

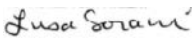
## EAST BAY MUNICIPAL UTILITY DISTRICT

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DATE: September 17, 2020

MEMO TO: Members of the Retirement Board

THROUGH: Laura Acosta, Manager of Human Resources 

FROM: Lisa Sorani, Manager of Employee Services 

SUBJECT: Retirement Board Regular Meeting – 9/17/2020

A regular meeting of the Retirement Board will convene at 8:30 a.m. on Thursday, September 17, 2020. This meeting will be conducted via teleconference only. Public participation is available by telephone calling 1 (855) 369-0450 and using participant PIN 51656096#. A live audio stream of the public portion of the meeting can be listened to at <https://www.ebmud.com/about-us/board-directors/board-meetings/retirement-board-meetings/>; however, listeners will not be able to provide public comment via live audio stream.

Enclosed are the agenda for the September 17, 2020 meeting and the minutes for the July 16, 2020 regular meeting. The package also includes the following: **(1) CONSENT** items: Approval of Minutes – Regular meeting of July 16, 2020, Ratifying and Approving Investment Transactions by Fund Managers for June 2020 and July 2020, Ratifying and Approving Short-Term Investment Transactions by Treasurer for June 2020 and July 2020, Approving Treasurer's Statement of Receipts and Disbursements for June 2020 and July 2020; **(2) ACTION** items: Declaring the results of the election of the Retired Member of the Retirement Board, Approve Resolution thanking Lisa Ricketts Mann for her term as a Retiree-Elected Retirement Board Member; **(3) INFORMATION:** Fisher Investments Update, Performance Report and Economic Review, Securities Lending Training, SEC/AMAC Panel on Diversity and Inclusion, Tipping Point Update, Working Capital Update, International Manager Transition and Rebalance Activity, Financial Outreach and ERS Forum Information, Review draft change to Board Rule C-3 Low Income Adjustment; **(4) REPORTS FROM THE RETIREMENT BOARD.**

LS:jm

Enclosures

## AGENDA

### EBMUD EMPLOYEES' RETIREMENT SYSTEM

September 17, 2020

Due to COVID-19 and in accordance with Alameda County's Health Order 20-04 (issued March 31, 2020), and with the Governor's Executive Order N-29-20 which suspends portions of the Brown Act, **this meeting will be conducted via teleconference only.** In compliance with said orders, a physical location will not be provided for this meeting. These measures will only apply during the period in which state or local public health officials have imposed or recommended social distancing.

*Retirement Board Members: Clifford Chan, Frank Mellon, Marguerite Young, Doug Higashi (President), Tim McGowan, and Lisa Ricketts will participate via teleconference*

*Staff to the Retirement Board: Laura Acosta, Sophia Skoda, Lourdes Matthew, Lisa Sorani, Valerie Weekly, Robert Hannay, Damien Charléty, and Karyn Field will participate via teleconference*

*Consultant Presenters: Meketa - Eric White, Sarah Bernstein, Eric Larsen; Fisher Investment - Jill Hitchcock, Justin Arbuckle, Aaron Anderson, Ben Kothe; Northern Trust – Lori Paris, Dennis Zuccarelli, Kathy Stevenson, Clayton Robinson (will participate via teleconference)*

### Public Participation

**To participate via telephone (including public comment): Dial 855-369-0450;  
Enter participant pin 51-656-096# when prompted**

**To listen to the live audio stream of the public portion of the meeting, but not provide public comment, visit <https://www.ebmud.com/about-us/board-directors/board-meetings/retirement-board-meetings/>**

### **ROLL CALL:**

**PUBLIC COMMENT:** The Retirement Board is limited by State Law to providing a brief response, asking questions for clarification, or referring a matter to staff when responding to items that are not listed on the agenda.

### **CONSENT CALENDAR:**

1. Approval of Minutes of the Retirement Board – Regular meeting of July 16, 2020
2. Ratifying and Approving Investment Transactions by Retirement Fund Managers for June 2020 and July 2020 (R.B. Resolution No. 6918)
3. Ratifying and Approving Short-Term Investment Transactions for June 2020 and July 2020 (R.B. Resolution No. 6919)

4. Approving Treasurer's Statement of Receipts and Disbursements for June 2020 and July 2020

**ACTION:**

5. Declaring Results of the Election of a Retiree Member of the Retirement Board (Resolution No. 6920) – L. Sorani
6. Expressing Appreciation to Lisa Ricketts Mann for Her Service to the EBMUD Retirement Board (R.B. Resolution No. 6921) – L. Sorani

**INFORMATION:**

7. Update from Fisher Investments – S. Skoda
8. 2nd Quarter 2020 Performance Report (Meketa Investment Group) – S. Skoda
9. Securities Lending Training – S. Skoda
10. Diversity in the Asset Management Industry – S. Skoda
11. Tipping Point Update – S. Skoda
12. Working Capital Annual Update – S. Skoda
13. International Manager Transition and Rebalance Activity – S. Skoda
14. Employees' Retirement System (ERS) Forum Information – S. Skoda
15. Draft Changes to Retirement Board Rule C-3 Low Income Adjustment – L. Sorani

**REPORTS FROM THE RETIREMENT BOARD:**

16. Brief report on any course, workshop, or conference attended since the last Retirement Board Meeting

**ITEMS TO BE CALENDARED:**

- None

**MEETING ADJOURNMENT:**

*The next regular meeting of the Retirement Board will be held at 8:30 a.m. on Thursday, November 19, 2020.*

**2020 Retirement Board Meetings**

November 19, 2020

## MINUTES OF THE RETIREMENT BOARD

July 16, 2020

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A regular meeting of the Retirement Board convened on Thursday, July 16, 2020 at 8:46 a.m. The meeting was called to order by President Doug Higashi.

Due to COVID-19 and in accordance with Alameda County's Health Order 20-10 (issued April 29, 2020), and with the Governor's Executive Order N-29-20 which suspends portions of the Brown Act, **this meeting will be conducted via teleconference only.** In compliance with said orders, a physical location has not been provided for this meeting. These measures will only apply during the period in which state or local public health officials have imposed or recommended social distancing.

**Roll Call** – The following Retirement Board Members were present: Clifford Chan, Frank Mellon, Marguerite Young, Doug Higashi, Tim McGowan, and Lisa Ricketts.

The following staff members were present: Laura Acosta, Sophia Skoda, Lourdes Matthew, Lisa Sorani, Robert Hannay, and Damien Charléty.

### **PUBLIC COMMENT**

No public comment.

### **CONSENT CALENDAR**

**1-4. Consent Calendar** – A motion to move the consent calendar was made by Tim McGowan and seconded by Marguerite Young. The motion carried (5-0) by the following voice vote: AYES (Chan, Higashi, McGowan, Mellon, Young), NOES (none), ABSTAIN (none), ABSENT (none).

### **ACTION**

**5. Resolve Franklin Templeton Watch Status** – Sophia Skoda introduced this item and reviewed the Watch Status. Franklin Templeton (Franklin) is one of two active international equity managers for the portfolio. Franklin has been on Watch Status since May 2019 due to underperformance relative to its benchmark. Staff and Meketa have reviewed the conditions that led to the watch status determination. Franklin has presented to the Retirement Board in the past year to answer questions and share information about their investment philosophy and their strategy for the Retirement System's mandate. Staff recommendation is to remove the 7.5% international allocation mandate from Franklin and transition to a passively-managed Northern Trust ACWI ex-US index fund. This would increase the assets in the Northern Trust ACWI ex-US index fund to 17.5% of the overall portfolio. Eric White from Meketa also provided an update on the Watch Status for Franklin and noted that the performance issues were not new. Franklin's investment style has a value bias while Fisher Investments, the other active international manager for the Retirement System, has a growth bias. This means that Franklin would theoretically perform better in value-driven markets. The last 5 to 10 years have been bad for managers with value bias. Franklin has been part of the Retirement System portfolio for over 25 years and had done well over the long-term, until the last few years. From a portfolio

standpoint there also seems to be a mismatch in their strategy versus the rest of the portfolio due to their significant overweight to value. The following options were discussed for the assets after Franklin's termination: move to a single international equity manager, move to passive management, or search for a new international equity manager with a small value bias. Meketa recommended waiting for the pandemic to end before searching for a new active manager, if that were the option chosen. The recommendation from Meketa was to terminate Franklin and move to passive at this time. Marguerite Young made the motion to terminate the Franklin Templeton mandate and to move the allocation into the passive Northern Trust international equity index fund and to not conduct a search until market fluctuations from the pandemic have quieted, Frank Mellon seconded the motion, and the motion carried (5-0) by the following voice vote: AYES (Chan, Mellon, Young, Higashi, McGowan), NOES (none), ABSTAIN (none), ABSENT (None).

**6. Declare the Interest Rate on Member Contributions for the Period Ending December 31, 2019 (R.B. Resolution No. 6916)** – Lisa Sorani presented this item. The resolution declares the interest that will be credited to member accounts effective June 30, 2020, covering the period ending December 31, 2019. The formula looks at the actuarially-assumed rate of return (7.0%) and the five-year average rate of return (8.0%) on that date. The ordinance requires taking the lesser of the two; therefore the resolution will declare the annual interest rate of 7.0%. The rate is credited to member accounts on a prorated basis to a semi-annual rate of 3.5%, effective June 30, 2020. Doug Higashi made the motion to approve, Marguerite Young seconded the motion, and the motion carried (5-0) by the following voice vote: AYES (Chan, Mellon, Young, Higashi, McGowan), NOES (none), ABSTAIN (none), ABSENT (None).

**7. Adopt Resolution to Add Board Rule C-24 Annual Cost of Living Adjustment Procedure (R.B. Resolution No. 6917)** - Lourdes Matthew presented this item regarding adopting a new rule: Rule C-24, Annual Cost of Living Adjustment Procedure. A draft was provided of this new rule at the May 2020 Retirement Board meeting. This rule serves to clarify the consumer price index that must be used to determine the Cost of Living Adjustment (COLA) and builds in at least two levels of review to ensure that the COLA is accurately determined and correct. The adoption of this rule is intended to minimize the risk of future errors and it is one of the corrective measures that the Internal Revenue Service accepted to maintain the Retirement System's tax-qualified status under the Voluntary Correction Program. Staff confirmed that creating the Board Rule is the last item to fulfill the request corrective measures. The correction to retiree monthly benefits was completed on July 14, 2020, as discussed in item #9.. Frank Mellon made the motion to adopt the resolution, Doug Higashi seconded the motion, and the motion carried (5-0) by the following voice vote: AYES (Chan, Mellon, Young, Higashi, McGowan), NOES (none), ABSTAIN (none), ABSENT (None).

## **INFORMATION**

**8. Performance Report and Economic Review** – Eric White from Meketa reviewed the Q2 Preliminary 2020 Performance Report. The second quarter of 2020 was a complete reversal of the first quarter which ended with a sharp downturn. The market value of the portfolio increased by \$217 million during the quarter, up 13.2% for the quarter and outperforming its

benchmark. For the quarter, US Equity was up 21.9%; International Equity was up 16.3%; Real Estate was up 5.9% (slightly under the asset class benchmark); Covered Calls were up 13.5%; and Fixed Income was up 5.0%. Eric White mentioned that the next six months will be challenging economically due to uncertainty.

**9. Update on Correction Plan for COLA Error** – Lisa Sorani presented this update on the correction plan for COLA error as authorized by the Internal Revenue Service to maintain the Retirement System's tax-qualified status under the Voluntary Correction Program. Steps included several communications to retirees as well as adoption of a new rule. On May 22, 2020, staff apprised all retirees that the IRS had accepted the Retirement System's proposed correction. Staff followed up with another letter on June 15, 2020 that Segal had calculated each affected retiree's retirement allowance to confirm what their adjustment should be for errors in their 2014, 2015 and 2016 allowances. The June letter outlined individual correction details to both the COLA bank balances and monthly benefits. Overall, the result was about a 0.68% reduction in their benefit. Effective July 1, 2020, after posting the COLA correction, staff processed the 2020 COLA adjustment which is a 3.0% COLA increase and a 0.3% increase in COLA bank balances. Testing the application of the corrections to the PeopleSoft system was completed by ISD and Retirement staff. The corrections were loaded into the system and the July 2020 COLA was loaded on July 14, 2020. A letter to retirees regarding the 2020 COLA adjustment will be sent by July 22, 2020.

**10. Securities Lending Overview and Net Income** – Robert Hannay presented this item. At the last meeting a question was raised about securities lending income. Robert Hannay provided a description of the program. This program provides a modest source of net income to the Retirement System. The Retirement System has shares of stocks and bonds in Separately Managed Accounts (SMAs), which are the System's actively-managed accounts. Northern Trust lends these securities out to capital market participants. The borrowers give Northern Trust cash collateral equal to 102% or more of the value of the securities. Interest is earned on the cash collateral; some interest is returned to the borrower; and the remainder, after fees, is paid to Northern Trust and is kept by the Retirement System. This is the net income received from the program. Tim McGowan asked why the interest rebates fluctuated over time. Robert Hannay said he would relay this question to Northern Trust and get back to the Retirement Board with more information.

**11. Parametric Covered Calls Training** – Sophia Skoda introduced this item. Parametric is one of the Retirement System's two covered calls managers. Covered calls represent 20% of portfolio and Parametric manages two separate mandates for the retirement System, each for 6.66% of the total portfolio: Enhanced BXM and DeltaShift via quantitative strategies. Dan Ryan, Jay Strohmaier, and Jim Roccas from Parametric provided the training. The following topics related to Parametric were covered: firm overview, options training, covered call investment process, and a portfolio review for each mandate.

**12. Parametric Update** – This item was covered jointly with item 11.

**13. Report on Low Income Adjustments for Retired Members and Surviving Spouses** –

Lisa Sorani presented this item. Each year, staff from Employee Services reviews retirees for certain low income markers and send letters to those who could potentially be qualified for a low income adjustment. Letters were mailed to 29 potentially eligible members. One response was received and the respondent was determined to be ineligible for the benefit.

**14. HRIS Replacement Project – Stakeholder Communication** –

Lisa Sorani provided an update on the HRIS Replacement Project. Information was brought to the Retirement Board earlier this year on this project and the Board requested to be kept updated on the project. A stakeholder communication was mailed out on July 7, 2020 and a copy of the communication was provided to the Board.

**15. Responses to Public Questions about HIB and HRIS Project from March 19, 2020** –

Lisa Sorani provided an update. These were questions that are usually answered during the Retirement Board meeting but came in during the first semi-remote meeting. They were sent to the generic email address for incoming retiree inquiries and answered via email. A copy of the answers was provided to the Retirement Board. Director Mellon requested to see the RFP when it is completed.

**REPORTS FROM THE RETIREMENT BOARD**

**16. Brief report on any course, workshop, or conference attended since the last Retirement Board meeting**

None; Lisa Sorani will send information regarding CALAPRS to Board members as they are doing their meetings remotely.

**ITEMS TO BE CALENDERED / UPCOMING ITEMS**

- Status of Retirement System
- Fisher to address the Board

**ADJOURNMENT** – Frank Mellon moved to adjourn the meeting at 11:29 a.m. and Tim McGowan seconded the motion; the motion carried (4-0) by the following voice vote: AYES (Chan, Higashi, Mellon, and McGowan), NOES (none), ABSTAIN (none), ABSENT (Young).

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President

ATTEST: \_\_\_\_\_  
Secretary

7/16/2020

**EAST BAY MUNICIPAL UTILITY DISTRICT**

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DATE: September 17, 2020

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance 

SUBJECT: Item 2\_Investment Transactions by Retirement Fund Managers for June 2020  
and July 2020

The attached Investment Transactions by Retirement Fund Managers report for the months of June 2020 and July 2020 is hereby submitted for Retirement Board approval.

Attachment

SDS:AMM:aw



INVESTMENT TRANSACTIONS BY RETIREMENT FUND MANAGERS			
<b>June 2020</b>			
	<b>PURCHASES</b>	<b>SALES</b>	<b>PORTFOLIO VALUE</b>
<b><u>FIXED INCOME</u></b>			
C.S. McKee	\$34,533,763	\$30,963,893	\$208,451,905
Federated Bank Loans	\$611,308	\$0	\$42,686,783
Garcia Hamilton Associates	\$39,424,519	\$36,156,246	\$193,326,468
Mackay Shields - HY	\$1,611,851	\$503,044	\$45,187,876
Western Asset Management Co.-IG	\$0	\$0	\$2
<b>TOTAL</b>	<b>\$76,181,441</b>	<b>\$67,623,183</b>	<b>\$489,653,034</b>
<b><u>DOMESTIC EQUITY</u></b>			
Russell 3000 Index Fund	\$0	\$0	\$484,835,094
T. Rowe Price	\$0	\$0	\$290
<b>Total Domestic Equity</b>	<b>\$0</b>	<b>\$0</b>	<b>\$484,835,383</b>
<b><u>COVERED CALLS</u></b>			
Parametric (BXM)	\$7,322,181	\$7,095,936	\$120,436,167
Parametric (Delta-Shift)	\$2,471,037	\$2,280,714	\$132,189,749
Van Hulzen	\$9,207,230	\$5,652,678	\$121,968,902
<b>Total Covered Calls</b>	<b>\$19,000,448</b>	<b>\$15,029,328</b>	<b>\$374,594,818</b>
<b><u>INTERNATIONAL EQUITY</u></b>			
ACWI Index fund	\$0	\$0	\$164,779,445
Franklin/Templeton	\$3,701,475	\$2,758,169	\$105,966,784
Fisher Investments	\$493,838	\$499,206	\$133,014,161
Global Transition	\$0	\$0	\$779,196
<b>Total International Equity</b>	<b>\$4,195,312</b>	<b>\$3,257,375</b>	<b>\$404,539,586</b>
<b><u>REAL ESTATE EQUITY</u></b>			
RREEF America II	\$0	\$0	\$50,071,572
CenterSquare	\$4,795,765	\$4,604,237	\$45,577,779
<b>Total Real Estate</b>	<b>\$4,795,765</b>	<b>\$4,604,237</b>	<b>\$95,649,351</b>
<b>TOTAL ALL FUND MANAGERS</b>	<b>\$104,172,966</b>	<b>\$90,514,123</b>	<b>\$1,849,272,172</b>
<b>July 2020</b>			
	<b>PURCHASES</b>	<b>SALES</b>	<b>PORTFOLIO VALUE</b>
<b><u>FIXED INCOME</u></b>			
C.S. McKee	\$21,792,639	\$15,714,485	\$212,073,851
Federated Bank Loans	\$108,427	\$250,000	\$43,470,452
Garcia Hamilton Associates	\$30,315,620	\$33,473,996	\$194,945,826
Mackay Shields - HY	\$1,955,162	\$15,810	\$46,441,680
<b>TOTAL</b>	<b>\$54,171,848</b>	<b>\$49,454,291</b>	<b>\$496,931,810</b>
<b><u>DOMESTIC EQUITY</u></b>			
Russell 3000 Index Fund	\$0	\$0	\$512,226,902
<b>Total Domestic Equity</b>	<b>\$0</b>	<b>\$0</b>	<b>\$512,226,902</b>
<b><u>COVERED CALLS</u></b>			
Parametric (BXM)	\$5,770,280	\$5,596,356	\$125,042,070
Parametric (Delta-Shift)	\$1,039,755	\$957,998	\$139,242,575
Van Hulzen	\$14,729,265	\$13,953,175	\$124,696,462
<b>Total Covered Calls</b>	<b>\$21,539,301</b>	<b>\$20,507,530</b>	<b>\$388,981,106</b>
<b><u>INTERNATIONAL EQUITY</u></b>			
ACWI Index fund	\$0	\$0	\$171,566,615
Franklin/Templeton	\$0	\$458,707	\$107,709,895
Fisher Investments	\$1,586,526	\$1,577,645	\$139,925,706
Global Transition	\$0	\$0	\$779,535
<b>Total International Equity</b>	<b>\$1,586,526</b>	<b>\$2,036,351</b>	<b>\$419,981,751</b>
<b><u>REAL ESTATE EQUITY</u></b>			
RREEF America II	\$275,698	\$0	\$49,783,321
CenterSquare	\$2,643,469	\$2,539,737	\$47,443,925
<b>Total Real Estate</b>	<b>\$2,919,168</b>	<b>\$2,539,737</b>	<b>\$97,227,246</b>
<b>TOTAL ALL FUND MANAGERS</b>	<b>\$80,216,842</b>	<b>\$74,537,909</b>	<b>\$1,915,348,814</b>

Prepared By: Anjanique Walsh  
Anjanique Walsh, Accounting Technician

Date: 8/26/20

R.B. RESOLUTION NO. 6918

RATIFYING AND APPROVING INVESTMENT TRANSACTIONS BY FUND MANAGERS  
FOR MONTHS OF JUNE, 2020 AND JULY, 2020

Introduced by: ; Seconded by:

WHEREAS, Retirement Board Rule No. B-5 provides for investment transactions without prior specific approval by the Retirement Board; and

WHEREAS, investment transactions have been consummated during June, 2020 and July, 2020, in accordance with the provisions of said rule and in securities designated as acceptable by Retirement Board Resolution No. 4974, as amended;

NOW, THEREFORE, BE IT RESOLVED that the investment transactions appearing on the following exhibits are hereby ratified and approved.

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President

ATTEST:

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Secretary


9/17/2020


## EAST BAY MUNICIPAL UTILITY DISTRICT

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DATE: September 17, 2020

MEMO TO: Members of the Retirement Board

THROUGH: Sophia D. Skoda, Director of Finance 

FROM: D. Scott Klein, Controller 

SUBJECT: Item 3\_Short Term Investment Transactions for June 2020

The attached Short Term Investment Transactions report for the month of June 2020 is hereby submitted for Retirement Board approval.

Attachment

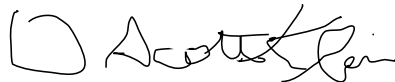
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**EBMUD EMPLOYEES' RETIREMENT SYSTEM  
SHORT TERM INVESTMENT TRANSACTIONS  
CONSUMMATED BY THE TREASURER  
MONTH OF JUNE 2020**

<u>COST/ FACE VALUE</u>	<u>DESCRIPTION</u>	<u>DATE OF PURCHASE</u>	<u>DATE OF SALE/MATURITY</u>	<u>YIELD (%)</u>
\$ 4,217,000.00	Local Agency Investment Fund	12-Jun-20		1.217
4,210,000.00	Local Agency Investment Fund	26-Jun-20		1.217
(10,403,000.00)	Local Agency Investment Fund		29-Jun-20	1.217
<b><u>\$ (1,976,000.00)</u></b>	Net Activity for Month			

\$ 6,493,745.85	Beginning Balance
<u>(1,976,000.00)</u>	Net Activity for Month
<b><u>\$ 4,517,745.85</u></b>	Ending Balance

SUBMITTED BY \_\_\_\_\_



D. Scott Klein  
Controller

DATE 7/31/2020




Robert L. Hannay  
Treasury Manager

Sandy Lindley  
Acctg. Systems Supvr.

prepared by Awalsh

## EAST BAY MUNICIPAL UTILITY DISTRICT

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DATE: September 17, 2020

MEMO TO: Members of the Retirement Board

THROUGH: Sophia D. Skoda, Director of Finance *SDS*

FROM: Andrea Miller, Controller *AM*

SUBJECT: Short Term Investment Transactions for July 2020

The attached Short Term Investment Transactions report for the month of July 2020 is hereby submitted for Retirement Board approval.

Attachment

SDS:AMM:aw

**EBMUD EMPLOYEES' RETIREMENT SYSTEM  
SHORT TERM INVESTMENT TRANSACTIONS  
CONSUMMATED BY THE TREASURER  
MONTH OF JULY 2020**

<u>COST/ FACE VALUE</u>	<u>DESCRIPTION</u>	<u>DATE OF PURCHASE</u>	<u>DATE OF SALE/MATURITY</u>	<u>YIELD (%)</u>
\$ 4,226,000.00	Local Agency Investment Fund	10-Jul-20		0.920
33,916.31	Local Agency Investment Fund	15-Jul-20		0.920
2,761.24	Local Agency Investment Fund	15-Jul-20		0.920
4,202,000.00	Local Agency Investment Fund	24-Jul-20		0.920
(10,700,000.00)	Local Agency Investment Fund		30-Jul-20	0.920
 <b><u>\$ (2,235,322.45)</u></b>	Net Activity for Month			
 \$ 4,517,745.85	Beginning Balance			
(2,235,322.45)	Net Activity for Month			
<b><u>\$ 2,282,423.40</u></b>	Ending Balance			

SUBMITTED BY Andrea Miller  
Andrea Miller  
Controller

DATE 8/26/20

Robert L. Hannay Sandy Lindley  
Robert L. Hannay Sandy Lindley  
Treasury Manager Acctg. Systems Supvr.  
prepared by Awalsh

R.B. RESOLUTION NO. 6919

RATIFYING AND APPROVING SHORT TERM INVESTMENT TRANSACTIONS BY THE  
TREASURER FOR JUNE, 2020 AND JULY, 2020

Introduced by: ; Seconded by:

WHEREAS, Retirement Board Rule No. B-7 provides for the temporary investment of retirement system funds by the Treasurer or Assistant Treasurer in securities authorized by Sections 1350 through 1366 of the Financial Code or holding funds in inactive time deposits in accordance with Section 12364 of the Municipal Utility District Act; and

WHEREAS, investment transactions during June, 2020 and July, 2020, have been made in accordance with the provisions of the said rule;

NOW, THEREFORE, BE IT RESOLVED that the investment transactions consummated by the Treasurer and included on the attached Exhibit A for June, 2020 and July, 2020 are hereby ratified and approved.

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President

ATTEST:

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Secretary


9/17/2020


## EAST BAY MUNICIPAL UTILITY DISTRICT

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DATE: September 17, 2020

MEMO TO: Members of the Retirement Board

THROUGH: Sophia D. Skoda, Director of Finance 

FROM: D. Scott Klein, Controller 

SUBJECT: Item 4\_Statement of Receipts and Disbursements for June 2020

The attached Statement of Receipts and Disbursements report for the month of June 2020 is hereby submitted for Retirement Board approval.

Attachment

SDS:DSK:aw



**STATEMENT OF RECEIPTS AND DISBURSEMENTS  
EMPLOYEES' RETIREMENT FUND  
MONTH OF JUNE 2020**

CASH BALANCE at May 31, 2020 \$ 3,059,580.59

**Receipts**

Employees' Contributions	\$	1,500,356.26	
District Contributions		6,967,175.87	
LAIF Redemptions		10,403,000.00	
Refunds and Commission Recapture		<u>14,820.04</u>	
TOTAL Receipts			18,885,352.17

**Disbursements**

Checks/Wires Issued:			
Service Retirement Allowances	\$	9,240,880.27	
Disability Retirement Allowances		148,672.32	
Health Insurance Benefit		984,062.25	
Payments to Retiree's Resigned/Deceased		6,399.80	
LAIF Deposits		8,427,000.00	
Administrative Cost		<u>263,602.83</u>	
TOTAL Disbursements			<u>(19,070,617.47)</u>

CASH BALANCE at June 30, 2020 \$ 2,874,315.29

LAIF 4,517,745.85

LAIF and CASH BALANCE at June 30, 2020 \$ 7,392,061.14

**Domestic Equity**

Russell 3000 Index Fund	\$	484,835,093.62
T. Rowe Price		<u>289.68</u>
Subtotal Domestic Equity		484,835,383.30

**Covered Calls**

Parametric (BXM)	\$	120,436,166.70
Parametric (Delta-Shift)		132,189,749.28
Van Hulzen		<u>121,968,901.86</u>
Subtotal Covered Calls		374,594,817.84

**International Equity**

ACWI Index fund	\$	164,779,445.02
Franklin Templeton		105,966,784.26
Fisher Investments		133,014,160.78
Global Transition		<u>779,195.66</u>
Subtotal International Equity		404,539,585.72

**Real Estate**

RREEF America REIT II	\$	50,071,572.00
Center Square		<u>45,577,778.86</u>
Subtotal Real Estate		95,649,350.86

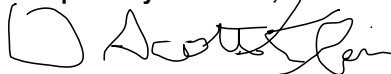
**Fixed Income**

CS Mckee	\$	208,451,905.46
Federated Bank Loans		42,686,783.36
Garcia Hamilton Associates		193,326,467.90
Mackay Shields-High Yield		45,187,875.65
Western Asset Mgt Co-Short Term Inv Grade		<u>1.75</u>
Subtotal Fixed Income		489,653,034.12

Total for Domestic and International Equities 1,849,272,171.84

MARKET VALUE of ASSETS at June 30, 2020 \$ 1,856,664,232.98

Respectfully submitted,



D. Scott Klein  
Controller



Robert L. Hannay  
Treasury Mgr.



S. F. Lindley  
Acctg Sys Supvr.

prepared by Awalsh

## EAST BAY MUNICIPAL UTILITY DISTRICT

---

DATE: September 17, 2020

MEMO TO: Members of the Retirement Board

THROUGH: Sophia D. Skoda, Director of Finance *SDS*

FROM: Andrea Miller, Controller *AM*

SUBJECT: Statement of Receipts and Disbursements for July 2020

The attached Statement of Receipts and Disbursements report for the month of July 2020 is hereby submitted for Retirement Board approval.

Attachment

SDS:AMM:aw

**STATEMENT OF RECEIPTS AND DISBURSEMENTS  
EMPLOYEES' RETIREMENT FUND  
MONTH OF JULY 2020**

<b>CASH BALANCE at June 30, 2020</b>		<b>\$</b>	<b>2,874,315.29</b>
<b><u>Receipts</u></b>			
Employees' Contributions	\$	1,501,174.00	
District Contributions		6,969,353.97	
LAIF Redemptions		10,700,000.00	
Refunds and Commission Recapture		<u>12,161.40</u>	
<b>TOTAL Receipts</b>			<b>19,182,689.37</b>
<b><u>Disbursements</u></b>			
Checks/Wires Issued:			
Service Retirement Allowances	\$	9,530,479.66	
Disability Retirement Allowances		152,255.83	
Health Insurance Benefit		1,000,015.79	
Payments to Retiree's Resigned/Deceased		8,336.00	
LAIF Deposits		8,428,000.00	
Administrative Cost		<u>69,791.41</u>	
<b>TOTAL Disbursements</b>			<b><u>(19,188,878.69)</u></b>
<b>CASH BALANCE at July 31, 2020</b>		<b>\$</b>	<b><u>2,868,125.97</u></b>
<b>LAIF</b>			<b><u>2,282,423.40</u></b>
<b>LAIF and CASH BALANCE at July 31, 2020</b>		<b>\$</b>	<b><u>5,150,549.37</u></b>
<b><u>Domestic Equity</u></b>			
Russell 3000 Index Fund	\$	512,226,901.64	
T. Rowe Price		<u>0.01</u>	
<b>Subtotal Domestic Equity</b>		<b>512,226,901.65</b>	
<b><u>Covered Calls</u></b>			
Parametric (BXM)	\$	125,042,069.61	
Parametric (Delta-Shift)		139,242,575.26	
Van Hulzen		<u>124,696,461.61</u>	
<b>Subtotal Covered Calls</b>		<b>388,981,106.48</b>	
<b><u>International Equity</u></b>			
ACWI Index fund	\$	171,566,615.16	
Franklin Templeton		107,709,894.50	
Fisher Investments		139,925,705.56	
Global Transition		<u>779,535.39</u>	
<b>Subtotal International Equity</b>		<b>419,981,750.61</b>	
<b><u>Real Estate</u></b>			
RREEF America REIT II	\$	49,783,321.00	
Center Square		<u>47,443,924.66</u>	
<b>Subtotal Real Estate</b>		<b>97,227,245.66</b>	
<b><u>Fixed Income</u></b>			
CS Mckee	\$	212,073,851.35	
Federated Bank Loans		43,470,451.84	
Garcia Hamilton Associates		194,945,826.28	
Mackay Shields-High Yield		<u>46,441,680.09</u>	
<b>Subtotal Fixed Income</b>		<b>496,931,809.56</b>	
<b>Total for Domestic and International Equities</b>			<b><u>1,915,348,813.96</u></b>
<b>MARKET VALUE of ASSETS at July 31, 2020</b>		<b>\$</b>	<b><u>1,920,499,363.33</u></b>

Respectfully submitted,

*Andrea Miller*

**Andrea Miller  
Controller**

*Robert L. Hannay*

**Robert L. Hannay  
Treasury Mgr.**

*Sandy Lindley*

**S. F. Lindley  
Acctg Sys Supvr.**

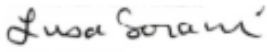
prepared by Awalsh

## EAST BAY MUNICIPAL UTILITY DISTRICT

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DATE: September 17, 2020

TO: Members of the Retirement Board

FROM: Lisa Sorani, Manager of Employee Services 

SUBJECT: Declaring Results of the Election of a Retiree Member of the Retirement Board

The election of a retiree member to the District Retirement Board has been completed.

Based on the current social distancing requirements, staff made changes to the election process to allow completion of the process within the current constraints. On June 11, 2020 the revised election process was announced to all retirees by email and by US mail. An important part of the updated process was that we would use email to communicate with all retirees with an email address on file with the District, and via US mail for those retirees who do not have an email address on file with the District. Also, all election email communication to and from the District would need to use the [RetirementBoardElections@ebmud.com](mailto:RetirementBoardElections@ebmud.com) email address.

The revised process allowed retirement staff to facilitate the candidate nomination process more directly than in the past. Each interested candidate submitted a candidate form to staff. Staff then sent out all the candidate forms to all retirees via email and US mail with instructions noting that each candidate requires at least five nominations to get their name on the final election ballot and how each retiree could submit nominations for the candidates.

All nominations were sent to the [RetirementBoardElections@ebmud.com](mailto:RetirementBoardElections@ebmud.com) inbox to be counted. Those retirees without email were allowed to call the employee services hotline (which is answered by one of five Human Resources Technicians each day). The staff answering the hotline took the instructions and forwarded them to the [RetirementBoardElections@ebmud.com](mailto:RetirementBoardElections@ebmud.com) email address to document each election related call made to the hotline. One staff member was responsible for running the election process and monitoring the [RetirementBoardElections@ebmud.com](mailto:RetirementBoardElections@ebmud.com) inbox.

The revised process also stated that if only one Candidate received the five nominations needed to be eligible for the ballot, that retiree would take the open seat. This year there were two candidates who receive the necessary five nominations. Both candidates Elizabeth Grasseti (100 nominations) and Richard Van Tassel (21 nominations) were put on the election ballot. Staff used Survey Monkey to facilitate online voting for the election. A link to the ballot on survey monkey was sent by email to those retiree members with email. Those retiree members without email were sent letters by US mail with instructions to contact the Employee Services hotline to post their vote. Similar to the nomination process, votes that came in to the hotline were forwarded by staff to the [RetirementBoardElections@ebmud.com](mailto:RetirementBoardElections@ebmud.com) inbox and documented. The votes that were called in were then manually entered to survey monkey by the staff member running the election.

The revised election process detailed above provided an easier way for the retiree candidates to gather the nominations needed to be eligible for the election ballot. It was also much easier for staff to manage the entire election process while working remotely. There were also small cash and paper savings related to not mailing paper ballots out to 1800+ retirees. While there were many more nominations for the candidate during the nomination process than in prior years, there were a smaller number of votes against the final election ballot than in prior years.

The total number of votes on the ballot this year was 351. The prior three elections periods had 647 votes (2018), 503 votes (2016) and 648 votes (2014). While there were fewer votes this election period, there was still a clear winner.

A total of 351 ballots were cast in the 2020 election of a retiree member to the Retirement Board. A total of 337 votes were cast directly by retired members using the online ballot on Survey Monkey. A total of 14 votes were cast by retired members by calling the employee services hotline and then staff manually adding the votes to Survey Monkey.

The results of the tally are as follows:

Elizabeth Grassetti	263 votes
Richard Van Tassell	88 votes

I hereby certify that Elizabeth Grassetti has been elected to the Retirement Board for a two-year term beginning September 24, 2020 and expiring on September 23, 2022. The attached Resolution is the Retirement Board's attestation that the results have been officially declared.

In November, staff will bring a draft Retirement Board Rule related to Retirement Board elections (employee and retiree) for the Board to review and offer comments. The Retirement Ordinance is silent on the election process other than stating that it should happen on a two-year cycle. While staff does not require specific direction, they would like the Retirement Board to review and agree to items such as electronic voting and no ballot if only one candidate receives necessary nominations.

LS:ls

R.B. RESOLUTION NO. 6920

DECLARING THE RESULTS OF AN ELECTION OF A RETIREE MEMBER OF THE  
RETIREMENT BOARD

Introduced by: ; Seconded by:

WHEREAS, Section 4(a) of the Retirement Ordinance provides for election by and from the retired members of the Retirement System to elect a non-voting Retirement Member to serve as a representative on the Retirement Board; and

WHEREAS, the Secretary of the Retirement Board has certified that retiree Elizabeth Grassetti has been elected by the retired members of the Retirement System to serve as a non-voting representative on the Retirement Board pursuant to an election conducted for said purpose;

NOW, THEREFORE, BE IT RESOLVED that retiree Elizabeth Grassetti is hereby declared the non-voting retired member to serve as a representative on the Retirement Board and that said retired member shall serve a period of two years commencing September 24, 2020 and terminating on September 23, 2022.

\_\_\_\_\_  
President

ATTEST:

\_\_\_\_\_  
Secretary

09/17/20



**R.B. RESOLUTION NO. 6921**

EXPRESSING APPRECIATION TO LISA RICKETTS MANN FOR HER SERVICE TO THE  
EAST BAY MUNICIPAL UTILITY DISTRICT RETIREMENT BOARD

**WHEREAS**, Lisa Ricketts Mann has served as retiree representative to the East Bay Municipal Utility District Retirement Board from September 24, 2014 through September 23, 2020, and;

**WHEREAS**, during Lisa Ricketts Mann's term of office, the Retirement System's assets grew from \$1.3 billion to \$1.9 billion and;

**WHEREAS**, during her term, Lisa Ricketts Mann tirelessly promoted the interest of retirees and served as their voice on the Retirement Board; and

**WHEREAS**, Lisa Ricketts Mann has earned the respect of her fellow Retirement Board members, the Retirement System staff, employees and retired members of the East Bay Municipal Utility District Employees' Retirement System for her commitment to the welfare of the Retirement System and its membership;

**NOW, THEREFORE, BE IT RESOLVED** that the members of the Retirement Board express their appreciation to Lisa Ricketts Mann for her outstanding service as a member of the Retirement Board.

\_\_\_\_\_  
Douglas Higashi, Board Member

\_\_\_\_\_  
Frank Mellon, Board Member

\_\_\_\_\_  
Marguerite Young, Board Member

\_\_\_\_\_  
Timothy McGowan, Board Member

\_\_\_\_\_  
Clifford Chan, General Manager

**ATTEST:** \_\_\_\_\_  
Secretary

9/17/20

## EAST BAY MUNICIPAL UTILITY DISTRICT

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DATE: September 17, 2020

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance *SDS*

SUBJECT: Update from Fisher Investments

### SUMMARY

At its November 21, 2019 meeting, the Retirement Board elected to put Fisher Investments on Watch Status following inappropriate comments from its executive chairman and co-chief investment officer, Ken Fisher, during a presentation at a conference in San Francisco. Since then, the Retirement Board has received information, analysis, and training from Meketa on the international equities asset class and the specific mandates of the Retirement System's international equity managers.

This presentation will allow staff at Fisher Investments to address the issue that led to the determination by the Retirement Board to place the manager on Watch Status and steps taken by the firm since then on the matter. It will also be an opportunity for Fisher Investments' staff to discuss an update on the Retirement System's mandate and the firm's view on the asset class. This presentation helps the Retirement Board continue its review of its international equity allocation.

SDS:DC



FISHER INVESTMENTS<sup>TM</sup>  

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INSTITUTIONAL GROUP

*A PRESENTATION TO*



*PRESENTED BY*

Jill Hitchcock – Senior Executive Vice President, US Private Client Group  
Justin Arbuckle – Senior Executive Vice President, Institutional  
Aaron Anderson – Senior Vice President of Research, Investment Policy Committee Member  
Ben Kothe – Vice President, Relationship Manager

*SEPTEMBER 17, 2020*



Fisher Investments Camas, WA



Fisher Investments San Mateo, CA



Fisher Investments Woodside, CA



Fisher Investments Plano, TX



Fisher Investments  
Europe - London



Fisher Investments Branch  
Office - Dubai



Fisher Investments  
Australasia - Sydney



Fisher Investments  
Japan - Toyko



Fisher Investments  
Ireland - Dublin

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*Inside cover photographs: Four offices of FI are located in Washington, California, and Texas, USA. The London, UK office is the headquarters of Fisher Investments Europe, Limited, FI's wholly owned subsidiary in England. The Dubai International Financial Centre office is a branch office of FI. Fisher Investments Australasia Pty Ltd (FIA) is FI's wholly-owned subsidiary based in Sydney, Australia. Fisher Investments Japan (FIJ) is FI's wholly-owned subsidiary based in Tokyo, Japan. Fisher Investments Ireland Limited (FI) is FI's wholly-owned subsidiary located in Dublin, Ireland.*

## WATCH LETTER CONCERNS UPDATE

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ENVIRONMENTAL, SOCIAL & GOVERNANCE

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DIVERSITY & INCLUSION

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APPENDIX

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# AN UPDATE ON WATCH LETTER CONCERNS

## PERSONNEL TURNOVER

Over the last 12 months

- Complete retention of all executives, Investment Policy Committee members and senior Portfolio Management Group (PMG) professionals\*
- Expanded the PMG by adding a net 14 analysts

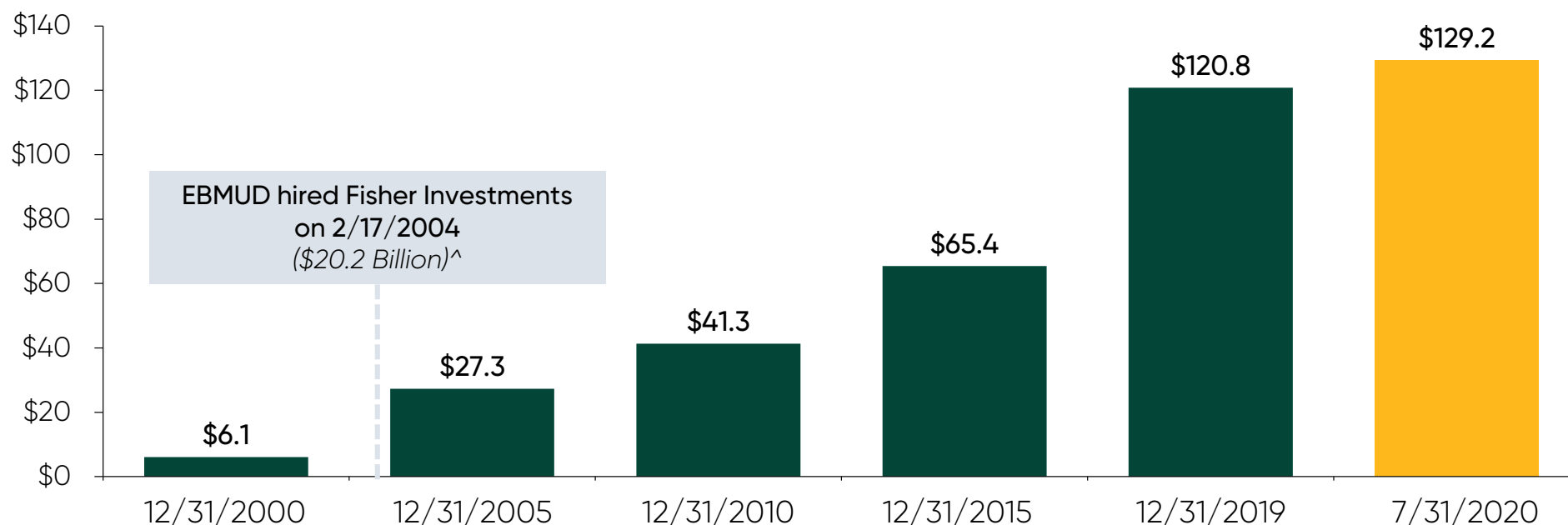
## FIRM SOLVENCY

- AUM is at all-time highs
- Averaging \$667 million in net positive monthly flows YTD\*\*
- Never been more solvent than as we are now

## PERFORMANCE

- Since October 2019, outperformed benchmark by 698bps (gross)\*\*\*

Firm AUM (USD, Billions)



\*Executives are defined as individuals with the title of Chief Executive Officer (CEO), Chief Operating Officer (COO), Senior Executive Vice President (SEVP) and Executive Vice President (EVP). \*\*Monthly flows defined as the net of new accounts and terminations. \*\*\*Performance shown above is from 11/1/2020-7/31/2020 and is based on the East Bay MUD account. Performance is preliminary. Preliminary performance is subject to the final reconciliation of accounts and deduction of any outstanding advisory fees, which will have the effect of lowering performance by the amount of the deductions. Performance is inclusive of dividends, royalties, interest and other forms of accrued income and may reflect end of month adjustments, such as unsettled trades, accrued interest, and/or dividends that may have not yet been applied to your account at the custodian. Gross returns are gross of advisory fees and net of brokerage or other commissions. Data in USD. Sources: Eagle Investment Systems LLC & FactSet. ^As of 12/31/2003.

# PORTFOLIO PERFORMANCE & PEER RANKINGS

Since hiring Fisher in 2004, it has been a very successful partnership. Thus far, the cumulative net dollar return is **\$93,343,849\***, which is **\$23,452,739^** more than what the passive alternative produced. Consistently in the top 30th percentile relative to peers.

**Mandate:** All Foreign Equity

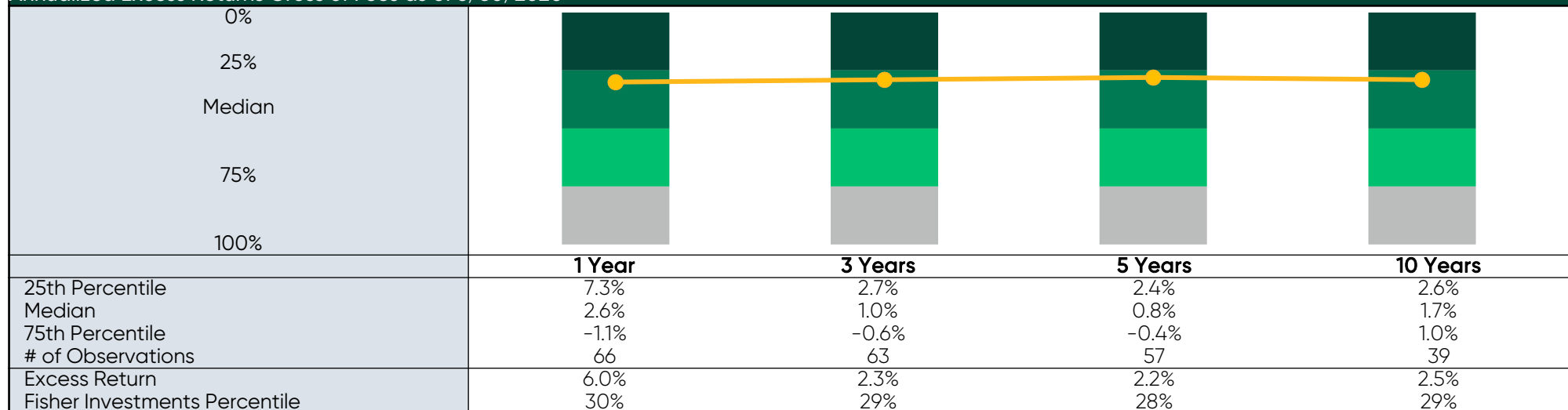
**Benchmark:** MSCI ACWI ex-US

**Market Value:** \$139,144,879

	YTD	1 Year	3 Year**	5 Year**	10 Year**	Since Inception (2/17/2004)**
EBMUD (Gross)	-2.5%	8.1%	4.2%	5.5%	7.1%	6.6%
EBMUD (Net)	-2.9%	7.4%	3.6%	4.8%	6.5%	5.9%
MSCI ACWI ex-US	-7.0%	0.7%	1.4%	3.2%	4.5%	4.9%
Excess Return (Net)	4.1%	6.7%	2.2%	1.6%	2.0%	1.0%

## Fisher Investments All Foreign Equity vs. Peers\*\*\*

Annualized Excess Returns Gross of Fees as of 6/30/2020



Universe: eVestment AWCI ex-US Large Cap Core Equity. Based off monthly excess returns in USD, gross of fees.

Source: eVestment as of 6/30/2020. Screened for active, long only, equity managers.

\*Net Dollar Return = Portfolio market value as of 7/31/2020 – Initial investment on 2/17/2004 – Asset Flows – Management Fees. Gross Dollar Return = Portfolio market value as of 7/31/2020 – Initial investment on 2/17/2004 – Asset Flows. ^Benchmark Hypothetical Dollar Gain for the given period is \$69,891,110. Hypothetical excess return is calculated as Gross Dollar Return less benchmark hypothetical dollar gain. Hypothetical dollar gain is calculated utilizing actual benchmark returns, assuming the same initial investment on 2/17/2004 less client asset flows.

\*\*Annualized. As of 7/31/2020. Based on the East Bay MUD account, unless otherwise noted. Performance is preliminary. Preliminary performance is subject to the final reconciliation of accounts and deduction of any outstanding advisory fees, which will have the effect of lowering performance by the amount of the deductions. Performance is inclusive of dividends, royalties, interest and other forms of accrued income and may reflect end of month adjustments, such as unsettled trades, accrued interest, and/or dividends that may have not yet been applied to your account at the custodian. Gross returns are gross of advisory fees and net of brokerage or other commissions. Net returns are net of advisory fees and net of brokerage or other commissions. See full net of fees performance and important disclosures in the Appendix. Data in USD. Sources: Eagle Investment Systems LLC & FactSet.

\*\*\*As of 6/30/2020. The foregoing information is based on the Fisher Investments Institutional Group All Foreign Equity composite, which was inceptioned on 5/1/2004 and is benchmarked against the MSCI All Country World ex-US Index. Performance is preliminary. Preliminary performance is subject to the final reconciliation of accounts and deduction of any outstanding advisory fees, which will have the effect of lowering performance by the amount of the deductions. Performance results are inclusive of dividends, royalties, interest and other forms of accrued income. Gross returns are gross of advisory fees and net of brokerage or other commissions. See full net of fees performance and important disclosures in the Appendix.

WATCH LETTER CONCERNS UPDATE

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**ENVIRONMENTAL, SOCIAL & GOVERNANCE**

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DIVERSITY & INCLUSION

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# ESG PHILOSOPHY & CAPABILITIES

## ESG Philosophy Statement

We believe ESG investors are best served by an investment process that considers both top-down and bottom-up factors. Integrating ESG analysis at the country, sector and stock levels consistent with clients' investment goals and ESG policies maximizes the likelihood of achieving desired performance and improving environmental and social conditions worldwide.

## ESG Capabilities

- Unique combination of top down and bottom up investment process. ESG issues are regularly evaluated to determine potential impact on portfolio macro themes, country, sector, industry allocation, and stock selection.
- PRI report score of "A+" on two modules (Strategy & Governance, Incorporation) and "A" on one module (active ownership).
- Utilize MSCI ESG Research Data to comply with a variety of optional client mandated mechanical screens and/or ESG/SRI policies.
- Prospective holdings are analyzed for potential ESG risks as well as positive ESG attributes as part of equity selection and monitoring process.
- Formal ESG committee and dedicated ESG specialists within the research group.
- Ongoing ESG learning & training including Principles for Responsible Investment Academy courses and ESG conferences.
- Partnering with clients to enhance their ESG policies and capabilities.
- Dedicated engagement team to drive positive changes through active ownership. Partner with clients and other asset managers/owners. Customized engagement reporting.
- Over 25 years experience managing various ESG and SRI client mandates, as well as recently offering Impact portfolios aligned with the SDGs. As of July 31 2020, FI managed assets valued at over \$15.8 billion for 49 ESG, SRI and Impact mandates across all of the firm's strategies: Emerging Markets Equity, Global Developed Equity, Foreign Equity, and US Equity.

*As of 7/31/2020.*

# FISHER INVESTMENTS INVESTOR RESPONSIBILITY & ENGAGEMENT TEAM

Fisher Investments regularly engages corporations on relevant environmental, social and governance issues, often seeking additional disclosure for investors or requesting that companies take steps to strengthen their ESG performance. Engagements are conducted by our Investor Responsibility & Engagement team and our Research Analysts.

## OUR INVESTOR RESPONSIBILITY & ENGAGEMENT TEAM



**Anita Green**

*VP, Investor Responsibility & Engagement*

Anita leads strategic development and implementation of the Fisher Investments ESG corporate engagement program. Anita has 30 years of experience in the industry and is active in Responsible Investment trade associations and served on the Interfaith Center on Corporate Responsibility Board of Directors.



**Sagar Rijal**

*Investor Responsibility & Engagement Analyst*

Sagar is an expert in corporate governance, global climate politics and ESG analysis. Prior to joining the firm, he spent 4 years at Institutional Shareholder Services, where his roles included proxy voting researcher, corporate governance advisor and engagement coordinator.

