COUNTY OF TULARE
BOARD OF RETIREMENT

Leanne Malison
Retirement Administrator

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AGENDA OF THE BOARD OF RETIREMENT
REGULAR RETIREMENT BOARD MEETING
Wednesday, April 28, 2021 at 8:30 a.m.
TCERA Board Room, 136 N. Akers Street, Visalia, CA 93291

NOTICE OF TEMPORARY PROCEDURES FOR BOARD OF RETIREMENT MEETINGS

On March 17, 2020, California Governor Gavin Newsom issued Executive Order N-29-20, relating to the convening of public meetings in light of the COVID-19 pandemic. The Tulare County Employees' Retirement Association (TCERA) hereby provides notice that it will continue to convene its regularly scheduled public meetings of the Board of Retirement in the Board Room at 136 N. Akers Street, Visalia, as provided in the publicly posted agenda notice, and until further notice.

Persons who wish to address the Board of Retirement during public comment or regarding an item that is on the agenda may address the Board of Retirement in person at the meeting. Members of the public may also submit public comment via email to BORPublicComment@tcera.org before the meeting. The comments received via email before the meeting will be read to the Board of Retirement in open session during the meeting as long as the comments meet the requirements for Public Comments as posted in the agenda. Persons wishing to listen to the meeting and/or participate in public comment remotely may call the TCERA Office during regular business hours (Monday through Friday, 8:00 a.m. to 5:00 p.m.) within 48 hours of the meeting at 559-713-2900 for login information. Public comments are limited to any item of interest to the public that is within the subject matter jurisdiction of the Board of Retirement. (Gov't Code Section 54954.3(a).)

As a courtesy to those in attendance, all individuals are requested to place cell phones and other electronic devices in the non-audible alert mode.

I. CALL TO ORDER

II. ROLL CALL

III. PLEDGE OF ALLEGIANCE

IV. PUBLIC COMMENT

At this time, members of the public may comment on any item not appearing on the agenda. Under state law, matters presented under this item cannot be discussed or acted upon by the Board at this time. For items appearing on the agenda, the public is invited to make comments at the time the item comes up for Board consideration. Any person addressing the Board will be limited to a maximum of five (5) minutes so that all interested parties have an opportunity to speak. Please state your name for the record.

V. X-AGENDA ITEMS

VI. DISABILITIES

1. Closed session to be held regarding disability matters listed on this agenda.
2. In the matter of the disability application of Mark Hays, consider and take action regarding the application for a disability retirement.
3. Accept as filed the Disability Status Report Overview.

VII. CONSENT CALENDAR

1. Approve Minutes of the following meetings:
   a. Retirement Board Minutes of April 14, 2021.
2. Approve payments to:
   a. Cheiron – invoice for actuarial services in the amount of $4,548.50 for the quarter ended March 31, 2021.

VIII. NEW BUSINESS

1. Presentation from Meketa Investment Group regarding the firm's response to TCERA's Request for Proposal for investment consulting services. Discussion and possible action.
2. Presentation from AndCo Consulting regarding the firm's response to TCERA's Request for Proposal for investment consulting services. Discussion and possible action.

IX. UPCOMING MEETINGS

1. Special Board of Retirement Meeting April 29, 2021, 8:30 a.m.
2. Administrative Committee Meeting, April 29, 2021, 12:00 noon.
3. Investment Committee Meeting – May 12, 2021 - Canceled
4. Board of Retirement Meeting May 26, 2021, 8:30 a.m.
5. Administrative Committee Meeting – May 26, 2021, 10:30 a.m.

X. TRUSTEE/STAFF COMMMENTS

Under state law, matters presented under this item cannot be discussed or acted upon by the Board at this time.

XI. ADJOURNMENT

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Secretary of the Board of Retirement at (559) 713-2900. Notification 48 hours prior to the meeting will help enable staff to make reasonable arrangements to ensure meaningful access. Documents related to the items on this Agenda submitted after distribution of the Agenda packet are available for public inspection at TCERA, 136 N. Akers Street, Visalia, CA. during normal business hours.

DISABILITY STATUS REPORT
Status as of April 21, 2021
(17 Active Disability Applications)

02 - Pending Receipt of Medical Records

12/11/20 Corazzini, Tracie (Jeanette Burks)

Tulare County Fire Dept/Safety Member Orthopedic/Service Connected Disability

Presumptive Indicator: N
Active

Eligible for Service Retirement = No

12/21/20 Disability Application Documents Scanned

12/21/20 Disability Application Packet Received and Reviewed

12/23/20 Benefit Estimate Sent to DMS

12/23/20 DMS Notified of Disability Application Filing

12/23/20 Employment Records Requested
Additional Remarks : due 1/21/21

12/23/20 Disability File Folder Created

12/23/20 Infolinx Setup

2/9/21 Tulare County Health Centers Records Received
Additional Remarks : Declaration of Custodian of Records received

2/9/21 Risk Management Records Received

2/9/21 HR & D Records Received

2/9/21 County Department Records Received
Additional Remarks : Fire Department

4/29/19 Hoogeveen, Sonja (Jeanette Burks)

Library-Visalia/General Member Disease/ Service Connected Disability

Retired

Eligible for Service Retirement = Yes

4/30/19 Disability Application Documents Scanned

4/30/19 Disability File Folder Created

4/30/19 Infolinx Setup

5/14/19 Disability Application Packet Received and Reviewed

5/15/19 DMS Notified of Disability Application Filing

5/15/19 Employment Records Requested
Additional Remarks : due 6/14/19; reminder sent to TCHC, records due 7/25/19; 7/12/19 All dept records received, pending medical records from appl; 7/24/19 mailed 1st reminder to appl for pending med recs

5/30/19 Risk Management Records Received

7/10/19 County Department Records Received
Additional Remarks : Library Dept

7/10/19 HR & D Records Received

1/25/21 Carlson, Jerry (Adriana Gonzales-Chang) **RMA-TR-Fleet Central Shop/General Member Orthopedic/Service Connected Disability**

Active **Eligible for Service Retirement = Yes**

1/26/21 Disability Application Packet Received and Reviewed

1/26/21 DMS Notified of Disability Application Filing

2/8/21 Disability Application Documents Scanned

2/8/21 Infolinx Setup

2/8/21 Disability File Folder Created

2/8/21 Employment Records Requested
Additional Remarks : due 3/10/21; 4/15/21 letter sent to member re pending med recs, Risk Management records are still pending

2/8/21 Tulare County Health Centers Records Received
Additional Remarks : Declaration of Custodian of Records received 2/8/21

3/10/21 County Department Records Received
Additional Remarks : RMA Dept

3/10/21 HR & D Records Received

10/29/20 Lack, Tonnya (Jeanette Burks) **Prob-Juvenile Detention/Safety Member**
Presumptive Indicator: N
Active **Eligible for Service Retirement = Yes**

11/5/20 Disability Application Packet Received and Reviewed

11/18/20 Disability Application Documents Scanned

11/18/20 Disability File Folder Created

11/18/20 Infolinx Setup

12/2/20 Employment Records Requested

1/8/21 County Department Records Received

1/8/21 Disability Findings Summary Prepared

1/8/21 HR & D Records Received

1/8/21 Tulare County Health Centers Records Received
Additional Remarks : No records

1/11/21 Long, Jacilyn (Adriana Gonzales- **Prob-Center Street/General Member Disease/**

DISABILITY STATUS REPORT
Status as of April 21, 2021
(17 Active Disability Applications)

Chang) **Non-Service Connected Disability**

Retired **Eligible for Service Retirement = Yes**

1/14/21 Disability Application Packet Received and Reviewed

1/14/21 DMS Notified of Disability Application Filing

1/26/21 Disability Application Documents Scanned

1/26/21 Infolinx Setup

1/26/21 Disability File Folder Created

1/26/21 Employment Records Requested
Additional Remarks : Due 2/25/21

1/27/21 Tulare County Health Centers Records Received
Additional Remarks : Declaration of Custodian of Records received 1/27/21

2/2/21 County Department Records Received
Additional Remarks : Probation Dept

3/25/21 Fernandez, Gene (Christene Brown) **Prob-Admin-Visalia/Safety Member**
Presumptive Indicator: N
Retired **Eligible for Service Retirement = Yes**

3/31/21 Disability Application Packet Received and Reviewed
Additional Remarks : TPS had white out- Leanne stated we can accept packet anad date stamp, but he will need to provid a clean TPS. Letter sent to physician and member contacted by JBurks

3/31/21 Disability Interview/Application Packet Provided

3/31/21 Member Sent Authorization and Questionnaire

5/8/20 Chambers, Mark (Christene Brown) **RMA-TR-Porterville Rd Yd 1/General Member**
Orthopedic/Service Connected Disability

Retired **Eligible for Service Retirement = Yes**

5/8/20 Disability Application Packet Received and Reviewed

5/8/20 Disability Interview/Application Packet Provided

5/8/20 Member Sent Authorization and Questionnaire

6/2/20 DMS Notified of Disability Application Filing

6/2/20 Disability Application Documents Scanned

6/2/20 Disability File Folder Created

6/2/20 Employment Records Requested
Additional Remarks : 06-27-2020 dept records due, Sent new request 9-10-20

6/2/20 Infolinx Setup

9/10/20 County Department Records Received

Additional Remarks : No records

9/10/20 Risk Management Records Received
Additional Remarks : No records / No interactive processes have been held.

9/25/20 Tulare County Health Centers Records Received
Additional Remarks : No records

11/9/20 HR & D Records Received
Additional Remarks : Received 11-10-20 after three request.

2/3/21 IME Appointment Scheduled
Additional Remarks : Appointment 4-13-2021

2/12/21 IME Appointment Letter to Member Sent

7/24/20 Minor, Bryan (Adriana Gonzales-Chang)
Presumptive Indicator: Y
Retired

Sher-Op-Porterville/Safety Member Disease/ Non-Service Connected Disability

Eligible for Service Retirement = Yes

7/28/20 Disability Application Packet Received and Reviewed

7/28/20 Disability Application Documents Scanned

7/28/20 Disability File Folder Created

7/28/20 Infolinx Setup

8/3/20 Employment Records Requested
Additional Remarks : due 8/31/2020; All dept recs received. pending med recs; 12/9/20 mailed reminder to member re: pending medical records; 4/1/21 Notified member of pending medical records

8/14/20 DMS Notified of Disability Application Filing

8/14/20 Tulare County Health Centers Records Received
Additional Remarks : none on file

11/5/20 County Department Records Received
Additional Remarks : Sheriff Dept

11/5/20 HR & D Records Received

11/5/20 Risk Management Records Received
Additional Remarks : none on file

03 - Pending Medical Records Review

5/11/20 Nieburgs, Randolph (Adriana Gonzales-Chang)

Retired

Aud-General Accounting/General Member Neurological/Non-Service Connected Disability

Eligible for Service Retirement = Yes

5/11/20 Disability Application Packet Received and Reviewed

5/11/20 Disability Interview/Application Packet Provided

5/13/20 DMS Notified of Disability Application Filing

5/13/20 Disability Application Documents Scanned

5/13/20 Disability File Folder Created

5/13/20 Infolinx Setup

5/13/20 Employment Records Requested
Additional Remarks : due 6/10/20; 6/22/20 - All dept records received. Pending medical records from applicant; 11/6/20 - called member re: pending medical records; 12/9/20 - mailed letter to member re: pending medical records; 4/1/21 - All medical records received, pending summarization

6/2/20 Risk Management Records Received
Additional Remarks : 5/11/20 - No Risk records available, pending Workers Comp records

6/22/20 County Department Records Received
Additional Remarks : Auditors

6/22/20 HR & D Records Received

4/1/21 Tulare County Health Centers Records Received
Additional Remarks : none on file

7/28/20 Perez, Clorinda (Adriana Gonzales-Chang) **Ag Commissioner/Sealer/General Member**

Active **Eligible for Service Retirement = No**

7/28/20 Disability Application Packet Received and Reviewed

8/14/20 Disability Application Documents Scanned

8/14/20 Disability File Folder Created

8/14/20 Infolinx Setup

10/27/20 DMS Notified of Disability Application Filing

10/27/20 Employment Records Requested
Additional Remarks : Due 9/14/20; 10/27/20 - All County records received, member notified by phone of pending medical records; 12/9/20 letter mailed to applicant re: pending medical records; 3/10/21 All records have been received. Medical records sent for summarization

10/27/20 County Department Records Received
Additional Remarks : Ag Comm

10/27/20 HR & D Records Received

10/27/20 Risk Management Records Received

10/27/20 Tulare County Health Centers Records Received
Additional Remarks : None on file.

04 - IME Scheduled/Pending Report

DISABILITY STATUS REPORT
Status as of April 21, 2021
(17 Active Disability Applications)

4/3/19 Lujano, Rose (Jeanette Burks) **HHS-HS-Visalia District Off/General Member**

Retired **Eligible for Service Retirement = Yes**

4/3/19 Disability Application Documents Scanned

4/3/19 Disability File Folder Created

4/3/19 Infolinx Setup

4/9/19 DMS Notified of Disability Application Filing

4/9/19 Employment Records Requested

7/10/19 County Department Records Received
Additional Remarks : HHSA Dept

7/10/19 HR & D Records Received

7/10/19 Risk Management Records Received

4/21/21 IME Appointment Scheduled
Additional Remarks : Pending appointment date and time.

06 - Additional Information Pending

2/3/20 Woods, Sean (Adriana Gonzales-Chang) **Information Technology/General Member Orthopedic/Service Connected Disability**

Active **Eligible for Service Retirement = No**

2/3/20 Disability Application Packet Received and Reviewed

2/4/20 Disability Application Documents Scanned

2/4/20 Disability File Folder Created

2/4/20 Infolinx Setup

2/4/20 DMS Notified of Disability Application Filing

4/23/20 Employment Records Requested
Additional Remarks : due 3/5/2020; 4/23/2020 All dept records received, pending medical records

4/23/20 County Department Records Received
Additional Remarks : IT Dept

4/23/20 HR & D Records Received

4/23/20 Risk Management Records Received

11/5/20 IME Appointment Scheduled
Additional Remarks : appt on 12/11/20 in Clovis; appt rescheduled to 1/14/20

11/5/20 IME Appointment Letter to Member Sent

2/9/21 IME Reports Received
Additional Remarks : Supplemental IME Report requested, due 3/19/21

3/9/21 Accommodation Memo Sent
Additional Remarks : due 3/30/21

4/1/21 Accommodation Response Received

4/1/21 IRC Meeting Scheduled
Additional Remarks : On 4/21/21 IRC agenda

2/6/20 Doyal, Eric (Jeanette Burks)

Sher-Op-Orosi/Safety Member Orthopedic/ Service Connected Disability

Presumptive Indicator: N
Active

Eligible for Service Retirement = No

2/13/20 Disability Application Documents Scanned

2/13/20 Disability Application Packet Received and Reviewed
Additional Remarks : SCDR

2/13/20 Disability File Folder Created

2/13/20 Disability Interview/Application Packet Provided

2/13/20 Employment Records Requested

2/13/20 Infolinx Setup

2/13/20 Disability Findings Summary Prepared

2/13/20 DMS Notified of Disability Application Filing

2/21/20 Benefit Estimate Sent to DMS

2/21/20 Tulare County Health Centers Records Received
Additional Remarks : No records.

6/29/20 IME Appointment Scheduled
Additional Remarks : IME scheduled 7/21/20 in Clovis

6/29/20 IME Appointment Letter to Member Sent

1/7/21 IME Notify Letter Sent to TPMSP

1/7/21 IME Reports Received

3/23/21 Accommodation Response Received

3/23/21 Accommodation Response Reviewed

3/23/21 Employment Records Reviewed

3/23/21 IRC Meeting Scheduled

09 - Referred to Hearing/Pending HO Recommendation

9/24/19 Ramos, Myrna (Adriana Gonzales-Chang)

HHS-HLTH-Hillman Hlth Ctr/General Member Orthopedic/Service Connected Disability

DISABILITY STATUS REPORT
Status as of April 21, 2021
(17 Active Disability Applications)

Active **Eligible for Service Retirement = No**

9/24/19 Disability Application Packet Received and Reviewed

9/25/19 Disability Application Documents Scanned

9/25/19 Disability File Folder Created

9/25/19 Infolinx Setup

9/27/19 DMS Notified of Disability Application Filing

9/27/19 Employment Records Requested
Additional Remarks : Due 10/28/19; 2nd request sent to HR and TCHHSA, new due date is 11/26/19

11/13/19 County Department Records Received
Additional Remarks : HHSA

11/13/19 Risk Management Records Received

12/4/19 HR & D Records Received

1/16/20 IME Appointment Scheduled
Additional Remarks : 1/15/2020: IME requested; Ortho IME scheduled on 01/21/2020 in Clovis

1/16/20 IME Appointment Letter to Member Sent

3/31/20 IME Reports Received
Additional Remarks : Member had surgery after IME was completed, additional medical records have been received and submitted to IME for a Supplemental Report, due 5/4/2020; 4/23/20 Supplemental IME Report received

5/5/20 Accommodation Memo Sent
Additional Remarks : due 5/26/20

6/2/20 Accommodation Response Received

6/2/20 IRC Meeting Scheduled
Additional Remarks : Case added to 6/24/20 IRC agenda

6/29/20 Added to Board Meeting Agenda
Additional Remarks : On 7/8/20 Board agenda

7/10/20 Board Decision Letter Sent to Applicant
Additional Remarks : 7/8/20 - Board denied SCDR, deadline to appeal is 7/20/20

7/22/20 Hearing Request Form Received
Additional Remarks : Formal Hearing received 7/20/20

7/22/20 County Counsel Client Request Form Sent
Additional Remarks : 8/4/2020 - Notice of hearing assignment sent to parties, exhibits being prepared

9/8/20 Exhibits Prepared and Sent
Additional Remarks : Deadline to designate add'l records for augmented exhibits: 10/8/2020

11/5/20 Augmented Exhibits Prepared and Sent, if applicable
Additional Remarks : Hearing scheduled on 1/26/21; 11/5/20 - Notice of hearing sent to all parties; County Counsel closing brief is due 2/26/21; County Counsel brief received, applicant closing brief is due 3/9/21

4/8/21 Brief Notification/Required Correspondence Complete

4/8/21 Findings of Fact and Recommendations Received
Additional Remarks : Deadline for objections is 4/12/21

7/31/19 Hays, Mark (Jeanette Burks) **TC Association of Governments/General Member**

Retired **Eligible for Service Retirement = Yes**

3/9/15 Disability Interview/Application Packet Provided

8/1/19 Disability Application Documents Scanned

8/1/19 Disability Application Packet Received and Reviewed

8/1/19 Disability File Folder Created

8/1/19 Infolinx Setup

8/7/19 DMS Notified of Disability Application Filing

8/7/19 Employment Records Requested

8/8/19 Tulare County Health Centers Records Received
Additional Remarks : No records for this member.

8/8/19 Disability Findings Summary Prepared

8/21/19 County Department Records Received

11/12/19 Employment Records Reviewed

11/12/19 IME Appointment Letter to Member Sent

11/12/19 IME Appointment Scheduled
Additional Remarks : NDE Dr. Klassen in Fresno.

1/30/20 HR & D Records Received

1/30/20 IME Notify Letter Sent to TPMSP

1/30/20 IME Reports Received
Additional Remarks : Received 12/16/2020

1/30/20 Risk Management Records Received

7/3/20 Accommodation Memo Sent
Additional Remarks : Accommodation letter sent to Risk on 5/4/2020, due 5/26/20; 6/23/20 - Update: Risk is pending additional info from dept, report is still pending

8/3/20 Accommodation Response Received

8/3/20 IRC Meeting Scheduled
Additional Remarks : On 8/26/2020 agenda

9/24/20 Accommodation Response Reviewed

11/30/20 Added to Board Meeting Agenda
Additional Remarks : On Retirement Board Agenda for 11/18/2020.

11/30/20 Board Decision Letter Sent to Applicant
Additional Remarks : Board denied SCDR on 11/18/2020.

11/30/20 Board Meeting Notification Letter Sent

11/30/20 Hearing Request Form Received
Additional Remarks : formal hearing

11/12/19 Milton, Sheryl (Adriana Gonzales-Chang) **HHS-Admin Human Resources/General Member Multiple/Service Connected Disability**

Active **Eligible for Service Retirement = No**

11/13/19 Disability Application Packet Received and Reviewed
Additional Remarks : received by mail 11/12/19

11/14/19 Disability Application Documents Scanned

11/14/19 Disability File Folder Created

11/14/19 Infolinx Setup

11/15/19 DMS Notified of Disability Application Filing

11/15/19 Employment Records Requested
Additional Remarks : Due 12/16/19; 1/6/20 - All dept records received, pending medical recs from member; 3/12/2020 all records received, medical record summary ordered, due 4/2/2020

1/6/20 County Department Records Received
Additional Remarks : HHSA

1/6/20 HR & D Records Received

1/6/20 Risk Management Records Received

5/15/20 IME Appointment Scheduled
Additional Remarks : Ortho appt scheduled 5/28/20 in Clovis, CA, IME Cancelled because of high cost, added to 6/24/20 Board agenda for approval; Cost approved, IME rescheduled on 7/21/20 in Clovis

5/15/20 IME Appointment Letter to Member Sent

9/9/20 IRC Meeting Scheduled
Additional Remarks : On 2/26/20 IRC agenda; On 9/9/2020 IRC agenda

11/5/20 Added to Board Meeting Agenda
Additional Remarks : Added to 12/9/20 Board agenda; 12/7/20 Case removed from Board agenda and placed on 12/16/20 IRC agenda; Added to 1/13/21 Board agenda

12/29/20 Board Meeting Notification Letter Sent

1/15/21 Board Decision Letter Sent to Applicant
Additional Remarks : hearing request due 1/25/21

1/27/21 Hearing Request Form Received
Additional Remarks : Formal Hearing Request

1/27/21 County Counsel Client Request Form Sent
Additional Remarks : Parties have been assigned, Hearing Officer Assignment notice mailed on 2/26/21. Deadline for distribution of exhibits is 4/12/21.

4/8/21 Exhibits Prepared and Sent

Additional Remarks : Designation of records due 5/10/21

11 - Writ Received

11/15/18 Iftimie, Mara (Jeanette Burks) — **HHS-HLTH-Visalia Hlth Ctr/General Member Orthopedic/Service Connected Disability**

Active — **Eligible for Service Retirement = No**

12/3/18 Disability Application Documents Scanned

12/3/18 Disability Application Packet Received and Reviewed
Additional Remarks : Filed application for SCDR 11/15/18

12/3/18 Disability File Folder Created

12/3/18 Disability Findings Summary Prepared

12/3/18 Employment Records Requested
Additional Remarks : due 1/2/19; Only pending Risk records, to be submitted asap (per Risk 2/12/19)

12/3/18 Infolinx Setup

12/3/18 DMS Notified of Disability Application Filing

2/12/19 County Department Records Received
Additional Remarks : HHSA Dept

2/12/19 HR & D Records Received

2/12/19 Tulare County Health Centers Records Received

4/9/19 IME Appointment Letter to Member Sent
Additional Remarks : Scheduled through NDE on 4/18/19.

4/9/19 IME Appointment Scheduled

5/14/19 IME Reports Received

5/14/19 IRC Meeting Scheduled
Additional Remarks : Added to 5/22/19 IRC agenda

8/30/19 Accommodation Response Received

8/30/19 Accommodation Response Reviewed

8/30/19 Added to Board Meeting Agenda

8/30/19 Board Meeting Notification Letter Sent
Additional Remarks : On 9/25/19 Board Agenda.

8/30/19 Employment Records Reviewed

8/30/19 Risk Management Records Received

10/16/19 County Counsel Client Request Form Sent

10/16/19 Hearing Request Form Received

2/11/20 Augmented Exhibits Prepared and Sent, if applicable

2/11/20 Exhibits Prepared and Sent

4/27/20 Brief Notification/Required Correspondence Complete

4/27/20 Findings of Fact and Recommendations Received

4/27/20 Findings of Fact and Recommendations Sent to All Parties by HO

4/27/20 Objection Period Expired

Additional Remarks : Case added to 5/13/20 Board agenda; 5/6/20 Notice regarding upcoming board meeting mailed to applicant; 5/13/20 - Board referred case back to hearing officer; 6/8/20 - Letter sent to hearing officer requesting clarification on decision; 6/12/20 - Copy of 6/8 letter sent to applicant and county counsel; 6/22/2020 - Amended Hearing Officer's Decision received. Deadline to file objections is 7/2/2020; 6/23/20 - Applicant's objection filed

COUNTY OF TULARE
BOARD OF RETIREMENT

Leanne Malison
Retirement Administrator

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VISALIA, CALIFORNIA 93291

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MINUTES OF THE BOARD OF RETIREMENT
REGULAR RETIREMENT BOARD MEETING
Wednesday, April 14, 2021 at 8:30 a.m.
TCERA Board Room, 136 N. Akers Street, Visalia, CA 93291

I. CALL TO ORDER

The meeting was called to order at 8:30 a.m. by Wayne Ross, Chair.

II. ROLL CALL

Voting Trustees Present:	Cass Cook, Laura Hernandez, Wayne Ross, Gary Reed, Nathan Polk, Dave Kehler, Pete Vander Poel
Voting Alternate Trustees Present:	David Vasquez
Alternate Trustees Participating Remotely:	Paul Sampietro
Trustees Absent:	Jim Young
Alternate Trustees Absent:	George Finney
Staff Members Present:	Leanne Malison, Retirement Administrator Mary Warner, Assistant Retirement Administrator
Board Counsel Participating Remotely:	Marit Erickson, Deputy County Counsel

III. PLEDGE OF ALLEGIANCE

IV. PUBLIC COMMENT

At this time, members of the public may comment on any item not appearing on the agenda. Under state law, matters presented under this item cannot be discussed or acted upon by the Board at this time. For items appearing on the agenda, the public is invited to make comments at the time the item comes up for Board consideration. Any person addressing the Board will be limited to a maximum of five (5) minutes so that all interested parties have an opportunity to speak. Please state your name for the record.

None

V. X-AGENDA ITEMS

None

VI. CONSENT CALENDAR

1. Approve Minutes of the following meetings:

a. Retirement Board Minutes of March 24, 2021.

2. Approve payments to:

a. Verus – invoice for investment consulting services in the amount of $20,000 for the month ended March 31, 2021.

b. Hanson Bridgett – invoice for legal services to the Board of Retirement in the amount of $211.50 for the period ending February 28, 2021.

3. Pension Board Reports

a. Ratify Retirement Administrator actions regarding Retirement Application approvals and Option Selections for the month of March 2021.

b. Approve Reports regarding Retirement Applications, Option Selections and Deceased Pensioners and 30-Year Members for the month of March 2021.

Motion to approve the Consent Calendar as presented.

Motion: Polk
Second: Reed
Motion passed unanimously.

VII. INVESTMENTS

1. Presentation from PIMCO regarding TCERA's investment allocation to International Value Equity. Discussion and possible action.

Matt Clark, Ben Ruffel, and Raji Manasseh of PIMCO presented information regarding the firm and the portfolio including performance, process, and market outlook.

The Chair authorized 50 minutes of education credit for the presentation.

2. Presentation from Ivy regarding TCERA's investment allocation to Large Cap Growth Equity. Discussion and possible action.

Brian Sullivan and Brad Klapmeyer presented information regarding the firm and the portfolio including performance, process, and market outlook.

The Chair authorized 50 minutes of education credit for the presentation.

3. Discussion and possible action regarding TCERA's strategic investment allocation and investment managers, including performance, contracts, and fees.

Mr. Kehler expressed disappointment in the Ivy presentation noting that the performance of the manager is a concern. He expected the manager to address the performance issues in more detail. This ties in with the Board's ongoing discussions regarding the active and passive investment allocations in TCERA's investment portfolio. A related item is on today's Investment Committee agenda.

VIII. ADMINISTRATIVE COMMITTEE REPORT

1. Update by Dave Kehler regarding the Administrative Committee meeting of March 24, 2021. Discussion and possible action regarding the following items:

a. TCERA and TCERA Property, Inc. Financial Statements – December 31, 2020 and January 31, 2021.

Mr. Kehler noted the significant improvement in the Market Stabilization Reserve, a direct result of the investment performance in the first half of the fiscal year.

Motion to approve the December 31, 2020 and January 31, 2021 TCERA and TCERA Property, Inc. Financial Statements as presented.

Motion: Kehler
Second: Hernandez
Motion passed unanimously.

b. Supplemental Retiree Benefit Reserve (SRBR) Analysis.

Mr. Kehler reported to the Board that the Committee has three recommendations for SRBR analysis to be included with the June 30, 3021 Actuarial Valuation:

Scenario #1: Reduce the Supplemental Cash benefit from $12.50 per month to $10.00 per month with projected investment returns of 8.5%, 7.0%, and 6.13% (projected return as noted in last year's valuation).

Scenario #2: Reduce the Supplemental Cash benefit from $12.50 per month to $8.00 per month with projected investment returns of 8.5%, 7.0%, and 6.13%.

Scenario #3: Eliminate the post-retirement spouse continuance benefit for future retirees.

Motion to authorize TCERA's actuary to include an analysis of the projected effect that each of the listed scenarios would have on the SRBR as part of the June 30, 2021 Actuarial Valuation.

Motion: Kehler
Second: Polk
Motion passed unanimously.

c. TCERA Staffing – Secretary Vacancy and Recruitment.

Mr. Kehler reported that Staff is notifying the Board of the intent to fill the Secretary position that has been vacant for an extended period of time. The Committee is in support of filling the position. No action is required.

IX. NEW BUSINESS

1. Discussion and possible action regarding Resolution Regarding Pay Codes Included as Pensionable Income – Tulare County.

Motion to approve the resolution as presented.

Motion: Kehler
Second: Hernandez
Ayes: Cook, Hernandez, Polk, Kehler, Vander Poel, Vasquez
Noes: Ross, Reed
Motion passed 6/2.

2. Discussion and possible action regarding Resolution Regarding Pay Codes Included as Pensionable Income – Tulare County Superior Court.

Motion to approve the resolution as presented.

Motion: Kehler
Second: Cook
Ayes: Cook, Hernandez, Polk, Kehler, Vander Poel, Vasquez
Noes: Ross, Reed
Motion passed 6/2.

Ms. Hernandez noted for the Board that these pay codes serve an important purpose for employees during the pandemic.

3. Discussion and possible action regarding SACRS Board of Director Elections 2021-2022 – Final Ballot.

Motion to grant the voting delegates the authority to vote on behalf of the Board on the matter of the SACRS Board of Director Elections at the SACRS business meeting.

Motion: Cook
Second: Hernandez
Motion passed unanimously.

4. Discussion and possible action regarding SACRS sponsorship for omnibus bill SB634 (Committee on Labor, Public Employment and Retirement).

Motion to authorize the voting delegates to vote in support of omnibus bill SB634 at the SACRS business meeting.

Motion: Kehler
Second: Vasquez
Motion passed unanimously.

5. Discussion and possible action regarding Resolution Ordering Board of Retirement Trustee Special Election - Second Member Position (Elected General Member).

Ms. Malison reported that due to the final retirement date of former trustee, Roland Hill, a special election is required under TCERA Policy.

Motion to approve the Resolution Ordering Board of Retirement Trustee Special Election – Second Member Position (Elected General Member) with correction to an erroneous reference to safety rather than general members in the document.

Motion: Cook
Second: Hernandez
Motion passed unanimously.

X. EDUCATION ITEMS

1. Discussion and possible action regarding Summary Education Reports as filed:
   a. Mary Warner – CALAPRS General Assembly, March 8-9, 2021, 7.75 hours.

Motion to approve the Summary Education Report as filed.

Motion: Vander Poel
Second: Vasquez
Motion passed unanimously.

2. Discussion and possible action regarding available educational events.

No action.

XI. COMMUNICATIONS

1. SACRS Legislative Update
2. SACRS Business Meeting Packet for Spring SACRS, Friday, May 14, 2021

XII. UPCOMING MEETINGS

1. Investment Committee Meeting April 14, 2021
2. Board of Retirement Meeting April 28, 2021, 8:30 a.m.
3. Special Board of Retirement Meeting April 29, 2021, 8:30 a.m.
4. Administrative Committee Meeting April 29, 2021, 12:00 noon.

XIII. TRUSTEE/STAFF COMMMENTS

Under state law, matters presented under this item cannot be discussed or acted upon by the Board at this time.

Mr. Reed asked if the responses to the investment consultant RFP could be printed. The trustees were informed that this would be hundreds of pages of documents. Ms. Malison indicated that hard copies would be provided upon request.

Mr. Kehler noted that Larry Fink, CEO of BlackRock, received a 19% increase in compensation as reported in Pension & Investments. He expressed concern over such a large increase in executive compensation for one of our managers.

Mr. Ross announced that he has appointed Mr. Finney to the Administrative Committee as a voting member.

Ms. Hernandez acknowledged Ms. Malison's recent presentation at the Board of Supervisors regarding the implementation of the retirement contribution rates for Fiscal Year 2021-2022.

XIV. ADJOURNMENT

The meeting was adjourned at 11:01 a.m.

____

Wayne Ross, Chair

Cheiron

Invoice

8300 Greensboro Drive, Suite 800
McLean, VA 22102
Phone 1-703-893-1456 Fax 1-703-893-2006
Tax Id: 13-4215617

Date: 13-Apr-21

Inv. # 40309

Bill To:
Ms. Leanne Malison
Retirement Administrator
Tulare County Employees' Retirement Association
136 N. Akers Street
Visalia, CA 93291

For:
Actuarial Services

DESCRIPTION	AMOUNT
PROFESSIONAL SERVICES (January 1, 2021 through March 31, 2021)	
Misc. Retainer (COLA Analysis and Letter; Produce Rate Tables; Interest Crediting and AVA Review; Form 700)	$ 2,776.00
Asset Liability Study (respond to Verus requests)	$ 1,772.50
TOTAL	**$ 4,548.50**

within contract
JEM

Payment Options

Pay by Check
Cheiron, Inc., P.O. Box 37117, Baltimore, MD 21297-3117

Pay by Electronic Deposit / ACH
BB&T, Routing Number: 051404260, Account Number: 0000155739428
Please include invoice number(s) with your payment and forward the payment confirmation to accounting@cheiron.us to ensure payment is applied accurately.

If you have any questions concerning this invoice, please contact accounting@cheiron.us or 703-893-1456, x1020.

THANK YOU FOR YOUR BUSINESS!

CHEIRON

MEKETA
INVESTMENT GROUP

Presentation to the Tulare County Employees' Retirement Association

April 28, 2021

Presenters

David Sancewich

Managing Principal
Lead Consultant

- 20 years of industry experience
- Joined the firm in 2004, Shareholder
- Serves as a consultant to public funds
- Consulting work includes asset allocation, risk budgeting, investment policy and guideline development, portfolio and manager attribution analysis, asset class structural reviews, investment manager searches, and performance monitoring
- Member of Meketa's Marketable Securities Investment Committee
- MBA from Washington State University; BBA in Finance and Business Management from Washington State University
- Frequent speaker at multiple conferences including SACRS, NCPERS, and Institutional Investor

Paola M. Nealon

Managing Principal
Consultant

- 15 years of industry experience
- Joined the firm in 2017, Shareholder
- Serves as a consultant to public funds
- Consulting work includes investment policy design, asset allocation modeling, fund performance analysis, and asset class education
- Member of Meketa's Global Macroeconomic Investment and Marketable Securities Investment Committees
- Prior to joining the firm, she was an Investment Officer at Oregon State Treasury, which manages the $75B Oregon Public Employees Retirement Fund
- MBA from Thunderbird School of Management at Arizona State University; BA from Colgate University

Note: David started working for Pension Consulting Alliance (PCA) and became part of the Meketa team when Meketa and PCA merged in 2019.

Table of Contents

Why Meketa?

Why Meketa?

42
Years of Experience

219
clients

$1.5 T
In assets under advisement

$1.4 T
In Public Fund assets

- Four decades of investment advisory experience.
  - Advising Defined Benefit and Defined Contribution plans, and Endowment/Foundations.
- Over 200 clients.*
  - 81 Public Fund Clients.
  - 180 General Consulting clients.
  - 16 California Public Fund Clients.
- Staff of 209, including 139 investment professionals.
  - 63 consultants.
  - 39 analysts.
  - 65 investment operations.
- One Line of Business.
  - All revenue from advisory and consulting services.
  - No proprietary products.
  - Financially Strong.

* Overlap may occur as some clients have multiple mandates.

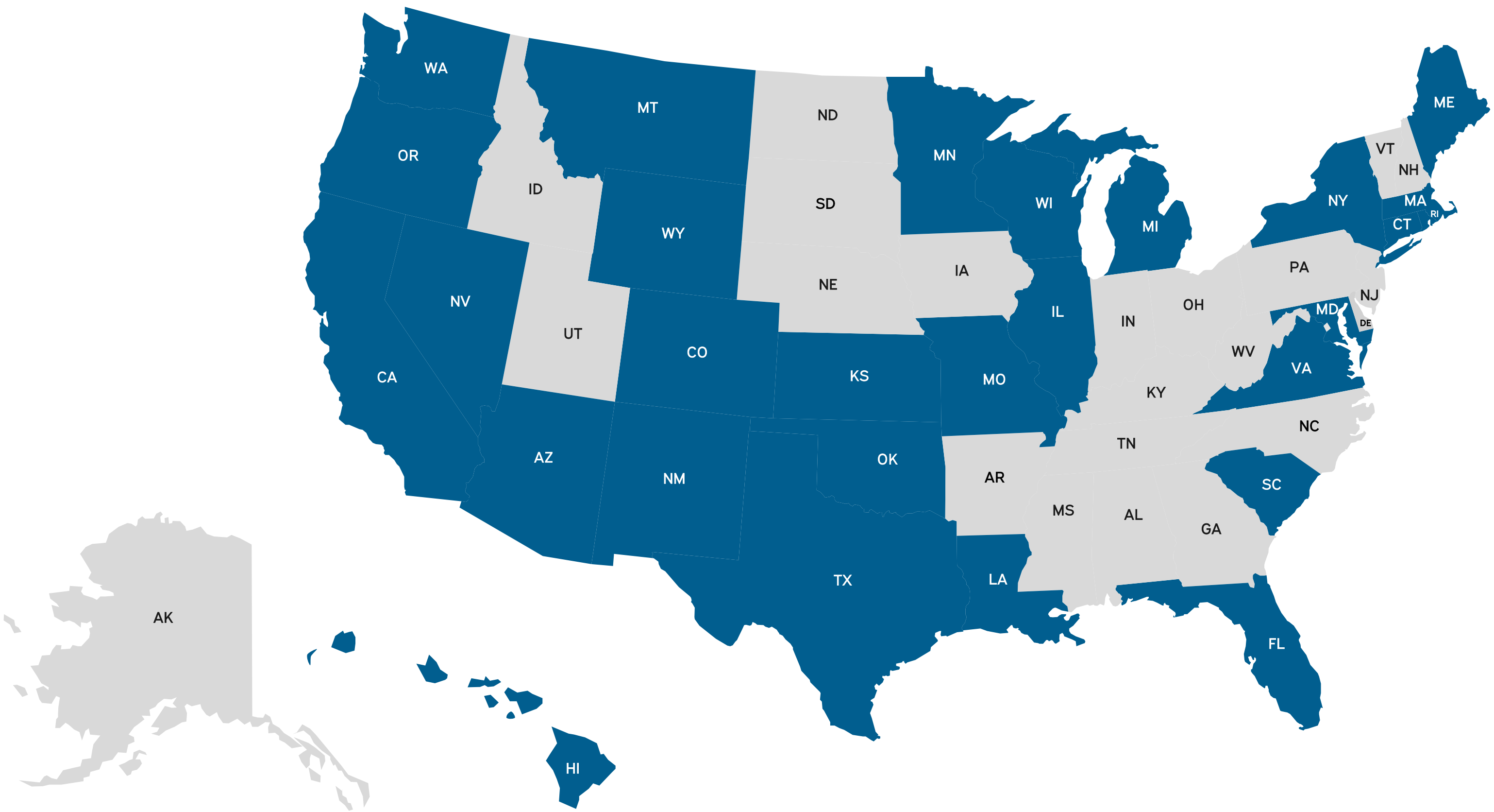
As of December 31, 2020.

Why Meketa?

- Aligned Investment Philosophies
- Alignment of Interests
- Diversity of Thought
- Thought Leadership
- Leveraging a Broader Firm
- Proactive, High-Touch Customized Client Service
- Open Dialogue, Trust and Communication
- Innovation

Significant Public Fund Experience

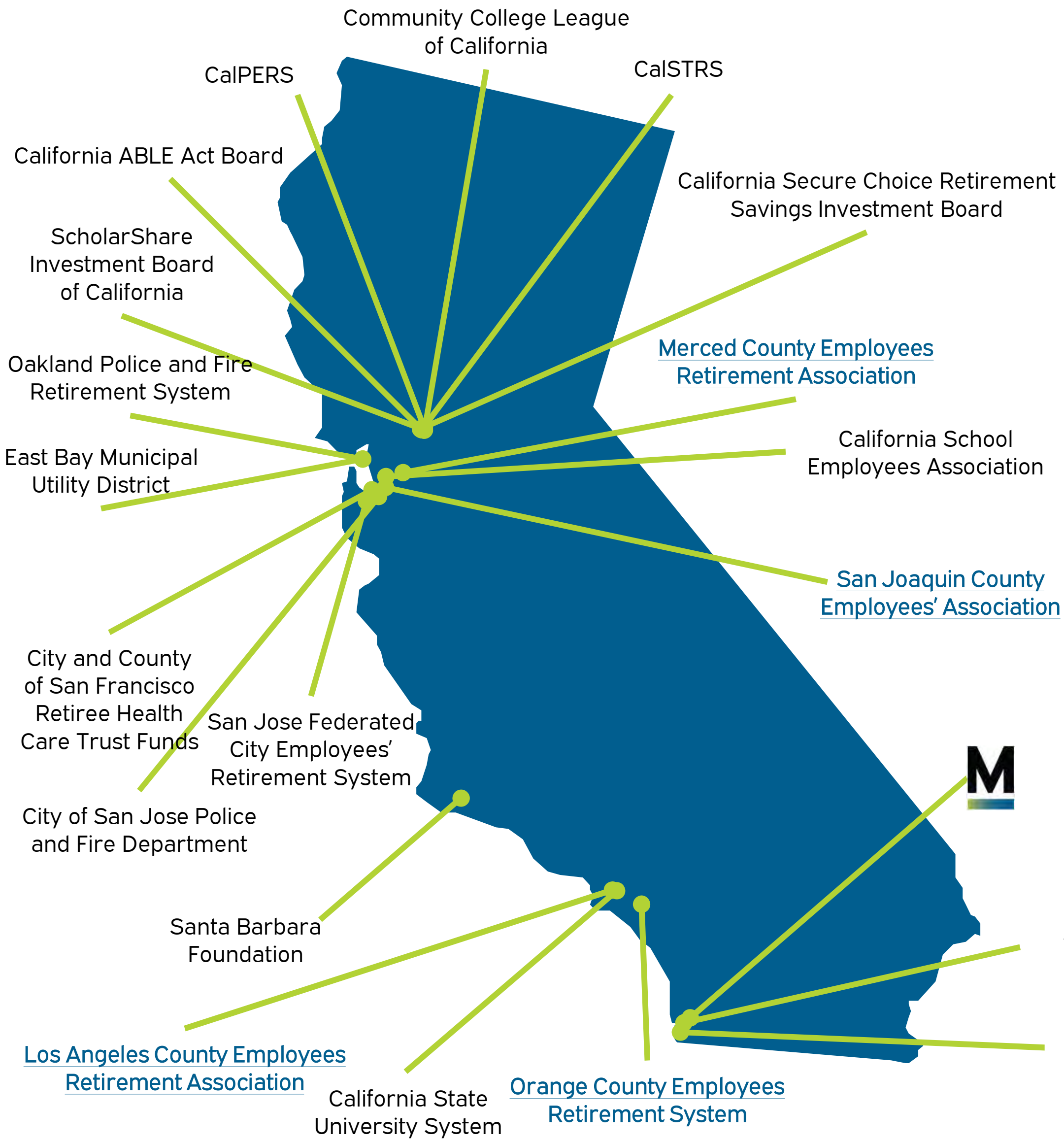
- We were hired by our first public fund client in 1988*.
- We currently advise on over $1.4 trillion in assets for 81 public fund clients throughout the nation.



* PCA began working with public funds in 1988.

As of December 31, 2020.

Why Meketa? California Clients



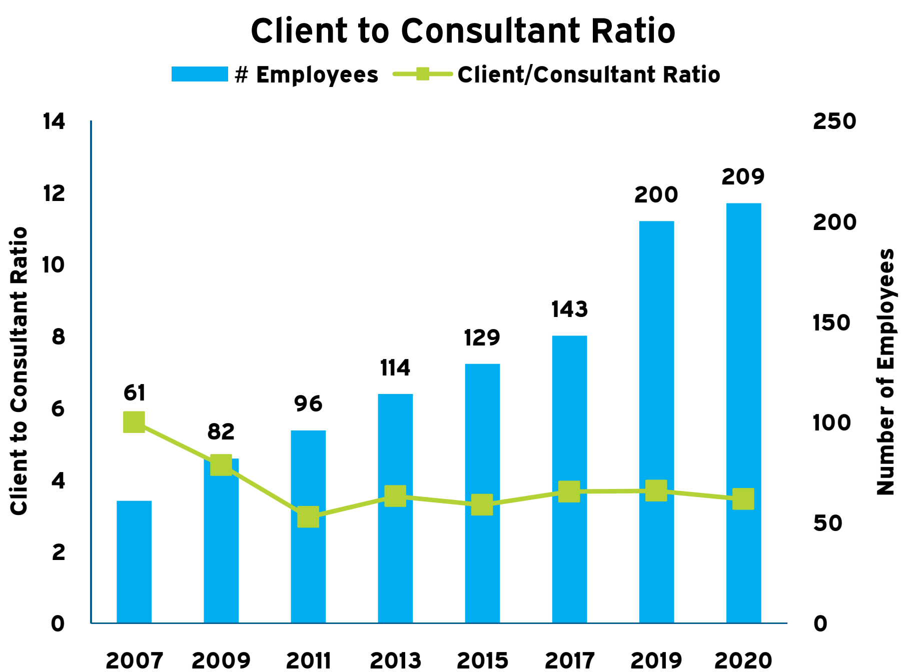
Relevant Experience

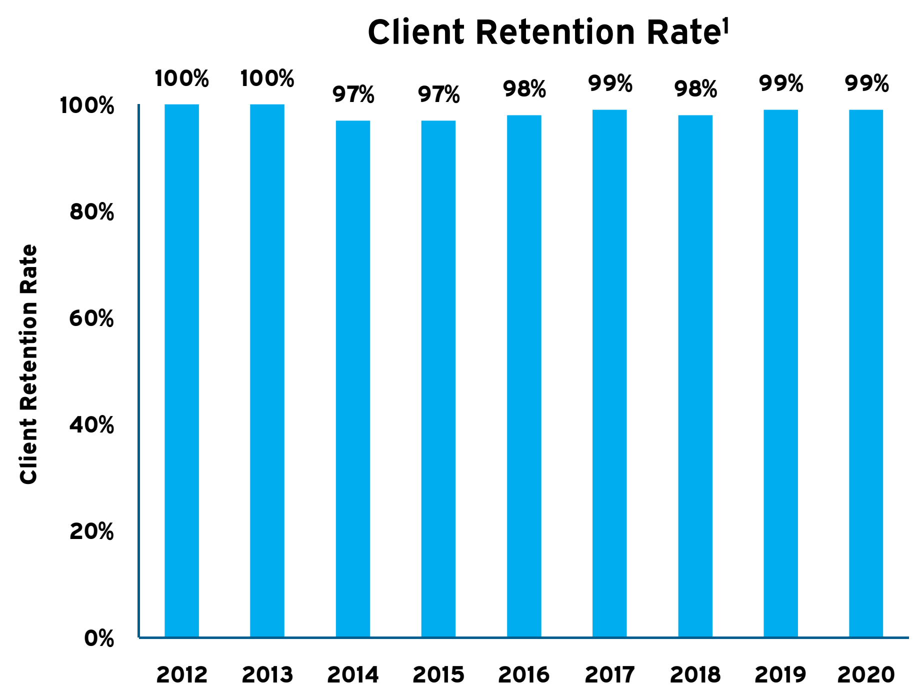
- 39 California clients:
  - 16 Public Fund Clients.
  - 12 Taft-Hartley Clients.
  - 11 Endowment, Foundation, and Non-Profit Clients.
- Advise on over $800 billion in assets within the state of California.
  - Over $82 billion in SACRS clients.

As of December 31, 2020. The above clients are representative only and not an endorsement by any client listed. It is not known whether the clients listed approve of Meketa or the services we provide. Blue font indicates SACRS clients.

Deep & Growing Team

- Consistent, and controlled growth.
- Highly experienced staff.
- Low client to consultant ratio.
- 99% client retention rate[1].





[1] Average over the previous five years. Client Retention Rate is one minus the number of clients lost divided by the number of clients at prior year end.

Why is Meketa a good partner for TCERA?

- Experienced, full-service consulting firm.
  - Strong organization: financially, organizationally, and operationally.
- Objective, independent advice, client focused.
  - We have opinions and will work with TCERA board/staff to help meet its 7.0% return objective.
- Investment recommendations, solutions and programs.
  - Customized and proactive advice for TCERA.
- Significant Public Fund and '37 Act experience.
- Research Focused.
  - Industry thought leaders, forward-thinking, producing value-added original research.
- Shared long term focus.

Portfolio Observations

Portfolio Observations: What We Bring to TCERA

Consulting Philosophy

- Provide active leadership.
- Always fiduciaries.
- Proactive in bringing our best ideas.
- Our role:
  - Assisting clients in setting their objectives.
  - Assisting clients in achieving those objectives.
- Provide continuing education on investment topics.
- Provide reports, analysis, and advice that are of the highest quality.
- Maintain open dialogue and communication with our clients.

Investment Philosophy

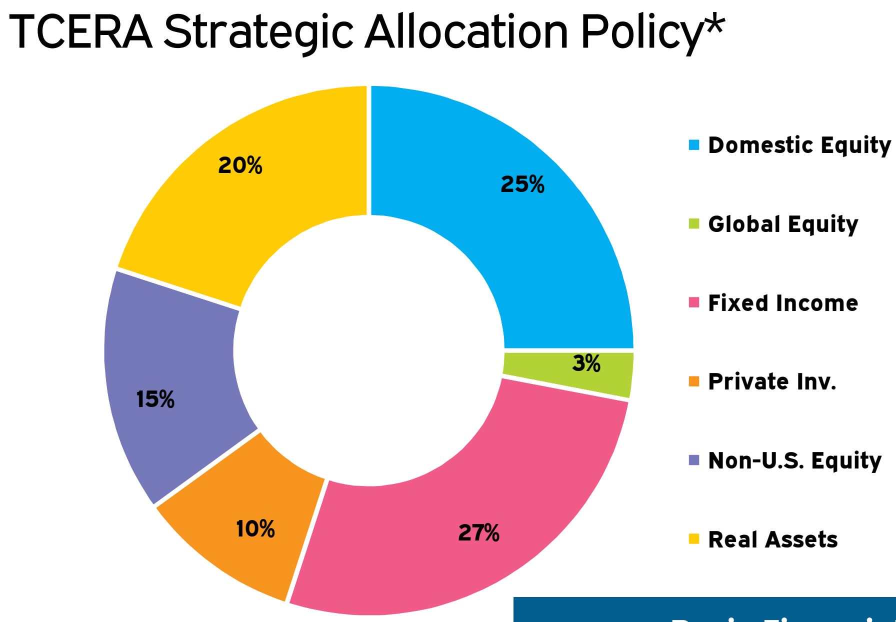
- Primary focus on strategic advice (i.e., a long-term approach to investing).
- Asset allocation will be the largest determinant of a fund's performance.
- Diversify very broadly to protect against a wide variety of risks.
- Avoid unnecessary risks.
- Be skeptical regarding new investment strategies or fads.
- Create efficient, cost-effective portfolios.
- Focus active management on less efficient asset classes and passive management on more efficient asset classes.
- Use high conviction managers.
- Minimize fees and other expenses.

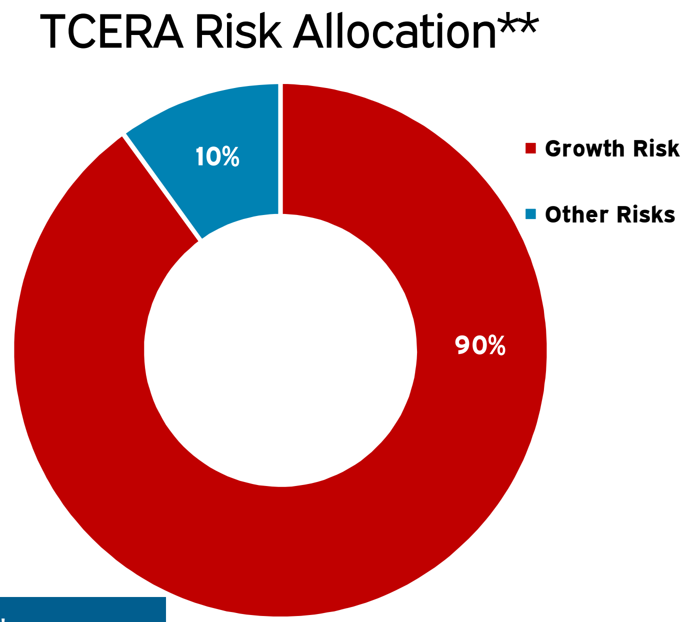
Portfolio Observations: Meketa/TCERA Partnership

Scope of Work / Duties	Why Meketa?
Policy	Significant experience developing policy for public fund clients. Long history of creating appropriate rebalancing policies and working with Staff and Board to implement an effective process. Significant experience in custodian, transition manager, and commission recapture searches.
Asset Allocation	Customized asset allocation framework, thought leadership, deep team and proactive recommendations. Considerable experience conducting Asset Liability Studies for clients and collaborating with actuaries and specialty consultants.
Investment Manager Oversight	Deep research team of specialists, ability to customize searches to TCERA specifications.
Performance Measurement	Simple transition using Investment Metrics; ability to create custom slides and risk analysis, including peer ranking and manager monitor comparisons.
Training Education and Client Service	Success creating offsite and onsite customized educational presentations for clients; always available to our clients. Educated clients make better decisions.

Tulare County Employees' Retirement Association

Portfolio Observations





Basic Financial Metrics*	
Net Cash Flow	(7%)
Assumed Rate of Return	7.0%
Funded Ratio	89%
AUM	$1,812 (M)

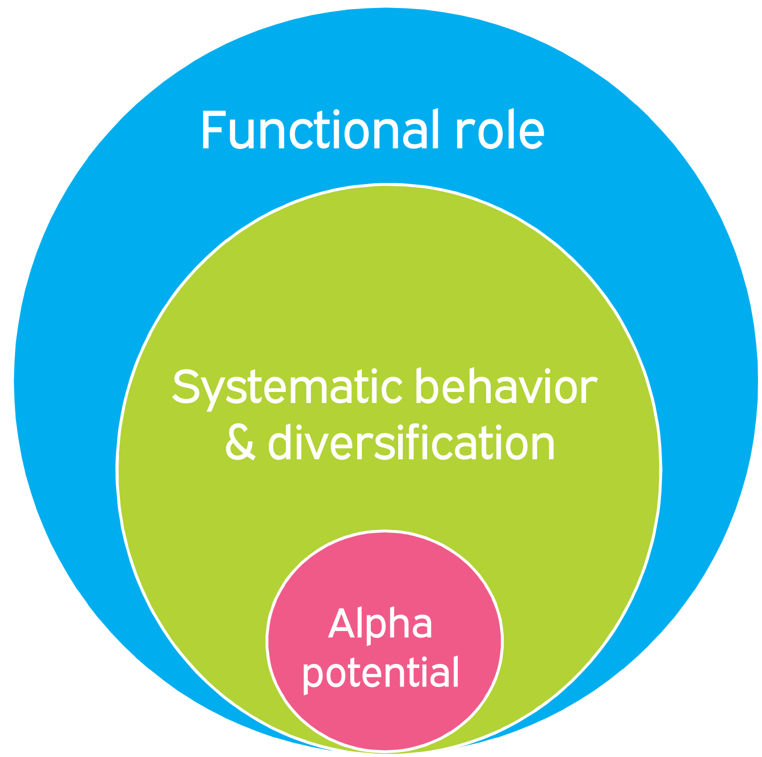
- Similar to other mature public funds, TCERA faces challenging headwinds.
- Meketa has a plan to help the Trustees meet its 7.0% return objective and navigate the current landscape.

