulting services, fund evaluation services, securities custodian services, and interest expense and other fees incurred in security lending transactions.

NOTE 10 – GENERAL ADMINISTRATIVE EXPENSES

General administrative expenses, including the depreciation and amortization of capital assets, are funded by investment income earnings and are limited, pursuant to Government Code Section 31580.2, to twenty-one-hundredths of one percent (0.21 percent) of SJCERA's accrued actuarial liability. The actual administration expense for the year ended December 31, 2020, was 0.08 percent of the accrued actuarial liability. SJCERA was in compliance with this requirement during 2020.

NOTE 11 – PENDING LITIGATION

Allum, et al. v. SJCERA, et al.

SJCERA Retirees Edward Allum and Pauline Toy (“Plaintiff Retirees”) have sued SJCERA and its Board of Retirement (“SJCERA Respondents”) in San Joaquin County Superior Court, on behalf of a class of similarly situated retirees (“post-’82 Retirees”), alleging that SJCERA breached a 2001 class action settlement agreement and committed other alleged wrongdoing by taking a variety of actions, and allegedly failing to take a variety of actions, related to the reserving for, and payment of, supplemental retirement benefits (“post-’82 Benefits”) (“*Allum* Class Action”). Plaintiff Retirees claim over $25 million in damages. The SJCERA Respondents have denied the post-’82 Retirees’ claims of wrongdoing with respect to the post-’82 Benefits and are vigorously defending themselves in the *Allum* Class Action. SJCERA and cross-defendant County of San Joaquin each filed Motions for Summary Judgment and/or Summary Adjudication, which the Superior Court granted in their entirety. The Plaintiff Retirees timely filed an appeal of the summary judgement order with the Third District Court of Appeal. The Court heard oral argument on the appeal on April 20, 2021, and a decision is expected by July 20, 2021.

SJCERA v. Travelers

SJCERA sought coverage for its defense fees and costs incurred in the *Allum* Class Action (“Allum Litigation”) under a fiduciary liability insurance policy issued by SJCERA’s prior fiduciary insurance carrier, Travelers Casualty & Surety Company of America (“Travelers”). Travelers declined to provide a defense to SJCERA, and SJCERA filed a lawsuit in the United States District Court, Eastern District of California (“U.S.D.C.”) that alleges both that Travelers breached the insurance contract and acted in bad faith by failing to defend it in the Allum Litigation. The Eastern District of California granted Travelers’ motion for summary judgment, ruling that the “prior and pending litigation” exclusion in the Travelers’ policy precluded coverage. SJCERA timely filed an appeal with the Ninth Circuit Court of Appeal. The Ninth Circuit Court of Appeal reversed the U.S.D.C.’s decision and have remanded the case to enter judgement for SJCERA. SJCERA expects to be reimbursed its attorney’s fees and costs incurred in the *ALLUM* Class Action from Travelers as a result of this decision.

NOTE 12 – COMMITMENTS AND CONTINGENCIES

SJCERA participates in certain investments that require commitments of a specified amount of capital upfront that is then drawn down at a later time as the investment vehicle requires. The total unfunded capital commitment represents the amount of funds that SJCERA could potentially be required to contribute at a future date. SJCERA had unfunded capital commitments totaling $415 million at December 31, 2020.

NOTE 13 – SUBSEQUENT EVENTS

SJCERA has evaluated subsequent events through May 25, 2021, the date on which the financial statements were available to be issued. On March 11, 2020, the World Health Organization declared the outbreak of a coronavirus (COVID-19) a pandemic. As a result of the spread of COVID-19, economic uncertainties have arisen which are likely to negatively impact the Net Increase in Fiduciary Net Position. Other financial impact could occur although such potential impact is unknown at this time.

On July 30, 2020, the California Supreme Court issued a decision in the *Alameda County Deputy Sheriff’s Association, et al. v. Alameda County Employees’ Retirement Association, et al.* case (commonly referred to as the *Alameda* decision). SJCERA is bound by the *Alameda* decision because it interprets the County Employees’ Retirement Law, which governs SJCERA.

In the decision, the Court determined that pay for hours “in excess of your normal working hours” cannot be included in calculating retirement benefits as of January 1, 2013. Examples include Standby Pay and Correctional Briefing Pay. The Court also clarified that Boards of Retirement do not have the authority to include items that are considered “in-kind” benefits under law. Examples include employer contributions paid to deferred compensation on the member’s behalf.

NOTE 13 – <u>SUBSEQUENT EVENTS</u> (Continued)

As a result, approximately 1500 active, deferred or retired members received letters of notification regarding benefit adjustments and contribution overpayments that are expected to be implemented in 2021.

REQUIRED SUPPLEMENTARY INFORMATION

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
FOR THE YEARS ENDED*

	December 31, 2020	December 31, 2019	December 31, 2018	December 31, 2017	December 31, 2016	December 31, 2015	December 31, 2014
Total Pension Liability							
Service cost	$ 115,229,486	$ 110,608,926	$ 103,300,553	$ 98,438,144	$ 92,857,369	$ 94,377,630	$ 90,429,416
Interest (includes interest on service cost)	350,095,503	337,480,353	325,161,265	308,566,601	295,197,992	280,581,484	266,668,435
Change of benefit terms	-	-	-	-	-	-	-
Differences between expected and actual experience	(58,571,957)	4,950,114	(49,383,683)	37,219,673	(10,171,368)	(25,752,670)	-
Changes of assumptions	135,011,307	16,016,526	81,854,664	-	87,601,669	-	-
Benefit payments, including refunds of member contributions	(251,551,677)	(236,350,072)	(221,443,668)	(205,406,970)	(194,719,177)	(181,468,913)	(165,870,971)
Net Change in Total Pension Liability	290,212,662	232,705,847	239,489,131	238,817,448	270,766,485	167,737,531	191,226,880
Total Pension Liability - Beginning	4,933,361,306	4,700,655,459	4,461,166,328	4,222,348,880	3,951,582,395	3,783,844,864	3,592,617,984
Total Pension Liability - Ending (a)	$ 5,223,573,968	$ 4,933,361,306	$ 4,700,655,459	$ 4,461,166,328	$ 4,222,348,880	$ 3,951,582,395	$ 3,783,844,864
Fiduciary Net Position							
Contributions - employer	$ 240,700,988	$ 225,528,756	$ 208,757,572	$ 200,051,742	$ 159,122,523	$ 150,371,556	$ 136,686,133
Contributions - member	40,568,995	38,098,688	35,377,951	33,634,906	30,117,408	29,026,901	27,367,908
Transfer between plans	172,041	299,014	324,269	364,714	293,779	378,969	19,968,779
Net investment income (loss)	276,996,530	380,674,528	(56,397,598)	299,960,693	151,114,788	(47,339,750)	110,728,303
Benefit payments, including refunds of member contributions	(251,551,677)	(236,350,072)	(221,443,668)	(205,406,970)	(194,719,177)	(181,468,913)	(165,870,971)
Administrative expenses	(4,536,455)	(4,931,163)	(4,865,082)	(4,118,578)	(4,369,744)	(4,075,745)	(4,042,986)
Net Change in Fiduciary Net Position	302,350,422	403,319,751	(38,246,555)	324,486,507	141,559,577	(53,106,982)	124,837,166
Fiduciary Net Position - Beginning	3,244,361,827	2,841,042,076	2,879,288,631	2,554,802,124	2,413,242,547	2,466,349,529	2,341,512,363
Fiduciary Net Position - Ending (b)	$ 3,546,712,249	$ 3,244,361,827	$ 2,841,042,076	$ 2,879,288,631	$ 2,554,802,124	$ 2,413,242,547	$ 2,466,349,529
Fiduciary Net Pension Liability (a)-(b)	$ 1,676,861,719	$ 1,688,999,479	$ 1,859,613,383	$ 1,581,877,697	$ 1,667,546,756	$ 1,538,339,848	$ 1,317,495,335
Fiduciary Net Position as a Percentage of the Total Pension Liability	67.90%	65.76%	60.44%	64.54%	60.51%	61.07%	65.18%
Covered Payroll**	$ 460,456,931	$ 453,710,584	$ 436,763,447	$ 425,886,951	$ 392,227,314	$ 396,136,470	$ 376,030,944
Fiduciary Net Pension Liability as a Percentage of Covered Payroll	364.17%	372.26%	425.77%	371.43%	425.15%	388.34%	350.37%

* Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

** Covered Payroll reported by plan sponsors is the payroll on which contributions are based in accordance with GASB Statement No. 82.

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
SCHEDULE OF CONTRIBUTIONS FROM THE EMPLOYERS
AND OTHER CONTRIBUTING SOURCES
DEFINED BENEFIT PENSION PLAN
FOR THE TEN YEARS ENDED DECEMBER 31

2020-2016

	2020	2019	2018	2017	2016
Actuarially Determined Contributions	$ 218,611,737	$ 203,058,574	$ 188,322,653	$ 179,824,882	$ 159,122,523
Contributions in Relation to the Actuarially Determined Contributions	240,700,988	225,528,756	208,757,572	200,051,742	159,122,523
Contribution Deficiency / (Excess)	$ (22,089,251)	$ (22,470,182)	$ (20,434,919)	$ (20,226,860)	$ -
Covered Payroll*	$ 460,456,931	$ 453,710,584	$ 436,763,447	$ 425,886,951	$ 392,227,914
Contributions as a Percentage of Covered Payroll	52.27%	49.71%	47.80%	46.97%	40.57%

2015-2011

	2015	2014	2013	2012	2011
Actuarially Determined Contributions	$ 150,371,556	$ 136,686,133	$ 119,494,319	$ 108,062,510	$ 112,891,701
Contributions in Relation to the Actuarially Determined Contributions	150,371,556	136,686,133	119,494,319	108,062,510	112,891,701
Contribution Deficiency / (Excess)	$ -	$ -	$ -	$ -	$ -
Covered Payroll*	$ 396,136,470	$ 376,030,944	$ 362,650,568	$ 356,419,000	$ 367,344,000
Contributions as a Percentage of Covered Payroll	37.96%	36.35%	32.95%	30.32%	30.73%

* Covered Payroll reported by plan sponsors for 2014 through 2020. Previous years' amounts are based on projected payroll from the actuarial valuation reports.

The contributions in excess of Actuarially Determined Contributions are due to the County's, MVCD's, and the Court's additional contributions.

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
SCHEDULE OF INVESTMENT RETURNS
FOR THE YEARS ENDED*

	December 31, 2020	December 31, 2019	December 31, 2018	December 31, 2017	December 31, 2016	December 31, 2015	December 31, 2014
Annual Money-Weighted Rate of Return, Net of Investment Expense	2.23%	13.77%	-2.11%	11.85%	6.20%	-2.06%	4.29%

* Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. It is calculated by finding the rate of return that will set the present values of all cash flows and terminal values equal to the value of the initial investment. The money-weighted rate of return is equivalent to the internal rate of return (IRR).

Time-weighted rate of return assumes that all cash distributions are reinvested in the portfolio and the exact same periods are used for comparisons. When calculating the time-weighted rate of return, the effect of varying cash inflows is eliminated by assuming a single investment at the beginning of a period and measuring the growth or loss of fair value to the end of that period.

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
NOTE TO REQUIRED SUPPLEMENTARY INFORMATION
FOR THE YEAR ENDED DECEMBER 31, 2020

NOTE 1 – KEY METHODS AND ASSUMPTIONS USED TO DETERMINE CONTRIBUTION RATES

The following actuarial methods and assumptions were used to determine contribution rates for the year ended December 31, 2020, in the Schedule of Contributions from the Employers and Other Contributing Sources:

Valuation Date	January 1, 2019
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll with Separate Amortization Periods for Extraordinary Actuarial Gains or Losses
Remaining Amortization Period	2008 Extraordinary Actuarial Loss - 20 years Remaining UAL as of January 1, 2014 - 14 years Subsequent Unexpected Changes in UAL after January 1, 2014 - 15 years Single Equivalent Period as of January 1, 2019 - 15 years
Asset Valuation Method	Smoothed Actuarial Value (5 years) 80%-120% Asset Corridor
Actuarial Assumptions:	
Discount Rate	7.25%, Net of Pension Plan Investment Expenses, Including Inflation
Projected Salary Increases	3.15%, Plus Service-Based Rates
General Inflation Rate	2.90%
Cost-of-Living Adjustments (COLA)	2.60% Per Year Assumed
Healthy Mortality	Mortality rates for General active members are based on the sex distinct Public General 2010 Above-Median Income Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2018, and a partial credibility adjustment of 1.05 for females and no adjustment for males. Mortality rates for Safety active members are based on the sex distinct Public Safety 2010 Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2018, and a partial credibility adjustment of 0.98 for males and 1.06 for females. 10% of Safety member active deaths are assumed to occur in the line of duty. Mortality rates for healthy General annuitants and General beneficiaries are based on the sex distinct Public General 2010 Above-Median Income Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2018, and a partial credibility adjustment of 1.04 for females and no adjustment for males. Mortality rates for Safety annuitants and Safety beneficiaries are based on the sex distinct Public Safety 2010 Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2018, and a partial credibility adjustment of 1.02 for males and 1.05 for females.
Disabled Mortality	Mortality rates for General disabled annuitants are based on the sex distinct Public General Disabled Annuitant 2010 Mortality Table, with a generational mortality improvements projected from 2010 using Projection Scale MP-2018, with a partial credibility adjustment of 1.04 for males and 1.07 for females. Mortality rates for Safety disabled annuitants are based on the sex distinct Public Safety Disabled Annuitant 2010 Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2018, with a partial credibility adjustment of 1.04 for males and 0.98 for females.

A complete description of the methods and assumptions used to determine contribution rates for the year ending December 31, 2020, can be found in the January 1, 2019 actuarial valuation report.

OTHER SUPPLEMENTARY INFORMATION

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
SCHEDULE OF ADMINISTRATIVE EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2020

	2020
General Administrative Expenses	
(Expenses Subject to the Statutory Limit)	
Personnel Services	
Staff Salaries	$ 1,633,981
Cafeteria Benefits	161,122
Insurance	300,478
Social Security	117,625
Retirement	716,829
Total Personnel Services	2,930,035
Professional Services	
Professional and Specialized Services	347,867
Allocated Department Costs	38,421
Total Professional Services	386,288
Communications	
Postage	14,105
Telephone	19,824
Travel	40,966
Total Communications	74,895
Rentals/Equipment	
Office Space and Equipment	191,725
Depreciation-Equipment	34,949
Total Rentals/Equipment	226,674
Miscellaneous	
Office Supplies/Expense	15,592
Subscriptions and Periodicals	1,816
Memberships	6,845
Maintenance	6,806
Insurance	90,794
Total Miscellaneous	121,853
Total General Administrative Expenses	3,739,745
Other Expenses	
(Expenses Not Subject to the Statutory Limit)	
Information Technology Expenses	197,080
Actuary Fees	123,800
Fund Legal Fees	475,830
Total Other Expenses	796,710
Total General Administrative and Other Expenses	$ 4,536,455

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
SCHEDULE OF INVESTMENT EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2020

	2020
Investment Management Fees	
Global Public Equities	$ 1,253,692
Stable Fixed Income	1,170,135
Credit	3,067,152
Risk Parity	1,458,959
Private Appreciation	6,090,910
Credit Risk Offset	2,355,821
Short-Term Investments/Cash/Cash Equivalents	168
Total Investment Management Fees	15,396,837
Other Investment Fees and Expenses	
Custodian Fees	213,279
Investment Consultant Fees	350,696
Investment Legal Fees	111,830
Miscellaneous Investment Expense	1,943,408
Total Investment Fees and Expenses	2,619,213
Total Investment Expense	18,016,050
Security Lending Fees	
Security Lending Fees and Rebates	269,089
Total Investment Fees and Expenses	$ 18,285,139

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
SCHEDULE OF PAYMENTS TO CONSULTANTS
FOR THE YEAR ENDED DECEMBER 31, 2020

	2020
Nature of Service	
Actuarial-Retainer and Valuation	$ 123,800
Audit	60,670
Fund Legal Fees	475,830
Business Technology Services	29,750
Total Payments to Consultants	$ 690,050

OTHER INFORMATION

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
SCHEDULE OF COST SHARING EMPLOYER ALLOCATIONS
AS OF AND FOR THE YEAR ENDED DECEMBER 31, 2020

Employer	Proportionate Share [1]	Net Pension Liability [2]
County of San Joaquin	93.1067%	$ 1,561,270,562
Superior Court	3.7058%	62,141,779
Lathrop-Manteca Rural Fire Protection District	1.4907%	24,997,459
SJC Mosquito and Vector Control District	0.5267%	8,831,459
Waterloo-Morada Rural Fire Protection District	0.5668%	9,505,101
Mountain House Community Services District	0.4733%	7,936,884
Tracy Public Cemetery District	0.0679%	1,138,909
SJC Historical Society and Museum	0.0450%	753,951
San Joaquin County Law Library	0.0171%	285,615
Total	100.0000%	$ 1,676,861,719

(1) As SJCERA is a cost sharing multiple-employer pension plan, each employer participating in SJCERA must reflect a portion of the collective net pension liability and pension expense in their financial statements. The calculation for the proportionate share for each employer allocates net pension liability and pension expense based on each employer's share of the unfunded liability amortization payment. The proportionate shares are then adjusted to account for the additional contributions made by the County of San Joaquin, the SJC Mosquito and Vector Control District, and Superior Court for the year ended December 31, 2020.

(2) Proportionate share of net pension liability is based on the actuarial valuation.

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
SCHEDULE OF EMPLOYER PENSION AMOUNTS
ALLOCATED BY COST SHARING PLAN
AS OF AND FOR THE YEAR ENDED DECEMBER 31, 2020

		Deferred Outflows of Resources				Deferred Inflows of Resources				Pension Expense		
Employer	Net Pension Liability	Differences Between Expected and Actual Experience	Changes of Assumptions	Changes in Proportion and Differences Between Contributions and Proportionate Share of Pension Expense	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Differences Between Projected and Actual Investment Earnings	Changes in Proportion and Differences Between Contributions and Proportionate Share of Pension Expense	Total Deferred Inflows of Resources	Proportionate Share of Plan Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Proportionate Share of Pension Expense	Total Pension Expense
County of San Joaquin	$ 1,561,270,562	$ 9,696,132	$ 139,996,000	$ 1,985,676	$ 151,677,808	$ 62,019,337	$ 55,153,008	$ 4,880,571	$ 122,052,916	$ 225,360,204	$ (1,778,410)	$ 223,581,794
Superior Court	62,141,779	385,926	5,572,129	2,391,255	8,349,310	2,468,497	2,195,203	3,946,774	8,610,474	8,969,800	67,405	9,037,205
Lathrop-Manteca Rural Fire Protection District	24,997,459	155,245	2,241,472	3,339,408	5,736,125	992,990	883,053	1,506,291	3,382,334	3,608,236	822,513	4,430,749
SJC Mosquito and Vector Control District	8,831,459	54,847	791,899	455,580	1,302,326	350,818	311,978	288,709	951,505	1,274,769	(37,159)	1,237,610
Waterloo-Morada Rural Fire Protection District	9,505,101	59,031	852,303	1,617,119	2,528,453	377,577	335,775	441,027	1,154,379	1,372,005	289,564	1,661,569
Mountain House Community Services District	7,936,884	49,291	711,684	1,095,823	1,856,798	315,282	280,376	368,762	964,420	1,145,642	415,144	1,560,786
Tracy Public Cemetery District	1,138,909	7,073	102,124	167,914	277,111	45,242	40,233	37,154	122,629	164,395	74,022	238,417
SJC Historical Society and Museum	753,951	4,682	67,605	363,821	436,108	29,950	26,634	33,537	90,121	108,828	118,528	227,356
San Joaquin County Law Library	285,615	1,774	25,611	159,465	186,850	11,346	10,090	73,234	94,670	41,227	28,393	69,620
Totals	$ 1,676,861,719	$ 10,414,001	$ 150,360,827	$ 11,576,061	$ 172,350,889	$ 66,611,039	$ 59,236,350	$ 11,576,059	$ 137,423,448	$ 242,045,106	$ -	$ 242,045,106

NOTE 1 – BASIS OF PRESENTATION AND BASIS OF ACCOUNTING

Because San Joaquin County Employees' Retirement Association (SJCERA) is a cost sharing multiple-employer pension plan, employers participating in SJCERA are required to report a portion of the collective Net Pension Liability, Pension Expense, and Deferred Outflows and Inflows of Resources in their financial statements for fiscal periods beginning on or after June 15, 2014, in accordance with Governmental Accounting Standards Board (GASB) Statement No. 68, *Accounting and Financial Reporting for Pensions – an Amendment of GASB Statement No. 27.* GASB Statement No. 68 requires that the proportionate share for each employer be determined based on the employer's projected long-term contribution effort to the pension.

SJCERA's actuary prepared the following documents, (1) the Schedule of Cost Sharing Employer Allocations and (2) the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan, in accordance with accounting principles generally accepted in the United States of America as applicable to governmental organizations based on information provided by SJCERA. These documents provide the required information for financial reporting related to SJCERA that employers may use in their financial statements. The measurement date for SJCERA is December 31, 2020. Measurements are based on the fair value of assets as of December 31, 2020, and the Total Pension Liability, $5,223,573,968 as of December 31, 2020, was measured as of a valuation date of January 1, 2020, and projected to December 31, 2020.

NOTE 2 – AMORTIZATION OF DEFERRED OUTFLOWS AND DEFERRED INFLOWS OF RESOURCES

The difference between projected and actual investment earnings on pension plan investments is amortized over five years on a straight-line basis. One-fifth is recognized in Total Pension Expense for each of the five years. The changes in assumptions and differences between expected and actual experience are recognized over the average of the expected remaining service lives of all active and inactive members of SJCERA, which is also five years. The net effect of the change in the employer's proportionate share of the collective net pension liability and collective deferred outflows of resources and deferred inflows of resources is recognized over the average expected remaining service lives of all active and inactive members of SJCERA.

MEKETA

INVESTMENT GROUP

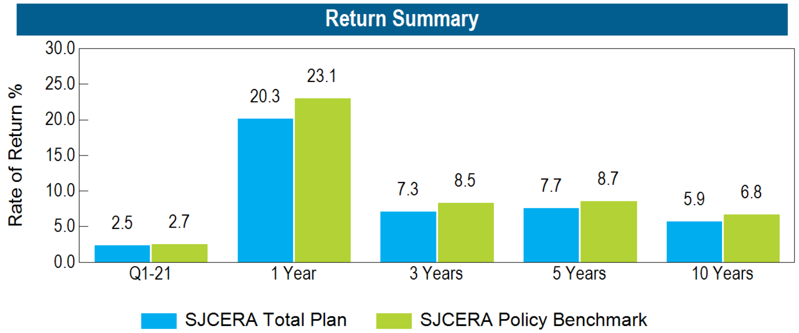
San Joaquin County Employees' Retirement Association (SJCERA)

Q1 2021

Quarterly Report

Table of Contents

Introduction



Summary of Cash Flows	First Quarter	One Year
Beginning Market Value	$3,500,512,188	$2,978,278,164
Net Cash Flow	$4,916,246	$28,882,660
Net Investment Change	$92,039,616	$590,307,226
Ending Market Value	$3,597,468,050	$3,597,468,050

Introduction

The SJCERA Total Portfolio had an aggregate value of $3.6 billion as of March 31, 2020. During the latest quarter, the Total Portfolio increased in value by $97.0 million, and over the one-year period, the Total Portfolio increased by $619.2 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 6.4% vs. a quarter-over-quarter (annualized) increase of 4.1% in the fourth quarter of 2020. Full year The IMF also forecasts global GDP to increase by 6.0% 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 COVID-19 vaccine. One-year returns are also being heavily influenced by the roll-off the significant declines from March 2020. In March 2021, rising inflation and US economic growth expectations continued to drive longer-dated Treasury yields higher, leading to negative returns across most maturities. Equity markets across developed economies showed a notable level of resilience to the tighter financial conditions. Emerging markets were impacted by rising COVID-19 cases and re-shuttering of some economies, as well as rising inflation risks prompting some central banks to consider tightening measures.

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 first quarter of 2021 were 5.9% and -(13.4%), respectively. Commodities were up 6.9% for the quarter, as measured by the Bloomberg Commodity Index and global equity returns, as measured by the MSCI ACWI IMI, were up 5.1% for the quarter ended March 31, 2021.

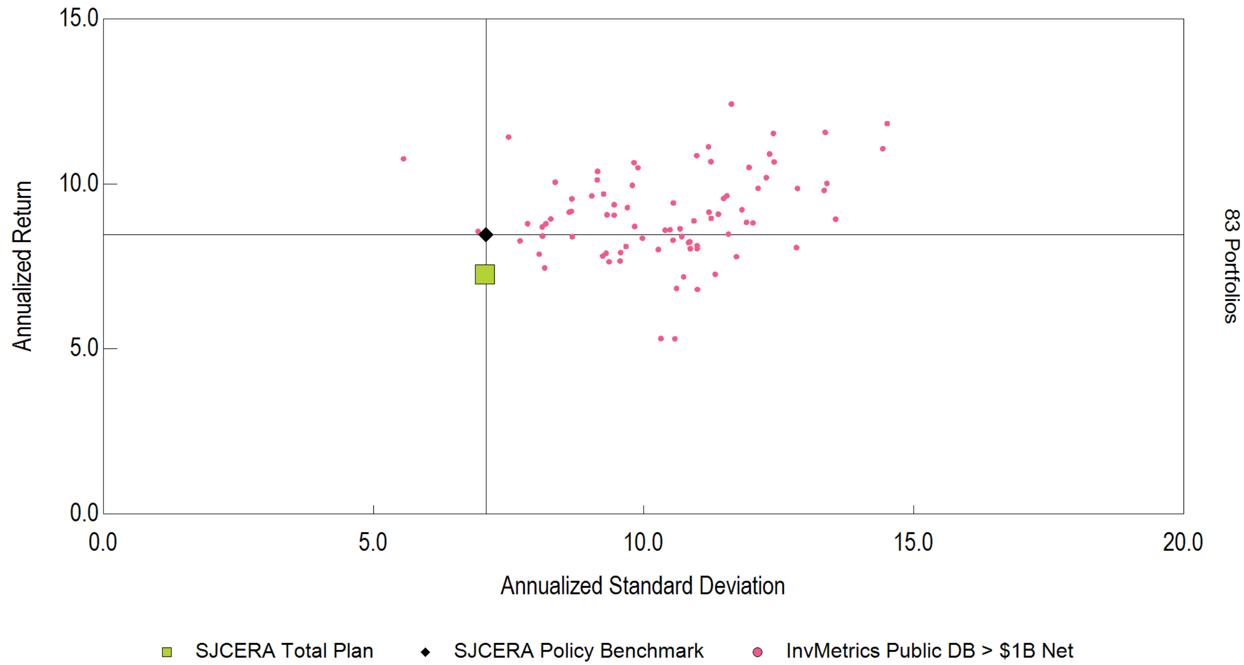
Recent Investment Performance

The Total Portfolio underperformed the policy benchmark for the quarter by (0.2%) and underperformed the Median Public Fund by (0.9%) over the same period. Over the 1-, 3-, 5-, 10-, 15-, 20-, and 25-year periods, the portfolio has trailed its benchmark by (2.8%), (1.2%), (1.0%), (0.9%), (1.2%), (0.4%), and (0.2%) respectively, and trailed the Median Public Fund by (11.4%), (1.6%), (2.0%), (2.0%), (2.1%), (1.0%), and (0.6%), respectively. However, the portfolio earned higher risk adjusted returns, as measured by the Sharpe Ratio, than the Median Public Fund over the 3- and 5-year time periods.

	QTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs	25 Yrs
SJCERA Total Plan - Net	**2.5**	**20.3**	**7.3**	**7.7**	**5.9**	**4.5**	**5.7**	**6.7**
SJCERA Total Plan - Gross	**2.7**	**20.9**	**7.9**	**8.5**	**6.7**	**5.2**	**6.3**	**7.2**
SJCERA Policy Benchmark	*2.7*	*23.1*	*8.5*	*8.7*	*6.8*	*5.7*	*6.1*	*6.9*
Over/Under (vs. Net)	-0.2	-2.8	-1.2	-1.0	-0.9	-1.2	-0.4	-0.2
InvMetrics Public DB > $1B Net Median	*3.4*	*31.7*	*8.9*	*9.7*	*7.9*	*6.6*	*6.7*	*7.3*

Investment Metrics Total Fund Public Universe >$1 Billion, net of fees.
Policy Benchmark composition is listed in the Appendix.

Total Fund Risk/Return Analysis
Latest 3 Years



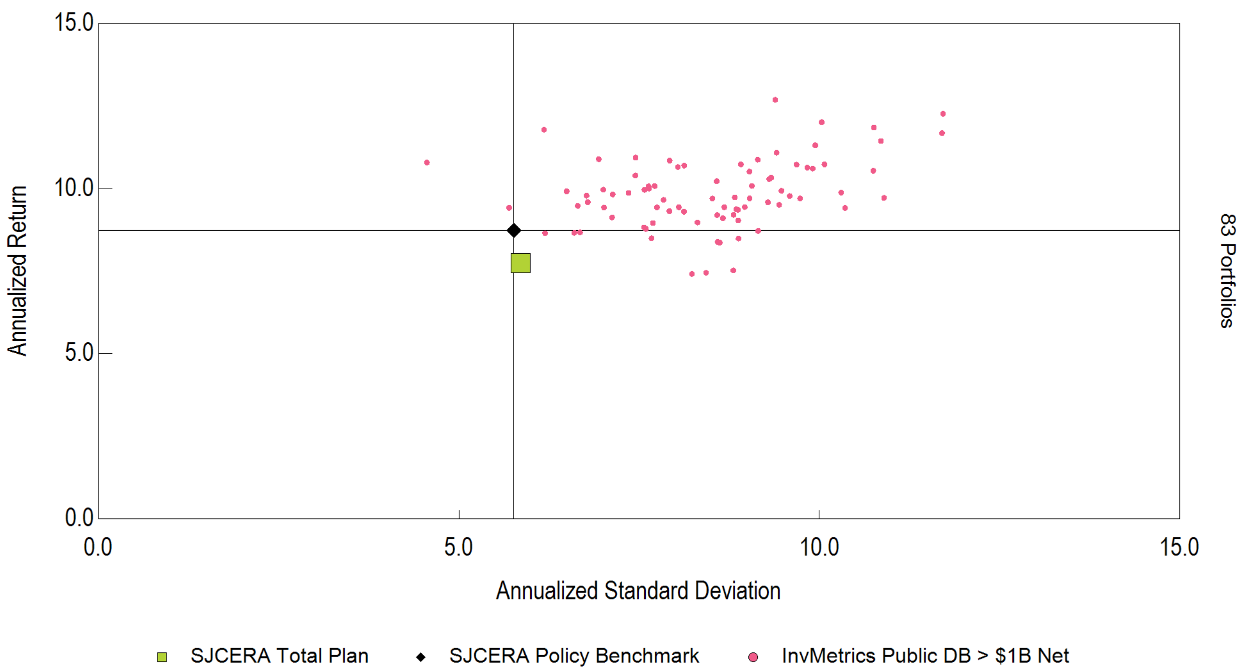
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio[1]
SJCERA Total Plan	7.27%	7.07%	0.84
SJCERA Policy Benchmark	8.47%	7.08%	1.00
InvMetrics Public DB > $1B Net Median[2]	8.93%	10.55%	0.72

Returns are net of fees.

[1] Computed as annualized return less the risk free rate, divided by the annualized standard deviation.

[2] Investment Metrics Total Fund Public Universe >$1 Billion, net of fees.

Total Fund Risk/Return Analysis
Latest 5 Years



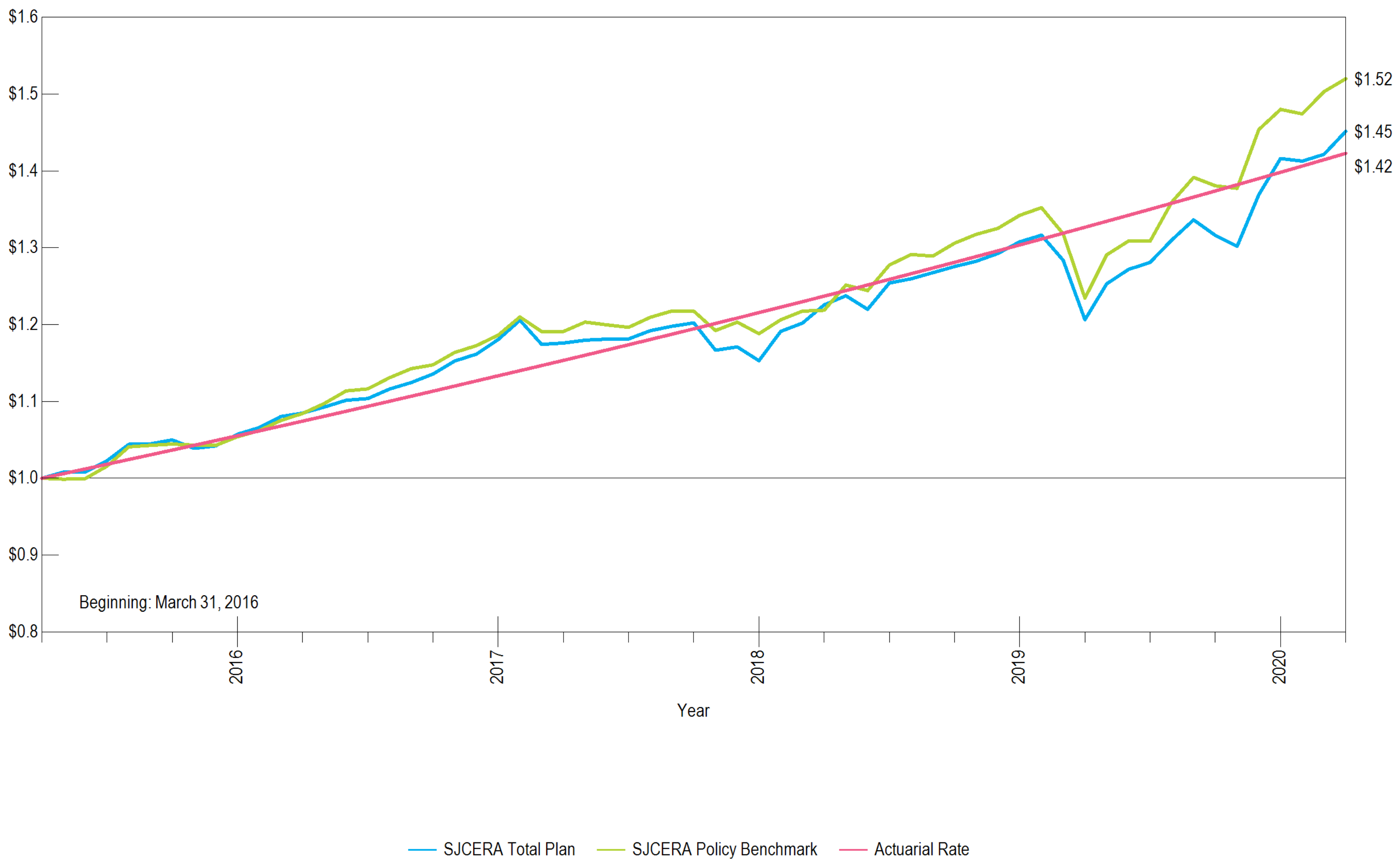
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio[1]
SJCERA Total Plan	7.74%	5.86%	1.13
SJCERA Policy Benchmark	8.74%	5.76%	1.32
InvMetrics Public DB > $1B Net Median[2]	9.73%	8.58%	1.01

Returns are net of fees.

[1] Computed as annualized return less the risk free rate, divided by the annualized standard deviation.

[2] Investment Metrics Total Fund Public Universe >$1 Billion, net of fees.

Growth of a Dollar - Latest 5 Years

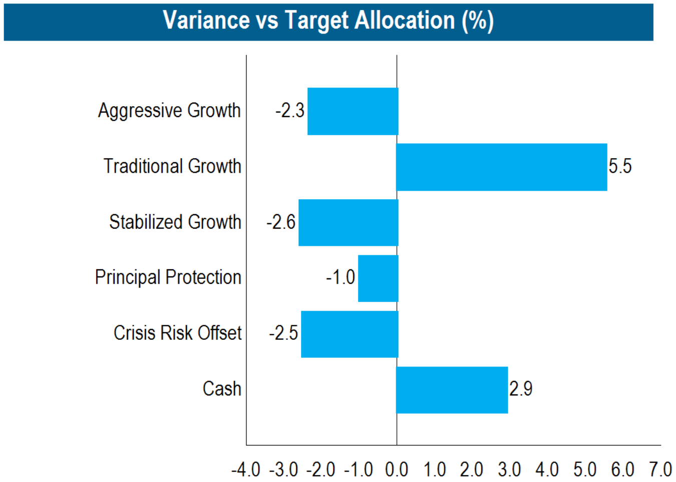


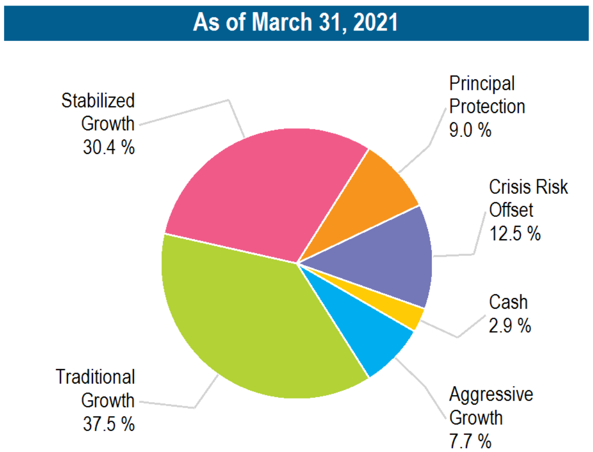
7.0% Actuarial Rate from 1/1/2020 to present. 7.25% Actuarial Rate from 1/1/2018 to 12/31/2019. 7.4% Actuarial Rate from 8/1/2016-12/31/2017. 7.5% Actuarial Rate from 1/1/2012-7/31/2016; previously 8.0%

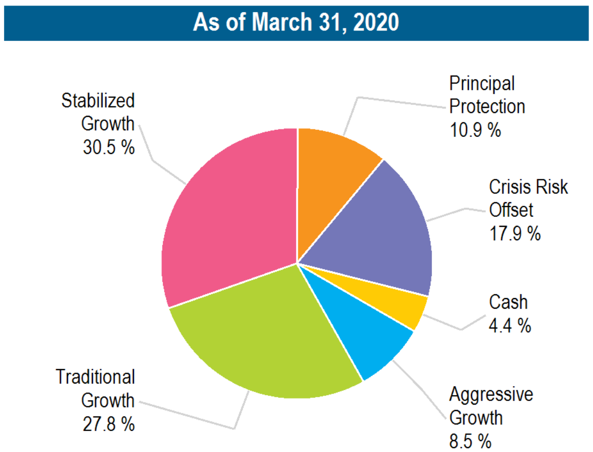
Portfolio Review

Asset Allocation vs. Target	Current	Current	Policy	Difference*
Broad Growth	**$2,720,021,633**	**75.6%**	**75.0%**	**0.6%**
Aggressive Growth	$275,666,221	7.7%	10.0%	-2.3%
Traditional Growth	$1,350,167,074	37.5%	32.0%	5.5%
Stabilized Growth	$1,094,188,338	30.4%	33.0%	-2.6%
Diversified Growth	**$772,902,520**	**21.5%**	**25.0%**	**-3.5%**
Principal Protection	$323,811,174	9.0%	10.0%	-1.0%
Crisis Risk Offset	$449,091,346	12.5%	15.0%	-2.5%
Cash[2]	**$104,543,898**	**2.9%**	**0.0%**	**2.9%**
Cash	$104,543,898	2.9%	0.0%	2.9%
Total [1]	**$3,597,468,050**	**100.0%**	**100.0%**	

*Difference between Policy and Current Allocation







[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 March 31, 2021

	Market Value ($)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
SJCERA Total Plan[1]	**3,595,868,050**	**100.0**	**2.5**	**20.3**	**7.3**	**7.7**	**5.9**
SJCERA Policy Benchmark[2]			*2.7*	*23.1*	*8.5*	*8.7*	*6.8*
Broad Growth	**2,718,421,633**	**75.6**	**3.8**	**29.0**	**8.4**	**9.6**	**6.7**
Aggressive Growth Lag	**274,066,221**	**7.6**	**10.2**	**12.5**	**9.9**	**10.2**	**10.8**
Aggressive Growth Blend			*8.3*	*11.9*	*10.8*	*10.1*	*9.5*
Traditional Growth	**1,350,167,074**	**37.5**	**5.6**	**52.3**	**9.4**	**12.0**	**8.1**
MSCI ACWI IMI Net			*5.1*	*57.6*	*13.2*	*14.1*	*9.9*
Stabilized Growth	**1,094,188,338**	**30.4**	**0.1**	**12.0**	**6.6**	**6.8**	**3.9**
Diversifying Strategies	**772,902,520**	**21.5**	**-1.7**	**-4.0**	**3.3**	**2.2**	**4.4**
Principal Protection	**323,811,174**	**9.0**	**-1.7**	**2.6**	**3.5**	**3.6**	**4.5**
BBgBarc US Aggregate TR			*-3.4*	*0.7*	*4.7*	*3.1*	*3.4*
Crisis Risk Offset Asset Class	**449,091,346**	**12.5**	**-1.7**	**-8.3**	**2.9**	**1.3**	**6.0**
CRO Benchmark[3]			*-3.4*	*-0.7*	*5.2*	*3.0*	*5.0*
Cash and Misc Asset Class	**59,051,255**	**1.6**	**0.0**	**0.2**	**1.0**	**1.0**	**0.5**
ICE BofA 91 Days T-Bills TR			*0.0*	*0.1*	*1.5*	*1.2*	*0.6*

[1] Market values may not add up due to rounding.
[2] Policy Benchmark composition is listed in the Appendix.
[3] (1/3) BC Long Duration Treasuries, (1/3) BTOP50 Index, (1/3) 5% Annual.

	Market Value ($)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Aggressive Growth Lag[1 2]	**274,066,221**	**100.0**	**10.2**	**12.5**	**9.9**	**10.2**	**10.8**
Aggressive Growth Blend			*8.3*	*11.9*	*10.8*	*10.1*	*9.5*
Blackrock Global Energy and Power Lag[2]	14,250,572	5.2	1.3	3.4	--	--	--
MSCI ACWI +2% Blend			*15.3*	*19.1*	--	--	--
Morgan Creek III Lag[2]	7,899,653	2.9	8.3	3.1	-5.1	0.6	--
MSCI ACWI +2% Blend			*15.3*	*19.1*	*13.1*	*11.4*	--
Morgan Creek V Lag[2]	9,893,870	3.6	0.0	1.7	7.9	9.0	--
MSCI ACWI +2% Blend			*15.3*	*19.1*	*13.1*	*11.4*	--
Morgan Creek VI Lag[2]	25,332,027	9.2	9.6	17.8	15.1	12.7	--
MSCI ACWI +2% Blend			*15.3*	*19.1*	*13.1*	*11.4*	--
Ocean Avenue II Lag[2]	40,855,968	14.9	25.0	39.4	18.9	21.9	--
MSCI ACWI +2% Blend			*15.3*	*19.1*	*13.1*	*11.4*	--
Ocean Avenue III Lag[2]	53,593,391	19.6	11.7	9.0	19.5	--	--
MSCI ACWI +2% Blend			*15.3*	*19.1*	*13.1*	--	--
Ocean Avenue IV Lag[2]	24,059,249	8.8	20.9	26.7	--	--	--
MSCI ACWI +2% Lag			*15.3*	*19.1*	--	--	--
Non-Core Real Assets Lag[2 3]	99,781,491	36.4	3.8	4.1	3.6	4.3	8.0
NCREIF ODCE +1% lag (blend)			*1.4*	*1.3*	*5.0*	*6.3*	*9.7*

1 Market values may not add up due to rounding.
2 Lagged 1 quarter.
3 Trailing Non-Core real estate performance includes returns provided by prior real estate consultant from inception through Q419.

Private Appreciation

Investment Activity Statement for Since Inception by Fund

Investment	Vintage Year	Original Inv. Commitment	Gross Contributions	Management Fees	Return of Capital	Distributions	Net Income	Unrealized Appreciation	Realized Gain	Ending Market Value
Blackrock Global Energy & Power III	2019	50,000,000	15,850,296	1,256,149	823,960	1,833,366	303,765	182,779	571,056	14,250,572
Ocean Avenue II*	2013	40,000,000	36,000,000	5,488,067	284,189	29,903,469	18,733,666	6,901,635	9,408,326	40,855,968
Ocean Avenue III	2016	50,000,000	44,000,000	4,378,097	500,000	18,000,000	7,297,105	17,859,587	2,936,700	53,593,391
Ocean Avenue IV	2019	50,000,000	18,500,000	1,552,269	-	-	919,484	4,608,512	31,252	24,059,249
Morgan Creek III	2015	10,000,000	9,900,000	572,771	1,847,525	195,728	(1,052,310)	744,161	351,055	7,899,653
Morgan Creek V	2013	12,000,000	11,520,000	1,206,636	3,330,348	5,203,843	(1,392,977)	4,041,093	4,259,946	9,893,870
Morgan Creek VI Estimate	2015	20,000,000	18,200,000	1,985,364	3,903,799	1,729,404	(892,231)	8,253,664	5,403,796	25,332,027
Total			**153,970,296**	**16,439,351**	**10,689,821**	**56,865,810**	**23,916,502**	**42,591,431**	**22,962,131**	**175,884,730**

* Ocean II commitment started at $30 Mil in Q213 and increased to $40 Mil in Q114.

Aggressive Growth

During the latest three-month period ending March, 31, 2021, four of SJCERA's aggressive growth managers outperformed their MSCI ACWI +2% Blended benchmark. Note that returns data for this asset class is lagged one quarter.

BlackRock Global Energy and Power, a recently added fund to the Aggressive Growth asset class, underperformed its target benchmark over the quarter by (14.0) and produced a 1-year return of 3.4%, underperforming its benchmark by (15.7%).

Morgan Creek III produced a quarterly return of 8.3%, underperforming its target benchmark by (7.0%). The manager also underperformed its benchmark over the 1-, 3-, and 5-year periods by (16.0%), (18.2%), and (10.8%) respectively.

Morgan Creek V outperformed its benchmark over the quarter, 3-, and 5-year periods by 2.1%, 2.4%, and 0.4%, respectively, and underperformed for the 1-year period by (8.9%).

Morgan Creek VI underperformed its benchmark over the quarter and 1-year periods by (5.7%) and (1.3%) respectively and outperformed for the 3- and 5-year periods by 2.0% and 1.3%, 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 9.7%, 20.3%. 5.8%, and 10.5% respectively.

Ocean Avenue III, a Private Equity Buyout fund-of-funds manager, trailed its benchmark for the quarter and 1-year periods by (3.6%) and (10.1%) respectively, and outperformed over the 3-year period by 6.4%.

Ocean Avenue IV outperformed its benchmark in the quarter and 1-year time periods by 5.6% and 7.6% respectively.

Non-Core Private Real Assets outperformed its benchmark over the quarter and 1-year periods by 22.4% and 2.8%, respectively. It lagged its benchmark over the 3-, 5-, and 10-year periods by (1.4%), (2.0%), and (1.7%), respectively.

Asset Class Performance Net-of-Fees | As of March 31, 2021

	Market Value ($)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Traditional Growth[1]	**1,350,167,074**	**100.0**	**5.6**	**52.3**	**9.4**	**12.0**	**8.1**
MSCI ACWI IMI Net			*5.1*	*57.6*	*13.2*	*14.1*	*9.9*
SJCERA Transition[2]	3,371	0.0					
Northern Trust MSCI World	1,166,974,309	86.4	5.5	--	--	--	--
MSCI World IMI Net USD			*5.5*	--	--	--	--
PIMCO RAE Emerging Markets	75,682,960	5.6	11.5	69.4	3.0	11.6	2.9
MSCI Emerging Markets Gross			*2.3*	*58.9*	*6.9*	*12.5*	*4.0*
GQG Active Emerging Markets	65,259,399	4.8	-1.2	--	--	--	--
MSCI Emerging Markets			*2.3*	--	--	--	--
Invesco REIT	42,247,035	3.1	8.6	28.6	8.1	5.8	8.4
FTSE NAREIT Equity REIT			*8.9*	*37.8*	*9.5*	*5.3*	*8.6*

[1] Market values may not add up due to rounding.
[2] Returns not meaningful.

Traditional Growth

During the latest three-month period ending March, 31, 2021, the traditional growth asset class outperformed its MSCI ACWI IMI benchmark by 0.5%. Two of the four managers matched or outperformed their benchmark over the quarter time period.

Northern Trust MSCI World, the Plan's new Passive Global Equity manager, matched its benchmark over the quarter time period.

PIMCO RAE Fundamental - Emerging, one of SJCERA's Active Emerging Markets Equity manager, outperformed the MSCI Emerging Markets Index over the quarter and 1-year time periods by 9.2% and 10.5% respectively, and underperformed its benchmark over the 3-, 5-, and 10-year periods by (3.9%), (0.9%), and (1.1%) respectively.

GQG, the Plan's new Active Emerging Markets Equity manager, was opened during the third quarter of 2020. It underperformed its MSCI Emerging Markets benchmark by (3.5%) in the first quarter of 2021.

Invesco, the Plan's Core US REIT manager, underperformed the FTSE NAREIT Equity REIT Index over the quarter, 1-, 3-, and 10-year periods by (0.3%), (9.2%), (1.4%), and (0.2%), and outperformed the benchmark over the 5-year time period by 0.5%.

	Market Value ($)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Stabilized Growth[1]	**1,094,188,338**	**100.0**	**0.1**	**12.0**	**6.6**	**6.8**	**3.9**
Risk Parity Asset Class	**398,914,622**	**36.5**	**-2.5**	**20.6**	**7.3**	**7.8**	**2.1**
ICE BofAML 3mo US TBill+4%			*1.0*	*4.1*	*5.6*	*5.2*	*4.7*
Bridgewater All Weather	193,436,024	17.7	-2.9	18.1	6.1	7.2	--
Bridgewater All Weather (blend)			*1.0*	*4.1*	*5.6*	*5.2*	--
PanAgora Diversified Risk Multi Asset	205,478,598	18.8	-2.2	23.0	8.4	8.3	--
ICE BofAML 3mo US TBill+4%			*1.0*	*4.1*	*5.6*	*5.2*	--
Liquid Credit	**231,931,993**	**21.2**	**0.3**	**19.7**	**3.9**	**4.6**	**3.3**
50% BBgBC US HY/50% S&P LSTA Lev Loan[3]			*1.3*	*22.2*	*5.5*	*6.7*	*5.4*
Neuberger Berman	103,514,635	9.5	-0.3	22.3	--	--	--
33% ICEBofAMLUSHY /33%JPMEMBI Global Div /33% S&P LSTALevLoan			*-0.6*	*19.8*	--	--	--
Stone Harbor Absolute Return	128,417,358	11.7	0.8	18.0	3.2	4.2	3.0
ICE BofA-ML LIBOR			*0.1*	*0.6*	*1.8*	*1.5*	*0.9*
Private Credit Lag	**300,017,543**	**27.4**	**2.0**	**2.6**	**2.7**	**2.8**	**4.4**
Custom Credit Benchmark[2]			*5.1*	*5.1*	*5.1*	*6.9*	*5.6*
Blackrock Direct Lending Lag	28,523,103	2.6	2.5	--	--	--	--
CPI + 6% BLK Blend			*1.5*	--	--	--	--
Crestline Opportunity II Lag	19,879,050	1.8	0.6	-4.4	-2.3	2.2	--
Credit Blend CPI +6%			*1.5*	*7.4*	*7.8*	*8.3*	--
Davidson Kempner Long-Term Distressed Opportunities Fund V, L.P. Lag	9,040,182	0.8	8.3	--	--	--	--
Credit Blend CPI +6%			*1.5*	--	--	--	--
HPS European Asset Value II, LP Lag	5,572,982	0.5	3.0	--	--	--	--
Credit Blend CPI +6%			*1.5*	--	--	--	--

1 Market values may not add up due to rounding.
2 NCREIF ODCE Net + 1% 10/1/2012-present. NCREIF Property Index previously.
3 50% BBgBC High Yield, 50% S&P Leveraged Loans.