## HOW WE SOURCE OUR ENGAGEMENT OPPORTUNITIES



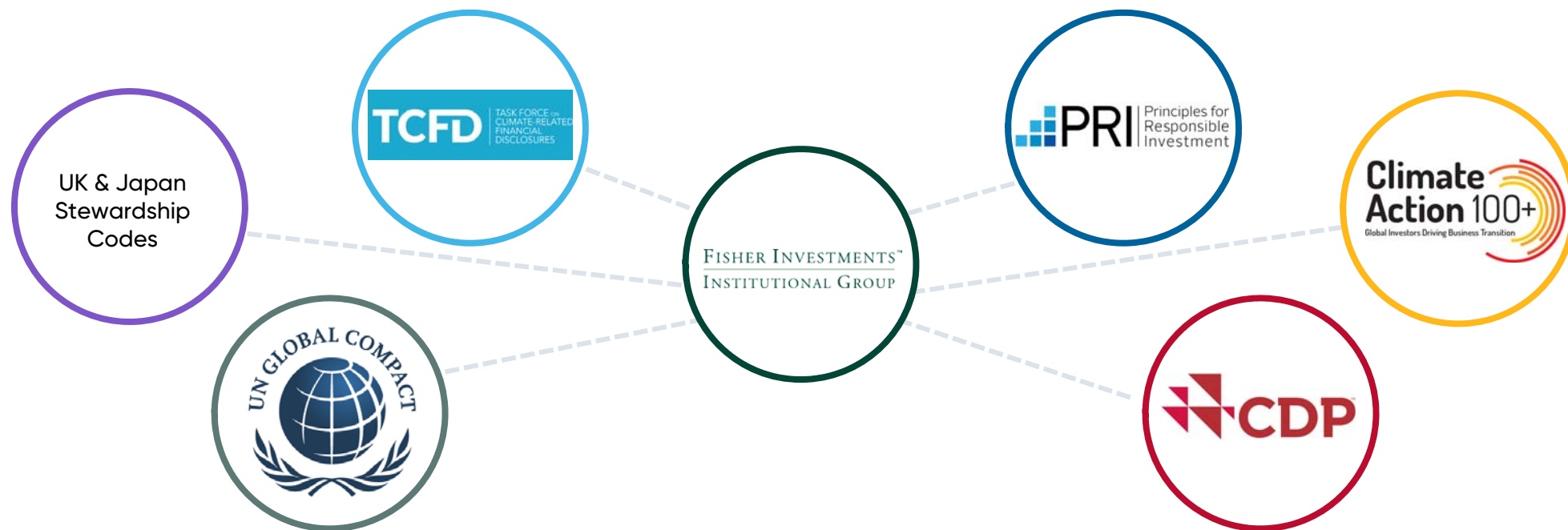
## EACH ENGAGEMENT IS...

- ...researched by our team – “What are the relevant risks and opportunities?”
- ...assigned an objective – “What are we asking the company to do?”
- ...supported by a business case – “Why is it important?”
- ...monitored over time – “What milestones are achieved?”

# FISHER INVESTMENTS INVESTOR RESPONSIBILITY & ENGAGEMENT TEAM

## COLLABORATING WITH OTHERS

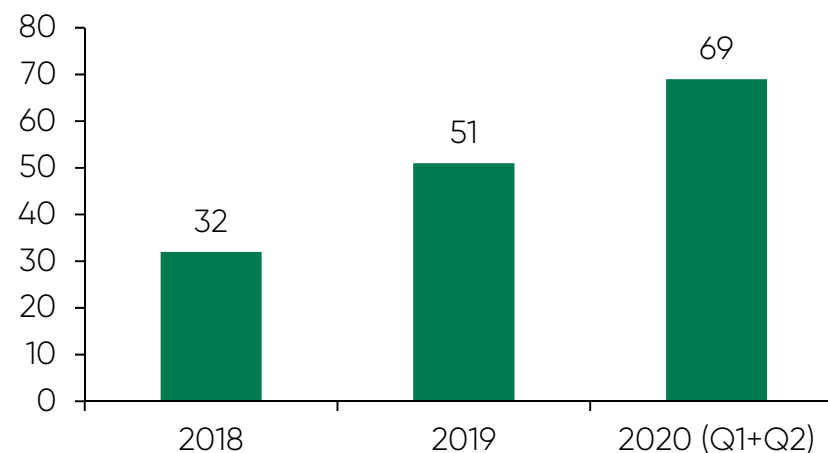
When investors work together, it can be effective in driving change. Fisher Investments participates in the following responsible investment networks and initiatives:



## ENGAGEMENTS BY CATEGORY (12 MONTHS: Q3 2019 – Q2 2020)

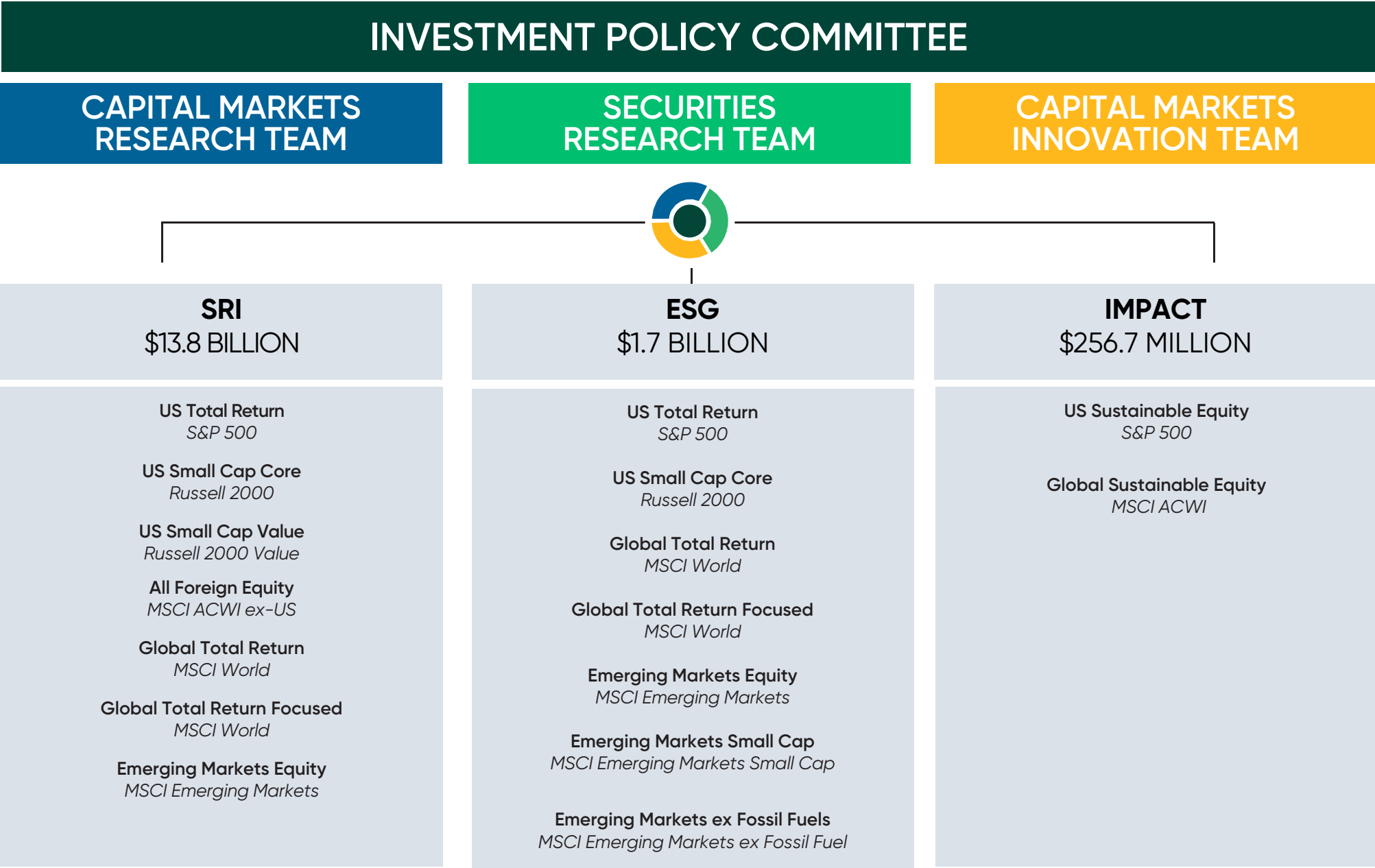
Category	% of Engagements	Engagement Priorities
Environmental	66%	Environmental (Climate Change, Water, Forest) Disclosures; GHG Emissions; Pollution & Waste
Social	15%	Employee Health and Safety; Human Capital
Governance	19%	Board Composition; Executive Compensation; Proxy Voting

## TOTAL ESG ENGAGEMENTS BY YEAR



Source: Fisher Investments Research. As of June 2020.

# INVESTMENT STRATEGIES



WATCH LETTER CONCERNS UPDATE

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ENVIRONMENTAL, SOCIAL & GOVERNANCE

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**DIVERSITY & INCLUSION**

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APPENDIX

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# GREAT PLACE TO WORK

"GPTW" is an independent research firm, that utilizes its proprietary survey technology to assist businesses in gathering anonymous feedback on their employees experience. According to GPTW, "A great workplace for all is one where no matter who you are, you trust the people you work for; have pride in what you do; and enjoy the people you work with."

- Fisher Investments was certified as a Great Place To Work from 2018 through 2020 inclusive.
- This recognition shows Fisher Investments' ability to drive trust and pride, and celebrates our employees' outstanding commitment to the organization, one another and clients.



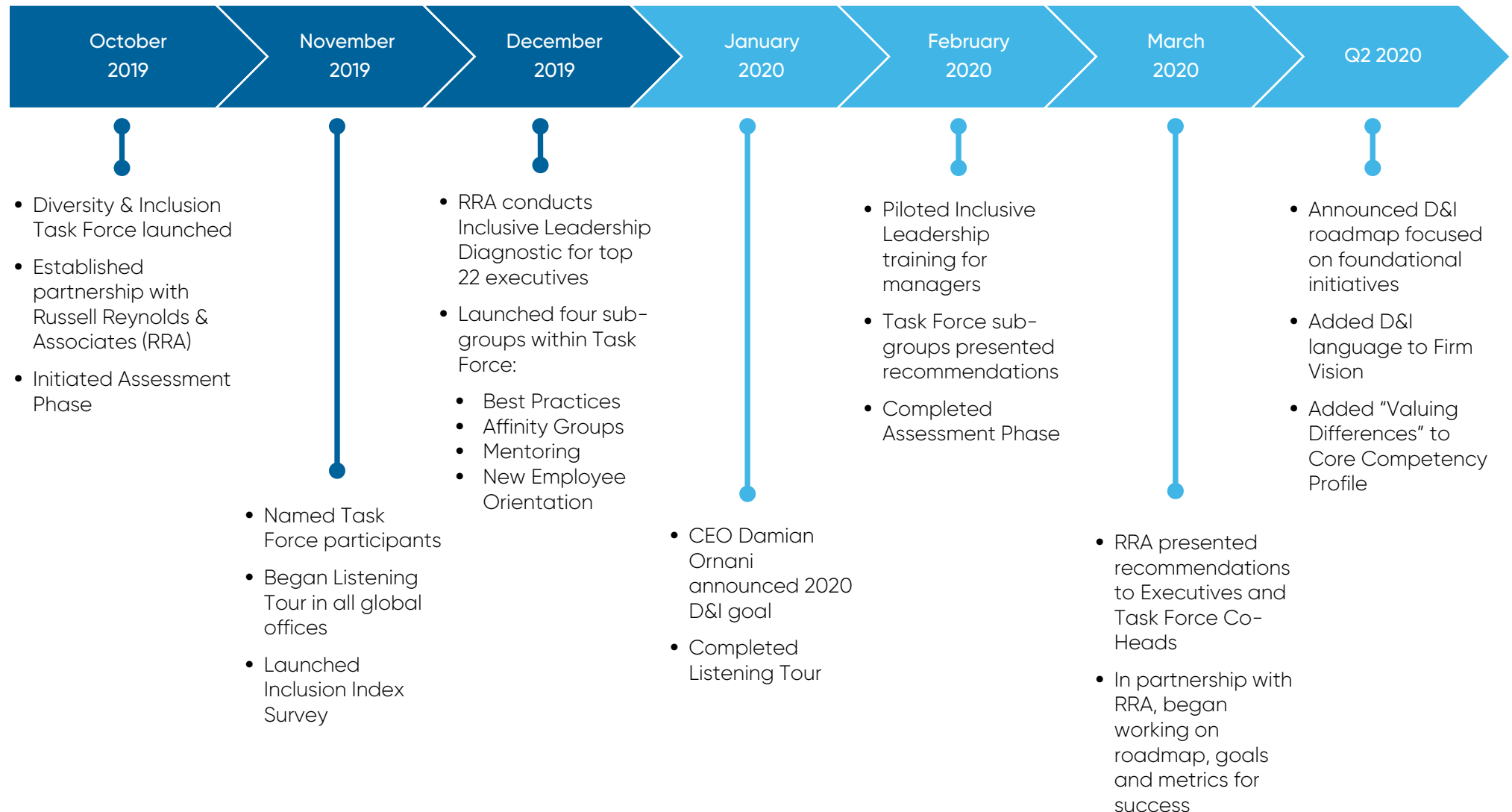
## Highlights of the Fisher Investments 2020 Survey:

Responses from All Employees*	
When you join the organization, you're made to feel welcome	92%
When I look at what we accomplish, I feel a sense of pride	81%
Management is honest and ethical in its business practices	92%
People here are treated fairly regardless of their gender	87%
People here are treated fairly regardless of their race	94%
People here are treated fairly regardless of their sexual orientation	95%

*\*Scale is out of 100; the result indicates the % of employees that participated who believe that the following statements are "almost always true" or "often true". Great Place to Work selects winners of the Best Workplaces lists primarily based on employees' responses to their industry-defining Trust Index® Survey, taken as part of Great Place to Work® Certification. Results from the survey are highly reliable, having a 95% confidence level and a margin of error of 5% or less. Great Place to Work® is a recognized global authority on workplace culture and producer of important reviews, including the annual Fortune "100 Best Companies to Work For®" list. Great Place to Work® anonymously surveyed more than 2,000 Fisher Investments employees as part of its comprehensive review process. The survey measured several factors including compensation, manager quality, overall workplace atmosphere and the pride that employees feel working for Fisher Investments.*

# DIVERSITY AND INCLUSION (D&I) TASKFORCE TIMELINE RECAP

The taskforce was launched to examine all aspects of diversity and inclusion (D&I) at Fisher Investments with the ultimate goal of becoming a leader in this space. We believe passionately that a diverse and inclusive company makes for more innovative, engaged, and happy employees – which ultimately improves the client experience.



# FISHER INVESTMENTS COMPANY VISION

Boldly Pioneering Tomorrow's Investment Solutions Today, Assuring Success.

*We will maximize the firm's long-term enterprise value by independently striving to dominate our chosen markets.*

*Our quest requires delivering unparalleled service, continuous education, and appropriate solutions to our clients and always considering their interests first.*

*We believe in directness, delivering personal via machine, driving quality through scale, being fact-driven, and demanding metric-based accountability.*

*We will develop human capital from within by building breadth and depth in individuals. We endeavor to build lifelong careers and reward those embodying loyalty, flexibility, and "will-do".*

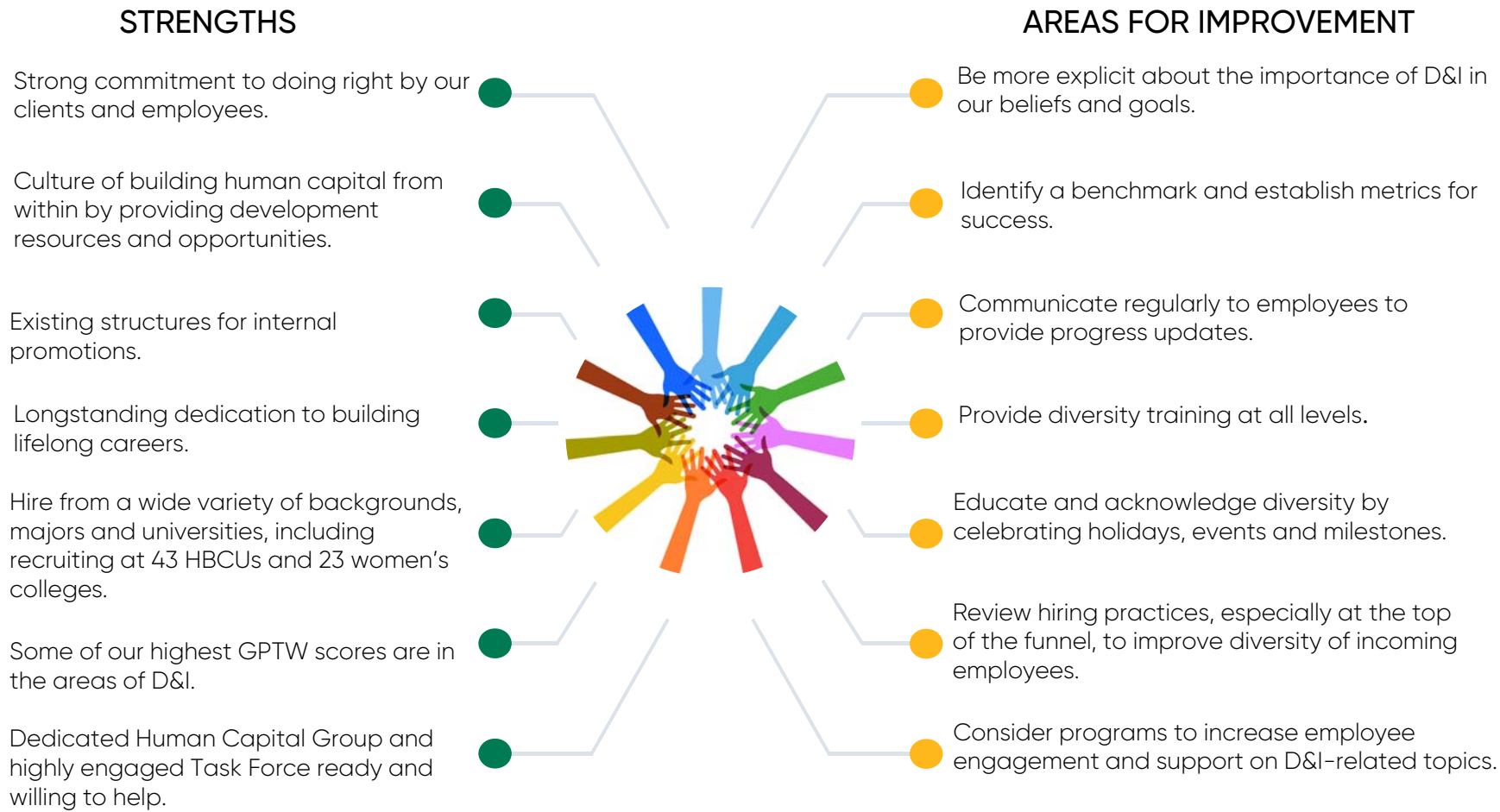
*To succeed, we must have an inclusive culture, actively developing and supporting diversity across the vast spectrum of human differences, creating a place of authentic belonging for all.*

*Along this journey, we seek to better the investment universe by doing what others haven't done yet. We will create knowledge, foster innovation, embrace change, and be unconstrained by convention.*



# ROADMAP INPUTS

Strengths and Areas for Improvement are based on the Inclusion Index Survey, workforce data analysis, internal Listening Tour of 23 focus groups, and feedback and recommendations from Russell Reynolds & Associates.



# ROADMAP FOR 2020

Our D&I initiative will be an ongoing and continuous set of plans and goals, influenced by learning, challenges, and successes along the way. We are now ready to embark on the first steps of our D&I roadmap and are prioritizing foundational initiatives that can be built on over the coming months and years. Our short term road map includes the following components:



Thank you for being a valued client. We greatly appreciate your business.

WATCH LETTER CONCERNS UPDATE

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ENVIRONMENTAL, SOCIAL & GOVERNANCE

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DIVERSITY & INCLUSION

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**APPENDIX**

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# BENEFITS OF ACTIVE MANAGEMENT IN INTERNATIONAL EQUITIES

A much larger percentage of international equity strategies beat their benchmarks than US strategies.

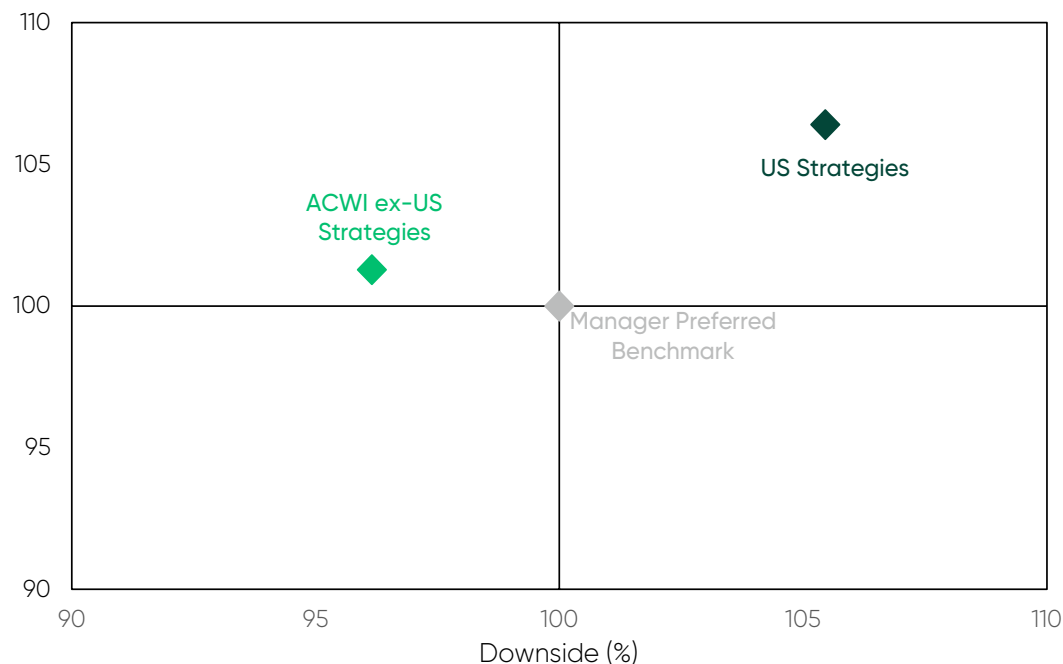
	1 Year		3 Years*		5 Years*		10 Years*		15 Years*	
	US	ACWI ex-US	US	ACWI ex-US	US	ACWI ex-US	US	ACWI ex-US	US	ACWI ex-US
25th Percentile	1.24	7.32	1.19	2.66	0.08	2.36	0.64	2.58	1.43	2.05
Median	-7.28	2.62	-3.86	1.01	-3.14	0.82	-1.39	1.73	-0.02	1.36
75th Percentile	-16.33	-1.12	-9.19	-0.64	-6.45	-0.36	-3.46	1.03	-1.57	0.95

Excess returns of US & ACWI ex US strategies. \*Annualized.

We believe active management in international equity strategies can not only help returns, but also reduce risk. International equity strategies tend to have a lower long-term down market capture. Relative to US equities, international sectors see sparser analyst coverage.

Upside (%)

## Mean Gross Up/Down Capture



## Analyst Coverage by Sector

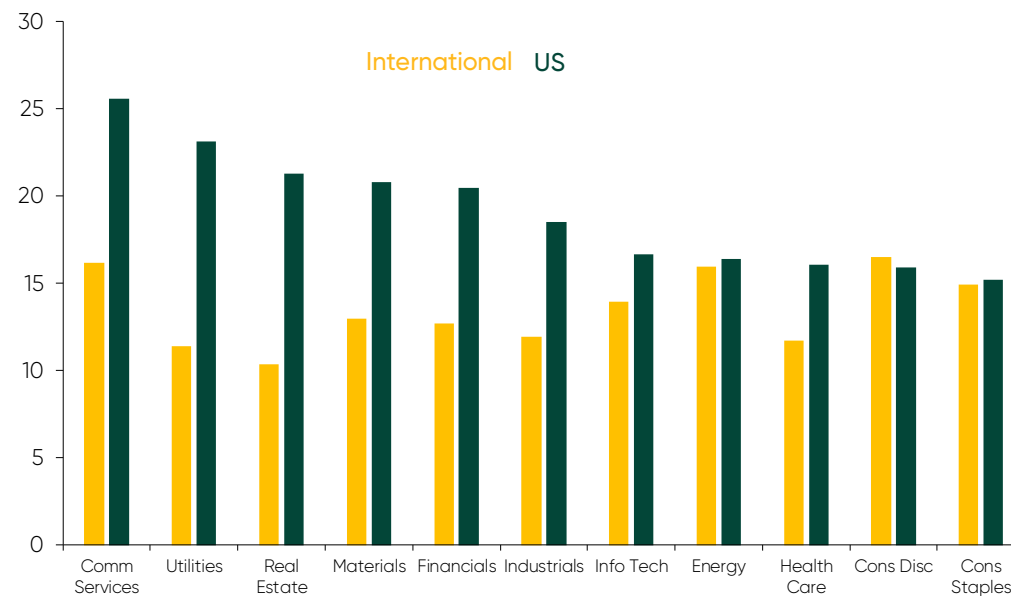


Table Source: eVestment as of 6/30/2020 Universes - US Large Cap Equity, ACWI ex US Large Cap Core Equity.

Bottom left chart source: eVestment Trailing 15 years as of 6/30/2020. Mean Performance Up/Down Capture was calculated by taking the quarterly average up/down gross return of the composite and dividing it by the quarterly average up/down return of the benchmark. Positive benchmark returns are defined as "Up" periods and negative benchmark returns are defined as "Down" periods.

Bottom right chart source: MSCI ACWI ex-US source: FactSet as of 7/31/2020.

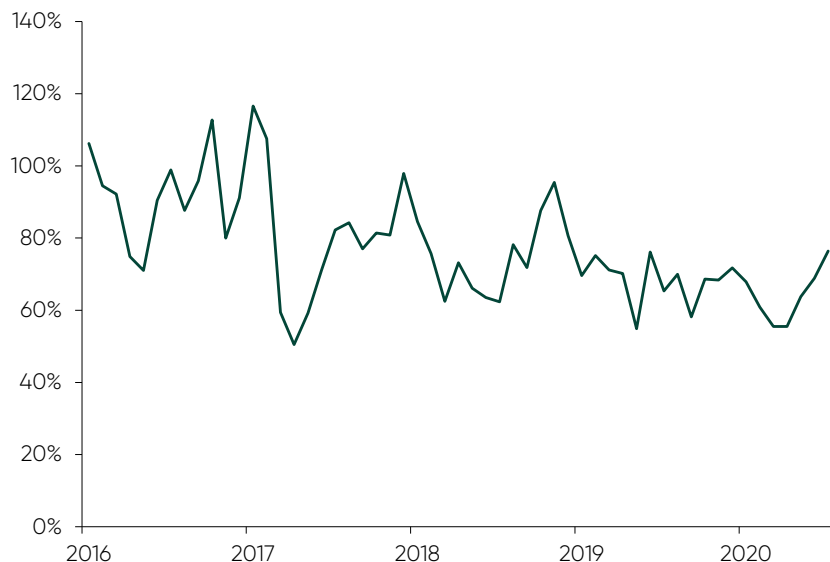
# COUNTRY AND SECTOR DISPERSION

Typically, there is a wide dispersion between top and bottom performing countries and sectors within international equities, allowing ample opportunities for active managers to deliver relative outperformance.

Trailing 10 Years	Country	Cumulative Performance	Relative Performance
Best	New Zealand	262.8%	207.3%
	Denmark	204.0%	148.5%
	Taiwan	167.6%	112.1%
	Netherlands	143.3%	87.8%
	Switzerland	137.1%	81.6%
Worst	Greece	-94.6%	-150.1%
	Kazakhstan	-72.7%	-128.2%
	Pakistan	-58.8%	-114.3%
	Turkey	-58.7%	-114.2%
	Colombia	-47.7%	-103.2%

Trailing 10 Years	Sector	Cumulative Performance	Relative Performance
Best	Information Technology	183.1%	127.6%
	Health Care	167.0%	111.5%
Worst	Energy	-20.7%	-76.2%
	Financials	11.9%	-43.6%

Rolling 12M Country Performance Dispersion



Rolling 12M Sector Performance Dispersion

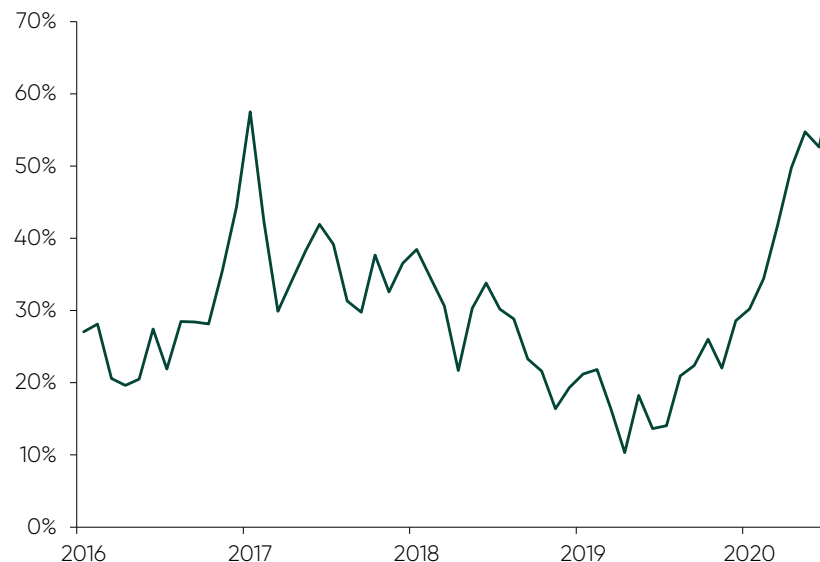


Table source: Factset as of July 2020 MSCI ACWI ex-US and based on 10-year trailing data.

Bottom graphs source: FactSet as of 7/31/2020. Based on maximum-minimum rolling 12 month country and sector index total returns, net of dividends.

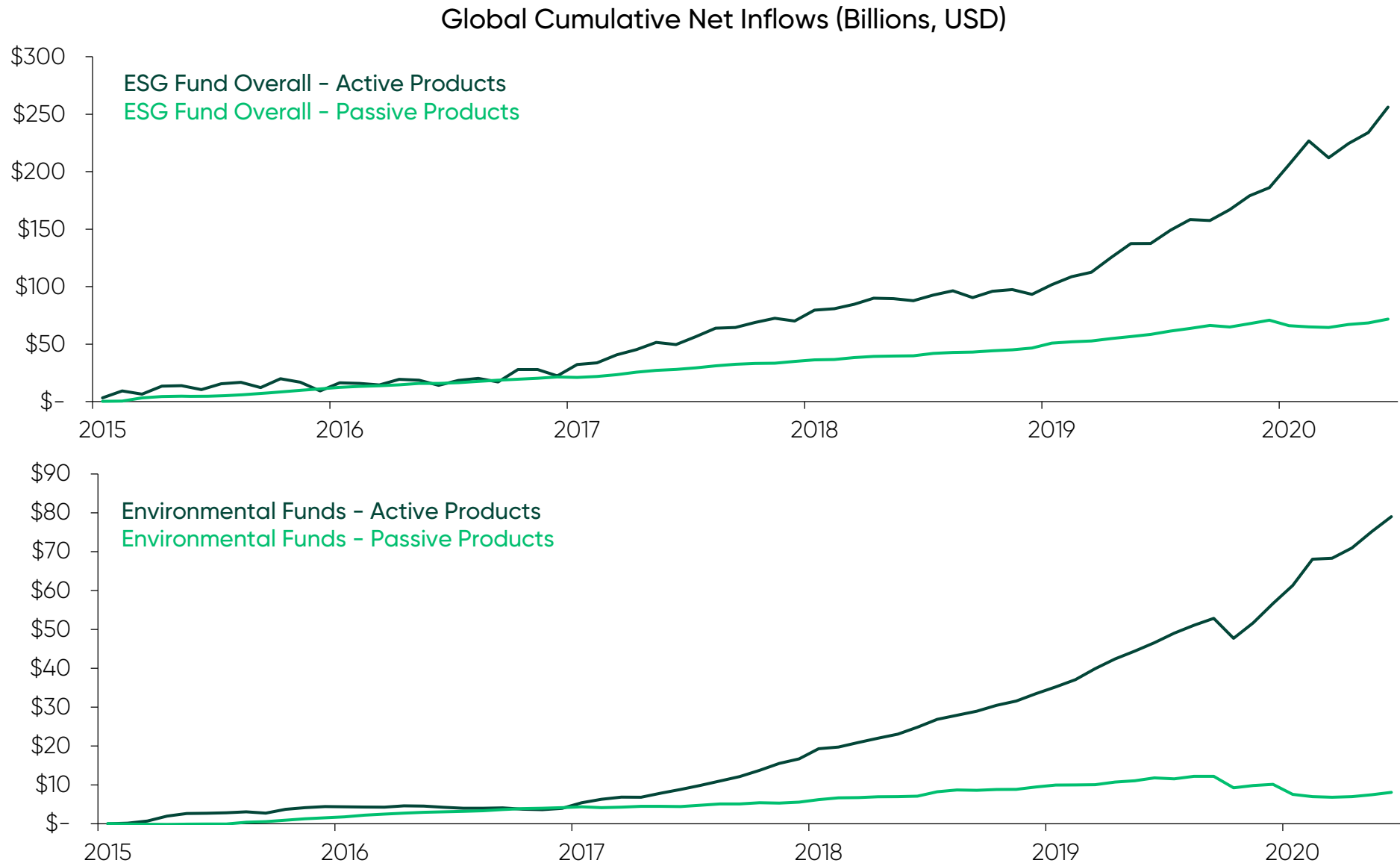
# MSCI ACWI IMI: COUNTRY AND SECTOR ESG SCORES

Weighted Average ESG Score	Comm.Serv.	Cons.Disc.	Cons.Stap.	EN	FN	HC	IDT	IT	MT	RE	UT	Overall	Index Weight
Portugal	6.8	--	8.1	10.0	7.1	--	7.1	--	4.7	--	9.7	9.0	0.05%
Denmark	--	9.8	8.9	4.2	4.4	9.0	7.7	6.6	8.6	--	10.0	8.5	0.66%
Ireland	--	7.9	7.8	--	4.8	--	8.2	--	9.3	4.0	--	8.3	0.18%
Netherlands	7.9	8.1	9.0	7.2	6.8	5.6	7.6	7.1	8.4	7.3	--	7.7	1.13%
Sweden	5.7	9.3	3.6	8.2	7.0	4.4	6.3	7.6	5.5	5.2	8.9	7.5	1.06%
Spain	5.8	--	6.6	9.2	6.6	--	8.0	5.9	8.2	6.3	8.1	7.5	0.64%
Austria	8.5	6.7	10.0	10.0	4.1	7.9	6.4	8.2	8.3	8.4	5.4	7.4	0.07%
Finland	8.5	5.7	7.0	8.4	7.1	6.7	8.1	9.0	8.7	5.8	--	7.4	0.31%
Norway	8.9	6.8	7.6	8.5	7.0	--	5.9	5.7	5.2	8.0	8.6	7.4	0.22%
Germany	6.6	5.9	4.9	8.5	--	8.0	9.0	6.2	6.9	7.3	7.9	7.3	2.47%
New Zealand	9.0	6.8	7.3	--	7.3	6.5	7.3	6.9	7.2	6.9	7.0	7.2	0.12%
France	5.4	5.6	7.7	3.1	8.6	5.4	8.7	9.1	7.0	6.4	6.9	7.2	2.71%
United Kingdom	7.6	7.1	7.3	6.6	6.4	7.2	8.0	6.0	6.4	7.1	8.6	7.1	3.96%
Switzerland	7.5	6.3	9.1	7.1	8.0	6.2	7.5	7.8	5.8	7.9	6.7	7.0	2.70%
Italy	5.4	3.9	5.1	5.7	7.1	6.4	5.6	5.5	4.3	3.0	9.2	6.9	0.67%
Belgium	6.3	6.0	6.0	7.7	6.7	6.9	8.6	5.8	5.8	7.1	7.6	6.7	0.30%
Australia	6.6	7.0	7.3	4.2	6.8	5.8	5.8	4.2	8.8	5.2	8.3	6.6	1.97%
Hungary	7.2	4.6	5.3	5.0	7.6	8.4	7.1	3.8	--	5.2	5.2	6.5	0.03%
Singapore	7.6	--	--	8.4	6.2	5.6	--	--	--	--	--	6.4	0.34%
Czech Republic	6.6	4.9	4.7	2.7	6.2	4.4	4.4	6.7	2.1	3.3	--	6.4	0.01%
Taiwan	7.3	6.7	6.3	6.1	6.4	6.5	6.7	5.2	3.7	6.8	--	6.2	1.73%
Canada	6.4	5.2	5.2	5.5	7.0	3.6	6.0	4.5	5.6	4.2	7.1	5.9	2.83%
South Africa	3.3	--	--	--	7.1	--	--	--	--	--	6.0	5.9	0.45%
Hong Kong	6.5	6.7	3.9	6.2	6.1	6.9	4.6	3.5	6.7	5.2	4.8	5.8	0.88%
United States	5.0	5.5	6.1	4.9	4.7	5.3	6.0	6.9	5.5	4.8	6.8	5.8	57.16%
Japan	6.0	4.9	3.7	--	7.3	4.1	4.5	5.2	--	4.9	6.0	5.7	6.95%
Thailand	6.6	5.7	5.0	6.9	5.9	5.8	5.9	5.6	5.5	5.0	5.0	5.6	0.27%
Greece	6.8	3.9	5.2	4.6	7.0	5.4	4.2	3.1	3.1	3.5	4.2	5.5	0.03%
Chile	4.8	6.4	3.4	5.2	6.7	6.1	2.7	--	2.7	2.8	3.3	5.4	0.08%
Indonesia	4.8	4.4	4.5	5.8	4.3	--	3.6	5.0	5.2	5.4	7.1	5.4	0.18%
Malaysia	5.6	5.4	--	4.9	5.4	--	--	--	6.9	--	--	5.4	0.24%
Pakistan	3.8	4.6	6.3	5.3	7.0	1.9	5.3	4.9	3.3	3.3	2.6	5.3	0.01%
United Arab Emirates	--	--	--	3.3	5.4	--	--	--	6.4	--	--	5.2	0.06%
Poland	5.3	--	--	--	6.2	--	3.6	--	--	2.6	--	5.0	0.09%
India	5.0	4.7	3.3	5.6	5.5	--	5.4	5.3	4.8	--	2.8	4.9	1.05%
Israel	5.1	4.7	6.0	4.1	5.1	2.5	2.7	7.0	3.6	2.6	3.2	4.9	0.23%
Colombia	--	--	--	2.1	5.3	--	--	--	5.3	--	5.5	4.7	0.02%
Brazil	5.3	3.8	5.7	3.8	6.3	3.7	5.0	4.8	1.4	3.1	4.8	4.5	0.70%
South Korea	--	--	--	--	--	--	--	--	--	--	--	4.4	1.50%
Argentina	--	3.0	7.1	3.2	5.1	--	--	4.7	1.6	--	5.6	4.3	0.03%
China	3.9	1.6	2.9	4.8	3.7	--	1.9	--	3.7	4.9	5.0	4.3	4.73%
Russia	5.7	--	2.9	5.4	4.6	--	1.5	--	--	1.9	2.1	4.2	0.35%
Egypt	4.8	5.1	2.2	1.9	4.7	4.1	2.8	3.5	1.4	2.6	3.1	4.2	0.02%
Mexico	2.1	5.9	5.3	--	5.8	1.8	3.2	--	2.7	3.0	8.5	4.0	0.21%
Qatar	--	--	3.4	--	4.6	--	4.1	--	--	2.2	--	4.0	0.10%
Philippines	--	--	--	--	4.6	--	--	--	1.5	--	--	3.7	0.09%
Turkey	4.5	--	2.1	2.9	5.8	--	3.7	--	3.0	3.3	3.4	3.7	0.06%
Peru	6.7	2.6	3.3	2.9	3.6	--	4.3	--	2.3	1.6	5.1	3.3	0.03%
Saudi Arabia	0.5	3.8	4.6	3.5	4.0	2.1	1.6	--	3.0	0.6	2.4	3.2	0.31%
Overall	5.3	5.6	6.3	5.4	5.7	5.6	6.3	6.8	5.5	5.0	7.0	5.9	--
Index Weight	8.76%	12.19%	7.74%	3.20%	12.91%	12.77%	10.11%	20.41%	5.08%	3.64%	3.20%	--	--

Source: FactSet Portfolio Analysis, as of July 2020. Percentage of holdings in the portfolio qualifying for ESG Score: 85%

# INVESTORS PREFER ACTIVELY MANAGED ESG

Since mid-2015, net inflows into active products considered as ESG funds by Morningstar has been growing at a much faster clip than passive products. Active leading is even more evident for environmentally focused funds.

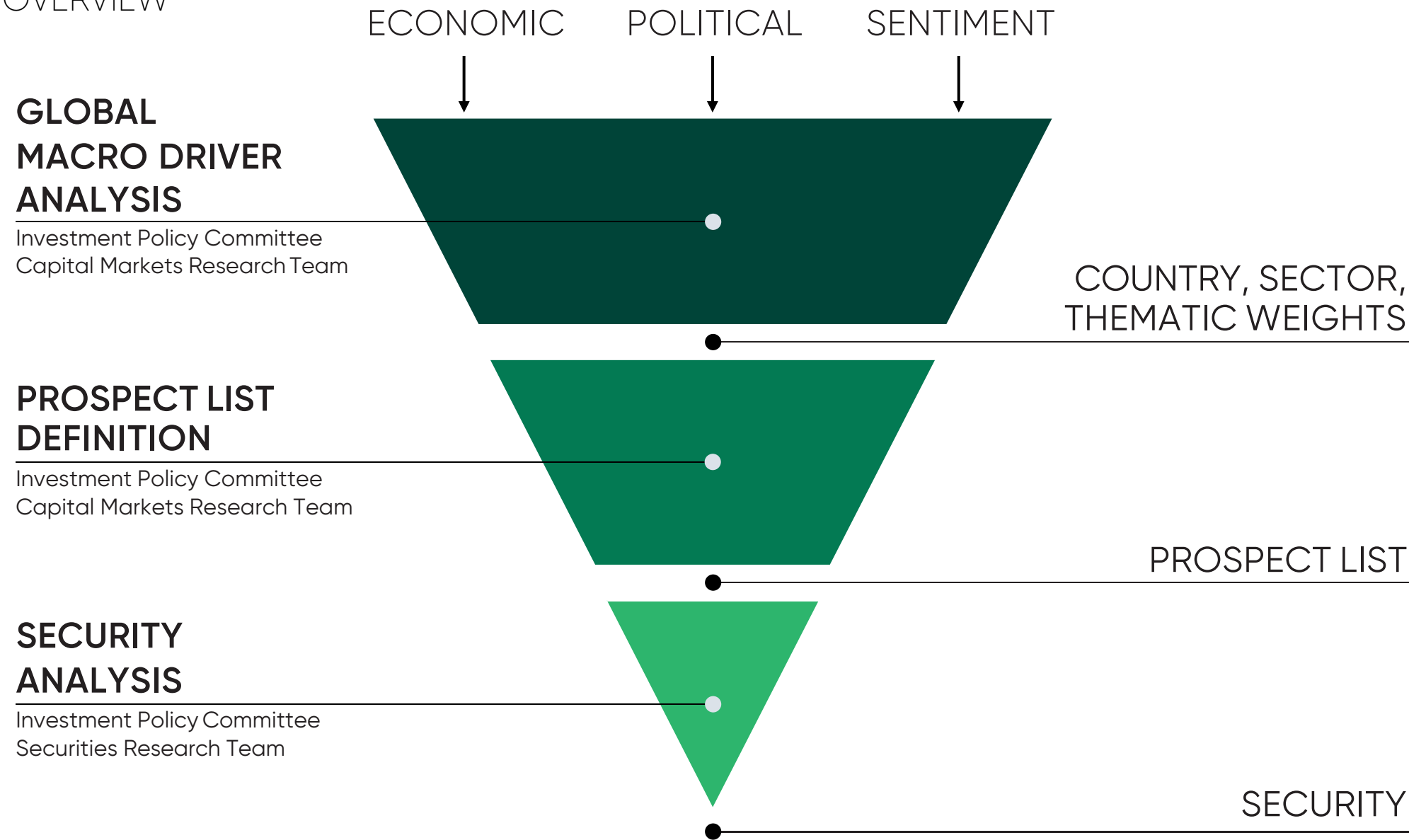


Source: Morningstar Direct as of 6/30/2020. Cumulative net flows shown for 1/1/2015 to 6/30/2020. Top chart shows active and passive cumulative net inflows for all open-end funds & ETF's classified as satisfying the "ESG overall" sustainable investment criteria (21,148 products). Bottom chart shows active and passive cumulative net inflows for all open-end funds & ETF's classified as satisfying the "Environmental" sustainable investment criteria's (3,517 products). As products may satisfy multiple criteria, some funds may be represented on both charts.



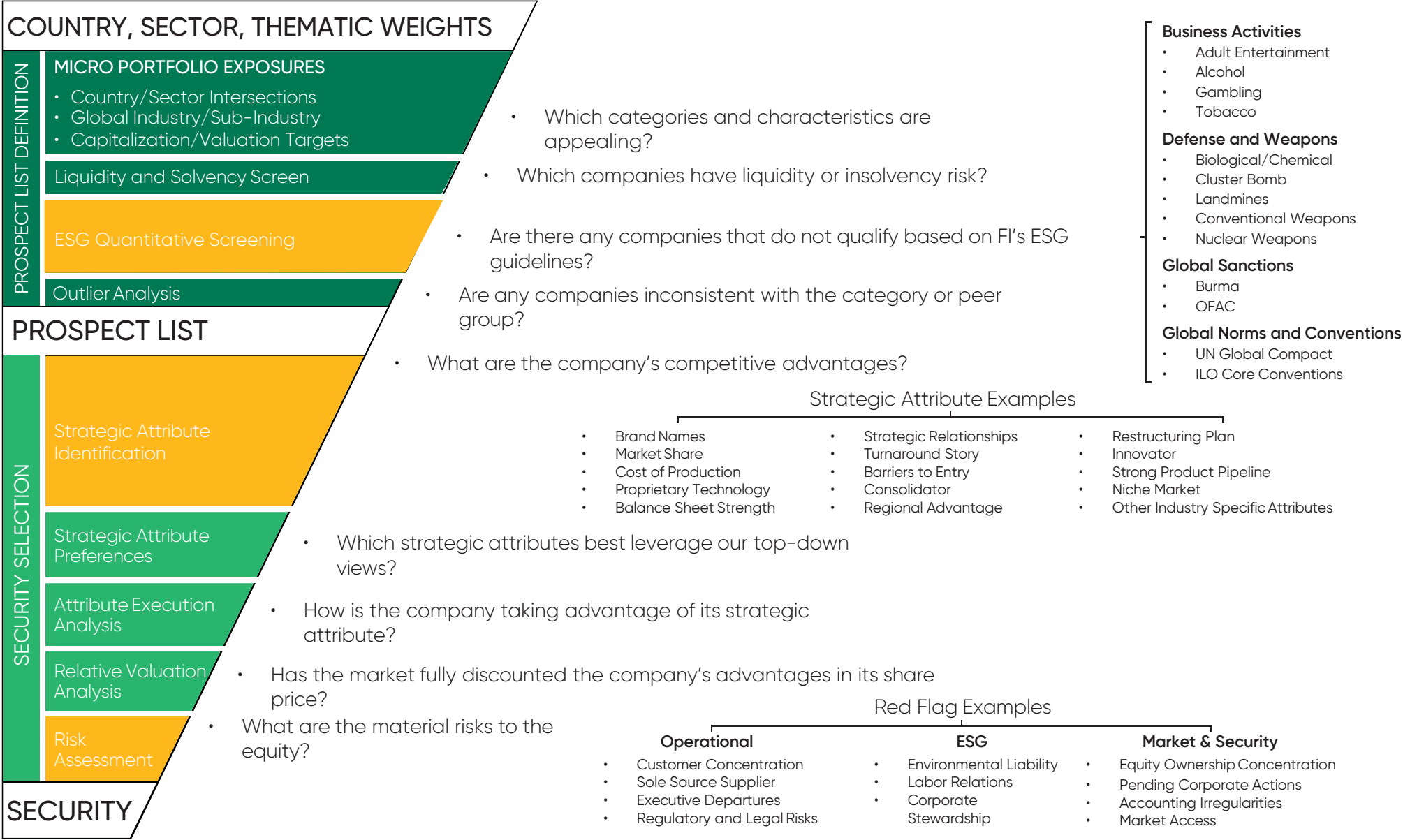
# TOP-DOWN INVESTMENT PROCESS

## OVERVIEW



# PROSPECT LIST DEFINITION AND EQUITY SELECTION

## FROM COUNTRY, SECTOR AND THEMATIC WEIGHTS TO THE PORTFOLIO



# PORTFOLIO DRIVERS

		ECONOMIC	POLITICAL	SENTIMENT
DRIVERS		<ul style="list-style-type: none"><li>• Yield curve spreads</li><li>• Access to credit</li><li>• Relative GDP growth</li><li>• Monetary base/growth</li><li>• Currency strength</li><li>• Relative interest rates</li><li>• Inflation</li><li>• Debt level</li><li>• Leading economic indicators</li></ul>	<ul style="list-style-type: none"><li>• Taxation</li><li>• Property rights</li><li>• Structural reform</li><li>• Privatization</li><li>• Trade/capital barriers</li><li>• Current account</li><li>• Government stability</li><li>• Political turnover</li></ul>	<ul style="list-style-type: none"><li>• Mutual fund flows</li><li>• Relative style, asset class, valuation</li><li>• Media coverage</li><li>• Institutional searches</li><li>• Consumer confidence</li><li>• Foreign investments</li><li>• Professional investors</li><li>• Forecasts</li><li>• Risk aversion</li></ul>
	ESG CONSIDERATIONS	<ul style="list-style-type: none"><li>• Costs of environmental regulation</li><li>• Resource dependency and access</li><li>• Wages &amp; labor costs</li><li>• Carbon emissions programs</li><li>• Embargos and tariffs</li></ul>	<ul style="list-style-type: none"><li>• Hostile governments/regimes</li><li>• Governmental influence on public companies</li><li>• Environmental legislation</li><li>• Human rights</li><li>• Corruption</li><li>• Market reforms impacting private property</li><li>• Labor rights and practices</li></ul>	

# COMPANY LEVEL ESG REVIEW

## ENVIRONMENTAL

### Do the company's operations or industry introduce significant environmental risk?

- Biodiversity and land use
- Toxic emissions and waste
- Supply chain management
- Water stress
- Nuclear
- CO<sup>2</sup> emissions

## SOCIAL

### Do the company's operations or industry introduce significant social risk?

- Human rights abuse or use of child labor or animal testing
- Involvement in adult entertainment, alcohol, gambling, genetic engineering, and tobacco
- Weapons related involvement including biological, conventional, nuclear, cluster munitions, civilian firearms, and landmines
- Involvement with controversial countries (Burma, Sudan, Iran, North Korea, Libya, Syria, others)

## GOVERNANCE

### Do the company's operations or industry introduce significant governance risk?

- Review government influence/control
- Review largest shareholders, management ownership/transactions
- Executive departures
- Board construction and independence
- Controversial investments, bribery, and fraud

*The above list is shown for illustrative purposes and is not all inclusive. This constitutes the general views of FI, and no assurances are made FI will continue to hold these views, which may change at any time based on new information, analysis or reconsideration.*

# SAMPLING OF MECHANICAL SCREENS

## DEFENSE AND WEAPONS

- Biological/chemical\*\*\*
- Conventional\*
- Depleted uranium weapons production
- Nuclear\*\*\*
- Cluster munitions (any ties)
- Civilian firearms
- Landmines (any ties)

## BUSINESS ACTIVITIES

- Adult entertainment\*
- Alcohol/gambling/tobacco\*
- Child labor controversy
- Genetic engineering\*
- Animal welfare
- Thermal coal
- Extraction & power generation\*\*

## GLOBAL SANCTIONS

- US Office of Foreign Asset Control (OFAC)
- EU sanctioned entities
- Canada's Special Economic Measures Act (SEMA)
- Australian Department of Foreign Affairs and Trade (DFAT)

## GLOBAL NORMS AND CONVENTIONS

- The Norwegian Global Pension Fund restriction list
- UN global compact
- ILO core conventions
- Universal Declaration of Human Rights

\*Maximum 5% of revenue

\*\*Maximum 30% of revenue or power generation

\*\*\*Maximum 0% of revenue

# SPECTRUM OF ESG OFFERINGS

**Benchmark:** US, Foreign, Global, Emerging Markets

- Performance Objective: Excess return of roughly 4% annualized over a full market cycle

## **Sustainability and ESG Targets and Goals (Customizable):**

- Sustainable Impact Metric Targets
  - Focus on companies positively aligned with the United Nations Sustainable Development Goals (SDG) with a particular emphasis on SDGs 3, 5, 6, 7, 8, 9, 12, 13
  - Long term goal of 2x the exposure to sustainable impact revenue relative to the benchmark
- Carbon Reduction:
  - 50% carbon intensity reduction compared to the benchmark
  - Will not purchase worst 20% of companies in the benchmark by carbon intensity
- ESG Screens – Mechanically screen out any companies based on a variety of ESG factors such as (but not limited to):
  - Revenue limits tied to select business activities such as alcohol, tobacco, gambling, adult entertainment, and weapons
  - Power generation or revenue from thermal coal
  - Government sanctions list (EU, OFAC, UN Security Council, etc.)
  - Non-compliance with the UN's Global Compact Principles or fail the International Labor Organization's Core Conventions
- Portfolio ESG Score (using MSCI ESG research and scoring)
  - Target portfolio average rating of one grade above benchmark
  - Restrict purchasing CCC rated firms

# INVESTMENT STRATEGIES

## INVESTMENT POLICY COMMITTEE

**CAPITAL MARKETS  
RESEARCH TEAM**

**SECURITIES  
RESEARCH TEAM**

**CAPITAL MARKETS  
INNOVATION TEAM**



**US EQUITY**  
\$7.6 BILLION

**GLOBAL EQUITY**  
\$10.2 BILLION

**GLOBAL EX-US EQUITY**  
\$5.3 BILLION

**EM/FM EQUITY**  
\$14.7 BILLION

**US Total Return**  
*S&P 500*

**US Small and Mid Cap Core**  
*Russell 2500*

**US Small and Mid Cap Value**  
*Russell 2500 Value*

**US Small Cap Core**  
*Russell 2000*

**US Small Cap Value**  
*Russell 2000 Value*

**US Small Cap Opportunities**  
*Russell Micro Cap Value*

**All World Equity**  
*MSCI ACWI*

**Global Total Return**  
*MSCI World*

**Global Total Return Focused**  
*MSCI World*

**Global High Dividend Yield**  
*MSCI World High Dividend Yield*

**Global Long/Short**  
*MSCI World (50%), 3-Month T-Bill (50%)*

**Global Small Cap**  
*MSCI World Small Cap*

**All Foreign Equity**  
*MSCI ACWI ex-US*

**All Foreign Equity Growth**  
*MSCI ACWI ex-US Growth*

**All Foreign Equity Focused**  
*MSCI ACWI ex-US*

**Foreign Equity**  
*MSCI EAFE*

**All Foreign Equity Small Cap**  
*MSCI ACWI ex-US Small Cap*

**Foreign Equity Small Cap**  
*MSCI World ex-US Small Cap*

**Emerging Markets All Cap**  
*MSCI Emerging Markets IMI*

**Emerging Markets Equity**  
*MSCI Emerging Markets*

**Emerging Markets Small Cap**  
*MSCI Emerging Markets Small Cap*

**Emerging and Frontier  
Markets Equity**  
*MSCI Emerging + Frontier Markets*

**Frontier Markets Equity**  
*MSCI Frontier Markets*

*All strategies available as SRI, ESG, or Impact*

*As of 7/31/2020. The assets listed above may not match composite assets due to removal of underlying accounts across some strategies. The total of strategy assets under each of the four categories may not match the total FIIG assets due to the inclusion of some accounts in multiple strategies and the exclusion of some accounts from all strategies.*

# COUNTRY ALLOCATION

As of 7/31/2020











Country	EBMUD	MSCI ACWI ex-US	Relative Weight
France	16.4%	6.9%	9.5%
Netherlands	8.1%	2.8%	5.5%
United Kingdom	14.0%	8.9%	5.1%
Germany	9.1%	6.0%	3.1%
Taiwan	5.8%	3.9%	1.9%
China	13.4%	12.3%	1.1%
Indonesia	1.3%	0.4%	0.9%
Brazil	2.2%	1.6%	0.6%
Norway	0.9%	0.4%	0.5%
Belgium	0.9%	0.6%	0.3%
South Korea	3.7%	3.4%	0.3%
Denmark	1.8%	1.6%	0.2%
Israel	0.6%	0.4%	0.2%
Italy	1.0%	1.5%	-0.5%
Malaysia	0.0%	0.5%	-0.5%
Mexico	0.0%	0.5%	-0.5%
Thailand	0.0%	0.6%	-0.6%
Saudi Arabia	0.0%	0.7%	-0.7%
Singapore	0.0%	0.7%	-0.7%
Spain	0.8%	1.5%	-0.7%
Finland	0.0%	0.7%	-0.7%
Russia	0.0%	0.9%	-0.9%
India	1.3%	2.4%	-1.1%
South Africa	0.0%	1.1%	-1.1%
Hong Kong	0.9%	2.1%	-1.2%
Australia	3.0%	4.4%	-1.4%
Sweden	0.0%	2.1%	-2.1%
Switzerland	2.8%	6.7%	-3.9%
Japan	10.9%	15.5%	-4.6%
Canada	1.2%	6.6%	-5.4%










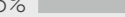
Percent of portfolio market value that is allocated to a given country, excluding cash. For illustrative purposes, countries for which the portfolio has no weight and the benchmark has less than 0.5% weight have been excluded. Relative Weight calculation is based on the difference between the rounded values for portfolio and benchmark weight. The Netherlands include an opportunistic weight via NXP Semiconductors which is dually headquartered in Austin, Texas and Eindhoven, Netherlands. NXP Semiconductors is listed on the NASDAQ. Sources: Eagle Investment Systems LLC and FactSet.