* Source: March 2021 Targets based on various TCERA reports, and most recent actuarial report, available in TCERA's website.
** Estimated based on TCERA Target allocations.

Structural Considerations

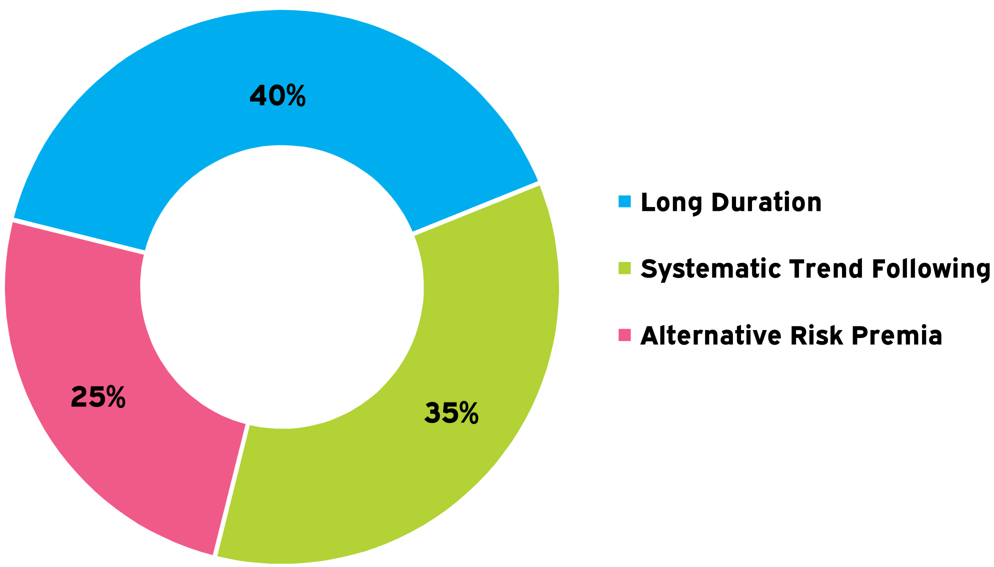
- Key first step: establishing the purpose of a strategic class.
- Assets underwritten (expected) to meet a specified function.
- Strategic classes modeled to reflect custom characteristics.
- Managers: meet class or segment functional requirements first.

Functional Paradigm



Risk Mitigation Class

- Designed to appreciate during an equity crisis.
- Combination of various strategies such as long duration bonds, trend following, long volatility, alternative risk premia, and gold.
  - Programs are designed individually for each client based on goals and risk tolerance.



- Key premise: flight to default-free USD assets during crisis.
- Long duration is first-responder; trend following is second phase.
- Alternative risk premia bolsters returns during non-crisis periods.
- All liquid, readily accessible portfolios (*not* hedge funds).

Potentially Add Investment Beliefs to the TCERA IPS

Investment Beliefs

- Articulates high level investment principles.
- Guide to managing the investment portfolio.

Consider Reconfiguring to a Functional Framework

Risk Mitigating Concepts

- Engage a limited number of managers in specific risk-offset strategies.
- Ensure defensive posture posts strong gains in down equity markets.

Within Existing TCERA Structure

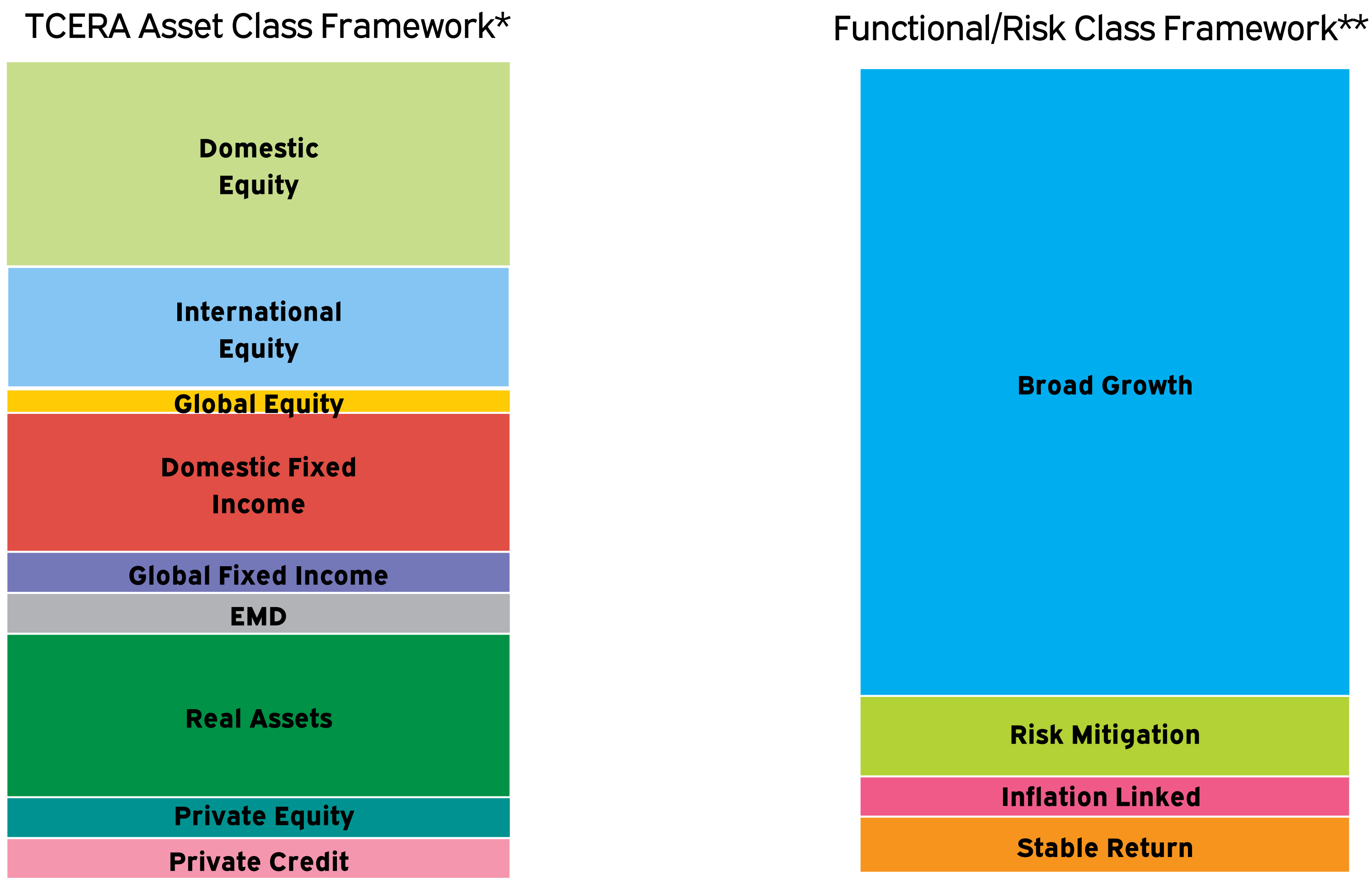
Reconsider Public Equity Structure

- Consider stream lining your equity portfolio.
- Consider continued use of passive management where efficient.

Reconfigure Fixed Income

- Consider revising mandates and benchmarks.
- Streamline the Global, Domestic and EMD segments.

Mapping of TCERA Classes to More Risk Consistent Groupings



The new class structure assigns a role/risk to assets within the portfolio.

* Source: March 2021 allocations based on various TCERA reports.
** Sample portfolio framework.

We Are Staffed to Provide an Intensive Level of Client Service

Proposed Client Consulting Team

David Sancewich
Lead Consultant

Paola Nealon
Consultant

Eric White, CFA
Consultant

Additional Team Members
Investment Analyst
Performance Analyst
Client Service Administrator

Governance
Investment Policy Committee
Marketable Securities Investment Committee
Private Markets Policy Committee

Support Teams*

General Consulting	Public Markets	Private Markets	Defined Contribution	Support Services
116 professionals	21 professionals	46 professionals	11 professionals	33 professionals

- Each of our clients is serviced by a team of consultants, analysts, and support staff.
- We strive to provide timely and detailed responses to all inquiries from our clients.

* General Consulting, Public Markets, Private Markets, and Defined Contribution counts include overlap of professionals and includes support staff.

As of December 31, 2020.

Summary

Why is Meketa a good partner for TCERA?

- Experienced, full-service consulting firm.
  - Strong organization: financially, organizationally, and operationally.
- Objective, independent advice, client focused.
  - We have opinions and will work with TCERA board/staff to help meet its 7.0% return objective.
- Investment recommendations, solutions and programs.
  - Customized and proactive advice for TCERA.
- Significant Public Fund and '37 Act experience.
- Research Focused.
  - Industry thought leaders, forward-thinking, producing value-added original research.
- Shared long term focus

Thank you for the opportunity to meet with you and present our capabilities.

We are excited about the prospect of serving the

and believe we would be a great fit for your organization.

It would be an honor and a privilege to serve as your investment consultant.

Appendix

Thought Leadership: Research and Perspectives

Tulare County Employees' Retirement Association

Thought Leadership: Research and Perspectives

Proactive communication of our ideas.

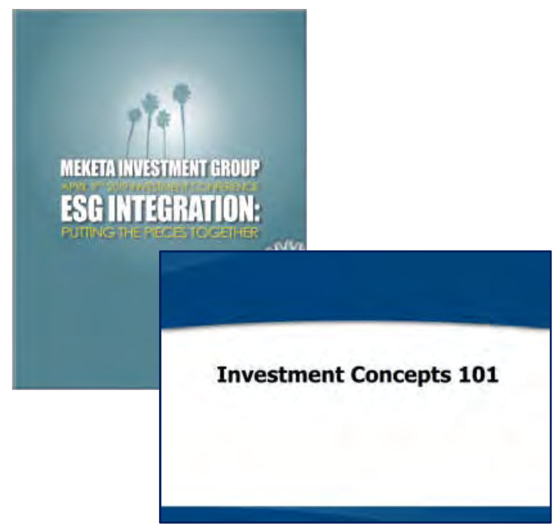
- Investment research papers on industry topics.
- Economic and market updates via webinars and newsletters.
- Client Conference.
- Customized educational retreats.
- Formal presentations on pertinent investment topics.
- Ongoing education at client meetings.
- Interim memos on significant market and portfolio-related events.

White Papers & Newsletters

Updates & Webinars

Online Thought Leadership

Investment Education



Communicating our Research

- We present our research at our weekly consultant meetings.
- This meeting serves not only as an opportunity to educate consultants on our research, but also for consultants to discuss what projects their clients are working on.

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Artificial Intelligence

WHITEPAPER
MARCH 2019

Artificial Intelligence, or more simply, A.I., has captured our collective imagination since the 1950s when the idea was first introduced[1] in the modern sense. It was popularized in media even earlier by Isaac Asimov who introduced the three laws of robotics,[2] and later more famously in the film series *The Terminator*. A discussion of the topic causes some to envisage some extreme scenarios, while others can feel that something that has been so long in coming cannot truly be real.[3]

The purpose of this paper is to illustrate that not only has A.I. become a reality in our day to day lives, but that it *is already* impacting investment portfolios as well as the investment process in many cases. While A.I. looks nothing like the doomsday scenarios portrayed in blockbusters, it can come in many different forms. Understanding the best opportunities to make use of this quickly expanding technology can be a challenge, but keeping a focus on the 'how' and the 'why' it is valuable is the clearest path to a successful implementation. In the vast majority of cases, A.I. either expands or improves upon processes that are already in use. While the mathematics and technical details behind an A.I. algorithm can be very complex, the fundamentals of A.I.'s value-add should be clear and interpretable.

What A.I. is and what it is not

What A.I. is not

In popular media, A.I. is sometimes portrayed as a seemingly 'all-knowing' machine with super human powers that is continually self-upgrading. This idea is called the technological singularity. In truth, not only is this not representative of A.I. today, but such an outcome is nowhere in sight. Worrying about the technological singularity (while entertaining) is about as productive as concerning oneself with the fact that in billions of years the Sun will engulf the Earth.

Successful A.I.—a combination of tools

A.I. as it exists today can still be exciting, but it can also sometimes be quite mundane. This is true because any successful A.I. implementation will comprise a set of solutions and tools that combine complexity and elegance with rote task automation. Those seeking to incorporate A.I. solutions are faced with a significant problem, since many different components exist but not all may be a truly valuable addition on a standalone basis.

MEKETA.COM | BOSTON CHICAGO LONDON MIAMI NEW YORK PORTLAND SAN DIEGO

PAGE 1 OF 16

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Today's Low Interest Rate Environment—Zero Bound and Down

GLOBAL MACROECONOMIC RESEARCH SERIES

Why are interest rates so low today?

Are low rates driven by cyclical or secular forces?

What are the implications of low rates for investors?

GLOBAL MACROECONOMIC INVESTMENT COMMITTEE

To combat the effects of the Global Financial Crisis (GFC) of 2007-2009, central banks around the world aggressively lowered interest rates and ultimately engaged in non-traditional policies such as quantitative easing and negative deposit rates to encourage investment and growth. Ten years after the GFC, interest rates remain well below historical norms, with large portions of some countries' yield curves in negative territory. In this paper, we will discuss the current environment, how we got here, and what implications "lower for longer" might have on return assumptions, asset allocation, and overall economic activity.

Client Education

- Meketa Client Conference.
- Customized Investment Retreats.
  - Personalized for each client.
  - Formal presentations on pertinent investment topics.
  - Interactive with the opportunity to ask many questions.
- Ongoing education at client meetings.
- Investment research papers on timely investment topics.
- Interim memos to keep clients apprised of significant market and Fund-related events.

Differentiated Research: Macroeconomic Research

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INVESTMENT GROUP

Modern Monetary Theory – Flipping the Current Monetary Policy on its Head

GLOBAL MACROECONOMIC RESEARCH SERIES

Has traditional fiscal and monetary policy failed?

What are the risks and benefits of MMT policy?

What are the investment considerations under MMT?

GLOBAL MACROECONOMIC INVESTMENT COMMITTEE

In recent years, Modern Monetary Theory ("MMT") has been rising in prominence as several influential US policymakers and their economic advisors have advocated the adoption of this nontraditional economic doctrine in response to perceived failures of current monetary and fiscal policy. It is important to note that while the name is stated as a "theory," it may be more accurate to refer to MMT as a policy, or doctrine, as it prescribes a manner in which a government can or should conduct monetary and fiscal policy. Proponents of MMT cite growing levels of wealth inequality, evidence of asset pricing bubbles, and a lack of sustainable inflation produced by existing practices, among other issues, as reasons to consider a new approach to economic policy.

In this paper, we will provide a brief background of fiscal and monetary policies employed by the United States, describe the theory and mechanics that underpin MMT, discuss the merits and risks of MMT, and detail the investment implications if MMT were to be deployed. MMT often elicits strong positive or negative responses in the academic and financial communities; this newsletter is neither an indictment nor an endorsement of MMT. However, we do believe MMT would increase the possibility of monetary destabilization and/or hyperinflation if implemented. A change to this doctrine would require that investors reconsider the core tenets of conventional asset allocation.

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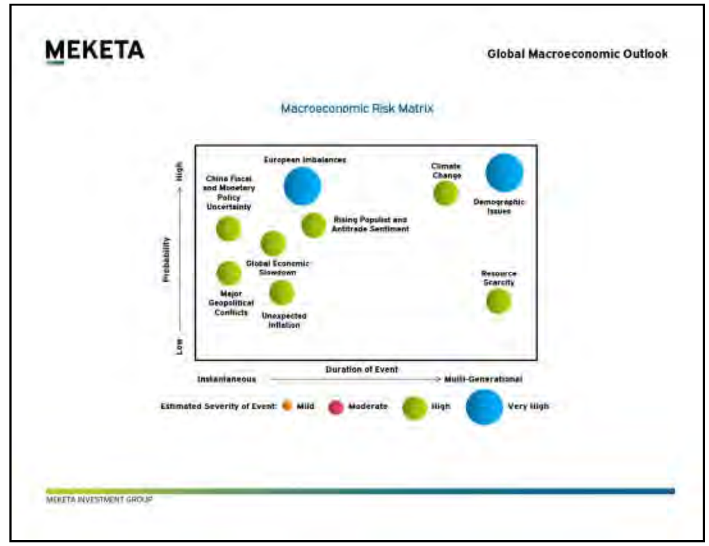
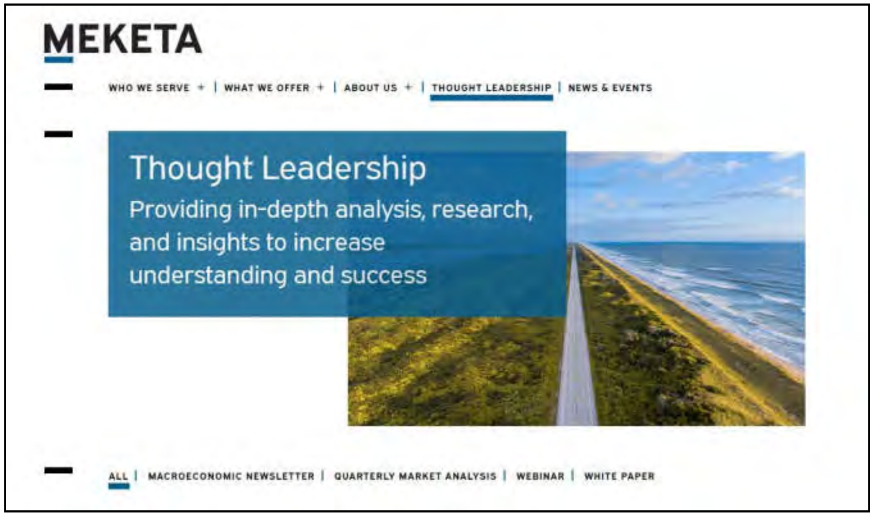
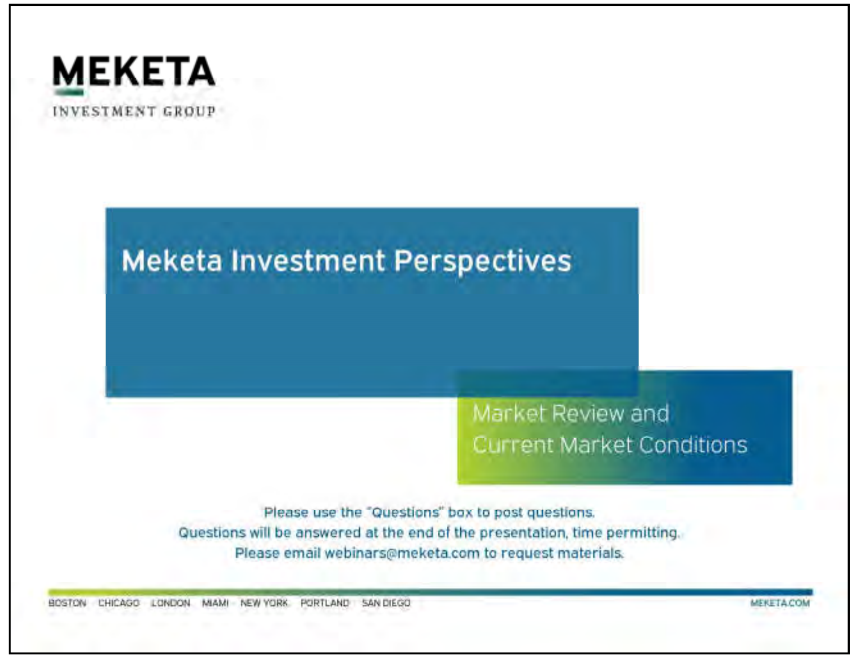


- Meketa has a dedicated Global Macroeconomic Investment Committee.
- These groups are tasked with collecting information on, and insights into, the dynamic global economy.
- This allows us to better evaluate investment strategies and direct our clients' portfolios in a world increasingly governed by shifts in public policy and the perpetuation of large global economic imbalances.

Differentiated Research: Meketa Investment Perspectives





- In 2015, Meketa launched a series of client webcasts and conference calls.
- The Investment Perspectives series features interesting and accessible conversations on investment research and the markets with the Meketa research team, Global Macroeconomic Investment Committee members, and other respected investors and thought leaders.

Public Markets Manager Research

Broad Manager Research Coverage

- **Investment Policy Committee**
  - **Marketable Securities Investment Committee**
    - Public Equities: Global; U.S.; Developed Markets; Emerging Markets; Frontier Markets; Long/Short
    - Fixed Income: Investment Grade; TIPS; High Yield; Bank Loans; Global; Emerging Markets
    - Marketable Alternatives: Hedge Funds; GTAA; Natural Resources; Commodities; REITs; Infrastructure
  - **Private Markets Policy Committee**
    - Private Equity: Buyouts; Venture Capital; Special Situations; Secondaries
    - Private Debt: Mezzanine; Distressed; Opportunistic; Direct Lending
    - Real Assets: Natural Resources; Infrastructure; Real Estate

Investment Committee Structure

- We maintain dedicated resources across all public & private markets asset classes.
- Our due diligence teams report to the firm's Marketable Securities and Private Markets Policy Committees.
- Investment Committee structure draws on the expertise of the firm's senior professionals.

Tulare County Employees' Retirement Association

Public Markets Manager Research

Marketable Securities Investment Committee (MSIC)

Amy Hsiang, CFA, CAIA*
Chair, Managing Principal

Mitch Dynan, CFA*
Managing Principal

Josh Brough, CFA*
Managing Principal

Mark McKeown, CFA*
Managing Principal

Brian Dana, CAIA*
Managing Principal

Sandra Ackermann-Schaufler, CFA
Managing Principal

Mary Mustard, CFA
Managing Principal

Paola Nealon
Managing Principal

David Sancewich
Managing Principal

PUBLIC MARKETS DUE DILIGENCE TEAMS

EQUITIES	RATE SENSITIVE	CREDIT	REAL ASSETS	HEDGE FUNDS & TACTICAL ASSET ALLOCATION	FACTOR BASED STRATEGIES & QSI
Josh Brough, CFA* Managing Principal	Mark McKeown, CFA* Managing Principal	Tim Atkinson* Managing Principal	Brian Dana, CAIA* Managing Principal	Brian Dana, CAIA* Managing Principal	Stephen MacLellan, CFA* Managing Principal
Mitch Dynan, CFA* Managing Principal	Amy Hsiang, CFA, CAIA* Managing Principal	Mark McKeown, CFA* Managing Principal	Josh Brough, CFA* Managing Principal	Tim Atkinson* Managing Principal	Daniel Dynan, CFA, CAIA Managing Principal
Stephen MacLellan, CFA* Managing Principal	Alma Marmolejo* Senior Associate	Amy Hsiang, CFA, CAIA* Managing Principal		Colin Bebee, CFA Managing Principal	
David Smith Senior Vice President	Ricky Pamensky* Senior Associate	Alma Marmolejo* Senior Associate		Ryan Lobdell, CAIA Managing Principal	
Matthew Curran, CFA, CAIA Vice President		Ricky Pamensky* Senior Associate		Amy Hsiang, CFA, CAIA* Managing Principal	
Younes Ibnatik Associate				Emily Agnew, CFA Senior Vice President	
				Zachary Driscoll, CFA Senior Associate	

* Denotes an individual with multiple roles among public asset classes.

As of January 2021.

The Five Components of the Meketa Investment Manager Evaluation Process

Organization

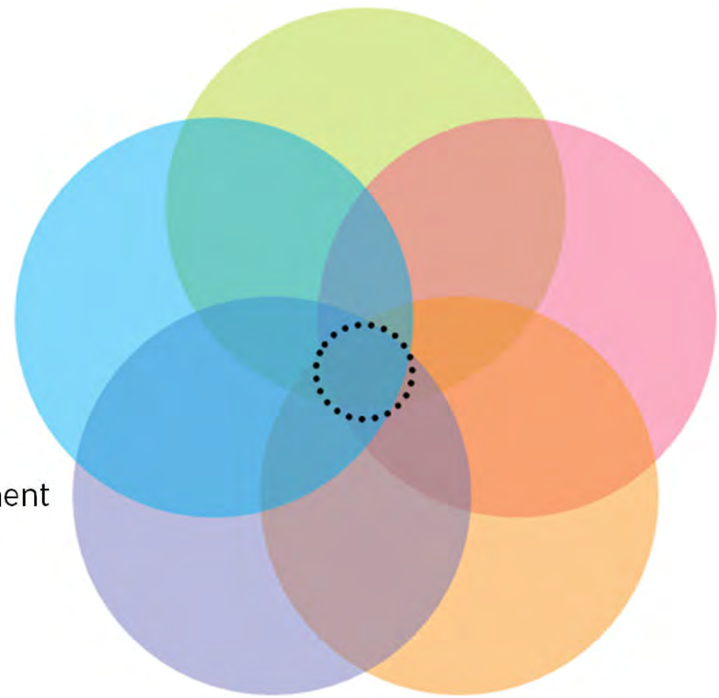
- Stability and focus
- Diversity and Inclusion
- Employee ownership
- Investment driven culture
- Operationally sound

Performance & Fees

- Validates process
- Long-term record
- Risk-adjusted returns
- Reasonable fees

Investment Team

- Experience
- Depth of resources
- Team-oriented, performance driven
- Stock selection ability
- Investment intuition



Investment Process & Risk Management

- Level of due diligence
- Thought process assessment
- Communication
- Decision-making and portfolio construction
- Self-evaluation / lessons learned
- Risk controls

Investment Philosophy

- Set of beliefs
- Stock price determinants
- Reasons for mispricings
- Competitive edge / how add value
- Avoid the tails
- High Quality bias

Public Markets Research Portal

Beginning in Q3 2021, we will be offering clients direct access to research produced by our manager research team in an easy-to-navigate environment.

Fund Details

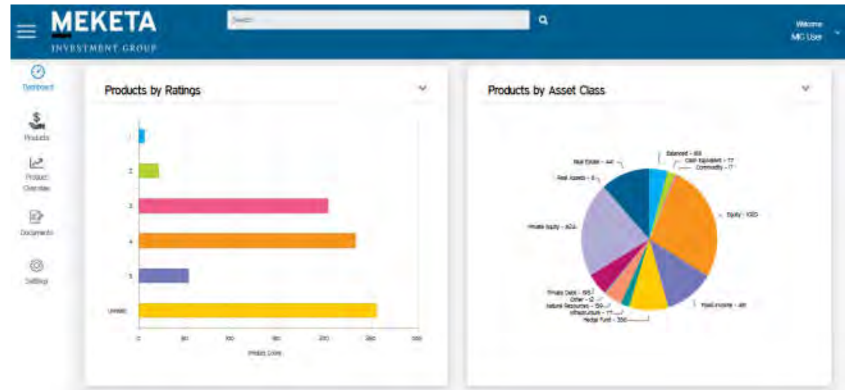
- Summary investment products by asset class and strategy.
- Full research summaries, including investment ratings, ESG ratings, ownership status, benchmarking, and performance.

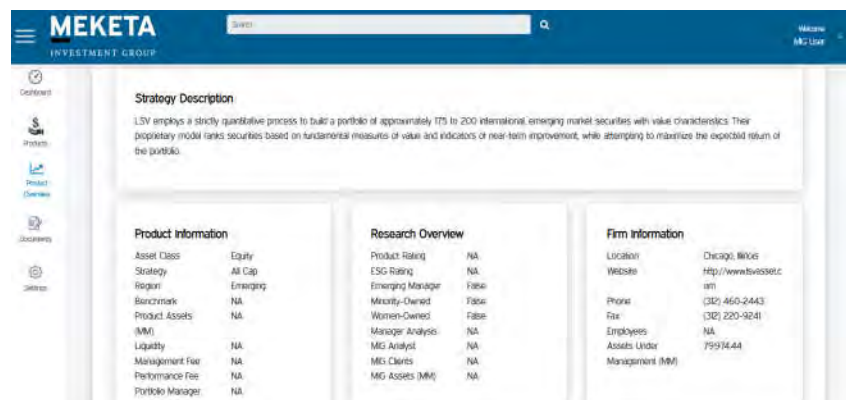
Proprietary Research

- Meketa-produced investment analyses including full manager due diligence reports.
- Meeting notes written by our research analysts for each meeting taken (when available).
- Operational due diligence, summarizing middle and back-office functions and risks (when available).

Deep Environment

- Notes from over 500 meetings taken each year with investment managers.





Private Markets Manager Research

Significant Private Markets Expertise

We have been evaluating Private Markets strategies since 1999. We serve as a specialized Private Markets Advisor on many client relationships and are long-tenured in the space.

1994

Real Estate inception
95+ clients with approximately $50 billion invested*

2000

Private Equity inception
60+ clients with approximately $80 billion invested*

2002

Private Debt inception
20+ clients with approximately $5 billion invested*

2006

Natural Resources inception
20+ clients with approximately $2 billion invested*

Infrastructure inception
20+ clients with approximately $5 billion invested*

* As of December 31, 2020.

Tulare County Employees' Retirement Association

Private Markets Manager Research: Private Markets Research Organization

Private Markets Policy Committee

- John Haggerty, CFA* — Managing Principal
- Stephen McCourt, CFA — Managing Principal
- Peter Woolley, CFA, CLU, ChFC — Managing Principal
- Frank Benham, CFA, CAIA — Managing Principal
- Judy Chambers* — Managing Principal
- Christy Fields* — Managing Principal
- Alan Spatrick, CFA — Managing Principal
- Jess Downer, CFA* — Managing Principal

PRIVATE MARKETS DUE DILIGENCE TEAMS

PRIVATE EQUITY

- Todd Silverman, CFA, CAIA* — Managing Principal
- Judy Chambers* — Managing Principal
- Molly LeStage* — Managing Principal
- John Haggerty, CFA* — Managing Principal
- Steven Hartt, CAIA* — Managing Principal
- Jess Downer, CFA* — Managing Principal
- Tad Fergusson, CFA* — Managing Principal
- Timothy Atkinson* — Managing Principal
- Gustavo Bikkesbakker — Managing Principal
- Ethan Samson, JD — Managing Principal
- Jed Constantino* — Senior Vice President
- Luke Riela, CFA* — Senior Vice President
- Danny Chan, CFA* — Vice President
- Andrew Gilboard* — Vice President
- Aleem Naqvi, CFA* — Vice President

PRIVATE DEBT

- Timothy Atkinson* — Managing Principal
- Mary Bates — Managing Principal
- Todd Silverman, CFA, CAIA* — Managing Principal
- Jed Constantino* — Vice President
- Molly LeStage* — Managing Principal
- John Haggerty, CFA* — Managing Principal
- Tad Fergusson, CFA* — Managing Principal
- Luke Riela, CFA* — Vice President
- Andrew Gilboard* — Assistant Vice President

REAL ASSETS
(Infrastructure and Natural Resources)

- Lisa Bacon, CAIA — Managing Principal
- Gerald Chew, CAIA — Managing Principal
- Judy Chambers* — Managing Principal
- Adam Toczylowski, CFA — Managing Principal
- Danny Chan, CFA* — Vice President
- Steven Hartt, CAIA* — Managing Principal
- John Haggerty, CFA* — Managing Principal
- Jed Constantino* — Senior Vice President
- Luke Riela, CFA* — Senior Vice President
- Aleem Naqvi, CFA* — Vice President

REAL ESTATE

- Christy Fields — Managing Principal
- David Glickman — Executive Vice President
- Karen Reeves — Principal
- Esther Lho — Vice President
- Derek Proctor — Vice President
- Abigail Fischer — Associate
- Jess Downer, CFA* — Managing Principal
- Steve Hartt, CAIA* — Managing Principal
- John Haggerty, CFA* — Managing Principal

INVESTMENT ASSOCIATES

Investment Associates
(6 Professionals)

LEGAL

Inside Counsel
(2 Professionals)
+
Outside Counsel

OPERATIONS & ADMINISTRATION

Operations
(7 Professionals)

Administration
(4 Professional)

TECHNOLOGY & DEVELOPMENT

IT Ops / Net Infrastructure
(7 professionals)

Investment Software & Support
(4 Professionals)

* Denotes an individual with multiple roles among asset classes.

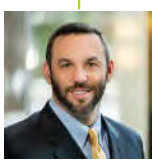
As of March 2021.

Asset Allocation and Risk Management

Our Strategic Asset Allocation / Risk Management Committee works with our Investment Policy Committee to:

- Develop firm-wide policy on strategic asset allocation.
- Develop return, risk, and correlation forecasts for asset classes.
- Develop and update model portfolios.
- Oversee publication and update of all white papers.
- Research and determine appropriate risk management strategies for clients.

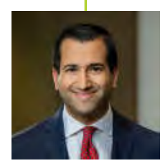
Strategic Asset Allocation/Risk Management Committee



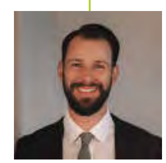
Frank Benham, CFA, CAIA
Managing Principal
Chair

Neil Rue, CFA
Managing Principal

Rafi Zaman, CFA
CIO
Meketa Fiduciary Mgmt.

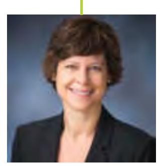


Aneish Arora, CAIA
Managing Principal



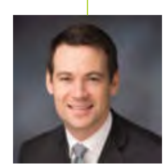
Jess Downer, CFA
Managing Principal

Mary Mustard, CFA
Managing Principal



Alison Adams
Senior Vice President

Jonathan Camp, ASA
Senior Vice President



Orray Taft, CAIA, FRM
Senior Vice President

The Mosaic Approach

- The real world risks and objectives faced by investors are complex and often conflicting.
  - These cannot be summarized in a single statistic.
  - Rather, we use a variety of tools to build a more complete picture.
- Our staff has access to the best tools used in the industry, and specialized, proprietary tools developed by our internal team.

Mean-Variance Optimization	Tracking Error vs. Peers
Risk Budgeting	Historical Scenario Analysis
Alpha Assumptions	Factor Stress Tests
Sequence of Returns Impact	Liquidity Stress Tests
Big Data Simulations	Economic Regime Analysis
High Dimension Optimization	Simulation-Based Optimization

- This approach provides a better understanding of how the plan might behave.

New Client Onboarding

Onboarding Process

- At the inception of a new relationship, we assign a team to the Fund. The team consists of:
  - Investment Analyst,
  - Performance (Data) Analyst,
  - Client Administrator.
- In addition, we have an onboarding specialist that is dedicated to transitioning client accounts.
  - The onboarding specialists is responsible for:
    - The coordination of all Requests for Information and vendor notifications.
    - Coordinating with the Client Team the set up of the reporting procedure.
    - Collection and compilation of governance documents.
    - Working closely across all departments as it relates to client onboarding.

Once a contract is executed, we would propose the following transition timeline:

Week 1 to Week 3	Week 4 to Week 6	Week 7 to Week 9	Week 10 & Beyond
☑ Gather all critical data for the Fund from current providers (managers, custodian, actuary, etc.) ☑ Schedule due diligence meetings with each of the Fund's managers ☑ Begin review of investment policy, asset allocation, manager roster and other critical Fund components	☑ Complete initial investment policy review ☑ Complete initial asset allocation review ☑ Complete initial manager due diligence meetings ☑ Finalize Initial Fund Review	☑ Present Initial Fund Review to Board ☑ Review investment policy with Board ☑ Review asset allocation policy with Board ☑ Review manager roster analysis with Board	☑ Begin to implement Board decisions ☑ Continue dialogue with Board regarding other components critical to running a successful investment program

Comprehensive Initial Fund Review:

- Examines existing Investment Policy Statement, asset allocation policy, and structure.
- Results in a useful guide for discussions and decision-making.
- Provides current status of the funds, recommendations, and priorities.
- Use an iterative process and dialogue among our clients' Staff, Board members, and consultants.

MEKETA
INVESTMENT GROUP

Initial Fund Review

Sample Client Fund

Summary Initial Fund Review

The table below summarizes Meketa Investment Group's initial review of the Sample Client Fund, including recommendations for action and priorities. Each recommendation is described in detail in the following pages.

Fund Governance	Priority
Investment Policy Statement	
• Review and update Investment Policy Statement	One
Investment Manager Guidelines	
• Review and update Investment Manager Guidelines	One
Crisis Response Plan	
• Establish a Crisis Response Plan	One
Fund Asset Allocation & Portfolio Construction	**Priority**
Asset Allocation Policy & Portfolio Construction	
• Adopt a new asset allocation and target ranges; revise definitions of asset classes; establish rebalancing policy	One
• Meet with the Fund's investment managers on a regular basis	One
• Replace lower conviction, redundant portfolios	Two
• Consider passive investments for large cap equities (domestic and international)	Two
• Diversify broadly across and within asset classes to reduce idiosyncratic risks	Two
Equity	
• Remain market cap neutral relative to the broad domestic equity index	One
• Eliminate value/growth biases in the domestic and international equity portfolio	One
• Consider adding a dedicated emerging market equity portfolio	Two
• Consider redeeming investments in dedicated long-short equities (Manager)	Two
Fixed Income	
• Consider adding an explicit target allocation to TIPS	One
• Consider adding an allocation to emerging markets debt	Two
• Consider adding a dedicated high yield bond mandate	Three

Priority one areas will be addressed by the Trustees and Meketa Investment Group, and any recommendations implemented by Meketa Investment Group within the next nine months. Priority two areas will be addressed over the next six to eighteen months, and any recommended actions implemented within that timeframe. Priority three areas will be addressed over the next twelve to thirty-six months, and any recommended actions implemented within that timeframe.

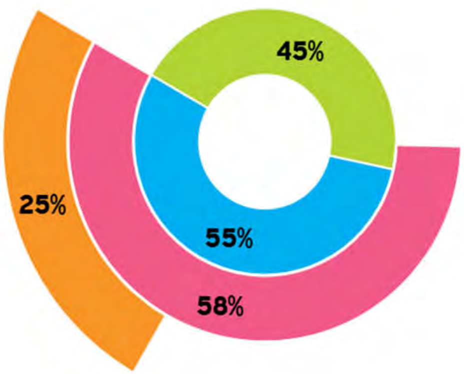
BOSTON CHICAGO LONDON MIAMI NEW YORK PORTLAND SAN DIEGO

Diversity, Equity and Inclusion

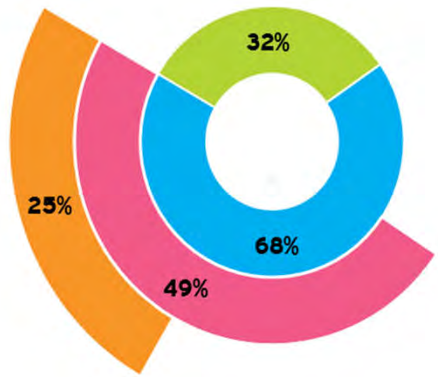
Tulare County Employees' Retirement Association

Diversity, Equity and Inclusion (DE&I)

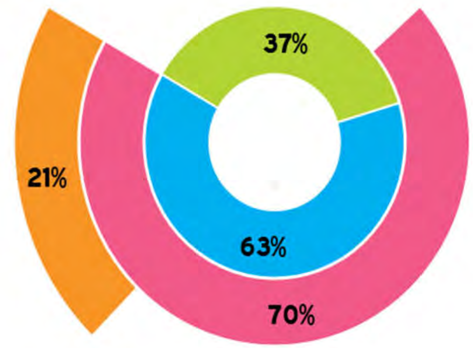
Total Employees



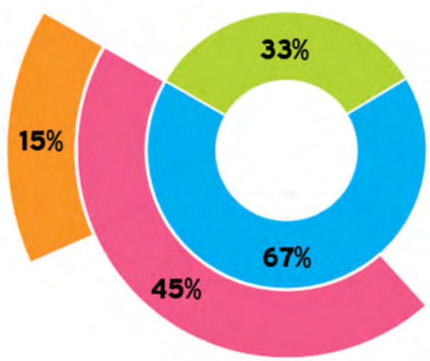
Investment Professionals



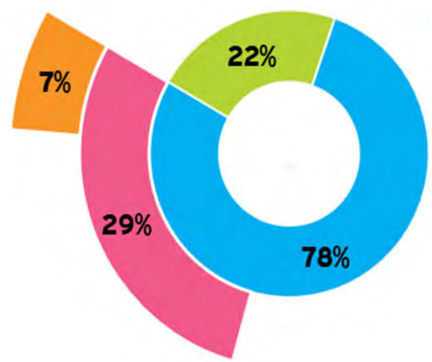
Operations



Shareholders



Senior Management



Male | Female or Minority | Female | Minority

As of December 31, 2020.

Diversity, Equity and Inclusion (DE&I)

- Today, we are a large, diverse, global institutional investment consulting firm, and more than half of our 209 total employees are women or minorities.
- Over the last three years, over 50% of the firm's new hires were women or minorities.
- Additionally, over 30% of our employees are multi-lingual, speaking 26 different languages or dialects.
- As of December 31, 2020, Meketa Investment Group was 100% independently owned by 60 senior professionals who have direct equity ownership. 27 of our 60 owners, or 45%, are women or minorities.
- Of the 33 professionals who have become shareholders in the last three years (2018-2020), 16 (or 48%) of the new owners are women or minorities.

As of December 31, 2020.

We use a mosaic of committees to integrate DE&I practices into all aspects of our business model and investment processes.

We organize our DE&I efforts around three kinds of engagement

Internal (Meketa) Engagement	Community Engagement	Industry Engagement
• Diversity and Inclusion Policy and corporate goals. • Recruitment and retention initiatives. • Training (Overcoming Unconscious Bias, Giving and Receiving Feedback, and Leading Inclusively in 2020). • Committee composition. • Formal networking and mentoring. • Learning library.	• Support of women, veteran, and ethnically diverse owned businesses in each of the communities where we live and work. • Vendor policy. • Support of local, regional and national organizations that promote social justice and/or support underserved communities.	• Manager research. • Emerging manager programs and outreach. • Internships. • Active participation, including as founding or early members, in various industry organizations seeking to improve diversity and inclusion in institutional investment.

Meketa partners with the following Industry Organizations:

- CEO Act!on for Diversity & Inclusion
- Institutional Investing Diversity Cooperative
- Toigo Foundation
- SEO – Seizing Every Opportunity
- United Nations Principals for Responsible Investment (UNPRI)
- National Association of Securities Professionals (NASP)
- Heartland
- Women in Institutional Investments Network (WIIN)
- Boston Women in Finance (BWIF)
- 100 Women in Finance

Representative Public Fund Client List and Contact Information

Tulare County Employees' Retirement Association

Representative Public Fund Client List

City of Ann Arbor Employees' Retirement System (MI)
Arizona State Retirement System
Austin Fire Fighters Relief and Retirement Fund (TX)
Bloomington Fire Department Relief Association Pension Fund, MN
California's Valued Trust
CalOptima (CA)
California Public Employees' Retirement System
California Secure Choice Retirement Savings Plan
California State Teachers' Retirement System
Connecticut Retirement Plans and Trust Funds
Dallas Police & Fire Pension Fund
Denver Employees Retirement Plan
District of Columbia Retirement Board
East Bay Municipal Utility District (CA)
El Paso Firemen & Policemen's Pension Fund (TX)
Employees' Retirement System of the Government of the Virgin Islands
Employees' Retirement System of Texas
Finance Authority of Maine
Fire and Police Retiree Health Care Fund, San Antonio (TX)
Hingham Contributory Retirement System (MA)
Illinois State Board of Investment
Industrial Commission of Arizona
Los Angeles County Employees' Retirement Association (CA)
Town of Lexington Contributory Retirement System (MA)
City of Marlborough Contributory Retirement System (MA)
Maryland State Retirement and Pension System
Massachusetts Housing Finance Agency Employees' Retirement System
Merced County Employees Retirement Association
Minnesota State Board of Investment
Montana University System
Municipal Employees' Retirement System of Louisiana
City of Newport News Employees' Retirement Fund
New Mexico Public Employees Retirement Association
Town of Norwood Retirement System (MA)
Oakland Police and Fire Retirement System (CA)
Orange County Employees Retirement System (CA)
Oregon Growth Board
Oregon Public Employees' Retirement System
Overseas Private Investment Corporation
City of Phoenix Employees' Retirement System (AZ)
Plymouth County Retirement Association (MA)
City of Quincy Retirement System (MA)
Regional Transportation Authority (IL)
Rhode Island Resource Recovery Corporation
City and County of San Francisco Retiree Health Care Trust Fund (CA)
City of San Jose Police and Fire Department (CA)
San Joaquin County Employees' Retirement Association (CA)
San Jose Federated City Employees' Retirement System (CA)
South Carolina Retirement System Investment Commission
State of Hawaii Employees' Retirement System
Town of Wellesley OPEB (MA)
Washington State Investment Board
Worcester Retirement System (MA)
Wyoming Retirement System

As of December 31, 2020.

Meketa Investment Group

Boston

80 University Avenue
Westwood, MA 02090

Tel: (781) 471-3500

Portland

2175 NW Raleigh Street
Suite 300A
Portland, OR 97210

Tel: (503) 226-1050

San Diego

5796 Armada Drive
Suite 110
Carlsbad, CA 92008

Tel: (760) 795-3450

Chicago

One E Wacker Drive
Suite 1210
Chicago, IL 60601

Tel: (312) 474-0900

Miami

5200 Blue Lagoon Drive
Suite 120
Miami, FL 33126

Tel: (305) 341-2900

New York

48 Wall Street
11th Floor
New York, NY 10005

Tel: (212) 918-4783

London

25 Green Street
London W1K 7AX
U.K.

Tel: +44 (0)20 3841 6255

www.meketa.com

MEKETA
INVESTMENT GROUP

Proposal for
General Investment Consultant Services

Tulare County Employees' Retirement Association

Submitted:
January 22, 2021

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TRANSMITTAL LETTER AND MINIMUM REQUIREMENTS CERTIFICATION

MEKETA
INVESTMENT GROUP

2175 NW Raleigh Street
Suite 300A
Portland, OR 97210

503.226.1050
Meketa.com

January 22, 2021

Ms. Leanne Malison
Retirement Administrator
Tulare County Employees' Retirement Association
136 North Akers Street
Visalia, CA 93291

RE: Request for Proposal (RFP) for General Investment Consultant Services

Dear Ms. Malison:

On behalf of Meketa Investment Group (Meketa), we respectfully submit the attached proposal to provide General Investment Consultant Services to the Tulare County Employees' Retirement Association.

Meketa acknowledges that all documents submitted pursuant to this request for proposal will become a matter of public record.

Per the proposal instructions, please note the following:

1. **The Proposer's name, address, email, telephone, and facsimile number.**

Name:	Meketa Investment Group, Inc.
Address:	2175 NW Raleigh Street, Suite 300A Portland, OR 97210
Email:	lrubin@meketa.com
Telephone Number:	(503) 226-1050
Facsimile Number:	(503) 226-7702

2. **The proposer's Federal Employer Identification Number and Corporate Identification number, if applicable.**

   Federal Employer Identification Number: 04-2659023

3. **The name, title or position, telephone number of the individual signing the transmittal letter.**

Name:	Lisa M. Rubin
Title:	Principal, Director of Marketing
Telephone Number:	(781) 471-3500

4. **A statement indicating that the signatory is authorized to bind the Proposer contractually.**

   As a Vice President of Meketa Investment Group, I, Lisa M. Rubin, the undersigned, am authorized to bind the firm contractually to perform the commitments contained in the proposal.

5. **The name, title or position, and telephone number of the primary contact and/or account administrator, if different from the individual signing the transmittal letter.**

Name:	David Sancewich
Title:	Principal, Consultant
Telephone Number:	(503) 226-1050

6. **A statement to the effect that the proposal is a firm and irrevocable offer, good for 120 days. Please attach a fee proposal of your RFP response.**

   Meketa's proposal is a firm and irrevocable offer good for 120 days from the date of submission. Please refer to Exhibit M for our fee proposal.

7. **A statement that firm meets the minimum qualifications set out in the RFP.**

   Meketa meets all minimum qualifications set out in the RFP.

8. **A statement expressing the Proposer's willingness to perform the services as described in this RFP.**

   Meketa is willing and able to perform the services as described in this RFP.

9. **A statement expressing the Proposer's availability of staff and other required resources for performing all services and providing all deliverables within the specific time frames described in the RFP.**

   Meketa has the staff and other required resources to perform the services and provide the deliverables within the specified time frames as described in this RFP.

We appreciate the opportunity to participate in this search and look forward to the prospect of presenting our capabilities in person. TCERA would be a very important client for our firm. We would devote significant resources to advising the Board, and we would welcome the opportunity to work with you. If you have any additional questions, please do not hesitate to call me, or any member of the proposed team at (503) 226-1050. Thank you for your time and consideration.

Sincerely,

Lisa M. Rubin

Lisa M. Rubin
Principal, Director of Marketing

attachment(s)

MANDATORY REQUIREMENTS CERTIFICATION

Name of Proposer: Meketa Investment Group, Inc.

The undersigned Proposer hereby represents and warrants to TCERA that the Proposer meets the Mandatory Requirements described in this RFP as restated below and will provide sufficient information in the response to this RFP to assure TCERA that the Proposer meets these requirements:

1. The investment consulting firm must be a registered advisor under the Investment Company Act of 1940.
2. The investment consulting firm must have provided investment consulting services comparable to the duties contained in this RFP to at least three (3) defined benefit public retirement systems, each of which must have had at least $1 billion in current assets for at least (5) continuous years.
3. The investment consulting firm must be able to maintain a satisfactory data processing interface with TCERA's custodian bank, on-line connection or other electronic means, at the firm's expense, for the purpose of compiling all required reviews and reports. TCERA's current custodian bank is BNY Mellon.
4. The investment consulting firm must agree to disclose all potential, current conflicts of interest as well as potential conflicts as they might occur, and annually disclose all sources of revenue from sources and affiliations other than investment consulting.
5. The investment consulting firm must agree to disclose pending litigation against the firm at the time a suit is filed. The investment consulting firm will confirm annually whether any such litigation exists.
6. The individual assigned to TCERA as the primary consultant must have a minimum of ten (10) total years of experience in the public/private defined benefit pension fund area.
7. The investment consulting firm must be directly responsible for the management of the account, and all personnel responsible for working on the account must be employees of the firm.
8. The investment consulting firm must not have, nor potentially have, a materials conflict of interest to include, but not limited to: TCERA's Board, staff, actuary, auditor, investment managers, or other consultants.
9. The investment consulting firm must carry Errors and Omissions coverage and other insurance as discussed in Section V. Insurance Requirements.

The Proposer confirms that the Proposer will serve in a fiduciary capacity and hereby confirms its fiduciary status with TCERA if the contract is awarded.

Failure to sign and return this statement may disqualify the proposal from further consideration.

Lisa M. Rubin

Signature

January 22, 2021

Date

Lisa M. Rubin

Printed Name

Director of Marketing

Title

SECTION VII TECHNICAL PROPOSAL

VII. TECHNICAL PROPOSAL

A. Organization

1. Provide a brief history of the firm including the year formed, ownership structure, the year the firm began providing investment consulting services for defined benefit public retirement systems, and the nature of the firm's ownership (including any changes in the last five years) and specific details with regard to any affiliated companies or joint ventures.

Meketa was founded in 1974 as an investment partnership. In 1978, the firm was incorporated under Massachusetts law and became registered with the Securities and Exchange Commission as an investment adviser in 1979. Meketa is owned by senior professionals who are all active in the firm, and has been in business continuously for over four decades.

The firm originated by providing investment strategy and systems advice to the Harvard Management Company (Harvard University Endowment). The firm was hired by its first pension fund client in 1978, a relationship that continues to this day. Meketa has grown steadily and consults on $1.5 trillion in assets for 218 clients.

Meketa began consulting for defined benefit public retirement systems in 1988. We currently consult on over $1.3 trillion for 80 public fund clients located throughout the country. In addition, we consult for 16 California public fund clients with over $735 billion in assets. We understand the public fund marketplace and the Board's responsibilities to the Association as well as their missions and goals. Public funds are a significant area of focus for our firm.

Over the past five years the firm has expanded ownership to senior employees, bringing the total number of shareholders to 58.

In July of 2015, Steve McCourt and Peter Woolley became Co-Chief Executive Officers of Meketa. Jim Meketa, the firm's founder and former CEO, assumed the role of Chairman of the firm's Board of Directors. Messrs. McCourt and Woolley have worked together at Meketa for 20 years and this transition has long been part of the firm's succession plan and was successfully executed.

Meketa expanded our office locations with offices in Chicago, Illinois (2015); and New York, NY (2019).

On March 15, 2019, we announced the completion of the merger of Meketa and Pension Consulting Alliance (PCA), a leading investment consulting and advisory firm based in Portland, Oregon. While this does not constitute a change in control of Meketa or our ownership structure, our ownership was expanded to include the former six owners of PCA and all employees of PCA became employees of Meketa.

We have two subsidiaries: Meketa Investments London Ltd. which provides research support services to Meketa, and Meketa Fiduciary Management, LLC, an entity through which our firm provides discretionary investment advisory services.

2. **Provide an organizational chart detailing the total number of employees and categories of employment, including the total number of employees identified as investment professionals.**

   Please refer to Exhibit C for the firm's Organizational chart.

   Meketa has a staff of 209, including 139 investment professionals.

   The firm is organized to provide only the highest caliber of investment research, advice, and client service. We have a management structure that includes a Senior Management team that directs general business operations and strategy. We formulate investment advice on significant issues through a structure of multiple investment committees. These committees ensure that our advice is based on thorough fundamental research, is scrutinized from a variety of perspectives before it is delivered to clients, and represents the firm's best ideas and practices through our broad experience over several decades. Our Investment Advisory Services Department is composed of 63 consultants, 39 investment analysts, and 30 performance analysts who are responsible for developing and delivering all investment services. Our investment professionals are organized into two distinct teams covering both public markets and private markets. They are supported by the efforts of our operations, technology, administrative, and legal departments.

3. **List the firm's lines of business and the approximate contributions of each business to the firm's total revenue. If the firm is an affiliate of an organization, identify the firm's percentage of the parent firm's total revenue generated in the most recent fiscal year.**

   Meketa does not have a parent company or affiliates. We have only one line of business – providing investment advice to institutional funds. 100% of our revenue is derived from providing consulting services – discretionary advisory and nondiscretionary investment consulting.

4. **Provide the firm's target ratio of clients to a primary consultant, the current average ratio, and the number of clients the proposed primary consultant currently services.**

   We maintain a low average client to consultant ratio and we expand our staff in anticipation of future client business. Based on the workload of each client relationship, lead consultants are assigned three to eight relationships, on average. The depth and quality of our investment staff allow for a high level of client service. We provide timely and detailed responses to all inquiries from our clients. Each of our clients is assured personal attention from one of several consultants, analysts, and support staff. We attend all meetings at which our presence is requested, and our responsibilities related to other clients will never interfere with our charge to provide the most comprehensive, personalized consulting services possible for the client.

   The proposed primary consultant currently services four client relationships.

5. **Provide the location and function of each of your firm's offices, including the number of professionals at each office and what services are provided by each office.**

Location	Services Provided	Number of Professionals
Boston *(Headquarters)*	Investment Consulting, Research, Business Operations	100
Chicago	Investment Consulting, Research	11
Miami	Investment Consulting, Research	4
New York City	Investment Consulting, Research	4
Portland	Investment Consulting, Research	27
San Diego	Investment Consulting, Research, Business Operations	60
London	Investment Consulting, Research	3

* As of December 31, 2020.

6. **Indicate the address of the office that would service this account, the names of the team members who would be assigned to this account and their contact information. Include biographies for these team members. If the location is different from the main office, please provide the address of the main office location as well.**

If retained, consulting services would be provided from our Portland and San Diego offices at the addresses listed below.