	Market Value ($)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Medley Opportunity II Lag	11,154,548	1.0	4.1	-14.2	-13.3	-7.7	--
Credit Blend CPI +6%			*1.5*	*7.4*	*7.8*	*8.3*	--
Mesa West III Lag	1,926,744	0.2	-11.0	-14.7	-0.1	3.6	--
Credit Blend CPI +6%			*1.5*	*7.4*	*7.8*	*8.3*	--
Mesa West IV Lag	46,635,765	4.3	1.0	6.6	7.6	--	--
Credit Blend CPI +6%			*1.5*	*7.4*	*7.8*	--	--
Oaktree Middle-Market Direct Lending Lag	22,291,736	2.0	3.7	16.0	--	--	--
CPI + 6% Oaktree Blend			*1.5*	*4.9*	--	--	--
Raven Opportunity II Lag	11,743,981	1.1	-0.4	-13.1	-3.2	-3.2	--
Credit Blend CPI +6%			*1.5*	*7.4*	*7.8*	*8.3*	--
Raven Opportunity III Lag	48,013,572	4.4	2.8	1.1	6.8	3.5	--
Credit Blend CPI +6%			*1.5*	*7.4*	*7.8*	*8.3*	--
White Oak Summit Peer Lag	46,190,005	4.2	1.8	4.1	6.3	--	--
Credit Blend CPI +6%			*1.5*	*7.4*	*7.8*	--	--
White Oak Yield Spectrum Master V Lag	49,045,875	4.5	1.5	7.7	--	--	--
Credit Blend CPI +6%			*1.5*	*7.4*	--	--	--
Private Core Real Assets Lag [1]	163,324,180	14.9	3.3	5.2	9.0	9.8	14.1
NCREIF ODCE +1% lag (blend)			*1.4*	*1.3*	*5.0*	*6.3*	*9.7*

Market values may not add up due to rounding.

1 Trailing Core real estate performance includes returns provided by prior real estate colsultant from incetion through Q419.

Stabilized Growth

During the latest three-month period ending March, 31, 2021, eleven of SJCERA's seventeen Stabilized Growth managers matched or outperformed their benchmarks while six of the remaining managers underperformed their respective benchmarks. Several of the 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).

Bridgewater All Weather, one of the Plan's Risk Parity managers, underperformed its benchmark over the quarter by (3.9%) and outperformed its benchmark over the 1-, 3-, and 5-year periods by 14.0%, 0.5%, and 2.0% respectively.

PanAgora DRMA, one of the Plan's Risk Parity managers, underperformed its T-Bill +4% benchmark over the quarter by (3.2%) and outperformed its benchmark over the 1-, and 3-year periods by 18.9%, 2.8%, and 3.1% respectively

Neuberger Berman, one of the Plan's Liquid Credit managers, outperformed its blended benchmark for the quarter and 1-year periods by 0.3% and 2.5%, respectively.

Stone Harbor, the Plan's Absolute Return Fixed Income manager, outperformed the 3-month ICE BofAML LIBOR index over the quarter, 1-, 3-, 5-, and 10-year periods by 0.7%, 17.4%, 1.4%, 2.7%, and 2.1% respectively.

BlackRock Direct Lending, one of the Plan's newer Private Credit manager, outperformed its CPI+6% benchmark by 1.0% for the quarter.

Crestline Opportunity II, the Plan's Credit, Niche Alternatives, and Hedge Fund Secondaries manager, trailed its benchmark over the quarter, 1-, 3-, and 5-year periods by (0.9%), (11.8%), (10.1%), and (6.1%) 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 6.8%.

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 first quarter of 2021 by 1.5%.

Stabilized Growth (Continued)

Medley Opportunity II, one of the Plan's Direct Lending managers, produced a positive quarterly return of 4.1%, outperforming its CPI +6% annual return target by 2.6%. The fund trailed its benchmark over the 1-, 3-, and 5-year time periods by (21.6%), (21.2%) and (16.0%) respectively.

Mesa West RE Income III, one of the Plan's Commercial Mortgage managers, produced a negative quarterly return of (11.0%), underperforming its CPI +6% annual benchmark by (12.5%). It also underperformed its benchmark over the 1-, 3-, and 5-year periods by (22.1%), (7.9%), and (4.7%) respectively.

Mesa West RE Income IV, one of the Plan's Commercial Mortgage managers, produced a quarterly return of 1.0%, underperforming its CPI +6% annual benchmark by (0.5%). Over the 1- and 3-year periods, the fund underperformed its benchmark by (0.8%) and (0.2%) respectively.

Oaktree, a Middle-Market Direct Lending manager, outperformed its MSCI ACWI +2% Blended benchmark over the quarter and 1-year time periods by 2.2%, and 11.1% respectively.

Raven Capital II, one of the Plan's Direct Lending managers, produced a quarterly return of (0.4%) and trailed its target over the quarter, 1-, 3-, and 5-year periods by (1.9%), (20.5%), (11.0), and (11.5%) respectively.

Raven Capital III outperformed its CPI +6% annual target over the quarter by 1.3% and trailed its benchmark over the 1-, 3-, and 5-year periods by (6.3%), (1.0%), and (4.8%) respectively.

White Oak Summit Peer, one of the Plan's Direct Lending managers, outperformed its CPI +6% index over the quarter by 0.3%, and underperformed its benchmark over the 1-, and 3-year periods by (3.3%) and (1.5%) respectively.

White Oak Yield Spectrum Master V matched its CPI +6% benchmark over the quarter and outperformed its benchmark over the 1-year time period by 0.3%.

Core Private Real Estate, investing in Private Core Real Assets, outperformed its Private RE Benchmark for the quarter, 1-, 3-, 5-, and 10-year periods by 1.9%, 3.9%, 4.0%, 3.5%, and 4.4% respectively.

Asset Class Performance Net-of-Fees | As of March 31, 2021

	Market Value ($)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Principal Protection	**323,811,174**	**100.0**	**-1.7**	**2.6**	**3.5**	**3.6**	**4.5**
BBgBarc US Aggregate TR			*-3.4*	*0.7*	*4.7*	*3.1*	*3.4*
Dodge & Cox Fixed Income	163,973,413	50.6	-2.6	7.5	5.7	4.8	4.7
BBgBarc US Aggregate TR			*-3.4*	*0.7*	*4.7*	*3.1*	*3.4*
DoubleLine	111,409,776	34.4	0.1	7.6	4.2	3.9	--
BBgBarc US Aggregate TR			*-3.4*	*0.7*	*4.7*	*3.1*	--
SJ Principal Protection	48,427,985	15.0	--	--	--	--	--
BBgBarc US Aggregate TR			--	--	--	--	--

Market values may not add up due to rounding.

Principal Protection

During the latest three-month period ending March 31, 2021, two of SJCERA's three Principal Protection managers outperformed the Blmbg. Barc. US Aggregate Index. PRIMA Mortgage was closed at the beginning of the quarter and SJ Principal Protection, a passive fixed income manager, was opened.

Dodge & Cox, the Plan's Core Fixed Income manager, earned a quarterly return of (2.6%), outperforming its benchmark by 0..8%. The portfolio also outperformed its benchmark over the 1-, 3-, 5-, and 10-year periods by 6.8%, 1.0%, 1.7%, and 1.3% respectively.

DoubleLine, the Plan's Mortgage Backed Securities manager, provided a quarterly return of 0.1%, outperforming its benchmark by 3.5%. The manager outperformed its benchmark over the 1-, and 5-year time periods by 6.9% and 0.8%, respectively, while underperforming its benchmark over the 3-year time period by (0.5%).

SJ Principal Protection, the Plan's passive Fixed Income manager, opened in January 2021, and therefore does not have a full quarter of performance.

Asset Class Performance Net-of-Fees | As of March 31, 2021

	Market Value ($)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Crisis Risk Offset Asset Class [1]	**449,091,346**	**100.0**	**-1.7**	**-8.3**	**2.9**	**1.3**	**6.0**
CRO Benchmark [2]			*-3.4*	*-0.7*	*5.2*	*3.0*	*5.0*
Long Duration	**142,418,103**	**31.7**	**-12.6**	**-15.1**	**5.7**	**2.9**	**--**
BBgBarc US Treasury Long TR			*-13.5*	*-15.8*	*5.9*	*3.1*	*--*
Dodge & Cox Long Duration	142,418,103	31.7	-12.6	-15.1	5.7	2.9	--
BBgBarc US Treasury Long TR			*-13.5*	*-15.8*	*5.9*	*3.1*	*--*
Systematic Trend Following	**182,558,332**	**40.7**	**6.9**	**13.4**	**4.0**	**-1.4**	**6.3**
BTOP 50 (blend)			*2.7*	*10.3*	*4.0*	*0.4*	*3.2*
Graham Tactical Trend	90,707,025	20.2	4.8	14.7	4.7	--	--
SG Trend			*4.0*	*8.0*	*5.3*	*--*	*--*
Mount Lucas	91,851,307	20.5	9.0	12.1	3.2	-3.3	5.2
BTOP 50 (blend)			*2.7*	*10.3*	*4.0*	*0.4*	*3.2*
Alternative Risk Premium	**124,114,911**	**27.6**	**0.8**	**-22.9**	**-2.6**	**-0.1**	**3.4**
5% Annual (blend)			*1.2*	*5.0*	*5.0*	*5.0*	*7.5*
AQR Style Premia	29,642,987	6.6	21.6	-2.7	-12.1	--	--
5% Annual			*1.2*	*5.0*	*5.0*	*--*	*--*
Lombard Odier	57,677,888	12.8	-6.1	-14.6	--	--	--
5% Annual			*1.2*	*5.0*	*--*	*--*	*--*
P/E Diversified Global Macro	36,794,036	8.2	-1.3	-43.4	-2.1	--	--
5% Annual			*1.2*	*5.0*	*5.0*	*--*	*--*

1 Market values may not add up due to rounding.
2 (1/3) BC Long Duration Treasuries, (1/3) BTOP50 Index, (1/3) 5% Annual.

Crisis Risk Offset

During the latest three-month period ending March 31, 2021, four of the six of SJCERA's Crisis Risk Offset managers outperformed their respective benchmarks.

Dodge & Cox Long Duration produced a negative quarterly return of (12.6%), outperforming the Blmbg. Barc. US Long Duration Treasuries by 0.9%. The manager outperformed the benchmark over the 1-year time periods by 0.7% and underperformed its benchmark over the 3-, and 5-year time periods by (0.2%) and (0.2%) respectively.

Graham, one of the Plan's Systematic Trend Following managers, produced a quarterly return of 4.8%, outperforming the SG Trend Index by 0.8% The fund also outperformed its benchmark over the 1-year time period by 6.7% and underperformed the benchmark over the 3-year time period by (0.6%).

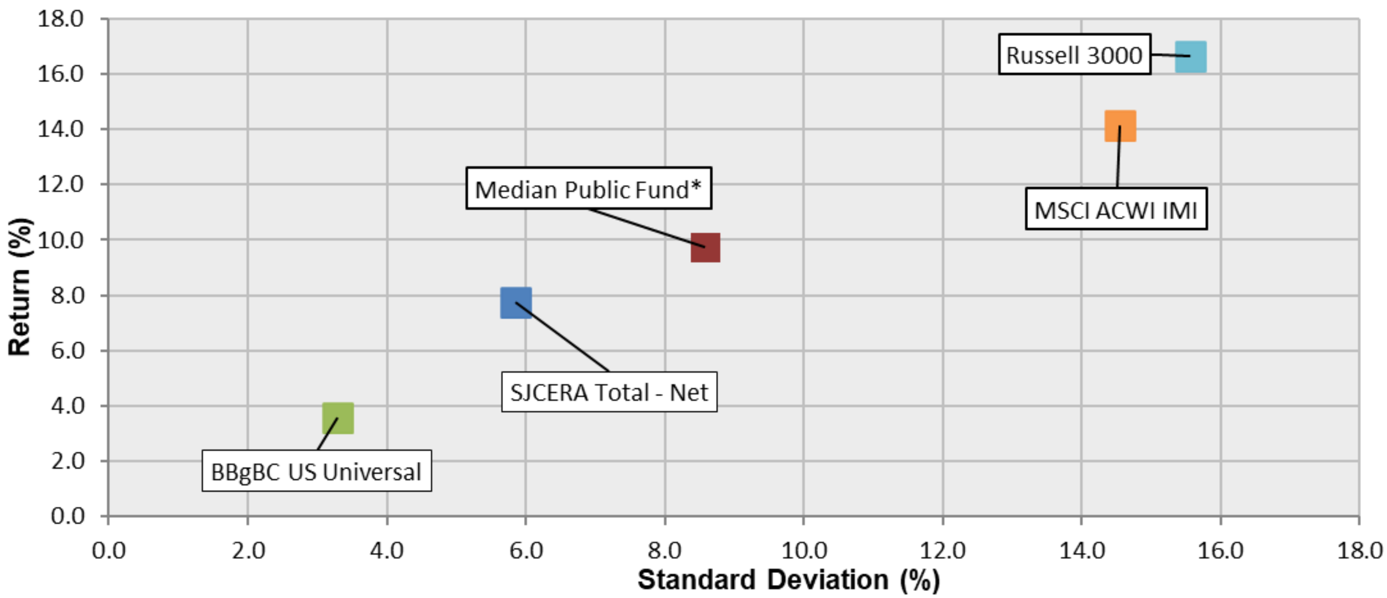
Mount Lucas, one of the Plan's Systematic Trend Following managers, produced a quarterly return of 9.0%, outperforming the Barclays BTOP 50 Index by 6.3%. The fund also outperformed its benchmark over the 1- and 10-year periods by 1.8% and 2.0%, respectively, while underperforming the benchmark index over the 3-, and 5-year time periods by (0.8%) and (3.7%), respectively.

AQR, one of the Plan's Alternative Risk Premium managers, posted a positive quarterly return of 21.6%, outperforming its 5% Annual target by 20.4% Over the 1- and 3-year periods, the manager trailed its benchmark by (7.7%) and (17.1%) respectively.

Lombard Odier, the newest of the Alternative Risk Premium class managers, earned a negative quarterly return of (6.1 %), trailing its 5% Annual target benchmark by (7.3%). The manager also underperformed its benchmark over the 1-year period by (19.6%).

P/E Diversified, one of the Plan's Alternative Risk Premium managers, underperformed its 5% Annual target for the quarter, 1-, and 3-year time periods by (2.5%), (48.4%), and (7.1%) respectively.

SJCERA Total Fund
5-Year Annualized Risk/Return (Net of Fees)



	Anlzd Return	Anlzd Std. Dev.	Sharpe Ratio
SJCERA Total - Net	7.74	5.86	1.13
Median Public Fund*	9.73	8.58	1.01
BBgBC US Universal	3.59	3.29	0.75
Russell 3000	1664	15.56	1.00
MSCI ACWI IMI	14.14	14.54	0.9

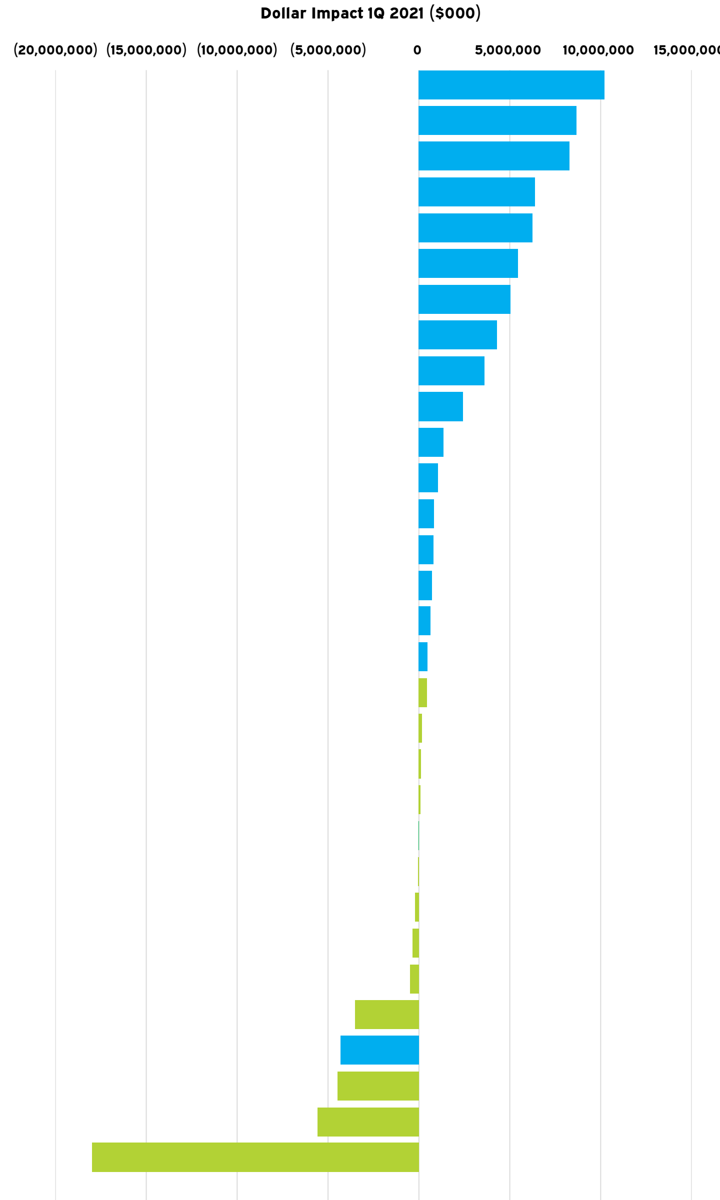
* InvMetrics Public DB > $1B Net

SJCERA Total Plan

As of March 31, 2021

San Joaquin County Employees' Retirement Association: Manager Value-Added (Dollar-Impact)
As of March 31, 2021

Manager/Mandate	Manager Return	Benchmark Return	Dollar Impact	Benchmark Added Value	Manager BNAV
3/31/2021			2,048,818,559		2,048,818,559
SJCERA Total Policy Benchmark	2.5%	2.7%			
Ocean Avenue II MSCI ACWI +2% Blend	25.0%	15.3%	10,216,852		40,855,968
PIMCO RAE Emerging Markets MSCI Emerging Markets	11.5%	2.3%	8,683,863		75,682,960
Mount Lucas BTOP 50	9.0%	2.7%	8,295,092		91,851,307
AQR 5% Annual	21.6%	1.2%	6,416,225		29,642,987
Ocean Avenue III MSCI ACWI +2% Blend	11.7%	15.3%	6,273,106		53,593,391
Private Core Real Estate Private Real Estate Benchmark	3.3%	1.4%	5,459,927		163,324,180
Ocean Avenue IV MSCI ACWI +2% Blend	20.9%	15.3%	5,035,601		24,059,249
Graham Tactical Trend SG Trend Index	4.8%	4.0%	4,316,747		90,707,025
Invesco REIT FTSE NAREIT Index	8.6%	8.9%	3,636,625		42,247,035
Morgan Creek VI MSCI ACWI +2% Blend	9.6%	15.3%	2,425,795		25,332,027
Raven III CPI + 6% Annual	2.8%	1.5%	1,354,463		48,013,572
Stone Harbor Absolute Return 3-Month Libor TR USD	0.8%	0.1%	1,050,454		128,417,358
Oaktree MSCI ACWI +2% Blend	3.7%	15.3%	831,928		22,291,736
White Oak Summit Peer CPI + 6% Annual	1.8%	1.5%	817,563		46,190,005
BlackRock Direct Lending CPI + 6% Annual	2.5%	1.5%	726,198		28,523,103
Morgan Creek III MSCI ACWI +2% Blend	8.3%	15.3%	655,355		7,899,653
Mesa West IV CPI + 6% Annual	1.0%	15.3%	486,877		46,635,765
Medley Opportunity II CPI + 6% Annual	4.1%	1.5%	454,882		11,154,548
BlackRock Global Energy & Power MSCI ACWI +2% Blend	1.3%	15.3%	180,982		14,250,572
DoubleLine BB Aggregate	0.1%	-3.4%	128,121		111,409,776
Crestline Opportunity II CPI + 6% Annual	0.6%	1.5%	110,329		19,879,050
Morgan Creek V MSCI ACWI +2% Blend	0.0%	15.3%	989		9,893,870
Raven II CPI + 6% Annual	-0.4%	1.5%	(49,677)		11,743,981
Mesa West III CPI + 6% Annual	-11.0%	1.5%	(211,229)		1,926,744
Neuberger Berman Global Credit Hybrid	-0.3%	-0.6%	(354,020)		103,514,635
P/E Diversified Global Macro 5% Annual	-1.3%	1.2%	(486,417)		36,794,036
Lombard Odier 5% Annual	-6.1%	1.2%	(3,518,928)		57,677,888
Dodge & Cox Fixed Income BB Aggregate	-2.6%	-3.4%	(4,312,501)		163,973,413
PanAgora Diversified Risk Multi Asset T-bill + 4%	-2.2%	1.0%	(4,479,433)		205,478,598
Bridgewater All Weather T-bill + 4%	-2.9%	1.0%	(5,574,826)		193,436,024
Dodge & Cox Long Duration BB US Long Duration Treasuries	-12.6%	-13.5%	(17,988,831)		142,418,103
Total Portfolio MV as of 3/31/2021			3,595,868,050		



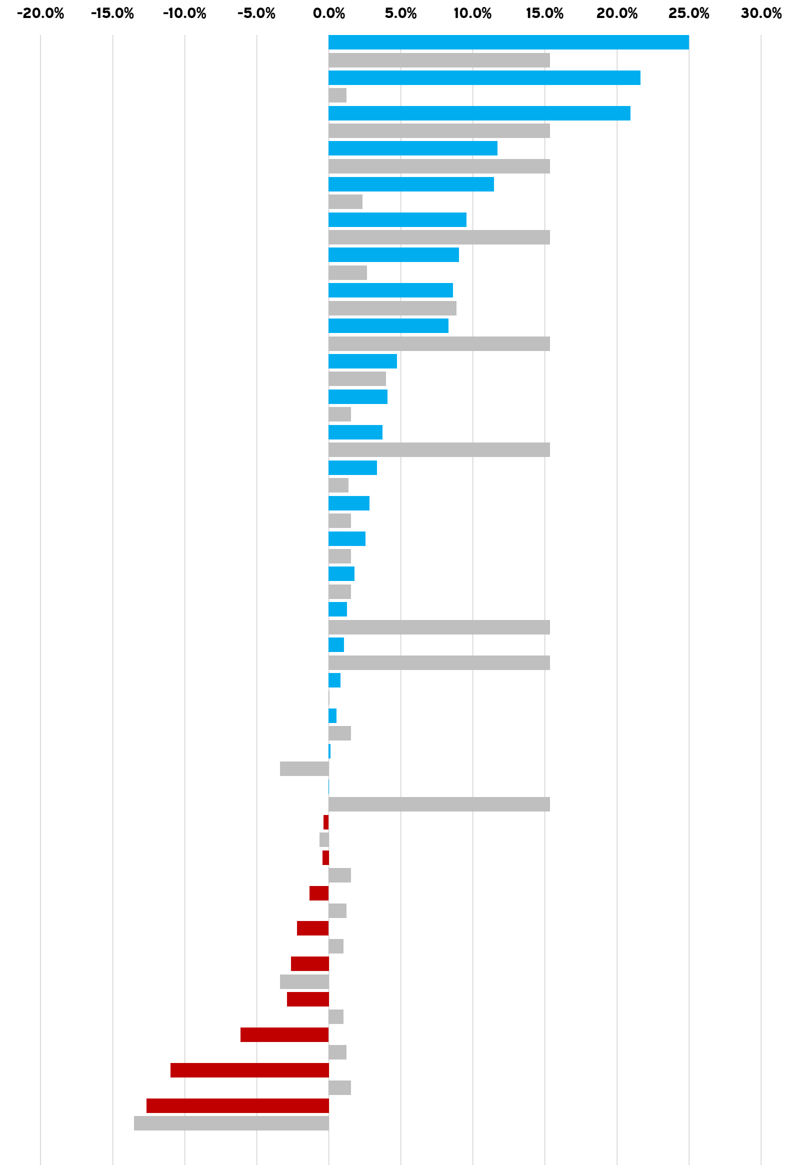
SJCERA Total Plan

As of March 31, 2021

San Joaquin County Employees' Reitrement Association: Manager Value-Added (Return)
As of March 31, 2021

Manager/Mandate 3/31/2021	Manager Return	Benchmark Return	Dollar Impact 2,048,818,559	Benchmark Added Value	Manager BNAV 2,048,818,559
SJCERA Total	2.5%	2.7%			
Policy Benchmark					
Ocean Avenue II / MSCI ACWI +2% Blend	25.0%	15.3%	10,216,852		40,855,968
AQR / 5% Annual	21.6%	1.2%	6,416,225		29,642,987
Ocean Avenue IV / MSCI ACWI +2% Blend	20.9%	15.3%	5,035,601		24,059,249
Ocean Avenue III / MSCI ACWI +2% Blend	11.7%	15.3%	6,273,106		53,593,391
PIMCO RAE Emerging Markets / MSCI Emerging Markets	11.5%	2.3%	8,683,863		75,682,960
Morgan Creek VI / MSCI ACWI +2% Blend	9.6%	15.3%	2,425,795		25,332,027
Mount Lucas / BTOP 50	9.0%	2.7%	8,295,092		91,851,307
Invesco REIT / FTSE NAREIT Index	8.6%	8.9%	3,636,625		42,247,035
Morgan Creek III / MSCI ACWI +2% Blend	8.3%	15.3%	655,355		7,899,653
Graham Tactical Trend / SG Trend Index	4.8%	4.0%	4,316,747		90,707,025
Medley Opportunity II / CPI + 6% Annual	4.1%	1.5%	454,882		11,154,548
Oaktree / MSCI ACWI +2% Blend	3.7%	15.3%	831,928		22,291,736
Private Core Real Estate / Private Real Estate Benchmark	3.3%	1.4%	5,459,927		163,324,180
Raven III / CPI + 6% Annual	2.8%	1.5%	1,354,463		48,013,572
BlackRock Direct Lending / CPI + 6% Annual	2.5%	1.5%	726,198		28,523,103
White Oak Summit Peer / CPI + 6% Annual	1.8%	1.5%	817,563		46,190,005
BlackRock Global Energy & Power / MSCI ACWI +2% Blend	1.3%	15.3%	180,982		14,250,572
Mesa West IV / CPI + 6% Annual	1.0%	15.3%	486,877		46,635,765
Stone Harbor Absolute Return / 3-Month Libor TR USD	0.8%	0.1%	1,050,454		128,417,358
Crestline Opportunity II / CPI + 6% Annual	0.6%	1.5%	110,329		19,879,050
DoubleLine / BB Aggregate	0.1%	-3.4%	128,121		111,409,776
Morgan Creek V / MSCI ACWI +2% Blend	0.0%	15.3%	989		9,893,870
Neuberger Berman / Global Credit Hybrid	-0.3%	-0.6%	(354,020)		103,514,635
Raven II / CPI + 6% Annual	-0.4%	1.5%	(49,677)		11,743,981
P/E Diversified Global Macro / 5% Annual	-1.3%	1.2%	(486,417)		36,794,036
PanAgora Diversified Risk Multi Asset / T-bill + 4%	-2.2%	1.0%	(4,479,433)		205,478,598
Dodge & Cox Fixed Income / BB Aggregate	-2.6%	-3.4%	(4,312,501)		163,973,413
Bridgewater All Weather / T-bill + 4%	-2.9%	1.0%	(5,574,826)		193,436,024
Lombard Odier / 5% Annual	-6.1%	1.2%	(3,518,928)		57,677,888
Mesa West III / CPI + 6% Annual	-11.0%	1.5%	(211,229)		1,926,744
Dodge & Cox Long Duration / BB US Long Duration Treasuries	-12.6%	-13.5%	(17,988,831)		142,418,103
Total Portlolio MV as of 3/31/2021			3,595,868,050		

Manager Return 1Q 2021

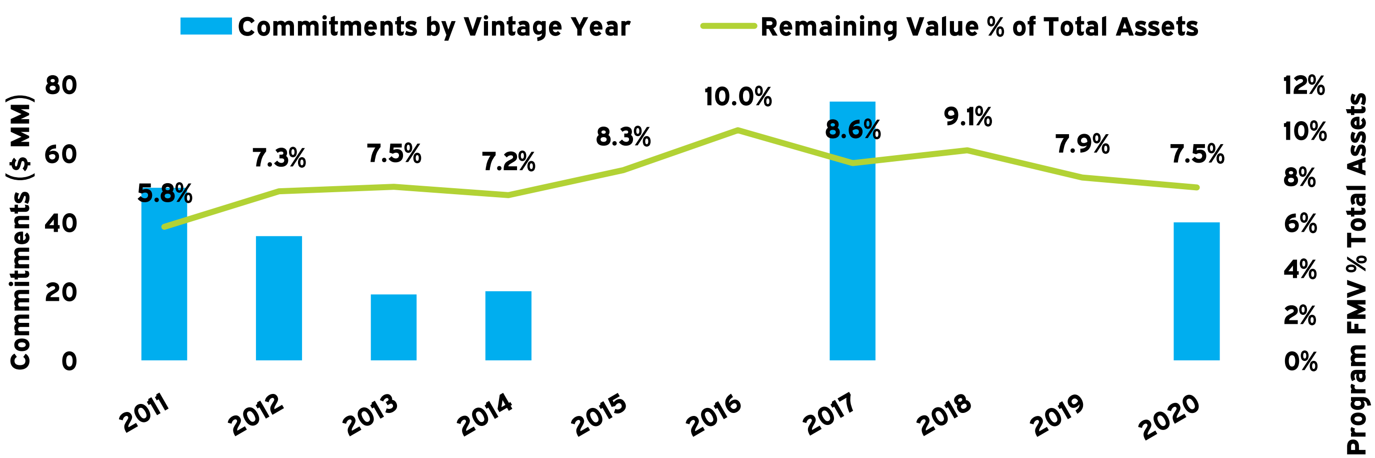


Real Estate Program

December 31, 2020

Introduction

The Retirement Association's target allocation towards real estate assets is 10-12%. As of December 31, 2020, the Retirement Association had invested with eighteen real estate managers (three private open-end and fourteen private closed-end). The aggregate reported value of the Retirement Association's real estate investments was $263.1 million.



Program Status

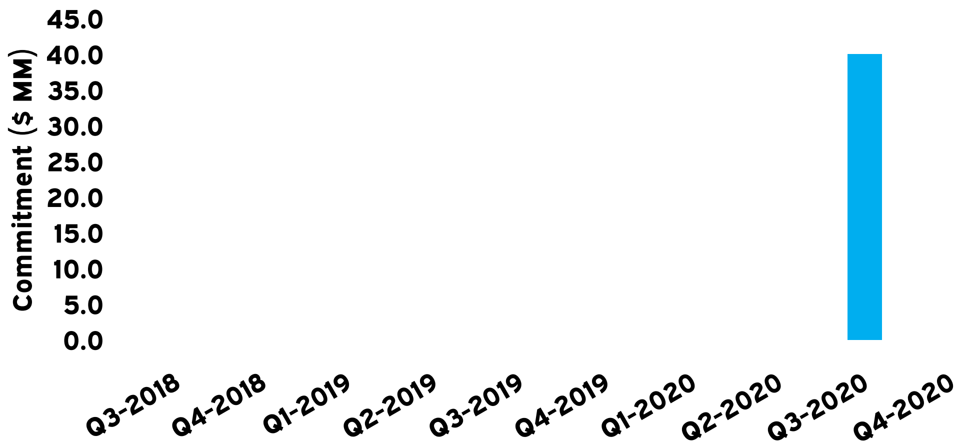
No. of Investments	18
Committed ($ MM)	501.6
Contributed ($ MM)	414.0
Distributed ($ MM)	301.2
Remaining Value ($ MM)	263.1

Performance Since Inception

	Program	Peer Universe
DPI	0.73x	0.90x
TVPI	1.36x	1.25x
IRR	5.9%	5.5%

Commitments

Recent Quarterly Commitments



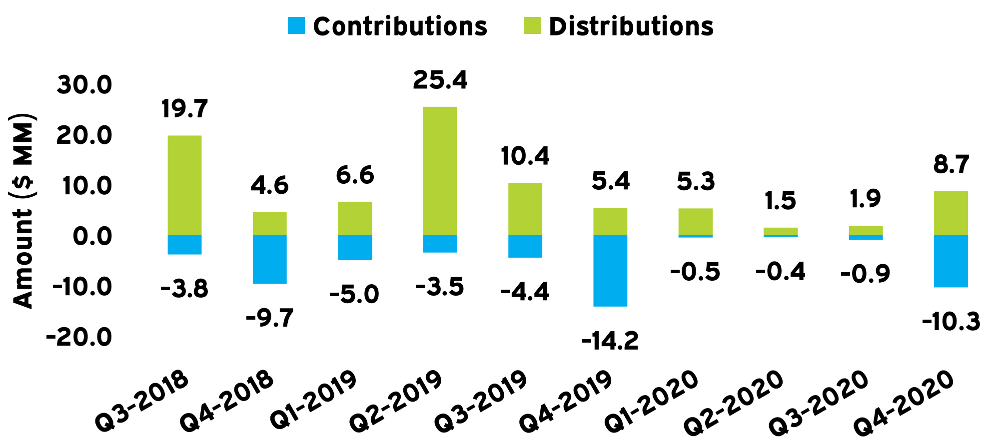
Commitments This Quarter

Fund	Strategy	Region	Amount (MM)

None to report.

Cash Flows

Recent Quarterly Cash Flows



Largest Contributions This Quarter

Fund	Vintage	Strategy	Region	Amount ($MM)
Stockbridge RE III	2017	Value-Added	North America	7.31
Berkeley V	2020	Value-Added	North America	2.94
Prologis Logistics	1970	Core	North America	0.10

Largest Distributions This Quarter

Fund	Vintage	Strategy	Region	Amount ($MM)
Greenfield VII	2013	Opportunistic	North America	5.04
Greenfield VIII	2017	Opportunistic	North America	1.55
Prologis Logistics	1970	Core	North America	0.67

Significant Events

- During the fourth quarter, Prologis Targeted US Logistics acquired six buildings and three covered land parcels in the fourth quarter for a combined total of $135.2 million.
- During the fourth quarter, Prologis Targeted US Logistics disposed of three non-strategic buildings for a combined total of $49.6 million.
- Greenfield Acquisitions Partners VIII was rebranded as Grandview I-A in the fourth quarter, and two parallel partnerships were created, Grandview I-B, LP ("I-B") & Grandview I-C, LP ("I-C". The combined partnerships are referred to as GVP-I with an overall fund size of $296.5 million.
- During the fourth quarter, Greenfield Acquisitions Partners VIII acquired Plano Commerce Center, a 66.7-acre fully entitled development parcel located in Plano, Texas, with an existing JV partner.
- Berkeley Partners Value Industrial Fund V held its final close on December 18, 2020 and currently has $400 million in capital commitments.
- On December 3, 2020, Berkeley Partners Value Industrial Fund V acquired 1501 N. Plano Road, an 83,000 SF warehouse in Dallas, for a purchase price of $8.3 million through a fully-marketed process.

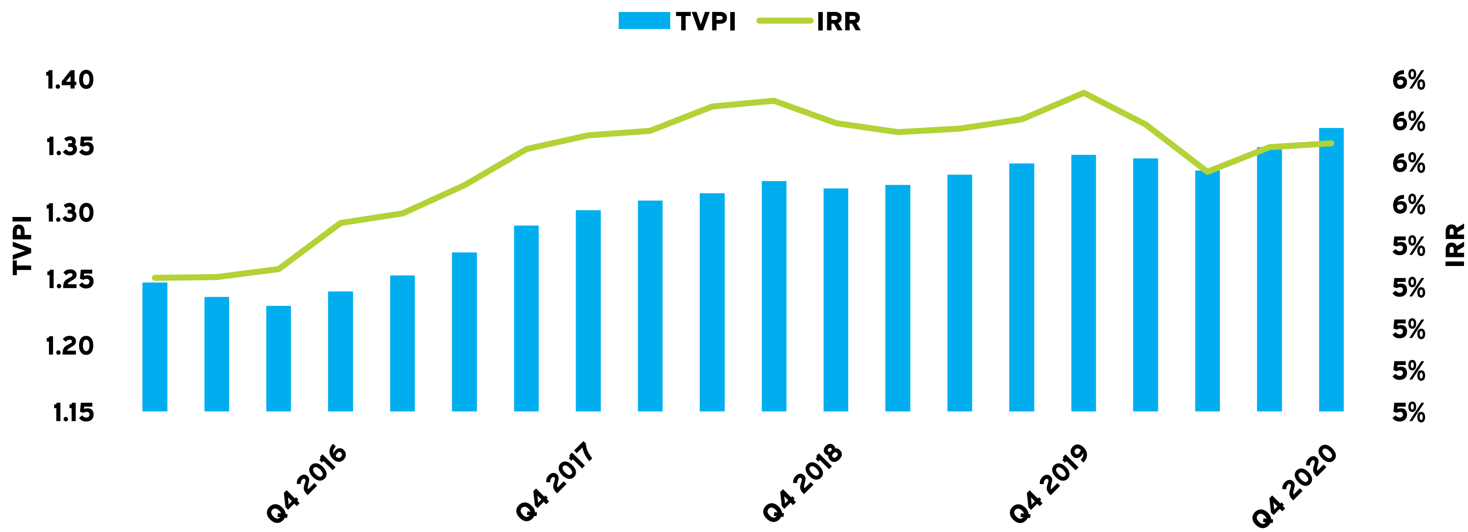
By Strategy

Group	Number	Committed ($ MM)	Contributed ($ MM)	Unfunded ($ MM)	Distributed ($ MM)	Remaining Value ($ MM)	Exposure ($ MM)	DPI (X)	TVPI (X)	IRR (%)
Core	3	120.5	121.5	0.0	24.5	163.3	163.3	0.20	1.55	6.0
Opportunistic	9	204.1	173.8	31.3	190.5	36.7	67.9	1.10	1.31	5.2
Value-Added	6	177.0	118.8	59.9	86.2	63.1	123.0	0.73	1.26	7.6
Total	**18**	**501.6**	**414.0**	**91.2**	**301.2**	**263.1**	**354.3**	**0.73**	**1.36**	**5.9**

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	121.5	0.0	24.5	163.3	163.3	0.20	1.55	NM
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	114.6	5.3	17.3	1.36	1.43	7.2
2011	2	50.0	38.3	11.7	47.1	3.7	15.5	1.23	1.33	9.6
2012	2	36.0	33.8	3.0	48.6	0.3	3.3	1.44	1.45	12.5
2013	1	19.1	18.3	0.8	20.0	9.6	10.5	1.09	1.62	13.0
2014	1	20.0	19.0	1.8	3.3	20.6	22.4	0.17	1.26	7.8
2017	2	75.0	51.8	24.6	5.5	55.1	79.7	0.11	1.17	9.9
2020	1	40.0	2.9	37.3	0.0	3.0	40.3	0.00	1.03	NM
Total	**18**	**501.6**	**414.0**	**91.2**	**301.2**	**263.1**	**354.3**	**0.73**	**1.36**	**5.9**

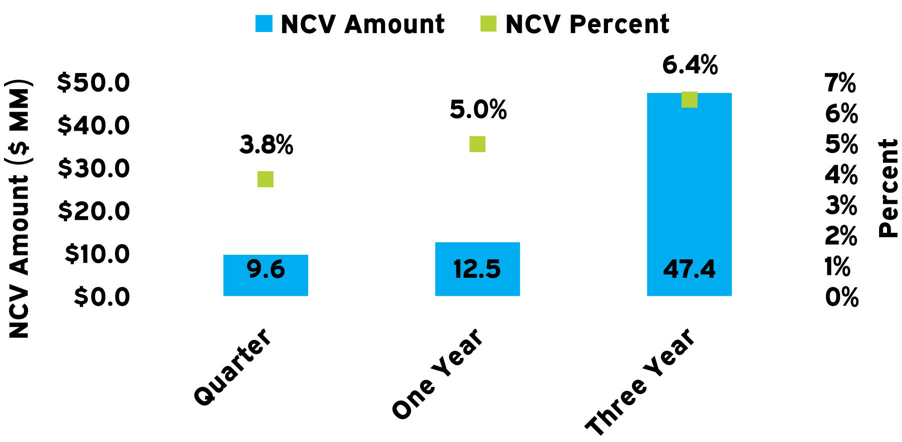
Since Inception Performance Over Time



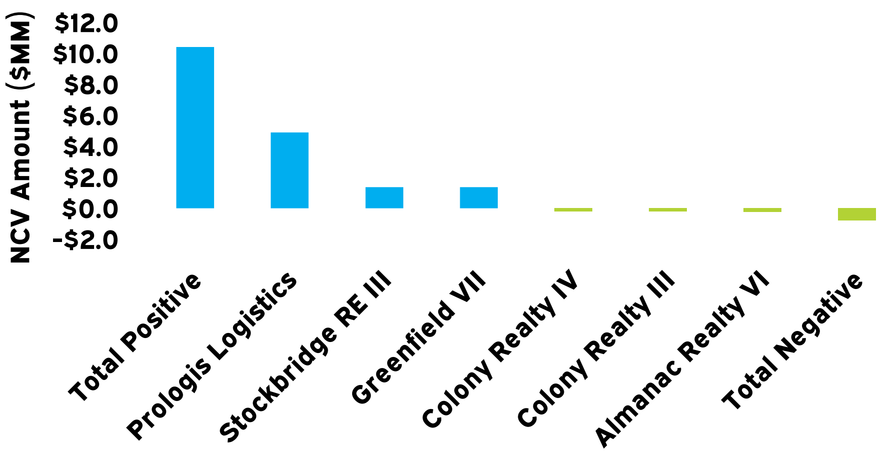
Horizon IRRs

	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)	Since Inception (%)
Aggregate Portfolio	2.9	5.8	6.9	10.1	5.9
Public Market Equivalent	-11.3	1.9	3.1	7.5	7.4

Periodic NCV



1 Quarter Drivers Of NCV



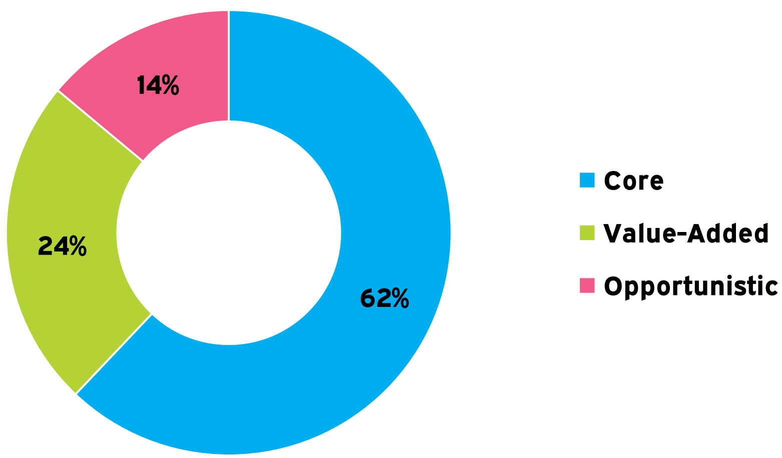
Fund Performance: Sorted By Vintage And Strategy

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	34.3	1.37	NM	6.1	NM
Prologis Logistics	Open-end	Core	50.5	51.5	0.0	17.6	78.5	1.87	NM	6.0	NM
RREEF America II	Open-end	Core	45.0	45.0	0.0	7.0	50.5	1.28	NM	5.9	NM
Miller GLobal Fund V	2005	Opportunistic	15.0	14.5	0.0	17.6	0.0	1.21	1.03	3.3	0.5
Walton Street V	2005	Opportunistic	30.0	30.0	0.0	20.1	2.1	0.74	1.03	-3.3	0.5
Greenfield V	2007	Opportunistic	30.0	29.6	0.4	40.4	0.2	1.37	1.23	8.3	4.8
Miller Global VI	2007	Opportunistic	30.0	21.1	8.9	32.3	0.4	1.55	1.23	7.5	4.8
Walton Street VI	2007	Opportunistic	15.0	13.3	1.7	15.2	4.7	1.50	1.23	7.8	4.8
Colony Realty III	2007	Value-Added	21.0	20.0	1.0	26.7	0.0	1.33	1.23	5.1	4.8
Greenfield VI	2011	Opportunistic	20.0	19.2	0.8	26.1	0.2	1.37	1.51	9.7	14.3
Almanac Realty VI	2011	Value-Added	30.0	19.1	10.9	21.0	3.6	1.29	1.51	9.6	14.3
Miller Global VII	2012	Opportunistic	15.0	12.0	3.0	15.9	0.3	1.35	1.48	14.8	11.8
Colony Realty IV	2012	Value-Added	21.0	21.7	0.0	32.7	0.0	1.50	1.48	11.7	11.8
Greenfield VII	2013	Opportunistic	19.1	18.3	0.8	20.0	9.6	1.62	1.35	13.0	10.5
AG Core Plus IV	2014	Value-Added	20.0	19.0	1.8	3.3	20.6	1.26	1.34	7.8	9.5

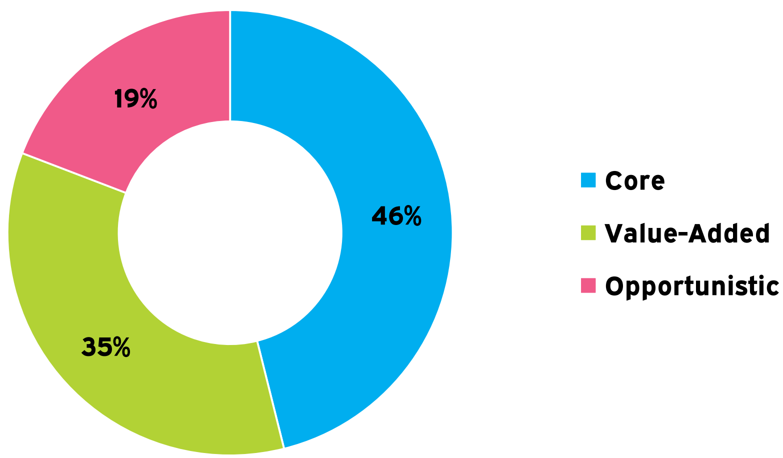
By Investment	Vintage	Strategy	Committed ($ MM)	Contributed ($ MM)	Unfunded ($ MM)	Distributed ($ MM)	Remaining Value ($ MM)	TVPI (X)	Peer TVPI (X)	IRR (%)	Peer IRR (%)
Greenfield VIII	2017	Opportunistic	30.0	15.8	15.6	3.0	19.2	1.41	1.17	17.5	9.4
Stockbridge RE III	2017	Value-Added	45.0	36.0	9.0	2.5	35.9	1.07	1.17	4.5	9.4
Berkeley V	2020	Value-Added	40.0	2.9	37.3	0.0	3.0	1.03	0.99	NM	NM
Total			**501.6**	**414.0**	**91.2**	**301.2**	**263.1**	**1.36**	**1.25**	**5.9**	**5.5**

By Strategy

Percent of FMV

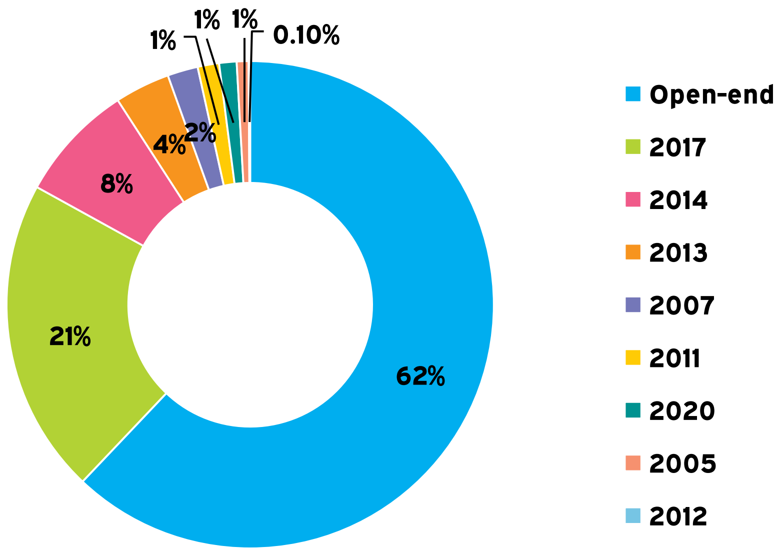


Percent of Exposure

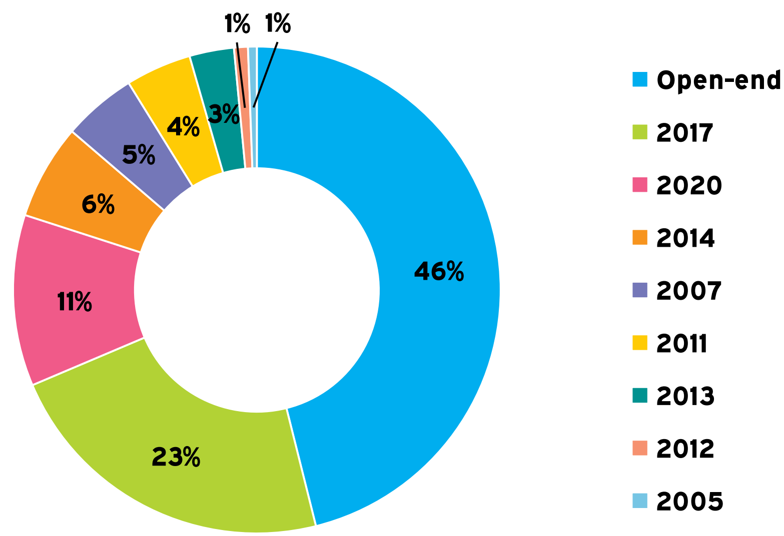


By Vintage

Percent of FMV

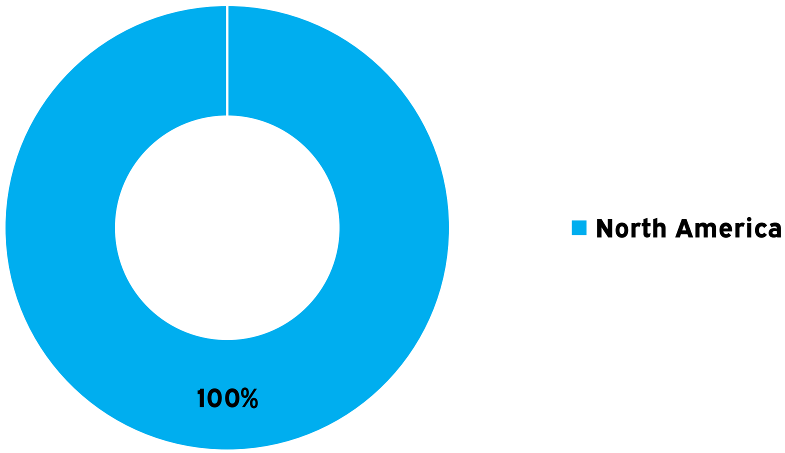


Percent of Exposure

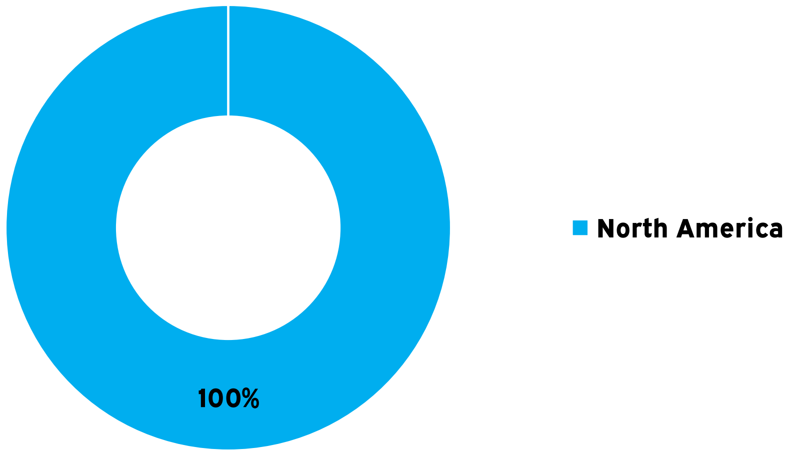


By Geographic Focus

Percent of FMV



Percent of Exposure



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

	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 Real Estate: Dow Jones U.S. Select Real Estate Securities Index
Remaining Value	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.
TVPI	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.
Unfunded	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.

