

Pursuant to the Governor's Executive Order N-29-20, all members of the City Council, as well as the City Administrator, City Attorney and City Clerk will join the meeting via phone/video conference and no teleconference locations are required

Oakland Police and Fire Retirement Board meetings are being held via Tele-Conference. Please see the agenda to participate in the meeting. For additional information, contact the Retirement Unit by calling (510) 238-6481.



Retirement Unit
150 Frank H. Ogawa Plaza
Oakland, CA 94612

AGENDA

AUDIT COMMITTEE MEMBERS

John C. Speakman
Chairperson

R. Steve Wilkinson
Member

Kevin Traylor
Member

"In the event a quorum of the Board participates in the Committee meeting, the meeting is noticed as a Special Meeting of the Board; however, no final Board action can be taken. In the event that the Audit Committee does not reach quorum, this meeting is noticed as an informational meeting between staff and the Chair of the Audit Committee."

SPECIAL MEETING of the AUDIT / OPERATIONS COMMITTEE of the OAKLAND POLICE AND FIRE RETIREMENT SYSTEM ("PFRS")

Thursday, December 10, 2020 – 9:00 am
Tele-Conference Board Meeting
via Zoom

OBSERVE

- To observe the meeting by video conference, please click on this link: <https://us02web.zoom.us/j/82880493983> at the noticed meeting time.
- To listen to the meeting by phone, please call the numbers below at the noticed meeting time: Dial (for higher quality, dial a number based on your current location):
- iPhone one-tap: US: +16699006833, 82880493983# or +13462487799, 82880493983#
- US: +1 669 900 6833 or +1 346 248 7799 or +1 253 215 8782 or +1 301 715 8592 or +1 312 626 6799 or +1 929 205 6099
- International numbers available: <https://us02web.zoom.us/j/82880493983>
- Webinar ID: 828 8049 3983.
If asked for a participant ID or code, press #.

PUBLIC COMMENTS

There are three ways to submit public comments.

- eComment. To send your comment directly to staff BEFORE the meeting starts, please email to mvisaya@oaklandca.gov with "PFRS Board Meeting" in the subject line for the corresponding meeting. Please note that eComment submission **closes two (2) hours before posted meeting time.**

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
SPECIAL AUDIT COMMITTEE MEETING
DECEMBER 10, 2020**

- To comment by Zoom video conference, click the “Raise Your Hand” button to request to speak when Public Comment is being taken on an eligible agenda item at the beginning of the meeting. You will be permitted to speak during your turn, allowed to comment, and after the allotted time, re-muted. Instructions on how to “Raise Your Hand” is available at: <https://support.zoom.us/hc/en-us/articles/205566129> - Raise-Hand-In-Webinar.
- To comment by phone, please call on one of the above listed phone numbers. You will be prompted to “Raise Your Hand” by pressing “*9” to speak when Public Comment is taken. You will be permitted to speak during your turn, allowed to comment, and after the allotted time, re-muted. Please unmute yourself by pressing *6.

If you have any questions, please email Maxine Visaya, Administrative Assistant II at mvisaya@oaklandca.gov

- - - ORDER OF BUSINESS - - -

- 1. Subject:** **Oakland Police and Fire Retirement System (“PFRS”) Audit Committee Meeting Minutes**
From: Staff of the PFRS Board

Recommendation: **APPROVE** October 28, 2020 Audit Committee Meeting minutes.
- 2. Subject:** **Report of the Audit of PFRS Financial Statements for the Year Ending June 30, 2020**
From: Macias, Gini, & O’Connell LLP

Recommendation: **RECOMMEND BOARD APPROVAL** of Audit Report of PFRS Financial Statements for the year ending June 30, 2020.
- 3. Subject:** **Administrative Expenses Report**
From: Staff of the PFRS Board

Recommendation: **ACCEPT** an informational report regarding PFRS administrative expenses as of October 31, 2020.

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
SPECIAL AUDIT COMMITTEE MEETING
DECEMBER 10, 2020**

4. Subject: Resolution No. 8004 - Approving Request of PFRS Trustee R. Steven Wilkinson to Attend Virtual Pension & Financial Services Conference and for Reimbursement of Registration Expenses for said Conference

From: Staff of the PFRS Board

Recommendation: **RECOMMEND BOAD APPROVAL** of Resolution No. 8004 - Resolution approving request of Oakland Police and Fire Retirement System Trustee R. Steven Wilkinson to attend the National Association of Securities Professionals 31st Annual Virtual Pension & Financial Services Conference in a virtual format from December 7 through December 10, 2020 and for reimbursement of registration fees in an amount not to exceed One-Hundred Twenty-Five Dollars (\$125.00).

5. Subject: Resolution No. 8005 - Approving Request of PFRS Plan Administrator David F. Jones to Attend Virtual Pension & Financial Services Conference and for Reimbursement of Registration Expenses for said Conference

From: Staff of the PFRS Board

Recommendation: **RECOMMEND BOAD APPROVAL** of Resolution No. 8005 - Resolution approving request of Oakland Police and Fire Retirement System Plan Administrator David F. Jones to attend the National Association of Securities Professionals 31st Annual Virtual Pension & Financial Services Conference in a virtual format from December 7 through December 10, 2020 and for reimbursement of registration fees in an amount not to exceed One-Hundred Twenty-Five Dollars (\$125.00).

6. REVIEW OF PENDING AUDIT COMMITTEE MEETING AGENDA ITEMS

7. OPEN FORUM

8. FUTURE SCHEDULING

9. ADJOURNMENT

AN AUDIT/OPERATIONS COMMITTEE MEETING of the Oakland Police and Fire Retirement System (“PFRS”) was held on Wednesday October 28,2020 via Zoom Tele-Conference.

Committee Members Present:

- John C. Speakman Chairperson
- Kevin R. Traylor Member
- R. Steven Wilkinson Member

Additional Attendees:

- David Jones Plan Administrator
- Teir Jenkins Staff Member
- Maxine Visaya Staff Member
- Jennifer Logue PFRS Legal Counsel

The Meeting was called to order at 9:35 a.m. PST

1. **PFRS Audit Committee Meeting Minutes** – Member Traylor made a motion to approve the September 30, 2020 Audit Committee meeting minutes, second by Chairperson Speakman. Motion passed.

[SPEAKMAN – Y/ WILKINSON – ABSTAIN / TRAYLOR – Y]
(AYES: 2 / NOES: 0 / ABSTAIN: 1)

2. **Administrative Expenses Report** – Investment Officer Teir Jenkins presented an informational report of the PFRS administrative expenditures as of August 31, 2020.

MOTION: Member Wilkinson made a motion to accept the administrative expenses report, second by Member Traylor. Motion passed.

[SPEAKMAN – Y/ WILKINSON – Y / TRAYLOR – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

3. **Review of Pending Audit Committee Meeting Agenda Items** – David Jones provided a brief update on two pending items: (1) Ad Hoc Committee did not meet on October 26, 2020; outside counsel is still working on legal memo regarding actuarial funding requirement and collection of Pension Tax Override and (2) The 2006 Management Audit remains pending due to COVID-19 restrictions in place and the need for staff to be on-site to review records.

4. **Open Forum** – No Report

5. **Future Scheduling** – The next Regular Audit Committee Meeting would typically be scheduled for Wednesday, November 25, 2020. In consideration of the upcoming holidays, the committee would like to cancel this Regular Meeting and hold a Special Meeting on a date yet to be determined. The scheduling of the next Audit Committee Meeting will be forwarded to the Full Board for consensus.

6. **Adjournment** – Member Wilkinson made a motion to adjourn, second by Member Traylor. Motion Passed.

[SPEAKMAN – Y/ WILKINSON – Y / TRAYLOR – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

The meeting adjourned at 9:44 am PST



Board of Administration
Oakland Police and Fire Retirement System
Oakland, California

We have audited the financial statements of the Oakland Police and Fire Retirement System (System), a pension trust fund of the City of Oakland, California, as of and for the year ended June 30, 2020, and have issued our report thereon dated November 23, 2020. Professional standards require that we advise you of the following matters relating to our audit.

1. Our Responsibility in Relation to the Financial Statement Audit

As communicated in our engagement letter dated June 15, 2020, our responsibility, as described by professional standards, is to form and express an opinion about whether the financial statements that have been prepared by management with your oversight are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America. Our audit of the financial statements does not relieve you or management of your respective responsibilities.

Our responsibility, as prescribed by professional standards, is to plan and perform our audit to obtain reasonable, rather than absolute, assurance about whether the financial statements are free of material misstatement. An audit of financial statements includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control over financial reporting. Accordingly, as part of our audit, we considered the internal control of the System solely for the purpose of determining our audit procedures and not to provide any assurance concerning such internal control.

We are also responsible for communicating significant matters related to the audit that are, in our professional judgment, relevant to your responsibilities in overseeing the financial reporting process. However, we are not required to design procedures for the purpose of identifying other matters to communicate to you.

2. Planned Scope and Timing of the Audit

We conducted our audit consistent with the planned scope and timing we previously communicated to you.

3. Compliance with All Ethics Requirements Regarding Independence

The engagement team, others in our firm, as appropriate, our firm, and our network firms have complied with all relevant ethical requirements regarding independence.

**Oakland Police and Fire Retirement System
Report to the Board of Administration
For the Year Ended June 30, 2020**

4. Qualitative Aspects of the Entity's Significant Accounting Practices

Significant Accounting Policies

Management has the responsibility to select and use appropriate accounting policies. A summary of the significant accounting policies adopted by the System is included in Note 2 to the financial statements. There have been no initial selection of accounting policies and no changes in significant accounting policies or their application during the year ended June 30, 2020. No matters have come to our attention that would require us, under professional standards, to inform you about (1) the methods used to account for significant unusual transactions and (2) the effect of significant accounting policies in controversial or emerging areas for which there is a lack of authoritative guidance or consensus.

Significant Accounting Estimates

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's current judgments. Those judgments are normally based on 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 markedly from management's current judgments.

The most sensitive estimates affecting the System's financial statements were:

- Fair value of investments, including derivative instruments, and related net appreciation in the fair value of investments; and
- Actuarial data of the pension plan.

Management's estimates were based on the following:

- The methodologies for determining the fair value of investments and derivative instruments are discussed in Notes 2.c) and 4.1) to the financial statements, respectively.
- The actuarial data for the pension plan is based on actuarial calculations performed in accordance with the parameters set forth in Governmental Accounting Standards Board (GASB) Statement No. 67, *Financial Reporting for Pension Plans – an Amendment of GASB Statement No. 25*, which incorporate actuarial methods and assumptions adopted by the System's Board of Administration.

We evaluated the key factors and assumptions used to develop these accounting estimates and determined that it is reasonable in relation to the financial statements taken as a whole.

5. Significant Difficulties Encountered during the Audit

We encountered no significant difficulties in dealing with management relating to the performance of the audit.

**Oakland Police and Fire Retirement System
Report to the Board of Administration
For the Year Ended June 30, 2020**

6. Uncorrected and Corrected Misstatements

For purposes of this communication, professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that we believe are trivial, and communicate them to the appropriate level of management. Further, professional standards require us to also communicate the effect of uncorrected misstatements related to prior periods on the relevant classes of transactions, account balances or disclosures, and the financial statements as a whole and each applicable opinion unit. Management has corrected all identified misstatements.

7. Disagreements with Management

For purposes of this letter, professional standards define a disagreement with management as a matter, whether or not resolved to our satisfaction, concerning a financial accounting, reporting, or auditing matter, which could be significant to the System's financial statements or the auditor's report. No such disagreements arose during the course of the audit.

8. Representations Requested from Management

We have requested certain written representations from management, that are included in the management representation letter dated November 23, 2020.

9. Management's Consultations with Other Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters. Management informed us that, and to our knowledge, there were no consultations with other accountants regarding auditing and accounting matters.

10. Other Significant Matters, Findings, or Issues

In the normal course of our professional association with the System, we generally discuss a variety of matters, including the application of accounting principles and auditing standards, operating and regulatory conditions affecting the entity, and operational plans and strategies that may affect the risks of material misstatement. None of the matters discussed resulted in a condition to our retention as the System's auditors.

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

Macias Gini & O'Connell LLP

Walnut Creek, California
November 23, 2020

**OAKLAND POLICE AND FIRE
RETIREMENT SYSTEM
(A Pension Trust Fund of the City of Oakland)**

Financial Statements and
Required Supplementary Information

Years Ended June 30, 2020 and 2019



Certified
Public
Accountants

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

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Independent Auditor's Report

Board of Administration
Oakland Police and Fire Retirement System
Oakland, California

We have audited the accompanying financial statements of the Oakland Police and Fire Retirement System (System), a pension trust fund of the City of Oakland, California (City), as of and for the years ended June 30, 2020 and 2019, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements 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 that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements 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 the entity'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.

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the System as of June 30, 2020 and 2019, and the changes in financial position thereof for the years then ended in accordance 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, the schedule of changes in the employer's net pension liability and related ratios, the schedule of employer contributions, and the schedule of investment returns 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 required supplementary information 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.

Macias Gini & O'Connell LLP

Walnut Creek, California
November 23, 2020

**Oakland Police and Fire Retirement System
Management's Discussion and Analysis – Unaudited
June 30, 2020 and 2019**

As management of the Oakland Police and Fire Retirement System (System), we offer readers of the System's financial statements this narrative overview and analysis of the financial activities of the System for the fiscal years ended June 30, 2020 and 2019. We encourage readers to consider the information presented here in conjunction with the System's financial statements that follow this section. These discussions and analyses are presented in the following sections:

- Organizational Overview and Highlights
- Financial Statement Overview
- Financial Analysis: 2020 vs. 2019
- Financial Analysis: 2019 vs. 2018
- Requests for Additional Information

ORGANIZATIONAL OVERVIEW AND HIGHLIGHTS

The City of Oakland City Charter established the System and provides for its funding. Accordingly, the System is an integral part of the City of Oakland (City) and its operations have been reported as a Pension Trust Fund in the City's basic financial statements. The System is a closed, single employer, defined benefit pension plan that provides retirement, disability and survivor benefits for eligible sworn safety employees of the City. The System serves the City's sworn employees hired prior to July 1, 1976 who have not transferred to the California Public Employees' Retirement System (CalPERS). The System is governed by a board of seven trustees: the Mayor or his/her designate, three Mayoral appointees approved by the City Council, an elected active or retired member of the Police Department, an elected active or retired member from the Fire Department, and an elected member position which alternates between the Police Department and Fire Department membership. Trustees receive no compensation.

The System has been funded by periodic employee and City contributions at actuarially determined amounts sufficient to accumulate the necessary assets to pay benefits when due as specified by the City Charter, unless the Board and the City have agreed to other funding options. In accordance with the City Charter, active members hired after July 1, 1951, and prior to July 1, 1976, contribute a percentage of their earned salaries based upon entry age as determined by consulting actuaries. During the years ended June 30, 2020 and 2019, the employee contribution rates was 0% for both years. There are no active participants in the Plan as of June 30, 2020 and 2019.

As of June 30, 2020, the total pension liability of \$604.0 million less the fiduciary net position of \$379.0 million results in a net pension liability of approximately \$225.0 million. The fiduciary net position as a percentage of the total pension liability is 62.7%.

As of June 30, 2019, the total pension liability of \$628.2 million less the fiduciary net position of \$384.7 million results in a net pension liability of approximately \$243.5 million. The fiduciary net position as a percentage of the total pension liability is 61.2%.

The System membership at June 30, 2020 is 768, which includes 519 retirees and 249 beneficiaries. The System membership at June 30, 2019 is 798, which includes 547 retirees and 251 beneficiaries. The following are the significant assumptions used to compute contribution requirements in the July 1, 2019 Actuarial Valuation Report:

- Select and ultimate rates, equal to 5.37% single equivalent investment rate of return
- 2.75% inflation rate, US

**Oakland Police and Fire Retirement System
Management's Discussion and Analysis – Unaudited
June 30, 2020 and 2019**

- 2.85% inflation rate, Bay Area
- 3.25% long-term post-retirement benefit increases

City contributions are based on spreading costs as a level percentage of the City's total uniform payroll to July 1, 2026. The System uses the entry age normal cost method for its disclosure and reporting. During fiscal years 2020 and 2019, the City of Oakland contributed \$43.4 million and \$44.82 million to the System. The next required City contribution is projected to be approximately \$43.65 million in FY 2020-2021.

FINANCIAL STATEMENT OVERVIEW

This annual financial report consists of three parts – management's discussion and analysis (this section), the basic financial statements and required supplementary information. The basic financial statements include *Statements of Fiduciary Net Position*; *Statements of Changes in Fiduciary Net Position*; and the *Notes to the Basic Financial Statements*.

The *Statements of Fiduciary Net Position* and the *Statements of Changes in Fiduciary Net Position* report information to assist readers in determining whether the System's finances as a whole have improved or deteriorated as a result of the year's activities. These statements report the net position of the System and the activities that caused the changes in the net position during the year, respectively.

The *Statements of Fiduciary Net Position* present information on all System assets and liabilities, with the difference between the two reported as net position restricted for pensions. Over time, increases or decreases in net position restricted for pensions may serve as a useful indicator of whether the financial condition of the System is improving or deteriorating.

While the *Statements of Fiduciary Net Position* provide information about the nature and amount of resources and obligations at year-end, the *Statements of Changes in Fiduciary Net Position* present the results of the System's activities during the fiscal year and information on the change in the net position restricted for pensions during the fiscal year. The *Statements of Changes in Fiduciary Net Position* measure the results of the System's investment performance as well as its additions from contributions and investment income and deductions for payment of benefits and administrative expenses. The *Statements of Changes in Fiduciary Net Position* can be viewed as indicators of the System's progress on the set goals of fully funding all current and past service costs and possessing sufficient additional resources to pay for current refunds of contributions and administrative and investment expenses.

The *Notes to the Basic Financial Statements* and *Required Supplementary Information* provide explanations and other information that is helpful to a full understanding of the data provided in the financial statements. The *Notes to the Financial Statements* and *Required Supplementary Information* are found starting on page 11 and page 26, respectively.

**Oakland Police and Fire Retirement System
Management's Discussion and Analysis – Unaudited
June 30, 2020 and 2019**

FINANCIAL ANALYSIS: 2020 VS. 2019

Table 1 summarizes net position restricted for pensions as of June 30, 2020 and 2019:

Table 1
Statements of Fiduciary Net Position
As of June 30, 2020 and 2019

	June 30		Change	
	2020	2019	Amount	Percentage
Assets:				
Cash and deposits	\$ 6,345,777	\$ 6,484,343	\$ (138,566)	-2.1%
Receivables	8,099,428	4,427,785	3,671,643	82.9%
Investments	<u>404,700,887</u>	<u>420,244,755</u>	<u>(15,543,868)</u>	-3.7%
Total Assets	<u>419,146,092</u>	<u>431,156,883</u>	<u>(12,010,791)</u>	-2.8%
Liabilities:				
Accounts payable	8,161	15,871	(7,710)	-48.6%
Benefits payable	4,431,728	4,596,563	(164,835)	-3.6%
Investments payable	13,548,872	7,464,071	6,084,801	81.5%
Accrued investment management fees	278,835	351,847	(73,012)	-20.8%
Securities lending liabilities	<u>21,903,806</u>	<u>34,017,817</u>	<u>(12,114,011)</u>	-35.6%
Total liabilities	<u>40,171,402</u>	<u>46,446,169</u>	<u>(6,274,767)</u>	-13.5%
Net position:				
Restricted for pensions	<u>\$ 378,974,690</u>	<u>\$ 384,710,714</u>	<u>\$ (5,736,024)</u>	-1.5%

Net position restricted for pensions decreased \$5,736,024 from June 30, 2019 to June 30, 2020. The main sources of this decrease was from benefit payments of \$54.6 million offset by contributions of \$43.4 million and net investment income of \$7.0 million. The remaining fluctuations in receivables and investments payable are primarily due to investment trading at year-end, where the outstanding balances represent investments either sold or purchased, but not yet settled.

**Oakland Police and Fire Retirement System
Management's Discussion and Analysis – Unaudited
June 30, 2020 and 2019**

Table 2 summarizes changes in net position restricted for pensions for the years ended June 30, 2020 and 2019:

Table 2
Statements of Changes in Fiduciary Net Position
For the Years Ended June 30, 2020 and 2019

	June 30		Change	
	2020	2019	Amount	Percentage
Additions:				
Contributions	\$ 43,409,000	\$ 44,821,000	\$ (1,412,000)	-3.2%
Net investment income	6,996,833	21,551,868	(14,555,035)	-67.5%
Other additions	132	19,949	(19,817)	-99.3%
Total additions	50,405,965	66,392,817	(15,986,852)	-24.1%
Deductions:				
Benefits to members and beneficiaries	54,619,079	56,212,013	(1,592,934)	-2.8%
Administrative expenses	1,522,910	1,446,361	76,549	5.3%
Total deductions	56,141,989	57,658,374	(1,516,385)	-2.6%
Changes in net position	(5,736,024)	8,734,443	(14,470,467)	-165.7%
Net position restricted for pensions:				
Beginning of year	384,710,714	375,976,271	8,734,443	2.3%
End of year	<u>\$ 378,974,690</u>	<u>\$ 384,710,714</u>	<u>\$ (5,736,024)</u>	-1.5%

During fiscal year 2020, the City of Oakland contributed \$43.4 million to the System. In addition, the System's net investment income for the year ended June 30, 2020 was \$6,996,833, mainly due to net appreciation in fair value of the investment portfolio as a result of returns on investments. The time-weighted annual returns for the year ended June 30, 2020 was 2.3%, compared to a benchmark return of 4.6% and an actuarial expected rate of return of 5.37%.

**Oakland Police and Fire Retirement System
Management's Discussion and Analysis – Unaudited
June 30, 2020 and 2019**

FINANCIAL ANALYSIS: 2019 VS. 2018

Table 3 summarizes net position restricted for pensions as of June 30, 2019 and 2018:

Table 3
Statements of Fiduciary Net Position
As of June 30, 2019 and 2018

	June 30		Change	
	2019	2018	Amount	Percentage
Assets:				
Cash and deposits	\$ 6,484,343	\$ 7,821,078	\$ (1,336,735)	-17.1%
Receivables	4,427,785	6,288,527	(1,860,742)	-29.6%
Investments	420,244,755	415,917,756	4,326,999	1.0%
Total Assets	<u>431,156,883</u>	<u>430,027,361</u>	<u>1,129,522</u>	0.3%
Liabilities:				
Accounts payable	15,871	94,654	(78,783)	-83.2%
Benefits payable	4,596,563	4,608,511	(11,948)	-0.3%
Investments payable	7,464,071	5,188,668	2,275,403	43.9%
Accrued investment management fees	351,847	343,919	7,928	2.3%
Securities lending liabilities	<u>34,017,817</u>	<u>43,815,338</u>	<u>(9,797,521)</u>	-22.4%
Total liabilities	<u>46,446,169</u>	<u>54,051,090</u>	<u>(7,604,921)</u>	-14.1%
Net position:				
Restricted for pensions	<u>\$ 384,710,714</u>	<u>\$ 375,976,271</u>	<u>\$ 8,734,443</u>	2.3%

Net position restricted for pensions increased \$8,734,443 from June 30, 2018 to June 30, 2019. The main sources of this increase were from pension contribution payments from the City of Oakland of \$44.82 million. The remaining fluctuations in receivables and investments payable are primarily due to investment trading at year-end, where the outstanding balances represent investments either sold or purchased, but not yet settled.

**Oakland Police and Fire Retirement System
Management's Discussion and Analysis – Unaudited
June 30, 2020 and 2019**

Table 4 summarizes changes in net position restricted for pensions for the years ended June 30, 2019 and 2018:

Table 4
Statements of Changes in Fiduciary Net Position
For the Years Ended June 30, 2019 and 2018

	June 30		Change	
	2019	2018	Amount	Percentage
Additions:				
Contributions	\$ 44,821,000	\$ 44,860,000	\$ (39,000)	-0.1%
Net investment income/(loss)	21,551,868	35,435,113	(13,883,245)	-39.2%
Other additions	19,949	20,307	(358)	-1.8%
Total additions	<u>66,392,817</u>	<u>80,315,420</u>	<u>(13,922,603)</u>	-17.3%
Deductions:				
Benefits to members and beneficiaries	56,212,013	55,998,595	213,418	0.4%
Administrative expenses	1,446,361	1,490,486	(44,125)	-3.0%
Other expenses	-	52,926	(52,926)	-100.0%
Total deductions	<u>57,658,374</u>	<u>57,542,007</u>	<u>116,367</u>	0.2%
Changes in net position	8,734,443	22,773,413	(14,038,970)	-61.6%
Net position restricted for pensions:				
Beginning of year	<u>375,976,271</u>	<u>353,202,858</u>	<u>22,773,413</u>	6.4%
End of year	<u>\$ 384,710,714</u>	<u>\$ 375,976,271</u>	<u>\$ 8,734,443</u>	2.3%

During fiscal year 2019, the City of Oakland contributed \$44.82 million to the System. In addition, the System's net investment income for the year ended June 30, 2019 was \$21,551,868, mainly due to net appreciation in fair value of the investment portfolio as a result of robust returns on investments. The time-weighted annual returns for the year ended June 30, 2019 was 6.2%, compared to a benchmark return of 5.5% and an actuarial expected rate of return of 5.44%.

REQUESTS FOR ADDITIONAL INFORMATION

This financial report is designed to provide a general overview of the System's finances and to account for the money that the System receives. Questions concerning any of the information provided in this report or requests for additional information should be addressed to:

Retirement System
City of Oakland
150 Frank H Ogawa Plaza, Suite 3349
Oakland, CA 94612

Oakland Police and Fire Retirement System
Statements of Fiduciary Net Position
June 30, 2020 and 2019

	2020	2019
Assets		
Cash and Cash Equivalents	\$ 6,345,777	\$ 6,484,343
Receivables:		
Interest Receivable	720,730	756,150
Dividends Receivable	122,028	128,434
Investments Receivable	7,005,167	2,542,199
Retired Members and Beneficiaries	137,530	867,195
Miscellaneous	113,973	133,807
Total Receivables	8,099,428	4,427,785
Investments, at Fair Value:		
Short-Term Investments	14,097,351	12,579,526
Bonds	123,135,071	120,250,504
Domestic Equities and Mutual Funds	157,386,763	151,450,528
International Equities and Mutual Funds	44,599,350	46,731,155
Alternative Investments	43,589,826	55,212,879
Foreign Currency Contracts, Net	(20,041)	-
Securities Lending Collateral	21,912,567	34,020,163
Total Investments	404,700,887	420,244,755
Total Assets	419,146,092	431,156,883
Liabilities		
Accounts Payable	8,161	15,871
Benefits Payable	4,431,728	4,596,563
Investments Payable	13,548,872	7,464,071
Investment Management Fees Payable	278,835	351,847
Securities Lending Liabilities	21,903,806	34,017,817
Total Liabilities	40,171,402	46,446,169
Net Position Restricted for Pensions	\$ 378,974,690	\$ 384,710,714

See accompanying notes to the basic financial statements.

Oakland Police and Fire Retirement System
Statements of Changes in Fiduciary Net Position
Years Ended June 30, 2020 and 2019

	2020	2019
Additions		
Contributions from the City	\$ 43,409,000	\$ 44,821,000
Investment Income:		
Net Appreciation in Fair Value of Investments	677,414	16,624,371
Interest	4,598,569	3,736,667
Dividends	2,775,312	2,431,327
Less: Investment Expenses	(1,173,450)	(1,333,048)
Net Appreciation in Fair Value of Investments	6,877,845	21,459,317
Securities Lending Income:		
Securities Lending Earnings	521,009	937,736
Securities Lending Expenses	(402,021)	(845,185)
Net Securities Lending Income	118,988	92,551
Net Investment Income	6,996,833	21,551,868
Claims and Settlements	132	13,856
Other Income	-	6,093
Total Additions	50,405,965	66,392,817
Deductions		
Benefits to Members and Beneficiaries:		
Retirement	33,125,069	34,238,470
Disability	19,696,369	20,160,033
Death	1,797,641	1,813,510
Total Benefits to Members and Beneficiaries	54,619,079	56,212,013
Administrative Expenses	1,522,910	1,446,361
Total Deductions	56,141,989	57,658,374
Change in Net Position	(5,736,024)	8,734,443
Net Position Restricted for Pensions		
Beginning of Year	384,710,714	375,976,271
End of Year	\$ 378,974,690	\$ 384,710,714

See accompanying notes to the basic financial statements.

Oakland Police and Fire Retirement System
Notes to the Basic Financial Statements
Years Ended June 30, 2020 and 2019

1. Description of the Oakland Police and Fire Retirement System

The Oakland Police and Fire Retirement System (System) is a closed, single-employer defined benefit pension plan (Plan) established by the City of Oakland (City) Charter. The System is governed by a board of seven trustees (Board); the City Mayor or his/her designate, three Mayoral appointees approved by the City Council, an elected active or retired member of the Police Department, an elected active or retired member from the Fire Department, and an elected member position which alternates between the Police Department and Fire Department membership. Trustees receive no compensation. As a result of a City Charter amendment, known as Measure R approved by the electorate on June 8, 1976, membership in the Plan is limited to uniformed employees hired prior to July 1, 1976.

The System is exempt from the regulations of the Employee Retirement Income Security Act of 1974. The System is also exempt from federal and California income taxes.

The System is considered to be a part of the City’s financial reporting entity and is included in the City’s basic financial statements as a pension trust fund. The financial statements of the System are intended to present only the plan net position and changes in plan net position of the System. They do not purport to, and do not, present fairly the financial position of the City as of June 30, 2020 and 2019, and the changes in its financial position for the years then ended in conformity with accounting principles generally accepted in the United States of America. The City’s basic financial statements can be obtained from Finance Department, Controller’s Bureau, City of Oakland, 150 Frank H. Ogawa Plaza, Suite 6353; Oakland, California 94612.

a) System Membership

At June 30, 2020 and 2019, the System membership consisted of only retirees and beneficiaries. The System’s membership is as follows:

	2020	2019
Retirees and beneficiaries currently receiving benefits:		
Police	460	475
Fire	308	323
Total	768	798

b) Basic Benefit Provisions

The City Charter establishes plan membership, contribution, and benefit provisions. The System provides that any member who completes at least 25 years of service, regardless of age, or completes 20 years of service and attains age 55, or has attained age 65, is eligible for retirement benefits. The basic retirement allowance equals 50% of the compensation attached to the average rank held during the three years immediately preceding retirement, plus an additional allowance of 1 and 2/3% of such compensation for each year of service (up to ten) subsequent to (a) qualifying for retirement and (b) July 1, 1951. However, any member retiring at age 65 with less than 20 years of service shall receive a reduced retirement allowance based upon the number of years of service. A member is eligible for early retirement benefits after 20 to 24 years of service with a retirement allowance based upon 40% to 48% of the compensation attached to the average rank held during the three years preceding retirement. Additionally, a member with 10 to 19 years of service may retire and, on or after the 25th anniversary of his/her date of employment may receive a retirement allowance based upon 20% to 38% of the compensation attached to the average rank held during the three years preceding retirement.

Oakland Police and Fire Retirement System
Notes to the Basic Financial Statements
Years Ended June 30, 2020 and 2019

The System also provides for various death, disability, and survivors' benefits. Death and disability benefits are paid to eligible members who became disabled or passed away prior to retirement. If the member's death or disability is duty related, then the surviving spouse or member is paid a pension equivalent to an immediate service retirement. The duty related death or disability pension is paid at a level no less than 50% of the pay attached to the rank. If a death occurs after retirement, then a one-time payment of \$1,000 is paid to the member's designated beneficiary.

After retirement, members receive benefits based on a fixed monthly dollar amount. Pension amounts change based on changes to the compensation attached to the average rank. Upon a retiree's death, benefits are continued to an eligible surviving spouse at a two-thirds level for service and non-duty disabled retirees and at a 100% level for retirements for duty disability.

2. Summary of Significant Accounting Policies

a) Basis of Presentation

The financial statements are prepared in accordance with U.S. generally accepted accounting principles as applicable to governmental organizations. The System adheres to the reporting requirements established by the Governmental Accounting Standards Board (GASB).

b) Measurement Focus and Basis of Accounting

The financial statements are prepared on a flow of economic resources measurement focus using the accrual basis of accounting. Contributions are recognized in the period in which the contributions are due pursuant to formal commitments as well as statutory or contractual requirements, and benefits and refunds are recognized when payable under plan provisions.

c) Methods Used to Value Investments

Investments are reported at fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Investments that do not have an established market are reported at estimated fair values based on the net asset value as determined by the fund manager based on quoted market prices of fund holdings or values provided by the custodian or the applicable money manager. Purchases and sales of investments are recorded on a trade date basis.

d) Use of Estimates

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

3. Contributions

In accordance with the City Charter, active members hired after July 1, 1951, and prior to July 1, 1976, contribute a percentage of their earned salaries based upon entry age as determined by consulting actuaries. During the years ended June 30, 2020 and 2019, there were no employee contributions as there are no active employees in the Plan.

In March 1997, the City issued pension obligation bonds and deposited \$417 million into the System to pay the City's contributions through June 2011. In accordance with an agreement entered into at the time the pension obligation bonds were issued in 1997, the City was not expected to contribute until July 2011. In the year ended June 30, 2005, the City transferred excess proceeds of \$17.7 million from

Oakland Police and Fire Retirement System
Notes to the Basic Financial Statements
Years Ended June 30, 2020 and 2019

the Oakland Joint Powers Financing Authority Refunding Revenue 2005 Series B Bond to fund a portion of the City's future obligation to the System.

Effective July 1, 2011, the City resumed contributing to the System. The City contributed \$45.5 million in the year ended June 30, 2012. Using the current actuarial cost method, these contributions are based on spreading costs as a level percentage of all uniformed employees' compensation through June 30, 2026. Budgeted administrative expenses are included in the City contribution rates. The City must contribute, at a minimum, such amounts as are necessary, on an actuarial basis, to provide assets sufficient to meet benefits to be paid to plan members.

On July 30, 2012, the City contributed \$210 million to the System. As a result of a funding agreement entered into between the System's Board and the City no additional contributions were required until July 1, 2017. The City resumed contributions to the System on July 1, 2017. The City contributed \$43.41 million and \$44.82 million in the years ended June 30, 2020 and 2019, respectively. The next required contribution for fiscal year 2021 is \$43.65 million.

4. Cash, Deposits and Investments

a) Investment Policy

The System's investment policy authorizes investment in U.S. equities, international equities, U.S. fixed income instruments including U.S. Treasury notes and bonds, government agency mortgage backed securities, U.S. corporate notes and bonds, collateralized mortgage obligations, Yankee bonds and non-U.S.-issued fixed income securities denominated in foreign currencies. The System's investment portfolio is managed by external investment managers, except for the bond iShares which are managed internally. During the years ended June 30, 2020 and 2019, the number of external investment managers was twelve and twelve, respectively.

The System investments are also restricted by the City Charter. In November 2006, City voters passed Measure M to amend the City Charter to allow the System's Board to invest in non-dividend paying stocks and to change the asset allocation structure from 50% equities and 50% fixed income to the Prudent Person Standard as defined by the California Constitution.

The System's Investment Policy limits fixed income investments to a maximum average duration of 10 years and a maximum remaining term to maturity (single issue) at purchase of 30 years, with targeted portfolio duration of between 3 to 8 years and targeted portfolio maturity of 15 years. The System's investment policy allows the fixed income managers to invest in fixed income instruments and some exposure to investments below an investment grade rating of B- or higher, as long as the portfolio maintains an average credit quality of BBB (investment grade using Standard & Poor's, Moody's or Fitch ratings).

The System's investment policy states that investments in securities known as collateralized mortgage obligations (CMOs) shall be limited to a maximum of 20% of a broker account's fair value with no more than 5% in any one issue. CMOs are mortgage-backed securities that create separate pools of pass-through rates for different classes of bondholders with varying maturities. The fair values of CMOs are considered sensitive to interest rate changes because they have embedded options.

Oakland Police and Fire Retirement System
Notes to the Basic Financial Statements
Years Ended June 30, 2020 and 2019

The Investment Policy allows for each fixed income asset manager to have a maximum of 10% of any single security investment in their individual portfolios with the exception of U.S. government securities, which is allowed to have a maximum of 25% in each manager's portfolio.

The following was the Board's adopted asset allocation policy as of June 30, 2020 and 2019:

<u>Asset Class</u>	<u>Target Allocation</u>	
	<u>June 30, 2020</u>	<u>June 30, 2019</u>
Fixed Income	21%	21%
Credit	2	2
Covered Calls	5	5
Domestic Equity	40	40
International Equity	12	12
Crisis Risk Offset	20	20
Total	<u>100%</u>	<u>100%</u>

The Board's target allocation does not include cash and cash equivalents, which are designated for approved administrative budget purposes.

b) Concentrations

GASB Statement No. 67 requires the disclosure of investments in any one organization that represent 5 percent or more of the System's fiduciary net position. As of June 30, 2020, the System's investments in securities issued by the Northern Trust Russell 100 Growth Index Fund and by Vanguard represented 24.0% and 8.9% of its fiduciary net position, respectively. As of June 30, 2019, the System's investments in the Northern Trust Russell 1000 Growth Index Fund and the Parametric Research Affiliates Systematic U.S. Fund represented 22.5% and 6.3%, respectively, of its fiduciary net position.

c) Rate of Return

The money-weighted rate of return is a measure of the rate of return for an asset or portfolio of assets that incorporates the size and timing of cash flows. For the years ended June 30, 2020 and 2019, the annual money-weighted rates of return on pension plan investments, net of pension plan investment expenses, were 2.04% and 6.10%, respectively.

d) Cash and Cash Equivalents

As of June 30, 2020 and 2019, cash and cash equivalents consisted of cash in treasury held in the City's cash and investment pool as well as cash deposits held in bank and with a custodian. Funds in the City Treasury are invested according to the investment policy adopted by the City Council. Interest earned in the City Treasury is allocated monthly to all participants based on the average daily cash balance maintained by the respective funds. Information regarding the characteristics of the entire investment pool can be found in the City's June 30, 2020 and 2019 basic financial statements. As of June 30, 2020 and 2019, the System's share of the City's investment pool totaled \$6,340,768 and \$6,471,696, respectively. The System also had cash not included in the City's investment pool. As of June 30, 2020 and 2019, the System's cash and cash deposits not held in the City's investment pool totaled \$5,009 and \$12,647, respectively.

Oakland Police and Fire Retirement System
Notes to the Basic Financial Statements
Years Ended June 30, 2020 and 2019

e) Hierarchy of Inputs

The System categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs.

The System has the following recurring fair value measurements as of June 30, 2020:

	2020		
	Level One	Level Two	Total
Investments by fair value level:			
Short-Term Investments	\$ -	\$ 6,023,223	\$ 6,023,223
Bonds	14,422,008	100,740,951	115,162,959
Domestic Equities and Mutual Funds	66,325,124	-	66,325,124
International Equities and Mutual Funds	44,599,350	-	44,599,350
Alternative Investments	27,764,888	-	27,764,888
Total investments by fair value level	<u>\$ 153,111,370</u>	<u>\$ 106,764,174</u>	<u>259,875,544</u>
Investments measured at net asset value (NAV):			
Short-Term Investment Funds			8,074,128
Fixed Income Funds			7,972,112
Domestic Equities and Mutual Funds			91,061,639
Hedge Fund			15,824,938
Foreign Currency Contracts, Net			(20,041)
Securities Lending Collateral - Short-Term Investment Fund			21,912,567
Total investments measured at NAV			<u>144,825,343</u>
Total investments measured at fair value			<u>\$404,700,887</u>

The System has the following recurring fair value measurements as of June 30, 2019:

	2019			
	Level One	Level Two	Level Three	Total
Investments by fair value level:				
Short-Term Investment Funds	\$ -	\$ 2,485,991	\$ -	\$ 2,485,991
Bonds	13,419,178	98,870,991	-	112,290,169
Domestic Equities and Mutual Funds	64,821,686	-	-	64,821,686
International Equities and Mutual Funds	33,045,062	-	1,656	33,046,718
Alternative Investments	30,912,896	-	-	30,912,896
Total investments by fair value level	<u>\$ 142,198,822</u>	<u>\$ 101,356,982</u>	<u>\$ 1,656</u>	<u>243,557,460</u>
Investments measured at net asset value (NAV):				
Short-Term Investments				10,093,535
Fixed Income Funds				7,960,335
Domestic Equities and Mutual Funds				86,628,842
International Equities and Mutual Funds				13,684,437
Hedge Fund				24,299,983
Securities Lending Collateral - Short-Term Investment Fund				34,020,163
Total investments measured at NAV				<u>176,687,295</u>
Total investments measured at fair value				<u>\$420,244,755</u>

Oakland Police and Fire Retirement System
Notes to the Basic Financial Statements
Years Ended June 30, 2020 and 2019

Investments measured at NAV represent commingled funds where fair value is measured based on the System's pro rata share of the total NAV. As of June 30, 2020, the System's hedge fund investment has monthly liquidity with a notice period of 5 days. As of June 30, 2019, the System's hedge fund investment has monthly liquidity with a notice period of 5 days.

f) Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. As described previously, the System's Investment Policy limits fixed income investments to a maximum average duration of 10 years and a maximum remaining term to maturity (single issue) at purchase of 30 years, with targeted portfolio duration of between 3 to 8 years and targeted portfolio maturity of 15 years. The weighted average duration for the System's fixed income investment portfolio excluding fixed income short-term investments, foreign currency contracts, and securities lending investments was 7.69 years as of June 30, 2020, and 6.92 years as of June 30, 2019.

The following summarizes the System's fixed income investments by category as of June 30, 2020 and 2019:

Short-Term Investment Duration

Investment Type	2020		2019	
	Fair Value	Modified Duration (Years)	Fair Value	Modified Duration (Years)
Short-Term Investment Funds	\$ 8,074,128	n/a	\$ 12,579,526	n/a
U.S. Treasury Bills	6,023,223	0.21	None	n/a
Foreign Currency Exchange Contracts, Net	(20,041)	n/a	None	n/a

Long-Term Investment Duration

Investment Type	2020		2019	
	Fair Value	Modified Duration (Years)	Fair Value	Modified Duration (Years)
Fixed Income Investments				
U.S. Government Bonds				
U.S. Treasuries	\$ 8,153,603	8.03	\$ 18,478,407	6.42
Government Agencies	39,171,830	7.23	34,766,352	7.45
Total U.S. Government Bonds	<u>47,550,982</u>		<u>53,244,759</u>	
Corporate and Other Bonds				
Corporate Bonds	<u>75,809,638</u>	7.89	<u>67,005,745</u>	6.79
Total Fixed Income Investments	<u>\$123,135,071</u>	7.69	<u>\$ 120,250,504</u>	6.92
Securities Lending	<u>\$ 21,912,567</u>		<u>\$ 34,020,163</u>	

Oakland Police and Fire Retirement System
Notes to the Basic Financial Statements
Years Ended June 30, 2020 and 2019

g) Fair Value Highly Sensitive to Change in Interest Rates

The terms of a debt investment may cause its fair value to be highly sensitive to interest rate changes. The System has invested in CMOs, which are mortgage-backed bonds that pay pass-through rates with varying maturities. The fair values of CMOs are considered sensitive to interest rate changes because they have embedded options, which are triggers related to quantities of delinquencies or defaults in the loans backing the mortgage pool. If a balance of delinquent loans reaches a certain threshold, interest and principal that would be used to pay junior bondholders is instead directed to pay off the principal balance of senior bondholders, shortening the life of the senior bonds.

The following are the System's investments in CMOs at June 30, 2020:

<u>Investment Type</u>	<u>Weighted Average Coupon Rate</u>	<u>Weighted Average Maturity (Years)</u>	<u>Fair Value</u>	<u>Percent of Total Investments Fair Value</u>
Mortgage-backed securities	3.07%	23.76	\$27,010,178	6.67%

The following are the System's investments in CMOs at June 30, 2019:

<u>Investment Type</u>	<u>Weighted Average Coupon Rate</u>	<u>Weighted Average Maturity (Years)</u>	<u>Fair Value</u>	<u>Percent of Total Investments Fair Value</u>
Mortgage-backed securities	3.88%	25.76	\$26,460,818	6.30%

h) Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligation.

The following provides information concerning the credit risk of fixed income securities as of June 30, 2020 and 2019:

Short-Term Investment Ratings

<u>Investment Type</u>	<u>2020</u>		<u>2019</u>	
	<u>S&P Moody's/ Fitch Rating</u>	<u>Fair Value</u>	<u>S&P Moody's/ Fitch Rating</u>	<u>Fair Value</u>
Short-Term Investment Funds	Not Rated	\$8,074,128	Not Rated	\$12,579,526
U.S. Treasury Bills	AAA	6,023,223	N/A	None
Foreign Currency Exchange Contracts, Net	Not Rated	(20,041)	N/A	None

Oakland Police and Fire Retirement System
Notes to the Basic Financial Statements
Years Ended June 30, 2020 and 2019

Long-Term Investment Ratings

S&P / Moody's Rating	2020		2019	
	Fair Value	Percentage of Total Fair Value	Fair Value	Percentage of Total Fair Value
AAA/Aaa	\$ 48,352,450	39.3%	\$ 41,409,989	34.44%
AA/Aa	26,839,048	21.8%	28,801,312	23.95%
A/A	16,270,507	13.2%	13,190,791	10.97%
BBB/Baa	22,504,035	18.3%	14,583,850	12.13%
BB/Ba	1,388,389	1.1%	885,050	0.74%
B/B	313,940	0.3%	-	0%
CCC/CCC	7,466,702	6.0%	-	0%
Unrated	-	-	21,379,513	17.77%
	<u>\$ 123,146,717</u>	<u>100.00%</u>	<u>\$ 120,250,504</u>	<u>100.00%</u>

Securities Lending Ratings

S&P / Moody's Rating	2020 Fair Value	2019 Fair Value
Not Rated	\$ 21,912,567	\$ 34,020,163

i) Custodial Credit Risk

Custodial credit risk is the risk that, in the event of a failure of a depository financial institution or counterparty to a transaction, there will be an inability to recover the value of deposits, investments, or collateral securities in the possession of an outside party.

The California Government Code requires that governmental securities or first trust deed mortgage notes be used as collateral for demand deposits and certificates of deposit at 110 percent and 150 percent, respectively, of all deposits not covered by federal deposit insurance. As the City holds cash and certificates of deposit on behalf of the System, the collateral must be held by the pledging financial institution's trust department and is considered held in the City's name. For all other System deposits, the collateral must be held by the pledging financial institution's trust department and is considered held in the System's name.

The City, on behalf of the System, does not have any funds or deposits that are not covered by depository insurance, which are either uncollateralized, collateralized with securities held by the pledging financial institution, or collateralized with securities held by the pledging financial institution's trust department or agent, but not in the City's name. The System does not have any investments that are not registered in the name of the System and are either held by the counterparty or the counterparty's trust department or agent but not in the System's name.

Oakland Police and Fire Retirement System
Notes to the Basic Financial Statements
Years Ended June 30, 2020 and 2019

j) Foreign Currency Risk

Foreign currency risk is the risk that changes in foreign exchanges rates will adversely affect the fair values of an investment or deposit. Currency hedging is allowed under the System's investment policy for defensive purposes only. The investment policy limits currency hedging to a maximum of 25% of the portfolio value.

The following summarizes the System's investments denominated in foreign currencies as of June 30, 2020 and 2019:

Foreign Currency	Fair Value	
	June 30, 2020	June 30, 2019
Australian Dollar	\$ 1,165,827	\$ 726,669
Brazilian real	684,785	-
British Pound	2,900,002	3,881,313
Canadian Dollar	2,916,358	190,691
Danish Krone	108,321	1,046,692
Euro	5,257,480	9,930,129
Hong Kong Dollar	2,540,943	2,806,718
Indonesian Rupiah	179,056	336,856
Japanese Yen	5,606,895	4,060,244
Mexican Peso	652,060	620,720
New Israeli shekel	270,619	-
Norwegian Krone	158,176	173,665
Singapore Dollar	506,973	330,028
South African rand	254,493	-
Swedish Krona	837,087	448,360
Swiss Franc	2,093,668	1,512,860
Turkish lira	612,927	-
Total	\$ 26,745,670	\$ 26,064,945

k) Securities Lending Transactions

The System's investment policy authorizes participation in securities lending transactions, which are short-term collateralized loans of the System's securities to broker-dealers with a simultaneous agreement allowing the System to invest and receive earnings on the collateral received. All securities loans can be terminated on demand by either the System or the borrower, although the average term of loans is one week.

The administrator of the System's securities lending activities is responsible for maintaining an adequate level of collateral in an amount equal to at least 102% of market value of loaned U.S. government securities, common stock and other equity securities, bonds, debentures, corporate debt securities, notes, and mortgages or other obligations. Collateral received may include cash, letters of credit, or securities. The term to maturity of the loaned securities is generally not matched with the term to maturity of the investment of the said collateral. If securities collateral is received, the System cannot pledge or sell the collateral securities unless the borrower defaults.

As of June 30, 2020 and 2019, management believes the System has minimized its credit risk exposure to borrowers because the amounts held by the System as collateral exceeded the securities loaned by the System. The System's contract with the administrator requires it to indemnify the System if the borrowers fail to return the securities (and if the collateral is inadequate to replace the securities borrowed) or fails to pay the System for income distributions by the securities' issuers while the securities are on loan.

Oakland Police and Fire Retirement System
Notes to the Basic Financial Statements
Years Ended June 30, 2020 and 2019

The following summarizes investments in securities lending transactions and collateral received at June 30, 2020 and 2019:

Securities Lending as of June 30, 2020

Investment Type	Fair Value of Loaned Securities		
	For Cash Collateral	For Non-Cash Collateral	Total
Securities on Loan for Cash Collateral			
U.S. Government and agencies	\$ 4,674,146	\$ 5,349,244	\$ 10,023,390
U.S. Corporate bonds	7,480,228	-	7,480,228
U.S. Equities	9,388,017	470,835	9,858,852
Total investments in securities lending transactions	<u>\$ 21,542,391</u>	<u>\$ 5,820,079</u>	<u>\$ 27,362,470</u>
Collateral Received	<u>\$ 21,903,806</u>	<u>\$ 5,913,897</u>	<u>\$ 27,817,703</u>

Securities Lending as of June 30, 2019

Investment Type	Fair Value of Loaned Securities		
	For Cash Collateral	For Non-Cash Collateral	Total
Securities on Loan for Cash Collateral			
U.S. Government and agencies	\$ 10,531,762	\$ 4,119,916	\$ 14,651,678
U.S. Corporate bonds	5,350,565	-	5,350,565
U.S. Equities	17,536,838	635,146	18,171,984
Non-U.S. equities	-	967,891	967,891
Total investments in securities lending transactions	<u>\$ 33,419,165</u>	<u>\$ 5,722,953</u>	<u>\$ 39,142,118</u>
Collateral Received	<u>\$ 34,017,817</u>	<u>\$ 5,913,897</u>	<u>\$ 39,931,714</u>

l) Derivative Instruments

The Retirement System reports its derivative instruments under the provisions of GASB Statement No. 53, *Accounting and Financial Reporting for Derivatives Instruments*. Pursuant to the requirements of this statement, the Retirement System has provided a summary of derivative instrument activities during the reporting periods presented and the related risks.

As of June 30, 2020 and 2019, the derivative instruments held by the Retirement System are considered investments and not hedges for accounting purposes. All investment derivatives are reported as investments at fair value in the statements of fiduciary net position. The gains and losses arising from this activity are recognized as incurred in the statement of changes in fiduciary net position. All investment derivatives discussed below are included within the investment risk schedules, which precede this subsection. Investment derivative instruments are disclosed separately to provide a comprehensive and distinct view of this activity and its impact on the overall investment portfolio.

Valuation methods used by the System are described in more detail in Note 2.c). The fair value of the exchange traded derivative instruments, such as futures, options, rights, and warrants are based on quoted market prices. The fair values of forward foreign currency contracts are determined using a pricing service, which uses published foreign exchange rates as the primary source. The fair values of swaps are determined by the System's investment managers based on quoted market prices of the underlying investment instruments.

Oakland Police and Fire Retirement System
Notes to the Basic Financial Statements
Years Ended June 30, 2020 and 2019

The tables below present the notional amounts, the fair values, and the related net appreciation (depreciation) in the fair value of derivative instruments that were outstanding at June 30, 2020 and 2019:

As of and for the Year Ended June 30, 2020

Derivative Type / Contract	Notional Amount	Fair Value	Net Appreciation (Depreciation) in Fair Value
Forwards			
Foreign Currency Exchange Contracts	\$ -	\$ (20,041)	\$ -
Options			
Equity Contracts	69	(378,167)	108,759
Rights/Warrants			
Rights/Warrants	5,630	-	-
Swaps			
Credit Contracts	1,920,000	(11,645)	32,754
Total	\$ 1,925,699	\$ (409,853)	\$ 141,513

As of and for the Year Ended June 30, 2019

Derivative Type / Contract	Notional Amount	Fair Value	Net Appreciation (Depreciation) in Fair Value
Options			
Equity Contracts	82	(588,704)	(264,482)
Swaps			
Credit Contracts	1,660,000	74,601	9,478
Total	\$ 1,660,082	\$ (514,103)	\$ (255,004)

Counterparty Credit Risk

The System is not exposed to credit risk on non-exchange traded derivative instruments that are in asset positions. As of June 30, 2020, the System held forward currency contracts on the amount of \$20,041. The System's counterparties to these contract held credit ratings of A or better, as assigned by one or more of the major credit rating organizations (S&P, Moody's and/or Fitch). As of June 30, 2019, the System did not hold any forward currency contracts.

Custodial Credit Risk

The custodial credit risk disclosure for exchange traded derivative instruments is made in accordance with the custodial credit risk disclosure requirements of GASB Statement No. 40. At June 30, 2020 and 2019, all of the System's investments in derivative instruments are held in the System's name and are not exposed to custodial credit risk.

Oakland Police and Fire Retirement System
Notes to the Basic Financial Statements
Years Ended June 30, 2020 and 2019

Interest Rate Risk

The tables below describe the maturity periods of the derivative instruments exposed to interest rate risk at June 30, 2020 and 2019.

Derivative Interest Rate Risk as of June 30, 2020			
Derivative Type / Contract	Fair Value	Maturities	
		Less than 1 Year	1-5 years
Forwards			
Forward Foreign Currency Exchange Contracts	\$ (20,041)	\$ (20,041)	\$ -
Options			
Equity Contracts	(378,167)	(378,167)	-
Swaps			
Credit Contracts	(11,645)	-	74,601
Total	\$ (389,812)	\$ (378,167)	\$ 74,601

Derivative Interest Rate Risk as of June 30, 2019			
Derivative Type / Contract	Fair Value	Maturities	
		Less than 1 Year	1-5 years
Options			
Equity Contracts	\$ (588,704)	\$ (588,704)	\$ -
Swaps			
Credit Contracts	74,601	-	74,601
Total	\$ (514,103)	\$ (588,704)	\$ 74,601

Foreign Currency Risk

At June 30, 2020, the System is exposed to foreign currency risk on \$20,041 of its investments in forwards denominated in the Mexican peso. At June 30, 2019, the System is not exposed to foreign currency risk for its derivative instruments.

Contingent Features

At June 30, 2020 and 2019, the Retirement System held no positions in derivatives containing contingent features.

Oakland Police and Fire Retirement System
Notes to the Basic Financial Statements
Years Ended June 30, 2020 and 2019

5. Net Pension Liability

The components of the net pension liability of the City at June 30, 2020 and 2019, are as follows:

	June 30, 2020	June 30, 2019
Total pension liability	\$ 603,971,861	\$ 628,212,362
Less: Plan fiduciary net position	(378,974,690)	(384,710,714)
City's net pension liability	\$ 224,997,171	\$ 243,501,648
 Plan fiduciary net position as a percentage of the total pension liability	62.7%	61.2%

a) Actuarial Method and Assumptions

The total pension liability as of June 30, 2020 was determined based on an actuarial valuation as of June 30, 2019, using the entry age normal actuarial cost method and the following actuarial assumptions, applied to all periods included in the measurement.

Investment Rate of Return	5.37%
Inflation Rate, U.S.	2.75%
Inflation Rate, Bay Area	2.85%
Long-term Post-Retirement Benefit Increases	3.25%

Measurements as of the June 30, 2020 are based on the fair value of assets as of June 30, 2020 and the total pension liability as of the valuation date, June 30, 2019, updated to June 30, 2020. There were no significant events between the valuation date and the measurement date. The update only included the addition of interest cost, offset by actual benefit payments. There are no active members of the plan, and thus no service cost.

Mortality rates for healthy lives were based on the CalPERS Healthy Table from the 2012-2015 Experience Study, excluding the 15-year projection using 90% of Scale MP-2016. Mortality rates for disabled lives were based on the CalPERS Industrial Disability Mortality Table from the 2012-2015 Experience Study, excluding the 15-year projection using 90% of Scale MP-2016. The mortality tables are projected to improve with MP-2017 generational mortality improvement tables, with improvements projected from a base year of 2014 (the mid-point of the CalPERS base tables).

The total pension liability as of June 30, 2019 was determined based on an actuarial valuation as of June 30, 2018, updated to June 30, 2019, using the entry age normal actuarial cost method and the actuarial assumptions as described above for the June 30, 2019 valuation, except for the assumed investment rate of return was 5.44%. New Memorandums of Understanding (MOUs) went into effect for both Police and Fire members between the valuation date and the measurement date, changing both Police and Fire retirees' cost of living adjustments (COLAs). The update procedures included the changes in liability due to the new Police and Fire MOUs, and the addition of interest cost, offset by actual benefit payments. There are no active members of the Plan, and thus no service cost.

Oakland Police and Fire Retirement System
Notes to the Basic Financial Statements
Years Ended June 30, 2020 and 2019

The actuarial assumptions used in the June 30, 2019 and 2018 valuations were based on the results of actuarial experience studies for the period July 1, 2014 through June 30, 2017, respectively.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) 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 allocation percentage and by adding expected inflation.

Best estimates of geometric real rates of return for each major class included in the pension plan's target asset allocation as of June 30, 2020 and 2019 are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return	
	June 30, 2020	June 30, 2019
Fixed Income	2.29%	3.10%
Domestic Equity	5.55	6.00
International Equity	7.69	6.80
Covered Calls	4.64	6.10
Crisis Risk Offset	3.78	4.80
Cash	1.92	2.50

b) Discount Rate

The discount rates used to measure the total pension liability were 5.37% and 5.44% as of June 30, 2020 and 2019, respectively. The projection of cash flows used to determine the discount rate assumed that the City would contribute to the Plan based on its July 1, 2012 funding agreement with the System. This agreement suspends City contributions until the fiscal year beginning July 1, 2017, after which they will resume, based upon the recommendation of the actuary, with a City Charter requirement that the Plan's liabilities be fully funded by July 1, 2026. A cash flow projection showed that the projected fiduciary net position would be greater than or equal to the benefit payments projected for each future period. Therefore, the long-term expected rate of return on Plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

c) Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of the City, calculated using the discount rate, as well as what the Plan's net pension liability would be if it were calculated using a discount rate of 1-percentage-point lower or 1-percentage-point higher than the discount rate.

	June 30, 2020		
	1% Decrease (4.37%)	Current Discount Rate (5.37%)	1% increase (6.37%)
City's net pension liability	\$279,560,331	\$224,997,171	\$178,053,408

	June 30, 2019		
	1% Decrease (4.44%)	Current Discount Rate (5.44%)	1% increase (6.44%)
City's net pension liability	\$301,403,454	\$243,504,648	\$193,837,313

Oakland Police and Fire Retirement System
Notes to the Basic Financial Statements
Years Ended June 30, 2020 and 2019

6. Reserves

Retired Member Contribution Reserve represents the total accumulated transfers from active member contributions and investments, less payments to retired members and beneficiaries.

Employer Reserve represents the total accumulated employer contributions for retirement payments. Additions include contributions from the employer, investment earnings and other income; deductions include payments to retired members and beneficiaries and administrative expenses.

The aggregate total of the System’s major reserves as of June 30, 2020 and 2019 equals net position restricted for pensions and comprises the following:

	2020	2019
Retired member contribution reserve	\$ 29,205,764	\$ 31,655,922
Employer reserve	249,768,926	353,054,722
Total	\$ 378,974,690	\$ 384,710,714

7. Administrative Expenses

The City provides the System with accounting and other administrative services. Staff salaries included in administrative expenses for the years ended June 30, 2020 and 2019 were \$1,257,550 and \$1,073,971, respectively. Other administrative expenses including accounting and audit services, legal fees, annual report and miscellaneous expense for the years ended June 30, 2020 and 2019 were \$265,360 and \$372,390, respectively.

8. Receivable from Retired Members and Beneficiaries

The City filed a lawsuit (City of Oakland v. Oakland Police and Fire Retirement System, et al., Alameda County Superior Court case number RG 11580626) in June 2011, and sought to stop the System from paying retirement benefits based on certain holidays and shift differential premium pay (7.25%) to many police retirees. The City also sought an order requiring the System to collect overpayments. The trial court ruled in favor of the City and the decision was partially upheld upon appeal. The Court of Appeal agrees that those elements were overpayments, but limited the extent to which shift differential overpayments could be recovered back from retirees.

The writ and judgment entered by the trial court after the appeals process directed the System’s board to cease paying excessive holidays and the shift differential premium. In September and October 2014, the System’s Board passed Resolutions No. 6819 and No. 6824 to seek 100% recovery of the combined overpayments, which totals approximately \$3.9 million. On October 28, 2015, the System’s Board approved a collection methodology to recover the overpayments from police members over a 48-month period. The System began deducting these repayments from benefit disbursement commencing in June 2016. Eleven payees were granted a delayed repayment date, which commenced on May 1, 2017. Nine payees received a discharge of their debt totaling \$51,886. These actions increased fund assets by approximately \$3.3 million. As of June 30, 2020 and 2019, the receivable totaled \$0.1 million and \$0.9 million, respectively.

**Oakland Police and Fire Retirement System
Required Supplementary Information
Years Ended June 30, 2020 and 2019**

**Schedule of Changes in the Employer's Net Pension Liability
and Related Ratios (Unaudited)**

	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
<u>Total Pension Liability</u>				
Interest (includes interest on service cost)	\$ 36,078,037	\$ 37,621,301	\$ 44,320,094	\$ 44,931,829
Differences between expected and actual experience	(5,699,459)	(7,915,210)	(10,656,139)	3,027,944
Changes of assumptions	-	(1,475,030)	17,858,013	-
Benefit payments, including refunds of member contributions	(54,619,079)	(56,212,013)	(55,998,595)	(57,375,815)
Net change in total pension liability	(24,240,501)	(27,980,952)	(4,476,627)	(9,416,042)
Total pension liability – beginning	628,212,362	656,193,314	660,669,941	670,085,983
Total pension liability – ending (a)	\$ 603,971,861	\$ 628,212,362	\$ 656,193,314	\$ 660,669,941
<u>Plan fiduciary net position</u>				
Contributions - member	\$ 43,409,000	\$ 44,821,000	\$ 44,860,000	\$ -
Net investment income	6,996,833	21,557,961	35,446,275	50,158,795
Benefit payments, including refunds of member contributions	(54,619,079)	(56,212,013)	(55,998,595)	(57,375,815)
Administrative expense	(1,522,910)	(1,446,361)	(1,543,412)	(1,261,641)
Claims and settlements	132	13,856	9,145	70,282
Net change in plan fiduciary net position	(5,736,024)	8,734,443	22,773,413	(8,408,379)
Plan fiduciary net position – beginning	384,710,714	375,976,271	353,202,858	361,611,237
Plan fiduciary net position – ending (b)	\$ 378,974,690	\$ 384,710,714	\$ 375,976,271	\$ 353,202,858
City's net pension liability – ending (a) – (b)	\$ 224,997,171	\$ 243,501,648	\$ 280,217,043	\$ 307,467,083
Plan fiduciary net position as a percentage of the total pension liability	63%	61%	57%	53%
Covered payroll	\$ -	\$ -	\$ -	\$ -
Net pension liability as a percentage of covered payroll	N/A	N/A	N/A	N/A

Note: This is a 10-year schedule. Information for additional years will be presented when available.