Portland	**San Diego**	**Boston (Main Office)**
2175 NW Raleigh Street, Suite 300A	5796 Armada Drive, Suite 110	80 University Avenue
Portland, OR 97210	Carlsbad, CA 92008	Westwood, MA 02090

Meketa utilizes a team structure that provides each client with multiple investment professionals familiar with the account at all times. This results in a built-in back-up function, improved quality control, and effective and efficient client service. Client accounts are serviced by consultants and dedicated investment analysts who are closely involved in the day-to-day business of the client and who meet regularly with the consultants on issues of strategy. We typically assign each client a team of two or three Consultants, an Investment Analyst, a Performance Analyst, and a Client Service Administrator. This team approach ensures that a number of experienced individuals are familiar with the circumstances and complexities of each client's account. It also ensures that we are able to meet with clients in person on a schedule that best meets their needs.

The proposed consulting team would include David Sancewich, Eric White, and Paola Nealon.

While Meketa would utilize a team approach to TCERA, Mr. Sancewich would serve as the primary day-to-day contact associated with the services provided with Mr. White serving alongside as secondary consultant. Ms. Nealon would act as a back-up consultant. Additionally, the team would be further supported from the full resources of the firm. Their contact information is below. Please refer to Exhibit A for the proposed consulting team's biographies.

Consultant Name:	David Sancewich, Principal
Office:	Portland, OR
Telephone Number:	(503) 226-1050
Email Address:	dsancewich@meketa.com

Consultant Name:	Eric White, CFA, Principal
Office:	Sacramento/San Diego, CA
Telephone Number:	(760) 795-3450
Email Address:	ewhite@meketa.com

Consultant Name:	Paola Nealon, Principal
Office:	Portland, OR
Telephone Number:	(503) 226-1050
Email Address:	pnealon@meketa.com

7. Provide the following information regarding the proposed team members for this relationship:

Years of investment consulting experience.

Years of tenure with your firm.

Years the team has worked together at your firm.

Consultant	Years of Investment Consulting Experience	Years with Meketa	Years the team has worked together at Meketa
David Sancewich	20	16*	2*
Eric White, CFA	12	12*	2*
Paola Nealon	16	4	2

* Messrs. Sancewich and White joined Meketa as part of the merger with Pension Consulting Alliance on March 15, 2019. Years with Meketa includes tenure at PCA. In addition, Messrs. Sancewich and White worked together at PCA for over 10 years prior to the merger.

8. Provide details on the financial condition your firm. Include levels of debt and debt payoff plans.

Meketa is strong financially. Our annual revenue has increased in 19 of the last 20 years. We have grown our client base and resources consistently over the past 42 years. We continue to expand our presence nationally. This growth has positioned us as a leading institutional consulting firm with even greater resources to serve clients better than ever. We would be happy to share our financial statements if selected as a finalist.

9. Provide registration status with the SEC or any state securities regulator as an investment adviser. If so registered, provide all disclosures required under those laws (including Part I and Part II of Form ADV).

Meketa Investment Group registered with the Securities and Exchange Commission as an investment adviser in 1979. Please refer to Exhibit B for the firm's Form ADV, Parts 1 and 2A.

10. State if your firm has ever been censured by the SEC or any regulatory body. If so, please describe.

Our firm has never been censured by the SEC or any other regulatory body.

11. State if your firm has been subject to or is currently being reviewed or audited by the SEC or other regulatory agencies. If yes, please describe the nature of the investigation.

Our firm was last subject to a SEC routine examination in late 2002/early 2003. There were no materials findings.

On June 2, 2009, the U.S. Department of Labor (DOL) notified our firm that it was scheduled for an investigation and requested the submission of certain documents. We complied with the document request. On September 21, 2011, the DOL notified us that "[their] review is now concluded and that no further action by the department is contemplated at this time."

Beginning on April 19, 2012 and February 1, 2013 our firm was requested to produce documents and other information to the SEC and the DOL, respectively, in connection with their respective investigations of a former private pension fund client of our firm. During the course of these investigations, the SEC and the DOL asked for information from the pension fund and its service providers, including our firm. After having no communication with the SEC since September 2012, on November 24, 2015 the SEC formally notified us that our involvement in their investigation of the former client had come to an end. And, after having no substantive communication with the DOL since January 2015, the DOL informed us in April 2016 that our firm's involvement in their investigation had come to an end.

On March 30, 2016, our firm received notice of examination from the SEC. This examination related to a single client of our firm and one of that client's investments. The investment under examination was made by the client approximately six years prior to our firm's engagement with the client. Our firm cooperated with the examination. On May 19, 2016, the SEC notified us that their examination was complete and no further action by our firm was required.

To our knowledge, our firm is not currently being reviewed or audited by the SEC or any other regulatory agency.

12. State if in the last five (5) years the firm, the Primary Consultant, or other principal or officer of the firm have been involved in any business litigation, regulatory, or other legal proceedings or government investigation involving allegations of fraud, negligence, criminal activity or breach of fiduciary duty. If so please describe.

A class action complaint was filed on October 21, 2020 relating to the New York State Teamsters Conference Pension and Retirement Fund ("NYST"). The complaint names as defendants NYST's trustees, Horizon Actuarial Services, LLC (NYST's actuary) and Meketa Investment Group (NYST's investment consultant). The complaint makes breach of fiduciary duty claims against all defendants. We believe that the claims are without merit and intend to vigorously contest the complaint.

13. State if your firm will acknowledge fiduciary status and accept fiduciary responsibility for recommendations to TCERA.

Meketa acknowledges fiduciary status and accepts fiduciary responsibility for recommendations for TCERA. We acts as a fiduciary for all clients and has since the firm's inception.

14. State whether or not the firm's employees comply with the Code of Ethics and Standards of Professional Conduct of the CFA institute. Provide a copy of any code of ethics maintained by your firm.

Yes. In 1988, Meketa adopted the Code of Ethics and Standards of Professional Conduct published by the CFA Institute. The CFA standards cover every component of our business, including fair dealing, priority of transactions, disclosure of referral fees, and prohibition against use of material, non-public information.

The firm's Compliance Committee, headed by Alan Spatrick, CFA, has composed a policy to respond to and/or disclose all conflicts of interest. Mr. Spatrick's responsibilities include firm wide compliance policy implementation and monitoring. This also includes projects related to SEC and DOL requirements, providing compliance training for staff, ensuring compliance requirements are being followed firm wide, testing compliance procedures, and developing disclosure statements.

We have adopted a personal security transactions policy that mandates:

- All personal trades must be reported to the Compliance Department at the end of each calendar quarter.
- Meketa prohibits ownership or trades of any company whose revenues are mostly derived from investment management.
- Meketa prohibits trades based on the knowledge that a client portfolio is in the process of acquiring or liquidating a security.

Please refer to Exhibit D for the firm's Code of Ethics and Compliance Manual.

15. List the dollar amount of fiduciary liability insurance, errors and omissions insurance and bonding insurance carried by your firm including carrier, type of coverage and dollar amount/limits.

Meketa carries a $20 million annual aggregate Errors & Omissions liability policy. The policy is underwritten by Everest, HCC, and Sompo. The policy has a $500,000 retention.

Meketa also carries an Investment Advisor ERISA Bond with Hanover Insurance Company. The limit of liability on this bond per claim is up to $500,000 per fund and $1 million if the fund holds employer securities. The limit of liability for the policy annual aggregate is $25 million.

Meketa also carries a $5 million annual aggregate Commercial General Liability policy. The policy is underwritten by Hanover Insurance Company.

Meketa also carries a $3 million annual aggregate Cyber Liability policy with Everest National Insurance Company.

16. **Discuss the firm's business objectives and plans for growth. Comment on any present or planned areas of emphasis over the near future. Be sure to include in your response:**
    a. **Total client asset limits.**
    b. **Cap on total client relationships.**
    c. **Maximum Limits on asset amounts or number of clients per consultant.**
    d. **Plans to develop and expand resources, merge or acquire other firms, spin off subsidiaries.**

We anticipate that the firm will continue to grow as an internationally recognized firm, due to the high level of service we provide to our clients. We intend to continue to expand the ownership of the firm to other senior professionals. We have a long-standing commitment to excellence and will never compromise the quality of our work in order to grow. We accept new assignments only if we believe we can offer client services of the highest caliber. Our firm increases staffing in advance of additional work from existing or from new clients. We are consistent in supporting our investment professionals with a strong infrastructure of people and technology (both hardware and software).

We recognize that the investment universe for institutions is increasingly complex. The market for services and for capital has become global and investment strategies have proliferated. To keep pace in this environment, Meketa has grown its research resources and is committed to doing so prospectively. We feel that powerful insights can be gained by following all asset classes on a global basis. The increased hunger for non-market generated investment returns, or "alpha," has led our firm to dedicate resources to private market and alternative research. Our experience over the past two decades here has been very positive and, as such, will propel continued commitments to this area of the firm.

Meketa has a long standing commitment to excellence. We will never compromise the quality of our work in order to grow. We accept new assignments only if we believe we can offer client services of the highest caliber.

Meketa does not have a current limit on the number of total client assets, new client relationships, or maximum limits on asset amounts or number of clients per consultant that will be accepted. We are fully staffed to handle an influx of new business, and fully expect to continue to grow to meet the demand for our services.

We maintain a low average client to consultant ratio and we expand our staff in anticipation of future client business. Based on the workload of each client relationship, lead consultants are assigned three to eight relationships, on average. The depth and quality of our investment staff allow for a high level of client service. We provide timely and detailed responses to all inquiries from our clients. Each of our clients is assured personal attention from one of several consultants, analysts, and support staff. We attend all meetings at which our presence is requested, and our responsibilities related to other clients will never interfere with our charge to provide the most comprehensive, personalized consulting services possible for the client. At this time, we have no planned changes to our ownership structure or organization. We intend to continue hiring professional staff as our company grows and to expand ownership to other senior professionals.

17. Provide a list of consulting staff who left or joined your firm within the last three (3) years. Include anticipated personnel changes for the next year. For those who have left or plan to leave, provide the reason for the departure.

In the past three years as of December 31, 2020, the following consulting staff have joined the firm.

Name	Title/ Position	Date of Hire
Sandra Ackermann-Schaufler, CFA	Principal, Consultant/Portfolio Strategist	3/2020
Orray Taft, CAIA, FRM	Vice President, Consultant/Risk Manager	2/2020
Jonathan Camp, ASA	Vice President, ALM/LDI Consultant	11/2019
David Glickman*	Executive Vice President, Real Estate Consultant	3/2019
Peter King*	Executive Vice President, Real Estate Consultant	3/2019
Judy Chambers*	Managing Principal, Private Markets Consultant	3/2019
Tad Fergusson, CFA*	Managing Principal, Private Markets Consultant	3/2019
Christy Fields*	Managing Principal, Real Estate Consultant	3/2019
Mary Bates*	Principal, Private Markets Consultant	3/2019
Ethan Samson, JD*	Principal, Private Markets Consultant	3/2019
Colin Bebee, CFA*	Principal, Consultant	3/2019
Sarah Bernstein, PhD, FSA*	Principal, Consultant	3/2019
Kay Ceserani*	Managing Principal, Consultant	3/2019
Allan Emkin*	Managing Principal, Consultant	3/2019
Ryan Lobdell, CFA, CAIA*	Principal, Consultant	3/2019
Neil Rue, CFA*	Managing Principal, Consultant	3/2019
David Sancewich*	Principal, Consultant	3/2019
Eric White, CFA*	Principal, Consultant	3/2019

*Joined our firm as part of the merger with PCA in March 2019.

In the past three years December 31, 2020, the following consulting staff have left the firm.

Name	Position	Date of Departure	Reason for Departure
Chris Theordor, CAIA	Vice President, Consultant	10/2020	Pursue other opportunities
Brandon Colón	Managing Principal, Co-Director of Public Markets Manager Research	10/2020	Pursue other opportunities
Roberto Obregon, CFA, CAIA	Senior Vice President, Research Consultant	7/2020	Pursue other opportunities
Sean Copus, CFA	Vice President, Consultant	6/2020	Pursue other opportunities
Timur Kaya Yontar, PhD	Senior Vice President, Consultant	3/2020	Pursue other opportunities

Name	Position	Date of Departure	Reason for Departure
Rita McCusker	Principal, Director of Client Service	2/2020	Pursue other opportunities
Chaunice Peebles, CAIA	Vice President, Consultant	2/2020	Pursue other opportunities
Gabe Ayoroa, CFA, CAIA	Vice President, Real Estate Consultant	11/2019	Pursue other opportunities
David Eisenberg, CFA	Principal, Director of Consulting Services	11/2019	Pursue other opportunities
Ed Omata, CFA	Principal, Co-CIO, MFM	10/2019	Pursue other opportunities
Edmund Walsh	Vice President, Senior Research Analyst	9/2019	Pursue other opportunities
Leanne Moore	Vice President, Consultant	8/2019	Pursue other opportunities
Holly Heiserman, CFA	Vice president, Consultant	9/14/2018	Pursue other opportunities

18. Describe your firm's compensation system for principal staff, and indicate what specific incentives are utilized to encourage retention of key professionals.

Compensation is indirectly tied to client satisfaction, as our clients represent our only source of revenue. As such, client satisfaction is our number one goal.

Compensation for our professional staff includes a competitive base salary, participation in one or more incentive compensation plans, and the firm's profit sharing plan with 401(k) provision. The firm's incentive compensation plans are merit based and discretionary.

The Meketa Profit Sharing Plan with 401(k) provision is available to all employees following thirty days of employment and includes a company matching provision. Additionally, Meketa, at its discretion, may make an annual profit sharing contribution (six year vesting schedule: 20% per year beginning after two years). Compensation for the firm's professionals is reviewed on an annual basis.

The senior staff of Meketa participates in equity ownership and incentive compensation. Senior employees participate in direct ownership, while additional employees participate in a deferred compensation program. We intend to continue to expand the ownership of the firm to other senior professionals.

Also, Meketa provides an academically focused, team oriented work environment, which has contributed positively to our ability to retain employees over time. We strive to provide a challenging, stimulating environment for the best and brightest in the industry. We believe our employees can best serve our clients in an atmosphere where individuals are treated fairly, where professional growth is fostered and encouraged, and where a healthy balance between work and home life is respected and preserved. Therefore, we promote a friendly and collaborative work environment as well as offer our employees flexible work schedules.

19. Disclose any hard or soft dollar compensation derived from sources other than contracted client fees and any policies related to acceptance of such compensation.

Not applicable. We do not receive soft dollars or any brokerage commissions. Our primary line of business is providing investment consulting and advisory services. We work only for our clients, and are paid directly by our clients. As a result, we limit potential conflicts of interest and can provide clients with objective investment information and advice.

20. Identify the percentage of the firm's clients that utilize money managers, investment funds, brokerage services or other service providers from whom the firm receives fees.

Zero percent. As mentioned above, we work only for our clients and are paid directly by our clients.

21. Describe your firm's disaster recovery plan including the results of the most recent testing of the plan.

Meketa maintains a comprehensive, written, operational contingency plan designed to ensure all business critical capabilities are functional in the event of a regional natural disaster or building related emergency.

The objective is to maintain business process continuity plans to recover critical systems and functions. At least annually, business teams and technology departments test their plans to ensure that they are workable and in compliance, and that staff are aware of their roles in any business interruption.

The technology team and key staff internally test business continuity solutions quarterly to ensure that recent technology enhancements are appropriately incorporated into our business continuity solution. A company-wide communication and management process exists to ensure business functions resume quickly, thereby reducing business risk and delays to client servicing.

Meketa's primary datacenter facilities are located in our Massachusetts office, and our Disaster Recovery/Business Continuity solution is cloud hosted with Microsoft Azure (DRaaS) in a geo diverse location in the central United States. Our primary technology location is physically secured via electronic security systems. The datacenter is housed in a climate controlled space, and utilizes both uninterruptible power supply (UPS) and a diesel generator system capable of maintaining critical systems indefinitely regardless of power interruption. We are positioned to withstand an event that renders our primary computing facilities substantially or entirely disabled, and we can work from any location utilizing robust remote access solutions. Tape back-up procedures are in place, with secure off site vaulting with an industry leading vaulting firm.

The firm's response plan addresses both business and technology components, including:

1. Identified all critical business functions and their recovery time objectives.
2. Identified all resources required to support critical business functions and applications (e.g., technology, software, data, personnel and vendors).

3. Replication of business critical data occurs in real time between our primary facility and our geographically diverse offsite location using an industry leading replication solution.
4. Off-site storage program for protection of critical materials and data.
5. Designated individuals to authorize the execution of the continuity plan.
6. Established notification procedures to be executed at the time of a business interruption.
7. Established a strategy for an appropriate response to various outage types and utilize effective communications with all affected parties; this strategy must comply with all Meketa standards and procedures.
8. Implemented a workable plan that demonstrates the recovery and restoration of all critical functions, processes, and technologies within the required recovery time objective.
9. Developed a workable plan for resuming normal business operations.
10. Acquired a Data Center Generator to greatly enhance our Disaster Recovery/Business Continuity Planning Solutions
11. Completed an annual comprehensive recovery exercise program and resultant plan revisions.

Meketa's Disaster Recovery/Business Continuity Plan is reviewed on a regular basis. Technology failover testing is done quarterly by the IT Department. Full scale companywide testing is done annually. The IT Department references a comprehensive failover and failback guide which is kept offsite in case of an emergency.

Meketa last conducted a companywide business continuity test on March 10, 2020. All employees were instructed to work from home for the day using our Citrix remote access system. The Citrix server was available for employees to use all day and had about 195 employees logged in at peak usage. Employees also were instructed to forward their work phones to their Meketa cell phones so they could be reached. Employees utilized Skype for Business for messaging and Zoom for virtual meetings.

No critical technical or operational issues were found and all systems performed correctly. Meketa was able to conduct critical business operations without any interruptions. There were minor issues that were able to be resolved or solutions that were implemented to improve employees' efficiency while working remotely.

Meketa last conducted disaster recovery failover tests on April 30, 2020, January 23, 2020, and January 7, 2020. Meketa's critical systems were accessible at our geographically diverse recovery site within approximately 90 minutes of initiating failover processes.

B. Assets Advised

1. **Provide the number of clients, assets under advisement for the firm's investment consulting relationships. Separately identify the number of clients and assets under advisement for outsourced chief investment officer services (full discretionary contract), if any.**

Meketa consults on approximately $1.5 trillion in assets for 216 clients consisting of 396 plans. We currently serve as a discretionary advisor for 43 clients with $18.5 billion in assets, managing either all or part of the client's portfolio. Of the 43 clients, 25 have a full discretionary contract with approximately $14 billion in assets under management.

2. **Provide a list of the firm's investment consulting clients as of 12/31/2020. Please provide a table listing all current clients for whom you provide investment consulting services along with the following information:**
   a. **Name/Type of Client (public plan, corporate plan, endowment fund, fund of hedge funds, etc.)**
   b. **Total size of each relationship**
   c. **Assets on which you provide consulting services**
   d. **Length of service of the relationship**
   e. **Brief, one sentence description of the type of services you provide for each client**
   f. **Nature of the relationship (retainer or project based)**

Please refer to Exhibit E for the firm's representative client list.

3. **List all clients your firm has gained in the last three (3) years and the clients who have terminated your services during that time. For those who have terminated your services, please indicate the reason for terminating service.**

In the last three years, ending December 31, 2020, Meketa has gained the following clients. Please note that this is a representative list, as some clients wish to remain confidential. Additionally, this list excludes clients who joined Meketa in 2019 as part of the merger with PCA.

Client Name	Date of Hire
American University of Beirut	11/2020
North Atlantic States Carpenters Labor Management Program	11/2020
Teachers' Retirement System of the State of Illinois	7/2020
Museum of Science and Industry	7/2020
Massachusetts Service Employees' Pension Fund	7/2020
California School Employees Association Retirement Plan	4/2020
Heat & Frost Insulators Local No. 33	1/2020
Marshall University Foundation, Inc.	1/2020
City of Miami Fire Fighters' and Police Officers' Retirement Trust	8/2019

Client Name	Date of Hire
Teachers' Retirement System of Oklahoma	8/2019
The Texas A&M University System	8/2019
Labor Relations Division of Construction Industries of Massachusetts	7/2019
Oregon Episcopal School	7/2019
City of Newport News	7/2019
Irving Firemen's Relief & Retirement Fund	6/2019
Freeport-McMoRan Inc.	6/2019
District of Columbia's Office of Finance and Treasury	4/2019
PACE Industry-Union Management	3/2019
Peralta Community College District Board OPEB Trust II	2/2019
Jet.Com Retirement Trust	1/2019
North Atlantic States Carpenters Training Fund	11/2018
American Maritime Officers Pension Plan	11/2018
State Board of Administration of Florida	10/2018
Denver Employees Retirement Plan	9/2018
Oregon Growth Board	8/2018
SEIU Local 32BJ, District 36 Building Operators	8/2018
J. Craig Venter Institute	6/2018
Dallas Police and Fire Pension System	4/2018
Merced County Employees' Retirement Association	4/2018
California Secure Choice Retirement Savings Investment Board	1/2018

In the last three years, ending December 31, 2020, the following clients did not renew their contracts with the firm. Clients that have ceased relationships due to plan mergers, liquidation of assets, or our resignation of accounts are excluded from the list.

Client Name	Termination Date	Reason for Terminating Services
Jacksonville University	12/31/2020	Effective December 16, 2020, Jacksonville University ($48 million endowment) replaced Meketa as their OCIO provider.
Southern California District Council of Laborers (LiUNA)	9/30/2020	Effective September 30, 2020, Southern California District Council of Laborers ended its contract with Meketa to provide infrastructure project services to the pension fund. Meketa provided infrastructure project services for over six years and these services were consolidated with another provider's services.

Client Name	Termination Date	Reason for Terminating Services
American Federation of Musicians and Employers Pension Fund	3/25/2020	Effective March 25, 2020, the American Federation of Musicians and Employers Pension Fund elected to replace Meketa as their Outsourced CIO Overseer.
J. Craig Venter Institute	11/30/2019	Effective November 30, 2019, J. Craig Venter Institute ($50 million) elected to transfer their assets to a bank, terminating their relationship with Meketa.
William Henry Insurance	8/31/2019	Effective August 31, 2019, William Henry Insurance ($30 million) replaced Meketa as their OCIO.

4. **Provide the name, address, telephone number, and contact person for three (3) current public pension plan clients to serve as a reference for your firm. Clients domiciled in the state of California are preferred.**

   Please refer to Exhibit F for our Public Fund References.

C. Investment Consulting Philosophy and Process

1. **Briefly describe your firm's philosophy with respect to investment consulting mandates, and the nature of the service that you provide. What key strengths and competitive advantages does the firm possess that generate superior performance and service for your clients?**

   Meketa is a full service investment consulting and advisory firm. We work with clients on both a full retainer and project basis, and our services are available on a non-discretionary or discretionary basis. Our expertise falls into three primary categories: General Investment Consulting Services, Alternatives Consulting Services, and Discretionary Investment Services.

   Many investment consultants do not take an active role in the funds they serve. To limit their own liability, these consultants offer only arm's length advice. Our firm always accepts and acknowledges fiduciary responsibility.

   Since 1978, Meketa has provided investment consulting services to institutional clients. During this time, we have helped our clients manage investment programs that have produced strong investment returns based on a prudent philosophy.

   We believe in taking a long-term approach to investing, recognizing that asset allocation will be the largest determinant of a fund's performance. We look to diversify broadly to protect against a wide variety of risks. We believe that long-term investors should invest in generative assets (equities) and approach new investment strategies or fads with skepticism.

   We believe clients can benefit from utilizing passive management in more efficient asset classes to achieve broad diversification with low management fees and low operating costs. Where active management is utilized, we seek to identify best-in-class managers through our thorough due diligence process that includes on-site visits and multiple points of ongoing contact.

We also believe that risk should be managed more holistically than many consultants approach it. We have developed, and continue to develop, proprietary methods such as Economic Regime Management®, and Quality, Stability & Income® (QSI) indexing methodology, to help our clients achieve their objectives in the most efficient way possible.

Essentially, we believe running a fund is no different than running any other business. You succeed by careful planning, attention to detail, using the best people, moderating risks, and minimizing fees and expenses, which is the surest way to increase investment returns.

We believe our role as investment advisor is two-fold: to assist clients in setting their objectives, and to assist clients in achieving those objectives. We achieve this through the three broad components of our services: Strategic Investment Advice, Fund Coordination, and Specialized Consulting Services. Strategic Investment Advice and Fund Coordination are essential for a successful investment program. Specialized Consulting Services are designed to add significant value for those clients for whom the services are appropriate.

Below are areas which we believe to be our firm's key strengths and competitive advantages:

Independent, Objective Advisors – Consultants must be independent and objective. Meketa Group is independently owned, and does not have any financial relationships with brokers, banks, or actuaries. We do not receive soft dollars or any brokerage commissions. All of the firm's revenues are derived from our clients. Our independence allows us to provide clients with unbiased advice.

Public Fund Experience – Meketa began consulting for public funds in 1988. Currently, we consult on over $1.3 trillion for 80 public fund clients, located throughout the country. We understand the public fund marketplace and the Board's responsibilities to the retirement association, as well as their missions and goals. Public funds are a significant area of focus for our firm.

Defined Benefit Plan Experience — We have been providing investment consulting services to institutional investors for over 40 years. The firm was hired by its first client, a defined benefit plan, in 1978, a relationship that continues to this day. We currently advise on over $1.2 trillion in assets for 122 defined benefit plans on behalf of our clients.

Client Success – Our clients' results is the greatest measure of our success. Our work has helped clients control costs, reduce risks, and achieve outstanding investment results. The firm was hired by its first client in 1978, a relationship which continues to this day. We are pleased that our annual client turnover has averaged less than 3%, and we believe that this speaks to the level of satisfaction achieved by our clients.

Investment Thought Leaders – Our work goes beyond what is offered by traditional consulting firms. We have a demonstrated track record of creating and identifying innovative ways to develop asset allocation policies, analyze portfolio risks, and build customized portfolio structures. We create and implement custom risk control measures for our clients, including Safety Reserve® portfolios, Economic Regime Management®, and Crisis Response plans. We are not afraid to think independently.

Customized Investment Solutions – Due to our resources, philosophy, and experience, we are able to think strategically about each of our client's needs. As a result, we seek to deliver a customized investment program tailored to the circumstances faced by each client. This approach requires deep resources, a research focus, and intellectual curiosity to bridge these challenges. We do not offer a cookie cutter approach to investment consulting. We have experience providing proactive investment advice and working collaboratively with investment staff. We have proven experience solving unique situations faced by clients, and are confident we would be able to help the fund meet its goals and objectives.

Intensive Client Service – With 216 clients and 209 employees (including 139 investment professionals), we maintain a very low client to consultant ratio. This allows us to offer our clients the intensive level of service that they deserve. Each of our clients is assured personal attention from one of several consultants, analysts, and support staff. We provide timely and detailed responses to all inquiries from our clients, and we attend all meetings at which our presence is requested.

Risk-focused Approach to Asset Allocation – The past decade has underscored the significant shortcoming of a one-dimensional view of risk (i.e., standard deviation). We employ a risk-focused, multi-faceted approach to asset allocation. Our asset studies are designed to provide an all-encompassing analysis of the many risks facing a fund.

Robust Manager Research – Meketa's manager research team is composed of senior investment professionals, including a former portfolio manager and research analysts. When conducting manager searches, we do not rely solely on a preferred list or a stable of investment managers. Instead, we employ a rigorous due diligence process to identify top-flight managers to meet our clients' objectives. We follow the universe of institutional quality asset classes, including domestic equity, developed foreign equity, emerging markets equity, fixed income, real assets, hedge funds, and other alternatives.

2. **Describe your firm's experience in developing and reviewing investment policies and strategies for clients.**

Meketa undertakes a comprehensive Initial Fund Review of each new client. The Initial Fund Review includes an examination of the client's existing Investment Policy Statement, asset allocation policy and asset allocation structure; a review of actuarial reports; interviews with the client's investment managers and an examination of their guidelines and fees; and an assessment of the client's custody relationship(s) and fee structure, among other issues. We report to the Board an assessment of each separate issue, make appropriate recommendations, and prioritize these recommendations within a timeframe of six to thirty-six months for implementation. The resulting Initial Fund Review document is typically in excess of sixty pages in length and becomes a useful guide – essentially a business plan - for framing discussions and decision-making for the trustees and consultant.

We believe our role with respect to investment policy development is two-fold: to assist clients in setting their objectives, and to assist clients in achieving those objectives through the development of investment policies and manager guidelines that reflect real-world experience.

The identification and clarification of client objectives includes:

- explicit statement of the purposes of the assets,
- definition of the appropriate time horizon for the assets,
- identification of the degree of liquidity necessary and the funding patterns of the asset pool, and
- review of any legal, tax or special circumstances that affect the investment of the assets.

Once the client's objectives and constraints are identified, a relevant investment policy can be developed. Given that the asset allocation will be the primary determinant of the investment pool's risk and return characteristics, our investment policies focus on that area.

Investment policy development includes:

- extensive evaluation of risk and return attributes for various asset allocations,
- identification of a target asset allocation that best achieves the client's objectives, given their constraints,
- identification of appropriate ranges around which the long-term asset allocation may fluctuate, and
- description of the procedures for monitoring and adjusting the asset allocation over time.

The result of this process is an investment policy statement that describes the fund's return expectations, the types of investment risks that can be assumed, and the rules used to measure these returns and risks. Most importantly, this document includes our recommendations for a long-term asset mix for the fund.

Following the Initial Fund Review and investment policy development, we work with clients on how best to implement long-term strategy, address specialist manager roles, use passive management, and employ active manager guidelines. The written manager guidelines describe in detail the type of investment services that the fund needs to meet its investment objectives.

The investment policy statement and all manager guidelines will be reviewed regularly to ensure that their objectives and constraints remain relevant. Further, these documents will be reviewed whenever significant developments in the circumstances of the fund occur. Specifically, the investment policy statement will be reviewed upon each actuarial valuation, and manager guidelines will be updated whenever a new manager is hired or the mandate changes for an existing manager. Finally, our quarterly fund evaluation will include an asset summary page that compares each fund's actual asset allocation to its target allocation.

The firm also develops a number of different investment strategy/policy statements, each customized to our clients' specific needs.

3. Describe your firm's methodology for reviewing asset allocation, asset liability reviews, and manager structure reviews, include the following:

a. Theory and methodology

In order to construct the best portfolio from a risk-return standpoint, conventional financial wisdom dictates that one develop return, volatility, and correlation expectations for the relevant investing horizon. Because of its impact on our clients' wealth, the development of these expectations is one of Meketa's most important fiduciary roles. However, given the uncertainty surrounding financial and economic forecasts, we employ several methodological approaches for this complex task.

Our process relies on both quantitative and qualitative methodologies. First, we employ a large set of quantitative models to arrive at a set of baseline expected ten-year annualized returns for major asset classes. These models attempt to forecast a gross "beta" return for each asset class—that is, we explicitly do not model "alpha," nor do we apply an estimate for management fees or other operational expenses[1]. Our models may be econometrically derived (that is, based on a historical return relationship with current observable factors), factor-based (that is, based on a historical return relationship with predicted factors), or fundamentally based (that is, based on some theoretically defined return relationship with current observable factors).

Some of these models are more predictive than others: for example, the model for US investment grade bonds, which relies on yields, is much more accurate than the model for US equities, which relies on fundamental valuation metrics (e.g., PE ratios, divided yield). For this reason, we next overlay a qualitative analysis, which takes the form of a data-driven deliberation among the asset allocation team. We ask: Why are different models within the same asset class leading to different conclusions? Are the assumptions consistent across asset classes? What are our models missing about the possible evolution of the next ten years? Naturally, return assumptions for hard-to-predict asset classes will be influenced more heavily by our qualitative analysis.

Our ten-year expectations serve as the primary foundation for our longer-term, twenty-year expectations. We form our twenty-year annualized return expectations by combining our ten-year expectations for each asset class with the observed historical returns for each asset class. We calculate a weighted average of our ten-year expectations and average historical returns in each asset class, with the weights determined by a qualitative assessment of the value of the long-term historical data. Generally, if we have little confidence that the historical average return is representative of what an investor can expect in the not-too-distant future[2], we will weight our ten-year forecasts more heavily. If we have great confidence in the historical average, we will weigh the ten-year forecasts and historical average equally. Therefore, the weight on our ten-year forecasts ranges from 0.5 to 0.9 (with an average of 0.8). Generally,

[1] Our expectations are net of fees where passive management is not available (e.g., private markets and hedge funds).

[2] For example, we have less confidence in historical data that do not capture many possible market scenarios or are overly polluted by survivorship bias.

the weights are similar within broad asset class categories, such as public equities, fixed income, or hedge funds. Finally, we discuss the results with the wider consultant community at Meketa, who pose questions to the research team and help us refine our models and assumptions.

Please refer to the table below for the major factors that we incorporate into our asset class return inputs:

Asset Class Category	Major Factors
Equities	Dividend Yield, GDP Growth, Valuation
Bonds	Yield to Worst, Default Rate, Recovery Rate
Commodities	Collateral Yield, Roll Yield, Inflation
Infrastructure	Public IS Valuation, Income, Growth
Natural Resources	Price per Acre, Income, Public Market Valuation
Real Estate	Cap Rate, Yield, Growth
Private Equity	EBITDA Multiple, Debt Multiple, Public VC Valuation
Hedge Funds and Other	Leverage, Alternative Betas

We develop our twenty-year volatility and correlation expectations slightly differently. For these variables, we do not first develop separate ten-year expectations. Instead, we rely primarily on historical averages, with an emphasis given to the experience of the trailing ten years. Qualitative adjustments, when applied, usually serve to increase the correlations and volatility over and above the historical estimates (e.g., using the higher correlations usually observed during a volatile market environment). In the case of private markets and other illiquid assets, where historical volatility and correlations have been artificially dampened, we seek public market equivalents on which to base our estimates before applying any qualitative adjustments. These volatility and correlation expectations are then combined with our twenty-year return expectations to assist us in subsequent asset allocation work, including mean-variance optimization and scenario analyses.

Throughout the process, we remind ourselves of our overarching goals:

- Consistency of results with historical experience and fundamentals
- Consistency of results with macroeconomic reality
- Consistency of results across asset classes
- Recognition of forecasting error and its implications

b. Description of your firm's capital markets model. Source of the model (proprietary or outside vendor)

Using the methodology mentioned above, Meketa utilizes data from outside vendors as inputs to our capital markets model. The models are proprietary and involve both quantitative and qualitative inputs as described in the previous question.

To provide a further example our most recent Asset Study includes inputs for 81 distinct asset classes.

Asset Class	
Fixed Income	**Alternatives**
Cash Equivalents	Private Equity
Short-term Investment Grade Bonds	Buyouts
Investment Grade Bonds	Venture Capital
Investment Grade Corporate Bonds	Mezzanine Debt
Long-term Corporate Bonds	Distressed Debt
Long-term Government Bonds	Real Estate
TIPS	REITs
High Yield Bonds	Core Private Real Estate
Bank Loans	Value Added Real Estate
Foreign Bonds	Opportunistic Real Estate
Emerging Market Bonds (major)	Natural Resources (Public)
Emerging Market Bonds (local)	Natural Resources (Private)
	Commodities
Public Equities	Infrastructure (Public)
US Equity	Core Infrastructure (Private)
Developed Market Equity	Non-Core Infrastructure (Private)
Emerging Market Equity	Hedge Funds
Frontier Market Equity	Long-Short
Global Equity	Event-Driven
	Global Macro
	Risk Parity (10% vol)
	Tactical Asset Allocation

c. Development of inputs to the model (standard inputs or customized by client)

A majority of the inputs to our model are standard as most clients utilize the same benchmarks and asset classes in the investment portfolio (equities and bonds). However, we do have clients with customized classes that require unique input, an example would be clients that utilize covered calls.

Return expectations should be determined by diligent and comprehensive research. There are three common methods used to estimate the future returns of asset classes. The methods vary in complexity, but should result in similar outcomes. These methods are: Top Down Economic Forecasting, Bottom-Up Fundamental Forecasting, and Statistical Forecasting.

Within each of these three classifications of methods, there are numerous models that we use to project asset class returns. It is important to reconcile the projections of all types of models. This reconciliation highlights implications and assumptions inherent in each of the models, and leads to a more intellectually sound forecast.

Meketa estimates future asset class returns using a variety of methods. For bonds and cash, we utilize current market yields and the implied forward yield curve to calculate the market's return expectations. For equity asset classes, a modified risk premium model is used.

However, our investment expectations include aspects of all three forecasting methods to assure a full understanding of the implications of the outputs from the models.

All return expectations are quantified with appropriate measures of return uncertainty (i.e., volatility) and with reasonable estimates of return correlations with other asset classes.

Each year, Meketa revises asset class expectations based on the status of changes in the capital markets. These estimates are then used as one of the bases for long term strategic investment planning. We have four goals when developing realistic asset class return projections:

- Consistency of results across asset classes,
- Consistency of results with macroeconomic reality,
- Consistency of results with historical experience, and
- Recognition of uncertainty and forecasting error, and the implications of both on long-term investment planning.

d. Current inputs to the asset allocation model including expected returns, standard deviations, and correlation coefficients for all significant asset classes for which the firm has developed inputs.

Please refer to Exhibit H for a copy of our proprietary Annual Asset Study for 2020, which further describes our methodology and expectations.

e. If the firm has a recommendation for frequency of these reviews, state provide the firm's current recommendation.

We would be prepared to conduct a formal asset allocation study annually. Meketa generally recommends a formal review of asset allocation policy for clients at least every three years or earlier if requested by the client. However, for the majority of our clients, we review their asset allocation on an annual basis and continuously monitor a client's asset allocation and address it explicitly each quarter in our quarterly reports. When necessary, such reviews may result in a rebalancing of assets. In general, it is our intention that the fund will adhere to its long term target allocations, and that major changes to these targets will be made rarely and only in response to significant developments in the circumstances of the fund or in response to material changes in the fundamental nature or appropriateness of the asset classes themselves.

f. Samples of an Asset Allocation review and an Asset/Liability Modeling study.

Please refer to Exhibit G for a sample Asset Allocation Review and sample Asset/Liability Modeling study.

g. The firm's most recent five (5) years of capital markets assumptions (projected returns, volatilities, and corrections).

Please refer to Exhibit H for copies of the firm's most recent five (5) years capital markets assumptions.

4. **Describe how our firm develops a target allocation recommendation for a client. Provide a sample allocation that you are currently recommending for a client similar to TCERA.**

Given that asset allocation will be the primary determinant of the fund's risk and return characteristics, the first step after our Initial Fund Review is often to review the fund's asset allocation policy. The past decade has underscored many shortcomings of institutional asset allocation processes. Among these is an inordinate reliance on mean variance optimization, which as practiced by institutional investors systematically obscures the dynamism and risk in capital markets. In response, there is a growing movement toward an asset allocation framework that incorporates a more complete picture of investing environments, but that still retains the simplicity and practicality of traditional approaches. Our asset allocation review involves multiple steps that are designed to provide an all-encompassing analysis of the risks facing a fund and how they affect its assets.

First, we fully evaluate the fund's current status, which includes interfacing with the client's staff and professional service providers. In this step, we strive to understand the overall goal of the fund, how it is invested, and what its spending and distribution goals are.

Second, we analyze both assets and liabilities through the lens of a constrained mean variance optimization (MVO). Though imperfect, MVO presents a rough picture of the portfolios that will provide the best return for the funding risk. The inputs we use are generated annually by our own research staff, providing us a solid understanding of the caveats that accompany these inputs.

Third, we seek to further dissect the risk compositions of the portfolios. We perform a risk budgeting analysis to highlight the source and scale of portfolio level risk, including identification of the portfolios' true risk exposures by asset class. We conduct MVO based risk analytics, include worst case return expectations, and Value at Risk (VaR) analyses. We stress test our proposed allocations using a variety of relevant scenarios, including both historical and hypothetical. These scenario analyses reveal the best and the worst possible performance the fund could reasonably expect based on history, both in terms of asset levels and liabilities.

Fourth, we view our proposed allocations through the lens of economic regime allocation. In this analysis, we seek to identify how the portfolio will perform (from both an asset and a distribution standpoint) in common economic environments, such as low growth or high inflation. This analysis provides added perspective about the economic risks the fund may be assuming.

We then conduct a thorough liquidity analysis of our proposed portfolios that evaluates the fund's shorter term spending and distribution needs given a variety of economic and capital market scenarios (e.g., rising interest rates, deflation, recession, etc.).

Finally, it is important that this process be open and iterative. We would expect this process to take at least several months with ongoing and meaningful communication between the Meketa and the Board. We would provide full transparency to the Board on how we produce our assumptions and arrive at our recommendations.

Following the selection of an appropriate asset allocation policy for the fund, we would then work with the Board to devise a comprehensive implementation plan and timeline.

Please see the table below for a sample allocation that you we are currently recommending for a client similar to TCERA.

Strategic Classes	Current (%)	Proposed (%)	Change (%)
Broad Growth	**70.0**	**75.0**	**5.0**
Aggressive Growth	8.0	10.0	2.0
Traditional Growth	30.0	32.0	2.0
Stabilized Growth	32.0	33.0	1.0
Risk Parity	*14.0*	*10.0*	*-4.0*
Credit	*14.0*	*17.0*	*3.0*
Core Real Assets	*4.0*	*6.0*	*2.0*
Diversifying Strategies	**30.0**	**25.0**	**-5.0**
Principal Protection	10.0	10.0	0.0
Inflation Protection	0.0	0.0	0.0
CRO	20.0	15.0	-5.0
10 Year Simulation Stats	**Current (%)**	**Proposed (%)**	**Change (%)**
Median Scenario Compound Return	7.15	7.30	0.15
Average Scenario Standard Deviation	8.4	9.1	-0.7
Sharpe Ratio	0.8	0.8	-0.0
Average Compound Return of bottom 10%	1.8	1.4	-0.4
Average Compound Return of top 10%	11.7	12.3	0.6
Percent of Compound Returns < 7.25%	52.0	49.4	-2.6
Percent of Compound Returns < 2.9%	7.8	9.1	1.3
Best Calendar Year	24.2	25.2	1.0
Worst Calendar Year	-15.6	-18.5	-2.9

5. Describe the firm's view of tactical/dynamic asset allocation.

At the plan sponsor level, we believe strategic asset allocation is the most appropriate approach to use when determining the long term target asset allocation for pension funds. However, tactical asset allocation (TAA) strategies, employed on a stand-alone basis, can provide plan sponsors with an additional opportunity set when constructing diversified manager rosters. The appropriateness of tactical asset allocation strategies will vary by client.

Tactical asset allocation draws its fundamental traits from market timing, as it depends on forecasts to determine which assets currently appear favorable, as well as unfavorable. Such strategies rely on changing market conditions to exploit short term opportunities in the hope of producing alpha in various market conditions. Meketa believes that TAA managers are most useful during particularly volatile market environments. Similar to traditional asset classes, we have investment professionals assigned to cover the TAA manager universe and a current database is maintained.

6. Describe the firm's experience in evaluating alternative investment managers (e.g. real estate, private equity, co-investments, secondaries, hedge fund, real assets, etc.)

Meketa began formally providing alternative investment advisory services in 1999. Our alternatives staff has grown steadily since 1999 and comprises 39 investment professionals. While our alternative assets coverage originated with Private Equity, we have established separate teams for Private Debt, Infrastructure, Natural Resources, Real Estate, and Hedge Funds, with each team comprising full time research analysts and members of the Private Markets Research or Policy Committees or members of the Marketable Securities Investment Committee. These teams are charged with seeking out and evaluating the highest quality managers in each sector. The teams are cross fertilized to ensure consistency and adherence to best practices. Several of our clients have delegated to us the responsibility of selecting individual partnership investments, as a result of our capabilities and expertise in this area. We oversee over $125 billion in alternative investments.

Real Estate

Meketa began investing in real estate in 1994 and currently consults on real estate assets of approximately $50 billion for more than 100 clients. Our clients invest with over 60 different real estate managers and over 100 unique strategies.

While diversified real estate portfolios should contain exposure to core, cash flowing assets, these strategies invest in a highly efficient market. Our research emphasizes niche non-core opportunities (value-added, opportunistic, debt) that can enhance overall returns and take advantage of market dislocations. Such opportunities exist in a less efficient market.

Private Equity

Meketa oversees private equity investments of approximately $80 billion for over 60 clients. We track managers all over the globe covering a wide range of private equity styles including buyouts, venture capital, secondaries, fund of funds, and special situations. In the past ten years, we have reviewed over 4,000 funds.

We have reviewed and evaluated the full range of private equity strategies both domestically and overseas. We have observed that general partner quality is a more powerful factor in returns than the sector in which the strategy resides. We require that strategies be differentiated and managers demonstrate distinct advantages in their market. There is ample opportunity for dedicated and skilled advisors to generate returns well above the market averages. We are confident that our clients are well served by avoiding second tier managers even if they are executing a strategy that we feel is favored by the macro environment. Average managers, in our view, do not compensate our clients for the risks and higher expenses of the private markets.

Private Debt

Meketa oversees approximately $5 billion in private debt investments for three discretionary clients with dedicated private debt allocations, plus an additional fifteen clients as part of broader private equity or private markets allocations. Private debt investments can provide investors with near-term income and long-term capital appreciation through a variety of sub-strategies, including mezzanine, distressed debt, and opportunistic credit. Meketa recommends that its clients have a dedicated allocation to private debt funds for portfolio diversification and to take advantage of attractive current income components.

Co-Investments

We have been evaluating co-investment opportunities since 2008 and we have the demonstrated ability to review, analyze, evaluate, and recommend potential co-investment opportunities. We feel that co-investments can be an effective way to gain access to direct companies, bypassing fund structure and, in many cases, related fees. We have the transaction flow, analytic resources, and disciplined investment review process to build successful co-investment portfolios for our clients. Our extensive set of general partner relationships provides us access to an attractive flow of co-investment opportunities across a range of strategies and sectors. Our team of experienced personnel allows us to quickly and effectively evaluate, structure and, if appropriate, execute on co-investments on behalf of our discretionary and non-discretionary clients.

Our staff has extensive experience in analyzing one-off, special purpose investment vehicles and direct investments. Like our fund review, we utilize a similar, disciplined staged investment review process to properly evaluate such opportunities. Our reviews of potential co-investments are based on detailed analysis of financial statements, business plans, management depth, funding and capital structure, competitive market analysis, implementation risk, and the focus of the underlying equity sponsor. Additionally, we seek to fully understand the key drivers of returns and appreciate the various risks of the investment at both the company level and macro level. A client considering co-investments should have a process and the resources to effectively evaluate investment opportunities and complete legal documentation which frequently are offered within compressed time frames. Further, the client should be prepared to actively monitor the investment post-closing.

From a portfolio perspective, co-investments can represent concentrated, undiversified investment exposure and as such are generally most appropriate for larger investors. In some cases, and depending on how agreements are written, co-investors can be charged expenses for transactions that did not close.

Secondaries

Secondary market transactions can be an attractive investment opportunity for the appropriate situation, assets, and price. Key advantages of secondary market transactions involve portfolio transparency, pricing (typically at a discount to NAV), J-curve mitigation, and a shorter horizon to liquidity. For most clients, including non-discretionary, Meketa approaches secondary transactions on an opportunistic basis and has completed transactions for both individual funds as well as for complete portfolios of investments.

Key risks and considerations of secondary transactions include transaction and transfer fees, incomplete information, and competition. For several of the secondary transactions that Meketa has completed, we have structured transactions where the seller bears most of the transaction costs (brokerage, transfer fees, etc.). Meketa favors situations where there are informational advantages in the form of portfolio and asset familiarity. When there is significant uncertainty with regard to portfolio performance or sector outlook, we will aggressively price our bids to reflect those risks. Additionally, when expressing indications of interest for transactions, we tend to seek exclusivity arrangements while we conduct further due diligence.

Hedge Funds

Meketa began investing in hedge funds in 2005. The general philosophy for hedged strategies is a second chance at asset allocation. Hedge funds are a unique category unto themselves and allow investors the opportunity to be very aggressive or very defensive based upon the goals of the client/investor. Similar to our perspective on investment policies, we attempt to gain a robust understanding of the role required by the client to ensure the hedge fund program is properly constructed.

Meketa advises more than 50 clients with allocations to hedge funds, with assets of approximately $28 billion. We receive information from more than 500 hedge fund investment opportunities per year, and meet with approximately 100 hedge fund investment managers per year. We constantly assess information directly from hedge fund managers, investment bank capital introduction groups, and third party placement agents.

Infrastructure

Meketa began investing in infrastructure in 2006 and advises clients representing approximately $5 billion in assets for more than 20 clients. We were an early mover in infrastructure, recognizing the valuable attributes of the asset class, including the defensive quality of many infrastructure assets, the relatively low correlation to public markets, and the possibility for inflation protection. Due to the diversity of the asset class, our approach to infrastructure is research-driven, specialized, and highly selective. In particular, we focus on managers and sponsors with deep operational experience, and on high quality, essential assets with strong contractual and regulatory structures.

Natural Resources

Meketa began investing in natural resources in 2006 and advises clients representing approximately $2 billion in assets for more than 20 clients. Our general philosophy for natural resources is to partner with well experienced managers that invest with a value-add approach. We seek to create a portfolio of natural resources managers that can potentially provide a hedge against inflation, reduce portfolio volatility, and generate outsized returns for our clients.

We have separated natural resources investments into two broad categories: extracted and harvested. The natural resources class includes private market investments in oil and gas, precious and base metals, timberland, and farmland. Natural resources investments can provide a fund with diversification benefits, reduced volatility, and the possibility of outsized returns.

7. Describe your firm's view regarding the implementation of alternative investments for a fund of TCERA's asset size and staffing levels, including minimum/maximum suggested allocations.

We believe that as public equity market returns fluctuate, and fixed income returns prove insufficient to meet the goals of our clients, alternative asset classes will be relied upon to a greater extent to help our clients meet their investment goals.

Determining which investments are appropriate is a function of factors such as the client's risk tolerance, liquidity constraints, and time horizon. It also depends on how an investment would complement the existing portfolio (e.g., does it provide diversification or merely add exposure to existing factors such as credit risk or interest rate risk). While we are not inclined to favor certain strategies (e.g., those that combine volatile, potentially illiquid assets with leverage), ultimately we customize our decisions to each client's specific needs. The firm's philosophy for each of the alternative asset classes noted is nuanced, but similar to our overarching investment philosophy. As a firm, we seek managers in these spaces where the team, process, and strategy improve our clients' portfolios.

We realize the continuing importance of non-traditional assets and focus our efforts to remain among the leaders in the space. Our alternatives staff has grown substantially and has become increasingly specialized. While originating with Private Equity, Meketa has established separate teams for Private Debt, Infrastructure, Natural Resources, Real Estate and Hedge Funds with each team comprised of full-time research analysts and members of the Private Markets Research or Policy Committees. These teams have been established to seek out and evaluate the highest quality managers in each sector. The teams are cross-fertilized to ensure consistency and adherence to best practices. Several of our clients have delegated to us the responsibility of selecting individual partnership investments due to our capabilities and expertise in this area.

While not absolutely necessary or appropriate for all clients, we believe that adding private market investments vastly increases the opportunity set and return expectations of plan sponsors. To the extent the illiquidity can be tolerated, we believe there is more to gain than to lose from these investments. We are more mindful of hedge fund investments, on the other hand, as transparency is limited, and these strategies usually involve trading of securities already in our clients' portfolios, such as stocks and bonds.

The considerations important in determining an allocation to alternatives fall into two categories. The first relates to the plan sponsor. The plan's funding ratio, cash flows, and risk tolerance are critical. A plan with a low funding ratio and negative net cash flows may not be able to invest in private markets, as the illiquidity of the investment may prove disastrous in a market correction. The other consideration involves the specifics of the investment or product, such as transparency, leverage, volatility, and correlation. Our research team conducts exhaustive due diligence to minimize the likelihood of a negative surprise with an investment.

For a fund the size of TCERA, Meketa would recommend a combination of fund of fund vehicles and the use of direct investments. As the fund grows, we would rely more heavily on direct investments within Real Estate, Private Equity, and Private Credit. In general, Meketa believes that a minimum allocation to any asset class should be at least 5%, including alternative assets.

Allocations that are lower generally, become cost prohibitive and not worth the time and effort spent researching, educating, and implementing. A maximum amount would ideally need to be determined through an asset allocation study but given the size of the TCERA portfolio, we would expect that number to be 1-2% higher. Until the fund grows, it becomes cost prohibitive to over allocate a large portion of TCERA assets to alternatives.

8. **Describe your firm's view of the use of leverage in a public fund investment portfolio.**

Leverage is inherent in most private markets strategies and Meketa feels it can be an appropriate tool for managers, with appropriate limitations based on strategy and with protections (e.g., lack of mark-to-market triggers) in terms of how credit facilities are structured. Additionally, some managers offer investors levered and unlevered versions of their investment products. Meketa reviews each opportunity individually and seeks to understand the benefits and risks provided in each version and we may recommend one or the other on a case-by-case basis for each specific client, taking into account many factors, including risk tolerance and expected return from the asset class.

When evaluating potential investments within a private markets portfolio, Meketa performs an in-depth analysis on the extent leverage is being utilized in order to generate or enhance returns. This analysis includes reviewing investment and underwriting projections to confirm the use of leverage is both appropriate for the strategy as well as accretive to the fund, analyzing legal documents to ensure specific limits are in place to avoid excess leverage, and evaluating a manager's investment track record to confirm a disciplined use of leverage has been in accordance with previous strategies. Meketa also performs ongoing monitoring of private market funds post investment to ensure investment managers abide by the stated guidelines through update meetings, attendance of annual investor conferences, and when applicable, participation on Advisory Committees. Throughout the diligence process, as well as ongoing monitoring, Meketa's analysis is documented in meeting notes and in a formal investment memorandum, which are subject to review by both the individual asset class committees.

9. **Describe the firm's view on rebalancing including targets, ranges, frequency, and implementation methods.**

Our research has shown that the frequency of rebalancing is not important, with the caveat that too-frequent rebalancing can result in higher transaction costs. Rather, it is the discipline of rebalancing, which effectively forces an investor to "buy low" and "sell high," that provides a long-term benefit.

In periods of extreme market stress, rebalancing can become particularly challenging. Long-term asset allocation targets specify the overall risk posture intended by the Trustees. Having an investment policy with appropriate target ranges prevents the risk posture from deviating too far from the Trustees' intentions, while providing leeway regarding the timing of a rebalancing decision. This can be important if liquidity (e.g., bid-ask spreads) becomes temporarily impaired.

In normal markets, there are numerous means by which a multi asset investment fund can be rebalanced, and depending upon the mechanism chosen, the effective cost of rebalancing adjustments can range from very little to substantial. As with most portfolio strategies, we recommend that investors select the solution with the lowest operating cost.

In our judgment, external cash flows (i.e., external contributions or withdrawals from investment assets) should always be used as a rebalancing tool. In this way, a necessary event (i.e., the cash flow) is made to serve two purposes at no additional cost. Cash should be used to return assets to an allocation target even if the assets remain within the target range. The cost of making this type of rebalancing is essentially zero. We work closely with our clients to make these recommendations to improve the efficiency and performance of the funds.

10. Describe your firm's views of active versus passive management.

Meketa believes that certain areas of the capital markets (e.g., large capitalization stocks and very high quality bonds) are largely "efficient." Therefore, quality passive strategies have a high probability of generating greater returns than active strategies in these areas. This is mainly the result of the low fees associated with passive strategies. While the fees for active strategies are typically anywhere between 50 and 150 basis points, the fees for passive strategies are on the order of 5 to 10 basis points. The most certain way to increase returns is by reducing fees and controlling costs.

Passive management is most appropriate when the objective is to provide broad exposure to an asset class at minimal expense. For example, by owning an S&P 500 index fund, an investor can be assured that these assets will track the performance of the large capitalization segment of the domestic equity market cheaply and efficiently.