Capital Markets Outlook & Risk Metrics

As of April 30, 2021

Capital Markets Outlook

Takeaways

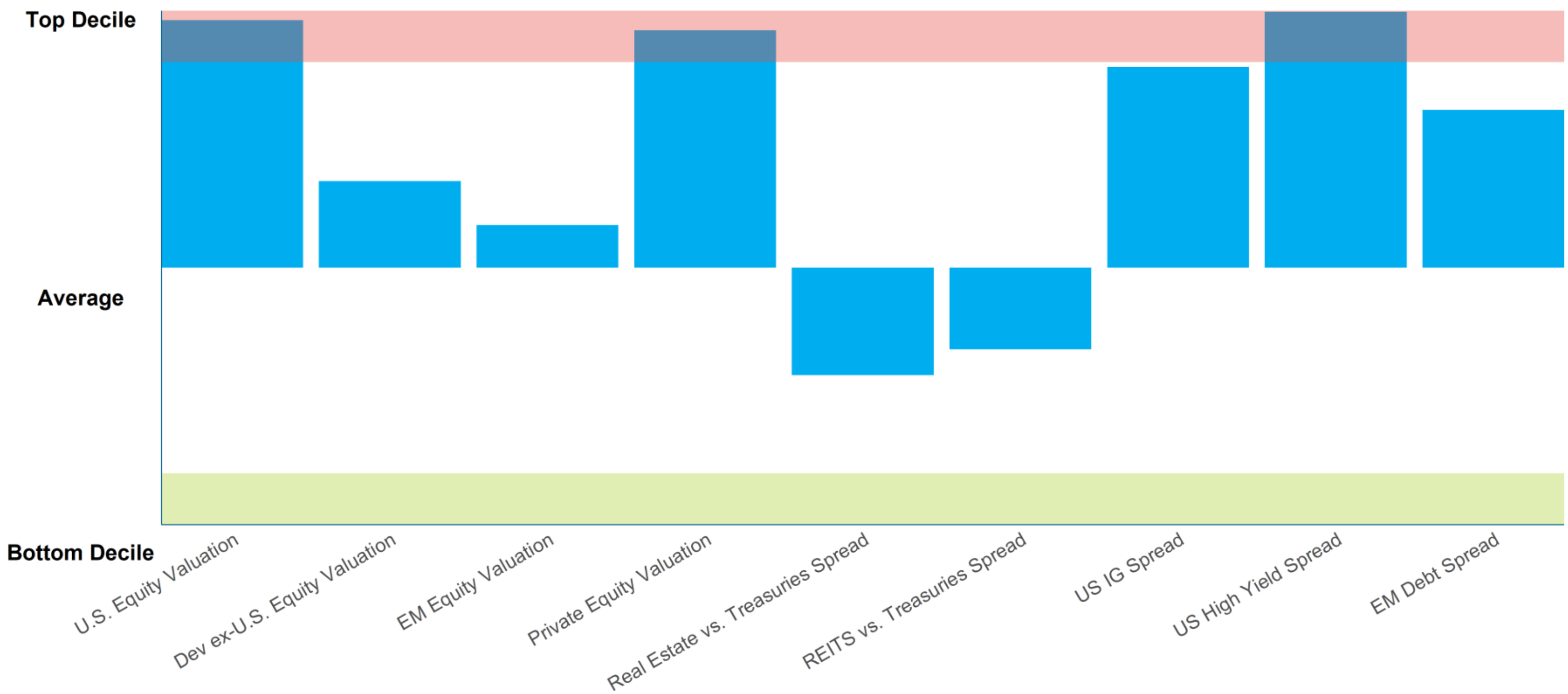
- The advent of ambitious global vaccination campaigns has begun to shift market focus to repricing of cyclical stocks, commodities, and real assets that may benefit from economic growth.
- The rotation to value and cyclical stocks took a pause so that growth stocks outperformed value stocks in the month of April as the Russell 1000 Growth Index outperformed the Russell 1000 Value Index.
- Developed markets outside of the US outperformed emerging market equities, and like the US, growth outperformed value.
- The MSCI China index continued its underperformance with a 1.4% return in April.
- Fixed income markets posted modest positive returns as the yield curve steepened rapidly to reflect higher inflation expectations.
- The Barclays TIPS index returned 1.4% in April and the Barclays 1-3 Year TIPS Index posted a 0.6% gain.
- Commodities and related stocks posted gains, with the Bloomberg Commodities index returning 8.3% and the S&P Global Natural Resources Index returning 4.1%.
- Global infrastructure stocks likewise posted positive returns in April, with the DJ Brookfield Global Infrastructure gaining 4.7% and the S&P Infrastructure index returning 3.8%.
- Global REITs have continued to recover from steep 2020 losses, with the MSCI US REITs and FTSE NAREIT Equity Index both of which returned 8.1% in April.

Capital Markets Outlook

Takeaways

- The US vaccination efforts combined with the American Recovery Act have lifted 2021 GDP forecasts for the US to 6.5%, while COVID-related setbacks in Europe have muted growth expectations there for 2021.
- According to the World Health Organization, global COVID cases have been falling since January. While the efficacy of many of the vaccines is promising, governments are closely monitoring new COVID variants as these may prove less susceptible to currently available vaccines.
- While the markets appear as though they are looking past COVID, a full recovery to pre-COVID levels of economic activity is not expected to occur until mid-2021 at the earliest.
- As the new administration in the US implements its policy agenda, investors will continue to examine its actions as it relates to monetary and fiscal policy, with a particular focus on economic stimulus, taxation, and broad infrastructure spending.

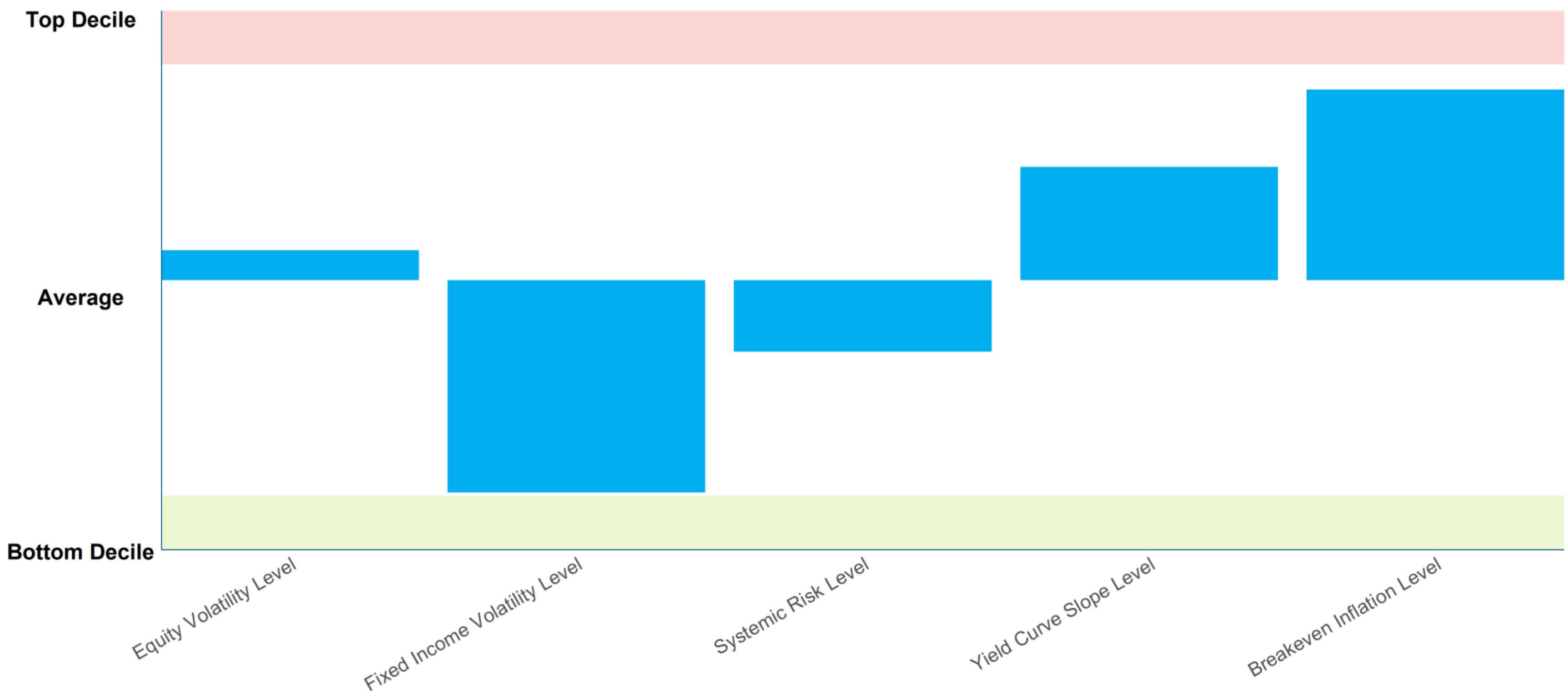
Risk Overview/Dashboard (1)
(As of April 30, 2021)[1]



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

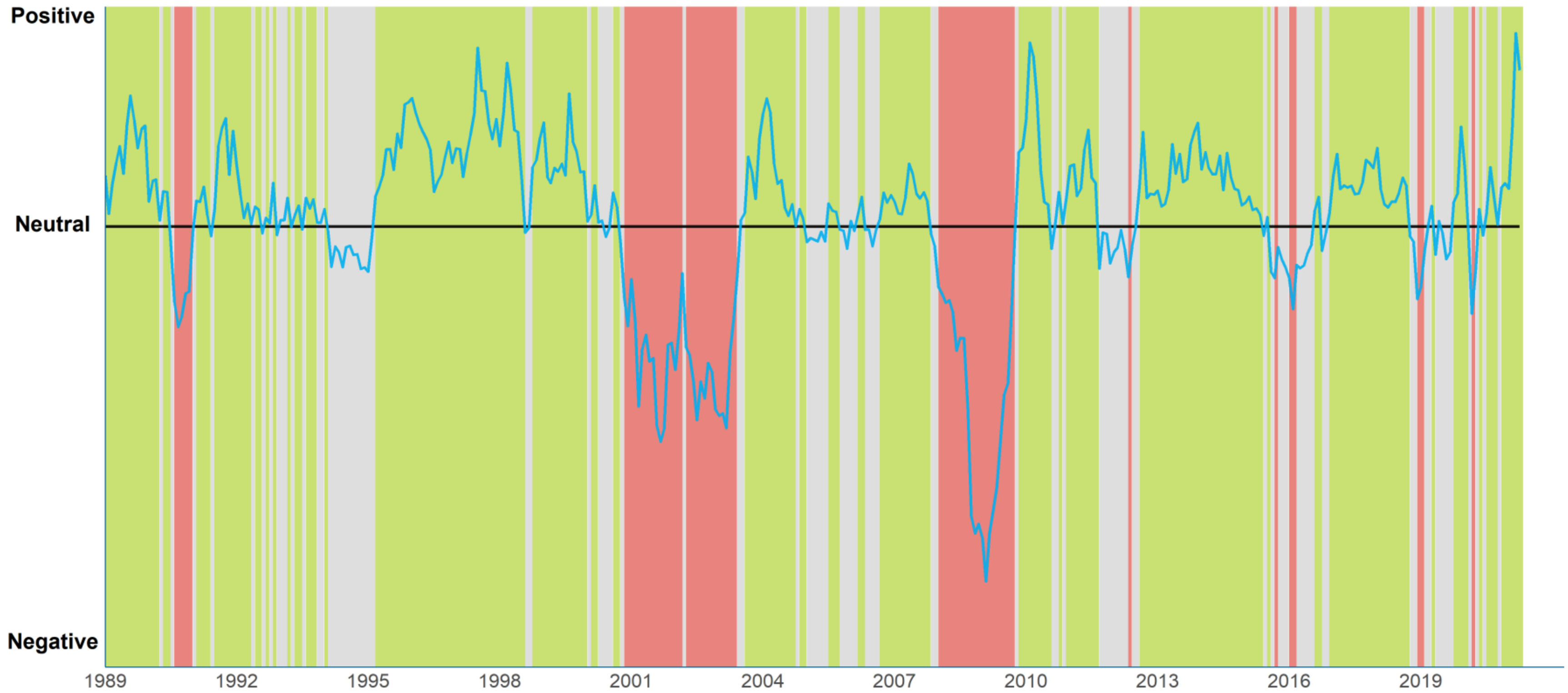
[1] With the exception of Private Equity Valuation, that is YTD as of December 31, 2020.

Risk Overview/Dashboard (2)
(As of April 30, 2021)

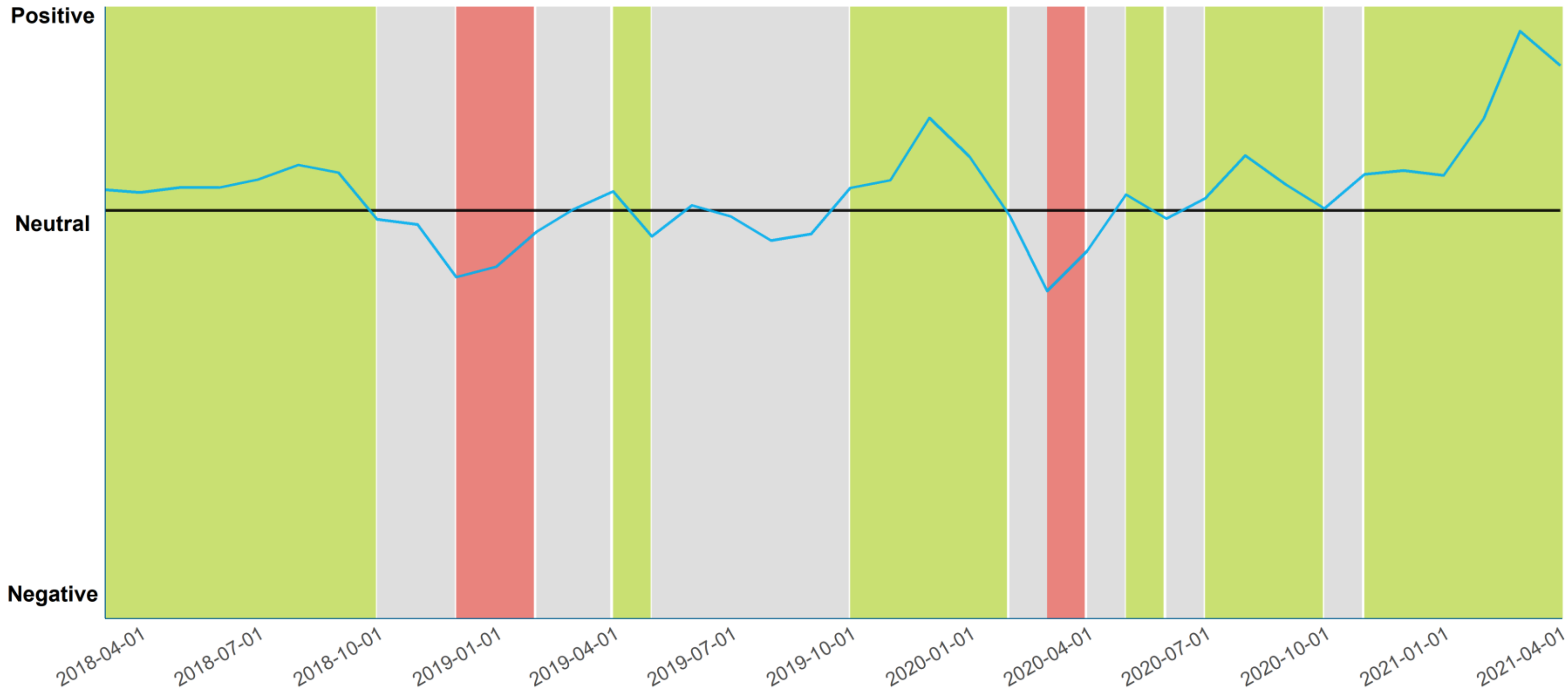


- Dashboard (2) shows how the current level of each indicator compares to its respective history.

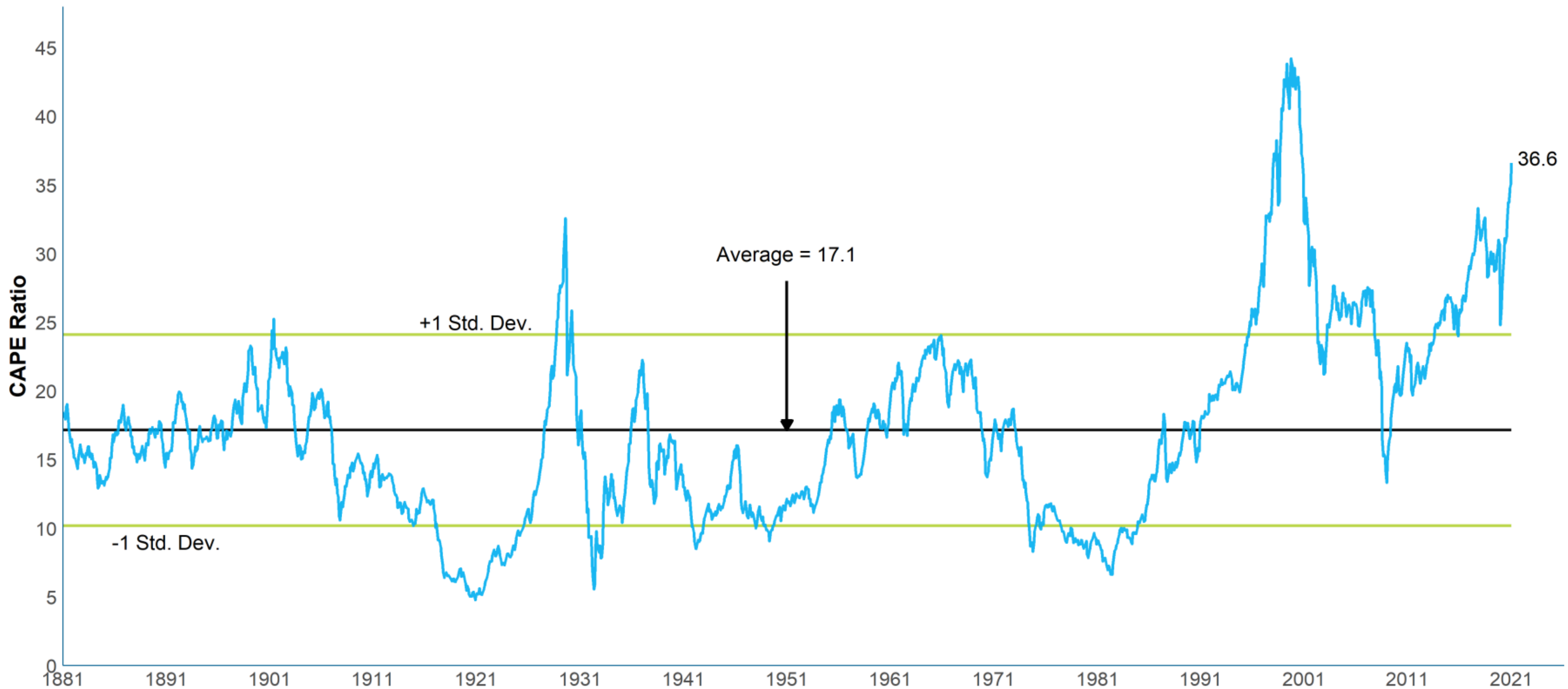
Market Sentiment Indicator (All History)
(As of April 30, 2021)



Market Sentiment Indicator (Last Three Years)
(As of April 30, 2021)



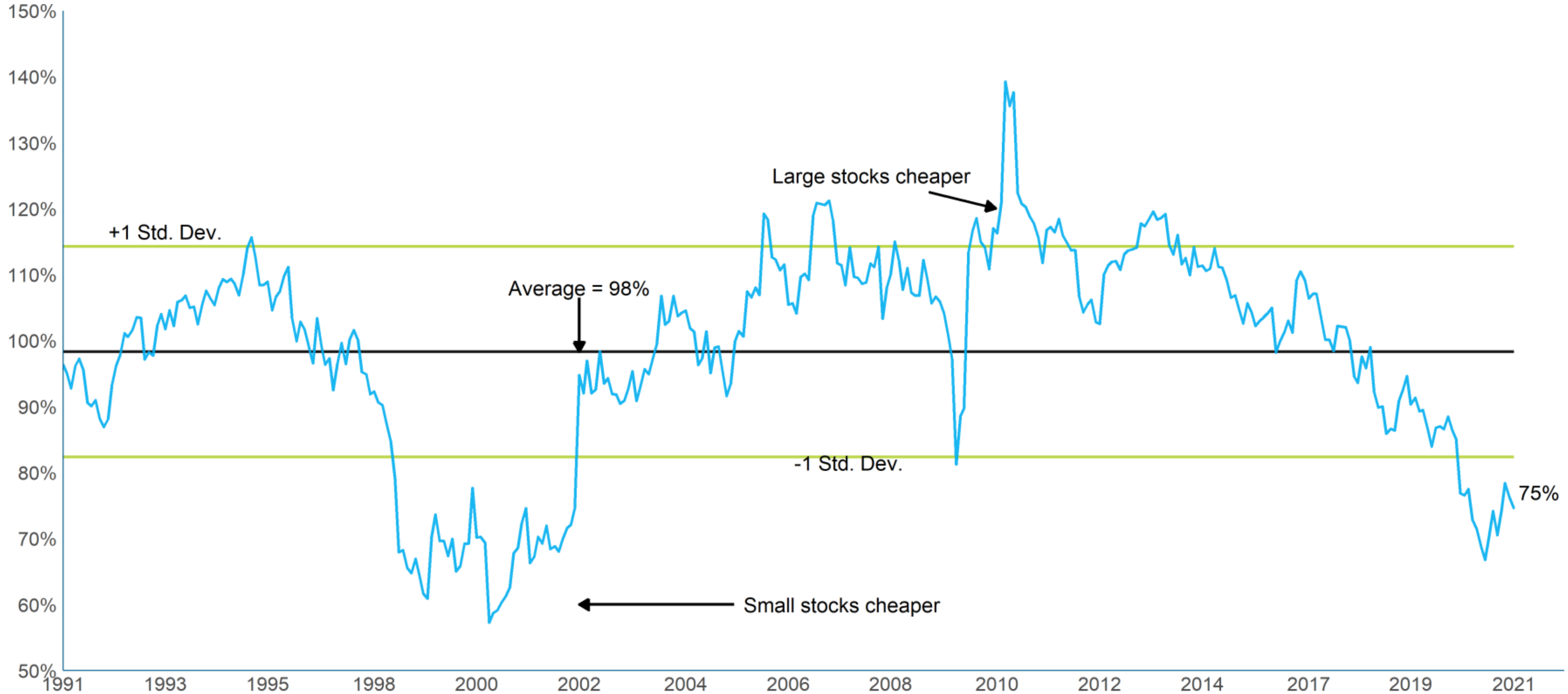
US Equity Cyclically Adjusted P/E[1]
(As of April 30, 2021)



- 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/E[1]
(As of April 30, 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/E[1]
(As of April 30, 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/E[1]

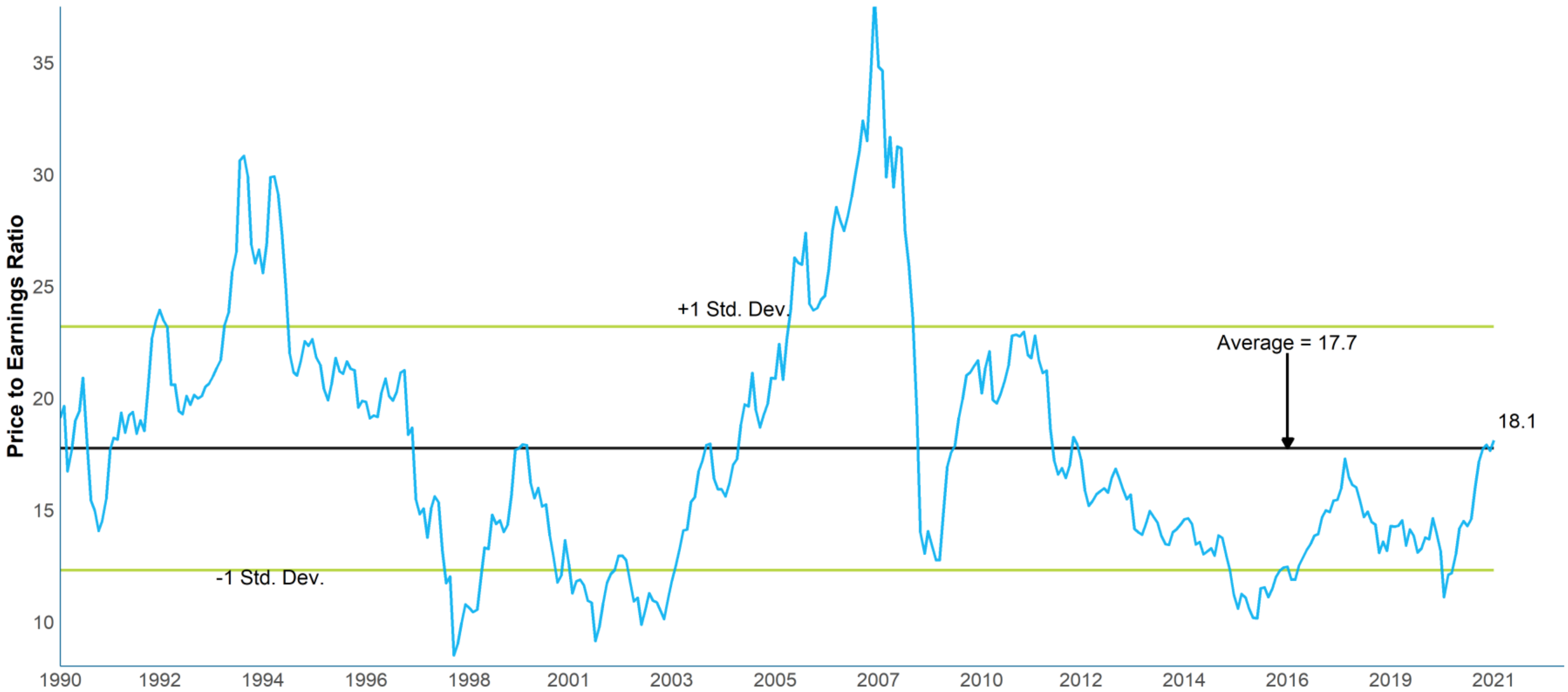
(As of April 30, 2021)

- 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/E[1]

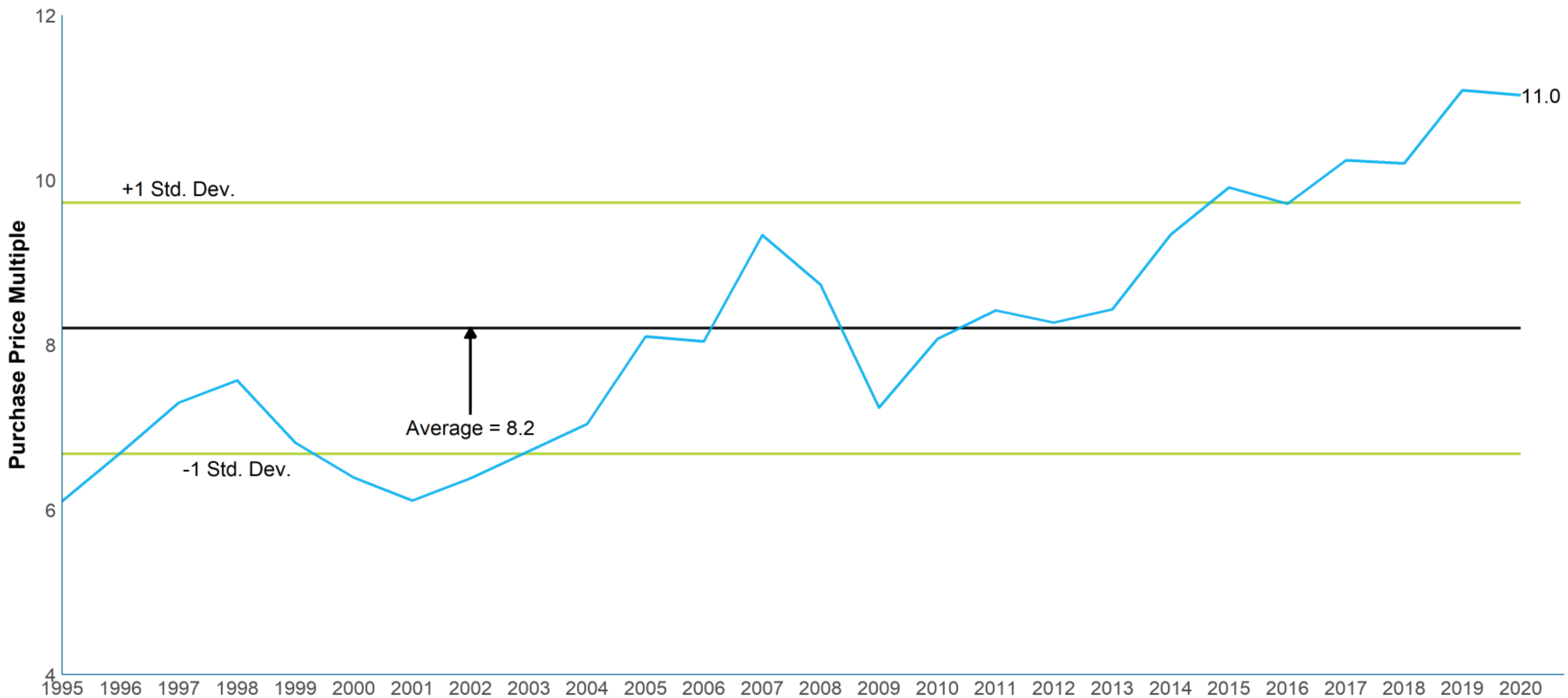
(As of April 30, 2021)



- 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 Multiples[1]
(As of February 28, 2021)[2]

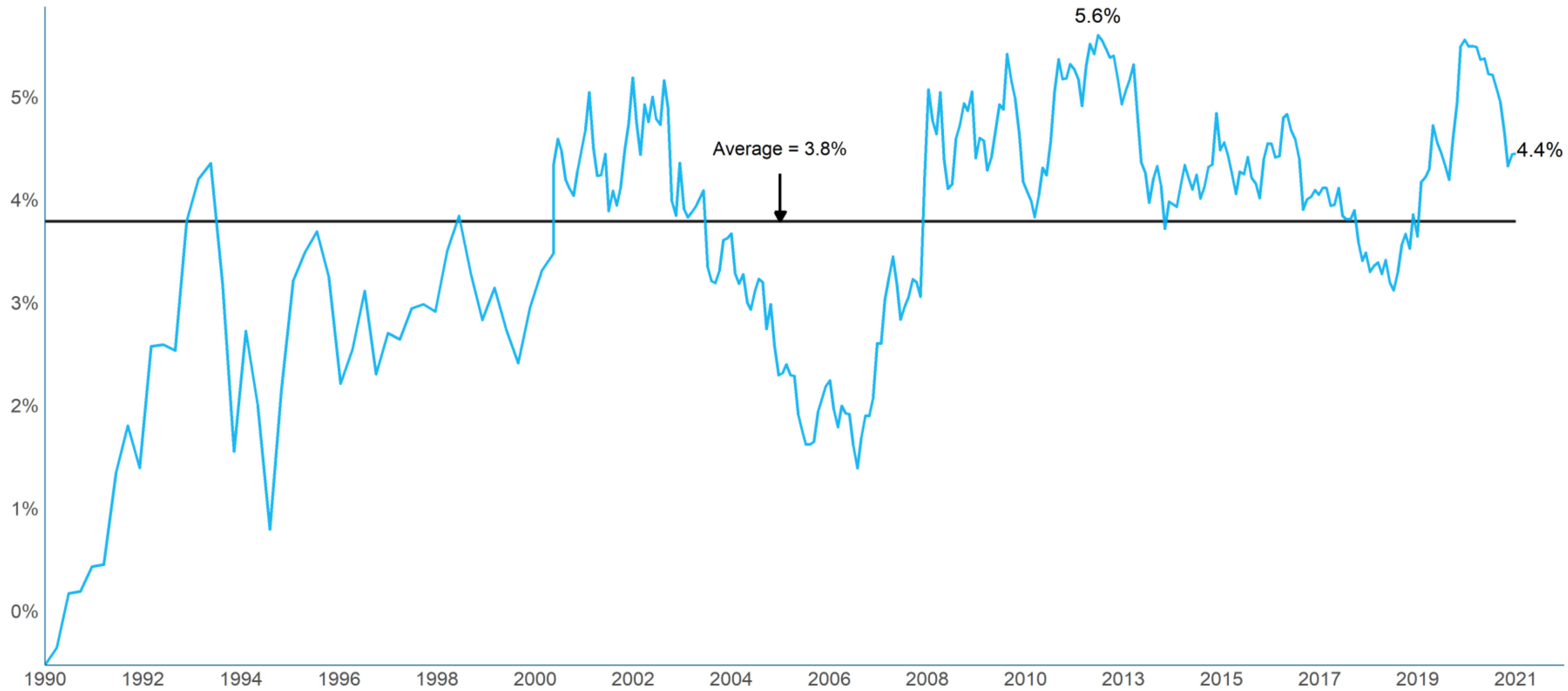


- This chart details one valuation metric for the private equity market. A higher (lower) figure indicates more expensive (cheaper) valuation relative to history.

[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 Treasury[1]
(As of April 30, 2021)

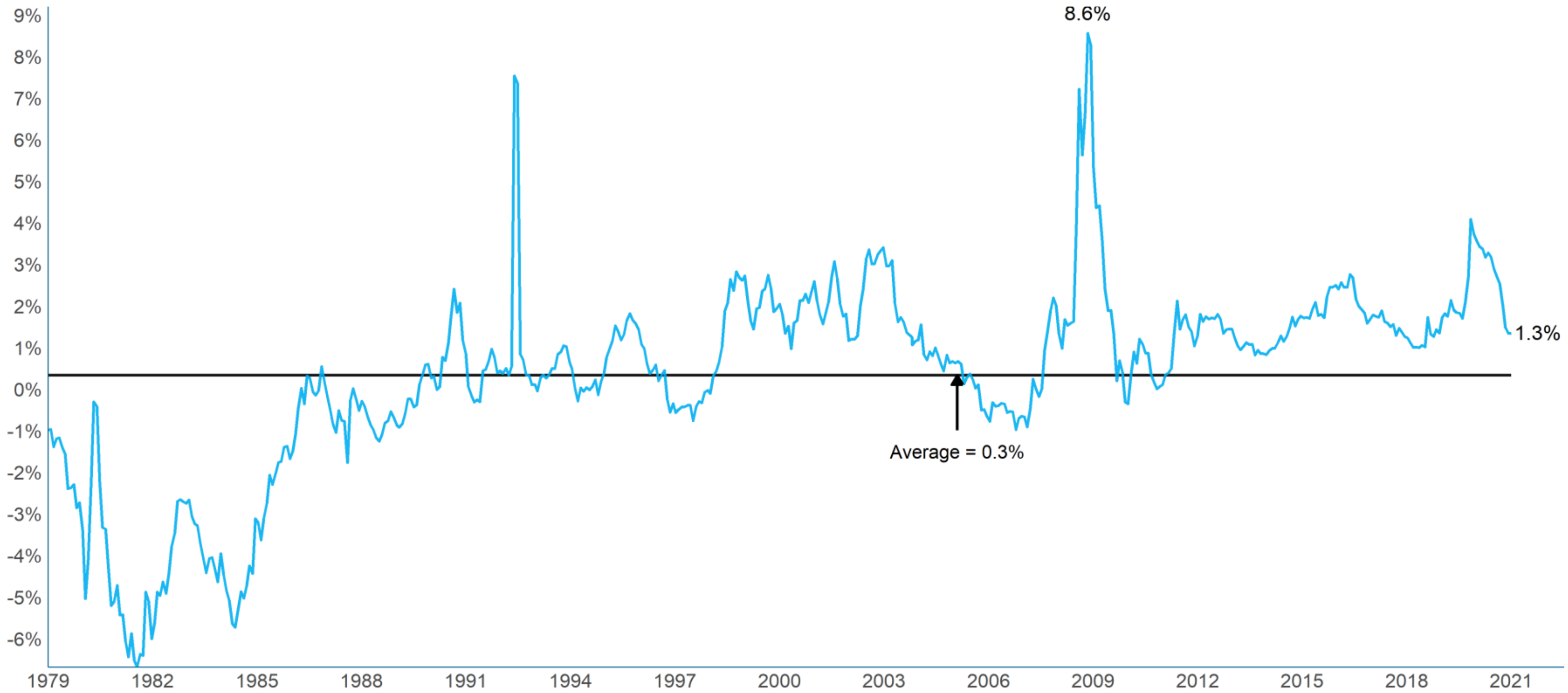


- This chart details one valuation metric for the private core real estate market. A higher (lower) figure indicates cheaper (more expensive) valuation.

[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 Treasury[1]

(As of April 30, 2021)

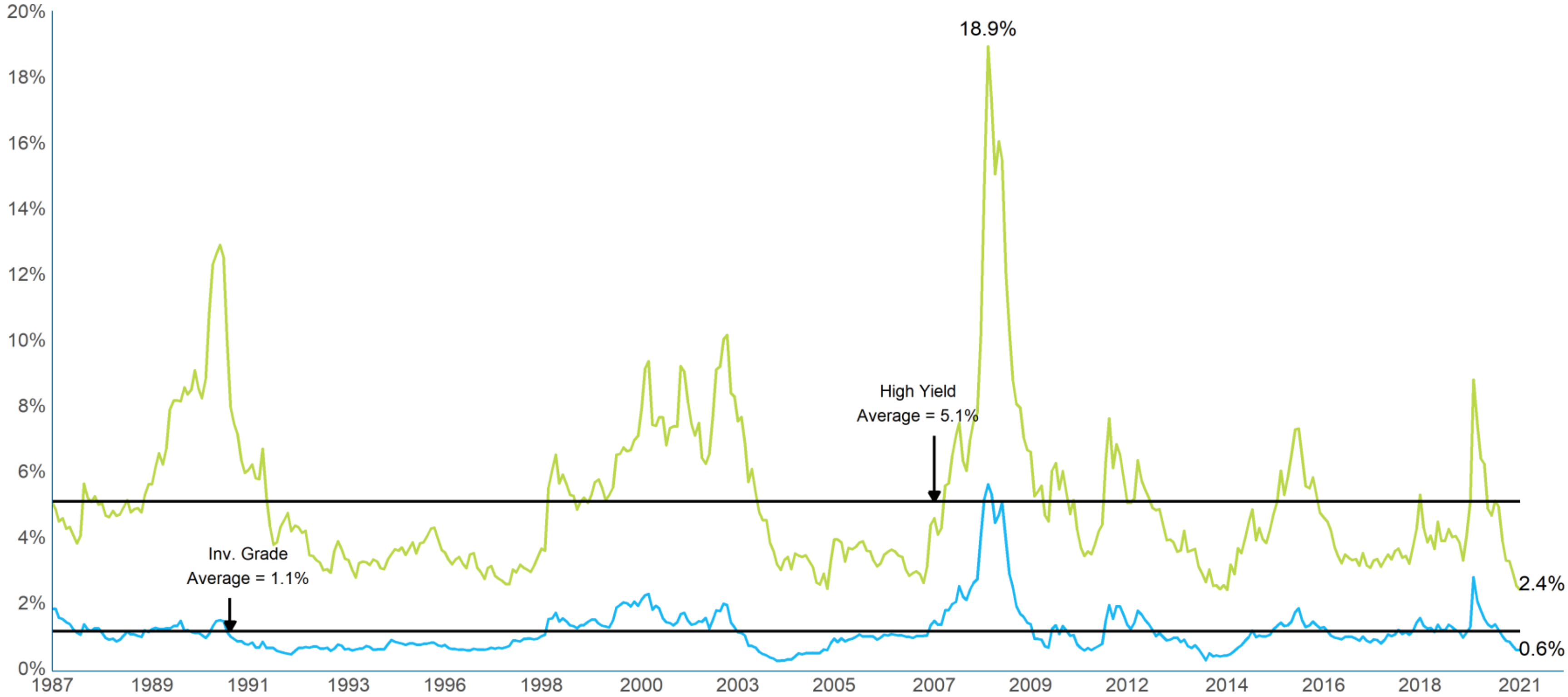


- This chart details one valuation metric for the public REITs market. A higher (lower) figure indicates cheaper (more expensive) valuation.

[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 Spreads[1]

(As of April 30, 2021)



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

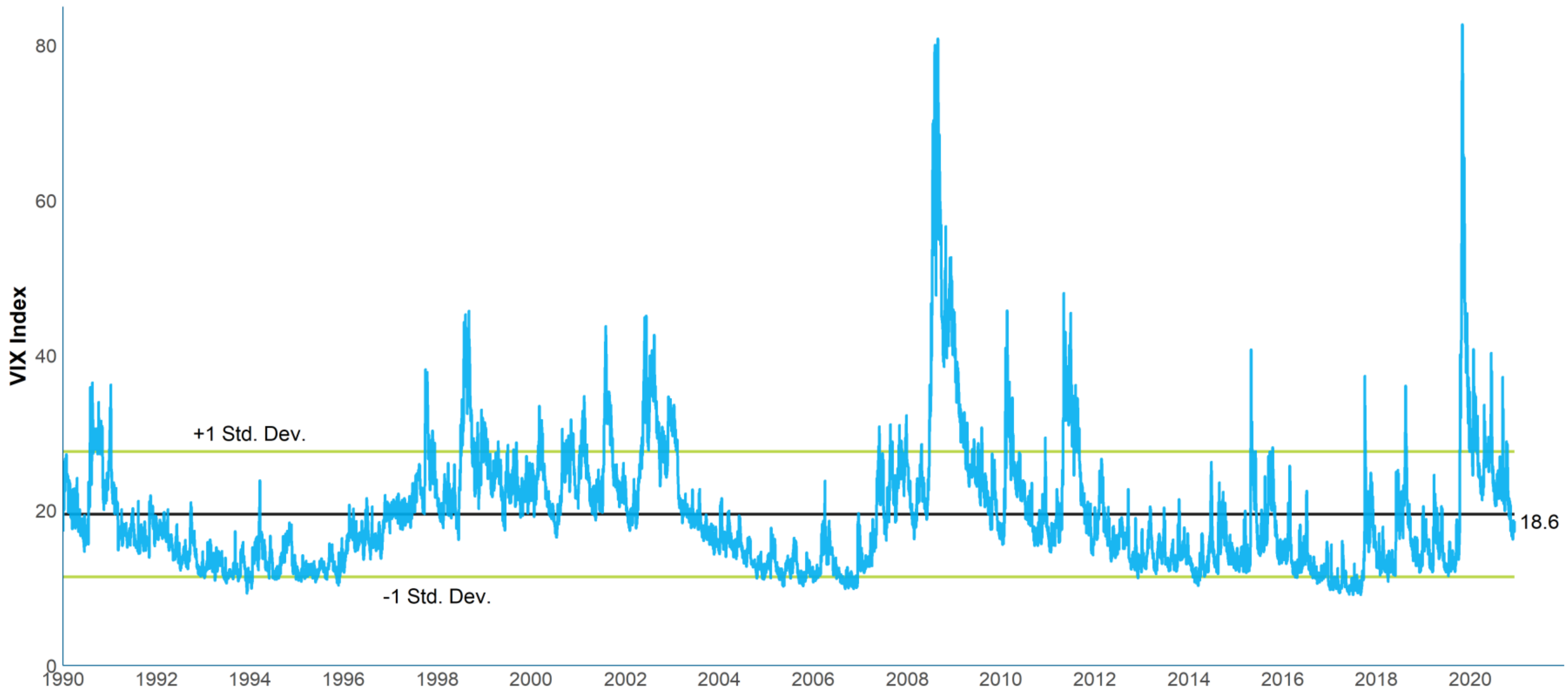
[1] Credit Spreads – Source: Barclays Capital. High Yield is proxied by the Barclays High Yield index and Investment Grade Corporates are proxied by the Barclays US Corporate Investment Grade index. Spread is calculated as the difference between the Yield to Worst of the respective index and the 10-Year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

Emerging Market Debt Spreads[1]
(As of April 30, 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.

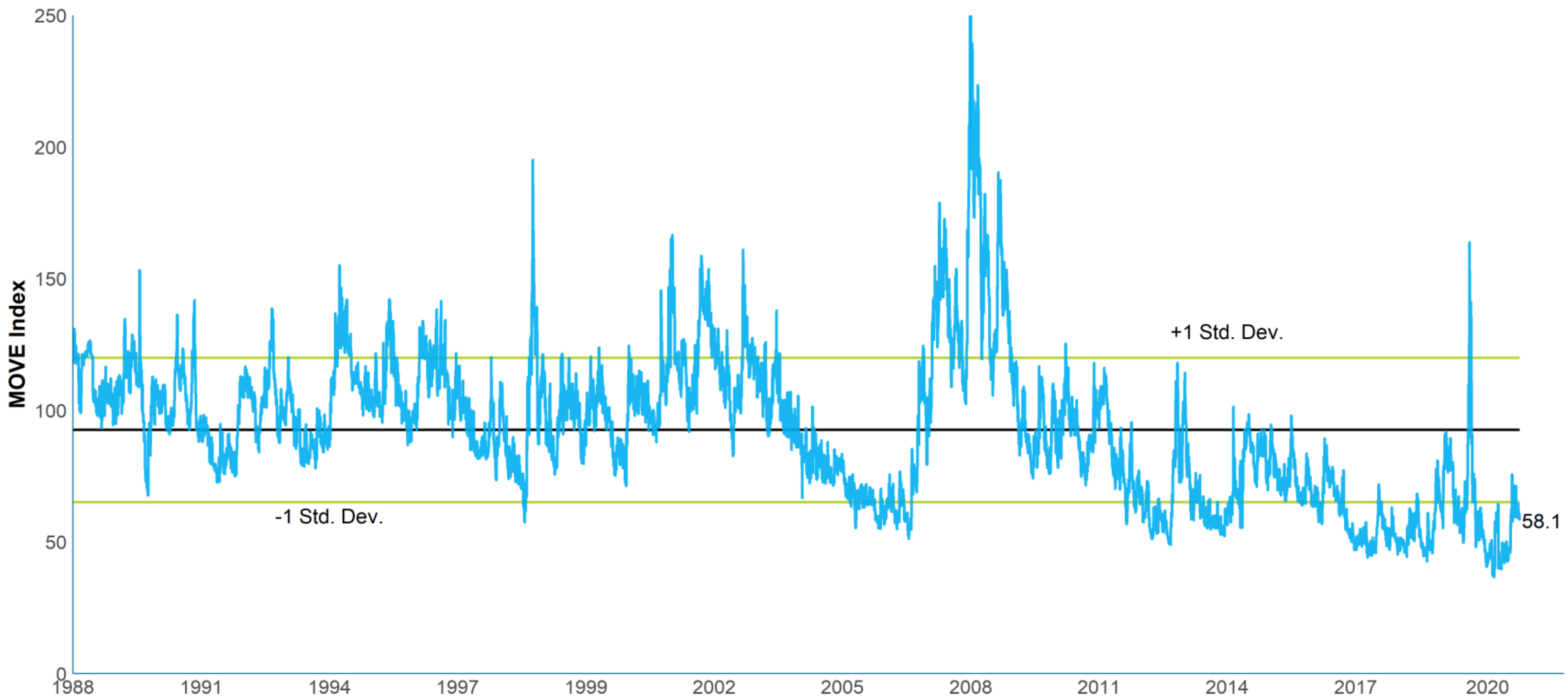
Equity Volatility[1]
(As of April 30, 2021)



- 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.