# SECTOR AND INDUSTRY ALLOCATION

As of 7/31/2020

Sector	EBMUD	MSCI ACWI ex-US	Relative Weight
Information Technology	33.0%	11.7%	 21.3%
Industrials	13.8%	11.1%	 2.7%
Energy	5.6%	4.6%	 1.0%
Health Care	10.5%	10.5%	0.0%
Communication Services	6.5%	7.6%	-1.1% 
Consumer Discretionary	10.9%	12.7%	-1.8% 
Materials	5.2%	7.9%	-2.7% 
Real Estate	0.0%	2.7%	-2.7% 
Utilities	0.0%	3.5%	-3.5% 
Consumer Staples	6.5%	10.0%	-3.5% 
Financials	7.9%	17.6%	-9.7% 

Industry	EBMUD	MSCI ACWI ex-US	Relative Weight
Semiconductors & Semiconductor Equipment	13.0%	3.8%	 9.2%
Software	9.9%	1.6%	 8.3%
Professional Services	5.5%	1.1%	 4.4%
Textiles Apparel & Luxury Goods	4.6%	1.9%	 2.7%
Interactive Media & Services	4.8%	2.6%	 2.2%
Automobiles	0.0%	2.2%	-2.2% 
Food Products	0.9%	3.2%	-2.3% 
Chemicals	0.0%	3.1%	-3.1% 
Insurance	0.9%	4.5%	-3.6% 
Banks	4.8%	9.7%	-4.9% 

Percent of portfolio market value that is allocated to a given sector and industry, excluding cash. Relative Weight calculation is based on the difference between the rounded values for portfolio and benchmark weight. Sources: Eagle Investment Systems LLC and FactSet.

# PORTFOLIO HOLDINGS AND CHARACTERISTICS

Top 10 Holdings	Country	Sector	Weight (%)
Taiwan Semiconductor Manufacturing	Taiwan	Information Technology	4.9
Tencent	China	Communication Services	4.8
ASML	Netherlands	Information Technology	4.5
Keyence	Japan	Information Technology	4.1
SAP	Germany	Information Technology	4.0
Alibaba Group	China	Consumer Discretionary	3.9
Samsung Electronics	South Korea	Information Technology	3.7
LVMH Moët Hennessy	France	Consumer Discretionary	3.0
NXP Semiconductors*	Netherlands	Information Technology	2.8
Experian	United Kingdom	Industrials	2.6

Portfolio Characteristic	EBMUD	MSCI ACWI Ex-US
Number of Holdings	72	2,370
Weighted Average Market Cap (\$ Billions)	157.7	93.4
Trailing Price / Earnings	25.6	16.9
Price / Book Value	3.4	2.1
Price / Sales	2.3	1.2
Dividend Yield (%)	1.9	2.7

As of 7/31/2020. The foregoing information is based on the East Bay MUD AA portfolio. Sources: Eagle Investment Systems LLC & FactSet. \*The Netherlands include an opportunistic weight via NXP Semiconductors which is dually headquartered in Austin, Texas and Eindhoven, Netherlands. NXP Semiconductors is listed on the NASDAQ.

# INVESTMENT POLICY COMMITTEE

## BIOGRAPHIES

### KEN FISHER

41 Years at  
Fisher Investments

Ken Fisher is the founder, Executive Chairman and Co-Chief Investment Officer of Fisher Investments, a money management firm serving large institutions and high net worth individuals globally. With nearly 4,000 employees, the firm has offices in Washington, California, Texas, the United Kingdom, Germany, Dubai, Australia, Japan, Ireland, and Luxembourg with further global expansion under way.

His *Forbes* "Portfolio Strategy" column ran for 32 ½ years through 2016, making him the longest continuously running columnist in its history. Ken's columns have been featured in the UK's *Financial Times*, *USA Today*, Germany's *Focus Money* and *Handelsblatt*, Italy's *Il Sole 24 Ore*, Denmark's *Børsen*, the Netherlands' *De Telegraaf*, Spain's *El Economista*, Switzerland's *Handelszeitung*, Austria's *Trend*, France's *L'Opinion*, Ireland's *Independent*, Belgium's *La Libre*, China's *Caixin*, Taiwan's *Business Weekly*, South Korea's *Chosun Ilbo* and the *Hong Kong Economic Journal*. Ken authored 11 books, including four New York Times bestsellers—and has been published, interviewed and written about in media globally.

His 1970s theoretical work pioneered an investment tool called the Price-to-Sales Ratio, now a core element of modern financial curricula. A prize-winning researcher, his credits span a multitude of professional and scholarly journals in addition to his firm's output—both in traditional and behavioral finance. In 2010, Investment Advisor recognized him on its "Thirty for Thirty" list as among the industry's 30 most influential individuals of the last three decades. In 2017, Investment News named Ken to its inaugural list of "Icons & Innovators" who have shaped and transformed the financial advice profession.

### EXECUTIVE CHAIRMAN, CO-CIO

### JEFFERY SILK

37 Years at  
Fisher Investments

Jeffery (Jeff) Silk is a Vice Chairman and Co-Chief Investment Officer of Fisher Investments. Jeff oversees all portfolio management functions across a wide range of investment strategies at the firm. Jeff joined the firm in 1983 as one of the firm's first employees. Prior to his current role, Jeff was President and Chief Operating Officer. He has also served as Director of Trading and Operations, where he was instrumental in developing the firm's first portfolio management, research and trading technologies. Jeff received his undergraduate degree from the University of San Francisco.

### VICE CHAIRMAN, CO-CIO

# INVESTMENT POLICY COMMITTEE

## BIOGRAPHIES

### WILLIAM GLASER

21 Years at  
Fisher Investments

William (Bill) Glaser is the Executive Vice President of Portfolio Management and a member of the Investment Policy Committee (IPC). In those roles, he oversees the firm's Portfolio Management Department, which includes the Research, Investment Operations, Investment Solutions and Portfolio Evaluation Groups. He is also a member of the Technology Transformation Committee. Bill speaks regularly at client seminars and meets with institutional clients globally, providing information regarding global economic factors, our market outlook and portfolio positioning.

Bill joined Fisher Investments in 1999 and has served on the firm's five-member IPC since 2011. Prior to his current responsibilities, Bill held several different positions at the firm, including Capital Markets Research Team Leader, Securities Research Team Leader and Securities Research Analyst. Bill has a degree in Finance from the University of Arizona.

### MICHAEL HANSON

18 Years at  
Fisher Investments

Michael Hanson is a Senior Vice President of Research and a member of the Investment Policy Committee (IPC). In this role, Michael oversees the Research Group and is responsible for the development of capital markets and securities research.

Michael joined Fisher Investments in 2002. Prior to his current role, he held a variety of positions, including Vice President of Portfolio Management Communications, Capital Markets Team Leader and Institutional Client Services Manager. Before joining the firm, he worked at Bear Stearns as a Corporate Finance Analyst in the Global Technology Group.

Michael regularly meets with clients globally, sharing the firm's market outlook, current portfolio positioning and answering questions. Michael appears regularly on various financial media programs, including those on Yahoo Finance and the Cheddar TV Network. He is the author of six books, including 20/20 Money: See the Markets Clearly, Gain Focus and Invest Better than the Pros. He speaks regularly around the US on a variety of topics ranging from economics to psychology. He was also a lecturer at the Haas School of Business at the University of California, Berkeley, where he taught Investment Management Topics.

Michael received his undergraduate degree from Claremont McKenna College and his doctorate in Depth Field Psychology from Pacifica Institute.

### EXECUTIVE VP, PORTFOLIO MANAGEMENT

### SENIOR VP OF RESEARCH

# INVESTMENT POLICY COMMITTEE

## BIOGRAPHIES

### AARON ANDERSON

15 Years at  
Fisher Investments

Aaron Anderson is a Senior Vice President of Research and a member of the Investment Policy Committee (IPC). In those roles, Aaron oversees the firm's global macroeconomic and capital markets research.

### SENIOR VP OF RESEARCH

Aaron joined Fisher Investments in 2005 and has served on the firm's five-member IPC since 2011. His previous roles at the firm include Capital Markets Research Team Leader, Capital Markets Research Analyst and Innovation Manager. Prior to joining Fisher Investments, Aaron worked at Deutsche Bank Alex Brown as an Assistant Vice President.

Aaron regularly meets with private and institutional clients globally, sharing the firm's market outlook, current portfolio positioning and answering questions. Aaron's views on global market conditions and geopolitical events are featured in publications globally, including *The Wall Street Journal*, *Financial Times*, *Reuters*, *MarketWatch*, *CNN.com*, *The Telegraph*, *Forbes* and *Investing.com*—among many others. He also appears regularly in the financial media, programs on CNBC, Yahoo Finance and the Cheddar TV Network.

Aaron has written two books, including *Own the World: How Smart Investors Create Global Portfolios*. He holds undergraduate degrees in Geophysics from the University of California, Santa Barbara and Applied Economics from the University of San Francisco.

# INVESTMENT PROFESSIONALS

## BIOGRAPHIES

### **JILL HITCHCOCK      SENIOR EXECUTIVE VICE PRESIDENT, US PRIVATE CLIENT GROUP**

21 Years at  
Fisher Investments

Jill joined Fisher Investments in 1999 and is one of five Senior Executive Vice Presidents who lead the firm's major business divisions. Currently, Jill is responsible for the US Private Client Group, which serves the financial needs of high net worth clients across the United States. In this role, she oversees over 1,500 of the firm's employees. Prior to her current responsibilities, Jill held a variety of other roles throughout the firm, including Assistant Director of Client Services, Group Vice President of Research, Group Vice President of Human Capital and Executive Vice President of US Private Client Services. Jill received her bachelor's degree from the University of California, Berkeley.

### **JUSTIN ARBUCKLE      SENIOR EXECUTIVE VICE PRESIDENT, INSTITUTIONAL**

21 Years at  
Fisher Investments

As Senior Executive Vice President for Fisher Investments Institutional Group, Justin oversees the firm's institutional client service, operations, business development and marketing efforts. In his capacity as a Portfolio Specialist, he acts as a liaison between the Investment Policy Committee and both current and prospective institutional clients and consultants. Prior to joining Fisher Investments Institutional Group, Justin was a Research Analyst where he provided company specific research for existing and prospective portfolio holdings.

### **BEN KOTHE      VICE PRESIDENT, RELATIONSHIP MANAGER**

19 Years at  
Fisher Investments

Ben serves as a liaison between the Investment Policy Committee and our institutional clients and their investment consultants. In this role, Ben communicates portfolio strategy, market outlook, performance, stock analysis and conducts ad hoc research projects. Prior to his current role, Ben was the Vice President of Marketing & Analytics where he oversaw the firm's global institutional marketing efforts. Previously, Ben was an Investment Counselor responsible for maintaining relationships with high-net-worth private clients, as well as a Group Manager within Investment Operations where he supervised back office activities.

# DISCLOSURES

## FISHER ALL FOREIGN EQUITY PERFORMANCE



Fisher Investments Institutional Group claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. The firm has been independently verified for the periods January 01, 1990 through December 31, 2018. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. The Fisher Investments Institutional Group All Foreign Equity Composite has been examined for the periods May 01, 2004 through December 31, 2018. The verification and performance examination reports are available upon request. Performance is preliminary as of August 05, 2020.

1. Fisher Asset Management, LLC, doing business as Fisher Investments (FI), is an investment adviser registered with the US Securities and Exchange Commission. As of July 31, 2020 FI managed assets valued over \$122 billion. FI maintains two principal business units – Fisher Investments Institutional Group (FIIG) and Fisher Investments Private Client Group (FIPCG). FIPCG services substantially all private client accounts managed by FI and FIIG services substantially all institutional accounts managed by FI (including those accounts sub-managed for Fisher Investments Europe and Fisher Investments Australasia). The Investment Policy Committee is responsible for all strategic investment decisions for both business units.
2. The FIIG All Foreign Equity composite consists of accounts managed against the MSCI All Country World Index ex US (MSCI ACWI ex US) Index with a view towards capital appreciation.
3. MSCI ACWI Ex US Index is a free float-adjusted market cap-weighted index that is designed to measure the equity market performance of 22 of 23 developed market countries (excluding the United States) and 26 emerging market countries. Unless otherwise specified, returns shown include dividends after deducting estimated withholding taxes. MSCI calculates estimated withholding taxes using the maximum rate of the constituent company's country of incorporation applicable to non-resident institutional investors that do not benefit from double-taxation treaties.
4. For the period from May 1, 2004 through October 31, 2007, performance for this composite was determined using time-weighted rates of return, with valuation on at least a monthly basis and geometric linking of periodic returns. On October 1, 2007, Fisher Investments adopted a new performance calculation system using time-weighted rates of return, with valuation on a daily basis and geometric linking of periodic returns. Valuations are based on trade date. Neither leverage nor derivatives have been used in obtaining performance. Returns reflect the reinvestment of dividends, royalties, interest and other forms of accrued income. Composite performance is presented net of foreign withholding taxes on dividends, interest income and capital gains. Withholding taxes may vary according to each investor's domicile. Net performance figures are presented after deduction of actual management fees and are inclusive of performance based fees where applicable.
5. Valuations and returns are computed and stated in US Dollars.
6. The dispersion of annual returns is measured by the asset-weighted standard deviation across portfolio returns gross of fees represented within the composite for the full year. The composite dispersion is shown as N/A when there is 1 or fewer accounts in the composite for the full calendar year.
7. Fisher Investments Institutional Group standard fee schedule for All Foreign Equity (also listed in Part 2A of Fisher Investments' Form ADV) is: 0.75% on the first \$25 million, 0.65% on the next \$25 million, 0.60% on the next \$50 million, 0.50% on the next \$50 million, and negotiable beyond \$150 million.
8. This composite was created in February 2004
9. A list of FIIG composite descriptions is available upon request.
10. The policies regarding valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.
11. Effective June 2015 individual portfolio cash flows (either cash or in-kind legacy holdings) greater than 50% of portfolio assets or greater than \$500 Million USD were placed in temporary accounts until the assets were implemented or disbursed, and performance of these temporary accounts were excluded from the composite.
12. Three year annualized ex-post standard deviation is measured using asset-weighted monthly composite returns gross of fees.
13. Investment in securities involves the risk of loss. Past performance is no guarantee of future returns. Other methods may produce different results, and the results for individual portfolios and for different periods may vary depending on market conditions and the composition of the portfolio.
14. GIPS® is a registered trademark of CFA Institute. CFA Institute has not been involved in the preparation or review of this report.

# DISCLOSURES

## FISHER ALL FOREIGN EQUITY PERFORMANCE



Year	Gross	Net	Benchmark	Number of Portfolios	Composite Dispersion	Total Strategy Assets at End of Period (USD Millions)	FI Institutional Assets*** (USD Millions)	% of FI Institutional Assets	Portfolio Trailing 3 Yr. Std. Dev.	Benchmark Trailing 3 Yr. Std. Dev.
2019	28.9%	28.3%	21.5%	10	1.1%	\$2,105	\$39,833	5.3%	13.3%	11.5%
2018	-15.6%	-15.9%	-14.2%	18	0.2%	\$3,347	\$37,904	8.8%	12.9%	11.5%
2017	30.1%	29.5%	27.2%	19	0.5%	\$4,156	\$44,197	9.4%	13.0%	11.9%
2016	2.1%	1.6%	4.5%	19	0.6%	\$3,322	\$33,962	9.8%	13.5%	12.5%
2015	-1.6%	-2.1%	-5.7%	18	0.4%	\$3,383	\$30,938	10.9%	12.6%	12.1%
2014	-2.0%	-2.4%	-3.9%	17	0.2%	\$3,238	\$28,167	11.5%	13.3%	12.8%
2013	17.5%	17.0%	15.3%	17	0.2%	\$3,852	\$24,000	16.0%	18.6%	16.2%
2012	16.7%	16.2%	16.8%	15	0.5%	\$3,020	\$19,074	15.8%	22.8%	19.3%
2011	-12.3%	-12.7%	-13.7%	14	0.2%	\$2,588	\$13,768	18.8%	26.6%	22.7%
2010	18.1%	17.6%	11.2%	8	0.8%	\$1,929	\$13,723	14.1%		

Trailing as of 07/31/2020	Gross	Net	Benchmark
YTD	-2.6%	-2.9%	-7.0%
1 Year	8.1%	7.6%	0.7%
3 Years*	4.2%	3.7%	1.4%
5 Years*	5.4%	4.9%	3.2%
10 Years*	7.0%	6.5%	4.5%
Since Inception*	7.2%	6.7%	5.5%
Since Inception**	207.8%	185.4%	138.9%

\*Annualized

\*\*Cumulative

\*\*\*Total FI Institutional Assets and % of FI Institutional Assets represent assets within Fisher Investments Institutional Group strategies only.



# DISCLOSURES

## FIRM

Fisher Investments (FI) is an investment adviser registered with the Securities and Exchange Commission. As of July 31, 2020, FI managed over \$129 billion, including assets sub-managed for its wholly-owned subsidiaries. FI and its subsidiaries maintain four principal business units – Fisher Investments Institutional Group (FIIG), Fisher Investments Private Client Group (FIPCG), Fisher Investments International (FI), and Fisher Investments 401(k) Solutions Group (401(k) Solutions). These groups serve a global client base of diverse investors including corporations, public and multi-employer pension funds, foundations and endowments, insurance companies, healthcare organizations, governments and high-net-worth individuals. FI's Investment Policy Committee (IPC) is responsible for investment decisions for all investment strategies.

For purpose of defining “years with Fisher Investments,” FI was established as a sole proprietorship in 1979, incorporated in 1986, registered with the US SEC in 1987, replacing the prior registration of the sole proprietorship, and succeeded its investment adviser registration to a limited liability in 2005. “Years with Fisher Investments” is calculated using the date on which FI was established as a sole proprietorship through July 31, 2020.

FI is wholly owned by Fisher Investments, Inc. Since Inception, Fisher Investments, Inc. has been 100% Fisher-family and employee owned, currently Fisher Investments Inc. beneficially owns 100% of Fisher Investments (FI), as listed in Schedule A to FI's Form ADV Part 1. Ken and Sherrilyn Fisher, as co-trustees of their family trust, beneficially own more than 75% of Fisher Investments, Inc., as noted in Schedule B to FI's Form ADV Part 1.

## REPRESENTATIVE PORTFOLIO

The foregoing information is based on a representative portfolio (rather than a composite or an average of a group of portfolios), excluding cash, unless otherwise denoted. This representative portfolio information is derived from an actual client portfolio. Clients' portfolio characteristics may differ given the various investment restrictions, cash requirements and other circumstances that can apply to particular clients. Portfolio information is as of the dates indicated, and no assurances can be given that it has not changed or that it will not change in the future.

## EQUITY SELECTION

The equity selection process presented herein is for illustrative purposes only. It should not be assumed that it represents, on its own, the sole method used by Fisher Investments to make investment recommendations. Other techniques may produce different results, and the results for individual clients and for different periods may vary depending on market conditions and the composition of their portfolios. Any mention of a particular equity in this illustration is not intended to represent a recommendation to buy or sell that equity. Rather, it is intended to illustrate a point. There can be no assurance that advisory clients invested in any equity mentioned or continue to hold such a equity. It should not be assumed that the future performance of any equity mentioned will be profitable. Upon request, Fisher Investments will provide a list of its recommendations over the past year. Investment in equities involves the risk of loss. Past performance is no guarantee of future returns.

FISHER INVESTMENTS<sup>TM</sup>

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INSTITUTIONAL GROUP

# East Bay Municipal Utility District

September 17, 2020

## Q2 2020 Performance Report

1. Introduction
2. Economic & Market Update
3. World Markets in the Second Quarter of 2020
4. EBMUD Portfolio Review
  - a. Second Quarter Performance Review
  - b. July Performance Update
5. Manager Watch Screens
6. Manager Compliance Certification Responses
7. Appendix

# Introduction

Performance Summary								
	Market Value (\$)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)
<b>EBMUD Total Plan Composite</b>	<b>1,853,379,610</b>	<b>100.0</b>	<b>13.2</b>	<b>2.8</b>	<b>6.0</b>	<b>6.7</b>	<b>9.8</b>	<b>6.4</b>
<i>Total Plan Bench<sup>1</sup></i>			<i>12.8</i>	<i>-0.1</i>	<i>4.8</i>	<i>5.9</i>	<i>8.9</i>	<i>5.8</i>
<b>US Equity Composite</b>	<b>485,614,289</b>	<b>26.2</b>	<b>21.9</b>	<b>6.5</b>	<b>10.4</b>	<b>10.3</b>	<b>14.0</b>	<b>7.1</b>
<i>Russell 3000 Hybrid<sup>2</sup></i>			<i>22.0</i>	<i>6.5</i>	<i>10.0</i>	<i>10.0</i>	<i>13.7</i>	<i>6.8</i>
<b>NonUS Equity Composite</b>	<b>403,760,390</b>	<b>21.8</b>	<b>16.3</b>	<b>-4.3</b>	<b>0.1</b>	<b>1.8</b>	<b>5.9</b>	<b>4.3</b>
<i>MSCI ACWI xUS (blend)<sup>3</sup></i>			<i>16.3</i>	<i>-4.4</i>	<i>1.6</i>	<i>2.7</i>	<i>5.5</i>	<i>3.4</i>
<b>Covered Calls Composite</b>	<b>374,594,191</b>	<b>20.2</b>	<b>13.5</b>	<b>0.8</b>	<b>4.9</b>	<b>6.5</b>	--	--
<i>CBOE S&amp;P 500 BuyWrite USD</i>			<i>9.1</i>	<i>-10.3</i>	<i>-0.2</i>	<i>3.0</i>	--	--
<b>Real Estate Composite</b>	<b>95,247,948</b>	<b>5.1</b>	<b>5.9</b>	<b>-1.4</b>	<b>5.0</b>	<b>7.4</b>	<b>11.2</b>	--
<i>NCREIF NPI Lag<sup>4</sup></i>			<i>6.2</i>	<i>-3.3</i>	<i>3.7</i>	<i>6.2</i>	<i>9.5</i>	--
<b>Fixed Income Composite</b>	<b>489,644,754</b>	<b>26.4</b>	<b>5.0</b>	<b>6.8</b>	<b>5.0</b>	<b>4.0</b>	<b>4.2</b>	<b>5.4</b>
<i>Fixed Income Composite Bench<sup>5</sup></i>			<i>3.7</i>	<i>6.3</i>	<i>4.6</i>	<i>3.9</i>	<i>3.8</i>	<i>5.1</i>
<b>Cash Composite</b>	<b>4,517,746</b>	<b>0.2</b>	<b>0.6</b>	<b>2.5</b>	<b>2.0</b>	<b>1.4</b>	<b>0.9</b>	<b>2.2</b>
<i>FTSE T-Bill 3 Months TR</i>			<i>0.1</i>	<i>1.6</i>	<i>1.7</i>	<i>1.2</i>	<i>0.6</i>	<i>1.6</i>

<sup>1</sup> Policy Benchmark consists of 25% Russell 3000 (blend), 25% MSCI ACWIxU.S. (blend), 20% CBOE BXM, 10% BB Aggregate, 10% BB US Intermediate Gov/Cred, 2.5% BB 1-5 Year U.S. High Yield Cash Pay, 2.5% 60% CredSuisLevLoan/40% BBStGovCorp, 2.5% S&P/LSTA Performing Loans, and 2.5% FTSE NAREIT Equity REITs index 12/1/2019-present; see Appendix for historical Policy Benchmark composition.

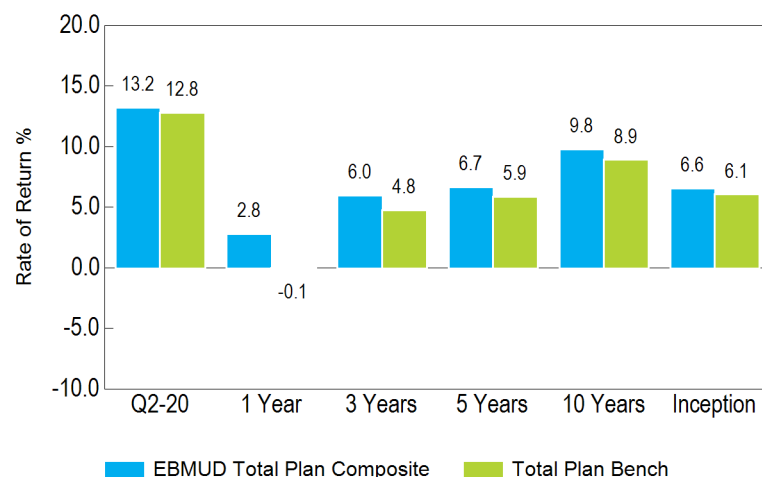
<sup>2</sup> Russell 3000 as of 10/1/05. Prior: 30% S&P500, 10% S&P400, 10% Russell 2000 (4/1/05-9/30/05); 33% S&P500, 10% S&P400, 10% Russell 2000 (9/1/98-3/31/05); 30% S&P500, 15% Wilshire 5000 (4/1/96 - 8/31/98).

<sup>3</sup> MSCI ACWIxU.S. as of 1/1/07; MSCI EAFE ND thru 12/31/06.

<sup>4</sup> 50% NCREIF (lagged), 50% FTSE NAREIT Equity REITs Index as of 11/1/11; NCREIF (lagged) thru 10/31/11.

<sup>5</sup> 40% BB Aggregate, 40% BBgBarc US Intermediate Gov/Cred, 10% ICE BofA ML U.S. Corp Cash Pay BB-B 1-5 Year, and 10% Blend 60% Credit Suisse Leverage Loan/40% BBg BC Short Term Gov/Corp 12/1/2019-present. See Appendix for historical Composite benchmark.

#### Return Summary\* Ending June 30, 2020



\* Performance is gross of fees.

#### Summary of Cash Flows

	Second Quarter	One Year
Beginning Market Value	\$1,638,344,551	\$1,830,424,259
Net Cash Flow	-\$1,677,901	-\$16,024,669
Capital Appreciation	\$216,712,960	\$38,980,020
Ending Market Value	\$1,853,379,610	\$1,853,379,610

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)
<b>EBMUD Total Plan Composite - Gross</b>	<b>13.2</b>	<b>2.8</b>	<b>6.0</b>	<b>6.7</b>	<b>9.8</b>	<b>6.4</b>
<b>EBMUD Total Plan Composite - Net<sup>1</sup></b>	<b>13.2</b>	<b>2.6</b>	<b>5.7</b>	<b>6.4</b>	--	--
<i>Total Plan Bench<sup>3</sup></i>	<i>12.8</i>	<i>-0.1</i>	<i>4.8</i>	<i>5.9</i>	<i>8.9</i>	<i>5.8</i>
<i>InvMetrics Public DB &gt; \$1B Gross Median<sup>2</sup></i>	<i>10.2</i>	<i>1.2</i>	<i>4.9</i>	<i>5.4</i>	<i>7.8</i>	<i>5.4</i>

<sup>1</sup> Historical net returns for the Total Portfolio aggregate are currently available from 2Q 2011.

<sup>2</sup> InvMetrics Public DB > \$1B Universe includes BNY Mellon Public > \$1B Fund Universe and IM client data.

<sup>3</sup> Policy Benchmark consists of 25% Russell 3000 (blend), 25% MSCI ACWI U.S. (blend), 20% CBOE BXM, 10% BB Aggregate, 10% BB US Intermediate Gov/Cred, 2.5% BB 1-5 Year U.S. High Yield Cash Pay, 2.5% 60% CredSuisLevLoan/40% BBStGovCorp, 2.5% S&P/LSTA Performing Loans, and 2.5% FTSE NAREIT Equity REITs index 12/1/2019-present; see Appendix for historical Policy Benchmark composition.

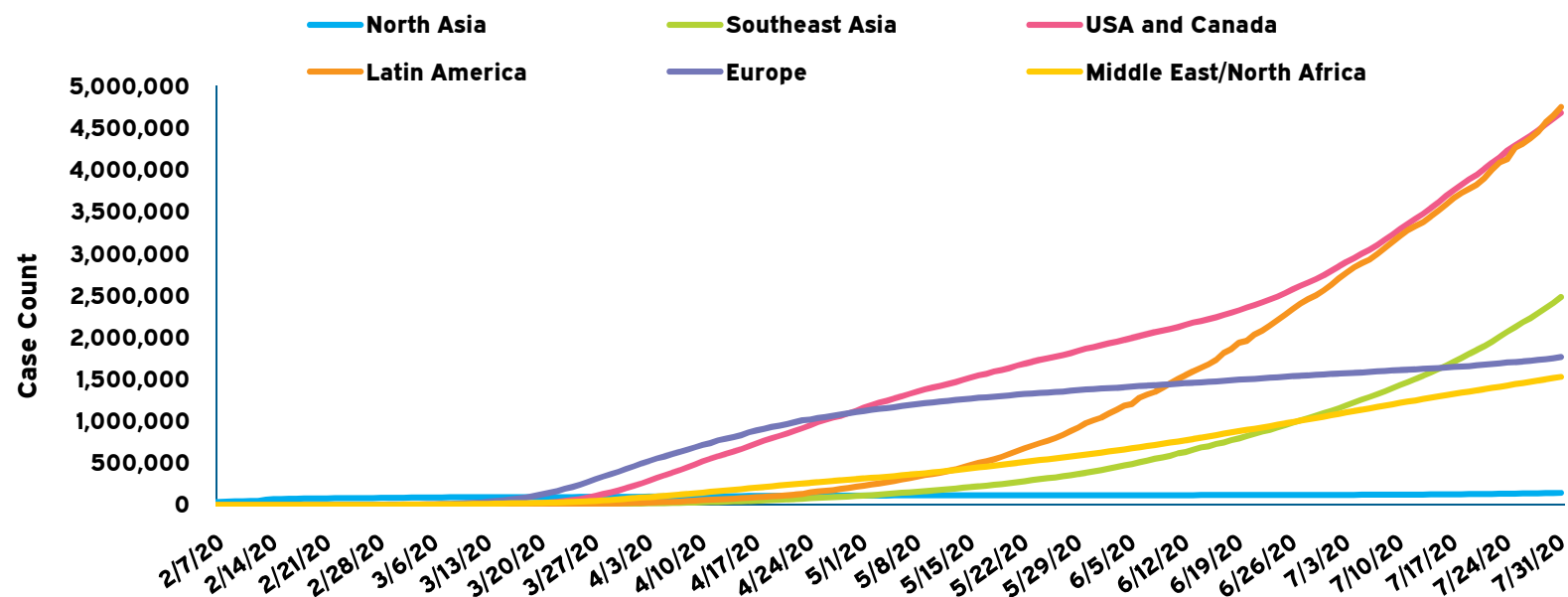
# Economic and Market Update

Data as of July 31, 2020





### Case Count by Select Region<sup>1,2</sup>

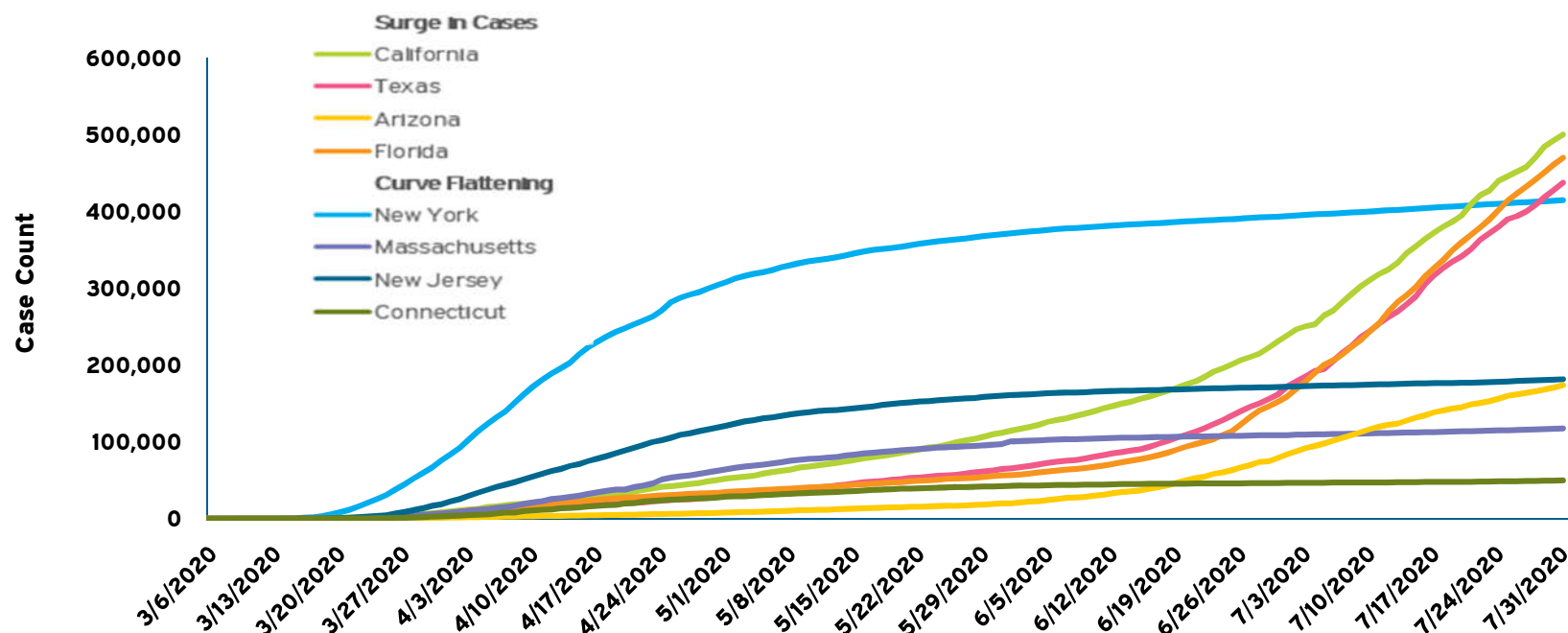


- Cases of COVID-19 continue to grow globally with now over 20 million reported cases across 188 countries.
- The US remains the epicenter, while cases in Latin America are surging, driven by Brazil, which now has the second highest case count. India has also emerged as a hotspot with over 2 million cases.

<sup>1</sup> Source: Bloomberg. Data is as of July 31, 2020.

<sup>2</sup> North Asia: China, Hong Kong, Japan, 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.

### COVID-19 Cases by State<sup>1</sup>



- As the US economy slowly reopens, there has been a spike in cases in certain states that is creating stress on their healthcare systems, leading to officials slowing, or reversing, reopening plans.
- Some of the states that were hardest hit in the early stages made progress on containing the virus, but have also seen small upticks in cases.
- Looking ahead, a continued trend of rising cases could significantly weigh on economic growth.

<sup>1</sup> Source: Bloomberg. Data is as of July 31, 2020.

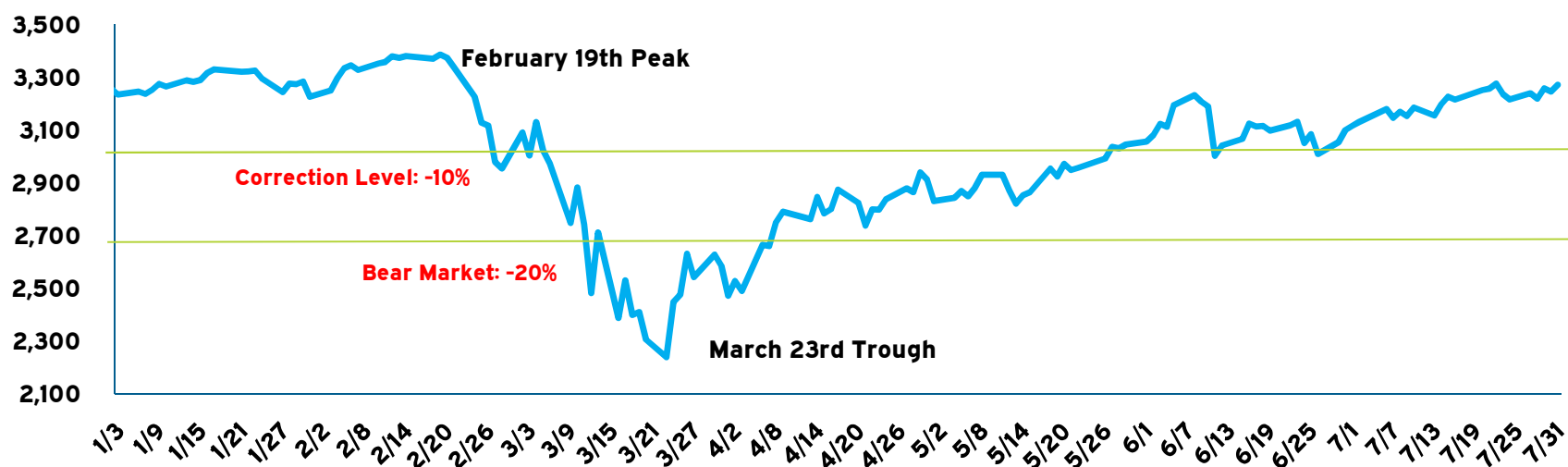
### Market Returns<sup>1</sup>

Indices	July	YTD	1 Year	3 Year	5 Year	10 Year
S&P 500	5.6%	2.4%	12.0%	12.0%	11.5%	13.8%
MSCI EAFE	2.3%	-9.3%	-1.7%	0.6%	2.1%	5.0%
MSCI Emerging Markets	8.9%	-1.7%	6.5%	2.8%	6.1%	3.3%
MSCI China	9.4%	13.3%	24.5%	8.7%	9.7%	6.9%
Bloomberg Barclays Aggregate	1.5%	7.7%	10.1%	5.7%	4.5%	3.9%
Bloomberg Barclays TIPS	2.3%	8.4%	10.4%	5.7%	4.2%	3.7%
Bloomberg Barclays High Yield	4.7%	0.7%	4.1%	4.5%	5.9%	6.8%
10-year US Treasury	1.2%	14.0%	12.7%	7.5%	5.1%	4.7%
30-year US Treasury	5.5%	31.8%	30.3%	16.2%	10.8%	8.9%

- Global risk assets have recovered meaningfully from their lows, largely driven by record fiscal and monetary policy stimulus; the S&P 500 recovered by over 46% from the mid-March lows.
- Risk assets have reacted positively to the combination of a gradual re-opening of the global economy, some economic data beating expectations, and the potential for a vaccine being developed sooner than initially expected.
- Despite the recovery in risk assets, yields on safe-haven assets like US Treasuries remain at record lows due to expectations for extremely accommodative monetary policy for the foreseeable future and expectations for weaker economic growth due to the recent surge in virus cases.

<sup>1</sup> Source: InvestorForce and Bloomberg. Data is as of July 31, 2020.

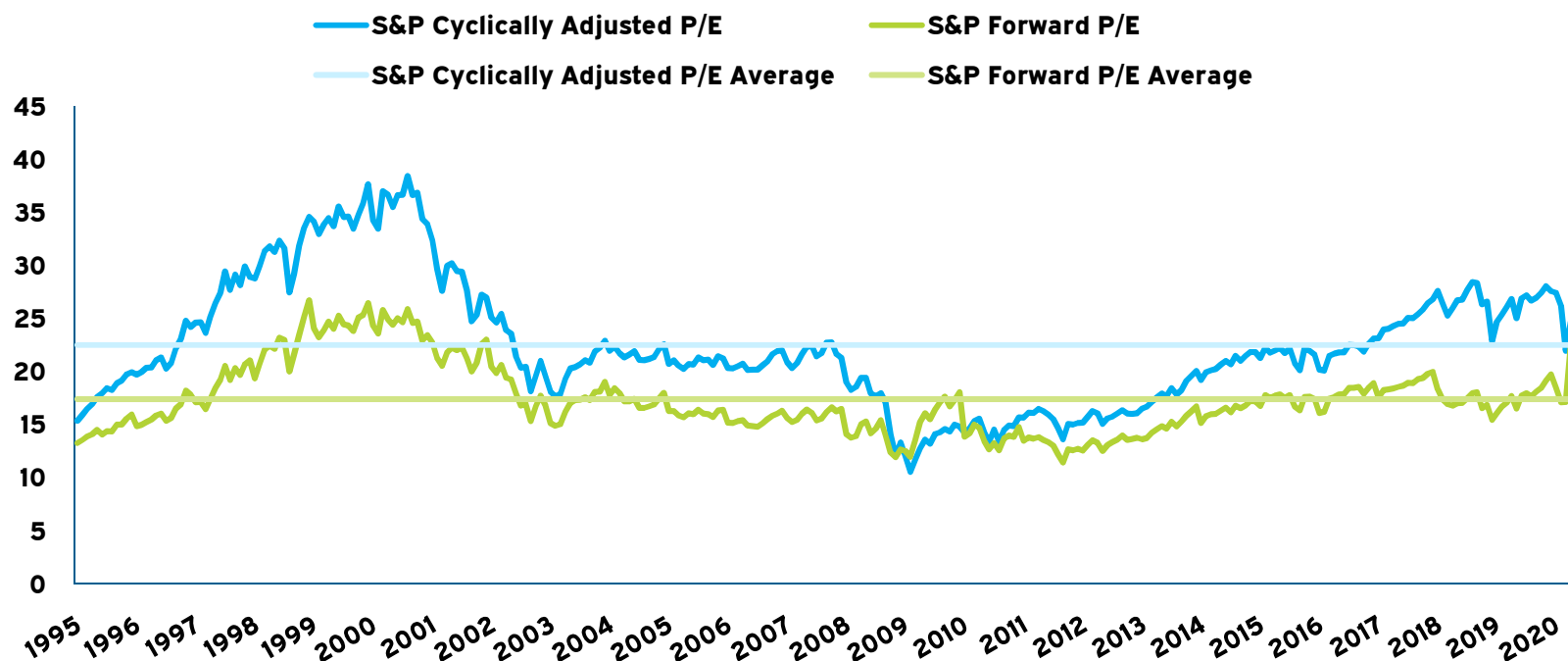
### S&P 500 Almost Fully Recovers<sup>1</sup>



- 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.
- The index rebounded from its lows, and was only down around 2.4% year-to-date through the end of July, primarily due to the unprecedented monetary and fiscal stimulus announced in the US, as well as improvements in some areas of the economy as it slowly reopens.
- It is unclear whether the pace of the recovery is sustainable in light of the recent surge in cases.

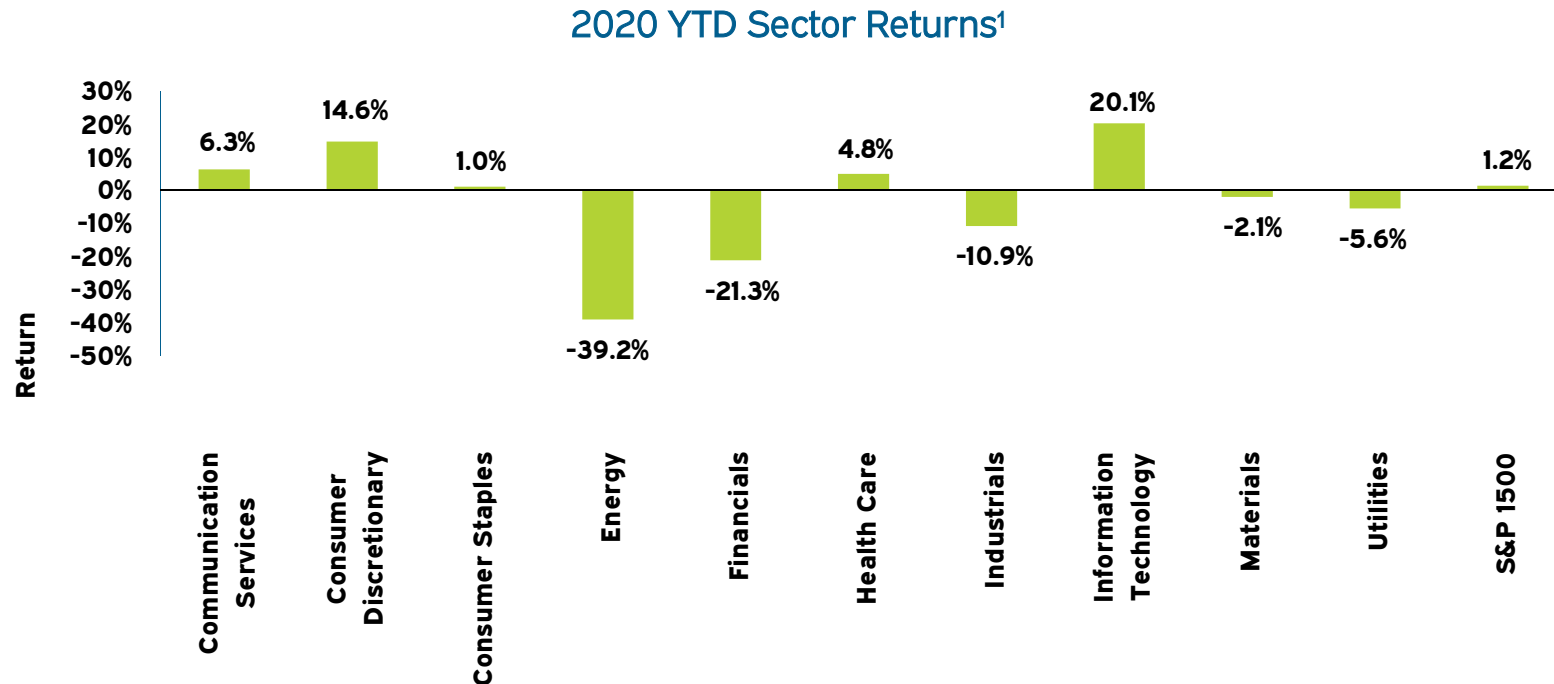
<sup>1</sup> Source: Bloomberg. Data is as of July 31, 2020.

### S&P Equity Valuations<sup>1</sup>



- Valuations based on both forward and backward looking earnings for the US stock market remain well above long-term averages, driven by the recent rise in equity markets.
- Many are looking to improvements in earnings to support market levels as the US economy continues to reopen with low interest rates also providing support.
- The key risk remains that a spike in COVID-19 cases could slow, or reverse, the reopening plans.

<sup>1</sup> Source: Bloomberg. Data is as of July 31, 2020.

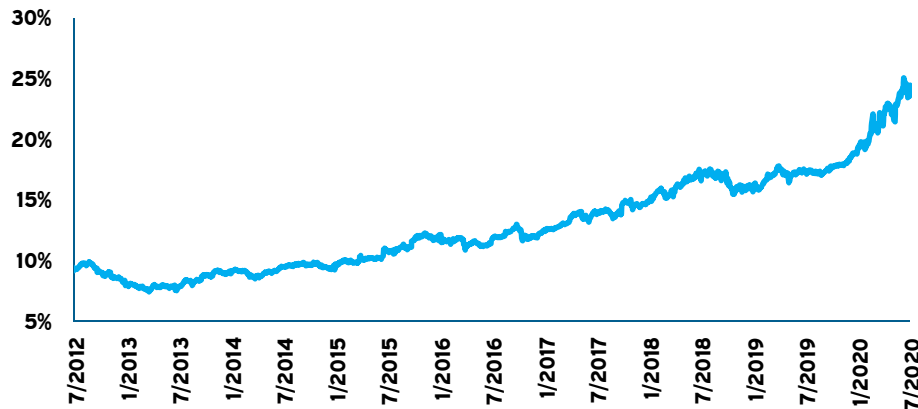


- Information technology is the best performing sector, with a narrow group of companies like Amazon and Netflix largely driving market gains. The outperformance has been due to consumers moving to online purchases and entertainment.
- The consumer discretionary sector also experienced gains as the economy slowly reopened, people returned to work, and as stimulus checks were spent.
- The energy sector has seen some improvements given supply cuts and economies starting to reopen, but it remains the sector with the greatest decline, triggered by the fall in oil prices.

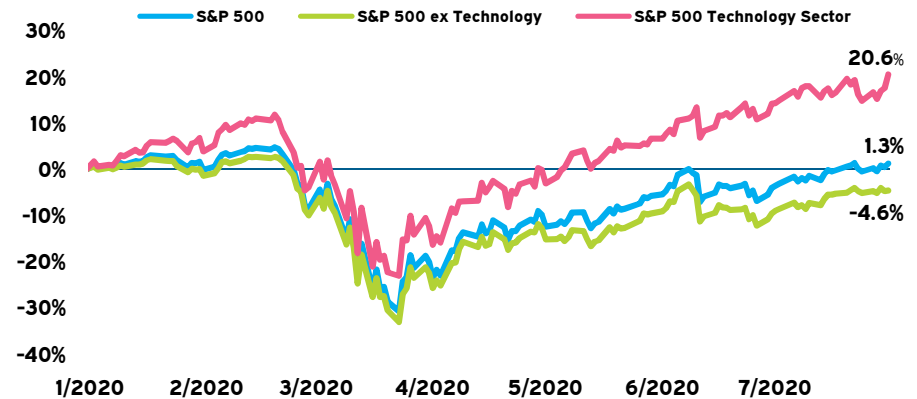
<sup>1</sup> Source: Bloomberg. Data is as of July 31, 2020.

### Technology has led the way in the Rebound

FAANG+M Share of S&P 500<sup>1</sup>



Returns Year to Date through July 31<sup>2</sup>

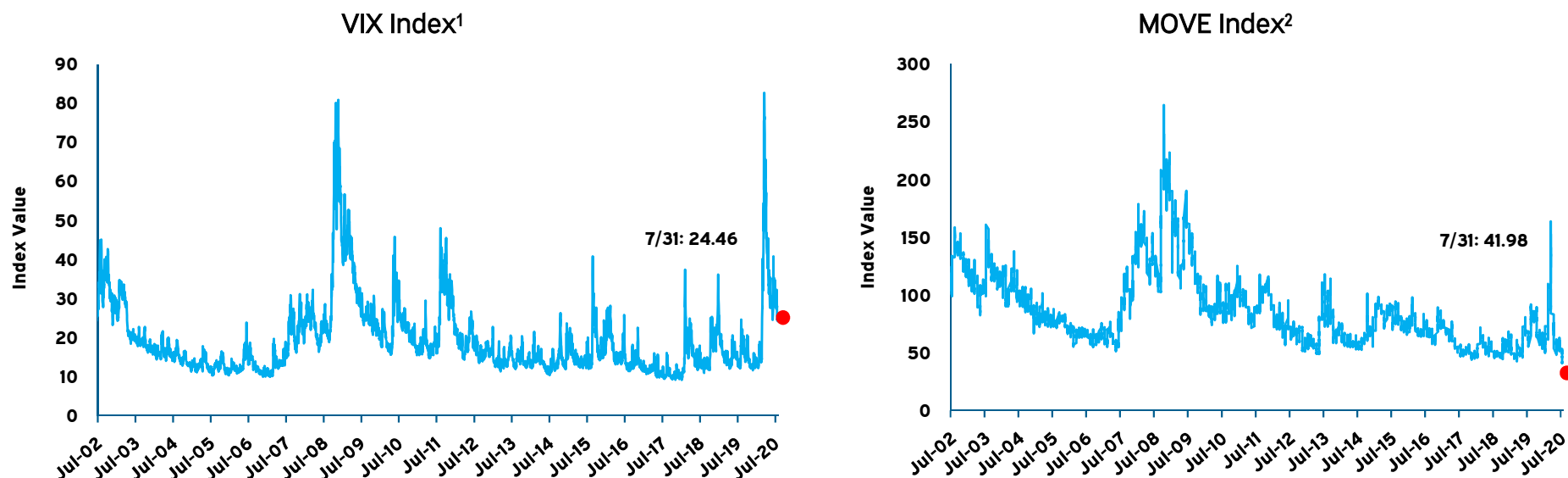


- The recent market recovery has largely been driven by a few select technology companies that have benefited from the stay-at-home environment related to the virus.
- Year-to date, the S&P 500 technology sector returned 20.6% compared to -4.6% for the S&P 500 ex. technology index, with Amazon (+71.3%), Netflix (+51.1%), and Apple (+44.7%) posting strong results.
- The strong relative results of these companies, has led to them making up a growing portion (24.4%) of the S&P 500 and making their performance going forward particularly impactful.