**Oakland Police and Fire Retirement System
Required Supplementary Information
Years Ended June 30, 2020 and 2019**

**Schedule of Changes in the Employer's Net Pension Liability
and Related Ratios (Unaudited) (Continued)**

	<u>2016</u>	<u>2015</u>	<u>2014</u>
<u>Total Pension Liability</u>			
Interest (includes interest on service cost)	\$ 42,480,394	\$ 41,262,826	\$ 42,333,496
Differences between expected and actual experience	6,977,470	(21,208,627)	-
Changes of assumptions	43,480,232	34,219,433	-
Benefit payments, including refunds of member contributions	<u>(58,441,353)</u>	<u>(59,007,536)</u>	<u>(57,409,113)</u>
Net change in total pension liability	34,496,743	(4,733,904)	(15,075,617)
Total pension liability – beginning	<u>635,589,240</u>	<u>640,323,144</u>	<u>655,398,761</u>
Total pension liability – ending (a)	<u><u>\$ 670,085,983</u></u>	<u><u>\$ 635,589,240</u></u>	<u><u>\$ 640,323,144</u></u>
<u>Plan fiduciary net position</u>			
Contributions - member	\$ -	\$ -	\$ 4,441
Net investment income	(1,418,645)	15,438,586	66,392,409
Benefit payments, including refunds of member contributions	(58,441,353)	(59,007,536)	(57,409,113)
Administrative expense	(1,375,749)	(985,227)	(776,112)
Claims and settlements	<u>3,593,096</u>	<u>-</u>	<u>-</u>
Net change in plan fiduciary net position	(57,642,651)	(44,554,177)	8,211,625
Plan fiduciary net position – beginning	<u>419,253,888</u>	<u>463,808,065</u>	<u>455,596,440</u>
Plan fiduciary net position – ending (b)	<u><u>\$ 361,611,237</u></u>	<u><u>\$ 419,253,888</u></u>	<u><u>\$ 463,808,065</u></u>
City's net pension liability – ending (a) – (b)	<u><u>\$ 308,474,746</u></u>	<u><u>\$ 216,335,352</u></u>	<u><u>\$ 176,515,079</u></u>
Plan fiduciary net position as a percentage of the total pension liability	54%	66%	72%
Covered payroll	\$ -	\$ -	\$ -
Net pension liability as a percentage of covered payroll	N/A	N/A	N/A

**Oakland Police and Fire Retirement System
Required Supplementary Information
Years Ended June 30, 2020 and 2019**

**Schedule of Employer Contributions (Unaudited)
(dollars in millions)**

	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017*</u>	<u>2016*</u>	<u>2015*</u>	<u>2014*</u>	<u>2013**</u>	<u>2012</u>	<u>2011</u>
Actuarially determined contribution	\$ 43.4	\$ 44.8	\$ 44.9	N/A	N/A	N/A	\$ 20.3	\$ 34.2	\$ 45.1	\$ 41.4
Contributions in relation to the actuarially determined contribution	\$ 43.4	\$ 44.8	\$ 44.9	\$ -	\$ -	\$ -	\$ -	\$ 210.0	\$ 45.5	\$ -
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	N/A	N/A	N/A	\$ 20.3	\$ (175.8)	\$ (0.4)	\$ 41.4
Covered payroll	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.1	\$ 0.1	\$ 0.1
Contributions as a percentage of covered payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	210000%	45500%	0%

* Actuarially determined contributions are calculated based on the actuarial valuation one year prior to the beginning of the fiscal year. Although actuarial valuations were performed as of June 30, 2014, June 30, 2015, and June 30, 2016, the System did not determine an actuarially determined contribution for FY 2015-2017, based on the City's funding policy.

** In July 2012, the City of Oakland contributed \$210 million in Pension Obligation Bond (POB) proceeds to the Plan.

Schedule of Investment Returns (Unaudited)

	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>
Annual money-weighted rate of return net of investment	2.04%	6.10%	10.57%	15.57%	-0.75%	3.90%	16.40%	9.70%	1.40%	24.50%

Table 1

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

Administrative Budget Spent to Date (Preliminary)

As of October 31, 2020

	Approved Budget					
		October 2020	FYTD	Remaining	Percent Remaining	
Internal Administrative Costs						
PFRS Staff Salaries	\$ 1,200,000	\$ 92,686	\$ 355,708	\$ 844,292	70.4%	
Board Travel Expenditures	52,500	-	-	52,500	100.0%	
Staff Training	20,000	-	110	19,890	99.5%	
Staff Training - Tuition Reimbursement	7,500	-	-	7,500	100.0%	
Annual Report & Duplicating Services	4,000	-	-	4,000	100.0%	
Board Hospitality	3,600	-	-	3,600	100.0%	
Payroll Processing Fees	40,000	-	-	40,000	100.0%	
Miscellaneous Expenditures	40,000	1,427	2,800	37,200	93.0%	
Internal Service Fees (ISF)	88,000	-	52,005	35,995	40.9%	
Contract Services Contingency	50,000	-	1,200	48,800	97.6%	
Internal Administrative Costs Subtotal :	\$ 1,505,600	\$ 94,113	\$ 411,823	\$ 1,093,777	72.6%	
Actuary and Accounting Services						
Audit	\$ 45,000	\$ 23,309	\$ 40,842	\$ 4,159	9.2%	
Actuary	46,500	-	-	46,500	100.0%	
Actuary and Accounting Subtotal:	\$ 91,500	\$ 23,309	\$ 40,842	\$ 50,659	55.4%	
Legal Services						
City Attorney Salaries	\$ 188,000	\$ 18,040	\$ 61,802	\$ 126,198	67.1%	
Legal Contingency	150,000	-	-	150,000	100.0%	
Legal Services Subtotal:	\$ 338,000	\$ 18,040	\$ 61,802	\$ 276,198	81.7%	
Investment Services						
Money Manager Fees	\$ 1,353,000	\$ 246,079	\$ 246,079	\$ 1,106,921	81.8%	
Custodial Fee	124,000	29,125	29,125	94,875	76.5%	
Investment Consultant (Meketa)	100,000	-	25,000	75,000	75.0%	
Investment Subtotal:	\$ 1,577,000	\$ 275,204	\$ 300,204	\$ 1,276,796	81.0%	
Total Operating Budget	\$ 3,512,100	\$ 410,666	\$ 814,671	\$ 2,697,429	76.80%	

Table 2

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

Cash in Treasury (Fund 7100) - Preliminary

As of October 31, 2020

	October 2020
Beginning Cash as of 9/30/2020	\$ 6,292,801
Additions:	
City Pension Contribution - October	\$ 3,637,333
Investment Draw	\$ 1,000,000
Misc. Receipts	-
Total Additions:	\$ 4,637,333
Deductions:	
Pension Payment (September Pension Paid on 10/1/2020)	(4,486,758)
Expenditures Paid	(470,959)
Total Deductions	\$ (4,957,717)
 Ending Cash Balance as of 10/31/2020*	 \$ 5,972,418

* On 11/1/2020, October pension payment of appx \$4,458,000 will be made leaving a cash balance of \$1,514,000

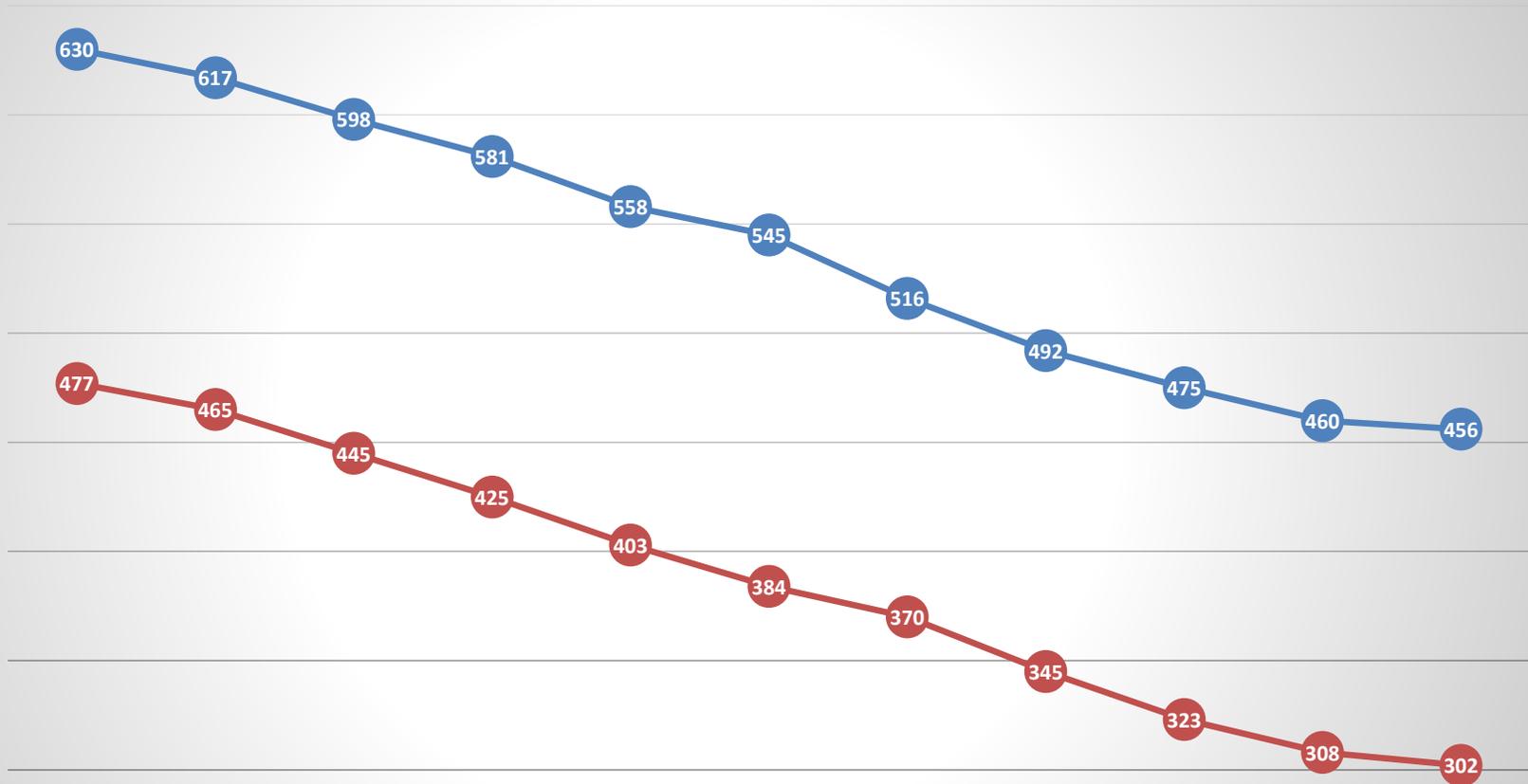
Table 3
CITY OF OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

Census
As of October 31, 2020

COMPOSITION	POLICE	FIRE	TOTAL
Retired Member:			
Retiree	326	190	516
Beneficiary	130	112	242
<i>Total Retired Members</i>	456	302	758
<i>Total Membership:</i>	456	302	758

COMPOSITION	POLICE	FIRE	TOTAL
Retired Member:			
Service Retirement	305	153	458
Disability Retirement	138	136	274
Death Allowance	13	13	26
<i>Total Retired Members:</i>	456	302	758
<i>Total Membership as of October 31, 2020:</i>	456	302	758
<i>Total Membership as of June 30, 2020:</i>	460	308	768
<i>Annual Difference:</i>	-4	-6	-10

Oakland Police and Fire Retirement System Pension Plan Membership Count As of October 31, 2020 (FY 2011 - FY 2021)



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 FYTD
Police	630	617	598	581	558	545	516	492	475	460	456
Fire	477	465	445	425	403	384	370	345	323	308	302
Total	1107	1082	1043	1006	961	929	886	837	798	768	758



AGENDA REPORT

TO: Oakland Police and Fire
Retirement Board

FROM: David F. Jones
Plan Administrator

SUBJECT: Authorization and
Reimbursement of Board/Staff
Travel/Education Expenses

DATE: November 24, 2020

R. Steven Wilkinson, Board Member of the **Oakland Police and Fire Retirement System** Board, requests authorization for reimbursement of travel and/or board education related funds for the event detailed below. Staff has verified that budgeted funds are available for this Staff member to be reimbursed.

Staff recommends the reimbursement of travel/education funds for the event below be approved by board motion.

Travel/Education Event: National Association of Securities Professionals (NASP)
31ST Annual Pension & Financial Services Conference

Event Location: Virtual Conference

Event Date: December 7, 2020 through December 10, 2020

Estimated Event Expense*: \$125.00

Notes: Prior Approval received from PFRS Board President

Walter L. Johnson, Sr.

* If enrollment, registration, or admission expenses are required, the fund will process a check in advance and pay vendor directly; all other board-approved reimbursements will be made upon delivery of receipts to staff by the travelling party. Cancellation of event attendance requires return of all reimbursed funds paid to attendee to the fund.

Respectfully submitted,

David F. Jones
Plan Administrator

Oakland Police and Fire Retirement System

Attachments:

(1) Resolution # 8004

(2) National Association of Securities Professionals (NASP) 31ST Annual Pension & Financial Services
Conference Agenda

ATTACHMENT 1

Resolution No. 8004

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

Approved as to
Form and Legality


RESOLUTION No. 8004

ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

RESOLUTION APPROVING REQUEST OF OAKLAND POLICE AND FIRE RETIREMENT SYSTEM TRUSTEE R. STEVEN WILKINSON TO ATTEND THE NATIONAL ASSOCIATION OF SECURITIES PROFESSIONALS 31ST ANNUAL VIRTUAL PENSION & FINANCIAL SERVICES CONFERENCE FROM DECEMBER 7 THROUGH DECEMBER 10, 2020 IN A VIRTUAL FORMAT AND FOR REIMBURSEMENT OF REGISTRATION FEES IN AN AMOUNT NOT TO EXCEED ONE-HUNDRED TWENTY-FIVE DOLLARS (\$125.00)

WHEREAS, the Oakland Police and Fire Retirement System (PFRS) Education and Travel Policy (“Travel Policy”) requires that PFRS Board members and staff obtain prior Board approval of all education and travel-related expenses that will be reimbursed by PFRS; and

WHEREAS, PFRS Trustee R. Steven Wilkinson would like to attend the National Association of Securities Professionals 31st Annual Virtual Pension & Financial Services Conference (“the Conference”) in a virtual format from December 7 through December 10, 2020; and

WHEREAS, in compliance with the Travel Policy, Trustee R. Steven Wilkinson has submitted documentation showing that registration fees to attend the Conference will be \$125.00; now, therefore, be it

RESOLVED: That System Trustee R. Steven Wilkinson’s request to attend the National Association of Securities Professionals 31st Annual Virtual Pension & Financial Services Conference in a virtual format from December 7 through December 10, 2020 at an estimated cost of \$125.00 is approved; and be it

FURTHER RESOLVED: That the PFRS Board authorizes reimbursement of registration fees in an amount not to exceed \$125.00 for Trustee R. Steven Wilkinson’s attendance at the National Association of Securities Professionals 31st Annual Virtual Pension & Financial Services Conference.

IN BOARD MEETING, CITY HALL, OAKLAND, CA DECEMBER 10, 2020

PASSED BY THE FOLLOWING VOTE:

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST: _____
PRESIDENT

ATTEST: _____
SECRETARY

ATTACHMENT 2

**National Association of Securities Professionals
31st Annual Pension & Financial Services
Conference Agenda**

SCHEDULE OF EVENTS

Pre-Conference: Monday, December 7, 2020

THE NASP INSTITUTE (TNI) **Trustees/Plan Sponsors/Investment Staff/Consultants ONLY (plus African trustees)*

TNI is a robust educational forum **exclusively** for members of the pension plan, foundation, and endowment community. This year, we also plan to offer the session to members of the investment consultant community. The specific courses are designed to serve a wide range of skill levels and are in an instructional style format.

In partnership with PFM Asset Management LLC, NASP is pleased to offer **six (6) Finance CPE Credits** for participation in The NASP Institute.

Learning Objectives:

NASP Institute Updated Learning Objectives:

- *Learn the key tenets of thematic, macro, factors based, and other types of investing*
- *Learn about portfolio strategies from the simple equity income to defensive equity to hedge funds and other more complex options*
- *Learn the differences among benchmarks for varying asset classes and regions and scoring and assessing ESG factors*
- *Develop your knowledge on various fixed income strategies including the differences between core and non-traditional strategies*

Advanced preparation is not necessary. Attendees must currently serve as Trustees or Staff to an Institutional Fund or Family Office. Program levels are presented in a group-live format at Intermediate and Advanced levels.

PFM Asset Management is registered with the National Association of State Boards of Accountancy (NASBA) as a sponsor of continuing professional education on the National Registry of CPE Sponsors. State boards of accountancy have final authority on the acceptance of individual courses for CPE credit.

Complaints regarding registered sponsors may be addressed to the: National Registry of CPE Sponsors, 150 Fourth Avenue North, Suite 700, Nashville, TN, 37219-2417, www.nasba.org.

9:00 AM - 9:30 AM Central Time

The NASP Institute (TNI) **Trustees/Plan Sponsors/Investment Staff/Consultants ONLY (plus African trustees)*

Primer for the Day: Gameshow Style

This interactive session will help you prepare for your time with us for the NASP Institute. Get a refresher of the ABCs of asset allocation whether tactical or strategic asset allocation, understand the framework of key concepts to be discussed, and hear about best practices of setting policies, fiduciary responsibility and governance.

Instructors:

Von Hughes, Managing Director, PAAMCO Prisma

9:30 AM -10:30 AM Central Time

The NASP Institute (TNI) **Trustees/Plan Sponsors/Investment Staff/Consultants ONLY (plus African trustees)*

Bond-nanza: A Review of Old and Burgeoning Fixed Income Sectors

With bond yields at historic lows in most of the developed world, many investors have been forced to rethink their fixed income allocations in order to meet their portfolio objectives. This prolonged market condition has put particular stress on traditional fixed income instruments that have historically played a critical role in institutional portfolios. In response, institutional investors are embracing alternative credit strategies that offer opportunities for higher rates of return relative to traditional fixed income. Those higher rates of return also come with added risks, as alternative credit strategies are typically less liquid, less regulated, and less transparent than their traditional counterparts. This session will seek to define the various segments within traditional and alternative credit, to highlight several key characteristics of these strategies, and to discuss real-time examples of the key risks and opportunities for institutional investors in today's market.

Instructors:

Kristin Ceva, Managing Principal, Payden & Rygel

Kevin Dockrell, Institutional Portfolio Manager – Credit Strategies, RBC

10:35 AM-11:35 AM Central Time

The NASP Institute (TNI) **Trustees/Plan Sponsors/Investment Staff/Consultants ONLY (plus African trustees)*

Portfolio Analytics: How “Good” is your Fund

A benchmark serves an essential role in investing and allows investors to measure the relative returns and volatility of their total plan, their composite portfolios, and their individual managers. Benchmarks should set an appropriate expectation for the magnitude by which an investment portfolio’s return should vary and under what market conditions that variance could be positive, neutral, or negative. There are many criteria an investor should consider when selecting the best-fit benchmark and under certain circumstances, two benchmarks may be best. Additionally, there are increasing requirements to integrate ESG factors into the investment process of all strategies, which may influence the choice of a benchmark, and, for many asset owners, evaluating non-sustainable and sustainable strategies to traditional investment metrics has been a challenge. This session will explore the importance of setting expectations through proper benchmarking and the various ways in which asset owners can evaluate and monitor traditional and ESG strategies and will also discuss the role of investment goals and objectives to determine the appropriate ways to measure how “good” a fund is.

Instructors:

Simone Andrews, ESG Credit Analyst, Bloomberg

Floyd Simpson, Senior Managing Consultant, PFM Group

11:40 AM - 12:40 PM Central Time

The NASP Institute (TNI) **Trustees/Plan Sponsors/Investment Staff/Consultants ONLY (plus African trustees)*

Defensive Strategies in a Volatile and Uncertain Marketplace

Whether faced with managing liquidity within an uncertain interest rate environment, minimizing the impact of a historic oil supply/demand curve imbalance, or navigating an economy crippling global pandemic, we were reminded in 2020 of the difficulty of protecting funding statuses in a volatile environment. Now faced with the first recession in more than a decade after years of bullish returns, investors must now revisit utilizing different portfolio strategies across multiple asset classes to both protect principal while still seeking a positive return. By revisiting traditional defensive portfolio strategies available within the equity markets and exploring more diverse, complex multi-asset

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investing solutions, attendees will gain insights in how different managers are working to minimize the impact of high volatility while providing stable returns. By incorporating discussions around commodities, sector themes, and the evolving role of emerging markets, investors will reexamine the various tools at their disposal to build a defensive portfolio for a long-term investment horizon.

Instructors:

Rupal J. Bhansali, Chief Investment Officer and Portfolio Manager, International & Global Equities, Ariel Investments

Lowell Yura, Head of Multi-Asset Solutions, North America

Jeffrey Saret, Senior Vice President, Portfolio Strategist, The D.E. Shaw Group

All Attendees are invited to attend the Institutional, Municipal Finance, Professional Development, Brokerage or AEMS Tracks

12:45 PM - 1:30 PM Central Time

Africa & Emerging Markets Summit (AEMS)

New Chapter in MiDA Advisors and NASP Engagement

This session will introduce the MiDA Advisory vision and roadmap. We will highlight the Industry Partners initiative and successes of the NASP-MiDA Partnership and increasing allocations to diverse and emerging asset managers.

Moderator: Aymeric Saha, Managing Director, MiDA

Panelists: Sundeeep Raichura, CEO, Zamara Actuaries, Administrators, Consultants, Ltd.
Henry Jones, President, Board of Administration, CALPERS

SCHEDULE OF EVENTS

Tuesday; December 8, 2020

All Attendees are invited to attend the Institutional, Municipal Finance, Professional Development, Brokerage or AEMS Tracks

8:00 AM - 9:00 AM Central Time

NASP Morning Plenary
“Monetizing” Diversity

The financial industry recognizes the value of diversity; furthermore, research has demonstrated that diversity increases productivity, increases creativity, increases profits, improves employee engagement, reduces employee turnover and improves company reputation. However, the number of ethnic minority firms in the financial industry have decreased notably in recent years. This panel will explore what the industry is doing (and can do) to improve the growth and enhance the success of ethnic minority firms and thereby “monetize” diversity.

Moderator: Monica Bertran, Head of Corporate Communications Digital and Innovation, Bloomberg

Panelists:

Justin Dean, Boston Consulting Group

Carey Lathrop, Managing Director, Co-Head of Markets & Securities Services, Citi

Jasmine Richards, CFA, Senior Investment Director, Manager Diversity, Cambridge Associates

9:10 AM - 9:55 AM Central Time

Professional Development Series (PDS)

Concurrent Breakout Session: Is the American Dream Dying - A Conversation About the US Economy and Rates

This session will explore the state of credit markets in the wake of Covid and the US elections. Additionally this fireside chat will provide insight in the future of the American dream of owning your own home and its long term effects on the country’s GDP growth.

Panelists:

Troy Dixon, Managing Partner and Chief Investment Officer, Hollis Park Partners

Erik Hall, Executive Director, GCM Grosvenor

9:10 AM - 9:55 AM Central Time

Institutional

Concurrent Breakout Session: Differentiated Equity: Micro Cap to Mega Cap and Beyond

Long gone are the days of gaining equity exposure by simply investing in blue chip stocks. As investors move towards passive investing in equity, where are the opportunities for active management? This breakout session will explore how investors are gaining exposure to differentiated strategies in the public equity spectrum.

Moderator: Will Forde, CFA, CAIA, senior Consultant, NEPC, LLC

Panelists:

William Heard, Founder, CEO & CIO, Heard Capital

Laura Kernaghan, Senior Director of Investments, Chicago Community Trust

Peter Zaldivar, Principal & Senior Portfolio Manager, Kabouter Management

9:10 AM - 9:55 AM Central Time

AEMS

Concurrent Breakout Session: Prosper Africa: Unleashing US-Africa Trade and Investment

Established in 2018, Prosper Africa is an initiative that brings together the resources of over 15 U.S. Government agencies to connect U.S. and African businesses with new buyers, suppliers, and investment opportunities. In this panel discussion, executives from two of those agencies – USAID and the DFC – will discuss their independent and collaborative efforts to drive commerce and investment between the U.S. and the African continent.

Moderator: Nadine Mentor, Founder and President, Mentor Holdings and Investments Inc.

Panelists:

Debra Erb, Managing Director of Housing Real Estate Project Finance, United States International Development Finance Corporation

Cameron Khosrowshahi, Investment Officer, Office of Private Capital and Microenterprise, United States Agency for International Development (USAID)

9:10 AM - 9:55 AM Central Time

Municipal

Concurrent Breakout Session: State Treasurer's Roundtable

Several of the most prominent treasurers in the country will discuss some of the challenges and opportunities they are facing and their plans to manage them-- with finite resources. In addition, the treasurer's will discuss the important role diversity will

have as they work to achieve the investment objectives of the public funds they manage and finance their capital improvement programs.

Moderator: Guy Logan, Managing Director, Citi, Board Chair, NASP

Panelists:

Honorable Rachael Eubanks, Treasurer, State of Michigan

Honorable Bruno Fernandes, Treasurer, District of Columbia

Honorable Shawn Wooden, Treasurer, State of Connecticut

9:10 AM - 9:55 AM Central Time

Brokerage

Concurrent Breakout Session: CFO/Treasury Panel

Panelists:

Rejji Hayes, Executive Vice President & Chief Financial Officer, CMS Energy

Jon Haygood, Assistant Treasurer, Southern Company

9:10 AM - 9:55 AM Central Time

Sponsored by Morgan Stanley

Concurrent Breakout Session: Modern Wealth Management: A Career as a Financial Advisor

In today's complex and volatile markets, it is imperative that individuals have the information and advice necessary to make sound investment and financial decisions. Hear how Morgan Stanley financial advisors leverage the firm's comprehensive capabilities and specialized services to assist clients in creating strategies to plan for their future, protect their wealth, and secure their legacy. Learn what it takes to build a successful career in wealth management from this dynamic panel of accomplished financial advisors.

Moderator: Justin Castleberry, First Vice President, Sub-Complex Manager, St. Paul, MN, Morgan Stanley

Panelists: Gail Covington, Senior Vice President, Financial Advisor, San Francisco, CA, Morgan Stanley

Antonio Monk, Senior Vice President, Financial Advisor, Dallas, TX, Morgan Stanley

Jesse Walton, Jr., Senior Vice President, Financial Advisor, Atlanta, GA, Morgan Stanley

10:05 AM - 11:35 AM Central Time

Women's Forum / Pacesetters Award Presentation

U.S. Congresswoman Joyce Beatty Remarks

This Forum will feature Black women working to make changes and expand opportunities in financial services for minority women. The forum will particularly focus on women in FinTech, global finance and finance entrepreneurship.

Remarks: U.S. Congresswoman Joyce Beatty, 3rd District of Ohio

Keynote: Carla Harris, Vice Chairman, Managing Director and Senior Client Advisor, Morgan Stanley

Moderator: Kim Evans, Senior Vice-President, Alternative Fund Services, Northern Trust

Panelists: Ingrid Jacobs, Vice President, Chief Diversity Officer, Eaton Vance
Robin Washington, Board of Directors, Alphabet

Tariye Gbadegesin, Managing Director & Chief Investment Officer, ARM-Harith Infrastructure Managers

11:35 AM - 1:05 PM Central Time

NASP Afternoon Plenary

Building a Dynamic Firm / Travers Bell Award Presentation

Hosted by Boston Consulting Group

Wells Fargo

1:30 PM - 2:15 PM Central Time

Professional Development Series

Concurrent Breakout Session: The Growth of Artificial Intelligence and How Technology is Disrupting Your Bottom Line Positively and Negatively

Long are the days of Uber and Airbnb as the household names for AI. Today, Regulators, Entrepreneurs, and Funds use technology to gain a competitive advantage. The rise in venture capital and capital raising on a global basis to the use of technology to fast track access to data and deal sourcing is moving at lightning speed. While the cost of AI is often a consideration when addressing business bottlenecks, more and more market participants use AI and technology as a material variable to advancing their success. Ignoring the implementation of technology can cause an adverse effect.

Panelists: Ashley Evans, Principal, Technology, Media and Telecom, Carlyle Group

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1:30 PM - 2:15 PM Central Time

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Concurrent Breakout Session: Smart Cities

By the year 2025 (in only 5 years) 45-50% of the population of Continental Africa will live in cities. There is a major urbanization trend that is taking place throughout continental Africa demanding a cohesive approach on how to adequately prepare to address this demographic tidal wave. Advanced thinkers on the subject believe that well planned advanced cities of the future (Smart Cities) will be required and that Africa will be a leading destination for these Smart Cities. Smart Cities create great opportunities for investments by providing a cohesive platform and master-planned approach to invest in major tenets of a Smart City: Energy, Technology, Food, Water, Infrastructure and healthcare. In fact, private equity and some hedge funds are organizing themselves to invest in these broad areas through a Smart City construct and a number of Smart City Funds are now being created to address these requirements. This is an eminently investable trend that will allow institutional investors to access the wave of Smart Cities that will be created over the next 25 years and in the process invest in the fastest growing continent in the world: Africa

Moderator: Marlon Brown, CEO, Clarendon Partners

Panelists:

Ndidi Nwueli, Managing Partner, Sahel Consulting Agriculture and Nutrition, Ltd.

Sola Lawson, Managing Director & Co-Head, African Infrastructure Investment Managers

Danladi Verheijen, Managing Director, Verod Capital

SCHEDULE OF EVENTS

Wednesday; December 9, 2020

All Attendees are invited to attend the Institutional, Municipal Finance, Professional Development, Brokerage or AEMS Tracks

8:00 AM - 8:45 AM Central Time

NASP Morning Plenary

Keynote Speaker: The Future of Capitalism

Dr. Nat Irvin, Assistant Dean of Thought Leadership and Civic Engagement, and Woodrow M. Strickler Chair, Professor of Management Practice, University of Louisville, College of Business

8:45 AM - 9:30 AM Central Time

NASP Morning Plenary

Economic Outlook - African Economic Outlook

Speaker: Dana Peterson, Chief Economist, Conference Board

9:30 AM - 10:15 AM Central Time

NASP Morning Plenary

No matter what you name it, one thing is certain, capital allocators of all types and from all geographies are proactively exploring the optimal ways to approach Sustainable and Impact Investing. Some are incorporating ESG principles in their investment policies, investing directly in impact portfolios and seeking to better understand how their external managers are incorporating ESG factors into the investment decision-making process. This session will provide a holistic view of the sustainable and impact investing space and explore key questions including:

- The ecosystem and approaches (i.e., negative screening, impact investing, thematic investing)
- Industry trends and myths about sustainable investing
- Market inefficiencies and the opportunity set, using ESG as a tool to identify risks, measuring impact
- How are DB and DC plans approaching sustainable investing?
- How will developments in the market continue to affect real assets such as commodities?
- What are ways in which corporate engagement and stewardship are evolving?

Moderator: Samantha Grant, CFA, CAIA, Marquette Associates

Panelists:

Jason M. Goins, CFA, Managing Director and Equity Research Analyst, Wellington Management Company LLP

Frances Barney, Managing Director, Head of Global Risk Solution, BNY Mellon
Carlton Lenoir, Chief Benefits Officer, Teachers' Retirement System of IL

10:25 AM - 11:10 AM Central Time

Institutional

Concurrent Breakout Session: Technology That Excites

Each year brings game-changing technology trends that shape how we live and how we do business – machine learning, artificial intelligence, cloud computing, and robotic automation, to name a few. This breakout session will explore burgeoning investment opportunities in technology for investors in public equity, private equity, and venture capital.

Panelists:

Rodrigo Garcia, Deputy Treasurer & Chief Investment Officer, State of Illinois
Khadir Richie, Principal, Richie Capital Group
Kelly Hardeman, Vice President, Insight Ventures
Dr. Kola Olofinboba, Managing Partner, Fairview Capital

10:25 AM - 11:10 AM Central Time

Brokerage

Concurrent Breakout Session: Global Trading and How We Make It Work

Moderator: Reggie Scantlebury, Managing Director, Stern Brothers

Panelists:

Stuart George, Division Director, Global Head of Equity Trading, Macquarie Investment Management
Paul Whitehead, Managing Director, Blackrock

10:25 AM - 11:10 AM Central Time

Municipal

Concurrent Breakout Session: U.S. Mayor's Roundtable

Mayors throughout the U.S. will provide their insights on how COVID-19 has affected their cities, the pace of the economic recovery, and how social justice has influenced policy and legislative matters.

Moderator: Tray Hairston, Attorney, Butler Snow, LLP

Panelists:

Honorable Stephen K. Benjamin, Mayor, City of Columbia, SC

Honorable Keisha Lance Bottoms, Mayor, City of Atlanta, GA
Honorable Sylvester Turner, Mayor, City of Houston, TX

10:25 AM - 11:10 AM Central Time

Defined Contributions

Concurrent Breakout Session: Sponsored by Nationwide

Moderator: Eric Stevenson, President, Nationwide Retirement Plans, Nationwide

11:20 AM - 12:05 PM Central Time

Institutional

Concurrent Breakout Session: Let's Get Real: A Discussion on Real Assets

Over the past decade, institutional investors have been steadily increasing their exposures to real assets for a variety of reasons that include diversification, yield, and inflation hedging. These increased allocations are not just simply in the form of real estate. Infrastructure (equity and debt), natural resources, commodities, and agriculture (to name a few) are becoming more prevalent in portfolios. This breakout session will explore the challenges and opportunities of investing in real assets across the spectrum.

Moderator: Avery Robinson, CAIA, Senior Vice President & Real Assets Co-Manager, Callan, LLC

Panelists: Reynold Martin, Managing Principal, Infrastructure and Energy, Allstate
David Cibrian, Chief Executive Officer, Co-Chief Investment Officer, and Co-Founder, American Triple I Partners
Jenny Chan, Head of Portfolio & Strategy, MIP Funds, Managing Director, Macquarie North American Private Funds

11:20 AM - 12:05 PM Central Time

AEMS

Concurrent Breakout Session: Re-Imagining Business Opportunities in the Next Big Growth Market

Conversation with the Co-Authors of Africa's Business Revolution: How to Succeed in the World's Next Big Growth Market. As countries recover from the impact of the pandemic and rebuild, there will be a need to re-imagine viable business opportunities in emerging markets such as Africa. Global and Africa-based companies seeking to access new growth markets or pivot existing business strategies, will need to focus on opportunities that will leverage on Africa's young population, fast-growing and increasingly urbanized cities coupled with significant infrastructure gaps including social infrastructure and the challenges presented by the high twin deficits (fiscal and current). Scaling opportunities to drive attractive returns and broad reaching impact will require

even more agility in frontier markets such as Africa. The panel provides the inside story on business in Africa and its future growth prospects and helps attendees understand and seize the opportunities for building profitable, sustainable enterprises on the African continent. The Panel will feature leading CEOs from key sectors including ICT, Manufacturing, Energy and top African Institutional investors.

Moderator: Tariye Gbadegesin, Managing Director & Chief Investment Officer, ARM-Harith Infrastructure Managers

Panelists:

Mitchell Elegbe, Chief Executive Officer, Interswitch
Sean Long, Chief Executive Officer, Denham Capital
Richard Okello, Co-Founding Partner, Sango Capital

11:20 AM - 12:05 PM Central Time

Municipal

Concurrent Breakout Session: A Practitioners Perspective to Financing Transportation Infrastructure: Present and Future

This panel will facilitate a discussion with large transportation issuers to hear their approaches to funding large project or program of projects, describe what tools work well, where there are challenges, and where they see opportunities for the future.

Moderator: Matt Bernstein, Director, Citi – Transportation Group

Panelists:

Horatio Porter, Chief Financial Officer, North Texas Tollway Authority
Erin Roseman, Chief Financial Officer, Transbay Joint Powers Authority
Dr. Shawn Wilson, Secretary, State of Louisiana Department of Transportation & Development

11:20 AM - 12:05 PM Central Time

Brokerage

Concurrent Breakout Session: Corporate Pensions

Moderator: Obie McKenzie, Vice Chair, Cordiant Capital

Panelists: Dekia Scott, Chief Investment Officer, Southern Company
Gbenga Oladeji, Managing Director, Johnson & Johnson

12:15 PM - 1:05 PM Central Time

NASP Afternoon Plenary

CIO Panel

Moderator: Shundrawn Thomas, President, Northern Trust Asset Management

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Panelists:

Doug Brown, Chief Investment Officer, Exelon Corporation
Nickol Hackett, Chief Investment Officer, Joyce Foundation

1:05 PM - 2:05 PM Central Time

Joyce Johnson Recognition

Fireside Chat

Mellody Hobson, President & co-CEO, Ariel Investments
Arlene Isaacs-Lowe, President, Moody's Foundation

2:15 PM - 3:45 PM Central Time

One on One Career Coaching + Corporate Sponsors Corner

SCHEDULE OF EVENTS

Thursday, December 10, 2020

All Attendees are invited to attend the Institutional, Municipal Finance, Professional Development, Brokerage or AEMS Tracks

9:00 AM - 10:00 AM Central Time

NASP Morning Plenary

Fireside Chat with Elected Officials / Maynard Jackson Jr. Award Presentation

Moderator: Senator James F. Clayborne, Jr., Partner, Clayborne and Wagner, LLP

Panelists: Lori Lightfoot, Mayor, City of Chicago

Toni Preckwinkle, President, Cook County Board

JB Pritzker, Governor, State of Illinois

10:10 AM - 11:10 AM Central Time

NASP Morning Plenary

Conference Roundtable

Is there a declining trend in diverse manager programs and support? Why? How can this be addressed? Audience interactive with NASP facilitator to lead the discussion.

Facilitator: Dr. Nat Irvin, Assistant Dean of Thought Leadership and Civic Engagement, and Woodrow M. Strickler Chair, Professor of Management Practice, University of Louisville, College of Business

11:20 AM - 12:20 PM Central Time

NASP Afternoon Plenary

Consultant CEO Roundtable

Moderator: Donna Sims Wilson, Chief Operating Officer, Kah Capital, Past-President, NASP Board

Panelists:

Ron Peyton, CEO, Callan, LLC

Samuel Austin, III, Partner, NEPC, LLC

SCHEDULE OF EVENTS

Post – Conference Sessions; Wednesday, December 16, 2020

9:00 AM - 9:45 AM Central Time

Professional Development Series

Concurrent Breakout Session: The Changing Environment of LPs:

The sophistication of the investor community from family offices, public and private plans through corporations has resulted in a growth in direct investments coupled with a series of new demands for the public and private fund community. LPs have created robust in-house teams and a new set of criteria for overseeing their own portfolios and investment models. Today, new LP demands reach far beyond the fee structure and exit models. With direct investments and the risk of competing with the LP community for deal flow, how the GP community competes and continues to advance demands cutting edge approaches to accessing data, deal flow and even exploring more of a global reach.

Moderator: Nanette Aguirre, Partner, Greenberg Traurig, LLP

Panelists:

Robert Greene, President & CEO, National Association of Investment Companies

Angela Matheny, Director of Investment Staff and Head of Diverse Manager Equity, Colonial Consulting

Kirk Sims, Head of Emerging Manager Program, Texas Teachers' Retirement System

9:00 AM - 9:45 AM Central Time

Institutional

Concurrent Breakout Session: Getting to Know Our Neighbors: Foundations & Endowments

This breakout session will guide attendees through various allocation approaches of well-known foundations, endowments, and outsourced CIOs, providing insight into potential partnership opportunities.

Moderator: Miguel Thames, Founder, T.I.G. Advisory

Panelist:

Caroline Greer, Managing Director, Commonfund

Sharcus Steen, Director of Investments, University of Maryland Foundation

Matthew Wright, Founder and CIO, Disciplina

Reginald Sanders, CFA, CAIA, Director of Investments, Kellogg Foundation

9:00 AM - 9:45 AM Central Time

AEMS

Concurrent Breakout Session: Dispatches from Africa, The CIO's Travelogue

Candid conversation with Chief Investment Officers and Plan Sponsors who have traveled and invested in Africa.

Moderator: Runa Alam, Chief Executive Officer, Development Partners International

Panelists:

Joseph Boateng, Chief Investment Officer, Casey Family Programs

Jarred Glansbeek, Chief Executive Officer, Riscura

Angela Miller-May, Chief Investment Officer, Chicago Teachers' Pension Fund

9:00 AM - 9:45 AM Central Time

Municipal

Concurrent Breakout Session: Benefits of a Diverse Investor Base

This panel will highlight what issuers can do to maximize the diversity of institutional investors in their bond issuances. Panelists will discuss best practices in conducting investor outreach. Specifically, how to successfully market to domestic and international investors during a pandemic.

Moderator: Natasha Holiday, Managing Director, Municipal Markets, RBC

Panelists:

Marjorie Henning, Deputy Comptroller, New York City

Simone Santiago, Senior Municipal Bond Trader, Eaton Vance

Sonelius Kedrick-Brown, Head of Corporate Treasury & Taxable Fixed Income Solutions, DWS – Deutsche Bank

9:00 AM - 9:45 AM Central Time

Brokerage

Concurrent Breakout Session: COVID, Currency and Carbon

This session will explore the intersection between the following three concepts: COVID: How supply chain disruptions and labor shortages experienced during the pandemic has compelled manufacturers to invest in automation & robots, and to consider 3D printing as way to bring manufacturing closer to home; Currency: How the perceived loss of American exceptionalism and a rising deficit has contributed to dollar weakness, while benefiting the yuan and the euro; Carbon: How stimulus bills to recover from COVID-related recessions are directing billions of dollars into low-carbon initiatives like renewable energy, electric mobility and EV charging, and hydrogen fuel infrastructure.

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9:55 AM - 10:40 AM Central Time

Plenary: The Social of ESG: Investing in Diversity and Inclusion

2020 has seen strong calls for social, economic and racial change. Firms are developing funds and indices that are more representative of the diversity in financial services. In what other ways can ESG practitioners support social change while maintaining financial growth goals? What will ESG investing look like in 2021 and beyond as more investors look to invest in socially conscious ways?



AGENDA REPORT

TO: Oakland Police and Fire Retirement Board
FROM: Teir Jenkins
Investment and Operations Manager
SUBJECT: Authorization and Reimbursement of Board/Staff Travel/Education Expenses
DATE: November 24, 2020

David Jones, Staff member of the **Oakland Police and Fire Retirement System** board, requests authorization for reimbursement of travel and/or board education related funds for the event detailed below. Staff has verified that budgeted funds are available for this Staff member to be reimbursed.

Staff recommends the reimbursement of travel/education funds for the event below be approved by board motion.

Travel/Education Event: National Association of Securities Professionals (NASP)
31ST Annual Pension & Financial Services Conference

Event Location: Virtual Conference

Event Date: December 7, 2020 through December 10, 2020

Estimated Event Expense*: \$125.00

Notes: Prior Approval received by PFRS Board President
Walter L. Johnson, Sr.

* If enrollment, registration, or admission expenses are required, the fund will process a check in advance and pay vendor directly; all other board-approved reimbursements will be made upon delivery of receipts to staff by the travelling party. Cancellation of event attendance requires return of all reimbursed funds paid to attendee to the fund.

Respectfully submitted,

Teir Jenkins
Investment & Operations Manager
Oakland Police and Fire Retirement System

Attachments:
(1) Resolution # 8005
(2) National Association of Securities Professionals (NASP) 31ST Annual Pension & Financial Services Conference Agenda

PFRS Board Meeting
December 10, 2020
Agenda Item B4

ATTACHMENT 1

Resolution No. 8005

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

Approved as to
Form and Legality



RESOLUTION No. 8005

ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

RESOLUTION APPROVING REQUEST OF OAKLAND POLICE AND FIRE RETIREMENT SYSTEM PLAN ADMINISTRATOR DAVID F. JONES TO ATTEND THE NATIONAL ASSOCIATION OF SECURITIES PROFESSIONALS 31ST ANNUAL VIRTUAL PENSION & FINANCIAL SERVICES CONFERENCE FROM DECEMBER 7 THROUGH DECEMBER 10, 2020 IN A VIRTUAL FORMAT AND FOR REIMBURSEMENT OF REGISTRATION FEES IN AN AMOUNT NOT TO EXCEED ONE-HUNDRED TWENTY-FIVE DOLLARS (\$125.00)

WHEREAS, the Oakland Police and Fire Retirement System (PFRS) Education and Travel Policy ("Travel Policy") requires that PFRS Board members and staff obtain prior Board approval of all education and travel-related expenses that will be reimbursed by PFRS; and

WHEREAS, PFRS Plan Administrator David F. Jones would like to attend the National Association of Securities Professionals 31st Annual Virtual Pension & Financial Services Conference ("the Conference") in a virtual format from December 7 through December 10, 2020; and

WHEREAS, in compliance with the Travel Policy, Plan Administrator David F. Jones has submitted documentation showing that registration fees to attend the Conference will be \$125.00; now, therefore, be it

RESOLVED: That System Plan Administrator David F. Jones' request to attend the National Association of Securities Professionals 31st Annual Virtual Pension & Financial Services Conference in a virtual format from December 7 through December 10, 2020 at an estimated cost of \$125.00 is approved; and be it

FURTHER RESOLVED: That the PFRS Board authorizes reimbursement of registration fees in an amount not to exceed \$125.00 for Plan Administrator David F. Jones' attendance at the National Association of Securities Professionals 31st Annual Virtual Pension & Financial Services Conference.

IN BOARD MEETING, CITY HALL, OAKLAND, CA DECEMBER 10, 2020

PASSED BY THE FOLLOWING VOTE:

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST: _____
PRESIDENT

ATTEST: _____
SECRETARY

ATTACHMENT 2

**National Association of Securities Professionals
31st Annual Pension & Financial Services
Conference Agenda**

SCHEDULE OF EVENTS

Pre-Conference: Monday, December 7, 2020

THE NASP INSTITUTE (TNI) **Trustees/Plan Sponsors/Investment Staff/Consultants ONLY (plus African trustees)*

TNI is a robust educational forum **exclusively** for members of the pension plan, foundation, and endowment community. This year, we also plan to offer the session to members of the investment consultant community. The specific courses are designed to serve a wide range of skill levels and are in an instructional style format.

In partnership with PFM Asset Management LLC, NASP is pleased to offer **six (6) Finance CPE Credits** for participation in The NASP Institute.

Learning Objectives:

NASP Institute Updated Learning Objectives:

- *Learn the key tenets of thematic, macro, factors based, and other types of investing*
- *Learn about portfolio strategies from the simple equity income to defensive equity to hedge funds and other more complex options*
- *Learn the differences among benchmarks for varying asset classes and regions and scoring and assessing ESG factors*
- *Develop your knowledge on various fixed income strategies including the differences between core and non-traditional strategies*

Advanced preparation is not necessary. Attendees must currently serve as Trustees or Staff to an Institutional Fund or Family Office. Program levels are presented in a group-live format at Intermediate and Advanced levels.

PFM Asset Management is registered with the National Association of State Boards of Accountancy (NASBA) as a sponsor of continuing professional education on the National Registry of CPE Sponsors. State boards of accountancy have final authority on the acceptance of individual courses for CPE credit.

Complaints regarding registered sponsors may be addressed to the: National Registry of CPE Sponsors, 150 Fourth Avenue North, Suite 700, Nashville, TN, 37219-2417, www.nasba.org.

9:00 AM - 9:30 AM Central Time

The NASP Institute (TNI) **Trustees/Plan Sponsors/Investment Staff/Consultants ONLY (plus African trustees)*

Primer for the Day: Gameshow Style

This interactive session will help you prepare for your time with us for the NASP Institute. Get a refresher of the ABCs of asset allocation whether tactical or strategic asset allocation, understand the framework of key concepts to be discussed, and hear about best practices of setting policies, fiduciary responsibility and governance.

Instructors:

Von Hughes, Managing Director, PAAMCO Prisma

9:30 AM -10:30 AM Central Time

The NASP Institute (TNI) **Trustees/Plan Sponsors/Investment Staff/Consultants ONLY (plus African trustees)*

Bond-nanza: A Review of Old and Burgeoning Fixed Income Sectors

With bond yields at historic lows in most of the developed world, many investors have been forced to rethink their fixed income allocations in order to meet their portfolio objectives. This prolonged market condition has put particular stress on traditional fixed income instruments that have historically played a critical role in institutional portfolios. In response, institutional investors are embracing alternative credit strategies that offer opportunities for higher rates of return relative to traditional fixed income. Those higher rates of return also come with added risks, as alternative credit strategies are typically less liquid, less regulated, and less transparent than their traditional counterparts. This session will seek to define the various segments within traditional and alternative credit, to highlight several key characteristics of these strategies, and to discuss real-time examples of the key risks and opportunities for institutional investors in today's market.

Instructors:

Kristin Ceva, Managing Principal, Payden & Rygel

Kevin Dockrell, Institutional Portfolio Manager – Credit Strategies, RBC

10:35 AM-11:35 AM Central Time

The NASP Institute (TNI) **Trustees/Plan Sponsors/Investment Staff/Consultants ONLY (plus African trustees)*

Portfolio Analytics: How “Good” is your Fund

A benchmark serves an essential role in investing and allows investors to measure the relative returns and volatility of their total plan, their composite portfolios, and their individual managers. Benchmarks should set an appropriate expectation for the magnitude by which an investment portfolio’s return should vary and under what market conditions that variance could be positive, neutral, or negative. There are many criteria an investor should consider when selecting the best-fit benchmark and under certain circumstances, two benchmarks may be best. Additionally, there are increasing requirements to integrate ESG factors into the investment process of all strategies, which may influence the choice of a benchmark, and, for many asset owners, evaluating non-sustainable and sustainable strategies to traditional investment metrics has been a challenge. This session will explore the importance of setting expectations through proper benchmarking and the various ways in which asset owners can evaluate and monitor traditional and ESG strategies and will also discuss the role of investment goals and objectives to determine the appropriate ways to measure how “good” a fund is.

Instructors:

Simone Andrews, ESG Credit Analyst, Bloomberg

Floyd Simpson, Senior Managing Consultant, PFM Group

11:40 AM - 12:40 PM Central Time

The NASP Institute (TNI) **Trustees/Plan Sponsors/Investment Staff/Consultants ONLY (plus African trustees)*

Defensive Strategies in a Volatile and Uncertain Marketplace

Whether faced with managing liquidity within an uncertain interest rate environment, minimizing the impact of a historic oil supply/demand curve imbalance, or navigating an economy crippling global pandemic, we were reminded in 2020 of the difficulty of protecting funding statuses in a volatile environment. Now faced with the first recession in more than a decade after years of bullish returns, investors must now revisit utilizing different portfolio strategies across multiple asset classes to both protect principal while still seeking a positive return. By revisiting traditional defensive portfolio strategies available within the equity markets and exploring more diverse, complex multi-asset

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investing solutions, attendees will gain insights in how different managers are working to minimize the impact of high volatility while providing stable returns. By incorporating discussions around commodities, sector themes, and the evolving role of emerging markets, investors will reexamine the various tools at their disposal to build a defensive portfolio for a long-term investment horizon.

Instructors:

Rupal J. Bhansali, Chief Investment Officer and Portfolio Manager, International & Global Equities, Ariel Investments

Lowell Yura, Head of Multi-Asset Solutions, North America

Jeffrey Saret, Senior Vice President, Portfolio Strategist, The D.E. Shaw Group

All Attendees are invited to attend the Institutional, Municipal Finance, Professional Development, Brokerage or AEMS Tracks

12:45 PM - 1:30 PM Central Time

Africa & Emerging Markets Summit (AEMS)

New Chapter in MiDA Advisors and NASP Engagement

This session will introduce the MiDA Advisory vision and roadmap. We will highlight the Industry Partners initiative and successes of the NASP-MiDA Partnership and increasing allocations to diverse and emerging asset managers.

Moderator: Aymeric Saha, Managing Director, MiDA

Panelists: Sundeeep Raichura, CEO, Zamara Actuaries, Administrators, Consultants, Ltd.
Henry Jones, President, Board of Administration, CALPERS

SCHEDULE OF EVENTS

Tuesday; December 8, 2020

All Attendees are invited to attend the Institutional, Municipal Finance, Professional Development, Brokerage or AEMS Tracks

8:00 AM - 9:00 AM Central Time

NASP Morning Plenary
“Monetizing” Diversity

The financial industry recognizes the value of diversity; furthermore, research has demonstrated that diversity increases productivity, increases creativity, increases profits, improves employee engagement, reduces employee turnover and improves company reputation. However, the number of ethnic minority firms in the financial industry have decreased notably in recent years. This panel will explore what the industry is doing (and can do) to improve the growth and enhance the success of ethnic minority firms and thereby “monetize” diversity.

Moderator: Monica Bertran, Head of Corporate Communications Digital and Innovation, Bloomberg

Panelists:

Justin Dean, Boston Consulting Group

Carey Lathrop, Managing Director, Co-Head of Markets & Securities Services, Citi

Jasmine Richards, CFA, Senior Investment Director, Manager Diversity, Cambridge Associates

9:10 AM - 9:55 AM Central Time

Professional Development Series (PDS)

Concurrent Breakout Session: Is the American Dream Dying - A Conversation About the US Economy and Rates

This session will explore the state of credit markets in the wake of Covid and the US elections. Additionally this fireside chat will provide insight in the future of the American dream of owning your own home and its long term effects on the country’s GDP growth.

Panelists:

Troy Dixon, Managing Partner and Chief Investment Officer, Hollis Park Partners

Erik Hall, Executive Director, GCM Grosvenor

9:10 AM - 9:55 AM Central Time

Institutional

Concurrent Breakout Session: Differentiated Equity: Micro Cap to Mega Cap and Beyond

Long gone are the days of gaining equity exposure by simply investing in blue chip stocks. As investors move towards passive investing in equity, where are the opportunities for active management? This breakout session will explore how investors are gaining exposure to differentiated strategies in the public equity spectrum.

Moderator: Will Forde, CFA, CAIA, senior Consultant, NEPC, LLC

Panelists:

William Heard, Founder, CEO & CIO, Heard Capital

Laura Kernaghan, Senior Director of Investments, Chicago Community Trust

Peter Zaldivar, Principal & Senior Portfolio Manager, Kabouter Management

9:10 AM - 9:55 AM Central Time

AEMS

Concurrent Breakout Session: Prosper Africa: Unleashing US-Africa Trade and Investment

Established in 2018, Prosper Africa is an initiative that brings together the resources of over 15 U.S. Government agencies to connect U.S. and African businesses with new buyers, suppliers, and investment opportunities. In this panel discussion, executives from two of those agencies – USAID and the DFC – will discuss their independent and collaborative efforts to drive commerce and investment between the U.S. and the African continent.

Moderator: Nadine Mentor, Founder and President, Mentor Holdings and Investments Inc.

Panelists:

Debra Erb, Managing Director of Housing Real Estate Project Finance, United States International Development Finance Corporation

Cameron Khosrowshahi, Investment Officer, Office of Private Capital and Microenterprise, United States Agency for International Development (USAID)

9:10 AM - 9:55 AM Central Time

Municipal

Concurrent Breakout Session: State Treasurer's Roundtable

Several of the most prominent treasurers in the country will discuss some of the challenges and opportunities they are facing and their plans to manage them-- with finite resources. In addition, the treasurer's will discuss the important role diversity will

have as they work to achieve the investment objectives of the public funds they manage and finance their capital improvement programs.

Moderator: Guy Logan, Managing Director, Citi, Board Chair, NASP

Panelists:

Honorable Rachael Eubanks, Treasurer, State of Michigan

Honorable Bruno Fernandes, Treasurer, District of Columbia

Honorable Shawn Wooden, Treasurer, State of Connecticut

9:10 AM - 9:55 AM Central Time

Brokerage

Concurrent Breakout Session: CFO/Treasury Panel

Panelists:

Rejji Hayes, Executive Vice President & Chief Financial Officer, CMS Energy

Jon Haygood, Assistant Treasurer, Southern Company

9:10 AM - 9:55 AM Central Time

Sponsored by Morgan Stanley

Concurrent Breakout Session: Modern Wealth Management: A Career as a Financial Advisor

In today's complex and volatile markets, it is imperative that individuals have the information and advice necessary to make sound investment and financial decisions. Hear how Morgan Stanley financial advisors leverage the firm's comprehensive capabilities and specialized services to assist clients in creating strategies to plan for their future, protect their wealth, and secure their legacy. Learn what it takes to build a successful career in wealth management from this dynamic panel of accomplished financial advisors.

Moderator: Justin Castleberry, First Vice President, Sub-Complex Manager, St. Paul, MN, Morgan Stanley

Panelists: Gail Covington, Senior Vice President, Financial Advisor, San Francisco, CA, Morgan Stanley

Antonio Monk, Senior Vice President, Financial Advisor, Dallas, TX, Morgan Stanley

Jesse Walton, Jr., Senior Vice President, Financial Advisor, Atlanta, GA, Morgan Stanley

10:05 AM - 11:35 AM Central Time

Women's Forum / Pacesetters Award Presentation

U.S. Congresswoman Joyce Beatty Remarks

This Forum will feature Black women working to make changes and expand opportunities in financial services for minority women. The forum will particularly focus on women in FinTech, global finance and finance entrepreneurship.

Remarks: U.S. Congresswoman Joyce Beatty, 3rd District of Ohio

Keynote: Carla Harris, Vice Chairman, Managing Director and Senior Client Advisor, Morgan Stanley

Moderator: Kim Evans, Senior Vice-President, Alternative Fund Services, Northern Trust

Panelists: Ingrid Jacobs, Vice President, Chief Diversity Officer, Eaton Vance
Robin Washington, Board of Directors, Alphabet

Tariye Gbadegesin, Managing Director & Chief Investment Officer, ARM-Harith Infrastructure Managers

11:35 AM - 1:05 PM Central Time

NASP Afternoon Plenary

Building a Dynamic Firm / Travers Bell Award Presentation

Hosted by Boston Consulting Group

Wells Fargo

1:30 PM - 2:15 PM Central Time

Professional Development Series

Concurrent Breakout Session: The Growth of Artificial Intelligence and How Technology is Disrupting Your Bottom Line Positively and Negatively

Long are the days of Uber and Airbnb as the household names for AI. Today, Regulators, Entrepreneurs, and Funds use technology to gain a competitive advantage. The rise in venture capital and capital raising on a global basis to the use of technology to fast track access to data and deal sourcing is moving at lightning speed. While the cost of AI is often a consideration when addressing business bottlenecks, more and more market participants use AI and technology as a material variable to advancing their success. Ignoring the implementation of technology can cause an adverse effect.

Panelists: Ashley Evans, Principal, Technology, Media and Telecom, Carlyle Group

1:30 PM - 2:15 PM Central Time

AEMS

Concurrent Breakout Session: Smart Cities

By the year 2025 (in only 5 years) 45-50% of the population of Continental Africa will live in cities. There is a major urbanization trend that is taking place throughout continental Africa demanding a cohesive approach on how to adequately prepare to address this demographic tidal wave. Advanced thinkers on the subject believe that well planned advanced cities of the future (Smart Cities) will be required and that Africa will be a leading destination for these Smart Cities. Smart Cities create great opportunities for investments by providing a cohesive platform and master-planned approach to invest in major tenets of a Smart City: Energy, Technology, Food, Water, Infrastructure and healthcare. In fact, private equity and some hedge funds are organizing themselves to invest in these broad areas through a Smart City construct and a number of Smart City Funds are now being created to address these requirements. This is an eminently investable trend that will allow institutional investors to access the wave of Smart Cities that will be created over the next 25 years and in the process invest in the fastest growing continent in the world: Africa

Moderator: Marlon Brown, CEO, Clarendon Partners

Panelists:

Ndidi Nwueli, Managing Partner, Sahel Consulting Agriculture and Nutrition, Ltd.

Sola Lawson, Managing Director & Co-Head, African Infrastructure Investment Managers

Danladi Verheijen, Managing Director, Verod Capital

SCHEDULE OF EVENTS

Wednesday; December 9, 2020

All Attendees are invited to attend the Institutional, Municipal Finance, Professional Development, Brokerage or AEMS Tracks

8:00 AM - 8:45 AM Central Time

NASP Morning Plenary

Keynote Speaker: The Future of Capitalism

Dr. Nat Irvin, Assistant Dean of Thought Leadership and Civic Engagement, and Woodrow M. Strickler Chair, Professor of Management Practice, University of Louisville, College of Business

8:45 AM - 9:30 AM Central Time

NASP Morning Plenary

Economic Outlook - African Economic Outlook

Speaker: Dana Peterson, Chief Economist, Conference Board

9:30 AM - 10:15 AM Central Time

NASP Morning Plenary

No matter what you name it, one thing is certain, capital allocators of all types and from all geographies are proactively exploring the optimal ways to approach Sustainable and Impact Investing. Some are incorporating ESG principles in their investment policies, investing directly in impact portfolios and seeking to better understand how their external managers are incorporating ESG factors into the investment decision-making process. This session will provide a holistic view of the sustainable and impact investing space and explore key questions including:

- The ecosystem and approaches (i.e., negative screening, impact investing, thematic investing)
- Industry trends and myths about sustainable investing
- Market inefficiencies and the opportunity set, using ESG as a tool to identify risks, measuring impact
- How are DB and DC plans approaching sustainable investing?
- How will developments in the market continue to affect real assets such as commodities?
- What are ways in which corporate engagement and stewardship are evolving?

Moderator: Samantha Grant, CFA, CAIA, Marquette Associates

Panelists:

Jason M. Goins, CFA, Managing Director and Equity Research Analyst, Wellington Management Company LLP

Frances Barney, Managing Director, Head of Global Risk Solution, BNY Mellon
Carlton Lenoir, Chief Benefits Officer, Teachers' Retirement System of IL

10:25 AM - 11:10 AM Central Time

Institutional

Concurrent Breakout Session: Technology That Excites

Each year brings game-changing technology trends that shape how we live and how we do business – machine learning, artificial intelligence, cloud computing, and robotic automation, to name a few. This breakout session will explore burgeoning investment opportunities in technology for investors in public equity, private equity, and venture capital.

Panelists:

Rodrigo Garcia, Deputy Treasurer & Chief Investment Officer, State of Illinois
Khadir Richie, Principal, Richie Capital Group
Kelly Hardeman, Vice President, Insight Ventures
Dr. Kola Olofinboba, Managing Partner, Fairview Capital

10:25 AM - 11:10 AM Central Time

Brokerage

Concurrent Breakout Session: Global Trading and How We Make It Work

Moderator: Reggie Scantlebury, Managing Director, Stern Brothers

Panelists:

Stuart George, Division Director, Global Head of Equity Trading, Macquarie Investment Management
Paul Whitehead, Managing Director, Blackrock

10:25 AM - 11:10 AM Central Time

Municipal

Concurrent Breakout Session: U.S. Mayor's Roundtable

Mayors throughout the U.S. will provide their insights on how COVID-19 has affected their cities, the pace of the economic recovery, and how social justice has influenced policy and legislative matters.

Moderator: Tray Hairston, Attorney, Butler Snow, LLP

Panelists:

Honorable Stephen K. Benjamin, Mayor, City of Columbia, SC

Honorable Keisha Lance Bottoms, Mayor, City of Atlanta, GA
Honorable Sylvester Turner, Mayor, City of Houston, TX

10:25 AM - 11:10 AM Central Time

Defined Contributions

Concurrent Breakout Session: Sponsored by Nationwide

Moderator: Eric Stevenson, President, Nationwide Retirement Plans, Nationwide

11:20 AM - 12:05 PM Central Time

Institutional

Concurrent Breakout Session: Let's Get Real: A Discussion on Real Assets

Over the past decade, institutional investors have been steadily increasing their exposures to real assets for a variety of reasons that include diversification, yield, and inflation hedging. These increased allocations are not just simply in the form of real estate. Infrastructure (equity and debt), natural resources, commodities, and agriculture (to name a few) are becoming more prevalent in portfolios. This breakout session will explore the challenges and opportunities of investing in real assets across the spectrum.