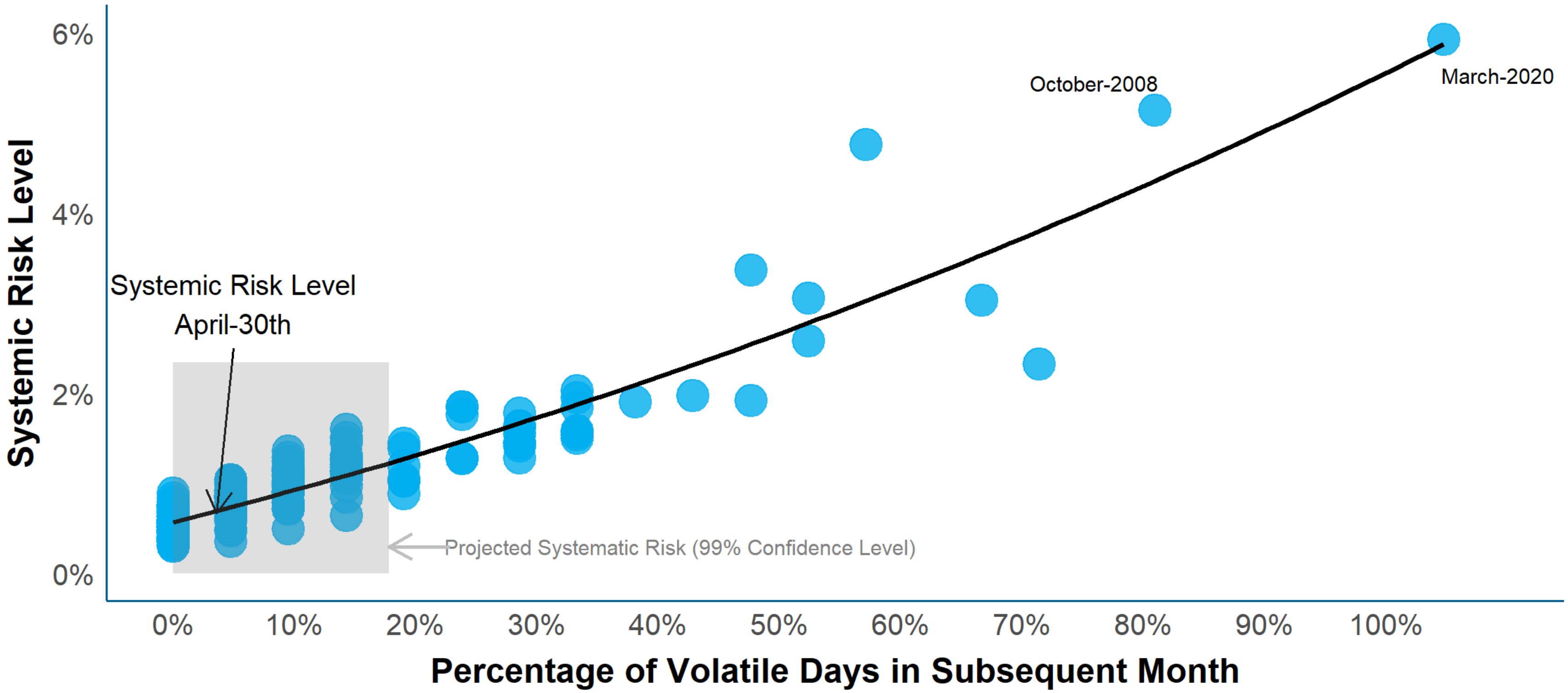
Fixed Income Volatility[1]
(As of April 30, 2021)



- 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.

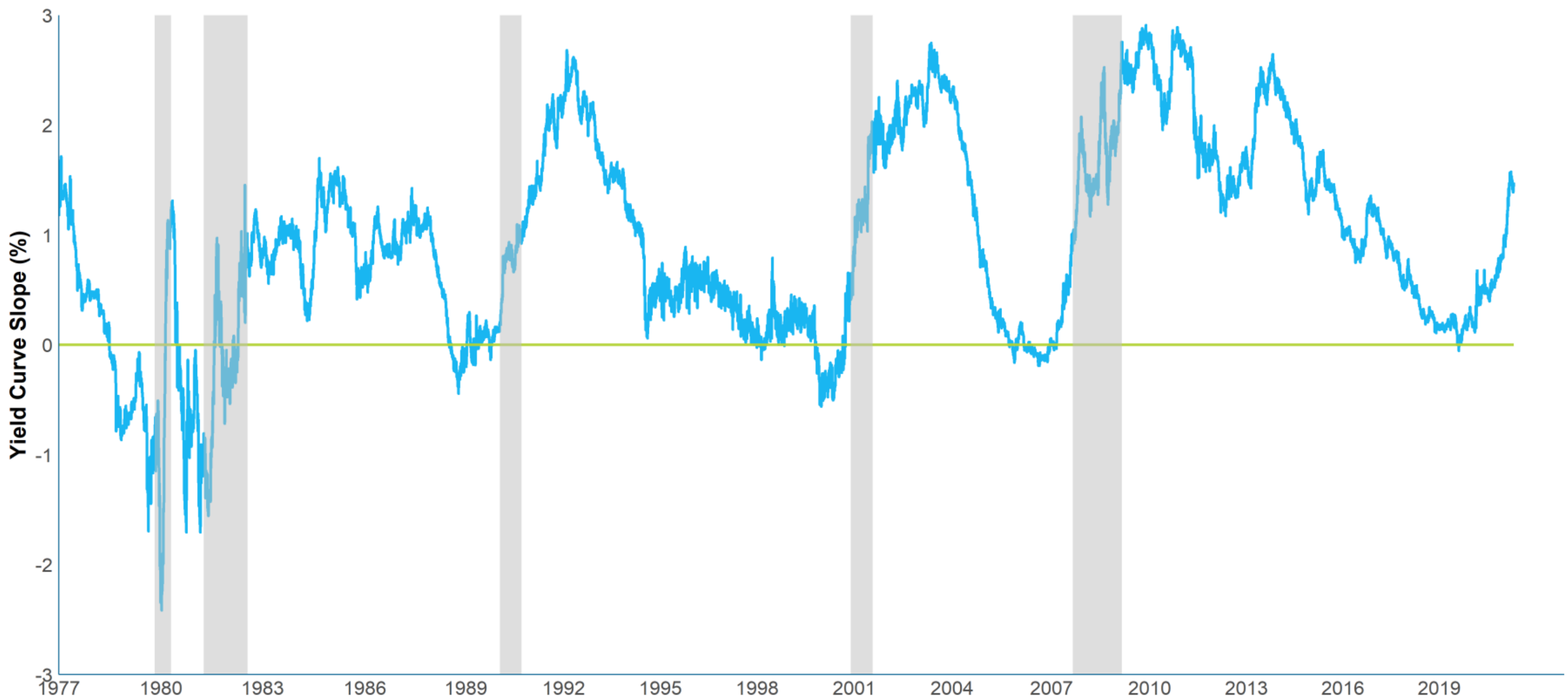
Systemic Risk and Volatile Market Days[1]
(As of April 30, 2021)



- 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.

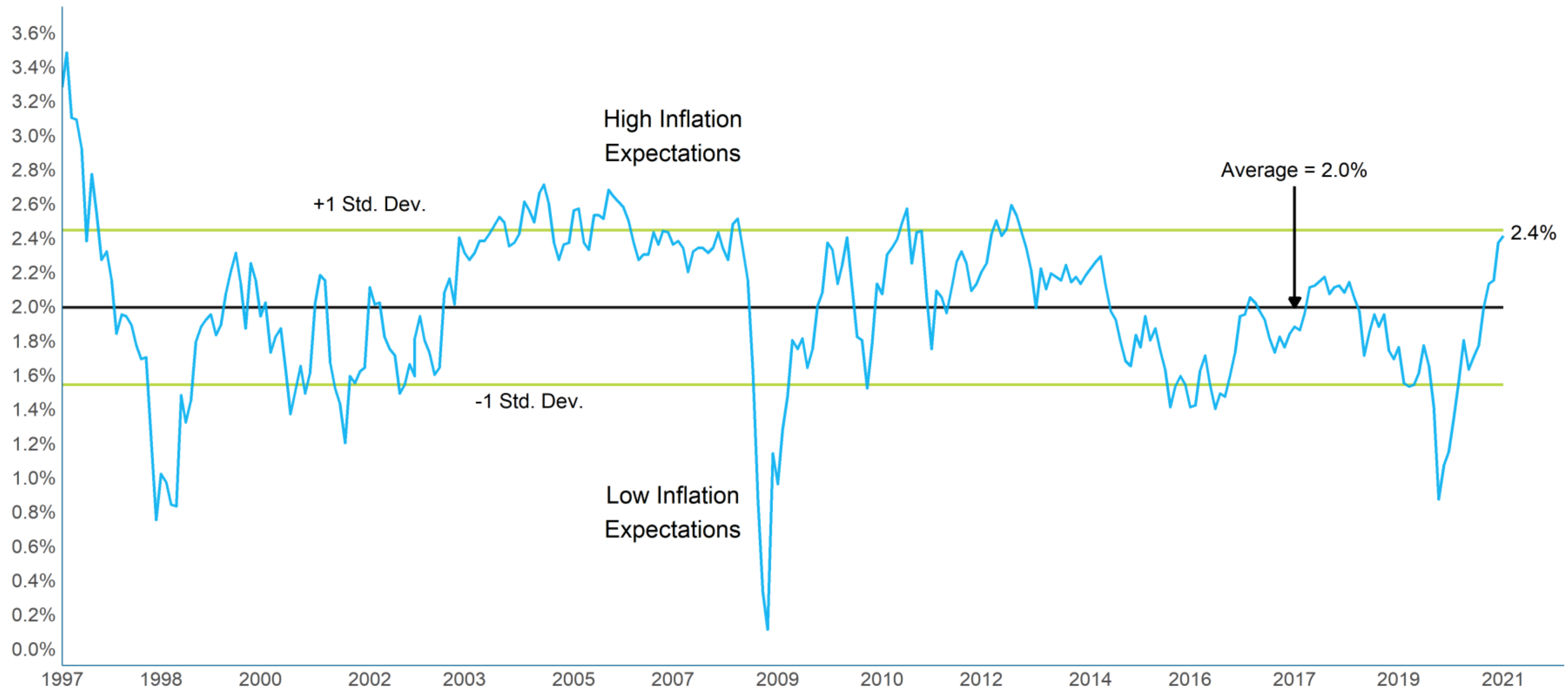
Yield Curve Slope (Ten Minus Two)[1]
(As of April 30, 2021)



- 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.

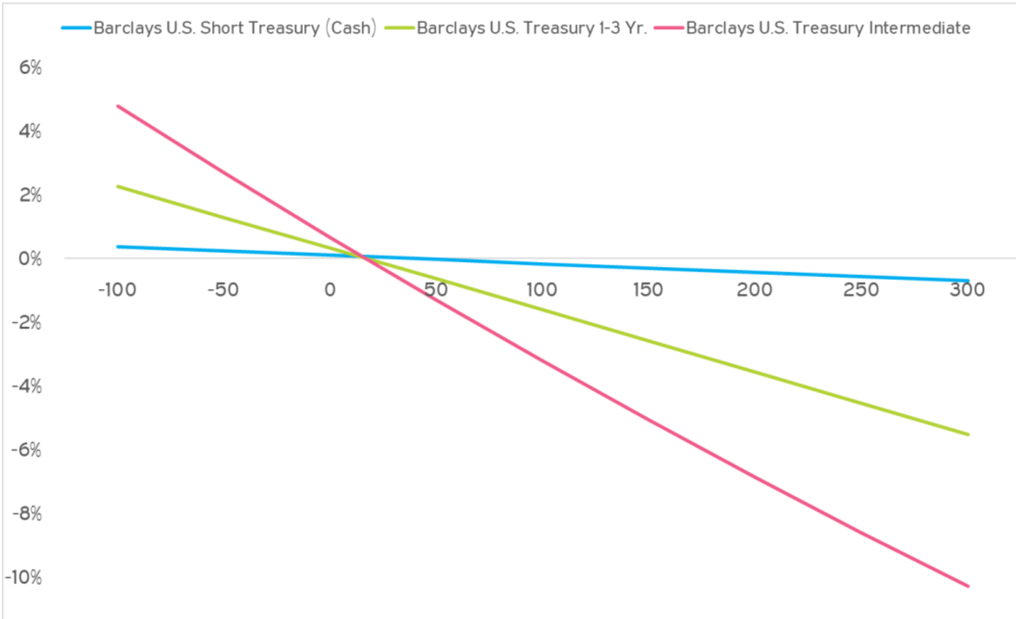
Ten-Year Breakeven Inflation[1]
(As of April 30, 2021)



- 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).

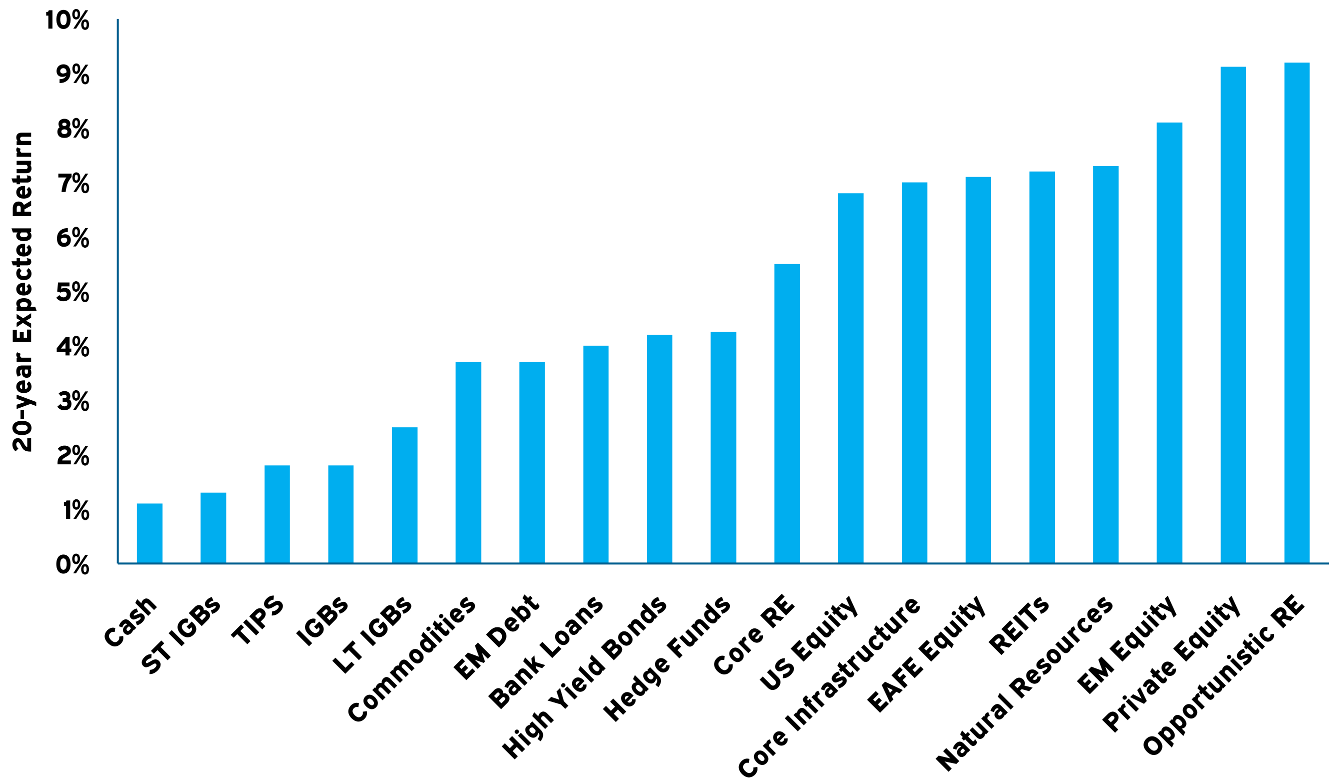
Total Return Given Changes in Interest Rates (bps)[1]
(As of March 31, 2021)



	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)	0.4%	0.2%	0.1%	-0.1%	-0.2%	-0.3%	-0.5%	-0.6%	-0.7%	0.27	0.08%
Barclays US Treasury 1-3 Yr.	2.2%	1.3%	0.3%	-0.7%	-1.6%	-2.6%	-3.6%	-4.6%	-5.5%	1.93	0.31%
Barclays US Treasury Intermediate	4.8%	2.7%	0.6%	-1.3%	-3.2%	-5.1%	-6.9%	-8.6%	-10.3%	4	0.64%
Barclays US Treasury Long	23.0%	12.1%	2.2%	-6.6%	-14.3%	-20.9%	-26.4%	-30.9%	-34.3%	18.65	2.22%

[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 Returns[1]



- 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 Explanations[1]

- 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 April 30, 2021 unless otherwise noted.

Appendix

Data Sources and Explanations[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 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 April 30, 2021 unless otherwise noted.

Appendix

Data Sources and Explanations[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 Inflation – Source: US Treasury and Federal Reserve. Inflation is measured by the Consumer Price Index (CPI-U NSA).

[1] All Data as of April 30, 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.

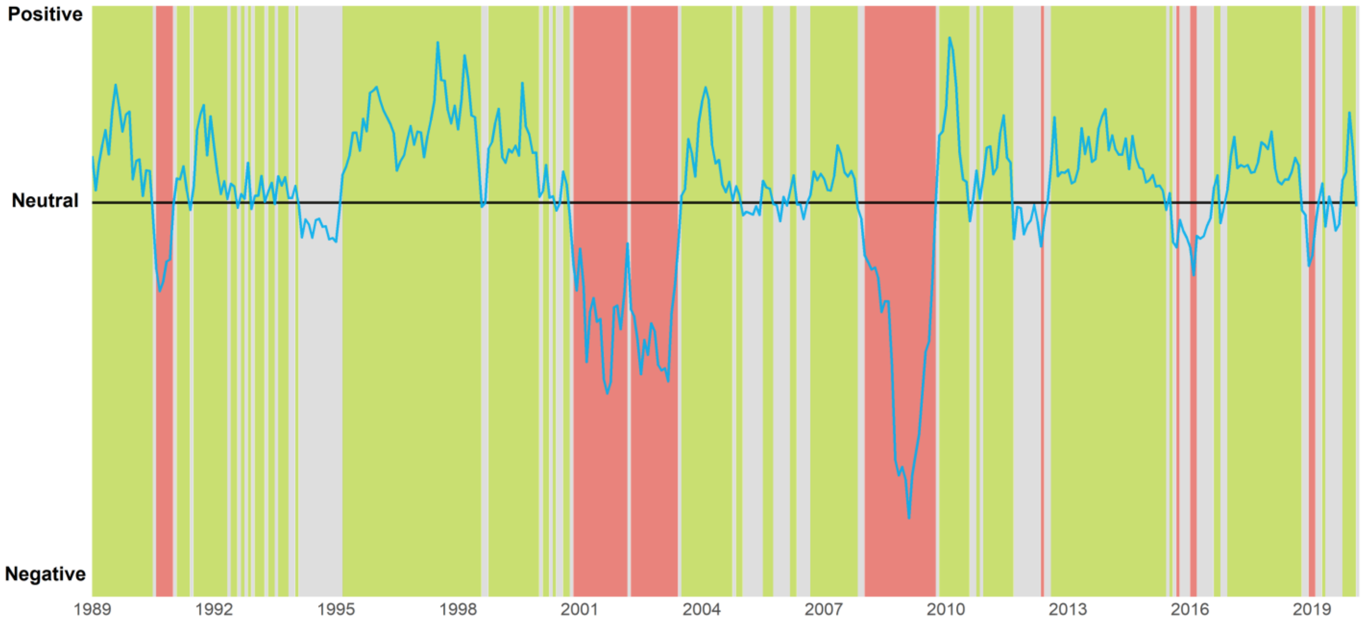
- Meketa's Risk Metrics, which rely significantly on standard market measures of relative valuation, often provide valid early signals of increasing long-term risk levels in the global investment markets. However, as is the case with numerous valuation measures, the Risk Metrics may convey such risk concerns long before a market corrections 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 measure[1]. 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?

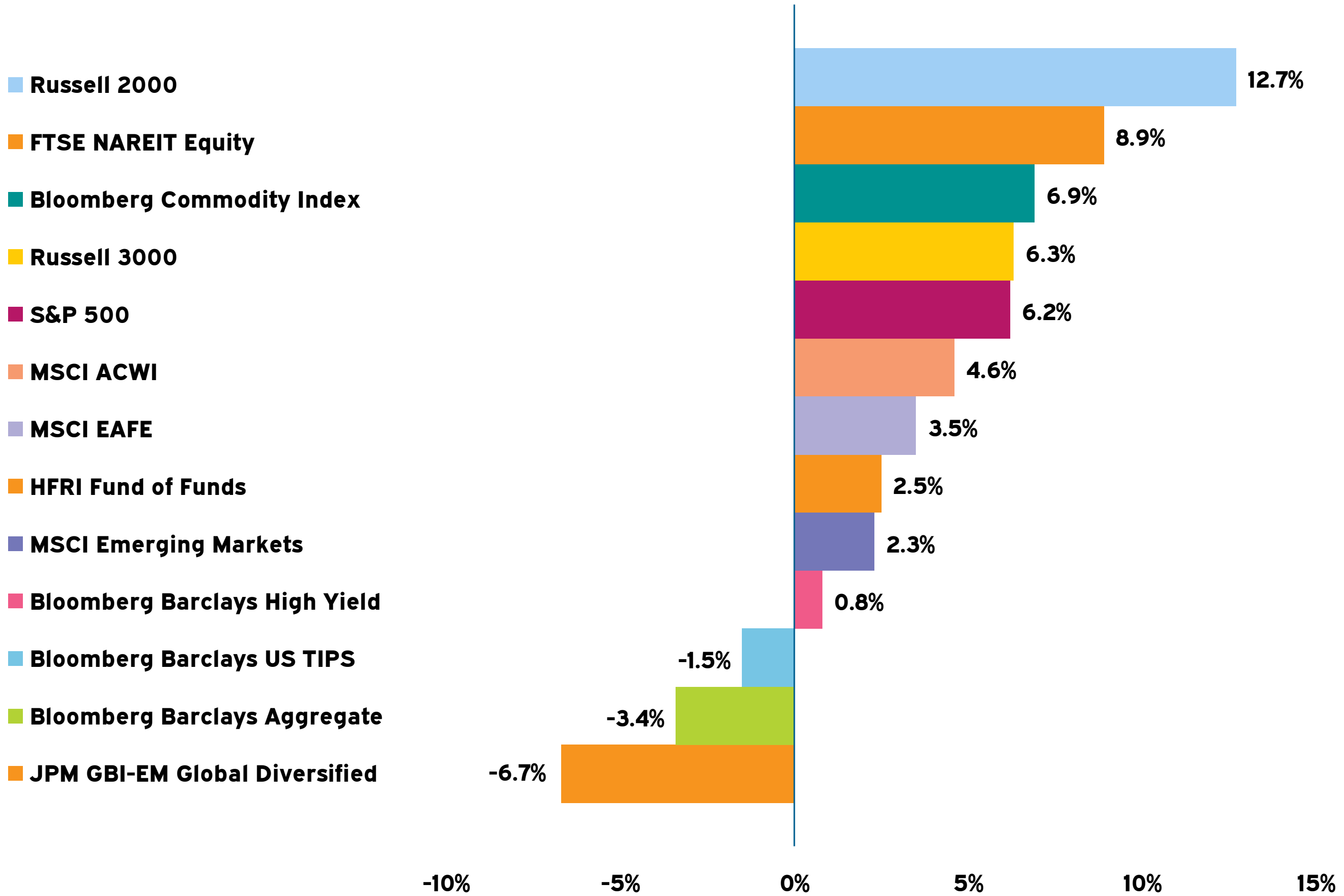
- There is strong evidence that time series momentum is significant and persistent. In particular, across an extensive array of asset classes, the sign of the trailing 12-month return (positive or negative) is indicative of future returns (positive or negative) over the next 12-month period. The MIG-MSI 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

This material is provided by Meketa Investment Group, Inc. ("Meketa") for informational purposes only and may contain information that is not suitable for all clients. No portion of this commentary is to be construed as a solicitation or recommendations to buy or sell a security, or the provision of personalized investment advice, tax or legal advice. Past performance may not be indicative of future results and may have been impacted by market events and economic conditions that will not prevail in the future. There can be no assurance that any particular investment or strategy will prove profitable and the views, opinions, and projects expressed herein may not come to pass. Any direct or indirect reference to a market index is included for illustrative purposes only, as an index is not a security in which an investment can be made. Indices are benchmarks that serve as market or sector indicators and do not account for the deduction of management fees, transaction costs and other expenses associated with investable products. Meketa does not make any representation as to the accuracy, timeliness, suitability, completeness or relevance of any information prepared by any unaffiliated third party and takes no responsibility, therefore. Any data provided regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of futures results. Investing involves risk, including the potential loss of principal and clients should be guided accordingly.

The World Markets
First Quarter of 2021

The World Markets[1]
First Quarter of 2021



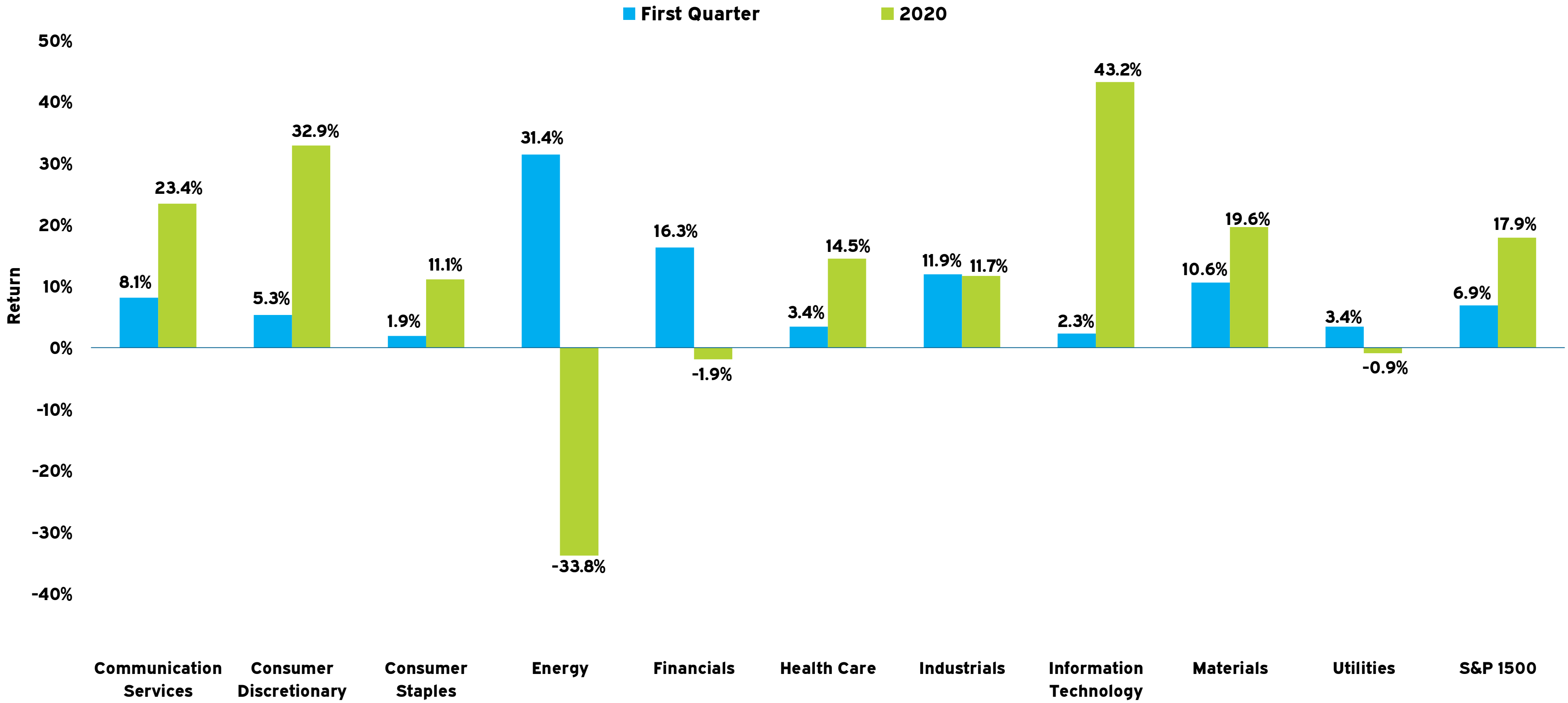
[1] Source: InvestorForce.

Index Returns[1]

	1Q21 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
Domestic Equity					
S&P 500	6.2	56.4	16.8	16.3	13.9
Russell 3000	6.3	62.5	17.1	16.6	13.8
Russell 1000	5.9	60.6	17.3	16.7	14.0
Russell 1000 Growth	0.9	62.7	22.8	21.0	16.6
Russell 1000 Value	11.3	56.1	11.0	11.7	11.0
Russell MidCap	8.1	73.6	14.7	14.7	12.5
Russell MidCap Growth	-0.6	68.6	19.4	18.4	14.1
Russell MidCap Value	13.1	73.8	10.7	11.6	11.1
Russell 2000	12.7	94.9	14.8	16.4	11.7
Russell 2000 Growth	4.9	90.2	17.2	18.6	13.0
Russell 2000 Value	21.2	97.1	11.6	13.6	10.1
Foreign Equity					
MSCI ACWI (ex. US)	3.5	49.4	6.5	9.8	4.9
MSCI EAFE	3.5	44.6	6.0	8.8	5.5
MSCI EAFE (Local Currency)	7.6	36.6	7.1	8.8	7.5
MSCI EAFE Small Cap	4.5	62.0	6.3	10.5	8.0
MSCI Emerging Markets	2.3	58.4	6.5	12.1	3.7
MSCI Emerging Markets (Local Currency)	4.0	53.0	9.3	12.9	6.9
Fixed Income					
Bloomberg Barclays Universal	-3.1	3.0	4.9	3.6	3.8
Bloomberg Barclays Aggregate	-3.4	0.7	4.7	3.1	3.4
Bloomberg Barclays US TIPS	-1.5	7.5	5.7	3.9	3.4
Bloomberg Barclays High Yield	0.8	23.7	6.8	8.1	6.5
JPM GBI-EM Global Diversified	-6.7	13.0	-0.8	3.1	0.5
Other					
FTSE NAREIT Equity	8.9	37.8	9.5	5.3	8.6
Bloomberg Commodity Index	6.9	35.0	-0.2	2.3	-6.3
HFRI Fund of Funds	2.5	24.6	5.6	5.7	3.5

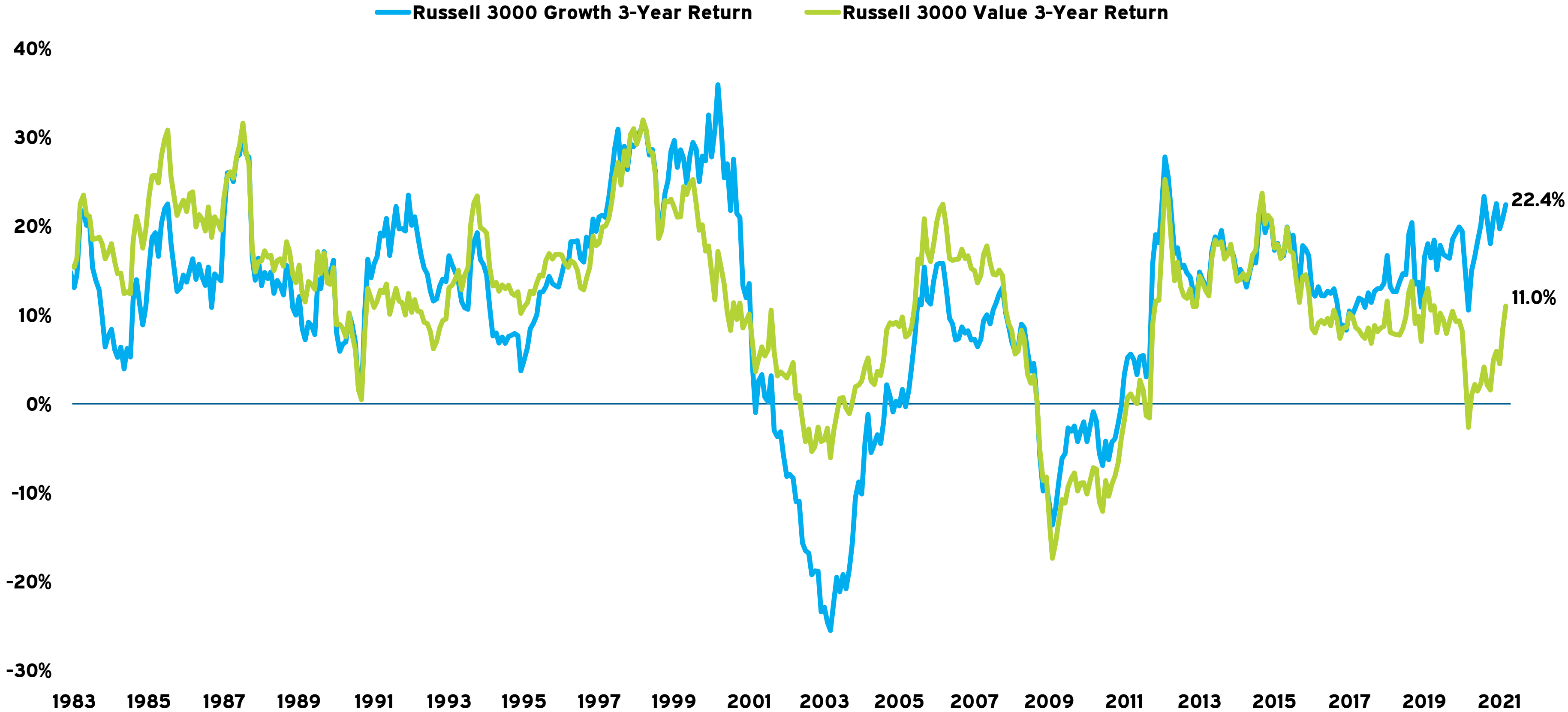
[1] Source: InvestorForce.

S&P Sector Returns[1]



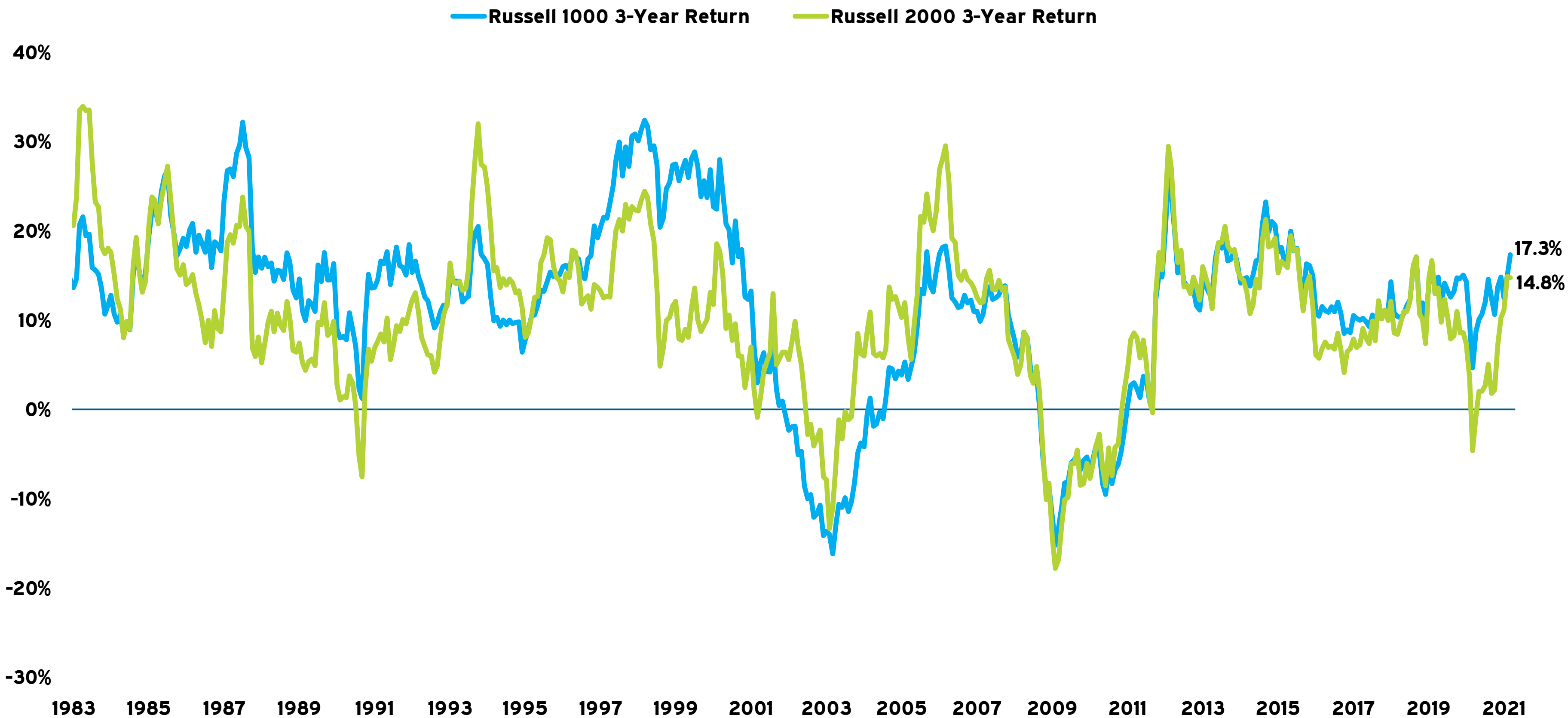
1 Source: InvestorForce. Represents S&P 1500 (All Cap) data.

Growth and Value Rolling Three Year Returns[1]



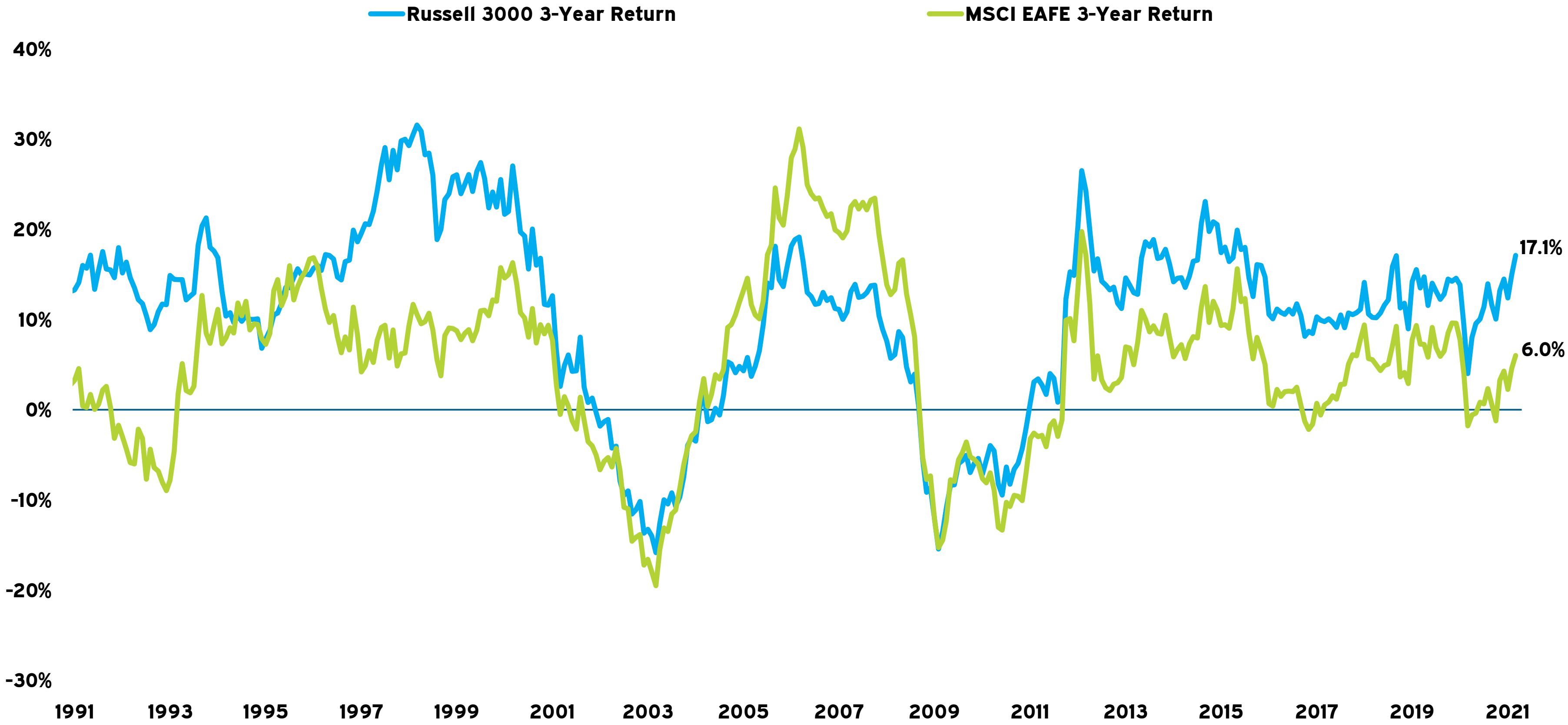
[1] Source: InvestorForce.

Large Cap (Russell 1000) and Small Cap (Russell 2000) Rolling Three Year Returns[1]



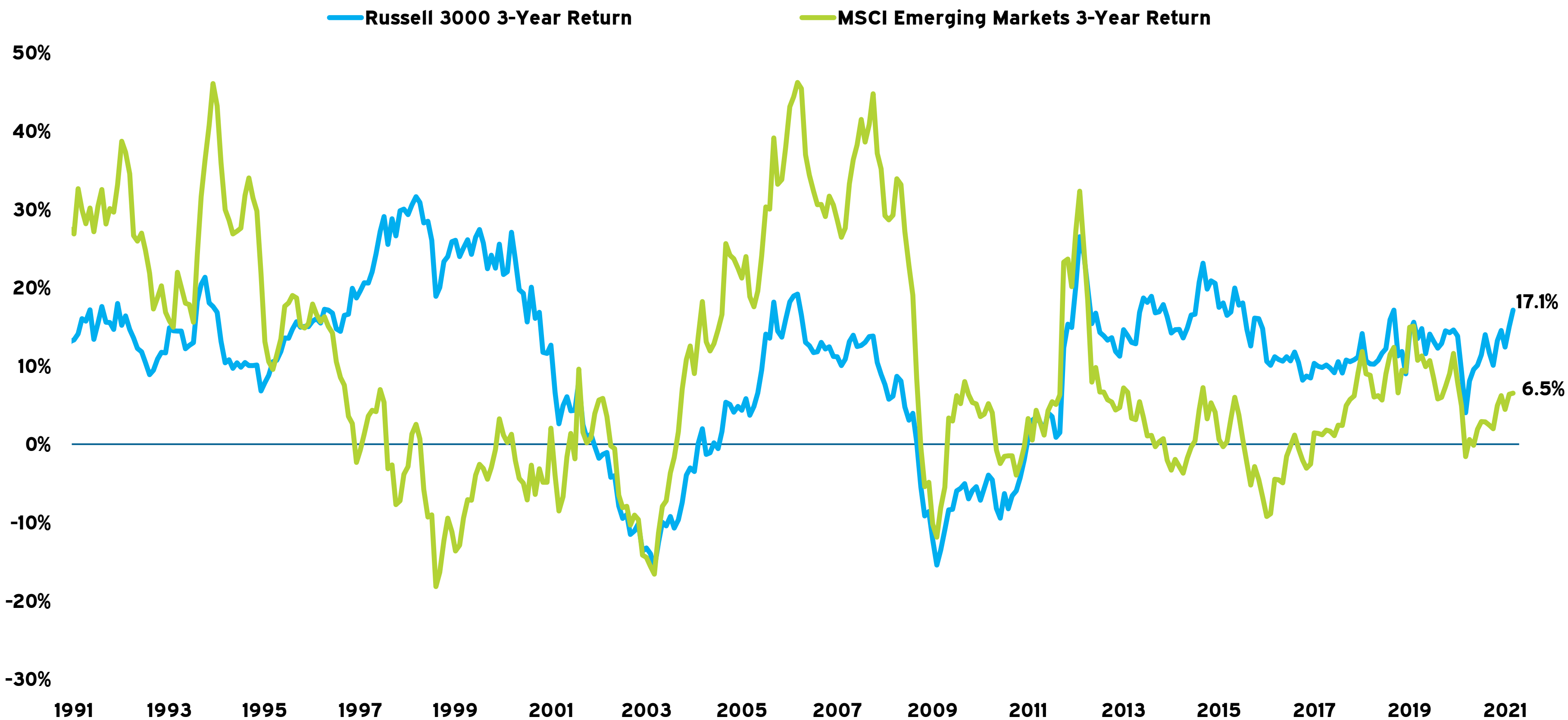
1 Source: InvestorForce.

US and Developed Market Foreign Equity Rolling Three-Year Returns[1]



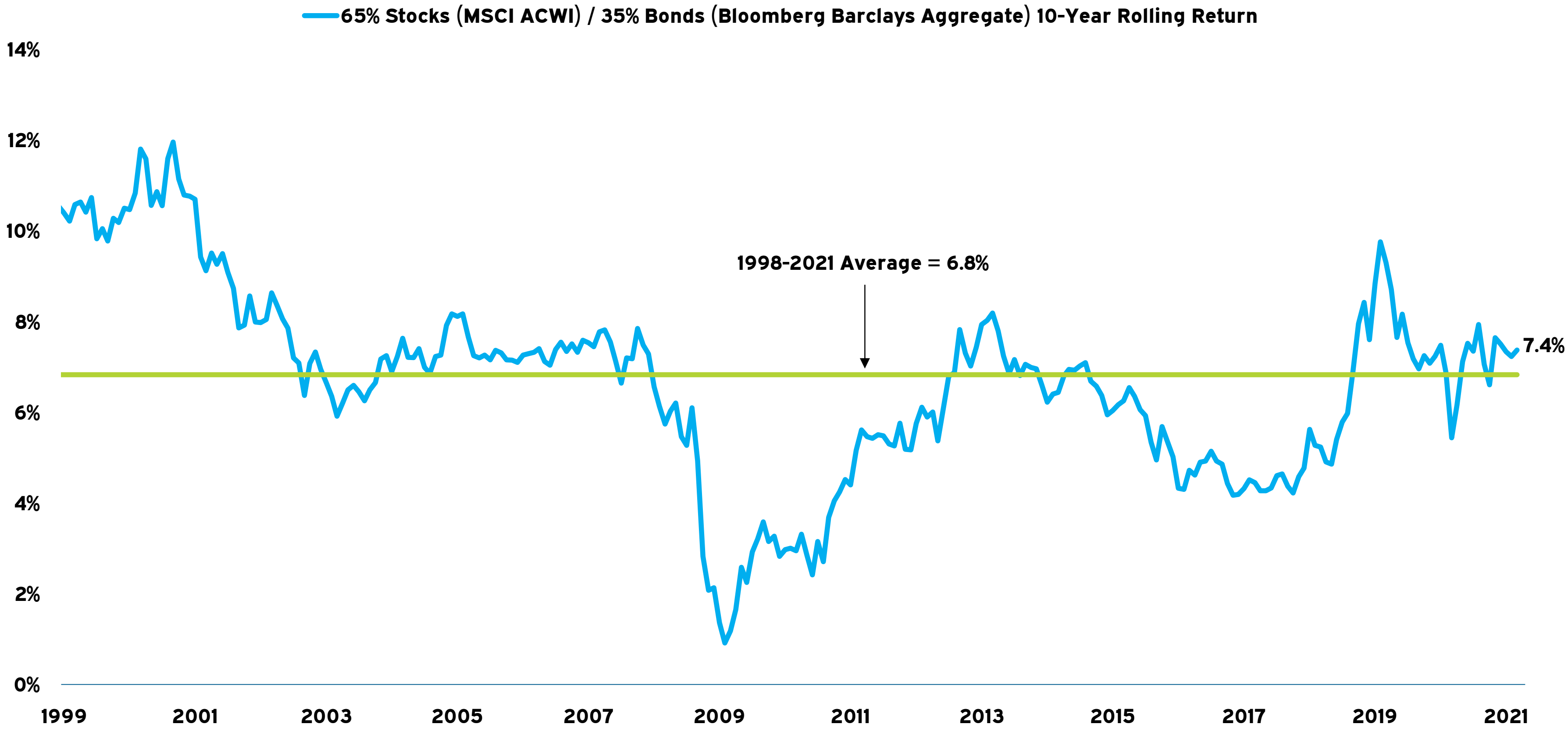
1 Source: InvestorForce.

US and Emerging Market Equity Rolling Three-Year Returns[1]



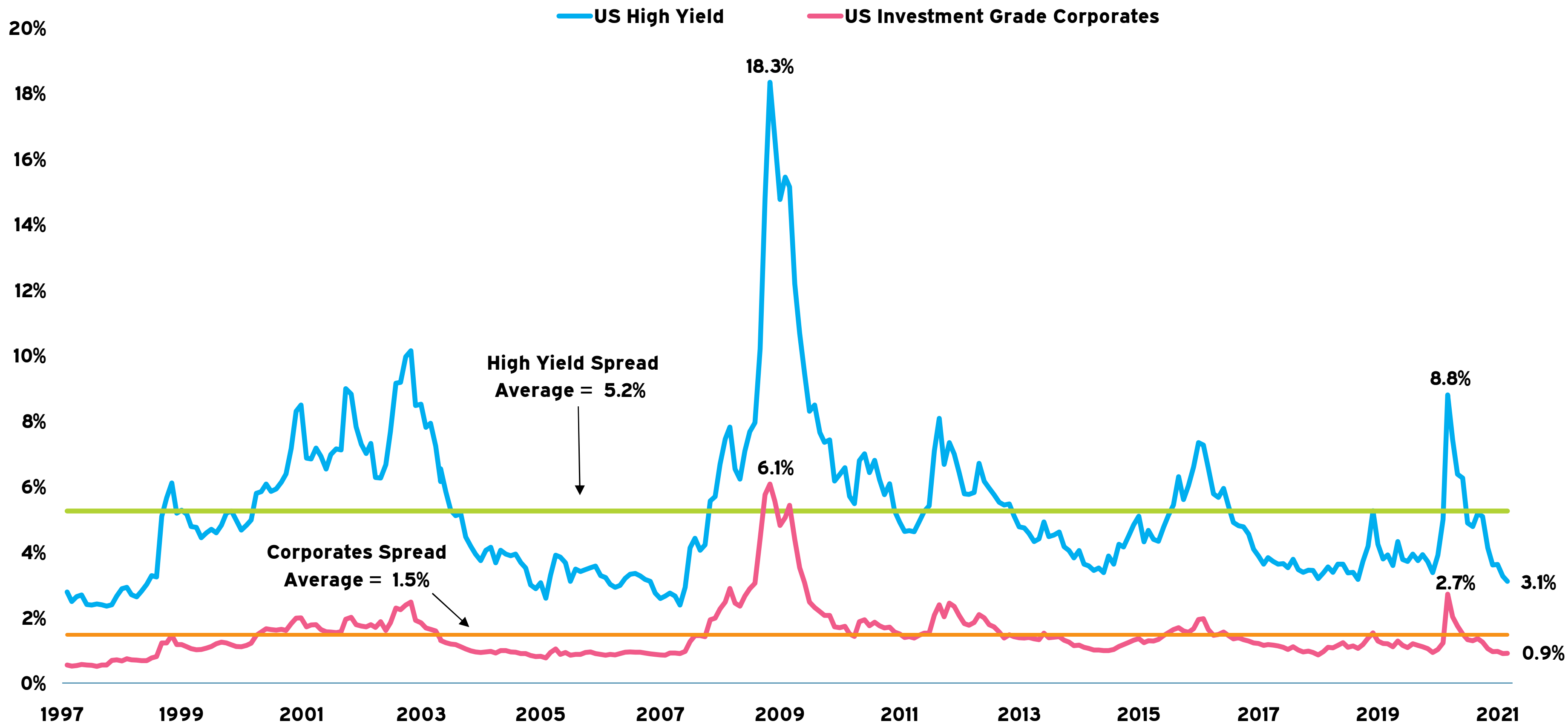
1 Source: InvestorForce.

Rolling Ten-Year Returns: 65% Stocks and 35% Bonds[1]



[1] Source: InvestorForce.