<sup>1</sup> 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.

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

### Volatility has Declined



- Given the recent fiscal and monetary support and corresponding improvement in investor risk sentiment, expectations of short-term equity volatility, as measured by the VIX index, continued to decline from record levels, though it remains elevated relative to the past decade.
- At the recent height, the VIX reached 82.7, surpassing the pinnacle of volatility during the GFC, showing the magnitude of the crisis, and of investor fear.
- In contrast, expectations of volatility within fixed income, as represented by the MOVE index, are at historic lows given the broad level of monetary support and forward guidance by the Fed to keep rates low.

<sup>1</sup> Source: Chicago Board of Exchange. Data is as of July 31, 2020.

<sup>2</sup> Source: Bloomberg. Data is as of July 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"> <li>Deregulation, un-constrained securitization, shadow banking system, fraud</li> </ul>	<p>Pandemic/Natural Disaster:</p> <ul style="list-style-type: none"> <li>Large scale global restrictions on businesses and individuals leading to immediate and significant deterioration in economic fundamentals</li> </ul>
2007-2009 Global Financial Crisis		COVID-19 Crisis
Fiscal Measures	<ul style="list-style-type: none"> <li>American Recovery Reinvestment Act of 2009: \$787 billion</li> <li>Economic Stimulus Act of 2008: \$152 billion</li> </ul>	<ul style="list-style-type: none"> <li>PPP Act: \$659 billion</li> <li>CARES Act of 2020: \$2.3 trillion</li> <li>Families First Coronavirus Response Act: \$150 billion</li> <li>Coronavirus Preparedness &amp; Response Supplemental Appropriations Act 2020: \$8.3 billion</li> <li>National Emergency: \$50 billion</li> </ul>
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) helps 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 July, Fed programs have experienced various degrees of usage. However, at this point, none has come close to reaching program limits. Still, respective programs have been extended through December 2020, and the psychological value of knowing the programs are available, if necessary, likely supports market sentiment.

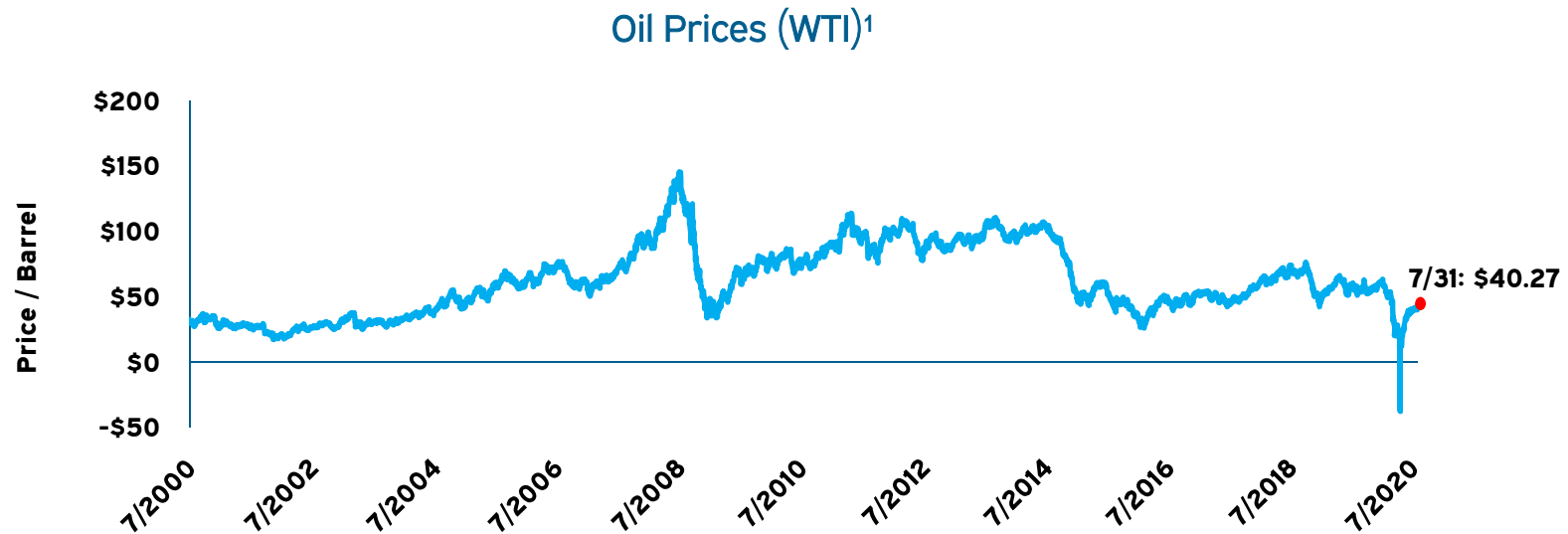
### Historic \$2T US Fiscal Stimulus

Destination	Amount (\$ Billion)
Individuals	\$560
Large Corporations	\$500
Small Business	\$377
State & Local Governments	\$340
Public Health	\$154
Student Loans	\$44
Safety Net	\$26

- Late in March, a historic \$2 trillion fiscal package was approved in the US, representing close to 10% of GDP and including support across the economy.
- Individuals received cash payments of up to \$1,200 per adult and \$500 per child, and extended and higher weekly unemployment benefits (+\$600/week).
- The package also includes a \$500 billion lending program for distressed industries like airlines, and \$377 billion in loans to small businesses (this program was recently extended).
- Other parts of the package include allocations to state and local governments, support for public health, student loan relief, and a safety net.
- With certain programs having recently expired, and Congress at an impasse on the next round of stimulus, President Trump recently signed an executive order extending various elements of the above measures.

## Policy Responses

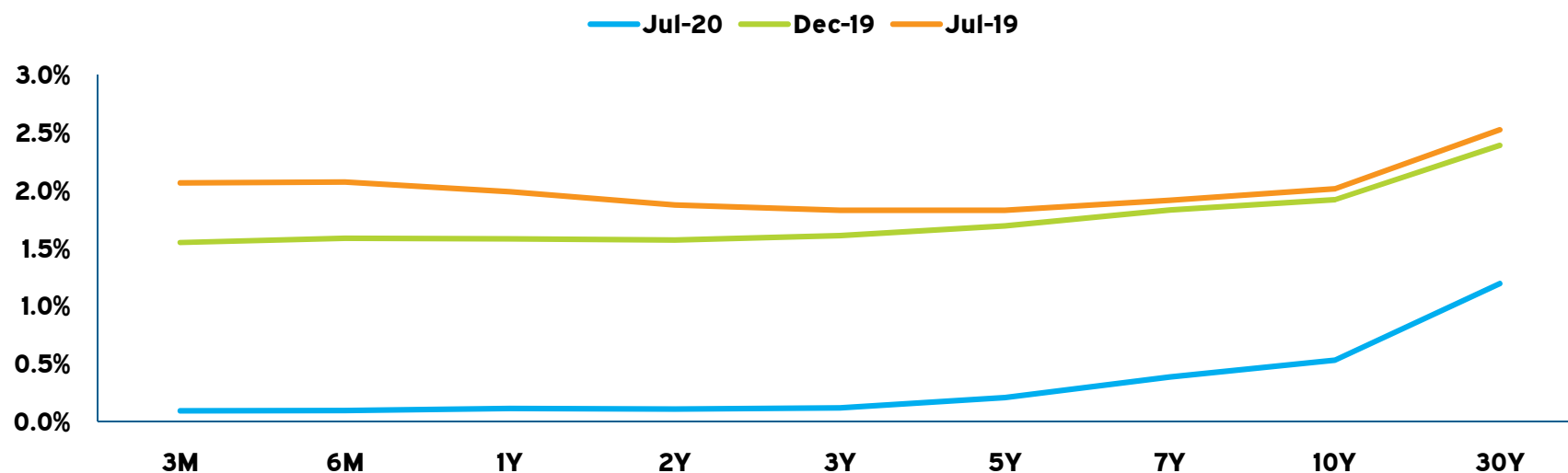
	Fiscal	Monetary
United States	\$50 billion to states for virus related support, interest waived on student loans, flexibility on tax payments and filings, expanded COVID-19 testing, paid sick leave for hourly workers, \$2 trillion package for individuals, businesses, and state/local governments. Additional \$484 billion package to replenish small business loans, provide funding to hospitals, and increase testing.	Cut policy rates to zero, forward guidance suggesting aggressively accommodative policy for the foreseeable future, unlimited QE4, offering trillions in repo market funding, restarted and extended CPFF, PDCF, MMTF 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, and easing of some financial regulations for lenders.
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.



- Global oil markets rallied from April lows, including from the technically-induced negative levels that saw the May futures contract trade at nearly -\$40 per barrel.
- In addition to improvements in sentiment as the global economy begins to reopen and some measures of economic fundamentals reporting better than expected numbers, OPEC+ recently agreed to extend supply cuts of 9.7 million barrels/day (~10% of global output) through July.
- Counterbalancing the OPEC+ production cut agreement, US oil producers (particularly shale output) are reportedly turning wells back on as the price of oil rises.
- As OPEC+ considers rolling back production cuts, and the virus spread increases with the potential to weigh on demand, oil pressures could experience pressure going forward.

<sup>1</sup> Source: Bloomberg. Represents WTI first available futures contract. Data is as of July 31, 2020.

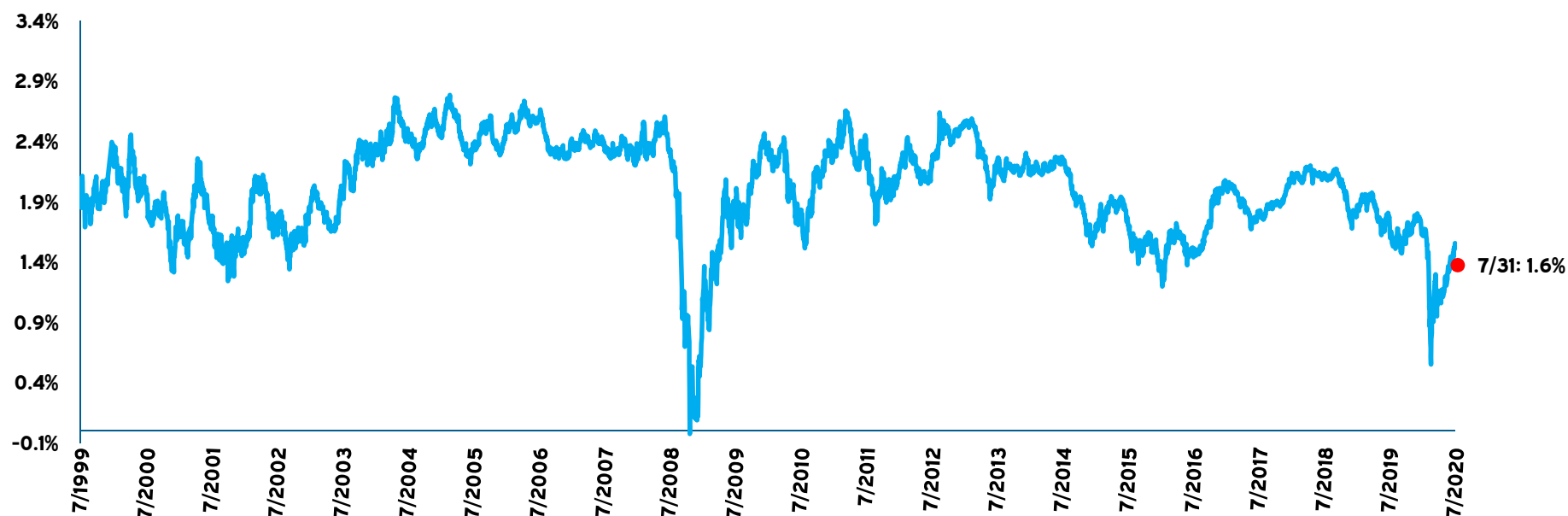
### US Yield Curve Declines<sup>1</sup>



- The US Treasury yield curve has declined materially since last year.
- Cuts in monetary policy rates, and policy maker's open commitments to keep rates low for the foreseeable future, drove yields down in shorter maturities, while flight-to-quality flows, low inflation, and economic growth uncertainty have driven the changes in longer maturities.
- The Federal Reserve's unlimited quantitative easing purchase program has provided further downward pressure on interest rates, particularly in the short and medium-term sectors due to the purchases being focused on those segments.

<sup>1</sup> Source: Bloomberg. Data is as of July 31, 2020.

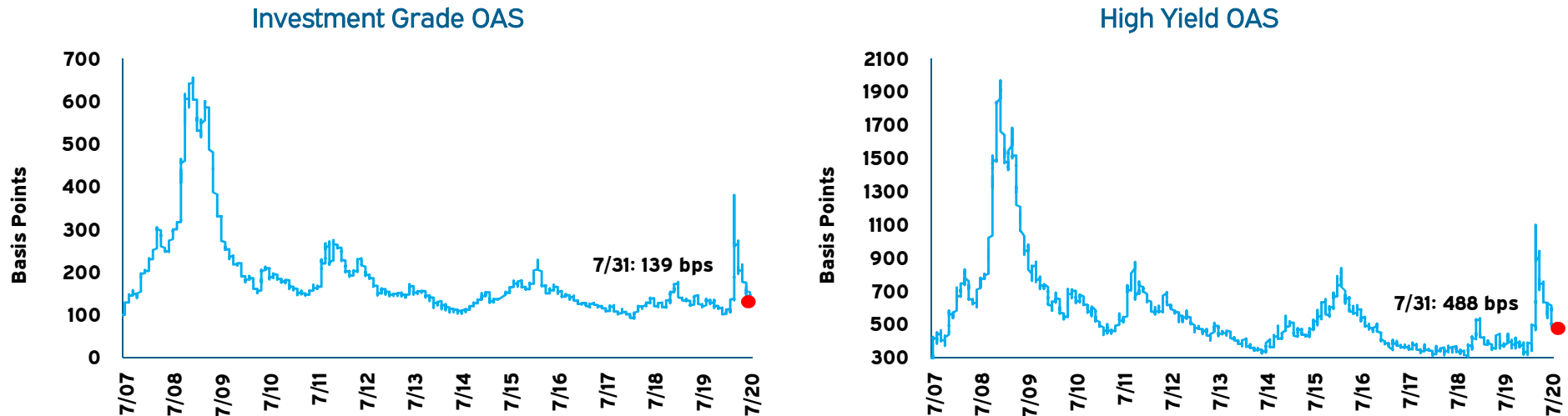
### 10-Year Breakeven Inflation<sup>1</sup>



- 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 rate volatility.
- Liquidity eventually improved and breakeven rates increased, but given the uncertainty regarding economic growth and the inflationary effects of the unprecedented US fiscal and monetary responses, inflation expectations continue to remain below historical averages.

<sup>1</sup> Source: Bloomberg. Data is as of July 31, 2020.

### Credit Spreads (High Yield & Investment Grade)<sup>1</sup>

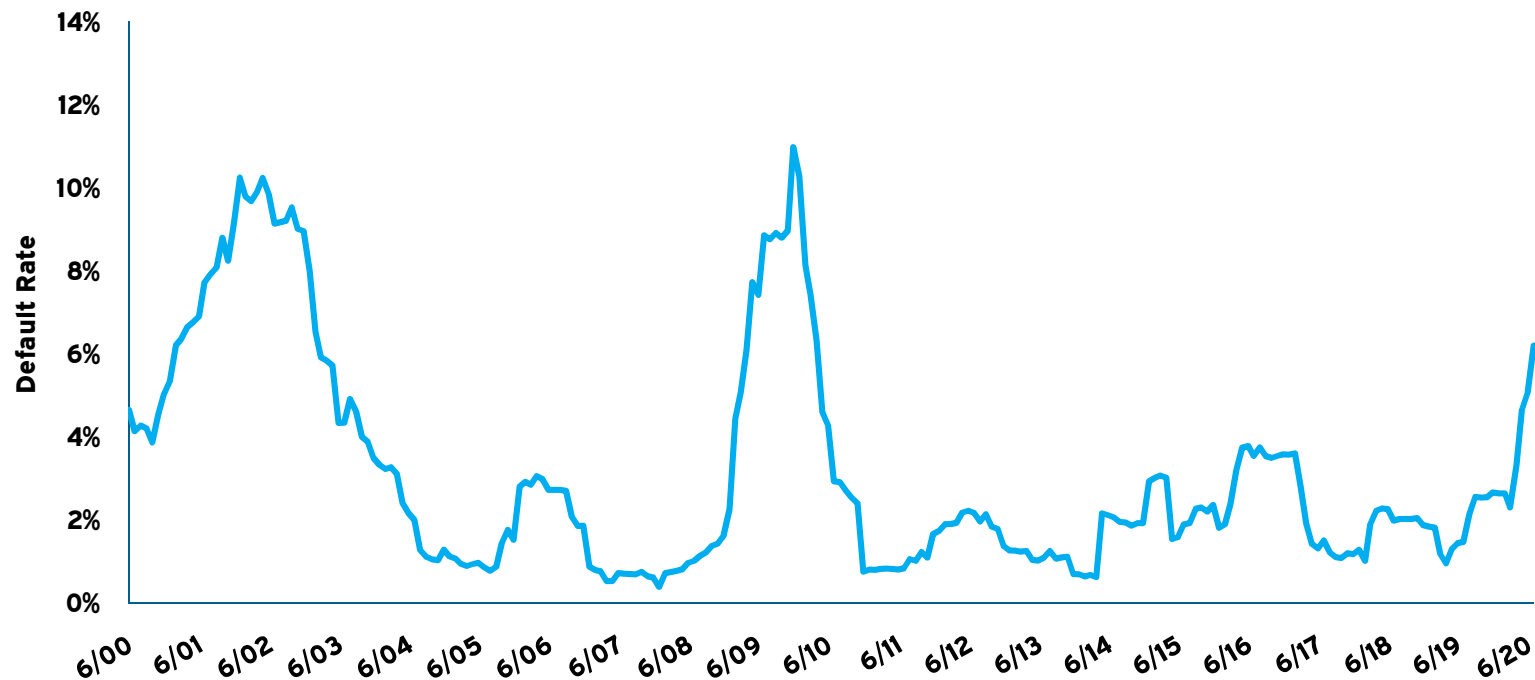


- Credit spreads (the spread above a comparable Treasury bond) for investment grade and high yield corporate debt expanded sharply as investors sought safety.
- Investment grade bonds held up better than high yield bonds. The Federal Reserve's corporate debt purchase program for investment grade and certain high yield securities that were recently downgraded from investment grade, was well received by investors, leading to a decline in spreads.
- 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.

<sup>1</sup> Source: Federal Reserve Bank of St. Louis Economic Research. Data is as of July 31, 2020.

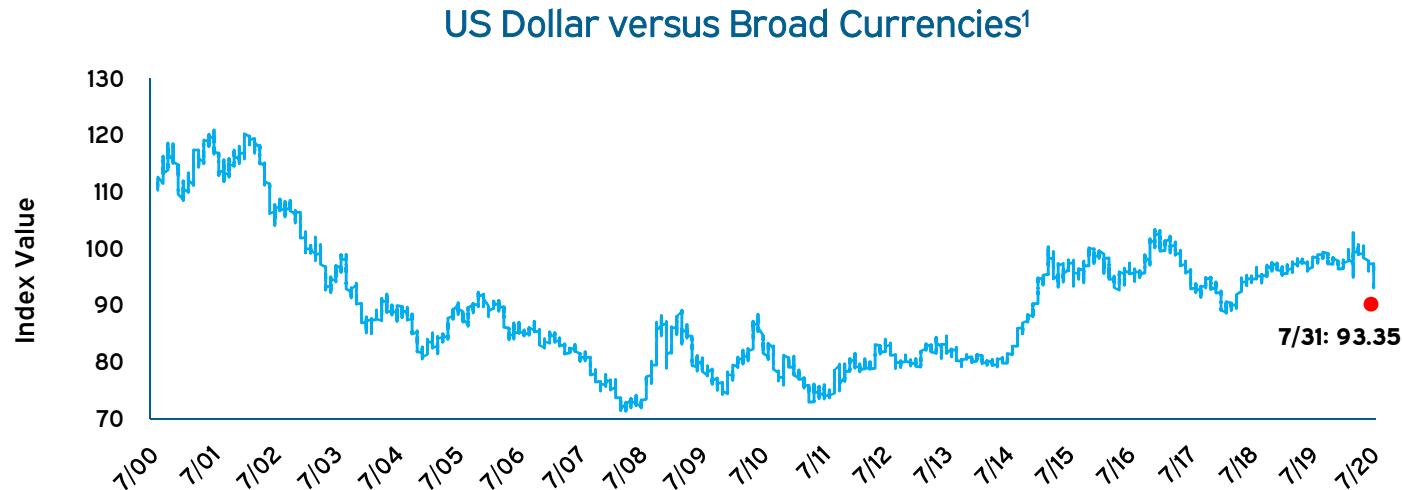


### US High Yield Credit Defaults<sup>1</sup>



- Even though spreads have declined given the Federal Reserve's support, defaults, particularly in the high yield sector, increased dramatically.
- The energy sector has seen the greatest impact given the decline in oil prices, with defaults reaching double-digit levels and expectations for them to increase.

<sup>1</sup> Source: J.P. Morgan; S&P LCD. July data is not yet available. Data is as of June 30, 2020.



- When financial markets began aggressively reacting to COVID-19 developments, the US dollar came under selling pressure as investors sought safe-haven exposure in currencies like the Japanese yen given its current account surplus and its status as the largest creditor globally.
- As the crisis grew into a pandemic, investors' preferences shifted to holding US dollars and highly liquid, short-term securities like US Treasury bills. This global demand for US dollars led to appreciation versus most major currencies.
- To help ease global demand for US dollars, the Federal Reserve, working with a number of global central banks, re-established the US dollar swap program, providing some relief to other currencies. Usage of the program continues to decline as dollar funding demands have eased.
- Recently we have seen some weakness in the dollar as interest rates have declined and the US has particularly struggled with containing the virus. Going forward, the dollar's safe haven quality and the still relatively higher rates in the US could provide support

<sup>1</sup> Source: Bloomberg. Represents the DXY Index. Data is as of July 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 will also depress the labor force.

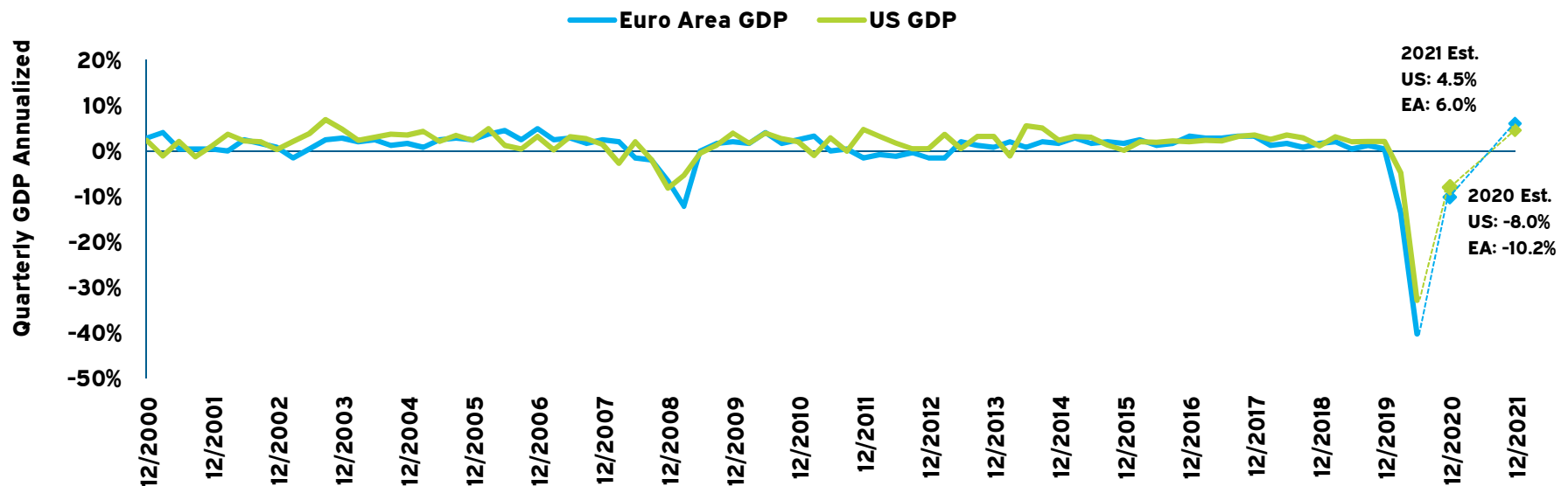
### Declines in Business and Consumer Sentiment:

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

### Wealth Effect:

- As financial markets decline and wealth deteriorates, consumer spending will be impacted.

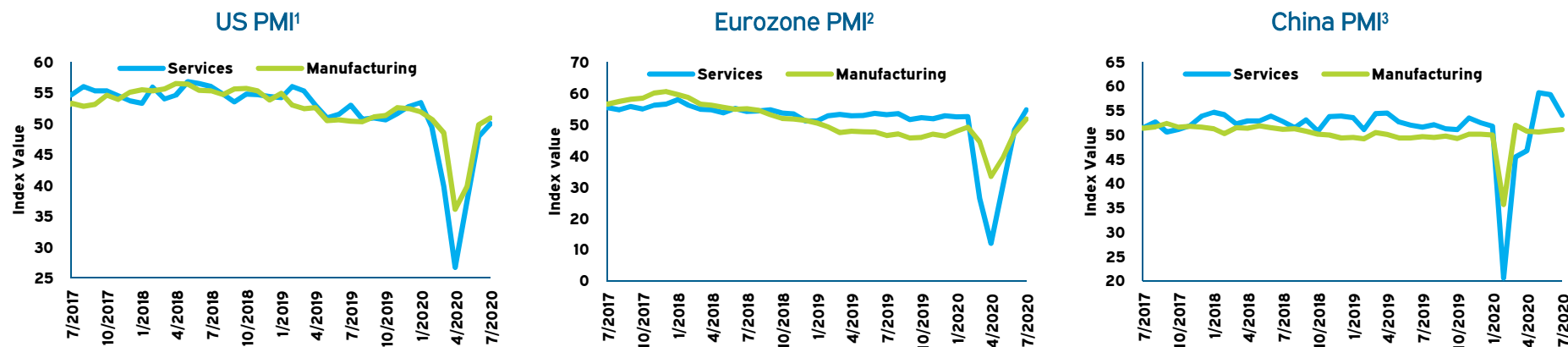
### GDP Data Shows Impact of the Pandemic<sup>1</sup>



- The global economy faces major recessionary pressures this year, but optimism remains for improvements in 2021, as economies are expected to gradually reopen.
- In the US, second quarter GDP posted a record decline of -32.9% annualized and officially put the US in a recession. Similarly, growth in the Euro Area declined by a record amount with the major economies in Germany, France, Italy, and Spain experiencing historic declines.
- Bloomberg Economics estimates that third quarter US GDP could be as high as 18.0% (QoQ annualized).

<sup>1</sup> Source: Bloomberg. Q2 2020 data represents first estimate of GDP for Euro Area and GDP for United States. Euro Area figures annualized by Meketa. Projections via June 2020 IMF World Economic Outlook and represent annual numbers.

### Global PMIs



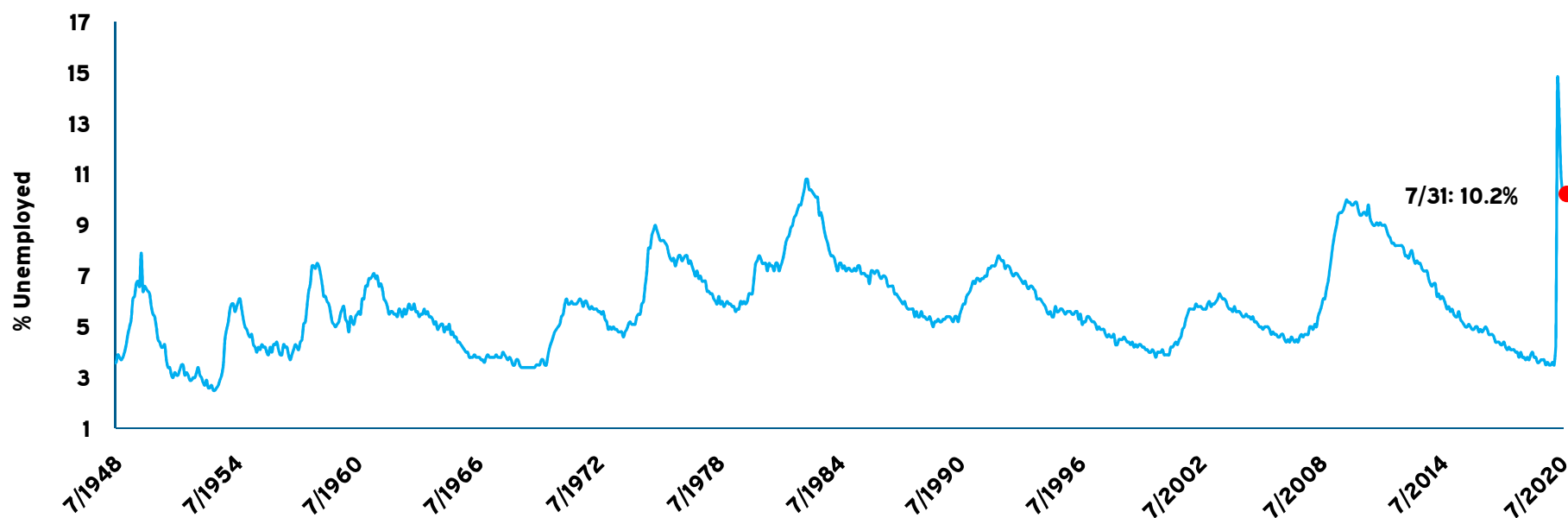
- Purchasing Managers Indices (PMI) based on surveys of private sector companies, initially collapsed across the world to record lows, as output, new orders, production, and employment were materially impacted by closed economies.
- Readings below 50 represent contractions across underlying components 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 the stay-at-home restrictions in many places.
- As the Chinese economy reopened over the last few month, their PMI's, particularly in the service sector, recovered materially. In the US and Europe, the indices have improved from their lows but remain below prior levels as they struggle to contain the spread of the virus.

<sup>1</sup> Source: Bloomberg. US Markit Services and Manufacturing PMI. Data is as of July 2020.

<sup>2</sup> Source: Bloomberg. Eurozone Markit Services and Manufacturing PMI. Data is as of July 2020.

<sup>3</sup> Source: Bloomberg. Caixin Services and Manufacturing PMI. Data is as of July 2020.

### US Unemployment Rate<sup>1</sup>

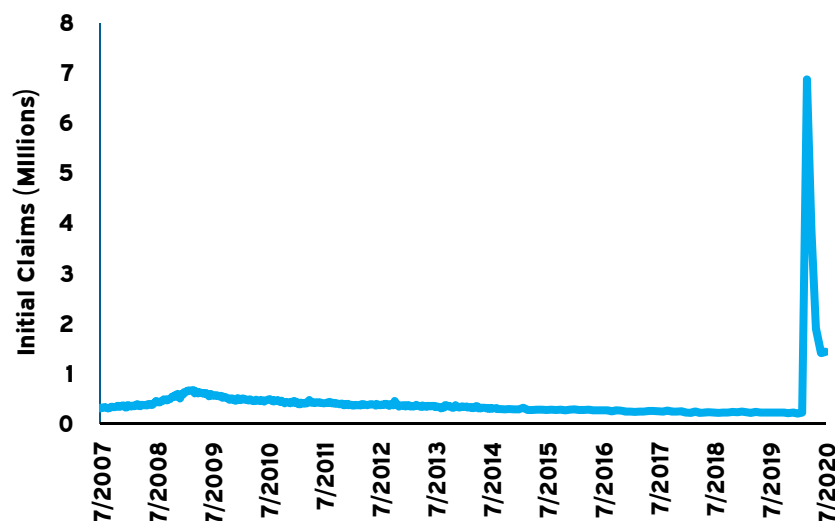


- In July, the unemployment rate continued its decline from the recent April 14.7% peak, falling to 10.2% as businesses emerged from the lockdown.
- Despite the improvement, unemployment levels remain well above pre-virus readings and are likely higher than reported due to issues related to some workers being misclassified. According to the Bureau of Labor Statistics, absent the misclassification issue, the July unemployment rate would be higher by 1.0%.
- The recent increase in COVID-19 cases could lead to an increase in the unemployment rate going forward.

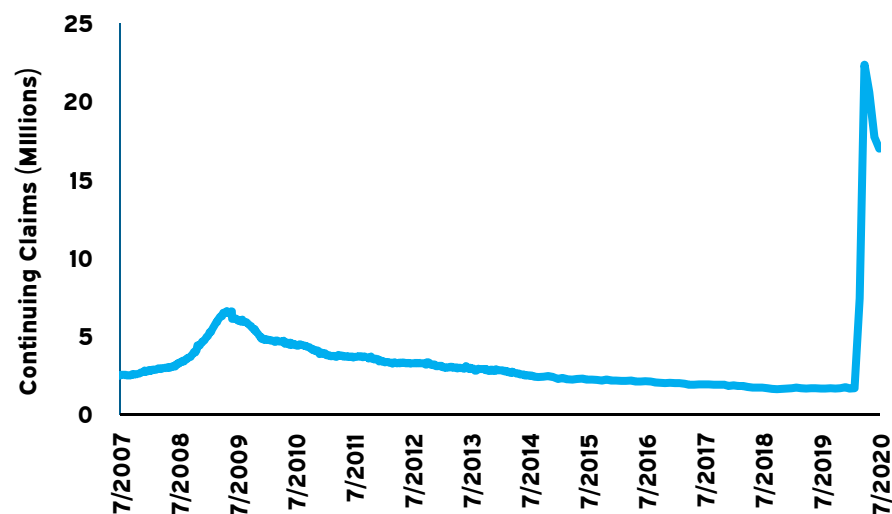
<sup>1</sup> Source: Bloomberg. Data is as of July 31, 2020.

### US Jobless Claims

US Initial Jobless Claims<sup>1</sup>



Continuing Claims<sup>2</sup>

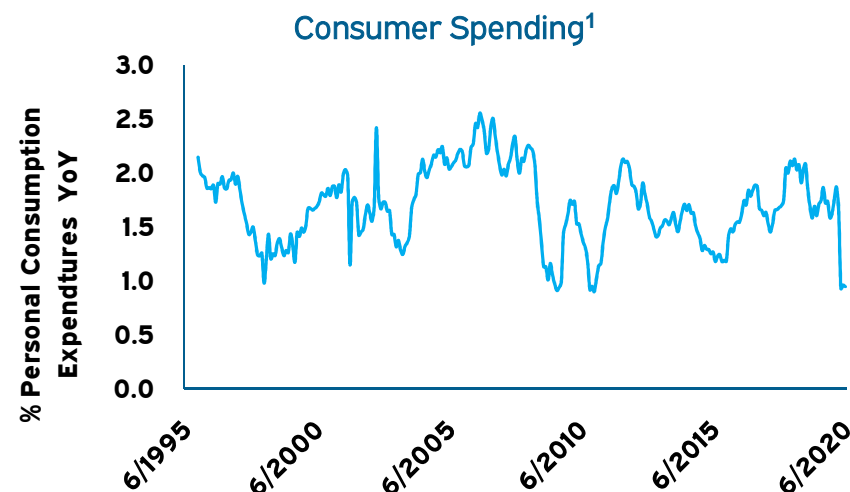
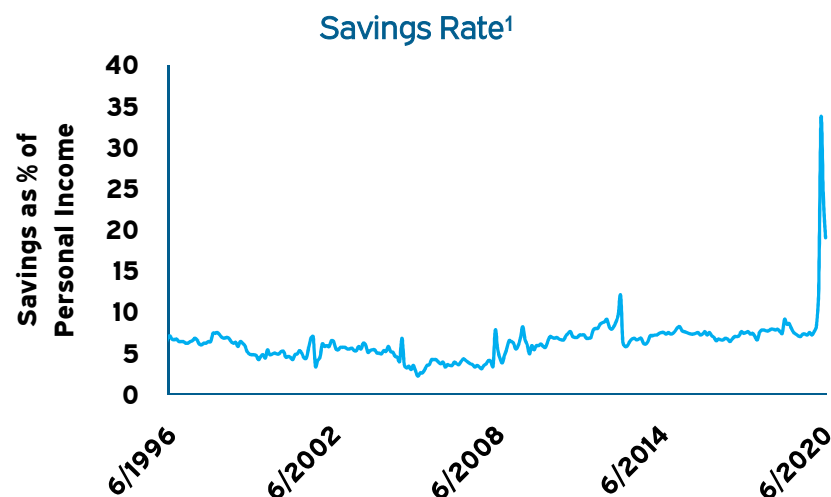


- Over the last 20 weeks, roughly 55.3 million people filed for initial unemployment. This level far exceeds the 22 million jobs added since the GFC, highlighting the unprecedented impact of the virus.
- Despite the continued decline in initial jobless claims, the 1.2 million level of the last reading (the lowest since the onset of the crisis) remains many multiples above the worst reading during the Global Financial Crisis.
- Continuing jobless claims (i.e., those currently receiving benefits) has also declined from record levels, but remains elevated at 16.1 million.

<sup>1</sup> Source: Bloomberg. First reading of seasonally adjusted initial jobless claims. Data is as of July 31, 2020

<sup>2</sup> Source: Bloomberg. US Continuing Jobless Claims SA. Data is as of July 31, 2020

### Savings and Spending



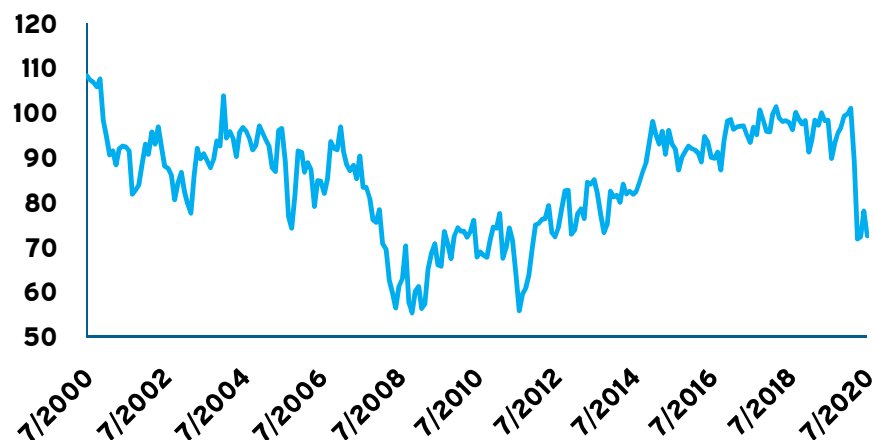
- Fiscal programs including stimulus checks, enhanced unemployment benefits, and loans to small businesses through the Paycheck Protection Program (PPP) have largely supported income levels through the shutdown.
- Despite the income support, the savings rate has increased due to the decline in consumer 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 has declined from its peak as spending increased with the economy slowly reopening.

<sup>1</sup> Source: Bloomberg. Latest data is as of June 30, 2020.

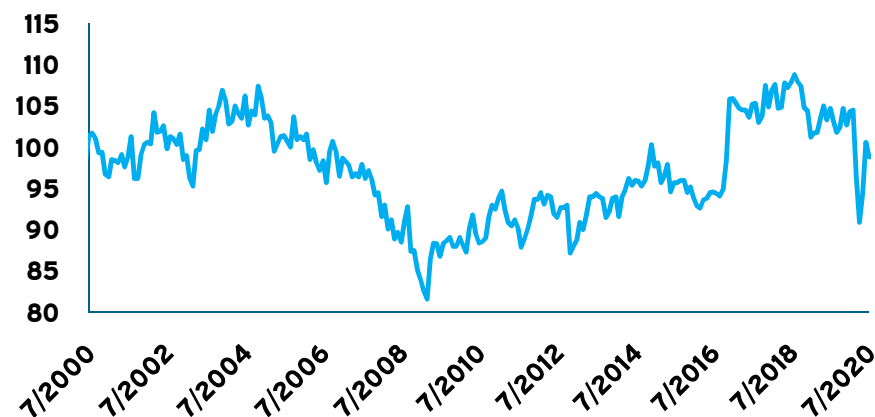


### Sentiment Indicators

University of Michigan Consumer Sentiment<sup>1</sup>



Small Business Confidence<sup>2</sup>



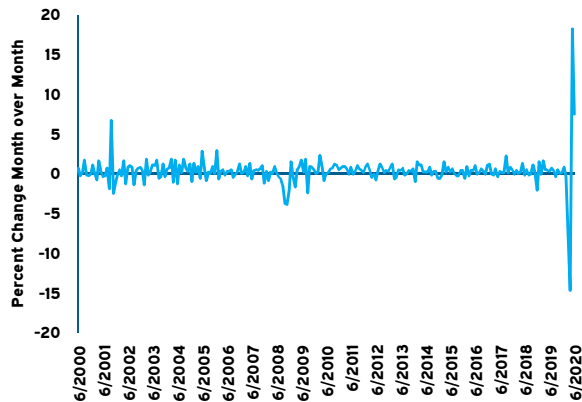
- A strong indicator of future economic activity are the attitudes of businesses and consumers today.
- Consumer spending comprises close to 70% of US GDP, making the attitudes of consumers an important driver of economic growth. Additionally, small businesses comprise a majority of the economy, making sentiment in that segment important too.
- Sentiment indicators have shown some improvements as the economy re-opens, but they remain below prior levels.

<sup>1</sup> Source: Bloomberg. University of Michigan Consumer Sentiment Index. Data is as of July 31, 2020.

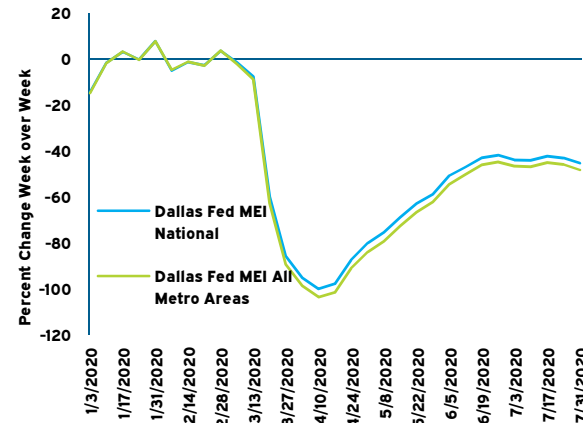
<sup>2</sup> Source: Bloomberg. NFIB Small Business Optimism Index. Data is as of July 31, 2020.

### Some US Data has Improved

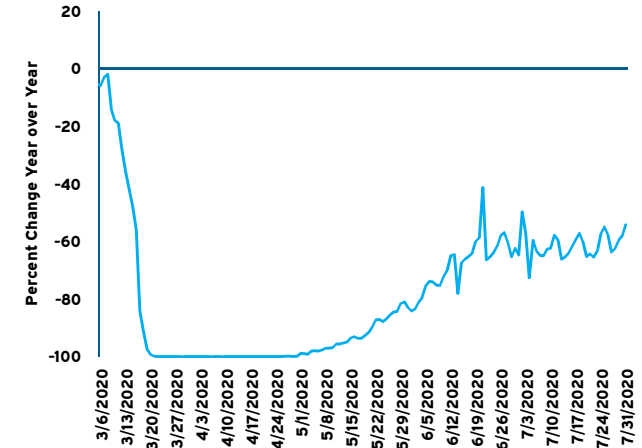
Retail Sales<sup>1</sup>



Dallas Fed Mobility and Engagement Index<sup>2</sup>



OpenTable Seated Diners YoY % Change<sup>3</sup>



- There have been improvements in high frequency data, but overall levels remain well below prior readings and have slowed in some cases given 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 two consecutive months of positive growth as the economy reopened.
- Restaurants saw initial improvements before declining and leveling-off, as in-store dining has been cited as a key contributor to increases in infections.

<sup>1</sup> Source: Bloomberg. Data is as of June 30, 2020 and represents the US Retail Sales SA MoM%

<sup>2</sup> Source: Bloomberg. Data is as of July 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.

<sup>3</sup> 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 July 31, 2020. Index start date 2/19/20.

### Looking Forward...

- There will be 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, it is not clear the end is in sight, particularly given the recent increases in cases in certain areas; however, individual countries are attempting to lay the groundwork to support a 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.
- Expect heightened market volatility should economies start to shut back down given the recent spike in cases.
  - This has been a consistent theme recently; volatility is likely to remain elevated for some time.
- 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 1926-2020<sup>1</sup>

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
September 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 July 2020	-34%	TBD
<b>Average</b>	<b>-36%</b>	<b>41 months</b>
<b>Average ex. Great Depression</b>	<b>-33%</b>	<b>25 months</b>

- As markets continue to recover and approach the prior peak, questions remain about the sustainability of the rally.
- Markets are continuing to reprice amid the uncertain impact of the virus on companies and the broader economy, which means this drawdown is still being defined in the context of history.
- That said, financial markets have experienced material declines with some frequency, and while certain declines took a meaningful time to recover, in all cases they eventually did.
- If the recovery continues back to prior peak levels it would represent one of the fastest recoveries on record, similar to the historic decline.

<sup>1</sup> Source: Goldman Sachs. Recent peak to trough declines are through July 31, 2020.

## Implications for Clients

- Portfolios have generally experienced significant improvements from the March lows.
- Even though equity markets have recovered from their lows, it is important to remain vigilant and be prepared to rebalance if volatility increases again.
  - 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.
- Diversification works. The latest decline was an example of a flight to quality leading to gains in very high quality bonds.

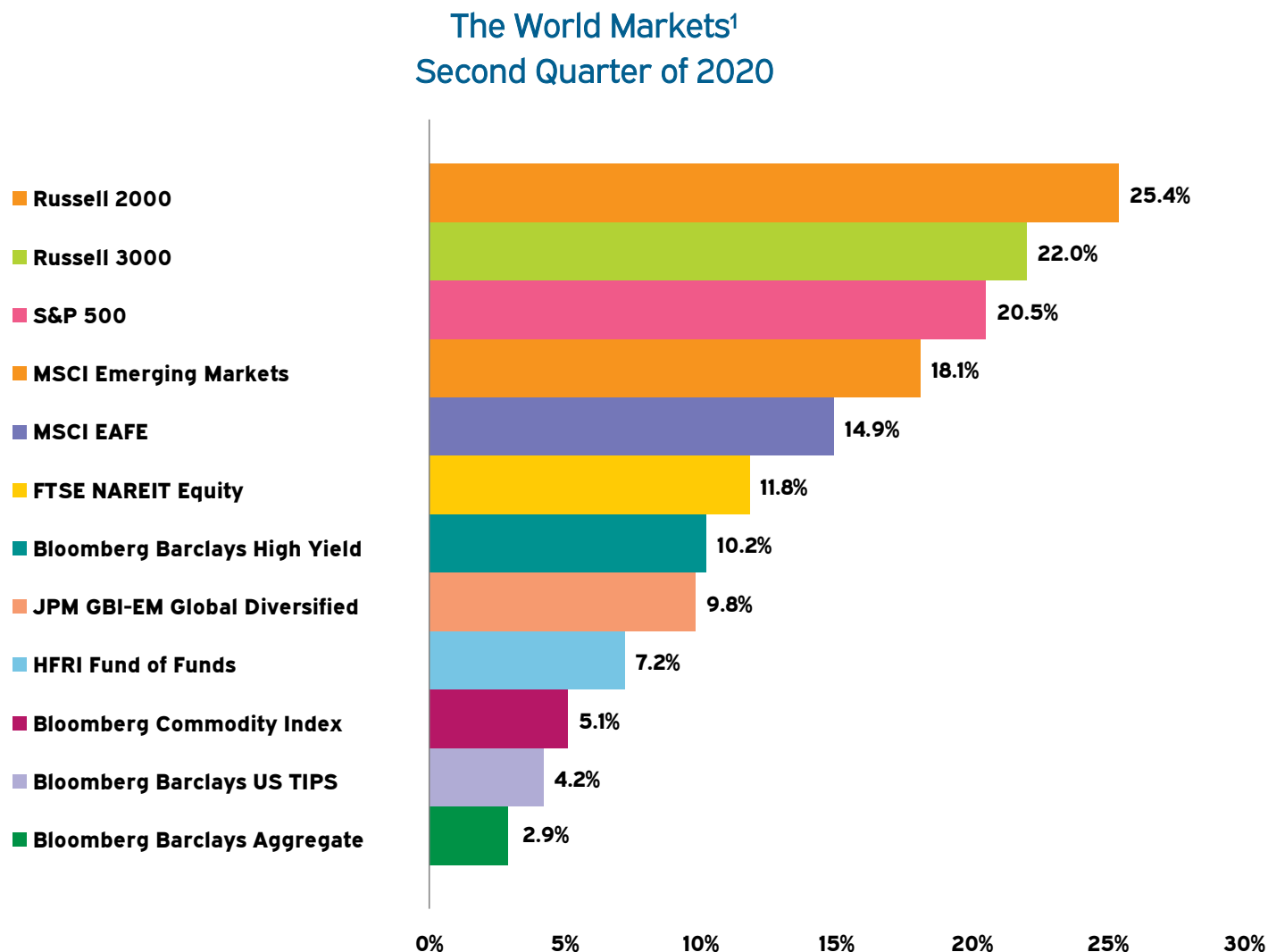
### Performance YTD (through July 31, 2020)

S&P 500	ACWI (ex. US)	Aggregate Bond Index	Balanced Portfolio <sup>1</sup>
2.4%	-7.0%	7.7%	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.

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

## **The World Markets Second Quarter of 2020**



<sup>1</sup> Source: InvestorForce.

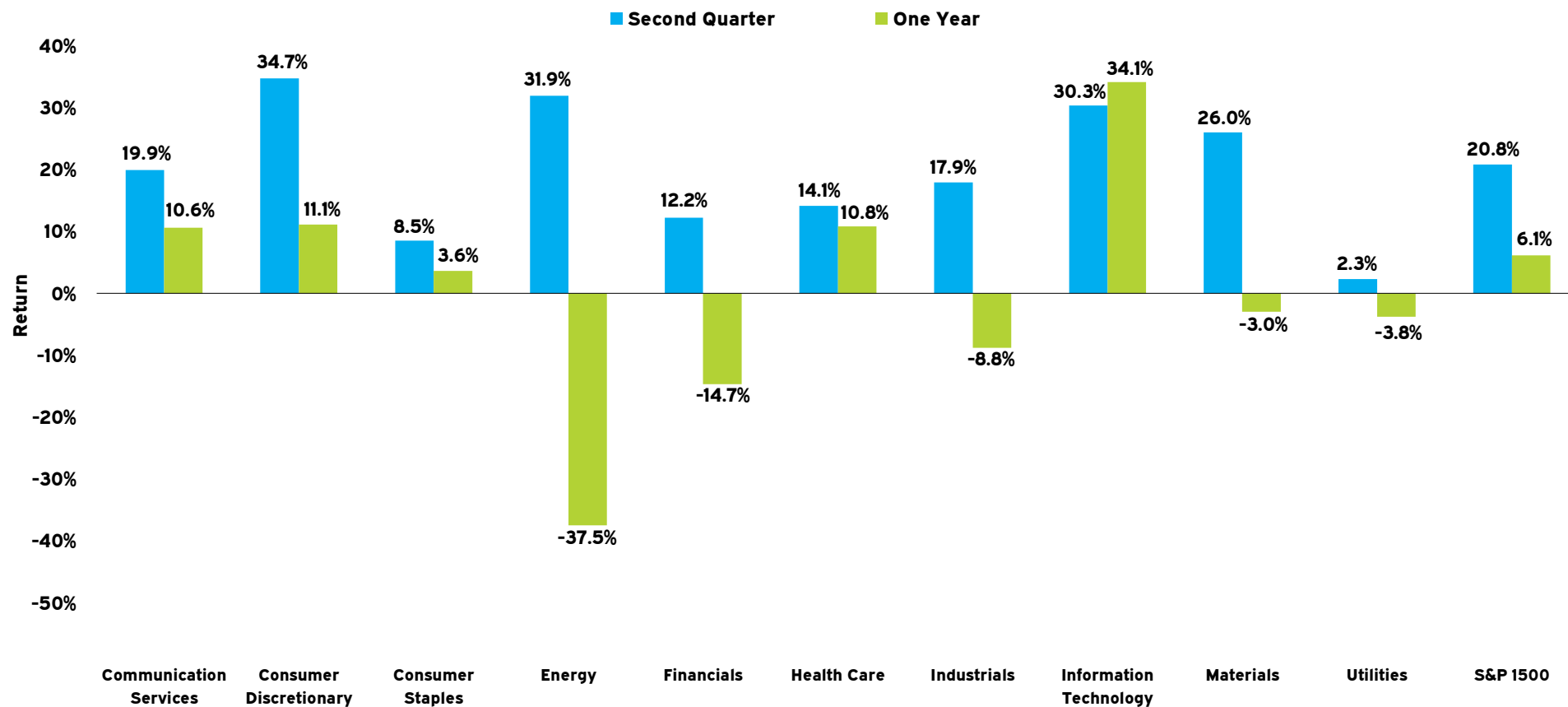
# Index Returns<sup>1</sup>

	2Q20 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
<b>Domestic Equity</b>						
S&P 500	20.5	-3.1	7.5	10.7	10.7	14.0
Russell 3000	22.0	-3.5	6.5	10.0	10.0	13.7
Russell 1000	21.8	-2.8	7.5	10.6	10.5	14.0
Russell 1000 Growth	27.8	9.8	23.3	19.0	15.9	17.2
Russell 1000 Value	14.3	-16.3	-8.8	1.8	4.6	10.4
Russell MidCap	24.6	-9.1	-2.2	5.8	6.8	12.3
Russell MidCap Growth	30.3	4.2	11.9	14.8	11.6	15.1
Russell MidCap Value	19.9	-18.1	-11.8	-0.5	3.3	10.3
Russell 2000	25.4	-13.0	-6.6	2.0	4.3	10.5
Russell 2000 Growth	30.6	-3.1	3.5	7.9	6.9	12.9
Russell 2000 Value	18.9	-23.5	-17.5	-4.3	1.3	7.8
<b>Foreign Equity</b>						
MSCI ACWI (ex. US)	16.1	-11.0	-4.8	1.1	2.3	5.0
MSCI EAFE	14.9	-11.3	-5.1	0.8	2.1	5.7
MSCI EAFE (Local Currency)	12.6	-10.5	-4.2	1.3	2.6	6.9
MSCI EAFE Small Cap	19.9	-13.1	-3.5	0.5	3.8	8.0
MSCI Emerging Markets	18.1	-9.8	-3.4	1.9	2.9	3.3
MSCI Emerging Markets (Local Currency)	16.7	-5.5	1.4	4.5	5.1	6.0
<b>Fixed Income</b>						
Bloomberg Barclays Universal	3.8	5.2	7.9	5.2	4.4	4.1
Bloomberg Barclays Aggregate	2.9	6.1	8.7	5.3	4.3	3.8
Bloomberg Barclays US TIPS	4.2	6.0	8.3	5.0	3.7	3.5
Bloomberg Barclays High Yield	10.2	-3.8	0.0	3.3	4.8	6.7
JPM GBI-EM Global Diversified	9.8	-6.9	-2.8	1.1	2.3	1.6
<b>Other</b>						
FTSE NAREIT Equity	11.8	-18.7	-13.0	0.0	4.1	9.1
Bloomberg Commodity Index	5.1	-19.4	-17.4	-6.1	-7.7	-5.8
HFRI Fund of Funds	7.2	-2.2	-0.2	2.0	1.4	2.7

<sup>1</sup> Source: InvestorForce.