Moderator: Avery Robinson, CAIA, Senior Vice President & Real Assets Co-Manager, Callan, LLC

Panelists: Reynold Martin, Managing Principal, Infrastructure and Energy, Allstate
David Cibrian, Chief Executive Officer, Co-Chief Investment Officer, and Co-Founder, American Triple I Partners
Jenny Chan, Head of Portfolio & Strategy, MIP Funds, Managing Director, Macquarie North American Private Funds

11:20 AM - 12:05 PM Central Time

AEMS

Concurrent Breakout Session: Re-Imagining Business Opportunities in the Next Big Growth Market

Conversation with the Co-Authors of Africa's Business Revolution: How to Succeed in the World's Next Big Growth Market. As countries recover from the impact of the pandemic and rebuild, there will be a need to re-imagine viable business opportunities in emerging markets such as Africa. Global and Africa-based companies seeking to access new growth markets or pivot existing business strategies, will need to focus on opportunities that will leverage on Africa's young population, fast-growing and increasingly urbanized cities coupled with significant infrastructure gaps including social infrastructure and the challenges presented by the high twin deficits (fiscal and current). Scaling opportunities to drive attractive returns and broad reaching impact will require

even more agility in frontier markets such as Africa. The panel provides the inside story on business in Africa and its future growth prospects and helps attendees understand and seize the opportunities for building profitable, sustainable enterprises on the African continent. The Panel will feature leading CEOs from key sectors including ICT, Manufacturing, Energy and top African Institutional investors.

Moderator: Tariye Gbadegesin, Managing Director & Chief Investment Officer, ARM-Harith Infrastructure Managers

Panelists:

Mitchell Elegbe, Chief Executive Officer, Interswitch
Sean Long, Chief Executive Officer, Denham Capital
Richard Okello, Co-Founding Partner, Sango Capital

11:20 AM - 12:05 PM Central Time

Municipal

Concurrent Breakout Session: A Practitioners Perspective to Financing Transportation Infrastructure: Present and Future

This panel will facilitate a discussion with large transportation issuers to hear their approaches to funding large project or program of projects, describe what tools work well, where there are challenges, and where they see opportunities for the future.

Moderator: Matt Bernstein, Director, Citi – Transportation Group

Panelists:

Horatio Porter, Chief Financial Officer, North Texas Tollway Authority
Erin Roseman, Chief Financial Officer, Transbay Joint Powers Authority
Dr. Shawn Wilson, Secretary, State of Louisiana Department of Transportation & Development

11:20 AM - 12:05 PM Central Time

Brokerage

Concurrent Breakout Session: Corporate Pensions

Moderator: Obie McKenzie, Vice Chair, Cordiant Capital

Panelists: Dekia Scott, Chief Investment Officer, Southern Company
Gbenga Oladeji, Managing Director, Johnson & Johnson

12:15 PM - 1:05 PM Central Time

NASP Afternoon Plenary

CIO Panel

Moderator: Shundrawn Thomas, President, Northern Trust Asset Management

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Panelists:

Doug Brown, Chief Investment Officer, Exelon Corporation
Nickol Hackett, Chief Investment Officer, Joyce Foundation

1:05 PM - 2:05 PM Central Time

Joyce Johnson Recognition

Fireside Chat

Mellody Hobson, President & co-CEO, Ariel Investments
Arlene Isaacs-Lowe, President, Moody's Foundation

2:15 PM - 3:45 PM Central Time

One on One Career Coaching + Corporate Sponsors Corner

SCHEDULE OF EVENTS

Thursday, December 10, 2020

All Attendees are invited to attend the Institutional, Municipal Finance, Professional Development, Brokerage or AEMS Tracks

9:00 AM - 10:00 AM Central Time

NASP Morning Plenary

Fireside Chat with Elected Officials / Maynard Jackson Jr. Award Presentation

Moderator: Senator James F. Clayborne, Jr., Partner, Clayborne and Wagner, LLP

Panelists: Lori Lightfoot, Mayor, City of Chicago

Toni Preckwinkle, President, Cook County Board

JB Pritzker, Governor, State of Illinois

10:10 AM - 11:10 AM Central Time

NASP Morning Plenary

Conference Roundtable

Is there a declining trend in diverse manager programs and support? Why? How can this be addressed? Audience interactive with NASP facilitator to lead the discussion.

Facilitator: Dr. Nat Irvin, Assistant Dean of Thought Leadership and Civic Engagement, and Woodrow M. Strickler Chair, Professor of Management Practice, University of Louisville, College of Business

11:20 AM - 12:20 PM Central Time

NASP Afternoon Plenary

Consultant CEO Roundtable

Moderator: Donna Sims Wilson, Chief Operating Officer, Kah Capital, Past-President, NASP Board

Panelists:

Ron Peyton, CEO, Callan, LLC

Samuel Austin, III, Partner, NEPC, LLC

SCHEDULE OF EVENTS

Post – Conference Sessions; Wednesday, December 16, 2020

9:00 AM - 9:45 AM Central Time

Professional Development Series

Concurrent Breakout Session: The Changing Environment of LPs:

The sophistication of the investor community from family offices, public and private plans through corporations has resulted in a growth in direct investments coupled with a series of new demands for the public and private fund community. LPs have created robust in-house teams and a new set of criteria for overseeing their own portfolios and investment models. Today, new LP demands reach far beyond the fee structure and exit models. With direct investments and the risk of competing with the LP community for deal flow, how the GP community competes and continues to advance demands cutting edge approaches to accessing data, deal flow and even exploring more of a global reach.

Moderator: Nanette Aguirre, Partner, Greenberg Traurig, LLP

Panelists:

Robert Greene, President & CEO, National Association of Investment Companies

Angela Matheny, Director of Investment Staff and Head of Diverse Manager Equity, Colonial Consulting

Kirk Sims, Head of Emerging Manager Program, Texas Teachers' Retirement System

9:00 AM - 9:45 AM Central Time

Institutional

Concurrent Breakout Session: Getting to Know Our Neighbors: Foundations & Endowments

This breakout session will guide attendees through various allocation approaches of well-known foundations, endowments, and outsourced CIOs, providing insight into potential partnership opportunities.

Moderator: Miguel Thames, Founder, T.I.G. Advisory

Panelist:

Caroline Greer, Managing Director, Commonfund

Sharcus Steen, Director of Investments, University of Maryland Foundation

Matthew Wright, Founder and CIO, Disciplina

Reginald Sanders, CFA, CAIA, Director of Investments, Kellogg Foundation

9:00 AM - 9:45 AM Central Time

AEMS

Concurrent Breakout Session: Dispatches from Africa, The CIO's Travelogue

Candid conversation with Chief Investment Officers and Plan Sponsors who have traveled and invested in Africa.

Moderator: Runa Alam, Chief Executive Officer, Development Partners International

Panelists:

Joseph Boateng, Chief Investment Officer, Casey Family Programs

Jarred Glansbeek, Chief Executive Officer, Riscura

Angela Miller-May, Chief Investment Officer, Chicago Teachers' Pension Fund

9:00 AM - 9:45 AM Central Time

Municipal

Concurrent Breakout Session: Benefits of a Diverse Investor Base

This panel will highlight what issuers can do to maximize the diversity of institutional investors in their bond issuances. Panelists will discuss best practices in conducting investor outreach. Specifically, how to successfully market to domestic and international investors during a pandemic.

Moderator: Natasha Holiday, Managing Director, Municipal Markets, RBC

Panelists:

Marjorie Henning, Deputy Comptroller, New York City

Simone Santiago, Senior Municipal Bond Trader, Eaton Vance

Sonelius Kedrick-Brown, Head of Corporate Treasury & Taxable Fixed Income Solutions, DWS – Deutsche Bank

9:00 AM - 9:45 AM Central Time

Brokerage

Concurrent Breakout Session: COVID, Currency and Carbon

This session will explore the intersection between the following three concepts: COVID: How supply chain disruptions and labor shortages experienced during the pandemic has compelled manufacturers to invest in automation & robots, and to consider 3D printing as way to bring manufacturing closer to home; Currency: How the perceived loss of American exceptionalism and a rising deficit has contributed to dollar weakness, while benefiting the yuan and the euro; Carbon: How stimulus bills to recover from COVID-related recessions are directing billions of dollars into low-carbon initiatives like renewable energy, electric mobility and EV charging, and hydrogen fuel infrastructure.

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9:55 AM - 10:40 AM Central Time

Plenary: The Social of ESG: Investing in Diversity and Inclusion

2020 has seen strong calls for social, economic and racial change. Firms are developing funds and indices that are more representative of the diversity in financial services. In what other ways can ESG practitioners support social change while maintaining financial growth goals? What will ESG investing look like in 2021 and beyond as more investors look to invest in socially conscious ways?



AGENDA REPORT

TO: Oakland Police and Fire
Retirement Board

FROM: David Jones
Plan Administrator

SUBJECT: Audit Committee Agenda Pending List **DATE:** November 24, 2020

	SUBJECT	TENTATIVE SCHEDULED MTG DATE	STATUS
1	Status Report of the Ad Hoc Committee regarding Actuarial Funding date of July 1, 2026	December 8, 2020	
2	Staff review of the 2006 Management Audit.	TBD	

Respectfully submitted,

David F. Jones
Plan Administrator
Oakland Police & Fire Retirement Systems

Pursuant to the Governor's Executive Order N-29-20, all members of the City Council, as well as the City Administrator, City Attorney and City Clerk will join the meeting via phone/video conference and no teleconference locations are required

Oakland Police and Fire Retirement Board meetings are being held via Tele-Conference. Please see the agenda to participate in the meeting. For additional information, contact the Retirement Unit by calling (510) 238-6481.



Retirement Unit
150 Frank H. Ogawa Plaza
Oakland, California 94612

AGENDA

INVESTMENT COMMITTEE MEMBERS

Jaime T. Godfrey
Chairperson

R. Steve Wilkinson
Member

Robert W. Nichelini
Member

"In the event a quorum of the Board participates in the Committee meeting, the meeting is noticed as a Special Meeting of the Board; however, no final Board action can be taken. In the event that the Investment Committee does not reach quorum, this meeting is noticed as an informational meeting between staff and the Chair of the Investment Committee."

SPECIAL MEETING of the INVESTMENT AND FINANCIAL MATTERS COMMITTEE of the OAKLAND POLICE AND FIRE RETIREMENT SYSTEM ("PFRS")

Thursday, December 10, 2020

10:00 AM

**Tele-Conference Board Meeting
via Zoom**

OBSERVE

- To observe the meeting by video conference, please click on this link: <https://us02web.zoom.us/j/82880493983> at the noticed meeting time.
- To listen to the meeting by phone, please call the numbers below at the noticed meeting time: Dial (for higher quality, dial a number based on your current location):
- iPhone one-tap: US: +16699006833, 82880493983# or +13462487799, 82880493983#
- US: +1 669 900 6833 or +1 346 248 7799 or +1 253 215 8782 or +1 301 715 8592 or +1 312 626 6799 or +1 929 205 6099
- International numbers available: <https://us02web.zoom.us/j/82880493983>
- Webinar ID: 828 8049 3983.
If asked for a participant ID or code, press #.

PUBLIC COMMENTS

There are three ways to submit public comments.

- eComment. To send your comment directly to staff BEFORE the meeting starts, please email to mvisaya@oaklandca.gov with "PFRS Board Meeting" in the subject line for the corresponding meeting. Please note that eComment submission **closes two (2) hours before posted meeting time.**

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
SPECIAL INVESTMENT COMMITTEE MEETING
DECEMBER 10, 2020**

- To comment by Zoom video conference, click the “Raise Your Hand” button to request to speak when Public Comment is being taken on an eligible agenda item at the beginning of the meeting. You will be permitted to speak during your turn, allowed to comment, and after the allotted time, re-muted. Instructions on how to “Raise Your Hand” is available at: <https://support.zoom.us/hc/en-us/articles/205566129> - Raise-Hand-In-Webinar.
- To comment by phone, please call on one of the above listed phone numbers. You will be prompted to “Raise Your Hand” by pressing “*9” to speak when Public Comment is taken. You will be permitted to speak during your turn, allowed to comment, and after the allotted time, re-muted. Please unmute yourself by pressing *6.

If you have any questions, please email Maxine Visaya, Administrative Assistant II at mvisaya@oaklandca.gov

- - - ORDER OF BUSINESS - - -

- 1. Subject: Police and Fire Retirement System (“PFRS”) Investment Committee Meeting Minutes**
From: Staff of the PFRS Board
Recommendation: **APPROVE** October 28, 2020 Investment Committee meeting minutes.
- 2. Subject: Investment Market Overview**
From: Meketa Investment Group
Recommendation: **ACCEPT** an informational report on the global investment markets as of October 31, 2020.
- 3. Subject: Investment Fund Quarterly Performance Update as of September 30, 2020**
From: Meketa Investment Group
Recommendation: **ACCEPT** the Investment Fund Quarterly Performance update as of September 30, 2020.
- 4. Subject: Preliminary Investment Fund Performance Update as of October 31, 2020**
From: Meketa Investment Group
Recommendation: **ACCEPT** the Preliminary Investment Fund Performance update as of October 31, 2020.

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
SPECIAL INVESTMENT COMMITTEE MEETING
DECEMBER 10, 2020

5. **Subject:** \$13.9 Million Drawdown for Fiscal Year 2020/2021 (Quarter Ending March 2021) Member Allowances Jan 1, 2021 through March 30, 2021
From: Meketa Investment Group
Recommendation: **ACCEPT** an informational report and **RECOMMEND BOARD APPROVAL** of the Meketa Investment Group recommendation of \$13.9 million drawdown, which includes a \$10.9 million contribution from the City of Oakland and a \$3.0 million contribution from the PFRS Investment Fund, to be used to pay for the January 2021 through March 2021 Member Retirement Allowances.
6. **Subject:** Investment Manager Performance Review – Parametric Portfolio Associates, LLC, a PFRS Covered Calls Asset Class Investment Manager
From: Meketa Investment Group
Recommendation: **ACCEPT** informational report regarding the Diversity Policy of Parametric Portfolio Associates, LLC, a PFRS Covered Calls Asset Class Investment Manager.
7. **Subject:** Resolution No. 8006 - Resolution Authorizing a One-Year Extension of Professional Services Agreement with Parametric Portfolio Associates, LLC for Covered Calls Asset Class Investment Manager
From: Staff of the PFRS Board
Recommendation: **RECOMMEND BOARD APPROVAL** of Resolution No. 8006 - Resolution Authorizing a One-Year Extension of Professional Services Agreement with Parametric Portfolio Associates, LLC for Covered Calls Asset Class Investment Manager.
8. **Subject:** Plan and Process for Selecting New PFRS Investment Manager to Implement the Defensive Equity Investment Strategy
From: Meketa Investment Group
Recommendation: **RECEIVE** an updated informational report regarding options to consider for selecting possible candidates to act as the new PFRS Investment Manager to implement the PFRS Defensive Equity Investment Strategy. **DISCUSS** and **RECOMMEND BOARD APPROVAL** of the recommendation from Meketa Investment Group to move forward with a review of the 2018 finalists for further consideration and conduct interviews with candidates who wish to act as the new PFRS Defensive Equity Investment Strategy Manager at an upcoming Investment Committee Meeting.

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
SPECIAL INVESTMENT COMMITTEE MEETING
DECEMBER 10, 2020**

9. **Subject:** Informational Report Regarding Underperformance of the Crisis Risk Offset Systematic Trend Following/Alternative Risk Premia Investment Strategy
From: Meketa Investment Group
-
- Recommendation:** RECEIVE an informational report regarding an explanation for the underperformance of the Crisis Risk Offset Systematic Trend Following/Alternative Risk Premia Investment Strategy formerly managed by Parametric Portfolio Associates, LLC.
10. **Schedule of Pending Investment Committee Meeting Agenda Items**
11. **Open Forum**
12. **Future Scheduling**
13. **Adjournment**

AN INVESTMENT AND FINANCIAL MATTERS COMMITTEE MEETING of the Oakland Police and Fire Retirement System (“PFRS”) was held October 28, 2020 via Zoom Tele-Conference.

- Committee Members:
- Jamie T. Godfrey Chairperson
 - R. Steven Wilkinson Member
 - Robert W. Nichelini Member
- Additional Attendees:
- David Jones Plan Administrator
 - Jennifer Logue PFRS Legal Counsel
 - Teir Jenkins PFRS Staff Member
 - Maxine Visaya PFRS Staff Member
 - David Sancewich Meketa Investment Group
 - Sidney Kawanguzi Meketa Investment Group
 - Dan Ryan Parametric Portfolio Associates, LLC
 - Jim Roccas Parametric Portfolio Associates, LLC

The meeting was called to order at 10:00 am

Chairperson Godfrey moved Agenda Items #7 & #8 to occur after Agenda Item #1 to accommodate guests from Parametric Portfolio Associates, LLC, and follow with Agenda Item #2.

1. **Approval of Investment Committee Meeting Minutes** Chairperson Godfrey made a motion to approve the September 30, 2020 Investment Committee Meeting Minutes, second by Member Wilkinson. The motion passed.

[GODFREY – Y/ NICHELINI – Y/ WILKINSON – Y]
(AYES: 3/ NOES: 0/ ABSTAIN: 0)

7. **Investment Manager Performance Review – Parametric Portfolio Associates, LLC, a PFRS Covered Calls Investment Manager** – Dan Ryan and Jim Roccas of Parametric Portfolio Associates, LLC, a PFRS Passive Covered Call Strategy and Active Covered Call Strategy Asset Class Investment Manager, presented an annual informational report detailing the firms updated organizational structure, focusing on the acquisition of Eaton Vance Corporation, parent company, by Morgan Stanley Investment Management and recent changes surrounding the retirement of Jay Strohmaier, Managing Director, Investment Strategy and John Orsik, Managing Director, Investment Manager. A review of the investment strategy for each portfolio, the market environment, portfolio performance updates, and the firm’s diversity policy was also presented. Member Wilkinson requested a Diversity Report to be submitted to the committee for review in the coming weeks.

MOTION: Chairperson Godfrey made a motion to accept the informational report regarding the annual update from Parametric Portfolio Associates, LLC, a PFRS Covered Calls Asset Class Investment Manager, second by Member Wilkinson. Motion passed.

[GODFREY – Y/ NICHELINI – Y/ WILKINSON – Y]
(AYES: 3/ NOES: 0/ ABSTAIN: 0)

8. **Investment Manager Performance Review – Parametric Portfolio Associates, LLC, a PFRS Covered Call Investment Manager** – David Sancewich of Meketa Investment Group presented a summarized review and evaluation of Parametric Portfolio Associates, LLC, a PFRS Covered Calls Asset Class Investment Manager. Mr. Sancewich expressed confidence in the firm, has no concerns regarding their performance at this time, and recommends exercising the option to extend the agreement for an additional year. Chairperson Godfrey expressed concern due to the recent major organizational changes at the firm.

MOTION: Member Wilkinson made a motion to accept the informational report from Meketa Investment Group, recommend PFRS exercise the option to extend the service agreement with Parametric Portfolio Associates, LLC for an additional year and place the firm on Watch Status due to recent organizational changes, second by Chairperson Godfrey. The motion passed.

[GODFREY – Y/ NICHELINI – Y/ WILKINSON – Y]
(AYES: 3/ NOES: 0/ ABSTAIN: 0)

2. **Investment Market Overview** – David Sancewich of Meketa Investment Group provided an informational report on the global economic factors affecting the PFRS Fund as of September 30, 2020, including the impact of the Coronavirus Pandemic on the world investment markets and the upcoming Presidential Election. Chairperson Godfrey and Plan Administrator Jones posed questions regarding market volatility. Mr. Sancewich emphasized the importance of diversifying the PFRS Portfolio in the interest of capital preservation.

MOTION: Chairperson Godfrey made a motion to accept the informational report from Meketa regarding the investment market overview as of September 30, 2020, second by Member Nichelini. Motion passed.

[GODFREY – Y/ NICHELINI – Y/ WILKINSON – Y]
(AYES: 3/ NOES: 0/ ABSTAIN: 0)

3. **Preliminary Investment Fund Quarterly Performance Update as of September 30, 2020** – David Sancewich of Meketa Investment Group reported on the details of the Preliminary Investment Fund Performance Update as of September 30, 2020. Mr. Sancewich reported out PFRS Staff Member Jenkins has implemented the action from the last board meeting thus liquidating the Parametric Risk Premia Strategy and placed 50% of those assets into Fixed Income and 50% into the Long Duration Portfolio, a part of Crisis Risk Offset.

MOTION: Chairperson Godfrey made a motion to accept the informational report regarding the preliminary investment fund quarterly performance update as of September 30, 2020 from Meketa, second by Member Nichelini. Motion passed.

[GODFREY – Y/ NICHELINI – Y/ WILKINSON – Y]
(AYES: 3/ NOES: 0/ ABSTAIN: 0)

4. **Informational Presentation – Collapsing Global Interest Rates/Negative Interest Rates** – David Sancewich of Meketa investment Group presented an informational report for educational purposes on the topic of Collapsing Global Interest Rates and Negative Interest Rates.

MOTION: Chairperson Godfrey made a motion to accept the informational report from Meketa regarding collapsing global interest rates and negative interest rates, second by Member Nichelini. Motion passed.

[GODFREY – Y/ NICHELINI – Y/ WILKINSON – Y]
(AYES: 3/ NOES: 0/ ABSTAIN: 0)

5. **Options to Consider a New PFRS Investment Manager to Implement the Crisis Risk Offset Systematic Trend Following/Alternative Risk Premia (SARP) Investment Strategy**– David Sancewich of Meketa Investment Group presented options for selecting a new PFRS Investment Manager to Implement the Crisis Risk Offset Strategic Class. Mr. Sancewich discussed the details of possible options (1) Conduct a new RFP and (2) Review the remaining finalists from the 2018 Alternative Risk Premia search: AQR and Lombard. Meketa recommends opting to review the remaining finalists from 2018. Member Wilkinson requests we also consider the firm who was the fourth candidate. Chairperson Godfrey requested that diversity be incorporated in the review of candidates.

MOTION: Chairperson Godfrey made a motion to accept the informational report regarding options to consider a new PFRS Investment Manager to Implement the Crisis Risk Offset Investment Strategy presented by Meketa Investment Group, second by Member Wilkinson. Motion Passed.

[GODFREY – Y/ NICHELINI – Y/ WILKINSON – Y]
(AYES: 3/ NOES: 0/ ABSTAIN: 0)

6. **Draft Emergency Procedures for Terminating or Limiting Trading Discretion of PFRS Investment Managers to Protect PFRS Fund Assets** – Plan Administrator Jones presented a draft version of emergency procedures for termination or limiting trading discretion of PFRS Investment Managers to protect PFRS Fund Assets for discussion. Members and staff discussed the draft policy and determined it was too general and specific scenarios need to be identified defining what constitutes an emergency and what procedures/actions might be taken to remedy a financial emergency. PFRS Legal Counsel and Staff will work together to return with a final version to present to the Committee and Board as an action item at the next meeting.

MOTION: Chairperson Godfrey made a motion to continue this item to the next committee meeting as an action item to bring to the Full Board, second by Member Nichelini. Motion passed.

[GODFREY – Y/ NICHELINI – Y/ WILKINSON – Y]
(AYES: 3/ NOES: 0/ ABSTAIN: 0)

9. **Schedule of Pending Investment Committee Meeting Agenda Items** – Chairperson Godfrey requests to bring back subject item #5 to the Investment Committee and Board next month as an action item and will make a motion at the Full Board Meeting. David Sancewich submitted a report regarding the agenda items scheduled for the upcoming Investment Committee meeting but was not discussed in the interest of time.
10. **Open Forum** – No Report
11. **Future Scheduling** – The next Regular Investment Committee Meeting would typically be scheduled for Wednesday, November 25, 2020. In consideration of the upcoming holidays, the committee would like to cancel this Regular Meeting and hold a Special Meeting on a date yet to be determined. Scheduling of the next Investment Committee Meeting will be forwarded to the Full Board for consensus.
12. **Adjournment** – Chairperson Godfrey made a motion to adjourn, second by Member Wilkinson. Motion passed.

[GODFREY – Y/ NICHELINI – Y/ WILKINSON – Y]
(AYES: 3/ NOES: 0/ ABSTAIN: 0)

The meeting adjourned at 11:54 a.m. PST

JAMIE T. GODFREY, COMMITTEE CHAIRPERSON

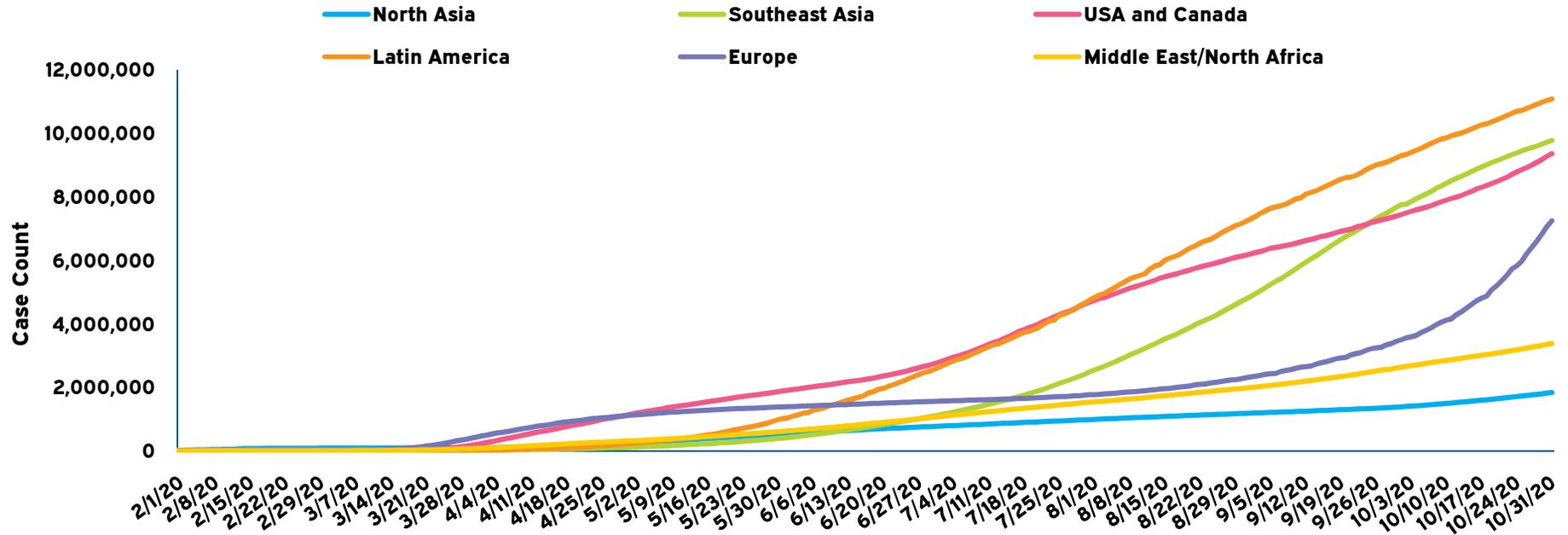
DATE

Economic and Market Update

Data as of October 31, 2020



Case Count by Select Region^{1,2}

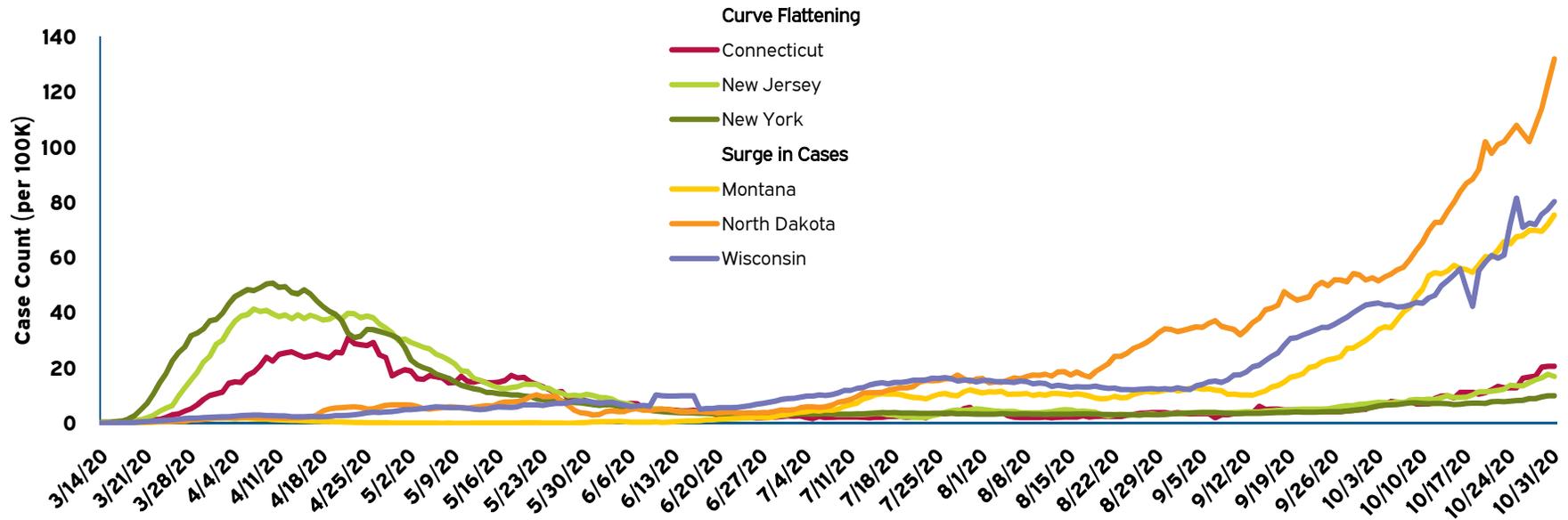


- Cases of COVID-19 continue to grow globally with now over 55 million reported cases across 191 countries.
- The US still has the highest number of cases, with India surpassing Brazil for the second spot. Europe has experienced the largest spike in case counts recently.

¹ Source: Bloomberg. Data is as of October 31, 2020.

² North Asia: China, Hong Kong, Japan, Russia, South Korea, and Taiwan. Southeast Asia: Singapore, India, Indonesia, Malaysia, Pakistan, Philippines, Thailand, Bangladesh, Sri Lanka, and Vietnam. Europe: Austria, Belarus, Bulgaria, Croatia, Czech Republic, Denmark, France, Germany, Hungary, Italy, Netherlands, Norway, Poland, Romania, Spain, Sweden, United Kingdom, Switzerland, and Ukraine. Latin America: Chile, Brazil, Mexico, Argentina, Colombia, Peru, Venezuela, Ecuador, Panama, Paraguay, Costa Rica, Bolivia, Uruguay, El Salvador, Honduras, Cuba, Dominican Republic, Haiti, and Nicaragua. Middle East/North Africa: Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syria, Turkey, Tunisia, United Arab Emirates, and Yemen.

New Daily Reported COVID-19 Cases¹



- Cases are trending back up in most states. Some states experienced initial spikes in cases with subsequent improvements, while other states fared better early on and are now seeing cases spike.
- Moving into the colder months, with flu season and people spending more time indoors, infections are rising notably and putting significant stresses on the hardest hit areas and their respective healthcare systems.

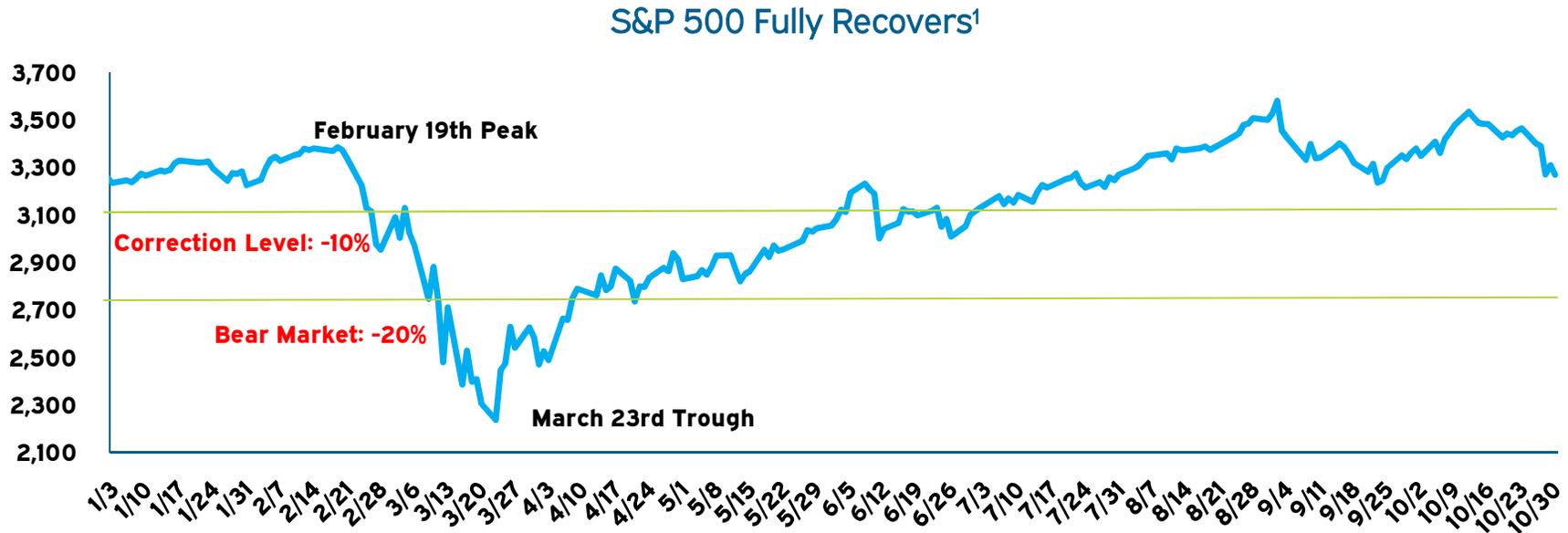
¹ Source: TrackTheRecovery. Data is as of October 31, 2020.

Market Returns¹

Indices	October	YTD	1 Year	3 Year	5 Year	10 Year
S&P 500	-2.7%	2.8%	9.7%	10.4%	11.7%	13.0%
MSCI EAFE	-4.0%	-10.8%	-6.9%	-1.2%	2.8%	3.8%
MSCI Emerging Markets	2.1%	0.9%	8.3%	1.9%	7.9%	2.4%
MSCI China	5.3%	22.6%	35.7%	8.5%	12.7%	6.7%
Bloomberg Barclays Aggregate	-0.4%	6.3%	6.2%	5.1%	4.1%	3.6%
Bloomberg Barclays TIPS	-0.6%	8.5%	9.1%	5.5%	4.4%	3.2%
Bloomberg Barclays High Yield	0.5%	1.1%	3.5%	4.2%	6.3%	6.3%
10-year US Treasury	-1.6%	10.9%	10.0%	6.7%	3.9%	3.7%
30-year US Treasury	-4.2%	18.8%	16.5%	12.2%	7.6%	7.1%

- Global risk assets have recovered meaningfully from their lows, largely driven by record fiscal and monetary policy stimulus. The S&P 500 has appreciated by over 45% from its mid-March trough.
- European and Japanese equity markets have lagged behind the recovery in the US and emerging markets.
- In October, risk appetite waned on weakening US economic fundamentals and fears over rising virus cases.
- Counter to risk assets, longer-dated US interest rates rose over the month on expectations at the time for a greater fiscal stimulus package.

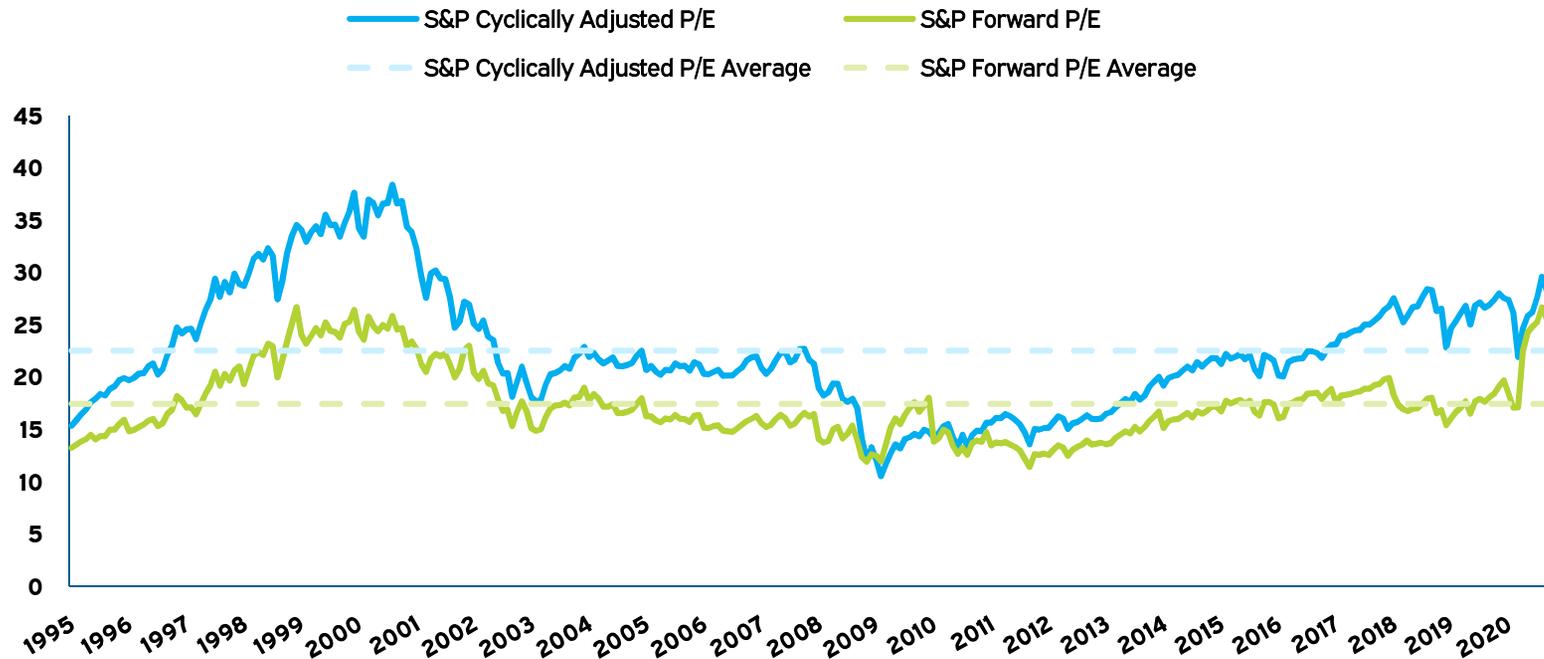
¹ Source: InvestorForce and Bloomberg. Data is as of October 31, 2020.



- Given the anticipated economic carnage surrounding the pandemic, US stocks declined from a February peak into bear market (-20%) territory at the fastest pace in history.
- From the February 19 peak, the S&P 500 plunged 34% in just 24 trading days.
- After quickly rebounding from its lows and finishing above its pre-COVID levels at the end of August, the market retraced 2.7% in October, bringing its year-to-date gain to 2.8%.
 - After month-end, there have been significant market gains, given meaningful progress on a vaccine and the US election results.
- The key risk going forward remains that a spike in COVID-19 cases could slow, or reverse, reopening plans.

¹ Source: Bloomberg. Data is as of October 31, 2020.

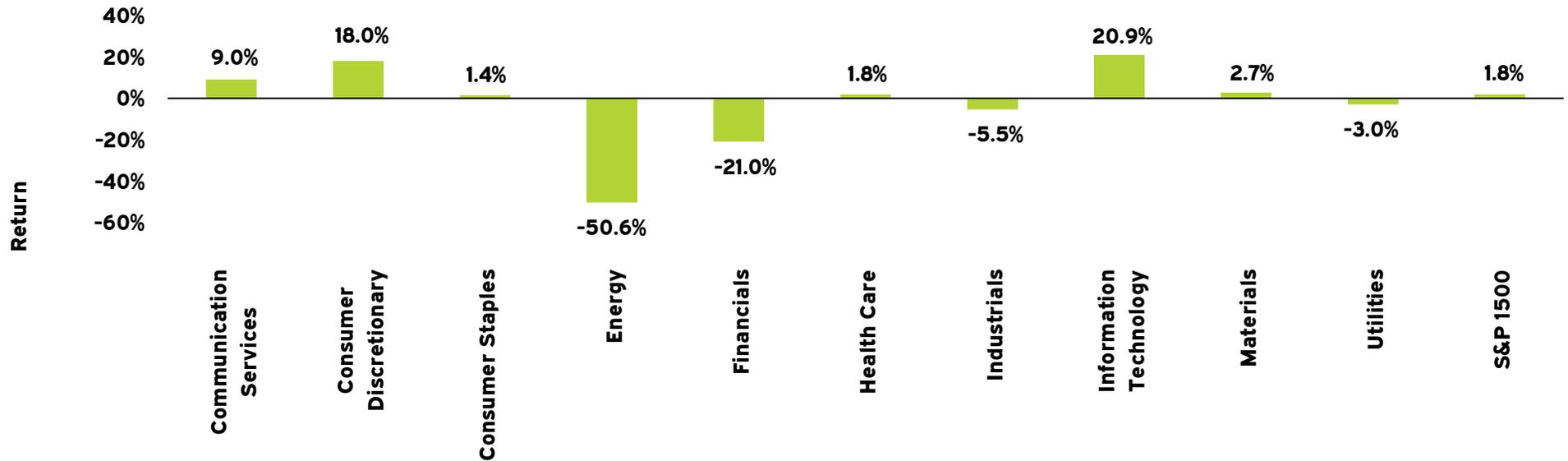
S&P Equity Valuations¹



- Despite the pullback in October, valuations based on both forward- and backward-looking earnings remain rich versus longer-term averages.
- Many are looking to improvements in earnings growth as the US economy continues to reopen to justify market levels, with historically low interest rates also providing support.

¹ Source: Bloomberg. Data is as of October 31, 2020.

2020 YTD Sector Returns¹

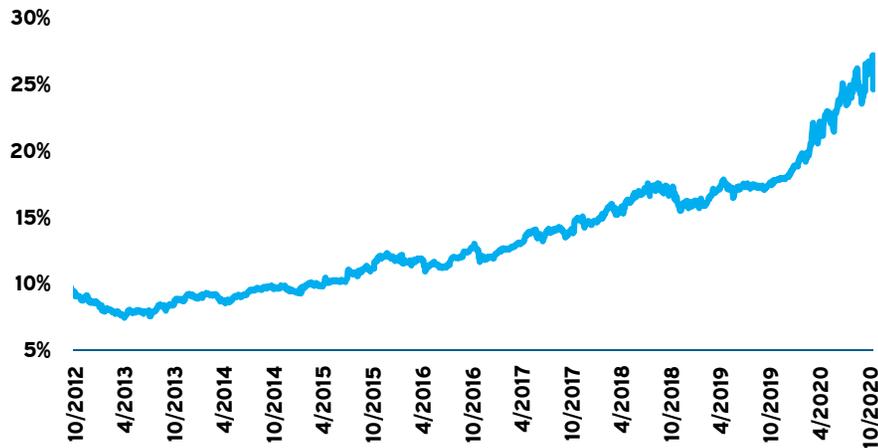


- Information technology remains the best performing sector, with a narrow group of companies including Amazon and Netflix driving market gains. The outperformance has been due to consumers moving to online purchases and streaming services.
- The consumer discretionary sector also experienced gains as the economy reopened, people returned to work, and stimulus checks were spent.
- Energy remains the sector with the greatest 2020 decline, triggered by the plunge in oil prices. Financials have also struggled in this slow growth environment with demand for loans down and low interest rates weighing on loan revenue.

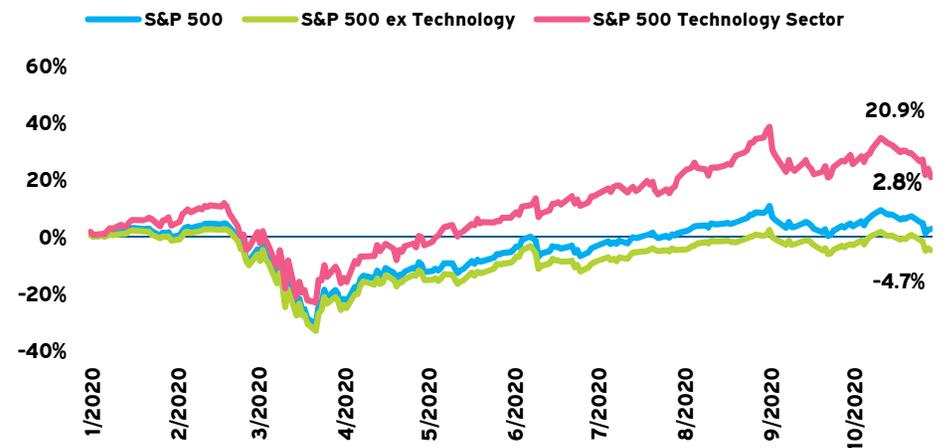
¹ Source: Bloomberg. Data is as of October 31, 2020.

Technology has led the way in the Rebound

FAANG+M Share of S&P 500¹



Returns Year to Date through October 31²

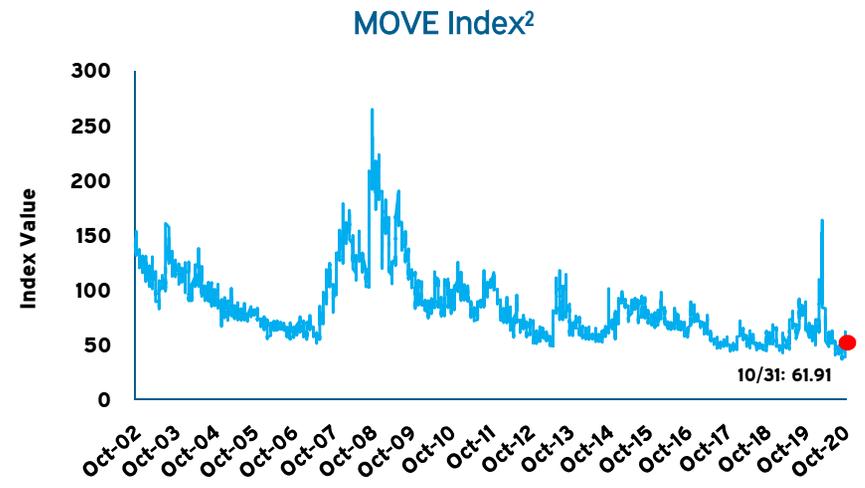
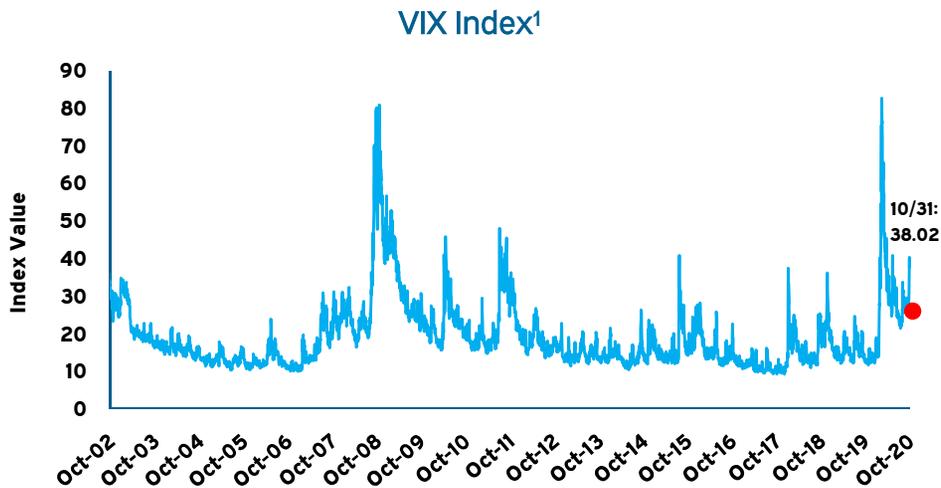


- The market recovery has largely been driven by a few select technology companies that benefited from the stay-at-home environment related to the virus.
- Year-to-date, the S&P 500 technology sector returned +20.9%, compared to -4.7% for the S&P 500 ex-technology index, with Amazon (+64%), Netflix (+47%), and Apple (+48%) posting strong results.
- The strong relative returns of these companies has led to them comprising an increasingly large portion (25%) of the S&P 500, which makes their future performance particularly impactful.

¹ FAANG+M = Facebook, Amazon, Apple, Netflix, Google (Alphabet), and Microsoft. The percentage represents the aggregate market capitalization of the 6 companies compared to the total market capitalization of the S&P 500 as of October 31, 2020.

² Each data point represents the price change relative to the 12/31/2019 starting value.

Volatility has Declined



- Expectations of short-term equity volatility, as measured by the VIX index, have trended down from record levels, but increased in October due to increased cases and concerns over the US election outcome.
- At the recent peak, the VIX reached 82.7, surpassing the pinnacle of volatility during the GFC, thus showing the magnitude of the crisis and of investor fear.
- Expectations of volatility within fixed income, as represented by the MOVE index, spiked and then dropped to historic lows, helped by the broad level of monetary support and forward guidance by the Fed. Volatility expectations in fixed income modestly increased in October, influenced by the potential for increased fiscal stimulus.

¹ Source: Chicago Board of Exchange. Data is as of October 31, 2020.

² Source: Bloomberg. Data is as of October 31, 2020.

Global Financial Crisis Comparison

	2007-2009 Global Financial Crisis	COVID-19 Crisis
Primary Causes	<p>Excess Risk Taking Due to:</p> <ul style="list-style-type: none"> Deregulation, un-constrained securitization, shadow banking system, fraud 	<p>Pandemic/Natural Disaster:</p> <ul style="list-style-type: none"> Large scale global restrictions on businesses and individuals leading to immediate and significant deterioration in economic fundamentals
Fiscal Measures	<ul style="list-style-type: none"> American Recovery Reinvestment Act of 2009: \$787 billion Economic Stimulus Act of 2008: \$152 billion 	<ul style="list-style-type: none"> PPP Act: \$659 billion CARES Act of 2020: \$2.3 trillion Families First Coronavirus Response Act: \$150 billion Coronavirus Preparedness & Response Supplemental Appropriations Act 2020: \$8.3 billion National Emergency: \$50 billion
	2007-2009 Global Financial Crisis	COVID-19 Crisis
Monetary Measures		
Lowering Fed Funds Rate	X	X
Quantitative Easing	X	X
Primary Dealer Repos	X	X
Central Bank Swap Lines	X	X
Commercial Paper Funding Facility	X	X
Primary Dealers Credit Facility	X	X
Money Market Lending Facility	X	X
Term Auction Facility	X	
TALF	X	X
TSLF	X	
FIMA Repo Facility		X
Primary & Secondary Corp. Debt		X
PPP Term Facility		X
Municipal Liquidity Facility		X
Main Street Loan Facility		X

Global Financial Crisis Comparison (continued)

- The US **fiscal** response to the COVID-19 Crisis has been materially larger than the response to the 2007-2009 Global Financial Crisis (GFC), and stimulus is acutely focused on areas of the economy showing the greatest need, including small- and mid-sized companies. For example, the Paycheck Protection Program (PPP) helped small businesses keep employees working by offering forgivable loans to cover salaries.
- On the **monetary** side, markets targeted during both crises represent those most in need, but for the COVID-19 Crisis the policy response was dramatically faster, measured in weeks, not years, as in the GFC.
- Of the monetary stimulus measures, the corporate debt (Primary & Secondary Corporate Debt) programs and Main Street Loan Facility are new and garnered much attention from market participants.
- Through the end of October, Fed programs have experienced various degrees of usage. However, at this point, none has come close to reaching program limits. Still, programs have been extended through December 2020, and the psychological value of knowing the programs are available, if necessary, likely supports market sentiment.

Policy Responses

	Fiscal	Monetary
United States	\$50 billion to states for virus related support, interest waived on student loans, flexibility on tax payments and filings, expanded COVID-19 testing, paid sick leave for hourly workers, \$2 trillion package for individuals, businesses, and state/local governments. Additional \$484 billion package to replenish small business loans, provide funding to hospitals, and increase testing.	Cut policy rates to zero, outcome-based forward guidance suggesting aggressively accommodative policy for the foreseeable future, unlimited QE4, offering trillions in repo market funding, restarted and extended CPFF, PDCF, MMMF programs to support lending and financing markets, expanded US dollar swap lines with foreign central banks, announced IG corporate debt buying program with subsequent amendment for certain HY securities, Main Street Lending program, Muni liquidity facility, repo facility with foreign central banks, easing of some financial regulations for lenders, and changing the inflation mandate to an average target of 2.0%
Euro Area	European Union: Shared 750 billion euro stimulus package. Germany: 220 billion euro stimulus France: 57 billion euro stimulus. Italy: 75 billion euro stimulus. Spain: 200 billion euro and 700 million euro loan and aid package, respectively.	Targeted longer-term refinancing operations aimed at small and medium sized businesses, under more favorable pricing, and announced the 750 billion euro Pandemic Emergency Purchase Program, and then expanded the purchases to include lower-quality corporate debt.
Japan	Hundreds of trillions in yen stimulus for citizens and businesses, including low interest loans, deferrals on taxes, and direct cash handouts.	Initially increased QE purchases (ETFs, corporate bonds, and CP) and then expanded to unlimited purchases and doubling of corporate debt and commercial paper, expanded collateral and liquidity requirements, and 0% interest loans to businesses hurt by virus.
China	Tax cuts, low-interest business loans, extra payments to gov't benefit recipients.	Expanded repo facility, policy rate cuts, lowered reserve requirements, loan-purchase scheme.
Canada	\$7.1 billion in loans to businesses to help with virus damage, C\$381 billion stimulus.	Cut policy rates, expanded bond-buying and repos, lowered bank reserve requirements.
UK (BOE)	190 billion pound stimulus, Tax cut for retailers, small business cash grants, benefits for those infected with virus, expanded access to gov't benefits for self and un-employed.	Lowered policy rates and capital requirements for UK banks, restarts QE program and subsequently increased the purchase amounts.
Australia	\$11.4 billion, subsidies for impacted industries like tourism, one-time payment to gov't benefit recipients.	Policy rate cut, started QE.

Next Round of US Fiscal Stimulus

	Republican Proposal ¹	Democratic Proposal ²
Status	Offered by the President and republican leaders in mid-October	Passed in House on October 1
Direct payments	\$1,200 for adults, \$1,000 per child	\$1,200 for adults, \$500 per dependent
Unemployment / Assistance	\$400 per week, through the third week of January and retroactive to Sept. 12	\$600 per week enhanced unemployment benefit through January. 15% increase in food stamps
State and local aid	\$300 billion	\$436 billion
Airlines	\$20 billion	\$25 billion
Paycheck Protection	\$330 billion	Extend program
Testing / Tracing / Healthcare	\$175 billion	\$75 billion
Education	\$150 billion	\$225 billion
Childcare	\$25 billion	\$57 billion
Total	\$1.8 Trillion	\$2.2 Trillion

- The next round of fiscal stimulus that the market has been anticipating remains in gridlock.
- Without further stimulus, many businesses might not survive, particularly services like restaurants, as we move into the colder months in much of the country.
- The enhanced unemployment benefits from the initial stimulus program were particularly impactful to those without jobs. After it ended in July an extension of a lesser amount (\$300 extra per week) was implemented, but is in the process of winding down and at risk of ending without replacement.

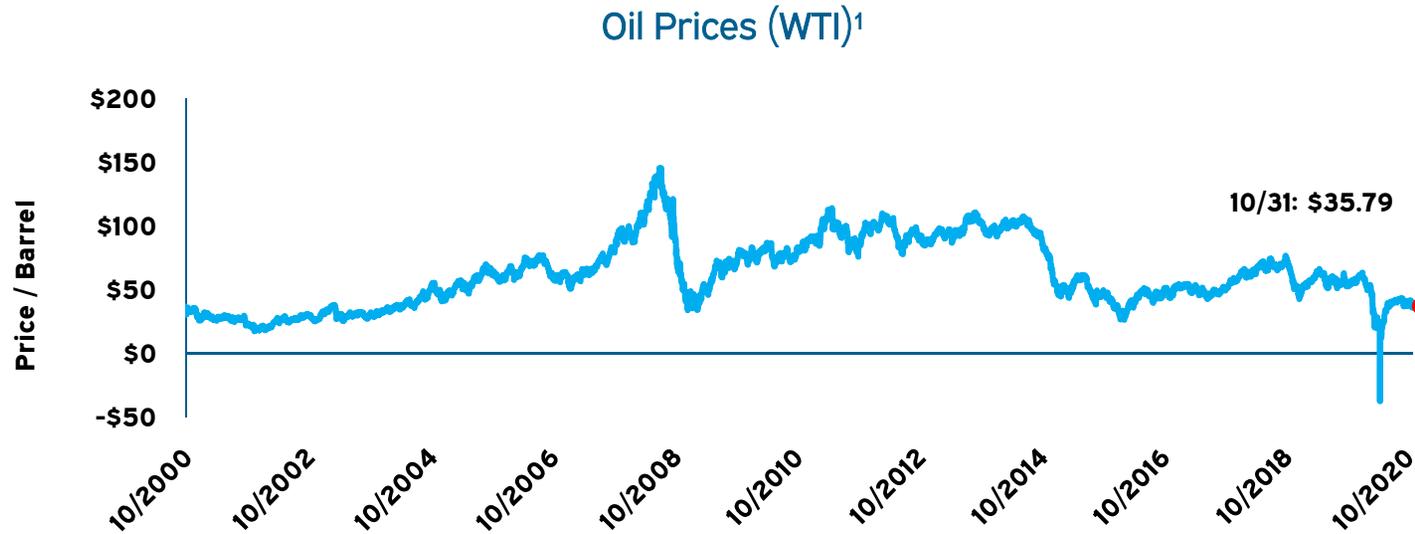
¹ Source: <https://www.cnn.com/2020/10/10/pelosi-dismisses-trump-coronavirus-stimulus-offer.html>

² Source: <https://www.cnn.com/2020/10/01/coronavirus-stimulus-update-house-passes-democratic-relief-bill.html>

Election Results Likely Leave a Split Government

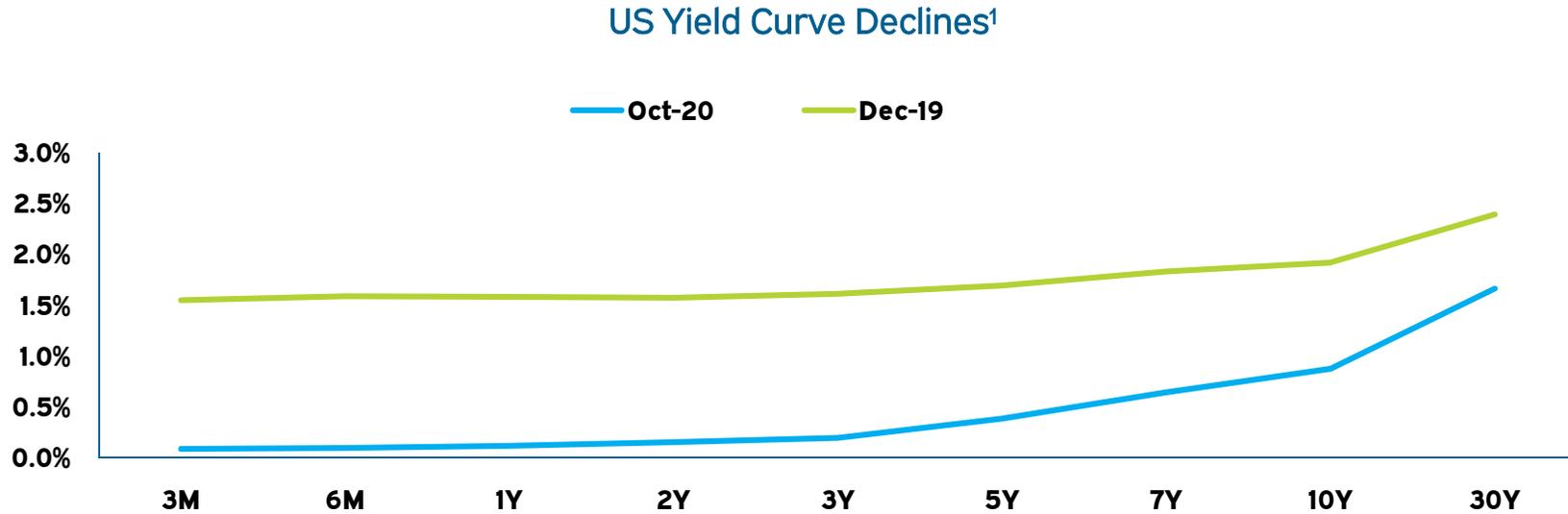
	Result	Change from Previous	Potential Implications
Presidency	<ul style="list-style-type: none"> Democratic victory. 	<ul style="list-style-type: none"> Donald Trump, Republican, to leave office January 20th. 	<ul style="list-style-type: none"> Day one executive actions announced to set new 12 person COVID-19 task force, rejoin the WHO, repeal Muslim travel ban, reinstate DACA program, and rejoin Paris climate accord. Biden listed a number of other priorities on the campaign trail that include addressing systemic racism, climate change, and expanding protections for union employees. Additional plans include bills for infrastructure, trade, foreign policy, and tax increases, but all seem less likely given the potential for a divided congress.
Senate	<ul style="list-style-type: none"> 48 seats for the Democrats. 50 seats for the Republicans. 2 seats to be decided in a January run off in Georgia. 	<ul style="list-style-type: none"> Yet to be determined. Democrats will pick up between 2 and 4 seats. It is possible, though unlikely, that the Democrats can win both run offs and obtain a supermajority with Vice President elect Harris casting the tiebreaking vote. 	<ul style="list-style-type: none"> Biden's agenda is particularly impacted by a divided Congress in a few key areas, namely the next round of fiscal stimulus (lesser amount), cabinet appointments (more moderate), tax reform (less rollbacks of Trump cuts), infrastructure spending (less green, less in amount).
House	<ul style="list-style-type: none"> Democratic majority maintained. As of November 16th 219 seats for Democrats, 203 seats for Republicans, and 13 still to be decided. 	<ul style="list-style-type: none"> Heading into the November 3, 2020, election, Democrats held a 232-197 advantage in the US House. Libertarians held one seat, and five seats were vacant. 	<ul style="list-style-type: none"> While the Democrats maintained their majority and therefore control of the agenda, Republicans gained ground, setting up a close battle for the midterms in 2022. Nancy Pelosi remains Speaker of the House.

- While the path to final election results could be bumpy, we do know that ultimately the new President will be sworn in on January 20th, with the two Senate run-off elections in Georgia taking place in January as well.
- Overall markets have generally responded positively to the election results, as the potential for a divided government has reduced fears over higher taxes and fiscal stimulus.



- While global oil prices have rallied from April lows, they remain below their pre-pandemic level.
- In October, OPEC+ maintained their 7.7 million barrels/day production cuts (~8% of global output) in an effort to support oil prices.
- Counterbalancing the OPEC+ production cut agreement, US oil producers (particularly shale output) are turning wells back on, due to higher prices.
- If OPEC+ starts rolling back production cuts, and if an increasing virus spread weighs on demand, oil prices could experience renewed downward pressure.

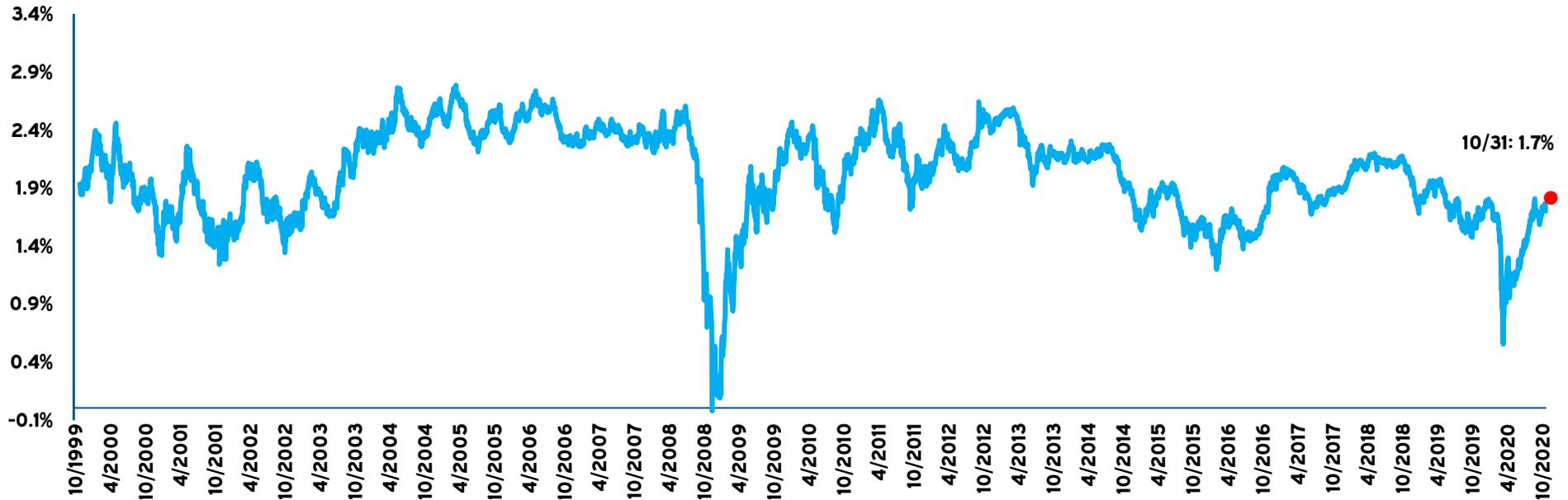
¹ Source: Bloomberg. Represents WTI first available futures contract. Data is as of October 31, 2020.