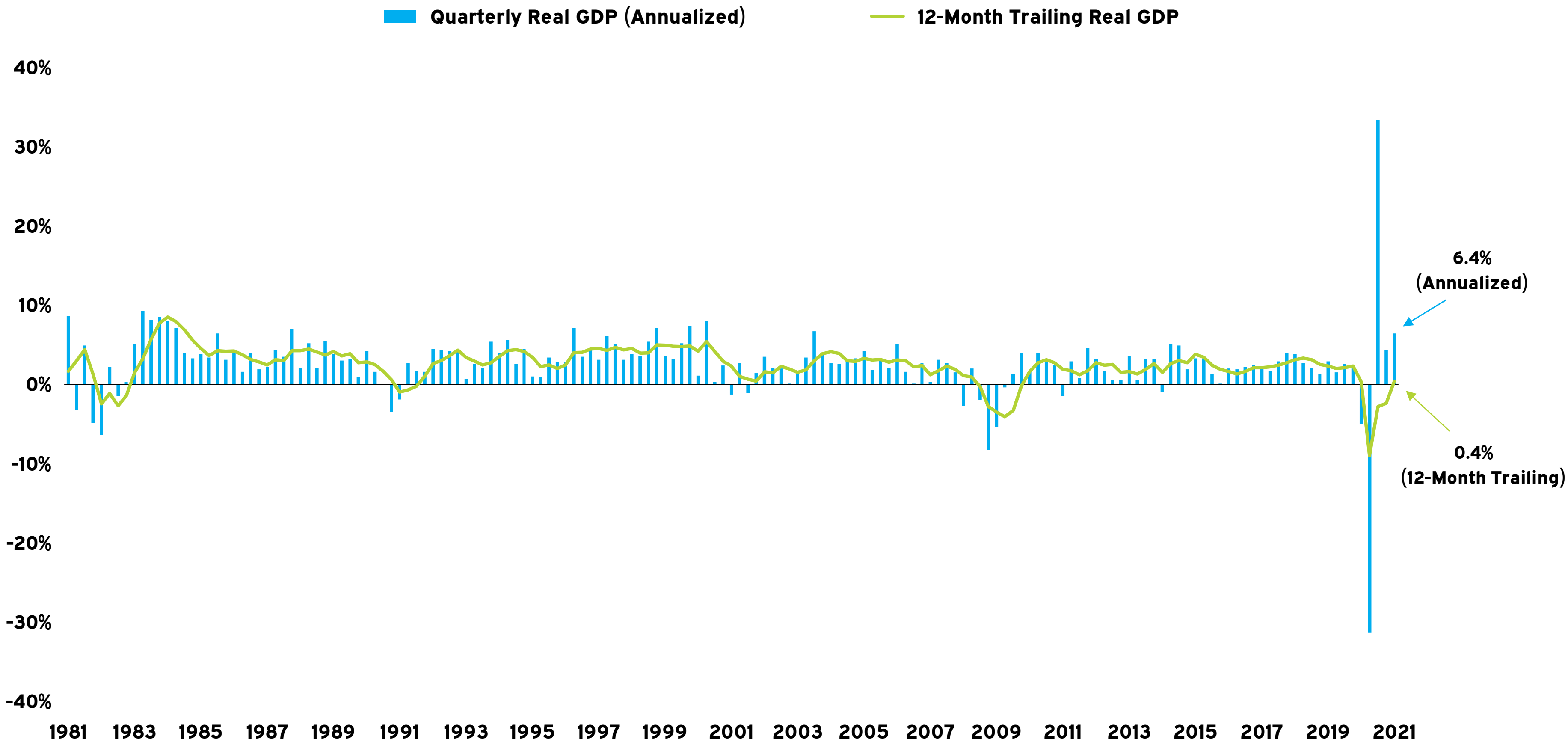
Credit Spreads vs. US Treasury Bonds[1,2]



1 Source: Barclays Live. Data represents the OAS.

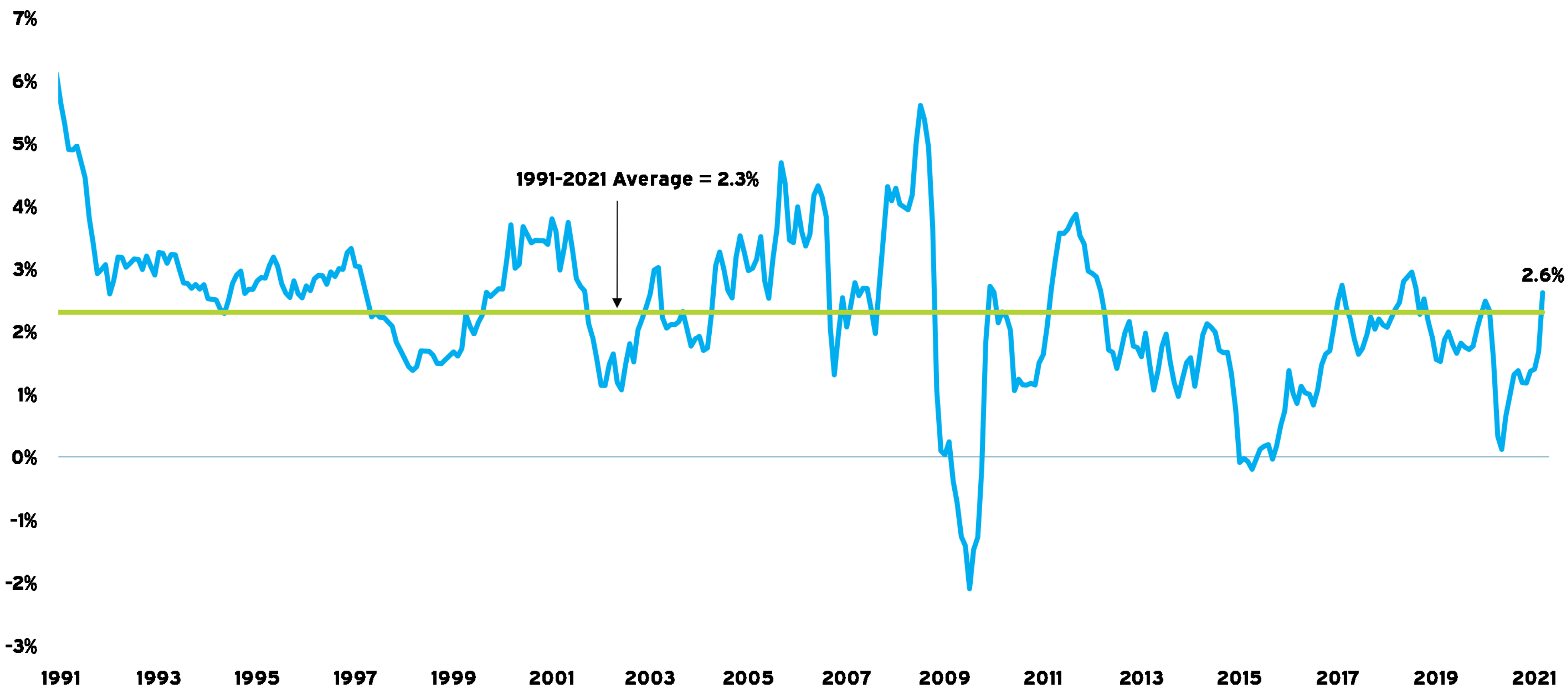
2 The median high yield spread was 4.8% from 1997-2021.

US Real Gross Domestic Product (GDP) Growth[1]



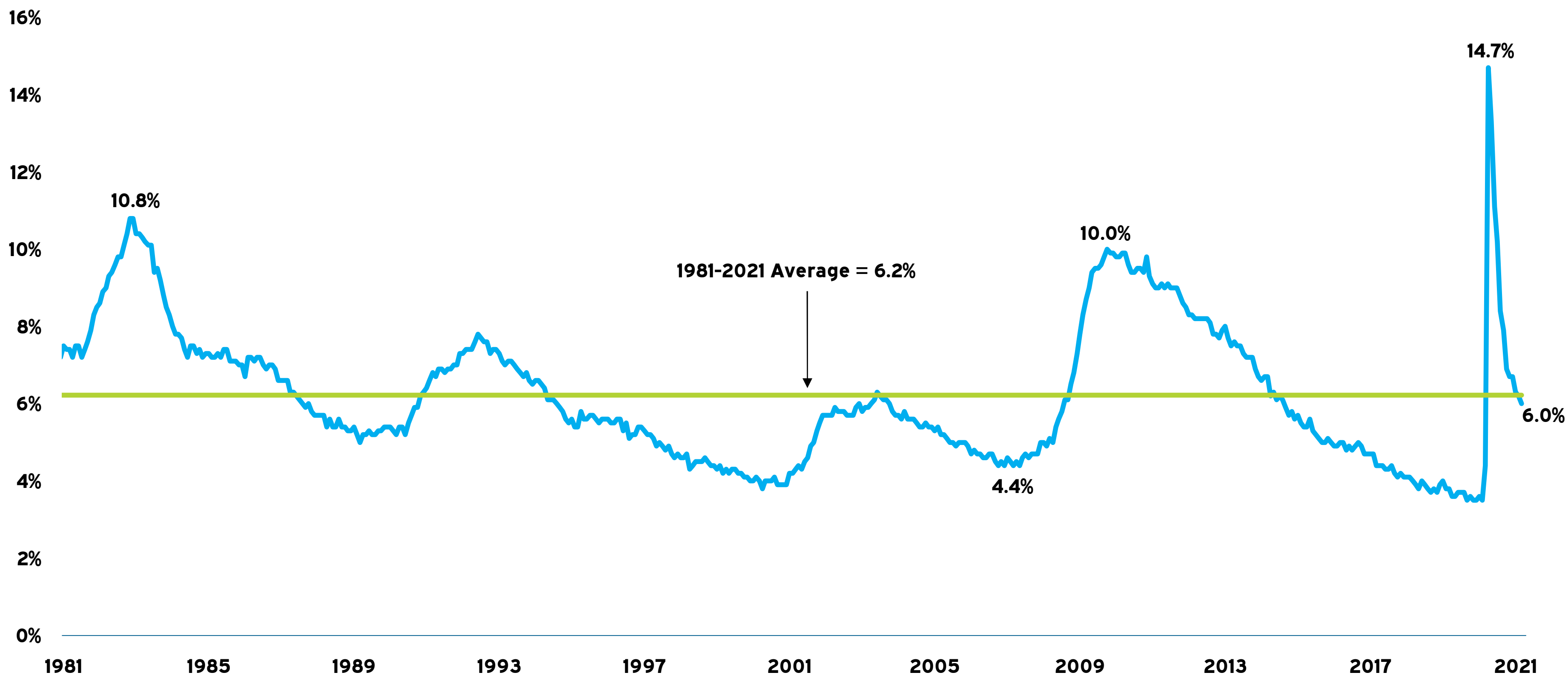
1 Source: Bureau of Economic Analysis. Data is as of Q1 2021 and represents the first estimate.

US Inflation (CPI)
Trailing Twelve Months[1]



1 Source: Bureau of Labor Statistics. Data is non-seasonally adjusted CPI, which may be volatile in the short-term. Data is as of March 31, 2021.

US Unemployment[1]



1 Source: Bureau of Labor Statistics. Data is as of March 31, 2021.

Disclaimer, Glossary, and Notes

WE HAVE PREPARED THIS REPORT (THIS “REPORT”) FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE “RECIPIENT”).

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE “FORWARD - LOOKING STATEMENTS,” WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS “MAY,” “WILL,” “SHOULD,” “EXPECT,” “AIM”, “ANTICIPATE,” “TARGET,” “PROJECT,” “ESTIMATE,” “INTEND,” “CONTINUE” OR “BELIEVE,” OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

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. Portfolio Return- [Risk Free Rate+Beta*(market return-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 is 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%.

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

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

The Russell Indices®, TM, SM are trademarks/service marks of the Frank Russell Company.

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.

MEKETA
INVESTMENT GROUP

411 NW Park Avenue
Suite 401
Portland, OR 97209

503.226.1050
Meketa.com

MEMORANDUM

TO: SJCERA Board of Retirement
FROM: Meketa Investment Group
DATE: June 4, 2021
RE: SJCERA Manager Certification Update: 1Q 2021 Overview and Responses

Summary of Responses

Meketa reviewed the SJCERA Quarterly Manager Certification Updates for the quarter ending March 31, 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 that[1]:

- All funded managers reported:
  - Registered Investment Advisor in Good Standing, or are exempt,
  - Compliance with Plan Investment Policy,
  - Compliance with SJCERA's Manager Guidelines,
  - 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, BlackRock, HPS, Medley, PIMCO, Principal, and White Oak.
- Five managers reported investment team changes: Crestline, Dodge & Cox, Invesco, Northern Trust, and Walton Street.
- Five managers reported material management changes: Colony, Graham, GQG, Northern Trust, and PIMCO.
- Three managers reported material business changes: Medley, Parametric, and Prima.
- Bridgewater and Graham chose not to provide responses to the SJCERA compliance questionnaire and directed Meketa to a standard quarterly business or compliance updates.
- No responses were received from ______.

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

June 4, 2021

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	Yes	Yes*	No	Yes*	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	No	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
Colony Capital***	Pvt. Non-core RE	--	--	--	--	--	--	--	--	--	--
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	Yes*	No	Yes	Yes
Stockbridge	Pvt. Non-core RE	Yes	Yes	Yes	Yes	No	No	No	No	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	Yes*	No	No	Yes	Yes
GQG	Emerging Mkts.	Yes	Yes	Yes	Yes	No	Yes*	Yes*	Yes*	Yes	Yes
PIMCO	Emerging Mkts.	Yes	Yes	Yes	Yes	Yes*	No	Yes*	No	Yes	Yes
Invesco	REITS	Yes	Yes	Yes	Yes	No	Yes*	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; Bank Loans	Yes	Yes	Yes	Yes	No	Yes*	No	No	Yes	Yes
BlackRock	Direct Lending	Yes	Yes	Yes	Yes	No	Yes*	No	No	Yes	Yes
Crestline	Opportunistic	Yes	Yes	Yes	Yes	Yes*	No	Yes*	No	Yes	Yes
Medley	Direct Lending	Yes	Yes	Yes	N/A*	No	Yes*	No	No	Yes	Yes
Mesa West	Comm. Mortgage	Yes	Yes	Yes	Yes	Yes*	No	No*	Yes*	No	No
Oaktree	Leveraged Direct	Yes	Yes	Yes	Yes	No	Yes*	No	No	Yes	Yes
HPS	Direct Lending	Yes	Yes	Yes	Yes	No	Yes*	No	No	Yes	Yes
Raven Capital	Direct Lending	Yes	Yes	Yes	Yes	Yes*	Yes*	No	No	Yes	Yes
White Oak	Direct Lending	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes
Principal	Pvt. Core RE	Yes	Yes	Yes	Yes	No*	No	Yes*	No	Yes	Yes
Prologis Targeted US	Pvt. Core RE	N/A*	Yes	Yes	N/A*	No	No	No	No	Yes	Yes
RREEF / DWS	Pvt. Core RE	Yes	Yes	Yes	N/A*	Yes*	No	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	No	Yes*	Yes*	Yes	Yes
DoubleLine	MBS	Yes	Yes	N/A*	Yes	No	Yes*	No	No	N/A*	Yes
Crisis Risk Offset℠											
Dodge & Cox	Long Duration	Yes	Yes	Yes	Yes	No	No	Yes*	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	Yes*	No	Yes	Yes
AQR	Alt. Risk Premia	Yes	Yes	Yes	Yes	No	No	Yes*	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	No	Yes*	Yes*	No
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.
*** The manager did not provide responses as all capital from the account was returned during the quarter.

Performance Information through March 31, 2021								
		Inception			Ann. Excess (bps)		Peer Ranking	
Manager	Sub-Segment	Date	Status	Benchmark	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%	582	1,041	n/a	n/a
Ocean Avenue III[1]	PE Buyout FOF	4/2016	Good Standing	MSCI ACWI +2%	639	n/a	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%	-1,818	-1,087	n/a	n/a
Morgan Creek V[1]	Multi-Strat FOF	6/2013	Good Standing	MSCI ACWI +2%	-520	-242	n/a	n/a
Morgan Creek VI[1]	Multi-Strat FOF	2/2015	Good Standing	MSCI ACWI +2%	-145	-76	n/a	n/a
AG Core Plus IV[3]	Pvt. Non-core RE	2014	Good Standing	Private RE Benchmark	70	-1,94	n/a	n/a
Almanac Realty VI[3]	Pvt. Non-core RE	2011	Good Standing	Private RE Benchmark	-2,183	-1,503	n/a	n/a
Colony Realty III[3]	Pvt. Non-core RE	2007	Good Standing	Private RE Benchmark	-1,691	-1,372	n/a	n/a
Colony Realty IV[3]	Pvt. Non-core RE	2012	Good Standing	Private RE Benchmark	-972	-614	n/a	n/a
Greenfield V[3]	Pvt. Non-core RE	2007	Good Standing	Private RE Benchmark	-1,915	-1,432	n/a	n/a
Greenfield VI[3]	Pvt. Non-core RE	2011	Good Standing	Private RE Benchmark	-4,372	-3,365	n/a	n/a
Greenfield VII[3]	Pvt. Non-core RE	2013	Good Standing	Private RE Benchmark	371	319	n/a	n/a
Grandview[3]	Pvt. Non-core RE	2018	Good Standing	Private RE Benchmark	-149	n/a	n/a	n/a
Miller Global V[3]	Pvt. Non-core RE	2005	Good Standing	Private RE Benchmark	-1,156	-2,131	n/a	n/a
Miller Global VI[3]	Pvt. Non-core RE	2007	Good Standing	Private RE Benchmark	-3,763	-2,474	n/a	n/a
Miller Global VII[3]	Pvt. Non-core RE	2012	Good Standing	Private RE Benchmark	-1,347	-920	n/a	n/a
Stockbridge III[3]	Pvt. Non-core RE	2017	Good Standing	Private RE Benchmark	n/a	n/a	n/a	n/a
Walton Street V[3]	Pvt. Non-core RE	2005	Good Standing	Private RE Benchmark	-2,322	-1,805	n/a	n/a
Walton Street VI[3]	Pvt. Non-core RE	2007	Good Standing	Private RE Benchmark	-1,069	-1,084	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	-388	--89	n/a	n/a
Invesco	REITS	8/2004	Good Standing	FTSE EPRA/NAREIT ex-US Equity	-140	44	n/a	n/a
Stabilized Growth								
Bridgewater[2]	Risk Parity	3/2012	Good Standing	Bridgewater All Weather Blend	55	196	n/a	n/a
PanAgora	Risk Parity	4/2016	Good Standing	T-Bill +4%	286	311	n/a	n/a
Neuberger Berman[1]	Opp. Credit	2/2019	Good Standing	33% HY Const./33% S&P LSTA LL/ 33% JPMEMBI Glbl Div.	n/a	n/a	n/a	n/a
Stone Harbor[1]	Abs. Return	4/2008	Good Standing	3-Month Libor	137	274	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 12/31/2020, lagged 1 quarter.

Performance Information through March 31, 2021								
		Inception			Ann. Excess (bps)		Peer Ranking	
Manager	Sub-Segment	Date	Status	Benchmark	3 Yrs	5 Yrs	3 Yrs	5 Yrs
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%	-1,011	-601	n/a	n/a
Medley[1]	Direct Lending	7/2012	Good Standing	CPI +6%	-2,111	-1,597	n/a	n/a
Mesa West III[1]	Comm. Mortgage	9/2013	Good Standing	CPI +6%	-789	-466	n/a	n/a
Mesa West IV[1]	Comm. Mortgage	3/2017	Good Standing	CPI +6%	-19	n/a	n/a	n/a
Oaktree[1]	Leveraged Direct	3/2018	Good Standing	MSCI ACWI +2%	n/a	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%	-1,093	-1,144	n/a	n/a
Raven Capital III[1]	Direct Lending	8/2015	Good Standing	CPI +6%	-97	-479	n/a	n/a
White Oak[1]	Direct Lending	3/2016	Good Standing	CPI +6%	-146	n/a	n/a	n/a
Principal[3]	Pvt. Core RE	10/2015	Good Standing	Private RE Benchmark	-332	-318	n/a	n/a
Prologis Targeted US[3]	Pvt. Core RE	9/2007	Good Standing	Private RE Benchmark	640	617	n/a	n/a
RREEF / DWS[3]	Pvt. Core RE	4/2016	Good Standing	Private RE Benchmark	-306	n/a	n/a	n/a
Principal Protection								
Dodge & Cox	Core Fixed Income	10/1990	Good Standing	BB Aggregate Bond	107	170	n/a	n/a
DoubleLine	MBS	2/2012	Good Standing	BB Aggregate Bond	-50	80	n/a	n/a
Crisis Risk Offset[1]								
Dodge & Cox	Long Duration	2/2016	Good Standing	BB US Long Duration Treasury	-16	-23	n/a	n/a
Mount Lucas	Sys. Trend Following	1/2005	Good Standing	BTOP50 Index	-87	-374	n/a	n/a
Graham[2]	Sys. Trend Following	4/2016	Good Standing	SG Trend	-59	n/a	n/a	n/a
AQR	Alt. Risk Premia	5/2016	Good Standing	5% Annual	-1,709	n/a	n/a	n/a
P/E Investments	Alt. Risk Premia	7/2016	Good Standing	5% Annual	-710	n/a	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	-43	-24	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.

On December 17, 2018, the SEC announced that NB Alternatives Advisers LLC ("NBAA"), without admitting or denying any wrongdoing, consented to the entry of an order (the "Order") by the SEC focused solely on certain expense allocations relating to Dyal Capital Partner's Business Services Platform (the "BSP"), a team within Dyal focused on providing client development, talent management, operational advisory and other services to the partner managers in which the Dyal Funds invest. No other businesses of NBAA utilize the BSP (or a similar model) nor allocate the expense associated with the BSP to NBAA advised funds. The SEC Order had no finding of intentional wrongdoing or fraud, and found that the issues relating to the BSP expenses ceased in 2017. NBAA agreed as part of the settlement to pay a disgorgement amount to certain Dyal funds covering 2012 - 2016, and to pay a civil monetary penalty to the SEC.

In December 2020, the Neuberger Berman Group 401(k) Plan Investment Committee (the "Plan IC") settled a class-action litigation related to a now-closed fund that had been previously offered in the Firm's 401(k) Plan. The settlement amount was $17 million dollars, and as part of the settlement all claims relating to the litigation against the Plan IC and Firm were released. The Plan IC denied, and continues to deny, all allegations of wrongdoing and all liability for the allegations and claims made in the litigation. The Firm remains proud of its 401(k) Plan, which offers participants a broad range of investment options, including leading third-party managers and a brokerage window. NBAA was not a party to the litigation.

Manager Responses to Highlighted Questions (continued)

With regard to current litigation related specifically to Almanac Realty Investors, on September 14, 2020, an action was filed in Wisconsin state court 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 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 to remove the case to Delaware. The plaintiff in the Wisconsin action has agreed to a voluntary stay of the Wisconsin action pending the resolution of the Delaware action.

Almanac Investment Personnel Changes

Blake Williams, Senior Associate on the investment team, joined in March 2021. Mr. Williams is responsible for conducting investment analysis, underwriting, structuring, transaction execution, and ongoing management of the investments of the ARS Funds.

Subsequent to the 3/31/2021, Kenny Moon, Managing Director on the Almanac investment team, departed the firm. Mr. Moon was responsible for investment origination, analysis, underwriting, structuring, transaction execution, and ongoing management of the investments of ARS Funds. While there has not been someone specifically hired to take over Mr. Moon's responsibilities, the investment team has added new members over the past year and has had promotions to senior levels.

Almanac Management Level Changes

Although there have been no significant personnel changes at the management level of the firm during the quarter, please note that on December 23rd, 2020, Neuberger Berman and its Dyal Capital Partners business, and the Owl Rock Capital Group, a private credit provider, announced that they had entered into a definitive business combination agreement with Altimar Acquisition Corporation, to form Blue Owl Capital Inc., an alternative asset management firm that will have over $45.0 billion in assets under management. Following the closing of the agreement, Neuberger Berman will own a meaningful minority equity position in Blue Owl Capital Inc. and will have representation on its Board of Directors. There is no guarantee that the pending transaction will close, or will do so pursuant to the terms discussed herein.

Almanac Material Business Changes

Neuberger Berman has coordinated and implemented a global response to COVID-19 (Novel Coronavirus) through the actions of the Operational Risk Team and Business Continuity Management ("BCM") Team. This team is partnering with over 60 Business Continuity Coordinators ("BCC"), covering each location and business function across the group, and is hosting regular calls with the

Manager Responses to Highlighted Questions (continued)

global senior management team and the BCCs to provide updates on the COVID-19 situation and discuss issues that arise accordingly. Neuberger Berman has senior management engaged, monitoring the evolving situation and drives key decision making. The team is responsible for team designs and planning for events, including health pandemics, natural disasters, data security breaches, acts of terrorism, political unrest, and power and transportation outages. These actions have resulted in minimal impact to operations and no impact on our clients.

The Fund was historically managed by Almanac Realty Investors, LLC ("ARI"), and effective January 31, 2020, in connection with the acquisition of ARI, all existing management agreements were in effect assigned to NB Alternatives Advisers LLC.

Angelo Gordon Custodian Reconciliation

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

Angelo Gordon Litigation

Yes. Please see below a summary of Current Litigation.

Summary of Angelo, Gordon Related Litigation

As of March 5, 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 2013, the firm and an affiliate of the firm were named as a defendant in a New York state personal injury lawsuit relating to an incident at a real estate portfolio property in New York, New York.

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.

In 2021, the firm was named as a defendant in a Delaware litigation in which plaintiffs issued a complaint containing multiple counts related to fraudulent transfer, breach of fiduciary duty, and civil conspiracy.

In 2016, the firm was named as a defendant in a New York personal injury lawsuit relating to an alleged incident at one of the firm's offices. This case was dismissed in 2020 and is now under appeal.

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

Manager Responses to Highlighted Questions (continued)

Angelo Gordon Investment Personnel Change

In March 2021, a Vice President on the US Real Estate Team, left the firm to pursue other opportunities.

In March 2021, an Associate on the US Real Estate Team, left the firm to pursue other opportunities.

AQR Management Level Changes

While not material in nature, please note the below change to key personnel for the quarter:

- David Kupersmith, Principal and portfolio manager on AQR's discretionary macro team, has departed AQR.

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.

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.

Manager Responses to Highlighted Questions (continued)

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.

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. In addition, BlackRock agreed to notify by letter, certain former employees who signed the agreement between October 2011 and March 2016.

Manager Responses to Highlighted Questions (continued)

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.

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.

BlackRock Management Level Changes

In 2010, BlackRock created the Global Executive Committee to provide oversight of operations and business performance, strategy and planning, talent development and retention, risk management, and external affairs. The following chart shows turnover within the GEC as of 31 March 2021.

Year	Previous Member	Previous Role	Reason for Change	Replacement
2021	Barbara Novick	Vice Chairman	Role changed to Senior Advisor pending retirement	Responsibilities assumed by existing BLK personnel
	Geraldine Buckingham	Head of Asia Pacific	Role changed to Senior Advisor pending retirement	Responsibilities assumed by existing GEC personnel

Consistent with the goals of fully leveraging the firm's talent and expanding our senior leadership team to ensure a broader, more diverse representation of views, we added the following members to the GEC:

On 8 March 2021, Stephen Cohen was appointed to the GEC from his role as Head of EMEA Indexing and Wealth.

Please note that the above does not include role changes of GEC members who remained on the committee.

Please refer to the link below for biographies of the firm's current GEC members.

http://www.blackrock.com/corporate/en-us/about-us/leadership

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

Abby Kizer, Associate – Abby's primary responsibilities are underwriting and asset management.

Manager Responses to Highlighted Questions (continued)

Dodge & Cox Management Level Changes

Yes. At Dodge & Cox, we aim to deliver excellent long-term investment performance to our clients, helping them meet their objectives by applying our consistent value-oriented investment philosophy and rigorous fundamental, bottom-up research process. The combination of deep research skills, knowledge, and experience across our investment team and our collaborative investment process underpin how we manage each investment strategy on behalf of our clients.

We take a deliberate approach to our Investment leadership appointments and the composition of our Investment Committees. We make changes to leadership positions and gradually evolve Investment Committee membership over time to preserve the continuity of the firm's investment philosophy, research process, and culture and to ensure long-term succession planning. Investment Committee members are selected based on their long-term contributions as analysts and members of Sector Committees, their demonstrated interest in portfolio strategy, and long-term contributions to investment process enhancements and our research efforts.

On January 15, 2021, we announced changes to our investment leadership team, three of our Investment Committees, including the U.S. Equity Investment Committee, and several other leadership roles within the firm.

Investment Leadership Positions
After nearly four distinguished decades at Dodge & Cox, Charles Pohl, Chairman and Chief Investment Officer (CIO), has decided to retire on June 30, 2022 to pursue personal interests. He will gradually transition his responsibilities over the course of the next 18 months, and he will continue to serve as Chairman of the Board of Dodge & Cox Inc. and the Dodge & Cox Funds until the spring of 2022. He will be succeeded as Chairman by Dana Emery, CEO and President, who joined the firm in 1983.

David Hoeft, Senior Vice President and Associate CIO, will assume the role of CIO on January 1, 2022. He joined the firm in 1993 and has served as a Global Industry Analyst, head of the Technology, Media & Telecom (TMT) Sector Committee, member of our U.S. and Global Equity Investment Committees, and as a Director of the Dodge & Cox Inc. Board. He is also a member of our Business Strategy Committee, which is comprised of senior leaders of the firm.

Bryan Cameron, Senior Vice President and Director of Research, will be retiring on December 31, 2021 after 38 distinguished years at the firm. Bryan's numerous contributions to Dodge & Cox include helping us globalize our research coverage, strengthen our value-oriented investment approach, train and mentor our investment team, and make strategic firm-related decisions.

Steven Voorhis, Vice President and Associate Director of Research, will become Director of Research on April 1, 2021. He joined the firm in 1996 and serves as a Global Industry Analyst, member of our U.S. and Global Equity Investment Committees, and Business Strategy Committee. He is also a member of the

Manager Responses to Highlighted Questions (continued)

Boards of Directors of the Dodge & Cox Worldwide Funds plc and Dodge & Cox Worldwide Investments Ltd.

The Dodge & Cox Inc. Board of Directors continues to be comprised of Charles Pohl, Dana Emery, Diana Strandberg, Senior Vice President and Director of International Equity, Thomas Dugan, Senior Vice President and Director of Fixed Income, David Hoeft, and Roger Kuo, Senior Vice President, Global Industry Analyst, and Investment Committee member.

Investment Committees

U.S. Equity Investment Committee
Karim Fakhry, who joined Dodge & Cox in 2005 and serves as a Global Industry Analyst covering Biotech & Pharma and Appliances and head of the Health Care and Consumer Sector Committee, will join the U.S. Equity Investment Committee on January 15, 2021. Bryan Cameron will leave the Committee upon his retirement on December 31, 2021. Charles Pohl will leave the Committee upon his retirement on June 30, 2022.

International Equity Investment Committee
Paritosh Somani, who joined Dodge & Cox in 2007 and serves as a Global Industry Analyst covering IT Hardware & Services and Mining and head of the TMT Sector Committee, joined the International Equity Investment Committee on January 15, 2021. Charles Pohl left the Committee on May 1, 2021.

Global Equity Investment Committee
Raymond Mertens, who joined Dodge & Cox in 2003 and serves as a Global Industry Analyst covering Health Care Services and Consumer and a member of the International Equity Investment Committee, rejoined the Global Equity Investment Committee on May 1, 2021. Charles Pohl left the Committee at that time.

For more information on these firm announcements, please see Exhibit C - Announcement.

Dodge & Cox Material Business Changes

Recently, we have filed an effective registration statement for the Dodge & Cox Emerging Markets Stock Fund, which we anticipate opening to investors in May of this year. This new Fund draws on the knowledge and expertise 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.

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.

Manager Responses to Highlighted Questions (continued)

DoubleLine Investment Personnel Changes

During the quarter, three investment professionals were promoted:

Employee	Previous Title	New Title
Elaine Zhang	Trader, U.S. Government Bonds	Portfolio Manager, U.S. Government Bonds
Kunal Patel	Trader, Agency Residential MBS	Portfolio Manager, Agency Residential MBS
Hannah Bashan	Analyst, U.S. Government Bonds	Trader, U.S. Government Bonds

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.

GQG Investment Personnel Changes

Yes. In Q1 2021 GQG added Investment Analysts Siddharth Jain and Kate Konetzke to the Investment team.

GQG Management Level Changes

Yes. In Q1 2021 GQG hired Chief Financial Officer, Gary Bachman and Chief Technology Officer, Robert Sokolich.

GQG Material Business Changes

Yes. GQG updated the Compliance Manual, dated 3.22.21.

- See attached GQG Compliance Manual - Summary of Changes 2021.03.22.
- See attached GQG Compliance Manual 2021.03.22.

Graham Management Level Changes

GCM experienced two changes to key personnel during the Reference Period:

- In January 2021, Jennifer Ancker Whelen was promoted to Chief Client Officer, Co-Head of Institutional Relations, and Managing Director. Mrs. Ancker Whelen was added to GCM's Executive Committee, Investment Committee, and Risk Committee. Mrs. Ancker Whelen joined GCM in 2007.

Manager Responses to Highlighted Questions (continued)

- Effective February 2021, Robert Murray, Vice Chairman, retired from the industry.

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 departure of a Vice President on the dedicated European Asset Value team during the first quarter of 2021. There have been no hires on the dedicated European Asset Value team during the first quarter of 2021.

Invesco Investment Personnel Changes

Effective September 3, 2020, portfolio manager ("PM") Darin Turner will be joining Joe Rodriguez as co-CIO for the IRE listed real assets business. Further, PM Mark Blackburn will take on the new role of Director of Risk Management and Portfolio Analytics within the IRE listed real assets business. Lastly, PM Paul Curbo will be retiring from the Firm and the investment management industry on April 1, 2021. Mr. Curbo's leadership role with the North American real estate securities team will transition to PM Grant Jackson.

Medley Litigation

Yes.

As previously reported, on March 7, 2021 (the "Petition Date"), Medley LLC ("Medley LLC") commenced a voluntary case (the "Chapter 11 Case") under chapter 11 of title 11 of the United States Code (the "Bankruptcy Code") in the United States Bankruptcy Court for the District of Delaware (the "Bankruptcy Court"). In connection with the commencement of the Chapter 11 Case, Medley LLC disclosed in its pleadings filed with the Bankruptcy Court certain matters related to Medley Management Inc.'s ("MDLY") and Medley LLC's business, including the regulatory matter described below:

On September 17, 2019 the staff of the Securities and Exchange Commission's Division of Enforcement (the "Staff") informed MDLY that it was conducting an informal inquiry and requested the production and preservation of certain documents and records. MDLY fully cooperated with the Staff's informal inquiry and began voluntarily providing the Staff with any requested documents.

By letter dated December 18, 2019, the Staff advised MDLY that a formal order of private investigation (the "Order") had been issued and that the informal inquiry was now a formal investigation. The Order indicated that the investigation relates to Section 17(a) of the Securities Act of 1933, Section 10(b) of the Exchange Act of 1934 (the "Exchange Act") and Rule 10b-5 thereunder, and Sections 206(1), 206(2), and 206(4) of the Investment Advisers Act of 1940, Rule 206(4)-8, Sections 13(a) and 14(a) of the Exchange Act and Rules 12b-20, 13a-1, 13a-11, 13a-13, and 14a-9 thereunder. MDLY continued to cooperate fully with the investigation.

Manager Responses to Highlighted Questions (continued)

On May 7, 2021, each of MDLY, Medley LLC, and six pre-IPO owners of Medley, each of whom is a current or former officer (the "Individuals") received a "Wells Notice" from the Staff relating to MDLY's previously-disclosed SEC investigation. The Wells Notices provided that the proposed action would allege violations of Section 10(b) of the Securities Exchange Act of 1934 ("Exchange Act") and Rule 10b-5 thereunder (including as a control person pursuant to Section 20(e) of the Exchange Act); Section 17(a) of the Securities Act of 1933; Sections 206(1) and/or (2) of the Investment Advisers Act of 1940; Section 14(a) of the Exchange Act and Rules 14a-3 and 14a-9 thereunder; Section 13(a) of the Exchange Act and Rules 12b-11, 12b-20, 13a-1, 13a-11, 13a-13, and 13a-15(a) thereunder; and Regulation S-T. The Wells Notices also provided that the Staff's recommendation may involve a civil injunctive action, public administrative proceeding, and/or cease-and-desist proceeding, and may seek remedies that include an injunction, a cease-and-desist order, disgorgement, pre-judgment interest, civil money penalties, censure, and limitations on activities or bars from association.

A Wells Notice is neither a formal charge of wrongdoing nor a final determination that the recipient has violated any law. The Wells Notices informed MDLY, Medley LLC and the Individuals that the Staff has made a preliminary determination to recommend that the SEC file an enforcement action against MDLY, Medley LLC and each of the Individuals that would allege certain violations of the federal securities laws.

The Wells Notices relate to, among other matters: MDLY's and Medley LLC's disclosures relating to MDLY's assets under management ("AUM"), its fee-earning assets under management ("FEAUM"), trends and risks related to AUM and FEAUM, and specifically, violations of the federal securities laws relating to such disclosures in MDLY's registration statement relating to its initial public offering, Medley LLC's registration statements relating to its bond offerings, and MDLY and Medley LLC's periodic reports under the Exchange Act; MDLY's and Medley LLC's disclosure controls and procedures designed to ensure that the information required in reports filed under the Exchange Act; and MDLY's financial projections included in a joint proxy statement/prospectus, including any amendments thereto, in connection with a proposed (but ultimately terminated) merger among MDLY, Sierra Income Corporation and Medley Capital Corporation.

MDLY, Medley LLC and the Individuals currently intend to pursue the Wells Notice process, which will include the opportunity to respond to the Staff's position. (source: https://www.sec.gov/Archives/edgar/data/1536577/000121390021026135/ea140835-8k_medleyllc.htm)

Medley Management Level Changes

No. However, we would note that we announced on April 16, 2021 promotions as follows: Howard Liao to Chief Executive Officer, Dean Crowe to President and David Richards to Chief Operating Officer effective May 3, 2021. Howard Liao succeeds coCEOs Brook Taube and Seth Taube each of whom will remain co-Chairman and continue to support the existing management team and provide strategic guidance.

Medley Material Business Changes

Manager Responses to Highlighted Questions (continued)

Yes. As we discussed with Meketa/SJCERA on a call in April 2021, please reference the 8-K filed on March 8, 2021 by Medley LLC with respect to its Chapter 11 bankruptcy filing: https://www.sec.gov/Archives/edgar/data/0001536577/000143774921005208/mdlx20210307_8k.htm

Mesa West Investment Personnel Changes

Yes. Two individuals, an Executive Director on the Originations team and a Vice President on the Asset Management team, left the firm in 1Q 2021. Mesa West is generally staffed accordingly to meet the needs of the Firm and its funds. At this time, Mesa West is evaluating adding a team member to replace in-house legal guidance for the originations team.

Miller Management Level Changes

Yes. Peter Savoie, the Chief Investment Officer, left the Firm during the first quarter of 2021. His duties were assumed by J. Matthew Haley.

Morgan Creek Custodian Reconciliation

N/A this is not a separate account.

Northern Trust Investment Team Changes

Yes. There were two departures to the Global Index Equity Team. Basit Amin (PM) and Masahiro Aikawa (PM) left the firm during 1Q21.

All Northern Trust Asset Management's passive mandates are managed using an integrated team-based approach whereby investment decisions are made in a systematic manner and are not dependent on a specific individual.

Oaktree Investment Team Changes

Below, please find the investment professionals (vice president and above) who have joined the U.S. Private Debt Team during the last quarter ending March 31, 2021.

Join Date	Name	Title[1] / Role
03/2021	Michael Deng	Vice President, Research Analyst

There have been no departures of investment personnel (vice president and above) for the U.S. Private Debt Team during the quarter.

PanAgora Management Level Changes

As previously reported on February 22nd, PanAgora's Chief Compliance Officer Louis Iglesias retired at the end of March. We have been working diligently to ensure a seamless transition and have made the decision that in light of Lou's retirement, the Compliance Team will be aligned with PanAgora's Legal Team going

Manager Responses to Highlighted Questions (continued)

forward. Our Legal team is led by Jason Ketchen, Managing Director, General Counsel. The Compliance Team will report to Jason who will assume CCO responsibilities on an interim basis effectively immediately. Jason, in consultation with Lou, have developed a detailed transition plan and have further engaged ACA Consulting Group to assist with planning and additional compliance support.
Please see the attached updated organization chart.

Parametric Management Level Changes

As announced on October 14, 2020, Jay Strohmaier, CFA, Managing Director, Investment Strategy, retired March 31, 2021. Effective January 1, 2021, Jay and Alex Zweber, CFA, Managing Director, Investment Strategy, co-led the Liquid Alternatives team that oversees Parametric's volatility risk premium strategies. Effective April 1, 2021, Alex assumed full leadership of the team.

Parametric Material Business Changes

On March 1, 2021, Morgan Stanley acquired Eaton Vance Corp. and its subsidiaries, including Parametric. Parametric is now a wholly-owned indirect subsidiary of Morgan Stanley, a publicly held company that is traded on the New York Stock Exchange (NYSE) under the ticker symbol MS. Parametric is a part of Morgan Stanley Investment Management, the asset management division of Morgan Stanley.

Parametric is owned directly by Eaton Vance Acquisitions and Eaton Vance Management, both privately held subsidiaries of Morgan Stanley.

This transaction does not change the structure or operating model of Parametric.

Parametric, in coordination with Morgan Stanley, continues to navigate the COVID-19 pandemic successfully – with a focus on the health and safety of its employees, maintaining high levels of investment performance and client service, and the continuity of our business operations as the highest priorities.

Parametric has made significant investments in technologies that allow employees to work remotely and collaborate effectively across locations. The firm's business continuity plans have been routinely tested over time in preparation for a variety of potential scenarios and are functioning successfully across all investment, operations, technology, service, and other business functions. As they are each day, Parametric's investment teams are focused on the markets and the investment portfolios they manage during this period of uncertainty.

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:

Manager Responses to Highlighted Questions (continued)

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 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.

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.

Manager Responses to Highlighted Questions (continued)

PIMCO Management Level Changes

Please refer to the tables below for a summary of PIMCO Investment Professionals gained and lost during the most recent quarter ending December 31, 2020.

Lost - PIMCO Investment Professionals

Date	Name	Title	Department	Years at PIMCO	Reason	Office
Mar-21	Priya Bishen	Senior Vice President	Account Management – Client Service	5	Other*	New York
Mar-21	Jeff Muehlethaler	Executive Vice President	Account Management – Client Service	14	Other*	New York
Mar-21	Vivek Maithani	Vice President	Analysts	8	Other*	New York
Mar-21	Taosha Wang	Senior Vice President	Analysts	8	Other*	Hong Kong
Mar-21	Daniel Lau	Senior Vice President	Portfolio Management	3	Other*	Singapore
Mar-21	Boris Erenburg	Executive Vice President	Portfolio Management	3	Other*	London

Lost - PIMCO Investment Professionals (continued)

Date	Name	Title	Department	Years at PIMCO	Reason	Office
Feb-21	Jonathan Webb	Senior Vice President	Account Management – Client Service	12	Other*	London
Feb-21	Sasha Talcott	Senior Vice President	Account Management – Client Service	9	Other*	Newport Beach
Feb-21	Courtney Garcia	Executive Vice President	Analysts	13	Other*	Newport Beach
Feb-21	Jin Fu	Senior Vice President	Portfolio Management	6	Other*	New York
Feb-21	Erin Leighty	Senior Vice President	Product Strategy Group	7	Other*	New York
Jan-21	Jonida Afezolli	Vice President	Account Management – Client Service	2	Other*	Newport Beach
Jan-21	Jason Kezelman	Executive Vice President	Account Management – Client Service	17	Other*	London
Jan-21	Alistair Belton	Vice President	Analysts	2	Other*	Newport Beach

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

Manager Responses to Highlighted Questions (continued)

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. 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 Material Business Changes

There were no material changes to the firm's business during the fourth quarter.

On January 4, 2021, nearly all of the assets (properties, cash and other investments) and liabilities of the Separate Account were transferred to the Principal U.S. Property Portfolio ("Portfolio"), a newly created real estate operating partnership. While most assets were transferred to the Portfolio, the Separate Account retained some properties (the "Retained Assets"). The investment strategy of the Separate Account is unchanged and the Portfolio will be managed according to that same investment strategy and objective. Instead of holding all properties in the Separate Account, the Separate Account now holds an interest in the Portfolio, which holds most of the properties, and a small number of properties directly as Retained Assets.

SJCERA was notified in advance of the transfer on October 15, 2020 and November 16, 2020.

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

Manager Responses to Highlighted Questions (continued)

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.

RREEF Custodian Reconciliation

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

Stone Harbor Investment Personnel Changes

In the beginning of 2021, Catherine Nolan, co-Portfolio Manager for Bank Loans, retired from Stone Harbor and the industry. Cathy managed the Bank Loans sleeve of the portfolio, alongside co-Portfolio Manager, Hunter Schwarz. Hunter has assumed the role as sole portfolio manager of the Bank Loans strategy. Bank Loan exposure in the portfolio is approximately 15% as of 1st quarter-ending March 31, 2021.

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, Corey Chamberlain has been promoted from Vice President to Principal in the Debt Platform department.

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.

Manager Responses to Highlighted Questions (continued)

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. White Oak continues to believe that the client's claims are without merit and will vigorously pursue all available remedies.

White Oak Management Level Changes

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

1. Joiners:
    a. Benjamin Kalmanowicz, Managing Director, Client Solutions
    b. Michael Giles, Managing Director, Originations
2. Leavers:
    a. Landy Pheloung, Managing Director, Marketing (retired)

DISCLOSURES:

This document is provided for informational purposes only. It does not constitute an offer of securities of any of the issuers that may be described herein. Information contained herein may have been provided by third parties, including investment firms providing information on returns and assets under management, and may not have been independently verified. The past performance information contained in this report is not necessarily indicative of future results and there is no assurance that the investment in question will achieve comparable results or that the Firm will be able to implement its investment strategy or achieve its investment objectives. The actual realized value of currently unrealized investments (if any) will depend on a variety of factors, including future operating results, the value of the assets and market conditions at the time of disposition, any related transaction costs and the timing and manner of sale, all of which may differ from the assumptions and circumstances on which any current unrealized valuations are based.

Neither MEKETA nor MEKETA's officers, employees or agents, make any representation or warranty, express or implied, in relation to the accuracy or completeness of the information contained in this document or any oral information provided in connection herewith, or any data subsequently generated here from, and accept no responsibility, obligation or liability (whether direct or indirect, in contract, tort or otherwise) in relation to any of such information. MEKETA and MEKETA's officers, employees and agents expressly disclaim any and all liability that may be based on this document and any errors therein or omissions therefrom. Neither MEKETA nor any of MEKETA's officers, employees or agents, make any representation of warranty, express or implied, that any transaction has been or may be effected on the terms or in the manner stated in this document, or as to the achievement or reasonableness of future projections, management targets, estimates, prospects or returns, if any. Any views or terms contained herein are preliminary only, and are based on financial, economic, market and other conditions prevailing as of the date of this document and are therefore subject to change.

The information contained in this report may include forward-looking statements. Forward-looking statements include a number of risks, uncertainties and other factors beyond the control of the Firm, which may result in material differences in actual results, performance or other expectations. The opinions, estimates and analyses reflect MEKETA's current judgment, which may change in the future.

Any tables, graphs or charts relating to past performance included in this report are intended only to illustrate investment performance for the historical periods shown. Such tables, graphs and charts are not intended to predict future performance and should not be used as the basis for an investment decision.

All trademarks or product names mentioned herein are the property of their respective owners. Indices are unmanaged and one cannot invest directly in an index. The index data provided is on an "as is" basis. In no event shall the index providers or its affiliates have any liability of any kind in connection with the index data or the portfolio described herein. Copying or redistributing the index data is strictly prohibited.

The Russell indices are either registered trademarks or tradenames of Frank Russell Company in the US and/or other countries.

The MSCI indices are trademarks and service marks of MSCI or its subsidiaries.

Standard and Poor's (S&P) is a division of The McGraw-Hill Companies, Inc. S&P indices, including the S&P 500, are a registered trademark of The McGraw-Hill Companies, Inc.

CBOE, not S&P, calculates and disseminates the BXM Index. The CBOE has a business relationship with Standard & Poor's on the BXM. CBOE and Chicago Board Options Exchange are registered trademarks of the CBOE, and SPX, and CBOE S&P 500 BuyWrite Index BXM are servicemarks of the CBOE. The methodology of the CBOE S&P 500 BuyWrite Index is owned by CBOE and may be covered by one or more patents or pending patent applications.

The Barclays Capital indices (formerly known as the Lehman indices) are trademarks of Barclays Capital, Inc.

The Citigroup indices are trademarks of Citicorp or its affiliates.

The Merrill Lynch indices are trademarks of Merrill Lynch & Co. or its affiliates.

FTSE is a trademark of the London Stock Exchange Group companies and is used by FTSE under license. All rights in the FTSE indices and/or FTSE ratings vest in FTSE and/or its licensors. No further distribution of FTSE data is permitted with FTSE's express written consent.