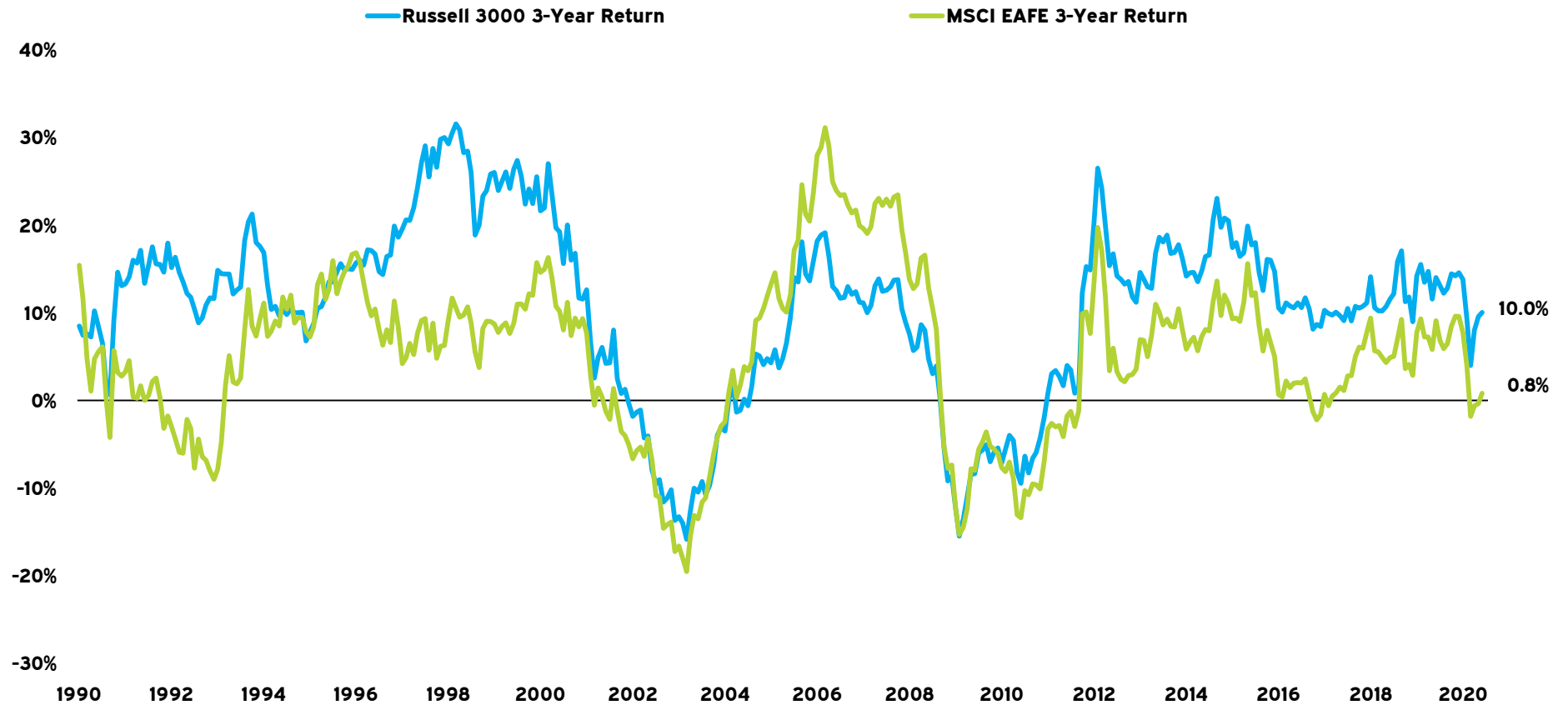


### S&P Sector Returns<sup>1</sup>



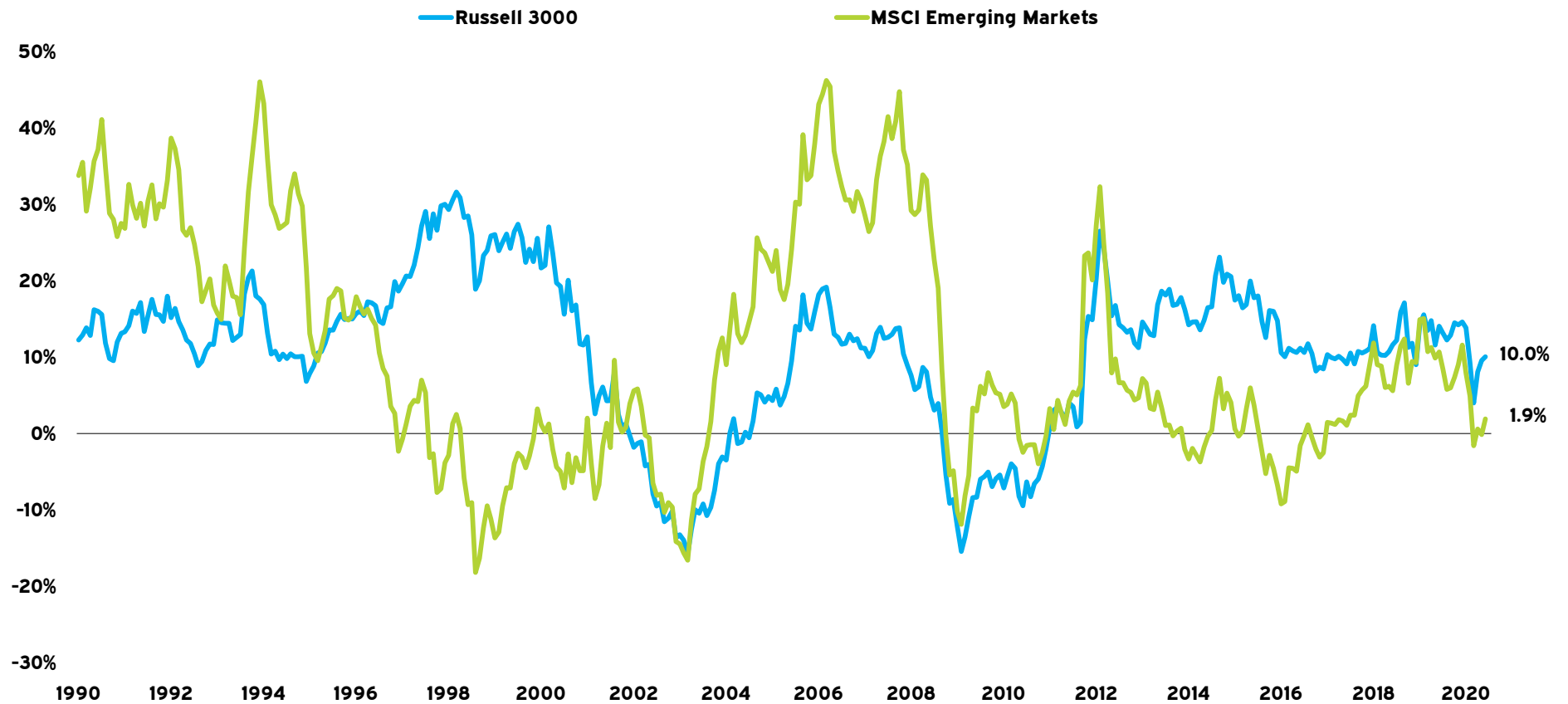
<sup>1</sup> Source: InvestorForce. Represents S&P 1500 (All Cap) data.

### US and Developed Market Foreign Equity Rolling Three-Year Returns<sup>1</sup>



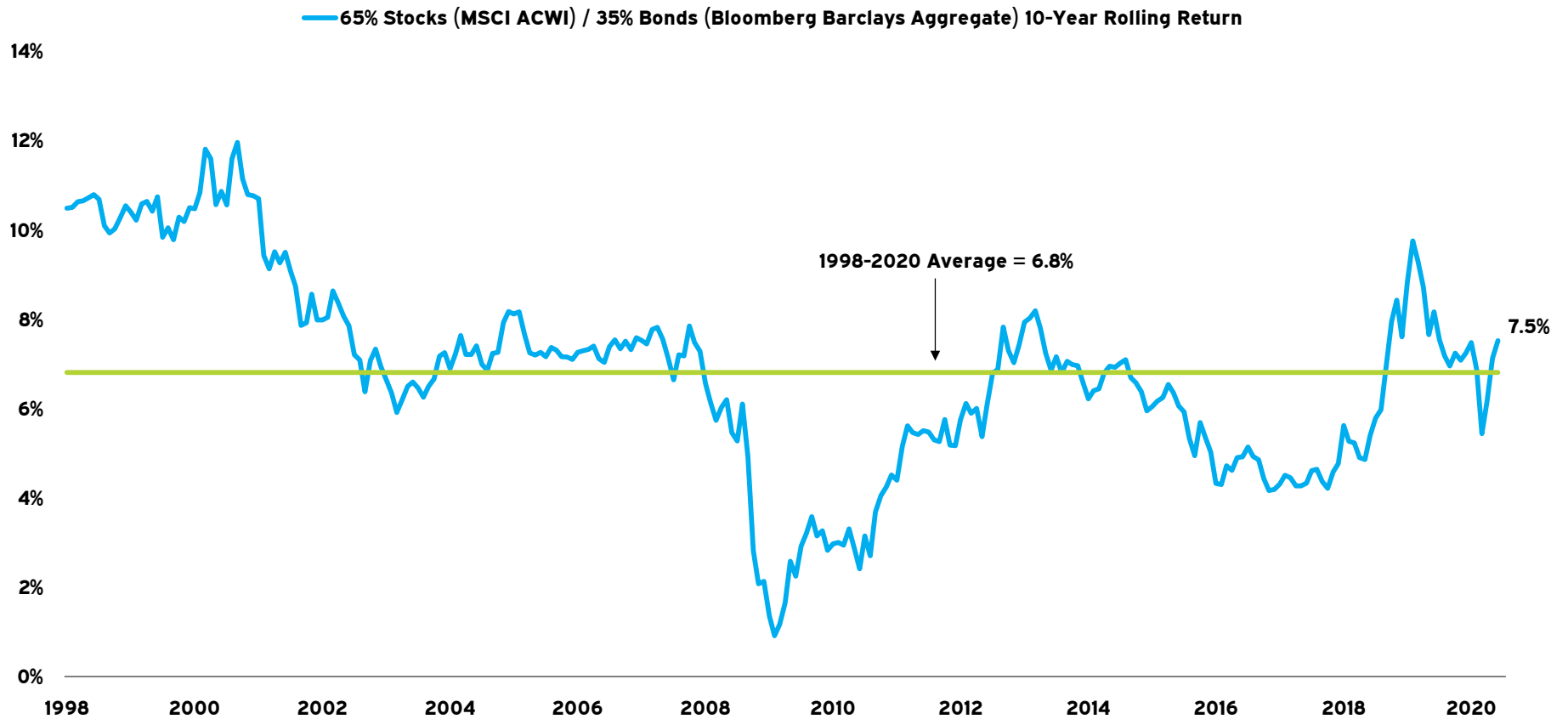
<sup>1</sup> Source: InvestorForce.

### US and Emerging Market Equity Rolling Three-Year Returns<sup>1</sup>



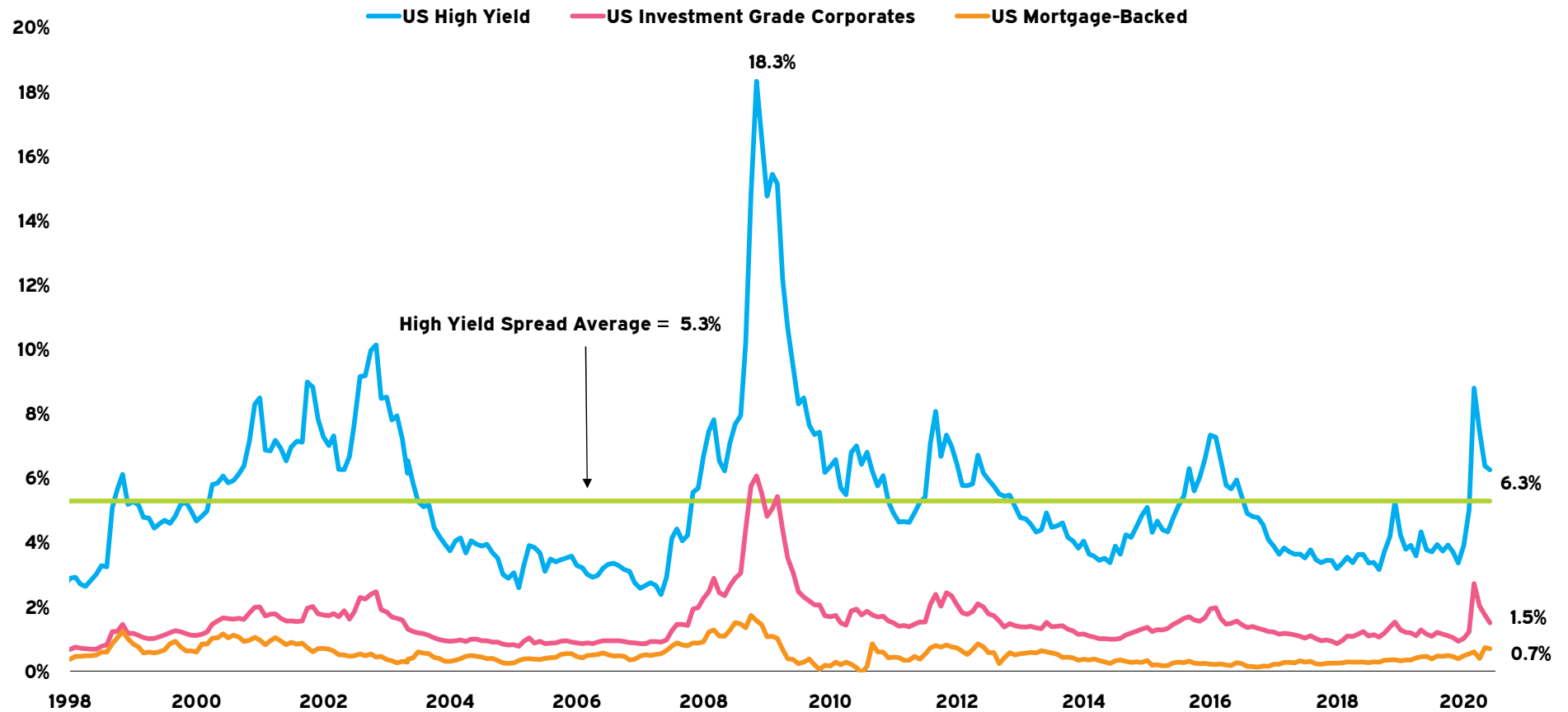
<sup>1</sup> Source: InvestorForce.

### Rolling Ten-Year Returns: 65% Stocks and 35% Bonds<sup>1</sup>



<sup>1</sup> Source: InvestorForce.

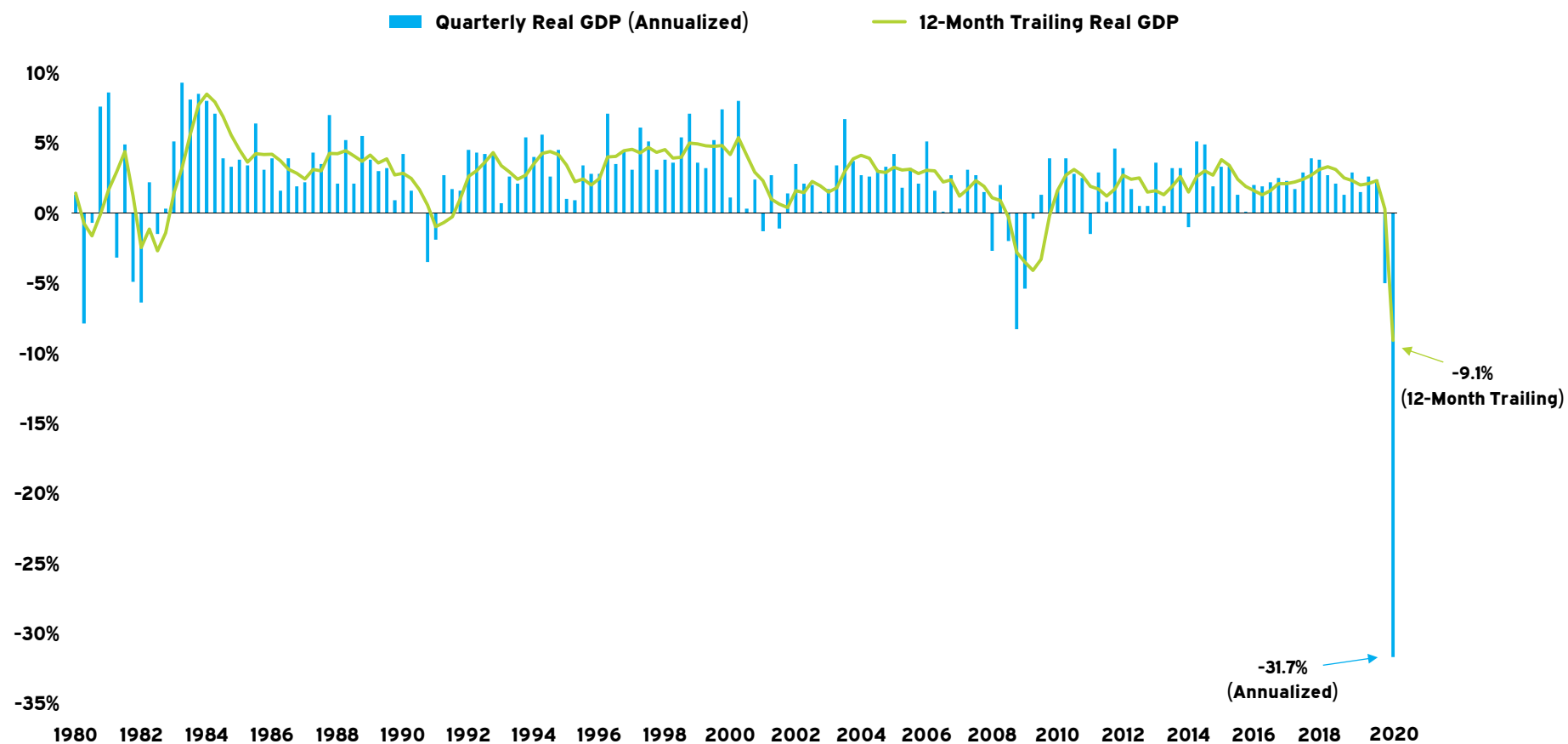
### Credit Spreads vs. US Treasury Bonds<sup>1,2</sup>



<sup>1</sup> Source: Barclays Live. Data represents the OAS.

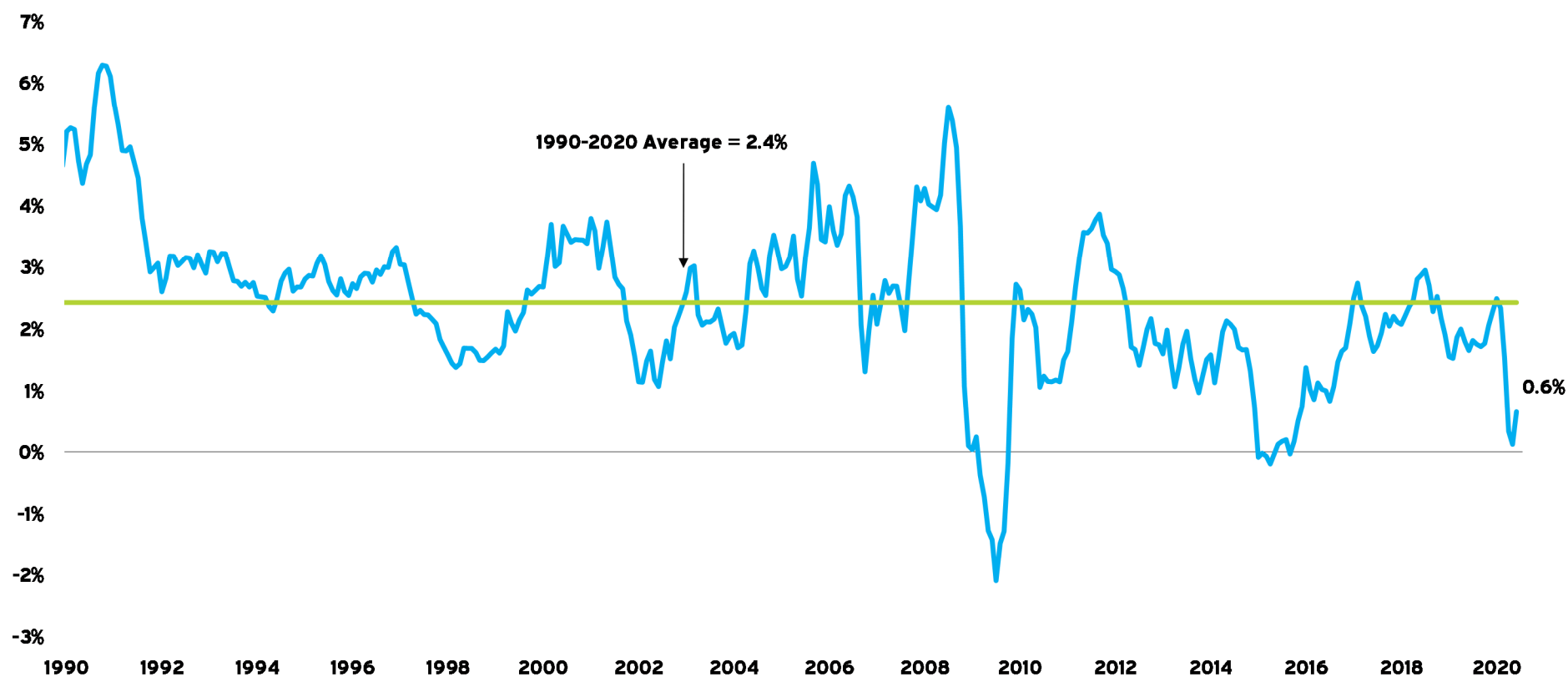
<sup>2</sup> The median high yield spread was 4.8% from 1997-2020.

### US Real Gross Domestic Product (GDP) Growth<sup>1</sup>



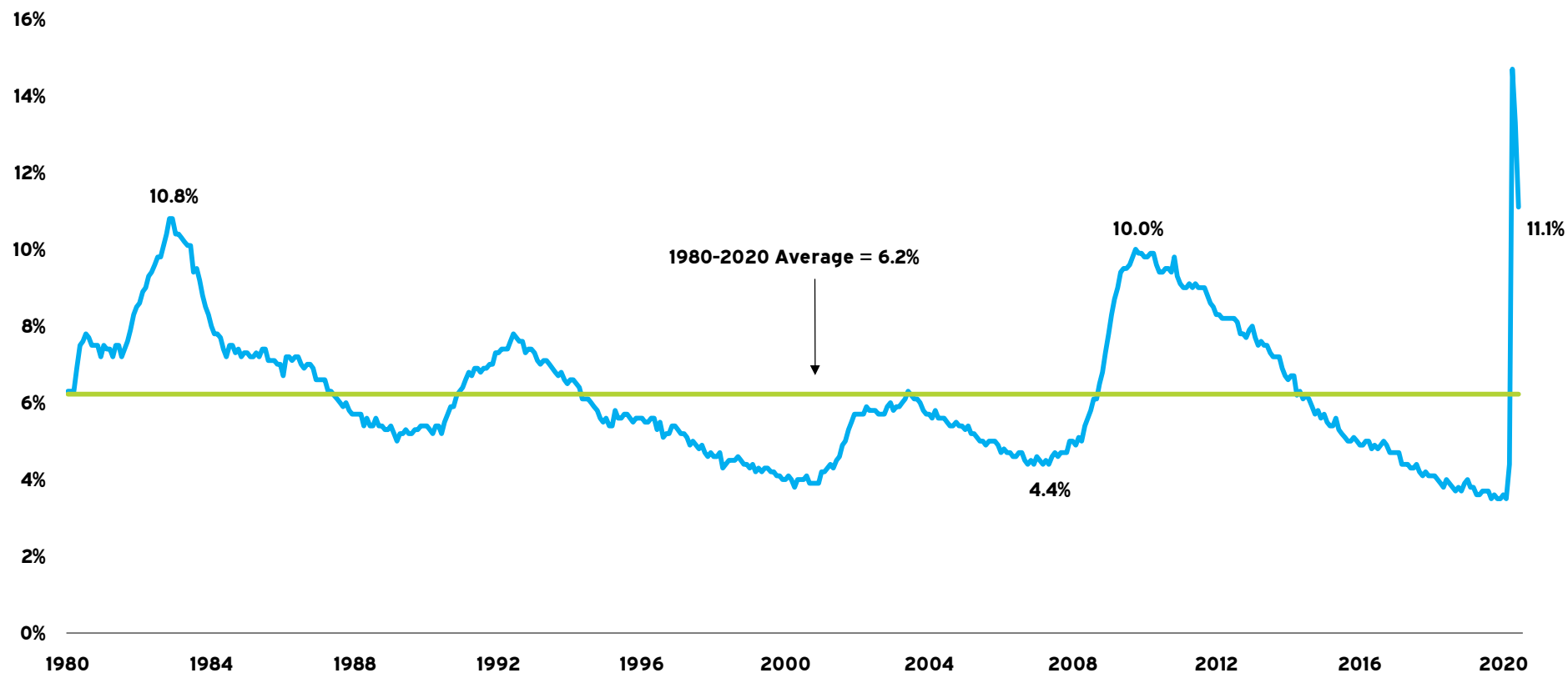
<sup>1</sup> Source: Bureau of Economic Analysis. Data is as of Q2 2020 and represents the second estimate.

### US Inflation (CPI) Trailing Twelve Months<sup>1</sup>



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

### US Unemployment<sup>1</sup>



<sup>1</sup> Source: Bureau of Labor Statistics. Data is as of June 30, 2020.

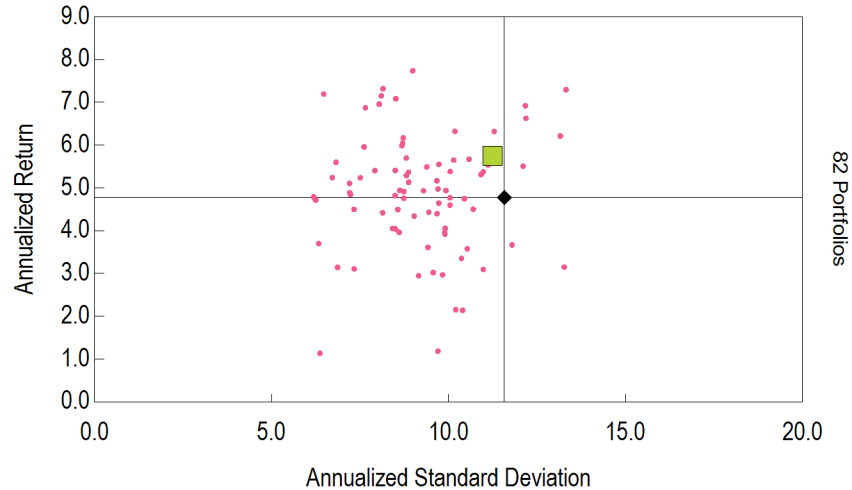


## **EBMUD Portfolio Review**

## Second Quarter Performance Review

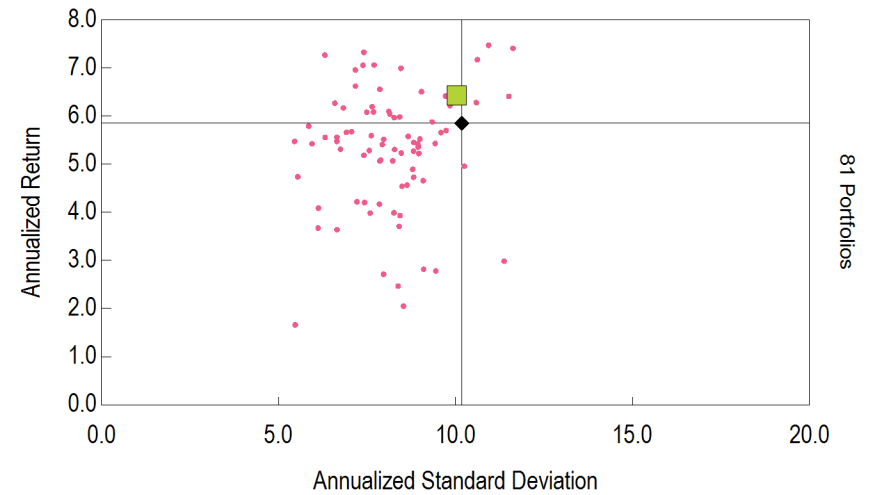
### EBMUD Total Plan Composite | As of June 30, 2020

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending June 30, 2020



■ EBMUD Total Plan Composite    ● InvMetrics Public DB > \$1B Gross  
◆ Total Plan Bench

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



■ EBMUD Total Plan Composite    ● InvMetrics Public DB > \$1B Gross  
◆ Total Plan Bench

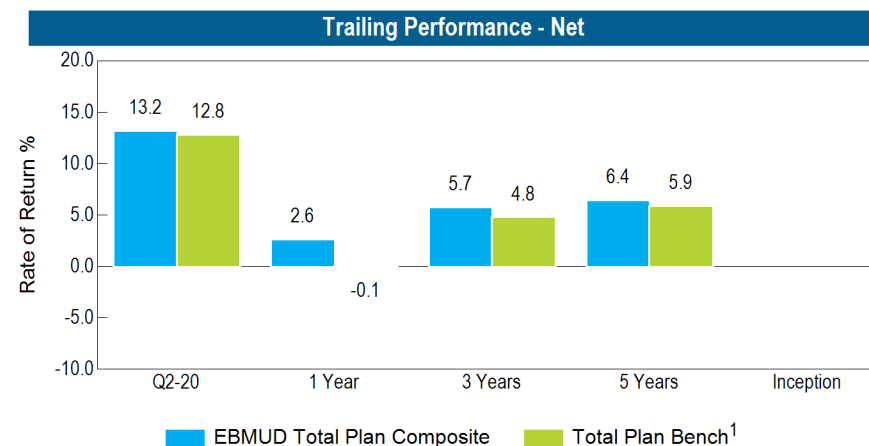
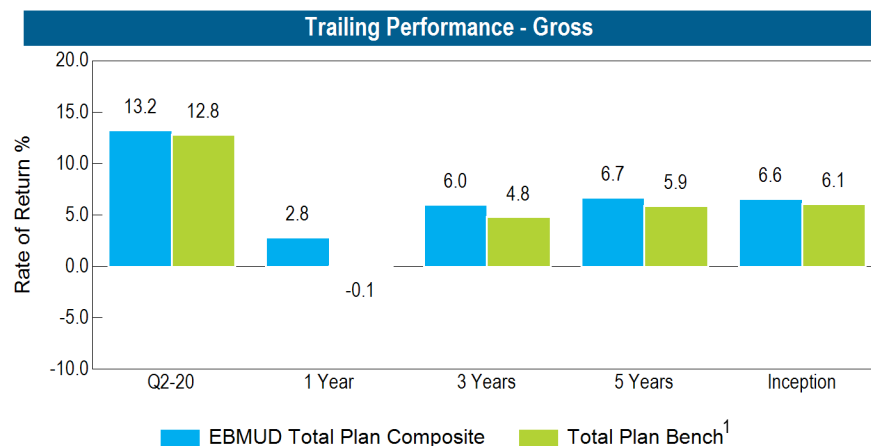
#### 3 Years Ending June 30, 2020

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
EBMUD Total Plan Composite	5.97%	11.24%	0.38
Total Plan Bench	4.77%	11.57%	0.27

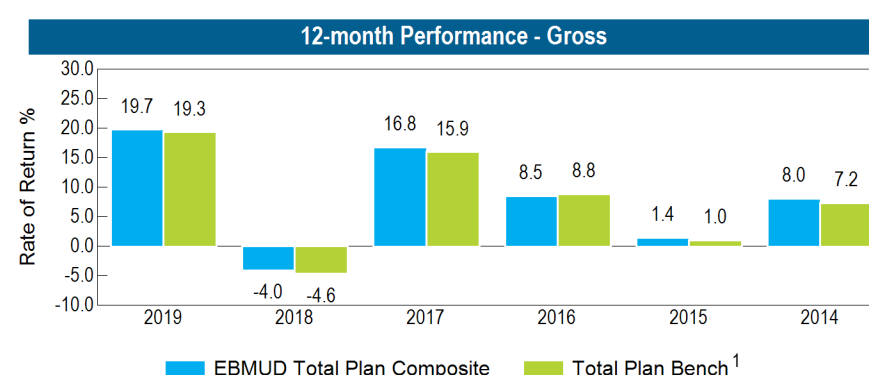
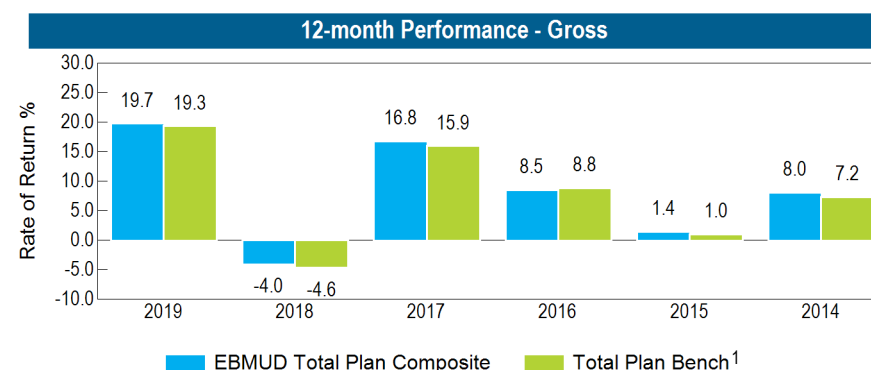
#### 5 Years Ending June 30, 2020

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
EBMUD Total Plan Composite	6.69%	10.02%	0.55
Total Plan Bench	5.85%	10.17%	0.46

### EBMUD Total Plan Composite | As of June 30, 2020



	QTD	1 Yr	3 Yrs	5 Yrs	Inception	2019	2018	2017	2016	2015	2014
<b>EBMUD Total Plan Composite - Gross</b>	<b>13.2</b>	<b>2.8</b>	<b>6.0</b>	<b>6.7</b>	--	<b>19.7</b>	<b>-4.0</b>	<b>16.8</b>	<b>8.5</b>	<b>1.4</b>	<b>8.0</b>
<b>EBMUD Total Plan Composite - Net</b>	<b>13.2</b>	<b>2.6</b>	<b>5.7</b>	<b>6.4</b>	--	<b>19.5</b>	<b>-4.3</b>	<b>16.4</b>	<b>8.2</b>	<b>1.1</b>	<b>7.7</b>
<i>Total Plan Bench<sup>1</sup></i>	<i>12.8</i>	<i>-0.1</i>	<i>4.8</i>	<i>5.9</i>	--	<i>19.3</i>	<i>-4.6</i>	<i>15.9</i>	<i>8.8</i>	<i>1.0</i>	<i>7.2</i>
<i>InvMetrics Public DB &gt; \$1B Gross Median<sup>2</sup></i>	<i>10.2</i>	<i>1.2</i>	<i>4.9</i>	<i>5.4</i>	--	<i>16.7</i>	<i>-3.7</i>	<i>16.2</i>	<i>8.0</i>	<i>0.3</i>	<i>5.7</i>



<sup>1</sup> Policy Benchmark consists of 25% Russell 3000 (blend), 25% MSCI ACWIxU.S. (blend), 20% CBOE BXM, 10% BB Aggregate, 10% BB US Intermediate Gov/Cred, 2.5% BB 1-5 Year U.S. High Yield Cash Pay, 2.5% 60% CredSuisLevLoan/40% BBStGovCorp, 2.5% S&P/LSTA Performing Loans, and 2.5% FTSE NAREIT Equity REITs index 12/1/2019-present; see Appendix for historical Policy Benchmark composition.

<sup>2</sup> InvMetrics Public DB > \$1B Universe includes BNY Mellon Public > \$1B Fund Universe and IM client data.

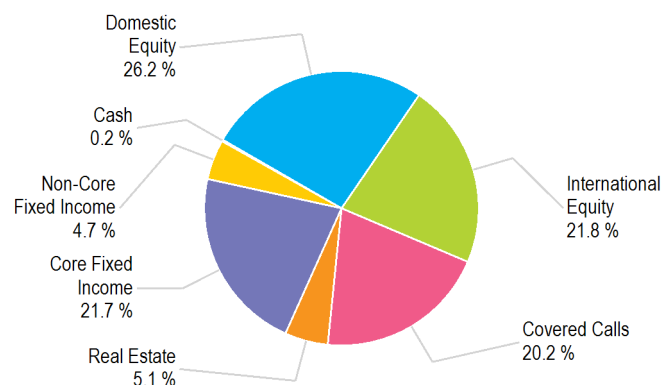
### EBMUD Total Plan Composite | As of June 30, 2020

#### Asset Allocation vs. Target<sup>1</sup>

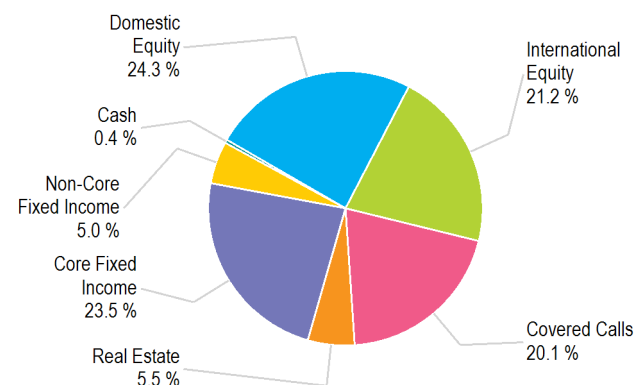
	Current (\$)	Current (%)	Policy (%)	Difference* (%)	Within Range <sup>2</sup>
Domestic Equity <sup>3</sup>	485,614,289	26.2	25.0	1.2	Yes
International Equity	403,760,390	21.8	25.0	-3.2	Yes
Covered Calls	374,594,191	20.2	20.0	0.2	Yes
Real Estate <sup>4</sup>	95,247,948	5.1	5.0	0.1	Yes
Core Fixed Income	401,778,373	21.7	20.0	1.7	Yes
Non-Core Fixed Income	87,866,381	4.7	5.0	-0.3	Yes
Cash	4,518,038	0.2	0.0	0.2	No
<b>Total</b>	<b>1,853,379,610</b>	<b>100.0</b>	<b>100.0</b>		

\*Difference between Policy and Current Allocation

June 30, 2020 : \$1,853,379,610



March 31, 2020 : \$1,638,344,551



<sup>1</sup> Current policy target allocations elected by the Board in January 2019 took effect March 2019 upon the transition to the new long-term strategic allocation.

<sup>2</sup> Policy rebalancing ranges shown are for non-turbulent market periods. The Plan also has established rebalancing ranges to be in effect during turbulent market periods.

<sup>3</sup> Includes approximately \$779,196 in the global transition account.

<sup>4</sup> RREEF performance results and allocation are lagged one-quarter.

### Domestic and International Equity

The EBMUD Domestic Equity class is currently 100% passively-managed. The Plan liquidated all of its actively-managed domestic equity mandates in June 2018 to move towards the Plan's new strategic policy target allocations effective July 1, 2018.

The International Equity class is 60% actively-managed by two managers, Franklin Templeton and Fisher Investments, and 40% passively-managed by Northern Trust.

Both of EBMUD's active International Equity managers produced material outperformance/underperformance relative to their respective benchmarks over various trailing periods ending June 30, 2020. The following addresses the drivers of these excess results.

- Fisher outperformed the MSCI ACWI x US (blend) Index over all the reported periods by 2.3%, 5.3%, 1.8%, and 1.8% respectively. An underweight and selection effect within Japan provided the largest positive contribution to relative return during the most recent quarter. Over the 1-, 3-, and 5-year periods, country, sector, and equity selection contributed to return with an overweight to Information Technology having the largest impact.
- The Franklin Templeton account trailed the MSCI ACWI x US (blend) Index over all the reported time periods by (3.6%), (5.8%), (5.5%) and (4.1%) respectively. Poor stock selection in Industrials and Information Technology detracted from the quarter and 1-year results. Overweight in Asia and Europe along with poor stock selection in Financials and Industrials dampened the 3- and 5-year results.

## Manager Performance - Gross of Fees | As of June 30, 2020

Domestic and International Equity					
	Market Value	QTD	1 Yr	3 Yrs	5 Yrs
<b>US Equity Composite</b>	<b>485,614,289</b>	<b>21.9</b>	<b>6.5</b>	<b>10.4</b>	<b>10.3</b>
<i>Russell 3000 Hybrid</i>		<i>22.0</i>	<i>6.5</i>	<i>10.0</i>	<i>10.0</i>
Northern Trust Russell 3000	484,835,094	21.9	6.5	--	--
<i>Russell 3000</i>		<i>22.0</i>	<i>6.5</i>	--	--
<b>NonUS Equity Composite</b>	<b>403,760,390</b>	<b>16.3</b>	<b>-4.3</b>	<b>0.1</b>	<b>1.8</b>
<i>MSCI ACWI xUS (blend)<sup>1</sup></i>		<i>16.3</i>	<i>-4.4</i>	<i>1.6</i>	<i>2.7</i>
Northern Trust ACWI ex US	164,779,445	16.3	-4.2	--	--
<i>MSCI ACWI ex USA Gross</i>		<i>16.3</i>	<i>-4.4</i>	--	--
Fisher Investments	133,014,161	19.5	0.9	3.4	4.5
<i>MSCI ACWI xUS (blend)</i>		<i>16.3</i>	<i>-4.4</i>	<i>1.6</i>	<i>2.7</i>
Franklin Templeton	105,966,784	12.7	-10.2	-3.9	-1.4
<i>MSCI ACWI xUS (blend)</i>		<i>16.3</i>	<i>-4.4</i>	<i>1.6</i>	<i>2.7</i>

<sup>1</sup> As of January 1, 2007, the benchmark changed from MSCI EAFE to MSCI ACWI xUS.

	Covered Calls				
	Market Value	QTD	1 Yr	3 Yrs	5 Yrs
Parametric BXM	120,435,868	11.8	-1.4	3.3	5.6
<i>CBOE S&amp;P 500 BuyWrite USD</i>		<i>9.1</i>	<i>-10.3</i>	<i>-0.2</i>	<i>3.0</i>
Parametric Delta Shift	132,189,421	19.3	5.7	8.0	9.0
<i>CBOE S&amp;P 500 BuyWrite USD</i>		<i>9.1</i>	<i>-10.3</i>	<i>-0.2</i>	<i>3.0</i>
Van Hulzen	121,968,902	9.4	-1.9	3.1	4.7
<i>CBOE S&amp;P 500 BuyWrite USD</i>		<i>9.1</i>	<i>-10.3</i>	<i>-0.2</i>	<i>3.0</i>

Over the latest quarter ending June 30, 2020, all of EBMUD's three Covered Calls mandates outperformed the CBOE BXM Index.

- The Parametric BXM strategy outperformed the CBOE BXM Index over all the reported time periods by 2.7%, 8.9%, 3.5% and 1.4% respectively. The Buy-Write Portfolio is implemented by writing at-the money options and diversifying option expiration dates which eliminates the path-dependency of the mechanical, passive BXM Index.
- Parametric Delta Shift strategy outperformed the benchmark over all reported periods by 10.2%, 16.0%, 8.2%, and 6.0% respectively. Delta Shift generally performs best in down, flat, moderately trending or range bound equity markets.
- Van Hulzen, outperformed the CBOE BXM Index over all reported periods by 0.3%, 8.4%, 3.3% and 1.7% respectively. The Van Hulzen covered call strategy uses call options with the goal of reducing portfolio volatility and creating incremental income.



## Manager Performance - Gross of Fees | As of June 30, 2020

Fixed Income Composite					
	Market Value	QTD	1 Yr	3 Yrs	5 Yrs
CS McKee	208,451,905	4.5	9.1	5.6	4.7
<i>BBgBarc US Aggregate TR</i>		<i>2.9</i>	<i>8.7</i>	<i>5.3</i>	<i>4.3</i>
Garcia Hamilton	193,326,468	4.6	--	--	--
<i>BBgBarc US Intermediate Gov/Cred</i>		<i>2.8</i>	<i>--</i>	<i>--</i>	<i>--</i>
MacKay Shields (HY)	45,187,876	9.0	2.8	--	--
<i>ICE BofA ML US Corp Cash Pay BB-B 1-5Yr</i>		<i>8.5</i>	<i>-1.4</i>	<i>--</i>	<i>--</i>
Federated Investment Counseling (Bank Loans)	42,678,505	5.2	-1.4	--	--
<i>60% CredSuisLevLoan/40% BBStGovCorp</i>		<i>5.9</i>	<i>-0.2</i>	<i>--</i>	<i>--</i>

Over the latest quarter ending June 30, 2020, all four of EBMUD's Fixed Income mandates produced material outperformance/underperformance relative to their respective benchmarks over various trailing periods. The following addresses the drivers of these excess results.

- CS McKee outperformed the BBgBarc US Aggregate Index over the quarter, 1-, 3-, and 5-year time periods by 1.6%, 1.4% and 0.4% respectively. Overweight to and selection within corporate credit were the largest contributors to performance.
- Garcia Hamilton outperformed the BBgBarc US Aggregate Index over the quarter by 1.7%.
- MacKay Shields outperformed the ICE BofAML US Corp Cash Pay BB-B 1-5Yr Index by 0.5% over the quarter and 4.2% for the 1-year period. Energy sector selection and positioning drove positive performance.
- Federated Investment Counseling (Bank Loans) has underperformed the 60% CredSuisLevLoan/40% BBStGovCorp benchmark over the second quarter and 1-year periods by 0.7% and -1.2% respectively.

## Manager Performance - Gross of Fees | As of June 30, 2020

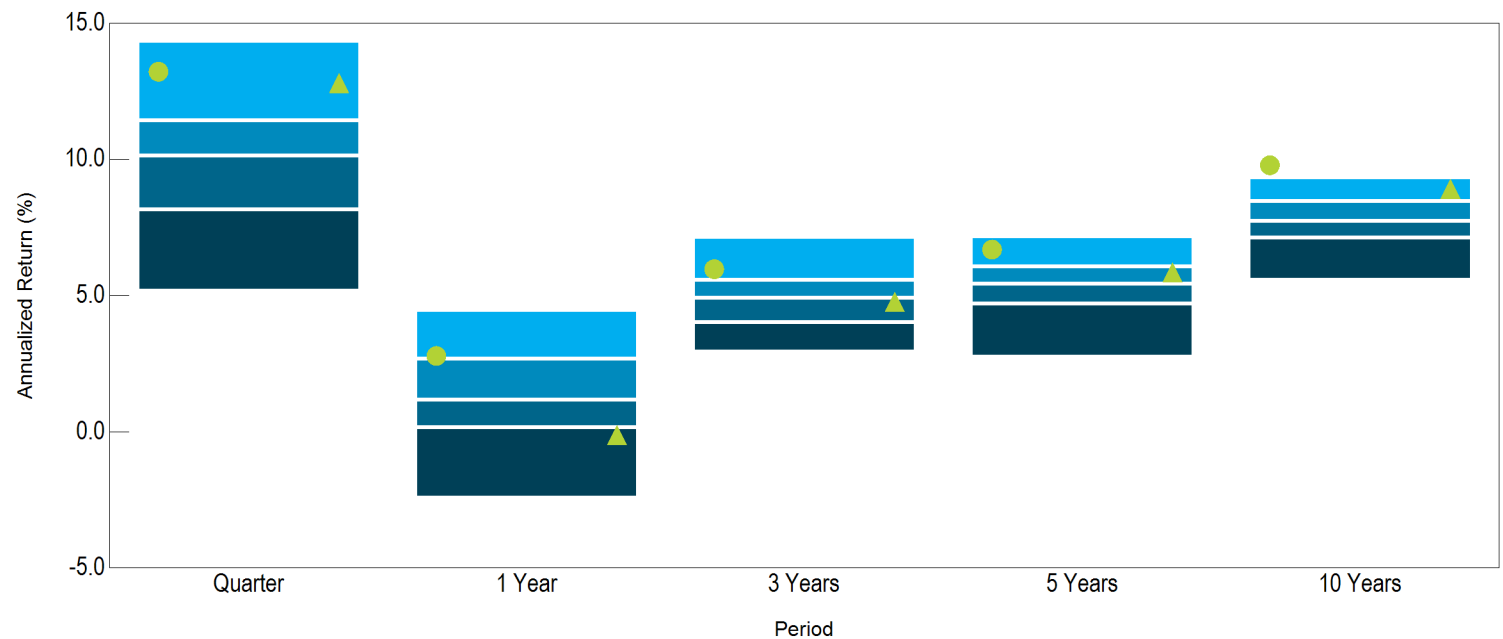
	Real Estate Composite				
	Market Value	QTD	1 Yr	3 Yrs	5 Yrs
RREEF America II Lag <sup>1</sup>	49,670,169	1.2	6.6	7.6	9.1
<i>NCREIF NPI Mo 1 Qtr Lag</i>		<i>0.7</i>	<i>5.3</i>	<i>6.4</i>	<i>7.6</i>
CenterSquare	45,577,779	11.7	-9.5	2.4	5.8
<i>FTSE NAREIT Equity REIT</i>		<i>11.8</i>	<i>-13.0</i>	<i>0.0</i>	<i>4.1</i>

East Bay's Real Estate manager, RREEF II, outperformed its benchmark, the NCREIF Property Index, over the quarter and the 1-, 3-, and 5-year time periods. During the lagged 12-month period, RREEF America REIT II operations generated an income return of 4.2% before fees. Same store net operating income for the 1-year period increased 3.1%, extending the trend of improving same store income from operations. Occupancy at the end of the quarter at 90 percent overall, slightly decreasing from the prior quarter.

CenterSquare, East Bay's REIT manager, tracked the FTSE NAREIT Equity REITs Index for the quarter and has outperformed over 1-, 3-, and 5-year trailing periods. Sector returns for the NAREIT Equity REITs Index lagged for the quarter.

<sup>1</sup> Results are lagged one quarter.