The advantages of passive management are not limited to diversification and low fees. Commingled index funds generally offer the flexibility for daily cash contributions and withdrawals. Furthermore, index funds are useful for rebalancing, liquidity, and portfolio transitions. Lastly, passive strategies will protect the portfolio from active management risk—essentially the risk that an active manager grossly underperforms their benchmark.

Not every area of the capital markets should be considered "efficient." Some areas, such as emerging market equities and particularly private markets (e.g., real estate and private equity) do allow for active managers to add significant value. We believe that passive and active management can coexist in a client portfolio, each with its own role and objective. Currently, 90% of our clients invest in one or more index funds.

11. Describe recent market conditions or concerns, if any, which have caused your firm to recommend significant changes to client portfolios. Describe any such recommendations.

The world has changed from ten years ago, and what has worked for the past decade is not necessarily going to prove as effective going forward. What follows are some general areas that we think are worth considering given the low rate environment. With rates having declined to such low levels, it is likely to be more difficult than ever for institutional investors such as TCERA to achieve their target returns. First, the Board should determine how much risk it is willing to take. If the Board can live with lower returns, there is no need to take on more risk. If not, the Board must decide how much additional risk and what level of modifications are acceptable.

The lower expected return across asset classes argues for a "barbell approach" to portfolio structuring. This means emphasizing higher-risk assets such as equities along with hedges such as long Treasuries and other Risk Mitigating Strategies (RMS). It effectively "crowds out" assets with expected returns in the middle that tend to be correlated with higher risk assets. A barbell approach takes on risk more efficiently, providing better downside protection than a typical portfolio that theoretically has the same level of risk in it.

In 2019, we shifted to somewhat defensive position in response to late cycle dynamics and record high valuations in both equity and credit markets. We continued to utilize Risk Mitigating Strategies like long US Treasuries and defensive hedge fund strategies to diversify. Our concern was that high valuations would make markets susceptible to heightened volatility in response to any adverse circumstances. While we certainly did not anticipate a global pandemic as a catalyst, our caution regarding riskier assets led to modest shifts in portfolio positioning which had a meaningful impact on client portfolios.

In 2020 during the pre-COVID-19 and post-COVID-19 period of the first quarter, Meketa was active across the spectrum of equity and fixed income. Our core belief remained to seek high quality risk and reward on a forward-looking basis. This dynamic changed dramatically from late February to early April and into May. February equity market declines moved client portfolios away from tactical target weights, primarily moving Risk Mitigating Assets to the top of policy ranges. We reduced investment grade bond and short-term government/credit exposure and purchased passive Global Equity exposure. In mid-March we harvested strong gains from our gold positioning and purchased passive equity exposure. We continued to review the portfolios in March making taking steps to preserve our ability to act swiftly. We increased cash exposure during this period of higher market volatility and moving from long term TIPS favoring Short-Term TIPS as a more efficient inflation proxy. Actions taken did spill into April and May as the swift downturn and then rebound in global equities continued with the support of monetary and fiscal policies. The strong equity rally increased the Global Equity exposure closer to the policy weight. Our action was a reduction of global equity exposure and used the proceeds to fund new Bank Loan and High Yield managers. We placed redemptions for long volatility hedge funds and portions of systematic trend following managers in April as they were both successful in capturing gains in a negative risk asset environment. In May, we took two actions that were tactical in nature, adding a TALF 2.0 manager and adding an Opportunistic Credit manager. Source of funds for the TALF 2.0 was Investment Grade Bonds and source of funds for the Opportunistic Credit investment were defensive hedge funds.

12. **Describe your firm's methodology for assessing risk in a client's portfolio. Include a description of any recent changes to that methodology. Include a description of public pension fund risks and information regarding the firm's use of risk measurements and risk budgets.**

Measuring Portfolio Risk

We believe that risk should be managed more holistically than many other firms do. We believe that risk cannot be summarized in a single number or accurately measured using a quantitative model. We believe that true risk management must be embedded in a firm's culture, and must be continually assessed on a real-time, forward-looking basis by experienced professionals. We have developed, and continue to develop, proprietary methods to help our clients achieve their objectives in the most efficient way possible.

One of the first steps we take in any new client relationship is an in-depth discussion on the definition of risk. In the investment industry, risk is typically defined as volatility, although that is not how we think about risk in the real world. Risk can take many forms – volatility, permanent impairment of capital, failure to meet return targets, underperforming peers, etc. – and each of our clients has a unique definition of what constitutes risk to them. We don't believe we can tell clients what their risk profile should be, but we can certainly facilitate a discussion that helps to draw out their own views and opinions. Once all parties are on the same page as to how we will define risk going forward, we can then begin to construct and monitor portfolios with this definition in mind.

We review risk on an ongoing basis. We provide an asset-weighted framework for review by our clients on a quarterly basis. Internally, we review risk contribution by asset class and manager to understand the specific drivers of risk (and return) within the overall portfolio.

The financial markets are intrinsically risky and volatile. We monitor and calculate quantitative risk measures such as beta and standard deviation on portfolios and funds. We include in our reports standard deviation, beta, correlation, Sharpe and information ratios at the aggregate asset class and at the individual manager level (given sufficient available data). However, these risk measures are purely retrospective, and do not necessarily represent a clear picture of the prospective risk profile.

To determine future risk profiles, we evaluate the actual investments of all managers and the asset allocation determined by the plan. Equity manager portfolios are analyzed from the perspective of company size, fundamental characteristics (price-earnings ratio, price book value ratio, dividend yield, historical and projected earnings growth rates), industry concentration, and individual stock concentration. Fixed income manager portfolios are analyzed from the perspective of interest-rate sensitivity (duration), credit quality, and sector diversification, among other measures. In addition, a fund's risk is viewed at a total portfolio and aggregate asset class level. For example, for equity portfolios these metrics include arithmetic mean return, standard deviation, best monthly return, worst monthly return, beta, correlation to index, correlation to total fund return, Sharpe ratio, information ratio, and active share calculations.

We also utilize FactSet and Bloomberg to analyze forward-looking, factor-based risk exposures of client portfolios. This provides an even deeper look at potential sources of risk (e.g., inflation exposure, interest rate exposure, value/growth exposure, momentum exposure). While this is not a perfect or complete picture of risk either, used in conjunction with the other tools described previously, we believe factor-based risk analysis can prove very helpful.

In addition to these quantitative metrics, we also place a heavy emphasis on qualitative risk assessment. Our Investment Committee members have a strong background in macroeconomic research and analysis, and are continually discussing and debating potential systemic risk factors that may impact client portfolios. These macroeconomic views manifest themselves in client portfolios via tactical asset allocation. While we are likely more "active" than many of our peers from a tactical standpoint, the majority of our tactical decisions are driven by an effort to reduce portfolio risk rather than attempting to exploit a short-term upside opportunity. Thus, we view macroeconomic research and tactical asset allocation as important and differentiating aspects of our risk management approach.

Public Pension Fund Risks

We believe the most challenging issues for all of our clients are:

1) **Publicity (anti DB feelings)** — The defined benefit structure, which the private sector continues to trend away from, is often portrayed in the press as overly generous, inflexible, and no longer viable. However, the risks associated with alternative plans (i.e., defined contribution) should not be discounted, including limited/no required savings levels, lower returns on average relative to defined benefit plans, and greater dispersion among returns, on average.

2) **Funding/regulation (limited ability to change benefit levels)** — Current funding levels, the combined result of previously promised benefits and low investment returns (notably over the last ten years) have reached critically low levels for some municipalities. Regulations/laws limit a municipality's ability to change benefit levels, resulting in larger inputs from: (1) investment returns, or (2) appropriations/contributions. Given the current state of the US economy, increasing contributions to defined benefit plans will likely remain challenging for some time. Additionally, with the continued rebound in the global markets, expecting increased investment does not offer a strong alternative. As a result, further debate with regards to modifying benefits is likely.

3) **Investment Return —** Hurdle rates of return, whether they be actuarial- or formula-based (multiples) are not always achievable. These expectations have not changed to keep pace with expectations of pension plans. In the years to come, there is likelihood that funds will not meet their targets. There are various ways a pension plan can attempt to mitigate these issues. Meketa recommends that plans reduce overall portfolio expenses and increase exposure to illiquid investments. There are several ways that plans can reduce expenses such as utilizing passive managers and negotiating lower manager and custodial fees. In addition, plans should consider exposure to or increasing allocations in illiquid investments that can produce higher expected returns than traditional investments.

4) **Interest Rates** – The current low interest rate environment presents yet another headwind for pension fund plan sponsors today. Allocations to fixed income investments offer lower yields, thus lowering overall total portfolio expected returns for investors. For now, this creates a challenge in achieving long-term target returns (we are not discounting the probability that this may be the case for some time). Further, in the event interest rates begin to rise, this will challenge returns for fixed income investors. Lastly, if rates rise significantly, as a result of the considerable balance sheet expansion by the Fed, fixed income returns may be severely impaired. We believe building a diversified fixed income portfolio, structured to weather numerous scenarios, is a critical component to investment a long-term portfolio today.

5) **State Budget Issues** – With funded ratios down, lower expected returns on global assets, and limited benefit flexibility, there will be greater pressure for increased appropriations /contributions by municipalities. However, the current condition of many state's budgets limits flexibility. Without denying current retirees or current employees' earned benefits, states must find a way to reduce the burden of the pension system on their budgets.

6) **Governance/Conflicts of Interest** – Plans must employ a high level of due-diligence in each decision that is made with respect to its investments. Implementation of a policy statement inclusive of expectations along with roles of all parties involved helps to establish appropriate governance, and limit the potential for conflicts of interest. Consultants must be independent and objective. Meketa is independently owned, and does not have any financial relationships with investment managers, brokers, banks, or actuaries. We do not receive soft dollars or any brokerage commissions. Unlike other consulting firms, we do not sell any services to the investment management industry. 100% of the firm's revenues are derived from our clients. Our independence allows us to provide clients with unbiased advice.

Risk Measurement

Meketa's risk monitoring system relies on both proprietary systems and third-party vendors. We use proprietary risk systems to aggregate and analyze portfolio and manager specific risk characteristics. We have placed considerable effort toward building these systems since our inception. These proprietary systems include portfolio analytics, reporting and liquidity management. We also integrate information from external vendors such as FactSet and eVestment/PerTrac into our proprietary systems.

When doing an Asset Allocation Study, we conduct a thorough risk analysis. We perform worst case return and risk exposure analysis, Value at Risk calculations, risk factor analysis, and historical scenario analysis of the current portfolio vs. various alternative asset allocations. These scenario analyses and stress tests provide a mosaic of the risks the fund is facing and their impact on asset levels and liabilities. We view our proposed allocations through the lens of our internally developed Economic Regime Management® (ERM) methodology. ERM combines elements of traditional mean variance optimization with a flexible but comprehensive set of economic scenarios. In this analysis, we identify how the portfolio will perform (from both an asset and a liability standpoint) in various economic environments.

We also conduct a thorough liquidity analysis of the current and our proposed policy portfolios that evaluates the fund's short-term liability needs during periods of extreme market stress to determine if these portfolios provide sufficient liquidity.

The tools used to conduct these analyses vary. We have developed a "Dashboard" that provides market-wide relative value metrics, systemic risk analysis, and ERM measures in real time. We also recently built our own optimizer program. These tools are proprietary and may be based on Excel, MatLab, and/or the R programming language.

Risk Budgeting

We view risk within a far broader context than the traditional risk budget model. While risk budgets generally perform well in quantifying interim "volatility," many of our clients perceive risk differently. We view the primary risk of operating a fund as "mission failure." The "mission" is to pay all promised benefits, while protecting and prudently growing principal. A risk budget may determine that cash is the least risky asset class, when, in fact, it is the least likely to produce the returns necessary to meet all required spending over the long term.

Meketa reviews risk on an ongoing basis. We provide an asset-weighted framework for review by our clients on a quarterly basis. Internally, we review risk contribution by asset class and manager to understand the specific drivers of risk (and return) within the overall portfolio.

The financial markets are intrinsically risky and volatile. Meketa monitors and calculates quantitative risk measures such as beta and standard deviation on portfolios and funds. We include in our reports standard deviation, beta, correlation, Sharpe and information ratios at the aggregate asset class and at the individual manager level (given sufficient available data). However, these risk measures are purely retrospective, and do not necessarily represent a clear picture of the prospective risk profile.

To assess future risk potential, we evaluate the actual investments of all managers and the asset allocation determined by the plan. Equity manager portfolios are analyzed from the perspectives of company size, fundamental characteristics (price-earnings ratio, price-book value ratio, dividend yield, historical and projected earnings growth rates), industry concentration, and individual stock concentration. Fixed income manager portfolios are analyzed from the perspectives of interest-rate sensitivity (duration), credit quality, and sector diversification, among other measures. In addition, a fund's risk is viewed at a total portfolio and aggregate asset class level. For example, for equity portfolios these metrics include arithmetic mean return, standard deviation, best monthly return, worst monthly return, beta, correlation to index, correlation to total fund return, Sharpe ratio, information ratio, and active share calculations.

Our multi-faceted analysis represents a sophisticated form of return attribution. For example, we are able to determine accurately whether a manager's superior results are due to security selection, top-down macro judgments, or the assumption of high levels of risk. This process helps ensure that our clients' funds are never subjected to excessive risk levels.

13. Describe your firm's perspective on evaluating a consulting firm's performance, including any specific metrics or measurements that are beneficial in that evaluation.

To measure a consulting firm's services, a client should evaluate the fund's investment performance, the level of diligence exercised by our firm, and the quality of our service to the Board and professionals.

To gauge investment performance, the fund's performance should be compared against the policy objectives determined by the Board. These objectives should be outlined when conducting a review of the fund's Investment Policy, and should include an investable alternative for the fund. This alternative could be a blended benchmark of passive market indices that represent either the target asset allocation set forth in the policy, a generic asset allocation for long term plans, or the fund's current asset allocation targets. Ideally, performance should be compared over a time period of at least three to five years (i.e., a full market cycle).

To evaluate the consulting firm's performance over shorter term periods, the Board could assess the level of diligence exercised by the consulting firm. For example, the Board could track the number of their investment managers with whom the consulting firm has meet annually. Further, the Board could measure the explicit cost savings it has received through our supervision of manager transitions and fee negotiations. The Board can also evaluate if the consulting firm has been responsive to their requests and have provided useful education and training.

We evaluate the quality of our services by the results of our clients, and we pride ourselves on superior client service and high quality work. Our references can attest to our "hands on" approach, and to the success of our team structure in ensuring quality control in straightforward as well as more complex tasks. We are pleased that our annual client turnover has averaged less than 3%. We believe this speaks to the level of satisfaction achieved by our clients. We encourage you to contact the provided client references to solicit their opinion of our people, services, capabilities, and expertise. Additionally, we are happy to provide further client references upon request.

14. Describe your views regarding performance versus asset based fees.

While performance based fees can be used to align the manager's economic interests with those of the client, a fund should be careful in how it structures such fee schedules. First, performance based fees tend to be asymmetrical in their reward structure. That is, the investment manager may be rewarded handsomely when they outperform, but they do not share in the client's loss to an equal proportion when they underperform. Similarly, a fund must take care that the fee schedule does not encourage risk taking behavior by the manager. For example, a manager who underperforms in a given year may try to compensate the next year by substantially increasing the portfolio's risk. Such undesirable behavior should be factored into the fee schedules negotiated with a fund's investment managers. Many of our clients have asset based fees, with some percentage of strategies with performance based or incentive fees. We evaluate each individual manager relationship and expected return and risk profile to help the client determine the appropriate compensation structure.

Investment management fees typically represent the largest component of a fund's expenses, and should be negotiated aggressively and monitored closely. For example, while a manager's fees may be low when measured as a percentage of assets, the dollar fee may have increased substantially through market appreciation. Much of the accompanying fee appreciation does not represent additional management responsibility, and a fee re negotiation is appropriate.

D. Manager Measurement and Evaluation

1. Describe your firm's process for analyzing and monitoring investment manager performance. Include information regarding determination of benchmarks and any databases used by your firm. Provide a sample performance report.

At Meketa, investment review includes, but is not limited to, performance monitoring, statutory and regulations compliance, and manager guideline compliance. Top-down strategic objectives are monitored continuously, not only in the context of individual manager performance, but from a global financial framework as well.

Every quarter, we send a detailed questionnaire to all of our clients' managers. The purpose of this questionnaire is to determine for each manager if any significant changes have occurred in their firm or among their investment personnel. Further, the questionnaire inquires about regulatory violations, lawsuits, or investigations.

Monthly, we collect client information from a variety of sources including custody banks, investment managers, database providers, and news services. We purchase data from FactSet, Cambridge Associates, Bloomberg, Ibbotson, eVestment Alliance, and Morningstar. We also have access to NCREIF and Investment Metrics, and we maintain an internal database. This data is used to audit, reconcile, and number check our clients' portfolio performance and holdings. At the aggregate level, we then evaluate performance relative to appropriate benchmarks, both industry and peer. The appropriate use of benchmarks is crucial in the analysis and evaluation of both current and prospective investment managers.

Meketa is committed to ensuring accuracy of the data in our reports to clients. We recommend that clients utilize the performance calculation services of their custodian bank when possible, because the custodian represents an independent third party with immediate and comprehensive access to all portfolio activity.

We collect performance from a client's investment managers as well, and compare performance figures for consistency. When discrepancies are discovered, our staff works with the investment manager and the custodian to determine the source of the differential and to make any necessary adjustments.

Performance calculation for illiquid investments such as real estate and private equity is dependent upon the valuation of those assets, which would be determined by the fund's custodian. Different custody banks have differing policies regarding the pricing of private market assets. Usually, however, they will price all private market assets at cost unless they obtain an audited statement from the respective manager that revalues the asset as of year-end or quarter-end.

Meketa works with clients to establish benchmark performance targets at the total plan level, as well as at the underlying manager level. Below, we have summarized our approach to each.

Fund / Plan Level Benchmarking

In addition to analyzing investment manager returns, Meketa also creates custom benchmarks to evaluate the performance of the client's overall fund.

This includes a policy benchmark, which reflects the target asset allocation of the client's overall plan. The policy benchmark is used to evaluate the overall effectiveness of the fund's actual asset allocation and investment manager performance versus its stated target allocation. Secondly, we create a shadow benchmark ("actual allocation benchmark") to incorporate the client's actual allocations over time across various portfolios. The shadow benchmark is used to isolate and evaluate the overall effectiveness of the plan's active investment managers. Lastly, we include a static benchmark (e.g., 60% S&P 500 / 40% Barclays Aggregate) to provide a comparison to the broadly defined "default" benchmark pension fund portfolio to provides clients with a sense of how their portfolio has performed versus a simple portfolio structure.

It is also important to evaluate a plan's performance relative to its own institutional fund peer universe. Our firm has access to the Investment Metrics Plan Universes, which provides us with an institutional plan sponsor peer universe consisting of 2,300 plans totaling $3.5 trillion in assets. In accessing this data, we are able to receive this information for numerous plan sponsor sub categories (i.e., public pension funds, private pension funds, health funds, endowments & foundations, etc.), varying asset sizes and by asset class categories. The Investment Metrics Universe is an effective means to evaluate a client's total fund performance relative to the performance of its institutional fund peer universe.

Manager Level Benchmarking

Meketa compares client investment managers to three types of benchmarks. The first benchmark is a broad market index (e.g., the S&P 500 index for equity managers). This comparison gives information about the broad market conditions under which the manager was operating. Our second comparison is to a style-specific benchmark matched to the portfolio's investment style. For example, a small capitalization value manager would be compared to the Russell 2000 Value index. This comparison refines the analysis provided by the broad market index by focusing more exclusively on the area of the manager's expertise. And finally, we compare managers to carefully crafted benchmarks of their peers. Each of the three types of benchmarks is described in more detail below:

Broad Market Benchmarks

Broad market benchmarks (e.g., the S&P 500 index, Russell 3000 index) seek to measure the return of the market as a whole, or at least a substantial fraction of the market. While broad market benchmarks are widely quoted, they pose several difficulties when used to evaluate managers. First, most market indices are capitalization weighted, meaning that the index is dominated by the returns of the largest stocks. For example, approximately 80% of the

S&P 500 index's return is determined by the fifty largest stocks, leaving only a small role for the remaining 450 stocks.

Second, market indices are intended to be style neutral, placing no special emphasis on value stocks versus growth stocks. However, if the largest company shares are predominantly growth companies, as was the case in the late 1990s, then the index acquires a growth stock bias.

Finally, the stocks listed in a broad market index are selected to be representative of all industry groups, regardless of their financial strength or return prospects. Just because a stock is selected for inclusion in an index in no way implies that it is a good investment.

Meketa uses broad market indices to evaluate how much of a manager's return can be attributed to the market as a whole. For example, a manager's return of +20% in one year is less impressive if the market, as measured by broad market indices, also returned +20%.

Style Specific Benchmarks

Some vendors create market benchmarks using a simple and arbitrary definition of investment style. For example, the firm BARRA creates two lists of stocks: those with low price multiples and high dividends (value stocks), and those with higher relative prices and strong earnings growth (growth stocks). There is no overlap between the two lists. The value index purports to measure the return of all value stocks, while the growth index assesses growth stocks.

Meketa uses style specific benchmarks to assess how much of a manager's performance is attributable to the performance of their style specific benchmark. A manager's return of +20% in one year is less impressive if the market as measured by their style specific benchmark, returned +22%.

Peer Group Benchmarks

Often, it is useful to compare managers directly to other managers with similar styles and goals. A direct peer to peer comparison, if performed correctly, eliminates any bias due to market trends. For example, it would not be useful to compare a value manager to a growth stock manager in periods when either growth stocks or value stocks are outperforming. However, whether growth or value stocks are leading the market, it is useful to compare growth stock managers to other growth stock managers, and value stock managers to like value stock managers.

Meketa uses peer group benchmarks to make like comparisons among managers. Public mutual funds are rigorously audited, and SEC rules require that mutual funds adhere to the specific investment strategy specified in the fund's prospectus. Thus, mutual fund managers cannot operate as a growth stock fund one day and as a value fund the next. For this reason, public mutual funds peer group are a good benchmark for group analysis. All of the managers in a peer benchmark are subjected to the same market forces, and all have the same opportunities to prosper.

Also, Meketa creates custom benchmarks for our clients. The static benchmark typically reflects the target asset allocation of the client's overall plan; in addition, we often create shadow benchmarks that incorporate the client's actual allocations over time across various portfolios.

Further, our clients employ a number of strategies that are not "benchmark oriented," or take strategic bets relative to the market in which they invest. For those portfolios, it is important to separate the effects of these strategic bets (e.g., dividend yield emphasis, avoidance of utility stocks, micro-cap emphasis) from the effects of stock selection. For example, a small capitalization value strategy that does not invest in financial stocks has been compared to the Russell 2000 Value index, excluding financial stocks. This has allowed for a far more straightforward assessment of the manager's stock picking ability. We would determine, with the Board, the most appropriate benchmarks for the fund.

Meketa currently creates over 200 custom indices for our clients, a majority of which are used for comparison to a client's aggregate performance. We track over 900 indices, from which we can blend any return stream to fit an investment manager's respective strategy. At the aggregate level we frequently create a Policy Benchmark based on the client's target asset class allocations, and the relevant benchmarks for comparison. We also create Actual Allocation benchmarks which allow us to compare the actual current weight of each asset class against their respective benchmark.

Using our Morningstar subscription, we can customize the parameters of our peer universes. These parameters are set for each peer group, and as new universes broaden we create new universes suitable for more commonly invested assets classes (i.e., target date funds, bank loans, etc.). These peer groups are downloaded to our internal systems monthly, utilizing expense ratios found on Morningstar for the net of fee performance data. This allows us to analyze managers on both a gross and net of fee basis.

Please refer to Exhibit I for a Sample Quarterly Performance Report and Monthly Flash Report.

2. **Identify the steps the firm would take to analyze TCERA's current investment portfolio and investment policy. Copies of both are included as attachments to this RFP.**

As previously mentioned, Meketa undertakes a comprehensive Initial Fund Review of each new client. The Initial Fund Review includes an examination of the client's existing Investment Policy Statement, asset allocation policy and asset allocation structure; a review of actuarial reports; interviews with the client's investment managers and an examination of their guidelines and fees; and an assessment of the client's custody relationship(s) and fee structure, among other issues. We report to the Board an assessment of each separate issue, make appropriate recommendations, and prioritize these recommendations within a timeframe of six to thirty-six months for implementation. The resulting Initial Fund Review document is typically in excess of sixty pages in length and becomes a useful guide – essentially a business plan - for framing discussions and decision-making for the trustees and consultant. We would implement this with TCERA to gain a better understanding of the current portfolio structure and the best direction forward.

As mentioned above, we would spend time reviewing the investment policy statement to make sure it accurately reflects the portfolios objectives and goals. We believe having a discussion with trustees and staff about investment beliefs, which is currently absent from the TCERA policy, is beneficial as it helps guide decision-makers.

3. **Describe the level of customization available for reports provided and any additional charges that would be incurred for customization or requests for additional information.**

   Though most of our reports take on the same general structure, we are able to make certain modifications, customizing each report to our client's needs. There are no additional charges for customization or requests for additional information. Most requests for additional information are included in our standard fee.

4. **Provide expected timeframes for completion of the preliminary monthly reports and the final quarterly performance reports (number of calendar days after required data in available).**

   Meketa's turnaround time for performance reporting is dependent on the speed and accuracy with which a client's record keeper and investment managers are able to provide data. Typically, we are able to provide our preliminary monthly reports no later than 30 days after quarter end. Depending on the complexity of the portfolio (alternative investments), final quarterly reports generally are available 45 days after the end of each quarter. Once investment manager statements, manager universes, and custodial data have been finalized.

5. **Describe the plan data submission/collection process including whether the firm collects holdings data and performance data from investment managers, client custodian, or clients.**

   We work with Investment Metrics for our performance measurement and reporting. Investment Metrics receives data directly from most well established custodian banks for on-going data collection for our clients. Data that is not already maintained is requested directly from the managers or the custodian. We would work with TCERA's custodian to establish a data feed into our systems to help streamline the collection process.

   For separately managed accounts we are often able to obtain manager holdings from the custodial provider and for others we will reach out to individual managers.

6. **Describe your firm's step by step process for return reconciliation and your follow up procedures for any discrepancies discovered.**

   Performance analysis is central to the prudent management of investment portfolios, we recommend a multi-tiered approach. First, we recommend that the custodian bank calculate detailed rates of return for each manager and each segment of a portfolio. Second, we ask each manager to submit comparable rates of return, calculated independently and internally. Finally, we internally verify and reconcile the rates of returns reported by the custodian and managers, as well as cash flow adjusted returns calculated using Investment Metrics, for each strategy utilized.

All documentation produced by Meketa must go through numerous quality control checks by multiple members of the team to ensure that material produced is of client ready quality. Our process has been refined over many years and includes a detailed, 3-page control sheet to ensure accuracy and eliminate errors. Members of the client team are required to follow the reporting process and sign off on the control sheet at every step.

All of our reports must go through numerous quality control checks by multiple members of the firm to ensure that material produced is of client-ready quality.

7. **Describe the firm's performance attribution capabilities, including returns-based and holdings-based capabilities. Include a breakdown of domestic, international, and fixed income performance attribution capabilities and state to what extent performance attribution analysis is proved in the quarterly investment report.**

   We evaluate performance attribution on three primary levels: the individual portfolio, the aggregate asset classes, and the aggregate plan. For equity portfolios both domestic and international, we determine the influence that country, sector, and capitalization size exerted on returns, relative to the benchmark. For fixed income portfolios, we evaluate the influence of country, duration, credit quality, and sector relative to the benchmark. At the aggregate asset class levels, comparisons to a broad market benchmark allow us to determine and analyze how the asset class specific (e.g., domestic equity) manager structure has impacted results. At the aggregate plan level, comparisons to a custom or shadow benchmark assist in isolating the influence that particular strategic bets or implementation processes (e.g., an overweight to small capitalization stocks) exert on returns. Quarterly, we review the holdings of each of our client's managers and perform portfolio analytics to evaluate overlap and ensure that they fulfill their specific mandates. In cases where potential overlap exists, we work to ensure that both risks and costs are minimized. Our quarterly reports include manager level and Fund level holdings and performance based attribution analytics.

8. **Describe your firm's procedures for communicating with the client and with investment managers regarding performance issues including the frequency of the type of reviews (formal, ad hoc, etc.) and the use of a "watch list" if any.**

   We maintain an ongoing dialogue with all of our clients regarding pertinent developments at the managers they are invested in. We view ongoing client communication and education to be an essential component of the services provided by an investment consultant. These communications range from formal memoranda to telephone conversations to in-person discussions at our client's Board meetings. Managers will also present updates to the Board on a regular basis. Our opinion of a manager will sometimes change or we may suggest replacing a manager we have inherited with a stronger option. Most of our consultants prefer presentations to memos.

When appropriate, we monitor managers on an especially intensive basis called a "Watch Status." Watch Status is a state of heightened oversight, triggered by any change that could jeopardize an investment manager's ability to fulfill their role successfully. We recommend that the manager be placed on Watch Status and note the event that triggered the status change.

Our criteria for placing a manager on Watch Status are divided into two categories: qualitative and quantitative factors. Qualitative factors relate to organizational or strategic changes, and include events such as changes in the personnel selecting securities, a change in the security evaluation process, or a material change in a firm's ownership structure. Quantitative factors relate to performance, portfolio structure, and explicit costs. Typical quantitative factors leading to Watch Status are consistent failures to meet performance benchmarks or increases in operating costs or risks.

When a manager is placed on Watch Status, we conduct a comprehensive review of the manager with the goal of assessing whether the manager should be retained or terminated. Even if an isolated violation or problem triggered the status change, our review addresses all aspects of the investment manager's work: strategy, process, resources, performance, and fees. These are the same criteria evaluated during the original manager search process. Our thorough review ensures that the client will receive a comprehensive assessment of the manager's fitness.

Following the comprehensive review, we inform the client of our findings, and recommend a course of action. Our review will conclude with one of three recommendations:

- favorable resolution and removal from Watch Status
- no resolution, continued Watch Status
- unfavorable resolution, with recommendation to terminate

9. Describe your firm's criteria for recommending investment manager termination.

Changing investment managers is an expensive process, and should not be undertaken lightly. Further, it is difficult to judge a manager's real potential for adding value using short term data. The world's capital markets are volatile and capricious, and even an excellent manager may produce mediocre short term results. Our job as investment consultants is to know when a manager's sub-par performance is grounds for termination, and when it is simply short term bad luck.

Generally, we recommend that a manager be terminated for the following reasons: large scale turnover of important personnel, failure to maintain a portfolio within assigned guidelines, unexpected shifts in overall strategy, and significant underperformance that cannot be attributed to market forces beyond the manager's control.

We believe that overly aggressive "management" of managers (i.e., rapid hiring and firing of managers), is counterproductive. Producing superior returns requires patience, and managers should be terminated cautiously, and only when the case is compelling. If termination is recommended and this action involves replacing a manager, we assist the client with identifying a replacement manager and implementing the change efficiently.

Another unique feature of our monitoring process is our crisis response planning. Occasionally, events occur which place our clients' assets in immediate jeopardy. For example, several years ago, several key investment professionals at a Midwest money manager left the firm unexpectedly to start their own operation. Because the money manager then lacked the expertise to continue managing our client's portfolio prudently, we invoked our crisis response plan immediately. In this case, the client's assets were transferred in kind to another manager within days.

Our crisis response system anticipates these types of events, and provides a pre-arranged plan for protecting the client. We designate key trustees and individuals who are authorized to make important decisions on an as needed basis. We review our plans with the custodian to ensure that any transfers that may become necessary can be accomplished without delay or error.

10. Provide information regarding your firm's review of its success in selecting top tier managers and subsequent recommendations to clients.

The evaluation and selection of investment managers is both an art and a science. The process entails both qualitative and quantitative analysis. Unfortunately, there is no formula or screen to identify future performance. Our success in selecting investment managers is evaluated constantly through our standard performance monitoring services. Circumstances when manager performance deviates from expectations are investigated further.

On an ongoing basis, Meketa's manager research committee reviews the various asset classes within our Bullpen to determine how managers have performed relative to their benchmark and their peers. During this review process, we evaluate our success in evaluating and recommending investment managers to our clients. With clients, where Meketa is overseeing the manager selection process we continually evaluate our success through monthly and quarterly performance reports and through ongoing due diligence reviews.

E. Research

1. Describe the firm's commitment to research and system enhancements. Describe the structure and organization of the firm's research department, including the number and experience of its analysts.

Our research function is separated into three distinct areas.

Investment Research - To serve our clients well, we conduct in-depth internal research on a constant basis. Our research focuses on economics, capital markets, investment strategies, and investor needs.

Our Director of Research, Frank Benham, chairs our Strategic Asset Allocation/Risk Management Committee which oversees all research projects, including white papers, and is further supported by our broader investment staff (138 investment professionals). Mr. Benham typically assigns research on a project basis to the investment staff, ensuring broad experience and growth.

Our investment professionals are extremely knowledgeable and highly skilled in developing specialized research for our clients. We frequently provide custom studies, reports, and memoranda to keep clients informed of changes and new ideas within the industry. We also prepare specialized white papers detailing the risks and opportunities implicit in various types of investments. We generally produce fifteen to twenty white papers and research notes per year that we distribute to our clients via e-mail or hardcopy.

In 2015, Meketa launched a new series of client webcasts and conference calls called Investment Perspectives. The Investment Perspectives series features interesting and accessible lunchtime conversations on investment research and the markets with our research team, Global Macroeconomic Advisory Committee members, and other respected investors and thought leaders in the industry. We also write a number of ad hoc commentaries on market risks or opportunities that we see, particularly those that are directly influencing the positioning of client portfolio.

Macroeconomic and Market Research - Meketa has a Global Macroeconomic/Tactical Asset Allocation Committee that is responsible for overall firm research on macroeconomic issues. The Committee is headed by Richard O'Neill and consists of eight professionals who conduct global macroeconomic research on a variety of topics. The Committee publishes a global macroeconomic newsletter on a bi-monthly basis and produces quarterly economic outlooks.

In addition, the Meketa Fiduciary Management Investment Committee conducts its own macroeconomic and market research on a daily basis to help drive tactical asset allocation decisions. This effort is led by CIO Rafi Zaman, whose three decades of direct portfolio management experience are a significant competitive advantage over many of our peers. Prior to joining the firm, Mr. Zaman served as the lead portfolio manager for global equity, U.S. equity, international equity and emerging markets equity strategies, as well as managing a long-short hedge fund. This direct money management experience adds extremely valuable insight into our short-term and long-term market views.

In addition to our proprietary macroeconomic research, we have formed a relationship with Oxford Economics, a leader in global economic forecasting and quantitative analysis. Oxford Economics provides our Global Macroeconomic Committee with full access to over 150 experienced in-house economists and business analysts who are supported by a worldwide contributor network of analysts and journalists on the ground in over 100 countries. We are fully aware that we do not have a monopoly on good ideas, and have specifically engaged third-party macroeconomic/market research firms whose areas of expertise complement our own. Their published research, as well as our ad hoc conversations with their analysts based all over the world, has provided valuable economic insights that have helped shape our own market views.

Manager Research – The role of our manager research group is to identify, analyze, evaluate, and monitor the universe of investment managers on behalf of our clients. For our public markets and private markets manager selection processes, Meketa has two distinct research teams, as well as Investment Committees comprising senior professionals who carry out and oversee the manager research process. These dedicated research professionals work closely with the firm's Fiduciary

Management Investment Committee to incorporate client-specific objectives and constraints, resulting in customized searches for each client. All manager information is continually shared with the broader firm through manager meeting notes, weekly team meeting notes, Investment Committee meeting notes, formal memoranda, email, ad-hoc meetings, etc.

Our public markets manager research team is led by Amy Hsiang, Director of Public Markets Manager Research. The team consists of 21 investment professionals with direct coverage responsibilities. The Marketable Securities Investment Committee (MSIC) is our firm's governing body over marketable asset strategies. MSIC members are involved with all aspects of this manager search process and provide guidance and oversight to the process.

Our private markets research team, led by John Haggerty, CFA, Director of Private Markets, comprises 39 investment professionals dedicated to covering private equity, private debt, infrastructure, real estate, and natural resources. We have been advising clients in private markets since the late 1990s.

2. **List notable publications that have included your firm's research.**

Meketa actively participates in pension plan industry events globally where we are invited to speak, moderate, or participate as a panelist. We are affiliated with over a dozen organizations including State Association of County Retirement Systems (SACRS), California Association of Public Retirement Systems (CALAPRS), National Conference on Public Employee Retirement Systems (NCPERS), Texas Association of Public Employee Retirement Systems (TEXPERS), International Foundation of Employee Benefit Plans (IFEBP), and many more.

We are frequently quoted or published in industry publications, including:

- Pension & Investments
- Emerging Managers Monthly
- Buyouts
- Money Management Intelligence
- FPPTA's The Voice
- FundFire
- NCPERS' PERSist Newsletter
- Private Asset Management Magazine
- Chief Investment Officer
- TEXPERS Pension Observer
- International Foundation of Employee Benefit Plan's Employee Benefit Issues
- Wall Street Journal

3. **Provide a recent sample of a white paper on a topic relevant to public pension plans.**

Please refer to Exhibit J for a recent sample white paper on a topic relevant to public pension plans.

4. Describe in detail the type and frequency of research that would be provided to TCERA. Describe any research or analytical resources available that your firm would be willing to provide TCERA?

To serve our clients well, we conduct in depth internal research on a constant basis. Our research focuses on economics, capital markets, investment strategies, and investor needs. Meketa formally revises a model portfolio on an annual basis. The model portfolio represents our best practices with respect to all aspects of investing institutional assets, a comprehensive manual to guide a fund. It addresses dominant issues such as asset allocation, implementation issues (e.g. manager selection) and operational issues (e.g., custodian banking and brokerage). The model portfolio serves to organize all of our research efforts and to focus them on specific ways to improve performance.

Our investment professionals are extremely knowledgeable and highly skilled in developing specialized research for our clients. We frequently provide custom studies, reports, and memoranda to keep clients informed of changes and new ideas within the industry. We also prepare specialized white papers and research notes detailing the risks and opportunities implicit in various types of investments. We generally produce fifteen to twenty white papers and research notes per year that we distribute to our clients via e mail or hardcopy.

The following is a representative list of our white papers and research notes:

White Papers

- A Better Way to Manage Managers
- Active Management
- Alternative Beta Strategies
- An Overview of Hedge Funds
- Art of Selecting Investment Managers
- Bank Loans
- Commitment Pacing
- Commodities
- Communication Infrastructure
- Core Real Estate
- Currency Hedging
- Decreasing Number of Public Companies
- Defined Benefit and Defined Contribution
- Defining ESG Investing
- Direct Lending
- Dual Portfolio Framework
- Dynamic Asset Allocation
- Emerging Markets Debt
- Emerging Markets Equities
- Endpoint Bias
- Endowment & Foundation Spending Policies
- Enhanced Indexing
- Equity Index Funds
- Equity Style
- Foreign Small Cap
- Infrastructure
- Inverted Yield Curve
- Investing in Foreign Bonds Investment Beliefs
- Is the Performance of Active Equity Managers Cyclical?
- Long-Term Treasuries
- Manager Oversight – Watch Status
- Master Limited Partnerships
- Mezzanine Debt
- Microcap Stocks
- Natural Resources
- Non-Core Real Estate
- Operational Due Diligence
- Option-Based Equity Strategies
- Performance-Based Fees
- Portable Alpha
- Private Equity Fees
- Private Equity in China
- Private Equity Secondary Market
- Rebalancing Investments
- Risk Budgeting
- Risk Mitigating Strategies
- Risk Parity
- Searching for Manager Alpha
- Securities Lending

White Papers	
• Frontier Markets	• Short-Term Fund Management
• Global Macro	• Small- and Middle-Market Buyouts
• Healthcare: An Evaluation of the Investment Opportunity Set	• Stable Value
• Hedge Fund Operating Expenses	• Tactical Asset Allocation
• High Yield Bonds	• Target Date Funds
• Impact of Chinese A Shares	• Tail Risk Management
• Impact of AI and Machine Learning	• Transition Management
• International Small Capitalization Equities	• TIPS
• Introduction to Private Equity	• Timberland
	• Total Portfolio Benchmarking
	• US Midstream
	• Value of Quality, Stability and Income

Meketa also regularly hosts a series of client webcasts and conference calls called Investment Perspectives. The Investment Perspectives series features interesting conversations on investment research and the markets with our research team, Global Macroeconomic Investment Committee members, and other respected investors and thought leaders in the industry.

In addition to ongoing education on various topics at select board meetings, TCERA would have access to all of our Whitepapers, webcasts, and research pieces that we publicly make available. In addition, TCERA trustees and staff can be added to our distribution list and receive these publications and announcements.

F. Manager Searches and Evaluation

1. Describe in detail your manager search process including any databases or outside sources used in evaluating managers for inclusion in a search. Include the criteria used to make manager recommendations.

Public Markets Manager Research

Our manager search process is differentiated by the resources that we are able to commit to evaluating managers fully. The process begins with the consulting team working with the client's investment staff to define the needs of the fund. Our search process is a collaborative process often having up to six investment professionals working internally on the search. Our dedicated research staff takes the lead on the day-to-day management of the process, but the consultants are directly involved in the decision-making process.

Meketa's research professionals are accustomed to working with a client's investment Staff to whatever extent the client prefers. In some cases, a client's investment staff will travel with our research professionals to manager due diligence meetings, participate in conference calls, or interact directly with our research professionals, rather than working through consulting staff.

Meketa has specific, strict criteria to identify manager candidates for our clients. We ensure that the most appropriate managers have been identified for each client for each search, by utilizing our tools and resources.

As described below, we evaluate a manager's strategy and process, resources and performance, and fees:

Investment Strategy – We analyze each manager's investment strategy from a number of perspectives. Managers utilize bottom-up and top-down strategies, growth- and value-based strategies, fundamental and technical strategies, quantitative and qualitative strategies, and varying blends of strategies. We evaluate each strategy and its likelihood of producing superior investment returns in the future.

Investment Process – We evaluate the process behind the implementation of each manager's investment strategy to ensure that it is clearly articulated, consistently applied, cohesive, and efficient. An inadequate process can lead to poor or delayed investment decisions.

Investment Resources – We evaluate each organization's structure to ensure stability and depth. In today's turbulent environment, when it is common for key personnel to leave an investment organization without warning, it is important to ensure that the talent pool is sufficiently deep to withstand personnel departures.

Investment Performance – We evaluate the performance record of each manager, including relative and absolute total returns. Also, returns are evaluated to determine the risk inherent in the investment strategy and the "fit" of the particular strategy within the existing investment plan.

Operating Costs – We evaluate all the costs involved in implementing an investment strategy. The surest way to produce a higher investment return is to lower management fees and other operating costs.

While our firm utilizes numerous databases to track and screen managers, the lists and performance rankings generated provide only a starting point. We go beyond the superficial computerized "search" and monitoring process with a methodology that identifies the best managers to meet our clients' objectives. In doing so, we emphasize:

Face-to-face meetings and site inspection visits[3]

Through meetings with professional and back office staff, and visits to manager offices, Meketa discovers potential problems before they impact performance. In search situations, on-site inspection visits provide information relative to employee morale, reinvestment in facilities and hardware, and organizational efficiency - all crucial areas not reflected in database statistics. On-site visits and working meetings with non-marketing staff are essential for any comprehensive evaluation of a manager, whether a candidate or an existing provider to a fund.

3 In response to restrictions on travel and face-to-face meetings, Meketa has continued to adapt its manager due diligence processes, across private and public markets. We have increased/enhanced the use of videoconferences, expanded our work at the "desktop," and increased/enhanced our use of reference calls and background checks.

In-depth analysis of actual portfolio holdings

A manager's self-described investment style may or may not reflect the actual investment of their portfolios. At Meketa, we have a healthy skepticism of a manager's own product description; we like to "see for ourselves" by submitting portfolio holdings to our proprietary internal analytics. For prospective managers, we perform an exhaustive examination of actual portfolios to ensure that our client invests in a strategy with the essential characteristics required.

Evaluation of manager impact

To understand the implications of adding a prospective manager to the client's roster, we include the prospective portfolio in an aggregate analysis of the fund's existing managers. Using our internal analytics, we can evaluate not just the more straightforward impact of a new manager, but also the subtle changes to a fund's structure that are not apparent under less rigorous review.

Unbiased assessment of capabilities

Meketa is completely independent and objective during every manager search. We receive no fees from managers included in a search.

Meketa utilizes three distinct investment manager databases. Two are third-party databases that include over 3,000 managers and over 10,000 investment products (including mutual funds). These third-party databases are updated at least quarterly and include both performance and data concerning the managers' operations. We also use our proprietary manager database which is updated continually. All three databases are described below.

Internal Proprietary Manager Database – Our internal database consists of approximately 2,000 investment managers and over 3,500 of their respective investment products. This database is updated continuously. Note, however, that we do not rely on a roster of favorite, or preferred, managers. Instead, each search is conducted in an open, competitive manner, consistent with our role as a fiduciary. We do not charge a fee for inclusion nor do we sell information from our database.

Morningstar Direct – Morningstar Direct provides information on a broad range of investments including over 6,000 mutual funds and commingled vehicles, a breadth of index data, economic data, and individual security data.

eVestment Alliance – Meketa has purchased a customized database from eVestment Alliance that includes in-depth profiles of virtually the entire universe of institutional investment managers, plus the range of products they offer. eVestment Alliance represents over 1,100 investment managers and more than 6,100 investment products.

Private Markets Manager Research

Selecting superior investments requires deep resources and a disciplined process. Meketa typically evaluates over 500 institutional quality private markets opportunities per year, and meets with approximately 300 General Partners per year. We constantly assess information received from placement agents and directly from managers. Further, we subscribe to many services that keep us informed of fundraising activity globally. Our deal flow is broad, consistent, and constantly refreshed. We are focused on establishing relationships with top tier managers well in advance of their next fundraise. Our entire investment staff is leveraged to source investment ideas for the Board.

All private market investments are reviewed in the same fashion. The process is systematic, disciplined, and involves multiple steps that are performed in sequence, generally, over a period of 60 to 120 days. If needed, our due diligence can be accelerated to meet short deadlines. Further, we are opportunistic with face to face meetings with key investment professionals, scheduling them at multiple points along our due diligence process and at various locations. Decisions to advance or decline investments at any stage of the process are well documented in the firm's database and are reviewed periodically for process enhancements.

Four Phase Process

Meketa's private markets investment process has four stages: Initial Screening, Phase I Analysis, Phase II Analysis, and Phase III Analysis.

Initial Screening

As a result of our research efforts and the strong network we have developed, Meketa historically has received documentation on the majority of partnerships deemed to be of institutional quality. Most often, we will receive a Private Placement Memorandum (PPM), but other documents or marketing materials may initiate due diligence. Proactively, we seek documents on all attractive investments identified via databases, trade publications, relationships, and conferences. As documents are received, investment terms are entered into our customized Vantage Deal Manager database. Investments are then assigned to team members who will serve as "Sponsors," driving the day-to-day due diligence for the investment opportunity.

Phase I

Phase I analysis determines whether or not an investment has attractive characteristics and if it fits within our clients' strategy and portfolio structure. For each investment, a Sponsor prepares a Phase I Review, a three- to five-page summary report of the opportunity that is automatically assembled from populated fields in the deal flow module of our software system, Vantage Deal Manager. On roughly a weekly basis, Research Team meetings are conducted where the most recently created Phase I Reviews are discussed. A Sponsor leads a discussion of the investment and receives input on its perceived strengths and weaknesses. At this point, a decision is made by the Research Team on whether to pursue a meeting with the manager in our offices. As with all decisions that are part of our process, this will be recorded in our database. If the view is favorable, then the Sponsor conducts a meeting with key investment professionals, and records it with comprehensive notes that are distributed to the Research Team and placed in the database. The investment is then discussed again by the Research Team, which seeks consensus in order to advance it to the next phase.

Phase II

Phase II analysis probes competitive advantages in the market ahead and seeks generally to answer the question: "What is special about this opportunity?" In this phase of due diligence, we seek to know the professionals making the investment, their strategy, and their track record in extreme detail. Analysis continues by sending our comprehensive Due Diligence Questionnaire (DDQ) to the target manager, reviewing the DDQ response, making preliminary reference calls, and scheduling an onsite visit with key professionals. These visits involve four to seven hours of meeting professionals, discussing questions that remain from the DDQ, and touring the facilities. When appropriate, the negotiation of investment terms begins at this stage. The Meketa attendees record their impressions from each meeting in the database where they are viewed by the Research Team.

If favorable information is obtained from the onsite visit, then work is begun on an Investment Memorandum, a fifty- to seventy-page document that explores the opportunity in greater detail. If, for example, a fund has already made investments after a first closing, these early investments are examined. Reference checks are completed. The Sponsor will present the investment to the Research Team for advancement to Phase III, along with a recommended size of investment.

Phase III

Phase III Analysis seeks to ensure that no detail is missed by resolving any remaining issues with the investment. At this stage, the Investment Memorandum is reviewed further and amended with any additional analysis requested by the Research Committee. During Phase III, each sponsor completes reference calls and documents the results. Background checks are performed on key professionals, and legal documents are sent to counsel for review and suggested revisions.

2. **Describe the process used for updating the database and revising your list of top tier managers and/or approved manager lists, including the criteria for the addition of new investment managers into your database**

Every quarter, we send a detailed questionnaire to all of our clients' managers. The purpose of this questionnaire is to determine for each manager if any significant changes have occurred in their firm or among their investment personnel. Further, the questionnaire inquires about regulatory violations, lawsuits, or investigations.

Monthly, we collect client information from a variety of sources including custody banks, investment managers, database providers, and news services. We purchase data from FactSet, Cambridge Associates, Bloomberg, Ibbotson, eVestment Alliance, and Morningstar. We also have access to NCREIF and Investment Metrics, and we maintain an internal database. This data is used to audit, reconcile, and number check our clients' portfolio performance and holdings. At the aggregate level, we then evaluate performance relative to appropriate benchmarks, both industry and peer. The appropriate use of benchmarks is crucial in the analysis and evaluation of both current and prospective investment managers.

Meketa does not rely on a roster of favorite, or preferred, managers. Instead, each manager search is conducted in an open, competitive manner, consistent with our role as a fiduciary. We add new managers that we discover through new client rosters, manager meetings, conferences, and our own research. We do not delete managers from our database.

3. Provide samples of investment manager research/due diligence reports used in evaluating managers.

Please refer to Exhibit K for sample investment manager analyses and due diligence reports.

4. Describe your policy regarding frequency of on-site due diligence visits to managers as well as periodic phone and/or email due diligence.

In the normal course of business, Meketa performs over 1,000 manager meetings per year.

On-site inspection visits provide information relative to employee morale, reinvestment in facilities and hardware, and organizational efficiency - all crucial areas not reflected in database statistics. On-site visits and working meetings with non-marketing staff are essential for any comprehensive evaluation of a manager, whether a candidate or an existing provider to a fund. We generally interview managers who provide services to our clients at least once a year. We also often interview managers who do not presently provide services to our clients.

Meketa's consultants and analysts meet with investment managers under various circumstances. Often, managers will come to our headquarters in Boston or our other offices. Consultants and analysts will also meet with managers at their offices, sometimes with our clients. We also try to meet with as many managers as possible at industry conferences around the country.

Due to the pandemic, at this time we are not conducting on-site, in-person visits. We have adapted our processes to be fully remote and connect face-to-face using video technology. We believe these changes do not sacrifice the depth of research and analysis we conduct, and put smaller and emerging asset managers on a level playing field within Meketa's due diligence processes. We continue to work on behalf of our clients and to evaluate attractive opportunities as they are presented with the same rigor of due diligence we have exercised in the past. Tele- and video- conferences often allow for the expansion of our interviewing teams and access to a greater number of professionals at the target manager. Absent travel logistics, we are able to schedule these conferences generally for longer periods of time, often held over multiple sessions, and covering a wider range of subjects. Meketa continues to develop a deep level of understanding of the risk/reward profiles of private asset offerings and, in turn, a high level of conviction in our recommendations.

5. Provide results for the three most recent searches conducted for public pension clients for US equities, non-US equities, and fixed income. At a minimum, identify the managers provided to the client for consideration and indicate which firm was selected. Identify if the firm's most recent investment manager searches have resulted in the same investment manager/advisor being selected for multiple clients.

In some cases, yes. We are always meeting with managers to identify the strongest managers in specific asset classes. Meketa's manager search process is conducted in an open, competitive manner, consistent with our role as a fiduciary. We develop search criteria and screen our databases for potential managers for each individual client search. We have specific, strict criteria which we use to identify manager candidates for our clients. Among the criteria we use are performance, fees, experience, organizational stability, and trading costs. If there are two clients with similar needs, it is possible that the same manager could be recommended to both. However, we look at each client's needs as unique and do not have a list of managers from which clients must choose. Due to confidentially, we prefer not to release our clients' names for each search. Below are the results of recent manager searches:

US Equities		
Strategy	**Finalists**	**Hired**
Large Cap	Parnassus Investments SSGA RhumbLine Advisers	Parnassus Investments
Small/Micro Cap	Wellington Management Company, LLP Champlain Investment Partners	Wellington Management Company, LLP
Small Cap Growth	Brown Advisory Loomis Sayles	Loomis Sayles

Non-US Equities		
Strategy	**Finalists**	**Hired**
Emerging Market Equity	Driehaus Capital Management, LLC GQG Partners	GQG Partners
International Developed Equity	Artisan Partners JO Hambro Capital Management	JO Hambro Capital Management
Emerging Markets Equity	DFA ABS Investment Management GQG Partners	ABS Investment Management GQG Partners

Fixed Income		
Strategy	**Finalists**	**Hired**
High Yield	Columbia Management Nomura Asset Management	Nomura Asset Management
Emerging Markets Bonds	Payden Wellington Management Company, LLP	Wellington Management Company, LLP
Bank Loans	Pacific Asset Management Sands Capital Shenkman	Shenkman

6. **Provide a sample of an investment manager search report your firm has provided to a client to present recommended managers for consideration in a recently completed investment manager search.**

   Please refer to Exhibit L for a sample investment manager search report.

7. **State your position regarding making specific investment hiring or firing recommendations to your clients.**

   We do not hesitate to make specific recommendations, because we believe that is our job. All recommendation decisions are made by committees, comprised of senior investment professionals at the firm. For each search, a comprehensive manager search document is constructed which details our evaluation process and the key attributes of each finalist, including strengths and weaknesses. All managers are evaluated within the context of a client's overall investment policy.

   We view our relationship with each client as a collaborative partnership. We believe that an open dialogue and transparent approach with clients is paramount to a successful consulting relationship. We welcome client participation and productive discussions. With some of our most successful client relationships, we have become an extension of their Board and staff because of our collaborative and open approach.

G. Other Information

1. **Describe your firm's capabilities in providing educational opportunities for trustees and staff including any investment conferences made available to clients.**

   A significant component of our work as consultants is to provide ongoing education to our clients. We welcome the opportunity to work with clients' one-on- one or in a group forum at a location convenient to them. We consider client education an important part of our job as consultants. All of our education is done on a client by client basis. In this way, each client receives our full attention, and all investment seminars are organized specifically for each client.

   We believe that an informed client is much more likely to make prudent investment decisions and is less likely to shift strategies during a period of temporary market weakness. Consequently, we constantly strive to educate clients on various investment topics. Our preference is to organize off site investment seminars for clients, where we can devote uninterrupted time to investment education. However, we realize that many clients simply do not have the time for offsite investment seminars. For those clients, we ensure that adequate time is spent at regularly scheduled client meetings to discuss investment issues.

   In general, our educational initiatives fall into the following categories.

   Educational Seminars – These seminars can take place in any of our offices or at a location determined by the client. They normally last between one and three days and typically involve formal presentations by our investment professionals on pertinent investment topics, such as alternative investing, international equity investing, or long term asset allocation. The meetings are highly interactive and offer clients an opportunity to ask many questions that they are unable to ask in a typical quarterly meeting environment. These seminars are customized by the client and consultants and vary based upon each client's priorities.