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
AQR	Diversifying Strategies	Alternative Risk Premia	Apr-19	Jul-19	Mar-21	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				8/11/2020		New York, NY
Dodge & Cox	Diversifying Strategies, PP	Core Fixed Income		Dec-20		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
HPS EU	Stabilized Growth, PC	Direct Lending		Mar-20		8/3/2017*		New York, NY
Invesco	Traditional Growth	REITs, Core US				5/6/2020*		Atlanta, GA
Lombard	Diversifying Strategies	Alternative Risk Premia				10/19/2020		New York, NY
Medley	Stabilized Growth, PC	Direct Lending		Feb-21		3/12/2015		San Francisco/New York
Mesa West III & IV	Stabilized Growth, PC	Comm. Mortgage				8/22/2019	8/22/2019	Los Angeles, CA
Morgan Creek III, V, & VI	Aggressive Growth	Multi-Strat FOF		May-18		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		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				Santa Monica, CA
P/E Diversified	Diversifying Strategies	Alternative Risk Premia		May-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
Raven II & III	Stabilized Growth, PC	Direct Lending		Apr-18			2/23/2018	New York, NY
Stone Harbor	Stabilized Growth, LC	Absolute Return		Feb-20		9/29/2020*	2/3/2021	New York, NY
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

Stellex Capital Management		Private Equity	5/8/2020

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

San Joaquin County Employees Retirement Association (SJCERA)

Preliminary Monthly Flash Report (Net) April 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
TOTAL PLAN[1]			$ 3,704,434,514	100.0%	100.0%	2.7	5.5	5.2	18.9	8.1	8.1	7.9	Apr-90
Policy Benchmark [4]						*1.9*	*5.0*	*4.6*	*20.0*	*8.8*	*9.2*	*7.8*	
Difference:						0.8	0.5	0.6	-1.1	-0.7	-1.1	0.1	
75/25 Portfolio [5]						*3.6*	*6.6*	*6.1*	*34.7*	*12.5*	*11.2*	*7.8*	
Difference:						-0.9	-1.1	-0.9	-15.8	-4.4	-3.1	0.1	
Broad Growth			$ 2,778,908,234	75.0%	75.0%	2.9	7.1	6.8	26.6	9.2	10.0	8.6	Jan-95
Aggressive Growth Lag[2]			$ 257,489,760	7.0%	10.0%	10.1	10.1	10.1	12.4	9.9	10.2	-4.8	Feb-05
MSCI ACWI +2%Lag						*3.0*	*8.3*	*8.3*	*11.9*	*10.8*	*10.1*	*0.0*	
Difference:						7.1	1.8	1.8	0.5	-0.9	0.1	-4.8	
BlackRock Global Energy&Power Lag[3]	*$50,000*	*Global Infrastructure*	$ 14,096,272	0.4%		1.3	1.3	1.3	--	--	--	10.3	Jul-19
MSCI ACWI +2%Lag						*4.8*	*15.3*	*15.3*	--	--	--	*19.7*	
Difference:						-3.5	-14.0	-14.0	--	--	--	-9.4	
Ocean Avenue II Lag[3]	*$40,000*	*PE Buyout FOF*	$ 30,055,968	0.8%		25.0	25.0	25.0	39.4	18.9	21.9	13.3	May-13
MSCI ACWI +2% Lag						*4.8*	*15.3*	*15.3*	*19.1*	*13.1*	*11.4*	*10.6*	
Difference:						20.2	9.7	9.7	20.3	5.8	10.5	2.7	
Ocean Avenue III Lag[3]	*$50,000*	*PE Buyout FOF*	$ 53,593,391	1.4%		11.7	11.7	11.7	9.0	19.5	--	21.0	Apr-16
MSCI ACWI +2% Lag						*4.8*	*15.3*	*15.3*	*19.1*	*13.1*	--	*11.6*	
Difference:						6.9	-3.6	-3.6	-10.1	6.4	--	9.4	
Ocean Avenue IV Lag[3]	*$50,000*	*PE Buyout*	$ 20,809,249	0.6%		20.9	20.9	20.9	--	--	--	38.3	Dec-19
MSCI ACWI +2% Lag						*4.8*	*15.3*	*15.3*	--	--	--	*24.3*	
Difference:						16.1	5.6	5.6	--	--	--	14.0	
Morgan Creek III Lag[3]	*$10,000*	*Multi-Strat FOF*	$ 6,099,653	0.2%		8.3	8.3	8.3	3.1	-5.1	0.6	-1.6	Feb-15
MSCI ACWI +2% Lag						*4.8*	*15.3*	*15.3*	*19.1*	*13.1*	*11.4*	*11.1*	
Difference:						3.5	-7.0	-7.0	-16.0	-18.2	-10.8	-12.7	
Morgan Creek V Lag[3]	*$12,000*	*Multi-Strat FOF*	$ 8,213,870	0.2%		0.0	0.0	0.0	1.7	7.9	9.0	12.1	Jun-13
MSCI ACWI +2% Lag						*4.8*	*15.3*	*15.3*	*19.1*	*13.1*	*11.4*	*10.6*	
Difference:						-4.8	-15.3	-15.3	-17.4	-5.2	-2.4	1.5	
Morgan Creek VI Lag[3]	*$20,000*	*Multi-Strat FOF*	$ 25,332,027	0.7%		9.6	9.6	9.6	17.8	15.1	12.7	7.5	Feb-15
MSCI ACWI +2% Lag						*4.8*	*15.3*	*15.3*	*19.1*	*13.1*	*11.4*	*11.1*	
Difference:						4.8	-5.7	-5.7	-1.3	2.0	1.3	-3.6	
Opportunistic Private Real Estate													
Greenfield V[3]	*$30,000*	*Opportunistic Pvt. RE*	$ 227,471	0.0%		-2.0	-2.0	-2.0	-26.0	-11.0	-4.8	-3.2	Jul-08
NCREIF ODCE + 1% Lag Blend						*2.1*	*2.1*	*2.1*	*4.4*	*8.2*	*9.5*	*8.2*	
Difference:						-4.1	-4.1	-4.1	-30.4	-19.2	-14.3	-11.4	
Greenfield VI[3]	*$20,000*	*Opportunistic Pvt. RE*	$ 172,521	0.0%		-24.9	-24.9	-24.9	-37.4	-35.5	-24.2	-9.9	Apr-12
NCREIF ODCE + 1% Lag Blend						*2.1*	*2.1*	*2.1*	*4.4*	*8.2*	*9.5*	*12.5*	
Difference:						-27.0	-27.0	-27.0	-41.8	-43.7	-33.7	-22.4	
Greenfield VII[3]	*$19,100*	*Opportunistic Pvt. RE*	$ 9,627,532	0.3%		11.2	11.2	11.2	8.5	11.9	12.7	12.6	Oct-14
NCREIF ODCE + 1% Lag Blend						*2.1*	*2.1*	*2.1*	*4.4*	*8.2*	*9.5*	*11.4*	
Difference:						9.1	9.1	9.1	4.1	3.7	3.2	1.2	
Grandview[3]	*$30,000*	*Opportunistic Pvt. RE*	$ 19,232,146	0.5%		4.5	4.5	4.5	20.9	6.7	--	6.7	Apr-18
NCREIF ODCE + 1% Lag Blend						*2.1*	*2.1*	*2.1*	*4.4*	*8.2*	*9.5*	*8.5*	
Difference:						2.4	2.4	2.4	16.5	--	--	-1.8	
Miller Global Fund V[3]	*$15,000*	*Opportunistic Pvt. RE*	$ -	0.0%		0.0	0.0	0.0	-52.7	-3.4	-11.8	-7.3	Oct-05
NCREIF ODCE + 1% Lag Blend						*2.1*	*2.1*	*2.1*	*4.4*	*8.2*	*9.5*	*9.9*	
Difference:						-2.1	-2.1	-2.1	-57.1	-11.6	-21.3	-17.2	
Miller Global Fund VI[3]	*$30,000*	*Opportunistic Pvt. RE*	$ 392,542	0.0%		9.4	9.4	9.4	-67.1	-29.5	-15.2	-6.5	May-08
NCREIF ODCE + 1% Lag Blend						*2.1*	*2.1*	*2.1*	*4.4*	*8.2*	*9.5*	*8.2*	
Difference:						7.3	7.3	7.3	-71.5	-37.7	-24.7	-14.7	
Miller Global Fund VII[3]	*$15,000*	*Opportunistic Pvt. RE*	$ 273,461	0.0%		16.1	16.1	16.1	15.1	-5.3	0.3	24.8	Dec-12
NCREIF ODCE + 1% Lag Blend						*2.1*	*2.1*	*2.1*	*4.4*	*8.2*	*9.5*	*11.8*	
Difference:						14.0	14.0	14.0	10.7	-13.5	-9.2	13.0	

[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 3/31/21, and lagged 1 quarter.
[3] Manager returns are as of 3/31/21, and lagged 1 quarter. Since Inception date reflects one quarter lag.
[4] 4/1/20 to present benchmark is **32%** MSCI ACWI IMI, **10%** BB Aggregate Bond Index, **17%** *50%* BB High Yield/*50%* S&P Leveraged Loans, 6% NCREIF ODCE +1% lag; **10%** T-Bill +4%, **10%** MSCI ACWI +2%, **15%** CRO Custom Benchmark. Prior to 4/1/20 benchmark is legacy policy benchmark.
[5] 4/1/20 to present **75%** MSCI ACWI, **25%** BB Global Aggregate. Prior to 4/1/20 60% MSCI ACWI, 40% BB Global Aggregate.

San Joaquin County Employees Retirement Association (SJCERA)

Preliminary Monthly Flash Report (Net) April 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*	$ 2,060,130	0.1%		0.8	0.8	0.8	-8.7	-15.0	-8.6	-4.3	Nov-06
NCREIF ODCE + 1% Lag Blend						*2.1*	*2.1*	*2.1*	*4.4*	*8.2*	*9.5*	*9.3*	
Difference:						-1.3	-1.3	-1.3	-13.1	-23.2	-18.1	-13.6	
Walton Street VI[3]	*$15,000*	*Opportunistic Pvt. RE*	$ 4,695,403	0.1%		-0.8	-0.8	-0.8	-11.0	-2.5	-1.4	6.8	Jul-09
NCREIF ODCE + 1% Lag Blend						*2.1*	*2.1*	*2.1*	*4.4*	*8.2*	*9.5*	*11.1*	
Difference:						-2.9	-2.9	-2.9	-15.4	-10.7	-10.9	-4.3	
Value-Added Private Real Estate													
AG Core Plus IV[3]	*$20,000*	*Value-Added Pvt. RE*	$ 19,412,416	0.5%		3.8	3.8	3.8	6.1	8.9	7.6	4.6	Sep-15
NCREIF ODCE + 1% Lag Blend						*2.1*	*2.1*	*2.1*	*4.4*	*8.2*	*9.5*	*10.6*	
Difference:						1.7	1.7	1.7	1.7	0.7	-1.9	-6.0	
Almanac Realty VI[3]	*$30,000*	*Value-Added Pvt. RE*	$ 3,574,816	0.1%		-6.5	-6.5	-6.5	-32.9	-13.0	-5.5	22.5	Feb-13
NCREIF ODCE + 1% Lag Blend						*2.1*	*2.1*	*2.1*	*4.4*	*8.2*	*9.5*	*12.5*	
Difference:						-8.6	-8.6	-8.6	-37.3	-21.2	-15.0	10.0	
Berkeley Partners Fund V, LP	*$40,000*	*Value-Added Pvt. RE*	$ 3,742,531	0.1%		6.7	6.7	6.7	--	--	--	0.0	Aug-20
NCREIF ODCE + 1% Lag Blend						*2.1*	*2.1*	*2.1*	--	--	--	*0.0*	
Difference:						4.6	4.6	4.6	--	--	--	0.0	
Colony Realty III[3]	*$21,000*	*Value-Added Pvt. RE*	$ -	0.0%		0.0	0.0	0.0	4.4	-8.7	-4.2	4.7	Dec-09
NCREIF ODCE + 1% Lag Blend						*2.1*	*2.1*	*2.1*	*4.4*	*8.2*	*9.5*	*13.2*	
Difference:						-2.1	-2.1	-2.1	0.0	-16.9	-13.7	-8.5	
Colony Realty IV[3]	*$21,000*	*Value-Added Pvt. RE*	$ -	0.0%		0.0	0.0	0.0	-12.2	-1.6	3.3	9.3	Mar-13
NCREIF ODCE + 1% Lag Blend						*2.1*	*2.1*	*2.1*	*4.4*	*8.2*	*9.5*	*12.3*	
Difference:						-2.1	-2.1	-2.1	-16.6	-9.8	-6.2	-3.0	
Stockbridge RE III[3]	*$45,000*	*Value-Added Pvt. RE*	$ 35,878,361	1.0%		4.4	4.4	4.4	8.1	--	--	2.8	Jul-18
NCREIF ODCE + 1% Lag Blend						*2.1*	*2.1*	*2.1*	*4.4*	*8.2*	*9.5*	*7.8*	
Difference:						2.3	2.3	2.3	3.7	--	--	-5.0	
Traditional Growth[2]			$ 1,412,021,648	38.1%	32.0%	4.6	10.9	10.4	44.5	10.7	12.5	9.6	Jan-95
MSCI ACWI IMI Net						*4.3*	*9.9*	*9.7*	*48.1*	*14.4*	*14.8*	*8.4*	
Difference:						0.3	1.0	0.7	-3.6	-3.7	-2.3	1.2	
Global Equity			$ 1,366,372,956	36.9%									
Northern Trust MSCI World IMI		*All Cap Global*	$ 1,220,899,813	33.0%		4.6	11.1	11.1	--	--	--	12.3	Sep-20
MSCI World IMI Net						*4.6*	*11.0*	*11.0*	--	--	--	*23.1*	
Difference:						0.0	0.1	0.1	--	--	--	-10.8	
SJCERA Transition		*All Cap Global*	$ 3,453	0.0%		NM	NM	NM	--	--	--	NM	Jul-20
Emerging Markets			$ 145,469,690										
GQG Active Emerging Markets		*Emerging Markets*	$ 66,152,669	1.8%		1.4	-1.4	0.2	--	--	--	18.8	Aug-20
MSCI Emerging Markets Index Net						*2.5*	*1.7*	*4.8*	--	--	--	*26.2*	
Difference:						-1.1	-3.1	-4.6	--	--	--	-7.4	
PIMCO RAE Fundamental Emerging Markets		*Emerging Markets*	$ 79,317,021	2.1%		4.8	15.4	16.8	62.6	4.7	11.5	5.8	Apr-07
MSCI Emerging Markets Index						*2.5*	*1.8*	*4.9*	*49.2*	*7.9*	*12.9*	*5.5*	
Difference:						2.3	13.6	11.9	13.4	-3.2	-1.4	0.3	
REITS			$ 45,648,692	1.2%									
Invesco All Equity REIT		*Core US REIT*	$ 45,648,692	1.2%		8.1	18.2	17.4	28.6	10.9	7.8	9.3	Aug-04
FTSE NAREIT Equity Index						*8.1*	*17.5*	*17.6*	*37.5*	*11.8*	*7.5*	*9.0*	
Difference:						0.0	0.7	-0.2	-8.9	-0.9	0.3	0.3	

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

[3] Manager returns are as of 3/31/21, 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) April 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			$ 1,109,396,826	29.9%	33.0%	1.6	1.8	1.7	12.2	7.1	7.1	4.0	Jan-05
Risk Parity			$ 414,295,834	11.2%		3.9	1.5	1.2	20.4	8.5	8.4	5.0	
T-Bill +4%						*0.3*	*1.0*	*1.3*	*4.1*	*5.5*	*5.2*	*4.6*	
Difference:						3.6	0.5	-0.1	16.3	3.0	3.2	0.4	
Bridgewater All Weather		*Risk Parity*	$ 201,922,113	5.5%		4.4	1.7	1.4	18.9	7.3	7.7	5.4	Mar-12
T-Bill +4%						*0.3*	*1.0*	*1.3*	*4.1*	*5.5*	*5.2*	*5.5*	
Difference:						4.1	0.7	0.1	14.8	1.8	2.5	-0.1	
PanAgora Diversified Risk Multi-Asset		*Risk Parity*	$ 212,373,721	5.7%		3.4	1.4	1.1	21.9	9.6	--	8.8	Apr-16
T-Bill +4%						*0.3*	*1.0*	*1.3*	*4.1*	*5.5*	--	*5.2*	
Difference:						3.1	0.4	-0.2	17.8	4.1	--	3.6	
Liquid Credit			$ 234,008,978	6.3%		0.9	1.1	1.2	15.8	4.1	4.4	2.3	Oct-06
50% BB High Yield, 50% S&P/LSTA Leveraged Loans						*0.8*	*1.4*	*2.1*	*17.9*	*5.6*	*6.2*	*6.0*	
Difference:						0.1	-0.3	-0.9	-2.1	-1.5	-1.8	-3.7	
Neuberger Berman		*Global Credit*	$ 104,735,864	2.8%		1.2	0.8	0.8	18.1	--	--	6.2	Feb-19
33% ICE BofA HY Constrained, 33% S&P/LSTA LL, 33% JPM EMBI Glbl Div.						*1.3*	*0.5*	*0.6*	*17.2*	--	--	*6.2*	
Difference:						-0.1	0.3	0.2	0.9	--	--	0.0	
Stone Harbor Absolute Return		*Absolute Return*	$ 129,273,114	3.5%		0.7	1.3	1.5	14.1	3.4	4.0	3.0	Oct-06
3-Month Libor Total Return						*0.0*	*0.1*	*0.1*	*0.3*	*1.8*	*1.5*	*1.4*	
Difference:						0.7	1.2	1.4	13.8	1.6	2.5	1.6	
Private Credit Lag[2]			$ 298,178,932	8.0%		2.0	2.0	2.0	2.6	2.7	2.8	3.3	
50% BB High Yield, 50% S&P/LSTA Leveraged Loans						*1.6*	*5.1*	*5.1*	*5.1*	*5.1*	*6.9*	*6.0*	
Difference:						0.4	-3.1	-3.1	-2.5	-2.4	-4.1	-2.7	
BlackRock Direct Lending Lag[3]	*$100,000*	*Direct Lending*	$ 22,697,579	0.6%		2.5	2.5	2.5		---	---	9.9	May-20
CPI +6% Annual Blend [5]						*0.6*	*1.5*	*1.5*		---	---	*17.2*	
Difference:						1.9	1.0	1.0		---	---	-7.3	
Mesa West RE Income III Lag[3]	*$45,000*	*Comm. Mortgage*	$ 1,191,498	0.0%		-11.0	-11.0	-11.0	-14.7	-0.1	3.6	3.1	Sep-13
CPI +6% Annual Blend [4]						*0.6*	*1.5*	*1.5*	*7.4*	*7.8*	*8.3*	*5.6*	
Difference:						-11.6	-12.5	-12.5	-22.1	-7.9	-4.7	-2.5	
Mesa West RE Income IV Lag[3]	*$75,000*	*Comm. Mortgage*	$ 46,635,765	1.3%		1.0	1.0	1.0	6.6	7.6	--	7.3	Mar-17
CPI +6% Annual Blend [4]						*0.6*	*1.5*	*1.5*	*7.4*	*7.8*	--	*8.6*	
Difference:						0.4	-0.5	-0.5	-0.8	-0.2	--	-1.3	
Crestline Opportunity II Lag[3]	*$45,000*	*Opportunistic*	$ 19,879,050	0.5%		0.6	0.6	0.6	-4.4	-2.3	2.2	3.9	Nov-13
CPI +6% Annual Blend [4]						*0.6*	*1.5*	*1.5*	*7.4*	*7.8*	*8.3*	*8.5*	
Difference:						0.0	-0.9	-0.9	-11.8	-10.1	-6.1	-4.6	
Davidson Kempner Distr Opp V Lag[3]	*$50,000*	*Opportunistic*	$ 9,040,182	0.0%		8.3	--	--	--	--	--	31.1	Mar-18
CPI +6% Annual Blend [4]						*0.6*	--	--	--	--	--	*4.0*	
Difference:						7.7	--	--	--	--	--	27.1	
Oaktree Lag	*$50,000*	*Leveraged Direct*	$ 26,491,736	0.7%		3.7	3.7	3.7	16.0	--	--	9.6	Mar-18
CPI +6% Annual Blend [6]						*0.6*	*1.5*	*1.5*	*4.9*	--	--	*8.0*	
Difference:						3.1	2.2	2.2	11.1	--	--	1.6	
HPS EU Asset Value II Lag[3]	*$50,000*	*Direct Lending*	$ 5,572,982	0.2%		3.0	3.0	--	--	--	--	-4.1	Aug-14
CPI +6% Annual Blend [4]						*0.6*	*1.5*	--	--	--	--	*5.6*	
Difference:						2.4	1.5	--	--	--	--	-9.7	
Raven Opportunity II Lag[3]	*$45,000*	*Direct Lending*	$ 11,743,981	0.3%		-0.4	-0.4	-0.4	-13.1	-3.2	-3.2	-4.6	Aug-14
CPI +6% Annual Blend [4]						*0.6*	*1.5*	*1.5*	*7.4*	*7.8*	*8.3*	*8.4*	
Difference:						-1.0	-1.9	-1.9	-20.5	-11.0	-11.5	-13.0	
Raven Opportunity III Lag[3]	*$50,000*	*Direct Lending*	$ 48,013,572	1.3%		2.8	2.8	2.8	1.1	6.8	--	2.2	Nov-15
CPI +6% Annual Blend [4]						*0.6*	*1.5*	*1.5*	*7.4*	*7.8*	--	*8.3*	
Difference:						2.2	1.3	1.3	-6.3	-1.0	--	-6.1	

[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 3/31/21, and lagged 1 quarter.

[3] Manager returns are as of 3/31/21, 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% BBgBC 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

San Joaquin County Employees Retirement Association (SJCERA)

Preliminary Monthly Flash Report (Net) April 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
Private Credit Lag (continued)													
Medley Opportunity II Lag[3]	*$50,000*	*Direct Lending*	$ 11,154,548	0.3%		4.1	4.1	4.1	-14.2	-13.3	-7.7	-1.9	Jul-12
CPI +6% Annual Blend [4]						*0.6*	*1.5*	*1.5*	*7.4*	*7.8*	*8.3*	*8.6*	
Difference:						3.5	2.6	2.6	-21.6	-21.1	-16.0	-10.5	
White Oak Summit Peer Fund Lag[3]	*$50,000*	*Direct Lending*	$ 45,955,724	1.2%		1.8	1.8	1.8	4.1	6.3	--	7.1	Mar-16
CPI +6% Annual Blend [4]						*0.6*	*1.5*	*1.5*	*7.4*	*7.8*	--	*8.2*	
Difference:						1.2	0.3	0.3	-3.3	-1.5	--	-1.1	
White Oak Yield Spectrum Master V Lag[3]	*$50,000*	*Direct Lending*	$ 49,802,315	1.3%		1.5	1.5	---	---	---	--	-0.3	Mar-20
CPI +6% Annual Blend [4]						*0.6*	*1.5*	---	---	---	--	*7.2*	
Difference:						0.9	0.0	---	---	---	--	-7.5	
Principal US[3]	*$25,000*	*Core Pvt. RE*	$ 34,326,840	0.9%		1.7	1.7	1.7	0.6	4.9	6.3	7.0	Jan-16
NCREIF ODCE + 1% Lag Blend						*2.1*	*2.1*	*2.1*	*4.4*	*8.2*	*9.5*	*9.9*	
Difference:						-0.4	-0.4	-0.4	-3.8	-3.3	-3.2	-2.9	
Prologis Logistics[3]	*$35,000*	*Core Pvt. RE*	$ 78,473,587	2.1%		6.6	6.6	6.6	10.6	14.6	15.7	6.7	Dec-07
NCREIF ODCE + 1% Lag Blend						*2.1*	*2.1*	*2.1*	*4.4*	*8.2*	*9.5*	*8.5*	
Difference:						4.5	4.5	4.5	6.2	6.4	6.2	-1.8	
RREEF America II[3]	*$45,000*	*Core Pvt. RE*	$ 50,112,656	1.4%		0.8	0.8	0.8	1.7	5.1	--	6.5	Jul-16
NCREIF ODCE + 1% Lag Blend						*2.1*	*2.1*	*2.1*	*4.4*	*8.2*	*9.5*	*9.3*	
Difference:						-1.3	-1.3	-1.3	-2.7	-3.1	--	-2.8	
Diversifying Strategies			$ 786,324,698	21.2%	25.0%	1.7	0.0	0.0	-3.1	4.0	2.8	6.4	Oct-90
Principal Protection			$ 326,800,604	8.8%	10.0%	0.9	-0.8	-0.8	2.1	3.9	3.7	6.4	Oct-90
BB Aggregate Bond Index						*0.8*	*-1.9*	*-2.6*	*-0.3*	*5.2*	*3.2*	*6.0*	
Difference:						0.1	1.1	1.8	2.4	-1.3	0.5	0.4	
Dodge & Cox		*Core Fixed Income*	$ 165,668,594	4.5%		1.0	-1.1	-1.6	5.2	6.2	4.8	7.2	Oct-90
BB Aggregate Bond Index						*0.8*	*-1.9*	*-2.6*	*-0.3*	*5.2*	*3.2*	*6.0*	
Difference:						0.2	0.8	1.0	5.5	1.0	1.6	1.2	
DoubleLine Capital		*MBS*	$ 112,285,192	3.0%		0.8	0.0	0.9	7.3	4.5	4.0	5.1	Feb-12
BB Aggregate Bond Index						*0.8*	*-1.9*	*-2.6*	*-0.3*	*5.2*	*3.2*	*2.9*	
Difference:						0.0	1.9	3.5	7.6	-0.7	0.8	2.2	
SJ Principal Protection		*Int Core Bond ETF*	$ 48,846,818	1.3%		0.9	---	---	---	---	---	---	Jan-21
BB Aggregate Bond Index						*0.8*	---	---	---	---	---	---	
Difference:						0.1	---	---	---	---	---	---	

[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 3/31/21, and lagged 1 quarter.

[3] Manager returns are as of 3/31/21, 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) April 2021

	Commitment ($000)	Sub-Segment	Market Value	Physical % of Total	Policy Target %	1-Mo	3-Mos	YTD	1-Yr	3-Yrs	5-Yrs	SI Return	SI Date
Crisis Risk Offset			**$ 459,524,094**	**12.4%**	**15.0%**	**2.3**	**0.7**	**0.6**	**-6.4**	**3.8**	**2.2**	**6.6**	**Jan-05**
CRO Custom Benchmark [2]						*1.7*	*-0.3*	*-1.8*	*0.1*	*5.9*	*3.5*	*5.3*	
Difference:						0.6	1.0	2.4	-6.5	-2.1	-1.3	1.3	
Long Duration			$ 145,707,974	3.9%		2.3	-7.8	-10.6	-13.8	7.2	--	3.1	
BB US Long Duration Treasuries						*2.3*	*-8.2*	*-11.5*	*-15.6*	*7.4*	--	*4.0*	
Difference:						0.0	0.4	0.9	1.8	-0.2	--	-0.9	
Dodge & Cox Long Duration		*Long Duration*	$ 145,707,974	3.9%		2.3	-7.8	-10.6	-13.8	7.2	--	3.1	Feb-16
BB US Long Duration Treasuries						*2.3*	*-8.2*	*-11.5*	*-15.6*	*7.4*	--	*4.0*	
Difference:						0.0	0.4	0.9	1.8	-0.2	--	-0.9	
Systematic Trend Following			$ 192,432,213	5.2%		5.4	10.4	12.6	17.0	5.4	1.1	8.7	
BTOP50 Index						*2.4*	*6.2*	*5.0*	*12.5*	*4.7*	*1.3*	*4.5*	
Difference:						3.0	4.2	7.6	4.5	0.7	-0.2	4.2	
Mt. Lucas Managed Futures - Cash		*Systematic Trend Following*	$ 98,918,292	2.7%		7.7	11.8	17.4	18.0	5.3	-0.3	8.1	Jan-05
BTOP50 Index						*2.4*	*6.2*	*5.0*	*12.5*	*4.7*	*1.3*	*4.5*	
Difference:						5.3	5.6	12.4	5.5	0.6	-1.6	3.6	
Graham Tactical Trend		*Systematic Trend Following*	$ 93,513,921	2.5%		3.1	9.1	8.0	16.1	5.2	--	1.6	Apr-16
SG Trend Index						*2.8*	*7.7*	*6.9*	*10.9*	*6.1*	--	*1.4*	
Difference:						0.3	1.4	1.1	5.2	-0.9	--	0.2	
Alternative Risk Premia			$ 121,383,907	3.3%		-2.2	-2.3	-1.4	-23.1	-3.2	-0.1	7.0	
5% Annual						*0.4*	*1.2*	*1.6*	*5.0*	*5.0*	*5.0*	*6.4*	
Difference:						-2.6	-3.5	-3.0	-28.1	-8.2	-5.1	0.6	
AQR Style Premia		*Alternative Risk Premia*	$ 29,114,205	0.8%		-1.8	12.0	19.5	2.4	-12.4	--	-5.1	May-16
5% Annual						*0.4*	*1.2*	*1.6*	*5.0*	*5.0*	--	*5.0*	
Difference:						-2.2	10.8	17.9	-2.6	-17.4	--	-10.1	
PE Diversified Global Macro		*Alternative Risk Premia*	$ 33,952,503	0.9%		-7.7	-9.8	-8.9	-43.3	-5.0	--	-4.0	Jun-16
5% Annual						*0.4*	*1.2*	*1.6*	*5.0*	*5.0*	--	*5.0*	
Difference:						-8.1	-11.0	-10.5	-48.3	-10.0	--	-9.0	
Lombard Odier		*Alternative Risk Premia*	$ 58,317,199	1.6%		1.1	-3.7	-5.1	-16.1	--	--	-5.2	Jan-19
5% Annual						*0.4*	*1.2*	*1.6*	*5.0*	--	--	*5.0*	
Difference:						0.7	-4.9	-6.7	-21.1	--	--	-10.2	
Cash [3]			**$ 90,727,100**	**2.4%**	**0.0%**	**0.0**	**0.0**	**0.1**	**0.2**	**1.0**	**1.0**	**2.4**	**Sep-94**
US T-Bills						*0.0*	*0.0*	*0.0*	*0.1*	*1.5*	*1.2*	*2.4*	
Difference:						0.0	0.0	0.1	0.1	-0.5	-0.2	0.0	
Northern Trust STIF		*Collective Govt. Short Term*	$ 69,635,049	1.9%		0.0	0.0	0.1	0.2	1.0	1.0	2.6	Jan-95
US T-Bills						0.0	0.0	0.0	0.1	1.5	1.2	*2.4*	
Difference:						0.0	0.0	0.1	0.1	-0.5	-0.2	0.2	
Parametric Overlay [4]		*Cash Overlay*	**$ 48,474,482**	**1.3%**		**0.0**	**0.0**	**0.0**	**--**	**--**	**--**	**0.0**	**Jan-20**

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

[3] Includes lagged cash.

[5] **60%** MSCI ACWI, **40%** BB Universal

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

Capital Markets Outlook & Risk Metrics

As of April 30, 2021

Capital Markets Outlook

Takeaways

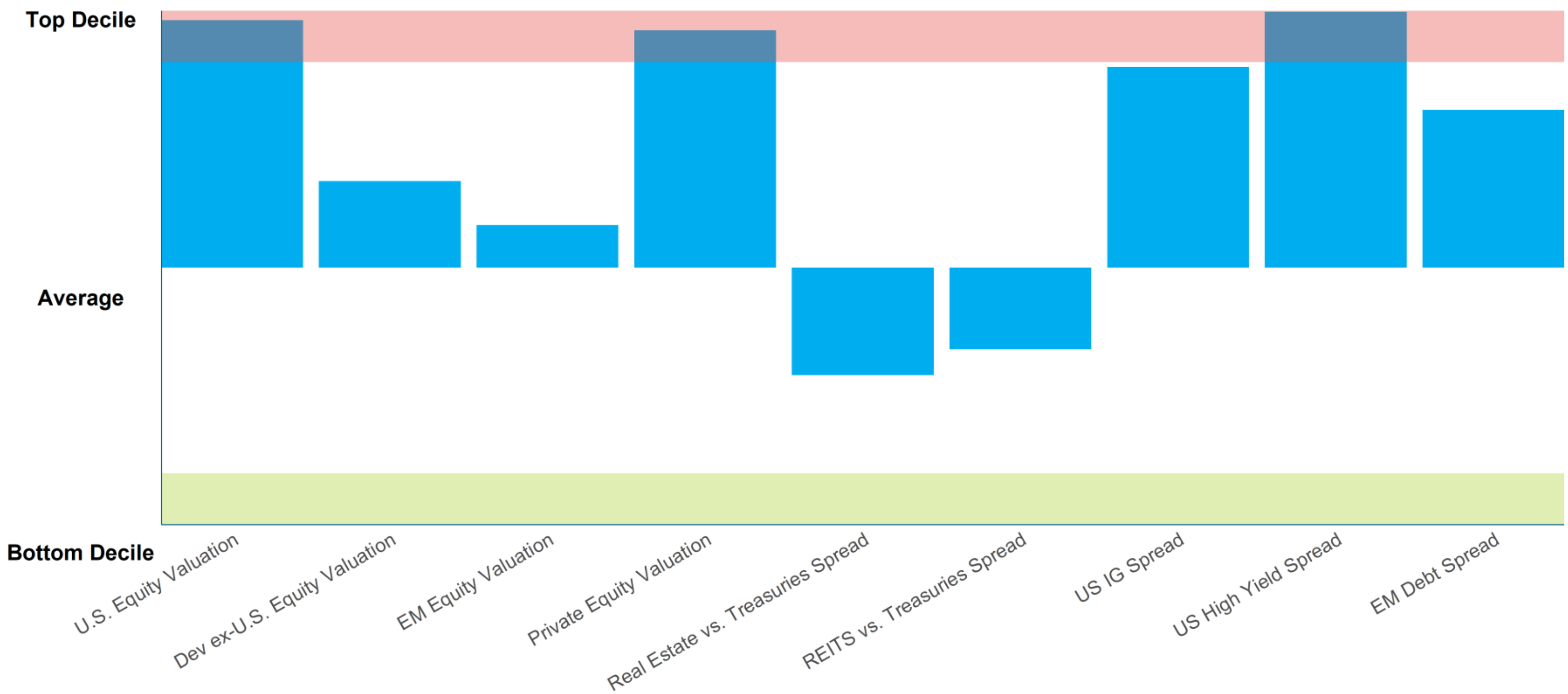
- The advent of ambitious global vaccination campaigns has begun to shift market focus to repricing of cyclical stocks, commodities, and real assets that may benefit from economic growth.
- The rotation to value and cyclical stocks took a pause so that growth stocks outperformed value stocks in the month of April as the Russell 1000 Growth Index outperformed the Russell 1000 Value Index.
- Developed markets outside of the US outperformed emerging market equities, and like the US, growth outperformed value.
- The MSCI China index continued its underperformance with a 1.4% return in April.
- Fixed income markets posted modest positive returns as the yield curve steepened rapidly to reflect higher inflation expectations.
- The Barclays TIPS index returned 1.4% in April and the Barclays 1-3 Year TIPS Index posted a 0.6% gain.
- Commodities and related stocks posted gains, with the Bloomberg Commodities index returning 8.3% and the S&P Global Natural Resources Index returning 4.1%.
- Global infrastructure stocks likewise posted positive returns in April, with the DJ Brookfield Global Infrastructure gaining 4.7% and the S&P Infrastructure index returning 3.8%.
- Global REITs have continued to recover from steep 2020 losses, with the MSCI US REITs and FTSE NAREIT Equity Index both of which returned 8.1% in April.

Capital Markets Outlook

Takeaways

- The US vaccination efforts combined with the American Recovery Act have lifted 2021 GDP forecasts for the US to 6.5%, while COVID-related setbacks in Europe have muted growth expectations there for 2021.
- According to the World Health Organization, global COVID cases have been falling since January. While the efficacy of many of the vaccines is promising, governments are closely monitoring new COVID variants as these may prove less susceptible to currently available vaccines.
- While the markets appear as though they are looking past COVID, a full recovery to pre-COVID levels of economic activity is not expected to occur until mid-2021 at the earliest.
- As the new administration in the US implements its policy agenda, investors will continue to examine its actions as it relates to monetary and fiscal policy, with a particular focus on economic stimulus, taxation, and broad infrastructure spending.

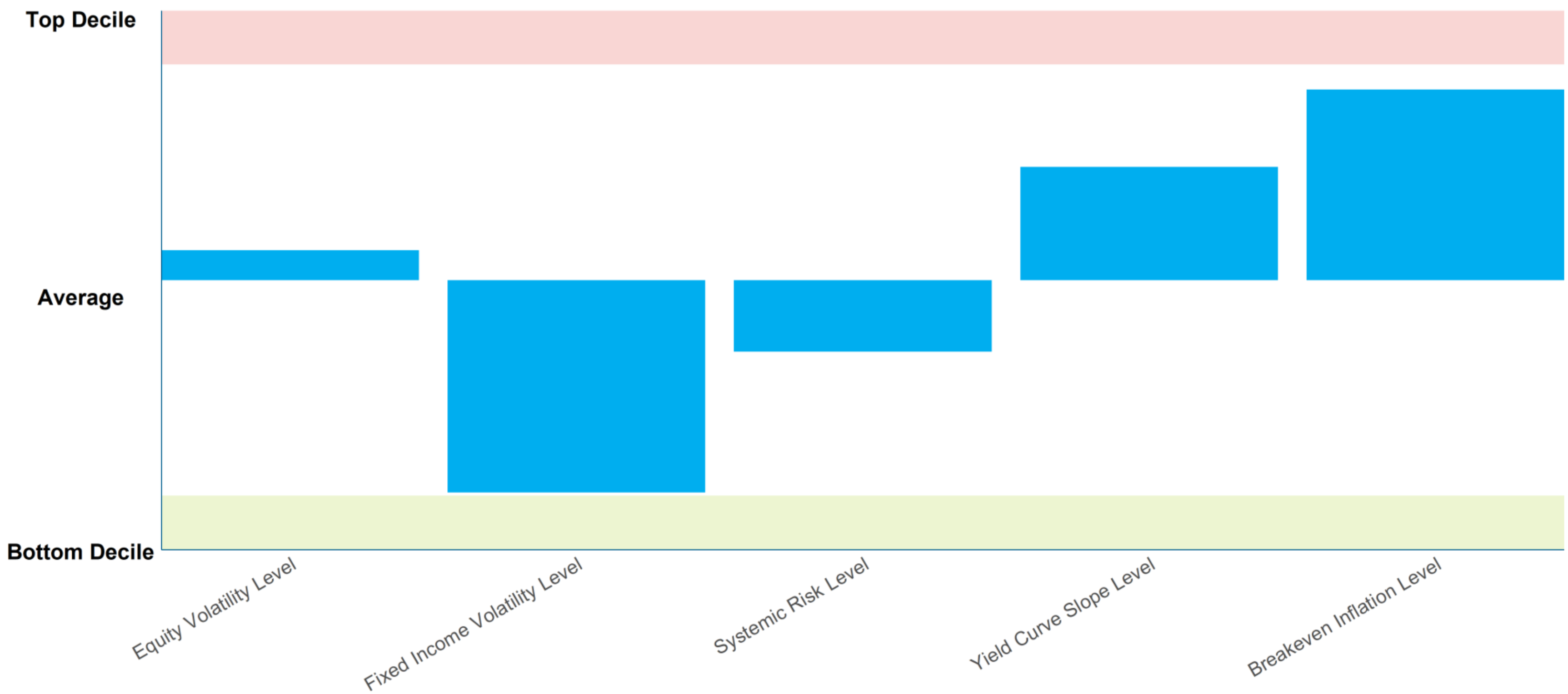
Risk Overview/Dashboard (1)
(As of April 30, 2021)[1]



- 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.

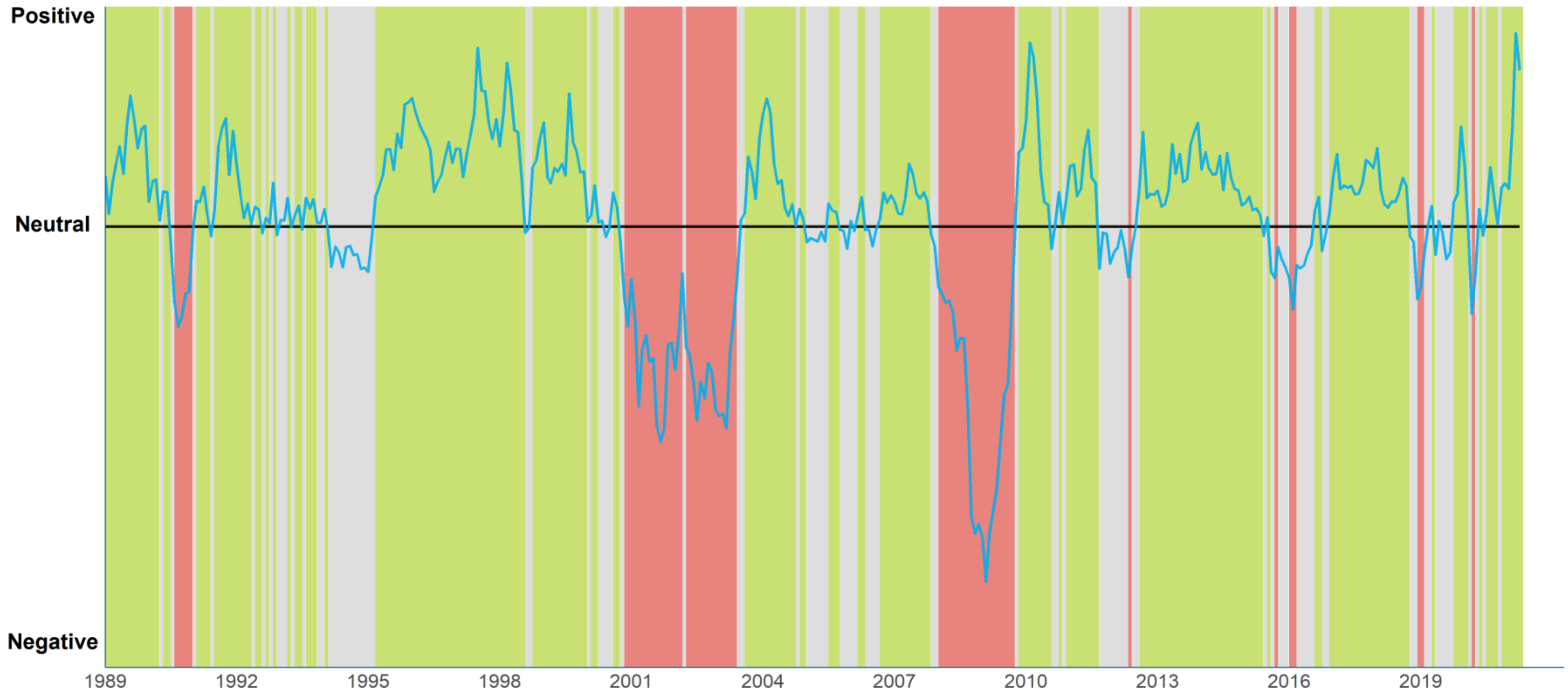
Risk Overview/Dashboard (2)
(As of April 30, 2021)



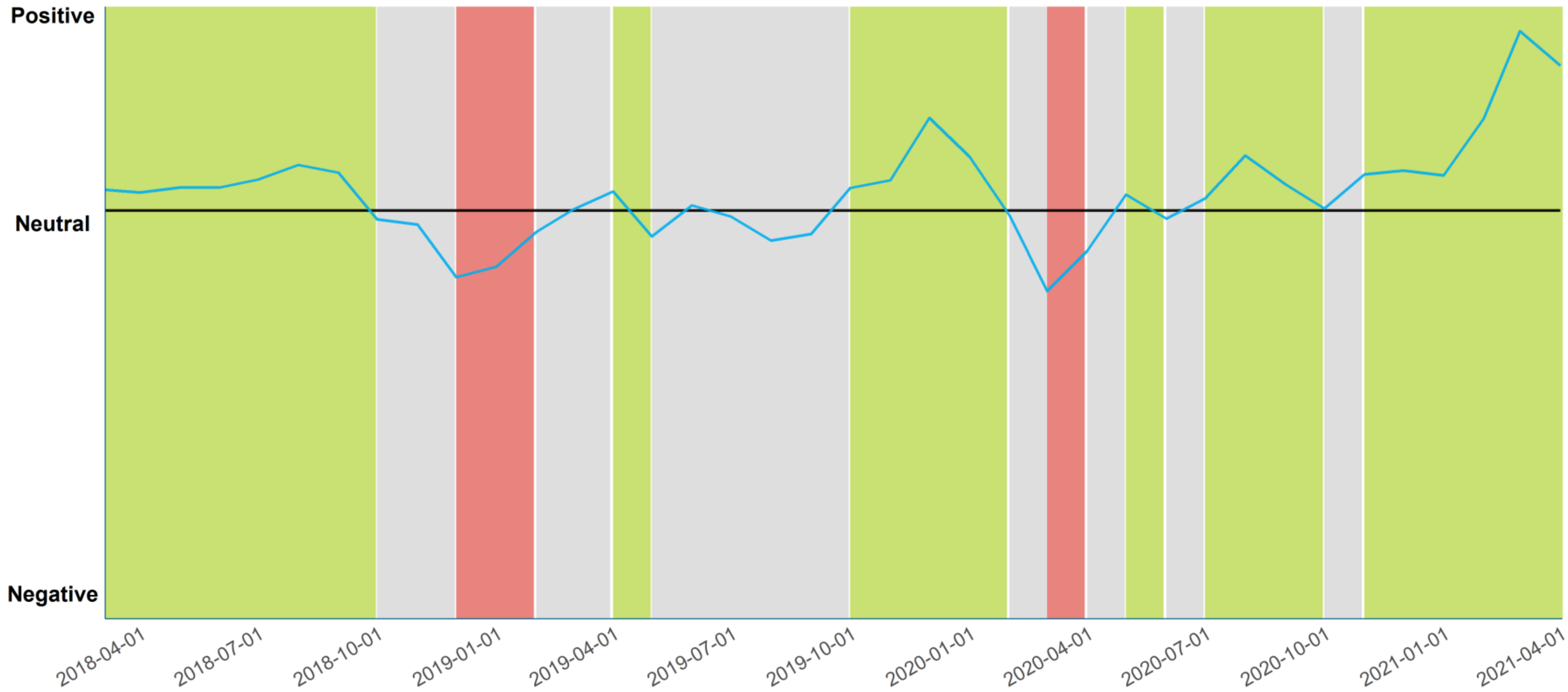
- Dashboard (2) shows how the current level of each indicator compares to its respective history.

Market Sentiment Indicator (All History)

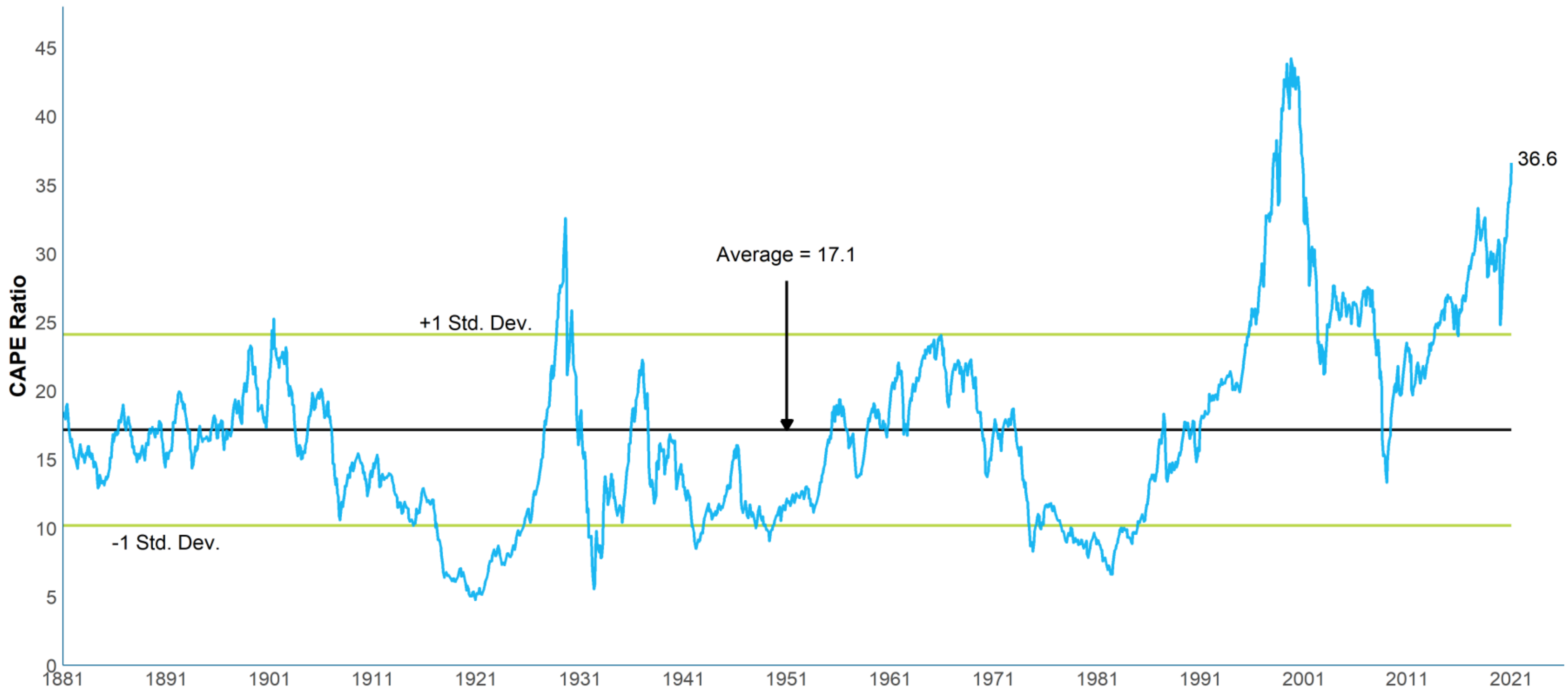
(As of April 30, 2021)



Market Sentiment Indicator (Last Three Years)
(As of April 30, 2021)



US Equity Cyclically Adjusted P/E[1]
(As of April 30, 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/E[1]

(As of April 30, 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/E[1]
(As of April 30, 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.

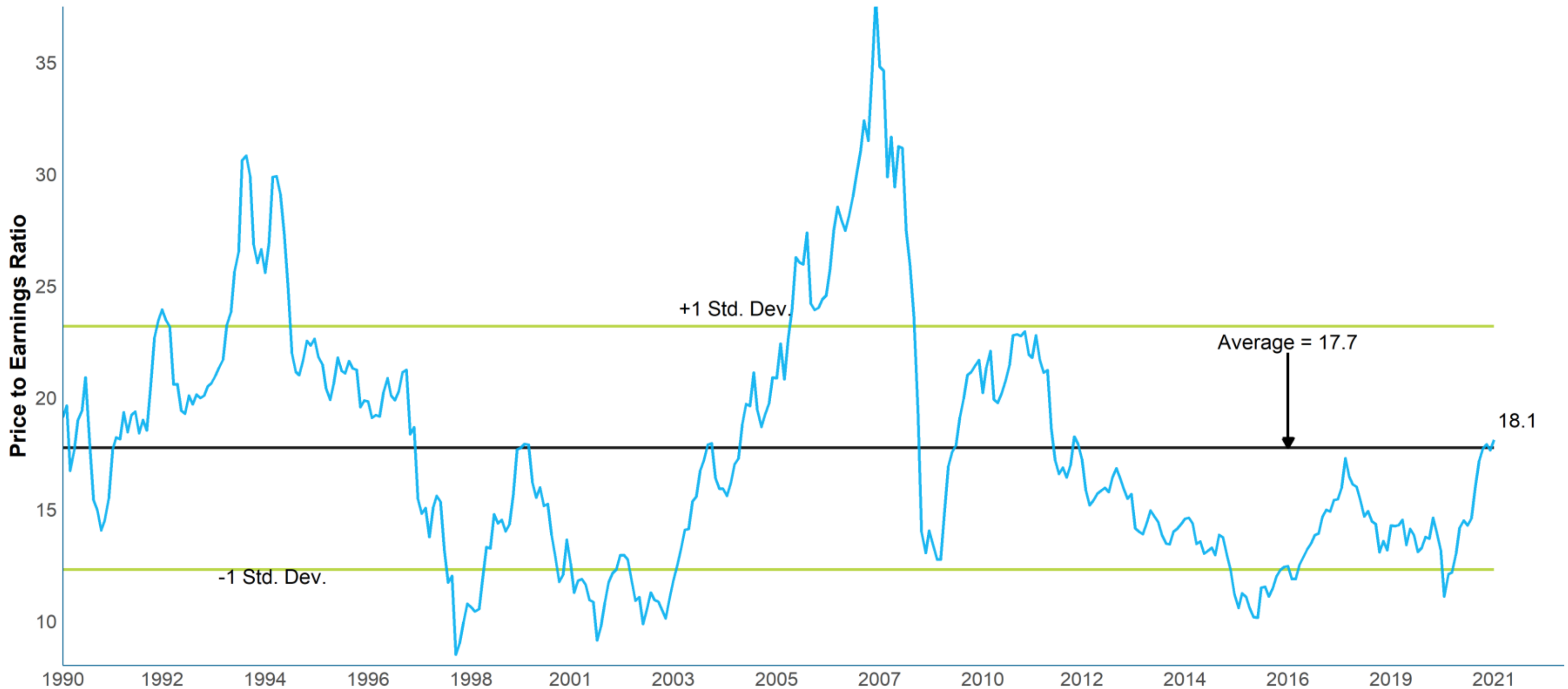
Developed International Equity Cyclically Adjusted P/E[1]

(As of April 30, 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.