- The US Treasury yield curve declined materially during 2020, driven by safe-haven demand, Federal Reserve policies (policy rate cuts and the quantitative easing program), and weak US economic fundamentals.
- Over the last few months, the curve has steepened on gradual signs of economic improvement and expectations for longer-dated Treasury issuance to support additional fiscal stimulus in the coming months.

¹ Source: Bloomberg. Data is as of October 31, 2020.

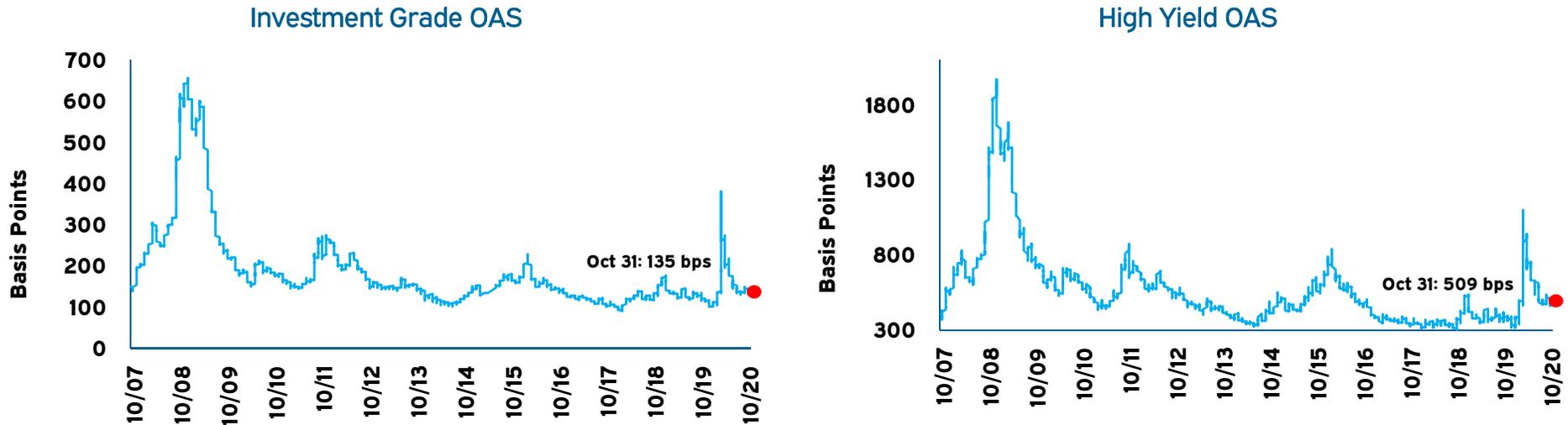
10-Year Breakeven Inflation¹



- Inflation breakeven rates initially declined sharply, due to a combination of lower growth and inflation expectations, as well as liquidity dynamics in TIPS during the height of market volatility.
- Liquidity eventually improved and breakeven rates increased as deflationary concerns moderated, but given the uncertainty regarding economic growth and the inflationary effects of the unprecedented US fiscal response, inflation expectations remain below historical averages.

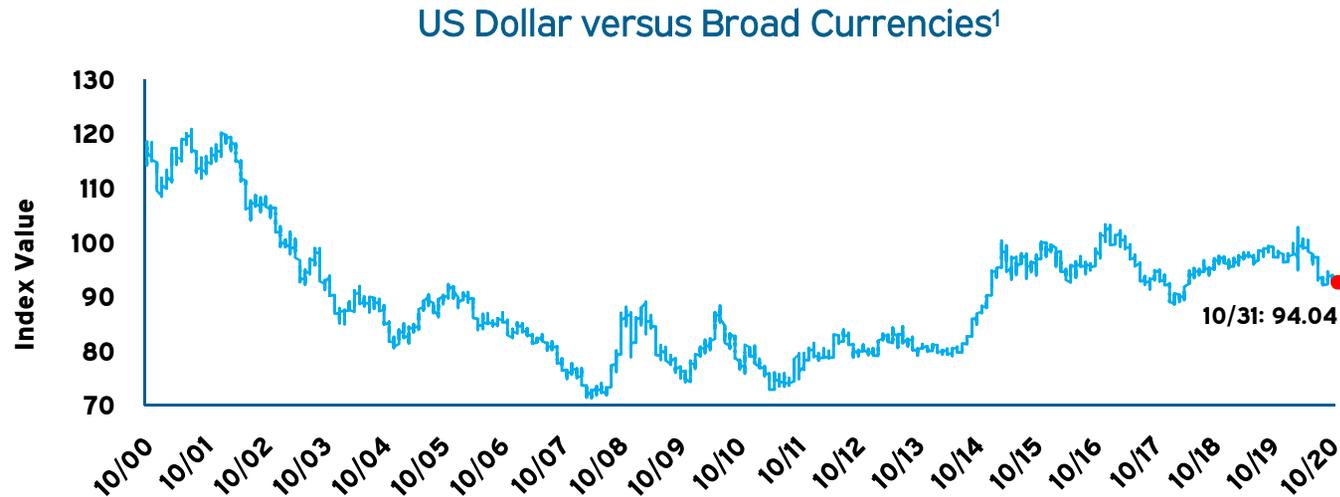
¹ Source: Bloomberg. Data is as of October 31, 2020.

Credit Spreads (High Yield & Investment Grade)¹



- Credit spreads (the spread above a comparable Treasury) for investment grade and high yield corporate debt widened sharply at the start of the pandemic as investors sought safety.
- Investment grade bonds held up better than high yield bonds. The Federal Reserve’s corporate debt purchase program for investment grade and certain high yield securities recently downgraded from investment grade, was well received by investors, leading to a decline in spreads to around long-term averages.
- Overall, corporate debt issuance has more than doubled since 2008, which magnifies the impact of deterioration in the corporate debt market. This is particularly true in the energy sector, which represents over 10% of the high yield bond market.

¹ Source: Federal Reserve Bank of St. Louis Economic Research. Data is as of October 31, 2020.



- When financial markets began aggressively reacting to COVID-19 developments, the US dollar came under selling pressure as investors sought safe-haven exposure.
- As the crisis grew into a pandemic, investors' preferences shifted to holding US dollars and highly liquid, short-term securities like US Treasury bills.
- Recently we have seen some weakness in the dollar as the US struggles with containing the virus and investors seek higher-yielding non-US assets, particularly in emerging markets. This has created pressures on already stressed export-focused countries.
- Going forward, the dollar's safe haven quality and the relatively higher rates in the US could provide support.

¹ Source: Bloomberg. Represents the DXY Index. Data is as of October 31, 2020.

Economic Impact

Supply Chain Disruptions:

- Factories closing, increased cost of stagnant inventory, and disrupted supply agreements.
- Reduced travel, tourism, and separation policies including closed borders: Significant impact on service-based economies.

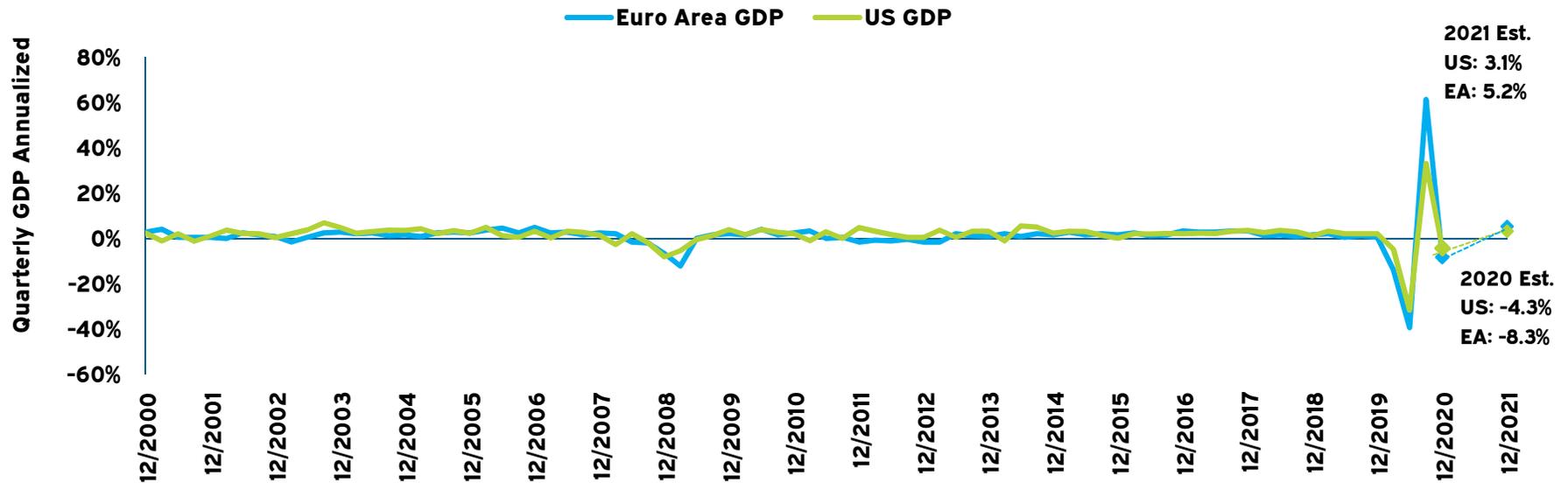
Labor Force Impacts:

- Huge layoffs across service and manufacturing economies.
- Increased strains as workforce productivity declines from increased societal responsibilities (e.g., home schooling of children) and lower functionality working from home.
- Illnesses from the disease also depresses the labor force.

Declines in Business and Consumer Sentiment:

- Sentiment drives investment and consumption, which leads to increased recessionary pressures as sentiment slips.

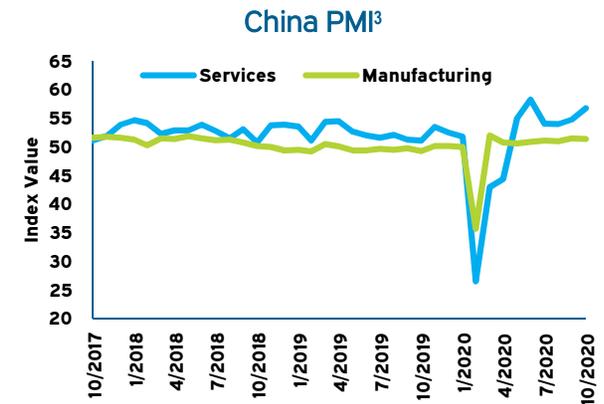
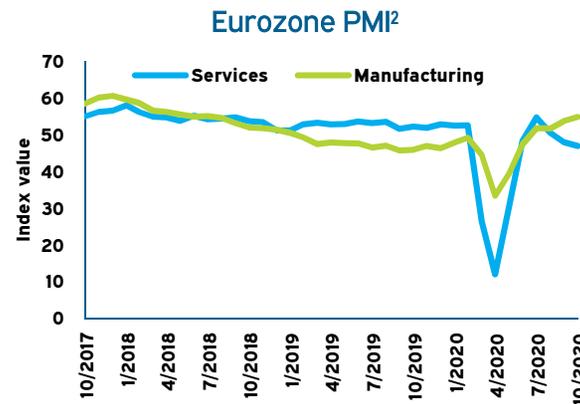
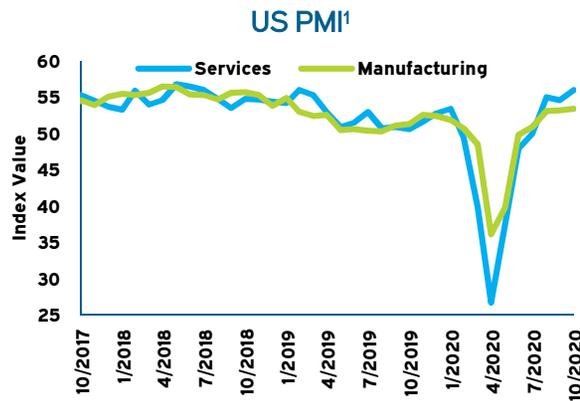
GDP Data Shows Impact of the Pandemic¹



- The global economy faces major recessionary pressures this year, but optimism remains for improvements in 2021, as economies are expected to gradually reopen despite the recent spike in virus cases.
- Historic declines in growth in the US and Europe during the second quarter, were followed by record increases in the third quarter, due to pent up demand from the lockdown measures earlier in the year.
- At the middle of November, Bloomberg Economics estimated that fourth quarter US GDP growth could be 2.5% (QoQ annualized). Full year US GDP growth is forecasted to decline by 4.3%.

¹ Source: Bloomberg and IMF. Q3 2020 data represents the first estimate of GDP for the Euro Area and United States. Euro Area figures annualized by Meketa. Projections via October 2020 IMF World Economic Outlook and represent annual numbers.

Global PMIs

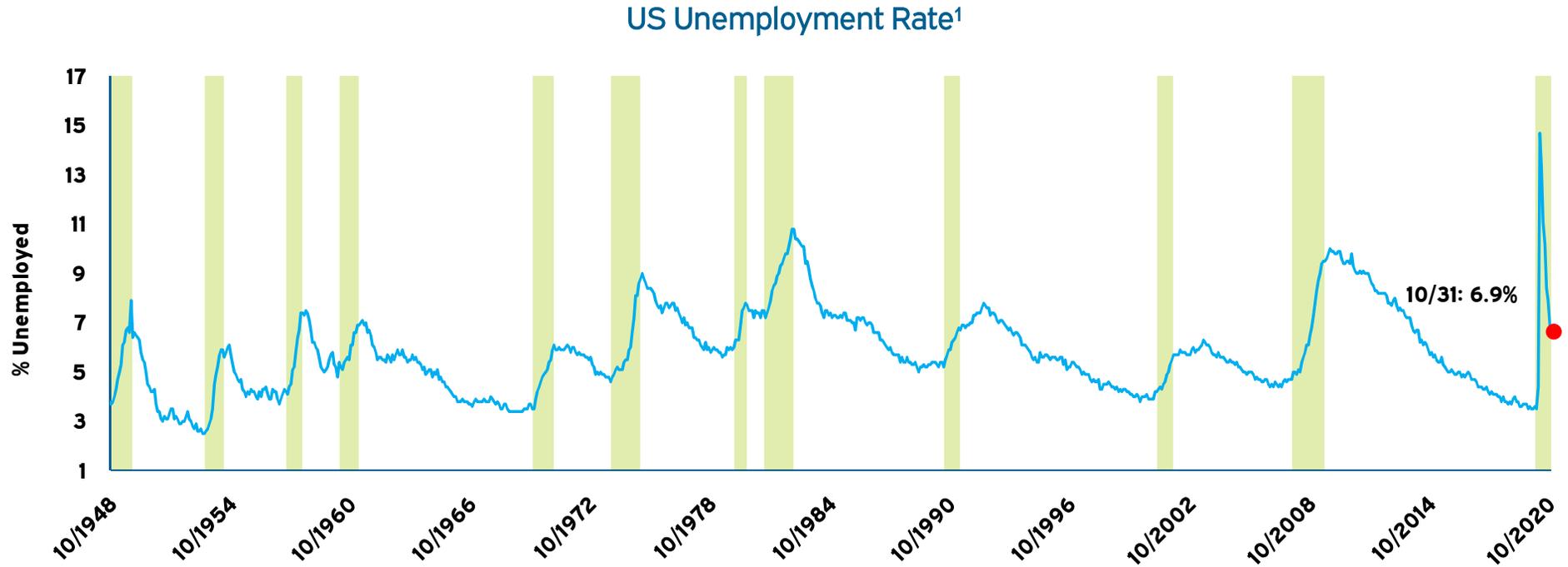


- Purchasing Managers Indices (PMI), based on surveys of private sector companies, initially collapsed across the world to record lows, as output, new orders, production, and employment were materially impacted by closed economies.
- Readings below 50 represent contractions across underlying components and act as a leading indicator of economic activity, including the future paths of GDP, employment, and industrial production.
- The services sector was particularly hard hit by stay-at-home restrictions in many places.
- As the Chinese economy reopened, their PMI's, particularly in the service sector, recovered materially. In the US and Europe, the indices have also improved from their lows to above contraction levels, in most cases.

¹ Source: Bloomberg. US Markit Services and Manufacturing PMI. Data is as of October 2020.

² Source: Bloomberg. Eurozone Markit Services and Manufacturing PMI. Data is as of October 2020.

³ Source: Bloomberg. Caixin Services and Manufacturing PMI. Data is as of October 2020.

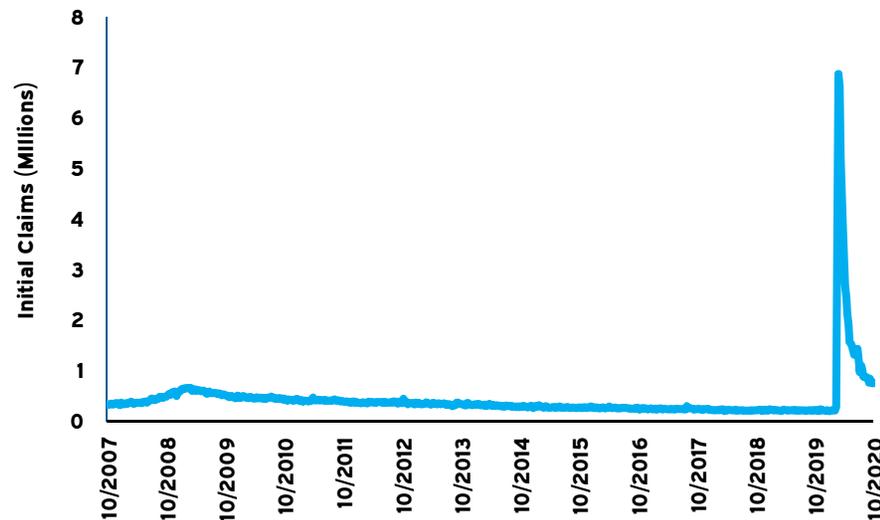


- In October, the unemployment rate continued its decline from the recent April 14.7% peak, falling to 6.9% as businesses and consumers emerged from the lockdown.
- Despite the improvement, unemployment levels remain well above pre-virus readings and are likely higher than reported, as some workers appear misclassified. According to the Bureau of Labor Statistics, absent the misclassification issue, the October unemployment rate would be higher by 0.3%.
- The recent spike in infections and the potential shutting down of some parts of the economy, could lead to an increase in the unemployment rate.

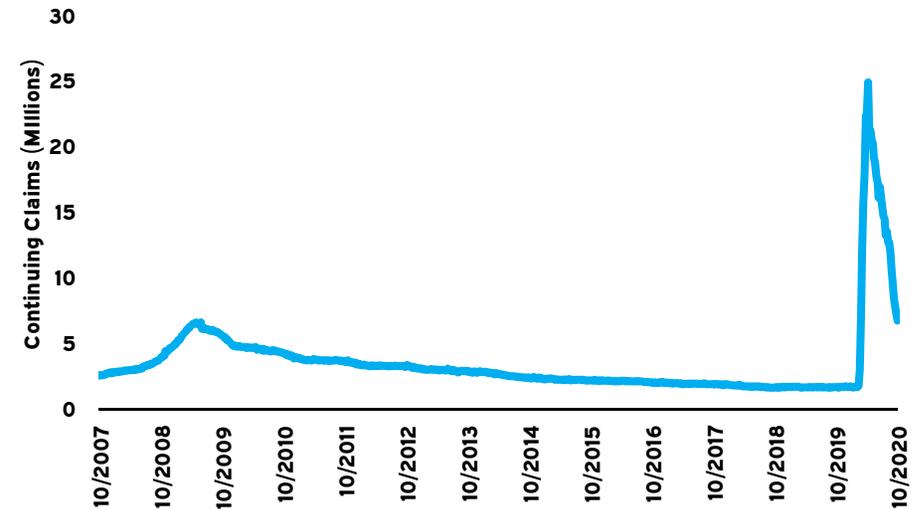
¹ Source: Bloomberg. Data is as of October 31, 2020. Bars represent recessions.

US Jobless Claims

US Initial Jobless Claims¹



Continuing Claims²

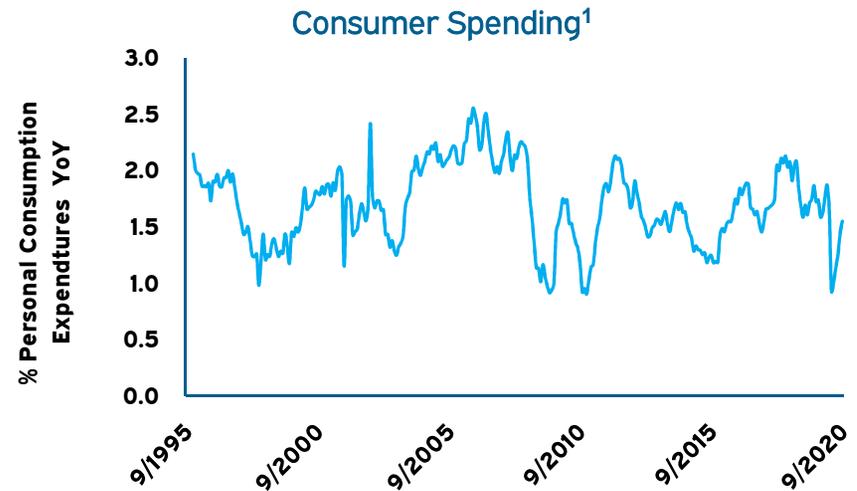
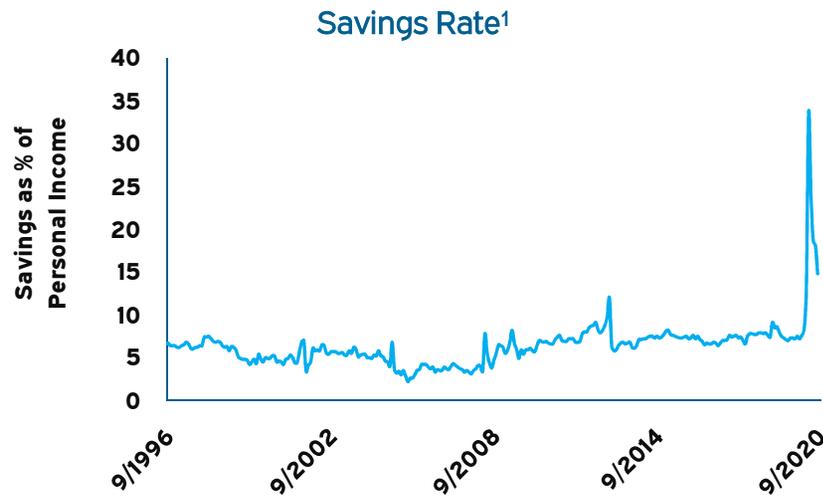


- Over the last 33 weeks, roughly 61 million people filed for initial unemployment. This level far exceeds the 22 million jobs added since the GFC, highlighting the unprecedented impact of the virus.
- Despite the continued decline in initial jobless claims to below one million per week, levels remain many multiples above the worst reading during the Global Financial Crisis.
- Continuing jobless claims (i.e., those currently receiving benefits) have also declined from record levels, but remain elevated at 6.8 million.

¹ Source: Bloomberg. First reading of seasonally adjusted initial jobless claims. Data is as of October 31, 2020.

² Source: Bloomberg. US Continuing Jobless Claims SA. Data is as of October 31, 2020.

Savings and Spending

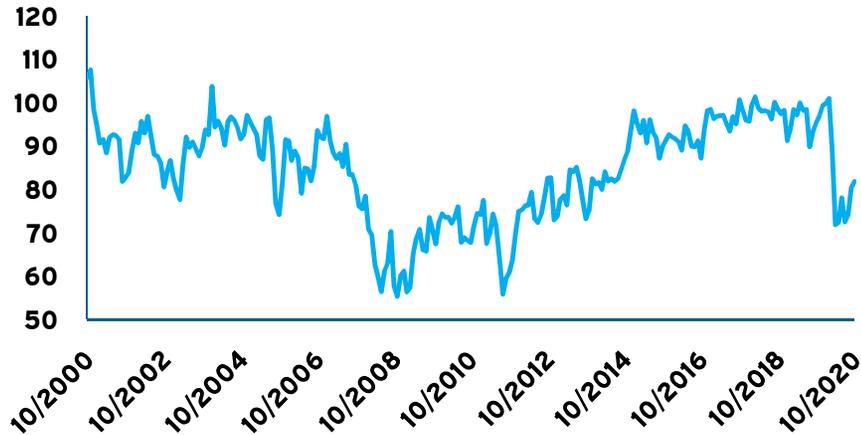


- Fiscal programs including stimulus checks, enhanced unemployment benefits, and loans to small businesses through the Paycheck Protection Program (PPP) have largely supported income levels through the shutdown.
- Despite the income support, the savings rate increased due to the decline in consumer spending, driven by the initial lock-down of the economy, and by uncertainties related to the future of the job market and stimulus programs.
- More recently, the savings rate declined from its peak as spending increased with the economy slowly reopening.

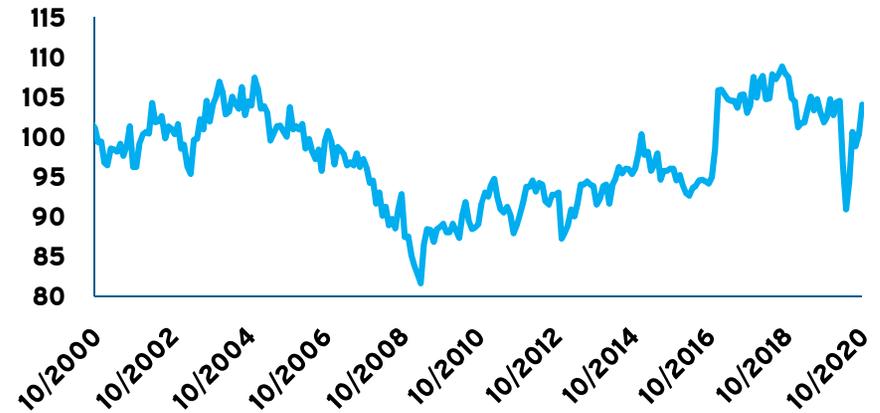
¹ Source: Bloomberg. Latest data is as of September 30, 2020.

Sentiment Indicators

University of Michigan Consumer Sentiment¹



Small Business Confidence²



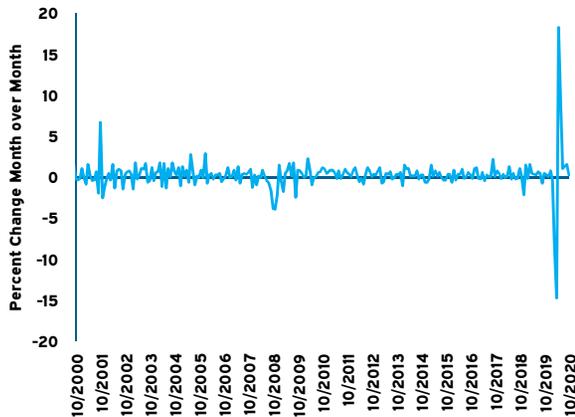
- A strong indicator of future economic activity are the attitudes of businesses and consumers today.
- Consumer spending comprises close to 70% of US GDP, making the attitudes of consumers an important driver of economic growth. Additionally, small businesses generate around half of US GDP, making sentiment in that segment important.
- Sentiment indicators have shown some improvements as the economy re-opens, particularly for small businesses which are approaching pre-pandemic levels.

¹ Source: Bloomberg. University of Michigan Consumer Sentiment Index. Data is as of October 31, 2020.

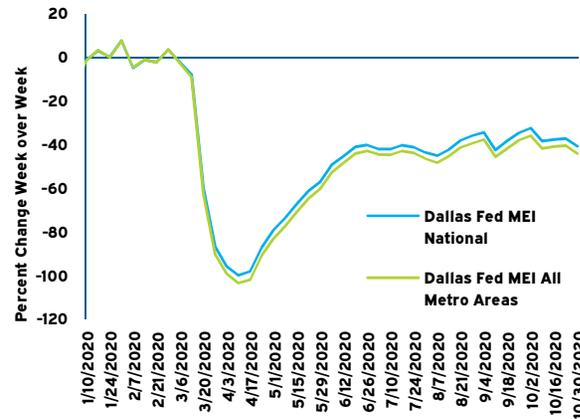
² Source: Bloomberg. NFIB Small Business Optimism Index. Latest data is as of October 31, 2020.

Some US Data has Improved

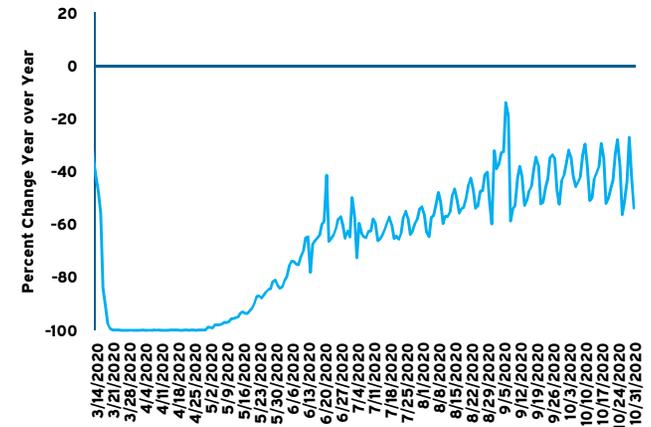
Retail Sales¹



Dallas Fed Mobility and Engagement Index²



OpenTable Seated Diners YoY % Change³



- There have been improvements in high frequency data, but overall levels remain well below historical averages, and have slowed in some instances from the recent spike in cases.
- Generally, people have become more active as restrictions eased and stores reopened. Retail sales recovered from a record decline with six consecutive months of growth as the economy reopened, but the pace of growth has been declining.
- Restaurants have seen some improvements from the dramatic declines earlier in the year, but seating remains around half the level from a year prior as in-store dining has contributed to the increase in infections.

¹ Source: Bloomberg. Data is as of October 31, 2020 and represents the US Retail Sales SA MoM%.

² Source: Bloomberg. Data is as of October 31, 2020 and represents the deviation from normal mobility behaviors induced by COVID-19 (formerly the “Social Distancing Index”). The index represents a weighted average of various lengths of time that a mobile device, like a cell phone, leaves its “home” or place of residence, and/or how long a device stays at home. A decline in this index represents a mobile device at home for a longer period of time than average.

³ Source: Bloomberg. This data shows year-over-year seated diners at restaurants on the OpenTable network across all channels: online reservations, phone reservations, and walk-ins. Only states or cities with 50+ restaurants in the sample are included. All such restaurants on the OpenTable network in either period are included. Data is as of October 31, 2020. Index start date 2/19/20.

Looking Forward...

- There has been a significant economic impact and a global recession.
 - How deep it will be and how long it will last depend on factors (below) that are unknowable at this time.
- The length of the virus and country responses will be key considerations.
 - As of now, despite the recent vaccine announcements it is not clear the end is in sight, particularly with the recent increases in cases in certain areas; however, individual countries are attempting to lay the groundwork to support recoveries in their economies.
- Central banks and governments are pledging support, but will it be enough?
 - Market reactions to announced policies have been positive, but additional support will likely be required until the virus gets better contained and a vaccine is distributed.
- Expect heightened market volatility should economies start to shut back down in response to the recent spike in cases.
 - This has been a consistent theme recently; volatility is likely to remain at risk of spiking again for the foreseeable future.
- It is important to retain a long-term focus.
 - History supports the argument that maintaining a long-term focus will ultimately prove beneficial for diversified portfolios.

Prior Drawdowns and Recoveries from 1926-2020¹

Period	Peak-to-Trough Decline of the S&P 500	Approximate Time to Recovery
Sept 1929 to June 1932	-85%	266 months
February 1937 to April 1942	-57%	48 months
May 1946 to February 1948	-25%	27 months
August 1956 to October 1957	-22%	11 months
December 1961 to June 1962	-28%	14 months
February 1966 to October 1966	-22%	7 months
November 1968 to May 1970	-36%	21 months
January 1973 to October 1974	-48%	69 months
October 1976 to March 1978	-19%	17 months
November 1980 to August 1982	-27%	3 months
August 1987 to December 1987	-32%	19 months
July 1990 to October 1990	-20%	4 months
July 1998 to August 1998	-19%	3 months
March 2000 to October 2002	-49%	56 months
October 2007 to March 2009	-57%	49 months
February 2020 to March 2020	-34%	6 months
Average	-36%	39 months
Average ex. Great Depression	-33%	24 months

- As markets have fully recovered to above pre-COVID levels, questions remain about the sustainability of the rally.
- The six-month recovery period represents one of the shortest on record, similar to the historic decline.

¹ Source: Goldman Sachs.

Implications for Clients

- Portfolios have experienced significant improvements from the March lows.
- Diversification and a disciplined rebalancing approach worked.
- Even though equity markets have recovered from their lows, it is important to remain vigilant and be prepared to rebalance if high volatility returns.
 - Before rebalancing, consider changes in liquidity needs given the potential for cash inflows to decline in some cases.
 - Also, consider the cost of rebalancing if investment liquidity declines.

Performance YTD (through October 31, 2020)

S&P 500	ACWI (ex. US)	Aggregate Bond Index	Balanced Portfolio ¹
2.8%	-7.5%	6.3%	1.7%

- Meketa will continue to monitor the situation and communicate frequently.
 - The situation is fluid and the economic impact is uncertain at this stage.
- Please feel free to reach out with any questions.

¹ Source: InvestorForce. Balanced Portfolio represents 60% MSCI ACWI and 40% Bloomberg Barclays Global Aggregate.

Disclaimers

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Oakland Police and Fire Retirement System

Q3 2020

Quarterly Report

1. Total Portfolio Summary
2. World Markets Third Quarter of 2020
3. Capital Markets Outlook & Risk Metrics
 - Meketa Market Sentiment Indicator
4. Total Portfolio Review
5. Manager Monitoring / Probation List
6. Individual Manager Performance
7. Disclaimer, Glossary, and Notes

Total Portfolio Summary

Total Portfolio Summary

As of September 30, 2020, the City of Oakland Police and Fire Retirement System (OPFRS) portfolio had an aggregate value of \$400.0 million. This represents a \$20.0 million increase in investment value and (\$3.0) million in benefit payments over the quarter. Year-to-date, the OPFRS Total Portfolio value is lower by (\$8.1) million, after withdrawals totaling (\$12.0) million for benefit payments.

Asset Allocation Trends

- The asset allocation targets throughout this report reflect those as of September 30, 2020. Target weightings reflect the interim phase (CRO = 10%) of the Plan’s previously approved asset allocation (effective 5/31/2017).
- Relative to policy targets, the portfolio ended the latest quarter overweight Domestic Equity, Covered Calls and Cash, while underweight Crisis Risk Offset. All asset classes were, however, within acceptable ranges from their policy targets.

Recent Investment Performance

- During the most recent quarter, the OPFRS Total Portfolio generated an absolute return of +5.2%, gross of fees, underperforming its policy benchmark by 10 basis points. The portfolio underperformed its benchmark by (2.7%) and (0.4%) over the 1- and 3-year periods, respectively, and underperformed by (20) basis points over the 5-year period.
- The Total Portfolio outperformed the Median fund’s return over the most recent quarter by 0.1% but underperformed the Median fund over the 1-year period by (2.3%). The Total Portfolio matched the median fund over the 3-year periods while outperforming the median fund by 0.8% over the 5-year period. Performance differences with respect to the Median Fund continue to be attributed largely to differences in asset allocation.

	Quarter	Fiscal Year	1 Year	3 Year	5 Year
Total Portfolio ¹	5.2	5.2	5.7	6.6	9.0
Policy Benchmark ²	5.1	5.1	8.4	7.0	9.2
Excess Return	0.1	0.1	-2.7	-0.4	-0.2
Reference: Median Fund ³	5.0	5.0	7.7	6.3	8.2
Reference: Total Net of Fees ⁴	5.1	5.1	5.4	6.3	8.7

¹ Gross of Fees. Performance since 2005 includes securities lending.

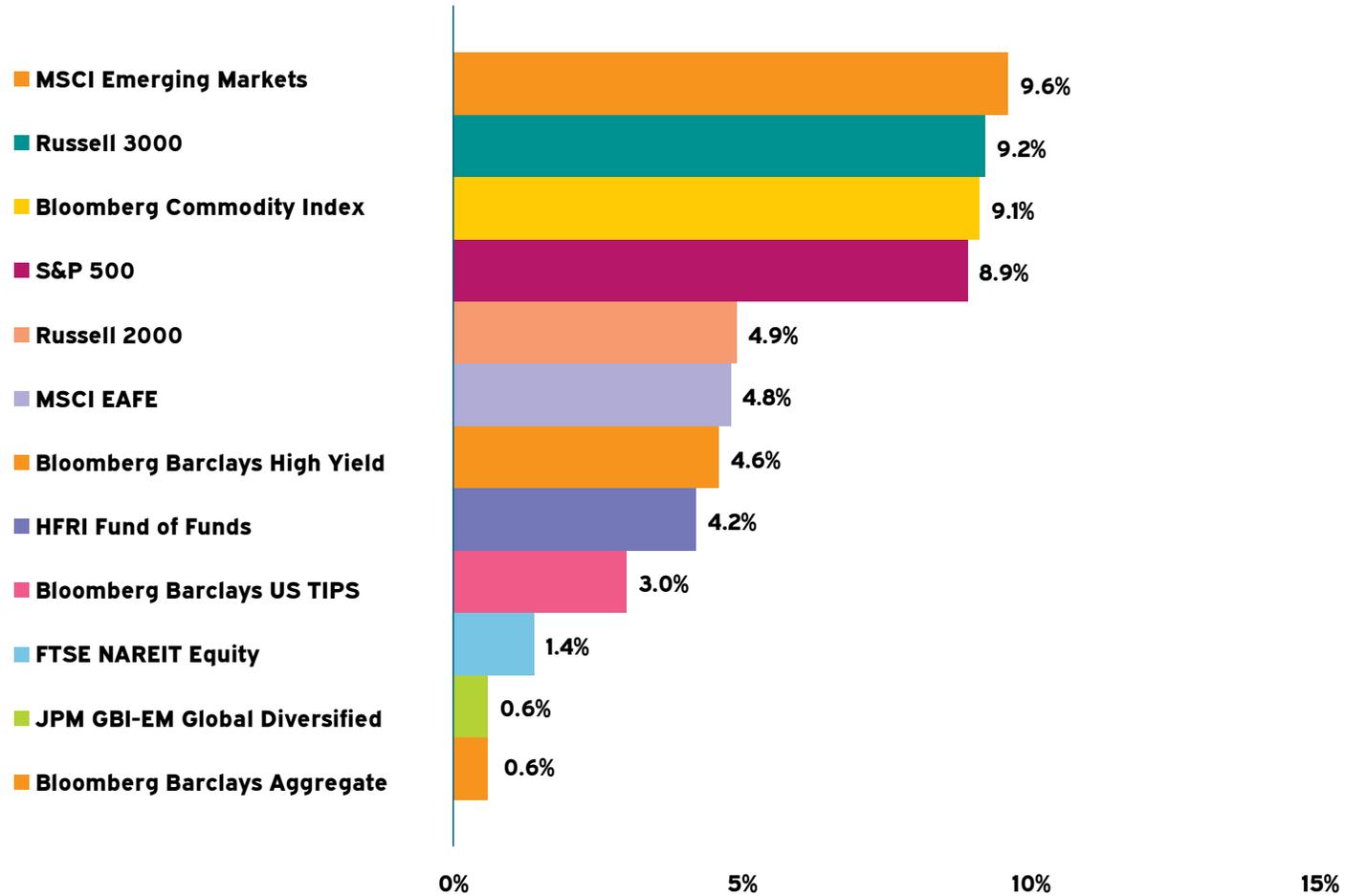
² Evolving Policy Benchmark consists of 40% Russell 3000, 12% MSCI ACWI ex U.S., 33% Bbg BC Universal, 5% CBOE BXM , 6.7% SG Multi Asset Risk Premia, 3.3% Bbg BC Long Treasury.

³ Investment Metrics < \$1 Billion Public Plan Universe.

⁴ Longer-term (>1 year) Net of fee returns are estimated based on OPFRS manager fee schedule (approximately 34 bps).

The World Markets Third Quarter of 2020

The World Markets¹ Third Quarter of 2020



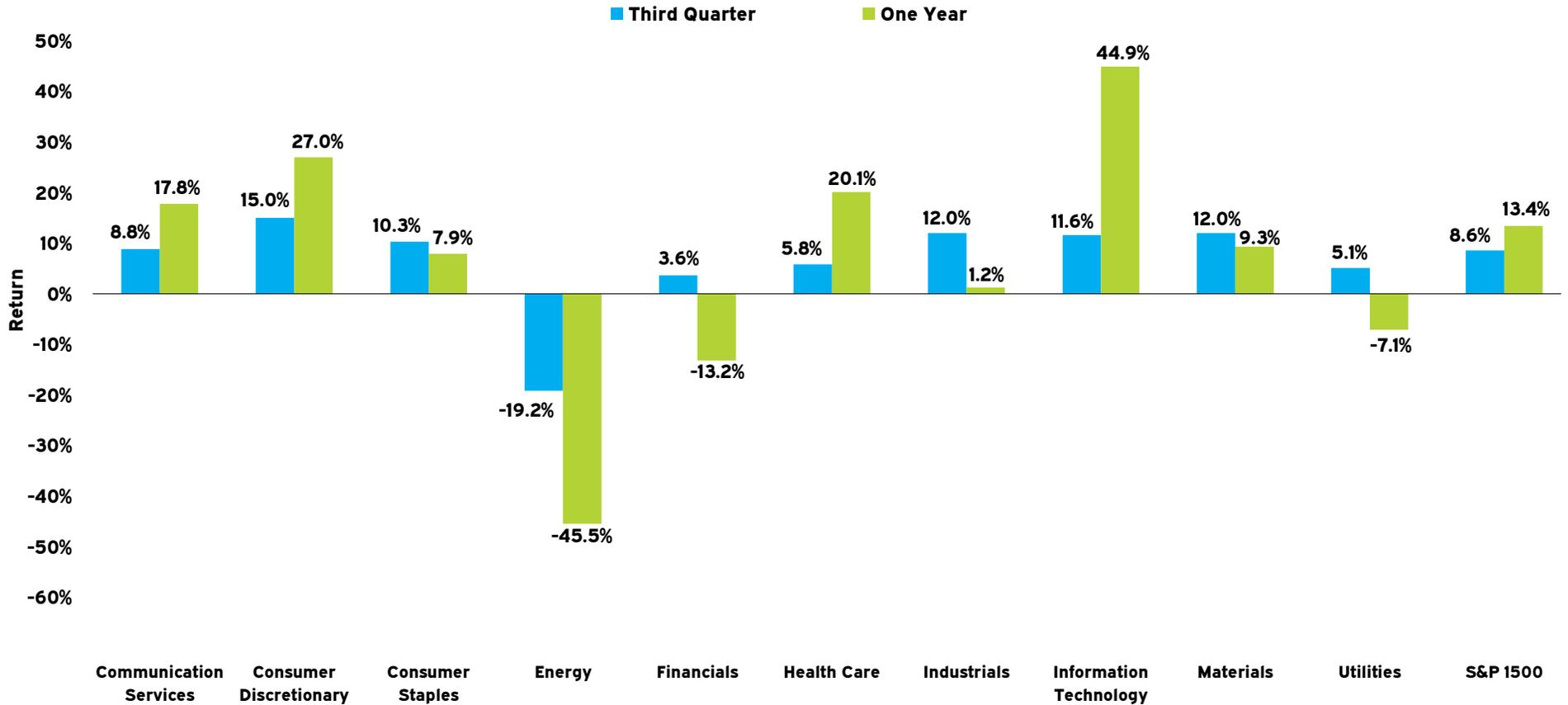
¹ Source: InvestorForce.

Index Returns¹

	3Q20 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
Domestic Equity						
S&P 500	8.9	5.6	15.1	12.3	14.1	13.7
Russell 3000	9.2	5.4	15.0	11.6	13.7	13.5
Russell 1000	9.5	6.4	16.0	12.4	14.1	13.8
Russell 1000 Growth	13.2	24.3	37.5	21.7	20.1	17.3
Russell 1000 Value	5.6	-11.6	-5.0	2.6	7.7	9.9
Russell MidCap	7.5	-2.3	4.6	7.1	10.1	11.8
Russell MidCap Growth	9.4	13.9	23.2	16.2	15.5	14.6
Russell MidCap Value	6.4	-12.8	-7.3	0.8	6.4	9.7
Russell 2000	4.9	-8.7	0.4	1.8	8.0	9.9
Russell 2000 Growth	7.2	3.9	15.7	8.2	11.4	12.3
Russell 2000 Value	2.6	-21.5	-14.9	-5.1	4.1	7.1
Foreign Equity						
MSCI ACWI (ex. US)	6.3	-5.4	3.0	1.2	6.2	4.0
MSCI EAFE	4.8	-7.1	0.5	0.6	5.3	4.6
MSCI EAFE (Local Currency)	1.2	-9.4	-4.7	0.6	4.8	6.3
MSCI EAFE Small Cap	10.3	-4.2	6.8	1.4	7.4	7.3
MSCI Emerging Markets	9.6	-1.2	10.5	2.4	9.0	2.5
MSCI Emerging Markets (Local Currency)	8.6	2.7	12.5	4.8	9.6	5.6
Fixed Income						
Bloomberg Barclays Universal	1.0	6.2	6.7	5.1	4.5	3.9
Bloomberg Barclays Aggregate	0.6	6.8	7.0	5.2	4.2	3.6
Bloomberg Barclays US TIPS	3.0	9.2	10.1	5.8	4.6	3.6
Bloomberg Barclays High Yield	4.6	0.6	3.3	4.2	6.8	6.5
JPM GBI-EM Global Diversified	0.6	-6.3	-1.4	0.2	4.8	0.5
Other						
FTSE NAREIT Equity	1.4	-17.5	-18.2	0.2	3.9	7.9
Bloomberg Commodity Index	9.1	-12.1	-8.2	-4.2	-3.1	-6.0
HFRI Fund of Funds	4.2	2.5	5.6	2.9	3.1	2.9

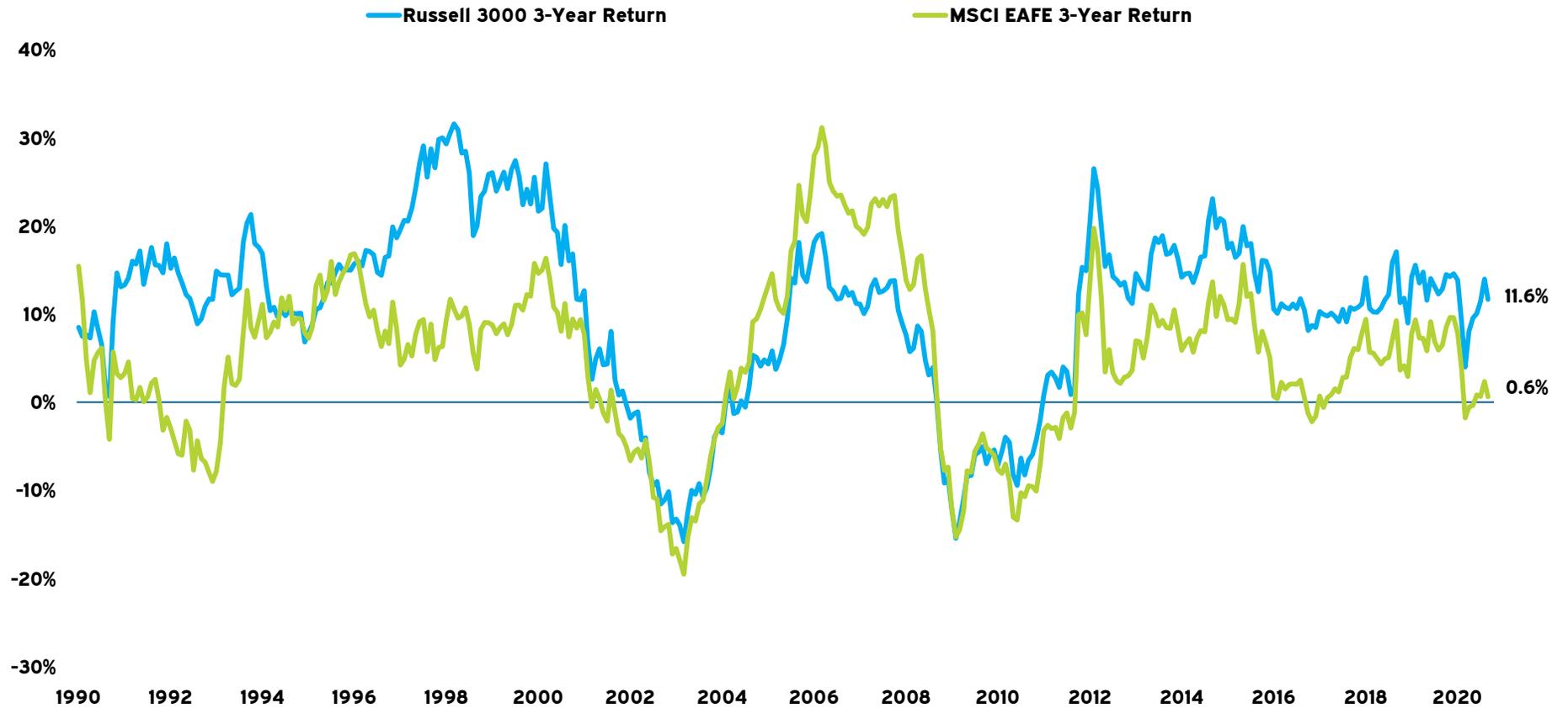
¹ Source: InvestorForce.

S&P Sector Returns¹



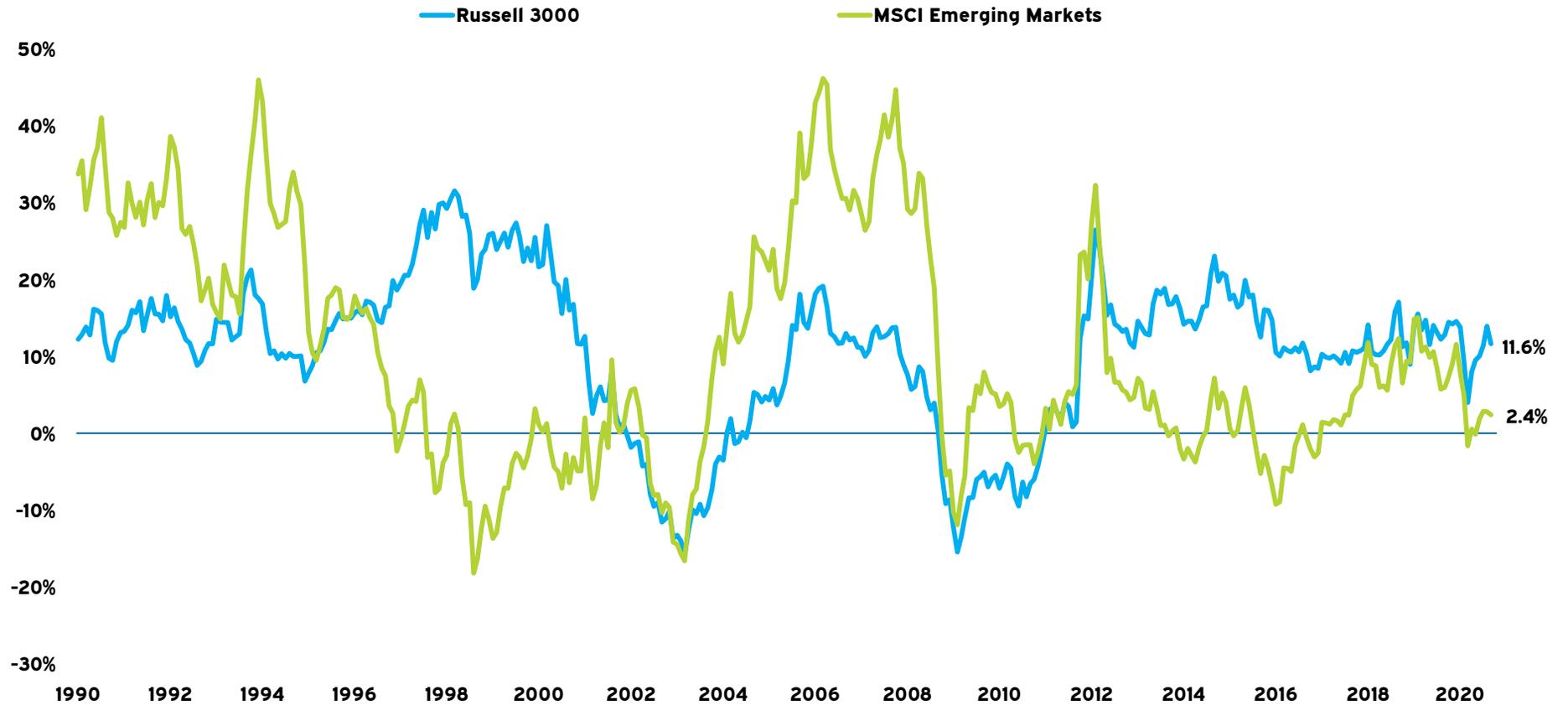
¹ Source: InvestorForce. Represents S&P 1500 (All Cap) data.

US and Developed Market Foreign Equity Rolling Three-Year Returns¹



¹ Source: InvestorForce.

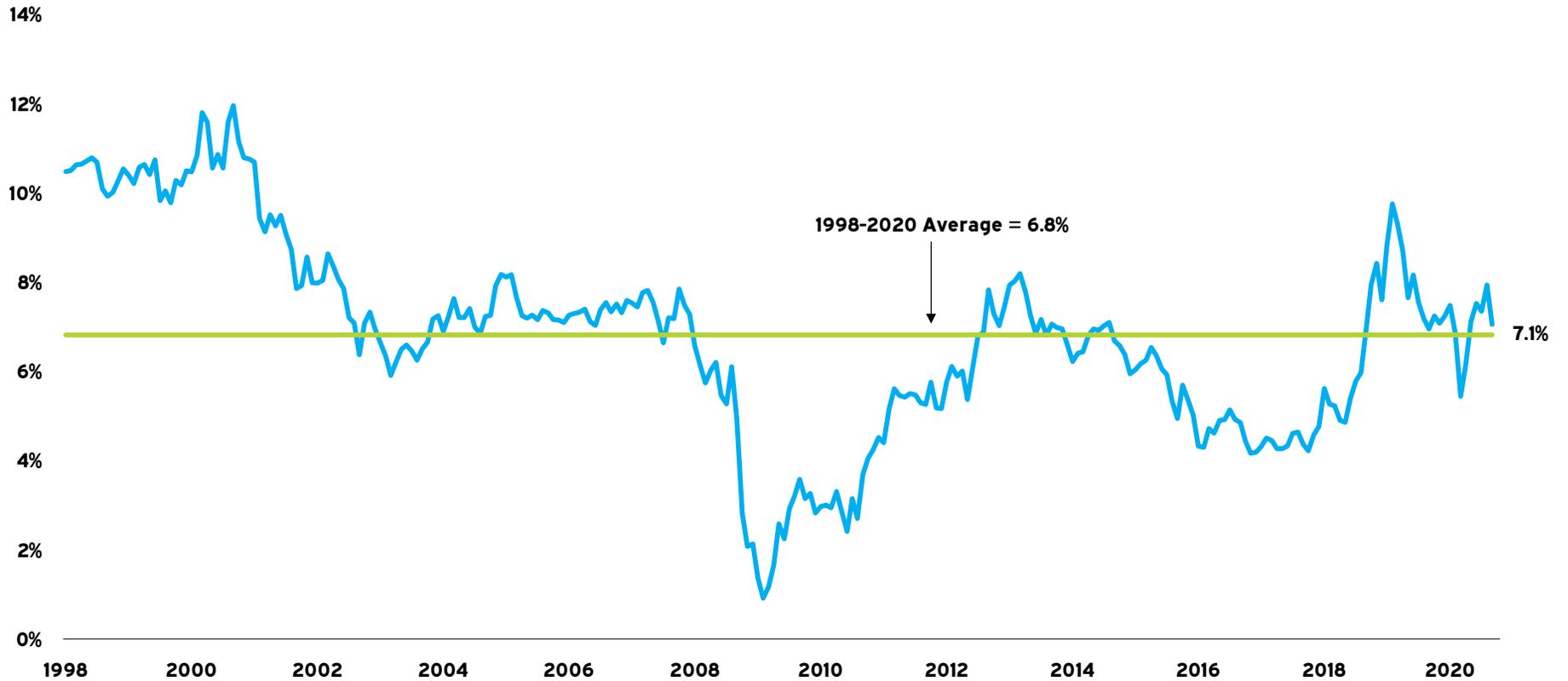
US and Emerging Market Equity Rolling Three-Year Returns¹



¹ Source: InvestorForce.

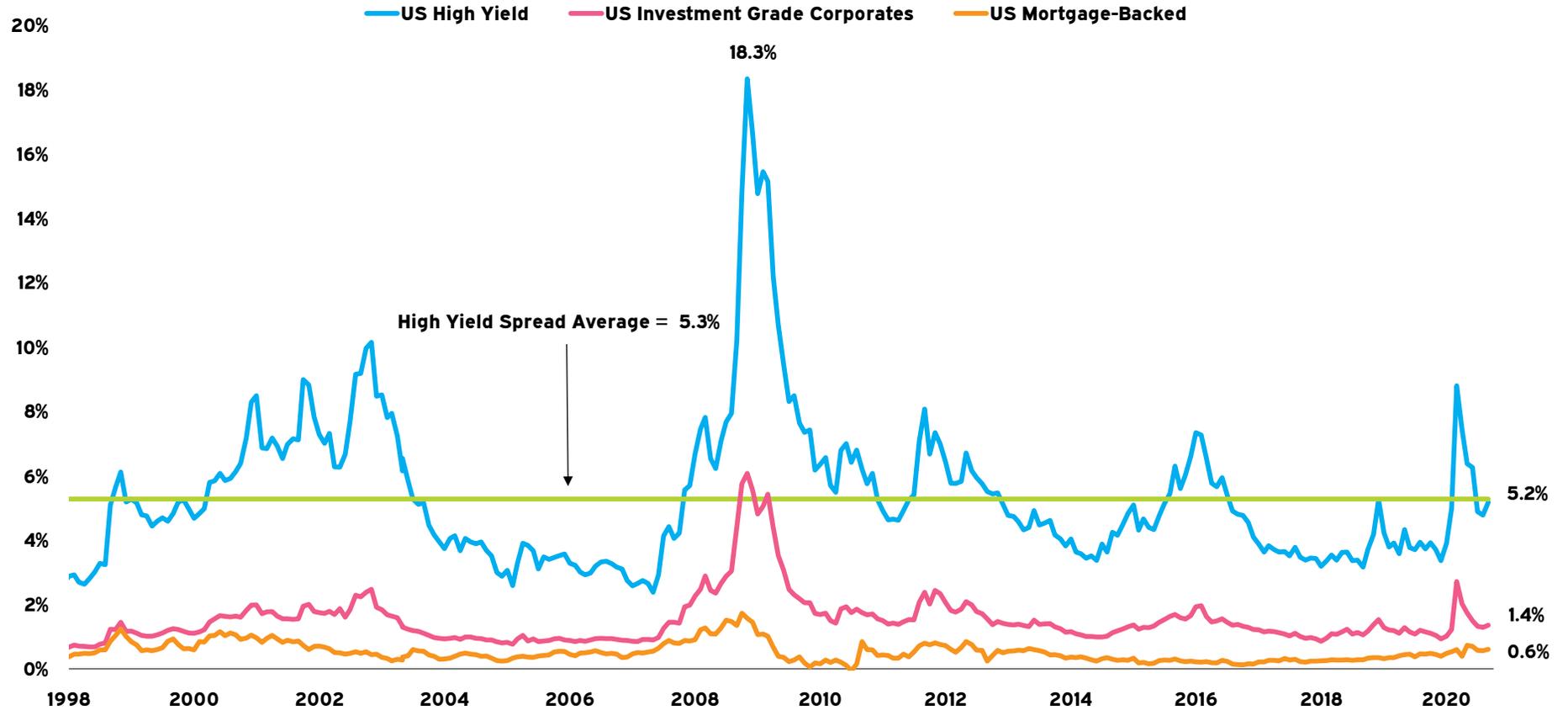
Rolling Ten-Year Returns: 65% Stocks and 35% Bonds¹

— 65% Stocks (MSCI ACWI) / 35% Bonds (Bloomberg Barclays Aggregate) 10-Year Rolling Return



¹ Source: InvestorForce.

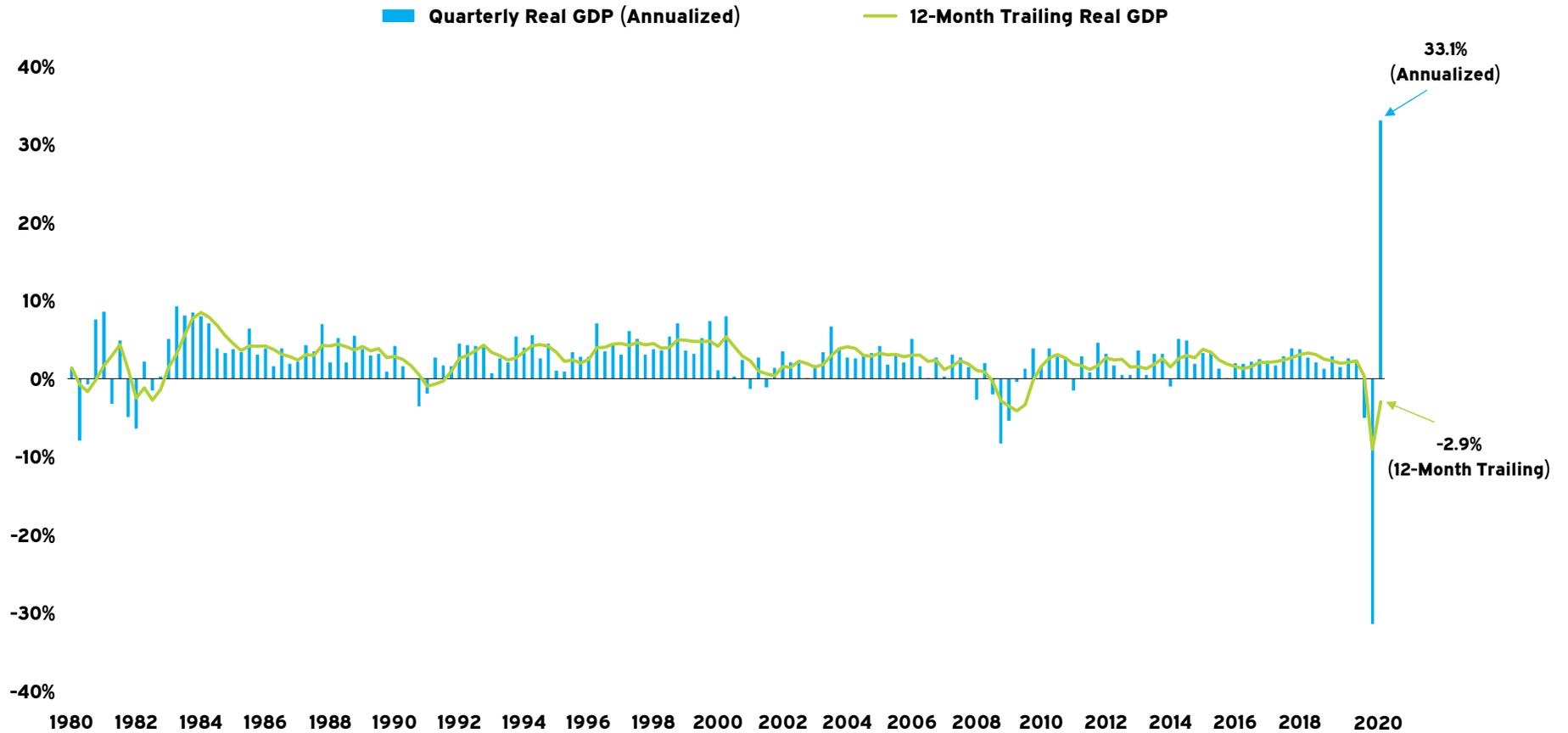
Credit Spreads vs. US Treasury Bonds^{1,2}



¹ Source: Barclays Live. Data represents the OAS.