Regular Educational Discussions – For clients that do not have the time to devote to an off-site educational seminar, we regularly infuse educational content into our discussions at client meetings. Usually at investment sub-committee meetings, consultants will spend significant time educating clients on investment topics relevant to imminent decisions. We will never make any recommendation to a client until we have fully explained the risks and potential rewards involved with a specific investment.

Research Papers and Global Macroeconomic Newsletters — We continually provide research papers on relevant investment topics for clients. These research papers augment our educational services and are particularly useful for clients who have limited time to devote to education. We also publish a bi monthly global macroeconomic newsletter and a quarterly economic outlook.

Client Conferences – We also hold a client conference that brings our clients together and allows for informal discussions as well as formal presentations by our principals, consultants, and research staff on timely investment related topics.

Webinars – We host webinars called Investment Perspectives. The Investment Perspectives series features interesting and accessible lunchtime conversations on investment research and the markets with our research team, Global Macroeconomic Investment Committee members, and other respected thought leaders in the industry.

All of our educational work is presented in straightforward terms and is designed to be useful for non-investment professionals as well as sophisticated investors.

2. **Describe your firm's experience and ability to support issues relating to securities lending, custodial services, and commission recapture.**

Very few of our clients utilize securities lending programs. The majority of these clients use the securities lending programs of their custody banks.

At present, given the very low added income potential from securities lending, we do not advocate clients add securities lending services. A number of our clients with securities lending exposure through commingled investments lost money during the 2008-2009 market debacle. In these cases, the manager of the commingled fund engaged in securities lending to enhance returns, and had lending exposure to companies that defaulted.

An important factor in evaluating a provider's capabilities lies with their resources dedicated to the program. Dedicated personnel and technological resources allow a provider to process large volumes of lending activity and service many program participants. A larger pool of participants creates more trading opportunities and more income generation.

Another important factor in our evaluation of a securities lending program provider is in their ability to reduce risk. Meketa requires providers to detail their borrower approval procedures and to define their collateral pool that supports the program. Additionally, we require providers to detail the extent for which they will indemnify a participant from losses as a result of default. Typically, larger institutions with more robust programs will fully indemnify a participant from both borrower and operational default.

Lastly, Meketa evaluates the income potential for a participant, based on the revenue split ratio and annual income estimate provided by the provider. Depending upon the size and nature of the assets that qualify for a program, a participant/provider revenue ratio of 60%/40% is reasonable. For larger amounts of lendable assets a more favorable ratio is warranted. Subsequently, for smaller amounts of lendable assets, a less favorable ratio may be offered. Additionally, we also request that providers clearly detail any additional fees or charges beyond the revenue split.

3. **Describe your process for assisting with a custodial bank search process. Please include details such as criteria used for evaluating and ranking custodians.**

Meketa is knowledgeable and experienced in providing custodian searches. Our staff currently includes several investment professionals who have prior work experience at custody banks. Their experience further familiarizes Meketa with a custodian's apparent and underlying strengths and weaknesses. This experience also gives us a valuable insight in assisting clients in selecting a custodian and in making a transition. Additionally, we continuously monitor and internally rate custodian banks with whom we interact on behalf of our clients.

Meketa constantly evaluates custodial services and fees associated with their services for our current and prospective clients. For our newer clients, our evaluation begins with our Initial Fund Review, which encompasses all aspects of services rendered, including accounting, safekeeping, income collection, online capabilities, disaster response, fees, etc. Upon the completion of our Initial Fund Review, our evaluation of custody services continues throughout the course of the relationship.

Meketa has experience working with most major bank custodians, including the following:

- Amalgamated Bank
- Bank of America
- Bank of New York / Mellon
- Comerica Bank
- JPMorgan Chase
- Northern Trust
- PNC
- State Street Bank & Trust
- Union Bank & Trust
- Union Bank of California

4. **Describe the information available on your website or client portal that would benefit your clients.**

As previously mentioned, we post select research and white papers on our website. Upon request, Meketa offers clients access to their reporting and manager notes and summaries through a portal that we are able to customize in Investment Metrics. In this portal, Meketa can upload any documents that might be of interest to clients. In addition, we have been working with Vantage since 2012 to provide online reporting and document management. We are collaborating with Vantage to expand our capabilities to include a searchable online database where clients can access both public and private markets research related to investment managers within their investment portfolio. We anticipate this capacity to be available in the first half of 2021. Also, clients have direct access to our full staff, including research professionals, in addition to their dedicated consulting team.

5. Provide information regarding the firm's diversity and inclusion policies for both the firm and in evaluation investment managers.

Meketa's Commitment to Diversity and Inclusion

Meketa is committed to promoting diversity within our firm and in the investment community. Research has confirmed that diversity of thought results in better organizational decision making, and Meketa continues to enhance our firm's focus on diversity.

We have made great strides over the last ten years in increasing the diversity of thought in our organization by hiring people from different backgrounds, and we know that we have to do even better going forward. Consistent with our mission to provide clients the highest quality investment opportunities, we believe it is our corporate responsibility to be better by doing better. One of the ways we implement this belief is our long standing commitment to increasing the diversity of our firm.

Through deliberate efforts we have significantly improved the diversity of our firm, which has made our organization stronger each year. We are committed to continuing to increase efforts to build our team with the most talented and diverse talent in order to maintain and enhance our leadership position in the industry.

Currently, 45% of our firm's owners are women or minorities. Over the last three years, over 50% of the firm's new hires were women or minorities. Meketa is a large, diverse, global institutional investment consulting firm, and more than half (58%) of our 209 total employees are women or minorities. We are proud of our success over this time period, and remain committed to further enhancing our firm's diversity initiatives in the future.

Meketa also recently established a Diversity Leadership Committee. The Committee is composed of the firm's leaders and is responsible for meeting with diverse financial industry leaders to identify best practices, and to advocate for those diversity and inclusion best practices at Meketa. Additionally, the Committee will help support the execution of the firm's Diversity Action Plan, which outlines concrete actions Meketa plans to take to further advance the value of diversity, equity, and inclusion in its business, the industry, and the community. Please refer to Appendix A for Meketa's Diversity and Inclusion Action Plan.

The firm has also created an employee resource group, Emerge Develop Grow Engage (EDGE), dedicated to promoting professional growth within the firm by encouraging employee engagement, interaction, and relationship building within and across departments. The group is open to all employees across the organization and is committed to ongoing open and thoughtful dialogue as well as providing training, mentoring, and resources to encourage a culture where all employees feel welcome and valued.

In addition to workplace diversity, we value community involvement and volunteerism. Meketa is keenly focused on the betterment of local communities. Whenever possible, we seek to support local minority, woman, or disabled businesses and organizations in an effort to keep capital in the local economy. Organizations include minority- or woman owned staffing and employment agencies, catering firm, travel agencies, and veteran-owned owned office supplies firm.

In 2008, in order to effectively address this core value of the firm, we established an ESG/Sustainability Committee to aggressively pursue these goals via several initiatives. We promote a culture that encourages employee volunteerism and charitable giving. All of Meketa employees are provided with eight paid volunteer hours per year. In 2019, approximately 60% of our employees volunteered 630 hours to their local communities. Furthermore, we regularly contribute to a variety of charities and sponsor employee-driven fundraisers. Please refer to Appendix B for Meketa's 2019 Corporate Responsibility Report.

Meketa offered Unconscious Bias training for all employees in 2020, which was completed in September 2020. The training, led by the Diversity@Workplace Consulting Group, LLC, consisted of interactive sessions to help increase awareness about unconscious biases which are social stereotypes that individuals form outside their own conscious awareness.

Following this session, the firm's leadership team participated in Leading Inclusively training. The training provided managers with proven tips and tools to manage their team and team members inclusively through change in processes and norms.

We know that having a more diverse firm than many of our peers does not suffice, but that it is critical that we continue to acknowledge areas where we could be stronger in terms of creating an equitable environment for diverse employees, and to continue to support these issues from the top down.

Meketa in committed to provide ongoing training opportunities to help further advance our firm's corporate values of diversity, equity, and inclusion within the workplace and beyond.

Meketa is proud of its efforts of elevating its corporate values of diversity and inclusion. We believe these initiatives improve our business and lead to better investment results for our clients. While we are a small firm, we believe the steps of every organization, and every person, are important. Further, we believe our reputation as a leader in our industry gives us the ability and, more importantly, the responsibility to have a material and beneficial impact. We continue to set corporate goals related to our firm's diversity efforts and are committed to elevating our corporate values of diversity and inclusion even further.

Meketa's Commitment to Diversity and Inclusion

We have considerable experience with and are dedicated to selecting, evaluating, and monitoring diverse and emerging managers in every asset class in order to bring the strongest investment opportunities to our clients. We are always proactive about meeting all managers, and specifically MWBE managers. Our public and private markets research teams include diverse and emerging manager evaluation as part of their individual asset class coverage.

Absent any state or fund regulation that mandates a specific ownership firm status, we develop search criteria and screens to determine the best manager for a specific investment mandate. Our databases include hundreds of small and emerging managers including women-, minority-, and disabled veteran-owned firms. Managers are identified as either emerging, majority-minority owned, or majority women-owned in our proprietary database such that we can screen for certain criteria.

In an effort to continue to expand the diversity of our clients' investment managers, Meketa has established an Emerging and Diverse Manager Committee. This Committee is made up of senior professionals at the firm. The committee meets quarterly to collaborate on strong emerging and diverse investment opportunities, discuss our client's initiatives in this space, and determine how to successfully achieve client goals with respect to identifying and hiring high caliber emerging and diverse managers. The committee discusses upcoming conferences and opportunities to meet new managers that may not currently be included in our database, and collaborates on industry trends we are seeing on the public and private funds we are working with throughout the country. In an effort to expand our efforts in this area, we have conducted over 170 meetings with diverse managers in the last 3 years.

Meketa hosts an Emerging and Diverse Manager event in the fall and spring each year. In 2020, due to the impact of COVID-19, we postponed out spring conference and held a successful two day event in October, which hosted approximately 100 asset managers and significantly expanded our diverse owned asset manager database.

We speak regularly at conferences, attend industry events, and meet with emerging and diverse managers at their offices and ours in an effort to expand our knowledge of the manager universe. Meketa has spoken at a number of events, including NASP, Loop Capital, GCM Grosvenor, NAIC, AAAIM, and Toigo in an effort to enhance the firm's exposure to emerging and diverse managers

Meketa casts a wide net and considers every investment manager for a search. Absent any state or fund regulation that mandates a specific ownership firm status, we develop search criteria and screens to determine the best manager for a specific investment mandate. Our databases include hundreds of minority-, women-, and disabled veteran-owned firms. Overall, we have specific criteria that we use to identify the best manager candidates for our clients. Among the criteria we use are performance, fees, experience, organizational stability, and trading costs. Should a client have a particular need to conduct a search for a minority- and women-owned investment manager, we can narrow the universe to satisfy that search, and then work to identify the best available manager within the reduced universe.

An important focus of Meketa's manager research process is taking the time to identify investment managers that have a high likelihood of meeting and exceeding client expectations in the future. We follow research on diversity closely, and we attend and hold Emerging and Diverse Manager conferences and other educational and information-sharing events. The academic research shows that diversity of thought, which is a direct byproduct of diversity of employee backgrounds, can enhance investment performance. Therefore, Meketa casts a wide net for each investment manager searches. We always include minority- and women-owned managers in these searches, and are actively recommending 24 MWBE firms as our highest conviction managers in various asset classes.

We track the number of diverse and emerging managers that present to our clients as part of manager searches and those managers that are subsequently hired by our clients. We ask that all managers report their firms diversity statistics on annual basis as part of our oversight and due diligence process, and when completing an RFP. This allows us to track both majority and minority owned firms diversity over time to opine on whether or not diversity and inclusion is being taken seriously at their organization and if their efforts are being reflected in the diversity statistics over time.

Our manager research databases includes over 500 emerging and diverse owned investment managers. Currently, we track over 250 minority- or women-owned firms encompassing approximately 1,000 products in our database that are 51% or more owned, operated, and controlled, on a daily basis by a minority or female.

Meketa continues to expand our coverage on MWBE managers. We are always proactive about meeting all managers.

6. **State if your firm has clients covered by California's "County Employees Retirement Law of 1937" (the '37 Act).**

Yes, we currently work with the following four clients covered by California's "County Employees Retirement Law of 1937" (the '37 Act).

- Los Angeles County Employees Retirement Association
- Merced County Employees' Retirement Association
- Orange County Employees Retirement Association
- San Joaquin County Employees' Retirement Association

7. **State if your firm belongs to and/or participates in the California State Association of County Retirement Systems (SACRS), the California Association of Public Retirement Systems (CALAPRS), or some other California public pension plan organization.**

Prior to our merger in 2019, PCA has been affiliated with both SACRS and CALAPRS since 1993. Today the combined organization remains a proud member of both SACRS and CALAPRS.

In addition, the firm actively participates in several public pension plan industry events nationwide. We are currently affiliated with the following organizations that keep us apprised of unique issues and developments affecting public employee retirement systems:

- State Association of County Retirement Systems (SACRS)
- California Association of Public Retirement Systems (CALAPRS)
- National Conference on Public Employee Retirement Systems (NCPERS)
- Michigan Association of Public Employee Retirement Systems (MAPERS)
- Massachusetts Association of Contributory Retirement Systems (MACRS)
- Florida Public Pension Trustees Association (FPPTA)
- Texas Association of Public Employee Retirement Systems (TEXpers)
- National Council on Teacher Retirement (NCTR)
- National Association of State Retirement Administrators (NASRA)
- Illinois Public Pension Fund Association (IPPFA)
- Louisiana Association of Public Employees' Retirement Systems (LAPERS)

H. Standard Contract

1. TCERA's standard contract provisions are attached to this RFP. Such provisions will be incorporated into the final contract. Any requests for exceptions to these provisions must be submitted as part of the response to the RFP.

Please refer to Exhibit P for Meketa's contract exceptions.

I. Fee Proposal

1. Provide a fee proposal for the services described in the RFP in the format provided in the attachment to this RFP. If any services are excluded from your proposal, clearly state what services you will not provide.

Please refer to Exhibit M for our firm's fee proposal.

2. List any additional costs that might be incurred based on the requirements listed in the RFP.

Our General Investment Consulting Services fee includes fund of funds in alternatives and private markets. We would be happy to offer custom private markets and alternatives advisory services independent of the fees quoted. Through these custom programs, Meketa builds diversified portfolios of direct private market and alterative partnerships. We welcome the opportunity to discuss these services and associated fee quotes with you should there be an interest.

We would be pleased to offer the option of investment due diligence only for direct alternative and private markets investments. The fee per due diligence would be $35,000 for each search.

Exhibit A

Biographies of Proposed Team Members

David Sancewich – Principal

Mr. Sancewich is a consultant and has 20 years of industry experience. Mr. Sancewich joined the firm in 2019 as part of the merger between Meketa and Pension Consulting Alliance (PCA). Mr. Sancewich serves a consultant to public funds. His consulting work included asset allocation, risk budgeting, investment policy and guideline development, portfolio and manager attribution analysis, asset class structural reviews, investment manager searches, and performance monitoring. Mr. Sancewich is a member of the firm's Marketable Securities Investment Committee and Marketing Committee.

Prior to joining PCA in 2004, Mr. Sancewich worked at Windermere Investment Consulting as an Analyst where he focused on performance measurement analysis, traditional manager research, and day-to-day support of client specific issues. Prior to that, Mr. Sancewich worked as an Analyst for the Russell Investment Group where he evaluated various US equity products for Russell's manager research group. Mr. Sancewich also advised large institutional clients on manager selection as well as Russell's multi-manager funds business. He also helped work on the structure of Russell's equity, taxable, and alternative investment products.

Mr. Sancewich earned his Bachelor of Arts in Finance and Business Management as well as his Master of Business Administration from Washington State University. Mr. Sancewich has been a speaker at multiple conferences including the State Association of County Retirement Systems (SACRS), National Conference on Public Employee Retirement Systems (NCPERS), Managed Funds Association (MFA) and Institutional Investor.

Eric White, CFA – Principal

Mr. White is a consultant and has 11 years of industry experience. Mr. White joined the firm in 2019 as part of the merger between Meketa and Pension Consulting Alliance (PCA). He works with public pension and defined contribution/529 clients focusing on asset allocation, investment policy development, manager research, and client education. In addition to his consulting relationships, he is a member of the firm's Defined Contribution Committee.

Mr. White earned his Bachelor of Science in Economics from the University of Oregon and his Master of Arts in Economics from the University of San Francisco. He holds the Chartered Financial Analyst designation and a member of the CFA Society of Sacramento.

Paola M. Nealon – Principal

Ms. Nealon joined Meketa in 2017 and has 15 years' experience in the investment industry. A Principal of the firm, Ms. Nealon serves as a consultant for endowment & foundations, public funds, and Taft-Hartley funds. Her consulting work includes investment policy design, asset allocation modeling, fund performance analysis, and asset class education.

Prior to joining the firm, she was an Investment Officer at Oregon State Treasury, which manages investment portfolios for various state agencies. Prior to that, she served as a Portfolio Manager at Northern Trust, where she was responsible for the construction and monitoring of managers within a multi-manager framework. Her responsibility coverage extended to US, International, and Emerging Markets program solutions for Defined Benefit plans as well as Endowments and Foundations. Ms. Nealon began her career at Russell Investments, where she was responsible for evaluating US equity managers, with specific focus on large and midcap value managers with recommendations geared towards advising asset pension consulting clients as well as Russell's fund portfolio managers. Ms. Nealon received her MBA from the Thunderbird School of Global Management at Arizona State University, and a BA from Colgate University, with a major in Spanish and a minor in Economics.

Exhibit B

Form ADV, Part 1 and 2A

FORM ADV

UNIFORM APPLICATION FOR INVESTMENT ADVISER REGISTRATION AND REPORT BY EXEMPT REPORTING ADVISERS

Primary Business Name: MEKETA INVESTMENT GROUP INC **CRD Number: 110601**

Other-Than-Annual Amendment - All Sections **Rev. 03/2020**

WARNING: Complete this form truthfully. False statements or omissions may result in denial of your application, revocation of your registration, or criminal prosecution. You must keep this form updated by filing periodic amendments. See Form ADV General Instruction 4.

Item 1 Identifying Information

Responses to this Item tell us who you are, where you are doing business, and how we can contact you. If you are filing an *umbrella registration*, the information in Item 1 should be provided for the *filing adviser* only. General Instruction 5 provides information to assist you with filing an *umbrella registration*.

A. Your full legal name (if you are a sole proprietor, your last, first, and middle names):
MEKETA INVESTMENT GROUP INC

B. (1) Name under which you primarily conduct your advisory business, if different from Item 1.A.
MEKETA INVESTMENT GROUP INC

List on Section 1.B. of Schedule D any additional names under which you conduct your advisory business.

(2) If you are using this Form ADV to register more than one investment adviser under an *umbrella registration*, check this box ☐

If you check this box, complete a Schedule R for each relying adviser.

C. If this filing is reporting a change in your legal name (Item 1.A.) or primary business name (Item 1.B.(1)), enter the new name and specify whether the name change is of
☐ your legal name or ☐ your primary business name:

D. (1) If you are registered with the SEC as an investment adviser, your SEC file number: **801-14519**

(2) If you report to the SEC as an *exempt reporting adviser*, your SEC file number:

(3) If you have one or more Central Index Key numbers assigned by the SEC ("CIK Numbers"), all of your CIK numbers:

CIK Number
310436

E. (1) If you have a number ("*CRD* Number") assigned by the *FINRA's CRD* system or by the IARD system, your *CRD* number: **110601**

If your firm does not have a CRD number, skip this Item 1.E. Do not provide the CRD number of one of your officers, employees, or affiliates.

(2) If you have additional *CRD* Numbers, your additional *CRD* numbers:

No Information Filed

F. *Principal Office and Place of Business*

(1) Address (do not use a P.O. Box):

Number and Street 1:		Number and Street 2:	
80 UNIVERSITY AVE			
City:	State:	Country:	ZIP+4/Postal Code:
WESTWOOD	Massachusetts	United States	02090

If this address is a private residence, check this box: ☐

List on Section 1.F. of Schedule D any office, other than your principal office and place of business, at which you conduct investment advisory business. If you are applying for registration, or are registered, with one or more state securities authorities, *you must list all of your offices in the state or states to which you are applying for registration or with whom you are registered. If you are applying for SEC registration, if you are registered only with the SEC, or if you are reporting to the SEC as an exempt reporting adviser, list the largest twenty-five offices in terms of numbers of employees as of the end of your most recently completed fiscal year.*

(2) Days of week that you normally conduct business at your *principal office and place of business:*

(•) Monday - Friday ( ) Other:
Normal business hours at this location:
8:30 AM - 5:30 PM

(3) Telephone number at this location:
781.471.3500

(4) Facsimile number at this location, if any:
781.471.3411

(5) What is the total number of offices, other than your *principal office and place of business*, at which you conduct investment advisory business as of the end of your most recently completed fiscal year?
6

G. Mailing address, if different from your *principal office and place of business* address:

Number and Street 1:		Number and Street 2:	
City:	State:	Country:	ZIP+4/Postal Code:

If this address is a private residence, check this box: ☐

H. If you are a sole proprietor, state your full residence address, if different from your *principal office and place of business* address in Item 1.F.:

Number and Street 1:		Number and Street 2:	
City:	State:	Country:	ZIP+4/Postal Code:

	Yes	No
I. Do you have one or more websites or accounts on publicly available social media platforms (including, but not limited to, Twitter, Facebook and LinkedIn)?	(•)	( )

If "yes," list all firm website addresses and the address for each of the firm's accounts on publicly available social media platforms on Section 1.I. of Schedule D*. If a website address serves as a portal through which to access other information you have published on the web, you may list the portal without listing addresses for all of the other information. You may need to list more than one portal address. Do not provide the addresses of websites or accounts on publicly available social media platforms where you do not control the content. Do not provide the individual electronic mail (e-mail) addresses of employees or the addresses of employee accounts on publicly available social media platforms.*

J. Chief Compliance Officer

(1) Provide the name and contact information of your Chief Compliance Officer. If you are an *exempt reporting adviser*, you must provide the contact information for your Chief Compliance Officer, if you have one. If not, you must complete Item 1.K. below.

Name: ALAN SPATRICK		Other titles, if any: MANAGING PRINCIPAL, DIRECTOR	
Telephone number: 781.471.3500		Facsimile number, if any: 781-471-3411	
Number and Street 1: 80 UNIVERSITY AVE		Number and Street 2:	
City: WESTWOOD	State: Massachusetts	Country: United States	ZIP+4/Postal Code: 02090

Electronic mail (e-mail) address, if Chief Compliance Officer has one:
ASPATRICK@MEKETA.COM

(2) If your Chief Compliance Officer is compensated or employed by any *person* other than you, a *related person* or an investment company registered under the Investment Company Act of 1940 that you advise for providing chief compliance officer services to you, provide the *person's* name and IRS Employer Identification Number (if any):

Name:

IRS Employer Identification Number:

K. Additional Regulatory Contact Person: If a person other than the Chief Compliance Officer is authorized to receive information and respond to questions about this Form ADV, you may provide that information here.

Name: ERIC CRESSMAN		Titles: SENIOR VICE PRESIDENT, SENIOR COMPLIANCE OFFICER	
Telephone number: 781.471.3500		Facsimile number, if any: 781.471.3411	
Number and Street 1: 80 UNIVERSITY AVE		Number and Street 2:	
City: WESTWOOD	State: Massachusetts	Country: United States	ZIP+4/Postal Code: 02090

Electronic mail (e-mail) address, if contact person has one:
ECRESSMAN@MEKETA.COM

Yes No

L. Do you maintain some or all of the books and records you are required to keep under Section 204 of the Advisers Act, or similar state law, somewhere other than your *principal office and place of business*? (Yes: selected)

If "yes," complete Section 1.L. of Schedule D.

Yes No

M. Are you registered with a *foreign financial regulatory authority*? (No: selected)

Answer "no" if you are not registered with a foreign financial regulatory authority, even if you have an affiliate that is registered with a foreign financial regulatory authority. If "yes," complete Section 1.M. of Schedule D.

Yes No

N. Are you a public reporting company under Sections 12 or 15(d) of the Securities Exchange Act of 1934? (No: selected)

Yes No

O. Did you have $1 billion or more in assets on the last day of your most recent fiscal year? (No: selected)
If yes, what is the approximate amount of your assets:

- $1 billion to less than $10 billion
- $10 billion to less than $50 billion
- $50 billion or more

For purposes of Item 1.O. only, "assets" refers to your total assets, rather than the assets you manage on behalf of clients. Determine your total assets using the total assets shown on the balance sheet for your most recent fiscal year end.

P. Provide your *Legal Entity Identifier* if you have one:

A *legal entity identifier* is a unique number that companies use to identify each other in the financial marketplace. You may not have a *legal entity identifier*.

SECTION 1.B. Other Business Names

List your other business names and the jurisdictions in which you use them. You must complete a separate Schedule D Section 1.B. for each business name.

Name: MEKETA FIDUCIARY MANAGEMENT, LLC (RELYING ADVISER)

Jurisdictions

☐ AL	☑ IL	☐ NE	☐ SC
☐ AK	☐ IN	☐ NV	☐ SD

☐ AZ	☐ IA	☐ NH	☐ TN
☐ AR	☐ KS	☐ NJ	☐ TX
☑ CA	☐ KY	☐ NM	☐ UT
☐ CO	☐ LA	☑ NY	☐ VT
☐ CT	☐ ME	☐ NC	☐ VI
☐ DE	☐ MD	☐ ND	☐ VA
☐ DC	☑ MA	☐ OH	☐ WA
☑ FL	☐ MI	☐ OK	☐ WV
☐ GA	☐ MN	☑ OR	☐ WI
☐ GU	☐ MS	☐ PA	☐ WY
☐ HI	☐ MO	☐ PR	☐ Other:
☐ ID	☐ MT	☐ RI	

List your other business names and the jurisdictions in which you use them. You must complete a separate Schedule D Section 1.B. for each business name.

Name: MEKETA INVESTMENTS LONDON LTD (RELYING ADVISER)

Jurisdictions

☐ AL	☑ IL	☐ NE	☐ SC
☐ AK	☐ IN	☐ NV	☐ SD
☐ AZ	☐ IA	☐ NH	☐ TN
☑ AR	☐ KS	☐ NJ	☐ TX
☐ CA	☐ KY	☐ NM	☐ UT
☐ CO	☐ LA	☑ NY	☐ VT
☐ CT	☐ ME	☐ NC	☐ VI
☐ DE	☐ MD	☐ ND	☐ VA
☐ DC	☑ MA	☐ OH	☐ WA
☑ FL	☐ MI	☐ OK	☐ WV
☐ GA	☐ MN	☑ OR	☐ WI
☐ GU	☐ MS	☐ PA	☐ WY
☐ HI	☐ MO	☐ PR	☐ Other:
☐ ID	☐ MT	☐ RI	

SECTION 1.F. Other Offices

Complete the following information for each office, other than your *principal office and place of business*, at which you conduct investment advisory business. You must complete a separate Schedule D Section 1.F. for each location. If you are applying for SEC registration, if you are registered only with the SEC, or if you are an *exempt reporting adviser*, list only the largest twenty-five offices (in terms of numbers of *employees*).

Number and Street 1:
5796 ARMADA DRIVE

Number and Street 2:
SUITE 110

City:
CARLSBAD

State:
California

Country:
United States

ZIP+4/Postal Code:
92008-4694

If this address is a private residence, check this box: ☐

Telephone Number:
760.795.3450

Facsimile Number, if any:
760.795.3445

If this office location is also required to be registered with FINRA or a *state securities authority* as a branch office location for a broker-dealer or investment adviser on the Uniform Branch Office Registration Form (Form BR), please provide the *CRD* Branch Number here:

How many *employees* perform investment advisory functions from this office location?
45

Are other business activities conducted at this office location? (check all that apply)

☐ (1) Broker-dealer (registered or unregistered)
☐ (2) Bank (including a separately identifiable department or division of a bank)
☐ (3) Insurance broker or agent
☐ (4) Commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
☐ (5) Registered municipal advisor
☐ (6) Accountant or accounting firm
☐ (7) Lawyer or law firm

Describe any other *investment-related* business activities conducted from this office location:

Complete the following information for each office, other than your *principal office and place of business*, at which you conduct investment advisory business. You must complete a separate Schedule D Section 1.F. for each location. If you are applying for SEC registration, if you are registered only with the SEC, or if you are an *exempt reporting adviser*, list only the largest twenty-five offices (in terms of numbers of *employees*).

Number and Street 1: 5200 BLUE LAGOON DRIVE		Number and Street 2: SUITE 120	
City: MIAMI	State: Florida	Country: United States	ZIP+4/Postal Code: 33126-7037

If this address is a private residence, check this box: ☐

Telephone Number: 305.341.2900	Facsimile Number, if any: 781.471.3411

If this office location is also required to be registered with FINRA or a *state securities authority* as a branch office location for a broker-dealer or investment adviser on the Uniform Branch Office Registration Form (Form BR), please provide the *CRD* Branch Number here:

How many *employees* perform investment advisory functions from this office location?
3

Are other business activities conducted at this office location? (check all that apply)

☐ (1) Broker-dealer (registered or unregistered)
☐ (2) Bank (including a separately identifiable department or division of a bank)
☐ (3) Insurance broker or agent
☐ (4) Commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
☐ (5) Registered municipal advisor
☐ (6) Accountant or accounting firm
☐ (7) Lawyer or law firm

Describe any other *investment-related* business activities conducted from this office location:

Complete the following information for each office, other than your *principal office and place of business*, at which you conduct investment advisory business. You must complete a separate Schedule D Section 1.F. for each location. If you are applying for SEC registration, if you are registered only with the SEC, or if you are an *exempt reporting adviser*, list only the largest twenty-five offices (in terms of numbers of *employees*).

Number and Street 1:
1 EAST WACKER DRIVE

Number and Street 2:
SUITE 1210

City:
CHICAGO

State:
Illinois

Country:
United States

ZIP+4/Postal Code:
60601-1923

If this address is a private residence, check this box: ☐

Telephone Number:
312.474.0900

Facsimile Number, if any:
312.474.0904

If this office location is also required to be registered with FINRA or a *state securities authority* as a branch office location for a broker-dealer or investment adviser on the Uniform Branch Office Registration Form (Form BR), please provide the *CRD* Branch Number here:

How many *employees* perform investment advisory functions from this office location?
9

Are other business activities conducted at this office location? (check all that apply)

☐ (1) Broker-dealer (registered or unregistered)
☐ (2) Bank (including a separately identifiable department or division of a bank)
☐ (3) Insurance broker or agent
☐ (4) Commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
☐ (5) Registered municipal advisor
☐ (6) Accountant or accounting firm
☐ (7) Lawyer or law firm

Describe any other *investment-related* business activities conducted from this office location:

Complete the following information for each office, other than your *principal office and place of business*, at which you conduct investment advisory business. You must complete a separate Schedule D Section 1.F. for each location. If you are applying for SEC registration, if you are registered only with the SEC, or if you are an *exempt reporting adviser*, list only the largest twenty-five offices (in terms of numbers of *employees*).

Number and Street 1:
48 WALL STREET

Number and Street 2:
11TH FLOOR

City:
NEW YORK

State:
New York

Country:
United States

ZIP+4/Postal Code:
10005-2887

If this address is a private residence, check this box: ☐

Telephone Number:
212.918.4783

Facsimile Number, if any:
212.918.4549

If this office location is also required to be registered with FINRA or a *state securities authority* as a branch office location for a broker-dealer or investment adviser on the Uniform Branch Office Registration Form (Form BR), please provide the *CRD* Branch Number here:

How many *employees* perform investment advisory functions from this office location?
4

Are other business activities conducted at this office location? (check all that apply)

☐ (1) Broker-dealer (registered or unregistered)

☐ (2) Bank (including a separately identifiable department or division of a bank)
☐ (3) Insurance broker or agent
☐ (4) Commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
☐ (5) Registered municipal advisor
☐ (6) Accountant or accounting firm
☐ (7) Lawyer or law firm

Describe any other *investment-related* business activities conducted from this office location:

Complete the following information for each office, other than your *principal office and place of business*, at which you conduct investment advisory business. You must complete a separate Schedule D Section 1.F. for each location. If you are applying for SEC registration, if you are registered only with the SEC, or if you are an *exempt reporting adviser*, list only the largest twenty-five offices (in terms of numbers of *employees*).

Number and Street 1:
411 NW PARK AVENUE

Number and Street 2:
SUITE 501

City:	State:	Country:	ZIP+4/Postal Code:
PORTLAND	Oregon	United States	97209-3356

If this address is a private residence, check this box: ☐

Telephone Number:
503.226.1050

Facsimile Number, if any:
503.226.7702

If this office location is also required to be registered with FINRA or a *state securities authority* as a branch office location for a broker-dealer or investment adviser on the Uniform Branch Office Registration Form (Form BR), please provide the *CRD* Branch Number here:

How many *employees* perform investment advisory functions from this office location?
18

Are other business activities conducted at this office location? (check all that apply)
☐ (1) Broker-dealer (registered or unregistered)
☐ (2) Bank (including a separately identifiable department or division of a bank)
☐ (3) Insurance broker or agent
☐ (4) Commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
☐ (5) Registered municipal advisor
☐ (6) Accountant or accounting firm
☐ (7) Lawyer or law firm

Describe any other *investment-related* business activities conducted from this office location:

Complete the following information for each office, other than your *principal office and place of business*, at which you conduct investment advisory business. You must complete a separate Schedule D Section 1.F. for each location. If you are applying for SEC registration, if you are registered only with the SEC, or if you are an *exempt reporting adviser*, list only the largest twenty-five offices (in terms of numbers of *employees*).

Number and Street 1:
25 GREEN STREET

Number and Street 2:

City:	State:	Country:	ZIP+4/Postal Code:
LONDON		United Kingdom	W1K 7AX

If this address is a private residence, check this box: ☐

Telephone Number: 02038416255

Facsimile Number, if any: 1.781.471.3411

If this office location is also required to be registered with FINRA or a *state securities authority* as a branch office location for a broker-dealer or investment adviser on the Uniform Branch Office Registration Form (Form BR), please provide the *CRD* Branch Number here:

How many *employees* perform investment advisory functions from this office location?
3

Are other business activities conducted at this office location? (check all that apply)
☐ (1) Broker-dealer (registered or unregistered)
☐ (2) Bank (including a separately identifiable department or division of a bank)
☐ (3) Insurance broker or agent
☐ (4) Commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
☐ (5) Registered municipal advisor
☐ (6) Accountant or accounting firm
☐ (7) Lawyer or law firm

Describe any other *investment-related* business activities conducted from this office location:

SECTION 1.I. Website Addresses

List your website addresses, including addresses for accounts on publicly available social media platforms where you control the content (including, but not limited to, Twitter, Facebook and/or LinkedIn). You must complete a separate Schedule D Section 1.I. for each website or account on a publicly available social media platform.

Address of Website/Account on Publicly Available Social Media Platform: http://meketa.com

Address of Website/Account on Publicly Available Social Media Platform: https://www.linkedin.com/company/meketa-investment-group/

SECTION 1.L. Location of Books and Records

Complete the following information for each location at which you keep your books and records, other than your *principal office and place of business*. You must complete a separate Schedule D, Section 1.L. for each location.

Name of entity where books and records are kept:
MEKETA INVESTMENT GROUP, INC.

Number and Street 1:		Number and Street 2:	
5796 ARMADA DRIVE		SUITE 110	
City:	State:	Country:	ZIP+4/Postal Code:
CARLSBAD	California	United States	92008-4694

If this address is a private residence, check this box: ☐

Telephone Number: 760.795.3450

Facsimile number, if any: 760.795.3445

This is (check one):

- [x] one of your branch offices or affiliates.
- [ ] a third-party unaffiliated recordkeeper.
- [ ] other.

Briefly describe the books and records kept at this location.
CLIENT FILES FOR CLIENTS SERVICED BY THE CARLSBAD OFFICE.

Name of entity where books and records are kept:
MEKETA INVESTMENT GROUP, INC.

Number and Street 1:		Number and Street 2:	
3077 STEVENSON DRIVE			
City:	State:	Country:	ZIP+4/Postal Code:
PEBBLE BEACH	California	United States	93953-2822

If this address is a private residence, check this box: [x]

Telephone Number:	Facsimile number, if any:
831.747.2825	

This is (check one):

- [ ] one of your branch offices or affiliates.
- [ ] a third-party unaffiliated recordkeeper.
- [x] other.

Briefly describe the books and records kept at this location.
CLIENT FILES

Name of entity where books and records are kept:
MEKETA INVESTMENT GROUP, INC.

Number and Street 1:		Number and Street 2:	
2165 BLACKHEATH LANE			
City:	State:	Country:	ZIP+4/Postal Code:
ROSEVILL	California	United States	95678-1915

If this address is a private residence, check this box: [x]

Telephone Number:	Facsimile number, if any:
916.740.0017	

This is (check one):

- [ ] one of your branch offices or affiliates.
- [ ] a third-party unaffiliated recordkeeper.
- [x] other.

Briefly describe the books and records kept at this location.
CLIENT FILES

Name of entity where books and records are kept:
MEKETA INVESTMENT GROUP, INC.

Number and Street 1:		Number and Street 2:	
8940 CANIS LANE			
City:	State:	Country:	ZIP+4/Postal Code:
SAN DIEGO	California	United States	92126

If this address is a private residence, check this box: ☑

Telephone Number: 858.693.7919
Facsimile number, if any:

This is (check one):

○ one of your branch offices or affiliates.

○ a third-party unaffiliated recordkeeper.

◉ other.

Briefly describe the books and records kept at this location.
CLIENT FILES

Name of entity where books and records are kept:
MEKETA INVESTMENT GROUP, INC.

Number and Street 1:		Number and Street 2:	
4242 AVENIDA OREINTE			
City:	State:	Country:	ZIP+4/Postal Code:
TARZANA	California	United States	91356

If this address is a private residence, check this box: ☑

Telephone Number: 818.508.1223
Facsimile number, if any:

This is (check one):

○ one of your branch offices or affiliates.

○ a third-party unaffiliated recordkeeper.

◉ other.

Briefly describe the books and records kept at this location.
CLIENT FILES

Name of entity where books and records are kept:
MEKETA INVESTMENT GROUP, INC.

Number and Street 1:		Number and Street 2:	
5200 BLUE LAGOON DRIVE		SUITE 120	
City:	State:	Country:	ZIP+4/Postal Code:
MIAMI	Florida	United States	33126-7037

If this address is a private residence, check this box: ☐

Telephone Number:
305.341.2900

Facsimile number, if any:
781.471.3411

This is (check one):

- (●) one of your branch offices or affiliates.
- ( ) a third-party unaffiliated recordkeeper.
- ( ) other.

Briefly describe the books and records kept at this location.
CLIENT FILES FOR CLIENTS SERVICED BY THE MIAMI OFFICE

Name of entity where books and records are kept:
MEKETA INVESTMENT GROUP INC

Number and Street 1:
1 EAST WACKER DRIVE

Number and Street 2:
SUITE 1210

City:
CHICAGO

State:
Illinois

Country:
United States

ZIP+4/Postal Code:
60601-1923

If this address is a private residence, check this box: ☐

Telephone Number:
312.474.0900

Facsimile number, if any:
312.474.0904

This is (check one):

- (●) one of your branch offices or affiliates.
- ( ) a third-party unaffiliated recordkeeper.
- ( ) other.

Briefly describe the books and records kept at this location.
CLIENT FILES FOR CLIENTS SERVICED BY THE CHICAGO OFFICE

Name of entity where books and records are kept:
IRON MOUNTAIN INC.

Number and Street 1:
175 BEARFOOT ROAD

Number and Street 2:

City:
NORTHBORO

State:
Massachusetts

Country:
United States

ZIP+4/Postal Code:
01532-1519

If this address is a private residence, check this box: ☐

Telephone Number:
800-935-6966

Facsimile number, if any:

This is (check one):

- ( ) one of your branch offices or affiliates.
- (●) a third-party unaffiliated recordkeeper.
- ( ) other.

Briefly describe the books and records kept at this location.
ARCHIVED RECORDS.

Name of entity where books and records are kept:
MEKETA INVESTMENT GROUP, INC.

Number and Street 1: 48 WALL STREET		Number and Street 2: 11TH FLOOR	
City: NEW YORK	State: New York	Country: United States	ZIP+4/Postal Code: 10005-2887

If this address is a private residence, check this box: ☐

Telephone Number: 212.918.4783
Facsimile number, if any: 212.918.4549

This is (check one):
- (●) one of your branch offices or affiliates.
- ( ) a third-party unaffiliated recordkeeper.
- ( ) other.

Briefly describe the books and records kept at this location.
CLIENT FILES

Name of entity where books and records are kept:
U STORE MINI STORAGE

Number and Street 1: 2860 NW 29TH		Number and Street 2:	
City: PORTLAND	State: Oregon	Country: United States	ZIP+4/Postal Code: 97210-1704

If this address is a private residence, check this box: ☐

Telephone Number: (503) 227-5634
Facsimile number, if any:

This is (check one):
- ( ) one of your branch offices or affiliates.
- (●) a third-party unaffiliated recordkeeper.
- ( ) other.

Briefly describe the books and records kept at this location.
CLIENT FILES

Name of entity where books and records are kept:
MEKETA INVESTMENT GROUP, INC.

Number and Street 1: 411 NW PARK AVENUE
Number and Street 2: SUITE 401

City: PORTLAND	State: Oregon	Country: United States	ZIP+4/Postal Code: 97209-3356

If this address is a private residence, check this box: ☐

Telephone Number: 503.226.1050	Facsimile number, if any: 503.226.7702

This is (check one):

◉ one of your branch offices or affiliates.

○ a third-party unaffiliated recordkeeper.

○ other.

Briefly describe the books and records kept at this location.
CLIENT FILES

Name of entity where books and records are kept:
MEKETA INVESTMENTS LONDON LTD

Number and Street 1: 25 GREEN STREET	Number and Street 2:

City: LONDON	State:	Country: United Kingdom	ZIP+4/Postal Code: W1K 7AX

If this address is a private residence, check this box: ☐

Telephone Number: 442038416255	Facsimile number, if any: 1.781.471.3411

This is (check one):

◉ one of your branch offices or affiliates.

○ a third-party unaffiliated recordkeeper.

○ other.

Briefly describe the books and records kept at this location.
CERTAIN RESEARCH DATA IN SUPPORT OF MEKETA INVESTMENT GROUP'S BUSINESS.

SECTION 1.M. Registration with Foreign Financial Regulatory Authorities

No Information Filed

Item 2 SEC Registration/Reporting

Responses to this Item help us (and you) determine whether you are eligible to register with the SEC. Complete this Item 2.A. only if you are applying for SEC registration or submitting an *annual updating amendment* to your SEC registration. If you are filing an *umbrella registration*, the information in Item 2 should be provided for the *filing adviser* only.

A. To register (or remain registered) with the SEC, you must check **at least one** of the Items 2.A.(1) through 2.A.(12), below. If you are submitting an *annual updating amendment* to your SEC registration and you are no longer eligible to register with the SEC, check Item 2.A.(13). Part 1A Instruction 2 provides information to help you determine whether you may affirmatively respond to each of these items.

You (the adviser):

☑ (1) are a **large advisory firm** that either:

(a) has regulatory assets under management of $100 million (in U.S. dollars) or more; or

(b) has regulatory assets under management of $90 million (in U.S. dollars) or more at the time of filing its most recent *annual updating amendment* and is registered with the SEC;

☐ (2) are a **mid-sized advisory firm** that has regulatory assets under management of $25 million (in U.S. dollars) or more but less than $100 million (in U.S. dollars) and you are either:

(a) not required to be registered as an adviser with the *state securities authority* of the state where you maintain your *principal office and place of business*; or

(b) not subject to examination by the *state securities authority* of the state where you maintain your *principal office and place of business*;

*Click **HERE** for a list of states in which an investment adviser, if registered, would not be subject to examination by the state securities authority.*

(3) Reserved

☐ (4) have your *principal office and place of business* **outside the United States**;

☐ (5) are **an investment adviser (or subadviser) to an investment company** registered under the Investment Company Act of 1940;

☐ (6) are **an investment adviser to a company which has elected to be a business development company** pursuant to section 54 of the Investment Company Act of 1940 and has not withdrawn the election, and you have at least $25 million of regulatory assets under management;

☑ (7) are a **pension consultant** with respect to assets of plans having an aggregate value of at least $200,000,000 that qualifies for the exemption in rule 203A-2(a);

☐ (8) are a **related adviser** under rule 203A-2(b) that *controls*, is *controlled* by, or is under common *control* with, an investment adviser that is registered with the SEC, and your *principal office and place of business* is the same as the registered adviser;

If you check this box, complete Section 2.A.(8) of Schedule D.

☐ (9) are an **adviser** relying on rule 203A-2(c) because you **expect to be eligible for SEC registration within 120 days;**

If you check this box, complete Section 2.A.(9) of Schedule D.

☐ (10) are a **multi-state adviser** that is required to register in 15 or more states and is relying on rule 203A-2(d);

If you check this box, complete Section 2.A.(10) of Schedule D.

☐ (11) are an **Internet adviser** relying on rule 203A-2(e);

☐ (12) have **received an SEC order** exempting you from the prohibition against registration with the SEC;

If you check this box, complete Section 2.A.(12) of Schedule D.

☐ (13) are **no longer eligible** to remain registered with the SEC.

State Securities Authority Notice Filings* and State Reporting by *Exempt Reporting Advisers

C. Under state laws, SEC-registered advisers may be required to provide to *state securities authorities* a copy of the Form ADV and any amendments they file with the SEC. These are called *notice filings*. In addition, *exempt reporting advisers* may be required to provide *state securities authorities* with a copy of reports and any amendments they file with the SEC. If this is an initial application or report, check the box(es) next to the state(s) that you would like to receive notice of this and all subsequent filings or reports you submit to the SEC. If this is an amendment to direct your *notice filings* or reports to additional state(s), check the box(es) next to the state(s) that you would like to receive notice of this and all subsequent filings or reports you submit to the SEC. If this is an amendment to your registration to stop your *notice filings* or reports from going to state(s) that currently receive them, uncheck the box(es) next to those state(s).

Jurisdictions

☐ AL	☑ IL	☐ NE	☐ SC
☐ AK	☐ IN	☐ NV	☐ SD
☐ AZ	☐ IA	☐ NH	☐ TN
☐ AR	☐ KS	☐ NJ	☐ TX
☑ CA	☐ KY	☐ NM	☐ UT
☐ CO	☐ LA	☑ NY	☐ VT
☐ CT	☐ ME	☐ NC	☐ VI
☐ DE	☐ MD	☐ ND	☐ VA
☐ DC	☑ MA	☐ OH	☐ WA
☑ FL	☐ MI	☐ OK	☐ WV
☐ GA	☐ MN	☑ OR	☐ WI
☐ GU	☐ MS	☐ PA	☐ WY
☐ HI	☐ MO	☐ PR	
☐ ID	☐ MT	☐ RI	

If you are amending your registration to stop your notice filings or reports from going to a state that currently receives them and you do not want to pay that state's notice filing or report filing fee for the coming year, your amendment must be filed before the end of the year (December 31).

SECTION 2.A.(8) Related Adviser

If you are relying on the exemption in rule 203A-2(b) from the prohibition on registration because you *control*, are *controlled* by, or are under common *control* with an investment adviser that is registered with the SEC and your *principal office and place of business* is the same as that of the registered adviser, provide the following information:

Name of Registered Investment Adviser

CRD Number of Registered Investment Adviser

SEC Number of Registered Investment Adviser
-

SECTION 2.A.(9) Investment Adviser Expecting to be Eligible for Commission Registration within 120 Days

If you are relying on rule 203A-2(c), the exemption from the prohibition on registration available to an adviser that expects to be eligible for SEC registration within 120 days, you are required to make certain representations about your eligibility for SEC registration. By checking the appropriate boxes, you will be deemed to have made the required representations. You must make both of these representations:

☐ I am not registered or required to be registered with the SEC or a *state securities authority* and I have a reasonable expectation that I will be eligible to register with the SEC within 120 days after the date my registration with the SEC becomes effective.

☐ I undertake to withdraw from SEC registration if, on the 120th day after my registration with the SEC becomes effective, I would be prohibited by Section 203A(a) of the Advisers Act from registering with the SEC.

SECTION 2.A.(10) Multi-State Adviser

If you are relying on rule 203A-2(d), the multi-state adviser exemption from the prohibition on registration, you are required to make certain representations about your eligibility for SEC registration. By checking the appropriate boxes, you will be deemed to have made the required representations.

If you are applying for registration as an investment adviser with the SEC, you must make both of these representations:

☐ I have reviewed the applicable state and federal laws and have concluded that I am required by the laws of 15 or more states to register as an investment adviser with the *state securities authorities* in those states.

☐ I undertake to withdraw from SEC registration if I file an amendment to this registration indicating that I would be required by the laws of fewer than 15 states to register as an investment adviser with the *state securities authorities* of those states.

If you are submitting your *annual updating amendment*, you must make this representation:

☐ Within 90 days prior to the date of filing this amendment, I have reviewed the applicable state and federal laws and have concluded that I am required by the laws of at least 15 states to register as an investment adviser with the *state securities authorities* in those states.

SECTION 2.A.(12) SEC Exemptive *Order*

If you are relying upon an SEC *order* exempting you from the prohibition on registration, provide the following information:

Application Number:

803-

Date of *order*:

Item 3 Form of Organization

If you are filing an *umbrella registration*, the information in Item 3 should be provided for the *filing adviser* only.

A. How are you organized?

- (•) Corporation
- ( ) Sole Proprietorship
- ( ) Limited Liability Partnership (LLP)
- ( ) Partnership
- ( ) Limited Liability Company (LLC)
- ( ) Limited Partnership (LP)
- ( ) Other (specify):

If you are changing your response to this Item, see Part 1A Instruction 4.

B. In what month does your fiscal year end each year?
DECEMBER

C. Under the laws of what state or country are you organized?

State	Country
Massachusetts	United States

If you are a partnership, provide the name of the state or country under whose laws your partnership was formed. If you are a sole proprietor, provide the name of the state or country where you reside.

If you are changing your response to this Item, see Part 1A Instruction 4.

Item 4 Successions

		Yes	No
A.	Are you, at the time of this filing, succeeding to the business of a registered investment adviser, including, for example, a change of your structure or legal status (e.g., form of organization or state of incorporation)?	○	◉

If "yes", complete Item 4.B. and Section 4 of Schedule D.

B. Date of Succession: (MM/DD/YYYY)

If you have already reported this succession on a previous Form ADV filing, do not report the succession again. Instead, check "No." See Part 1A Instruction 4.

SECTION 4 Successions

No Information Filed

Item 5 Information About Your Advisory Business - Employees, Clients, and Compensation

Responses to this Item help us understand your business, assist us in preparing for on-site examinations, and provide us with data we use when making regulatory policy. Part 1A Instruction 5.a. provides additional guidance to newly formed advisers for completing this Item 5.

Employees

If you are organized as a sole proprietorship, include yourself as an employee in your responses to Item 5.A. and Items 5.B.(1), (2), (3), (4), and (5). If an employee performs more than one function, you should count that employee in each of your responses to Items 5.B. (1), (2), (3), (4), and (5).

A. Approximately how many *employees* do you have? Include full- and part-time *employees* but do not include any clerical workers.

204

B. (1) Approximately how many of the *employees* reported in 5.A. perform investment advisory functions (including research)?

137

(2) Approximately how many of the *employees* reported in 5.A. are registered representatives of a broker-dealer?

0

(3) Approximately how many of the *employees* reported in 5.A. are registered with one or more *state securities authorities* as *investment adviser representatives*?

7

(4) Approximately how many of the *employees* reported in 5.A. are registered with one or more *state securities authorities* as *investment adviser representatives* for an investment adviser other than you?

0

(5) Approximately how many of the *employees* reported in 5.A. are licensed agents of an insurance company or agency?

0

(6) Approximately how many firms or other *persons* solicit advisory *clients* on your behalf?

0

In your response to Item 5.B.(6), do not count any of your employees and count a firm only once – do not count each of the firm's employees that solicit on your behalf.

Clients

In your responses to Items 5.C. and 5.D. do not include as "clients" the investors in a private fund you advise, unless you have a separate advisory relationship with those investors.

C. (1) To approximately how many *clients* for whom you do not have regulatory assets under management did you provide investment advisory services during your most recently completed fiscal year?

300

(2) Approximately what percentage of your *clients* are non-*United States persons*?

0%

D. *For purposes of this Item 5.D., the category "individuals" includes trusts, estates, and 401(k) plans and IRAs of individuals and their family members, but does not include businesses organized as sole proprietorships.*
The category "business development companies" consists of companies that have made an election pursuant to section 54 of the Investment Company Act of 1940. Unless you provide advisory services pursuant to an investment advisory contract to an investment company registered under the Investment Company Act of 1940, do not answer (d)(1) or (d)(3) below.

Indicate the approximate number of your *clients* and amount of your total regulatory assets under management (reported in Item 5.F. below) attributable to each of the following type of *client*. If you have fewer than 5 *clients* in a particular category (other than (d), (e), and (f)) you may check Item 5.D.(2) rather than respond to Item 5.D.(1).

The aggregate amount of regulatory assets under management reported in Item 5.D.(3) should equal the total amount of regulatory assets under management reported in Item 5.F.(2)(c) below.

If a *client* fits into more than one category, select one category that most accurately represents the *client* to avoid double counting *clients* and assets. If you advise a registered investment company, business development company, or pooled investment vehicle, report those assets in categories (d), (e), and (f) as applicable.

Type of *Client*	**(1) Number of *Client(s)***	**(2) Fewer than 5 *Clients***	**(3) Amount of Regulatory Assets under Management**
(a) Individuals (other than *high net worth individuals*)	0	☐	$ 0
(b) *High net worth individuals*	0	☐	$ 0
(c) Banking or thrift institutions	0	☐	$ 0
(d) Investment companies	0		$ 0
(e) Business development companies	0		$ 0
(f) Pooled investment vehicles (other than investment companies and business development companies)	0		$ 0
(g) Pension and profit sharing plans (but not the plan participants or government pension plans)	195	☐	$ 18,106,569,000
(h) Charitable organizations	28	☐	$ 1,315,100,000
(i) State or municipal *government entities* (including government pension plans)	107	☐	$ 279,336,000
(j) Other investment advisers		☑	$ 0
(k) Insurance companies	0	☐	$ 0
(l) Sovereign wealth funds and foreign official institutions	0	☐	$ 0
(m) Corporations or other businesses not listed above	8	☐	$ 0
(n) Other: NON-US ENTITIES		☑	$ 16,116,000

Compensation Arrangements

E. You are compensated for your investment advisory services by (check all that apply):

☑ (1) A percentage of assets under your management
☑ (2) Hourly charges
☐ (3) Subscription fees (for a newsletter or periodical)
☑ (4) Fixed fees (other than subscription fees)
☐ (5) Commissions
☐ (6) *Performance-based fees*
☐ (7) Other (specify):

Item 5 Information About Your Advisory Business - Regulatory Assets Under Management

Regulatory Assets Under Management

Yes No

F. (1) Do you provide continuous and regular supervisory or management services to securities portfolios? ◉ Yes ○ No

(2) If yes, what is the amount of your regulatory assets under management and total number of accounts?

		U.S. Dollar Amount		Total Number of Accounts
Discretionary:	(a)	$ 18,880,025,000	(d)	54
Non-Discretionary:	(b)	$ 837,096,000	(e)	4
Total:	(c)	$ 19,717,121,000	(f)	58

Part 1A Instruction 5.b. explains how to calculate your regulatory assets under management. You must follow these instructions carefully when completing this Item.

(3) What is the approximate amount of your total regulatory assets under management (reported in Item 5.F.(2)(c) above) attributable to *clients* who are non-*United States persons*?