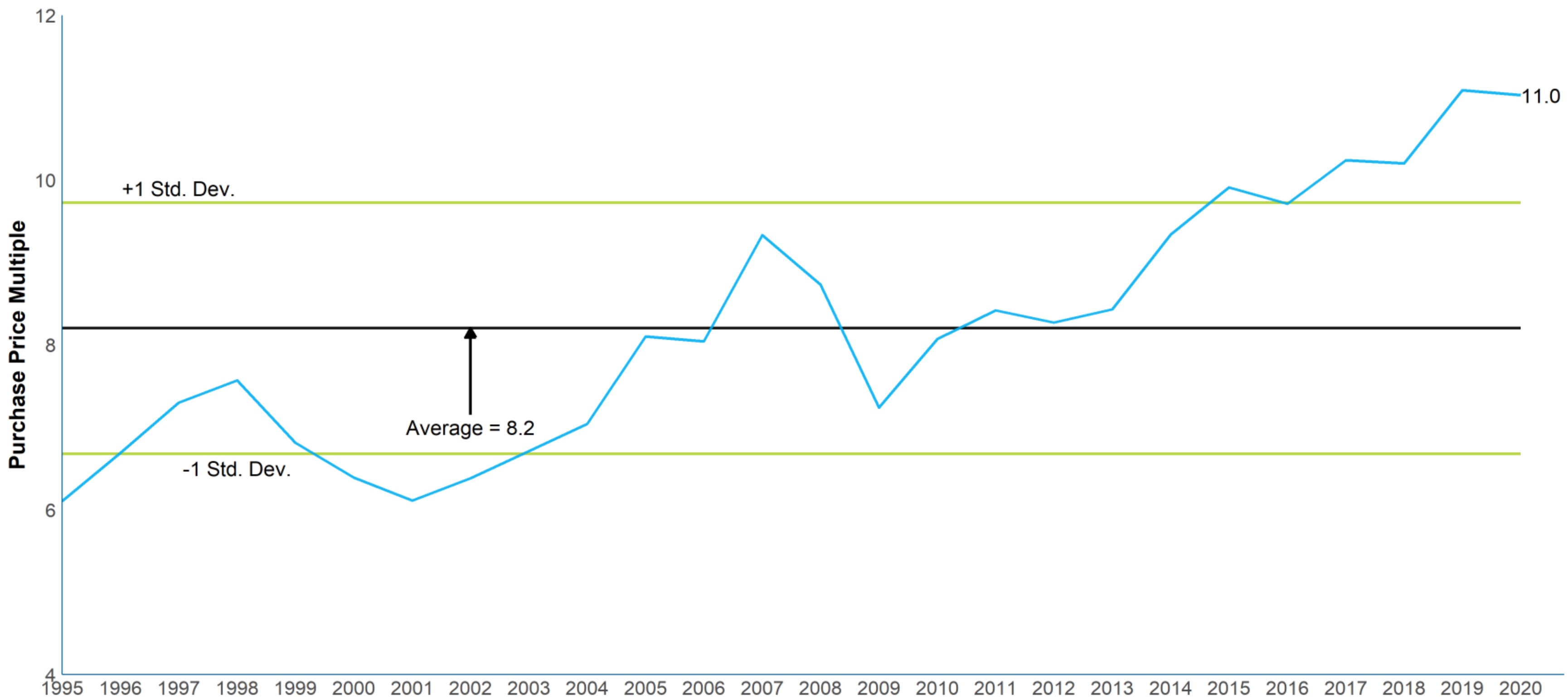
Emerging Market Equity Cyclically Adjusted P/E[1]
(As of April 30, 2021)



- 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.

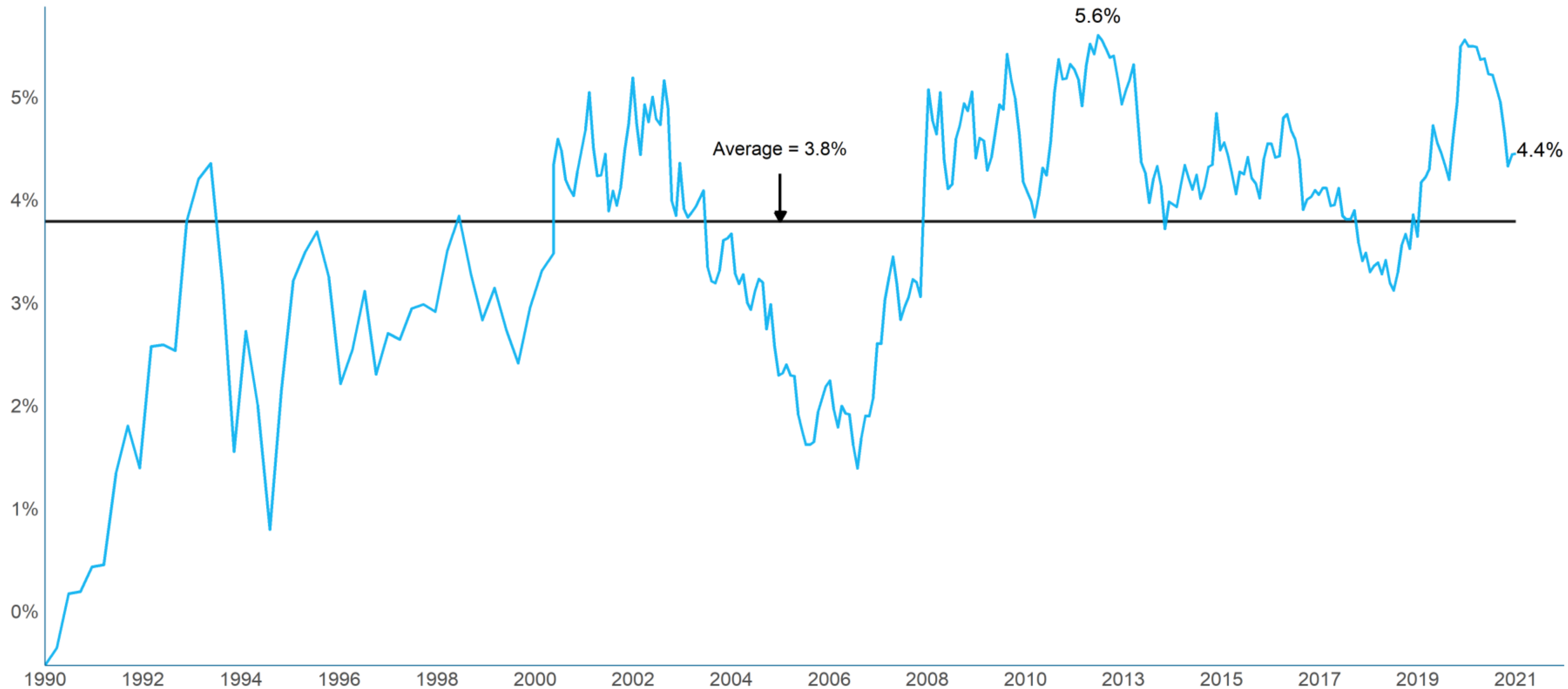
Private Equity Multiples[1]
(As of February 28, 2021)[2]



- 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

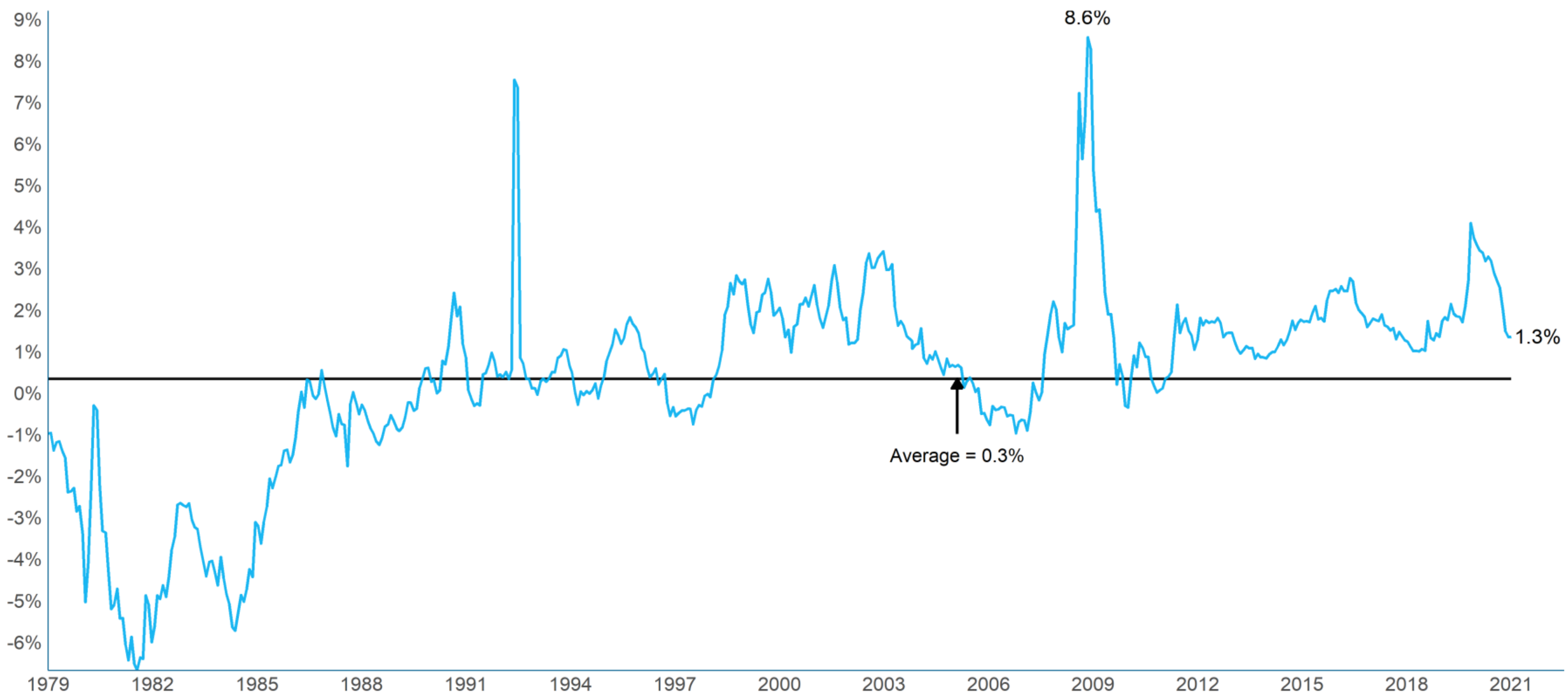
Core Real Estate Spread vs. Ten-Year Treasury[1]
(As of April 30, 2021)



- 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.

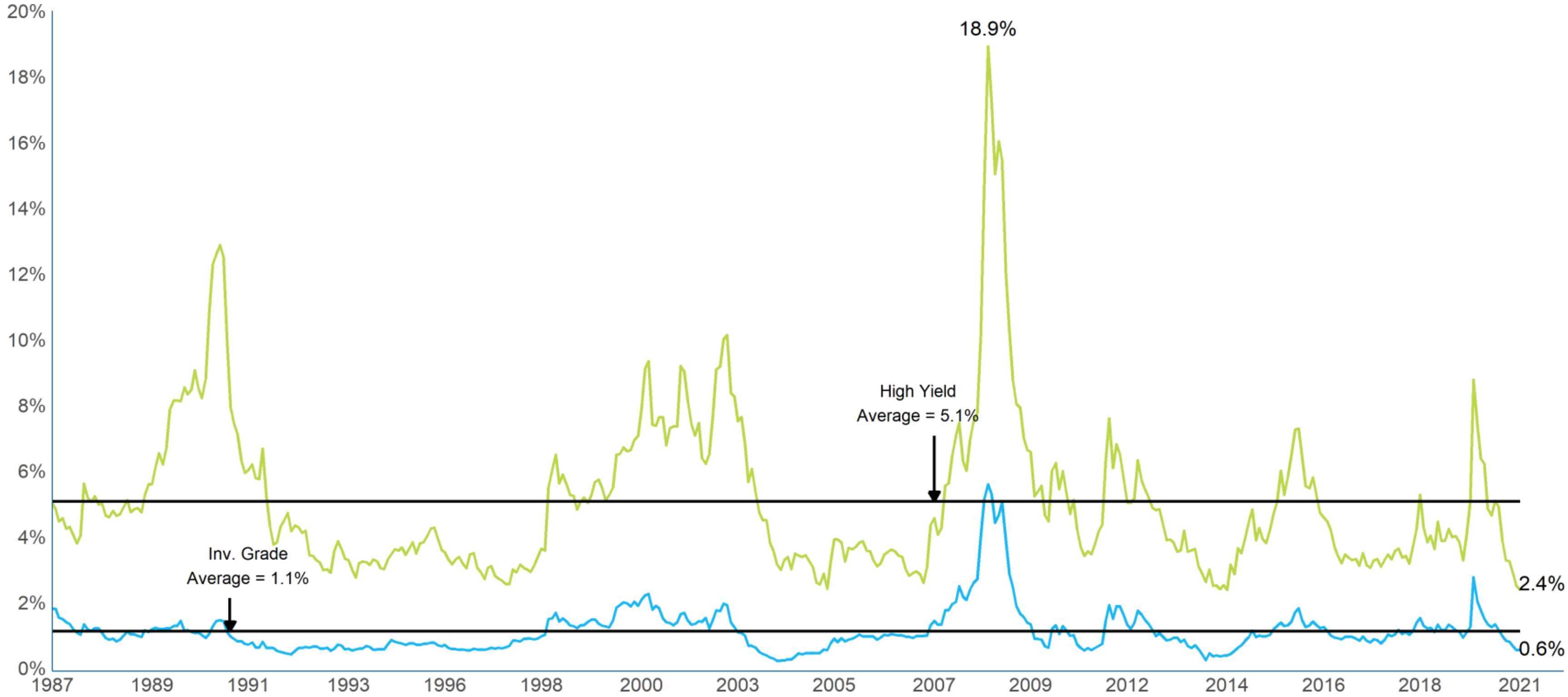
REITs Dividend Yield Spread vs. Ten-Year Treasury[1]
(As of April 30, 2021)



- 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 Spreads[1]
(As of April 30, 2021)



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

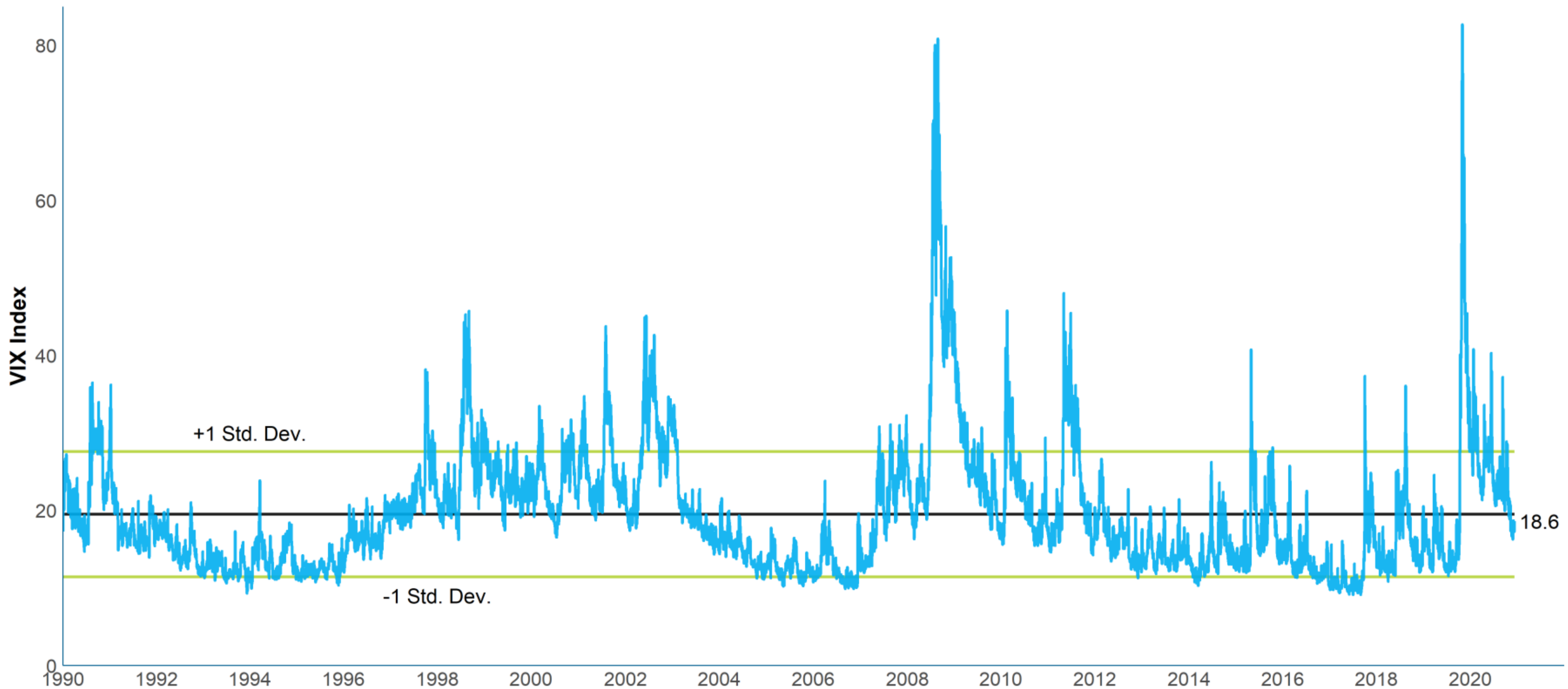
[1] Credit Spreads – Source: Barclays Capital. High Yield is proxied by the Barclays High Yield index and Investment Grade Corporates are proxied by the Barclays US Corporate Investment Grade index. Spread is calculated as the difference between the Yield to Worst of the respective index and the 10-Year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

Emerging Market Debt Spreads[1]
(As of April 30, 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.

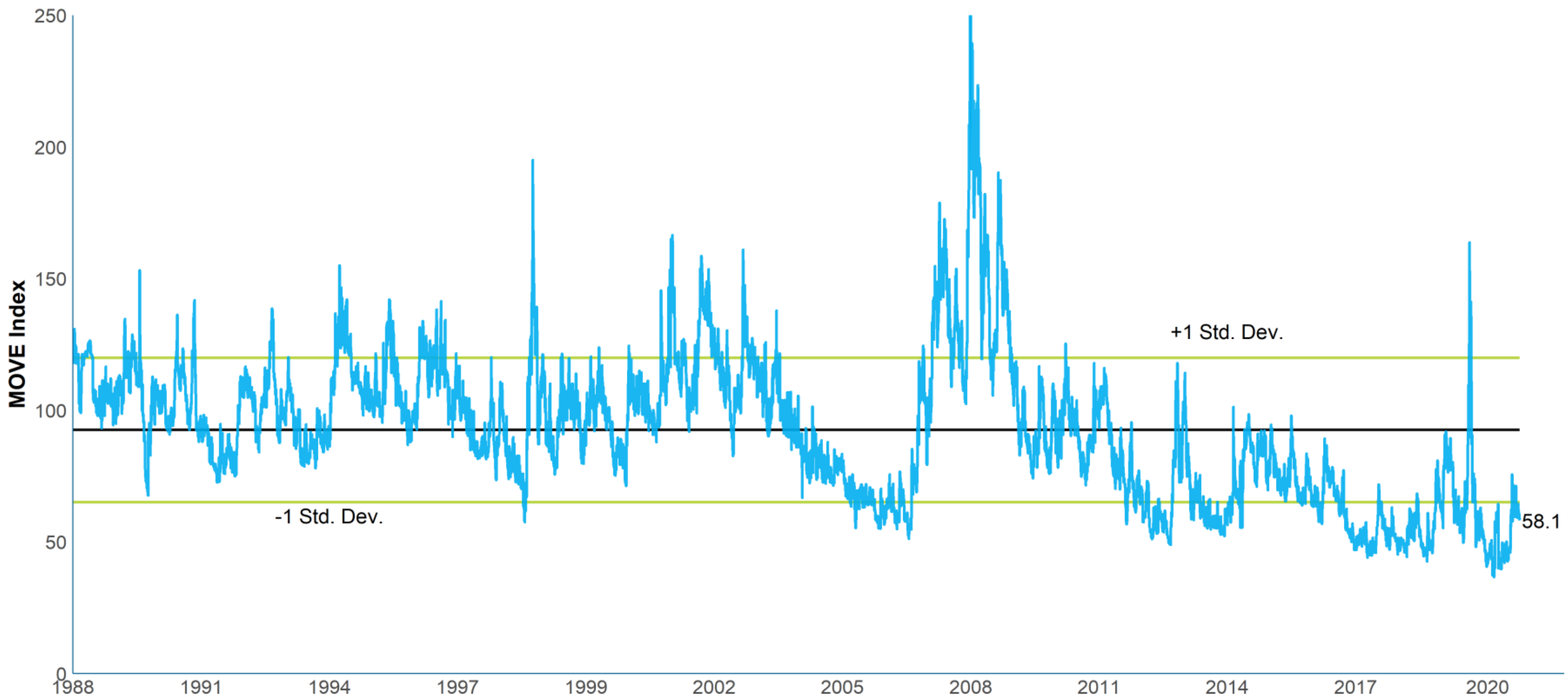
Equity Volatility[1]
(As of April 30, 2021)



- 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.

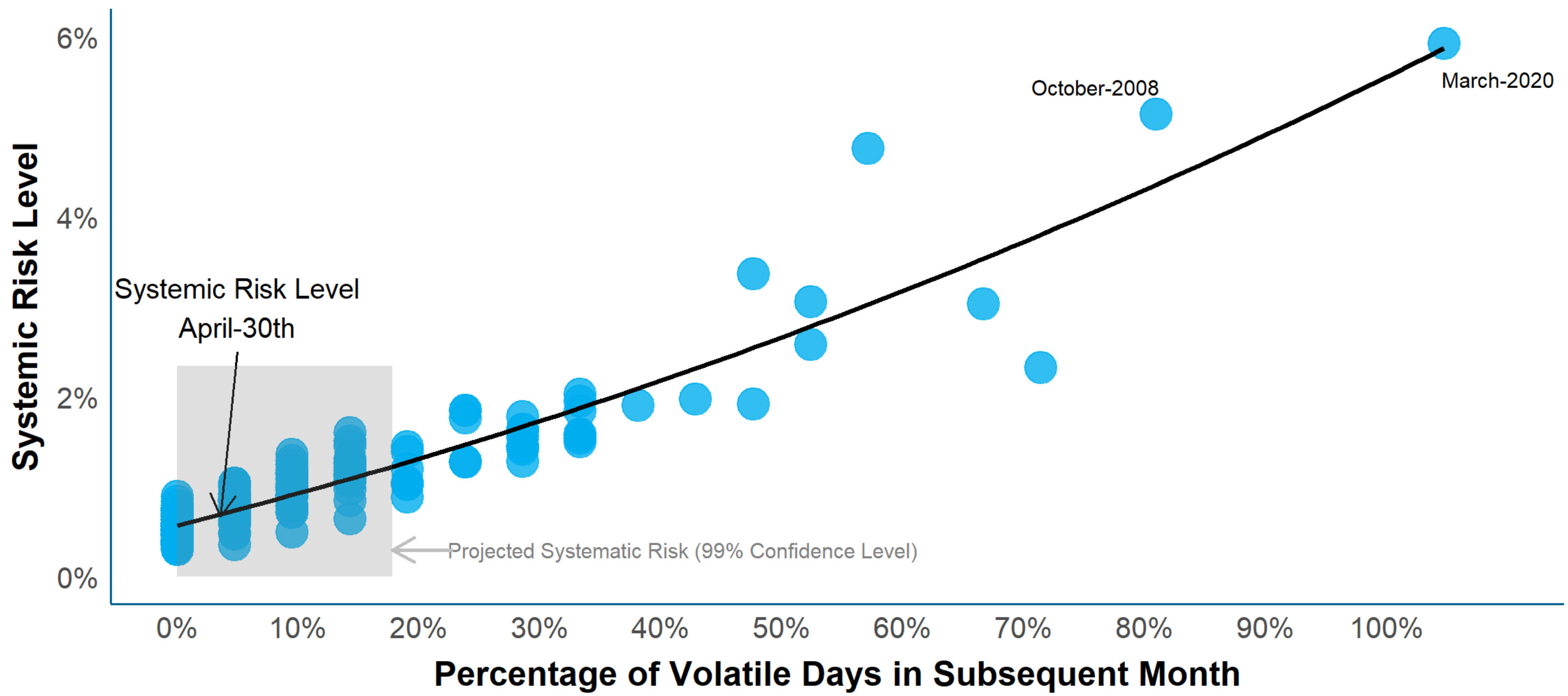
Fixed Income Volatility[1]
(As of April 30, 2021)



- 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.

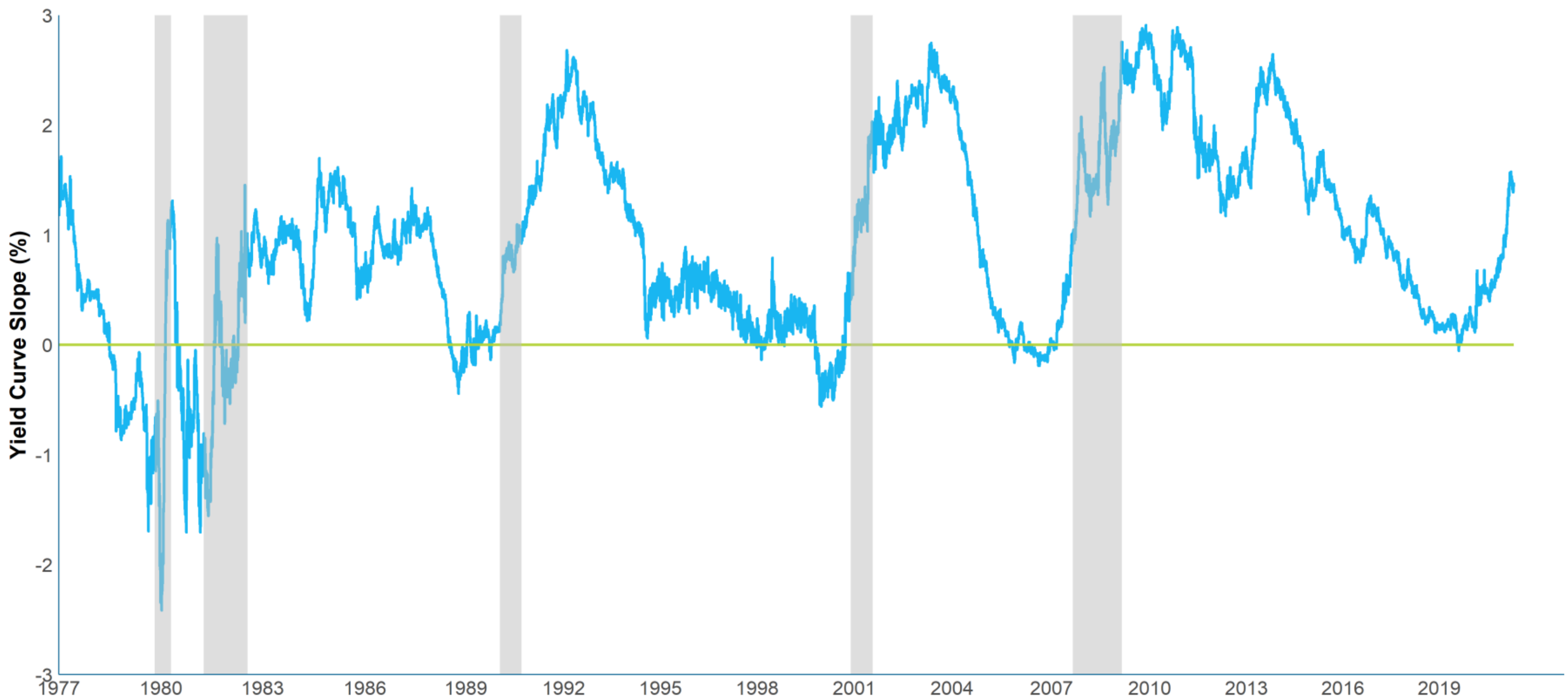
Systemic Risk and Volatile Market Days[1]
(As of April 30, 2021)



- 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.

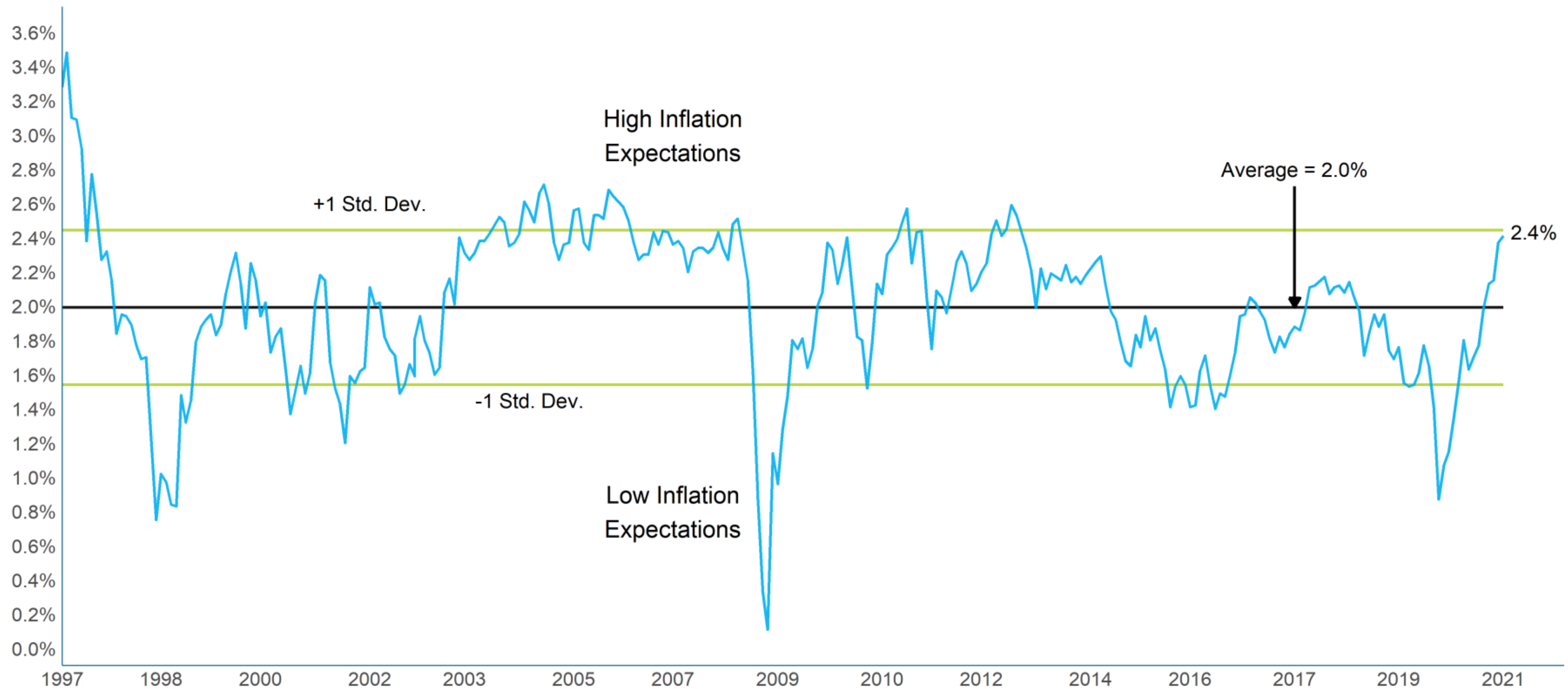
Yield Curve Slope (Ten Minus Two)[1]
(As of April 30, 2021)



- 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.

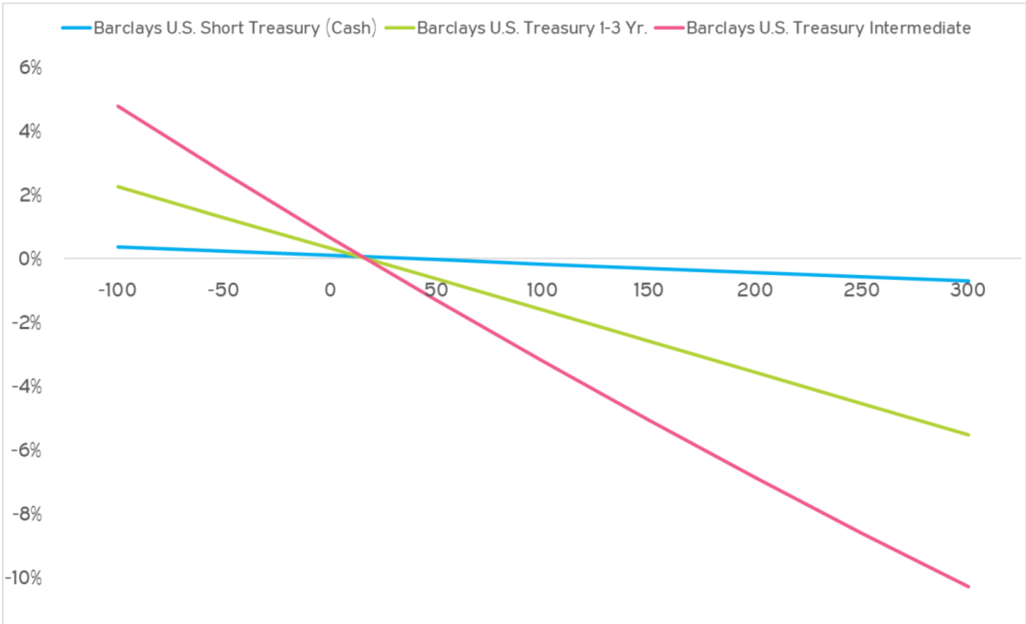
Ten-Year Breakeven Inflation[1]
(As of April 30, 2021)



- 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).

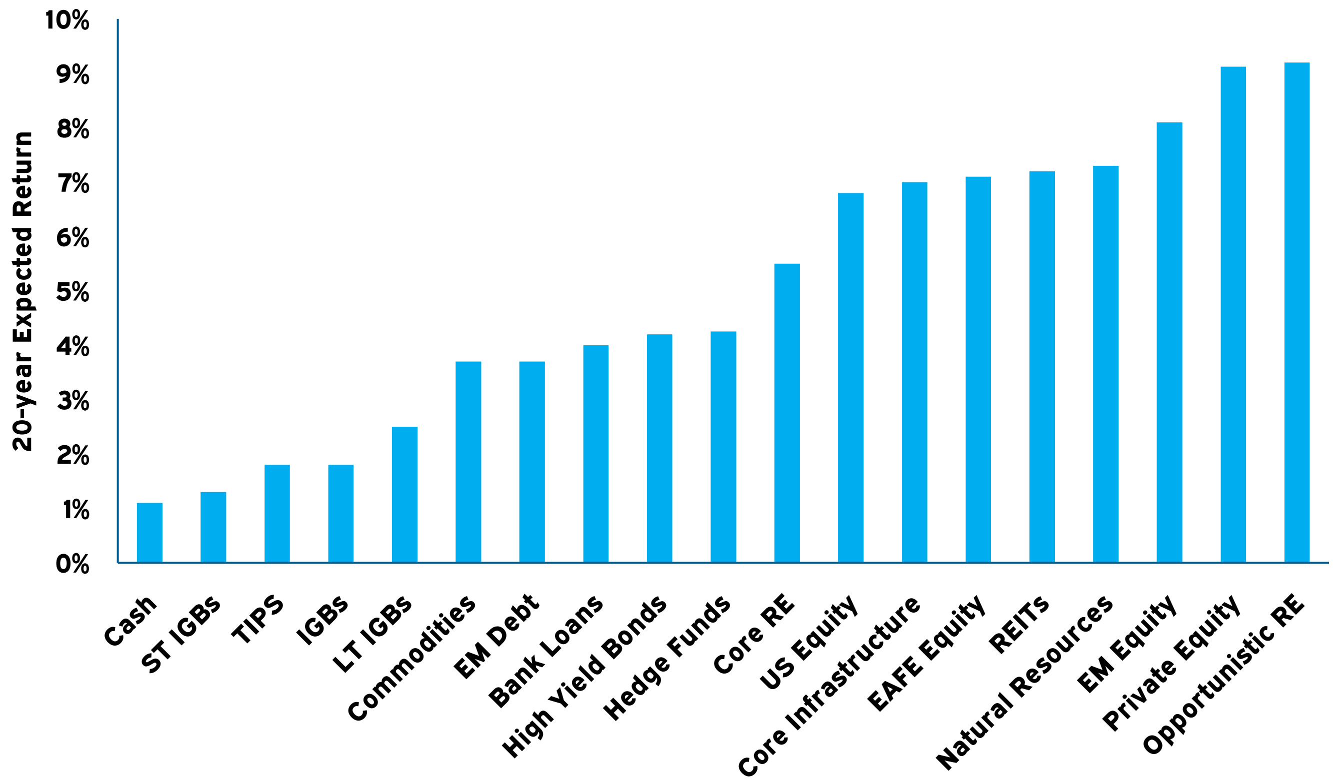
Total Return Given Changes in Interest Rates (bps)[1]
(As of March 31, 2021)



	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)	0.4%	0.2%	0.1%	-0.1%	-0.2%	-0.3%	-0.5%	-0.6%	-0.7%	0.27	0.08%
Barclays US Treasury 1-3 Yr.	2.2%	1.3%	0.3%	-0.7%	-1.6%	-2.6%	-3.6%	-4.6%	-5.5%	1.93	0.31%
Barclays US Treasury Intermediate	4.8%	2.7%	0.6%	-1.3%	-3.2%	-5.1%	-6.9%	-8.6%	-10.3%	4	0.64%
Barclays US Treasury Long	23.0%	12.1%	2.2%	-6.6%	-14.3%	-20.9%	-26.4%	-30.9%	-34.3%	18.65	2.22%

[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 Returns[1]



- 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 Explanations[1]

- 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 April 30, 2021 unless otherwise noted.

Appendix

Data Sources and Explanations[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 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 April 30, 2021 unless otherwise noted.

Appendix

Data Sources and Explanations[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 Inflation – Source: US Treasury and Federal Reserve. Inflation is measured by the Consumer Price Index (CPI-U NSA).

[1] All Data as of April 30, 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.

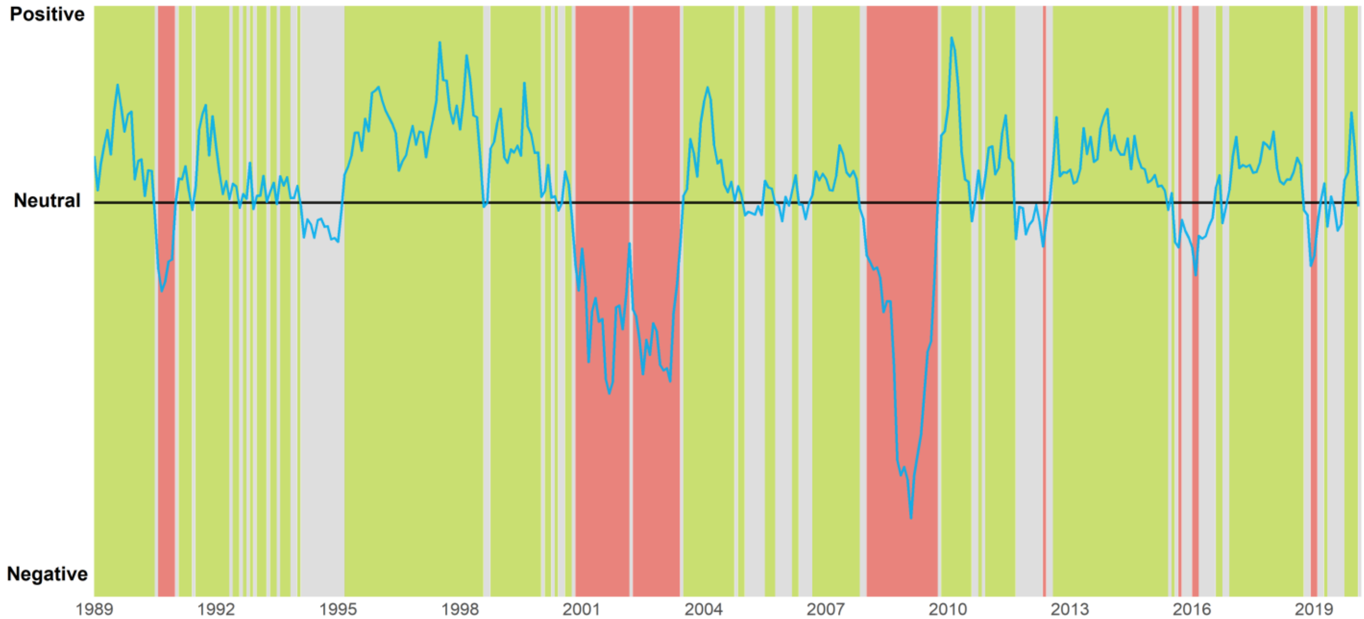
- Meketa's Risk Metrics, which rely significantly on standard market measures of relative valuation, often provide valid early signals of increasing long-term risk levels in the global investment markets. However, as is the case with numerous valuation measures, the Risk Metrics may convey such risk concerns long before a market corrections 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 measure[1]. 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

This material is provided by Meketa Investment Group, Inc. ("Meketa") for informational purposes only and may contain information that is not suitable for all clients. No portion of this commentary is to be construed as a solicitation or recommendations to buy or sell a security, or the provision of personalized investment advice, tax or legal advice. Past performance may not be indicative of future results and may have been impacted by market events and economic conditions that will not prevail in the future. There can be no assurance that any particular investment or strategy will prove profitable and the views, opinions, and projects expressed herein may not come to pass. Any direct or indirect reference to a market index is included for illustrative purposes only, as an index is not a security in which an investment can be made. Indices are benchmarks that serve as market or sector indicators and do not account for the deduction of management fees, transaction costs and other expenses associated with investable products. Meketa does not make any representation as to the accuracy, timeliness, suitability, completeness or relevance of any information prepared by any unaffiliated third party and takes no responsibility, therefore. Any data provided regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of futures results. Investing involves risk, including the potential loss of principal and clients should be guided accordingly.

MEKETA
INVESTMENT GROUP

San Joaquin County Employees' Retirement Association ("SJCERA")

June 4, 2021

Blockchain:

Institutional Investors and Cryptocurrency

Agenda

1. **Blockchain Technology**
2. **Summary**
3. **Appendix**

Blockchain Technology

Blockchain/Digital Wallets

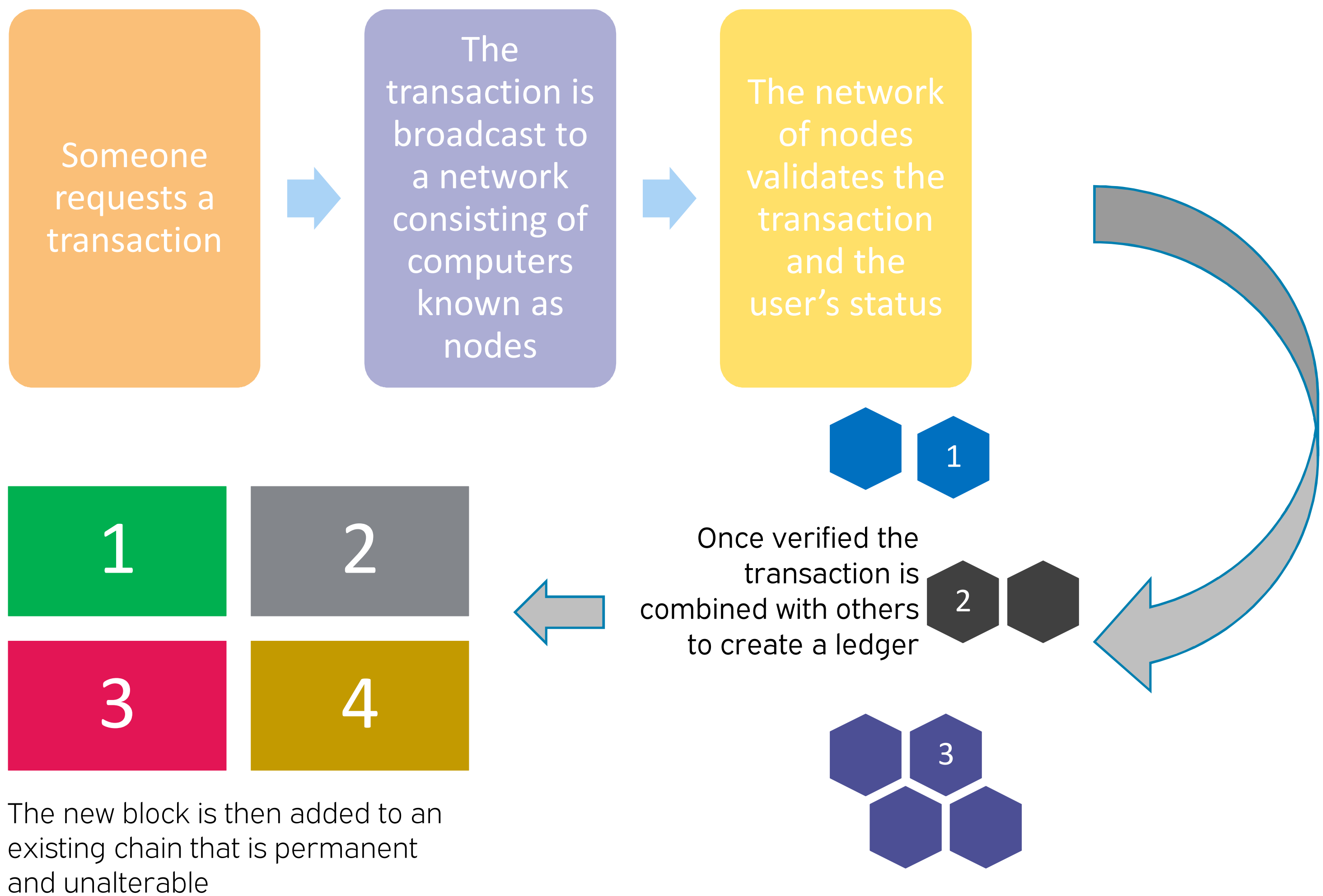
- Financial institutions are beginning to invest in and adopt Blockchain/DLT technology.
- Lower transaction costs when the transaction is over Blockchain.
- Blockchain enables faster transactions between assets.
- Blockchain users are anonymous (as long as their name isn't tied to the account).
- Because Blockchain is decentralized and distributed, it's more secure than a centralized system.

Distributed Ledger Technology ("DLT")

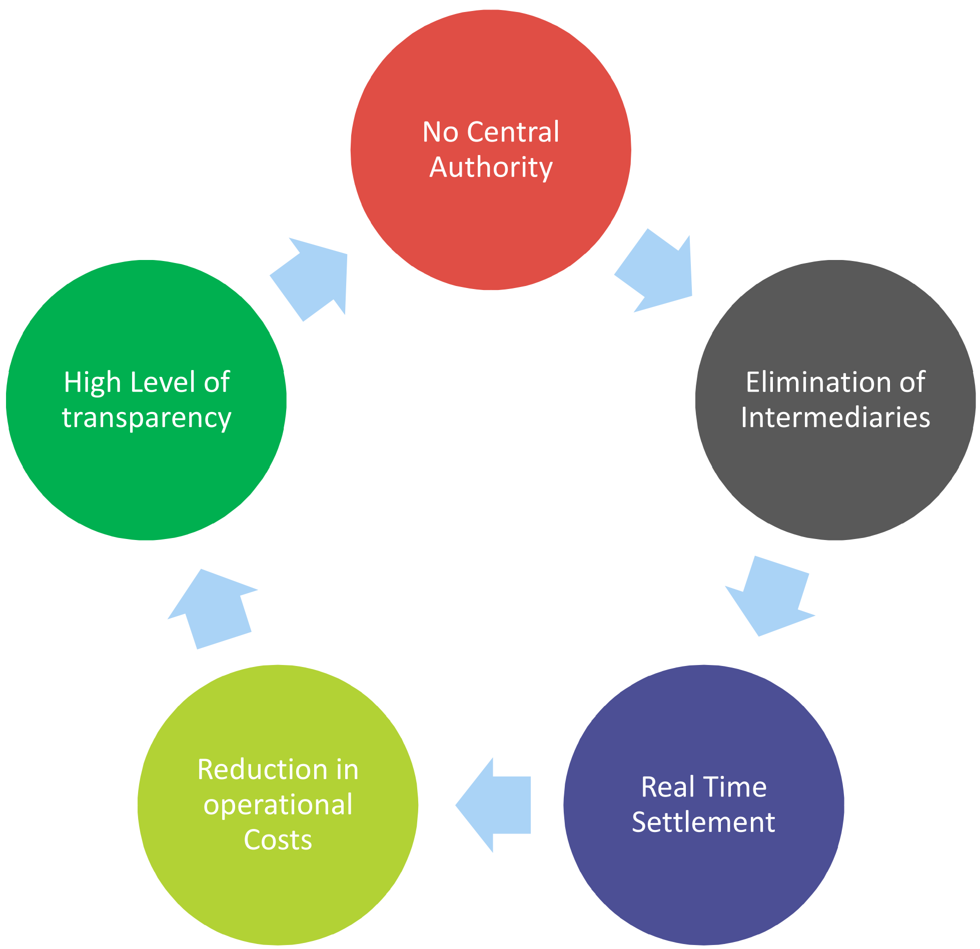
- Banks and other financial institutions have begun investing in Blockchain and other DLTs as a way of investing in this new market but not taking on the risk of cryptocurrencies.
- DLT is a database that records transactions and secures such data across multiple sites and locations that can be viewed by anyone in the database.
- DLTs have attributes that make it appealing for banks to invest in and adopt in future.
  - Transactions are low cost, anonymous, and secure.
  - Reduces inefficiencies in transactions (i.e., increases speed and decreases costs).
  - Reduces the time and cost of international transfers, including remittances.
    - Some payment services can make overseas transfers in hours, compared to days.
- JP Morgan has been one such leader in investing in DLT technology.
  - They recently created their own DLT, the Interbank Information network ("INN").

Source: IMF: https://www.imf.org/external/pubs/ft/fandd/2018/06/what-are-cryptocurrencies-like-bitcoin/basics.htm. To read more about JP Morgan's DLT system: https://www.jpmorgan.com/insights/technology/blockchain

How it works?


Someone requests a transaction
The transaction is broadcast to a network consisting of computers known as nodes
The network of nodes validates the transaction and the user’s status
1
Once verified the transaction is combined with others to create a ledger
2
3
1
2
3
4
The new block is then added to an existing chain that is permanent and unalterable

Advantages of Blockchain



Real World Application

- Bank Record Storage
- Payments
- Identify Theft Prevention
- Secure sharing of medical data
- Supply chain transactions

Crypto/Blockchain Stocks and ETFs

- There are a broad array of blockchain stocks.
  - The market is nascent, and the hype surrounding a company may be excessive in some cases.
  - The SEC has suspended trading in several securities regarding their crypto-related activities.
- There are four dedicated blockchain ETFs:
  - BLOK - Amplify Transformational Data Sharing ETF
    - Invests in companies "actively involved in the development and utilization of transformational data sharing technologies."
  - BLCN - Reality Shares Nasdaq NexGen Economy ETF
    - Tracks an index that includes companies that are "developing, researching, supporting, innovating or utilizing blockchain technology."
  - LEGR - First Trust Indxx Innovative Transaction & Process ETF
    - Tracks an index that includes companies that are "actively using, investing in, developing, or have products that are poised to benefit from blockchain technology."
  - KOIN - Innovation Shares NextGen Protocol ETF
    - Tracks an index that is composed of companies that "use, or are involved in, blockchain."