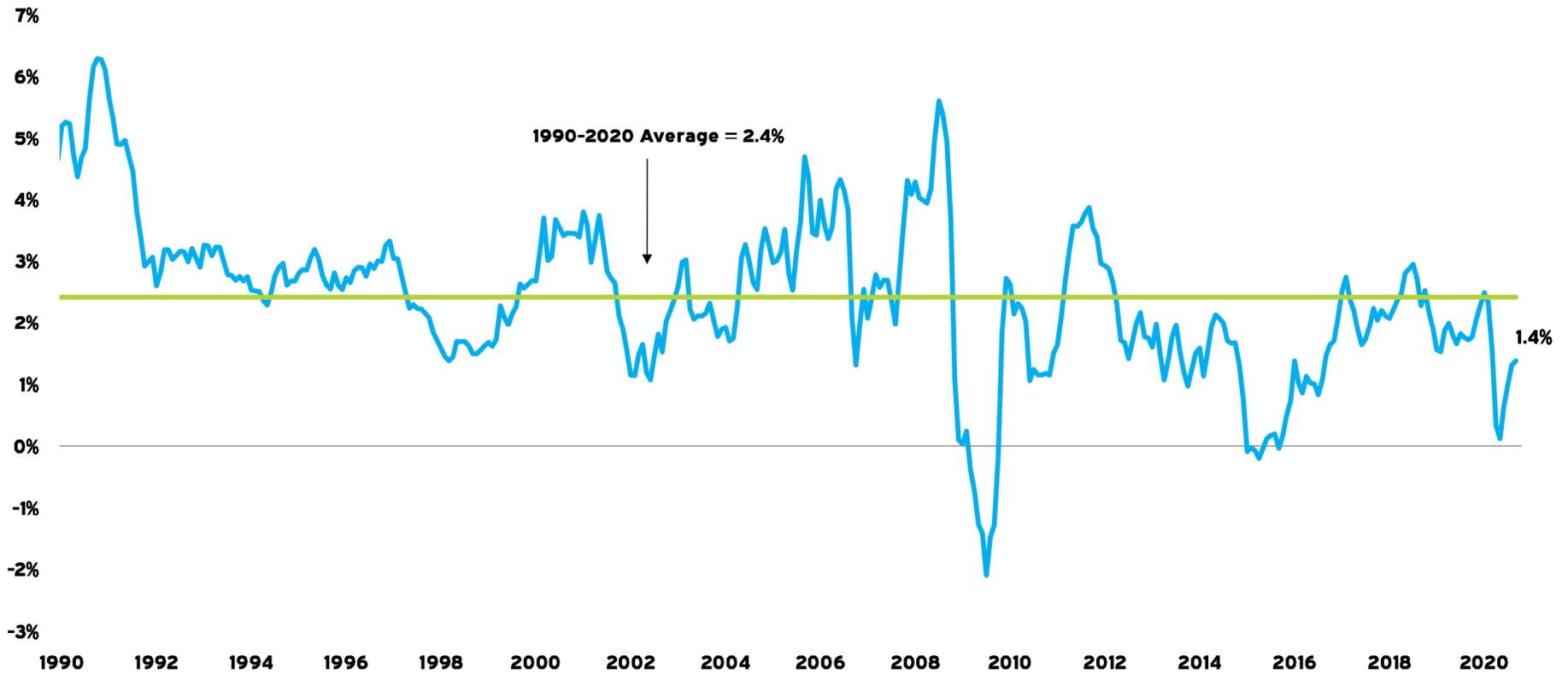
² The median high yield spread was 4.8% from 1997-2020.

US Real Gross Domestic Product (GDP) Growth¹



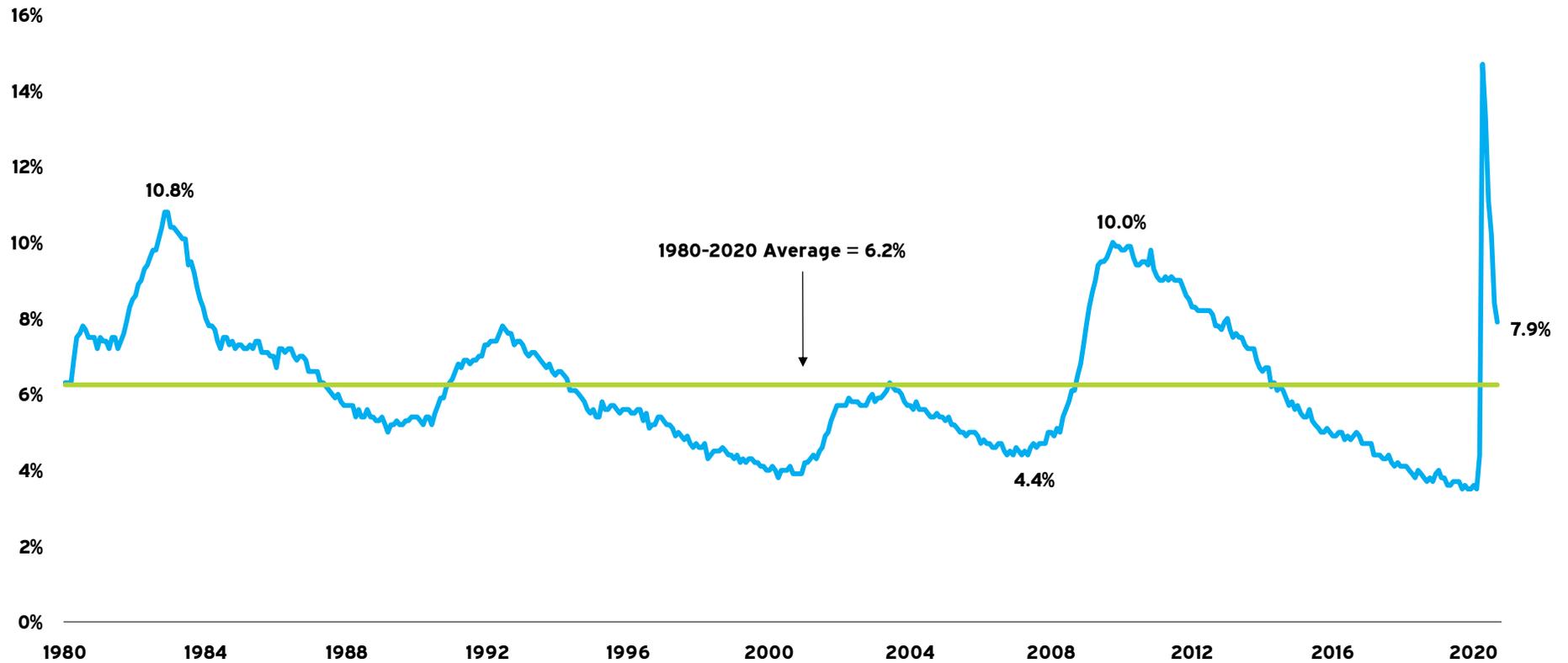
¹ Source: Bureau of Economic Analysis. Data is as of Q3 2020 and represents the first estimate.

US Inflation (CPI)
Trailing Twelve Months¹



¹ Source: Bureau of Labor Statistics. Data is non-seasonally adjusted CPI, which may be volatile in the short-term. Data is as of September 30, 2020.

US Unemployment¹



¹ Source: Bureau of Labor Statistics. Data is as of September 30, 2020.

Capital Markets Outlook & Risk Metrics
As of October 31, 2020

Capital Markets Outlook

Takeaways

- October saw a modest reversal from the primary themes of Q2 and Q3. In particular, global equity markets generally produced flat-to-negative returns, although small cap and value stocks regained some ground relative to their counterparts. Additionally, longer-term interest rates in the US ticked up slightly, resulting in negative returns for most safe haven assets (e.g., US Treasury bonds).
- Risk-oriented markets have rebounded significantly since the March lows, although October represented a pause to the recovery. Despite some catch-up in October, there continues to be a high degree of divergence among equity regions/styles/capitalizations, and this is exemplified at the extremes with US large cap growth stocks outperforming US small cap value stocks by nearly 40% thus far in 2020.
- While the shorter portions of the US Treasury curve were stable during October, yields rose by 10-20 basis points for US Treasuries greater than 5 years in maturity. Although this movement is not significant in an absolute sense, at current interest rate levels such a move does modestly impact bond prices.
- Real yields in the US ticked up during October, with the most significant movements occurring at the longer end of the curve. The entire real yield curve does, however, remain in negative territory.
- Q3 GDP and other economic data indicate that an economic recovery was well underway. However, recent increases in COVID-related cases/deaths, as well as newly announced shutdowns in Europe and other regions, represent a new headwind to the recovery.

Capital Markets Outlook

Takeaways

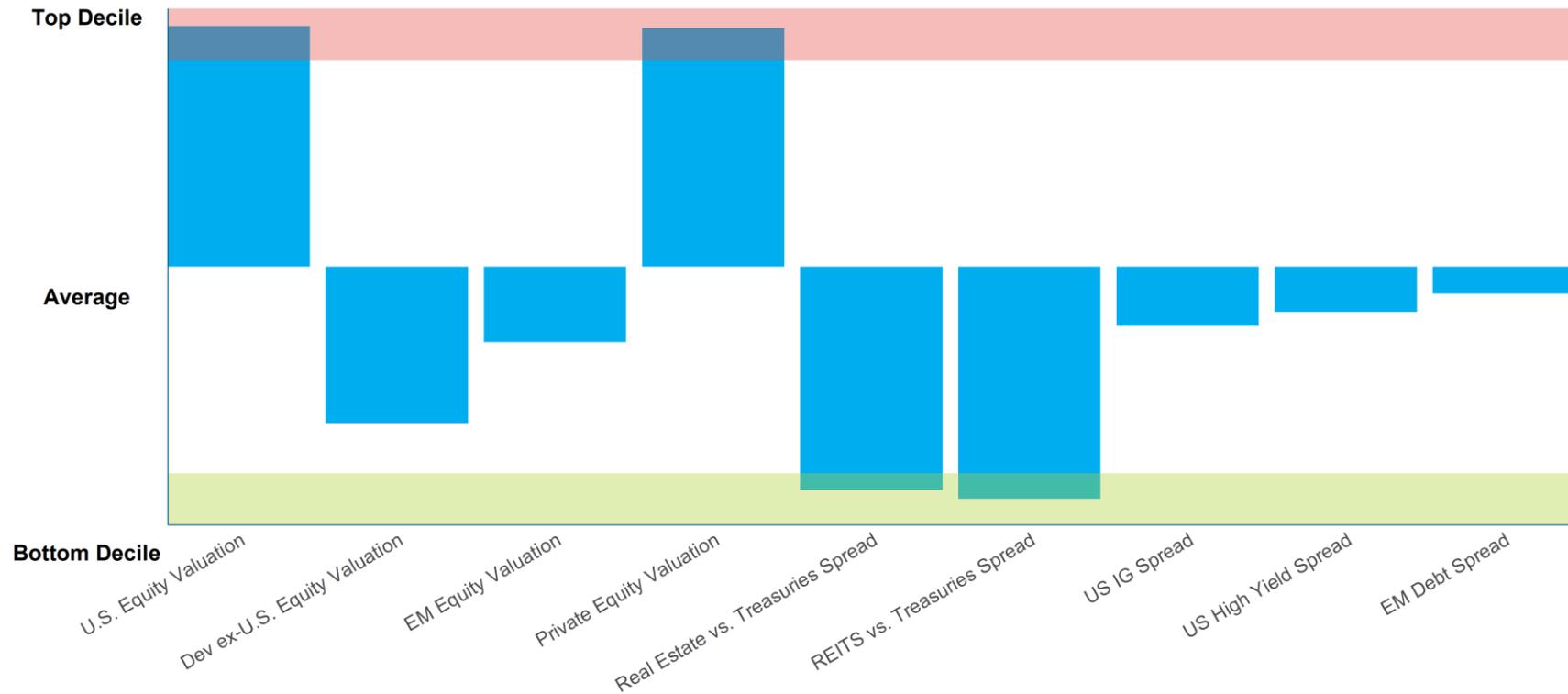
- Market activity appears to be focused on two items: 1) 2020 election results and 2) vaccine development and COVID-related shutdowns. Returning to pre-COVID levels of economic activity is not expected to occur until 2021 at the earliest.
- Implied equity market volatility¹ increased throughout October before ending the month at around 38. Conversely, our Systemic Risk measure decreased during the month, while implied fixed income volatility² increased.
- While valuations for several risk-based asset classes appear neutral-to-attractive at first glance, it is important to note that the full impact on corporate earnings and solvencies remains unknown. The path that the global economy will take moving forward is uncertain.
- The Market Sentiment Indicator³ returned to grey (i.e., neutral) at month-end.

¹ As measured by VIX Index.

² As measured by MOVE Index.

³ See Appendix for the rationale for selection and calculation methodology used for the risk metrics.

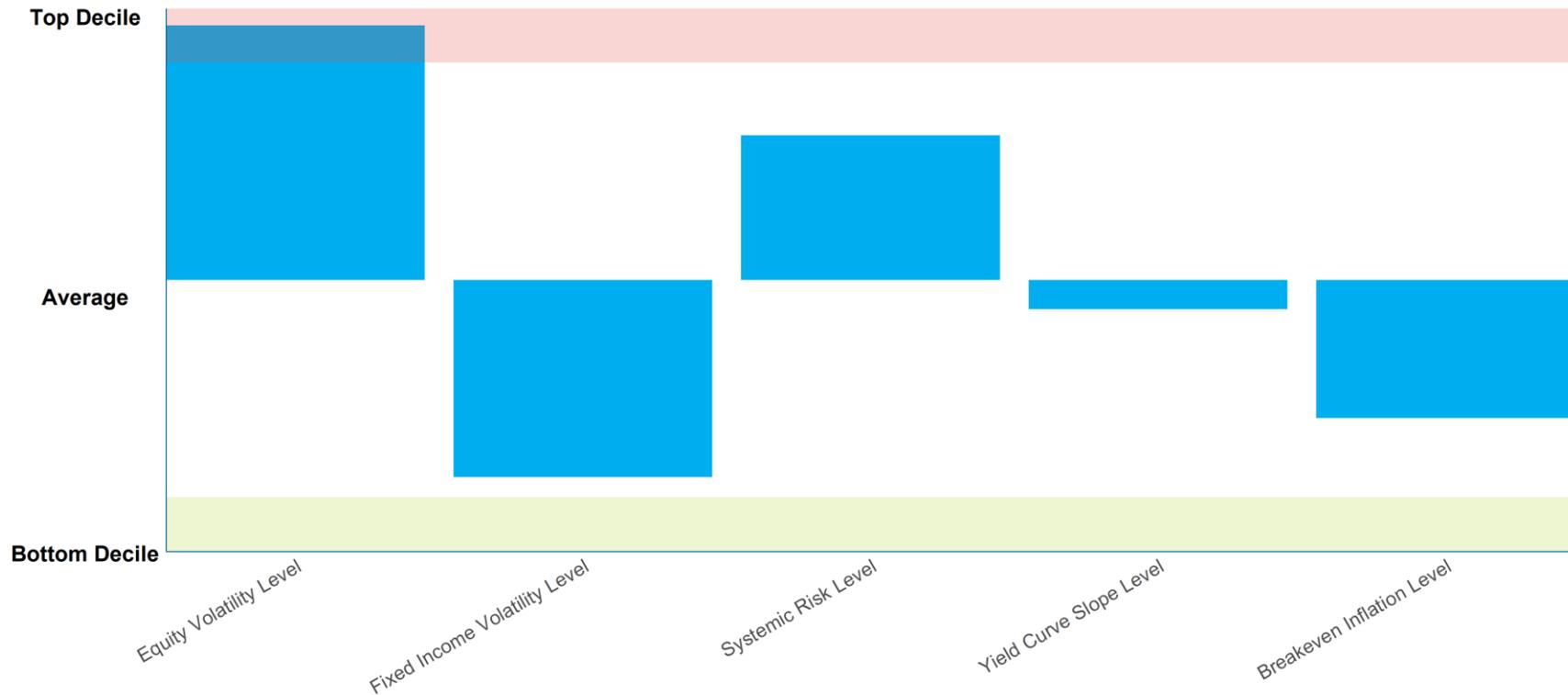
Risk Overview/Dashboard (1) (As of October 31, 2020)¹



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

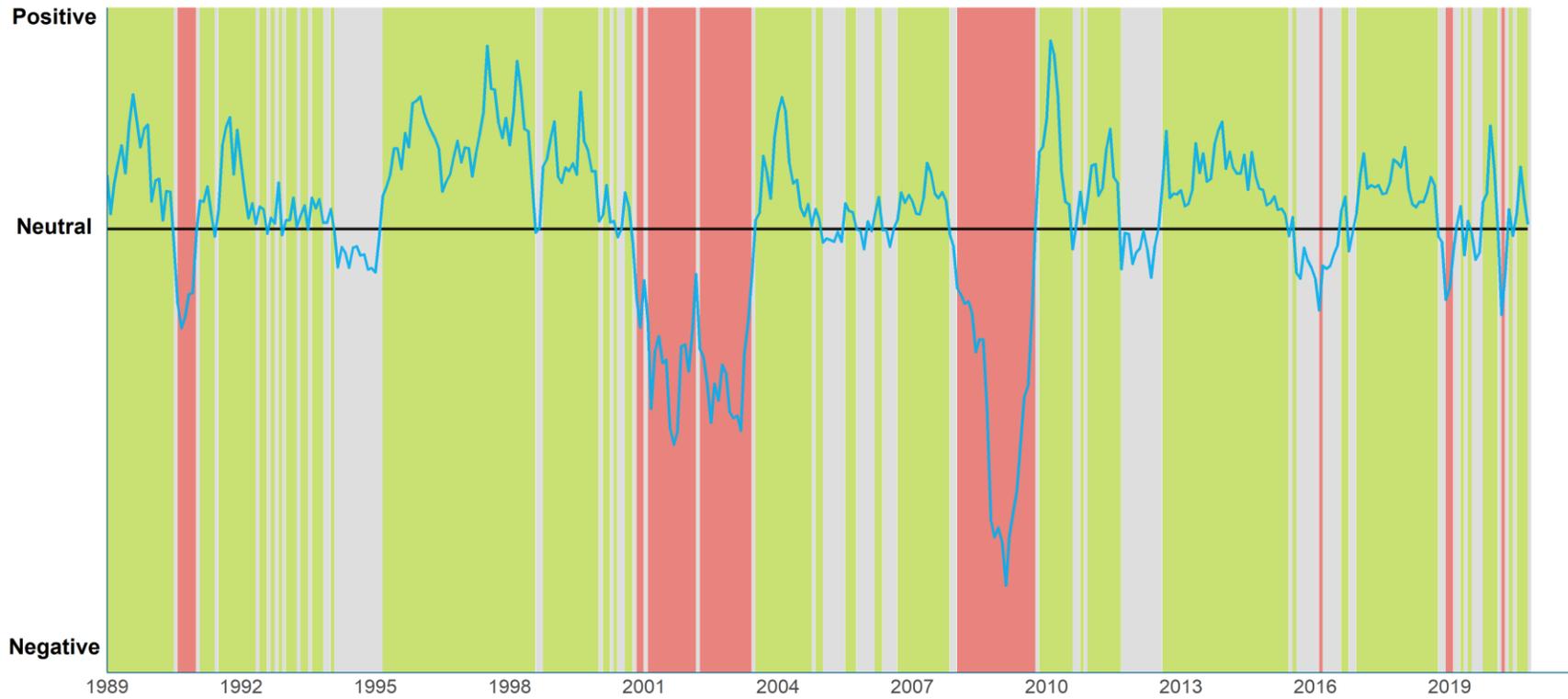
¹ With the exception of Private Equity Valuation, that is YTD as of December 31, 2019.

Risk Overview/Dashboard (2) (As of October 31, 2020)

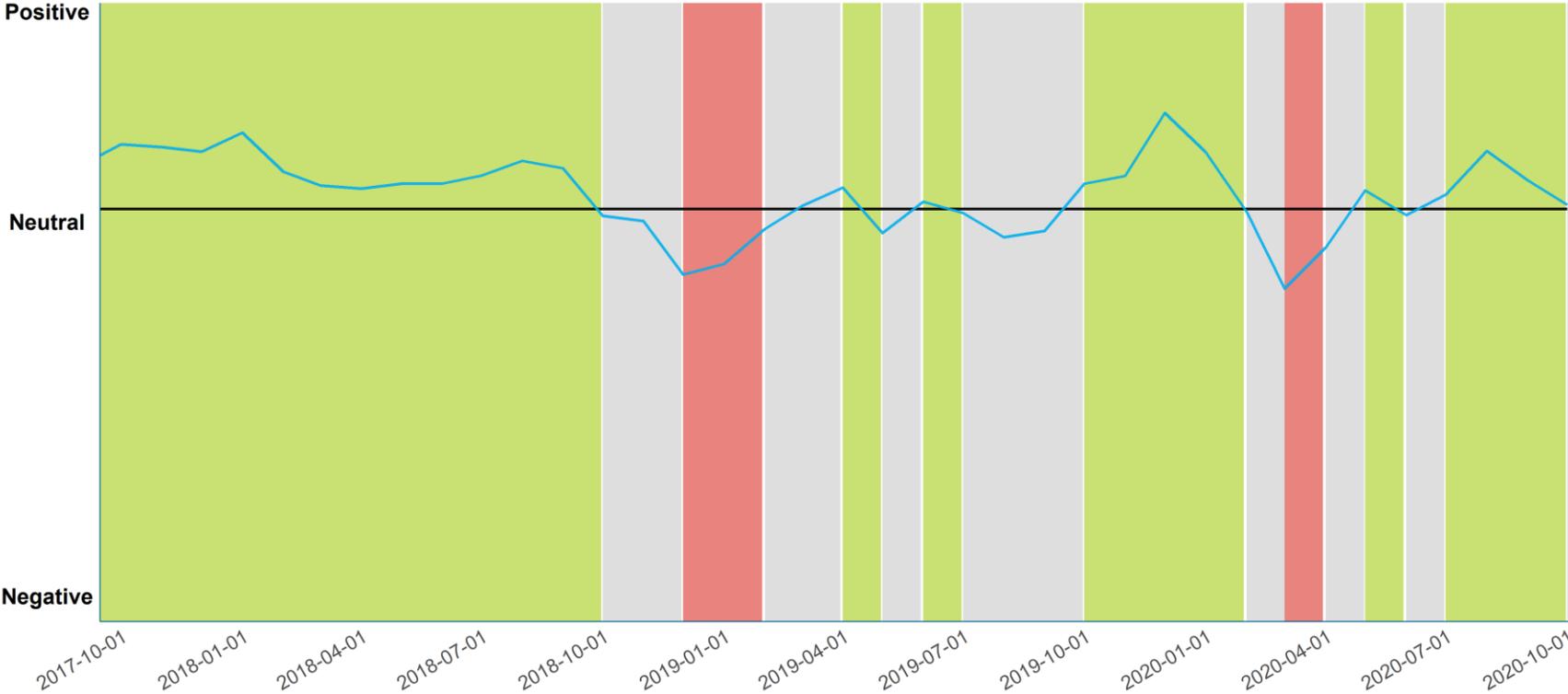


- Dashboard (2) shows how the current level of each indicator compares to its respective history.

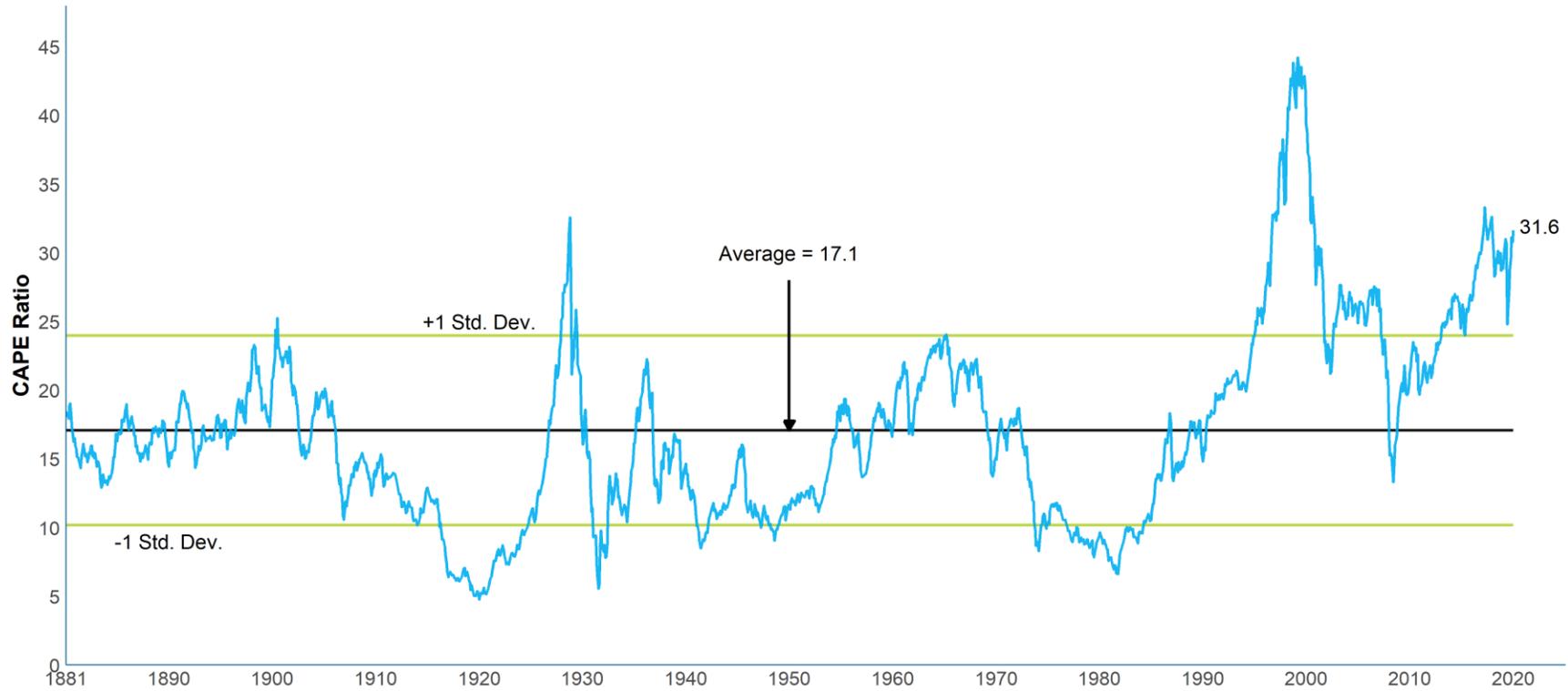
Market Sentiment Indicator (All History) (As of October 31, 2020)



Market Sentiment Indicator (Last Three Years)
(As of October 31, 2020)



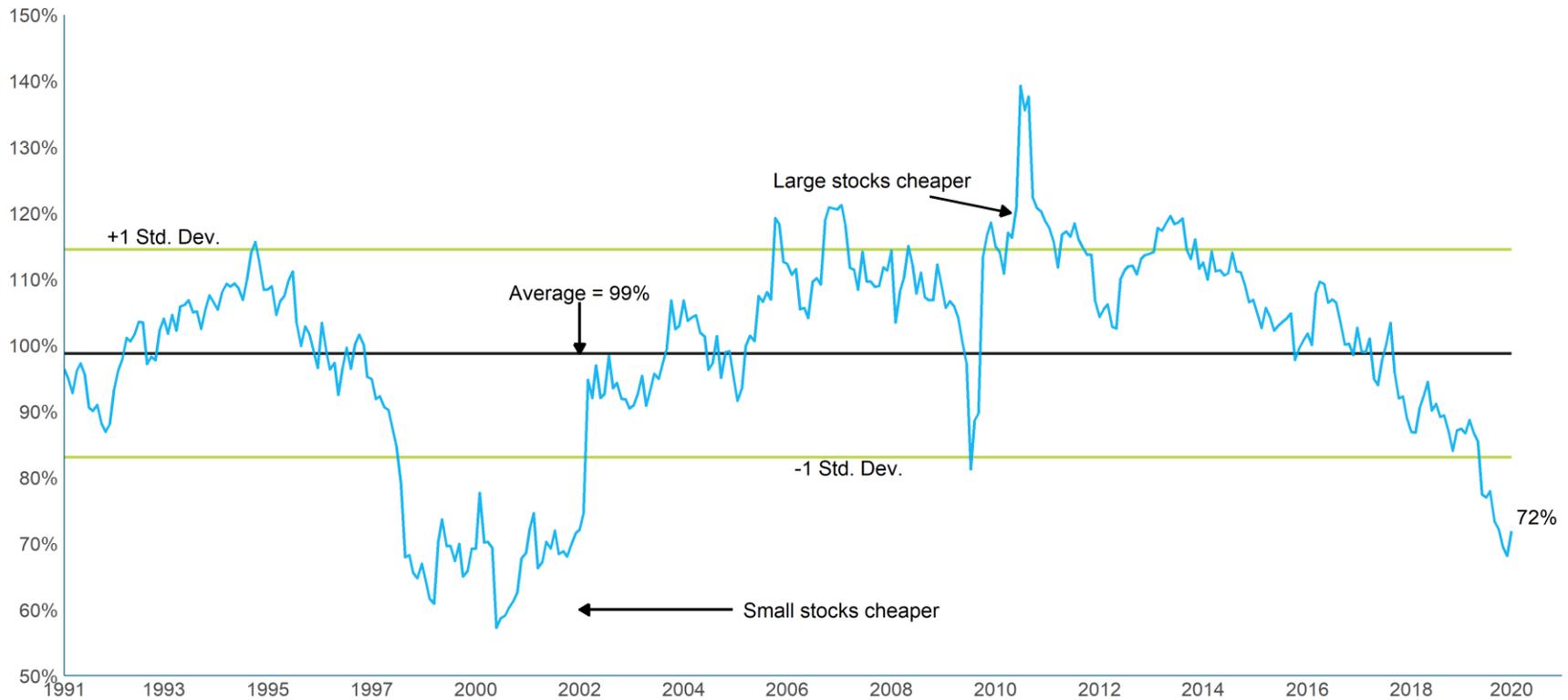
US Equity Cyclically Adjusted P/E¹
(As of October 31, 2020)



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

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

Small Cap P/E vs. Large Cap P/E¹ (As of October 31, 2020)



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

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

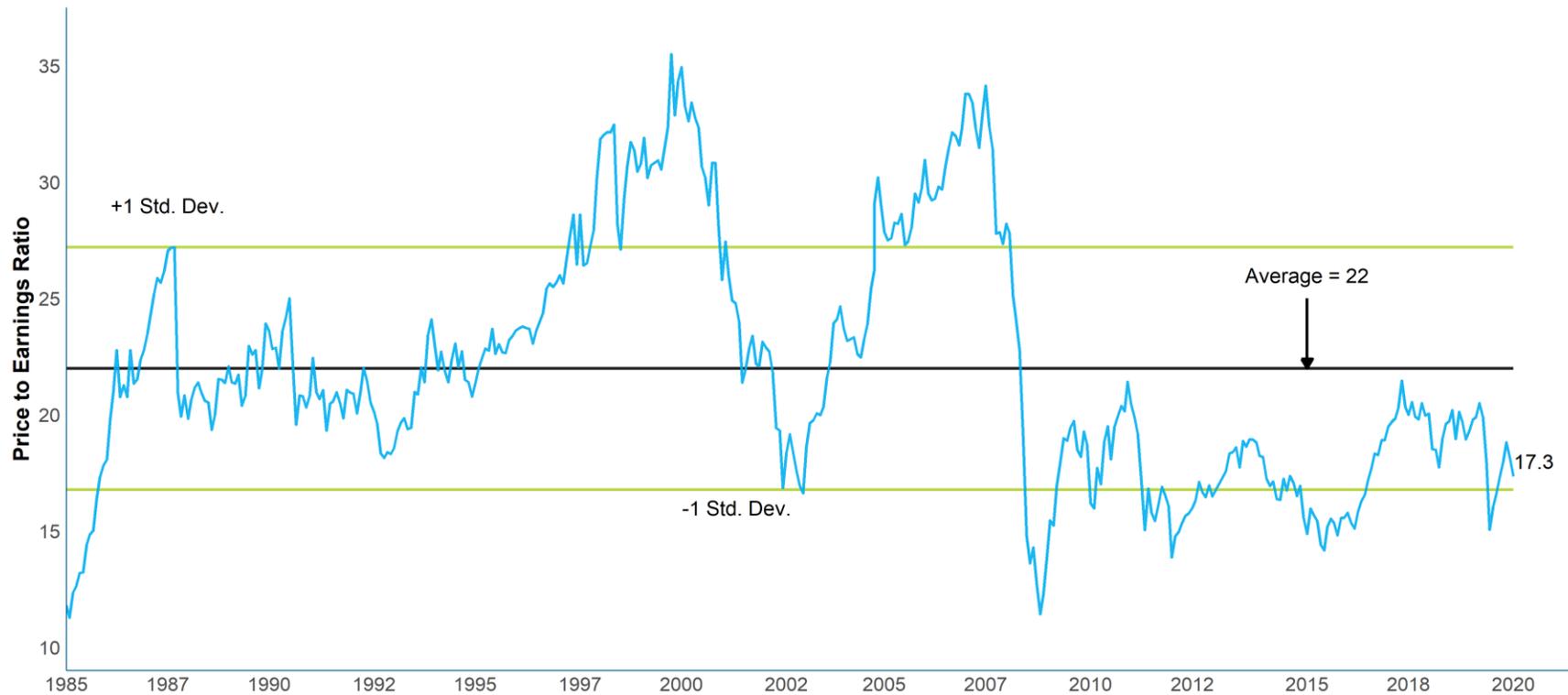
Growth P/E vs. Value P/E¹
(As of October 31, 2020)



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

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

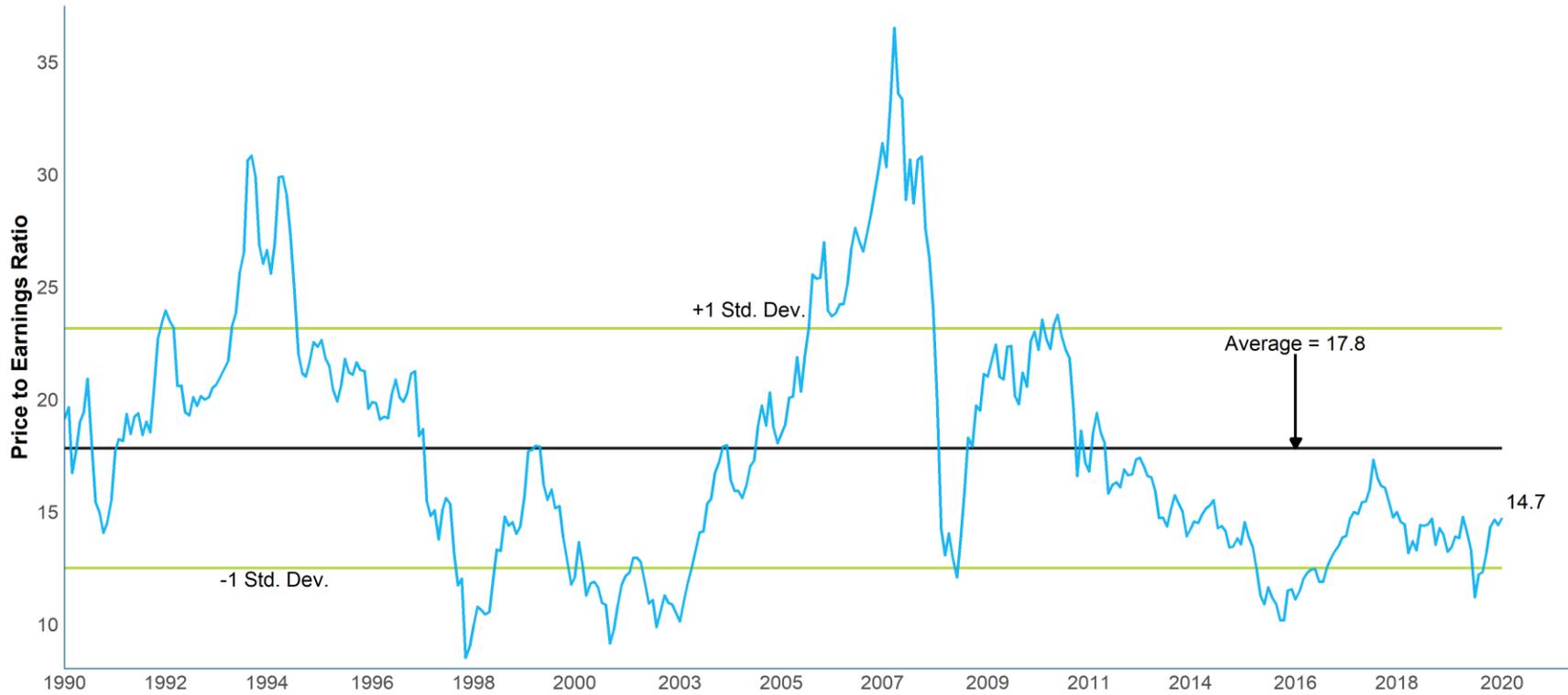
Developed International Equity Cyclically Adjusted P/E¹ (As of October 31, 2020)



- 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 ex Japan Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years.

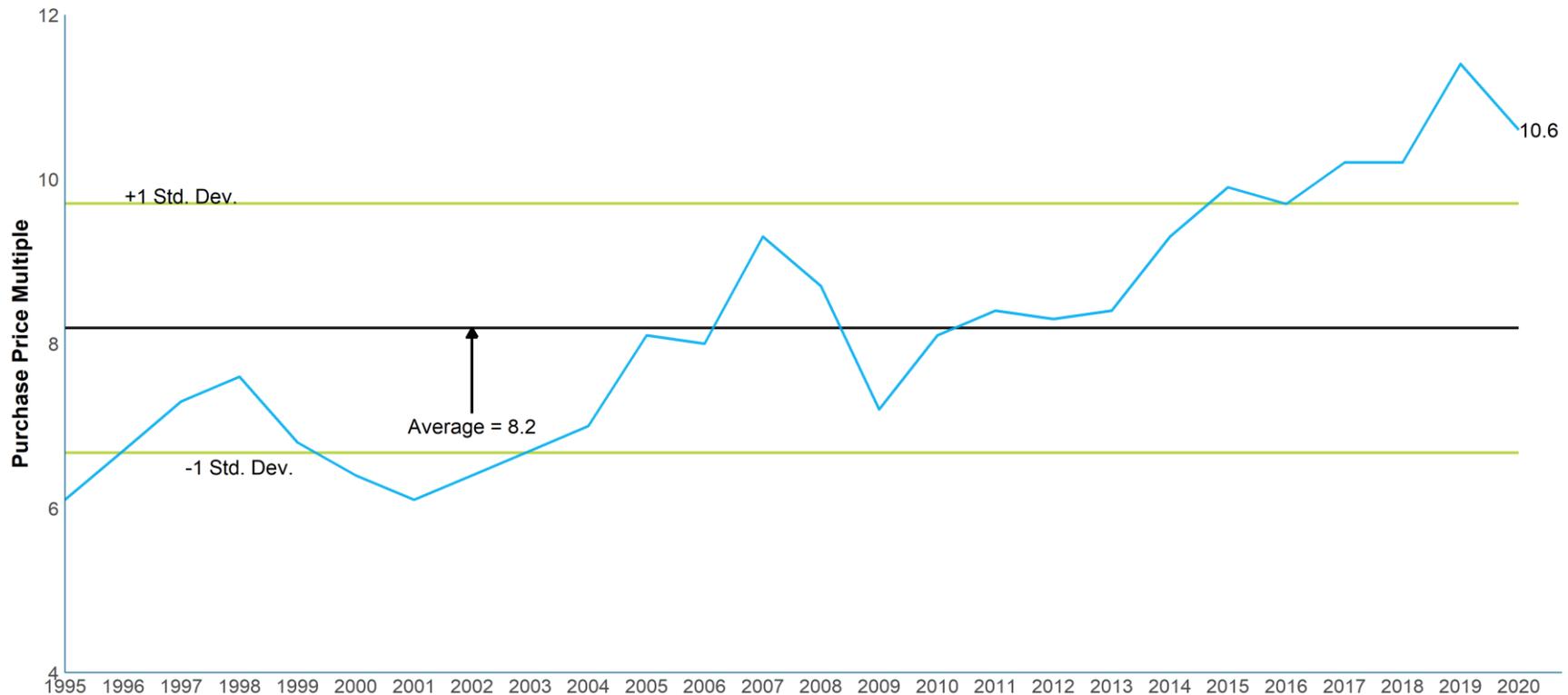
Emerging Market Equity Cyclically Adjusted P/E¹
 (As of October 31, 2020)



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

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

Private Equity Multiples¹ (As of February 29, 2020)²

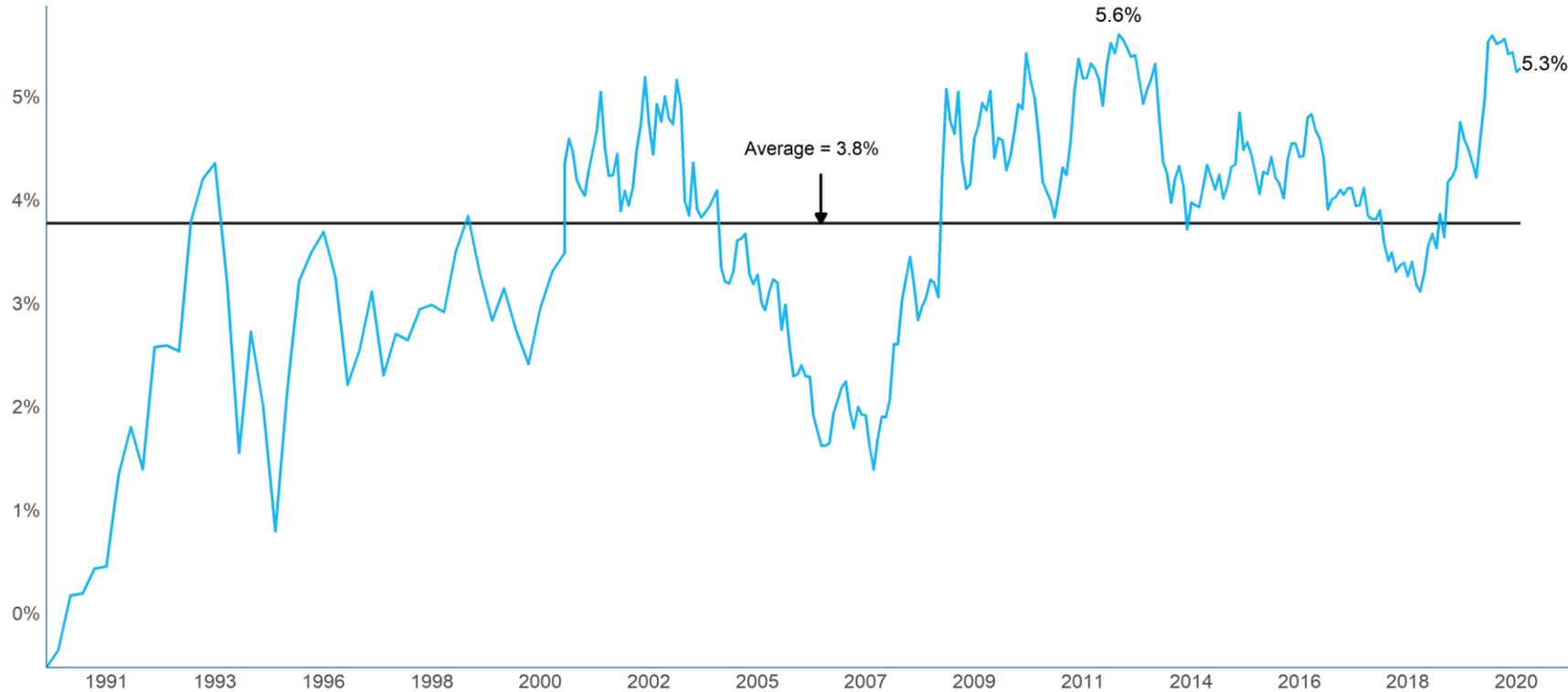


- This chart details one valuation metric for the private equity market. A higher (lower) figure indicates more expensive (cheaper) valuation relative to history.

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

² Annual figures, except for 2020 (YTD).

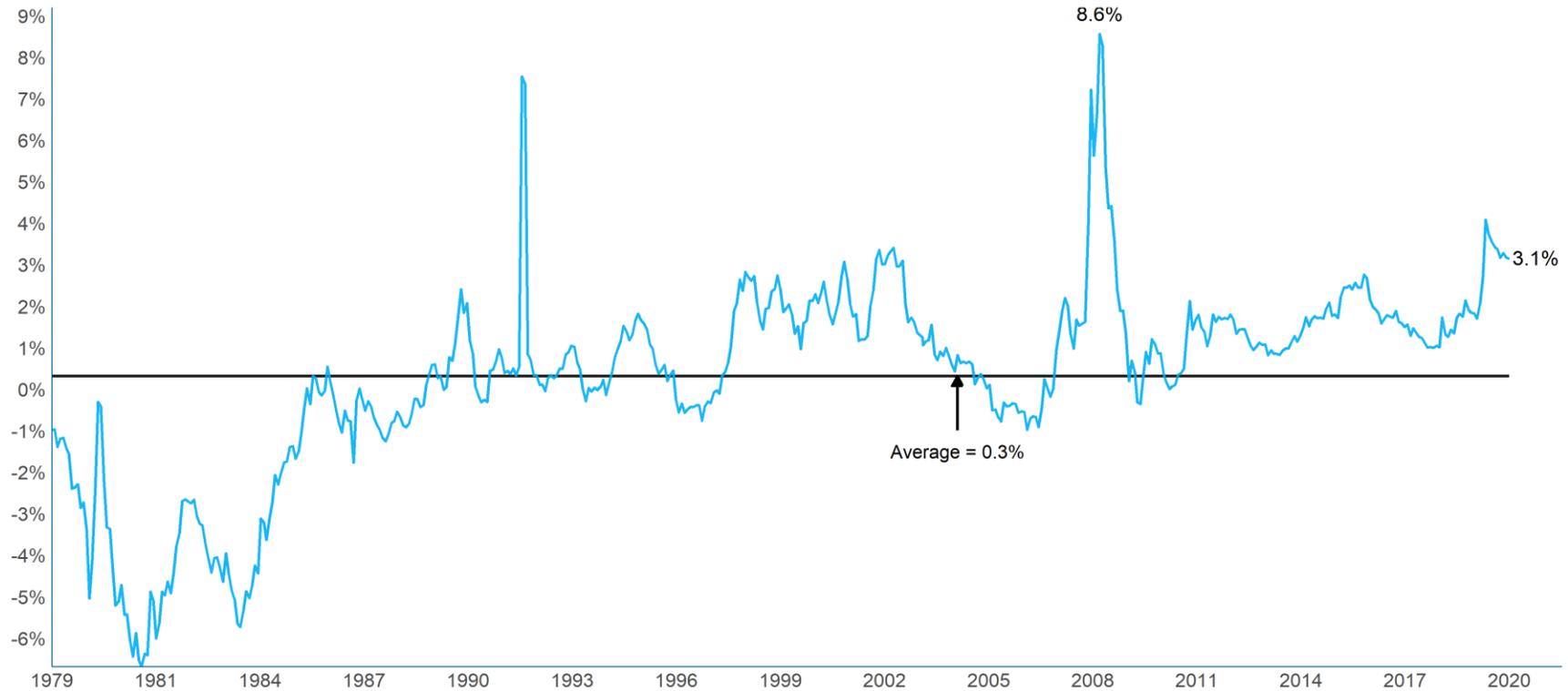
Core Real Estate Spread vs. Ten-Year Treasury¹
(As of October 31, 2020)



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

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

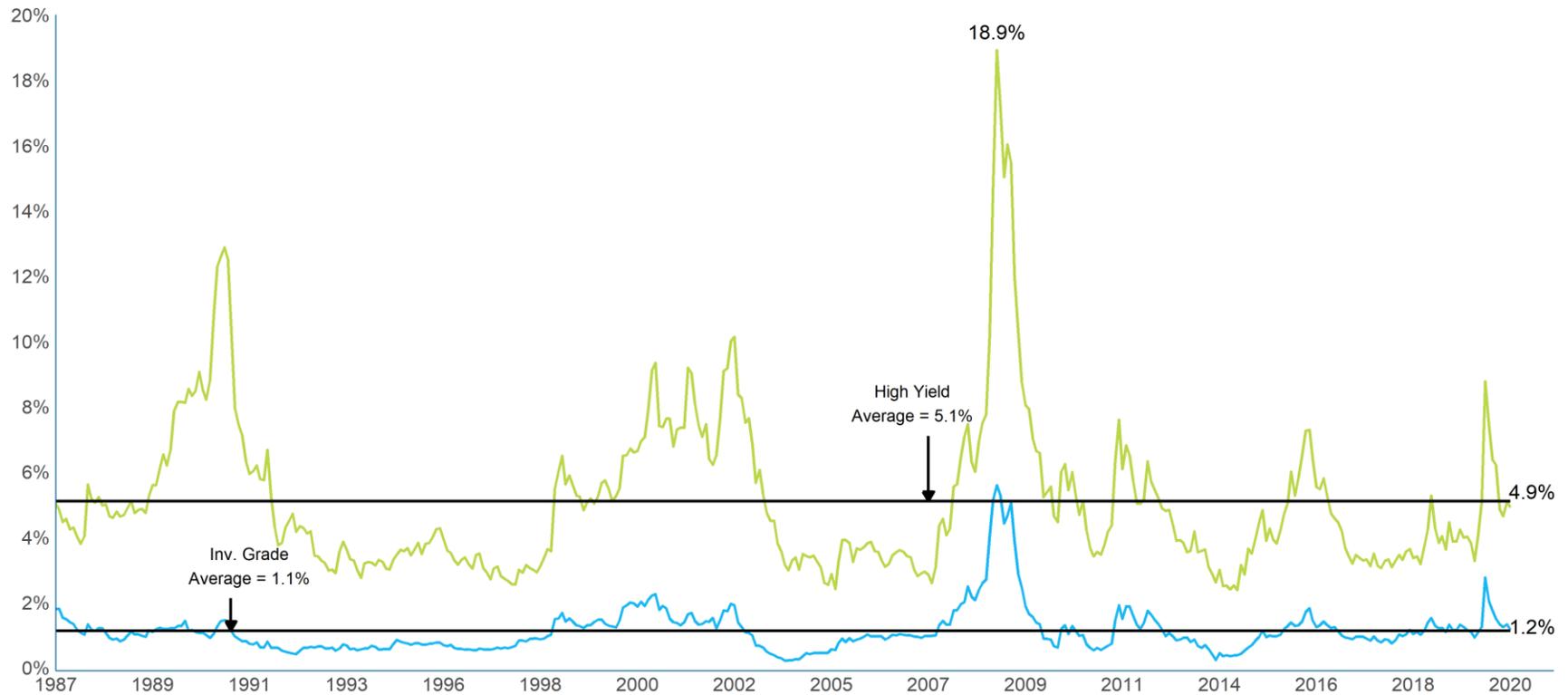
REITs Dividend Yield Spread vs. Ten-Year Treasury¹ (As of October 31, 2020)



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

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

Credit Spreads¹
(As of October 31, 2020)



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

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

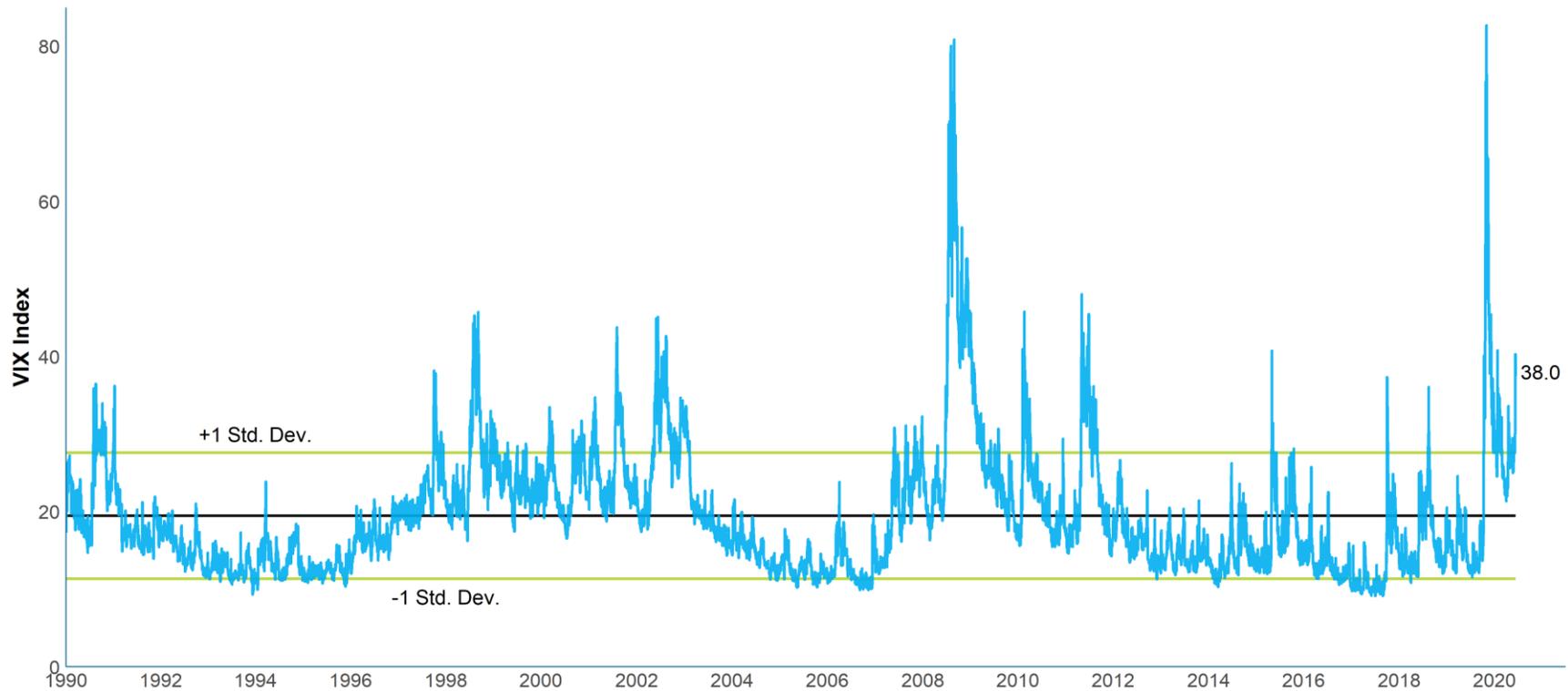
Emerging Market Debt Spreads¹ (As of October 31, 2020)



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

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

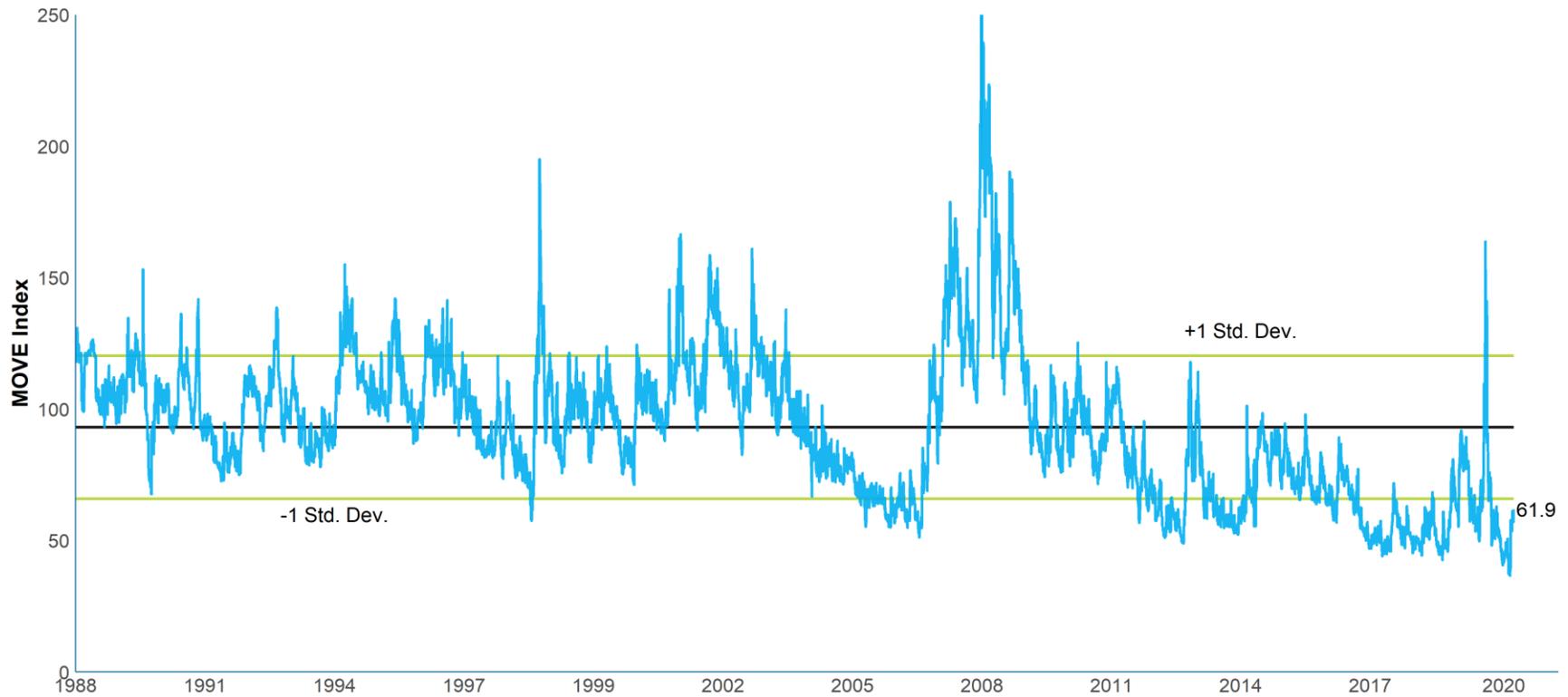
Equity Volatility¹
(As of October 31, 2020)



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

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

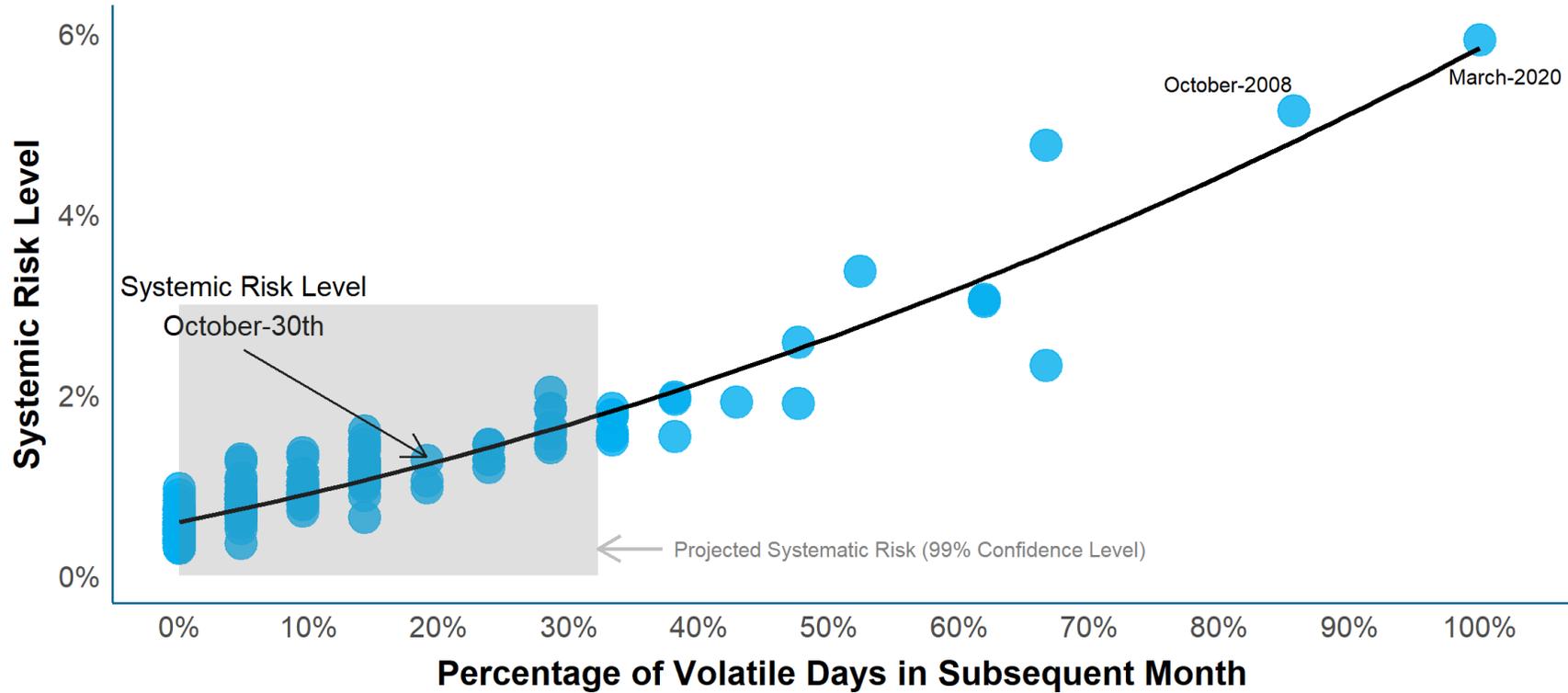
Fixed Income Volatility¹
(As of October 31, 2020)



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

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

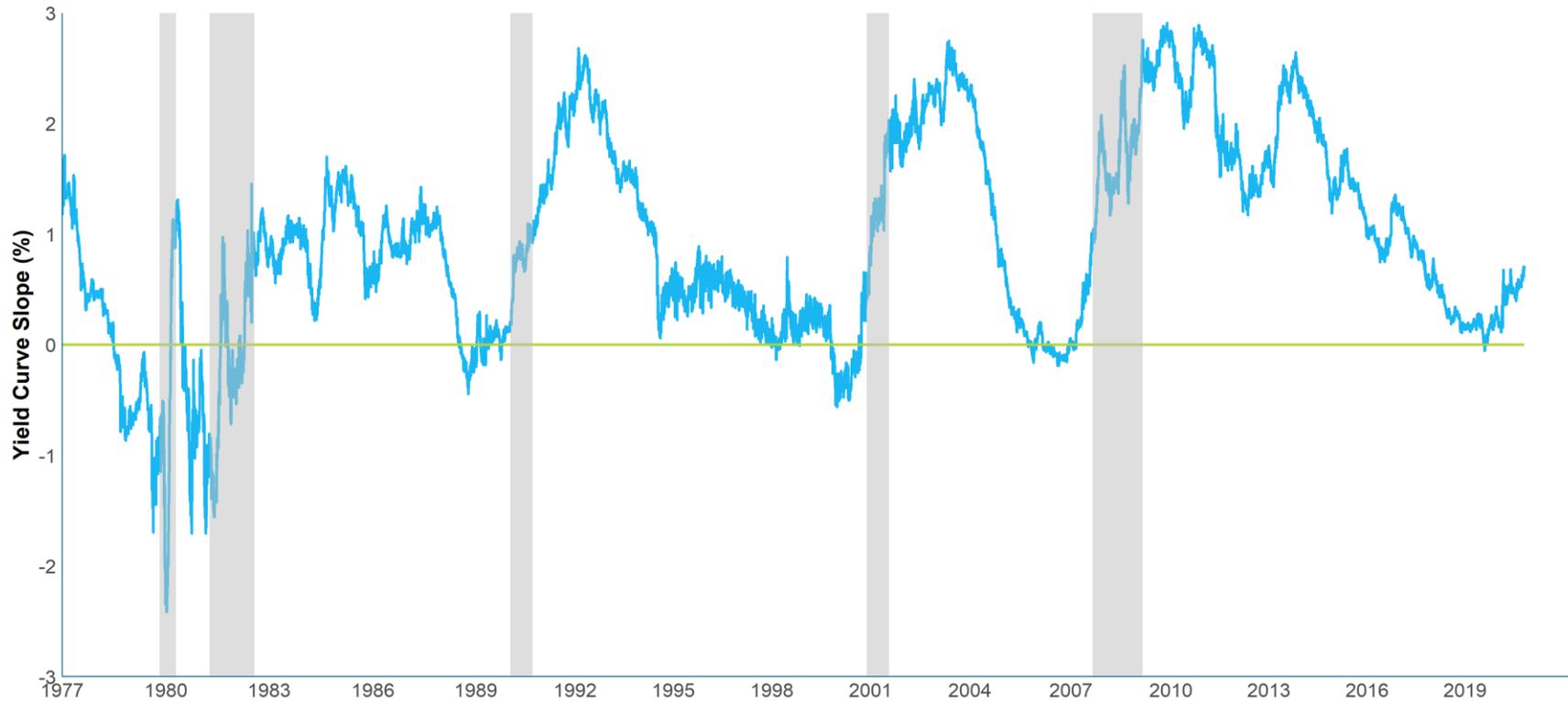
Systemic Risk and Volatile Market Days¹
(As of October 31, 2020)