$ 16,116,000

Item 5 Information About Your Advisory Business - Advisory Activities

Advisory Activities

G. What type(s) of advisory services do you provide? Check all that apply.

- [ ] (1) Financial planning services
- [ ] (2) Portfolio management for individuals and/or small businesses
- [ ] (3) Portfolio management for investment companies (as well as "business development companies" that have made an election pursuant to section 54 of the Investment Company Act of 1940)
- [ ] (4) Portfolio management for pooled investment vehicles (other than investment companies)
- [x] (5) Portfolio management for businesses (other than small businesses) or institutional *clients* (other than registered investment companies and other pooled investment vehicles)
- [x] (6) Pension consulting services
- [x] (7) Selection of other advisers (including *private fund* managers)
- [ ] (8) Publication of periodicals or newsletters
- [ ] (9) Security ratings or pricing services
- [ ] (10) Market timing services
- [ ] (11) Educational seminars/workshops
- [ ] (12) Other(specify):

Do not check Item 5.G.(3) unless you provide advisory services pursuant to an investment advisory contract to an investment company registered under the Investment Company Act of 1940, including as a subadviser. If you check Item 5.G.(3), report the 811 or 814 number of the investment company or investment companies to which you provide advice in Section 5.G.(3) of Schedule D.

H. If you provide financial planning services, to how many *clients* did you provide these services during your last fiscal year?

- ○ 0
- ○ 1 - 10
- ○ 11 - 25
- ○ 26 - 50
- ○ 51 - 100
- ○ 101 - 250
- ○ 251 - 500
- ○ More than 500

If more than 500, how many?
(round to the nearest 500)

In your responses to this Item 5.H., do not include as "clients" the investors in a private fund you advise, unless you have a separate advisory relationship with those investors.

	Yes	No
I. (1) Do you participate in a *wrap fee program*?	○	◉

(2) If you participate in a *wrap fee program*, what is the amount of your regulatory assets under management attributable to acting as:

(a) *sponsor* to a *wrap fee program*
$
(b) portfolio manager for a *wrap fee program*?
$
(c) *sponsor* to and portfolio manager for the same *wrap fee program*?
$

If you report an amount in Item 5.I.(2)(c), do not report that amount in Item 5.I.(2)(a) or Item 5.I.(2)(b).

If you are a portfolio manager for a wrap fee program, list the names of the programs, their sponsors and related information in Section 5.I.(2) of Schedule D.

If your involvement in a wrap fee program is limited to recommending wrap fee programs to your clients, or you advise a mutual fund that is offered through a wrap fee program, do not check Item 5.I.(1) or enter any amounts in response to Item 5.I.(2).

	Yes	No
J. (1) In response to Item 4.B. of Part 2A of Form ADV, do you indicate that you provide investment advice only with respect to limited types of investments?	○	◉
(2) Do you report *client* assets in Item 4.E. of Part 2A that are computed using a different method than the method used to compute your regulatory assets under management?	○	◉

K. Separately Managed Account *Clients*

	Yes	No
(1) Do you have regulatory assets under management attributable to *clients* other than those listed in Item 5.D.(3)(d)-(f) (separately managed account *clients*)?	◉	○

If yes, complete Section 5.K.(1) of Schedule D.

	Yes	No
(2) Do you engage in borrowing transactions on behalf of any of the separately managed account *clients* that you advise?	○	◉

If yes, complete Section 5.K.(2) of Schedule D.

	Yes	No
(3) Do you engage in derivative transactions on behalf of any of the separately managed account *clients* that you advise?	○	◉

If yes, complete Section 5.K.(2) of Schedule D.

	Yes	No
(4) After subtracting the amounts in Item 5.D.(3)(d)-(f) above from your total regulatory assets under management, does any custodian hold ten percent or more of this remaining amount of regulatory assets under management?	◉	○

If yes, complete Section 5.K.(3) of Schedule D for each custodian.

SECTION 5.G.(3) Advisers to Registered Investment Companies and Business Development Companies

No Information Filed

SECTION 5.I.(2) *Wrap Fee Programs*

No Information Filed

SECTION 5.K.(1) Separately Managed Accounts

After subtracting the amounts reported in Item 5.D.(3)(d)-(f) from your total regulatory assets under management, indicate the approximate percentage of this remaining amount attributable to each of the following categories of assets. If the remaining amount is at least $10 billion in regulatory assets under management, complete Question (a). If the remaining amount is less than $10 billion in regulatory assets under management, complete Question (b).

Any regulatory assets under management reported in Item 5.D.(3)(d), (e), and (f) should not be reported below.

If you are a subadviser to a separately managed account, you should only provide information with respect to the portion of the account that you subadvise.

End of year refers to the date used to calculate your regulatory assets under management for purposes of your *annual updating amendment* . Mid-year is the date six months before the end of year date. Each column should add up to 100% and numbers should be rounded to the nearest percent.

Investments in derivatives, registered investment companies, business development companies, and pooled investment vehicles should be reported in those categories. Do not report those investments based on related or underlying portfolio assets. Cash equivalents include bank deposits, certificates of deposit, bankers' acceptances and similar bank instruments.

Some assets could be classified into more than one category or require discretion about which category applies. You may use your own internal methodologies and the conventions of your service providers in determining how to categorize assets, so long as the methodologies or conventions are consistently applied and consistent with information you report internally and to current and prospective clients. However, you should not double count assets, and your responses must be consistent with any instructions or other guidance relating to this Section.

(a)

Asset Type	Mid-year	End of year
(i) Exchange-Traded Equity Securities	3 %	3 %
(ii) Non Exchange-Traded Equity Securities	0 %	0 %

(iii)	U.S. Government/Agency Bonds	13 %	10 %
(iv)	U.S. State and Local Bonds	0 %	0 %
(v)	*Sovereign Bonds*	0 %	0 %
(vi)	Investment Grade Corporate Bonds	2 %	5 %
(vii)	Non-Investment Grade Corporate Bonds	1 %	1 %
(viii)	Derivatives	0 %	0 %
(ix)	Securities Issued by Registered Investment Companies or Business Development Companies	15 %	16 %
(x)	Securities Issued by Pooled Investment Vehicles (other than Registered Investment Companies or Business Development Companies)	55 %	58 %
(xi)	Cash and Cash Equivalents	1 %	2 %
(xii)	Other	9 %	5 %

Generally describe any assets included in "Other"
HEDGE FUNDS

(b)

Asset Type		**End of year**
(i)	Exchange-Traded Equity Securities	%
(ii)	Non Exchange-Traded Equity Securities	%
(iii)	U.S. Government/Agency Bonds	%
(iv)	U.S. State and Local Bonds	%
(v)	*Sovereign Bonds*	%
(vi)	Investment Grade Corporate Bonds	%
(vii)	Non-Investment Grade Corporate Bonds	%
(viii)	Derivatives	%
(ix)	Securities Issued by Registered Investment Companies or Business Development Companies	%
(x)	Securities Issued by Pooled Investment Vehicles (other than Registered Investment Companies or Business Development Companies)	%
(xi)	Cash and Cash Equivalents	%
(xii)	Other	%

Generally describe any assets included in "Other"

SECTION 5.K.(2) Separately Managed Accounts - Use of *Borrowings*and Derivatives

☑ **No information is required to be reported in this Section 5.K.(2) per the instructions of this Section 5.K.(2)**

If your regulatory assets under management attributable to separately managed accounts are at least $10 billion, you should complete Question (a). If your regulatory assets under management attributable to separately managed accounts are at least $500 million but less than $10 billion, you should complete Question (b).

(a) In the table below, provide the following information regarding the separately managed accounts you advise. If you are a subadviser to a separately managed account, you should only provide information with respect to the portion of the account that you subadvise. End of year refers to the date used to calculate your regulatory assets under management for purposes of your *annual updating amendment*. Mid-year is the date six months before the end of year date.

In column 1, indicate the regulatory assets under management attributable to separately managed accounts associated with each level of gross notional exposure. For purposes of this table, the gross notional exposure of an account is the percentage obtained by dividing (i) the sum of (a) the dollar amount of any *borrowings* and (b) the *gross notional value* of all derivatives, by (ii) the regulatory assets under management of the account.

In column 2, provide the dollar amount of *borrowings* for the accounts included in column 1.

In column 3, provide aggregate *gross notional value* of derivatives divided by the aggregate regulatory assets under management of the accounts included in column 1 with respect to each category of derivatives specified in 3(a) through (f).

You may, but are not required to, complete the table with respect to any separately managed account with regulatory assets under management of less than $10,000,000.

Any regulatory assets under management reported in Item 5.D.(3)(d), (e), and (f) should not be reported below.

(i) Mid-Year

Gross Notional Exposure	**(1) Regulatory Assets Under Management**	**(2) *Borrowings***	**(3) Derivative Exposures**					
			(a) *Interest Rate Derivative*	**(b) *Foreign Exchange Derivative***	**(c) *Credit Derivative***	**(d) *Equity Derivative***	**(e) *Commodity Derivative***	**(f) *Other Derivative***
Less than 10%	$	$	%	%	%	%	%	%
10-149%	$	$	%	%	%	%	%	%
150% or more	$	$	%	%	%	%	%	%

Optional: Use the space below to provide a narrative description of the strategies and/or manner in which *borrowings* and derivatives are used in the management of the separately managed accounts that you advise.

(ii) End of Year

Gross Notional Exposure	**(1) Regulatory Assets Under Management**	**(2) *Borrowings***	**(3) Derivative Exposures**					
			(a) *Interest Rate Derivative*	**(b) *Foreign Exchange Derivative***	**(c) *Credit Derivative***	**(d) *Equity Derivative***	**(e) *Commodity Derivative***	**(f) *Other Derivative***
Less than 10%	$	$	%	%	%	%	%	%
10-149%	$	$	%	%	%	%	%	%
150% or more	$	$	%	%	%	%	%	%

Optional: Use the space below to provide a narrative description of the strategies and/or manner in which *borrowings* and derivatives are used in the management of the separately managed accounts that you advise.

(b) In the table below, provide the following information regarding the separately managed accounts you advise as of the date used to calculate your regulatory assets under management for purposes of your *annual updating amendment*. If you are a subadviser to a separately managed account, you should only provide information with respect to the portion of the account that you subadvise.

In column 1, indicate the regulatory assets under management attributable to separately managed accounts associated with each level of gross notional exposure. For purposes of this table, the gross notional exposure of an account is the percentage obtained by dividing (i) the sum of (a) the dollar amount of any *borrowings* and (b) the *gross notional value* of all derivatives, by (ii) the regulatory assets under management of the account.

In column 2, provide the dollar amount of *borrowings* for the accounts included in column 1.

You may, but are not required to, complete the table with respect to any separately managed accounts with regulatory assets under management of less than $10,000,000.

Any regulatory assets under management reported in Item 5.D.(3)(d), (e), and (f) should not be reported below.

Gross Notional Exposure	(1) Regulatory Assets Under Management	(2) *Borrowings*
Less than 10%	$	$
10-149%	$	$
150% or more	$	$

Optional: Use the space below to provide a narrative description of the strategies and/or manner in which *borrowings* and derivatives are used in the management of the separately managed accounts that you advise.

SECTION 5.K.(3) Custodians for Separately Managed Accounts

Complete a separate Schedule D Section 5.K.(3) for each custodian that holds ten percent or more of your aggregate separately managed account regulatory assets under management.

(a) Legal name of custodian:
US BANK N.A.

(b) Primary business name of custodian:
US BANK

(c) The location(s) of the custodian's office(s) responsible for *custody* of the assets :

City:	State:	Country:
LOS ANGELES	California	United States

	Yes	No
(d) Is the custodian a *related person* of your firm?	○	◉

(e) If the custodian is a broker-dealer, provide its SEC registration number (if any)
-

(f) If the custodian is not a broker-dealer, or is a broker-dealer but does not have an SEC registration number, provide its *legal entity identifier* (if any)

(g) What amount of your regulatory assets under management attributable to separately managed accounts is held at the custodian?
$ 4,555,089,321

(a) Legal name of custodian:
STATE STREET BANK AND TRUST COMPANY

(b) Primary business name of custodian:
STATE STREET GLOBAL SERVICES

(c) The location(s) of the custodian's office(s) responsible for *custody* of the assets :

City:	State:	Country:
QUINCY	Massachusetts	United States

	Yes	No
(d) Is the custodian a *related person* of your firm?	○	◉

(e) If the custodian is a broker-dealer, provide its SEC registration number (if any)
-

(f) If the custodian is not a broker-dealer, or is a broker-dealer but does not have an SEC registration number, provide its *legal entity identifier* (if any)

(g) What amount of your regulatory assets under management attributable to separately managed accounts is held at the custodian?
$ 5,908,497,781

(a) Legal name of custodian:

THE NORTHERN TRUST COMPANY

(b) Primary business name of custodian:

NORTHERN TRUST

(c) The location(s) of the custodian's office(s) responsible for *custody* of the assets :

City:	State:	Country:
CHICAGO	Illinois	United States

	Yes	No
(d) Is the custodian a *related person* of your firm?	○	◉

(e) If the custodian is a broker-dealer, provide its SEC registration number (if any)

-

(f) If the custodian is not a broker-dealer, or is a broker-dealer but does not have an SEC registration number, provide its *legal entity identifier* (if any)

(g) What amount of your regulatory assets under management attributable to separately managed accounts is held at the custodian?

$ 5,045,550,314

Item 6 Other Business Activities

In this Item, we request information about your firm's other business activities.

A. You are actively engaged in business as a (check all that apply):

- [ ] (1) broker-dealer (registered or unregistered)
- [ ] (2) registered representative of a broker-dealer
- [ ] (3) commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
- [ ] (4) futures commission merchant
- [ ] (5) real estate broker, dealer, or agent
- [ ] (6) insurance broker or agent
- [ ] (7) bank (including a separately identifiable department or division of a bank)
- [ ] (8) trust company
- [x] (9) registered municipal advisor
- [ ] (10) registered security-based swap dealer
- [ ] (11) major security-based swap participant
- [ ] (12) accountant or accounting firm
- [ ] (13) lawyer or law firm
- [ ] (14) other financial product salesperson (specify):

If you engage in other business using a name that is different from the names reported in Items 1.A. or 1.B.(1), complete Section 6.A. of Schedule D.

		Yes	No
B. (1)	Are you actively engaged in any other business not listed in Item 6.A. (other than giving investment advice)?	○	●
(2)	If yes, is this other business your primary business?	○	○

If "yes," describe this other business on Section 6.B.(2) of Schedule D, and if you engage in this business under a different name, provide that name.

		Yes	No
(3)	Do you sell products or provide services other than investment advice to your advisory *clients*?	○	●

If "yes," describe this other business on Section 6.B.(3) of Schedule D, and if you engage in this business under a different name, provide that name.

SECTION 6.A. Names of Your Other Businesses

No Information Filed

SECTION 6.B.(2) Description of Primary Business

Describe your primary business (not your investment advisory business):

If you engage in that business under a different name, provide that name:

SECTION 6.B.(3) Description of Other Products and Services

Describe other products or services you sell to your *client*. You may omit products and services that you listed in Section 6.B.(2) above.

If you engage in that business under a different name, provide that name:

Item 7 Financial Industry Affiliations

In this Item, we request information about your financial industry affiliations and activities. This information identifies areas in which conflicts of interest may occur between you and your *clients*.

A. This part of Item 7 requires you to provide information about you and your *related persons*, including foreign affiliates. Your *related persons* are all of your *advisory affiliates* and any *person* that is under common *control* with you.

You have a *related person* that is a (check all that apply):

- ☐ (1) broker-dealer, municipal securities dealer, or government securities broker or dealer (registered or unregistered)
- ☑ (2) other investment adviser (including financial planners)
- ☐ (3) registered municipal advisor
- ☐ (4) registered security-based swap dealer
- ☐ (5) major security-based swap participant
- ☐ (6) commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
- ☐ (7) futures commission merchant
- ☐ (8) banking or thrift institution
- ☐ (9) trust company
- ☐ (10) accountant or accounting firm
- ☐ (11) lawyer or law firm
- ☐ (12) insurance company or agency
- ☑ (13) pension consultant
- ☐ (14) real estate broker or dealer
- ☐ (15) sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
- ☐ (16) sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

Note that Item 7.A. should not be used to disclose that some of your employees perform investment advisory functions or are registered representatives of a broker-dealer. The number of your firm's employees who perform investment advisory functions should be disclosed under Item 5.B.(1). The number of your firm's employees who are registered representatives of a broker-dealer should be disclosed under Item 5.B.(2).

Note that if you are filing an umbrella registration, you should not check Item 7.A.(2) with respect to your relying advisers, and you do not have to complete Section 7.A. in Schedule D for your relying advisers. You should complete a Schedule R for each relying adviser.

For each related person, including foreign affiliates that may not be registered or required to be registered in the United States, complete Section 7.A. of Schedule D.

You do not need to complete Section 7.A. of Schedule D for any related person if: (1) you have no business dealings with the related person in connection with advisory services you provide to your clients; (2) you do not conduct shared operations with the related person; (3) you do not refer clients or business to the related person, and the related person does not refer prospective clients or business to you; (4) you do not share supervised persons or premises with the related person; and (5) you have no reason to believe that your relationship with the related person otherwise creates a conflict of interest with your clients.

You must complete Section 7.A. of Schedule D for each related person acting as qualified custodian in connection with advisory services you provide to your clients (other than any mutual fund transfer agent pursuant to rule 206(4)-2(b)(1)), regardless of whether you have determined the related person to be operationally independent under rule 206(4)-2 of the Advisers Act.

SECTION 7.A. Financial Industry Affiliations

Complete a separate Schedule D Section 7.A. for each *related person* listed in Item 7.A.

1. Legal Name of *Related Person*:
   MEKETA FIDUCIARY MANAGEMENT, LLC

2. Primary Business Name of *Related Person*:
   MEKETA FIDUCIARY MANAGEMENT, LLC

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)
   -
   or
   Other

4. *Related Person's*

(a) *CRD* Number (if any):

(b) CIK Number(s) (if any):

No Information Filed

5. *Related Person* is: (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
- (b) ☑ other investment adviser (including financial planners)
- (c) ☐ registered municipal advisor
- (d) ☐ registered security-based swap dealer
- (e) ☐ major security-based swap participant
- (f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
- (g) ☐ futures commission merchant
- (h) ☐ banking or thrift institution
- (i) ☐ trust company
- (j) ☐ accountant or accounting firm
- (k) ☐ lawyer or law firm
- (l) ☐ insurance company or agency
- (m) ☑ pension consultant
- (n) ☐ real estate broker or dealer
- (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
- (p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

	Yes	No
6. Do you *control* or are you *controlled* by the *related person*?	◉	○
7. Are you and the *related person* under common *control*?	◉	○
8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*?	○	◉
(b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*?	○	○

(c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:

Number and Street 1: Number and Street 2:
City: State: Country: ZIP+4/Postal Code:
If this address is a private residence, check this box: ☐

	Yes	No
9. (a) If the *related person* is an investment adviser, is it exempt from registration?	○	◉
(b) If the answer is yes, under what exemption?		
10. (a) Is the *related person* registered with a *foreign financial regulatory authority* ?	○	◉

(b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.

No Information Filed

	Yes	No
11. Do you and the *related person* share any *supervised persons*?	◉	○
12. Do you and the *related person* share the same physical location?	◉	○

1. Legal Name of *Related Person*:
MEKETA INVESTMENTS LONDON LTD

2. Primary Business Name of *Related Person*:
MEKETA INVESTMENTS LONDON LTD

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)
-
or
Other

4. *Related Person's*
   (a) *CRD* Number (if any):

   (b) CIK Number(s) (if any):
   No Information Filed

5. *Related Person* is: (check all that apply)
   (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
   (b) ☑ other investment adviser (including financial planners)
   (c) ☐ registered municipal advisor
   (d) ☐ registered security-based swap dealer
   (e) ☐ major security-based swap participant
   (f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
   (g) ☐ futures commission merchant
   (h) ☐ banking or thrift institution
   (i) ☐ trust company
   (j) ☐ accountant or accounting firm
   (k) ☐ lawyer or law firm
   (l) ☐ insurance company or agency
   (m) ☐ pension consultant
   (n) ☐ real estate broker or dealer
   (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
   (p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

	Yes	No
6. Do you *control* or are you *controlled* by the *related person*?	◉	○
7. Are you and the *related person* under common *control*?	◉	○
8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*?	○	◉
(b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*?	○	○

(c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:

Number and Street 1: Number and Street 2:
City: State: Country: ZIP+4/Postal Code:
If this address is a private residence, check this box: ☐

	Yes	No
9. (a) If the *related person* is an investment adviser, is it exempt from registration?	○	◉
(b) If the answer is yes, under what exemption?		
10. (a) Is the *related person* registered with a *foreign financial regulatory authority* ?	◉	○

(b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.

Name of Country/English Name of *Foreign Financial Regulatory Authority*
United Kingdom - Financial Conduct Authority

	Yes	No
11. Do you and the *related person* share any *supervised persons*?	◉	○
12. Do you and the *related person* share the same physical location?	○	◉

Item 7 *Private Fund* Reporting

	Yes	No
B. Are you an adviser to any *private fund*?	○	●

If "yes," then for each private fund that you advise, you must complete a Section 7.B.(1) of Schedule D, except in certain circumstances described in the next sentence and in Instruction 6 of the Instructions to Part 1A. If you are registered or applying for registration with the SEC or reporting as an SEC exempt reporting adviser, and another SEC-registered adviser or SEC exempt reporting adviser reports this information with respect to any such private fund in Section 7.B.(1) of Schedule D of its Form ADV (e.g., if you are a subadviser), do not complete Section 7.B.(1) of Schedule D with respect to that private fund. You must, instead, complete Section 7.B.(2) of Schedule D.

In either case, if you seek to preserve the anonymity of a private fund client by maintaining its identity in your books and records in numerical or alphabetical code, or similar designation, pursuant to rule 204-2(d), you may identify the private fund in Section 7.B.(1) or 7.B.(2) of Schedule D using the same code or designation in place of the fund's name.

SECTION 7.B.(1) *Private Fund* Reporting

No Information Filed

SECTION 7.B.(2) *Private Fund* Reporting

No Information Filed

Item 8 Participation or Interest in *Client* Transactions

In this Item, we request information about your participation and interest in your *clients*' transactions. This information identifies additional areas in which conflicts of interest may occur between you and your *clients*. Newly-formed advisers should base responses to these questions on the types of participation and interest that you expect to engage in during the next year.

Like Item 7, Item 8 requires you to provide information about you and your *related persons*, including foreign affiliates.

Proprietary Interest in *Client* Transactions

			Yes	No
A.	Do you or any *related person*:			
	(1)	buy securities for yourself from advisory *clients*, or sell securities you own to advisory *clients* (principal transactions)?	○	●
	(2)	buy or sell for yourself securities (other than shares of mutual funds) that you also recommend to advisory *clients*?	○	●
	(3)	recommend securities (or other investment products) to advisory *clients* in which you or any *related person* has some other proprietary (ownership) interest (other than those mentioned in Items 8.A.(1) or (2))?	○	●

Sales Interest in *Client* Transactions

			Yes	No
B.	Do you or any *related person*:			
	(1)	as a broker-dealer or registered representative of a broker-dealer, execute securities trades for brokerage customers in which advisory *client* securities are sold to or bought from the brokerage customer (agency cross transactions)?	○	●
	(2)	recommend to advisory *clients*, or act as a purchaser representative for advisory *clients* with respect to, the purchase of securities for which you or any *related person* serves as underwriter or general or managing partner?	○	●
	(3)	recommend purchase or sale of securities to advisory *clients* for which you or any *related person* has any other sales interest (other than the receipt of sales commissions as a broker or registered representative of a broker-dealer)?	○	●

Investment or Brokerage Discretion

			Yes	No
C.	Do you or any *related person* have *discretionary authority* to determine the:			
	(1)	securities to be bought or sold for a *client's* account?	●	○
	(2)	amount of securities to be bought or sold for a *client's* account?	●	○
	(3)	broker or dealer to be used for a purchase or sale of securities for a *client's* account?	○	●
	(4)	commission rates to be paid to a broker or dealer for a *client's* securities transactions?	○	●
D.	If you answer "yes" to C.(3) above, are any of the brokers or dealers *related persons*?		○	○
E.	Do you or any *related person* recommend brokers or dealers to *clients*?		●	○
F.	If you answer "yes" to E. above, are any of the brokers or dealers *related persons*?		○	●
G.	(1)	Do you or any *related person* receive research or other products or services other than execution from a broker-dealer or a third party ("soft dollar benefits") in connection with *client* securities transactions?	○	●
	(2)	If "yes" to G.(1) above, are all the "soft dollar benefits" you or any *related persons* receive eligible "research or brokerage services" under section 28(e) of the Securities Exchange Act of 1934?	○	○
H.	(1)	Do you or any *related person*, directly or indirectly, compensate any *person* that is not an *employee* for *client* referrals?	○	●
	(2)	Do you or any *related person*, directly or indirectly, provide any *employee* compensation that is specifically related to obtaining *clients* for the firm (cash or non-cash compensation in addition to the *employee's* regular salary)?	●	○
I.	Do you or any *related person*, including any *employee*, directly or indirectly, receive compensation from any *person* (other than you or any *related person*) for *client* referrals?		○	●

In your response to Item 8.I., do not include the regular salary you pay to an employee.

In responding to Items 8.H. and 8.I., consider all cash and non-cash compensation that you or a related person gave to (in answering Item 8.H.) or received from (in answering Item 8.I.) any person in exchange for client referrals, including any bonus that is based, at least in part, on the number or amount of client referrals.

Item 9 Custody

In this Item, we ask you whether you or a *related person* has *custody* of *client* (other than *clients* that are investment companies registered under the Investment Company Act of 1940) assets and about your custodial practices.

A. (1) Do you have *custody* of any advisory *clients'*: **Yes No**

(a) cash or bank accounts? ○ ◉

(b) securities? ○ ◉

If you are registering or registered with the SEC, answer "No" to Item 9.A.(1)(a) and (b) if you have custody solely because (i) you deduct your advisory fees directly from your clients' accounts, or (ii) a related person has custody of client assets in connection with advisory services you provide to clients, but you have overcome the presumption that you are not operationally independent (pursuant to Advisers Act rule 206(4)-2(d)(5)) from the related person.

(2) If you checked "yes" to Item 9.A.(1)(a) or (b), what is the approximate amount of *client* funds and securities and total number of *clients* for which you have *custody*:

U.S. Dollar Amount	Total Number of *Clients*
(a) $	(b)

If you are registering or registered with the SEC and you have custody solely because you deduct your advisory fees directly from your clients' accounts, do not include the amount of those assets and the number of those clients in your response to Item 9.A.(2). If your related person has custody of client assets in connection with advisory services you provide to clients, do not include the amount of those assets and number of those clients in your response to 9.A.(2). Instead, include that information in your response to Item 9.B.(2).

B. (1) In connection with advisory services you provide to *clients*, do any of your *related persons* have *custody* of any of your advisory *clients'*: **Yes No**

(a) cash or bank accounts? ○ ◉

(b) securities? ○ ◉

You are required to answer this item regardless of how you answered Item 9.A.(1)(a) or (b).

(2) If you checked "yes" to Item 9.B.(1)(a) or (b), what is the approximate amount of *client* funds and securities and total number of *clients* for which your *related persons* have *custody*:

U.S. Dollar Amount	Total Number of *Clients*
(a) $	(b)

C. If you or your *related persons* have *custody* of *client* funds or securities in connection with advisory services you provide to *clients*, check all the following that apply:

(1) A qualified custodian(s) sends account statements at least quarterly to the investors in the pooled investment vehicle(s) you manage. ☐

(2) An *independent public accountant* audits annually the pooled investment vehicle(s) that you manage and the audited financial statements are distributed to the investors in the pools. ☐

(3) An *independent public accountant* conducts an annual surprise examination of *client* funds and securities. ☐

(4) An *independent public accountant* prepares an internal control report with respect to custodial services when you or your *related persons* are qualified custodians for *client* funds and securities. ☐

If you checked Item 9.C.(2), C.(3) or C.(4), list in Section 9.C. of Schedule D the accountants that are engaged to perform the audit or examination or prepare an internal control report. (If you checked Item 9.C.(2), you do not have to list auditor information in Section 9.C. of Schedule D if you already provided this information with respect to the private funds you advise in Section 7.B.(1) of Schedule D).

D. Do you or your *related person(s)* act as qualified custodians for your *clients* in connection with advisory services you provide to *clients*? **Yes No**

(1) you act as a qualified custodian ○ ◉

(2) your *related person(s)* act as qualified custodian(s) ○ ◉

If you checked "yes" to Item 9.D.(2), all related persons that act as qualified custodians (other than any mutual fund transfer agent pursuant to rule 206(4)-2(b)(1)) must be identified in Section 7.A. of Schedule D*, regardless of whether you have determined the related person to be operationally independent under rule 206(4)-2 of the Advisers Act.*

E. If you are filing your *annual updating amendment* and you were subject to a surprise examination by an *independent public accountant* during your last fiscal year, provide the date (MM/YYYY) the examination commenced:

F. If you or your *related persons* have *custody* of *client* funds or securities, how many *persons*, including, but not limited to, you and your *related persons,* act as qualified custodians for your *clients* in connection with advisory services you provide to *clients?*

SECTION 9.C. ***Independent Public Accountant***

No Information Filed

Item 10 Control Persons

In this Item, we ask you to identify every *person* that, directly or indirectly, *controls* you. If you are filing an *umbrella registration*, the information in Item 10 should be provided for the *filing adviser* only.

If you are submitting an initial application or report, you must complete Schedule A and Schedule B. Schedule A asks for information about your direct owners and executive officers. Schedule B asks for information about your indirect owners. If this is an amendment and you are updating information you reported on either Schedule A or Schedule B (or both) that you filed with your initial application or report, you must complete Schedule C.

		Yes	No
A.	Does any *person* not named in Item 1.A. or Schedules A, B, or C, directly or indirectly, *control* your management or policies?	○	◉

If yes, complete Section 10.A. of Schedule D.

B. If any *person* named in Schedules A, B, or C or in Section 10.A. of Schedule D is a public reporting company under Sections 12 or 15(d) of the Securities Exchange Act of 1934, please complete Section 10.B. of Schedule D.

SECTION 10.A. ***Control Persons***

No Information Filed

SECTION 10.B. ***Control Person*** **Public Reporting Companies**

No Information Filed

Item 11 Disclosure Information

In this Item, we ask for information about your disciplinary history and the disciplinary history of all your *advisory affiliates*. We use this information to determine whether to grant your application for registration, to decide whether to revoke your registration or to place limitations on your activities as an investment adviser, and to identify potential problem areas to focus on during our on-site examinations. One event may result in "yes" answers to more than one of the questions below. In accordance with General Instruction 5 to Form ADV, "you" and "your" include the *filing adviser* and all *relying advisers* under an *umbrella registration*.

Your *advisory affiliates* are: (1) all of your current *employees* (other than *employees* performing only clerical, administrative, support or similar functions); (2) all of your officers, partners, or directors (or any *person* performing similar functions); and (3) all *persons* directly or indirectly *controlling* you or *controlled* by you. If you are a "separately identifiable department or division" (SID) of a bank, see the Glossary of Terms to determine who your *advisory affiliates* are.

If you are registered or registering with the SEC or if you are an exempt reporting adviser, you may limit your disclosure of any event listed in Item 11 to ten years following the date of the event. If you are registered or registering with a state, you must respond to the questions as posed; you may, therefore, limit your disclosure to ten years following the date of an event only in responding to Items 11.A.(1), 11.A.(2), 11.B.(1), 11.B.(2), 11.D.(4), and 11.H.(1)(a). For purposes of calculating this ten-year period, the date of an event is the date the final order, judgment, or decree was entered, or the date any rights of appeal from preliminary orders, judgments, or decrees lapsed.

You must complete the appropriate Disclosure Reporting Page ("DRP") for "yes" answers to the questions in this Item 11.

	Yes	**No**
Do any of the events below involve you or any of your *supervised persons*?	○	◉

For "yes" answers to the following questions, complete a Criminal Action DRP:

	Yes	**No**
A. In the past ten years, have you or any *advisory affiliate*:		
(1) been convicted of or pled guilty or nolo contendere ("no contest") in a domestic, foreign, or military court to any *felony*?	○	◉
(2) been *charged* with any *felony*?	○	◉

If you are registered or registering with the SEC, or if you are reporting as an exempt reporting adviser, you may limit your response to Item 11.A.(2) to charges that are currently pending.

	Yes	**No**
B. In the past ten years, have you or any *advisory affiliate*:		
(1) been convicted of or pled guilty or nolo contendere ("no contest") in a domestic, foreign, or military court to a *misdemeanor* involving: investments or an *investment-related* business, or any fraud, false statements, or omissions, wrongful taking of property, bribery, perjury, forgery, counterfeiting, extortion, or a conspiracy to commit any of these offenses?	○	◉
(2) been *charged* with a *misdemeanor* listed in Item 11.B.(1)?	○	◉

If you are registered or registering with the SEC, or if you are reporting as an exempt reporting adviser, you may limit your response to Item 11.B.(2) to charges that are currently pending.

For "yes" answers to the following questions, complete a Regulatory Action DRP:

	Yes	**No**
C. Has the SEC or the Commodity Futures Trading Commission (CFTC) ever:		
(1) *found* you or any *advisory affiliate* to have made a false statement or omission?	○	◉
(2) *found* you or any *advisory affiliate* to have been *involved* in a violation of SEC or CFTC regulations or statutes?	○	◉
(3) *found* you or any *advisory affiliate* to have been a cause of an *investment-related* business having its authorization to do business denied, suspended, revoked, or restricted?	○	◉
(4) entered an *order* against you or any *advisory affiliate* in connection with *investment-related* activity?	○	◉
(5) imposed a civil money penalty on you or any *advisory affiliate*, or *ordered* you or any *advisory affiliate* to cease and desist from any activity?	○	◉

D. Has any other federal regulatory agency, any state regulatory agency, or any *foreign financial regulatory authority*:		
(1) ever *found* you or any *advisory affiliate* to have made a false statement or omission, or been dishonest, unfair, or unethical?	○	◉
(2) ever *found* you or any *advisory affiliate* to have been *involved* in a violation of *investment-related* regulations or statutes?	○	◉
(3) ever *found* you or any *advisory affiliate* to have been a cause of an *investment-related* business having its	○	◉

authorization to do business denied, suspended, revoked, or restricted?

		Yes	No
(4)	in the past ten years, entered an *order* against you or any *advisory affiliate* in connection with an *investment-related* activity?	○	◉
(5)	ever denied, suspended, or revoked your or any *advisory affiliate's* registration or license, or otherwise prevented you or any *advisory affiliate*, by *order*, from associating with an *investment-related* business or restricted your or any *advisory affiliate's* activity?	○	◉

E. Has any *self-regulatory organization* or commodities exchange ever:

		Yes	No
(1)	*found* you or any *advisory affiliate* to have made a false statement or omission?	○	◉
(2)	*found* you or any *advisory affiliate* to have been *involved* in a violation of its rules (other than a violation designated as a "*minor rule violation*" under a plan approved by the SEC)?	○	◉
(3)	*found* you or any *advisory affiliate* to have been the cause of an *investment-related* business having its authorization to do business denied, suspended, revoked, or restricted?	○	◉
(4)	disciplined you or any *advisory affiliate* by expelling or suspending you or the *advisory affiliate* from membership, barring or suspending you or the *advisory affiliate* from association with other members, or otherwise restricting your or the *advisory affiliate's* activities?	○	◉

		Yes	No
F.	Has an authorization to act as an attorney, accountant, or federal contractor granted to you or any *advisory affiliate* ever been revoked or suspended?	○	◉
G.	Are you or any *advisory affiliate* now the subject of any regulatory *proceeding* that could result in a "yes" answer to any part of Item 11.C., 11.D., or 11.E.?	○	◉

For "yes" answers to the following questions, complete a Civil Judicial Action DRP:

H. (1) Has any domestic or foreign court: **Yes** **No**

		Yes	No
(a)	in the past ten years, *enjoined* you or any *advisory affiliate* in connection with any *investment-related* activity?	○	◉
(b)	ever *found* that you or any *advisory affiliate* were *involved* in a violation of *investment-related* statutes or regulations?	○	◉
(c)	ever dismissed, pursuant to a settlement agreement, an *investment-related* civil action brought against you or any *advisory affiliate* by a state or *foreign financial regulatory authority*?	○	◉
(2)	Are you or any *advisory affiliate* now the subject of any civil *proceeding* that could result in a "yes" answer to any part of Item 11.H.(1)?	○	◉

Item 12 Small Businesses

The SEC is required by the Regulatory Flexibility Act to consider the effect of its regulations on small entities. In order to do this, we need to determine whether you meet the definition of "small business" or "small organization" under rule 0-7.

Answer this Item 12 only if you are registered or registering with the SEC **and** you indicated in response to Item 5.F.(2)(c) that you have regulatory assets under management of less than $25 million. You are not required to answer this Item 12 if you are filing for initial registration as a state adviser, amending a current state registration, or switching from SEC to state registration.

For purposes of this Item 12 only:

- Total Assets refers to the total assets of a firm, rather than the assets managed on behalf of *clients*. In determining your or another *person's* total assets, you may use the total assets shown on a current balance sheet (but use total assets reported on a consolidated balance sheet with subsidiaries included, if that amount is larger).
- *Control* means the power to direct or cause the direction of the management or policies of a *person*, whether through ownership of securities, by contract, or otherwise. Any *person* that directly or indirectly has the right to vote 25 percent or more of the voting securities, or is entitled to 25 percent or more of the profits, of another *person* is presumed to *control* the other *person*.

		Yes	No
A.	Did you have total assets of $5 million or more on the last day of your most recent fiscal year?	○	○
	If "yes," you do not need to answer Items 12.B. and 12.C.		
B.	Do you:		
	(1) *control* another investment adviser that had regulatory assets under management (calculated in response to Item 5.F.(2)(c) of Form ADV) of $25 million or more on the last day of its most recent fiscal year?	○	○
	(2) *control* another *person* (other than a natural person) that had total assets of $5 million or more on the last day of its most recent fiscal year?	○	○
C.	Are you:		
	(1) *controlled* by or under common *control* with another investment adviser that had regulatory assets under management (calculated in response to Item 5.F.(2)(c) of Form ADV) of $25 million or more on the last day of its most recent fiscal year?	○	○
	(2) *controlled* by or under common *control* with another *person* (other than a natural person) that had total assets of $5 million or more on the last day of its most recent fiscal year?	○	○

Schedule A

Direct Owners and Executive Officers

1. Complete Schedule A only if you are submitting an initial application or report. Schedule A asks for information about your direct owners and executive officers. Use Schedule C to amend this information.
2. Direct Owners and Executive Officers. List below the names of:
   (a) each Chief Executive Officer, Chief Financial Officer, Chief Operations Officer, Chief Legal Officer, Chief Compliance Officer(Chief Compliance Officer is required if you are registered or applying for registration and cannot be more than one individual), director, and any other individuals with similar status or functions;
   (b) if you are organized as a corporation, each shareholder that is a direct owner of 5% or more of a class of your voting securities, unless you are a public reporting company (a company subject to Section 12 or 15(d) of the Exchange Act);
   Direct owners include any *person* that owns, beneficially owns, has the right to vote, or has the power to sell or direct the sale of, 5% or more of a class of your voting securities. For purposes of this Schedule, a *person* beneficially owns any securities: (i) owned by his/her child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, sharing the same residence; or (ii) that he/she has the right to acquire, within 60 days, through the exercise of any option, warrant, or right to purchase the security.
   (c) if you are organized as a partnership, all general partners and those limited and special partners that have the right to receive upon dissolution, or have contributed, 5% or more of your capital;
   (d) in the case of a trust that directly owns 5% or more of a class of your voting securities, or that has the right to receive upon dissolution, or has contributed, 5% or more of your capital, the trust and each trustee; and
   (e) if you are organized as a limited liability company ("LLC"), (i) those members that have the right to receive upon dissolution, or have contributed, 5% or more of your capital, and (ii) if managed by elected managers, all elected managers.
3. Do you have any indirect owners to be reported on Schedule B? ○ Yes ● No
4. In the DE/FE/I column below, enter "DE" if the owner is a domestic entity, "FE" if the owner is an entity incorporated or domiciled in a foreign country, or "I" if the owner or executive officer is an individual.
5. Complete the Title or Status column by entering board/management titles; status as partner, trustee, sole proprietor, elected manager, shareholder, or member; and for shareholders or members, the class of securities owned (if more than one is issued).
6. Ownership codes are: NA - less than 5% B - 10% but less than 25% D - 50% but less than 75%
   A - 5% but less than 10% C - 25% but less than 50% E - 75% or more
7. (a) In the *Control Person* column, enter "Yes" if the *person* has *control* as defined in the Glossary of Terms to Form ADV, and enter "No" if the *person* does not have *control*. Note that under this definition, most executive officers and all 25% owners, general partners, elected managers, and trustees are *control persons*.
   (b) In the PR column, enter "PR" if the owner is a public reporting company under Sections 12 or 15(d) of the Exchange Act.
   (c) Complete each column.

FULL LEGAL NAME (Individuals: Last Name, First Name, Middle Name)	**DE/FE/I**	**Title or Status**	**Date Title or Status Acquired MM/YYYY**	**Ownership Code**	***Control Person***	**PR**	***CRD* No. If None: S.S. No. and Date of Birth, IRS Tax No. or Employer ID No.**
MEKETA, JAMES, EDWARD	I	CHAIRMAN OF THE BOARD OF DIRECTORS	08/2015	C	Y	N	4361091
SPATRICK, ALAN, DAVID	I	MANAGING PRINCIPAL, CHIEF COMPLIANCE OFFICER, DIRECTOR	06/2001	B	Y	N	4361095
MCCOURT, STEPHEN, PATRICK	I	CO-CHIEF EXECUTIVE OFFICER, DIRECTOR	01/2015	B	Y	N	4632294
WOOLLEY, PETER, SCOTT	I	PRESIDENT, CO-CHIEF EXECUTIVE OFFICER, DIRECTOR	01/2015	B	Y	N	4361117
HAGGERTY, JOHN, ANDREW	I	MANAGING PRINCIPAL, DIRECTOR	08/2015	A	Y	N	4361123
BENHAM, FRANK, EDWARD	I	MANAGING PRINCIPAL	09/2007	NA	Y	N	5512299
FESTINO, LEANDRO, A	I	MANAGING PRINCIPAL	01/2010	NA	N	N	5902281
KANE, KELLIE	I	MANAGING PRINCIPAL, CHIEF OPERATING OFFICER, DIRECTOR	12/2015	NA	Y	N	5902423
MALONE, MIKA	I	MANAGING PRINCIPAL	01/2012	NA	N	N	6027890
DYNAN, MITCHELL, DAVID	I	MANAGING PRINCIPAL	01/2012	NA	N	N	4903329
BENEDICT, EDWARD, GRENVILLE	I	MANAGING PRINCIPAL	01/2012	NA	N	N	2833563
ZAYAC, TIMOTHY, G	I	CHIEF LEGAL OFFICER	08/2015	NA	N	N	6175294
DISABATO, TED, LOUIS	I	MANAGING PRINCIPAL	11/2015	NA	N	N	1348374
RUE, NEIL, ALLEN	I	MANAGING PRINCIPAL	03/2019	NA	N	N	1083271

CHAMBERS, JUDITH, FAE	I	MANAGING PRINCIPAL	03/2019	NA	N	N	3104245
CESERANI, KAY, RUTH	I	MANAGING PRINCIPAL	03/2019	NA	N	N	2870139
FERGUSSON, TAD, GREGORY	I	MANAGING PRINCIPAL	03/2019	NA	N	N	4518023
FIELDS, CHRISTIANA	I	MANAGING PRINCIPAL	03/2019	NA	N	N	4518002
EMKIN, ALLAN, ROBERT	I	MANAGING PRINCIPAL, DIRECTOR	03/2019	NA	Y	N	4424872

Schedule B

Indirect Owners

1. Complete Schedule B only if you are submitting an initial application or report. Schedule B asks for information about your indirect owners; you must first complete Schedule A, which asks for information about your direct owners. Use Schedule C to amend this information.
2. Indirect Owners. With respect to each owner listed on Schedule A (except individual owners), list below:
   (a) in the case of an owner that is a corporation, each of its shareholders that beneficially owns, has the right to vote, or has the power to sell or direct the sale of, 25% or more of a class of a voting security of that corporation;

   For purposes of this Schedule, a *person* beneficially owns any securities: (i) owned by his/her child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, sharing the same residence; or (ii) that he/she has the right to acquire, within 60 days, through the exercise of any option, warrant, or right to purchase the security.

   (b) in the case of an owner that is a partnership, all general partners and those limited and special partners that have the right to receive upon dissolution, or have contributed, 25% or more of the partnership's capital;

   (c) in the case of an owner that is a trust, the trust and each trustee; and

   (d) in the case of an owner that is a limited liability company ("LLC"), (i) those members that have the right to receive upon dissolution, or have contributed, 25% or more of the LLC's capital, and (ii) if managed by elected managers, all elected managers.
3. Continue up the chain of ownership listing all 25% owners at each level. Once a public reporting company (a company subject to Sections 12 or 15(d) of the Exchange Act) is reached, no further ownership information need be given.
4. In the DE/FE/I column below, enter "DE" if the owner is a domestic entity, "FE" if the owner is an entity incorporated or domiciled in a foreign country, or "I" if the owner is an individual.
5. Complete the Status column by entering the owner's status as partner, trustee, elected manager, shareholder, or member; and for shareholders or members, the class of securities owned (if more than one is issued).
6. Ownership codes are: C - 25% but less than 50% E - 75% or more
   D - 50% but less than 75% F - Other (general partner, trustee, or elected manager)
7. (a) In the *Control Person* column, enter "Yes" if the *person* has *control* as defined in the Glossary of Terms to Form ADV, and enter "No" if the *person* does not have *control*. Note that under this definition, most executive officers and all 25% owners, general partners, elected managers, and trustees are *control persons*.

   (b) In the PR column, enter "PR" if the owner is a public reporting company under Sections 12 or 15(d) of the Exchange Act.

   (c) Complete each column.

No Information Filed

Schedule D - Miscellaneous

You may use the space below to explain a response to an Item or to provide any other information.

SCH D, SEC 1B LISTS THE REGISTRANT'S RELYING ADVISERS. REGISTRANT AND ITS RELYING ADVISERS ARE TOGETHER FILING A SINGLE FORM ADV IN RELIANCE, AMONG OTHER THINGS, ON THE POSITION EXPRESSED BY THE STAFF OF THE SECURITIES AND EXCHANGE COMMISSION (SEC) IN ITS LETTER DATED 1/18/12 TO THE AMERICAN BAR ASSOCIATION, BUSINESS LAW SECTION. MEKETA INVESTMENT GROUP, INC. OWNS 84% OF THE MEKETA FIDUCIARY MANAGEMENT, LLC. ONE OF MEKETA FIDUCIARY MANAGEMENT, LLC'S SENIOR EMPLOYEES OWNS THE REMAINDER OF THE COMPANY. THE MANAGING DIRECTORS OF MEKETA FIDUCIARY MANAGEMENT, LLC ARE: JAMES E. MEKETA, STEPHEN P. MCCOURT, PETER S. WOOLLEY, AND RAFI ZAMAN. MEKETA INVESTMENTS LONDON LTD IS A WHOLLY-OWNED SUBSIDIARY OF MEKETA INVESTMENT GROUP, INC. THE DIRECTORS OF MEKETA INVESTMENTS LONDON LTD ARE: STEPHEN P. MCCOURT, ALAN SPATRICK, TIMOTHY ATKINSON, EDWIN CONSTANTINO AND DAVID SMITH. MEKETA FIDUCIARY MANAGEMENT, LLC AND MEKETA INVESTMENTS LONDON LTD'S NORMAL BUSINESS HOURS ARE MONDAY-FRIDAY, 8:30 AM-5:30PM (LOCAL TIME). MEKETA FIDUCIARY MANAGEMENT, LLC IS INDEPENDENTLY ELIGIBLE TO REGISTER WITH THE SEC AS A LARGE ADVISORY FIRM HAVING REGULATORY ASSETS UNDER MANAGEMENT IN EXCESS OF $100 MILLION AND AS A PENSION CONSULTANT. MEKETA INVESTMENTS LONDON LTD IS INDEPENDENTLY ELIGIBLE TO REGISTER WITH THE SEC AS A HAVING ITS PRINCIPAL OFFICE AND PLACE OF BUSINESS OUTSIDE OF THE UNITED STATES. ITEMS 5.A AND 5.B - THE RELYING ADVISERS RELY ON A PORTION OF THE TIME OF CERTAIN EMPLOYEES OF THE REGISTRANT. ITEMS 5.C, 5.D, 5.E, AND 5.G - MEKETA INVESTMENTS LONDON LTD DOES NOT CURRENTLY HAVE ANY CLIENTS. MEKETA INVESTMENTS LONDON LTD INTENDS TO PROVIDE INVESTMENT ADVISORY SERVICES IN THE EEA AND CURRENTLY PROVIDES RESEARCH SERVICES TO MEKETA INVESTMENT GROUP, INC. AND MEKETA FIDUCIARY MANAGEMENT, LLC. ITEMS 5.D AND 5.F - AS OF 9/30/19, MEKETA FIDUCIARY MANAGEMENT, LLC HAD APPROXIMATELY $12,284,345,000 IN REGULATORY ASSETS UNDER MANAGEMENT ACROSS TWENTY-FIVE DISCRETIONARY CLIENTS. THESE NUMBERS ARE INCLUDED AND REFLECTED IN THE AGGREGATE NUMBERS DISCLOSED IN RESPONSE TO ITEM 5.F. ITEM 5.K - NEITHER REGISTRANT NOR MEKETA FIDUCIARY MANAGEMENT, LLC "MANAGE MONEY". BOTH ENTITIES HAVE DISCRETION TO SELECT/TERMINATE THIRD-PARTY INVESTMENT MANAGERS ON BEHALF THEIR RESPECTIVE CLIENTS. CLIENTS HOLD INTERESTS IN SUCH INVESTMENT MANAGERS DIRECTLY. ITEM 5.K.(1) AND SCH D, SEC 5.K.(1)(a) - MID YEAR PERCENTAGES DO NOT REFLECT THE REGULATORY ASSETS UNDER MANAGEMENT FOR FOUR CLIENT ACCOUNTS. THREE OF THESE CLIENTS BECAME CLIENTS AFTER 6/30/19, AND THE OTHER CLIENT BECAME A CLIENT ON 6/24/19. ITEM 5.K(4) AND SCH D, SEC 5.K(3) - ALL REGULATORY ASSETS UNDER MANAGEMENT OF THE REGISTRANT AND MEKETA FIDUCIARY MANAGEMENT, LLC ARE HELD BY THEIR RESPECTIVE CLIENTS' QUALIFIED CUSTODIANS OR HELD DIRECTLY BY SUCH CLIENTS. ITEM 6.A(9) REGISTRANT PROVIDES INVESTMENT ADVICE TO A NUMBER OF ABLE AND 529 PLANS. WHILE REGISTRANT DOES NOT BELIEVE THAT IT IS IN ANY WAY ENGAGED IN THE OFFERING OR THE STRUCTURING, TIMING, TERMS, AND OTHER SIMILAR MATTERS CONCERNING THE ISSUANCE OF MUNICIPAL SECURITIES WITH RESPECT TO ITS 529 PLAN CLIENTS, AND AS SUCH IS NOT REQUIRED TO BE REGISTERED AS A MUNICIPAL ADVISOR UNDER RULE 15B1-1(d)(2)(ii), REGISTRANT HAS REGISTERED WITH THE SEC AND THE MSRB AS A MUNICIPAL ADVISOR OUT OF AN ABUNDANCE OF CAUTION IN LIGHT OF FOOTNOTE 339 OF THE ADOPTING RELEASE (RELEASE NO. 34-70462) AND THE LACK OF DEFINITION OF THE TERMS "STRUCTURE" AND "ISSUANCE".

Schedule R

No Information Filed

DRP Pages

CRIMINAL DISCLOSURE REPORTING PAGE (ADV)

No Information Filed

REGULATORY ACTION DISCLOSURE REPORTING PAGE (ADV)

No Information Filed

CIVIL JUDICIAL ACTION DISCLOSURE REPORTING PAGE (ADV)

No Information Filed

Part 2

Exemption from brochure delivery requirements for SEC-registered advisers

SEC rules exempt SEC-registered advisers from delivering a firm brochure to some kinds of clients. If these exemptions excuse you from delivering a brochure to *all* of your advisory clients, you do not have to prepare a brochure.

	Yes	No
Are you exempt from delivering a brochure to all of your clients under these rules?	○	◉

If no, complete the ADV Part 2 filing below.

Amend, retire or file new brochures:

Brochure ID	Brochure Name	Brochure Type(s)	Action
330748	MEKETA INVESTMENT GROUP FORM ADV PART 2A - MARCH 2020	Pension plans/profit sharing plans, Pension consulting, Foundations/charities, Government/municipal, Other institutional	Amend

Part 3

CRS	Type(s)	Affiliate Info	Retire

There are no CRS filings to display.

Execution Pages

DOMESTIC INVESTMENT ADVISER EXECUTION PAGE

You must complete the following Execution Page to Form ADV. This execution page must be signed and attached to your initial submission of Form ADV to the SEC and all amendments.

Appointment of Agent for Service of Process

By signing this Form ADV Execution Page, you, the undersigned adviser, irrevocably appoint the Secretary of State or other legally designated officer, of the state in which you maintain your *principal office and place of business* and any other state in which you are submitting a *notice filing*, as your agents to receive service, and agree that such *persons* may accept service on your behalf, of any notice, subpoena, summons, *order* instituting *proceedings*, demand for arbitration, or other process or papers, and you further agree that such service may be made by registered or certified mail, in any federal or state action, administrative *proceeding* or arbitration brought against you in any place subject to the jurisdiction of the United States, if the action, *proceeding*, or arbitration (a) arises out of any activity in connection with your investment advisory business that is subject to the jurisdiction of the United States, and (b) is *founded*, directly or indirectly, upon the provisions of: (i) the Securities Act of 1933, the Securities Exchange Act of 1934, the Trust Indenture Act of 1939, the Investment Company Act of 1940, or the Investment Advisers Act of 1940, or any rule or regulation under any of these acts, or (ii) the laws of the state in which you maintain your *principal office and place of business* or of any state in which you are submitting a *notice filing*.

Signature

I, the undersigned, sign this Form ADV on behalf of, and with the authority of, the investment adviser. The investment adviser and I both certify, under penalty of perjury under the laws of the United States of America, that the information and statements made in this ADV, including exhibits and any other information submitted, are true and correct, and that I am signing this Form ADV Execution Page as a free and voluntary act.

I certify that the adviser's books and records will be preserved and available for inspection as required by law. Finally, I authorize any *person* having *custody* or possession of these books and records to make them available to federal and state regulatory representatives.

Signature: ERIC CRESSMAN	Date: MM/DD/YYYY 11/25/2020
Printed Name: ERIC CRESSMAN	Title: SENIOR VICE PRESIDENT, SENIOR COMPLIANCE OFFICER
Adviser *CRD* Number: 110601	

***NON-RESIDENT* INVESTMENT ADVISER EXECUTION PAGE**

You must complete the following Execution Page to Form ADV. This execution page must be signed and attached to your initial submission of Form ADV to the SEC and all amendments.

1. Appointment of Agent for Service of Process

By signing this Form ADV Execution Page, you, the undersigned adviser, irrevocably appoint each of the Secretary of the SEC, and the Secretary of State or other legally designated officer, of any other state in which you are submitting a *notice filing*, as your agents to receive service, and agree that such persons may accept service on your behalf, of any notice, subpoena, summons, *order* instituting *proceedings*, demand for arbitration, or other process or papers, and you further agree that such service may be made by registered or certified mail, in any federal or state action, administrative *proceeding* or arbitration brought against you in any place subject to the jurisdiction of the United States, if the action, *proceeding* or arbitration (a) arises out of any activity in connection with your investment advisory business that is subject to the jurisdiction of the United States, and (b) is *founded*, directly or indirectly, upon the provisions of: (i) the Securities Act of 1933, the Securities Exchange Act of 1934, the Trust Indenture Act of 1939, the Investment Company Act of 1940, or the Investment Advisers Act of 1940, or any rule or regulation under any of these acts, or (ii) the laws of any state in which you are submitting a *notice filing*.