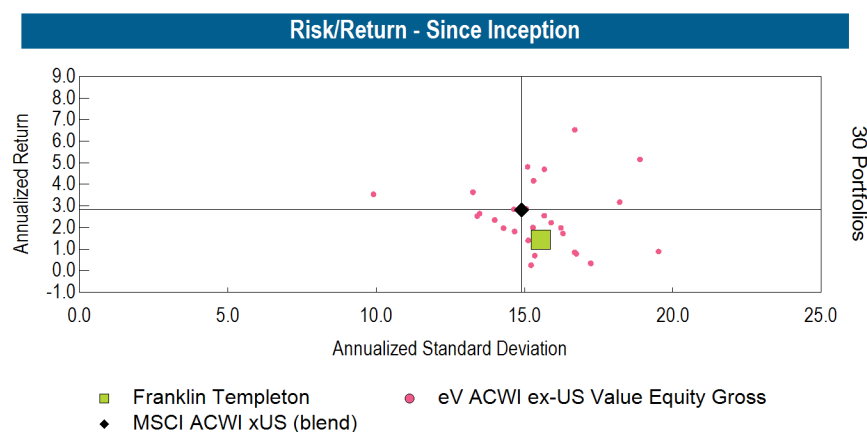
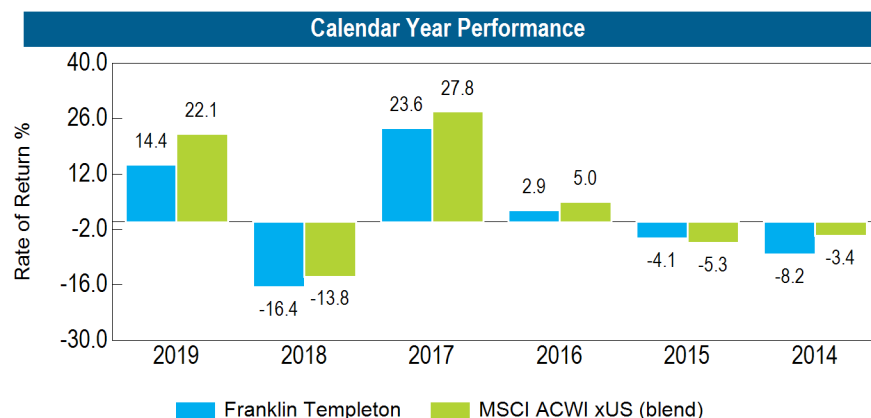
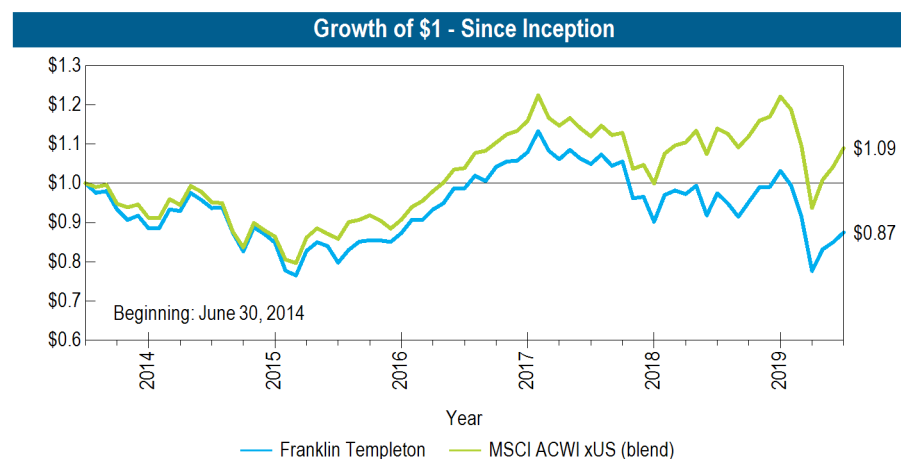
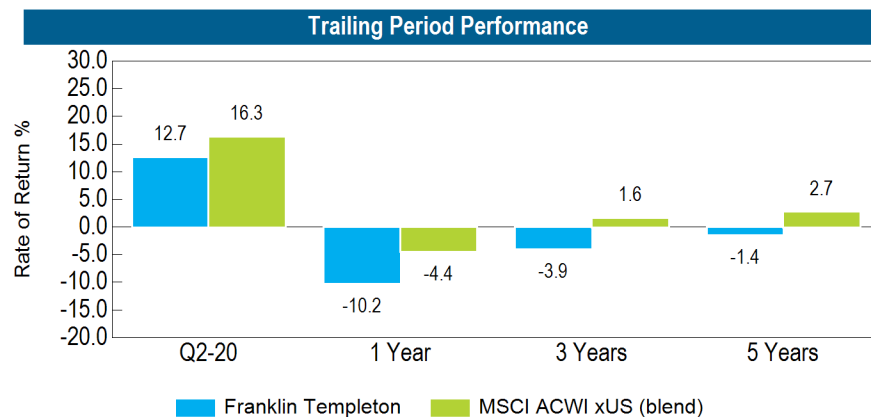
#### InvMetrics Public DB > \$1B Gross Return Comparison Ending June 30, 2020



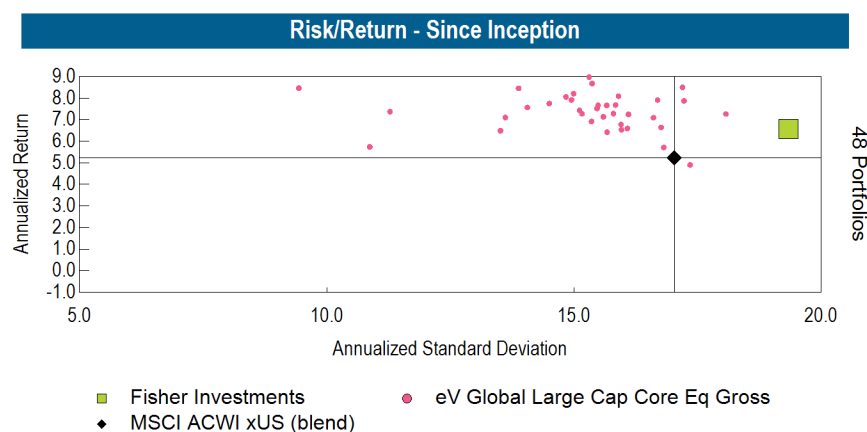
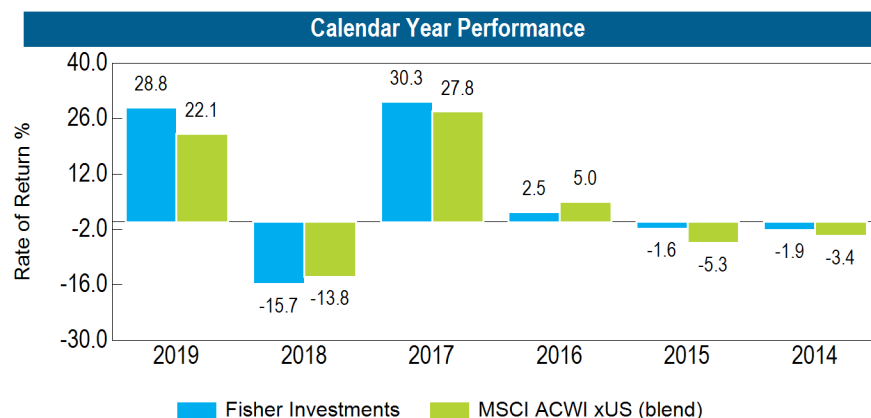
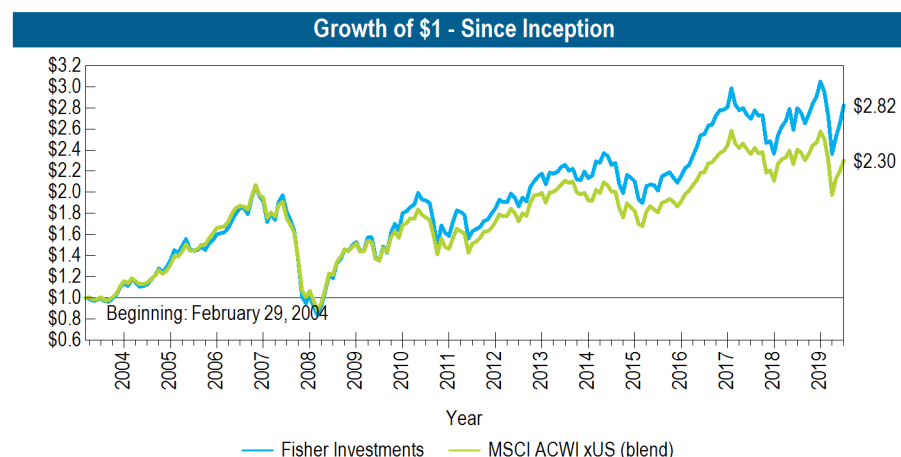
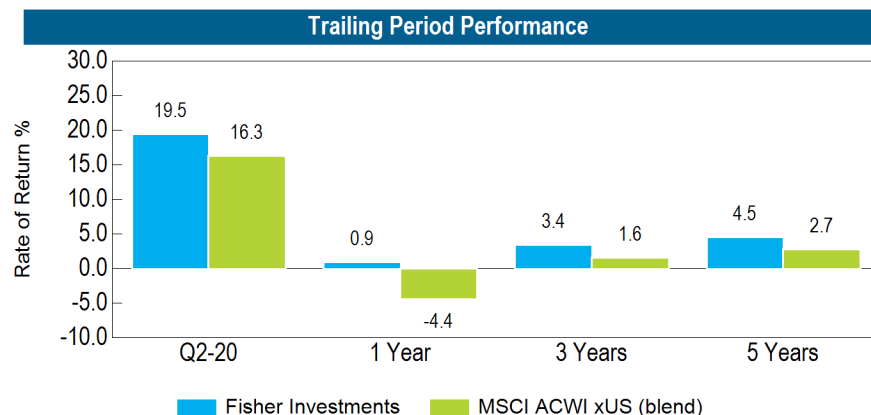
	Return (Rank)									
5th Percentile	14.3		4.5		7.1		7.2		9.3	
25th Percentile	11.4		2.7		5.6		6.1		8.5	
Median	10.2		1.2		4.9		5.4		7.8	
75th Percentile	8.2		0.2		4.0		4.7		7.1	
95th Percentile	5.2		-2.4		2.9		2.8		5.6	
# of Portfolios	82		82		82		81		74	
● EBMUD Total Plan Composite <sup>1</sup>	13.2	(11)	2.8	(22)	6.0	(20)	6.7	(12)	9.8	(2)
▲ Total Plan Bench <sup>1</sup>	12.8	(13)	-0.1	(78)	4.8	(57)	5.9	(33)	8.9	(14)

<sup>1</sup> Calculation based on monthly periodicity.

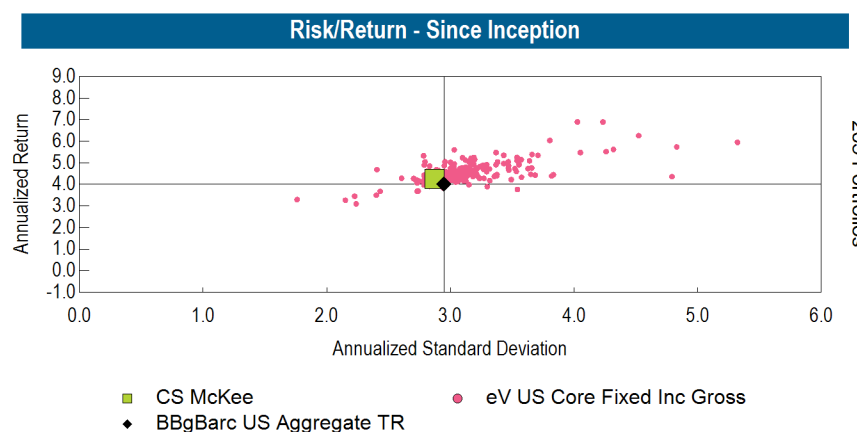
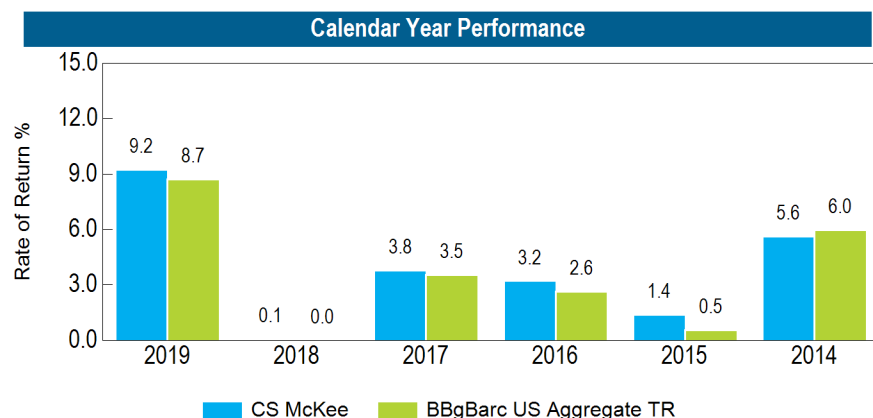
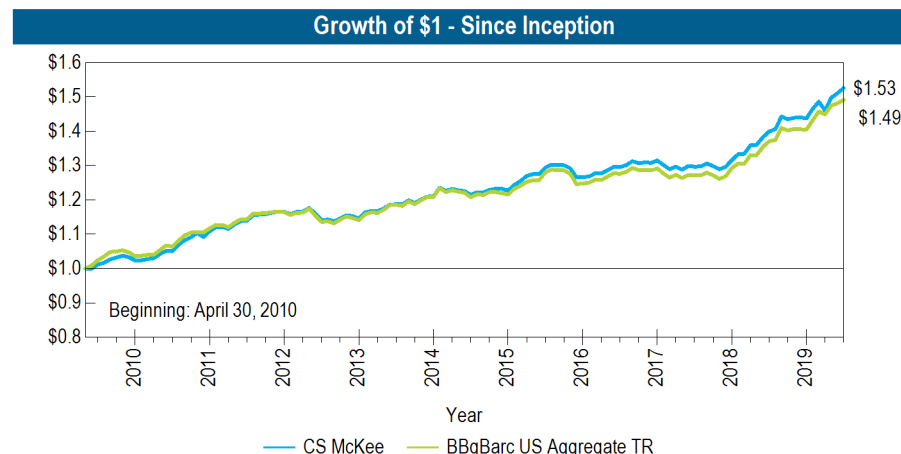
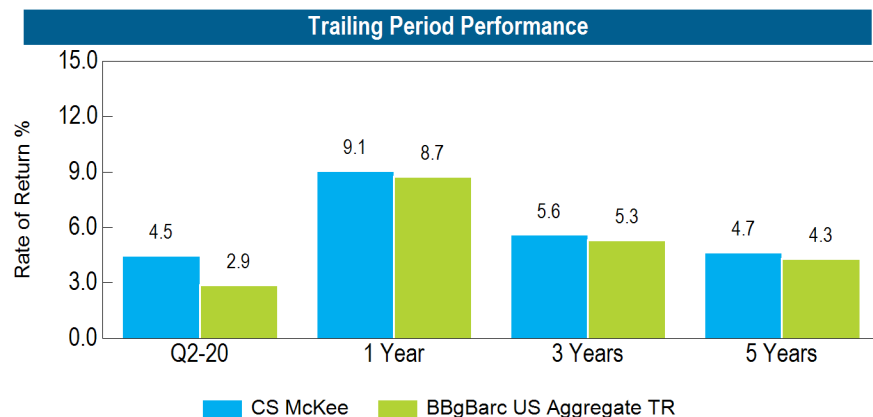
	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Franklin Templeton	-0.11%	1.01	-0.38	0.05	3.60%	0.95	94.77%	101.70%
MSCI ACWI xUS (blend)	0.00%	1.00	--	0.15	0.00%	1.00	100.00%	100.00%



	Alpha	Beta	Information Ratio	Sharpe Ratio	Tracking Error	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Fisher Investments	0.14%	1.10	0.56	0.41	3.85%	0.96	135.63%	101.48%
MSCI ACWI xUS (blend)	0.00%	1.00	--	0.32	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
CS McKee	0.04%	0.93	0.27	1.27	0.90%	0.91	101.29%	93.10%
BBgBarc US Aggregate TR	0.00%	1.00	--	1.16	0.00%	1.00	100.00%	100.00%



## Asset Class Returns - Net of Fees<sup>1</sup> | As of June 30, 2020

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
<b>EBMUD Total Plan Composite<sup>1</sup></b>	<b>13.2</b>	<b>2.6</b>	<b>5.7</b>	<b>6.4</b>
<i>Total Plan Bench<sup>2</sup></i>	<i>12.8</i>	<i>-0.1</i>	<i>4.8</i>	<i>5.9</i>
<b>US Equity Composite</b>	<b>21.9</b>	<b>6.5</b>	<b>10.4</b>	<b>10.2</b>
<i>Russell 3000 Hybrid<sup>3</sup></i>	<i>22.0</i>	<i>6.5</i>	<i>10.0</i>	<i>10.0</i>
<b>NonUS Equity Composite</b>	<b>16.3</b>	<b>-4.5</b>	<b>-0.3</b>	<b>1.4</b>
<i>MSCI ACWI xUS (blend)<sup>4</sup></i>	<i>16.3</i>	<i>-4.4</i>	<i>1.6</i>	<i>2.7</i>
<b>Covered Calls Composite</b>	<b>13.5</b>	<b>0.7</b>	<b>4.7</b>	<b>6.3</b>
<i>CBOE S&amp;P 500 BuyWrite USD</i>	<i>9.1</i>	<i>-10.3</i>	<i>-0.2</i>	<i>3.0</i>
<b>Real Estate Composite</b>	<b>5.8</b>	<b>-2.0</b>	<b>4.5</b>	<b>6.8</b>
<i>NCREIF NPI Lag<sup>6</sup></i>	<i>6.2</i>	<i>-3.3</i>	<i>3.7</i>	<i>6.2</i>
<b>Fixed Income Composite</b>	<b>5.0</b>	<b>6.6</b>	<b>4.8</b>	<b>3.8</b>
<i>Fixed Income Composite Bench<sup>5</sup></i>	<i>3.7</i>	<i>6.3</i>	<i>4.6</i>	<i>3.9</i>
<b>Cash Composite</b>	<b>0.6</b>	<b>2.5</b>	<b>2.0</b>	<b>1.4</b>
<i>FTSE T-Bill 3 Months TR</i>	<i>0.1</i>	<i>1.6</i>	<i>1.7</i>	<i>1.2</i>

<sup>1</sup> Historical net returns for the Total Portfolio aggregate is currently available from 2Q 2011.

<sup>2</sup> Policy Benchmark consists of 25% Russell 3000 (blend), 25% MSCI ACWIxU.S. (blend), 20% CBOE BXM, 10% BB Aggregate, 10% BB US Intermediate Gov/Cred, 2.5% BB 1-5 Year U.S. High Yield Cash Pay, 2.5% 60% CredSuisLevLoan/40% BBStGovCorp, 2.5% S&P/LSTA Performing Loans, and 2.5% FTSE NAREIT Equity REITs index 12/1/2019-present; see Appendix for historical Policy Benchmark composition.

<sup>3</sup> Russell 3000 as of 10/1/05. Prior: 30% S&P500, 10% S&P400, 10% Russell 2000 (4/1/05-9/30/05); 33% S&P500, 10% S&P400, 10% Russell 2000 (9/1/98-3/31/05); 30% S&P500, 15% Wilshire 5000 (4/1/96 - 8/31/98).

<sup>4</sup> MSCI ACWIxU.S. as of 1/1/07; MSCI EAFE ND thru 12/31/06.

<sup>5</sup> 40% BB Aggregate, 40% BBgBarc US Intermediate Gov/Cred, 10% ICE BofA ML U.S. Corp Cash Pay BB-B 1-5 Year, and 10% Blend 60% Credit Suisse Leverage Loan/40% BBg BC Short Term Gov/Corp 12/1/2019-present. See Appendix for historical Composite benchmark.

<sup>6</sup> 50% NCREIF (lagged), 50% FTSE NAREIT Equity REITs Index as of 11/1/11; NCREIF (lagged) thru 10/31/11

## Manager Returns - Net of Fees | As of June 30, 2020

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
<b>US Equity Composite</b>	<b>21.9</b>	<b>6.5</b>	<b>10.4</b>	<b>10.2</b>
<i>Russell 3000 Hybrid</i>	<i>22.0</i>	<i>6.5</i>	<i>10.0</i>	<i>10.0</i>
Northern Trust Russell 3000	21.9	6.5	--	--
<i>Russell 3000</i>	<i>22.0</i>	<i>6.5</i>	--	--
<b>NonUS Equity Composite</b>	<b>16.3</b>	<b>-4.5</b>	<b>-0.3</b>	<b>1.4</b>
<i>MSCI ACWI xUS (blend)<sup>1</sup></i>	<i>16.3</i>	<i>-4.4</i>	<i>1.6</i>	<i>2.7</i>
Northern Trust ACWI ex US	16.3	-4.3	--	--
<i>MSCI ACWI ex USA Gross</i>	<i>16.3</i>	<i>-4.4</i>	--	--
Fisher Investments	19.3	0.4	2.8	3.9
<i>MSCI ACWI xUS (blend)</i>	<i>16.3</i>	<i>-4.4</i>	<i>1.6</i>	<i>2.7</i>
Franklin Templeton	12.5	-10.6	-4.4	-1.9
<i>MSCI ACWI xUS (blend)</i>	<i>16.3</i>	<i>-4.4</i>	<i>1.6</i>	<i>2.7</i>
<b>Covered Calls Composite</b>	<b>13.5</b>	<b>0.7</b>	<b>4.7</b>	<b>6.3</b>
<i>CBOE S&amp;P 500 BuyWrite USD</i>	<i>9.1</i>	<i>-10.3</i>	<i>-0.2</i>	<i>3.0</i>
Parametric BXM	11.7	-1.6	3.1	5.4
<i>CBOE S&amp;P 500 BuyWrite USD</i>	<i>9.1</i>	<i>-10.3</i>	<i>-0.2</i>	<i>3.0</i>
Parametric Delta Shift	19.2	5.5	7.7	8.6
<i>CBOE S&amp;P 500 BuyWrite USD</i>	<i>9.1</i>	<i>-10.3</i>	<i>-0.2</i>	<i>3.0</i>
Van Hulzen	9.3	-2.1	2.9	4.5
<i>CBOE S&amp;P 500 BuyWrite USD</i>	<i>9.1</i>	<i>-10.3</i>	<i>-0.2</i>	<i>3.0</i>

<sup>1</sup> As of January 1, 2007, the benchmark changed from MSCI EAFE to MSCI ACWI x U.S.



## Manager Returns - Net of Fees | As of June 30, 2020

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
<b>Real Estate Composite</b>	<b>5.8</b>	<b>-2.0</b>	<b>4.5</b>	<b>6.8</b>
<i>NCREIF NPI Lag</i>	<i>6.2</i>	<i>-3.3</i>	<i>3.7</i>	<i>6.2</i>
RREEF America II Lag	0.9	5.6	6.6	8.1
<i>NCREIF NPI Mo 1 Qtr Lag</i>	<i>0.7</i>	<i>5.3</i>	<i>6.4</i>	<i>7.6</i>
CenterSquare	11.6	-9.8	2.1	5.5
<i>FTSE NAREIT Equity REIT</i>	<i>11.8</i>	<i>-13.0</i>	<i>0.0</i>	<i>4.1</i>
<b>Fixed Income Composite</b>	<b>5.0</b>	<b>6.6</b>	<b>4.8</b>	<b>3.8</b>
<i>Fixed Income Composite Bench</i>	<i>3.7</i>	<i>6.3</i>	<i>4.6</i>	<i>3.9</i>
<b>Fixed Income Core Fixed Income Composite</b>	<b>4.5</b>	<b>8.0</b>	<b>5.2</b>	<b>4.4</b>
<i>Fixed Income Core Composite Bench</i>	<i>2.9</i>	<i>--</i>	<i>--</i>	<i>--</i>
CS McKee	4.4	8.9	5.4	4.5
<i>BBgBarc US Aggregate TR</i>	<i>2.9</i>	<i>8.7</i>	<i>5.3</i>	<i>4.3</i>
Garcia Hamilton	4.5	--	--	--
<i>BBgBarc US Intermediate Gov/Cred</i>	<i>2.8</i>	<i>--</i>	<i>--</i>	<i>--</i>
<b>Fixed Income Non-Core Fixed Income Composite</b>	<b>7.1</b>	<b>0.6</b>	<b>2.1</b>	<b>1.8</b>
<i>Fixed Income Non-Core Composite Bench</i>	<i>7.2</i>	<i>-1.0</i>	<i>1.9</i>	<i>2.4</i>
MacKay Shields (HY)	8.9	2.4	--	--
<i>ICE BofA ML US Corp Cash Pay BB-B 1-5Yr</i>	<i>8.5</i>	<i>-1.4</i>	<i>--</i>	<i>--</i>
Federated Investment Counseling (Bank Loans)	5.0	-1.8	--	--
<i>60% CredSuisLevLoan/40% BBStGovCorp</i>	<i>5.9</i>	<i>-0.2</i>	<i>--</i>	<i>--</i>

## July Performance Update

	Market Value	1 Mo	YTD	1 Yr	3 Yrs	5 Yrs
<b>EBMUD Total Plan Composite</b>	<b>1,917,631,237</b>	<b>3.6</b>	<b>-0.4</b>	<b>6.2</b>	<b>6.7</b>	<b>7.1</b>
<i>Total Plan Bench</i>		<i>3.8</i>	<i>-2.5</i>	<i>3.3</i>	<i>5.5</i>	<i>6.3</i>
<b>US Equity Composite</b>	<b>513,006,437</b>	<b>5.6</b>	<b>2.0</b>	<b>10.8</b>	<b>11.9</b>	<b>11.1</b>
<i>Russell 3000 Hybrid</i>		<i>5.7</i>	<i>2.0</i>	<i>10.9</i>	<i>11.4</i>	<i>10.9</i>
Northern Trust Russell 3000	512,226,902	5.6	2.0	10.9	--	--
<i>Russell 3000</i>		<i>5.7</i>	<i>2.0</i>	<i>10.9</i>	--	--
<b>NonUS Equity Composite</b>	<b>419,202,215</b>	<b>3.8</b>	<b>-7.5</b>	<b>1.3</b>	<b>0.3</b>	<b>2.5</b>
<i>MSCI ACWI xUS (blend)</i>		<i>4.5</i>	<i>-6.7</i>	<i>1.1</i>	<i>1.9</i>	<i>3.7</i>
Northern Trust ACWI ex US	171,566,615	4.1	-6.9	1.6	--	--
<i>MSCI ACWI ex USA Gross</i>		<i>4.5</i>	<i>-6.7</i>	<i>1.1</i>	--	--
Fisher Investments	139,925,706	5.2	-2.6	7.8	4.1	5.4
<i>MSCI ACWI xUS (blend)</i>		<i>4.5</i>	<i>-6.7</i>	<i>1.1</i>	<i>1.9</i>	<i>3.7</i>
Franklin Templeton	107,709,895	1.6	-13.8	-6.3	-4.5	-1.1
<i>MSCI ACWI xUS (blend)</i>		<i>4.5</i>	<i>-6.7</i>	<i>1.1</i>	<i>1.9</i>	<i>3.7</i>
<b>Covered Calls Composite</b>	<b>388,981,106</b>	<b>3.8</b>	<b>-2.4</b>	<b>3.7</b>	<b>5.6</b>	<b>6.9</b>
<i>CBOE S&amp;P 500 BuyWrite USD</i>		<i>3.9</i>	<i>-11.8</i>	<i>-7.8</i>	<i>0.6</i>	<i>3.2</i>
Parametric BXM	125,042,070	3.8	-3.8	1.4	4.1	5.9
<i>CBOE S&amp;P 500 BuyWrite USD</i>		<i>3.9</i>	<i>-11.8</i>	<i>-7.8</i>	<i>0.6</i>	<i>3.2</i>
Parametric Delta Shift	139,242,575	5.3	1.2	9.7	9.2	9.6
<i>CBOE S&amp;P 500 BuyWrite USD</i>		<i>3.9</i>	<i>-11.8</i>	<i>-7.8</i>	<i>0.6</i>	<i>3.2</i>
Van Hulzen	124,696,462	2.2	-4.6	-0.2	3.4	4.9
<i>CBOE S&amp;P 500 BuyWrite USD</i>		<i>3.9</i>	<i>-11.8</i>	<i>-7.8</i>	<i>0.6</i>	<i>3.2</i>

### EBMUD Total Plan Composite | As of July 31, 2020

	Market Value	1 Mo	YTD	1 Yr	3 Yrs	5 Yrs
<b>Real Estate Composite</b>	<b>97,227,246</b>	<b>2.1</b>	<b>-4.8</b>	<b>-1.1</b>	<b>5.6</b>	<b>7.6</b>
<i>NCREIF NPI Lag</i>		<i>2.0</i>	<i>-6.1</i>	<i>-2.2</i>	<i>4.1</i>	<i>6.0</i>
RREEF America II Lag	49,783,321	0.2	3.1	6.2	7.5	8.9
<i>NCREIF NPI Mo 1 Qtr Lag</i>		<i>0.0</i>	<i>2.3</i>	<i>4.8</i>	<i>6.2</i>	<i>7.4</i>
CenterSquare	47,443,925	4.1	-12.1	-7.0	3.2	5.4
<i>FTSE NAREIT Equity REIT</i>		<i>4.0</i>	<i>-15.4</i>	<i>-10.7</i>	<i>1.0</i>	<i>3.7</i>
<b>Fixed Income Composite</b>	<b>496,931,810</b>	<b>1.5</b>	<b>5.7</b>	<b>8.0</b>	<b>5.4</b>	<b>4.3</b>
<i>Fixed Income Composite Bench</i>		<i>1.4</i>	<i>5.3</i>	<i>7.5</i>	<i>4.9</i>	<i>4.1</i>
CS McKee	212,073,851	1.7	8.0	10.4	6.1	4.9
<i>BBgBarc US Aggregate TR</i>		<i>1.5</i>	<i>7.7</i>	<i>10.1</i>	<i>5.7</i>	<i>4.5</i>
Garcia Hamilton	194,945,826	0.8	5.7	--	--	--
<i>BBgBarc US Intermediate Gov/Cred</i>		<i>0.7</i>	<i>6.1</i>	<i>--</i>	<i>--</i>	<i>--</i>
MacKay Shields (HY)	46,441,680	2.8	2.2	5.2	--	--
<i>ICE BofA ML US Corp Cash Pay BB-B 1-5Yr</i>		<i>3.6</i>	<i>-1.1</i>	<i>1.7</i>	<i>--</i>	<i>--</i>
Federated Investment Counseling (Bank Loans)	43,470,452	1.9	-1.9	-0.2	--	--
<i>60% CredSuisLevLoan/40% BBStGovCorp</i>		<i>1.1</i>	<i>-1.0</i>	<i>0.4</i>	<i>--</i>	<i>--</i>
<b>Cash Composite</b>	<b>2,282,423</b>	<b>0.5</b>	<b>1.8</b>	<b>2.0</b>	<b>2.1</b>	<b>1.5</b>
<i>FTSE T-Bill 3 Months TR</i>		<i>0.0</i>	<i>0.5</i>	<i>1.4</i>	<i>1.7</i>	<i>1.2</i>
Cash LAIF	2,282,423	0.5	1.8	2.0	2.1	1.5
<i>FTSE T-Bill 3 Months TR</i>		<i>0.0</i>	<i>0.5</i>	<i>1.4</i>	<i>1.7</i>	<i>1.2</i>

## **Manager Watch Screens**

### Performance Monitoring Summary

Portfolio	Violation Type (Window) <sup>1</sup>	Date of Initial Violation	Correction Action(s)	Current Status			
				Current Status	Est. Beg. Date of Current Status	Months Since Est. Beg. Date	Performance Since Est. Beg. Date <sup>2</sup>
Franklin	Long	3/31/2019	Placed on Watch (May-19)	Watch	5/31/2019	13	-4.8
MSCI ACWI x US (Blend)							1.3
Fisher	Qualitative	10/31/2019	Placed on Watch (Oct-19)	Watch	11/01/2019	9	-1.0
MSCI ACWI x US (Blend)							-6.0
CS McKee	Qualitative	1/7/2020	Placed on Watch (Jan-20)	Watch	1/16/2020	8	4.1
BBgBarc US Aggregate TR							4.1

- Meketa recommended that the Board place the Franklin International Equity strategy on Watch at the May 2019 Board meeting due to performance concerns.
  - The Franklin International Equity portfolio breached the medium-term relative to benchmark Watch criteria as of 3/31/2019.
- Fisher was placed on Watch for organizational issues as of November 2019 (please refer to Section 6).
- On January 7, 2020 it was announced that North Square Investments would acquire CS McKee. The decision to place CS McKee on watch as a result of this change was made at the January 16<sup>th</sup> meeting. Additional information is provided in the Manager Compliance Certification Response section of this report.

<sup>1</sup> Defined as: Short-Term (12 months), Medium-Term (36 months), Long-Term (60 months).

<sup>2</sup> Annualized for periods greater than 12 months.

#### Quantitative Compliance Monitoring per Watch Criteria

##### Active Management Criteria

- Active investment managers are expected to outperform their respective passive benchmarks related to both their asset class and investment style.
- Relative excess performance that falls below the red acceptable threshold stated in the Watch Criteria for six consecutive months may be a trigger for Watch status.

##### Passive Management Criteria

- Passive investment managers are expected to track the performance of their respective passive benchmarks related to both their asset class and their investment style.
- Tracking error is a measure of how closely a portfolio follows the index to which it is benchmarked.
- For short- and medium-term performance monitoring, a portfolio with tracking error that is above the red acceptable threshold stated in the Watch Criteria for six consecutive months may be a trigger for Watch status.
- For long-term performance monitoring, relative excess performance that falls below the red acceptable threshold stated in the Watch Criteria for six consecutive months may be a trigger for Watch status.

#### Quantitative Monitoring Results - Overall Status Summary

	Prior Qtr Status	Current Qtr Status
Northern Trust – R3000	Acceptable	Acceptable
Franklin Templeton	Caution	Caution
Fisher Investments	Caution	Caution
Northern Trust – ACWlxUS	N/A	N/A
Parametric – BXM	Acceptable	Acceptable
Parametric – Delta Shift	Acceptable	Acceptable
Van Hulzen	Acceptable	Acceptable
CS McKee	Caution	Caution
Garcia Hamilton	N/A	N/A
Mackay Shields – Short Term HY	Acceptable	Acceptable
Federated – Bank Loans	Acceptable	Acceptable
CenterSquare	Acceptable	Acceptable

### Investment Performance Criteria by Asset Class

Asset Class	Short-term (rolling 12-month periods)	Medium-term (rolling 36-month periods)	Long-term (60+ months)
Domestic Equity - Active	Fund return < benchmark return - 3.5%	Fund annualized return < benchmark annualized return - 1.75% for 6 consecutive months	VRR < 0.97 for 6 consecutive months
Domestic Equity - Passive	Tracking error > 0.30%	Tracking error > 0.25% for 6 consecutive months	Fund annualized return < benchmark annualized return - 0.40% for 6 consecutive months
International Equity - Active	Fund return < benchmark return - 4.5%	Fund annualized return < benchmark annualized return - 2.0% for 6 consecutive months	VRR < 0.97 for 6 consecutive months
Covered Calls - Active	Fund return < benchmark return - 3.5%	Fund annualized return < benchmark annualized return - 1.75% for 6 consecutive months	VRR < 0.97 for 6 consecutive months
Covered Calls - Replication	Fund return < benchmark return - 3.5%	Fund annualized return < benchmark annualized return - 1.75% for 6 consecutive months	Fund annualized return < benchmark annualized return - 0.40% for 6 consecutive months
Fixed Income - Core - Active	Fund return < benchmark return - 1.5%	Fund annualized return < benchmark annualized return - 1.0% for 6 consecutive months	VRR < 0.98 for 6 consecutive months
Fixed Income - Core - Passive	Tracking error > 0.25%	Tracking error > 0.20% for 6 consecutive months	Fund annualized return < benchmark annualized return - 0.30% for 6 consecutive months
Fixed Income - Non-Core	Fund return < benchmark return - 4.5%	Fund annualized return < benchmark annualized return - 2.0% for 6 consecutive months	VRR < 0.97 for 6 consecutive months

All criteria are on an annualized basis.

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



#### Manager Performance

	QTD	1 Yr
Northern Trust Russell 3000	21.9	6.5
<i>Russell 3000</i>	22.0	6.5

#### Short-Term Criteria (rolling 12-month periods)

Tracking error > 0.30% for 6 consecutive months

**Current Status:** **Acceptable**

#### Medium-Term Criteria (rolling 36-month periods)

Tracking error > 0.25% for 6 consecutive months

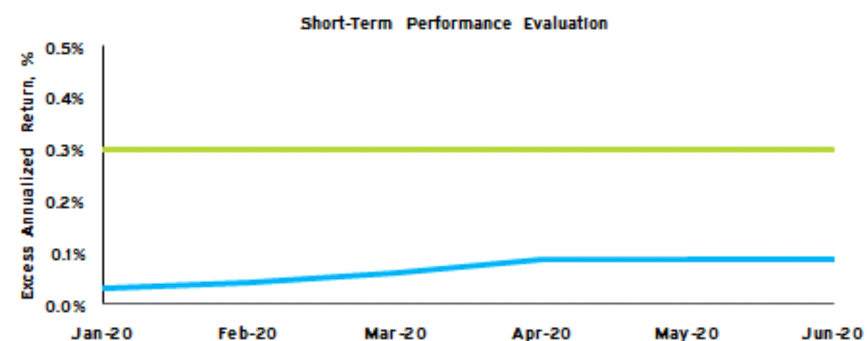
**Current Status:** Not Applicable

#### Long-Term Criteria (60+ months)

Fund annualized return < benchmark annualized return  
-0.40% for 6 consecutive months

**Current Status:** Not Applicable

**Overall Status:** **Acceptable**



#### Manager Performance

	QTD	1 Yr	3 Yrs	5 Yrs
Franklin Templeton	12.5	-10.6	-4.4	-1.9
MSCI ACWI xUS (blend)	16.3	-4.4	1.6	2.7

#### Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -4.5% for 6 consecutive months

**Current Status: Caution**

#### Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -2.0% for 6 consecutive months

**Current Status: Caution**

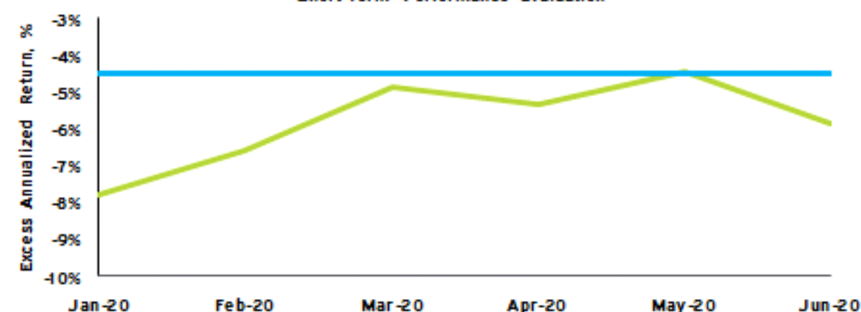
#### Long-Term Criteria (60+ months)

VRR < 0.97 for 6 consecutive months

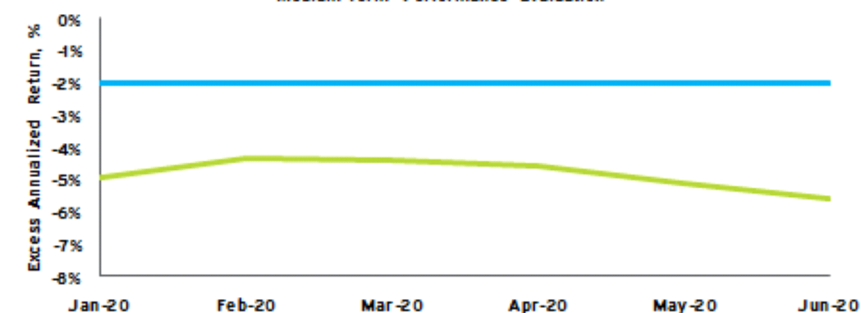
**Current Status: Caution**

**Overall Status: Caution**

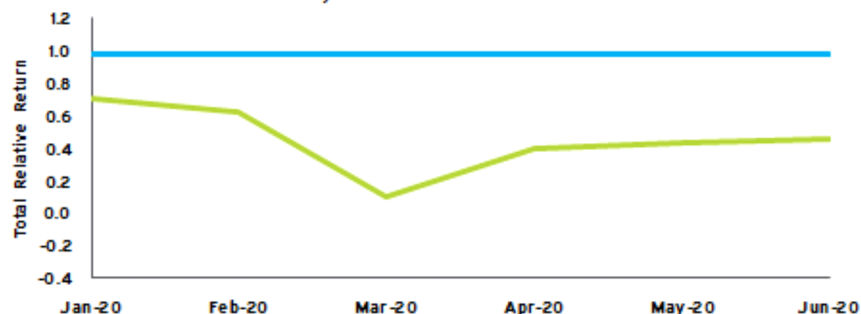
Short-Term Performance Evaluation



Medium-Term Performance Evaluation



Long-Term Performance Evaluation



#### Manager Performance

	QTD	1 Yr	3 Yrs	5 Yrs
Fisher Investments	19.3	0.4	2.8	3.9
MSCI ACWI xUS (blend)	16.3	-4.4	1.6	2.7

#### Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -4.5% for 6 consecutive months

**Current Status: Acceptable**

#### Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -2.0% for 6 consecutive months

**Current Status: Acceptable**

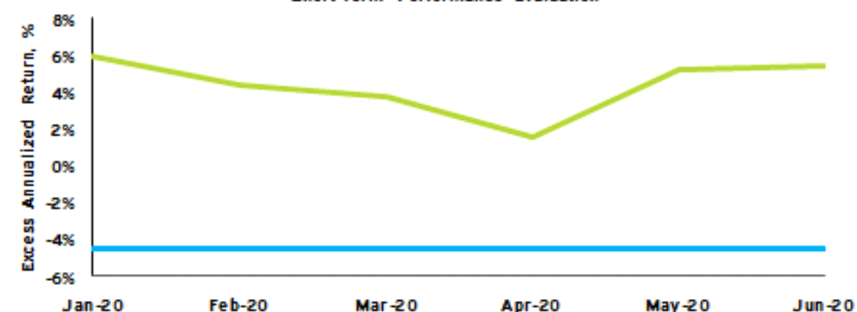
#### Long-Term Criteria (60+ months)

VRR < 0.97 for 6 consecutive months

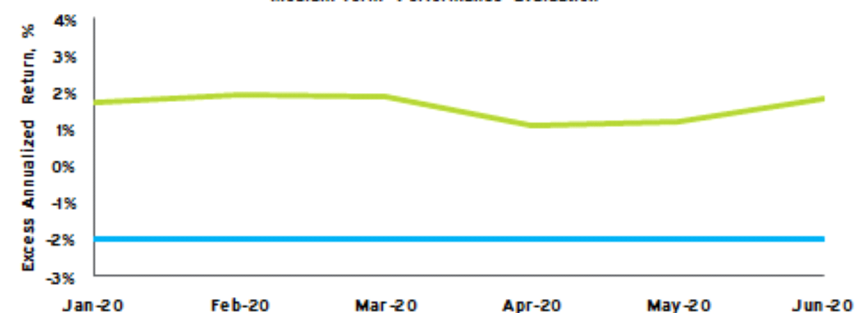
**Current Status: Acceptable**

**Overall Status: Caution**

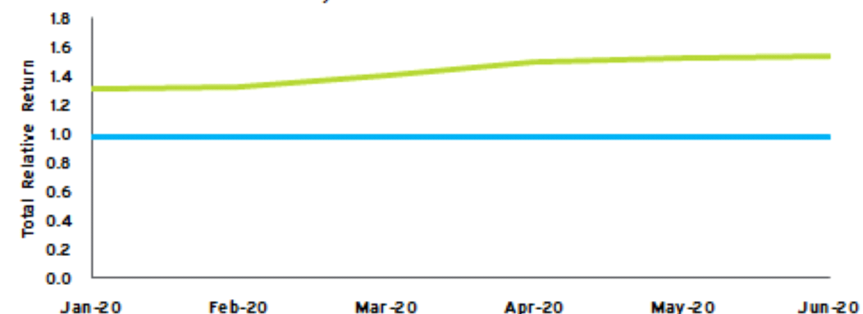
Short-Term Performance Evaluation



Medium-Term Performance Evaluation



Long-Term Performance Evaluation



Fisher Investments is on watch for qualitative reasons.

#### Manager Performance

	QTD	1 Yr	3 Yrs	5 Yrs
Parametric BXM	11.7	-1.6	3.1	5.4
<i>CBOE S&amp;P 500 BuyWrite USD</i>	<i>9.1</i>	<i>-10.3</i>	<i>-0.2</i>	<i>3.0</i>

#### Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -3.5% for 6 consecutive months

**Current Status:** **Acceptable**

#### Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -1.75% for 6 consecutive months

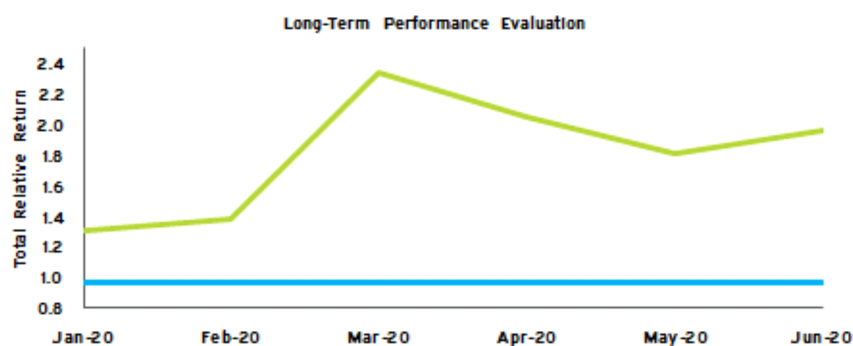
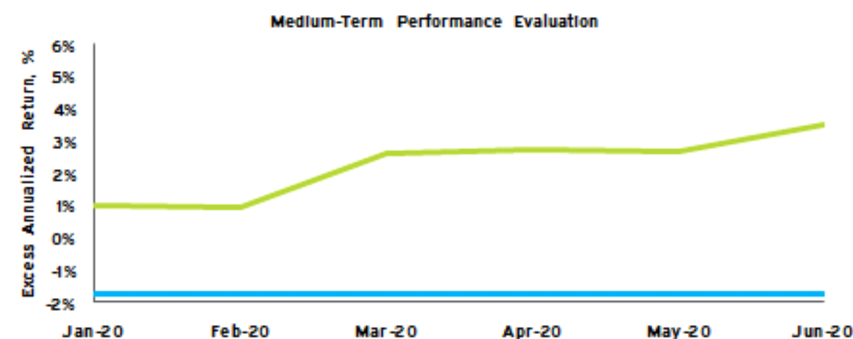
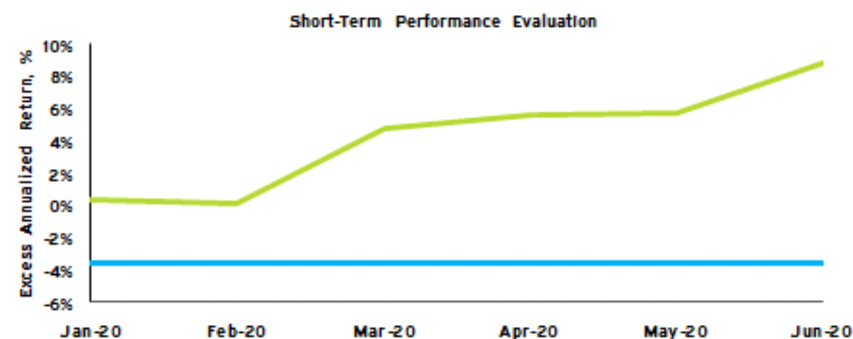
**Current Status:** **Acceptable**

#### Long-Term Criteria (60+ months)

VRR < 0.97 for 6 consecutive months

**Current Status:** **Acceptable**

**Overall Status:** **Acceptable**



#### Manager Performance

	QTD	1 Yr	3 Yrs	5 Yrs
Parametric Delta Shift	19.2	5.5	7.7	8.6
CBOE S&P 500 BuyWrite USD	9.1	-10.3	-0.2	3.0

#### Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -3.5% for 6 consecutive months

**Current Status:** **Acceptable**

#### Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -1.75% for 6 consecutive months

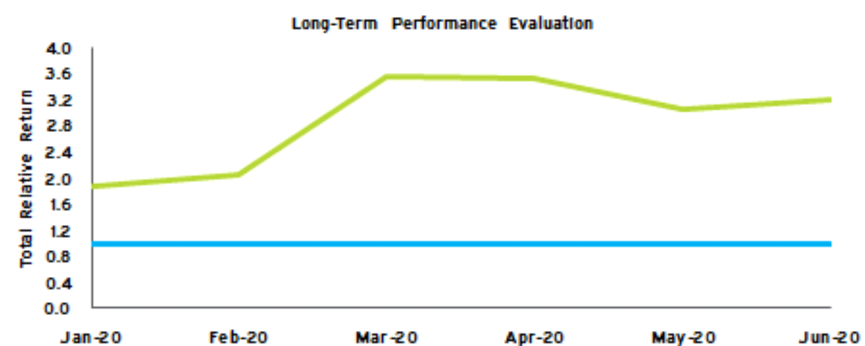
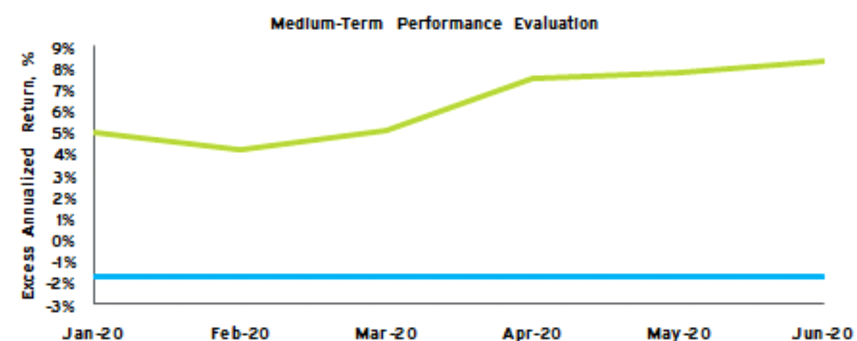
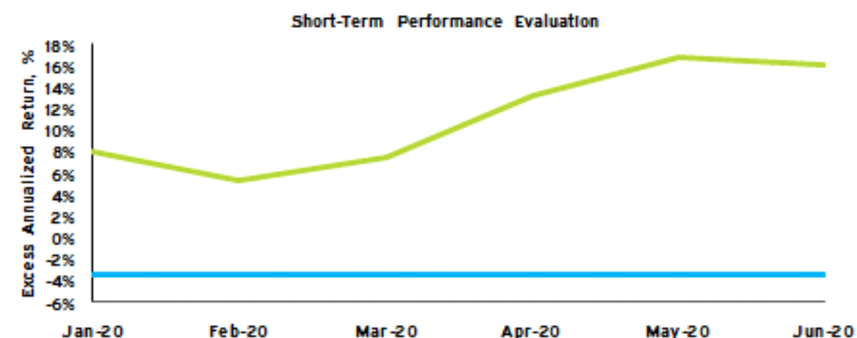
**Current Status:** **Acceptable**

#### Long-Term Criteria (60+ months)

VRR < 0.97 for 6 consecutive months

**Current Status:** **Acceptable**

**Overall Status:** **Acceptable**



#### Manager Performance

	QTD	1 Yr	3 Yrs	5 Yrs
Van Hulzen	9.3	-2.1	2.9	4.5
<i>CBOE S&amp;P 500 BuyWrite USD</i>	<i>9.1</i>	<i>-10.3</i>	<i>-0.2</i>	<i>3.0</i>

#### Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -3.5% for 6 consecutive months

**Current Status:** **Acceptable**

#### Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -1.75% for 6 consecutive months

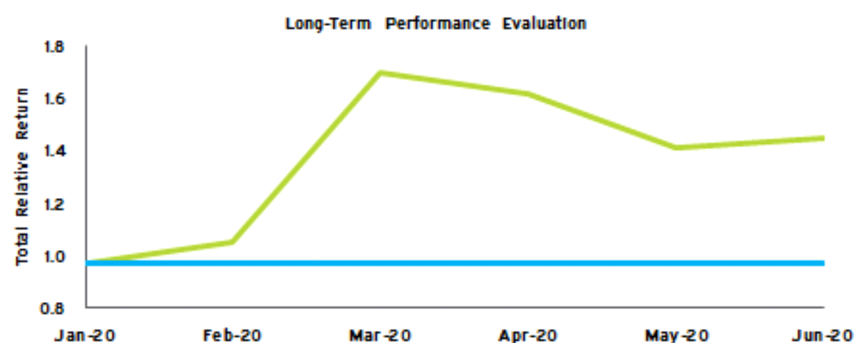
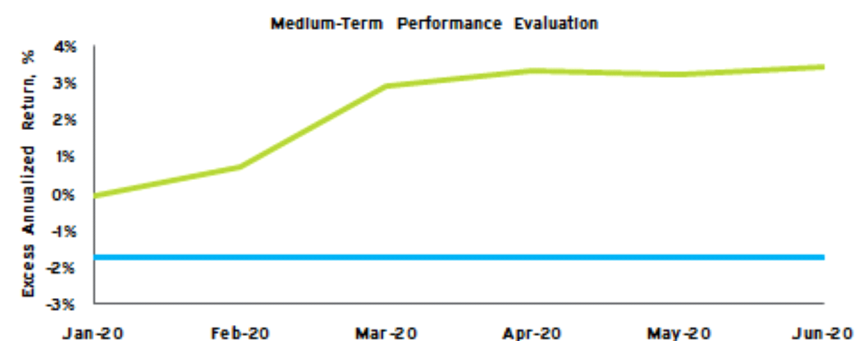
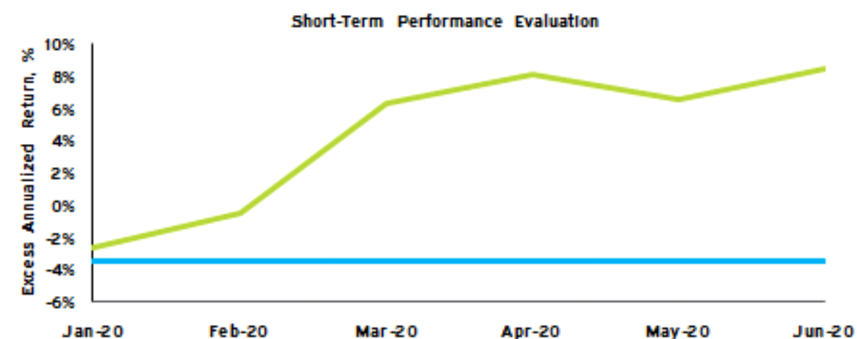
**Current Status:** **Acceptable**

#### Long-Term Criteria (60+ months)

VRR < 0.98 for 6 consecutive months

**Current Status:** **Acceptable**

**Overall Status:** **Acceptable**



#### Manager Performance

	QTD	1 Yr	3 Yrs	5 Yrs
CS McKee	4.4	8.9	5.4	4.5
BBgBarc US Aggregate TR	2.9	8.7	5.3	4.3

#### Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -1.5% for 6 consecutive months

**Current Status:** **Acceptable**

#### Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -1.0% for 6 consecutive months

**Current Status:** **Acceptable**

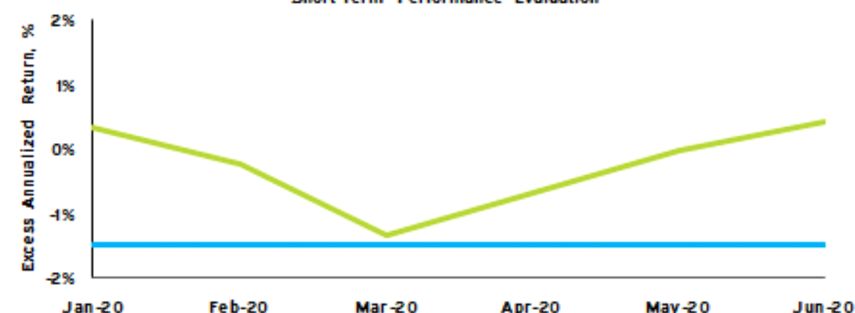
#### Long-Term Criteria (60+ months)