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

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

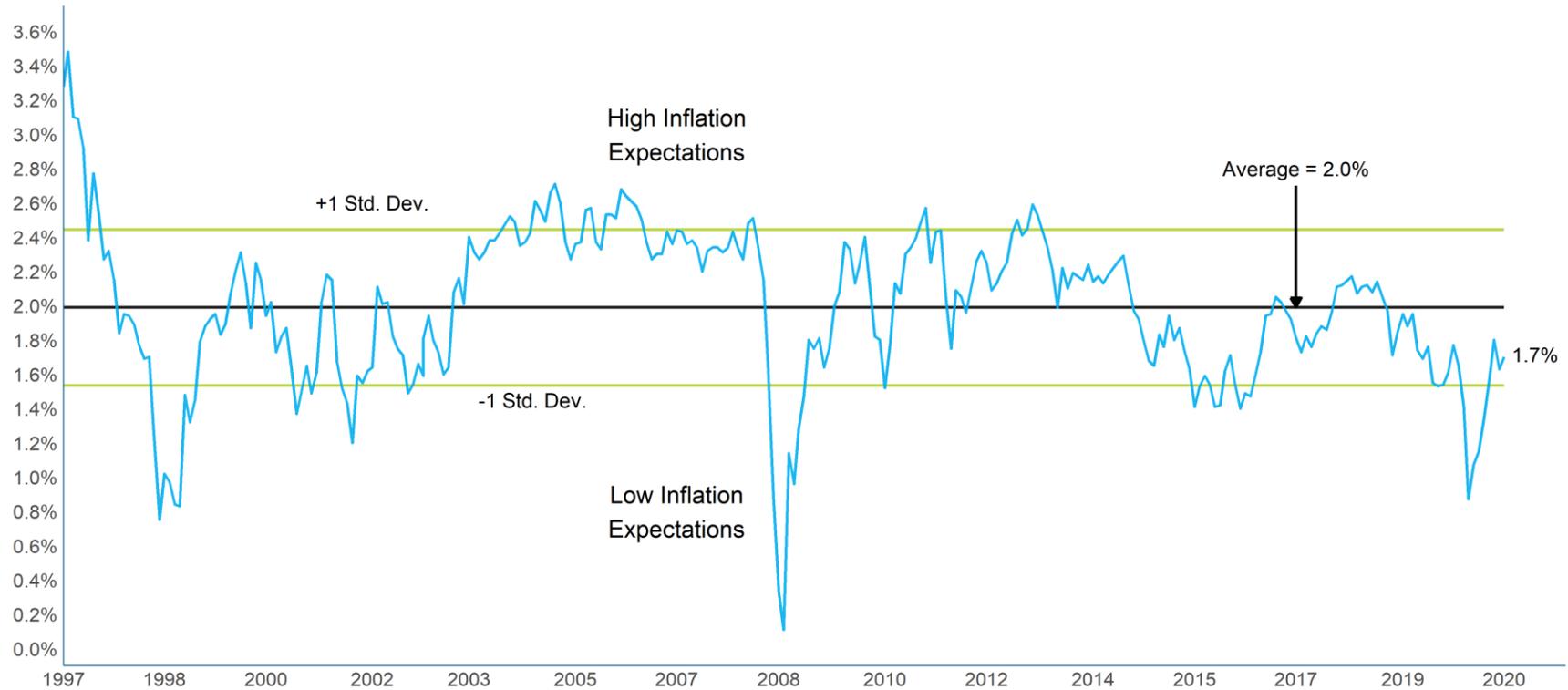
Yield Curve Slope (Ten Minus Two)¹
(As of October 31, 2020)



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

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

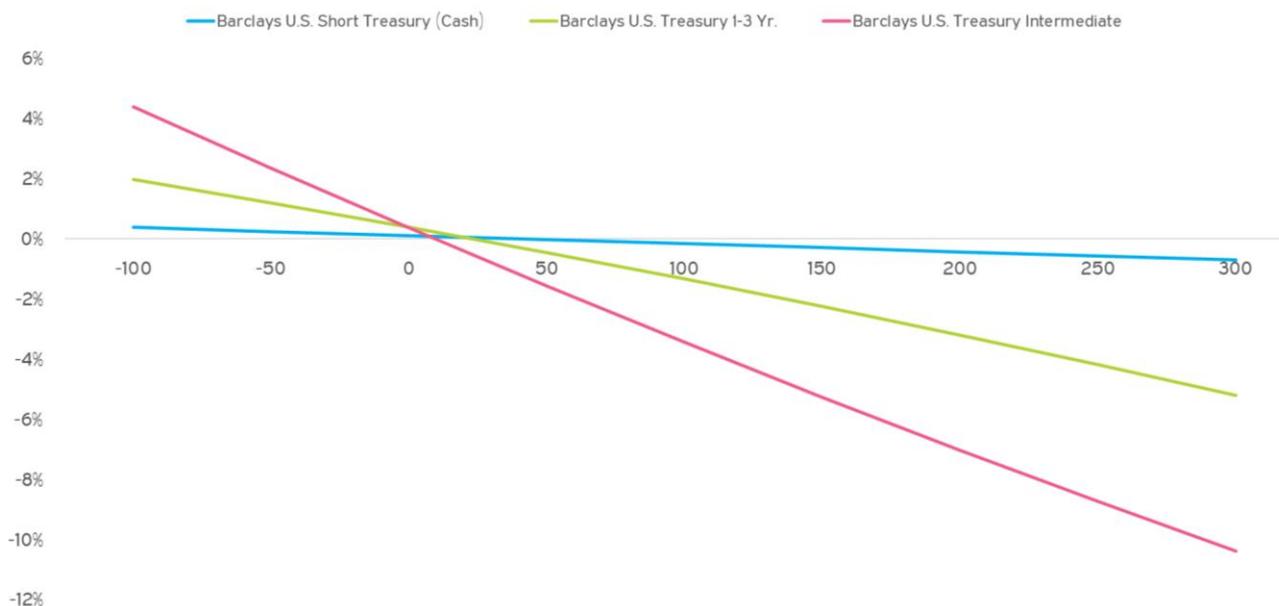
Ten-Year Breakeven Inflation¹
(As of October 31, 2020)



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

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

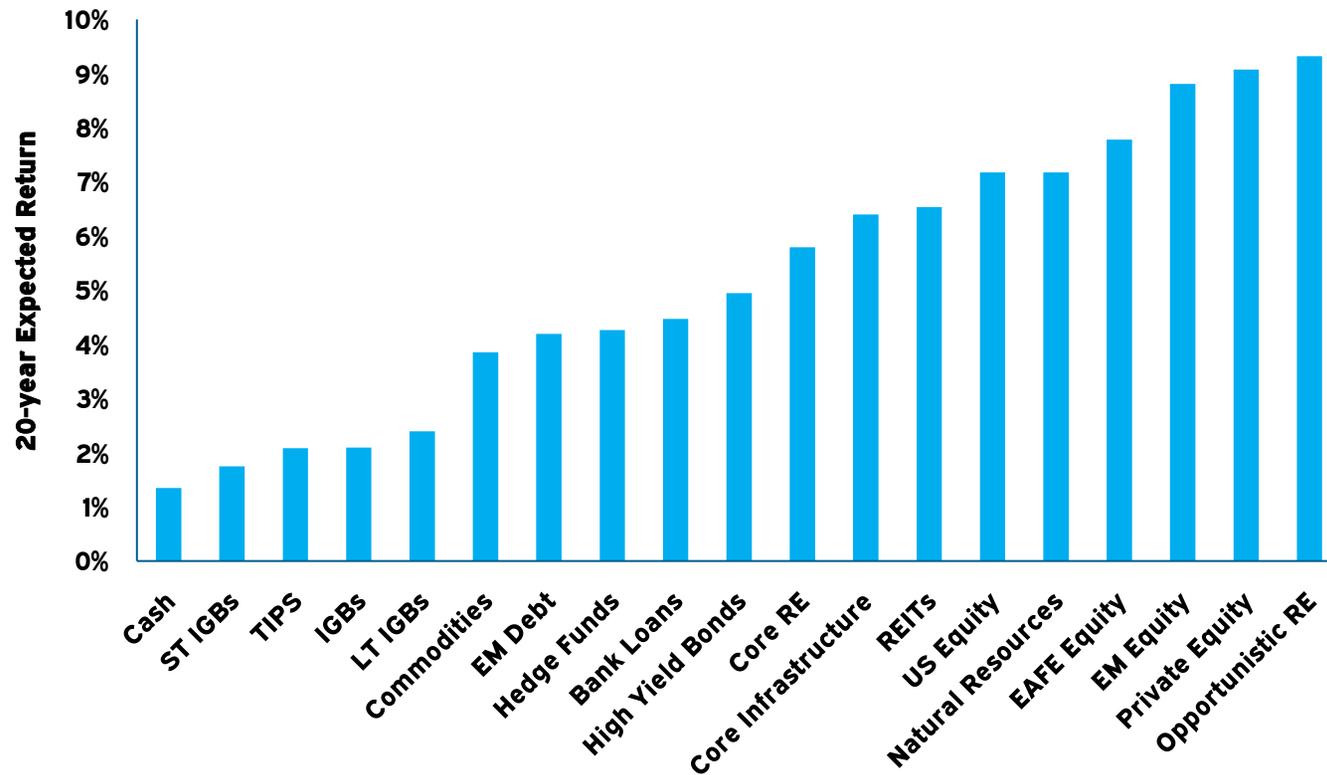
Total Return Given Changes in Interest Rates (bps)¹ (As of October 31, 2020)



	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%	0.0%	-0.2%	-0.3%	-0.4%	-0.6%	-0.7%	0.27	0.09%
Barclays US Treasury 1-3 Yr.	1.9%	1.2%	0.4%	-0.5%	-1.4%	-2.3%	-3.2%	-4.2%	-5.2%	1.65	0.37%
Barclays US Treasury Intermediate	4.4%	2.3%	0.3%	-1.6%	-3.5%	-5.3%	-7.0%	-8.8%	-10.4%	3.92	0.34%
Barclays US Treasury Long	23.0%	11.7%	1.5%	-7.6%	-15.5%	-22.3%	-27.9%	-32.4%	-35.8%	19.24	1.50%

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

Long-Term Outlook – 20-Year Annualized Expected Returns¹



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

¹ Source: Meketa Investment Group’s 2020 Annual Asset Study.

Appendix

Data Sources and Explanations¹

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

¹ All Data as of October 31, 2020 unless otherwise noted.

Appendix

Data Sources and Explanations¹

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

¹ All Data as of October 31, 2020 unless otherwise noted.

Appendix

Data Sources and Explanations¹

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

¹ All Data as of October 31, 2020 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.

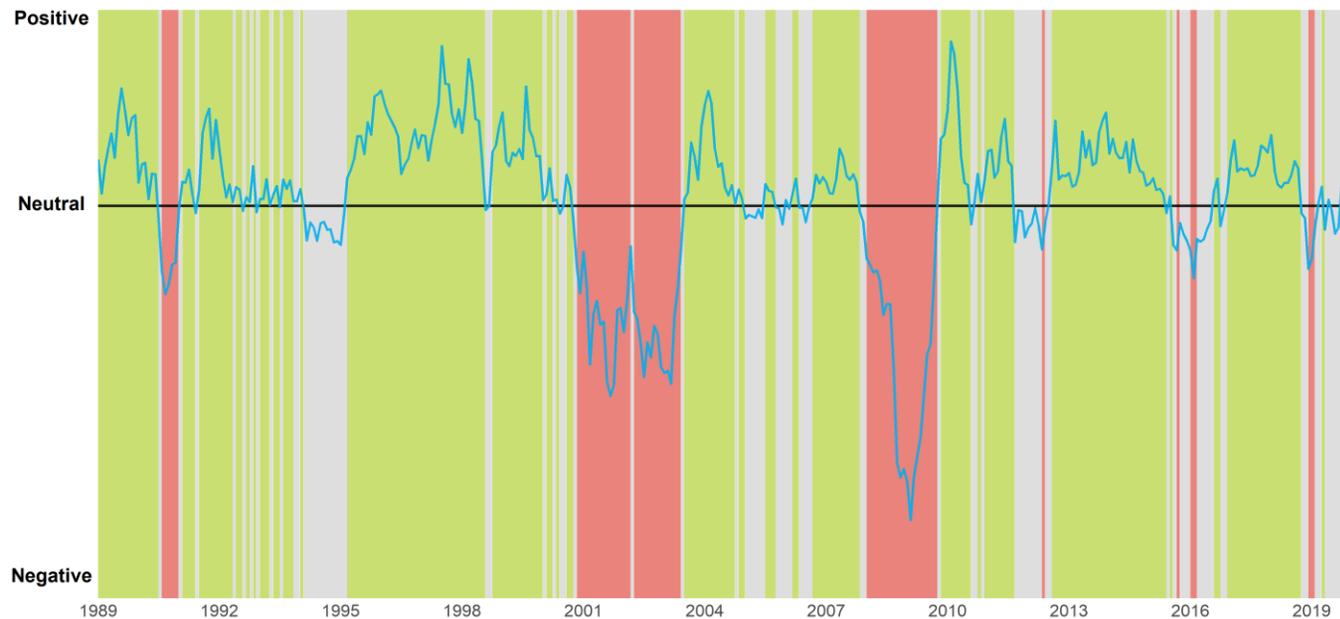
- Meketa’s Risk Metrics, which rely significantly on standard market measures of relative valuation, often provide valid early signals of increasing long-term risk levels in the global investment markets. However, as is the case with numerous valuation measures, the Risk Metrics may convey such risk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

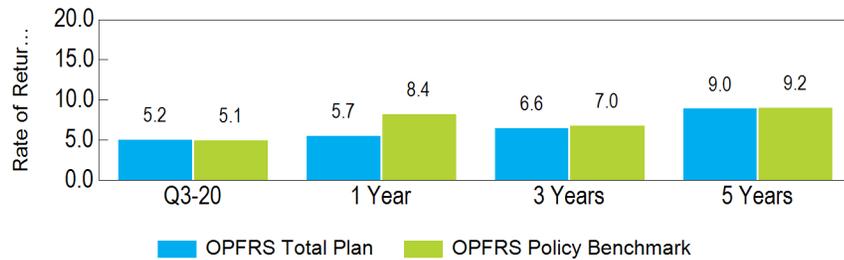
Total Portfolio Review

OPFRS Total Plan | As of September 30, 2020

Year to Date		
	Anlzd Return	Standard Deviation
OPFRS Total Plan	1.80%	5.29%
OPFRS Policy Benchmark	4.99%	4.50%
InvMetrics Public DB \$250mm-\$1B Gross Median	4.53%	4.40%

1 Year Ending September 30, 2020		
	Anlzd Return	Standard Deviation
OPFRS Total Plan	5.44%	4.82%
OPFRS Policy Benchmark	8.39%	4.09%
InvMetrics Public DB \$250mm-\$1B Gross Median	7.74%	4.03%

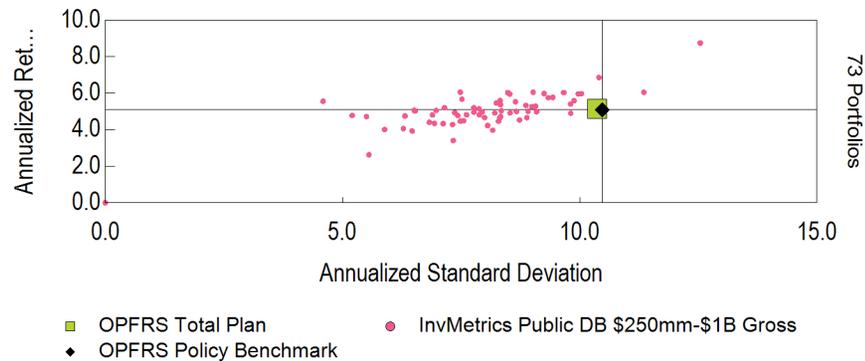
Return Summary Ending September 30, 2020



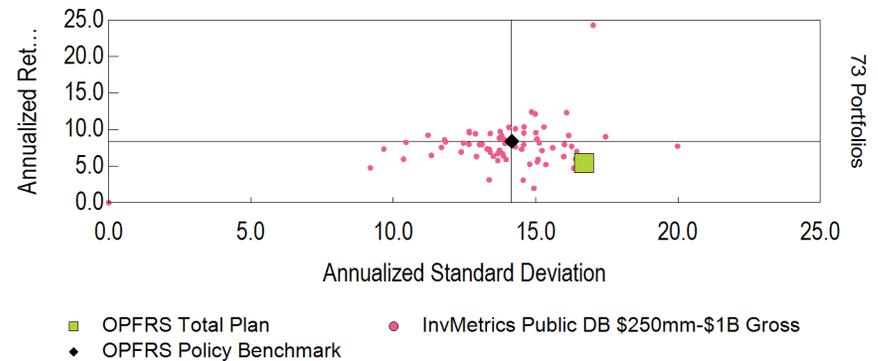
Summary of Cash Flows

	Quarter-To-Date	One Year
Beginning Market Value	\$383,325,294	\$391,243,866
Net Cash Flow	-\$3,291,600	-\$13,036,146
Capital Appreciation	\$20,033,548	\$21,859,522
Ending Market Value	\$400,067,242	\$400,067,242

Annualized Return vs. Annualized Standard Deviation 3 Months Ending September 30, 2020



Annualized Return vs. Annualized Standard Deviation 1 Year Ending September 30, 2020



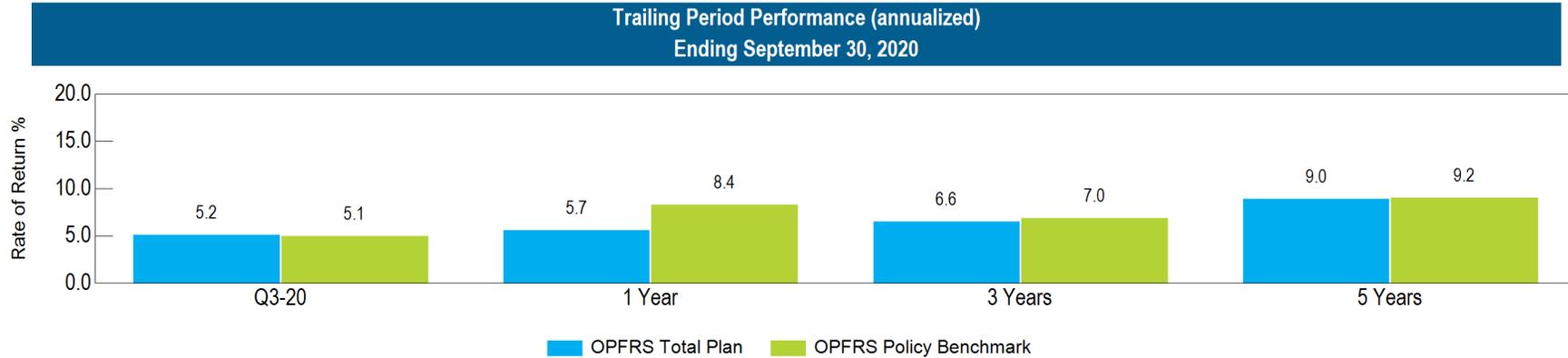
Evolving Policy Benchmark consists of 40% russell 3000, 12% MSCI ACWI ex U.S., 33% Bbg BC Universal, 5% CBOE BXM, 6.7% SG Multi Asset Risk Premia, 3.3% Bbg BC Long Treasury.

Asset Class Performance (gross of fees) | As of September 30, 2020

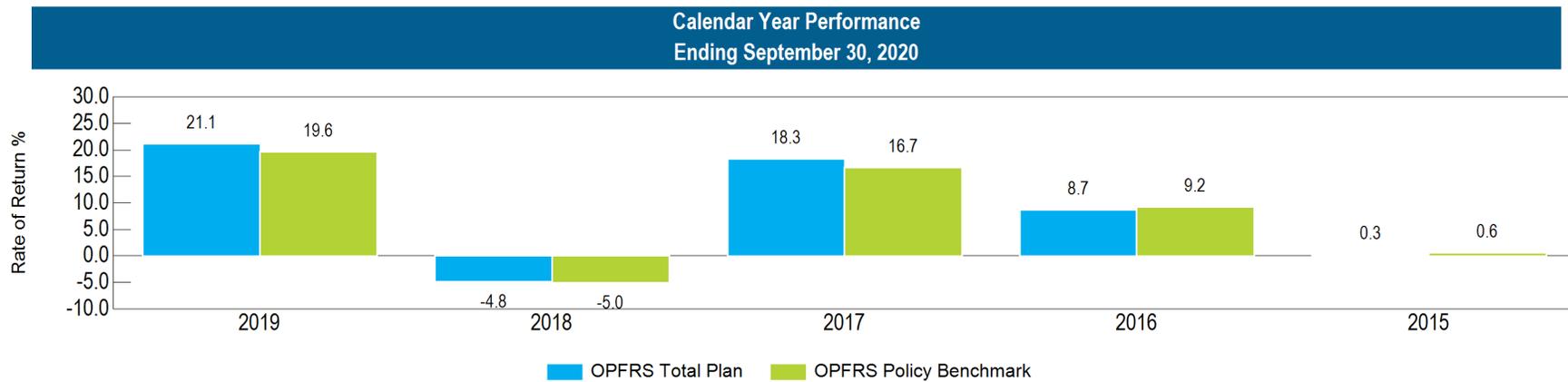
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
OPFRS Total Plan	5.2	5.7	6.6	9.0	7.7	8.3
<i>OPFRS Policy Benchmark</i>	<u>5.1</u>	<u>8.4</u>	<u>7.0</u>	<u>9.2</u>	<u>7.8</u>	<u>8.0</u>
Excess Return	0.1	-2.7	-0.4	-0.2	-0.1	0.3
Domestic Equity	8.3	11.6	10.3	12.9	11.4	13.2
<i>Russell 3000 (Blend)</i>	<u>9.2</u>	<u>15.0</u>	<u>11.6</u>	<u>13.7</u>	<u>12.1</u>	<u>13.5</u>
Excess Return	-0.9	-3.4	-1.3	-0.8	-0.7	-0.3
International Equity	5.5	2.4	1.8	7.2	4.5	5.3
<i>MSCI ACWI ex US (Blend)</i>	<u>6.4</u>	<u>3.4</u>	<u>1.6</u>	<u>6.7</u>	<u>3.7</u>	<u>4.5</u>
Excess Return	-0.9	-1.0	0.2	0.5	0.8	0.8
Fixed Income	1.9	6.8	5.6	4.9	4.5	4.2
<i>Bloomberg BC Universal (Blend)</i>	<u>1.0</u>	<u>6.7</u>	<u>5.1</u>	<u>4.5</u>	<u>4.2</u>	<u>3.9</u>
Excess Return	0.9	0.1	0.5	0.4	0.3	0.3
Credit	7.7	3.3	2.7	5.8	--	--
<i>Bloomberg US High Yield TR</i>	<u>4.6</u>	<u>3.3</u>	<u>4.2</u>	<u>6.8</u>	--	--
Excess Return	3.1	0.0	-1.5	-1.0		
Covered Calls	7.1	7.2	6.9	9.7	--	--
<i>CBOE S&P 500 BuyWrite USD</i>	<u>6.5</u>	<u>-4.9</u>	<u>1.1</u>	<u>4.8</u>	--	--
Excess Return	0.6	12.1	5.8	4.9		
Crisis Risk Offset	-1.2	-20.4	--	--	--	--
<i>SG Multi Alternative Risk Premia Index</i>	<u>-0.6</u>	<u>-13.9</u>	--	--	--	--
Excess Return	-0.6	-6.5				
Cash	0.0	1.5	1.9	1.4	1.0	--
<i>FTSE T-Bill 3 Months TR</i>	<u>0.0</u>	<u>1.0</u>	<u>1.6</u>	<u>1.2</u>	<u>0.8</u>	--
Excess Return	0.0	0.5	0.3	0.2	0.2	

1. Evolving Policy Benchmark consists of 40% Russell 3000, 12% MSCI Acwi ex U.S., 33% Bbg BC Universal, 5% CBOE BXM, 6.7% SG Multi Asset Risk Premia, 3.3% Bbg BC Long Treasury,
2. Domestic Equity Benchmark consists of S&P 500 thru 3/31/98 10% Russell 1000, 20% Russell 1000 Value, 5% RMC from 4/1/98 - 12/31/04 and Russell 3000 from 1/1/05 to present.
3. International Equity Benchmark consists of MSCI EAFE thru 12/31/04 and MSCI ACWI x US thereafter.
4. Fixed Income Benchmark consists of Bbg BC Aggregate prior to 4/1/06, and Bbg BC Universal thereafter.

Portfolio Relative Performance Results | As of September 30, 2020



	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	2015 (%)	2016 (%)	2017 (%)	2018 (%)	2019 (%)
OPFRS Total Plan	5.2	5.7	6.6	9.0	0.3	8.7	18.3	-4.8	21.1
<i>OPFRS Policy Benchmark</i>	<i>5.1</i>	<i>8.4</i>	<i>7.0</i>	<i>9.2</i>	<i>0.6</i>	<i>9.2</i>	<i>16.7</i>	<i>-5.0</i>	<i>19.6</i>
<i>InvMetrics Public DB \$250mm-\$1B Gross Median</i>	<i>5.0</i>	<i>7.7</i>	<i>6.3</i>	<i>8.2</i>	<i>0.0</i>	<i>7.8</i>	<i>15.8</i>	<i>-4.1</i>	<i>18.6</i>

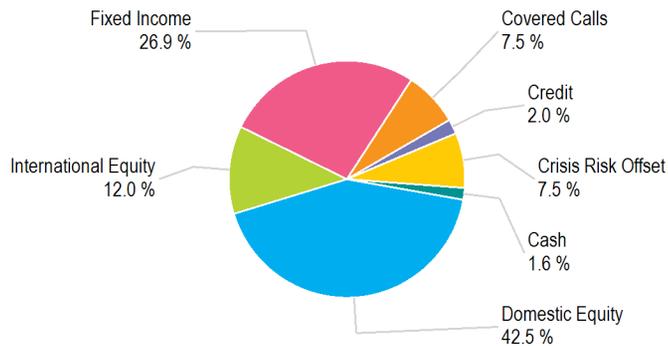


Asset Allocation | As of September 30, 2020

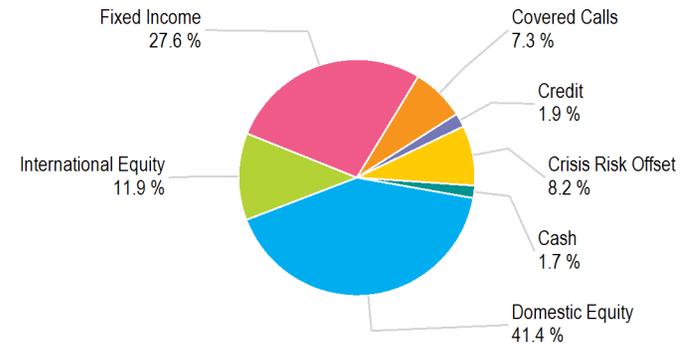
Asset Allocation vs. Target As Of September 30, 2020

	Current	%	Policy	Difference*
Domestic Equity	\$169,962,378	42.5%	40.0%	2.5%
International Equity	\$47,942,430	12.0%	12.0%	0.0%
Fixed Income	\$107,701,274	26.9%	31.0%	-4.1%
Covered Calls	\$29,895,963	7.5%	5.0%	2.5%
Credit	\$8,028,648	2.0%	2.0%	0.0%
Crisis Risk Offset	\$30,031,879	7.5%	10.0%	-2.5%
Cash	\$6,504,670	1.6%	0.0%	1.6%
Total	\$400,067,242	100.0%	100.0%	

September 30, 2020: \$400,067,242



June 30, 2020: \$383,325,294



Target weightings reflect the Plan's evolving asset allocation (effective 5/31/2017.)

Manager Performance - Gross of Fees | As of September 30, 2020

	Market Value	% of Portfolio	QTD	YTD	1 Yr	3 Yrs	5 Yrs	S.I.	S.I. Date
Domestic Equity	169,962,378	100.0	8.3	2.7	11.6	10.3	12.9	8.6	Jun-97
<i>Russell 3000 (Blend)</i>			<i>9.2</i>	<i>5.4</i>	<i>15.0</i>	<i>11.6</i>	<i>13.7</i>	<i>8.8</i>	<i>Jun-97</i>
Excess Return			-0.9	-2.7	-3.4	-1.3	-0.8	-0.2	
Northern Trust Russell 1000	97,755,168	57.5	9.4	6.3	15.9	12.4	14.0	13.8	Jun-10
<i>Russell 1000</i>			<i>9.5</i>	<i>6.4</i>	<i>16.0</i>	<i>12.4</i>	<i>14.1</i>	<i>13.9</i>	<i>Jun-10</i>
Excess Return			-0.1	-0.1	-0.1	0.0	-0.1	-0.1	
<i>eV US Large Cap Core Equity Gross Rank</i>			<i>30</i>	<i>34</i>	<i>31</i>	<i>34</i>	<i>29</i>	<i>37</i>	<i>Jun-10</i>
EARNEST Partners	34,661,855	20.4	8.5	2.5	10.4	11.4	14.6	9.8	Apr-06
<i>Russell MidCap</i>			<i>7.5</i>	<i>-2.3</i>	<i>4.6</i>	<i>7.1</i>	<i>10.1</i>	<i>8.2</i>	<i>Apr-06</i>
Excess Return			1.0	4.8	5.8	4.3	4.5	1.6	
<i>eV US Mid Cap Core Equity Gross Rank</i>			<i>26</i>	<i>24</i>	<i>19</i>	<i>22</i>	<i>10</i>	<i>31</i>	<i>Apr-06</i>
iShares Edge MSCI Min Vol	18,419,148	10.8	5.6	--	--	--	--	19.2	Apr-20
<i>MSCI USA Minimum Volatility GR USD</i>			<i>5.8</i>	--	--	--	--	<i>19.4</i>	<i>Apr-20</i>
Excess Return			-0.2					-0.2	
<i>eV US Low Volatility Equity Gross Rank</i>			<i>53</i>	--	--	--	--	<i>63</i>	<i>Apr-20</i>
Rice Hall James	12,400,423	7.3	5.7	3.0	13.1	7.6	--	8.2	Jul-17
<i>Russell 2000 Growth</i>			<i>7.2</i>	<i>3.9</i>	<i>15.7</i>	<i>8.2</i>	--	<i>9.5</i>	<i>Jul-17</i>
Excess Return			-1.5	-0.9	-2.6	-0.6		-1.3	
<i>eV US Small Cap Growth Equity Gross Rank</i>			<i>84</i>	<i>74</i>	<i>72</i>	<i>81</i>	--	<i>87</i>	<i>Jul-17</i>
Vanguard Russell 2000 Value	6,725,783	4.0	2.7	-21.3	-14.7	--	--	-13.0	Aug-19
<i>Russell 2000 Value</i>			<i>2.6</i>	<i>-21.5</i>	<i>-14.9</i>	--	--	<i>-13.4</i>	<i>Aug-19</i>
Excess Return			0.1	0.2	0.2			0.4	
<i>eV US Small Cap Value Equity Gross Rank</i>			<i>49</i>	<i>65</i>	<i>60</i>	--	--	<i>59</i>	<i>Aug-19</i>

Manager Performance - Gross of Fees | As of September 30, 2020

	Market Value	% of Portfolio	QTD	YTD	1 Yr	3 Yrs	5 Yrs	S.I.	S.I. Date
International Equity	47,942,430	100.0	5.5	-6.7	2.4	1.8	7.2	5.1	Jan-98
<i>MSCI ACWI ex US (Blend)</i>			<i>6.4</i>	<i>-5.1</i>	<i>3.4</i>	<i>1.6</i>	<i>6.7</i>	<i>5.3</i>	<i>Jan-98</i>
Excess Return			-0.9	-1.6	-1.0	0.2	0.5	-0.2	
SGA ACWI ex-U.S. Equity	33,541,668	70.0	5.9	-5.7	--	--	--	-5.1	Dec-19
<i>MSCI ACWI ex USA Gross</i>			<i>6.4</i>	<i>-5.1</i>	--	--	--	<i>-0.9</i>	<i>Dec-19</i>
Excess Return			-0.5	-0.6				-4.2	
<i>eV ACWI ex-US All Cap Core Eq Gross Rank</i>			<i>79</i>	<i>69</i>	--	--	--	<i>85</i>	<i>Dec-19</i>
Vanguard Developed Markets ETF	14,122,361	29.5	6.0	-5.6	2.2	--	--	5.0	Sep-19
<i>FTSE Developed All Cap Ex US TR USD</i>			<i>6.0</i>	<i>-5.8</i>	<i>2.3</i>	--	--	<i>5.0</i>	<i>Sep-19</i>
Excess Return			0.0	0.2	-0.1			0.0	
<i>eV ACWI ex-US All Cap Core Eq Gross Rank</i>			<i>77</i>	<i>68</i>	<i>72</i>	--	--	<i>71</i>	<i>Sep-19</i>

Total International Equity market value includes cash held in closed accounts Fisher and Hansberger.

Manager Performance - Gross of Fees | As of September 30, 2020

	Market Value	% of Portfolio	QTD	YTD	1 Yr	3 Yrs	5 Yrs	S.I.	S.I. Date
Fixed Income	107,701,274	100.0	1.9	6.5	6.8	5.6	4.9	5.6	Dec-93
<i>Blmbg BC Universal (Blend)</i>			<i>1.0</i>	<i>6.2</i>	<i>6.7</i>	<i>5.1</i>	<i>4.5</i>	<i>5.4</i>	<i>Dec-93</i>
Excess Return			0.9	0.3	0.1	0.5	0.4	0.2	
Ramirez	78,306,337	72.7	1.9	5.5	5.6	5.4	--	5.4	Jan-17
<i>BBgBarc US Aggregate TR</i>			<i>0.6</i>	<i>6.8</i>	<i>7.0</i>	<i>5.2</i>	--	<i>5.0</i>	<i>Jan-17</i>
Excess Return			1.3	-1.3	-1.4	0.2		0.4	
<i>eV US Core Fixed Inc Net Rank</i>			<i>6</i>	<i>93</i>	<i>93</i>	<i>49</i>	--	<i>34</i>	<i>Jan-17</i>
Reams	29,394,894	27.3	2.0	18.0	17.9	9.1	6.6	6.2	Feb-98
<i>Blmbg BC Universal (Blend)</i>			<i>1.0</i>	<i>6.2</i>	<i>6.7</i>	<i>5.1</i>	<i>4.5</i>	<i>5.1</i>	<i>Feb-98</i>
Excess Return			1.0	11.8	11.2	4.0	2.1	1.1	
<i>eV US Core Plus Fixed Inc Gross Rank</i>			<i>32</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>4</i>	<i>37</i>	<i>Feb-98</i>

Manager Performance - Gross of Fees | As of September 30, 2020

	Market Value	% of Portfolio	QTD	YTD	1 Yr	3 Yrs	5 Yrs	S.I.	S.I. Date
Covered Calls	29,895,963	100.0	7.1	1.0	7.2	6.9	9.7	8.0	Apr-14
<i>CBOE S&P 500 BuyWrite USD</i>			<i>6.5</i>	<i>-9.6</i>	<i>-4.9</i>	<i>1.1</i>	<i>4.8</i>	<i>4.3</i>	<i>Apr-14</i>
Excess Return			0.6	10.6	12.1	5.8	4.9	3.7	
Parametric DeltaShift	16,203,027	54.2	7.9	3.8	11.5	9.4	12.0	10.2	Apr-14
<i>CBOE S&P 500 BuyWrite USD</i>			<i>6.5</i>	<i>-9.6</i>	<i>-4.9</i>	<i>1.1</i>	<i>4.8</i>	<i>4.3</i>	<i>Apr-14</i>
Excess Return			1.4	13.4	16.4	8.3	7.2	5.9	
<i>eV US Large Cap Core Equity Gross Rank</i>			<i>56</i>	<i>49</i>	<i>54</i>	<i>68</i>	<i>69</i>	<i>64</i>	<i>Apr-14</i>
Parametric BXM	13,692,936	45.8	6.3	-1.9	2.7	4.2	7.3	6.2	Apr-14
<i>CBOE S&P 500 BuyWrite USD</i>			<i>6.5</i>	<i>-9.6</i>	<i>-4.9</i>	<i>1.1</i>	<i>4.8</i>	<i>4.3</i>	<i>Apr-14</i>
Excess Return			-0.2	7.7	7.6	3.1	2.5	1.9	
<i>eV US Large Cap Core Equity Gross Rank</i>			<i>83</i>	<i>82</i>	<i>91</i>	<i>96</i>	<i>97</i>	<i>97</i>	<i>Apr-14</i>

Manager Performance - Gross of Fees | As of September 30, 2020

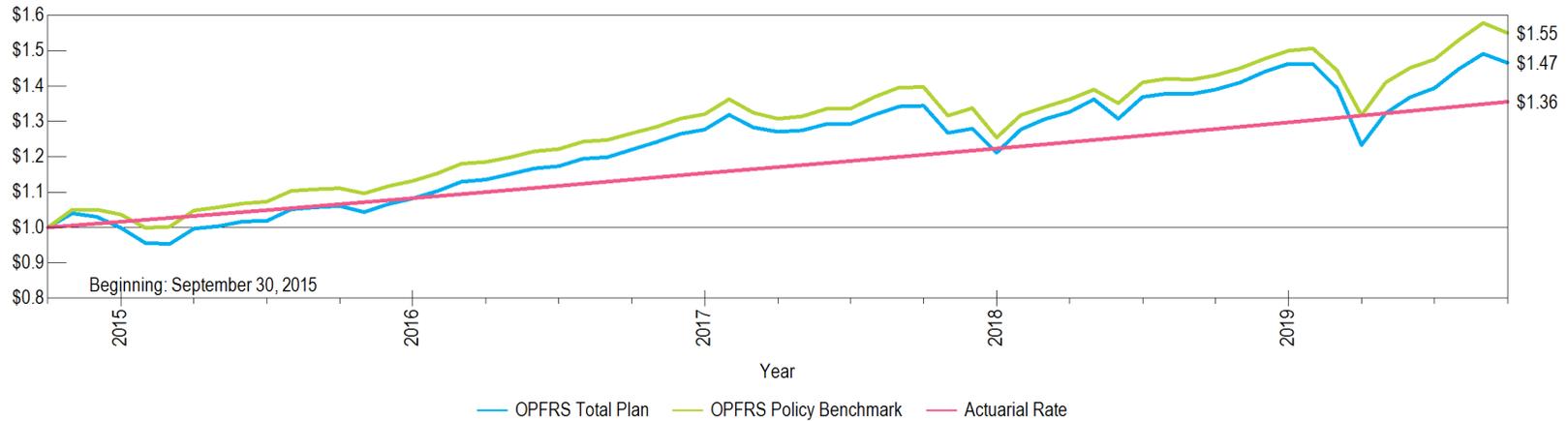
	Market Value	% of Portfolio	QTD	YTD	1 Yr	3 Yrs	5 Yrs	S.I.	S.I. Date
Credit	8,028,648	100.0	7.7	0.5	3.3	2.7	5.8	5.0	Feb-15
<i>BBgBarc US High Yield TR</i>			<u>4.6</u>	<u>0.6</u>	<u>3.3</u>	<u>4.2</u>	<u>6.8</u>	<u>5.4</u>	<u>Feb-15</u>
Excess Return			3.1	-0.1	0.0	-1.5	-1.0	-0.4	
DDJ Capital	8,028,648	100.0	7.7	0.5	3.3	2.7	5.8	5.0	Feb-15
<i>ICE BofA High Yield Master TR</i>			<u>4.7</u>	<u>-0.3</u>	<u>2.3</u>	<u>3.9</u>	<u>6.6</u>	<u>5.2</u>	<u>Feb-15</u>
Excess Return			3.0	0.8	1.0	-1.2	-0.8	-0.2	
<i>eV US High Yield Fixed Inc Gross Rank</i>			1	56	49	97	78	68	<i>Feb-15</i>

Manager Performance - Gross of Fees | As of September 30, 2020

	Market Value	% of Portfolio	QTD	YTD	1 Yr	3 Yrs	5 Yrs	S.I.	S.I. Date
Crisis Risk Offset	30,031,879	100.0	-1.2	-21.2	-20.4	--	--	-8.5	Aug-18
<i>SG Multi Alternative Risk Premia Index</i>			<i>-0.6</i>	<i>-13.1</i>	<i>-13.9</i>	--	--	<i>-5.5</i>	<i>Aug-18</i>
Excess Return			-0.6	-8.1	-6.5			-3.0	
Parametric Systematic Alternative Risk Premia	15,284,520	50.9	-2.4	-42.5	-40.3	--	--	-19.8	Aug-18
<i>SG Multi Alternative Risk Premia Index</i>			<i>-0.6</i>	<i>-13.1</i>	<i>-13.9</i>	--	--	<i>-5.5</i>	<i>Aug-18</i>
Excess Return			-1.8	-29.4	-26.4			-14.3	
Vanguard Long-Term Treasury ETF	14,747,360	49.1	0.0	21.0	15.8	--	--	19.6	Jul-19
<i>BBgBarc US Govt Long TR</i>			<i>0.1</i>	<i>2.1</i>	<i>16.2</i>	--	--	<i>19.8</i>	<i>Jul-19</i>
Excess Return			-0.1	-0.1	-0.4			-0.2	
<i>eV US Long Duration - Gov/Cred Fixed Inc Net Rank</i>			<i>99</i>	<i>5</i>	<i>14</i>	--	--	<i>7</i>	<i>Jul-19</i>

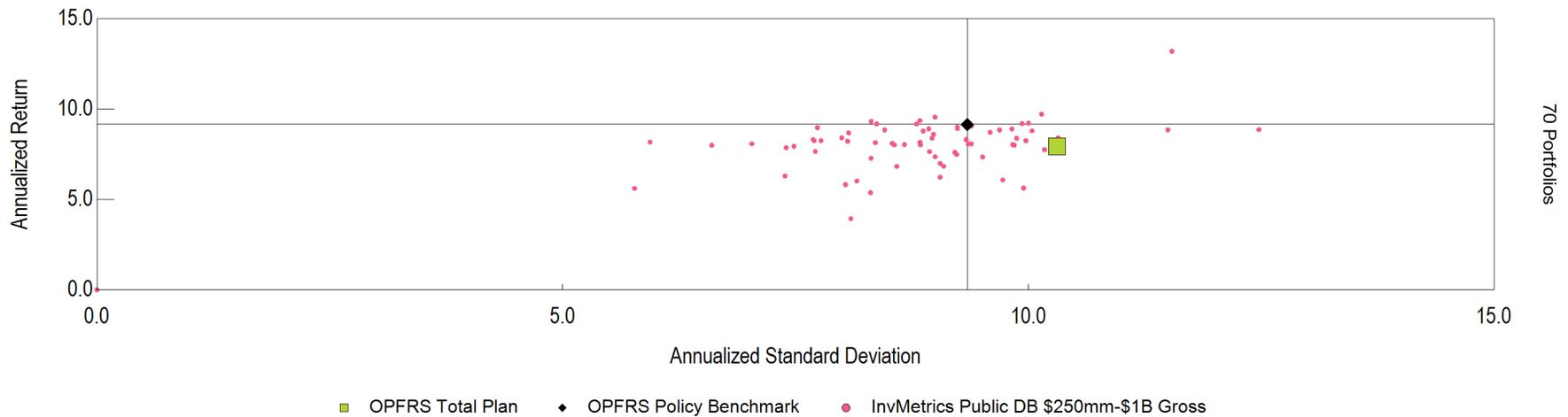
Total Portfolio 5-Year Performance | As of September 30, 2020

Growth of a Dollar



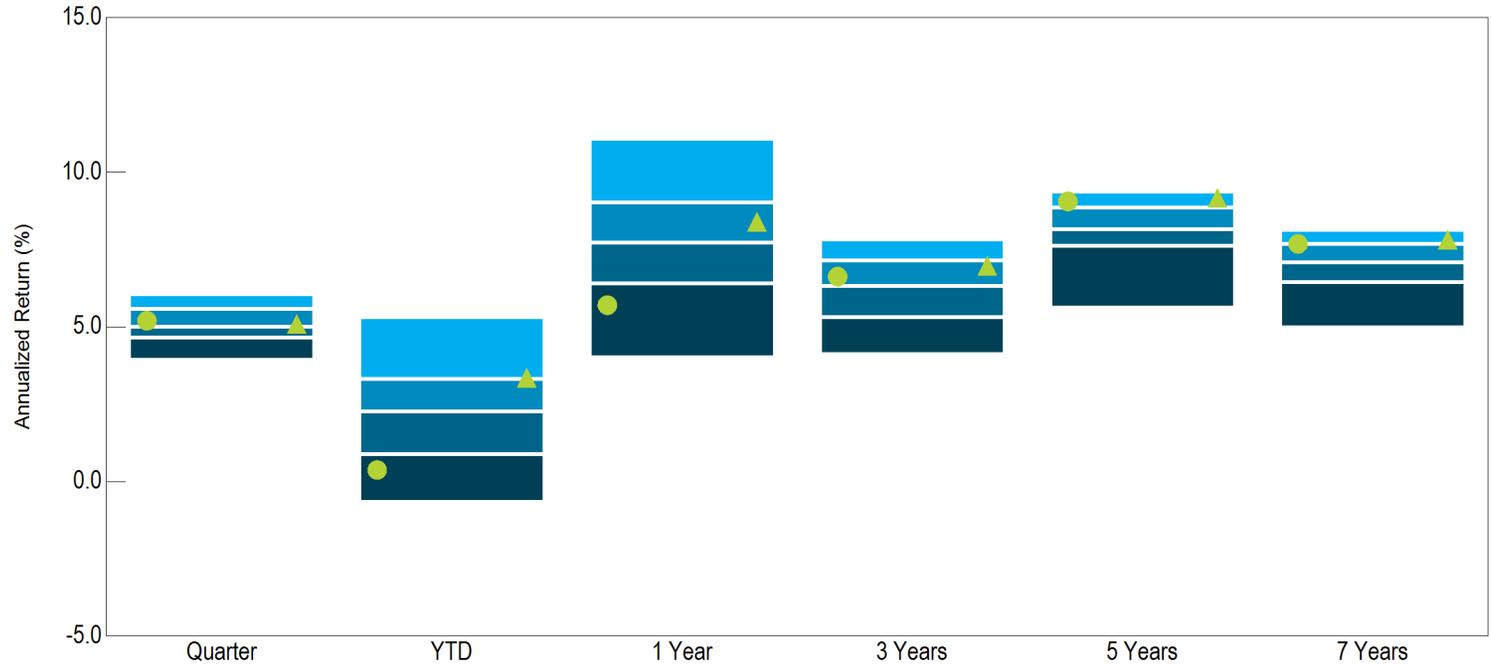
The actuarial expected rate of return was 8% through 6/30/2009, 7.5% through 6/30/2010, 7% through 6/30/2011, 6.75% through 6/30/2014, 6.5% through 2/31/2017 and 6.0% currently

Annualized Return vs. Annualized Standard Deviation 5 Years Ending September 30, 2020



Plan Sponsor Peer Group Analysis | As of September 30, 2020

InvMetrics Public DB \$250mm-\$1B Gross Return Comparison



Return (Rank)

5th Percentile	6.0		5.3		11.1		7.8		9.4		8.1	
25th Percentile	5.6		3.3		9.0		7.2		8.9		7.7	
Median	5.0		2.3		7.7		6.3		8.2		7.1	
75th Percentile	4.7		0.9		6.4		5.3		7.6		6.5	
95th Percentile	4.0		-0.7		4.0		4.1		5.6		5.0	
# of Portfolios	73		73		73		72		70		69	
● OPFRS Total Plan	5.2	(41)	0.4	(84)	5.7	(87)	6.6	(41)	9.0	(14)	7.7	(26)
▲ OPFRS Policy Benchmark	5.1	(43)	3.4	(24)	8.4	(35)	7.0	(33)	9.2	(12)	7.8	(21)

Manager Monitoring / Probation List

Monitoring/Probation Status

Return vs. Benchmark since Corrective Action As of September 30, 2020

Portfolio	Status	Concern	Months Since Corrective Action	Performance [^] Since Corrective Action (Gross)	Peer Group Percentile Ranking	Date of Corrective Action*
DDJ Capital	On Watch	Performance	15	1.1	1	5/29/2019
Ice BofAML US High Yield			---	4.6		
Rice Hall James	On Watch	Performance	15	11.2	84	5/29/2019
Russell 2000 Growth	---	---	---	14.2		

[^]Annualized performance if over one year.

* Approximate date based on when Board voted to either monitor a manager at a heightened level or place it on probation.

Investment Performance Criteria For Manager Monitoring/Probation Status

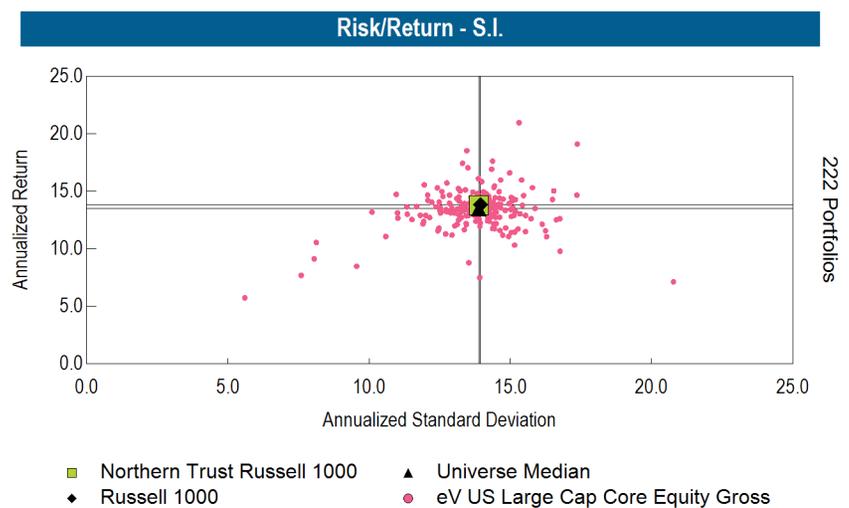
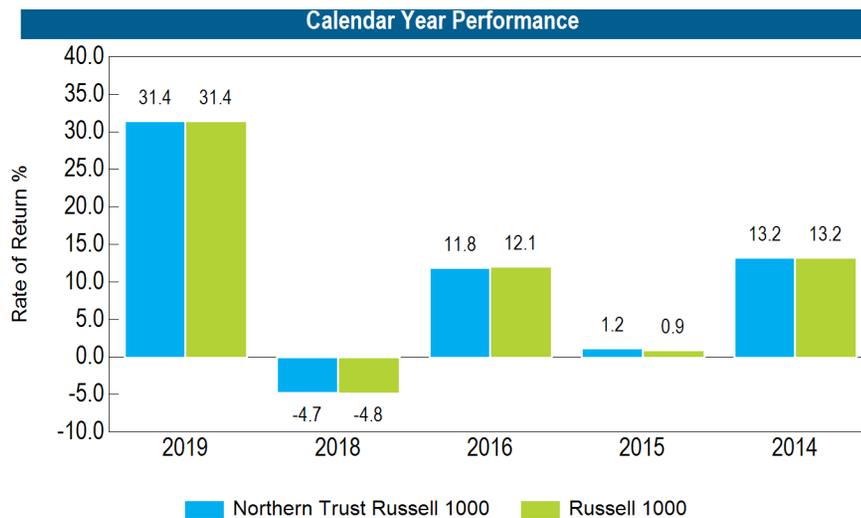
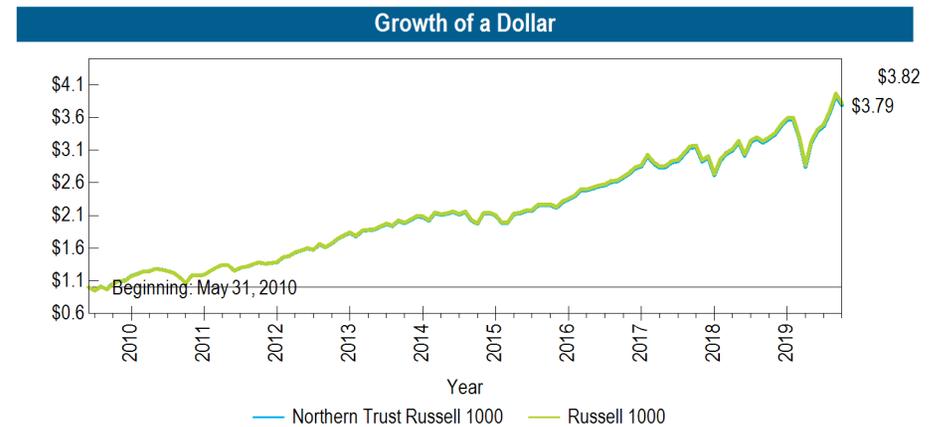
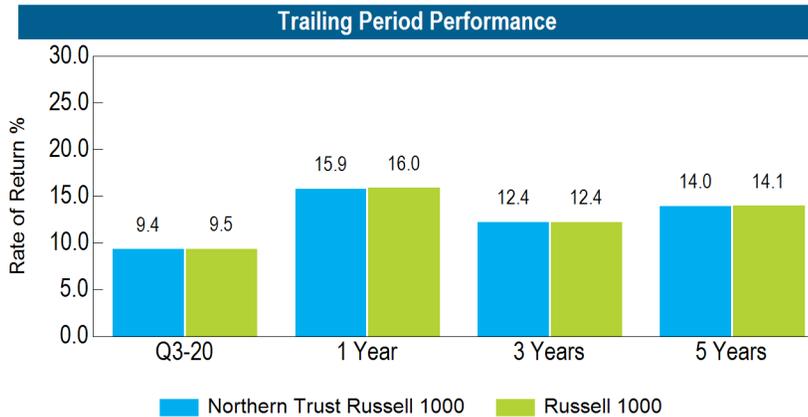
Asset Class	Short-term (Rolling 12 months)	Medium-term (Rolling 36 months)	Long-term (60 + months)
Active Domestic Equity	Fund return < benchmark return - 3.5%	Annualized Fund return < benchmark return - 1.75% for 6 consecutive months	VRR** < 0.97 for 6 consecutive months
Active International Equity	Fund return < benchmark return - 4.5%	Annualized Fund return < benchmark return - 2.0% for 6 consecutive months	VRR < 0.97 for 6 consecutive months
Passive International Equity	Tracking Error > 0.50%	Tracking Error > 0.45% for 6 consecutive months	Annualized Fund return < benchmark return - 0.40% for 6 consecutive months
Fixed Income	Fund return < benchmark return - 1.5%	Annualized Fund return < benchmark return - 1.0% for 6 consecutive months	VRR < 0.98 for 6 consecutive months

** VRR - Value Relative Ratio - is calculated as: manager cumulative return / benchmark cumulative return.

Individual Manager Performance

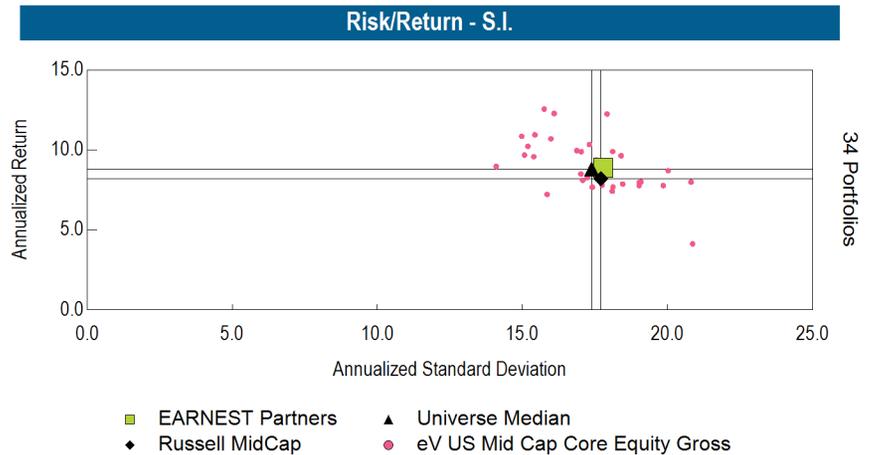
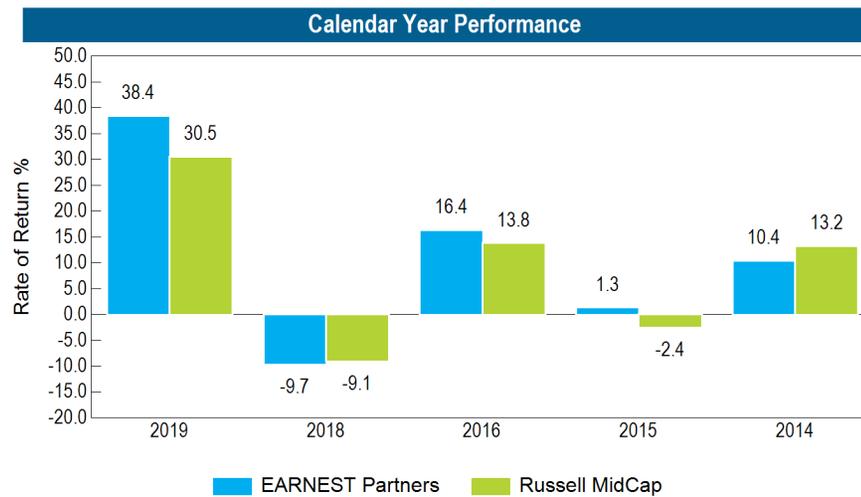
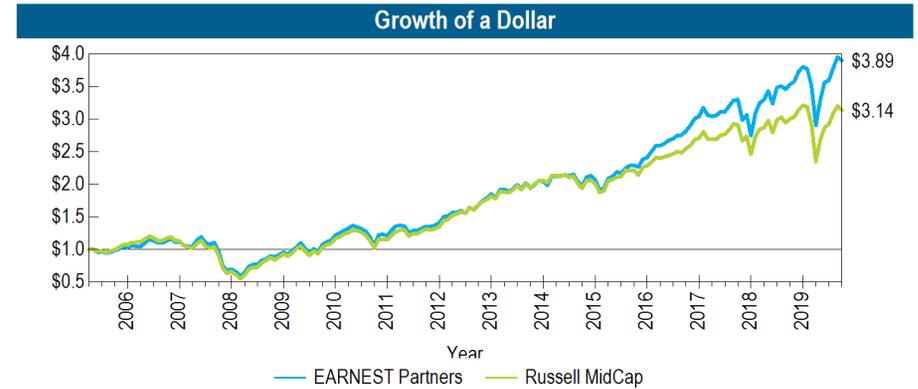
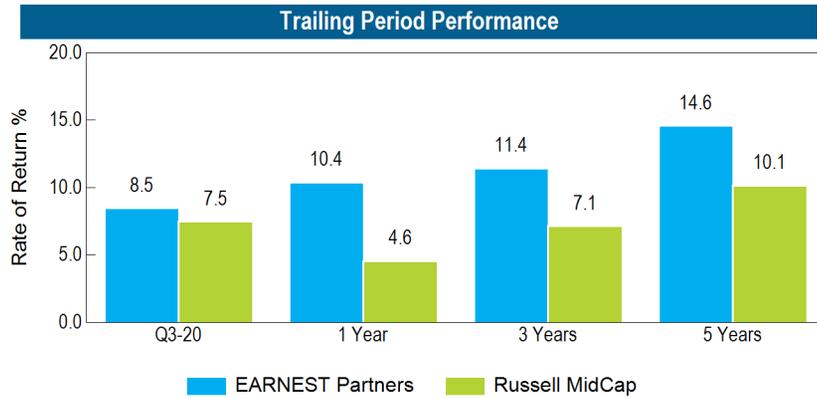
Northern Trust Russell 1000 | As of September 30, 2020

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Northern Trust Russell 1000	0.00%	1.00	-0.70	0.95	0.13%	1.00	98.37%	99.75%
Russell 1000	0.00%	1.00	--	0.95	0.00%	1.00	100.00%	100.00%



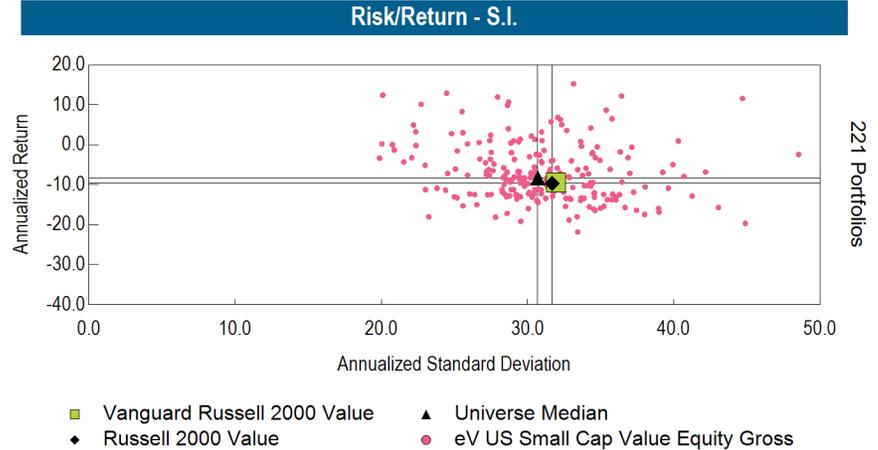
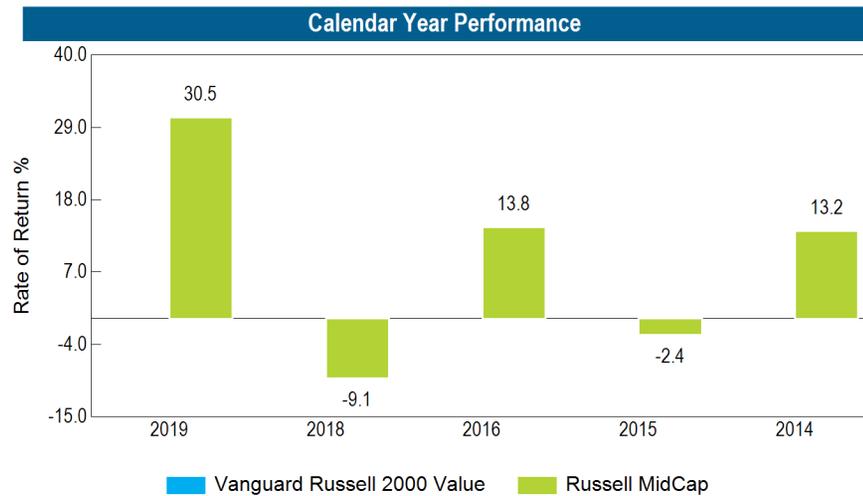
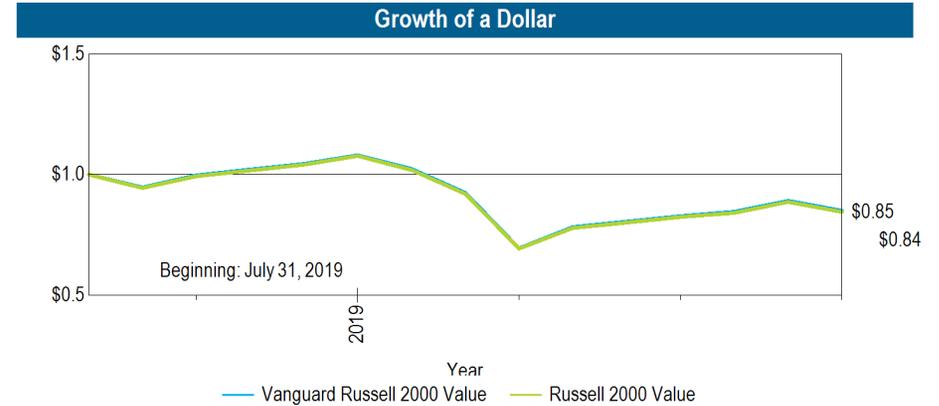
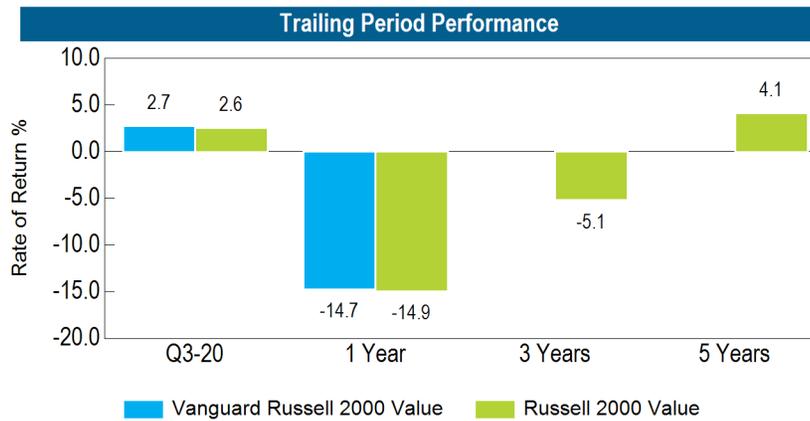
EARNEST Partners | As of September 30, 2020