Summary

Summary

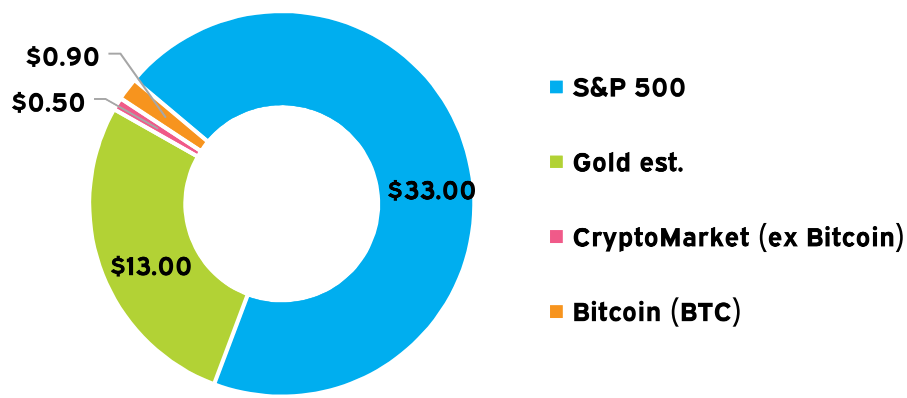
- Blockchain is not controlled by a single entity.
- Blockchain data is transparent.
- There are a broad array of Blockchain stocks .
- Institutional investors are just beginning to evaluate and potentially invest in Blockchain technology.
- Blockchain data is immutable

Appendix

What is a Digital Currency?

- A crypto-currency is a digital (or virtual) currency.
- Crypto-currency is secured by cryptography.
  - They are anonymous and nearly impossible to counterfeit.
- Unlike traditional currencies, most crypto-currencies are not issued by a central bank.
  - They operate outside the control of governments.
- Transactions can be completed without intermediaries and at a low cost.
  - Transfers can be made online or through a smartphone app.
- The first and most popular crypto-currency is Bitcoin, but new versions continue to be introduced.

Market Capitalizations (USD T.)[1]

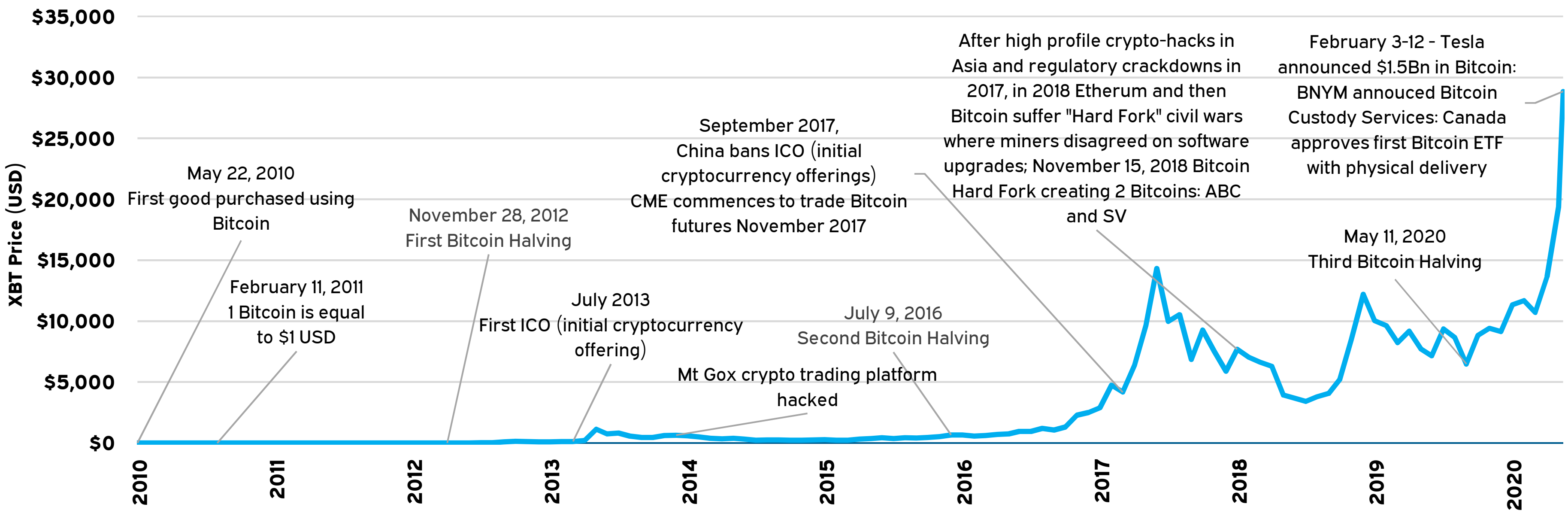


[1] Chart sources: WWW.Yardini.com, Bridgewater and www.coinmarketcap.com as of February 15, 2021.

Bitcoin

- Bitcoin ("BTC") is the most mature form of digital money, and it was created in 2009 by a person or group of people under the alias Satoshi Nakamoto.
- It was designed to be:
  - peer-to-peer
  - anonymous
  - decentralized
  - an alternative to national fiat currencies

Bitcoin Price History and Events



Source: Bloomberg, Financial Times " Digital tulip or new asset class? Bitcoins bid to go mainstream," 2/12/2021.

Crypto Currency Pros & Cons[1]

Pros	Cons
Distributed ledger technology could reduce financial transaction costs	Volatility reduces its usefulness as a store of value and unit of account
Independence from central banks mean that they cannot be devalued by money printing	Could diminish the effectiveness of monetary policy
Potential alternative to fiat currencies	Outside regulated banking systems
Shared ledger and anonymous transactions improves security	Crypto exchange and online wallets can be hacked
Increasing number of retail services coming online	Minimal acceptance and infrastructure limits its usefulness as a means of exchange
Transactions do not require traditional intermediaries	Global regulatory oversight is uncertain, and could limit future acceptance
Readily accessible via the internet	Nothing akin to FDIC insurance
More crypto currencies are becoming available	Uncertain future supply

[1] Source: Bloomberg: https://www.bloomberg.com/news/articles/2020-09-15/india-plans-to-introduce-law-to-ban-trading-in-cryptocurrency?sref=sA9cMlUe

WE HAVE PREPARED THIS REPORT (THIS "REPORT") FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE "RECIPIENT").

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM", "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

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

MEKETA
INVESTMENT GROUP

2175 NW Raleigh Street
Suite 300A
Portland, OR 97210

503.226.1050
Meketa.com

MEMORANDUM

TO: SJCERA Board of Retirement
FROM: Meketa Investment Group ("Meketa")
DATE: June 4, 2021
RE: Fixed Income Manager Search Update

This memo provides SJCERA with an update of the Fixed Income Manager Request-For-Proposal ("RFP") process and provides an overview of managers for further consideration.

Summary

Following the ongoing review of the Principal Protection portfolio, the Board approved a search for a new active Fixed Income manager that will be benchmarked to the Bloomberg Barclays Aggregate index.

Meketa subsequently released an RFP in April 2021 with a due date of May 12, 2021 for all prospective manager responses. As a result of the RFP, Meketa received responses from 46 prospective managers. Given the large array of manager responses, Meketa will use quantitative and qualitative screens to create a more focused list of prospective managers to present to the board. We plan on presenting a semifinalist list for the board to review and discuss at the July meeting, followed in August by a list of finalists for possible presentation.

The RFP contains a wide spectrum of questions that seek specific answers from the manager candidates on several topics related to the investment management of an active fixed income portfolio on behalf of SJCERA.

Manager Responses

Meketa received responses from the 46 firms listed on the following pages.

Core Fixed Income Manager Responses

Firm Name	
Amundi	MetLife
Attucks Asset Management	MFS Investment Management
Blackrock	Mondrian
C.S. McKee	Neuberger Berman
Capital Group	New Century Advisors
Conning	Nuveen
Diamond Hill	PGIM
DoubleLine	PIMCO
Ducenta Squared	PPM America
Federated Hermes	Ramirez Asset Management
FIAM	RBC Global Asset Management - US
Garcia Hamilton	Reams Asset Management
GW&K	Segal Bryant & Hamill
Invesco	Schroders
Income Research & Management	Seix Advisors
Johnson Asset Management	Sit Investment Associates
JP Morgan	SLC Management
Longfellow Investment Management	TCW
Loomis Sayles	Vanguard
Lord Abbett	Wellington Management
MacKay Shields	Wells Fargo Asset Management
Manulife	Western Asset
Mesirow	Ziegler Capital Management

DS/jls

2021 LEGISLATION

Last Updated: 05/25/2021

BILL NO.	AUTHOR	DESCRIPTION	LAST ACTION DATE	LOC	SPONSOR
Legislation Impacting SJCERA:					
AB 361	Rivas	This bill would authorize local agencies to use teleconferencing to hold meetings, without complying to Brown Act requirements for purpose of declaring or ratifying a local emergency, during a declared state or local emergency and other specified circumstances. The abbreviated procedures still require providing notice, posting the agenda, and allowing the public to access the meeting and address the legislative body. The intent is to improve public access to local agency meetings during COVID-19 and future emergencies.	05/18/21	**Senate** Rules Comm.	
AB 703	Rubio	Executive Order N-29-20 suspended the Brown Act requirements for teleconferencing during the COVID-19 pandemic, provided that notice requirements are met and the ability of the public to observe and provide comments. This bill would remove the requirements of the Act particular to teleconferencing and allow for teleconferencing subject to existing provisions regarding the posting of notice of an agenda and the ability of the public to observe the meeting and provide public comment. This bill would declare Legislature's intent, consistent with the Executive Order, to improve and enhance public access to meetings into the future, and considering the digital age, by allowing broader access through teleconferencing options.	05/03/21	Assembly L. Gov Comm	
AB 845	Rodriguez	This bill, until 1/1/2023, would create a presumption, applicable to the retirement systems that PEPRA regulates, that would be applied to disability retirements on the basis of a COVID-19-related illness. The presumption would apply to specified firefighter, public safety officer, and health care job classifications, or their functional equivalents, and to members in other job classes who test positive during a COVID-19 outbreak at their place of employment.	05/19/21	**Senate** L., PE & R Comm.	
SB 274	Wieckowski	This bill would require a local agency to email a copy of, or website link to, the agenda or a copy of the agenda packet if the person requests that the items be delivered by email. If it is technologically infeasible, the bill would require materials to be sent by mail.	05/13/21	**Assembly** L. Gov Comm	
SB 634	L, PE & R Comm.	This bill would authorize county health officer's duly authorized representative to also advise retirement boards with advice on medical matters; correct an obsolete CERL cross-reference to a provision in the Education Code; repeal a CERL member's authority to complete a service credit by paying a lump sum; authorize the Board to contract with a private practice physician for medical advice necessary to carry out disability retirement related provisions of CERL. This bill would also make changes to PERS and STRS that would not impact SJCERA.	5/13/21	**Assembly** PE & R Comm.	
Other Bills of Interest:					

BILL NO.	AUTHOR	DESCRIPTION	LAST ACTION DATE	LOC	SPONSOR
AB 339	Lee	**This bill would, until December 31, 2023, require all public meetings of a city council or county board of supervisors that governs a jurisdiction of at least 250,000 people to include an opportunity for members of the public to attend via a telephonic option or internet-based option.**	05/20/21	Assembly Third Reading	
AB 386	Cooper	This bill would exempt from disclosure under CPRA regarding an internally managed private loan made directly by the PERS fund.	05/13/21	Assembly Third Reading	
AB 473	Chau	Technical, non-substantive changes to CPRA.	05/24/21	Assembly Appr. Comm. Referred to suspense file	
AB 761	Chen	This bill would allow the OCERS Board to appoint CEO, ACEO, CIO and provide that personnel appointed pursuant to these provisions would not be county employees, and instead be employees of the retirement system.	05/12/21	**Senate** L., PE & R Comm.	OCERS
AB 885	Quirk	This bill would require State bodies that conduct meetings by teleconferencing to make the open session both audibly and visually observable, and to post the agenda at the designated primary physical meeting location where members of the public may physically attend the meeting and participate.	03/25/21	Assembly Re-referred to G.O. Comm.	
AB 890	Cervantes	This bill would require the Boards of CalPERS and CalSTRS to report annually to the Legislature on the status of achieving objectives and initiatives regarding the participation of emerging or diverse managers responsible for asset management within the pension fund's portfolio. The bill requires the Boards to define "emerging manager" and "diverse manager" for the purposes of these reports.	05/25/21	Assembly Third Reading	
AB 1133	Chen	This bill would state the intent of the Legislature to enact legislation that would create a hybrid retirement benefit, consisting of a DB plan and DC plan.	2/19/21	Assembly From printer	
AB 1354	Grayson	Technical, non-substantive changes to PEPRA.	02/22/21	Assembly First Reading	
AJR 9	Cooper	This measure would request the Congress of the U.S. to enact, and the President to sign, legislation that would repeal the Government Pension Offset and the Windfall Elimination Provision from the Social Security Act.	04/19/21	Assembly Ordered to 3rd reading	
SB 278	Leyva	This bill would establish new procedures under PERL for cases in which PERS determines that benefits of a member or annuitant are based on disallowed compensation that conflicts with PEPRA or other laws under PERL. For retirees, the bill would require adjustment of benefits and for actives it would require crediting of contributions paid on disallowed earnings against future required contributions.	05/20/21	Senate Third Reading	
SB 294	Leyva	This bill would remove the 12-year limitation for service credit earned on an employer-approved compensated leave for PERS and STRS.	05/13/21	**Assembly** PE & R Comm.	

BILL NO.	AUTHOR	DESCRIPTION	LAST ACTION DATE	LOC	SPONSOR
SB 411	Cortese	**PEPRA prescribed various limitations on public employees, employers, and retirement systems concerning, among other things, work after retirement. PERL generally prohibits retired PERS members from working for an agency participating in the system without reinstatement in the system, unless that employment is otherwise specifically authorized. This bill would eliminate the above-described requirement that a person employed without reinstatement in a manner other than authorized by PERL be reinstated, instead providing that reinstatement is permissive. The bill would limit the circumstances pursuant to which retired members and employers are obligated to pay employee and employer contributions, which would have otherwise been paid, plus interest, to apply only to specified reinstatements. The bill would make conforming changes and make specific reference to the duties of employees and employers regarding reinstatement after retirement in violation of PEPRA.**	05/20/21	**Assembly** PE & R Comm.	
Federal Legislation:					
HR 1319	Yarmuth	Called the "American Rescue Plan Act", HR 1319 was signed into law. Included in the $1.9 trillion aid package is pandemic-related aid to state and local governments. The final legislation makes clear that funds have to be used for COVID costs and economic recovery and cannot be deposited into a public pension plan, or used for lowering taxes, or paying down legacy obligations.	03/11/21	Public Law No: 117-2	
HR 2954	Neal	**Called the "Securing a Strong Retirement Act of 2021", this bill would among other things increase RMD age to 75 from 72 over the next decade.**	05/05/21	Ways and Means Committee	

2021 TENTATIVE State Legislative Calendar (Last Revised 12-21-2020)

Feb 19	Last day for new bills to be introduced
Mar 25	Spring Recess begins upon adjournment
Jun 4	**Last day for bills to be passed out of the house of origin**
Jun 15	Budget Bill must be passed by midnight
Jul 16 - Aug 15	Summer Recess upon adjournment provided budget bill passed
Sep 3	Last day to amend bills on the floor
Sep 10	Last day for each house to pass bills; Final Study Recess begins upon adjournment
Oct 10	Last day for Governor to sign or veto bills.

2021 CONFERENCES AND EVENTS SCHEDULE 2021

EVENT DATES 2021 BEGIN	END	EVENT TITLE	EVENT SPONSOR	LOCATION	REG. FEE	WEBLINK FOR MORE INFO	EST. BOARD EDUCATION HOURS
Apr 20	Apr 20	Legislative Conference	NCPERS	Webinar	N/A	ncpers.org	N/A
May 4	May 4	Preparing for the Pandemic's Impact on Your Pension Plan - Year 2	NCPERS	Webinar	N/A	ncpers.org	N/A
May 4	May 7	2021 Annual Pension Bridge Virtual Conference	Pension Bridge	Virtual Conference	N/A	pensionbridge.com	10 hrs*
May 10	May 10	Trustees Round Table	CALAPRS	Webinar	$50	calaprs.org	5 hrs*
May 11	May 14	SACRS Spring Conference	SACRS	Virtual Conference	$120	sacrs.org	11 hrs*
Jun	7, 9 & 11	Advanced Principles Trustees	CALAPRS	Virtual Conference	$650	calaprs.org	6 hrs*
Jun 8	Jun 9	Trustee Educational Seminar	NCPERS	Virtual Conference	$300	ncpers.org	8 hrs*
Jun 25	Jun 25	Administrators' Round Table	CALAPRS	Webinar	$125	calaprs.org	5 hrs*
Jul 13	Jul 22	SACRS Public Pension Investment Management Program	SACRS	Webinar	$500	sacrs.org	24 hrs*
Jul 27	Jul 29	Private Equity Exclusive 2021	Pension Bridge	Virtual Conference	N/A	pensionbridge.com	10 hrs*
Sep 9	Sep 9	Investments Round Table	CALAPRS	Webinar	$50	calaprs.org	6 hrs*
Nov 9	Nov 12	SACRS Fall Conference	SACRS	Hollywood, CA	$120	sacrs.org	11 hrs*

** Estimates based on prior agendas*

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION SUMMARY OF PENDING TRUSTEE AND EXECUTIVE STAFF TRAVEL					
2021 Event Dates	**Sponsor / Event Description**	**Location**	**Traveler(s)**	**Estimated Cost**	**BOR Approval Date**
Jun 22 - 23	Moody's Commercial Real Estate Analysis Foundations	Virtual Conference	Ba	$1,946	N/A
Jul 27 - 29	Private Equity Exclusive 2021	Virtual Conference	Ba	N/A	N/A
Nov 9 - 12	SACRS Fall Conference	Hollywood, CA	Keokham	$120	N/A

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

SUMMARY OF COMPLETED TRUSTEE AND EXECUTIVE STAFF TRAVEL

Event Dates 2020	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

San Joaquin County Employees' Retirement Association

May 28, 2021

TO: Board of Retirement

FROM: Johanna Shick
Chief Executive Officer

SUBJECT: Chief Executive Officer Report

Strengthen Fund Stability
Funded Ratio. Cheiron's preliminary actuarial valuation indicates SJCERA's funded ratio increased to 68 percent on a Market Value of Assets (MVA) basis (up from 64.7 percent last year). The preliminary actuarially determined employer contribution rate is expected to increase to 50.75 percent of payroll as we continue to phase in the decreased discount rate. These changes are almost exactly what was projected last year. SJCERA's Actuary, Graham Schmidt of Cheiron, will present the final Actuarial Valuation to the Board of Retirement at the August Board meeting.

Investment Performance. SJCERA's assets, as shown in the April Flash report, are at an all-time high of $3.7 billion, up 2.7 percent for the month, and 5.2 percent year-to-date. The quarterly report, for the period ended March 31, 2021, shows we have exceeded our assumed rate of return in each of the one-, three-, and five-year periods.

Berkeley Partners Most Favored Nation (MFN) Side Letter Election. In consultation with Investment Counsel, Sean Byrne and Niccolo Barber of Rimón Law, Investment Officer Paris Ba compared the new provisions against our existing side letter. Their analysis resulted in SJCERA electing to add those terms that were more favorable to SJCERA.

Leverage Technology to Improve Accuracy and Efficiency
Implement Year 1 of Five-Year Technology Plan.
Implement Pension System Enhancements Remaining on Statement of Work for Legacy PAS.
Work continues on the initial 2018 Enhancement project with live troubleshooting and resolution of issues. As previously reported, the enhanced system enables staff to process refunds through SJCERA's payroll process, eliminating the duplicate data entry required to process them through the County Auditor-Controller's Office. That process has now been expanded to include Death Refunds as well. Other processes that have also been refined and put into production include interest posting, data extraction for the Actuary, the Auditor and Member Statements, and records management for members who move between employers. Adnan Khan and his team continue to work through the list of remaining enhancements, to improve automation and functionality.

Issue RFP for a Provider to Write an RFP for a new PAS Vendor.
The evaluation team (Kathy Herman, Adnan Khan, Greg Frank, and myself) reviewed the proposals and plans to bring a recommendation to the Board in July, along with the mid-year budget adjustment. Longer term, the goal is for the successful provider to issue the RFP for a new PAS vendor by the end of 2021.

Manage Risk
Conduct Cyber-Security Audit. The Audit Committee approved the evaluation team's (Kathy Herman,

Adnan Khan, Lolo Garza, Greg Frank, Matt Eakin, Director of Information Security at OCERS, and myself) recommendation to award Linea Secure the Cyber Security Audit contract, pending successful contract negotiation. The audit is expected to begin upon execution of the contract. The scope of work includes: risk assessment, audit, vulnerability assessment, penetration testing and a red team exercise.

Conduct Actuarial Audit. The evaluation team, consisting of Kathy Herman, Greg Frank, Jason Morrish, and myself, scored the four proposals. We will reach out to each vendor shortly to notify them of the outcome of the search. The selected vendor will present their audit of Cheiron's Actuarial Valuation at the September 10, 2021 Board meeting.

Implement *Alameda* Decision. As of the June 1 payroll, retiree adjustments have been completed and all repayment plans for recoupment of overpaid retirement benefits are in place. Except for one person, the repayment plans will be complete by December 1, 2021. Kathy Herman has provided Cheiron with the first draft of the Active Member notifications and set up meetings with the County and the Superior Court to determine the most efficient manner for implementation. A late summer distribution is still planned.

Financial Audit. SJCERA's independent auditor issued an unmodified opinion again this year, based on their audit of SJCERA's financial statements. The audit is designed to provide reasonable assurance that the financial statements are prepared in accordance with accounting principles generally accepted in the United States and are free of material misstatements. This opinion—the highest possible—is particularly impressive in that two-thirds of our Finance team retired between October and March 31. Kudos to Carmen Murillo and Stephanie Conner. Thanks to Brown Armstrong for their assistance and the valuable service they provide. SJCERA's financial statement will be on the Board of Supervisors' June 8 agenda.

Deliver Excellent Service and Support to Stakeholders

Provide Stakeholder Communication and Education.

Member Education. Preparations are underway for the June 3, half-day *About to Retire* virtual seminar. SJCERA's virtual events continue to be well received, and offer employees more opportunities to learn about their benefits. SJCERA will continue to provide online events even after social distancing restrictions are lifted.

Employer Education. Staff distributed the *Base Pay for New Tier 2 Members* Employer Notice to SJCERA employers, County Department Heads, Labor Representatives, and payroll representatives. The Notice explains that Pensionable Compensation will exclude special pay items for Tier 2 members who first become SJCERA members on or after January 1, 2022, and highlights implementation considerations.

Provide Excellent Customer Service.

A few quotes from our members:

- "I have always said I miss [the] people and some of the place, about not being in California anymore. Mrs. Johnson and the other staff of SJCERA is a perfect example."
- "I sometimes get tongue tied and Alejandra was patient with me."
- "Ms. Smith is professional, knowledgeable and she takes her time to explain questions."

Maintain a High-Performing Workforce

Staffing Updates

Investment Accountant Recruitment. After interviewing and checking references, we are delighted to announce Eve Cavender joined SJCERA on May 24 as our new Investment Accountant. Eve comes to SJCERA from the San Joaquin County Superior Court with an accounting and tax preparation background, including being an Enrolled Agent, the highest credential the IRS awards. Eve's knowledge and experience will be a huge asset to our team both in terms of investment accounting and SJCERA's tax related reporting.

Retirement Technician Recruitment – Member Services Unit. ACEO Kathy Herman, Finance Officer Carmen Murillo and Retirement Services Supervisor Marta Gonzalez selected Bethany Vavzincak from a pool of strong candidates competing for the Retirement Technician position. Bethany, who starts on June 7, worked for SJCERA previously as a temporary employee before being hired full time by the County. We are excited to have her return. In addition to her experience with SJCERA and the County, she has a Bachelor's degree from CSU Stanislaus.

Congratulations and Fond Farewell. Stephanie Conner accepted a new position with the Auditor-Controller's Office, beginning June 7. This new position provides her opportunity to broaden her skills and experience, and having a former SJCERA employee in the County's payroll office could be very helpful to SJCERA as well! Stephanie has been with SJCERA for nearly 14 years—we will miss her, but we wish her all the best as she makes what is sure to be a great career move.

<u>Implement Approved Changes to Physical Layout of Office.</u> As schools close for the summer and COVID restrictions ease, more staff will be working in the office. In preparation, Greg Frank arranged for the County General Services staff to install a permanent and professionally designed sneeze-shield around the reception area (to replace the home-made one we installed in March 2020). In addition, Greg and ACEO Kathy Herman will identify the next phase of value-added modifications to the SJCERA workspace. (Recall that previous changes included, among other things, reconfiguring the reception area to enhance security and improve staff training, implementing a virtual receptionist, and implementing a new phone system to allow the main line to be picked up from users' desks, eliminating the need to share phones.)

Managing Emerging Organizational Needs

<u>Identify and Begin Implementing a 2022 Strategic Planning Process.</u> The Evaluation Team, consisting of ACEO Kathy Herman, Management Analyst III Greg Frank, and myself, reviewed and scored the three Strategic Planning Facilitator proposals. The finalists will meet with the Administrative Committee via Zoom at the Committee's June 9 meeting.

Conclusion

As I look ahead towards the second half of 2021, there is much to be optimistic about: with the increasing numbers of COVID-vaccinated people, restrictions will begin easing, and business operations (and life in general) will begin returning to some sense of normalcy; newly hired SJCERA employees add strength and depth to our team and fresh perspectives on ways to make SJCERA even better; the completion of multiple RFPs clears the way for work to begin on several significant projects; SJCERA's staff and processes have withstood the test of COVID, staff turnover, evolving IT systems, and increased workload due to *Alameda*—our audit was clean and our benefits continue to be paid accurately and timely every month; and we will soon begin envisioning the future of our organization as we develop our strategic plan. Together, we have weathered a storm, come out stronger, and are heading into a bright future.

2021 Action Plan Mid-Year Update

San Joaquin County Employees' Retirement Association

1. Strengthen Fund Sustainability

a. Deliver target investment return

i. <u>Performance.</u>

As of April 30, SJCERA's total portfolio tipped the $3.7 billion mark—an all-time high. As of the most recent quarterly report, SJCERA is meeting or exceeding its assumed rate of return over the one-, three-, and five-year periods: with net returns of 2.5 percent for the first quarter, one-year 20.3 percent, three-year 7.3 percent, and five-year return of 7.7 percent.

I will note, however, that our portfolio has underperformed its benchmark over the quarter, one-, three-, five-, and 10-year periods. The bulk of this underperformance has been due to the surge in equity markets, particularly growth stocks within the public equity markets. The Board has made several changes intended to improve performance relative to the policy benchmark including:

- Restructuring the global equity portfolio by simplifying the asset class, eliminating style and market capitalization tilts, and significantly reducing cost.
- Reviewing the Principal Protection class, which resulted in a fixed income manager request for proposal (RFP). The recommended list of finalists are scheduled to be brought to the Board in August.
- Adopting recommended benchmark changes to the Aggressive Growth and Private Credit portions of the portfolio to better align relative performance comparisons.
- Adopting a Non-Core Real Estate pacing plan to make one to two additional commitments in 2021 in order to diversify by vintage year.
- Requesting Meketa propose the best way of handling SJCERA's underperforming real estate funds.
- Adopting Meketa's recommendation to continue the 2020 Private Equity commitment pacing plan to commit $50 million per year across two to three equity partnerships.
- Scheduling a private credit manager search in the second half of the year.

ii. <u>Board Education Sessions.</u>

Several Board Education Sessions have been provided to assist the Board in making informed investment decisions. Tim Rudderow provided a presentation on Market Perspectives in March; Meketa presented Active Versus Passive Investing across the various equity and fixed income market segments in March; Meketa is presenting a Block Chain Technology education session in June. Additionally, staff and Meketa are in the very early stages of topic development for the October Investment Roundtable. More information will be provided at the July or August Board meeting.

b. Actuarial Funding

Cheiron's preliminary actuarial valuation indicates SJCERA's funded ratio increased to 68 percent on a Market Value of Assets (MVA) basis (up from 64.7 percent last year). This is SJCERA's highest funded ratio since 2007, when we were 95 percent funded. The preliminary actuarially determined employer contribution rate is expected to increase to 50.75 percent of payroll as we continue to phase in the decreased discount rate. These changes are almost exactly what was projected last year. SJCERA's Actuary, Graham

Schmidt of Cheiron, will present the final Actuarial Valuation to the Board of Retirement at the August Board meeting.

2. Leverage technology to improve accuracy and efficiency

a. Implement Year 1 of five-year technology plan

i. Implement enhancements remaining on the Statement of Work for legacy PAS.
The following is a list of enhancements implemented this year:
- Active/Deferred member death refunds – enabled direct deposit, eliminated duplicate data entry.
- Records Management for Employer to Employer moves (e.g., Courts to County moves) – improved the Active Member System records and contributions register merge process
- Improvements to the interest posting process
- Improvements to the data extraction process for the actuarial valuation, auditor file, and annual member statements

ii. Contract with a vendor to write a PAS RFP.
SJCERA issued an RFP to contract with a vendor to write a PAS RFP. We received proposals from three firms each of which has experience working with public pension funds. The evaluation team is scoring the proposals and plans to bring a recommendation to the July meeting.

3. Manage Risk

a. Conduct Cybersecurity Audit

SJCERA issued an RFP for cybersecurity auditing services and received three proposals. The Audit Committee approved the evaluation team's recommendation to award Linea Secure the Cybersecurity contract, pending successful contract negotiation. The audit is scheduled to be conducted in the second half of the year.

b. Conduct Actuarial Audit

SJCERA issued an RFP for actuarial auditing services and received four proposals. The evaluation team completed their review of the proposals and SJCERA is in contract negotiations with the finalist. The finalist will present their audit findings of Cheiron's actuarial valuation at the September meeting.

c. Implement *Alameda* Decision

One hundred percent of all affected retirees' benefits were adjusted on or before the May 3, 2021 payroll. As of June 1, all retirees who overpaid benefits have repayment plans in place. Nearly all repayments will be completed by December 31, 2021.

Cheiron has determined that it will be able to calculate the majority of overpaid contributions for the approximately 1,200 active and deferred members affected by the *Alameda* decision. Staff is coordinating with Cheiron, employer payroll departments, and deferred compensation program representatives to determine the most efficient manner for implementation, in anticipation of initiating distributions in late summer.

d. Implement retirement-eligible compensation controls for both incoming contributions and retirement calculations

This project will begin in the second half of the year, and will also be incorporated in the system requirements documented in the new pension administration system (PAS) RFP.

e. Assess Disaster Recovery procedures and identify opportunities for improvement

Staff worked with Northern Trust to formalize our disaster recovery procedures for running retiree payroll. In the event a disaster prevented SJCERA from running retiree payroll, SJCERA can authorize Northern Trust to use the previous month's retiree payroll file to issue the current month's payments. While this scenario is unlikely given the advance scheduling of processes, it's important to have a plan in place. A test of the process will be conducted annually.

f. Research Enterprise-Wide Risk Management (EWRM) methodologies
As a first step toward this goal, staff researched EWRM resources and trainings. Establishing a baseline understanding of EWRM will improve staff's ability to assess how to implement an EWRM framework at SJCERA. This project is scheduled to begin in second half of year.

4. Improve Operational Efficiency

a. Include disability application processing time performance standard measurements in quarterly performance report
The Disability Application Processing Time is now included on the Quarterly Report (see April meeting). Of the five cases included in the most recent quarterly report, 100 percent of those that did not require a hearing were completed within nine months.

b. Research providing retiree earnings statements electronically
This project is set to begin in August.

c. Reduce complexity

i. Identify SJCERA-unique processes and opportunities to align with industry norms
The project is set to begin in the second half of the year, as part of our work with the vendor who writes the PAS RFP. The vendor's experience with multiple retirement systems and pension vendors throughout the U.S., will help us identify industry norms. Staff will work with legal and actuarial consultants to review proposed changes.

d. Improve website architecture and functionality
Staff is documenting the identified requirements for improving the website. Next steps include researching vendors and obtaining bids for website modifications. Separately, staff is assessing the relative merits of becoming part of the County's web hosting service, and the implications for this project. If SJCERA were to move to the County's web hosting, we would get our own domain in order to retain our website addressing.

5. Deliver Excellent Service and Support to Stakeholders

a. Provide stakeholder communication and education

i. Revise and update prioritized member communications and web content.
Updates to the website include:

- Revamping the Seminar page to allow members to register for any seminar scheduled during the year.
- Updating the Board of Retirement page to provide a more comprehensive description of composition and responsibilities, and adding evergreen information about the election process.
- Updating the *Alameda* Decision information including adding an Implementation Status document, to keep members informed on SJCERA's progress implementing the court's decision.
- Providing Annual Updates and Maintaining Existing Information such as posting the 2021 Retiree Open Enrollment Meeting information and maintaining links throughout the website.

ii. Develop quality online videos.
Staff transcribed the May 6, *Understanding Your Retirement* seminar recording for the purpose of creating a script. This will serve as a starting place for developing scripts for short, online videos on individual topics.

b. Deliver Operations Timely and Accurately
In preparation for the annual Actuarial Valuation, staff prepared the actuarial data files using the enhanced system for the first time. The data pull was easier and faster than previous years and staff worked with the vendor to further refine the process so it will be even better in the future. These changes also affect the data production process for the audit and Annual Member Statements.

c. Provide Excellent Customer Service
Staff installed a virtual receptionist feature, and a Ring camera in the Lobby so staff can see visitors in the lobby who may need assistance using the video phone. The Benefits team has the Ring application on their workstations with alerts when motion is detected in the lobby, which allows them to offer assistance as needed.

6. Maintain a High-Performing Workforce

a. Modify SJCERA job descriptions for career paths to meet organizational needs
The two specific technician classifications (Retirement Payroll Technician and Retirement Services Technician) have been blended into one (Retirement Technician) to increase flexibility in job assignments, and increase training, backup and career opportunities.

Additionally, retiree payroll staff are now part of the Finance team; this move increases accounting oversite, builds additional layers of backup, and continues to enhance career opportunities for staff.

A series of meetings have been scheduled with representatives from the County's Human Resources Division to develop and review drafts of additional revised job descriptions. The goal is to obtain Civil Service Commission approval by the end of the 2021.

b. Implement approved changes to physical layout of the office
General Services manufactured and installed a permanent and professionally designed sneeze-shield around the reception area. Additional work on this goal will continue in the second half of the year.

c. Offer enterprise training on topics intended to strengthen SJCERA's succession planning
To promote collaboration and provide tools for bringing up potentially difficult topics, staff viewed the TED talk video, "4 Tips to Kickstart Honest Conversations at Work." The management team read the article, "Why Great Leaders Speak Last." These training sessions were intended to help us develop and sharpen our skills.

At the quarterly Leadership meeting, the Management team brainstormed potential training topics for the entire organization. A variety of topics emerged including investments, project management, communication skills, and how to better work as a team. We are on pace to have our first training, Project Management, led by a facilitator from the University of the Pacific, completed this summer. The trainings are meant to encourage an organization-wide way of conducting business, provide insights to all aspects of SJCERA's business, and hopefully assist our employees in their career growth or open doors to new opportunities.

7. Manage Emerging Organizational Needs

a. Assess need to issue RFPs for example for Custodian Bank, Investment Counsel, and Writing of Pension Administration RFP

i. Custodian Bank.
Staff surveyed other California pubic retirement systems and have concluded that we will stay with Northern Trust. In lieu of conducting an RFP, staff plans to verify that SJCERA is receiving competitive pricing and services by obtaining copies of other systems' contracts or proposers' responses to their RFPs.

ii. Investment Counsel.
This assessment will begin in the second half of the year.

iii. Writing of Pension Administration System RFP.
See 2.a.ii above.

b. Identify and begin implementing a 2022 Strategic Planning process

Staff contacted five strategic planning facilitation providers, four of whom specialize in providing strategic planning assistance to public pensions and the fifth worked with the Board of Supervisors and Executive staff in developing the strategic plan for the San Joaquin County. Staff reviewed the proposals and scheduled two providers to meet with the Administrative Committee in June as part of the selection process. The goal is to begin the strategic planning process in June or July.

c. Implement Tier 2b

At the May meeting, the Board determined that Pensionable Compensation will be base pay only for all individuals who become SJCERA members for the first time on or after January 1, 2022. Staff has notified the employers, including the County and Courts Payroll and Human Resources teams. The County and Courts are confident they will be able to test, program and implement the required changes as required.

MEKETA

INVESTMENT GROUP

Inflation: Is It Coming and Should We Care?

WORKING PAPER

MAY 2021

In this brief background piece, we explore the recent history of inflation in the US, including the trend toward lower and less volatile inflation, and we discuss the reasons for this. We also briefly discuss why the inflation situation may be changing and what impact inflation may have on asset prices.

CONTRIBUTORS

Alison Adams, PhD
Frank Benham, CFA, CAIA
Margret Duvall
Allan Emkin
Gloria Hazard
Gordon Latter, FSA, FCIA
Stella Mach
Mary Mustard, CFA
Orray Taft, CAIA, FRM
Rafi Zaman, CFA

Inflation: recent history

Since the 1970s, the US has had only brief periods of elevated inflation where CPI rose above 4%. These transitory periods have been associated with the first and second Iraq Wars. Moreover, inflation has averaged just 2.1% since 2000,[1] resetting inflation expectations to a much lower plateau than what would have been estimated in previous decades.

[1] As measured by CPI-U, as of April 2021.

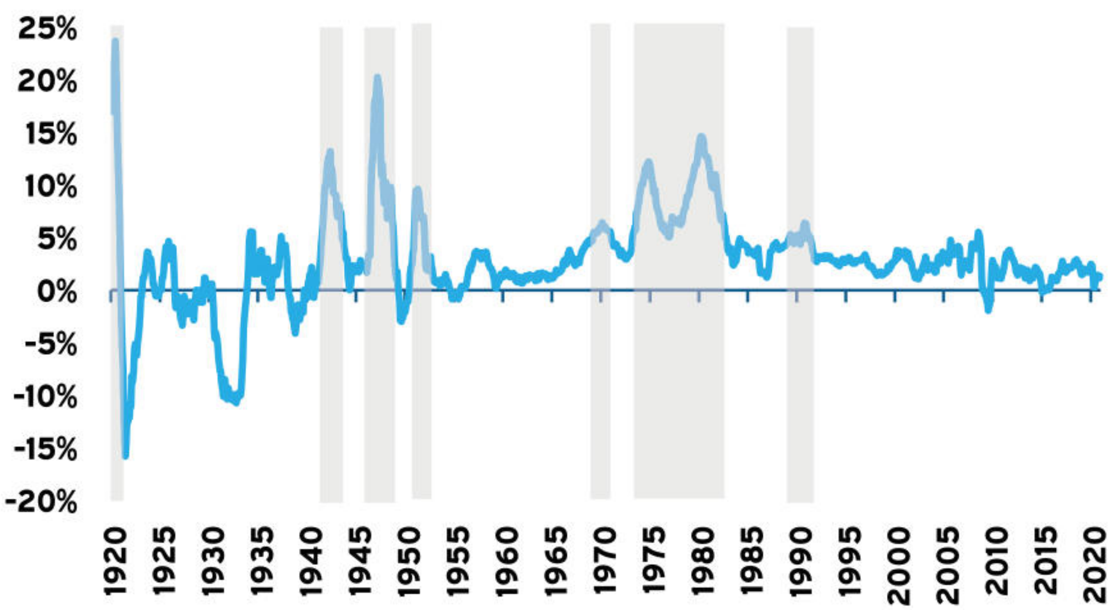


FIGURE 1

Rolling 1-Year Inflation

Source: Federal Reserve Economic Data (FRED) data.

However, such benign inflation has been the exception, rather than the rule, for much of history. As Figure 1 above illustrates, the level of inflation in the US has tended to be quite volatile since World War I. And as Figure 2 on the following page illustrates, it is unusual for inflation to be so constant at such a low level, with many of the observations of 2-3% inflation occurring over the past 30 years.[2] There are many different reasons for both the lower average level of inflation and the lower volatility of inflation, which we explore below.

[2] Specifically, 58% of the months with 2-3% annualized inflation occurred since 1990.

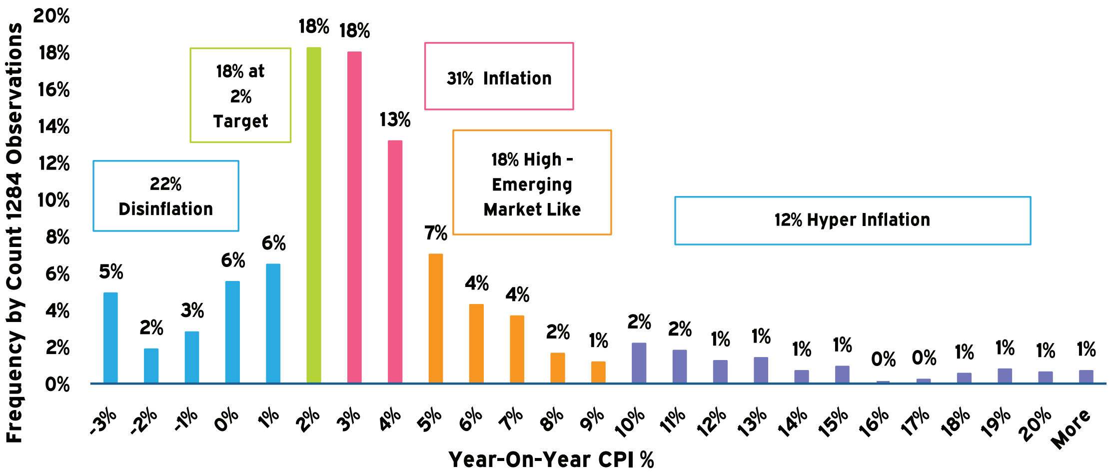


FIGURE 2

1914-2020 Distribution of Annual Inflation Rates in US

Source: FRED data.

Wages

Historically, wages would rise in accordance with economic growth. However, the negotiating power of the average employee appears to have deteriorated in recent decades. There are several reasons for the decline that include: globalization, gains in productivity, minimum wage laws and ERISA, the expansion of salaried work, decrease in private sector unions, the rise of the service sector, deindustrialization, automation in manufacturing, and rising costs of healthcare benefits.

Another reason why wages have less power to drive inflation than in the past is the relative success of the Federal Reserve's price stability credibility. This is, in fact, a self-reinforcing mechanism. Low and stable levels of inflation have resulted in incrementally smaller cost of living adjustments where contractually indicated.

Economists argue that automation and intensive use of technology is lowering the prices of goods and services.[3] As businesses invest in technology and automation, the links between wages and the prices of goods and services become increasingly weaker.[4]

Central bank policy

The 1970s was a decade of stagflation – a period of low economic growth, rising unemployment, and rising prices (i.e., inflation). Only with the appointment of Paul Volker in 1979 did the Federal Reserve move to fight inflation. Volker raised the Fed Funds Rate to 20% by June 1981, targeting the money supply so that the cost of borrowing became very expensive. This approach was very effective at fighting inflation, if temporarily harmful to the economy, and by the end of President Reagan's second term, inflation fell to around 3.5% and economic growth returned. Since that time, the Fed (and many central banks) have used interest rate targeting as their standard policy tool.

[3] Source: https://www.stlouisfed.org/on-the-economy/2018/april/closer-look-reasons-low-inflation.

[4] Source: Daron Acemoglu and Pascual Restrepo; Robots and Jobs: Evidence from US Labor Markets," Journal of Political Economy, 2020 Vol. 128, N. 6. See also: https://economics.mit.edu/files/19696 and https://mitsloan.mit.edu/ideas-made-to-matter/a-new-study-measures-actual-impact-robots-jobs-its-significant. MIT study finds that for every 1,000 robots added; wages fall 0.42% and the "employment to population ratio falls 0.2%." The study finds that adding one robot to commuting area reduces employment by six workers.

The end of inflation?

In recent decades, it has proved difficult for many central banks to create inflation/growth. The modern case study for low inflation is Japan, which has been struggling with too-low levels of inflation and economic growth for decades. In the late 1990s, Japan introduced a Zero Interest Rate Policy for short-term lending, in an attempt to stimulate some inflation/growth, but this has proved unsuccessful.

More recently, the Federal Reserve and other central banks expanded their monetary policy toolkit to include quantitative easing programs in response to the Global Financial Crisis. This was an unproven measure and many market watchers feared that this would cause inflation. However, inflation did not materialize. Although economic theory suggests that inflation is "always and everywhere a monetary phenomenon,"[5] the Federal Reserve's quantitative easing programs that injected money into the monetary system failed to deliver the economic drivers of inflation.

[5] Source: https://www.stlouisfed.org/on-the-economy/2014/september/what-does-money-velocity-tell-us-about-low-inflation-in-the-us.

What about today?

If the inflation beast has been seemingly tamed, why are we worried about it today? The primary reason is that this time, there is unprecedented non-war time fiscal stimulus accompanying the monetary stimulus. And much of the planned spending is set to take effect at a time when the economy will have likely already mostly, if not fully, recovered from the effects of the pandemic. What we do not know is exactly how much additional spending will take place. Likewise, we do not know how the Fed will respond if inflation ticks up. The Fed has already made it abundantly clear that they are willing to tolerate some level of inflation above their 2% target but how much, and for how long, is an open matter.

Inflation's impact on asset performance

Inflation has an impact on asset prices, though the extent, and even the direction, depends on many factors, including the source of the inflation, its level, the coincident level of economic growth, the length of the inflationary period, and whether it was anticipated. The choice of assets that an investor might use to hedge inflation depends on these same factors.

Most publicly traded securities have a negative correlation to expected and/or unexpected inflation, so that when inflation rises, both equities and bonds can suffer losses. Unexpected and persistent inflation may be more difficult to incorporate into a portfolio's construction. Traditional public market securities tend to have a negative correlation to unexpected inflation.

However, there are investible assets that are positively correlated with rising inflation and unexpected inflation, and these can be incorporated into a portfolio's asset allocation to offset inflation's drag on nominal and real performance. For example, we find that natural resource equities, commodities and gold have exhibited a positive sensitivity to unexpected inflation historically (see Figure 3), which may make them potential candidates for inflation protection. A meaningful allocation to assets expected to generate good performance in inflationary periods is required to benefit at the total portfolio level.

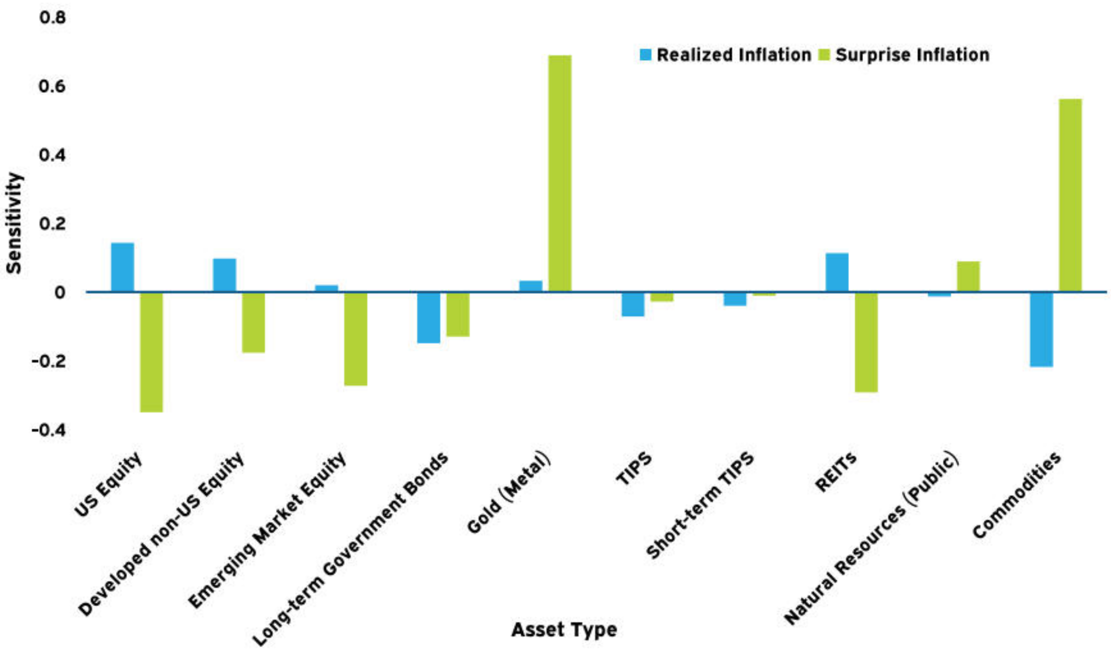


FIGURE 3
Asset Sensitivity to Inflation (Post 1973: High Inflation Periods)
Source: Meketa Capital Markets Expectations and FRED, St. Louis Federal Reserve.

Conclusion

The rationale for asset allocators' commitment to equity/growth assets (e.g., public and private equity, non-core real estate and infrastructure) and defensive assets (e.g., core and government bonds, core real estate and infrastructure) is relatively straight forward. These asset classes have a robust and well researched history. Their role in the portfolio is well understood.

Construction of a component of a portfolio to offset the impacts of high or unanticipated inflation is not straightforward. As discussed, the causes of inflation and the different policy responses from central banks to legislative bodies is uncertain, at best. There is no simple answer.

We recommend that investors initiate a discussion on how inflation may impact assets and liabilities, since benefits are tied to compensation and compensation is, at least in part, tied to inflation. That discussion should include a review of strategies and investment vehicles that will provide an increased level of diversification in the event of high or unanticipated inflation.

Disclaimers

This document is for general information and educational purposes only, and must not be considered investment advice or a recommendation that the reader is to engage in, or refrain from taking, a particular investment-related course of action. Any such advice or recommendation must be tailored to your situation and objectives. You should consult all available information, investment, legal, tax and accounting professionals, before making or executing any investment strategy. You must exercise your own independent judgment when making any investment decision.

All information contained in this document is provided "as is," without any representations or warranties of any kind. We disclaim all express and implied warranties including those with respect to accuracy, completeness, timeliness, or fitness for a particular purpose. We assume no responsibility for any losses, whether direct, indirect, special or consequential, which arise out of the use of this presentation.

All investments involve risk. There can be no guarantee that the strategies, tactics, and methods discussed in this document will be successful.

Data contained in this document may be obtained from a variety of sources and may be subject to change. We disclaim any and all liability for such data, including without limitation, any express or implied representations or warranties for information or errors contained in, or omissions from, the information. We shall not be liable for any loss or liability suffered by you resulting from the provision to you of such data or your use or reliance in any way thereon.

Nothing in this document should be interpreted to state or imply that past results are an indication of future performance. Investing involves substantial risk. It is highly unlikely that the past will repeat itself. Selecting an advisor, fund, or strategy based solely on past returns is a poor investment strategy. Past performance does not guarantee future results.