VRR < 0.98 for 6 consecutive months

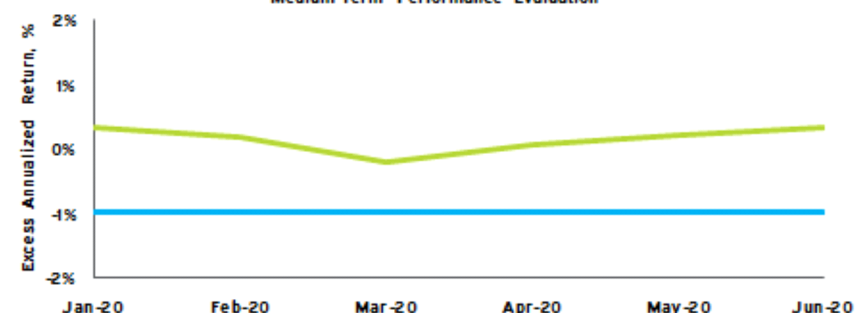
**Current Status:** **Acceptable**

**Overall Status:** **Acceptable**

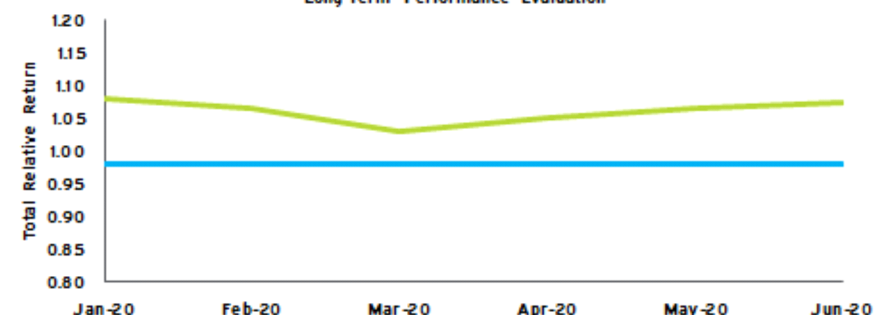
Short-Term Performance Evaluation



Medium-Term Performance Evaluation



Long-Term Performance Evaluation



#### Manager Performance

	QTD	1 Yr	3 Yrs	5 Yrs
MacKay Shields (HY)	8.9	2.4	--	--
ICE BofA ML US Corp Cash Pay BB-B 1-5Yr	8.5	-1.4	2.8	3.6

#### Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -4.5% for 6 consecutive months

**Current Status:** **Acceptable**

#### Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -2.0% for 6 consecutive months

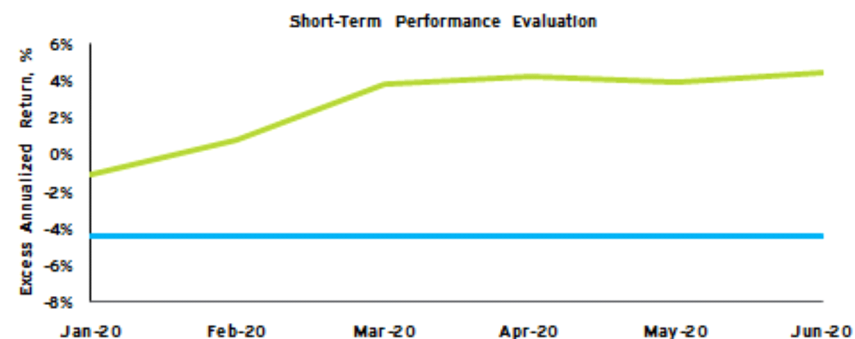
**Current Status:** Not Applicable

#### Long-Term Criteria (60+ months)

VRR < 0.97 for 6 consecutive months

**Current Status:** Not Applicable

**Overall Status:** **Acceptable**





Manager Performance				
	QTD	1 Yr	3 Yrs	5 Yrs
Federated Investment Counseling (Bank Loans)	5.0	-1.8	--	--
60% CredSuisLevLoan/40% BBStGovCorp	5.9	-0.2	2.2	2.4

#### Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -4.5% for 6 consecutive months

**Current Status:** **Acceptable**

#### Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -2.0% for 6 consecutive months

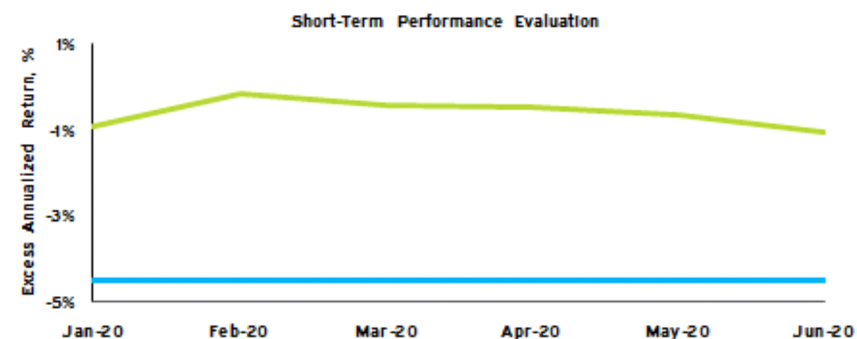
**Current Status:** Not Applicable

#### Long-Term Criteria (60+ months)

VRR < 0.97 for 6 consecutive months

**Current Status:** Not Applicable

**Overall Status:** **Acceptable**



#### Manager Performance

	QTD	1 Yr	3 Yrs	5 Yrs
CenterSquare	11.6	-9.8	2.1	5.5
FTSE NAREIT Equity REIT	11.8	-13.0	0.0	4.1

#### Short-Term Criteria (rolling 12-month periods)

Fund return < benchmark return -3.5% for 6 consecutive months

**Current Status:** Acceptable

#### Medium-Term Criteria (rolling 36-month periods)

Fund annualized return < benchmark annualized return -1.75% for 6 consecutive months

**Current Status:** Acceptable

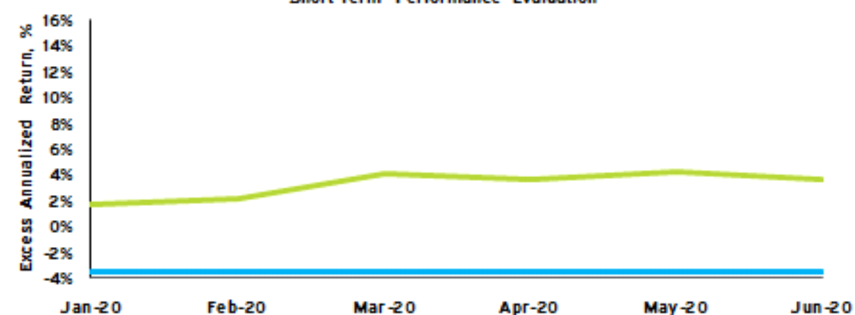
#### Long-Term Criteria (60+ months)

VRR < 0.97 for 6 consecutive months

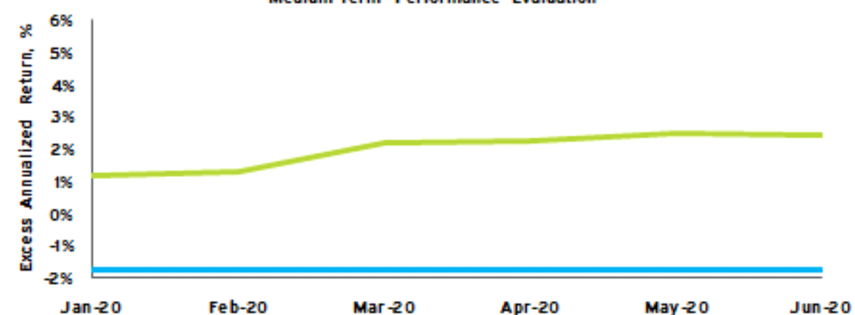
**Current Status:** Acceptable

**Overall Status:** Acceptable

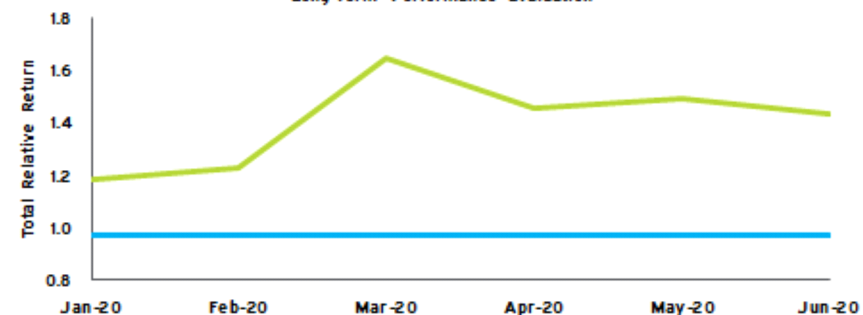
Short-Term Performance Evaluation



Medium-Term Performance Evaluation



Long-Term Performance Evaluation



## **Manager Compliance Certification Responses**

## Manager Compliance Certification Responses

### Qualitative Compliance Monitoring per EBMUD Investment Policy

Each of EBMUD's managers is required to respond to a questionnaire on a quarterly basis to certify their compliance with EBMUD's Investment Policy Statement and provide an update on specific qualitative indicators to be evaluated.

These indicators include:

- Compliance with the guidelines of 'Eligible Investments' for the manager's specific mandate
- Any litigation or governmental regulatory proceedings involving the firm/manager
- Changes to the manager's investment outlook, investment strategy, and/or portfolio structure
- Personnel changes to the investment team responsible for the EBMUD mandate
- Significant personnel changes at the management level of the firm
- Material client terminations
- Compliance with EBMUD's current Investment Policy Statement

The manager's responses are rated based on the potential effects these factors could pose to the performance and management of the EBMUD portfolio.

Reasons for heightened concern triggering Watch status include, but are not limited to:

- Instability of key members of the portfolio management team and organization
- Changes in investment strategy and style
- Failure to comply with investment guidelines

A summary of manager responses as of the latest quarter-end is provided below.

## Manager Compliance Certification Responses

### Manager Compliance Certification Responses

Manager	Asset Class	Question 1 Compliance with 'Eligible Investments' for mandate	Question 2 Good standing as Registered Investment Advisor	Question 3 Litigation?	Question 4 Changes in manager's investment outlook, strategy, structure	Question 5 Investment team personnel changes	Question 6 Management level personnel changes	Question 7 Material business changes	Question 8 Compliance with IPS
Northern Trust R3000	Domestic Equity – All Cap	Yes	Yes	Yes*	No	No	Yes*	No	Yes
Franklin Templeton	International Equity	Yes	Yes	No	No	Yes*	Yes*	No	Yes
Fisher	International Equity	Yes	Yes	No	No	No	No	No	Yes
Northern Trust ACWI ex US	International Equity	Yes	Yes	Yes*	No	No	Yes*	No	Yes
Parametric	Covered Calls	Yes	Yes	No	No	No	No	No	Yes
Van Hulzen	Covered Calls	Yes	Yes	No	No	No	No	No	Yes
CS McKee	Fixed Income – Core	Yes	Yes	No	No	No	No	No	Yes
Garcia Hamilton	Fixed Income – Core	Yes	Yes	No	No	No	No	No	Yes
Mackay Shields	Fixed Income – Short-term HY	Yes	Yes	No	No	No	No	No	Yes
Federated	Fixed Income – Bank Loans	Yes	Yes	No	No	No	No	No	Yes
RREEF	Real Estate	Yes	Yes	No	No	No	No	No	Yes
CenterSquare	Real Estate	Yes	Yes	Yes*	No	No	No	No	Yes

■ no concern 
 ■ low concern 
 ■ high concern (Watch status)

\* see detailed manager response below

**Northern Trust – R3000 and ACWI ex US****Question 3: Is there any litigation or governmental regulatory proceedings involving your Firm, the Manager?**

- Yes; As one of the world's largest asset managers, Northern Trust Investments, Inc. (NTI) is occasionally named as a defendant in asset management-related litigation. NTI is not currently party to any litigation that has had (or will have) a material effect on its ability to perform services for its clients. At this time, there are no significant pending cases. As one of the world's leading providers of asset servicing, Northern Trust and its subsidiaries occasionally receive requests for information from government and regulatory agencies. Northern Trust frequently does not know if such requests are related to a formal government or regulatory investigations or, assuming an investigation is underway, whether Northern Trust is a target of such investigation or simply thought to be in possession of information pertinent to such investigation. Northern Trust is not currently involved in any government or regulatory investigation or proceeding that would have a material impact on its ability to provide advisory services to its clients.

**Question 6: Have there been any significant changes at the management level of the Firm during the quarter?**

- Yes; As a result of the constantly changing landscape of asset management, we believe the occasional organizational changes are a natural progression and necessary in order to adapt to new market and regulatory environments. The most recent and anticipated changes to senior personnel are the following: March 2020, Mamadou Abou-Sarr, former Director of Product Development and Sustainable Investing, left Northern Trust to pursue other opportunities. We are in the process of recruiting for a Global head of ESG, but in the interim, our Global Head of Product, Sheri Hawkins, is responsible for our Sustainable Investing practice, well supported by a number of talented subject matter experts.

Franklin Templeton

**Question 5: Have there been any personnel changes to the investment team responsible for the EBMUD portfolio during the quarter?**

- Yes, Kimberly Reynolds, VP/Research Analyst of Templeton Global Equity Group (TGEG), the managing team of East Bay Municipal Utility District Employees' Retirement System departed the firm on May 1, 2020.

**Question 6: Have there been any significant changes at the management level of the Firm during the quarter?**

- During June 10, 2020, Franklin Templeton announced that Jed Plafker has been named Executive Vice President of Global Alliances and New Business Strategies. In this newly created position, Plafker will be responsible for the expansion of the company's digital wealth management and distribution-related financial technology, ensuring that the firm fully harnesses these capabilities for financial advisors and clients. Plafker will continue to report to CEO Jenny Johnson and serve as a member of the firm's Executive Committee.

Parametric

Question 3: Is there any litigation or governmental regulatory proceedings involving your Firm, the Manager?

- Parametric is not currently a plaintiff or defendant in any lawsuits or arbitration proceedings related to its investment management services, nor have there been any such lawsuits or arbitration proceedings in the last year, against Parametric or any affiliates controlled by Parametric. From time to time, Parametric receives subpoenas and/or information requests relating to lawsuits to which Parametric is not a party. These subpoenas and/or information request were/are incidental to Parametric's business and were/are handled in the ordinary course of business.
- Parametric believes that these actions have not and will not have a material adverse effect on the firm's ability to manage client assets.



**CenterSquare****Question 3: Is there any litigation or governmental regulatory proceedings involving your Firm, the Manager?**

- SEC Examination – Status: Update 2Q2020: CenterSquare received a written inquiry dated January 7, 2020 from the Securities and Exchange Commission (SEC), Division of Enforcement office in Washington, DC. The inquiry requested certain information relating to Soft Dollar practices of CenterSquare for the time period January 1, 2015 through December 31, 2019. We believe this was part of a sweep examination as we have confirmed that at least one other investment advisor received this request. Further, the SEC notice indicated the request was part of a non-public, fact finding inquiry. CenterSquare fully complied with the information request and since our response to the SEC on February 4, 2020, we have received no further communications or requests for documentation. We will provide an update on the matter should we receive any further correspondence from the SEC.
- Legal – Status: Update 2Q2020: On March 25, 2020, CenterSquare Investment Management LLC (“CenterSquare”) was named a party-defendant to a lawsuit filed in the District Court of Harris County, Texas (Docket No. 2020-19362). CenterSquare was advising a separate account client in our private real estate strategy (the “Buyer”) on the acquisition of a property in Texas and, after seller did not complete closing on the closing date, the Buyer delivered to the seller a notice of termination and demand for return of the earnest money deposit (\$250,000). In lieu of agreeing to return the deposit, the seller filed suit against the Buyer, CenterSquare and an employee of CenterSquare making various allegations and requests for relief. Based on contractual terms of the acquisition agreement, we believe the Buyer’s ultimate liability is limited to \$250,000 and we believe that no liability exists for CenterSquare and its employee. All three defendants are represented by counsel. CenterSquare intends to defend this lawsuit vigorously. CenterSquare filed a summary motion to dismiss the suit and the court hearing is scheduled for August 2020.

**Required California AB 2833 Disclosure – RREEF AMERICA II**

Effective January 1, 2017 RREEF America REIT II, Inc. (“alternative investment vehicle”) is required to provide to the East Bay Municipal Utility District (“public investment fund” or “District”) specific information at least annually pursuant to Section 7514.7 of the California Government Code (“Section 7514.7”).

1. The fees and expenses that the public investment fund pays directly to the alternative investment vehicle, the fund manager, or related parties.

EBMUD asset management fees – January 2018 – December 2018 = \$359,713.64

2. The public investment fund’s pro rata share of fees and expenses not included in paragraph (1) that are paid from the alternative investment vehicle to the fund manager or related parties.

\$0.00

3. The public investment fund’s pro rata share of carried interest distributed to the fund manager or related parties.

N/A

4. The public investment fund’s pro rata share of aggregate fees and expenses paid by all of the portfolio companies held within the alternative investment vehicle to the fund manager or related parties.

EBMUD asset management fees – January 2018 – December 2018 = \$359,713.64

5. Any additional information described in subdivision (b) of Section 6254.26.

N/A

6. The gross and net rate of return of each alternative investment vehicle since inception.

Gross = 6.46%    Net = 5.65% (as of December 31, 2018)

7. Any other information required to be collected pursuant to Section 7514.7.

N/A

## Appendix

**EBMUD Performance – Net of Fees**

Manager	Mandate	Estimated Annual Fee (bps)*
Northern Trust – R3000	Passive – All Cap Core	1.5
Franklin Templeton	Active – International Equity	53
Fisher	Active – International Equity	62
Northern Trust ACWI ex US	Passive – International Equity	4
Parametric – BXM	Replication – Covered Calls	17
Parametric – DeltaShift	Semi-Active – Covered Calls	32
Van Hulzen	Active – Covered Calls	25
CS McKee	Active – Core Fixed Income	20
Garcia Hamilton	Active – Core Fixed Income	15
MacKay Shields – Short-Term High Yield	Active – Non-Core Fixed Income	42
Federated – Bank Loans	Active – Non-Core Fixed Income	50
RREEF	Real Estate	95
CenterSquare	Real Estate	27.5 bps + 15% on excess returns

**EBMUD Total Plan Composite | As of June 30, 2020**
**Benchmark History**
**As of June 30, 2020**
**EBMUD Total Plan Composite**

12/1/2019	Present	25% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 25% MSCI ACWI ex USA Gross / 10% BBgBarc US Aggregate TR / 10% BBgBarc US Intermediate Gov/Cred / 2.5% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 2.5% 60% CredSuisLevLoan/40% BBStGovCorp / 2.5% FTSE NAREIT Equity REIT / 2.5% S&P/LSTA Performing Loan TR USD
3/1/2019	11/30/2019	25% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 25% MSCI ACWI ex USA Gross / 15% BBgBarc US Aggregate TR / 5% BBgBarc US Govt/Credit 1-3 Yr. TR / 2.5% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 2.5% 60% CredSuisLevLoan/40% BBStGovCorp / 2.5% FTSE NAREIT Equity REIT / 2.5% S&P/LSTA Performing Loan TR USD
7/1/2018	2/28/2019	25% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 25% MSCI ACWI ex USA Gross / 15% BBgBarc US Aggregate TR / 5% BBgBarc US Govt/Credit 1-3 Yr. TR / 2.5% BBgBarc US High Yield 1-5Yr Cash Pay 2% / 2.5% NCREIF NPI Mo 1 Qtr Lag / 2.5% FTSE NAREIT Equity REIT / 2.5% S&P/LSTA Performing Loan TR USD
4/1/2014	6/30/2018	40% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 15% MSCI ACWI ex USA Gross / 10% BBgBarc US Aggregate TR / 5% BBgBarc US Govt/Credit 1-3 Yr. TR / 2.5% BBgBarc US High Yield 1-5Yr Cash Pay 2% / 2.5% NCREIF NPI Mo 1 Qtr Lag / 2.5% FTSE NAREIT Equity REIT / 2.5% S&P/LSTA Performing Loan TR USD
3/1/2014	3/31/2014	40% Russell 3000 / 20% CBOE S&P 500 BuyWrite USD / 15% MSCI ACWI ex USA Gross / 15% BBgBarc US Aggregate TR / 2.5% BBgBarc US High Yield 1-5Yr Cash Pay 2% / 2.5% NCREIF NPI Mo 1 Qtr Lag / 2.5% FTSE NAREIT Equity REIT / 2.5% S&P/LSTA Performing Loan TR USD
11/1/2011	2/28/2014	50% Russell 3000 / 20% MSCI ACWI ex USA Gross / 25% BBgBarc US Universal TR / 2.5% NCREIF NPI Mo 1 Qtr Lag / 2.5% FTSE NAREIT Equity REIT
1/1/2008	10/31/2011	50% Russell 3000 / 20% MSCI ACWI ex USA Gross / 25% BBgBarc US Universal TR / 5% NCREIF NPI Mo 1 Qtr Lag
1/1/2007	12/31/2007	50% Russell 3000 / 20% MSCI ACWI ex USA Gross / 25% BBgBarc US Aggregate TR / 5% NCREIF Property Index
10/1/2005	12/31/2006	50% Russell 3000 / 25% BBgBarc US Aggregate TR / 5% NCREIF NPI Mo 1 Qtr Lag / 20% MSCI EAFE
4/1/2005	9/30/2005	30% S&P 500 / 10% S&P 400 MidCap / 10% Russell 2000 / 20% MSCI EAFE / 25% BBgBarc US Aggregate TR / 5% NCREIF NPI Mo 1 Qtr Lag
9/1/1998	3/31/2005	33% S&P 500 / 10% S&P 400 MidCap / 10% Russell 2000 / 17% MSCI EAFE / 30% BBgBarc US Aggregate TR
3/31/1996	8/31/1998	30% S&P 500 / 15% Wilshire 5000 / 15% MSCI EAFE / 30% BBgBarc US Aggregate TR / 5% NCREIF Property Index / 5% FTSE T-Bill 3 Months TR

**Fixed Income Composite | As of June 30, 2020**
**Benchmark History**
**As of June 30, 2020**
**Fixed Income Composite**

12/1/2019	Present	40% BBgBarc US Aggregate TR / 10% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 40% BBgBarc US Intermediate Gov/Cred / 10% 60% CredSuisLevLoan/40% BBStGovCorp
3/1/2019	11/30/2019	60% BBgBarc US Aggregate TR / 10% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 20% BBgBarc US Govt/Credit 1-3 Yr. TR / 10% 60% CredSuisLevLoan/40% BBStGovCorp
7/1/2018	2/28/2019	60% BBgBarc US Aggregate TR / 10% S&P/LSTA Performing Loan TR USD / 20% BBgBarc US Govt/Credit 1-3 Yr. TR / 10% BBgBarc US High Yield 1-5Yr Cash Pay 2%
4/1/2014	6/30/2018	50% BBgBarc US Aggregate TR / 12.5% S&P/LSTA Performing Loan TR USD / 25% BBgBarc US Govt/Credit 1-3 Yr. TR / 12.5% BBgBarc US High Yield 1-5Yr Cash Pay 2%
3/1/2014	3/31/2014	75% BBgBarc US Aggregate TR / 12.5% BBgBarc US High Yield 1-5Yr Cash Pay 2% / 12.5% S&P/LSTA Performing Loan TR USD
1/1/2008	2/28/2014	BBgBarc US Universal TR
1/1/1976	12/31/2007	BBgBarc US Aggregate TR

**Fixed Income Core Fixed Income Composite**

12/1/2019	Present	50% BBgBarc US Aggregate TR / 50% BBgBarc US Intermediate Gov/Cred
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**Fixed Income Non-Core Fixed Income Composite**

12/1/2019	Present	50% 60% CredSuisLevLoan/40% BBStGovCorp / 50% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr
3/1/2019	11/30/2019	25% 60% CredSuisLevLoan/40% BBStGovCorp / 25% ICE BofA ML US Corp Cash Pay BB-B 1-5Yr / 50% BBgBarc US Govt/Credit 1-3 Yr. TR
3/1/2014	2/28/2019	25% S&P/LSTA Performing Loan TR USD / 25% BBgBarc US High Yield 1-5Yr Cash Pay 2% / 50% BBgBarc US Govt/Credit 1-3 Yr. TR

### Glossary of Terms

**Alpha:** The premium an investment earns above a set standard. This is usually measured in terms of a common index (i.e., how the stock performs independent of the market). An Alpha is usually generated by regressing a security's excess return on the S&P 500 excess return.

**Annualized Performance:** The annual rate of return that when compounded  $t$  times generates the same  $t$ -period holding return as actually occurred from period 1 to period  $t$ .

**Batting Average:** Percentage of periods a portfolio outperforms a given index.

**Beta:** The measure of an asset's risk in relation to the Market (for example, the S&P 500) or to an alternative benchmark or factors. Roughly speaking, a security with a Beta of 1.5 will have moved, on average, 1.5 times the market return.

**Bottom-up:** A management style that de-emphasizes the significance of economic and market cycles, focusing instead on the analysis of individual stocks.

**Dividend Discount Model:** A method to value the common stock of a company that is based on the present value of the expected future dividends.

**Growth Stocks:** Common stock of a company that has an opportunity to invest money and earn more than the opportunity cost of capital.

**Information Ratio:** The ratio of annualized expected residual return to residual risk. A central measurement for active management, value added is proportional to the square of the information ratio.

**R-Squared:** Square of the correlation coefficient. The proportion of the variability in one series that can be explained by the variability of one or more other series a regression model. A measure of the quality of fit. 100% R-square means perfect predictability.

**Standard Deviation:** The square root of the variance. A measure of dispersion of a set of data from its mean.

**Sharpe Ratio:** A measure of a portfolio's excess return relative to the total variability of the portfolio.

**Style Analysis:** A returns-based analysis using a multi-factor attribution model. The model calculates a product's average exposure to particular investment styles over time (i.e., the product's normal style benchmark).

**Top-down:** Investment style that begins with an assessment of the overall economic environment and makes a general asset allocation decision regarding various sectors of the financial markets and various industries.

**Tracking Error:** The standard deviation of the difference between the performance of a portfolio and an appropriate benchmark.

**Turnover:** For mutual funds, a measure of trading activity during the previous year, expressed as a percentage of the average total assets of the fund. A turnover rate of 25% means that the value of trades represented one-fourth of the assets of the fund.

**Value Relative Ratio (VRR):** Performance metric used to evaluate long-term manager performance relative to a benchmark and to highlight compounded over/under performance data over a certain time frame. VRR is calculated by the growth of a dollar invested with the manager divided by the growth of a dollar invested in the benchmark for the same time period.

**Value Stocks:** Stocks with low price/book ratios or price/earnings ratios. Historically, value stocks have enjoyed higher average returns than growth stocks (stocks with high price/book or P/E ratios) in a variety of countries.



### Definition of Benchmarks

**BC Aggregate:** an index comprised of approximately 6,000 publicly traded investment-grade bonds including U.S. Government, mortgage-backed, corporate, and yankee bonds with an approximate average maturity of 10 years.

**BC High Yield:** covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (e.g., Argentina, Brazil, Venezuela, etc.) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, 144-As and pay-in-kind bonds (PIKs, as of October 1, 2009) are also included. Must be rated high-yield (Ba1/BB+ or lower) by at least two of the following ratings agencies: Moody's, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. All issues must have at least one year to final maturity regardless of call features and have at least \$150 million par amount outstanding.

**BC Multiverse Non-US Hedged:** provides a broad-based measure of the international fixed-income bond market. The index represents the union of the BC Global Aggregate Index and the BC Global High Yield Index. In this sense, the term "Multiverse" refers to the concept of multiple universes in a single macro index.

**BC US Credit:** includes publicly issued U.S. corporate and foreign debentures and secured notes that which are rated investment grade or higher by Moody's Investor Services, Standard and Poor's Corporation, or Fitch Investor's Service, with all issues having at least one year to maturity and an outstanding par value of at least \$250 million. Issues must be publicly issued, dollar-denominated and non-convertible.

**BC US Government:** includes treasuries (i.e., public obligations of the U.S. Treasury that have remaining maturities of more than one year) and agencies (i.e., publicly issued debt of U.S. Government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. Government).

**BC Universal:** includes market coverage by the Aggregate Bond Index fixed rate debt issues, which are rated investment grade or higher by Moody's Investor Services, Standard and Poor's Corporation, or Fitch Investor's Service, with all issues having at least one year to maturity and an outstanding par value of at least \$100 million) and includes exposures to high yield CMBS securities. All returns are market value weighted inclusive of accrued interest.

**Citigroup 3-Month Treasury Bills (T-bills):** tracks the performance of U.S. Treasury bills with 3-month maturity.

**MSCI ACWI x US ND:** comprises both developed and emerging markets less the United States. As of August 2008, the index consisted of 23 countries classified as developed markets and 25 classified as emerging markets. This series approximates the minimum possible dividend reinvestment. The dividend is reinvested after deduction of withholding tax, applying the rate to non-resident individuals who do not benefit from double taxation treaties. MSCI Barra uses withholding tax rates applicable to Luxembourg holding companies, as Luxembourg applies the highest rates.

**MSCI EAFE Free (Europe, Australasia, Far East) ND:** is a free float-adjusted market capitalization index that is designed to measure developed market equity performance, excluding the US & Canada. This series approximates the minimum possible dividend reinvestment. The dividend is reinvested after deduction of withholding tax, applying the rate to non-resident individuals who do not benefit from double taxation treaties. MSCI Barra uses withholding tax rates applicable to Luxembourg holding companies, as Luxembourg applies the highest rates.

**MSCI EM (Emerging Markets) GD:** is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. This series approximates the maximum possible dividend reinvestment. The amount reinvested is the entire dividend distributed to individuals resident in the country of the company, but does not include tax credits.

**MSCI Europe** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of the developed markets in Europe. As of June 2007, this index consisted of the following 16 developed market country indices: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

**MSCI Pacific** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of the developed markets in the Pacific region. As of June 2007, this index consisted of the following 5 Developed Market countries: Australia, Hong Kong, Japan, New Zealand, and Singapore.

**NAREIT Index:** consists of all tax-qualified REITs listed on the New York Stock Exchange, American Stock Exchange, and the NASDAQ National Market System. The data is market weighted.

**NCREIF Property Index:** the NPI contains investment-grade, non-agricultural, income-producing properties which may be financed in excess of 5% gross market value; were acquired on behalf of tax exempt institutions; and are held in a fiduciary environment. Returns are gross of fees; including income, realized gains/losses, and appreciation/depreciation; and are market value weighted. Index is lagged one quarter.

**Russell 1000:** measures the performance of the 1,000 largest securities in the Russell 3000 Index. Russell 1000 is highly correlated with the S&P 500 Index and capitalization-weighted.

**Russell 1000 Growth:** measures the performance of those Russell 1000 securities with a greater-than-average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-earnings ratios, lower dividend yields and higher forecasted growth values than the Value universe.

**Russell 1000 Value:** measures the performance of those Russell 1000 securities with a less-than-average growth orientation. Securities in this index tend to exhibit lower price-to-book and price-earnings ratios, higher dividend yields and lower forecasted growth values than the Growth universe.

**Russell 2000:** measures the performance of the 2,000 smallest companies in the Russell 3000 Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index.

**Russell 2000 Growth:** measures the performance of those Russell 2000 securities with a greater-than-average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-to-earnings ratios.

**Russell 2000 Value:** measures the performance of those Russell 2000 securities with a less-than-average growth orientation. Securities in this index tend to exhibit lower price-to-book and price-to-earnings ratios.

**Russell 3000:** represents the largest 3,000 US companies based on total market capitalization, representing approximately 98% of the investable US equity market.

**Risk Metric Description – Rationale for Selection and Calculation Methodology****US Equity Markets**

Metric:  $P/E \text{ ratio} = \text{Price} / \text{"Normalized" earnings for the S\&P 500 Index}$

To represent the price of US equity markets, we have chosen the S&P 500 index. This index has the longest published history of price, is well known, and also has reliable, long-term, published quarterly earnings. The price= $P$  of the  $P/E$  ratio is the current price of the market index (the average daily price of the most recent full month for the S&P 500 index). Equity markets are very volatile. Prices fluctuate significantly during normal times and extremely during periods of market stress or euphoria. Therefore, developing a measure of earnings power ( $E$ ) which is stable is vitally important, if the measure is to provide insight. While equity prices can and do double, or get cut in half, real earnings power does not change nearly as much. Therefore, we have selected a well known measure of real, stable earnings power developed by Yale Professor Robert Shiller known as the Shiller E-10. The calculation of E-10 is simply the average real annual earnings over the past 10 years. Over 10 years, the earnings shenanigans and boom and bust levels of earnings tend to even out (and often times get restated). Therefore, this earnings statistic gives a reasonably stable, slow-to-change estimate of average real earnings power for the index. Professor Shiller's data and calculation of the E-10 are available on his website at <http://www.econ.yale.edu/~shiller/data.htm>. We have used his data as the base for our calculations. Details of the theoretical justification behind the measure can be found in his book *Irrational Exuberance* [Princeton University Press 2000, Broadway Books 2001, 2nd ed., 2005].

**Developed Equity Markets Excluding the US**

Metric:  $P/E \text{ ratio} = \text{Price} / \text{"Normalized" earnings for the MSCI EAFE Index}$

To represent the price of non-US developed equity markets, we have chosen the MSCI EAFE index. This index has the longest published history of price for non-US developed equities. The price= $P$  of the  $P/E$  ratio is the current price of the market index (the average daily price of the most recent full month for the MSCI EAFE index). The price level of this index is available starting in December 1969. Again, for the reasons described above, we elected to use the Shiller E-10 as our measure of earnings ( $E$ ). Since 12/1972, a monthly price earnings ratio is available from MSCI. Using this quoted ratio, we have backed out the implied trailing-twelve month earnings of the EAFE index for each month from 12/1972 to the present. These annualized earnings are then inflation adjusted using CPI-U to represent real earnings in US dollar terms for each time period. The Shiller E-10 for the EAFE index (10 year average real earnings) is calculated in the same manner as detailed above.

However, we do not believe that the pricing and earnings history of the EAFE markets are long enough to be a reliable representation of pricing history for developed market equities outside of the US. Therefore, in constructing the Long-Term Average Historical P/E for developed ex-US equities for comparison purposes, we have elected to use the US equity market as a developed market proxy, from 1881 to 1982. This lowers the Long-Term Average Historical P/E considerably. We believe this methodology provides a more realistic historical comparison for a market with a relatively short history.

### **Emerging Market Equity Markets**

Metric: Ratio of Emerging Market P/E Ratio to Developed Market P/E Ratio

To represent the Emerging Markets P/E Ratio, we have chosen the MSCI Emerging Market Free Index, which has P/E data back to January 1995 on Bloomberg. To represent the Developed Markets PE Ratio, we have chosen the MSCI World Index, which also has data back to January 1995 on Bloomberg. Although there are issues with published, single time period P/E ratios, in which the denominator effect can cause large movements, we feel that the information contained in such movements will alert investors to market activity that they will want to interpret.

### **US Private Equity Markets**

Metrics: S&P LCD Average EBITDA Multiples Paid in LBOs and US Quarterly Deal Volume

The Average Purchase Price to EBITDA multiples paid in LBOs is published quarterly by S&P in their LCD study. This is the total price paid (both equity and debt) over the trailing-twelve month EBITDA (earnings before interest, taxes, depreciation and amortization) as calculated by S&P LCD. This is the relevant, high-level pricing metric that private equity managers use in assessing deals. Data is published monthly.

US quarterly deal volume for private equity is the total deal volume in \$ billions (both equity and debt) reported in the quarter by Thomson Reuters Buyouts. This metric gives a measure of the level of activity in the market. Data is published quarterly.

### **US Private Real Estate Markets**

Metrics: US Cap Rates, Cap Rate Spreads, and Transactions as a % of Market Value

Real estate cap rates are a measure of the price paid in the market to acquire properties versus their annualized income generation before financing costs (NOI=net operating income). The data, published by NCREIF, describes completed and leased properties (core) on an unleveraged

basis. We chose to use current value cap rates. These are capitalization rates from properties that were revalued during the quarter. This data relies on estimates of value and therefore tends to be lagging (estimated prices are slower to rise and slower to fall than transaction prices). The data is published quarterly.

Spreads between the cap rate (described above) and the 10-year nominal Treasury yield, indicate a measure of the cost of properties versus a current measure of the cost of financing.

Transactions as a % of Market Value Trailing-Four Quarters is a measure of property turnover activity in the NCREIF Universe. This quarterly metric is a measure of activity in the market.

#### **Credit Markets Fixed Income**

Metric: Spreads

The absolute level of spreads over treasuries and spread trends (widening / narrowing) are good indicators of credit risk in the fixed income markets. Spreads incorporate estimates of future default, but can also be driven by technical dislocations in the fixed income markets. Abnormally narrow spreads (relative to historical levels) indicate higher levels of valuation risk, wide spreads indicate lower levels of valuation risk and / or elevated default fears. Investment grade bond spreads are represented by the Barclays Capital US Corporate Investment Grade Index Intermediate Component. The high yield corporate bond spreads are represented by the Barclays Capital US Corporate High Yield Index.

#### **Measure of Equity Market Fear / Uncertainty**

Metric: VIX – Measure of implied option volatility for US equity markets

The VIX is a key measure of near-term volatility conveyed by implied volatility of S&P 500 index option prices. VIX increases with uncertainty and fear. Stocks and the VIX are negatively correlated. Volatility tends to spike when equity markets fall.

#### **Measure of Monetary Policy**

Metric: Yield Curve Slope

We calculate the yield curve slope as the 10 year treasury yield minus the 1 year treasury yield. When the yield curve slope is zero or negative, this is a signal to pay attention. A negative yield curve slope signals lower rates in the future, caused by a contraction in economic activity. Recessions are typically preceded by an inverted (negatively sloped) yield curve. A very steep yield curve (2 or greater) indicates a large difference between shorter-term interest rates (the 1 year rate) and longer-term rates (the 10 year rate). This can signal expansion in economic activity in the future, or merely higher future interest rates.

### **Measures of US Inflation Expectations**

Metrics: Breakeven Inflation and Inflation Adjusted Commodity Prices

Inflation is a very important indicator impacting all assets and financial instruments. Breakeven inflation is calculated as the 10 year nominal treasury yield minus the 10 year real yield on US TIPS (treasury inflation protected securities). Abnormally low long-term inflation expectations are indicative of deflationary fears. A rapid rise in breakeven inflation indicates an acceleration in inflationary expectations as market participants sell nominal treasuries and buy TIPS. If breakeven inflation continues to rise quarter over quarter, this is a signal of inflationary worries rising, which may cause Fed action and / or dollar decline.

Commodity price movement (above the rate of inflation) is an indication of anticipated inflation caused by real global economic activity putting pressure on resource prices. We calculate this metric by adjusted in the Dow Jones UBS Commodity Index (formerly Dow Jones AIG Commodity Index) by US CPI-U. While rising commodity prices will not necessarily translate to higher US inflation, higher US inflation will likely show up in higher commodity prices, particularly if world economic activity is robust.

These two measures of anticipated inflation can, and often are, conflicting.

### **Measures of US Treasury Bond Interest Rate Risk**

Metrics: 10-Year Treasury Forward-Looking Real Yield and 10-Year Treasury Duration

The expected annualized real yield of the 10 year US Treasury Bond is a measure of valuation risk for US Treasuries. A low real yield means investors will accept a low rate of expected return for the certainty of receiving their nominal cash flows. Meketa estimates the expected annualized real yield by subtracting an estimate of expected 10 year inflation (produced by the Survey of Professional Forecasters as collected by the Federal Reserve Bank of Philadelphia), from the 10 year Treasury constant maturity interest rate.

Duration for the 10-Year Treasury Bond is calculated based on the current yield and a price of 100. This is a measure of expected percentage movements in the price of the bond based on small movements in percentage yield. We make no attempt to account for convexity.

### **Definition of “Extreme” Metric Readings**

A metric reading is defined as “extreme” if the metric reading is in the top or bottom decile of its historical readings. These “extreme” reading should cause the reader to pay attention. These metrics have reverted toward their mean values in the past.

### **RISK METRICS DESCRIPTION – Meketa Market Sentiment Indicator**

#### **What is the Meketa Market Sentiment Indicator (MMSI)?**

The MMSI 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 MMSI takes into account the momentum<sup>1</sup> (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 (MMSI) graph?**

Simply put, the MMSI 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 MMSI 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 MMSI. The degree of the signal above or below the neutral reading is an indication the signal’s current strength.

#### **How is the Meketa Market Sentiment Indicator (MMSI) Constructed?**

The MMSI is constructed from two sub-elements representing investor sentiment in stocks and bonds:

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<sup>1</sup> Momentum is defined as the persistence of relative performance. There is a significant amount of academic evidence indicating that positive momentum (e.g., strong performing stocks over the recent past continue to post strong performance into the near future) exists over near-to-intermediate holding periods. See, for example, “Understanding Momentum,” *Financial Analysts Journal*, Scowcroft, Sefton, March, 2005.



1. Stock return momentum: Return momentum for the S&P 500 Equity Index (trailing 12-months)
2. Bond yield spread momentum: Momentum of bond yield spreads (excess of the measured bond yield over the identical duration U.S. Treasury bond yield) for corporate bonds (trailing 12-months) for both investment grade bonds (75% weight) and high yield bonds (25% weight). The scale of this measure is adjusted to match that of the stock return momentum measure.

The black line reading on the graph is calculated as the average of the stock return momentum measure and the bonds spread momentum measure. The color reading on the graph is determined as follows:

1. If both stock return momentum and bond spread momentum are positive = GREEN (positive)
2. If one of the momentum indicators is positive, and the other negative = GRAY (inconclusive)
3. If both stock return momentum and bond spread momentum are negative = RED (negative)

**What does the Meketa Market Sentiment Indicator (MMSI) mean? Why might it be useful?**

There is strong evidence that time series momentum is significant and persistent.<sup>1</sup> 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 MMSI is constructed to measure this momentum in stocks and corporate bond spreads. A reading of green or red is agreement of both the equity and bond measures, indicating that it is likely that this trend (positive or negative) will continue over the next 12 months. When the measures disagree, the indicator turns gray. A gray reading does not necessarily mean a new trend is occurring, as the indicator may move back to green, or into the red from there. The level of the reading (black line) and the number of months at the red or green reading, gives the user additional information on which to form an opinion, and potentially take action.

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<sup>1</sup> "Time Series Momentum" Moskowitz, Ooi, Pedersen, August 2010 <http://pages.stern.nyu.edu/~lpederse/papers/TimeSeriesMomentum.pdf>

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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.

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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.

## EAST BAY MUNICIPAL UTILITY DISTRICT

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DATE: September 17, 2020

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance *SDS*

SUBJECT: Securities Lending Training

### SUMMARY

Items at the May 21, 2020 and July 16, 2020 Retirement Board meetings covered some aspects of the Retirement System's securities lending program. At each meeting, Retirement Board members had further questions about the program. To provide additional information on securities lending, staff from Northern Trust will provide a training to cover details of the Retirement System's program and allow Retirement Board members to ask further questions.

### DISCUSSION

The Retirement System's custodian, Northern Trust, acts as administrator and lending agent for the securities lending program. Securities lending involves loaning stocks, bonds or other securities to a borrower in exchange for collateral. In the case of the Retirement System's program, the collateral is in the form of cash.

Northern Trust earns interest on the investment of the cash collateral. This amount, minus a rebate on the interest the borrower would have earned on the collateral cash and a Northern Trust fee for administering the program, represents the net income to the Retirement System. As the Retirement System's portfolio has shifted more toward passive management, the combined market value of individual securities held in the portfolio has declined. This has led to a reduction in the income earned through securities lending in recent years.

At each of the last two Retirement Board meetings, Retirement Board members had questions about revenues from the program and the variability of the year-over-year results. As part of responding to these questions, staff has asked Northern Trust to provide a training module on securities lending at the September 17, 2020 meeting. This provides an opportunity to increase understanding of the securities lending program and to answer any additional questions.

SDS:RLH:DC



# Northern Trust Global Securities Lending

Prepared for: **East Bay Municipal Utility District Employees' Retirement System**

*Presented by:*

*Dennis Zuccarelli  
Vice President, Relationship Manager  
Securities Lending*

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## SECURITIES LENDING DEFINED

*Securities transferred on a temporary basis from a lender to a borrower with the latter obliged to return the securities either on demand or at the end of a specific period*

### Parties to a loan:

Lender (Client) - beneficial owner of the securities

Borrower - to whom the assets are being lent, usually a bank or broker-dealer

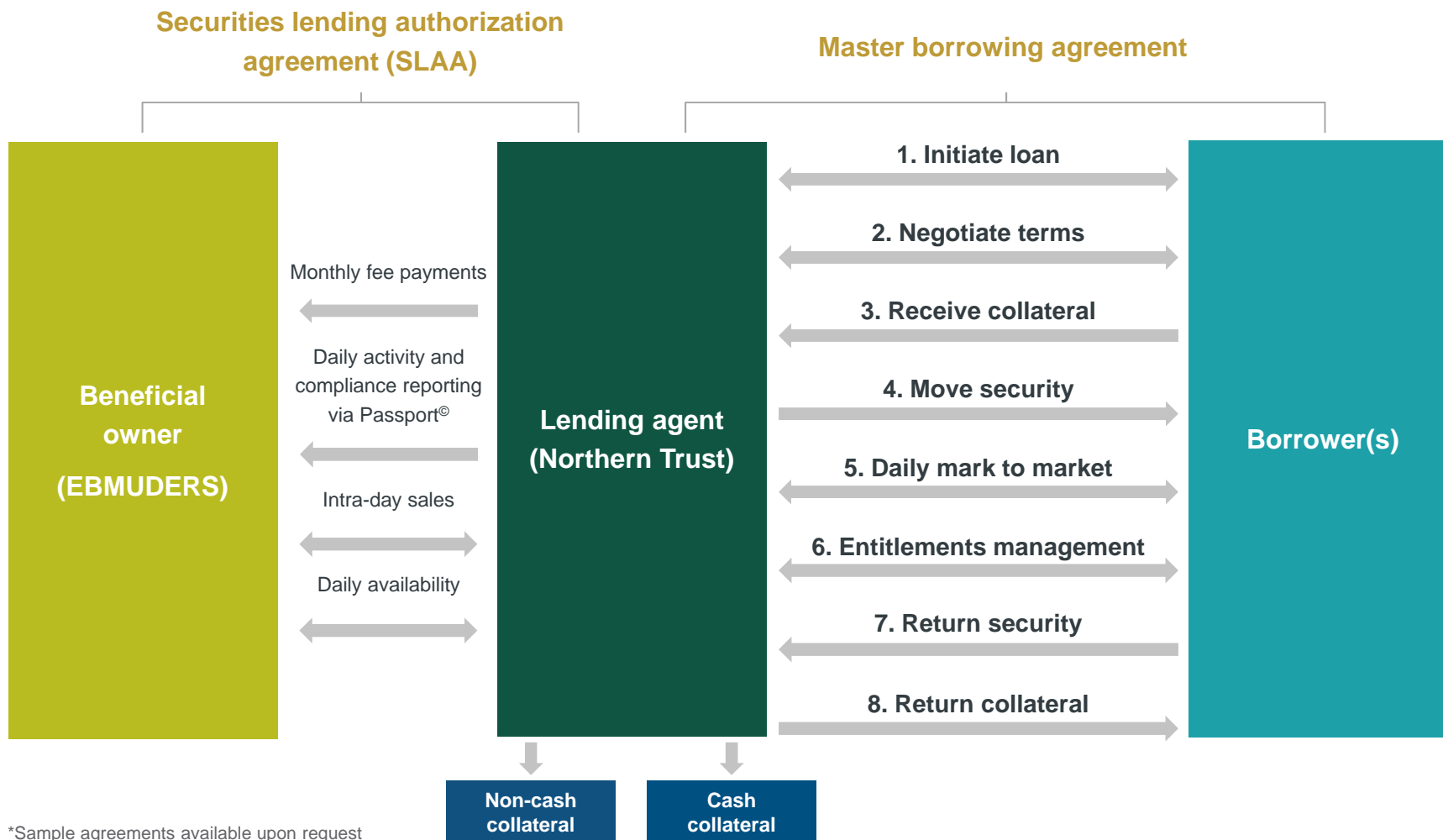
Lending Agent (Northern Trust) - the party negotiating and facilitating the loan

Re-investment manager - portfolio manager/team who invests the cash collateral



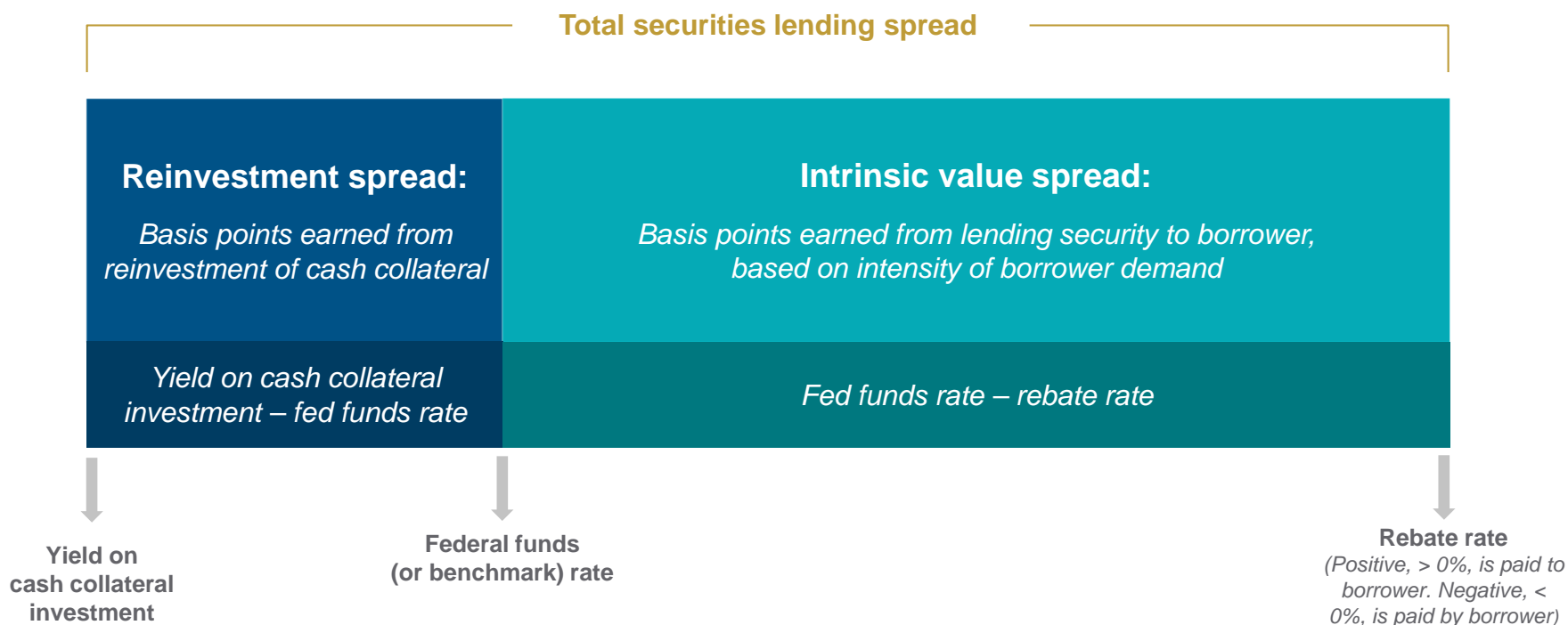
# SECURITIES LENDING TRANSACTION PROCESS

*The life cycle of a loan*



# SECURITIES LENDING INCOME COMPONENTS

Understanding how securities lending income is generated



Reinvestment spread + Intrinsic value spread = **Total securities lending spread**  
Total securities lending spread x Loan volume = **Total gross securities lending income**

## NORTHERN TRUST'S SECURITIES LENDING PROGRAM

Northern Trust has been a global industry leader in securities lending for almost 40 years. Our size, scale and technological innovation generates material value for our clients

**1.3** trillion  
lendable assets

**161** billion  
on loan with  
**12.28%**  
utilization

**467**  
participating  
clients from **31**  
countries

**74** approved  
universal banks  
and broker  
dealers

**35** lending  
markets including  
CSD's

**Aa2 / AA- /  
AA** top tier  
credit ratings

☒ Participating in securities lending **will not interfere** with your investment strategy

☒ Focused and consultative approach on building a **customized** program

☒ Adds **incremental alpha** that can be used to enhance portfolio returns or pay expenses

☒ A **single global platform**, with an integrated forecast engine to enhance returns

☒ Robust **risk management** with independent risk committees

*All figures in USD as at 06/30/2020*



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# MANAGING RISK

*Risk management is instrumental to our program*

## Borrower

Borrower defaults and collateral is not sufficient to cover

### Mitigating factors:

- Credit review of borrowers
- Over-collateralization / Daily marking
- Indemnification
- Risk analysis tools

## Trade Settlement

Fund sells securities and borrower doesn't return in time for trade to settle

### Mitigating Factors:

- Timely communication
- Automated reallocations
- Trade settlement protection

## Cash Collateral Reinvestment

Cash collateral investment becomes impaired or decreases in value

### Mitigating Factors:

- Client approved guidelines
- Dedicated team of fixed income research analysis
- Daily automated compliance

## Interest Rate

Loan rebate rate exceeds earnings on cash collateral investments

### Mitigating Factors:

- Weekly gap analysis
- Shared risk and stress testing of portfolio

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# BORROWER RISK MANAGEMENT : ON-GOING MONITORING

*Our credit analysts conduct on-going, regular reviews of our counterparties*

## Capital Markets Credit Committee (CMCC)

- Monitors counterparty exposures derived from internal risk-based approach
- Supplements traditional credit analysis by providing insight into risk from borrowers' securities lending activity while maintaining a responsive capability to take actions as needed

### Daily review

- Credit analysts review market commentary and data to analyze financial stability
- Provides oversight while maintaining a responsive capability to take actions as needed

### Weekly review

- Review of key market indicators for certain counterparties (as available) based on proprietary internal tools

### Annual review

- Wide-scale analysis includes review of financial statements, capital calculations, rating agency analysis
- Presents comprehensive analysis on counterparty and credit limits to the CMCC



## OVERALL COLLATERAL MANAGEMENT

*Northern Trust accepts both cash and non-cash collateral.*

**Loans are initially collateralized according to market convention at 102%, 105% or higher**

- All loans are marked to market daily
- Collateral maintenance margins may vary by collateral type or market events

**Variety of cash collateral options available:**

- Daily monitoring of portfolio reinvestment guidelines using Blackrock Solutions' Aladdin® software
- Stringent management of interest rate sensitivity

**Standard collateralization:**

- Fixed income loan versus cash, fixed income or equity collateral
- Equity loans versus cash, fixed income or equity collateral



### Non-cash collateral- EBMUDERS currently not accepting

- Custom collateral options
- Bilateral and tri-party arrangements of high grade collateral may include:
  - OECD Government and Agency Securities
  - Equities
  - Supranationals
  - Corporate Bonds
  - ETFs



### Cash collateral

- SL Core STIF

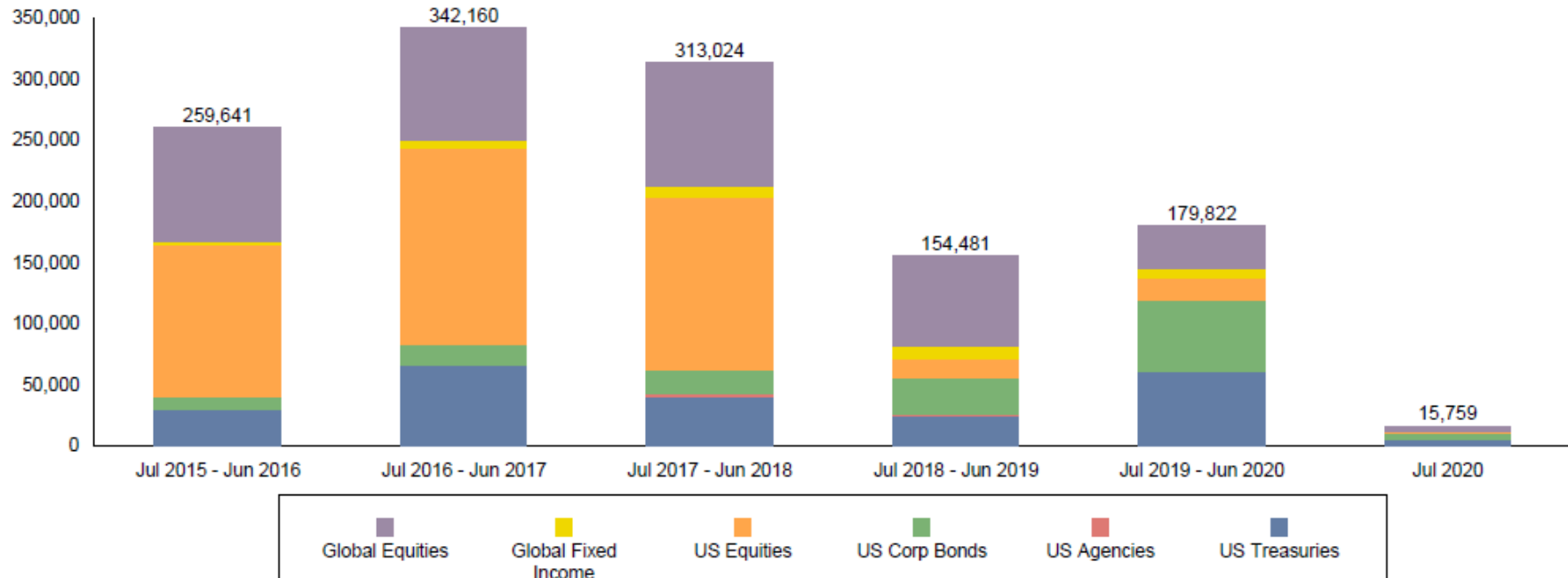


# East Bay Municipal Utility District Employees' Retirement System

## Securities Lending Program

## NET EARNINGS SUMMARY OF LENDING PROGRAM

East Bay Municipal Utility District Employees' Retirement System began lending in July 2000



Gross Revenue since 2001

**\$7,065,482**

Net Revenue since 2001

**\$3,862,092**

Fee Split\*

**70/30 for US Fixed Gov't  
65/35 for all others**

Collateral Fund

**SL Core STIF**

Revenue Posts

**All accounts post to self except  
accounts 2635656 and 2636333  
which post to EBM07**

\*Effective 2017 - East Bay Municipal Utility District Employees' Retirement System is receiving 65% of the total revenue and Northern Trust receiving 35% for all asset classes except US Fixed Government Securities whereby EBMUDERS is receiving 70% of total revenue and NT 30%.