2. Appointment and Consent: Effect on Partnerships

If you are organized as a partnership, this irrevocable power of attorney and consent to service of process will continue in effect if any partner withdraws from or is admitted to the partnership, provided that the admission or withdrawal does not create a new partnership. If the partnership dissolves, this irrevocable power of attorney and consent shall be in effect for any action brought against you or any of your former partners.

3. *Non-Resident* Investment Adviser Undertaking Regarding Books and Records

By signing this Form ADV, you also agree to provide, at your own expense, to the U.S. Securities and Exchange Commission at its principal office in Washington D.C., at any Regional or District Office of the Commission, or at any one of its offices in the United States, as specified by the Commission, correct, current, and complete copies of any or all records that you are required to maintain under Rule 204-2 under the Investment Advisers Act of 1940. This undertaking shall be binding upon you, your heirs, successors and assigns, and any *person* subject to your written irrevocable consents or powers of attorney or any of your general partners and *managing agents*.

Signature

I, the undersigned, sign this Form ADV on behalf of, and with the authority of, the *non-resident* investment adviser. The investment adviser and I both certify, under penalty of perjury under the laws of the United States of America, that the information and statements made in this ADV, including exhibits and any other information submitted, are true and correct, and that I am signing this Form ADV Execution Page as a free and voluntary act.

I certify that the adviser's books and records will be preserved and available for inspection as required by law. Finally, I authorize any *person* having *custody* or possession of these books and records to make them available to federal and state regulatory representatives.

Signature:	Date: MM/DD/YYYY
Printed Name:	Title:
Adviser *CRD* Number: 110601	

Item 1: Cover Page

Disclosure Brochure
(Form ADV, Part 2A)

Meketa Investment Group, Inc.

80 University Ave
Westwood, MA 02090

781.471.3500

www.meketa.com

November 2020

This disclosure brochure (this "Brochure") provides information about the qualifications and business practices of Meketa Investment Group, Inc. and its affiliates. If you have any questions about the contents of this Brochure, please contact us at 781.471.3500 and/or lkinniburghadv@meketa.com. The information in this Brochure has not been approved or verified by the United States Securities and Exchange Commission (the "SEC") or any state securities authority. Additionally, registration of an investment adviser does not imply a certain level of skill or training.

Copies of our current brochure may be requested by contacting Lisa Kinniburgh, Executive Coordinator, at 781.471.3500 or lkinniburghadv@meketa.com.

Additional information about us is also available via the SEC's website at www.adviserinfo.sec.gov.

Item 2: Material Changes

The purpose of this page is to inform you of any material changes since the previous version of this Brochure. If you are receiving this Brochure for the first time this section may not be relevant to you.

In this update, Item 1 has been amended to reflect Meketa Investment Group Inc.'s new principal office address.

Item 3: Table of Contents

Item 4: Advisory Business

Meketa Investment Group, Inc. ("Meketa Investment Group") began business in 1974 as a partnership. It was incorporated in Massachusetts in 1978. Meketa Investment Group has offices in the United States and affiliates in the United States and in the United Kingdom. Meketa Investment Group is an independent, employee-owned firm, with over sixty shareholders. The firm's founder - Mr. James Meketa - owns more than 25% of the firm's stock.

Meketa Investment Group, directly or through or with the assistance of its affiliates (each, a "Relying Adviser"), provides a broad range of investment advisory services that fall generally into two categories: General Consulting Services and Private Market Advisory Services. These services are provided on a discretionary or non-discretionary basis.

Our advisory services are tailored to the specific investment objectives and restrictions of each client account, and we may agree with a client upon specific investment policies or guidelines. Clients may impose restrictions on their account by discussing desired investment limitations with us and providing us with a written list of these limitations.

General Consulting Services

We assist clients in selecting and monitoring investment managers, developing investment guidelines and long-term policy objectives, allocating financial resources, and controlling risk. Additionally, we may assist with supervising investment manager transitions, developing crisis response plans, directing cash flows, and/or negotiating investment manager fees, among other activities.

We also offer quarterly monitoring services to our clients, their sponsors, and/or fiduciaries. This service consists of a detailed written report analyzing material developments to an investment portfolio during the applicable period and highlighting material risks or irregularities. Generally, we present these written reports to client representatives in person.

Private Market Advisory Services

We provide private market advisory services to certain clients to assist them with designing and/or managing private market portfolios, separate accounts, selecting and acquiring venture capital, private equity, private debt, real estate, timber and natural resources, hedge, and/or infrastructure investments for such portfolios and accounts, and monitoring the underlying private market investment managers. These services are designed for sophisticated, institutional clients.

Outsourced Fiduciary Services

Through Meketa Investment Group's affiliate — Meketa Fiduciary Management, LLC ("MFM") — we provide the services described above on a discretionary basis to clients who wish to outsource their investment process in full or in part. Among other things, we assume decision making authority to hire and terminate investment managers across public and private markets, to implement the client's asset allocation directives, and to manage investment manager transitions.

Other Services

Project-Based Services – On a non-discretionary basis, we provide certain clients with project-based advisory services, including, but not limited to, conducting due diligence, evaluating transaction terms, and account review. We generally provide a comprehensive written report outlining our findings and, to the extent requested, recommendations.

Regulatory Assets Under Management

As of the date hereof, we have not received the necessary information from all underlying investment managers to calculate Regulatory Assets Under Management ("RAUM") as of December 31, 2019. Therefore, RAUM is calculated as of September 30, 2019 and is approximately $19,717,121,000 in the aggregate (approximately $837,096,000 in non-discretionary RAUM in the aggregate and approximately $18,880,025,000 in discretionary RAUM in the aggregate).

Item 5: Fees and Compensation

All fees are subject to negotiation.

The specific amount and manner in which fees are charged is established in a client's written agreement. The amount of the fees charged is based on a number of factors, including, but not limited to, the scope of services, the complexity of such services and the nature of the client relationship (e.g., non-discretionary or discretionary). Fees may be billed on a fixed retainer basis or calculated as a percentage of assets under management or assets committed to investments.

We generally bill fees on a monthly or quarterly basis. Clients are generally billed in arrears, although we may agree with a client to bill in advance in certain circumstances. Clients are invoiced directly for fees. We are not authorized to directly debit fees from client accounts. Accounts initiated or terminated during a calendar month or quarter, as applicable, will be charged a prorated fee. Upon termination of any client account, any prepaid, unearned fees will be promptly refunded, and any earned, unpaid fees will be due and payable. In many instances, client agreements may be terminated before agreement expiration.

As noted above, depending on the scope and complexity of services provided, among other considerations, annual fees may be fixed, based on a client account's assets under management or advisement, assets committed to investments or some combination thereof. Annual fixed fees range from approximately $1,000 to $2.5 million. Fees based on assets under management generally range from 3 to 50 basis points per annum. Fees based on committed assets to an asset class generally range from 25 to 30 basis points per annum. Hourly rates for project-based services generally range from $250 to $850.

Our fees are exclusive of any brokerage commissions, custodial fees, transaction fees, sales charges and other related costs and expenses, which will be incurred directly by the client. We do not receive any portion of such commissions, fees, charges, costs, or expenses. Clients may incur certain charges imposed by their custodians, brokers and other third parties, such as fees charged by other advisors, managers and custodians, including, but not limited to, deferred sales charges, odd-lot differentials, transfer taxes, wire transfer and electronic fund fees, and other fees and taxes on brokerage accounts and securities transactions. Mutual funds and exchange traded funds also charge management fees, which are disclosed in a fund's prospectus. Such charges, expenses, costs, fees, and commissions are exclusive of and in addition to our fees, and we do not receive any portion of such commissions, expenses, costs, fees, or commissions.

Private pooled investment vehicles that we recommend or select also generally impose management fees, performance-based fees (including "carried interest" allocations), and additional expenses, which are disclosed in the private pooled investment vehicle's private placement memorandum and/or such vehicle's definitive documentation. Performance-based allocation arrangements may create an incentive for related persons of such private pooled investment vehicles to make investments that may be riskier or more speculative than those that would be made under a different fee arrangement. Clients are requested to refer to the governing documents of such private pooled investment vehicles for complete information on fee arrangements and expenses.

Item 6: Performance-Based Fees and Side-by-Side Management

We do not receive compensation from any performance-based fee and do not participate in side-by-side management.

Item 7: Types of Clients

We provide investment advisory services to public and private benefit plans (including pension, health and welfare, and ABLE and 529 plans), as well as charitable organizations, endowments, foundations, other US and non-US institutions and other entities.

We do not have any minimum requirements (such as minimum account size) for the opening and maintaining an advisory relationship.

Item 8: Methods of Analysis, Investment Strategies, and Risk of Loss

General Consulting Services

As indicated above in Item 4, our general consulting services incorporate, among other things, long-term policy and asset allocation construction, investment manager selection and evaluation, and risk mitigation.

Long-Term Policy — Generally, we initiate a new client relationship with a review that is designed to:

- identify and describe the major components and characteristics essential to the long-term success of the client's investment portfolio;
- provide a brief review of such components and the client's present investment portfolio status; and
- develop a long-term action plan, including the priority level for each action.

Asset Allocation — We develop forecasts for the potential returns and risks of all types of investment assets. Aided by statistical models and scenario tests, we seek to anticipate the behavior of various blends of asset classes. Using this information, we recommend several viable asset allocation policies, consistent with the particular client's objectives and limitations. We then work with the client to implement the asset allocation policy via investments made with third-party investment managers.

Manager Selection and Evaluation — We seek to identify investment managers with clear and consistent strategies, deep and stable staffs, and long-term records of success. For each client, we endeavor to recommend a diversified mix of investment managers consistent with the client's investment objectives.

The novel coronavirus (COVID-19) pandemic and associated measures to curtail its spread have had an adverse impact on market and economic conditions. Although the implications of the COVID-19 pandemic on markets and the resulting economic conditions are uncertain, the pandemic presents material risk to the performance and financial results of investments.

In addition, the COVID-19 pandemic and associated measures to curtail its spread, such as travel restrictions and implementation of enhanced health and safety precautions, have affected our ability to conduct on-site due diligence meetings with investment managers. While such restrictions and enhanced precautions continue, we will use other means to remain in contact with and monitor investment managers such as email, telephone, and video calls.

Risk Mitigation — The financial markets are risky and volatile. We typically seek to help clients mitigate risks by advising them to diversify, avoid "fads" and speculation, and to plan carefully.

Private Markets Advisory Services

Our private markets advisory services involve four services: strategic planning, private market investment analysis, program monitoring, and cash flow coordination.

Strategic Planning — We integrate a client's private markets allocation with its overall asset allocation plan.

Investment principles of diversification, discipline, and diligence guide our private markets advisory services. Our process generally seeks diversification by, among other criteria, fund, fund type, vintage year, and industry and geographic focus. Further, we seek to set clear investment parameters and expectations, providing clients' private markets programs with focus and discipline. Finally, we employ a rigorous due diligence process before determining whether a particular private market investment is suitable for a client's portfolio.

Private Market Investment Analysis — Identifying appropriate private market investments is an important component of a successful private market investment program. We generally seek the following characteristics in a private market investment manager:

- sound, cohesive investment process;
- deep, experienced investment resources;
- strong, consistent investment performance; and
- competitive operating costs and fees.

Identifying superior private market investment managers requires deep resources and a disciplined process. We evaluate hundreds of private market investment opportunities per year. We constantly assess information received directly from private market investment managers, as well as from placement agents and other third parties.

After an appropriate private market investment opportunity is identified, which a client or clients may access, we conduct due diligence on the opportunity, its investment manager and such manager's key professionals.

Investment Monitoring — Once a private market investment is made, we monitor the investment and the private market investment manager, and report relevant activity regularly to the client. This requires us to remain in routine contact with the private market investment manager.

The COVID-19 pandemic and associated measures to curtail its spread, such as travel restrictions and implementation of enhanced health and safety precautions, have affected our ability to conduct on-site due diligence meetings with investment managers. While such restrictions and enhanced precautions continue, we will use other means to remain in contact with and monitor investment managers such as email, telephone, and video calls.

Cash Flow Coordination — Private market investments require continuous contributions of capital to fund, among other things, new portfolio investments. To assist clients in managing capital calls and distributions effectively, we work with private market advisory service clients to develop a funding account that facilitates cash flow coordination for private market investments.

Risk of Loss — Investing in securities involves risk of loss that clients should be prepared to bear.

Certain General Risks – Financial markets are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, and/or economic developments. Different segments of the market can react differently to these developments.

Foreign financial markets can at times be more volatile than the US market due to increased risks of adverse issuer, political, regulatory, market, and/or economic developments and may perform differently from the US market.

Clients bear all risks of investment strategies employed by third party investment managers, including the risk that such managers will not meet their investment objectives.

Investments that we recommend or select may impose performance-based allocations or fees, management charges, and other expenses that are separate from the advisory fees charged by us for our advisory services. Such expenses will generally be paid regardless of whether the investments produce positive investment returns.

Financial market investments with third party investment managers are not bank deposits and are not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency.

Certain Investment Risks Associated with Private Markets Advisory Services – Private market investments involve a significant degree of risk and are suitable only for sophisticated clients who have no immediate need for liquidity of the amount invested and who can afford a risk of loss of all or a substantial part of such investment.

Identifying attractive private market investment opportunities and the right investment managers is difficult and involves a high degree of uncertainty. Clients will compete for investment opportunities with other potential investors, some of which may have greater access to investment opportunities, ability to complete investments, resources, and/or different return criteria, any of which may afford them a competitive advantage. There can be no assurance that we will be able to identify or that we or our clients (as the case may be) will be able to complete investments that will satisfy rate of return objectives or that will be able to fully invest targeted committed capital. There is no assurance that such investments will be profitable and there is a substantial risk that associated losses and expenses will exceed income and gains.

The performance of private market investments could differ substantially from the performance of the private market investment manager's prior and affiliated offerings. Further, the performance of any private market investment is subject to numerous factors which are neither predictable nor within our or our client's (as the case may be) control. Such factors include a wide range of economic, political, regulatory, competitive, and other conditions that may affect such investments in general or specific geographic areas, countries, business sectors, or industries. Private market investments (including underlying portfolio investments) outside the US or denominated in non US currencies pose currency exchange risks including blockage, devaluation, non-exchangeability, as well as a range of other potential risks including, but not limited to, expropriation, confiscatory taxation, political or social instability, illiquidity, and market manipulation. General economic conditions may also affect private market investments. Among the economic conditions that could influence the value of the investments are recession, inflation, rising interest rates, and adverse currency changes.

Private market investments require a commitment by clients for an extended period of time to contribute substantial amounts of capital, if and when called and often on short notice. Clients who are unwilling or unable to comply with their capital contribution obligations risk forfeiture of a portion, and possibly all, of their investments. Furthermore, clients will generally not be permitted to transfer their interests in such investments without the consent of the private market investment manager, which generally may be granted or withheld in the private market investment manager's sole discretion, and upon satisfaction of certain other conditions, including compliance with applicable federal, state, and non-US securities laws.

The structure of private market investments precludes investors and their representatives (including us) from actively participating in the investment decisions and management of the private market investment manager or its affiliates that manage the investments. Clients are required to rely entirely upon the judgment and the ability of the private market investment manager in making underlying investments and neither clients nor we will be able to evaluate the risks and economic merits of potential investment opportunities that come to the attention of the private market investment manager.

There generally will be little or no publicly available information regarding private market investments, their investment managers, or their prospects. Many investment recommendations and/or investment decisions made by us will be based on information from non-public sources, and we often will be required to make investment recommendations and/or investment decisions without complete information or in reliance upon information provided by private market investment managers and other third parties that is impossible or impracticable to verify.

Item 9: Disciplinary Information

Registered investment advisers are required to disclose all material facts about any legal or disciplinary event that would be material to a client's (or prospective client's) evaluation of its integrity or its management personnel. We have no information applicable to this Item 9.

Item 10: Other Financial Industry Activities and Affiliations

Financial Industry Activities

Registered investment advisers are required to describe material relationships or arrangements that they (or their management persons) have with related financial industry participants, any material conflicts of interest that these relationships or arrangements create, and how they address such conflicts. Registered investment advisers that select or recommend other advisers for clients are also required to disclose any compensation arrangements or other business relationships between them and such advisory firms, along with the conflicts created, and explain how they address such conflicts.

With respect to our private markets advisory services, some of our personnel may have the right to serve on the advisory boards of the private pooled investment vehicles in which our clients invest to provide advice on certain conflicts of interest and related matters. There may be instances where such persons are asked to vote on issues taking the needs of all investors (including third party investors that are not our clients) into account. Such persons may receive reimbursements from the relevant private market investment managers for direct expenses incurred in connection with advisory board activities.

Other Investment Advisers

Meketa Investment Group directly controls the following Relying Advisers, which are located in Carlsbad, CA and London, UK, respectively.

- Meketa Fiduciary Management, LLC ("MFM"). MFM is a subsidiary of Meketa Investment Group and owned by Meketa Investment Group and a senior member of MFM. MFM focuses exclusively on providing discretionary or Outsourced Fiduciary Services (described under Item 4 above) to institutional clients. Some personnel of Meketa Investment Group provide services to MFM.
- Meketa Investments London Ltd ("MIL"). MIL is a wholly-owned subsidiary of Meketa Investment Group. MIL intends to provide such consulting services to clients in the United Kingdom and in the EEA. MIL also provides research support on public markets, private markets, and risk management strategies across Europe, the Middle East, and Africa (EMEA) to MIG and MFM. Some personnel of Meketa Investment Group serve as officers and/or directors of MIL and certain personnel of Meketa Investment Group provide services to MIL. MIL may use Meketa Investment Group or MFM as subcontractors in connection with its provision of services to its clients.

Item 11: Code of Ethics

We have adopted a code of ethics ("Code of Ethics") for all of our supervised persons describing our standard of business conduct and fiduciary duties to clients. Each Relying Adviser has adopted the Code of Ethics, with modifications as required by local laws or regulations. The Code of Ethics includes provisions relating to the confidentiality of client records and information, prohibitions on insider trading, restrictions on the acceptance and giving of gifts and the reporting of certain gifts and business entertainment items, restrictions on personal securities trading, required standards of conduct, and compliance with federal securities laws, among other things. All supervised persons must comply with the Code of Ethics at all times and acknowledge the terms of the Code of Ethics annually, or as amended. It is our policy that none of our employees shall prefer his or her own interest to that of an advisory client or make personal investment decisions based on the investment decisions of advisory clients.

To supervise compliance with our Code of Ethics, we require all supervised persons to provide annual securities holdings reports and quarterly transaction reports (or equivalent brokerage statements) to our Chief Compliance Officer (the "CCO"). We also require these persons to receive approval from the CCO prior to investing in any initial public offerings, or private offerings.

Supervised persons are also generally prohibited from trading for their own accounts in securities of any client, the securities of any entity that derives the majority of its revenues from investment management activities, and securities that are known to supervised persons to be in the process of being acquired or liquidated by a client. The Code of Ethics is designed to help ensure that the personal securities transactions, activities, and interests of our supervised persons will not interfere with our making decisions in the best interests of our clients. Nonetheless, because the Code of Ethics in some circumstances would permit supervised persons to invest in the same securities then held by clients, there is a possibility that supervised persons might benefit from market activity by a client in a security held by a supervised person. Supervised person trading is continually monitored under the Code of Ethics.

Clients or prospective clients may request a copy of our Code of Ethics by contacting Lisa Kinniburgh, Executive Coordinator, at 781.471.3500 or lkinniburghadv@meketa.com.

We are not a duly-registered broker-dealer. We will not affect any principal or agency cross securities transactions for client accounts.

Item 12: Brokerage Practices

We do not select brokers for client transactions, determine the reasonableness of brokers' compensation, or receive soft dollar benefits.

Item 13: Review of Accounts

We review client accounts and furnish a number of written reports to clients. Each report is tailored to the specific needs of the client. For most clients, the standard written report generally consists of detailed analysis of investment performance. Specifically, a report typically addresses the following areas:

- Asset allocation;
- Account structure;
- Account performance; and
- Investment manager review.

Reports are generally furnished quarterly, but the frequency of reporting is generally negotiable.

Our investment consultants and analysts assigned to the specific client regularly review such client's account. Reports are written by such investment professionals and are reviewed by other investment professionals, who may possess information germane to any such report.

Item 14: Client Referrals and Other Compensation

Registered investment advisers are required to describe any arrangement under which they or their related person compensates another for client referrals and describe the compensation. Registered investment advisers are also required to disclose any arrangement under which they receive any economic benefit, including sales awards or prizes, from a person who is not a client for providing advisory services to clients. We have no information applicable to this Item 14.

Item 15: Custody

All client assets are either held directly by clients or maintained by their qualified custodian. Clients receive account statements from their custodians at least quarterly. We urge our clients to carefully review the account statements they receive from their qualified custodian and compare such statements to any account statements that we may provide to them. Our account statements may vary from account statements received from qualified custodians based on accounting procedures, reporting dates, or valuation methodologies.

Neither Meketa Investment Group nor any of its affiliates act as qualified custodian for client accounts or maintain physical custody of client assets.

Item 16: Investment Discretion

Meketa Investment Group and MIL may receive discretionary authority from their respective clients at the outset or during the course of an advisory relationship. MFM will receive discretionary authority from its clients at the outset of an advisory relationship. In all such cases, however, such discretion is to be exercised in a manner consistent with applicable law, the stated investment guidelines, policies, limitations, and restrictions of the particular client account, the client's governing documents, and the client's agreement with us.

Investment guidelines, policies, and any limitations and restrictions must be disclosed to us in writing.

Item 17: Voting Client Securities

As a general matter, we will not accept any authority to vote proxies on behalf of clients. Clients retain the responsibility for receiving and voting proxies for any and all securities maintained in their portfolios. This may entail the retention by such clients of a third-party proxy voting service provider.

Nevertheless, we may, in limited circumstances, accept authority to vote "fund level" proxies in connection with mutual fund investments and private market investments (e.g., waivers and consents at the manager or fund level and not with respect to proxies appurtenant to portfolio entity holdings). Accordingly, we have adopted policies and procedures (the "Proxy Voting Policies and Procedures") that reflect our commitment in such circumstances to vote such proxies for which we exercise voting authority in a manner consistent with the best interest of the client.

We vote all proxies in a prudent manner, considering the prevailing circumstances at such time, and in a manner consistent with the Proxy Voting Policies and Procedures and our fiduciary duties to our clients.

Item 18: Financial Information

We are not required to disclose any financial information pursuant to this Item due to the following:

- We do not require or solicit the prepayment of more than $1,200 in fees six months or more in advance;
- We do not have a financial condition that is reasonably likely to impair our ability to meet contractual commitments to our clients; and
- We have never been the subject of a bankruptcy.

In April 2020, we obtained a loan under the Paycheck Protection Program through the U.S. Small Business Administration in conjunction with the relief afforded by the CARES Act to support our ongoing operations in light of the economic uncertainly resulting from the COVID-19 pandemic. On October 2, 2020, we repaid the loan in full with interest.

Exhibit C

Organizational Chart

Meketa Investment Group

Firm Organizational Chart

BOARD OF DIRECTORS

Stephen McCourt*
Co-Chief Executive Officer

Peter Woolley*
Co-Chief Executive Officer

CONSULTING SERVICES

James Meketa
Allan Emkin
Stephen McCourt, CFA*
Peter Woolley, CFA, CLU, ChFC*
Kay Ceserani
Neil Rue, CFA
Alan Spatrick, CFA
Frank Benham, CFA, CAIA*
Ted Benedict, CFA, CAIA*
Ted Disabato
Leandro Festino, CFA, CAIA
Mika Malone, CAIA
Sandra Ackermann-Schaufler, CFA*
Aneish Arora, CAIA
Keith Beaudoin, CFA, CAIA
Colin Bebee, CFA*
Sarah Bernstein, PhD
Gustavo Bikkesbakker*
Shawn Bowen
C. LaRoy Brantley
Jonathan Camp
Paul Cowie
Brian Dana, CAIA*
Will Duryea
Daniel Dynan, CFA, CAIA*
Nick Erickson, CFA, CAIA
Tim Filla, CAIA*
Henry Jaung
Ghiane Jones
Aaron Lally, CFA, CAIA, CIPM
Gordon Latter, FSA, FCIA
Ryan Lobdell, CAIA*
Stephen MacLellan, CFA*
Mary Mustard, CFA
Paola Nealon
Richard O'Neill, CFA, CAIA
David Sancewich
Hannah Schriner*
Alli Wallace Stone, CFA
Orray Taft, CAIA, FRM
Eric White, CFA
Laura Wirick, CFA, CAIA*
Larry Witt, CFA, CAIA

OUTSOURCED CIO
Rafi Zaman, CFA
Chief Investment Officer
Meketa Fiduciary Management

Stephen McCourt, CFA*
Sandra Ackermann-Schaufler, CFA*
Brian Dana, CAIA*
Tim Filla, CAIA*
Gordon Latter, FSA, FCIA
Eric Cappello
Justin Kitts
Hannah Schriner*
Orray Taft, CAIA, FRM

CAPITAL MARKETS RESEARCH
Frank Benham, CFA, CAIA*
Director of Research

Colin Bebee, CFA*
Leo Hsia
Ryan Lobdell, CAIA*
Rose Smith
Zach Stevens

PRIVATE MARKETS RESEARCH
John Haggerty, CFA
Director of Private Market Investments

Timothy Atkinson*
Lisa Bacon, CAIA
Mary Bates
Gustavo Bikkesbakker*
Peter Cantatore*
Blaze Cass*
Judy Chambers
Danny Chan, CFA
Gerald Chew, CAIA
Sarah Christo*
Jed Constantino
Jess Downer, CFA
Tad Fergusson, CFA
Christy Fields
Christy Gahr
Andrew Gilboard
David Glickman
Steven Hartt, CAIA
Peter King
Molly LeStage
Esther Lho
John McCarthy*
Aleem Naqvi, CFA
Harrison Page*
Derek Proctor
Karen Reeves
Luke Riela, CFA
Ethan Samson, JD*
Todd Silverman, CFA, CAIA*
Sarah Spotts*
Lexi Tamburello*
Adam Toczylowski, CFA

PUBLIC MARKETS RESEARCH
Mitch Dynan, CFA
Director of Public Markets Manager Research

Brian Dana, CAIA, Director of Marketable Alternatives*
Sandra Ackermann-Schaufler, CFA*
Emily Agnew, CFA*
Timothy Atkinson*
Colin Bebee, CFA*
Ted Benedict, CFA, CAIA*
Joshua Brough, CFA
Matthew Curran, CFA, CAIA
Zachary Driscoll
Daniel Dynan, CFA, CAIA*
Orianna Grillo
David Hetzer
Younes Ibnatik
Ryan Lobdell, CAIA*
Mark McKeown, CFA
Stephen MacLellan, CFA*
Alma Marmolejo
Ricky Pamensky, CFA
David Sancewich*
Todd Silverman, CFA, CAIA*
David Smith
Laura Wirick, CFA, CAIA*

INVESTMENT OPERATIONS
Kellie Kane*
Chief Operating Officer

GENERAL CONSULTING INVESTMENT OPERATIONS

Colleen Smiley, Manager
Sue Brumbaugh, Manager

Investment Analysts
Nicholas Buckley, CPA
Kristen Chase
Nang Dang
Thomas Dunleavy, CFA, CAIA
John Harris, CFA
Sidney Kawanguzi, CAIA
Eric Larsen
Jessica Lau
Jonas Noack
Sam Nunez
Perry Opel
Sabina Panthi
Jared Pratt, CFA, CAIA
Casey Satterlee
Marina Simanovich
Stephanie Sorg
David Suh
Alina Yuan

Client Service Administrators
Natalie Alegre
Nat Barr
Diane Conrad
Karen Dulaney
Nathaly Duran
Rachel Evicci
Maryann Farris
Shannon Frye
Erika Hanson
Anne Hayes
Rohmee Mathe
Emily Polk
Phillip Quinn
Jaclyn Schuppener
Melanie Solo
Sarah Tedford
Susan Wood

CRM Administrator
Lynda Warburton

PRIVATE MARKETS INVESTMENT OPERATIONS

Mark Jackman, Operations Manager

Investment Associates
Peter Cantatore*
Sarah Christo*
John McCarthy*
Harrison Page*
Sarah Spotts*
Lexi Tamburello*

Transfer Operations
Laura Havens
Maryjory Charlot
Lisa Gerardi
Andrew James

Monitoring
Blaze Cass*
Andrew Jenkins, CAIA

Client Service Administrators
Lea Page Castle
Kristen Guelke
Amyko Ishizaki
Dominique Jones

Legal
Ethan Samson, JD*
Liat Alston

GENERAL CONSULTING PERFORMANCE ANALYTICS

Brandon Jernigan, Manager of Perf. Analytics

Performance Analysts
Heather Bedont
Sierra Bell
Peter Belval
Ryan Cotton
Sara Davis
Yvette Elizalde
Maria Falayev
Karim Fayyad
Javier Gonzalez
Brad Gretsch
Alex Hamilton
Gloria Hazard
Cynthia Johnson
Merav Kaufman
Alex Khorsandian
Henry Lopez
David Mesa
Joe Morris
Caelan Ness
Koral Ortiz
Matthew Sigmund
Meaghan Sylvester
Sela Tim
William Wright

OPERATIONAL DUE DILIGENCE

Emily Agnew, CFA*, Manager of Operational Business Risk
Eric Cressman*, Senior Compliance Officer

** Denotes multiple roles on this chart.*
As of November 2020.

CORPORATE & BUSINESS ADMINISTRATION

LEGAL
Timothy G. Zayac, Esq.
Chief Legal Officer

HUMAN RESOURCES
Nancy LaBier, SPHR
Director of Human Resources
+ 4 professionals

FINANCE
Eric Cressman*
Director of Finance/Sr. Compliance Officer
+3 professionals

BUSINESS MANAGEMENT
Brad Regier, CFA, CAIA
Director of Business Management
+ 2 professionals

OPERATIONS
Kellie Kane*
Chief Operating Officer
+ 16 professionals

MARKETING
Lisa Rubin
Director of Marketing & Comm.
+ 9 professionals

Exhibit D

Code of Ethics and Compliance Manual

MEKETA
INVESTMENT GROUP

Code of Ethics

and

Investment Policy, Procedures,

and Compliance Manual

November 25, 2020

Table of Contents

Introduction

This Code of Ethics and Investment Policy, Procedures, and Compliance Manual (this "Manual") has been prepared for Supervised Persons (defined in Article I) of Meketa Investment Group, Inc. (together with its affiliates, the "Company").

The entire basis of our business is the trust of our clients. Without their trust we cannot do our jobs or remain in business. We strive to maintain our clients' trust and confidence by providing them independent and unbiased consulting advice.

The Company acts as a fiduciary to our clients, and Supervised Persons have the responsibility to render professional and unbiased consulting advice. We must act at all times in our clients' best interests and seek to avoid any conflicts of interest. This Manual is designed to help us achieve these goals.

This Manual sets forth general principles and guidelines applicable to the Company and its Supervised Persons and is intended to comply with applicable laws, including Sections 204, 204(A) and 206 of the Investment Advisers Act of 1940, as amended (the "Advisers Act"), and the rules and regulations thereunder adopted by the U.S. Securities and Exchange Commission ("SEC").

If you are unclear about the applicability of the law to your job responsibilities, or if you are unsure about the legality or integrity of a particular course of action, please seek the advice the Company's Chief Compliance Officer ("CCO") or your supervisor. You should never assume that an activity is acceptable merely because others in the industry engage in it. If something does not appear to be lawful or ethical, it may not be. The Company strongly encourages you to ask questions and to discuss freely any concerns.

This Manual does not address all compliance issues that might arise as the result of the Company's business activities. The Manual is intended merely to summarize certain compliance matters and to establish applicable policies and procedures. Each Supervised Person should carefully review the entirety of this Manual and must annually represent that they have received, reviewed, and will comply with the Manual.

Article I. Scope and Certain Definitions

1.1 Supervised Persons. This Manual applies to "Supervised Persons." Supervised Persons include (i) directors and officers, (ii) employees, and (iii) any other person acting on the Company's behalf and who is subject to its supervision and control.

1.2 Access Persons. An "Access Person" is any Supervised Person who (i) has access to material non-public information ("MNPI") regarding clients' purchase or sale of securities or the portfolio holdings of any fund or plan advised by the Company, (ii) is involved in making securities recommendations or rendering advice to clients, or (iii) has access to such recommendations that are non-public in nature. For the avoidance of doubt, the Company's directors and officers are Access Persons.

1.3 ComplianceAlpha. The Company uses ACA Compliance Group's "ComplianceAlpha" system to streamline the collection of employee requests for compliance approval and other required reporting. Supervised Persons must use ComplianceAlpha anywhere that prior written permission is required by a policy herein.

Article II. General Principles

2.1. **Codes and Regulations**. Supervised Persons are expected to be knowledgeable of, and comply with, applicable federal, state, and non-U.S. laws and regulations. They are expected to abide by the compliance practices and procedures set forth in this Manual.

2.2. **General Standards of Business Conduct**. The Company expects that Supervised Persons will conduct themselves in accordance with the following general standards regardless of whether this Manual prescribes more specific practices or procedures in relation to certain conduct.

a. Supervised Persons are not permitted, directly or indirectly:

   1. To defraud the client in any manner;
   2. To mislead the client, including by making a statement that omits material facts;
   3. To engage in any act, practice or course of conduct which operates or would operate as a fraud or deceit upon the client;
   4. To engage in any manipulative practice with respect to the client; or
   5. To engage in any manipulative practice with respect to securities, including price manipulation.

   As a fiduciary, the Company has an affirmative duty of care, loyalty, honesty, and good faith to act in the best interests of its clients. Supervised Persons must conduct themselves in a manner consistent with such duties by, for example:

   1. Avoiding conflicts of interest and fully disclosing all material facts concerning any conflict that does arise with respect to any client;
   2. Refraining from inappropriate favoritism of one client (or potential client) over another client;
   3. Using caution in accepting gifts or bequests from clients and refraining from taking loans from clients;

4. Avoiding activities that are competitive with the Company; and
5. Not allowing one's own investments to influence judgment or action in the conduct of the Company's business.

Many of the Company's clients are employee benefit plans that are subject to the Employee Retirement Income Security Act of 1974, as amended ("ERISA"). With respect to these clients, the Company is subject to the fiduciary standards imposed by ERISA. Supervised Persons adhere to these standards and render advice and services in a manner consistent with the following:

1. *Exclusive Benefit*. A fiduciary must discharge its duties with respect to a plan solely in the interest of its participants and beneficiaries and for the exclusive purpose of providing benefits to them.
2. *Prudent Expert Rule*. A fiduciary in discharging its duties with respect to a plan is required to act "with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims."
3. *Diversification*. A fiduciary that has investment responsibility must diversify the investments of a plan so as to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so.
4. *Non-Deviation from Plan Documents*. A fiduciary must act in accordance with the documents and instruments governing a plan insofar as they are consistent with the provisions of ERISA.

Article III. Personal Trading Policy and Procedures

3.1. Introduction.

a. Rule 204A-1 under the Advisers Act requires the Company's Code of Ethics to impose certain restrictions on the personal securities trading of Supervised Persons and any family member living in the same household or to whom the Supervised Person provides material financial support ("Family Member"). Such restrictions include obtaining pre-approval for certain trades or private security transactions and reporting certain trading activities and securities holdings.

b. Pursuant to the Rule, the following policy is designed to help prevent potential legal, business or ethical conflicts and to minimize the risk of unlawful trading in any personal trading account and guard against the misuse of MNPI. All personal trading and other similar activities of Supervised Persons, and any Family Member, must avoid any conflict or perceived conflict with the interests of the Company and its clients. To that end, personal trading in the securities of issuers currently listed on the Company's Restricted List is not permitted, and personal trading in the securities of any entity that derives the majority of its revenues from investment management activities is acceptable only in limited circumstances with the CCO's pre-approval.

c. Supervised Persons are expected to devote their business time to the business of the Company. The Company discourages, and will monitor Supervised Persons' activities, including, but not limited to personal trading, that would distract Supervised Persons from their responsibilities to the Company. The Company therefore reserves the right to restrict such activities, including, but not limited to, suspending trading privileges. For the purpose of this policy, Supervised Persons are encouraged to submit all pre-clearance requests and personal trading reporting forms through ComplianceAlpha. Should the system not be accessible, Supervised Persons shall submit requests via e-mail to the CCO.

3.2. Definitions.

a. Covered Accounts

1. This policy applies to all accounts in which a Supervised Person has a current beneficial interest, and all accounts held or maintained by all Supervised Persons, their Family Members, and any person or entity whose financial affairs the Supervised Person controls or for whom the Supervised Person provides discretionary advisory services (collectively, "Covered Accounts").
2. This policy also applies to any person(s) hired by the Company as an independent contractor (or equivalent) and are the recipient of MNPI regarding the Company's trading activities (e.g., proprietary research notes, portfolio holdings, etc.). Any questions regarding the applicability of this policy to a particular investment should be raised with the CCO.

b. Non-Discretionary Managed Accounts

1. A "Non-Discretionary Managed Account" means an account over which a Supervised Person has no direct or indirect influence or control. This includes accounts for which a Supervised Person has granted full investment discretion to an outside broker-dealer, bank, investment manager, or adviser and therefore all specific investment decisions in the account are made by the third-party investment manager and not directly or indirectly influenced or controlled by a Supervised Person or any Family Member. For a Supervised Person to claim this status, sufficient documentation must first be provided to the CCO from the Supervised Person and outside adviser to illustrate the investment relationship.
2. Supervised Persons and their Family Members may not provide any advice, suggestions or directions to the professional investment manager with respect to the purchase or sale of a specific security or instrument in a Non-Discretionary Managed Account. Supervised Persons and their Family Members, may, however discuss with the professional investment manager overall investment goals and asset allocation among broad asset classes in a Non-Discretionary Managed Account.
3. A Non-Discretionary Managed Account is not a Covered Account and is not subject to the preclearance or quarterly reporting requirements detailed below.
4. Robo-advised accounts may be classified as Non-Discretionary Managed Accounts. Robo-advisers are registered investment advisers that use computer algorithms to provide investment advisory services online. As Supervised Persons typically have no direct or indirect influence or control, Supervised Persons must notify the Chief Compliance if a robo-account is opened. The CCO will determine if such account will be classified as a Non-Discretionary Managed Account.
5. In the event that a Non-Discretionary Managed Account is no longer deemed managed by a third party investment manager, it is the responsibility of the Supervised Person to promptly notify the CCO of the change in status.

c. Exempt Investments. The requirements of this policy do not apply to:

1. Direct obligations of the Government of the United States, individual states and local municipalities (including Treasury bonds);
2. Bankers' acceptances, bank certificates of deposit, commercial paper and high quality short-term debt instruments, including repurchase agreements;
3. Shares issued by money market funds;
4. Shares issued by open-end mutual funds (or the non-U.S. equivalents);
5. Shares issued by unit investment trusts that are invested ***solely*** in one or more open-end mutual funds;
6. "Section 529" college savings and pre-paid college tuition plans;
7. Currency and non-securities derivatives on foreign currency;
8. Cryptocurrencies[1]; and
9. Annuities and other insurance products (unless the product is referenced to an investment instrument that is not an Exempt Investment described above).

Covered Accounts that only have the ability to transact in Exempt Investments are not subject to the quarterly transaction disclosure or pre-approval requirements described in Sections III and IV below.

d. Private Placements

A "private placement" means an offering of securities that is exempt from registration under the Securities Act of 1933. Unregistered shares or other interests in a hedge fund, private equity fund, private real estate fund, private company, private partnership, or private limited liability company are all examples of private placements.

e. Restricted List

In general, a Restricted List may consist of securities of: (i) issuers or companies with respect to which the CCO has been made aware that a Supervised Person has received, expects to receive or may be in a position to receive MNPI; (ii) issuers or companies on whose board of directors or similar body a Supervised Person serves (notwithstanding an "open window" period, during which such issuers or companies are not restricted); (iii) private entities with which the Company has entered into a Confidentiality Agreement (a "CA") when information under such agreement may include MNPI of a public issuer or company; (iv) companies for which any Supervised Person has received MNPI when evaluating client strategies or private positions; and (v) other companies that the Company and its Supervised Persons should not be trading or in which such investments should not be made for various reasons, as may be determined from time to time by the CCO or management of the Company.

[1] The Company deems cryptocurrency "altcoins" or "coins" akin to traditional currencies and are therefore Exempt Investments. Examples include, but are not limited to, Bitcoin, Ethereum, and Ripple. For the avoidance of doubt, all other crypto and/or digital assets, such as participation in initial coin offerings, mining contracts, and other tokenized investments that provide the investor with a private interest in a business enterprise or venture (e.g., a private fund) are NOT Exempt Investments and are subject to preclearance.

Any time a Supervised Person receives MNPI about a company that has issued publicly traded securities, that company will be added to the Restricted List. Supervised Persons are responsible for contacting the CCO any time that they receive or intend to receive any non-public information about a public company. They are also responsible for notifying the CCO of any other circumstances in which a company should be added to the Restricted List. The CCO shall be responsible for maintaining the Company's Restricted List.

1. Overview

   Absent an exception granted by the CCO, Supervised Persons and their Family Members, are prohibited from trading or otherwise investing in the securities of issuers or companies that are on the Company's Restricted List until such security is removed from the Restricted List.

   The CCO will ensure that the Restricted List is available to all Supervised Persons via ComplianceAlpha. Supervised Persons are required to consult the Restricted List as needed to comply with this policy.

   The Restricted List is confidential and may not be disclosed to anyone outside the Company as it may contain MNPI. It is therefore vital that Supervised Persons do not disclose the contents of the Restricted List to anyone outside of the Company or to Supervised Persons who do not have a legitimate need to know, without the prior consent of the CCO.

2. Review

   The CCO will review the Restricted List on a regular basis to determine whether any Supervised Persons remain in possession of non-public information. Specifically, the CCO, during the course of his review, will update the Restricted List to reflect those issuers or companies for which a Supervised Person(s) and/or the Company no longer has MNPI. The CCO shall document the reasons an issuer or company has been removed from the Restricted List.

f. Investment Management Firms

Personal trading in Covered Accounts in the securities of any entity that derives the majority of its revenues from investment management activities is generally prohibited, and acceptable only in rare instances at the sole discretion of the CCO. For example, Supervised Persons may request pre-approval to exit the pre-existing stock position of an investment management firm or in the event a Family Member of a Supervised Person is employed and compensated by the investment management entity with securities similar to a stock purchase plan or Automatic Investment Plan.

g. Charitable Contributions, Gifts and Donor-Advised Funds

Charitable contributions or gifts of investment instruments are treated as sales under this policy and therefore subject to the same requirements that apply to sale transactions as described herein. Similarly, donor-advised funds (each, a "DAF") are treated as Covered Accounts and subject to the requirements described herein unless a DAF qualifies as a Non-Discretionary Managed Account.

h. Automatic Investment Plans

Participation by Covered Accounts in automatic investment plans that on a regular basis invest in a predetermined amount in a basket of securities chosen by an investor requires the CCO's prior approval. If participation in such a plan has been approved, regular and automatic investments are not subject to the transaction pre-approval requirement described below in Section 3.4. However, modifications to the previously approved, regular and automatic investment activities of the plan must receive the CCO's pre-approval. For the avoidance of doubt, any transactions in the same Covered Account that are not part of the pre-approved automatic investment plan are subject to the pre-approval requirement.

3.3 Account Disclosure Requirements.

a. Initial Holdings Disclosure Requirement for Covered Accounts

Within 10 calendar days of commencing employment (or otherwise becoming subject to this policy), you must submit via ComplianceAlpha a completed Initial Holdings Report, which includes information about each of your securities holdings in your Covered Accounts. In order to complete this report, you must first connect your Covered Accounts electronically to ComplianceAlpha.[2] As noted above, you must submit an Initial Holdings Report via ComplianceAlpha even if you do not have securities holdings to disclose. Without the CCO's prior approval, you may not execute a transaction in a Covered Account prior to disclosing it in ComplianceAlpha.

b. Quarterly Transaction Disclosure Requirement for Covered Accounts

Within 30 calendar days after the end of each calendar quarter, you must submit a Quarterly Transaction Report via ComplianceAlpha disclosing all transactions effected in each Covered Account during the prior quarter. **You must submit a Quarterly Transaction Report even if there were no transactions to report.** Transactions in Covered Accounts that are connected electronically to ComplianceAlpha will automatically populate in the Quarterly Transaction Report, however, it is your responsibility to ensure that such automatic reporting is complete and accurate. For the avoidance of doubt, such reports must include any transactions effected during the prior quarter that did not automatically feed to ComplianceAlpha, such as grants of restricted stock units, vested stock options, or transactions in private investment vehicles and other private placements.

c. Annual Holdings Disclosure Requirement for Covered Accounts

Within 45 calendar days after the end of each calendar year, you must submit an Annual Holdings Report via ComplianceAlpha disclosing holdings information regarding all investments in all Covered Accounts as of year-end. **You must submit a timely Annual Holdings Report even if there are no holdings in Covered Accounts to report.** Holdings information in Covered Accounts connected electronically to ComplianceAlpha will automatically populate in the Annual Holdings Report, however it is your responsibility to ensure that such automatic reporting is complete and accurate. For the avoidance of doubt, the holdings of Covered Accounts that only have the ability to transact in securities that are deemed Exempt Investments are required to be reported in your Annual Holdings Reports.

3.4 Transaction Pre-Approval Requirements.

[2] Covered Accounts should be connected electronically to ComplianceAlpha (i.e., automatically feed holdings and transactions information) via (i) adding your account to an existing direct data feed from your broker or (ii) your Covered Account's online login credentials. Since the holdings of Covered Accounts that only have the ability to transact in securities that are deemed Exempt Investments must only be reported initially and annually, you may attach a PDF account statement in your Initial Holdings Report and Annual Holdings Reports in lieu of an electronic connection. Please see the CCO with any issues regarding connecting your accounts to ComplianceAlpha or for guidance regarding the preferred connection method.

a. General Requirement

Voluntary transactions in the following securities require the CCO's pre-approval via submission of a "pre-clearance request" in ComplianceAlpha:

1. Participation in initial public offerings;
2. Private placements or other limited offerings;
3. Securities listed on the Company's Restricted List (generally prohibited); and
4. Securities of any entity that derives the majority of its revenues from investment management activities (generally prohibited).

To assist Supervised Persons' compliance with this policy, the CCO will maintain a copy of the Restricted List and a non-comprehensive list of investment management businesses in ComplianceAlpha. As a result, it is vital that Supervised Persons check these lists prior to transacting in securities.

b. Transaction Pre-Approval Process

As noted above, you must submit each transaction pre-approval request via ComplianceAlpha and may not effect the transaction until you have received confirmation from Compliance that the transaction has been approved. Such requests will be processed via ComplianceAlpha which will send an email alert to you disclosing the result of the pre-approval request. **Transactions that require prior approval must be effected by the end of the trading period approved by the CCO.** As a result, good-till-cancel orders for transactions are generally prohibited. Private placement transactions must be effected within 30 calendar days of compliance approval.

The Company may, in its discretion, deny any transaction request for any reason. The Company will generally deny a transaction request if

1. the investment is on the Company's Restricted List;
2. the investment directly relates to an entity that derives the majority of its revenues from investment management activities; or
3. The Company otherwise deems the transaction to be contrary to the interests of the Company or a Company client.

c. Exercise of Options

With the exception of a "cashless exercise" described below, the exercise of an option is not considered a transaction separate from the original transaction to acquire the option security. Please note, however, that the subsequent liquidation of an equity position that resulted from an option exercise is subject to this policy's pre-approval requirement. In addition, consistent with Article V "Insider Trading and the Protection of Material Non-public Information," please note that you may not exercise an option while aware of MNPI relating to that option or the entity that issued the option.

Stock options issued as compensation to employees from prior employers may allow the holder to effect a "cashless exercise". Because a cashless exercise is generally effected through a simultaneous exercise and sale of the stock acquired, a cashless exercise of employer issued options is subject to prior approval requirements.

3.5 Compliance Review and Surveillance.

The CCO or selected delegate conducts certain reviews and surveillance of personal investment activity. Also, the CCO may provide Company management with certain information about a Supervised Person's personal account transactions. A Managing Principal is responsible for the review and surveillance of the CCO's personal investment activity and requisite pre-approval requests.

Article IV. Conflicts of Interest

Certain interests or activities may create an actual or a potential conflict with the interests or activities of the Company or its clients or may give the appearance of conflicts though no actual conflicts exist. At all times you must act in the best interest of the Company and its clients and avoid conflicts of interest that could compel you to act in a manner that is inconsistent with the interests of the Company or its clients. Personal gain and advantage must never take precedent over your obligations to the Company and its clients. If you are aware of an interest, activity, or potential transaction that could cause you to act in manner that is inconsistent with the interests of the Company or its clients, you should discuss the matter with Compliance so that the Company can assess the potential conflict and take necessary steps to properly address it. You should not attempt to address a potential conflict without first involving the CCO.

The Company attempts to identify all actual or potential conflicts by administering this Manual and the Company's compliance procedures, training, required new hire disclosures and the Annual Financial/Conflict of Interest Statement; however, the aforementioned cannot anticipate every potential conflict. You must be attentive to your interests and activities and whether they create actual or potential conflicts of interest. To that end, it is important that you carefully consider whether your personal or professional relationships, direct or indirect beneficial interests, or activities outside of the Company including charitable endeavors, could create a conflict (or the appearance of a conflict) with the interests of the Company or its clients.

You should also be aware that a conflict of interest may exist even if it does not result in any financial loss to the Company, its clients, or any gain to you, the Company, certain clients, and irrespective of the motivations of the Company or the persons involved. Such factors should not prevent you from notifying the CCO.

Article V. Insider Trading and the Protection of MNPI

5.1 Introduction.

a. The Company absolutely forbids insider trading. No Supervised Person may trade, personally or on behalf of others (such as private pooled investment vehicles and client accounts managed by the Company) while in possession of MNPI. No Supervised Person may communicate MNPI to anyone except individuals who are entitled to receive the information in connection with their performance of their responsibilities for the Company.

5.2 Material Non-public Information.

a. Information is "material" if there is a substantial likelihood that a reasonable investor would consider the information important in deciding whether to hold, buy or sell the security in question. Information is likely to be "material" if it relates to significant changes affecting the issuer of the securities, including but not limited to:

   a. the impending termination of an investment manager;
   b. earnings (pre-tax income, operating income, net income);
   c. mergers, acquisitions, declaration of stock splits or dividend increase, decrease or omission;
   d. major management changes;
   e. major accounting changes, changes in tax rate or significant changes in debt or equity;
   f. establishment of a program to purchase the issuer's own shares;
   g. purchase or sale of a significant asset;
   h. write-downs or write-offs of assets;
   i. additions to reserves for bad debts or contingent liabilities;
   j. proposals or agreements involving a joint venture, merger, acquisition, consolidation, divestiture, leveraged buy-out or other reorganization;
   k. dispute with a major supplier or customer;
   l. debt service or liquidity problems;
   m. the public or private sale of a significant amount of securities;
   n. criminal indictments, civil litigation or government investigations;
   o. acquisition or loss of a significant contract;
   p. a significant new product or discovery; or
   q. a tender offer for another company's securities.

   "Non-public information" means information that has not been made available to the investing public generally, has been provided on a confidential basis, or has been provided in breach of a fiduciary duty not to disclose the information. Once MNPI has been disseminated broadly to the investing public through recognized channels of distribution designed to reach and to be readily absorbed by the securities marketplace (e.g., through a national wire service, *The Wall Street Journal* or *The New York Times* or through the filing of a public disclosure document such as a proxy statement or prospectus with the SEC or other appropriate regulatory agency), it loses its status as non-public information.

   MNPI includes information about the Company's recommendations and information about client's securities holdings and transactions (including pending transactions). The Company and Supervised Persons are not ordinarily privy to information regarding impending trades made in client portfolios. However, in the event such information becomes available to the Company or any Supervised Person, such information will be considered MNPI.

No simple test exists to determine when information is material. Assessments of materiality involve a highly fact-specific inquiry. If a Supervised Person is uncertain whether certain information is material, he or she should contact the CCO.

5.3. Policies and Procedures for Protection of MNPI. The use or improper disclosure of MNPI is prohibited under applicable securities laws and this Manual. If you believe you are in possession of MNPI, do not share the information with anyone and immediately contact the CCO.

a. The following governs the handling of MNPI:

1. Never trade, recommend, direct, or otherwise cause the trading in securities for a client account, your own account, or the account of the Company or any third party when you are aware of MNPI relating to the issuer of the securities.
2. Never disclose MNPI except: (i) to the extent such disclosure is authorized by the written approval of the CCO and when necessary in connection with your duties to the Company or a client; or (ii) when the person to whom the disclosure is made is under a formal obligation of confidence to the Company, as is the case with other Supervised Persons, the Company's outside counsel or auditors, and only when the person to whom the disclosure is made has a legitimate need to know such information; or (iii) to the SEC, the U.S. Department of Labor ("DOL") or other regulator at the direction of internal or outside counsel to the Company.

b. The following guidance is designed to help prevent unauthorized or improper disclosures:

1. Good judgment and care should be exercised at all times to avoid unauthorized or improper disclosures. Conversations in public places such as restaurants and elevators should be limited to matters that do not pertain to confidential information.
2. Sensitive confidential materials are frequently transmitted by e-mail and facsimile. When sending confidential materials via e-mail the sender should verify the recipient's e-mail address to ensure that confidential information is not misdirected. When sending confidential materials via facsimile, the sender should verify that the recipient's facsimile machine is in a secure place or that the intended recipient is standing by the machine when the transmission is made.

5.4. Confidentiality of Clients' Records and Information. All information pertaining to a client or its account is to be considered "confidential" and is not to be distributed to any parties outside of the Company, except as necessary to provide services as described in such client's advisory agreement or as required by law or law process.

Article VII. Reporting of Violations

Any known or suspected violations of any policy or procedure included in this Code of Ethics and Manual must be reported promptly to the CCO or a member of the Compliance Committee. The Company will use its best efforts to keep confidential the identity of any Supervised Person who makes such a report. Complete confidentiality may not be possible in every case, however, where an investigation is pending and/or regulatory reporting is required. Nonetheless, the Company will not permit retribution, harassment or intimidation of any Supervised Person who in good faith makes any such report. Notwithstanding your rights as referenced under the Whistleblower Policy, failing to report a suspected or known violation will be deemed a violation of this policy.

Article VIII. CCO; Compliance Committee

8.1. Compliance Committee. The Compliance Committee includes the CCO and is made up of various employees from relevant departments or responsibility (e.g., marketing, human resources, consulting, etc.) The Compliance Committee meets quarterly or more frequently as needed.

8.2. CCO. Eric Cressman serves as the CCO.

8.3. Periodic Review. Pursuant to Section 3.5, the CCO, or his delegate, will investigate any unusual transactions or trades executed by any Supervised Person and will promptly bring them to the attention of the Compliance Committee or management for appropriate action.

8.4. Authority; Annual Review. The CCO will conduct and document (or cause to be conducted and documented) an annual review of the Company's ethics and compliance policies and will have full authority to develop and enforce appropriate policies and procedures designed to prevent violation of applicable securities laws.

8.5. Document Distribution. The CCO will ensure timely distribution of the Company's Form ADV Part 2A (brochure) and supplements (Part 2B) thereto and other required documents to clients.

Article X. Outside Business Activities Policy

General Policy

This policy governs the outside business activities of the Company's Supervised Persons. Under this policy, an "Outside Business Activity" means any participation in any other enterprise (whether or not "for profit") and includes both temporary (e.g. serving as an expert network consultant) and permanent positions.

Supervised Persons are prohibited from engaging in any Outside Business Activity without the prior written approval of the CCO. Approval will be granted on a case-by-case basis, subject to consideration of, among other things, potential conflicts of interest, disclosure obligations, time commitment, and regulatory issues.