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
EARNEST Partners	0.14%	0.99	0.49	0.49	3.32%	0.97	104.84%	98.69%
Russell MidCap	0.00%	1.00	--	0.40	0.00%	1.00	100.00%	100.00%



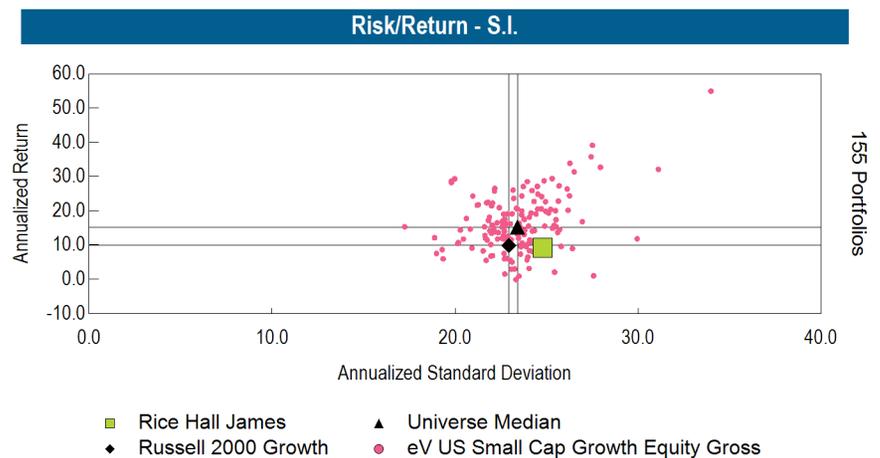
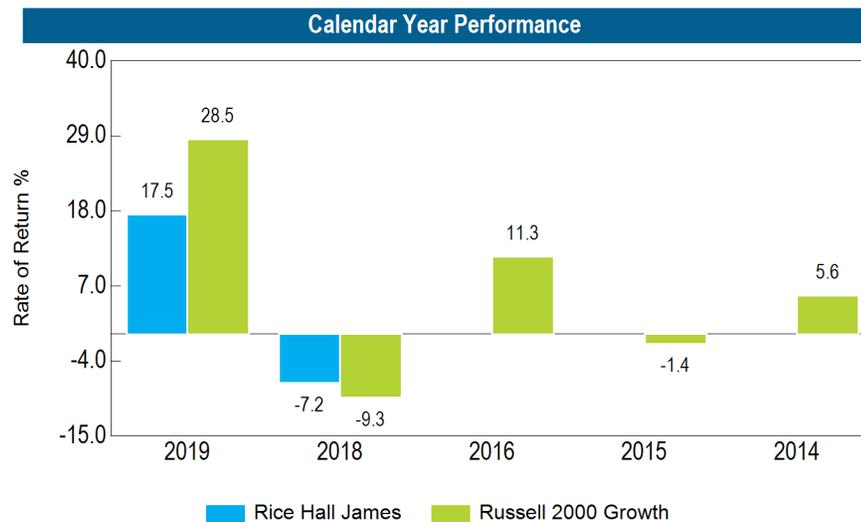
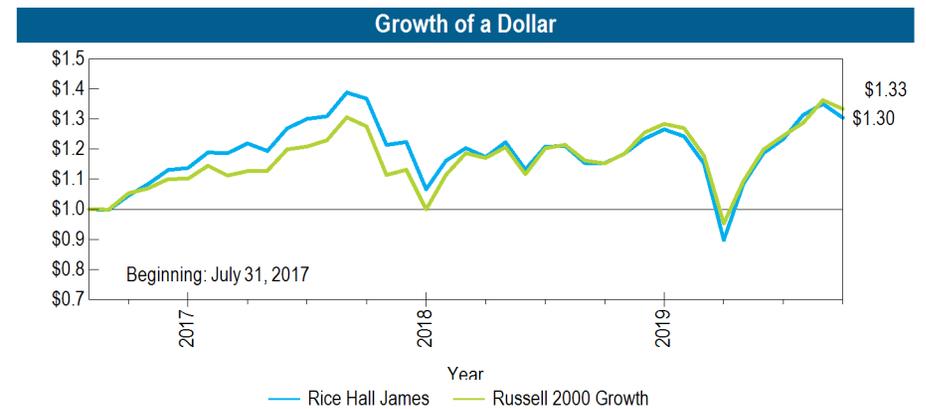
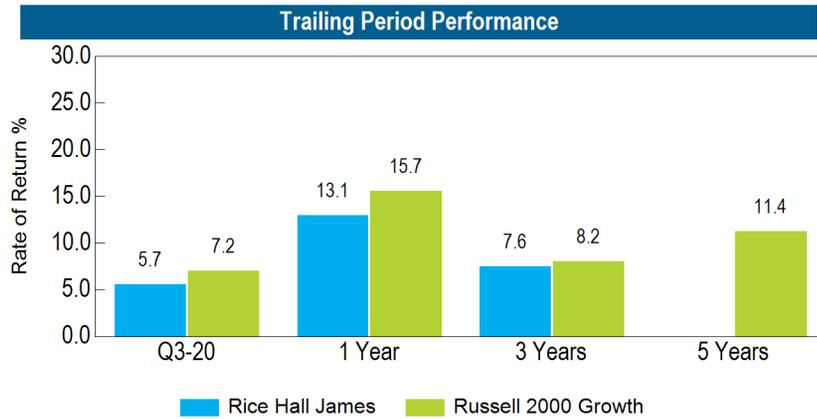
Vanguard Russell 2000 Value | As of September 30, 2020

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Vanguard Russell 2000 Value	0.05%	1.01	0.92	-0.45	0.49%	1.00	101.17%	99.67%
Russell 2000 Value	0.00%	1.00	--	-0.47	0.00%	1.00	100.00%	100.00%



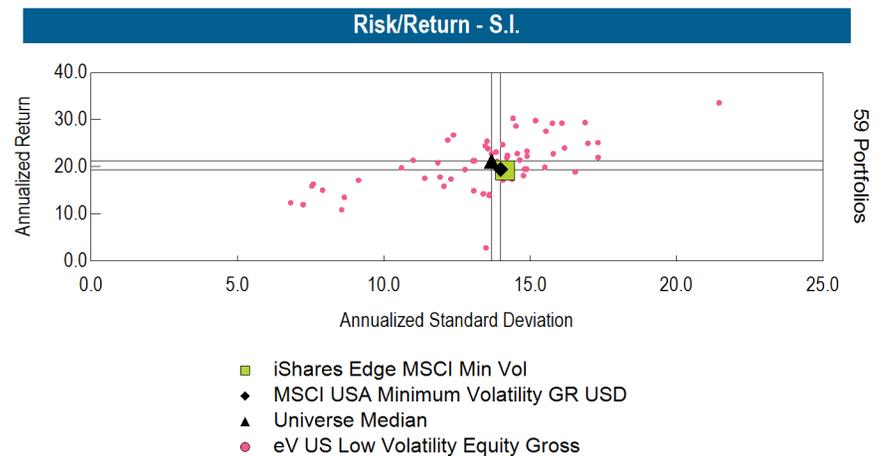
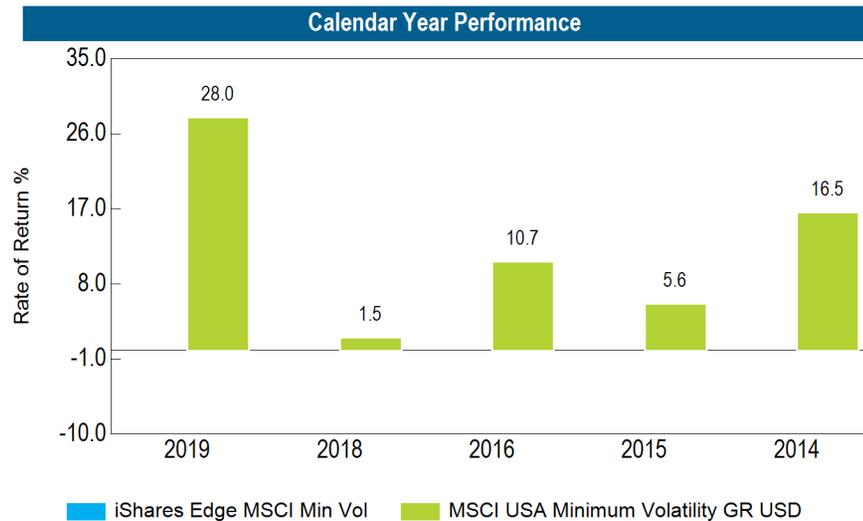
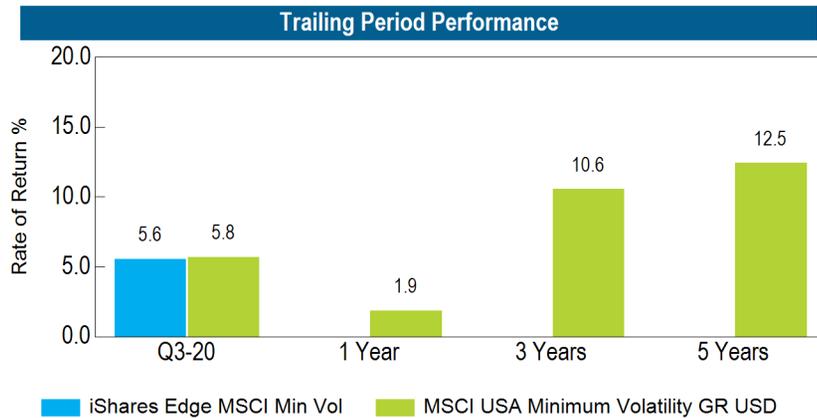
Rice Hall James | As of September 30, 2020

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Rice Hall James	-0.07%	1.05	-0.12	0.29	6.24%	0.94	100.90%	102.37%
Russell 2000 Growth	0.00%	1.00	--	0.35	0.00%	1.00	100.00%	100.00%



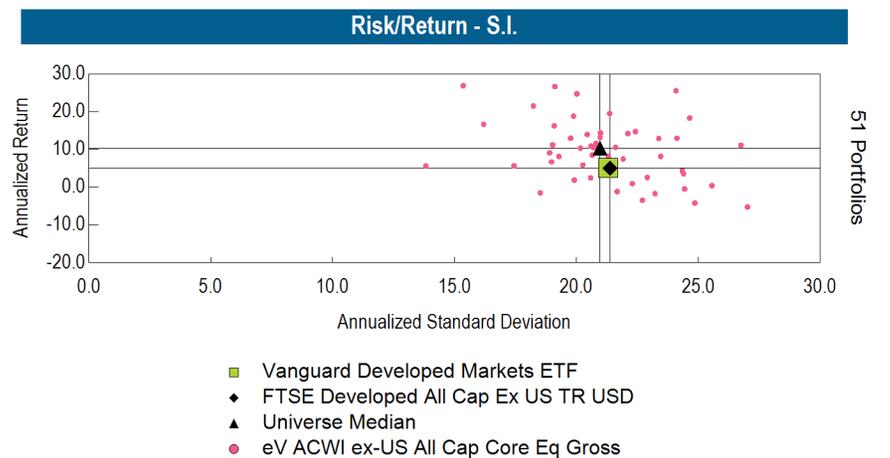
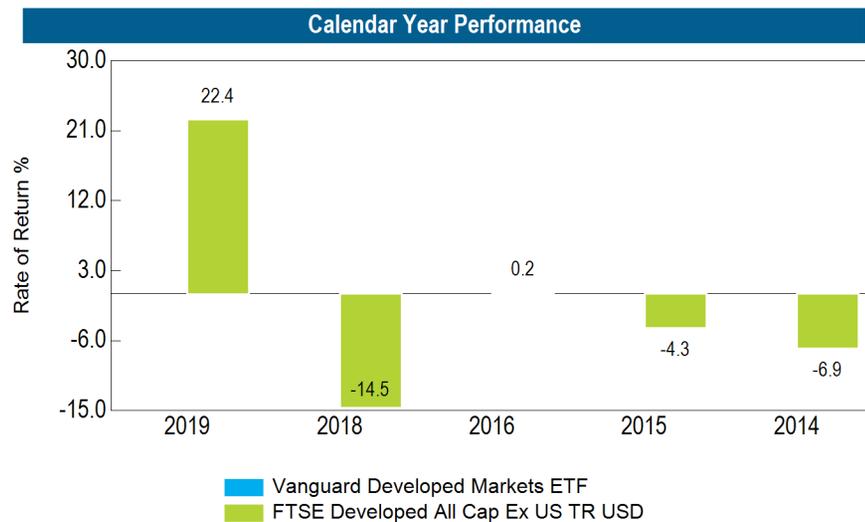
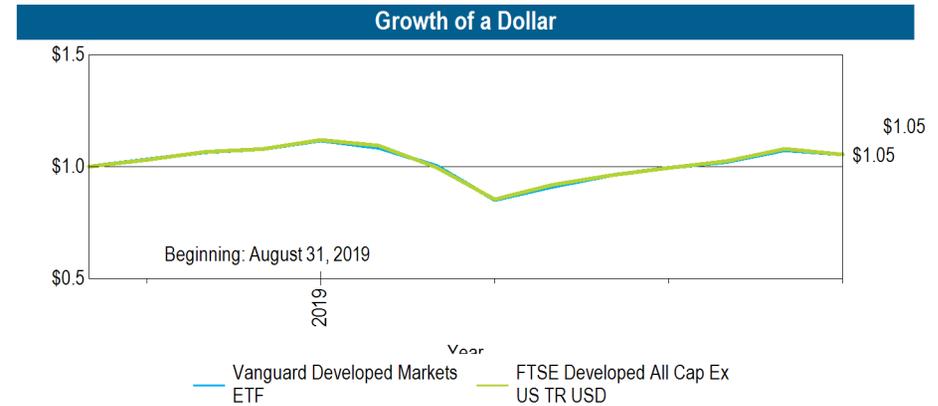
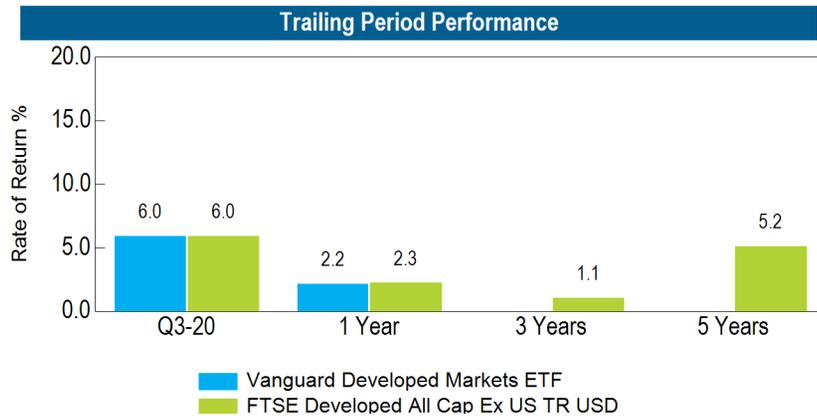
iShares Edge MSCI Min Vol | As of September 30, 2020

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
iShares Edge MSCI Min Vol	-0.06%	1.01	-0.66	1.35	0.28%	1.00	99.69%	103.64%
MSCI USA Minimum Volatility GR USD	0.00%	1.00	--	1.38	0.00%	1.00	100.00%	100.00%



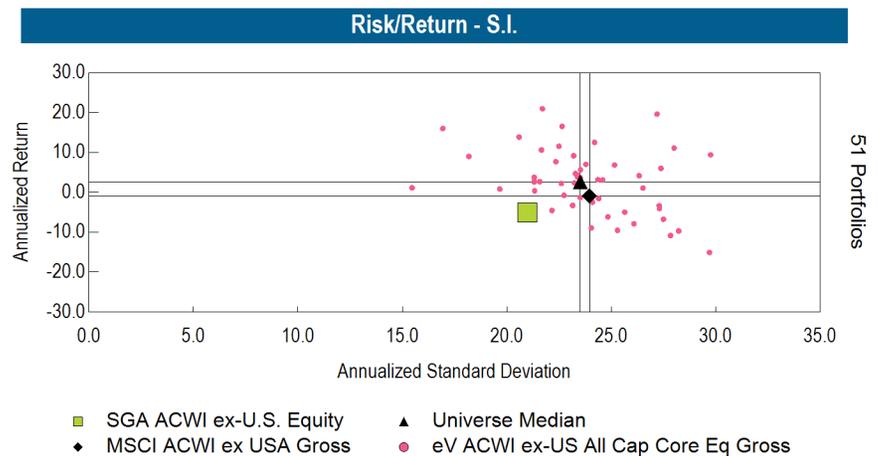
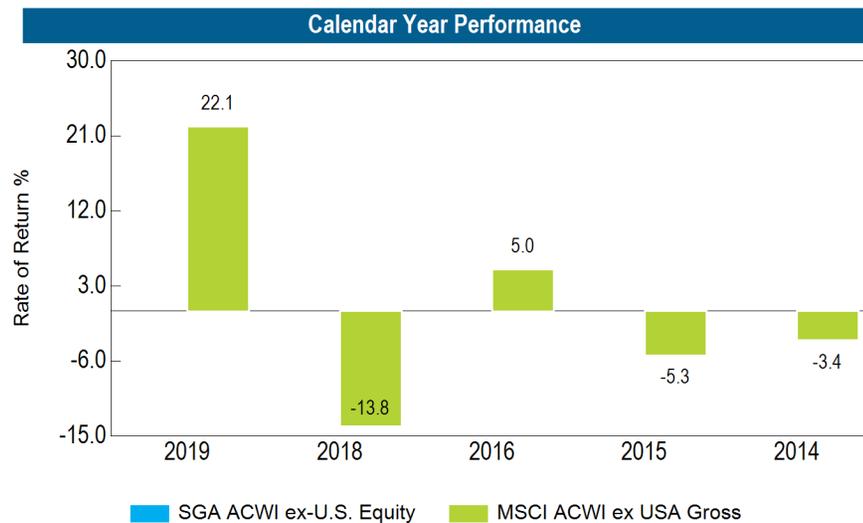
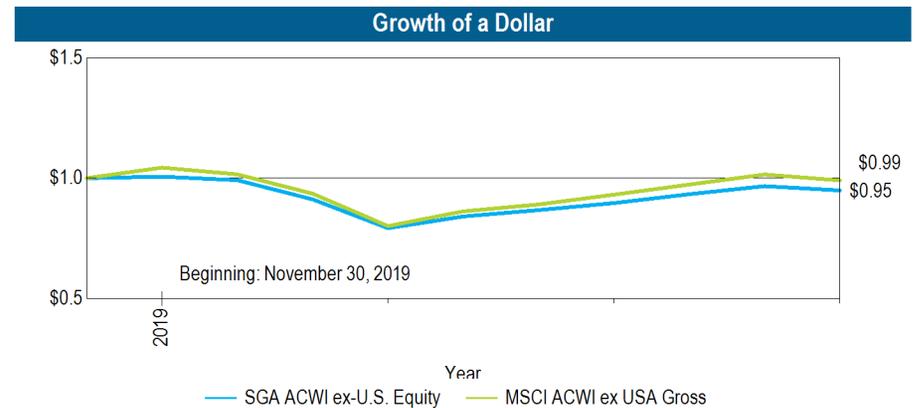
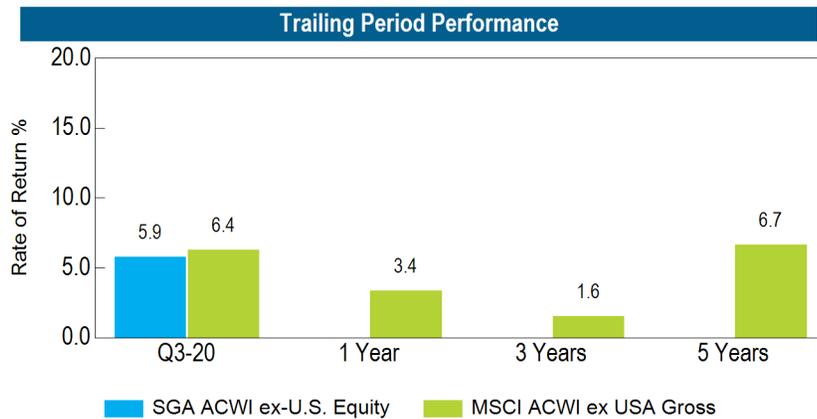
Vanguard Developed Markets ETF | As of September 30, 2020

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Vanguard Developed Markets ETF	0.01%	0.99	0.02	0.19	2.27%	0.99	98.64%	98.68%
FTSE Developed All Cap Ex US TR USD	0.00%	1.00	--	0.19	0.00%	1.00	100.00%	100.00%

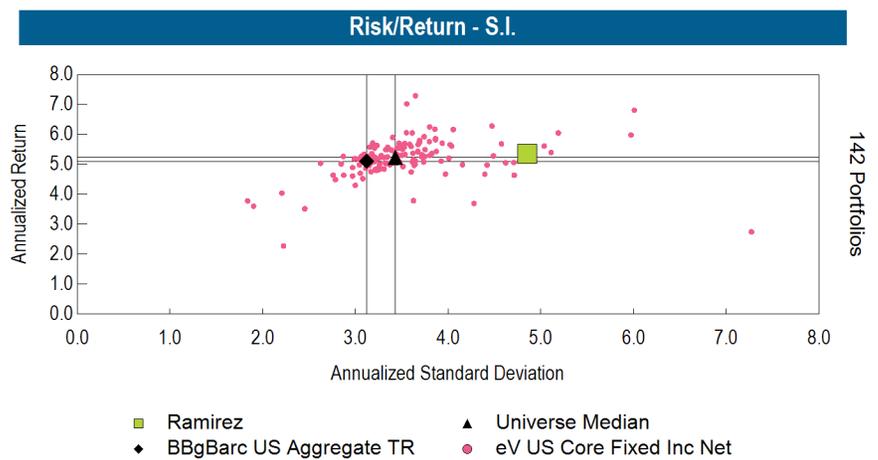
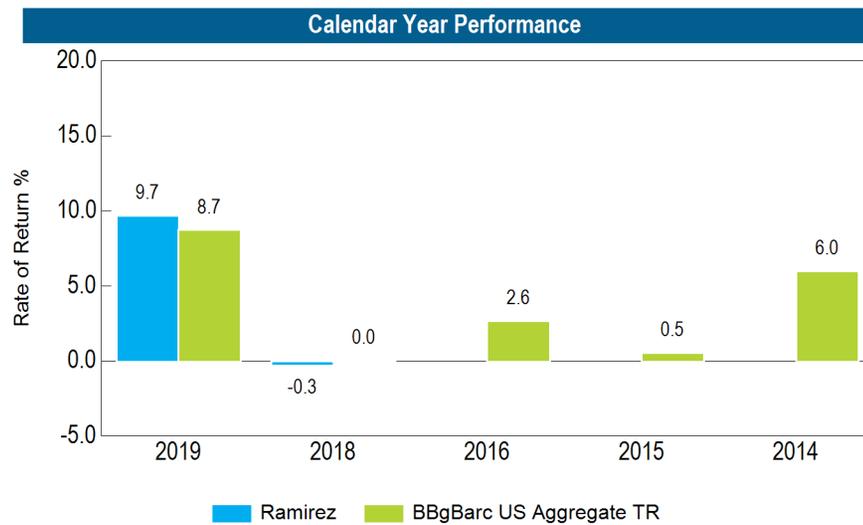
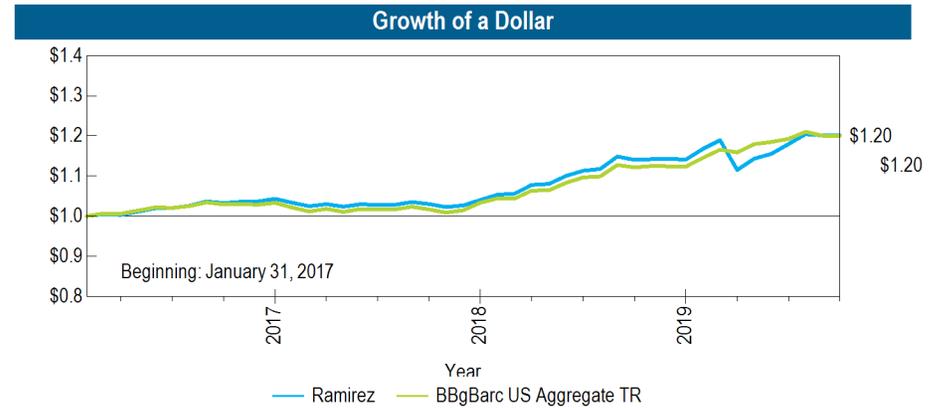
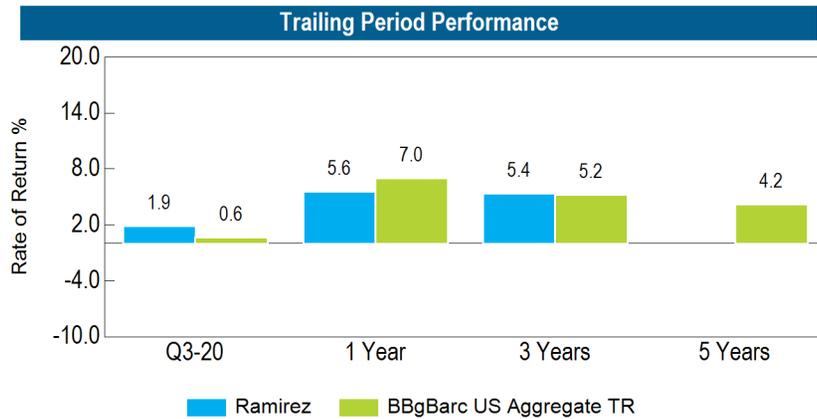


SGA ACWI ex-U.S. Equity | As of September 30, 2020

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
SGA ACWI ex-U.S. Equity	-0.46%	0.86	-0.81	-0.27	5.11%	0.97	70.62%	90.44%
MSCI ACWI ex USA Gross	0.00%	1.00	--	-0.06	0.00%	1.00	100.00%	100.00%

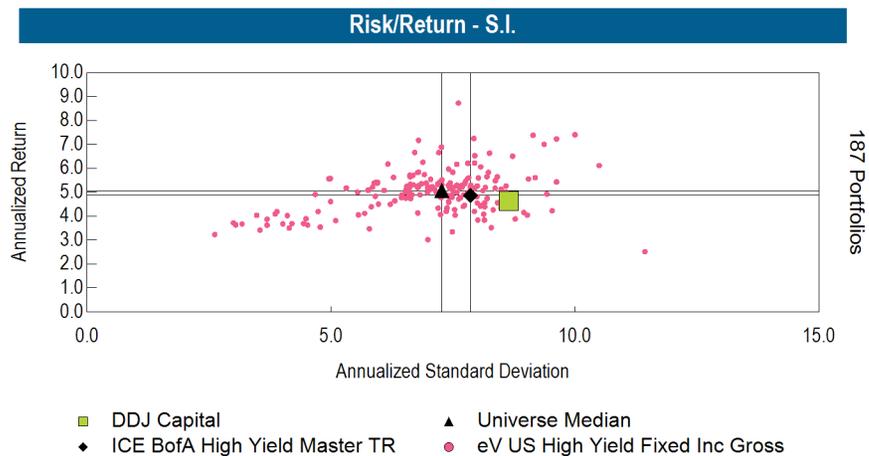
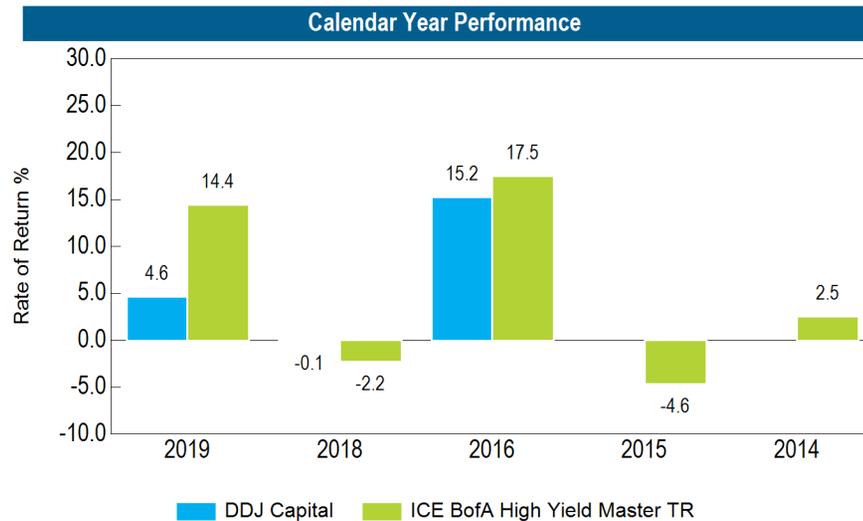
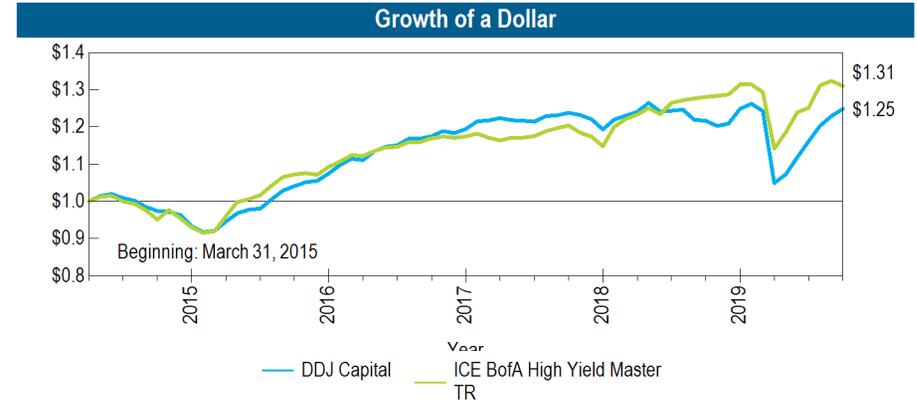
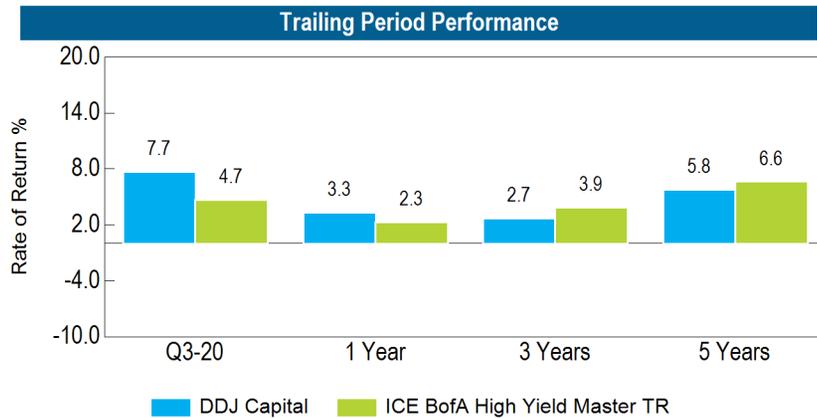


	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Ramirez	-0.05%	1.18	0.08	0.80	3.21%	0.58	121.17%	149.04%
BBgBarc US Aggregate TR	0.00%	1.00	--	1.17	0.00%	1.00	100.00%	100.00%



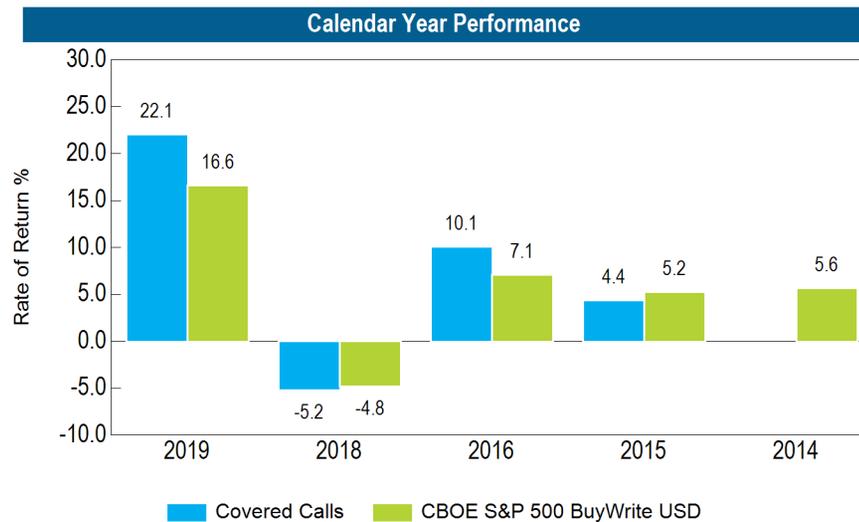
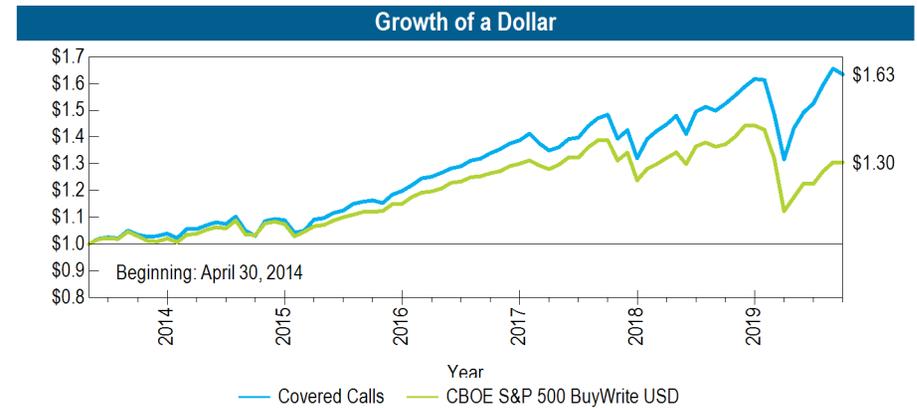
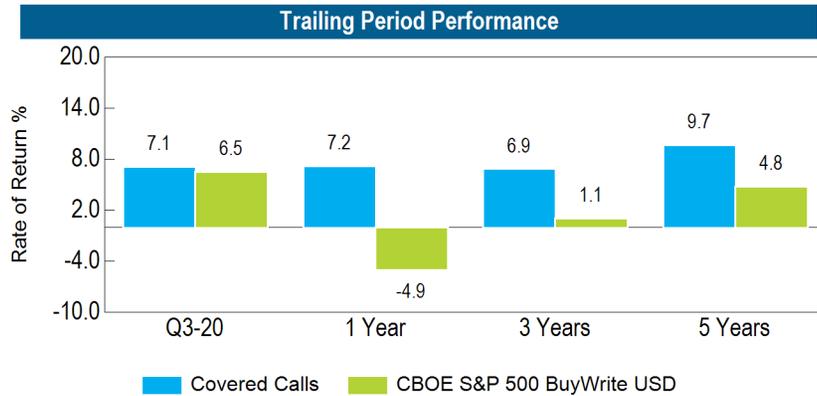
DDJ Capital | As of September 30, 2020

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
DDJ Capital	0.00%	0.97	-0.06	0.42	4.06%	0.78	86.77%	88.13%
ICE BofA High Yield Master TR	0.00%	1.00	--	0.49	0.00%	1.00	100.00%	100.00%



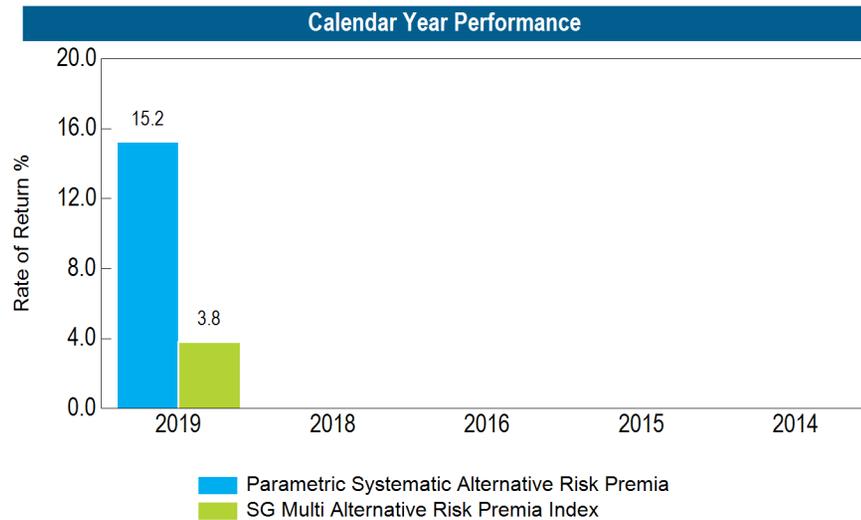
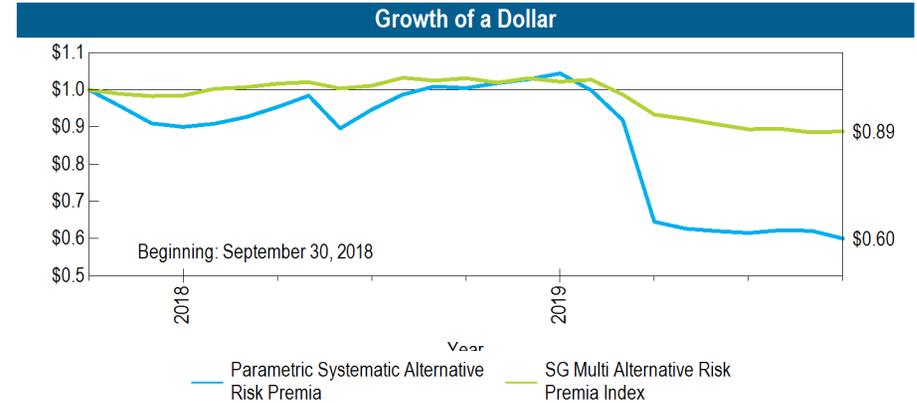
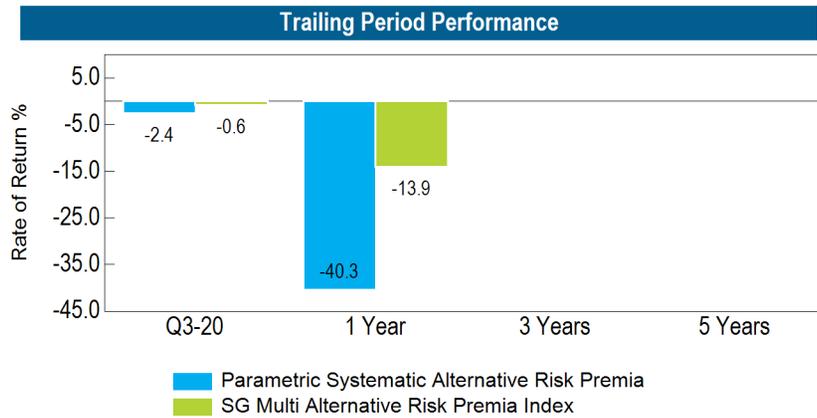
Covered Calls | As of September 30, 2020

	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Covered Calls	0.30%	0.99	1.13	0.67	3.30%	0.90	138.24%	97.36%
CBOE S&P 500 BuyWrite USD	0.00%	1.00	--	0.33	0.00%	1.00	100.00%	100.00%

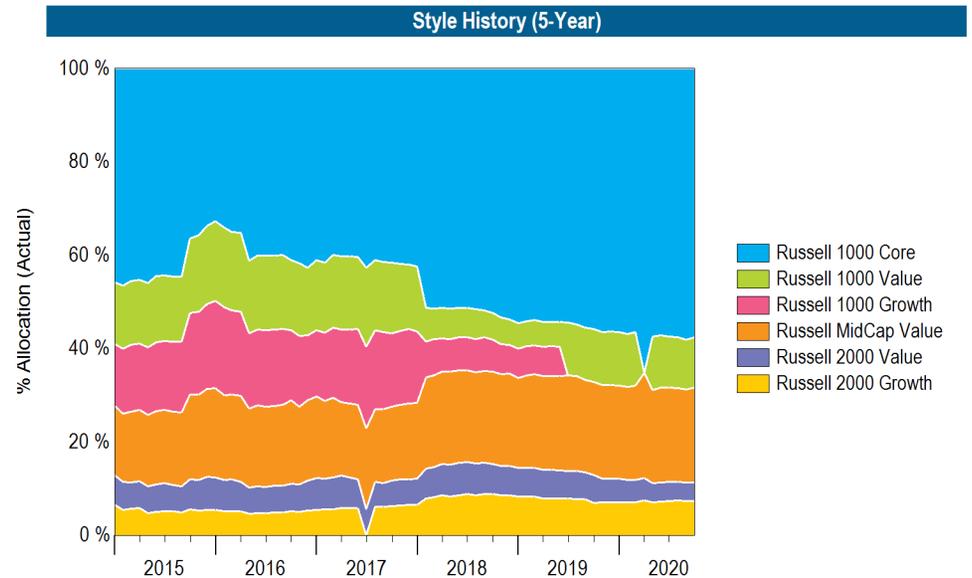
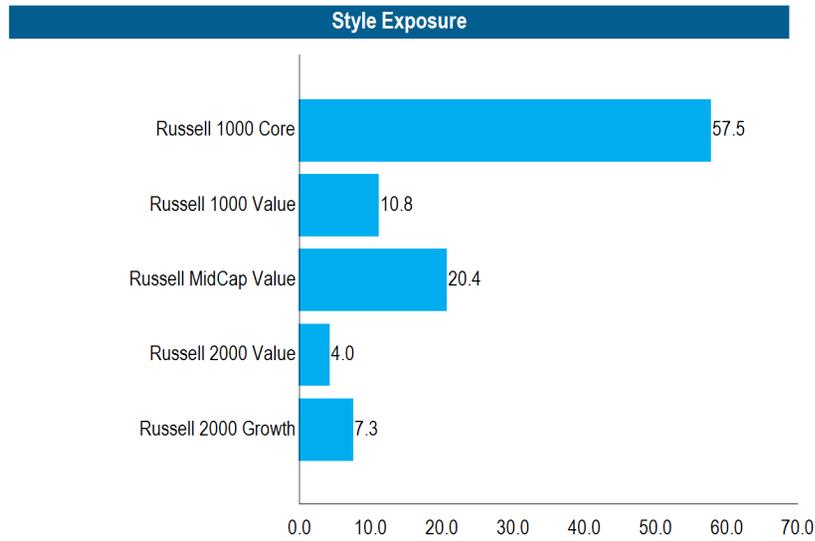
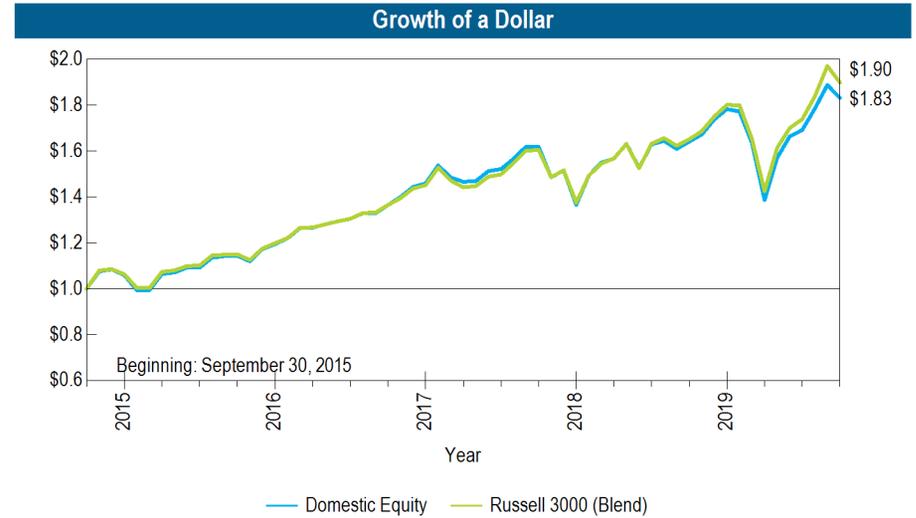
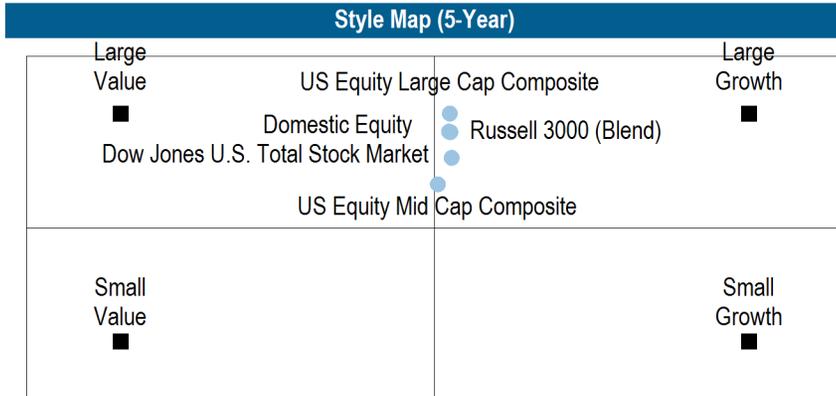


Parametric Systematic Alternative Risk Premia | As of September 30, 2020

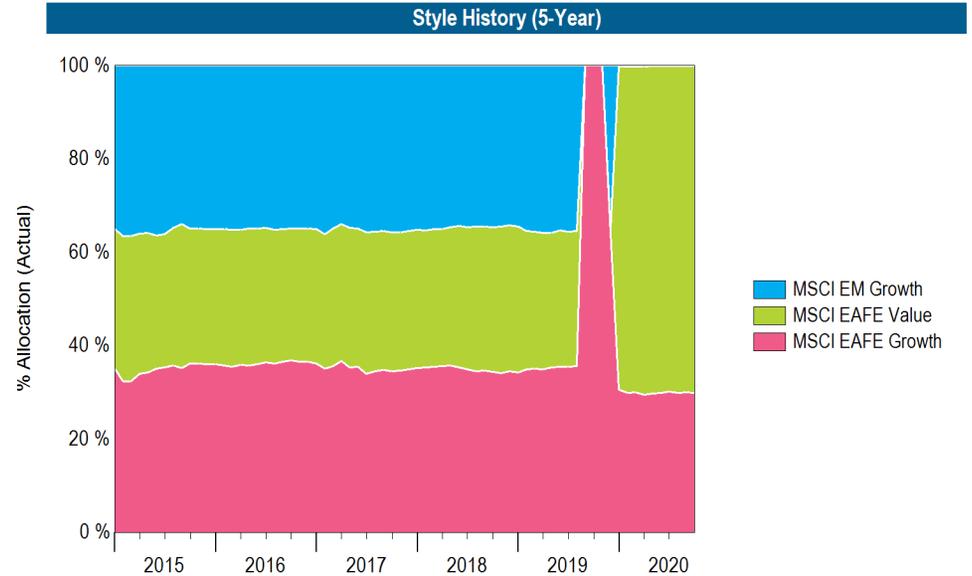
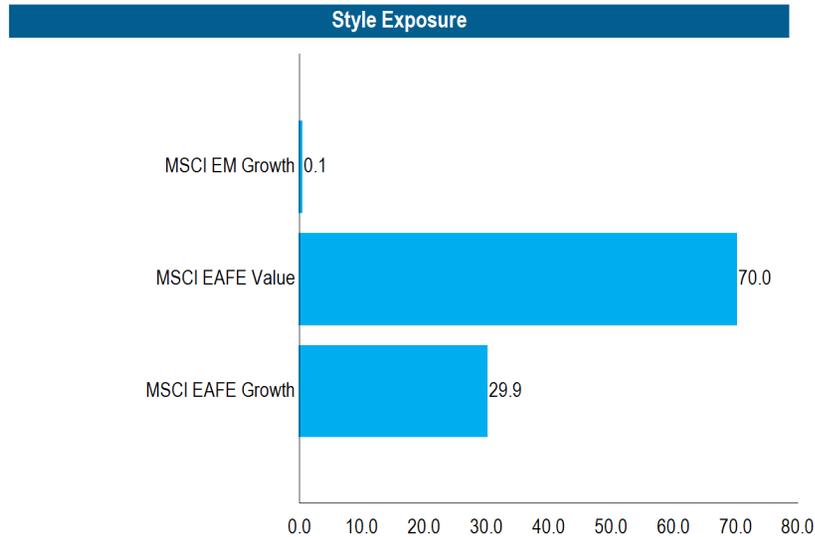
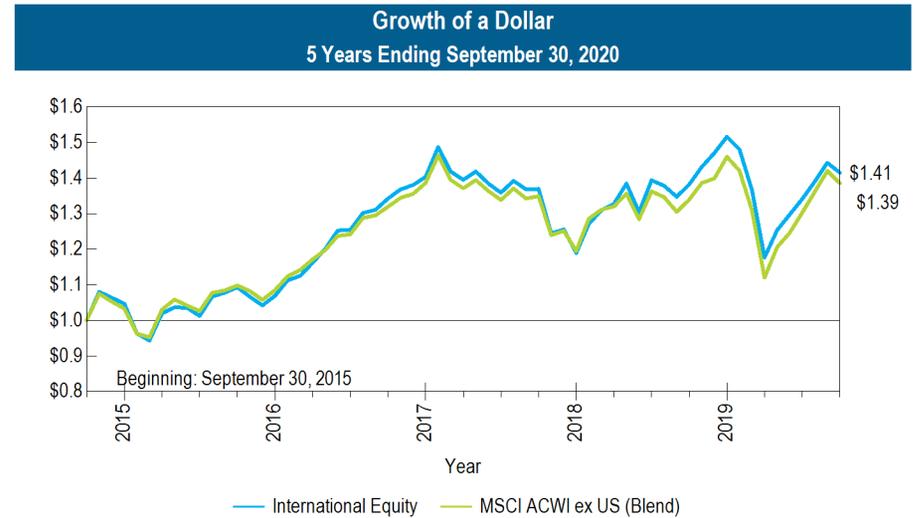
	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Parametric Systematic Alternative Risk Premia	-0.13%	3.31	-0.77	-0.92	19.68%	0.63	158.91%	243.77%
SG Multi Alternative Risk Premia Index	0.00%	1.00	--	-1.23	0.00%	1.00	100.00%	100.00%



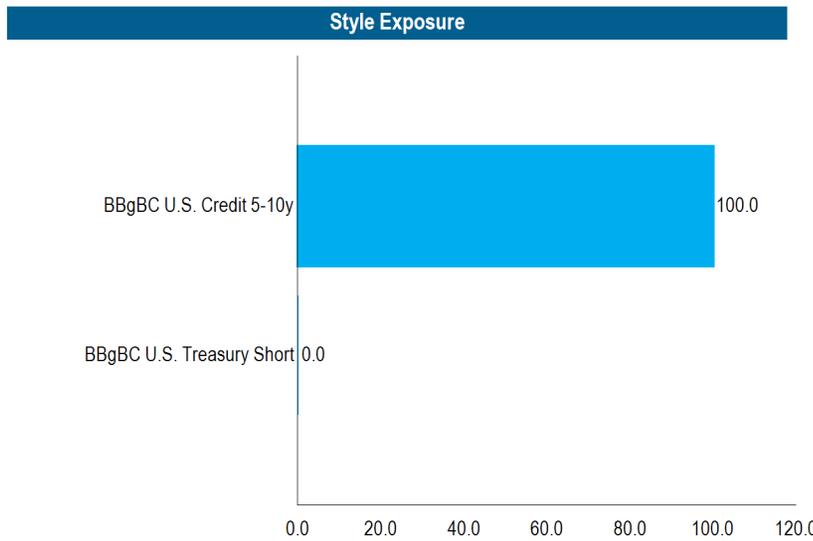
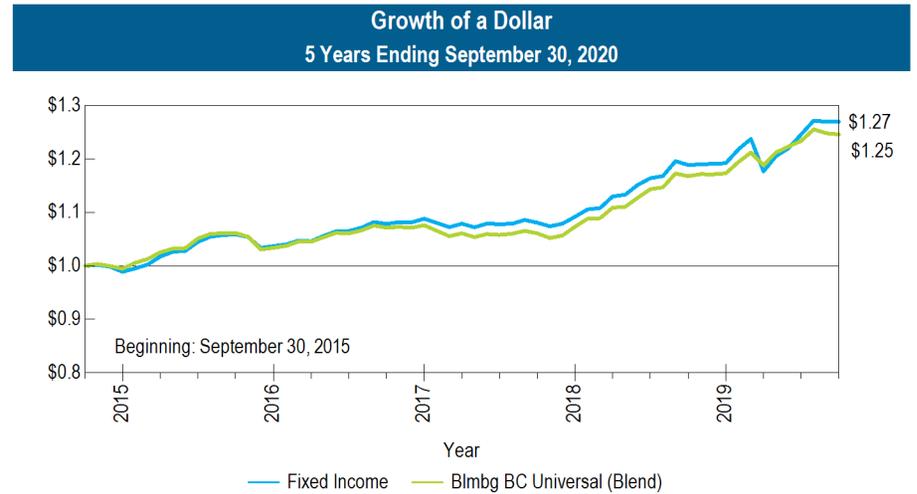
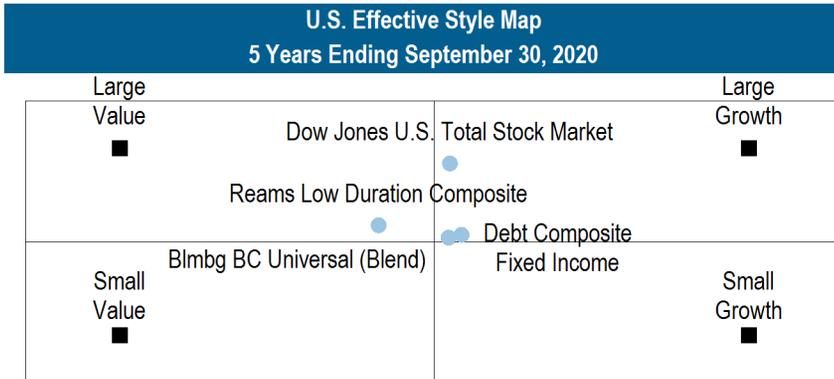
Domestic Equity | As of September 30, 2020



International Equity | As of September 30, 2020



Fixed Income | As of September 30, 2020



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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. $\text{Portfolio Return} - [\text{Risk Free Rate} + \text{Beta} * (\text{market return} - \text{Risk Free Rate})]$.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

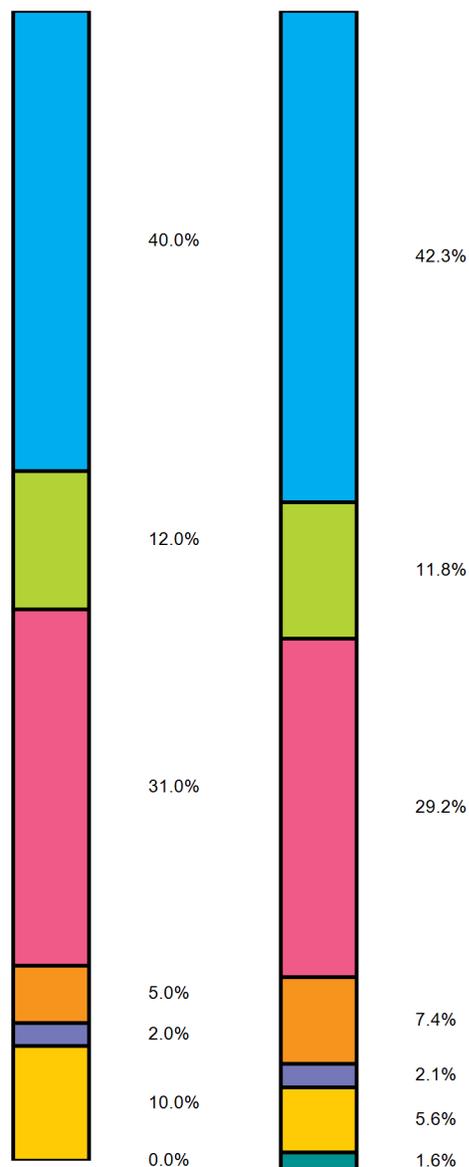
Values shown are in millions of dollars, unless noted otherwise.

Oakland Police and Fire Retirement System

October 31, 2020

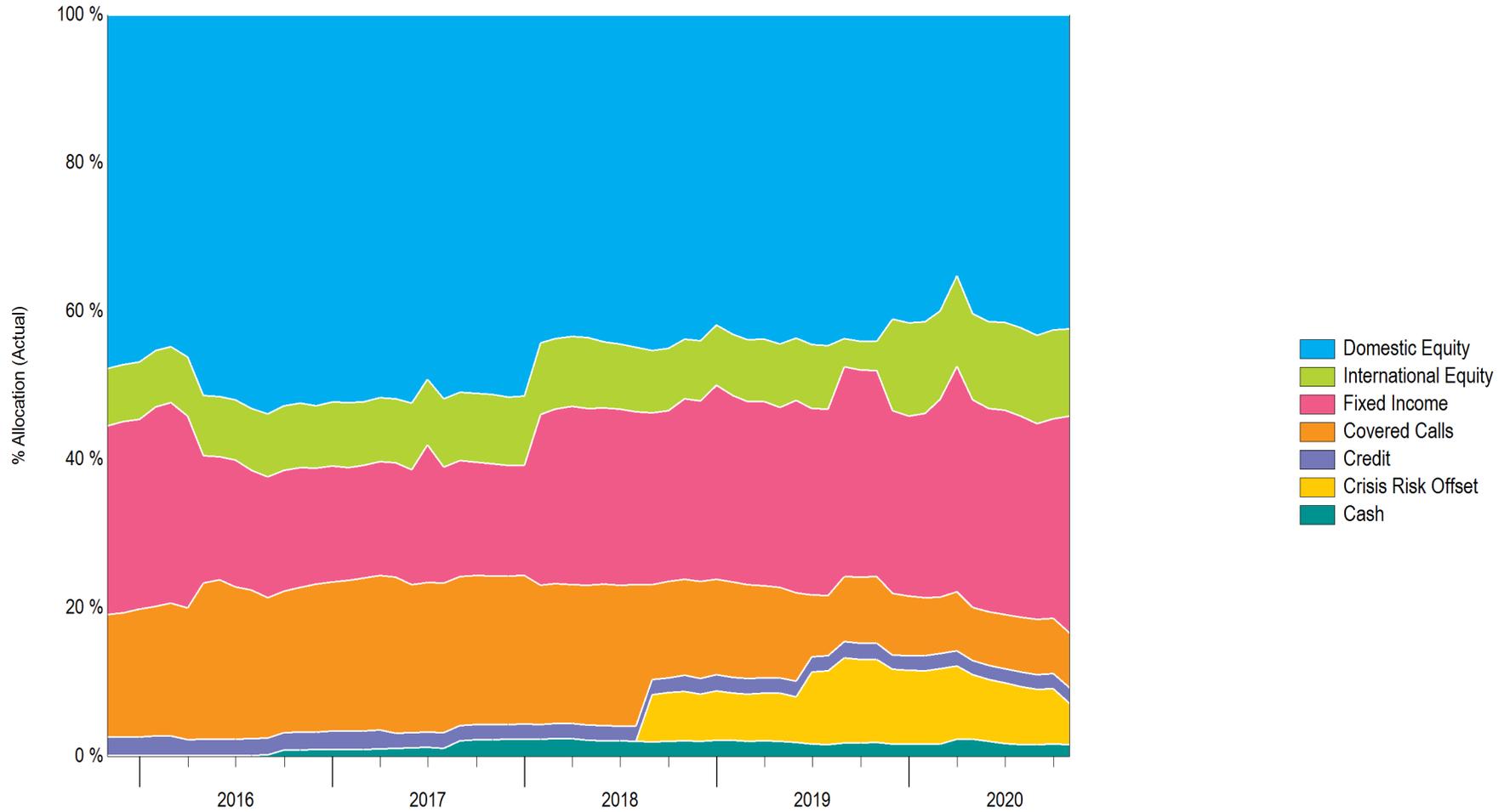
October Flash Report

OPFRS Total Plan As of October 31, 2020



Allocation vs. Targets and Policy						
	Current Balance	Current Allocation	Policy	Difference	Within IPS Range?	
Domestic Equity	\$166,273,796	42.3%	40.0%	2.3%	Yes	
International Equity	\$46,334,303	11.8%	12.0%	-0.2%	Yes	
Fixed Income	\$114,726,790	29.2%	31.0%	-1.8%	Yes	
Covered Calls	\$29,254,974	7.4%	5.0%	2.4%	Yes	
Credit	\$8,148,225	2.1%	2.0%	0.1%	Yes	
Crisis Risk Offset	\$21,909,584	5.6%	10.0%	-4.4%	Yes	
Cash	\$6,215,673	1.6%	0.0%	1.6%	Yes	
Total	\$392,863,345	100.0%	100.0%			

Asset Allocation History
5 Years Ending October 31, 2020



Asset Class Performance Summary

	Market Value (\$)	% of Portfolio	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
OPFRS Total Plan	392,863,345	100.0	-1.5	3.6	-1.1	2.6	5.5	7.6	7.8	6.7	Dec-88
<i>OPFRS Policy Benchmark</i>			<i>-1.7</i>	<i>3.4</i>	<i>1.6</i>	<i>5.1</i>	<i>5.9</i>	<i>7.7</i>	<i>7.5</i>	<i>8.1</i>	<i>Dec-88</i>
Domestic Equity	166,273,796	42.3	-1.6	6.6	1.1	7.8	8.8	10.9	12.5	8.5	Jun-97
<i>Russell 3000 (Blend)</i>			<i>-2.2</i>	<i>6.9</i>	<i>3.1</i>	<i>10.1</i>	<i>10.0</i>	<i>11.5</i>	<i>12.8</i>	<i>8.7</i>	<i>Jun-97</i>
International Equity	46,334,303	11.8	-3.4	2.0	-9.8	-4.5	0.0	4.8	4.6	4.9	Jan-98
<i>MSCI ACWI ex US (Blend)</i>			<i>-2.1</i>	<i>4.1</i>	<i>-7.1</i>	<i>-2.2</i>	<i>0.3</i>	<i>4.8</i>	<i>3.9</i>	<i>5.2</i>	<i>Jan-98</i>
Fixed Income	114,726,790	29.2	-0.6	1.3	5.9	6.1	5.3	4.7	4.1	5.6	Dec-93
<i>Blmbg BC Universal (Blend)</i>			<i>-0.4</i>	<i>0.6</i>	<i>5.8</i>	<i>6.0</i>	<i>5.0</i>	<i>4.3</i>	<i>3.8</i>	<i>5.4</i>	<i>Dec-93</i>
Credit	8,148,225	2.1	1.5	9.3	2.0	6.0	2.8	6.1	--	5.2	Feb-15
<i>BBgBarc US High Yield TR</i>			<i>0.5</i>	<i>5.1</i>	<i>1.1</i>	<i>3.5</i>	<i>4.2</i>	<i>6.3</i>	<i>6.3</i>	<i>5.4</i>	<i>Feb-15</i>
Covered Calls	29,254,974	7.4	-2.1	4.8	-1.1	2.8	5.7	8.1	--	7.5	Apr-14
<i>CBOE S&P 500 BuyWrite USD</i>			<i>-3.6</i>	<i>2.6</i>	<i>-12.9</i>	<i>-10.2</i>	<i>-0.4</i>	<i>3.1</i>	<i>5.5</i>	<i>3.7</i>	<i>Apr-14</i>
Crisis Risk Offset	21,909,584	5.6	-3.1	-4.3	-23.6	-23.2	--	--	--	-9.5	Aug-18
<i>SG Multi Alternative Risk Premia Index</i>			<i>-2.0</i>	<i>-2.7</i>	<i>-14.9</i>	<i>-14.6</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>-6.2</i>	<i>Aug-18</i>
Cash	6,215,673	1.6	0.0	0.0	1.0	1.3	1.9	1.4	--	0.7	Mar-11
<i>FTSE T-Bill 3 Months TR</i>			<i>0.0</i>	<i>0.0</i>	<i>0.6</i>	<i>0.9</i>	<i>1.6</i>	<i>1.2</i>	<i>0.6</i>	<i>0.6</i>	<i>Mar-11</i>

OPFRS Total Plan As of October 31, 2020

Trailing Net Performance												
	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
OPFRS Total Plan	392,863,345	100.0	--	-1.5	3.6	-1.1	2.6	5.5	7.6	7.8	6.7	Dec-88
<i>OPFRS Policy Benchmark</i>				<i>-1.7</i>	<i>3.4</i>	<i>1.6</i>	<i>5.1</i>	<i>5.9</i>	<i>7.7</i>	<i>7.5</i>	<i>8.1</i>	<i>Dec-88</i>
Domestic Equity	166,273,796	42.3	42.3	-1.6	6.6	1.1	7.8	8.8	10.9	12.5	8.5	Jun-97
<i>Russell 3000 (Blend)</i>				<i>-2.2</i>	<i>6.9</i>	<i>3.1</i>	<i>10.1</i>	<i>10.0</i>	<i>11.5</i>	<i>12.8</i>	<i>8.7</i>	<i>Jun-97</i>
Northern Trust Russell 1000	94,435,050	24.0	56.8	-2.4	6.8	3.8	10.8	10.6	11.7	13.0	13.5	Jun-10
<i>Russell 1000</i>				<i>-2.4</i>	<i>6.8</i>	<i>3.8</i>	<i>10.9</i>	<i>10.6</i>	<i>11.8</i>	<i>13.0</i>	<i>13.5</i>	<i>Jun-10</i>
EARNEST Partners	34,715,107	8.8	20.9	0.2	8.6	2.7	9.2	10.4	13.1	13.3	9.8	Apr-06
<i>Russell MidCap</i>				<i>0.6</i>	<i>8.1</i>	<i>-1.7</i>	<i>4.1</i>	<i>6.8</i>	<i>9.0</i>	<i>11.4</i>	<i>8.2</i>	<i>Apr-06</i>
Vanguard Russell 2000 Value	6,956,383	1.8	4.2	3.6	6.5	-18.4	-13.7	--	--	--	-9.6	Aug-19
<i>Russell 2000 Value</i>				<i>3.6</i>	<i>6.2</i>	<i>-18.7</i>	<i>-13.9</i>	<i>-4.1</i>	<i>3.7</i>	<i>7.1</i>	<i>-10.1</i>	<i>Aug-19</i>
Rice Hall James	12,337,228	3.1	7.4	-0.5	5.2	2.5	9.5	6.2	--	--	7.8	Jul-17
<i>Russell 2000 Growth</i>				<i>0.8</i>	<i>8.0</i>	<i>4.7</i>	<i>13.4</i>	<i>7.9</i>	<i>10.4</i>	<i>12.0</i>	<i>9.5</i>	<i>Jul-17</i>
iShares Edge MSCI Min Vol	17,830,028	4.5	10.7	-3.2	2.2	--	--	--	--	--	15.3	Apr-20
<i>MSCI USA Minimum Volatility GR USD</i>				<i>-3.4</i>	<i>2.1</i>	<i>-4.5</i>	<i>-1.4</i>	<i>8.6</i>	<i>10.4</i>	<i>12.7</i>	<i>15.3</i>	<i>Apr-20</i>
International Equity	46,334,303	11.8	11.8	-3.4	2.0	-9.8	-4.5	0.0	4.8	4.6	4.9	Jan-98
<i>MSCI ACWI ex US (Blend)</i>				<i>-2.1</i>	<i>4.1</i>	<i>-7.1</i>	<i>-2.2</i>	<i>0.3</i>	<i>4.8</i>	<i>3.9</i>	<i>5.2</i>	<i>Jan-98</i>
Vanguard Developed Markets ETF	13,636,839	3.5	29.4	-3.5	2.3	-8.9	-4.5	--	--	--	1.5	Sep-19
<i>FTSE Developed All Cap Ex US TR USD</i>				<i>-3.7</i>	<i>2.1</i>	<i>-9.3</i>	<i>-4.8</i>	<i>-0.7</i>	<i>2.9</i>	<i>2.3</i>	<i>1.3</i>	<i>Sep-19</i>
SGA ACWI ex-U.S. Equity	32,383,217	8.2	69.9	-3.5	2.2	-8.9	--	--	--	--	-8.4	Dec-19
<i>MSCI ACWI ex USA Gross</i>				<i>-2.1</i>	<i>4.1</i>	<i>-7.1</i>	<i>-2.2</i>	<i>0.3</i>	<i>4.8</i>	<i>3.9</i>	<i>-3.1</i>	<i>Dec-19</i>

International equity performance inclusive of residual cash in Fisher and Hansberger transition accounts.