NTAC:3NS-20

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## TOP 10 NET EARNINGS JULY 2019 – JUNE 2020

Rank	Security Name	CUSIP/SEDOL	Net Earnings	% Of Total Net Earnings	Market Value On Loan (USD)	Average % Utilization	Average Spread
1	UNITED STATES OF AMER TREAS BD 2	912828X88	12,682.35	7.05	4,894,946.55	53.46	36.26
2	EQUINOR ASA NOK2.50	7133608	9,058.03	5.04	457,717.91	23.48	288.21
3	YARA INTERNATIONAL NOK1.7	7751259	5,910.74	3.29	73,544.39	4.44	1,142.05
4	CATERPILLAR INC 2.6% DUE 04-09-203	149123CH2	4,070.99	2.26	1,094,309.56	80.57	55.21
5	WI TREASURY SEC TREAS NTS FLTG	9128285Y2	3,971.70	2.21	755,860.07	16.71	71.22
6	US TREASURY INFL INDX 0.125%	912828Z37	3,832.50	2.13	636,557.03	59.98	83.06
7	US TSY INFL IX TREAS BD 0.625 01-15-	912828B25	3,682.98	2.05	1,148,543.25	64.01	44.49
8	UNITED STATES TREAS INFL INDEXED	912828Y38	3,624.93	2.02	2,120,043.14	88.50	23.53
9	UNITED STATES TREAS NTS DTD 08/15	912828YB0	3,475.53	1.93	1,260,781.61	96.95	37.91
10	SANOFI EUR2	5671735	3,315.39	1.84	358,620.54	8.88	133.39
<b>Sub Total Of Top 10 Securities</b>			53,625.14	29.82	12,800,924.05	43.79	59.78
<b>All Other</b>			126,197.30	70.18	45,598,367.97	9.52	40.25
<b>Total</b>			179,822.44	100.00	58,399,292.02	11.49	44.51

- The top 10 securities contributed 29.8% of the earnings for period with an average spread of 59 basis points.

## TOP 10 NET EARNINGS JULY 2018 – JUNE 2019

Rank	Security Name	CUSIP/SEDOL	Net Earnings	% Of Total Net Earnings	Market Value On Loan (USD)	Average % Utilization	Average Spread
1	TOTAL S.E	B15C557	8,316.85	5.38	217,858.03	6.02	548.02
2	BNP PARIBAS EUR2	7309681	6,641.60	4.30	159,942.88	4.13	594.81
3	ADR ALIBABA GROUP HOLDING LTD SI	01609W102	4,234.41	2.74	2,052,624.41	71.62	30.70
4	LANDIS & GYR GROUP CHF10 (REGD)	BF41XY8	4,124.75	2.67	234,428.36	37.63	251.42
5	CIE DE ST-GOBAIN EUR4	7380482	3,999.32	2.59	144,242.58	4.47	406.24
6	VEOLIA ENVIRONNEME EUR5	4031879	3,660.12	2.37	168,096.73	9.26	307.40
7	ADR TEVA PHARMACEUTICAL INDS	881624209	3,643.88	2.36	1,401,249.42	63.01	38.06
8	SANOFI EUR2	5671735	3,423.07	2.22	297,585.63	7.09	164.82
9	SOCIETE GENERALE FRANCE EUR1.25	5966516	2,912.61	1.89	11,376.89	1.45	3,582.29
10	LVMH MOET HENNESSY LOUIS VUITTC	4061412	2,530.79	1.64	358,740.87	8.39	101.57
<b>Sub Total Of Top 10 Securities</b>			43,487.40	28.15	5,046,145.80	18.35	126.19
<b>All Other</b>			110,993.76	71.85	46,441,189.42	11.96	34.82
<b>Total</b>			154,481.16	100.00	51,487,335.22	12.38	43.87

- The top 10 securities contributed 28% of the earnings for period with an average spread of 126 basis points.

## TOP BORROWERS AND COLLATERALIZATION

### TOP 5 BORROWERS

As of 30 Jun 2020

Top 5 Borrowers	Domicile	From 01 Jul 2019 - 30 Jun 2020		As of 30 Jun 2020	
		Net Earnings	% of Net Earnings	Loan Volume	30 Jun 2020 % of Loan Volume
BOFA SECURITIES, INC.	US	26,030.52	14.48 %	16,386,679.57	20.83 %
CITIGROUP GLOBAL MARKETS INC.	US	19,452.34	10.82 %	11,582,637.98	14.73 %
WELLS FARGO SECURITIES, LLC	US	6,225.21	3.46 %	7,141,007.08	9.08 %
THE BANK OF NOVA SCOTIA, NEW YORK AGENCY	US	7,873.04	4.38 %	6,888,841.55	8.76 %
PERSHING LLC	US	17,389.12	9.67 %	6,492,067.48	8.25 %
<b>Total Top 5 Borrowers</b>		<b>76,970.23</b>	<b>42.80 %</b>	<b>48,491,233.66</b>	<b>61.65%</b>
<b>Total All Borrowers</b>	<b>From 01 Jul 2019 to 30 Jun 2020</b>	<b>179,822.44</b>	<b>100 %</b>	<b>78,659,516.40</b>	<b>100%</b>

The top 5 borrowers represent 61.65% of the total loan volume

### LOAN AND COLLATERAL PERCENTAGE

As of 30 Jun 2020

Loan Type	Cash Loan Balance	Cash Collateral Rate	Non-Cash Loan Balance	Non-Cash Collateral Rate	Total Cash and Non-Cash Loan Balance
Required Collateralization 102 %	70,805,819.19	102.33%	0.00	0.00 %	70,805,819.19
Required Collateralization 105 %	7,867,020.54	105.01%	0.00	0.00 %	7,867,020.54
<b>All Loans</b>	<b>78,672,839.73</b>		<b>0.00</b>		<b>78,672,839.73</b>

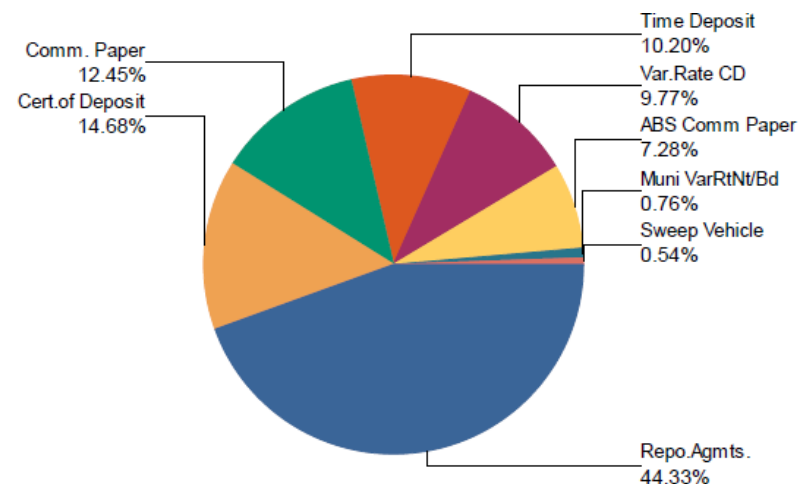
From the Executive Summary Report as of July 31, 2020

# INVESTMENT PROFILE: SL CORE STIF

JUNE 30, 2020

Characteristics		
Total Book Value (in USD)	13,182,384,448	
Weighted Average Maturity (Interest Reset Date)	31 Days	
Weighted Average Maturity (Maturity Date)	65 Days	
Average Equivalent Quality Rating		
Total Number of Issues	105	
Quality Distribution		Percentage
A1+ (SHORT TERM)	85.16%	
A1 (SHORT TERM)	14.3%	
AA- (LONG TERM)	.54%	
Maturity Breakdown Distribution		Interest Reset      Maturity Date
Overnight	53.54%	25.51%
2 - 15 Days	7.58%	6.50%
16 - 30 Days	9.35%	8.17%
31 - 60 Days	10.73%	13.16%
61 - 97 Days	7.08%	24.25%
98 - 180 Days	10.26%	17.15%
181 - 270 Days	1.51%	4.46%
367 Days - 2Yrs	0.00%	0.80%
Industry/Sector Distribution		Percentage
Banking Ind.	38.97%	
Broker/Dealer	45.09%	
Finance & Ins	7.28%	
Govt Agencies	6.75%	
Municipals	1.91%	

## Cash Collateral Asset Class Breakdown



*East Bay Municipal Utility District  
Employees' Retirement System  
pro rata share of SL Core STIF  
was 0.61%*

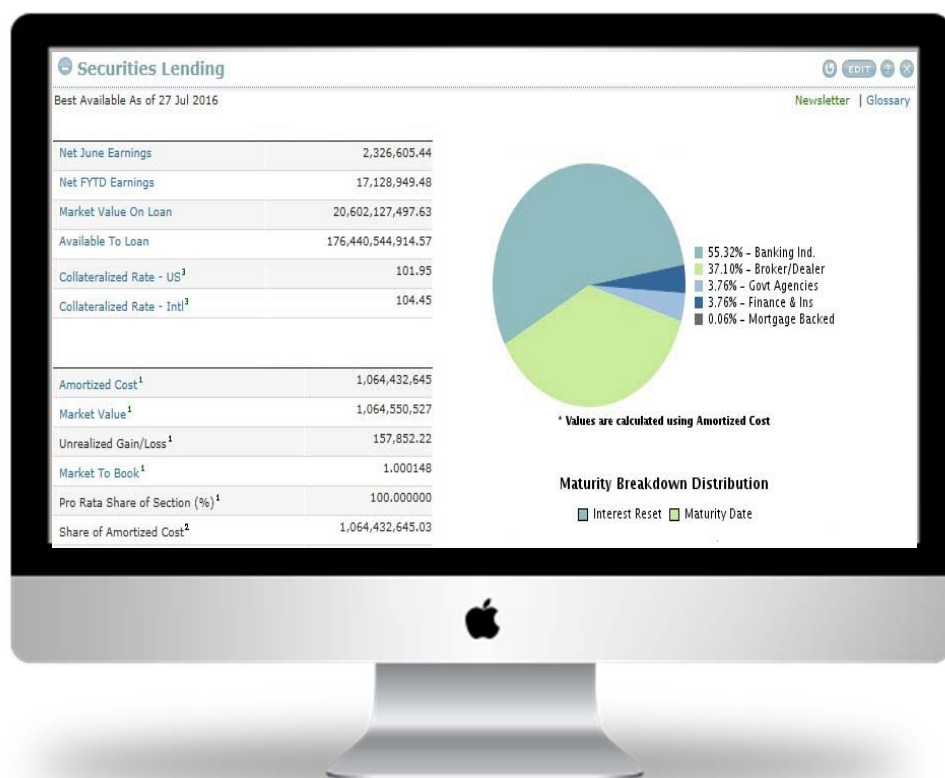
*NOTE: This information was created using the best unaudited data available to us and may not be completely reliable, accurate, or timely. Data is prepared on a settled basis, which may differ from traded basis data on the Cash Collateral Holdings report. "Traded Basis" reflects pending trades.*



# TRANSPARENCY AND INFORMATION DELIVERY

Customized reports to help monitor your securities lending activity

## Securities lending data block on Passport®



### Daily reporting

- **Securities loaned** – detail
- **Borrower utilization** – summary by borrower
- **Account utilization** – loan detail, summary by account
- **Collateral** – by security type, country and detail holdings
- **Executive summary**

### Monthly reporting

- **Performance scorecard:**
  - Account earnings and performance
  - Security level detail
  - Client by asset type and account earnings
  - Date range comparison
- **Historical statistics graph**
- **Earnings statement** – summary and detail

## CLIENT SERVICE TEAM

### Executive:

Oversight of relationship for Securities Lending products

### Relationship Manager:

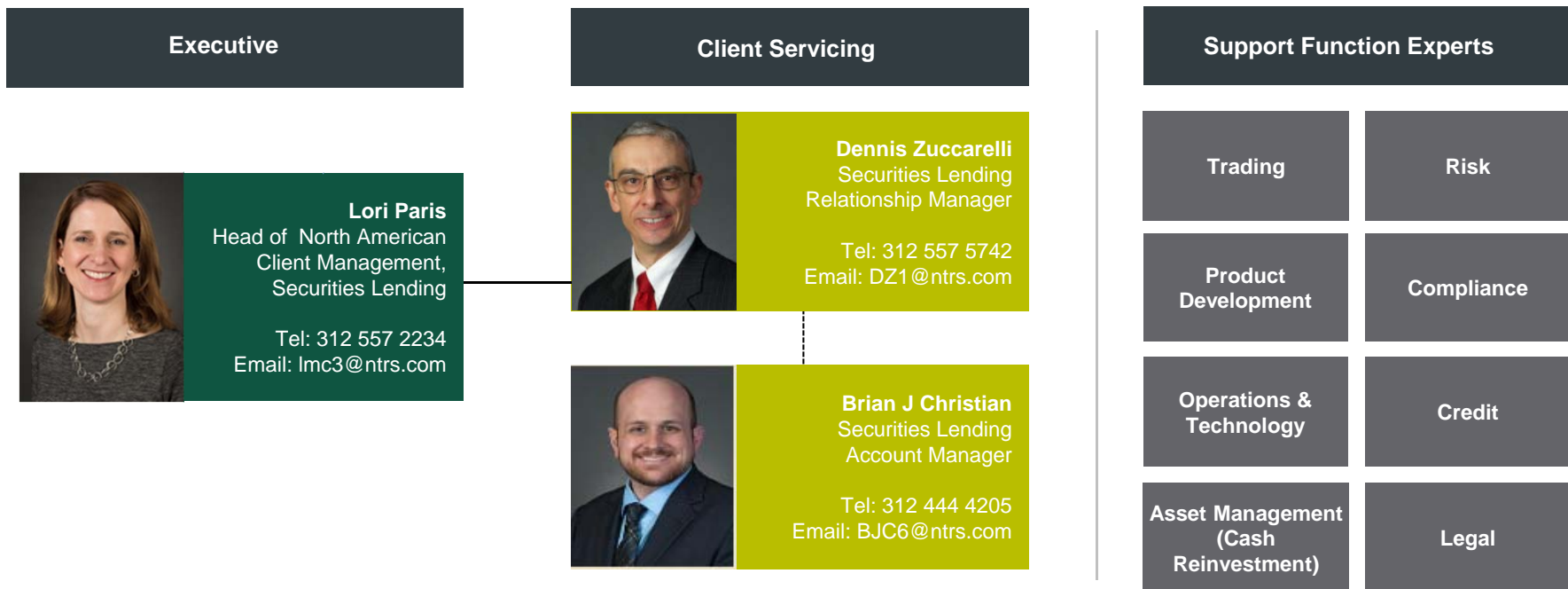
Coordinates all components of your securities lending program to ensure superior service, providing risk-adjusted returns, reviewing opportunities, and providing solutions where required

### Account Manager:

Supports relationship manager by handling daily servicing and reporting needs for clients

### Support Function Experts:

Work together to achieve performance objectives within the risk framework and create customized solutions



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# WHY NORTHERN TRUST

*An industry leader in securities lending*

## A core business

- Experienced team dedicated to securities lending
- Close coordination between custody and asset management

## Proven performance results

- 39-year track record of innovative solutions
- #1 in trade value for Fixed Income and Equities for *Autoborrow*

## Exceptional capital strength

- Sustained financial strength and stability
- Strong indemnification options

## Unrivalled client service

- Relationship staff anticipates client needs
- Focused on relationships, not transactions

## Unique global integration

- Expertise provided by a global team of professionals
- Technology efficiency achieved through a single, global proprietary trading platform

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NORTHERN  
TRUST

## MEMORANDUM

**TO:** Board of Trustees, EBMUDERS  
**FROM:** Sarah Bernstein, Principal, Meketa Investment Group  
**DATE:** September 17, 2020  
**RE:** Diversity in the Asset Management industry

---

In this Memorandum we summarize the recent Securities and Exchange Commission (“SEC”) Asset Management Advisory Committee findings on diversity in asset management, and propose two diversity-related questions to add to the EBMUDERS annual manager ESG review:

- Please report on women and minority representation in your firm’s ownership, on your Board of Directors, in your firm’s executive management and in the portfolio management team dedicated to the EBMUDERS assets.
- Please provide a copy of your firm’s policy on diversity and inclusion.

### SEC and Diversity in Asset Management

A July 16, 2020 panel discussion on diversity in asset management, before the SEC Asset Management Advisory Committee, recommended that regulators should find ways to make the asset-management industry more inclusive of minority- and women-owned firms. The panel was asked by SEC Chairman Jay Clayton to help inform the agency on how it can promote diversity and inclusion in the broader asset management industry, including getting more diverse candidates in the door and giving them access to opportunities to advance and succeed. The panel was chaired by Gilbert Garcia, founder of fixed income manager, Garcia Hamilton & Associates, an EBMUDERS fixed income manager.

Several panelists cited studies noting that women and minority owned asset management firms represent approximately 1% of the U.S. asset management industry, a percentage which has not changed materially in the last decade. For example, in 2017 just 1.1% of the \$71 trillion in assets under management in the U.S., was managed by minority- and women-owned firms, according to research the Knight Foundation published. During the hearing, there was no suggestion of establishing quota-based affirmative action, or a belief that an investor should sacrifice returns to hire a minority or female asset manager. In contrast, the arguments made were that diverse and inclusive board of directors and management teams consistently make more money than companies with white, male-only leadership. Minority and women-owned companies are overrepresented among the top-performing firms because diversity in thinking seems to produce a higher return on investment, more often than not.

Many asset management firms historically have declined to respond to surveys on diversity. For example, in 2018, just 69 of 1,367 entities completed an assessment of their diversity policies and practices, according to the SEC.

Recommendations by panelists to the SEC to more directly address diversity included the suggestions, as paraphrased below:

- The SEC should issue formal guidance to asset owners and asset managers about the importance of diversity in their workforces and outside managers.
- The SEC could require investment managers and consultants to report data, “because, if they don’t ask for it, it won’t happen”, proposed Robert L. Green, President and CEO of the National Association of Investment Companies, an industry association for diverse-owned private equity firms and hedge funds.
- Panel Moderator, Gilbert Garcia suggested creating a “Rotten Tomatoes” rating system for consultants, or ‘the Garcia Rule’, a diverse version of the NFL’s Rooney Rule that requires at least one woman and one underrepresented minority to be considered for open positions. Illinois State Treasurer, Michael Frerichs, has adopted the Garcia Rule for asset management hires.

### **EBMUDERS ESG Survey – Proposed Additional Questions on Diversity**

We recommend that the EBMUDERS expand their annual manager ESG survey to include two questions on how firms manage their own diversity. EBMUDERS would expand its annual manager ESG survey from 8 to 10 questions, as outlined in the Appendix.

### Appendix: Proposed 2021 EBMUDERS Annual ESG Survey

Note: two questions related to asset management diversity are proposed additions from the 2020 survey, highlighted in bold below.

- Is your firm a member of PRI and/or other institutional investor ESG related organizations? Please list.
- **Please report on women and minority representation in your firm's ownership, on your Board of Directors, in your firm's executive management and in the portfolio management team dedicated to the EBMUDERS assets.**
- **Please provide a copy of your firm's policy on diversity and inclusion.**
- Do you integrate ESG factors into your investment approach? If so, please describe.
- Have ESG factors affected your investing? If so, please provide example/s.
- What impact have ESG factors had on the fund's risk, return and diversification performance?
- What reporting on ESG does your firm provide for clients?
- How is your organization staffed regarding ESG analysis and investments?
- Do you have ESG Investment Policy and Guidelines? If so, please provide.
- Please provide, if available, an ESG scoring for your mandate and a comparison to its relevant benchmark. Please comment on differences between the scores for you mandate and its benchmark.



## EAST BAY MUNICIPAL UTILITY DISTRICT

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DATE: September 17, 2020

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance *SDS*

SUBJECT: Tipping Point Update

### SUMMARY

At the July 20, 2017 Retirement Board meeting, staff presented an item titled “Tipping Point Discussion.” This year, staff has worked with Segal, the Retirement System’s actuary, to update the 2017 data with the actual experience of the Retirement System for the last three years and to provide projections for another ten years. The updated analysis shows a continued, slow-growing, gap between benefits payments and contributions. Each year, the projected gap is illustrated in the Working Capital Annual Update memo.

The gap between benefits payments and contributions is primarily the result of the changing compositions of members of the Retirement System. However, while the gap between benefits payments and contributions is expected to continue, the updated analysis confirms that the overall Retirement System assets are still projected to continue to grow over the same time period. This is because the shortfall between benefits payments and contributions will remain smaller than the assumed return on investments for the Retirement System’s assets.

### BACKGROUND

The Retirement System’s Statement of Investment Policy and Procedures (the Policy) Section IV.A.7., requires the District to “maintain enough cash as working capital to effectively meet cash flow demands on the system. These funds are not considered investable System assets.” Pursuant to the Policy, this working capital is managed by District staff.

As presented at the Retirement Board’s July 20, 2017 meeting, the Retirement System has entered a period where annual benefit payments are projected to be greater than annual contributions. The difference in benefit payments and contribution is due in part to different benefit formulas for some new active members and the fact that beneficiaries are growing at a faster rate than active members. A separate memorandum at the September 17, 2020 Retirement Board meeting will detail the projected shortfall and working capital needs for Fiscal Year (FY) 2021.

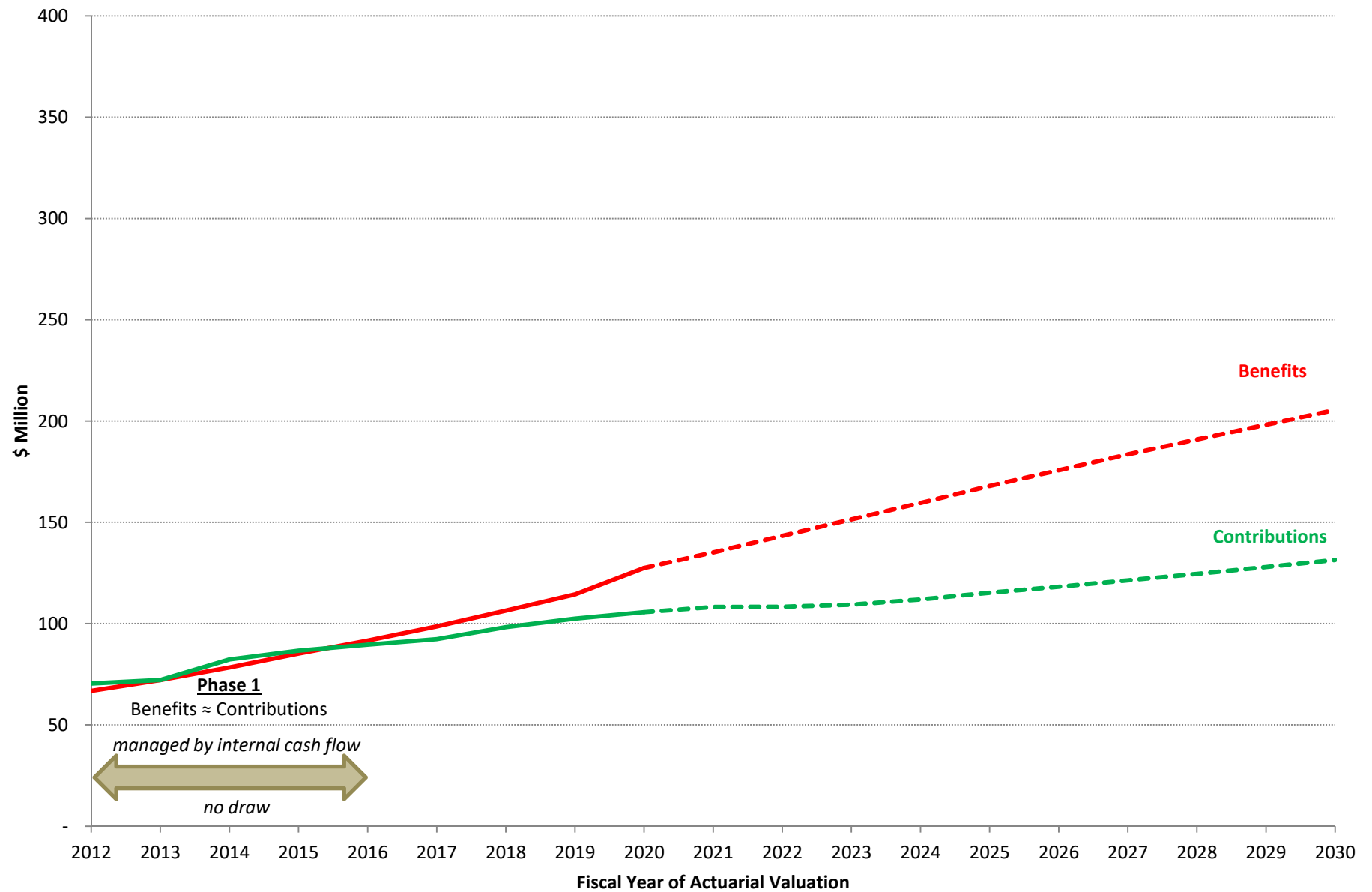
The original July 20, 2017 presentation, using data from Segal, showed three phases for recent and projected benefits payments and contributions:

- In the first phase, benefits payments and contributions were somewhat equal.
- In the second phase, benefits payments were greater than contributions but less than contributions supplemented with interest and dividend income (with interest and dividends representing the cash portion of the return on investments).
- In the third phase, benefits payments were greater than contributions plus interests, and dividends.

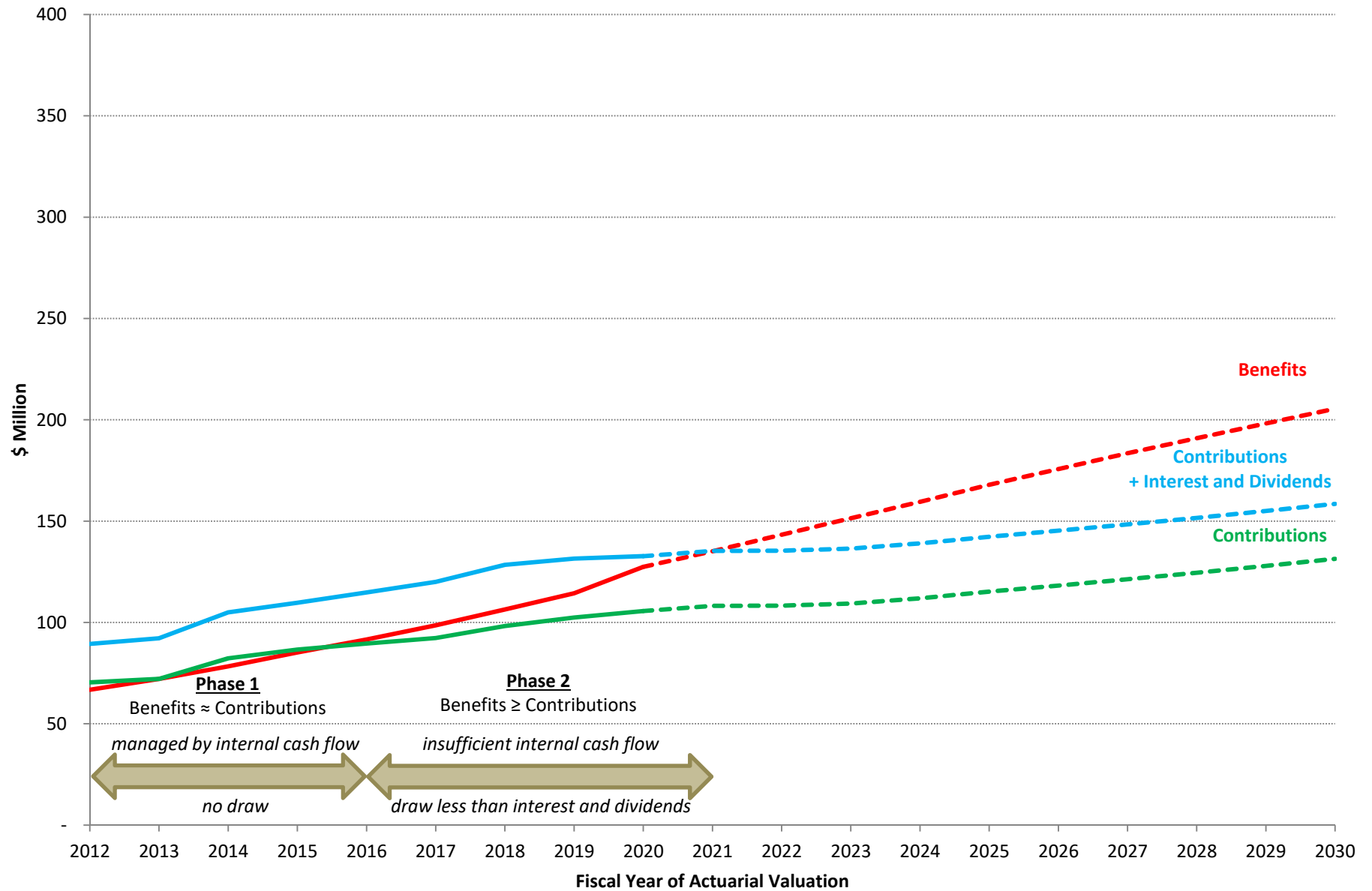
The original data showed the Retirement System entering the second phase in FY2017 and the third phase was projected to begin in FY2021. Staff requested an update to the actuarial data provided by Segal for the 2017 analysis and the updated data confirmed the transition in FY2021 to the third phase. The updated analysis also includes the Retirement System's projected total return on investments, using the current actuarially-assumed rate of return. This additional data show that, while the gap between benefit payments and contributions is expected to continue, and that the gap will remain greater than what can be supplemented by interests and dividends, overall assets of the system are still projected to grow (i.e., the gap between benefit payments and contributions will remain smaller than the assumed return on investments for the Retirement System's assets).

SDS:RLH:DC

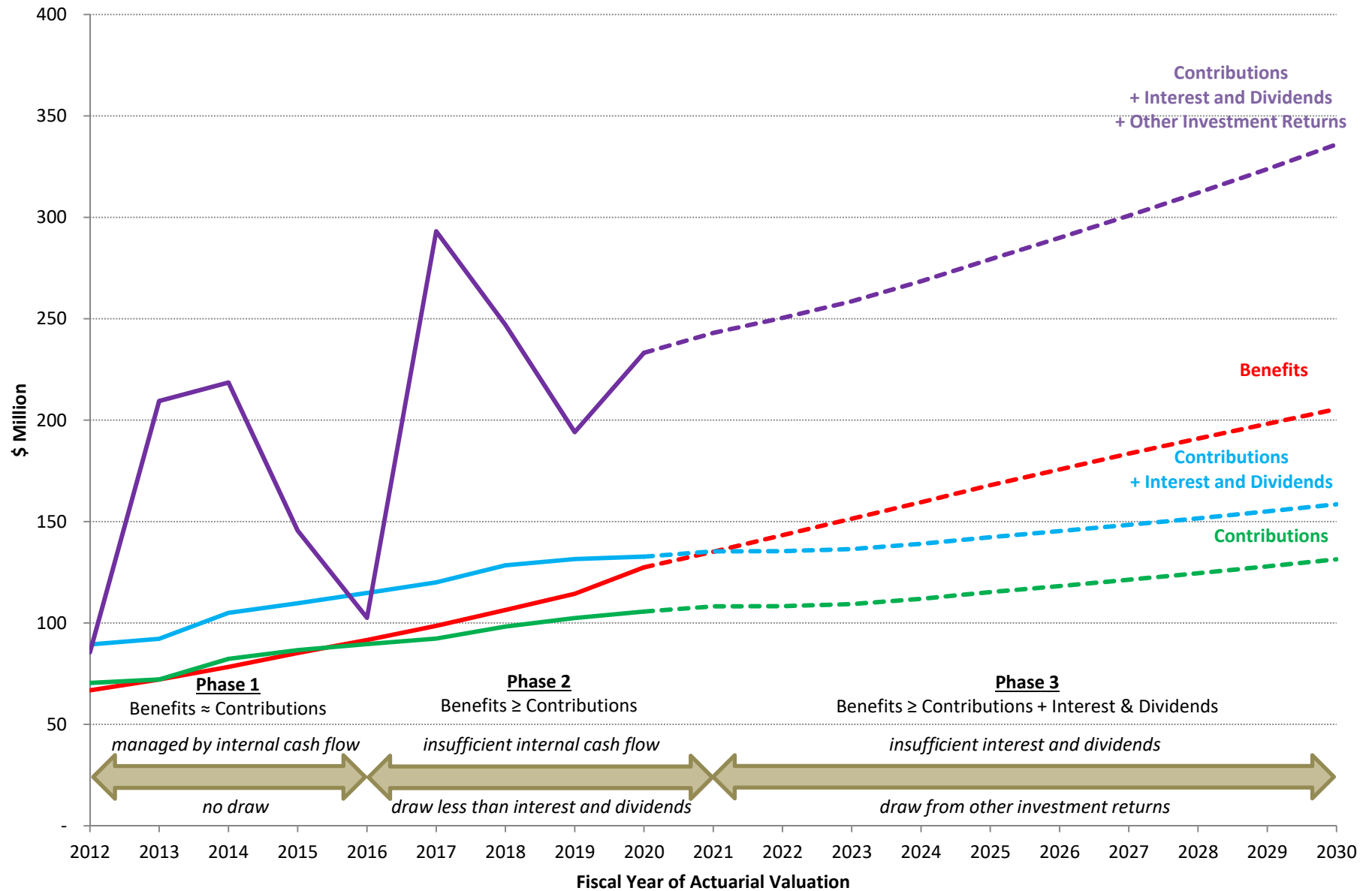
## Historical and Projected Retirement System Data



# Historical and Projected Retirement System Data



# Historical and Projected Retirement System Data




## EAST BAY MUNICIPAL UTILITY DISTRICT

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DATE: September 17, 2020

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance 

SUBJECT: Working Capital Annual Update

### SUMMARY

Since Fiscal Year (FY) 2017, the Retirement System's benefit payments continue to be greater than contributions. This is primarily due to the changing mix of members, where new retirees are receiving larger benefits under the 1955/1980 Plan formula while many new staff are making contributions under the 2013 Tier formula. Another contributing factor is the fact that the number of beneficiaries is growing faster than the number of active members. Since FY2017, staff has drawn on funds from the Retirement System's investment accounts to cover the gap between benefit payments and contributions. The projected gap for FY2021 is approximately \$19 million. Staff made a transfer of \$19 million to cover the gap for FY2020.

### BACKGROUND

As presented at the Retirement Board's July 20, 2017 meeting, the Retirement System has entered a period where benefit payments will be greater than contributions. A follow-up presentation with an updated analysis showing a continuing gap is scheduled for September 17, 2020. The difference in benefit and contribution payments is due in part to different benefit formulas for some new active members and the fact that beneficiaries are growing at a faster rate than active members. In FY2017, staff began supplementing employee contributions with small withdrawals from investment assets, held at Northern Trust, to cover benefit payments made from the Retirement System. This annual update documents the activity for the previous fiscal year and the expected withdrawal for the current fiscal year, using the steps outlined in the January 18, 2018 Retirement Board report titled 'Working Capital Management Strategy'.

To manage the Retirement System's Working Capital, staff invests bi-weekly member and District contributions into the Local Agency Investment Fund (LAIF) account and makes monthly withdrawals from LAIF to cover benefit payments. The table on the next page shows a summary of the flow of funds in the Retirement System LAIF account since FY2017.

<b>LAIF Activity (in \$ Million)</b>	<b>FY2017 (actual)**</b>	<b>FY2018 (actual)</b>	<b>FY2019 (actual)</b>	<b>FY2020 (actual)</b>	<b>FY2021 (projected)</b>
Deposits from Contributions	92.0	93.5	105.4	106.4	109.3
Withdrawal for Benefits	(97.8)	(106.3)	(119.3)	(122.2)	(128.4)
Interest	0.1	0.1	0.3	0.3	0.0
Supplemental Transfers	8.0	14.0	14.0	15.0	19.0
<i>Change in LAIF Balance*</i>	<i>2.2</i>	<i>1.4</i>	<i>0.4</i>	<i>(0.4)</i>	<i>(0.1)</i>

\* amounts may not add up due to rounding

\*\* does not include \$7.600 transfer made on July 1, 2017 but covering the June 30, 2016 Retirement System payroll, so it is not part of the FY2017 cash flow activity.

For FY2021, projected contributions, based on July 2020 employee payroll data, are \$109.3 million and projected payments, based on August 2020 benefits data, are \$128.4 million, resulting in a gap of \$19.1 million. The transfer of investment assets to Working Capital to cover the gap is \$19 million. Staff worked with Meketa to determine the accounts from which to withdraw funds. As in previous years, the funds will be invested in LAIF until they are periodically drawn down to cover monthly gaps.

As detailed in the report to the Retirement Board on January 18, 2018, the timing and number of employee retirements and new staff can have a significant effect on the projected amounts. To the extent that cash flow needs during the year become greater than projected, staff will withdraw additional funds as needed to ensure that sufficient funds are available as Working Capital to cover all benefits payments.


SDS:DC

## EAST BAY MUNICIPAL UTILITY DISTRICT

---

DATE: September 17, 2020

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance 

SUBJECT: International Manager Transition and Rebalance Activity

### SUMMARY

At its July 16, 2020 Board meeting, the Retirement Board took action to terminate one of its international equity managers, Franklin Templeton (Franklin), and transition the assets to the ACWI ex-US index fund passively managed by Northern Trust Asset Management (NTAM). This planned transition of assets also provided the opportunity to review current asset allocations versus target allocations and to potentially rebalance between accounts through an efficient process. Based on an analysis from Meketa, staff used the opportunity of the Franklin transition to complete additional rebalancing, moving funds from domestic equity and core fixed income to international equity. This rebalancing brings the Retirement System's asset allocations closer to the Retirement Board-approved target allocations.

### DISCUSSION

In order to carry out the transition of assets with Franklin Templeton to the Retirement System's NTAM ACWI ex-US account, staff used the same process used in recent years and engaged the transition services of Northern Trust Transition Management (NTTM). This planned transition also provided the opportunity to review current asset allocations versus target allocations allowing for any needed rebalancing of the portfolio through an efficient process. The Director of Finance may rebalance one or more asset classes under section IV.B of the Statement of Investment Policy and Procedures.

In early August, Meketa reviewed asset allocations based on market values at that time. Meketa found that both domestic equity and core fixed income were currently over-allocated compared to target allocations while international equity was under-allocated. More specifically, Meketa recommended that \$33 million in assets from the NTAM Russell 3000 index fund and \$20 million from the CS McKee core fixed income account be transferred to the NTAM ACWI-ex US index fund to bring the asset class allocations to their target levels. Staff directed NTTM and the associated investment managers to make funds available to process the rebalance transfers, as recommended by Meketa, concurrent with the Franklin transition.



NTTM began trading on August 13, 2020 and completed trading on August 19, 2020. In total, about \$165 million in assets were moved to the ACWI ex-US fund. This includes almost \$11 million in securities transferred in-kind (without incurring trading costs). NTTM provided a pre-trade analysis before the transition and a post-trade analysis after the transition. Trading costs (both explicit and implicit) were near NTTM's pre-trade estimate of 32.6 basis points. The transition is additionally exposed to opportunity cost, or the potential movement of the market value of the target portfolio during the transition. The opportunity cost can be positive or negative, and in the case of this transition was negative 10.7 basis points (i.e., 10.7 basis points in the Retirement System's favor). This led to a total transition shortfall (total transition cost) of 23.0 basis points.

At the close of the transition process, almost all assets in the Franklin account were transferred to the passively managed ACWI ex-US Fund, with some dividend receivables remaining until they become cash that can be transferred by staff. In addition, the rebalance activity has brought the Retirement System's asset allocations to within 1% of its target allocations as of September 1, 2020.

SDS:RLH:DC

## EAST BAY MUNICIPAL UTILITY DISTRICT

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DATE: September 17, 2020

MEMO TO: Members of the Retirement Board

FROM: Sophia D. Skoda, Director of Finance *SDS*

SUBJECT: Employees' Retirement System (ERS) Forum Information

### SUMMARY

Treasury staff hosted a District-wide ERS Forum for employees on August 20, 2020. The event was a continuation of staff's efforts over the last several years to provide information about the Retirement System to employees and covered basic information about the Retirement System. The event was held on Microsoft Teams and was attended by over 260 employees. Following the event, a recording of the presentation, along with presentation materials and resources, was made available on a shared District resource.

### BACKGROUND

Treasury staff, in its role supporting the Retirement System and the Retirement Board, provides annual updates to the District's Finance/Administration Committee about the Retirement System. Additionally, Treasury staff has engaged in increased outreach to employees and retirees regarding financial information about the ERS over the last several years.

In 2017, the Retirement Board made Environmental, Social, and Governance (ESG) related changes to the Retirement System's investment policy. Treasury staff presented an overview of the Retirement System and the recent ESG efforts at a noon-time Engineers Forum meeting open to all employees. Response to the presentation showed a desire for greater understanding about key aspects of the Retirement System. As a response, Treasury staff began annual updates on the Retirement System's finances through the District's Destinations publication sent to all Retirement System members.

In 2019, a finance-focused issue of Destinations (Issue 3) included basic terminology and components of the Retirement System, along with key data including the Retirement System's asset allocation and actuarial valuation. In the 2020 issue of Destinations (Issue 4), the focus was on the active/passive asset allocation split and on the Retirement System's funded ratio, along with other key metrics. Treasury staff plans to continue providing these updates annually, through Destinations.

## Employees' Retirement System (ERS) Forum Information

September 17, 2020

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While the information published in Destinations aims to increase the knowledge base of members, there had not been a live event where members could ask real time questions or provide feedback since 2017.

An ERS Forum was held virtually on August 20, 2020 over Microsoft Teams. The event was recorded and materials from the presentation were made available electronically following the event. The ERS Forum presentation covered basic Retirement System concepts and allowed for attendees to submit questions in advance and live, to be answered during the forum.

Feedback received since the event has been overwhelmingly positive and has reinforced staff's view that there is demand for such information on the part of members of the Retirement System. Treasury staff will continue to evaluate ways to increase outreach to Retirement System members on the finances of the Retirement System to fill this information gap.

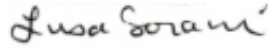
SDS:DC

## EAST BAY MUNICIPAL UTILITY DISTRICT

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DATE: September 17, 2020

TO: Members of the Retirement Board

FROM: Lisa Sorani, Manager of Employee Services 

SUBJECT: Draft Changes to Retirement Board Rule C-3 Low Income Adjustment

Last year staff noticed an inconsistency in the language between the Board Rule C-3 Low Income Adjustment and the language in the Retirement Ordinance. Upon review it was noted that Staff were using the language from the Retirement Ordinance in their work procedures for the Low Income Adjustment. Staff reviewed the history of the board rule and it appears that a sentence was split incorrectly in the most recent iteration of the Board Rule suggesting that Social Security and other forms of income are not to be considered as part of “total gross income”. The “gross income” language in the Board Rule C-3 currently reads as follows;

.... Total Gross Income Defined

*For purposes of determining the amount of low-income adjustments payable, the combined total gross income of a retired member and spouse, or the total gross income of a beneficiary, **shall include total retirement system benefits, including any health insurance benefit but excluding any low-income adjustment, social security benefits, and all other income from all sources, whether taxable or non-taxable.***

The Retirement Ordinance specifically states what should be considered as “total gross income” when reviewing retiree income for eligibility for the Low Income Adjustment and specifically includes Social Security benefits and other forms of income in “total gross income”. The only exclusion noted in the Retirement Ordinance is the actual Low Income Subsidy. The full language of Section 35 of the Retirement Ordinance reads as follows;

*Section 35*  
**LOW-INCOME ADJUSTMENT**

*(a) Commencing July 1, 1988, the Retirement Board is authorized to grant to service and disability retirees who retired with twenty (20) or more years of service, other than as a member of the Board of Directors, a low-income adjustment sufficient to bring the total gross income of the retiree and his or her spouse to two hundred percent (200%) of the poverty level of the State of California as of December 31 of each calendar year. The Retirement Board shall review the formula by which such low-income adjustments are calculated every three (3) years, with the first such review to occur in 1991. The Retirement Board shall adopt rules governing the administration of the program which shall (1)*

*define "total gross income" to include the combined income of the retiree and his or her spouse from Retirement System pension benefits, federal social security benefits and other sources; and (2) require that applicants submit documentation, including federal income tax and social security data, of the combined income of the retiree and his or her spouse for the prior year. Any person who elected to remain a Member of the Retirement System pursuant to Section 12(b)(2) or who is not currently receiving federal social security benefits shall be ineligible for this low-income adjustment. Amounts payable as low-income adjustments shall not be included in calculation of benefits payable under Section 21(b) or Section 33(a).*

*(b) Commencing July 1, 1988, the Retirement Board is authorized to grant to Beneficiaries of service and disability retirees who retired with twenty (20) or more years of service, other than as a member of the Board of Directors, a low-income adjustment sufficient to bring the total gross income of the Beneficiary to one hundred fifty percent (150%) of the poverty level of the State of California as of December 31 of each calendar year. The Retirement Board shall adopt rules governing the administration of the program which shall (1) define "total gross income" to include income from Retirement System pension benefits, federal social security benefits and other sources; and (2) require that applicants submit documentation, including federal income tax and social security data, of their income for the prior year. Any Beneficiary of a person who elected to remain a Member of the Retirement System pursuant to Section 12(b)(2) or who is not currently receiving federal social security benefits shall be ineligible for this low-income adjustment. Amounts payable as low-income adjustments shall not be included in calculation of benefits payable under Section 33(a).*

*(c) The years of service used to calculate the Retirement Allowance will be used to determine eligibility for the Low Income Adjustment.*

Attached is a draft revision to the Board Rule C-3 that corrects the language to be consistent with the Retirement Ordinance and staff administration of the Low Income Adjustment for the Retirement Board to review. If you are in agreement with this adjustment, it will be brought back to the next Retirement Board meeting for adoption.

LS:ls

## DRAFT REVISED RULE NO. C-3

RULE NO. C-3  
(PREVIOUS RULE NO. 23)

- Low Income Adjustment  
Res. 5826 – 5/24/88  
Revised by motion 1/28/92

### Authorization and Eligibility

The Retirement Board is authorized to grant to service and disability retirees who retired with twenty or more years of service, other than as a member of the Board of Directors, a low-income adjustment sufficient to bring the total gross income of the retiree and his or her spouse to two hundred percent of the poverty level of the State of California as of December 31 of the prior calendar year. The Retirement Board is also authorized to grant to beneficiaries of retirees described above, a low-income adjustment sufficient to bring the total gross income of the beneficiary to one hundred fifty percent of the poverty level described above. Retired members and beneficiaries of retired members who resigned from District service and elected to remain members of the Retirement System, and retired members and beneficiaries not currently receiving federal social security benefits are ineligible for low-income adjustments. Eligibility for low-income adjustments and the amount of said adjustments shall be determined by the Retirement Board based upon District records and information submitted by those applying for the adjustment.

### Total Gross Income Defined

For purposes of determining the amount of low-income adjustments payable, the combined total gross income of a retired member and spouse, or the total gross income of a beneficiary, shall include total retirement system benefits, including any health insurance adjustment, **social security benefits, and all other income from all sources, whether taxable or non-taxable benefit** but excluding any low-income adjustment, ~~social security benefits, and all other income from all sources, whether taxable or non-taxable.~~

### Annual Notice to Retired Members and Beneficiaries

Not later than June 1 of each year, the Secretary of the Retirement Board will notify retired members and surviving beneficiaries of the requirements and procedure for applying for low-income adjustments.

### Application Procedure

Retired members and beneficiaries wishing to apply for low-income adjustments will complete an application and return it to the Secretary of the Retirement Board by July 1 and attach (1) a copy of that portion of the prior year's federal income tax form 1040 or equivalent which shows gross income, and (2) copies of current social security forms which show the social security benefit being received by the retired member and spouse or by the beneficiary making application.

### Determining Adjustments

Except as otherwise provided, low-income adjustments will be determined and established for the twelve months beginning July 1 of each year. The amount of low-income adjustment shall be based upon the total gross income received in the preceding calendar year, plus any retirement benefit increases and social security benefit increases made payable up to and including July 1 of the year in which the low-income adjustment is determined. Low-income adjustments will be payable monthly, in an amount equal to one-twelfth of the annual adjustment determined. Increases in District retirement benefits made effective after July 1 of any year shall result in reduction of low-income adjustments for the remainder of the one-year adjustment period.

### Death of Retiree

Upon the death of a retired member, the surviving spouse or other beneficiary designated at the time of member retirement to continue to receive Retirement System benefits shall continue to receive the previously authorized low-income adjustment for the remainder of the fiscal year in which death occurred. Thereafter, the low-income adjustment will cease. However, the surviving spouse or beneficiary who continues to receive regular Retirement System benefits may, on the annual schedule described, apply for a low-income adjustment applicable to beneficiaries, to be payable in addition to other benefits payable under Ordinance provisions. In the event there is no surviving spouse or other beneficiary authorized to continue to receive regular benefits upon the death of the retired member, the low-income adjustment will terminate at the end of the month in which death occurred.

### Effect on Other Retirement Benefits

Low-income adjustment shall not be included in calculation of survivorship benefits, payments under retirement benefit options selected at retirement, or cost-of-living adjustments.

### Renewal of Adjustments

Low-income adjustments are applicable only for one fiscal year, and are renewable on July 1 of each year, with approval of the Retirement Board through the application procedure described.