OPFRS Total Plan As of October 31, 2020

	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Fixed Income	114,726,790	29.2	29.2	-0.6	1.3	5.9	6.1	5.3	4.7	4.1	5.6	Dec-93
<i>Blmbg BC Universal (Blend)</i>				-0.4	0.6	5.8	6.0	5.0	4.3	3.8	5.4	Dec-93
Ramirez	77,743,446	19.8	67.8	-0.7	1.2	4.7	4.6	5.0	--	--	5.1	Jan-17
<i>BBgBarc US Aggregate TR</i>				-0.4	0.2	6.3	6.2	5.1	4.1	3.6	4.8	Jan-17
Reams	29,347,745	7.5	25.6	-0.2	1.8	17.8	17.5	9.1	6.5	5.3	6.1	Feb-98
<i>Blmbg BC Universal (Blend)</i>				-0.4	0.6	5.8	6.0	5.0	4.3	3.8	5.1	Feb-98
iShares Core US Aggregate Bond ETF	7,635,555	1.9	6.7									
Credit	8,148,225	2.1	2.1	1.5	9.3	2.0	6.0	2.8	6.1	--	5.2	Feb-15
<i>BBgBarc US High Yield TR</i>				0.5	5.1	1.1	3.5	4.2	6.3	6.3	5.4	Feb-15
DDJ Capital	8,148,225	2.1	100.0	1.5	9.3	2.0	6.0	2.8	6.1	--	5.2	Feb-15
<i>ICE BofA High Yield Master TR</i>				0.5	5.2	0.2	2.5	3.9	6.2	6.1	5.2	Feb-15
Covered Calls	29,254,974	7.4	7.4	-2.1	4.8	-1.1	2.8	5.7	8.1	--	7.5	Apr-14
<i>CBOE S&P 500 BuyWrite USD</i>				-3.6	2.6	-12.9	-10.2	-0.4	3.1	5.5	3.7	Apr-14
Parametric BXM	13,432,883	3.4	45.9	-1.9	4.2	-3.7	-1.0	3.3	6.1	--	5.8	Apr-14
<i>CBOE S&P 500 BuyWrite USD</i>				-3.6	2.6	-12.9	-10.2	-0.4	3.1	5.5	3.7	Apr-14
Parametric DeltaShift	15,822,091	4.0	54.1	-2.4	5.3	1.3	6.5	8.0	9.9	--	9.7	Apr-14
<i>CBOE S&P 500 BuyWrite USD</i>				-3.6	2.6	-12.9	-10.2	-0.4	3.1	5.5	3.7	Apr-14
Crisis Risk Offset	21,909,584	5.6	5.6	-3.1	-4.3	-23.6	-23.2	--	--	--	-9.5	Aug-18
<i>SG Multi Alternative Risk Premia Index</i>				-2.0	-2.7	-14.9	-14.6	--	--	--	-6.2	Aug-18
Vanguard Long-Term Treasury ETF	21,909,584	5.6	100.0	-3.3	-3.3	17.0	13.2	--	--	--	15.4	Jul-19
<i>BBgBarc US Govt Long TR</i>				-3.0	-2.8	17.5	13.7	10.7	7.6	7.2	15.8	Jul-19
Cash	6,215,673	1.6	1.6	0.0	0.0	1.0	1.3	1.9	1.4	--	0.7	Mar-11
<i>FTSE T-Bill 3 Months TR</i>				0.0	0.0	0.6	0.9	1.6	1.2	0.6	0.6	Mar-11
Cash	224,673	0.1	3.6	0.0	0.3	1.5	1.8	2.1	1.5	--	0.8	Mar-11
<i>FTSE T-Bill 3 Months TR</i>				0.0	0.0	0.6	0.9	1.6	1.2	0.6	0.6	Mar-11
Cash - Treasury	5,991,000	1.5	96.4									

iShares Core US Aggregate Bond ETF funded 10/28/2020. Performance will be shown after the first full month of performance.

OPFRS Total Plan As of October 31, 2020
Cash Flow Summary
Month to Date

	Beginning Market Value	Net Cash Flow	Net Investment Change	Ending Market Value
Cash	\$213,670	\$11,003	\$0	\$224,673
Cash - Treasury	\$6,291,000	-\$300,000	\$0	\$5,991,000
DDJ Capital	\$8,028,648	\$0	\$119,577	\$8,148,225
EARNEST Partners	\$34,661,855	\$0	\$53,252	\$34,715,107
Fisher Transition	\$71,466	-\$2,600	-\$357	\$68,509
Hansberger Transition	\$206,936	\$0	\$38,802	\$245,738
iShares Core US Aggregate Bond ETF	\$0	\$7,635,555	\$0	\$7,635,555
iShares Edge MSCI Min Vol	\$18,419,148	\$0	-\$589,120	\$17,830,028
Northern Trust Russell 1000	\$97,755,168	-\$1,000,000	-\$2,320,118	\$94,435,050
Parametric BXM	\$13,692,936	\$0	-\$260,053	\$13,432,883
Parametric DeltaShift	\$16,203,027	\$0	-\$380,936	\$15,822,091
Parametric Systematic Alternative Risk Premia	\$15,284,520	-\$15,271,118	-\$13,402	--
Ramirez	\$78,306,337	\$0	-\$562,890	\$77,743,446
Reams	\$29,394,894	\$0	-\$47,149	\$29,347,745
Reams Low Duration	\$44	\$0	\$0	\$44
Rice Hall James	\$12,400,423	\$0	-\$63,195	\$12,337,228
Securities Lending Northern Trust	\$0	-\$8,404	\$8,404	\$0
SGA ACWI ex-U.S. Equity	\$33,541,668	\$0	-\$1,158,451	\$32,383,217
Vanguard Developed Markets ETF	\$14,122,361	\$0	-\$485,522	\$13,636,839
Vanguard Long-Term Treasury ETF	\$14,747,360	\$7,635,555	-\$473,331	\$21,909,584
Vanguard Russell 2000 Value	\$6,725,783	\$0	\$230,599	\$6,956,383
Total	\$400,067,242	-\$1,300,009	-\$5,903,888	\$392,863,345

Benchmark History
As of October 31, 2020

Total Plan x Securities Lending x Reams LD Exception Comp

1/1/2019	Present	40% Russell 3000 / 12% MSCI ACWI ex USA Gross / 33% BBgBarc US Universal TR / 5% CBOE BXM / 6.7% SG Multi Alternative Risk Premia Index / 3.3% BBgBarc US Treasury Long TR
5/1/2016	12/31/2018	48% Russell 3000 / 12% MSCI ACWI ex USA Gross / 20% BBgBarc US Universal TR / 20% CBOE BXM
10/1/2015	4/30/2016	43% Russell 3000 / 12% MSCI ACWI ex USA Gross / 20% BBgBarc US Universal TR / 15% CBOE BXM / 10% CPI - All Urban Consumers (unadjusted) +3%
1/1/2014	9/30/2015	48% Russell 3000 / 12% MSCI ACWI ex USA Gross / 20% BBgBarc US Universal TR / 10% CBOE BXM / 10% CPI - All Urban Consumers (unadjusted) +3%
3/1/2013	12/31/2013	40% Russell 3000 / 10% MSCI ACWI ex USA Gross / 17% BBgBarc US Universal TR / 33% ICE BofA 3M US Treasury TR USD
8/1/2012	2/28/2013	20% Russell 3000 / 7% MSCI ACWI ex USA Gross / 18% BBgBarc US Universal TR / 55% ICE BofA 3M US Treasury TR USD
10/1/2007	7/31/2012	53% Russell 3000 / 17% MSCI ACWI ex USA Gross / 30% BBgBarc US Universal TR
4/1/2006	9/30/2007	35% Russell 3000 / 15% MSCI ACWI ex USA Gross / 50% BBgBarc US Universal TR
1/1/2005	3/31/2006	35% Russell 3000 / 15% MSCI ACWI ex USA Gross / 50% BBgBarc US Aggregate TR
4/1/1998	12/31/2004	50% BBgBarc US Aggregate TR / 10% Russell 1000 / 20% Russell 1000 Value / 5% Russell MidCap / 15% MSCI EAFE
9/1/1988	3/31/1998	40% S&P 500 / 55% BBgBarc US Aggregate TR / 5% FTSE T-Bill 3 Months TR

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.

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

Oakland Police and Fire Retirement System

November 30, 2020

Cash Flow Report

Asset Class/ Manager Liquidity as of October 31, 2020

Asset Class	Fund	Tier
Domestic Equity	Northern Trust	1
Domestic Equity	iShares MSCI Min Vol ETF	3
Domestic Equity	EARNEST Partners	3
Domestic Equity	Vanguard Russell 2000 Value ETF	3
Domestic Equity	Rice Hall James	3
International Equity	Vanguard Developed ETF	3
International Equity	SGA MSCI ACWI ex-US	3
Covered Calls	Parametric	2
Crisis Risk Offset	Long Duration ETF	3
Domestic Fixed Income	Reams	2
Domestic Fixed Income	Ramirez	2
Domestic Fixed Income	iShares Core US Agg Bond ETF	3
Credit	DDJ	2
Cash	Cash	1

Description of Liquidity Tiers

Tier	Description	\$ Exposure (millions)	in Months
1	Public, Scheduled Withdrawal Allowances	100.7	16.8
2	Public, Accommodating of Withdrawals	144.5	24.1
3	Public, Must Plan Withdrawals	147.4	24.6
4	Closely Held	0.0	-
Total		392.5	

Cash Flow Report

PFRS Asset Allocation Oct 31st Market Values)*					Actual Cash flows For Oct - Dec Benefits Payable the 1st of each month		Suggested Cash flows For Jan - March 2021 Benefits Payable the 1st of each month	
	Market Value (\$mm)	Market Value (%)	Target (%)	\$ Variance (from basic target)	Inflow (\$mm)	Outflow (\$mm)	Inflow (\$mm)	Outflow (\$mm)
Northern Trust	94.4	24.1%	20.0%	15,925,239		(3.0)		(3.0)
iShares MSCI Min Vol ETF	17.8	4.5%	6.0%	(5,722,915)				
EARNEST Partners	34.7	8.8%	8.0%	3,311,183				
Vanguard Russell 2000 Value ETF	7.0	1.8%	3.0%	(4,820,089)				
Rice Hall James	12.3	3.1%	3.0%	560,756				
Total Domestic Equity	166.3	42.4%	40.0%	9,254,174				
Vanguard Developed ETF	13.6	3.5%	3.6%	(494,927)				
SGA MSCI ACWI ex-US	32.4	8.2%	8.4%	(590,904)				
Total International Equity	46.0	11.7%	12.0%	(1,085,830)				
Total Public Equity	212.3	54.1%	52.0%	8,168,344				
Parametric	29.3	7.5%	5.0%	9,627,521				
Total Covered Calls	29.3	7.5%	5.0%	9,627,521				
Long Duration ETF	219	5.6%	3.3%	8,824,629				
<i>TBD Risk Premia Manager</i>			6.7%	(26,169,675)				
Total Crisis Risk Offset	21.9	5.6%	10.0%	(17,345,047)				
Reams	29.3	7.5%	12.0%	(17,758,141)				
DDJ	8.1	2.1%	2.0%	297,244				
Ramirez	77.7	19.8%	19.0%	3,159,126				
iShares Core US Agg Bond ETF	7.6	1.9%		7,635,555				
Total Public Fixed	122.9	31.3%	33.0%	(6,666,217)				
Cash	6.2	1.6%	0.0%	6,215,673	10.90	(10.90)	10.90	(10.90)
Total Stable	129.1	32.9%	33.0%	(450,544)				
Total Portfolio	392.5	100.0%	100.0%	---	10.90	(13.90)	10.90	(13.90)

October 31st Market Values by Portfolio Segment

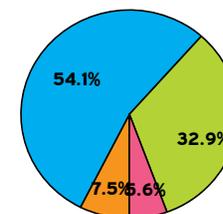
Portfolio Segment	MV (\$mm)
Total Domestic Equity	166.3
Total International Equity	46.0
Total Public Equity	212.3
Total Covered Calls	29.3
Total Crisis Risk Offset	21.9
Total Public Fixed	122.9
Total Stable	129.1
Total Portfolio	392.5

Suggested Cash Withdrawals

Manager	Amount
Cash in Treasury	\$10.9 million
NT R1000	\$3.00 million

Projected Equity to Fixed Allocation (MV)

As of 10/31/20



- Total Covered Calls
 - Total Public Equity
 - Total Stable
 - Total CRO
- \$ difference in MV of Public Equity from 52% allocation: \$8.2 million

* Estimated based on PFRS Oct 31, 2020 Northern Trust statement.

Projected OPFRS Asset Allocation¹²

	Est Mkt Value (\$mm)	Est Mkt Value (%)	Target (%)	Projected % Variance (from target)	Projected \$ Variance (from target)
Northern Trust	88.4	22.9	20.0	2.9	11,125,239
iShares MSCI Min Vol ETF	17.8	4.6	6.0	-1.4	(5,362,915)
EARNEST Partners	34.7	9.0	8.0	1.0	3,791,183
Vanguard Russell 2000 Value ETF	7.0	1.8	3.0	-1.2	(4,640,089)
Rice Hall James	12.3	3.2	3.0	0.2	740,756
Total Domestic Equity	160.3	41.5	40.0	1.5	5,654,174
Vanguard Developed ETF	13.6	3.5	3.6	-0.1	(278,927)
SGA MSCI ACWI ex-US	32.4	8.4	8.4	0.0	(86,904)
Total International Equity	46.0	11.9	12.0	-0.1	(365,830)
Total Public Equity	206.3	53.4	52.0	1.4	5,288,344
Parametric	29.3	7.6	5.0	2.6	9,927,521
Total Covered Calls	29.3	7.6	5.0	2.6	9,927,521
Long Duration ETF	21.9	5.7	3.3	2.3	9,024,628
<i>TBD Risk Premia Manager</i>	0.0	0.0	6.7	-6.7	(25,769,679)
Total Crisis Risk Offset	21.9	5.7	10.0	-4.3	(16,745,051)
Reams	29.3	7.6	12.0	-4.4	(17,038,141)
DDJ	8.1	2.1	2.0	0.1	417,244
Ramirez	77.7	20.1	19.0	1.1	4,299,126
iShares Core US Agg Bond ETF	7.6	2.0		2.0	7,635,555
Total Public Fixed	122.9	31.8	33.0	-1.2	(4,686,217)
Cash	6.2	1.6	0.0	1.6	6,215,673
Total Stable	129.1	33.4	33.0	0.4	1,529,456
Total Portfolio	386.5	100.0	100.0		

¹ Report reflects change in asset allocation from October 31 values listed by Northern Trust, and beneficiary payments estimated at \$13.9 million on a quarterly basis per OPFRS. Report reflects quarterly City contributions of \$10.9 million. Current City of Oakland quarterly contribution amount is based on FY 2020/2021 actuarial annual required contribution of \$43.65 million.

² As of October 31st, 2020, the projected equity portfolio represents 53.4% of the Total Portfolio (\$5.3 million more than the target allocation of 52%).



Diversity & Inclusion Mission

To foster an environment where employees can bring their authentic selves and diversity of thought to drive innovation and provide creative solutions for our clients.

Guiding Principles

- We focus on attracting, hiring, developing and retaining a diverse employee population of top talent.
- We are committed to a work environment that is based on collaboration, fairness and mutual respect for each other.
- We drive innovative business solutions through an open-minded approach and acceptance of each other's varied perspectives.
- We seek to understand the varied perspectives of our clients so that we can provide customized solutions that fit their investment needs.

Parametric Diversity and Inclusion

Parametric is a part of Eaton Vance's Diversity and Inclusion ("D&I") program which seeks to make the firm a stronger and better company and to contribute positively to the communities in which its employees live and work. The importance of organizational D&I is acknowledged by EV's Chairman and CEO, Thomas Faust, senior leadership at Parametric and the Eaton Vance Corp. Board of Directors

An initial priority of the D&I strategy is to educate managers across Parametric on the objectives of the D&I initiative, key challenges and measures of success. Managers are expected to work with their Human Resources business partners to assess their departments and to develop action plans for advancing D&I. In addition, the firm recognizes that efforts to enhance the ability to recruit, develop and retain a talented and diverse workforce involves everyone at Parametric. Human Resources has target goals to hire diverse candidates for full-time and internship positions. Over many years the firm has partnered with diversity organizations as part of its efforts to source candidates and increase diversity at the firm. Examples of these ongoing efforts include recruitment and networking events, internship opportunities and partnerships with several colleges and universities, community involvement and professional associations.

In 2018, Eaton Vance hired Ingrid Jacobs as Chief Diversity Officer, who works with employees across Eaton Vance affiliates to create and implement initiatives designed to foster a culture of D&I. Ingrid chairs Eaton Vance's D&I Leadership Council and D&I Operating Council and supports the work of the Employee Resource Groups, which are designed to bring together employees from across the firm with shared interests.

Eaton Vance Corp D&I Leadership Council

- Oversees mission to create value for Eaton Vance Corp and its stakeholders by increasing the firm's ability to attract, develop and retain a talented and diverse workforce
- Sets the strategy and direction for D&I across Eaton Vance Corp and develop the guiding principles for the Operating Council and Employee Resource Groups

Eaton Vance D&I Operating Council

- Acts as an active ambassador for D&I internally and externally to the firm
- Talent Acquisition, Retention through Engagement and Learning and Development
- Employee Resource Groups (MOSAIC, EV Pride +, Women's Leadership Exchange, EVolve)

In 2019, Parametric created a D&I Leadership Council to develop and implement the strategy, direction and guiding principles for D&I at Parametric, in partnership with the D&I Leadership Council at Eaton Vance. In 2020, Parametric also created a D&I Operating Council that serves to be ambassadors throughout Parametric and its communities to create a more diverse and inclusive environment through employee engagement. By continuing to increase the focus on

D&I, the firm will continue to foster an environment where employees can bring their authentic selves and diversity of thought to drive innovation and provide creative solutions for its clients.

Process and practices to foster diversity

The firm strives to implement a company culture that is inclusive, positive and performance-oriented. Parametric looks to create a diverse candidate pool by posting to various job boards, colleges and universities, and professional associations. Having a diverse workforce allows the firm to benefit from a variety of perspectives and strengthens its competitiveness.

Diversity Recruiting strategies have been determined so managers have options to choose from when defining the recruiting strategy for their open positions. These strategies support managers and the Talent Acquisition team in finding diverse top talent for each open position. Parametric posts all positions internally so all employees have access to review and apply for positions across the organization. These strategies also encourage development and promotion of diverse internal talent to fill open positions throughout the firm. Parametric looks to create a diverse candidate pool by posting to various job boards, colleges and universities, professional associations, and encouraging hiring managers and recruiters to create a network of diverse top talent. Having a diverse workforce allows the firm to benefit from a variety of perspectives and strengthens its competitiveness.

Parametric is an equal opportunity employer and is committed to providing a work environment that is free of discrimination and harassment. It does not discriminate against applicants or employees with respect to any terms or conditions of employment on account of race, color, religion, creed, national origin, ancestry, sex, sexual orientation, age, pregnancy, parenthood, physical or mental disability (actual or perceived), medical condition including genetic characteristics, marital status, citizenship status, military service, gender, gender identity, registered domestic partner status, domestic violence victim status, status with regard to public assistance, or any other characteristic protected by applicable federal, state or local laws. Parametric also prohibits discrimination based on the perception that a person has any of those characteristics or is associated with a person who has or is perceived as having any of those characteristics. This commitment applies to all persons involved in the operations of Parametric, and prohibits unlawful discrimination by any employee of Parametric, including supervisors and co-workers. All employment decisions shall be consistent with the principles of equal employment opportunity.

Parametric has set diversity targets (not quotas) for recruitment efforts of full-time and intern positions. These targets aim to increase both female and diversity hires at Parametric and are reviewed on a quarterly basis.

Parametric conducts a robust gender pay analysis annually to ensure that compensation is comparable for women and men for comparable positions.

In partnership with Eaton Vance's Chief Diversity Officer, Parametric's Diversity and Inclusion Leadership Council drive's strategy and implements initiatives and programs to continue to cultivate a diverse and inclusive environment.



Parametric Portfolio Associates® LLC ("Parametric")
All Parametric Locations as of 09/30/2020

Category	Total	Women		People of Color*	
	Number	Number	Percentage	Number	Percentage
Total employees	599	206	34.39%	152	25.38%
Board of Directors (BoD)	N/A	N/A	N/A	N/A	N/A
General Partner (GP)	N/A	N/A	N/A	N/A	N/A
Leadership/Executives**	10	2	20.00%	2	20.00%
Senior Staff	45	10	22.22%	8	17.78%
Managers	157	52	33.12%	35	22.29%
Investment Professionals	143	25	17.48%	35	24.48%

*Includes Race/Ethnicities other than "White" or "Not Declared"

**Parametric Executive Committee

Diversity and Inclusion Recruiting Outreach Plan

Parametric understands the importance of organizational diversity and we strive to attract, develop, promote and retain top diverse talent through a wide variety of initiatives.

Parametric has set diversity targets (not quotas) for recruitment efforts of full-time and intern positions. These targets aim to increase both female and diversity hires at Parametric and are reviewed on a quarterly basis.

In partnership with Eaton Vance's Chief Diversity Officer, Parametric will continue to implement initiatives and programs to continue to cultivate a diverse and inclusive environment.

The following is a summary of our current and planned diversity recruiting outreach initiatives which include partnerships with colleges and universities, professional associations, and partnering with our local communities.

I. Targeted College Diversity Recruitment

- University of Washington, Seattle and Tacoma
- Seattle University
- Gonzaga University
- Washington State University
- University of Minnesota
- University of Nevada, Las Vegas
- Howard University
- Alabama A&M
- Morehouse

II. Professional Associations and Organizations

- Association of Latino Professionals For America (ALPFA) - www.alpfa.org
- Year Up Program - www.yearup.org
- National Association of Securities Professionals - <http://www.nasphq.org/>
- Girls Who Code – www.girlswhocode.com

III. Diversity Job Postings

- Association of Latino Professionals For America (ALPFA) - www.alpfa.org
- Professional Diversity Network - www.prodivnet.com/
- Military 2 Career - <http://www.military2career.com/>
- Women's Career Chanel - <http://www.womenscareerchannel.com/>
- Black Career Network - <http://www.blackcareernetwork.com/>
- Asian Career Network - <http://www.acareers.net/>
- Pro Able - <http://www.proable.net/>

800 FIFTH AVENUE
SUITE 2800
SEATTLE, WA 98104

P 206 694 5500

F 206 694 5581

parametricportfolio.com

- Out Professional Network - <http://www.outpronet.com/>
- iHispano - <http://www.ihispano.com/>
- National Association of Asian American Professionals (NAAAP) - www.naaap.org
- National Black MBA Association - <https://nbmbaa.org>
- Women For Hire - <http://womenforhire.com/>
- Women Investment Professionals Chicago - <http://www.wipchicago.org/>
- 100 Women in Finance - <https://100women.org/>
- YUPRO - Placement Agency for Year Up Alumni

Parametric is an equal opportunity employer and is committed to providing a work environment that is free of discrimination and harassment. It does not discriminate against applicants or employees with respect to any terms or conditions of employment on account of race, color, religion, creed, national origin, ancestry, sex, sexual orientation, age, pregnancy, parenthood, physical or mental disability (actual or perceived), medical condition including genetic characteristics, marital status, citizenship status, military service, gender, gender identity or expression, registered domestic partner status, domestic violence victim status, status with regard to public assistance, or any other characteristic protected by applicable federal, state or local laws. Parametric also prohibits discrimination based on the perception that a person has any of those characteristics or is associated with a person who has or is perceived as having any of those characteristics. This commitment applies to all persons involved in the operations of Parametric, and prohibits unlawful discrimination by any employee of Parametric, including supervisors and co-workers. All employment decisions shall be consistent with the principles of equal employment opportunity.



AGENDA REPORT

TO: Oakland Police and Fire
Retirement System Board

FROM: David F. Jones

SUBJECT: Expiration Notice of PFRS
Investment Manager Service
Agreement and Action to Extend
Service Agreements

DATE: November 24, 2020

SUMMARY

The Service Contract for the following Investment Manager for the Oakland Police & Fire Retirement Systems (PFRS) will expire shortly. The PFRS Board is asked to consider acting to extend the service agreement for this manager for one addition year pursuant to their service agreements.

BACKGROUND

The Service Agreement for the following Investment Manager who provides services for the PFRS Board will expire shortly. The following table describes the investment manager timeline:

Investment Manager	Investment Class	Hire Date	Contract/Extension Expiration Date
Parametric Portfolio Associates	Covered Calls	December 23, 2013	December 23, 2020

RECOMMENDATION

Staff recommends that the PFRS Board approve the implementation of the relevant service agreement provision for the manager to extend the service agreement between the above mentioned PFRS Investment Manager and PFRS.

Respectfully submitted,

David F. Jones
Plan Administrator
Oakland Police and Fire Retirement System

Attachments:
(1) Resolution # 8006

PFRS Board Meeting
December 10, 2020
Agenda Item C8

ATTACHMENT 1

Resolution No. 8006

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

Approved to Form
and Legality



RESOLUTION No. 8006

ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

**RESOLUTION AUTHORIZING A ONE-YEAR
EXTENSION OF PROFESSIONAL SERVICES
AGREEMENT WITH PARAMETRIC PORTFOLIO
ASSOCIATES, LLC FOR COVERED CALLS ASSET
CLASS INVESTMENT MANAGER SERVICES**

WHEREAS, Oakland City Charter section 2601(e) states that the Board of the Oakland Police and Fire Retirement System (“PFRS Board”) shall possess power to make all necessary rules and regulations for its guidance and shall have exclusive control of the administration and investment of the funds established for the maintenance and operation of the system; and

WHEREAS, on June 19, 2013, the PFRS Board passed a motion to enter into an agreement (“The Agreement”) with Parametric Portfolio Associates, LLC (“Investment Counsel”), to provide advice and counsel regarding investments of the assets of the Police and Fire Retirement Fund (“Fund”); and

WHEREAS, Section XX of the Agreement allows for modification of the Agreement by written agreement of all parties; and

WHEREAS, Section IV(B) of the Agreement gave the PFRS Board the option to extend the initial term of the Agreement for three additional one-year terms by giving Investment Counsel written notice of its intent to exercise its option not less than sixty days prior to the expiration of the term or extended term of the agreement; and

WHEREAS, on November 28, 2018, the PFRS Board passed Resolution No. 7033 authorizing amendment of Section IV(B) of the Agreement to provide the Board with unlimited one-year extension options, and

WHEREAS, on October 30, 2019, the PFRS Board passed Resolution No. 7074 authorizing an extension of the Agreement with Investment Counsel for an additional one-year term, effective December 23, 2019; and

WHEREAS, the PFRS Board wishes to extend the current Agreement with Investment Counsel for another one-year term, effective December 23, 2020; now, therefore, be it

MEMORANDUM

TO: Oakland Police and Fire Retirement System (OPFRS)
FROM: David Sancewich, Paola Nealon, Sidney Kawanguzi – Meketa Inv. Group
DATE: December 10, 2020
RE: Defensive Equity Review

Recommendation and Discussion

During a 1Q 2020 PFRS board meeting, Meketa discussed with the trustees the sale of SPI strategies to Carillon Towers. During the review and discussion with the board, PFRS decided to terminate its contract with SPI strategies and move the assets into a defensive U.S. equity ETF.

Meketa believes the defensive equity component of U.S. equity is important as the plan continues to de-risk its allocation and reduce volatility.. Given the termination of SPI this segment requires action on the part of the Oakland PFRS board to maintain its allocation moving forward. Meketa recommends that Oakland PFRS select one of the following actions in regards to the defensive equity mandate:

1. Conduct a new RFP for a new investment manager.
2. Review the finalists from the 2018 defensive equity search for further consideration

Rather than spend the time and money conducting a new RFP. Meketa recommends OPFRS option #2 above. Specifically, sending a short update questionnaire to the previous managers with and interview at an upcoming meeting.



Memorandum

To:	Board of Trustees of the Oakland Police and Fire Retirement System
From:	Parametric Portfolio Associates
Date:	November 13, 2020
RE:	Parametric Research Affiliates Systematic Alternative Risk Premia Strategy ("SARP") Performance in 2020

The underperformance of SARP in 2020 was driven primarily by its poor performance in the first quarter of the year. SARP entered 2020 on a strong note, having delivered strong performance of 15.2% for the 2019 calendar year. Among other positions, its exposures to begin the year included net-long positions in energy commodities and equities. Unfortunately, the market events that subsequently unfolded in the first quarter of 2020 presented extremely challenging headwinds for the strategy, which finished Q1 with a -38.3% return. Two exogenous shocks – the worldwide coronavirus outbreak and the breakdown of OPEC negotiations between Saudi Arabia and Russia – contributed to one of the fastest bear markets in history. The S&P 500 Index fell 34% over the course of only 23 trading days and the CBOE VIX Index rose nearly 500%, from 14.4 on February 19th, the start of the sell-off, to 82.7 on March 16th, a record high. In the quarter, oil prices fell by nearly 67% and recorded the fastest drop on record. US Treasury yields fell to as low as 0.54% (10-year Treasury yield) on March 9th driven by a flight to quality and deleveraging, only to rise to 1.19% eight business days later. The speed and severity of the downturn in global markets impacted asset prices around the world and left few places to hide.

SARP's underperformance was influenced by two broad themes; the first was a loss of the diversification benefit of the 13 factor sleeves that make up our portfolio and historically had low cross-correlations to each other. Equity beta within many of these intuitively unrelated factors was elevated relative to long-term averages and when coupled with the timing and severity of the Q1 market shocks, led to higher-than-average downside performance during the extremely fast bear market environment. The second theme was the speed of the global sell-off, which was a particular challenge to SARP's lower turnover, monthly reconstitution process. SARP is designed to exploit longer-term factor risk premia, as we have not found empirical evidence that more frequent reconstitutions help deliver better risk-adjusted returns. Over the short-term, this means that SARP's process may suffer when markets experience sudden and sharp directional changes, such as those we saw in late February and March 2020.



In 2019, Parametric and Research Affiliates had begun research projects to address “correction environments” which were known to be potentially challenging. After a vigorous and thorough research and due diligence review process, enhancements to the SARP model were approved by the investment committee in January 2020. These enhancements were designed to moderate asset class beta, including equity beta, and introduce a more dynamic approach to the trend sleeves to improve returns around market turning points. After approval by the investment committee, the process began to incorporate them into the strategy’s quantitative algorithm code which unfortunately was not completed until mid-March, at which point the enhancements were implemented into the portfolio. Unfortunately, the model enhancements were incorporated after the market shocks and much of the strategy’s underperformance had taken place.

In late March, the equity markets began a significant rally which caused the strategy to lag further due to the new model’s lower equity beta position. The equity rebound continued through the second quarter, with the S&P 500 experiencing one of its largest rallies in its history and finishing with its best quarterly return since 1998 (+20.5). SARP returned -4.83% in Q2, with equities being the primary driver of the underperformance.

MEMORANDUM

TO: Oakland Police and Fire Retirement System (OPFRS)
FROM: David Sancewich, Paola Nealon, Sidney Kawanguzi – Meketa Inv. Group
DATE: December 10, 2020
RE: 2021 Ongoing Strategic Investment Agenda

On an ongoing (monthly) basis, Meketa develops a list of projects that we expect to work closely with OPFRS to complete over throughout the calendar year (see table below). In an attempt to coordinate the scheduling of these tasks, this memo details a Preliminary Investment Project Agenda by calendaring and prioritizing the expected tasks and deliverables that would be required to fulfill the Agenda. Meketa welcomes any suggestions and/or modifications to the proposed timeline.

2021 Preliminary Investment Project Agenda

Expected Completion Date	Task
January 2021	<ul style="list-style-type: none">Flash Performance (4Q2020)Risk Premia Search UpdateDefensive Equity Search Update
February 2021	<ul style="list-style-type: none">Quarterly Performance Report (4Q 2020)Defensive Equity Search InterviewsManager Update: Earnest PartnersContract Renewal: Earnest Partners
March 2021	<ul style="list-style-type: none">Cash Flow Report (2Q 2021)Watch Update Memo: DDJManager Update: DDJManager Update: Northern Trust R1000
April 2021	<ul style="list-style-type: none">Flash Performance (1Q2021)Manager Update: SGA

Expected Completion Date	Task
May 2021	<ul style="list-style-type: none"> Quarterly Performance Report (1Q 2021) Manager Update: BlackRock
June 2020	<ul style="list-style-type: none"> Cash Flow Report (3Q 2021) Educational Item: TBD Watch Update Memo: Rice Hall & James Manager Update: Rice Hall & James 2021 Asset Liability Review:
July 2020	<ul style="list-style-type: none"> Flash Performance (2Q2021) Manager Update: Parametric Contract Renewal: Parametric
August 2020	<ul style="list-style-type: none"> Quarterly Performance Report (2Q 2021)
September 2020	<ul style="list-style-type: none"> Cash Flow Report (4Q 2021) Educational Item: TBD Thermal Coal List Update: 2021
October 2020	<ul style="list-style-type: none"> Flash Performance (3Q2021) Manager Update: Parametric
November 2020	<ul style="list-style-type: none"> Quarterly Performance Report (3Q 2021) Manager Update: Ramirez Contract Renewal: Ramirez
December 2020	<ul style="list-style-type: none"> Cash Flow Report (1Q 2022)

Bold are priority strategic items.

This agenda includes only major strategic items. Meketa also expects to work with the Staff and Board to complete more routine tasks and projects, as expected.

Pursuant to the Governor's Executive Order N-29-20, all members of the City Council, as well as the City Administrator, City Attorney and City Clerk will join the meeting via phone/video conference and no teleconference locations are required

Oakland Police and Fire Retirement Board meetings are being held via Tele-Conference. Please see the agenda to participate in the meeting. For additional information, contact the Retirement Unit by calling (510) 238-6481.



Retirement Unit
150 Frank H. Ogawa Plaza
Oakland, California 94612

AGENDA

RETIREMENT BOARD MEMBERS

Walter L. Johnson, Sr.
President

Jaime T. Godfrey
Vice President

Robert W. Nichelini
Member

Kevin R. Traylor
Member

John C. Speakman
Member

R. Steven Wilkinson
Member

Margaret O'Brien
Member

SPECIAL MEETING of the BOARD OF ADMINISTRATION of the OAKLAND POLICE AND FIRE RETIREMENT SYSTEM ("PFRS")

Thursday, December 10, 2020

12:00 PM

**Tele-Conference Board Meeting
via Zoom**

OBSERVE

- To observe the meeting by video conference, please click on this link: <https://us02web.zoom.us/j/82880493983> at the noticed meeting time.
- To listen to the meeting by phone, please call the numbers below at the noticed meeting time: Dial (for higher quality, dial a number based on your current location):
- iPhone one-tap: US: +16699006833, 82880493983# or +13462487799, 82880493983#
- US: +1 669 900 6833 or +1 346 248 7799 or +1 253 215 8782 or +1 301 715 8592 or +1 312 626 6799 or +1 929 205 6099
- International numbers available: <https://us02web.zoom.us/j/82880493983>
- Webinar ID: 828 8049 3983.
If asked for a participant ID or code, press #.

PUBLIC COMMENTS

There are three ways to submit public comments.

- eComment. To send your comment directly to staff BEFORE the meeting starts, please email to mvisaya@oaklandca.gov with "PFRS Board Meeting" in the subject line for the corresponding meeting. Please note that eComment submission **closes two (2) hours before posted meeting time.**

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
SPECIAL BOARD MEETING
December 10, 2020**

- To comment by Zoom video conference, click the “Raise Your Hand” button to request to speak when Public Comment is being taken on an eligible agenda item at the beginning of the meeting. You will be permitted to speak during your turn, allowed to comment, and after the allotted time, re-muted. Instructions on how to “Raise Your Hand” is available at: <https://support.zoom.us/hc/en-us/articles/205566129> - Raise-Hand-In-Webinar.
- To comment by phone, please call on one of the above listed phone numbers. You will be prompted to “Raise Your Hand” by pressing “*9” to speak when Public Comment is taken. You will be permitted to speak during your turn, allowed to comment, and after the allotted time, re-muted. Please unmute yourself by pressing *6.

If you have any questions, please email Maxine Visaya, Administrative Assistant at mvisaya@oaklandca.gov.

- - - ORDER OF BUSINESS - - -

- A.**
- | | |
|------------------------|---|
| Subject: | Police and Fire Retirement System (“PFRS”) Board Meeting Minutes |
| From: | Staff of the PFRS Board |
| Recommendation: | APPROVE October 28, 2020 PFRS Board Meeting Minutes. |
- B. AUDIT & OPERATIONS COMMITTEE AGENDA – DECEMBER 10, 2020**
- B1. Subject:** Report of the Audit of PFRS Financial Statements for the Year Ending June 30, 2020
- From:** Macias, Gini and O’Connell, LLP
-
- Recommendation:** **APPROVE** Audit Report PFRS Financial Statements for the year ending June 30, 2020.
- B2. Subject:** Administrative Expenses Report
- From:** Staff of the PFRS Board
-
- Recommendation:** **APPROVE** the informational report regarding PFRS administrative expenses as of October 31, 2020.

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
SPECIAL BOARD MEETING
December 10, 2020

- B3. Subject:** Resolution No. 8004 - Approving Request of PFRS Trustee R. Steven Wilkinson to Attend Virtual Pension & Financial Services Conference and for Reimbursement of Registration Expenses for said Conference
- From:** Staff of the PFRS Board
-
- Recommendation:** **APPROVE** Resolution No. 8004 - Resolution approving request of Oakland Police and Fire Retirement System Trustee R. Steven Wilkinson to attend the National Association of Securities Professionals 31st Annual Virtual Pension & Financial Services Conference in a virtual format from December 7 through December 10, 2020 and for reimbursement of registration fees in an amount not to exceed One-Hundred Twenty-Five Dollars (\$125.00).
-
- B4. Subject:** Resolution No. 8005 - Approving Request of PFRS Plan Administrator David F. Jones to Attend Virtual Pension & Financial Services Conference and for Reimbursement of Registration Expenses for said Conference
- From:** Staff of the PFRS Board
-
- Recommendation:** **APPROVE** Resolution No. 8005 - Resolution approving request of Oakland Police and Fire Retirement System Plan Administrator David F. Jones to attend the National Association of Securities Professionals 31st Annual Virtual Pension & Financial Services Conference in a virtual format from December 7 through December 10, 2020 and for reimbursement of registration fees in an amount not to exceed One-Hundred Twenty-Five Dollars (\$125.00).
-
- C. INVESTMENT & FINANCIAL MATTERS COMMITTEE AGENDA – DECEMBER 10, 2020**
-
- C1. Subject:** Investment Market Overview
- From:** Meketa Investment Group
-
- Recommendation:** **ACCEPT** an informational report on the global investment markets as of October 31, 2020.
-
- C2. Subject:** Investment Fund Quarterly Performance Update as of September 30, 2020
- From:** Meketa Investment Group
-
- Recommendation:** **ACCEPT** the Investment Fund Quarterly Performance update as of September 30, 2020.

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
SPECIAL BOARD MEETING
December 10, 2020

- C3. **Subject:** Preliminary Investment Fund Performance Update as of October 31, 2020
From: Meketa Investment Group
Recommendation: **ACCEPT** the Preliminary Investment Fund Performance update as of October 31, 2020.
- C4. **Subject:** \$13.9 Million Drawdown for Fiscal Year 2020/2021 (Quarter Ending March 2021) Member Allowances Jan 1, 2021 through March 30, 2021
From: Meketa Investment Group
Recommendation: **APPROVE** Meketa Investment Group recommendation of \$13.9 million drawdown, which includes a \$10.9 million contribution from the City of Oakland and a \$3.0 million contribution from the PFRS Investment Fund, to be used to pay for the January 2021 through March 2021 Member Retirement Allowances.
- C5. **Subject:** Investment Manager Performance Review – Parametric Portfolio Associates, LLC, a PFRS Covered Calls Asset Class Investment Manager.
From: Meketa Investment Group
Recommendation: **RECEIVE** informational report regarding the Diversity Policy of Parametric Portfolio Associates, LLC, a PFRS Covered Calls Asset Class Investment Manager.
- C6. **Subject:** Resolution No. 8006 - Resolution Authorizing a One-Year Extension of Professional Services Agreement with Parametric Portfolio Associates, LLC for Covered Calls Asset Class Investment Manager
From: Staff of the PFRS Board
Recommendation: **APPROVE** Resolution No. 8006 - Resolution Authorizing a One-Year Extension of Professional Services Agreement with Parametric Portfolio Associates, LLC for Covered Calls Asset Class Investment Manager.

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
SPECIAL BOARD MEETING
December 10, 2020

- C7. **Subject:** Plan and Process for Selecting New PFRS Investment Manager to Implement the Defensive Equity Investment Strategy
From: Meketa Investment Group
Recommendation: **ACCEPT** an updated informational report regarding options to consider for selecting possible candidates to act as the new PFRS Investment Manager to implement the PFRS Defensive Equity Investment Strategy. **DISCUSS** and **APPROVE** the recommendation from Meketa Investment Group to move forward with a review of the 2018 finalists for further consideration and conduct interviews with candidates who wish to act as the new PFRS Defensive Equity Investment Strategy Manager at an upcoming Investment Committee Meeting.
- C8. **Subject:** Informational Report Regarding Underperformance of the Crisis Risk Offset Systematic Trend Following/Alternative Risk Premia Investment Strategy
From: Meketa Investment Group
Recommendation: **ACCEPT** informational report regarding an explanation for the underperformance of the Crisis Risk Offset Systematic Trend Following/Alternative Risk Premia Investment Strategy formerly managed by Parametric Portfolio Associates, LLC.
- D. **Subject:** Member Resolutions No. 8007 - 8008
From: Staff of the PFRS Board
Recommendation: **APPROVE** member resolutions no. 8007 – 8008
- D1. **Resolution No. 8007** | Resolution Fixing the Monthly Allowance of Janice R. Bosco, Surviving Spouse of Michael J. Bosco, in the amount of \$3,652.89; Rosie Boone, Surviving Spouse of William Boone Jr., in the amount of \$4,886.91; Diane Fyfe, Surviving Spouse of Robert D. Fyfe, in the amount of \$5,664.85, All Retired Members of the Police and Fire Retirement System.
- D2. **Resolution No. 8008** | Resolution Approving Death Benefit Payments and Directing Warrants Thereunder in the Total Sum of \$1,000.00 Payable to the Beneficiary of Deceased Members Melvin Woolcock, Lamar F. Dunster, and Raul Martin.
- E. NEW BUSINESS
- F. OPEN FORUM
- G. FUTURE SCHEDULING
- H. ADJOURNMENT

A **BOARD MEETING** of the Oakland Police and Fire Retirement System (“PFRS”) was held on October 28, 2020 via Zoom Tele-Conference.

- Board Members:
- Walter L. Johnson President
 - Jaime T. Godfrey Vice President
 - Margaret O’Brien Member
 - Robert W. Nichelini Member
 - John C. Speakman Member
 - Kevin R. Traylor Member
 - R. Steven Wilkinson Member
- Additional Attendees:
- David F. Jones PFRS Plan Administrator
 - Jennifer Logue PFRS Legal Counsel
 - Teir Jenkins PFRS Staff Member
 - Maxine Visaya PFRS Staff Member
 - David Sancewich Meketa Investment Group

The meeting was called to order at 12:01 p.m. PST

- A. PFRS Board Meeting Minutes** Member Nichelini made a motion to approve the September 30, 2020 Regular Board Minutes, second by Member Traylor. The motion passed.

[JOHNSON – Y/ GODFREY – Y/ O’BRIEN – Y/ NICHELINI – Y/ SPEAKMAN – ABSTAIN/ TRAYLOR – Y/ WILKINSON – Y]
(AYES: 6/ NOES: 0/ ABSTAIN: 1)

B. AUDIT AND OPERATIONS COMMITTEE AGENDA – OCTOBER 28, 2020

- B1. Administrative Expenses Report** – Investment Officer Jenkins presented the informational report of the PFRS administrative expenditures as of August 31, 2020.

MOTION: Member Speakman made a motion to accept the administrative expenses report as of August 31, 2020, second by Member Wilkinson. Motion passed.

[JOHNSON – Y/ GODFREY – Y/ O’BRIEN – Y/ NICHELINI – Y/ SPEAKMAN – Y/ TRAYLOR – Y/ WILKINSON – Y]
(AYES: 7/ NOES: 0/ ABSTAIN: 0)

**C. INVESTMENT & FINANCIAL MATTERS COMMITTEE AGENDA –
OCTOBER 28, 2020**

- C1. Investment Market Overview** – David Sancewich of Meketa Investment Group presented a summary of the informational report on the global economic factors affecting the PFRS Fund as of September 30, 2020, including the impact of the Coronavirus Pandemic on the world investment markets and the upcoming Presidential Election.

MOTION: Vice President Godfrey made a motion to accept the informational report from Meketa regarding the economic factors affecting the PFRS Fund as of September 30, 2020, second by Member Nichelini. Motion Passed

[JOHNSON – Y/ GODFREY – Y/ O'BRIEN – Y/ NICHELINI – Y/ SPEAKMAN – Y/ TRAYLOR – Y/ WILKINSON – Y]
(AYES: 7/ NOES: 0/ ABSTAIN: 0)

- C2. Preliminary Investment Fund Performance Update as of August 31, 2020** – David Sancewich of Meketa Investment Group reported on the details of the Preliminary Investment Fund Performance Update as of September 30, 2020. Member Wilkinson requested a report explaining to the Board the cause for the poor performance of Parametric Portfolio Associates, LLC (PPA) Systematic Trend Following/Alternative Risk Premia (SARP) Strategy. Meketa will obtain a report from PPA to provide the requested additional information and submit to the Board for review.

MOTION: Vice President Godfrey made a motion to accept the informational report from Meketa regarding the Preliminary Investment Fund Performance Update as of September 30, 2020, second by Member Traylor. Motion Passed.

[JOHNSON – Y/ GODFREY – Y/ O'BRIEN – Y/ NICHELINI – Y/ SPEAKMAN – Y/ TRAYLOR – Y/ WILKINSON – Y]
(AYES: 7/ NOES: 0/ ABSTAIN: 0)

- C3. Informational Presentation – Collapsing Global Interest Rates/Negative Interest Rates** – David Sancewich of Meketa Investment Group presented an informational report for educational purposes on the topic of Collapsing Global Interest Rates and Negative Interest Rates.

MOTION: Vice President Godfrey made a motion to accept the informational report from Meketa regarding collapsing global interest rates and negative interest rates, second by Member Nichelini. Motion passed.

[JOHNSON – Y/ GODFREY – Y/ O'BRIEN – Y/ NICHELINI – Y/ SPEAKMAN – Y/ TRAYLOR – Y/ WILKINSON – Y]
(AYES: 7/ NOES: 0/ ABSTAIN: 0)

- C4. Options to Consider a New PFRS Investment Manager to Implement the Crisis Risk Offset Systematic Trend Following/Alternative Risk Premia (SARP) Investment Strategy** – David Sancewich of Meketa Investment Group presented options, including pros and cons, for selecting a new PFRS Investment Manager to Implement the Crisis Risk Offset/SARP Strategic Class. Mr. Sancewich discussed the details of possible options (1) Conduct a new RFP and (2) Review the finalists from the 2018 Alternative Risk Premia search: AQR and Lombard, which would include an updated questionnaire for each candidate concerning diversity across the organization and the firm, investment strategy and conducting interviews with both managers at an upcoming Investment Committee Meeting. Meketa recommends opting to review the remaining finalists from 2018. Member Wilkinson requests we also consider the firm who was the fourth candidate.

MOTION: Vice President Godfrey made a motion to accept the informational report regarding options to consider a new PFRS Investment Manager to Implement the Crisis Risk Offset Investment Strategy presented by Meketa Investment Group, second by Member Nichelini. Motion Passed.

[JOHNSON – Y/ GODFREY – Y/ O'BRIEN – Y/ NICHELINI – Y/ SPEAKMAN – Y/ TRAYLOR – Y/ WILKINSON – Y]
(AYES: 7/ NOES: 0/ ABSTAIN: 0)

MOTION: Vice President Godfrey made a second motion to put in place a following matter for the next Investment Committee Meeting Agenda for discussion and action regarding option two to review the two finalists from 2018, with the addition of the manager who was the fourth candidate, for consideration regarding the implementation for the Crisis Risk Offset Systematic Trend Following/Alternative Risk Premia (SARP) Investment Strategy, second by Member Nichelini. Motion passed.

[JOHNSON – Y/ GODFREY – Y/ O'BRIEN – Y/ NICHELINI – Y/ SPEAKMAN – Y/ TRAYLOR – Y/ WILKINSON – Y]
(AYES: 7/ NOES: 0/ ABSTAIN: 0)

- C5. Draft Emergency Procedures for Terminating or Limiting Trading Discretion of PFRS Investment Managers to Protect PFRS Fund Assets** – Plan Administrator Jones reported on the Investment Committee discussion of the draft version of emergency procedures presented by staff for termination or limiting trading discretion of PFRS Investment Managers to protect PFRS Fund Assets. After discussions, staff would like to review and streamline the draft policy to make it more precise, as it was determined to be too general and will come back with more directed emergency procedures in place. PFRS Legal Counsel and Staff will work together with all attempts to make this an action item for approval at the next meeting.

MOTION: Vice President Godfrey made a motion to accept the informational report from staff and staff, at the next meeting, will bring back to the Investment Committee and Board an action item for determination, second by Member Traylor. Motion passed.

[JOHNSON – Y/ GODFREY – Y/ O'BRIEN – Y/ NICHELINI – Y/ SPEAKMAN – Y/ TRAYLOR – Y/ WILKINSON – Y]
(AYES: 7/ NOES: 0/ ABSTAIN: 0)

- C6. Investment Manager Performance Review – Parametric Portfolio Associates, LLC, a PFRS Covered Calls Investment Manager** – David Sancewich of Meketa Investment Group provided an overview of the annual informational report presented by Parametric Portfolio Associates, LLC, a PFRS Passive Covered Call Strategy and Active Covered Call Strategy Asset Class Investment Manager. The report consisted of the firms updated organizational structure; specifically the acquisition of Eaton Vance, parent company, by Morgan Stanley and the departure and retirement of investment professionals, as well as a review of investment strategy, market environment, portfolio performance updates, and the firm’s diversity policy.

MOTION: Vice President Godfrey made a motion to accept Meketa’s review of the annual informational report from Parametric Portfolio Associates, LLC, a PFRS Passive Covered Call Strategy and Active Covered Call Strategy Asset Class Investment Manager, second by Member Nichelini. Motion passed.

[JOHNSON – Y/ GODFREY – Y/ O’BRIEN – Y/ NICHELINI – Y/ SPEAKMAN – Y/ TRAYLOR – Y/ WILKINSON – Y]
(AYES: 7/ NOES: 0/ ABSTAIN: 0)

- C7. Investment Manager Performance Review – Parametric Portfolio Associates, LLC, a PFRS Covered Call Investment Manager** – David Sancewich of Meketa Investment Group presented a review and evaluation of Parametric Portfolio Associates, LLC, a PFRS Covered Calls Asset Class Investment Manager. Mr. Sancewich expressed confidence in the firm, has no concerns regarding their performance at this time, and recommends exercising the option to extend the agreement for an additional one-year period. Vice President Godfrey expressed concern due to the organizational changes at the firm and suggested to place the firm on Watch Status, as is the standard under these circumstances. Member Wilkinson requested a Diversity Report to be submitted for review in the coming weeks.

Motion: Member Wilkinson made a motion to accept the informational report from Meketa Investment Group, and to continue this item to the next meeting pending the review of the Diversity Report PFRS to exercise the option to extend the service agreement with Parametric Portfolio Associates, LLC for an additional one-year period and place the firm on Watch Status due to recent organizational changes, second by Member Traylor. Motion passed.

[JOHNSON – Y/ GODFREY – N/ O’BRIEN – Y/ NICHELINI – Y/ SPEAKMAN – N/ TRAYLOR – Y/ WILKINSON – Y]
(AYES: 5/ NOES: N/ ABSTAIN: 0)

- D. Convert PFRS from Compensation Attached to the Rank to Cost of Living Allowance (COLA)** – Member Nichelini discussed investigating the legal possibility and feasibility of converting PFRS from compensation attached to the rank to cost of living allowance based. PFRS Legal Counsel Logue suggested considering options ranging from issuing an RFP, engaging outside counsel to provide an opinion on how complicated the matter may be including an estimated cost of taking such action, to issuing an RFP or RFI to seek opinions from outside counsel regarding the estimated cost to investigating the matter of conversion.

MOTION: Member Nichelini made a motion to proceed with allowing PFRS Legal Counsel Logue to the PFRS 2026 Funding Committee to obtain a cost estimate for investigating the cost of conversion from compensation attached to rank to cost of living allowance through an RFP or RFI process and for PFRS Legal Counsel Logue to report back to the Board the findings on the matter, second by Member Traylor. Motion passed.

[JOHNSON – Y/ GODFREY – Y/ O'BRIEN – Y/ NICHELINI – Y/ SPEAKMAN – Y/ TRAYLOR – Y/ WILKINSON – Y]
(AYES: 7/ NOES: 0/ ABSTAIN: 0)

- E. New Business** – No Report.

- F. Open Forum** – No Report.

- G. Future Scheduling** – The Board discussed cancelling the PFRS Regular Committee & Board Meetings scheduled for November 25, 2020 and December 30, 2020 and to combine these meetings and convene for Special Meetings of the PFRS Committees and Board on Thursday, December 10, 2020.

MOTION: Member Speakman made a motion to combine the November and December 2020 meetings and schedule Special Meetings of the PFRS Committees & Board for Thursday, December 10, 2020 at the regular times, second by Member Nichelini. Motion passed.

[JOHNSON – Y/ GODFREY – Y/ O'BRIEN – Y/ NICHELINI – Y/ SPEAKMAN – Y/ TRAYLOR – Y/ WILKINSON – Y]
(AYES: 7/ NOES: 0/ ABSTAIN: 0)

- H. Adjournment** – Member Speakman made a motion to adjourn, second by Member O'Brien. Motion passed.

[JOHNSON – Y/ GODFREY – Y/ O'BRIEN – Y/ NICHELINI – Y/ SPEAKMAN – Y/ TRAYLOR – Y/ WILKINSON – Y]
(AYES: 7/ NOES: 0/ ABSTAIN: 0)

The meeting adjourned at 1:10 p.m. PST

WALTER L. JOHNSON, SR., BOARD PRESIDENT

DATE

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

Approved to
Form
and Legality



RESOLUTION NO. 8007

ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

RESOLUTION FIXING THE MONTHLY ALLOWANCE OF JANICE R. BOSCO, SURVIVING SPOUSE OF MICHAEL J. BOSCO; ROSIE BOONE, SURVIVING SPOUSE OF WILLIAM BOONE JR.; AND DIANE FYFE, SURVIVING SPOUSE OF ROBERT D. FYFE, ALL RETIRED MEMBERS OF THE POLICE AND FIRE RETIREMENT SYSTEM

WHEREAS, the retired members of the Police and Fire Retirement System, whose names appears in Column (1) below, died on the dates shown in Column (2) below; and

WHEREAS, the surviving spouses, whose names appear in Column (3) below, do not claim that their spouse's death was by reason of an injury received in, or illness caused by or arising out of the performance of duty; and

WHEREAS, there is now presented to this Board, the monthly allowance shown in Column (7) below and as calculated by the Actuary in accordance with Article XXVI of the Charter of the City of Oakland; now, therefore, be it

RESOLVED: That the Police and Fire Retirement Board does hereby fix the amounts shown in Column (7) as the monthly allowance that said surviving spouses shall receive beginning on the date shown in Column (4):

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Name of Deceased Member	Date of Death	Name of Surviving Spouse	Effective Date of Allowance	Form of Retirement	% of Compensation Attached to Avg. Rank Held	Monthly Allowance
Michael J. Bosco	05/17/2020	Janice R. Bosco	05/18/2020	SVC	0.3823133	\$3,652.89
William Boone Jr.	05/23/2020	Rosie Boone	05/24/2020	SVC	0.3668667	\$4,886.91
Robert D. Fyfe	06/08/2020	Diane Fyfe	06/09/2020	DIS	0.42376666	\$5,664.85

IN BOARD MEETING, VIA ZOOM CONFERENCE _____ **DECEMBER 10, 2020**

PASSED BY THE FOLLOWING VOTE:

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST: _____
PRESIDENT

ATTEST: _____
SECRETARY

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

RESOLUTION No. 8008

Approved to
Form
and Legality



ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

RESOLUTION APPROVING DEATH BENEFIT PAYMENTS AND DIRECTING WARRANTS THEREUNDER IN THE TOTAL SUM OF \$1,000.00 PAYABLE TO THE BENEFICIARY OF DECEASED MEMBERS MELVIN WOOLCOCK, LAMAR F. DUNSTER, AND RAUL MARTIN.

WHEREAS, due proof having been received of the death of the persons named in Column (1) below, retired members of the Oakland Police or Fire Department, under XXVI of the Charter of the City of Oakland; and

WHEREAS, the beneficiaries to whom the death benefit provided in Charter Section 2612 are payable, are the persons whose names are stated in Column (2) opposite the respective names of the deceased retired member; and

WHEREAS, the amount of said death benefit is stated in Column (4) opposite said respective names; now, therefore, be it

RESOLVED: That the Retirement Board does hereby approve the Death Benefit payment to the persons named in Column (5); and be it

FURTHER RESOLVED: That the Director of Finance, be and is hereby directed to draw and sign warrants for the amount in Column (4) payable to the respective persons whose name(s) appear(s) in Column (2):

(1)	(2)	(3)	(4)
Name of Deceased Member	Name of Beneficiary	Relationship of Beneficiary	Death Benefit Amount
Melvin Woolcock	Winifred Woolcock	Spouse	\$1,000.00
Lamar F. Dunster	Frances Dunster	Spouse	\$1,000.00
Raul Martin	Monica R. Martin	Spouse	\$1,000.00

IN BOARD MEETING, VIA ZOOM CONFERENCE _____ DECEMBER 10, 2020

PASSED BY THE FOLLOWING VOTE:

AYES:

NOES:

ABSENT:

ATTEST: _____
PRESIDENT

ATTEST: _____
SECRETARY