If the Supervised Person receives approval from the CCO to engage in an Outside Business Activity and subsequently becomes aware of a potential conflict of interest that was not disclosed when the approval was granted, the conflict must be immediately brought to the attention of the CCO. The CCO may determine to withdraw prior approval.

Specific Situations

A Supervised Person may seek or be asked to serve as an officer or on the board of directors of other public or private entities in which the Company's clients do not hold an interest (an "Outside Business"). Any such service may raise compliance concerns, including, but not limited to, access to MNPI and potential conflicts of interest.

- As a board member or officer of an Outside Business, the Supervised Person may come into possession of MNPI about the Outside Business, its competitors, its suppliers or customers or other organizations. In instances where such information relates, directly or indirectly, to publicly traded securities, particularly where the entity is itself a public company, it is critical (i) that appropriate controls be put in place and (ii) that all the Supervised Persons comply with such controls, including, but not limited to, the Company's Code of Ethics and Investment Policy and Procedure Manual's section entitled "Insider Trading and the Protection of MNPI'

- Conflicts of interest may arise should the Company or its clients or their related entities have or seek, in the future, to have a business relationship with the Outside Business. In those circumstances, the Supervised Person must not be involved in the decision to retain or otherwise transact business with the Outside Business in a manner which could place the Company's interests in conflict with those of its clients.

The Supervised Person may not participate in any Outside Business Activity that comes to his or her attention as a result of his or her association with the Company and in which he or she knows that the Company or its client might be expected to have an interest, without:

- disclosing in writing all necessary facts to the CCO; and
- obtaining written approval to participate from the CCO.

Exception

Standard volunteer work at a "not for profit" or charity organization that does not involve providing investment advice, a leadership position, or any compensation is permitted and falls outside the scope of Outside Business Activity.

Article XI. Client Onboarding

11.1. Account Acceptance and Opening Procedures.

a. A Managing Principal must approve each new client relationship.

When a new client relationship is established, the client must enter into a written agreement with the Company.

The Advisers Act requires the Company to deliver (1) a current brochure (Part 2A of Form ADV) to a client before or at the time it enters into an advisory agreement with the client and (2) a brochure supplement (Part 2B of Form ADV) for each Supervised Person that (1) formulates investment advice for that client and has direct client contact or (2) makes discretionary investment decisions of that client's assets at or before the time such Supervised Person takes any action with respect to that client's account. The Company also includes a copy of its Privacy Policy during client onboarding.

11.2 Procedures for Accepting Clients. The following are the basic procedures that should be followed after a new client is accepted:

a. The client should be provided with copies of all executed agreements and related documents.
b. Copies of all executed agreements and related documents should be retained for record-keeping purposes.

Article XII. Portfolio Advice and Management

12.1. Introduction.

a. As part of the Company's fiduciary duty to its clients, the Company must have a reasonable basis to believe that its investment recommendations or actions are suitable for each client, taking into consideration a client's financial situation, investment experience, and investment objective and limitations. Accordingly, the Company should be prepared to demonstrate that it has obtained (and maintains) sufficient information regarding the client's circumstances. Examples of documents that may be used to determine suitability include client questionnaires, fact sheets, investment objectives confirmation letters and a client's investment policy statement or guidelines.

b. The Company must act with prudence and exercise due care throughout the non-discretionary advisory or discretionary portfolio management process. The Company also has a duty to periodically review client accounts (discretionary or otherwise) to help ensure that such accounts are advised or managed in a manner suitable for the client and consistent with the client's advisory agreements with the Company and the Company's disclosures.

c. The portfolio management process is a dynamic activity that requires ongoing analysis of clients' investments. The Company's assigned investment consultants and all Supervised Persons who support Meketa's research and portfolio management processes (together, "Investment Professionals") must be mindful of their respective client's financial circumstances and investment objectives and must always seek to comply with any client-imposed investment restrictions.

d. The Company's Investment Professionals are expected to review the information disseminated by the Company's various investment committees on a regular basis and, after taking into consideration the particular client's facts and circumstances, implement necessary portfolio adjustments (or make a recommendation in the case of a non-discretionary client) in light of the respective committee's guidance. The following committees are generally responsible for providing market guidance for clients of the Company.
    i. Investment Policy Committee
    ii. Strategic Asset Allocation/Risk Management Committee
    iii. Global Macroeconomic Working Group
    iv. Marketable Securities Investment Committee
    v. Private Markets Policy Committee
    vi. Private Markets Research Committee
    vii. Defined Contribution Committee
    viii. Emerging and Diverse Manager Committee
    ix. ESG Investing Committee
    x. Endowment & Foundation Committee
    xi. MFM Investment Committee
    xii. Asset-Liability Risk Management Committee

12.2 Procedures.

a. The Company maintains several investment oriented committees that are responsible for disseminating macroeconomic and other market guidance to assist Investment Professionals managing client portfolios (both discretionary and non-discretionary). The Company generally expects those Investment Professionals to digest the applicable committee's serial guidance and make portfolio adjustments in response to the guidance (or recommend adjustments to non-discretionary clients). In cases where Investment Professionals elect to ignore a committee's guidance, such Investment Professionals must record contemporaneous rationale as to why "inaction" is in the best interests of the particular client.

b. The Company maintains extensive research files in connection with relevant recommendations and actions, most of which are produced by the Company's Marketable Securities Investment Committee and Private Markets Committees. The Company expects Investment Professionals with primary advisory responsibilities to adhere to these committees' research and only recommend new investments for clients in "approved" investment managers, as labeled internally by these committees. Notwithstanding the above requirement, the Company acknowledges there are instances where clients request the Company to conduct various levels of diligence and provide an opinion on an investment opportunity that has not been reviewed by the Company's committees. The Company also requires maintenance of documentation in connection with its periodic meetings with clients reviewing, among other things, the client's circumstances and current portfolio.

c. Copies of all executed client agreements and related documents must be retained for record-keeping purposes.

12.3. Periodic Client Reviews.

a. All clients' accounts (managed or otherwise) will be reviewed on an ad hoc basis and periodic basis.

b. The CCO or his designee will review a sample of the Company's client accounts at least annually to ensure compliance with clients' stated investment objectives and restrictions(generally, client-adopted investment policy statement or guidelines). The CCO or his designee will document the date of the review, the accounts reviewed, and note any irregularities or other identified issues. The CCO or his designee will work with client assigned investment personnel to remedy such irregularities and determine whether any issues warrant changes to the Company's policies or procedures.

12.4. Investment Allocation Policy

The Company needs to be sensitive to how to allocate investment opportunities among its discretionary clients and how it should allocate and disseminate investment recommendations among its non-discretionary clients (for the purpose of this policy, investment opportunities and recommendations are collectively referred to as "opportunities").

The SEC believes that an adviser may be dealing unfairly with clients in violation of the Advisers Act if it does not allocate opportunities in a fair and equitable manner to avoid favoritism among clients or the appearance thereof.

Clients with stated investment objectives that are compatible with a particular opportunity, should, when practicable, participate in that opportunity based upon, among other things, the relative importance of the opportunity to the fulfillment of such clients' investment objectives.

An assessment of the relative importance of an opportunity to the fulfillment of client investment objectives is dependent upon a number of factors, including, but not limited to, availability of alternative investment opportunities, existing portfolio composition and liquidity requirements.

Where the Company determines that a particular opportunity is compatible with the client's objectives, and is important to the fulfillment of the investment objectives of two or more clients, but where the total available allocation is restrained, it will seek to allocate such opportunity among such clients on a basis that it believes is fair and equitable after taking into account various factors, including, but not limited to, the following:

- Whether the client can take advantage of the investment opportunity in the time-frame established by the applicable investment manager or its agents;[3]
- Whether the client has existing contractual rights with the particular manager that grants it preference with respect to the investment opportunity (e.g., with respect to secondary transactions, the exercise of right of first offer and/or co-sale rights, co-investment opportunities, etc.);
- Whether the amount of the available allocation is consistent with the investment objectives of the client (e.g., whether the available allocation amount would be insufficient to make up a meaningful portion of the client's portfolio, whether the available allocation amount complies with the client's minimum investment requirements, etc.);
- Whether the opportunity is consistent with the client's total return requirements;
- Whether there are any potential conflicts of interest;
- Whether the economic or legal terms governing the potential opportunity are appropriate for the client; and
- Whether the costs, fees or limitations related to the opportunity are appropriate for the client.

The Company will document any such instances in an effort to avoid a pattern of any client being consistently disadvantaged.

Exceptions

Despite seeking a fair and equitable allocation, investment managers and their agents have ultimate control over the constituency of their investors, and therefore there may be situations where an investment manager does not accept the requested allocation to two or more of the Company's clients, despite both being compatible from a strategy perspective.

The Company may in its sole discretion depart from the foregoing guidelines in any particular instance if it in good faith concludes that it would be appropriate to do so, and that such a departure would be nonetheless consistent with the general principles described herein.

Oversight of Policy

[3] For example, non-discretionary clients' investment recommendation approval periods sometimes prevent an allocation to an investment opportunity with a time constraint.

The Company's Investment Professionals have primary responsibility for the oversight of client portfolios and in the event that there is a potential opportunity that is compatible with a Client's portfolio but the total amount of the opportunity is restrained, the Marketable Securities Investment Committee or the Private Markets Policy Committee will oversee the allocation to client portfolios.

The Company's Marketable Securities Investment Committee is the decision-making body responsible for all allocation decisions regarding public market investments.

The Company's Private Markets Policy Committee is the decision-making body responsible for all allocation decisions regarding private market investments.

The Public Markets Investment Committee or Private Markets Policy Committee (as the case may be) and the CCO are collectively responsible for enforcing this policy with respect to the allocation of public market or private market opportunities, respectively.

The Company will review allocations of opportunities from time to time as necessary to determine compliance with this policy.

12.5. Trade Errors.

a. **Introduction**

The Company may on occasion agree to direct or recommend client account cash movements (such cash movements, "trades") and errors may occur with respect to.

Examples of errors include, but are not limited to actions or recommendations resulting in:

- the purchase or sale of the incorrect quantity of securities;
- the sale of a security when it should have been purchased;
- the purchase of a security when it should have been sold;
- the purchase or sale of the wrong security;
- the purchase or sale of a security contrary to regulatory restrictions or a client's stated investment objectives or restrictions;
- the purchase or sale of a security for the wrong client account;
- the purchase or sale of securities on the incorrect date; or
- a bunched order of trades allocated incorrectly.

Errors that do not result in loss of an investment opportunity will not be viewed as trader errors and are therefore not subject to the procedures listed below.

Any trade error must be brought to the prompt attention of the CCO, the primary Consultant(s) assigned to the client, and the CIO of Meketa Fiduciary Management, LLC (if applicable).

b. **Correcting Trade Errors**

The Company, subject to its fiduciary obligations, will determine whether or not any trade error is required to be reimbursed in accordance with this policy. Any trade error resulting in a gain for the client will be retained by the client and not retained by the Company.

c. **Providing Notice to Clients**

Trade errors that do not result in transactions in client accounts will not be subject to this policy. Examples of occurrences which are not considered trade errors, for the purposes of this policy, include, but are not limited to: delivery failures caused by third-party broker-dealers; passive breaches of client investment paraments due to client directed activity; a trade that is properly executed but documented incorrectly; and errors of brokers, custodians, and other service providers.

Should a trade error occur in a client account, the Company will timely notify the client of the error, any investment guideline violation and any remedial action taken (or to be taken).

Article XIII. Recommendations

13.1 Client Recommendations.

a. All client recommendations must be made by or directly approved by an Investment Professional.

b. Time permitting, all data shown in reports, recommendations, memoranda, or other client documents must be checked for accuracy by at least one Investment Professional other than the writer.

c. No client may be treated in preference to any other client.

13.2 The investment staff may not make specific recommendation of any security to or for any person or organization other than those persons or organizations who are clients of the Company.

a. In those instances where the Company is soliciting the business of a prospective client and the making of an investment recommendation is necessary for the prospective client's informational and decisional purposes. Any member of the investment staff making such recommendations should inform through a written disclaimer that the recommendation is for their information and decisional purposes only, is based upon limited available information, and is to be considered operative only for a limited time; or

b. For advice rendered to accounts of which the Supervised Person may be considered the beneficial owner.[4]

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[4] See Personal Trading Policy for transactions in personal accounts.

Members of the investment staff may participate in discussions of investment related topics with non-clients only if the discussion does not pose a conflict with any client relationship or violate any applicable securities laws.

Article XIV. Electronic Communications

When engaging in written electronic communications involving matters in any way related to the Company, including without limitation discussing confidential information, the Company's actual or prospective position on client investments, or any other matter relating to the Company's Supervised Persons, clients, client investments or Company financials ("Business-Related Communications"), you must use only your Company-provided email account or other software previously approved for business use by the Company, such as Microsoft Teams.

Any use of personal email accounts (e.g., Gmail, Yahoo, etc.), cell phone/text messaging accounts, Instant Messaging (IM) accounts, social media/networking accounts (e.g., Facebook, Twitter, YouTube, Digg, Reddit, RSS and blogs), or any means other than your Company email account to engage in Business-Related Communications is strictly prohibited other than for purely administrative communications (e.g., scheduling a meeting), unless there are exigent circumstances that are pre-approved by the CCO.

Article XII. Advertising and Promotional Materials

12.1 General Principles.

a. The scope of what may constitute an advertisement for the purposes of the Advisers Act is extremely broad. Rule 206(4)-1 under the Advisers Act defines "advertisement" to include "notice, circular, letter or other written communication addressed to more than one person, or any notice or other announcement in any publication or by radio or television" that offers:

   i. any analysis, report, or publication concerning securities, or that is to be used in making any determination as to when to buy or to sell any security, or which security to buy or to sell;

   ii. any graph, chart, formula or other device to be used in making any determination as to when to buy or to sell any security, or which security to buy or to sell; or

   iii. any other investment advisory service with regard to securities.

b. The term "advertisement" has been interpreted by the SEC to include both materials designed to attract new clients and materials designed to maintain existing clients. Standardized materials delivered in individual presentations to prospective and existing clients may be considered advertisements if they are repeated in substantially the same form in presentations to more than one prospective or existing client. Certain materials provided for due diligence purposes to prospective clients also may be considered advertisements in certain circumstances. Depending on the facts and circumstances, advertisements may also include communications to existing clients, press releases, and materials delivered via electronic media, such as e-mail and internet websites (including the Company's website and social networking websites). If you are unsure whether certain material constitutes advertising, contact the CCO; **please do not guess**.

c. The Firm does not consider "advertising" to consist of (a) responses to unsolicited requests for information or (b) periodic or other reports distributed exclusively to existing clients discussing only their investments and/or recent investment performance, provided the context of such information does not suggest that the purpose of such communication is to offer advisory services.

d. Advertisements must not be fraudulent, deceptive, or manipulative. Supervised Persons must comply with the following guidelines to help ensure that all advertisements comply with the federal securities laws and other regulatory requirements.

   1. No person should communicate with the press or other news media without the prior approval of the Co-CEOs, the Director of Marketing, or the CCO. This prohibition includes, but is not limited to, interviews with print or electronic media, appearances on national network, local or cable television or radio broadcasts, publication of written investment related articles, or publication of materials over the internet. In the event that prior approval is not possible Supervised Persons should immediately inform the Director of Marketing and the CCO.
   2. If the written material is considered advertising, it must be reviewed and approved in advance by the relevant subject matter experts, Director of Marketing, and the CCO. Each Supervised Person is responsible for ensuring that all advertisements have been properly approved before being distributed outside the Company.
   3. The Director of Marketing is responsible for maintaining copies of all advertising and marketing materials, including approvals thereof and supporting documentation to demonstrate, for example, how performance claims (if any) were made, for a period of 5 years following the last dissemination of such material.
   4. It is the general policy of the Company that Supervised Persons may not publicly identify or comment on clients or provide any information regarding their accounts.

12.2 Pre-Clearance Procedures

All final versions of any written communication that is deemed an advertisement must be sent to the CCO or his designee for review and approval prior to dissemination. Any materials that include discussions of performance must be accompanied by supporting documentation demonstrating the basis and methodology used for the performance calculations.

The CCO or his designee shall approve the Company's data that is presented in such materials and shall ensure that all materials contain appropriate disclosures. The CCO or his designee may also consult with the Company's legal counsel and/or applicable consultants.

Additionally, use of any material mentioning the Company by entities other than the Company is prohibited unless the CCO or his designee has reviewed and approved such use in writing.

12.3 Prohibited Activities.

a. Various rules govern what the Company can and cannot say in communications with existing and prospective clients. As a general matter, no Supervised Person may:

   1. Employ any device, scheme or artifice to defraud any client or prospective client;

2. Engage in any transaction, practice or course of business which operates as a fraud or deceit upon any client or prospective client;
3. Engage in any fraudulent, deceptive or manipulative practice with respect to any client or prospective client;
4. Use any materials or make any communication that contains any untrue statement, omission of a material fact necessary to make the statements not misleading, or is otherwise false or misleading;
5. Make any communication which employs or is part of a high-pressure sales approach;
6. Use any material which has not been properly pre-approved; or
7. Use any materials or make any communication that contains promises of specific results, exaggerated or unwarranted claims, opinions for which there is no reasonable basis, or forecasts of future events which are unwarranted or which are not clearly labeled as forecasts.

12.3 Advertisements by Investment Advisers.

a. No Supervised Person may publish, circulate or distribute any advertisement, which:
   1. Refers, directly or indirectly, to any testimonial of any kind concerning the Company or concerning any advice, analysis, report or other service rendered by the Company. This includes personal endorsements by clients regarding a Supervised Persons' advisory services;
   2. Refers, directly or indirectly, to past specific recommendations of the Company which were or would have been profitable to any person; provided, however, that this will not prohibit an advertisement which sets out or offers to furnish a list of all recommendations made by the Company within the immediately preceding period of not less than one (1) year in accordance with SEC Rule 206(4)-1(a)(2);
   3. Represents, directly or indirectly, that any graph, chart, formula or other device being offered can in and of itself be used to determine which securities to buy or sell, or when to buy or sell them; or which represents directly or indirectly, that any graph, chart, formula or other device being offered will assist any person in making his or her own decisions as to which securities to buy or sell, or when to buy or sell them, without prominently disclosing in such advertisement the limitations thereof and the difficulties with respect to its use;
   4. Contains any statement to the effect that any report, analysis, or other service will be furnished free or without charge, unless such report, analysis or other service actually is or will be furnished entirely free and without any condition or obligation, directly or indirectly;
   5. Makes specific projections or forecasts without disclosing material factors which may affect such projections or forecasts;
   6. Includes any statement implying that performance is guaranteed; or
   7. Contains any untrue statement of material fact, or which is otherwise false or misleading.

b. As a general matter, the Company's advertisements which contain information or illustrations concerning client performance should, as applicable:

1. Generally calculate prior performance net of fees and other expenses, although the Company is permitted to present gross and net performance numbers with equal prominence in advertising;
2. Disclose the effect of material market or economic conditions on the results portrayed (e.g., stating or implying that the accounts appreciated by 25% without disclosing that the market generally appreciated 40% during the same period);
3. Disclose the possibility of loss and the fact that individual results will vary from that shown;
4. Disclose whether and to what extent the results portrayed include the reinvestment of dividends and other earnings (e.g., recycling of capital);
5. Select an appropriate index or benchmark (e.g., an apples-to-apples comparison) and disclose all material factors relevant to the comparison of performance results with an index (e.g., disclosing that the volatility of the index is materially different from that of the relevant portfolio); and
6. Disclose prominently, if applicable, that the results portrayed relate only to a select group of the Company's clients, the basis on which the selection was made, and the effect of this practice on the results portrayed, if material.

12.4 Use of Social Media. Supervised Persons are reminded that the use of social media for personal purposes may have implications for the Company from both a regulatory and reputational standpoint, particularly where the Supervised Person is identified as an officer, employee or representative of the Company.

Without the prior approval of the CCO and except for authorized actions concerning the Company's social media accounts, a Supervised Person may not: (i) post information relating to any investment strategy or similar information relating to the Company's business operations or those of its clients or former clients on a social networking site; or (ii) use a social networking site to conduct Company business, provided, however, that Supervised Persons may list general facts about his or her title or status with the Company on such sites without pre-approval (e.g., employment history on LinkedIn) and, subject to the prohibitions described in clause (i) above, use such sites to identify and initially contact prospective clients. In no event may a Supervised Person include a testimonial of any kind regarding his or her or the Company's advice or services on his or her social network profile/page (e.g., the retention of a "Recommendation" on LinkedIn regarding such advice or services).

Article XIV. Disaster Management and Business Continuity

As part of its fiduciary duties and as a matter of best business practice, the Company maintains and will periodically review its policies and procedures designed to ensure all business critical capabilities are functional in the event of a regional natural disaster or building-related emergency. It is paramount that Supervised Persons cooperate with the company-wide communications and related management processes in the event of an actual disaster. The Company's Director of Technology and Chief Operating Officer are jointly responsible for maintaining, implementing, and reviewing the Company's disaster recovery plan including, but not limited to, the following aspects of such plan:

a. Maintenance of back-up equipment and establishment of security procedures in respect of computer systems;

b. Maintenance of data storage and recovery equipment, locations and procedures; and

c. Maintenance of back-up communication systems.

Please contact the Company's IT Department for the most current version of the Company's Disaster Recovery Plan.

Article XV. Vendor Oversight

It is the Company's policy to conduct due diligence on critical third party service providers used by the Company prior to their engagement. The Company reviews the service provider's compliance with the terms of agreements in place and assesses the service provider's continued suitability and capacity to perform the activities being outsourced. The Company also determines whether the service provider maintains adequate physical and data security controls, transaction procedures, business continuity and IT contingency arrangements, insurance coverage, and compliance with applicable laws and regulations. If deemed necessary or advisable by the CCO an onsite visit at the provider's offices may be conducted. The Company may engage third party specialists to independently review critical service providers and provide reports to the Company on their findings. The Company understands that the ultimate compliance responsibility lies with the Company and cannot be delegated to the service provider.

15.1 Procedures

a. Prior to entering into a contract with a critical service provider, the Company will conduct(or have conducted on its behalf) the review described above.

b. All critical service provider relationships will be memorialized in a written agreement that will be reviewed by the Company's CCO or his designee in conjunction with a review by the Company's General Counsel. All such agreements will include appropriate confidentiality provisions protecting the Company and clients' confidential information, if applicable, in accordance with the Company's privacy and information security policy provisions requiring service providers to protect the security of personal information.

c. Periodically, in the CCO's discretion, the Company will conduct a due diligence review during the course of the provider's relationship with the Company. The CCO will be responsible for ensuring the performance of such reviews, which may include surveying Company personnel who interact with the critical service provider on a regular basis and reviewing any compliance violations or other errors attributable to the provider.

d. If any concerns/issues arise during the course of the relationship, they are escalated to senior management immediately

Article XVI. Books and Records

16.1 The Company must retain all applicable books and records described under the Rule 204-2 of the Advisers Act in its relevant office or in an easily accessible location for the periods required by such rule. The rule also mandates the location and minimum length of time for which an adviser must maintain the required books and records. The books and records required under Rule 204-2 under the Advisers Act include both those that should be maintained by any business and those that are unique to the investment management business. In addition, books and records identified in Rule 204-2 under the Advisers Act must be maintained whether they are created in hard copy or soft copy. For a complete list of all books and records maintained by the Company, see "Schedule of Required Books and Records" (Appendix B).

16.2 The Company must retain a record of all compliance programs and policies that are currently in effect or that were in effect at any time during the previous 5 years.

16.3 The Company must ensure that:

a. Books and records can be easily located, accessed and retrieved;

b. All books and records are legible, true and complete;

c. Records are adequately safeguarded from loss; and

d. Access to the Company's books and records is granted only to appropriate persons.

16.4 The Company may maintain required records electronically so long as 1) a duplicate copy of each record is stored separately and 2) the records are maintained in a manner that permits the easy location and retrieval of any such record.

16.5 The CCO has overall responsibility for ensuring that all required books and records are identified and properly maintained, although responsibility for maintaining certain books and records may be assigned to designated individuals within the Company's various business operations. Any question as to whether a particular document must be maintained by the Company should be directed to the CCO.

Article XVII. Client Complaints

17.1 "Complaint" Defined:

a. From time-to-time, despite its best efforts, the Company may receive complaints regarding the Company's services or related matters. The Company will strive to respond promptly and appropriately to all such complaints and will consider whether corrective action need be taken.

b. A "complaint" is defined as any communication, written or oral (including electronic communication), from a client, or any person acting on behalf of a client ("Client Representative"), alleging a grievance against the Company or any of their respective authorized representatives regarding the Company's services or related matters.

17.2 Record of Complaints

a. Any complaint received by a Supervised Person must be promptly reported to the CCO. The CCO will review the complaint and take such action as may be deemed appropriate. Such action may include, by way of example, alerting management and other relevant Company personnel of the complaint and responding or coordinating a response to the complaining client or Client Representative orally or in writing.

b. The CCO will retain a written record of all complaints received by the Company. Such records include the nature of the complaint and a description of any action(s) taken, if any, in response to such complaint. The CCO will maintain the client complaint file separate and apart from other correspondence files.

Article XVIII. Regulatory Reporting

16.1 The CCO is responsible for ensuring that:

c. An annual updating amendment to the Company's Form ADV is made within 90 calendar days following the close of the Company's fiscal year; and

d. The Company's Form ADV is amended promptly following a material change in the Company's business activities.

16.2 Any information in the Company's Form ADV or other regulatory filings that a Supervised Person believes to be inaccurate, or omits to include material information, should be reported promptly to the CCO or a member of the Compliance Committee.

16.3 The CCO is also responsible for ensuring compliance and timely filings with the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Currently, the Company does not expect to cross any thresholds that would require reporting pursuant to the Exchange Act.

Article XVII. Custody and Possession of Client Assets

17.1 Advisers registered under the Advisers Act and that have "custody" over client funds and securities (as defined in Rule 206(4)-2 under the Advisers Act) have certain obligations with regard to safeguarding those assets.

17.2 An adviser has custody of client assets (and must therefore comply with Rule 206(4)-2) when it holds directly or indirectly, client funds or securities or has any authority to obtain possession of them.

17.3 All client funds and securities will be held by a qualified custodian (as defined under Rule 206(4)-2 under the Advisers Act) with the assets held by the qualified custodian either under the client's name or under the Company's name as agent or trustee for the client. Clients should be instructed to make all payments to their accounts by wire transfer directly to the bank or brokerage firm acting as custodian for that client. Any check received inadvertently from a client for the benefit of a third party or from a third party for the benefit of a client should be returned to the sender promptly and in any event within 3 business days.

Article XVIII. Fee Calculation

18.1 **Flat Fee.** Fees for Clients with flat fee structures follow the terms stated in the client's advisory agreement (fee amount and collection rate).

18.2 **Asset-based Fee.** Clients billed on an assets-under-management basis are billed a percentage of the total market value of their portfolios monthly, quarterly, or annually depending on the terms stated in the most recent advisory agreement. The Company's standard practice is to bill monthly, based on the total market value for the most recent quarter-end (e.g., 9/30 valuation is used to bill October, November and December). Any variance from this procedure must be agreed to by the client and documented.

a. The asset valuation procedure for fee calculations must be consistent with each client's advisory agreement and is generally as follows:

   1. To avoid a conflict of interest, the book of record used for valuations is the client's custodian or record keeper (as the case may be) records, without variance or adjustment.

   2. In certain instances, there may be investments that are not reflected by a client's custodian. For assets that are not held or tracked by the custodian or record keeper, an independent statement is retrieved directly from the asset-holder (typically certain commingled vehicles or limited partnerships). All data comes from independent finalized statements (month-end,

or quarter-end) from the custodian, record keeper and/or asset-holder. Any adjustment to the total market value of a client portfolio as reflected by the custodian or record keeper should be documented and confirmed by the client prior to billing.

3. Once finalized data is available, the performance analyst assigned to the client account inputs the total market value into the Company's CRM system, which then generates an automated email to the lead consultant or Investment Professional for approval.
4. The lead consultant or Investment Professional reviews the valuation and notes any discrepancy for further investigation or approves the valuation for the Company's finance team to calculate the fee.
5. The finance team receives a notification that the lead consultant or Investment Professional approved the valuation and the client is billed.

b. Special Situations.

1. Some clients, especially at the fiscal year end, will ask the custodian or record keeper for amended statements to include data that has become final after the regularly scheduled statement. The Company does not update the billing market value to reflect the amended value to avoid inconsistency with underlying valuation dates and other period's statements.
2. In some cases, the custodian or record keeper does not include accrued income in their statements, whereas most do. In either case, the Company will use the custodian's or record keeper's statement of value.

Article XVIX. Proxy Voting

The Company does not vote proxies appurtenant to equity securities of publicly-traded or private companies. Generally, such proxies will be voted by the investment manager of the vehicle or entity holding such securities. Any such proxy received by the Company will be forwarded to the client or its designee for voting. Where the Company serves as a discretionary investment adviser to a client subject to ERISA, the advisory agreement between the client and the Company will provide that the Company is expressly precluded from voting such proxies.

However, in cases where the Company has explicitly accepted responsibility for the voting of, investment manager-level (e.g., mutual fund) "proxies," and consents, waivers, approvals, amendments and the like to the constituent documents of private commingled investment vehicles, separate accounts and the like in which the client has made an investment. This policy addresses these types of items only (such items, for remainder of this policy, "proxies").

This policy is designed to help ensure that such proxies are voted in the clients' best interest when the responsibility for voting client such proxies rests with the Company.

Policy

The Company may act as discretionary investment adviser for various clients, including clients subject to ERISA.

The Company will not vote any proxies unless a client expressly delegates the obligation (and the Company accepts such delegation) in its advisory agreement with the client. Should the Company accept responsibility for voting proxies, the Company will vote all proxies in accordance with this policy.

When voting proxies for clients, the Company's utmost concern is that all decisions with respect thereto be made in a manner consistent with the interests of that client (and for ERISA-subject clients, the plan beneficiaries and participants in accordance with ERISA). The Company will act in a prudent and diligent manner intended to enhance the value of the assets of the client's account while taking into account out of the ordinary costs of voting.

Purpose

The purpose of this policy is to memorialize the policies and procedures adopted by the Company to enable it to comply with its fiduciary responsibilities to clients and the requirements of Rule 206(4)-6 under the Advisers Act and if applicable, ERISA.

Procedures

The CCO (for the purposes of this policy, the "Proxy Voting Coordinator") is ultimately responsible for ensuring that all proxies received by the Company are voted in a timely manner and in a manner consistent with each client's interests. Specifically, the Proxy Voting Coordinator will:

- Review each proxy for conflicts of interest as part of the overall proxy review process.
    - A conflict of interest may exist, for example, (i) if the Company serves as the investment adviser to the investment company soliciting the proxy, or (ii) if the Company otherwise has a business relationship with (or is actively soliciting business from) either the person soliciting the proxy or a third party that has a material interest in the outcome of a proxy vote.

- Determine whether a proxy raises a conflict between the Company's interests and a client's interest, Proxy Voting Coordinator will resolve such a conflict in the manner described below:
    - To the extent that the Company has specific guidelines applicable to the proxy type in question, Company shall vote in accordance with such guidelines.
    - If the Company has discretion to deviate from or does not have specific guidelines with respect to the proxy type in question, then the Company may vote the proxy in the same proportion as the other holders of the interest for which proxy votes are being sought and who are not affiliated with Company; provided the Company has sufficient information from the investment manager or its representatives to permit that form of voting. This form of voting is also known as shadow or mirror voting. To the extent that shadow voting is not available on a timely basis, the Company will abstain from voting the proxy; provided that, subject to the limitations set forth below, the Company determines that it is in a client's interest to vote the proxy, the Company shall forward the proxy materials to the client or its designee for determination.

Limitations

In certain circumstances, in accordance with a client's investment advisory agreement (or other written directive) or when the Company has determined that it is in the client's interest, the Company will not vote proxies received. The following are certain circumstances where the Company will limit its role in voting proxies:

- Client Retains Proxy Voting Authority: Where a client retains the obligation to vote proxies or has delegated the right to vote proxies to its designees for voting proxies, the Company will not vote proxies and will direct the issuer of the proxy to send the proxy material directly to the client or its designee. If any proxy material is received by the Company, it will promptly be forwarded to the client or its designee.

- Terminated Account: Once a client account has been terminated, the Company will not vote any proxies received after the effective date of the termination. If any proxy material is received by the Company, it will promptly be forwarded to the client or its designee.

- Limited Value: If the Company determines that the any enhancement to the value of a client's economic interest of the interest to which the proxy relates is indeterminable or insignificant, the Company may abstain from voting proxies. The Company also will not vote proxies related to investments that are no longer held in the client's account.

- Out of the Ordinary Costs or Unusual Requirements: If after performing a cost-benefit analysis, the Company determines that the cost of voting a proxy would exceed any positive effect on the value of the interest to which the proxy relates, or the proxy presents unusual requirements (e.g., in the case of voting proxies related to foreign managers), the Company may abstain from voting the proxy.

- Managers Not Selected or Recommended by the Company: The Company will not vote proxies received from managers not selected by the Company on the client's behalf or recommended to the client by the Company.

Recordkeeping

In accordance with Rule 204-2 under the Advisers Act (and, as applicable, ERISA), the Company will maintain: (i) this policy and all modifications thereto; (ii) all proxies received; (iii) a record of all proxy votes cast on behalf of clients; (iv) records of all client requests for proxy voting information; (v) any documents prepared by the Company that were material to making a decision how to vote (or abstain from voting) or that memorialized the basis for the decision; and (vi) all records relating to requests made to clients regarding conflicts of interest in voting the proxy.

Article XVX. Client Travel Expense Allocation

20.1 Travel expenses include transportation and/or accommodation expenses that are incurred as part of a business trip. All travel expenses should be associated with the relevant client. In the event a Supervised Person visits multiple clients in one trip, the Supervised Person generally splits transportation costs evenly between clients. This division is most crucial where we bill clients for expenses.

For example, if a Supervised Person travels from Boston to New York for a client meeting, then flies to Washington D.C. for a different client meeting, then flies back to Boston, the total train and airfare are split evenly (50/50) between the two clients.

However, if the above-described methodology leads to a clearly unreasonable result, the transportation costs should be adjusted and documented in the expense form. For example, consider a trip consisting of a flight from

Portland to Seattle for one meeting, followed by a flight to Washington D.C. for a second meeting, and back to Portland. If the cost of a roundtrip from Portland to Washington D.C. would be nine times the cost of a roundtrip from Portland to Seattle, then the traveler should assign the total travel cost 90% to the Washington trip and 10% to the Seattle trip.

20.2 Additional expenses outside the scope of a client contract must be specifically requested by the client for the Company to incur on its behalf. Examples include, but are not limited to, due diligence, legal, or software expenses.

Expenses are to be reviewed and approved by the designated manager of the Supervised Person. Any issues or questions regarding expense allocation should be raised with the CCO.

Article XXI. Gifts and Entertainment

Introduction

The giving and receiving of gifts and entertainment is a customary and accepted method of creating good will, building and reinforcing business relationships and, with certain restrictions, represents a lawful practice.

However, the giving or receiving of gifts or entertainment could be seen as an attempt to bias a business decision or to enhance personal lifestyles. Accordingly, in compliance with this Gifts & Entertainment Policy (this "Policy") Supervised Persons are permitted to offer, give and receive gifts and participate in entertainment events in connection with their work with or on behalf of clients, prospective clients, vendors, and other service providers (collectively, "Business Partners").

Applicability

This Policy applies to Supervised Persons (and their immediate Family Members sharing their household).

This Policy applies to the offering, giving, requesting or receiving of (directly or indirectly) any gift or entertainment, including, without limitation, any promotional item, holiday gift, golf outing, spectator sport, special event, conference and seminar, travel, meal, and lodging.

Where uncertainty exists regarding a specific gift or entertainment event, Supervised Persons must contact the CCO prior to accepting or extending such gift or event.

General Prohibitions

No Supervised Person may ask for any gift or entertainment from Business Partners.

No gift or entertainment may be offered, given to or accepted from any Business Partner, where, for example:

- It is in the form of cash or a cash equivalent (e.g., a gift certificate);
- It may appear inconsistent with the Company's customary business practices;
- There is no demonstrable benefit to the Company's business;

- It may appear disproportionately generous or occur so frequently as to raise a question of propriety
- It may be construed as a bribe, payoff or kickback;
- It could reasonably be construed as an inducement to affect a business decision or creating an obligation on the recipient;
- If the proposed entertainment will be attended by a Supervised Person and/or a Family Member without the presence of the offering party;
- The Supervised Person would be embarrassed if colleagues knew about the gift or entertainment – or if it became public knowledge (e.g., reported in the press);
- It would violate the Company's "Policy With Respect to Payments to Public Officials";
- It would violate the Company's "Foreign Corrupt Practices Act and Travel Act Policy";
- It would violate any law or regulation (including, for the avoidance of doubt, ERISA); or
- It would violate the terms of the Company's agreements with a Business Partner.

See also the section entitled "Special Situations" below.

Gift Policy

Offering or Giving Gifts: Gifts should be offered or given only on rare occasions, and then primarily by those Supervised Persons that serve as Consultants to existing clients.

As a general rule, the value of any gift offered or given must not equal or exceed $50. In those instances where the proposed gift (i) would equal or exceed $50 in value, (ii) is to be offered or given by a Supervised Person, or (iii) is to be given to (a) a labor organization (union) or officer, agent, shop steward, or employee or other representative of a labor organization, (b) a foreign official, a foreign political party or official, a candidate for foreign office, or an employee of a state-owned enterprise, or (c) U.S. federal, state or local government (i.e., public) official, a Gift and Entertainment Report Given form must be submitted to the CCO using ComplianceAlpha for review and approval prior the offering or giving of such gift. See also the sections entitled "Special Situations" and "Monitoring, Recordkeeping & Reporting" below.

Accepting Gifts: Supervised Persons are discouraged from receiving gifts and must, as soon as practicable, report the receipt thereof by submitting a Gift and Entertainment Report Received Form via ComplianceAlpha.

Treatment of Gifts Received: In general, gifts will be returned or disposed of in some appropriate manner, such as by donation to a charitable organization. The CCO will determine the appropriate manner in which to treat gifts.

Charitable Donations: Supervised Persons must seek the approval of the CCO for any charitable contributions in excess of $200 made at the request of a person associated with a client.

Exclusion: Subject to the General Prohibitions, Supervised Persons may accept (and need not report) promotional gifts valued at less than $25, or holiday gifts (such as candy, nuts, fruit, flowers, calendars, or the like) valued at less than $25.

Entertainment Policy

Offering or Providing Entertainment: Supervised Persons providing entertainment (e.g., client meals, golf outings, sporting events, etc.) with a value equal or in excess of $50 per person must, where practicable, seek prior approval from the CCO by completing a Gift and Entertainment Report Given Form on ComplianceAlpha. If the seeking of prior approval is not practicable, Supervised Persons must nevertheless report, as soon as practicable, such entertainment accepted by completing a Gift and Entertainment Report Given form using ComplianceAlpha.

Accepting Entertainment: The Company generally encourages participation in appropriate entertainment events where there is a clear business purpose and if relevant business information is expected to be gained through attendance. Supervised Persons must, where practicable, seek prior approval to attend an entertainment event where the estimated value may equal or exceed $50 per person by submitting a Gift and Entertainment Report Received form to the CCO. Regardless of the value, Supervised Persons must report, as soon as practicable, any entertainment accepted by submitting a Gift and Entertainment Report to the CCO via ComplianceAlpha.

Special Situations

Certain laws, regulations, rules and policies prohibit or place restrictions on gifts and entertainment extended to public officials, and the Company contracts with public-plan and other clients and Business Partners may conflict with this Policy.

See also the Company's "Policy with Respect to Payments to Public Officials" and "Foreign Corrupt Practices Act and Travel Act Policy."

Monitoring, Recordkeeping & Reporting

Supervised Persons are responsible for monitoring applicable client contracts, and the laws, regulations, rules and policies governing public-plan clients with respect to gift and entertainment restrictions.

Supervised Persons are also responsible for maintaining records sufficiently detailed to verify the accuracy and completeness of any Gift and Entertainment Report and must retain any record necessary to verify, explain, or clarify reports, including, but not limited, to vouchers, receipts, worksheets, etc.

Other

Violations of this Policy will be grounds for disciplinary action, up to and including termination.
Any questions about this Policy should be directed to the CCO or a member of the Compliance Committee.

Article XXII. Payments to Public Officials

Introduction

As a registered investment adviser under Advisers Act, and as an entity that conducts business with various state and local government entities, the Company is subject to laws, regulations, rules and policies that restrict or prohibit the making of certain campaign contributions or other Payments to Public Officials. The Company is also subject to certain reporting requirements related to contributions made to certain Public Officials, including Form LM-10 required by the U.S. Department of Labor.

Capitalized terms used and not defined herein have the meanings assigned to them in the Definitions section below.

Application

This Policy applies to Supervised Persons who solicit[5] Government Entity on the Company's behalf and their Affiliates. For the avoidance of doubt, while the Company does not take the position that all Supervised Persons are considered "Covered Associates" under the SEC's Pay to Play Rule, all Supervised Persons are subject to this Policy.

Policy

Prohibited Payments. Payments to, or coordination[6] or solicitation of Payments on behalf of, any Public Official who controls, could (directly or indirectly) influence, or participates in decisions by a Government Entity to select or retain investment advisers, or can appoint any person who can (directly or indirectly) influence the selection or retention of investment advisers by a Government Entity.

Permitted Payments. Payments (other than Prohibited Payments) by a Supervised Person to any individual who is a candidate or successful candidate for federal elective office (U.S. President, Vice President or Member of Congress (Senate and House of Representatives)), including a Person known to be providing assistance with respect to the candidacy of any such individual (including but not limited to any PAC and any inauguration or transition committee) and a foundation or other charitable institution known to be closely associated with any such individual, unless such individual, at the time any Payment is made (or coordination or solicitation of Payments by others occurs) holds an elected or appointed office of a Government Entity.

Reporting

Supervised Person. Promptly following each calendar quarter, each Supervised Person must report any Payments to Public Officials during previous quarter, or the absence thereof, and submit such information to the CCO using ComplianceAlpha.

New Hires and Promotions. Every prospective hire of Supervised Person or promotion of an individual to a Supervised Person position requires, prior to such hire, the reporting to the CCO of any Payments to Public Officials during previous 2 years or the absence thereof (Appendix A). If any reported Payment to Public Officials constitutes a Prohibited Payment in violation of applicable law, regulation, rule or policy, such individual's start date or promotion (as the case may be) may, in the Company's sole discretion, be delayed or rescinded.

Other

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[6] *E.g.*, Organizing fundraisers and other raising of funds from others (including PACs) for, or on behalf of, a Public Official – even if nothing is contributed.

Supervised Persons are expressly prohibited from taking any action indirectly that if done directly, would result in a violation of this Policy.[7] Please pay close attention to the definitions of this policy's defined terms, and note that generally speaking, this policy prohibits all contributions from Supervised Persons' households to government officials holding or seeking a state or local government office. Prohibited recipients of contributions also include any PAC, any inauguration or transition committee, and a local or state political party, as well as any foundation or other charitable institution known to be closely associated with any of the foregoing.

If a Supervised Person discovers that he or she has made a Payment in violation of this Policy, such person will immediately notify the CCO and, if directed by the CCO, use best efforts to obtain the return of such Payment.

Violations of this Policy will be grounds for disciplinary action, up to and including termination.

Any questions about this Policy should be directed to the CCO or, in his or her absence, the Company's internal legal counsel.

Definitions

"Affiliate" means, as to any Supervised Person, any Person who is directly or indirectly controlled by, or primarily for the benefit of, such Supervised Person, including, without limitation: 1) any political action committee ("PAC") under direct or indirect control of such Supervised Person, 2) a spouse (other than a legally separated or divorced spouse and including domestic partners) of a Supervised Person; 3) a minor child or grandchild residing in the home of a Supervised Person or attending college; 4) any other Family Member who resides in the home of a Supervised Person or whose account is managed by a Supervised Person; 5) any entity or other account as to which a Supervised Person, or any person specified in clauses 2 through 4 above, has a pecuniary interest or exercises direct or indirect control or influence (such as a trust or estate, a partnership of which the person is a partner, or a corporation in which the person has a pecuniary interest), except that Affiliates do not include, for this purpose, those of the Company's clients; and any entity from which or account as to which a Supervised Person is entitled to receive, directly or indirectly, performance-related compensation, except that Affiliates do not include, for this purpose, those of the Company's clients.

"Government Entity" means any state and political subdivision of a state, including any agency, authority, or instrumentality of the state or political subdivision thereof; a plan, program, or pool of assets sponsored or established by the state or political subdivision or any agency, authority or instrumentality thereof (e.g., all public pension plans and collective government funds, including participant directed plans such as 403(b), 457 and 529 plans); and officers, agents or employees of the state or political subdivision or any agency, authority or instrumentality thereof, acting in their official capacity.

"Payment" means any gift, subscription, loan, advance, deposit of money, or anything of value for the purpose of influencing any election for federal, state or local office; payment for debts incurred in connection with such election; and transition or inaugural expenses of the successful candidate for public office.

"Person" means any natural person, general partnership, limited partnership, limited liability, partnership, limited liability company, corporation, joint venture, trust, business trust, cooperative or association.

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[7] *E.g.,* the spouse of a Supervised Person makes a Payment where the Supervised Person could not, or a Supervised Person gives money to a PAC that is funneling donations to a particular Public Official.

"Public Official" means: (1) any individual who was, at the time any Payment is made (or coordination or solicitation of Payments by others occurs), an incumbent, candidate or successful candidate for elective office of a Government Entity; (2) any individual who is a candidate or successful candidate for federal elective office (U.S. President, Vice President or Member of Congress (Senate and House of Representatives)) if such individual, at the time any Payment is made (or coordination or solicitation of Payments by others occurs) holds an elected or appointed office of a Government Entity; (3) any Person known to be providing assistance with respect to the candidacy of any of the foregoing, including but not limited to any PAC, any inauguration or transition committee, and a local or state political party; and (4) a foundation or other charitable institution known to be closely associated with any of the foregoing.

Article XXIII. Foreign Corrupt Practices Act and Travel Act

Anti-Bribery Provisions

Meketa Investment Group, Inc. (together with its affiliates, the "Company") is subject to the anti-bribery provisions of the U.S. Foreign Corrupt Practices Act of 1977 (the "FCPA"), a provision of the Securities and Exchange Act of 1934, and the Travel Act.

The FCPA

The FCPA's anti-bribery provisions prohibit U.S. companies and citizens from corruptly paying or offering to pay, directly or indirectly, money or anything of value to a foreign official, a foreign political party or official, or a candidate for foreign office for purposes of influencing any act or decision (including a decision not to act) of such official in his or her official capacity, inducing the official to do any act in violation of his or her lawful duty, or to secure any improper advantage in order to assist the payor in obtaining or retaining business for or with any person, or in directing business to any person.

The term "anything of value" is not defined in the FCPA. The term, however, has been broadly construed by the courts and can include not only cash or cash equivalents, but also, among other things: discounts; gifts; use of materials; facilities or equipment; entertainment; drinks; meals; transportation; lodging; insurance benefits; and promise of future employment. Please note that there is no de minimis, safe harbor-value associated with the "anything of value" element.

The FCPA defines the term "foreign official" to include:

> "…any officer or employee of a foreign government or any department, agency or instrumentality thereof…or any person acting in an official capacity for or on behalf of any such government, department, agency or instrumentality"

Please note that the enforcement agencies and the courts have broadly interpreted this term to include not only traditional government officials, but also employees of state-owned or state controlled entities ("SOEs") under the theory that SOEs are "instrumentalities" of foreign governments. Even if a foreign entity is not wholly-owned by a foreign government, it may still be considered an "instrumentality" of the foreign government if it exercises (or has the ability to exercise) control over the entity.

The “obtain or retain business” element of an antibribery violation also has broad application and will be satisfied even if the improper payment to a foreign official does not lead to a government contract, including, but not limited to, improper payments to secure special tax or custom treatment, secure government licenses or permits need to do business in a foreign jurisdiction, or otherwise secure an improper advantage over competitors.

Fines and Penalties

Violations of the FCPA can result in significant fines and penalties. A company can be criminally fined up to $2 million per violation and culpable individuals can be subject to a criminal fine of up to $250,000 per violation as well as imprisonment for up to 5 years. Such fine and penalties are in addition to harsh collateral sanctions that can result from an FCPA violation, including, but not limited to, termination of government licenses and contracts.

The Travel Act

The Travel Act is a U.S. federal statute prohibiting the use of “any facility in interstate or foreign commerce” with the intent to “distribute the proceeds of any unlawful activity” or “otherwise [to] promote, manage, establish, carry on, or facilitate the promotion, management, establishment, or carrying on, of any unlawful activity.”

Under the broad reach of the Travel Act, a “facility in interstate or foreign commerce” can include not only actual travel between U.S. states or between the U.S. and a foreign country, but it may also encompass cross-border communications (e.g., use of the mails and electronic communication).

Under the Travel Act, “unlawful activity” includes bribery in violation of U.S. law, including the FCPA, or the laws of any U.S. state where the alleged conduct occurs [Emphasis Added]. Many U.S. states (e.g., California and New York) criminalize commercial bribery, in addition to public corruption. The Travel Act effectively federalizes U.S. state anti-bribery laws, requiring a jurisdictional connection to the state whose law was allegedly violated. In the context of domestic conduct, that connection is usually simple to establish.

Penalties

The penalties for Travel Act violations can be severe, including fines or imprisonment for up to 5 years for most offenses (20 years for others), or both.

Policy

It is the Company’s policy to comply fully with the FPCA and the Travel Act. Each Supervised Person has the responsibility for compliance with the FCPA and the Travel Act within his or her area of authority and must report any suspected violations to the CCO immediately.

The Company’s business partners that are operating within or outside the U.S. (or within the U.S. with a focus abroad) in the Company’s name or on its behalf (“Business Partners”) must also comply with the FCPA and the Travel Act and violations of the FCPA and/or the Travel Act by such Business Partners may be imputed to the Company. Therefore, it is each Supervised Person’s and Business Partner’s responsibility to understand what may constitute a violation, and to proactively seek assistance should he, she or it see a possible violation of the FCPA and/or the Travel Act.

Please note that it is often difficult to determine whether a specific circumstance might constitute a violation of the FCPA and/or the Travel Act. Therefore, it is imperative that Supervised Persons read and understand this Policy, ask questions if any aspect to this Policy is unclear, and that all the Company's Business Partners operating on the Company's behalf certify their understanding and agreement with this Policy in general and the FCPA and the Travel Act specifically. See sample certification attached hereto.

This certification should be included in any agreement the Company makes to hire outside companies or other third parties who will be acting on behalf of the Company in a non-U.S. jurisdiction, and must be signed by an authorized representative of such third party.

Certification

This Agreement is contingent upon compliance with any applicable U.S. laws, particularly the Foreign Corrupt Practices Act (the "FCPA") and the Travel Act, as well as the laws of [Insert country(ies) in which services are to be performed by third party on behalf of Meketa].

On behalf of [Insert name of outside company/third party] ("[Short Name]"), the undersigned hereby represents and warrants that [Short Name] is familiar with the requirements of the FCPA and the Travel Act, and will conduct all actions on behalf of Meketa Investment Group, Inc. ("Meketa") in accordance with the FCPA and the Travel Act. The undersigned further represents and warrants that no money paid to [Short Name] as compensation or otherwise has been or will be used to pay any bribe or kickback in violation of U.S. or foreign law.

[Short Name] agrees to provide prompt certification of its continuing compliance with applicable laws whenever requested by Meketa.

All agents or employees of [Short Name] who will be involved in representing Meketa must be identified in writing to Meketa and approved by Meketa before they perform any actions on Meketa's behalf. A written accounting must be kept of all payments made by [Short Name] or its agents or employees on behalf of Meketa, or out of funds provided by Meketa. A copy of this accounting must be provided to Meketa upon request. In no event will any payment be made by [Short Name] or its agents or employees to any undisclosed third party.

It is understood and agreed that [Short Name] is an independent contractor without authority to bind Meketa in any way.

This Agreement can be terminated immediately either upon violation of its terms or in the event that this Agreement is found to be impermissible under U.S. or foreign law.

The undersigned hereby certifies that he/she has authority to enter into and bind [Short Name] to the terms and condition of this Agreement, including this Certification.

[INSERT NAME OF OUTSIDE COMPANY/THIRD PARTY]

By: ______________________________

Name: ______________________________

Title: ______________________________

Date: ______________________________

Article XXIV. Whistleblower Policy

Complying with this Manual is our collective responsibility. Any Supervised Person or other interested person may submit a good faith complaint regarding compliance with standards of conduct set forth in this Manual or regarding accounting or internal control matters without fear of dismissal or retaliation of any kind.

Pursuant to the Whistleblower Rule, as detailed in Section 922 of the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act"), the Company's Supervised Persons have the opportunity to report any concerns or suspicions of improper activity at the Company by a fellow Supervised Person or other party confidentially and without retaliation. The Company will take seriously any report regarding a potential violation of Company policy or other improper or illegal activity and the Company recognizes the importance of keeping the identity of the reporting person from being widely known. Supervised Persons must be assured that the Company will appropriately manage all such reported concerns or suspicions of improper activity in a timely and professional manner, confidentially and without retaliation.

a. Responsibility of the Whistleblower

Supervised Persons must act in good faith in reporting a complaint or concern under this policy and must have reasonable grounds for believing a breach of the Company's policies. A malicious allegation made by a Supervised Person known to be false is considered a serious offense and will be subject to disciplinary action which may include termination of such individual's employment.

b. Handling of the Reported Improper Activity

A Supervised Person should promptly report suspected improper activity in sufficient detail to the CCO to enable the matter to be investigated. In the event that the suspected improper activity involves the CCO, the Supervised Person should promptly report such activity to a supervisor or other member of the Compliance Committee.

c. No-Retaliation Policy

It is the Company's policy that no Supervised Person who submits a bona fide complaint in good faith will experience retaliation, harassment or unfavorable or adverse employment consequences. A Supervised Person who retaliates against a person reporting such a complaint will be subject to disciplinary action, which may include termination of such Supervised Person's employment. A Supervised Person who believes he or she has been subject to retaliation or reprisal as a result of reporting a concern or making a complaint is to promptly report such action to the CCO or the Company's' Chief Legal Officer.

d. Accountability for Violations

If the Compliance Committee determines that a policy has been violated, the offending Supervised Person may be disciplined with penalties up to and including termination of such person's employment. Violations of this Manual may also constitute violation of law and may result in criminal penalties and civil liabilities for the offending Supervised Person and the Company. All Supervised Persons are expected to cooperate in internal investigations of misconduct.

Prospective New Hire Payment to Public Officials Disclosure Form

Name of Submitting Person: ____ Date of Submission: (MM/DD/YEAR) ______________________________

☐ Nothing to Report

Date of Payment[8]	Amount of Payment	Form of Payment	Name of Public Official, Candidate or PAC	Office or Position Held (and/or Sought) by Public Official or Candidate at the Time of Payment	Total Payments Made to such Public Official During the Previous 12 Months

Additional Information[9]: ____

____

NEW/PROSPECTIVE EMPLOYEE: ADDITIONAL DISCLOSURES (CHECK ALL THAT ARE APPLICABLE):

☐ I solicited Government Entities (or supervised those that did) on behalf of my prior employer. If checked, please identify prior employer: ________________

____

☐ I was an employee of a Government Entity within the past 5 years. If so, please identify the Government Entity and your role: ___________________________

____

☐ I have made a Payment within the past 2 years. If so, please disclose all such Payments in the table above.

☐ My prior employer is (was) registered or required to be registered with the SEC or that is (was) unregistered in reliance on the exemption available under Section 203(b)(3) of the Advisers Act. If checked, please identify prior employer: ____

____

Signature of Submitting Person

8 Capitalized terms are defined in Meketa Investment Group, Inc.'s Policy with Respect to Payments to Public Officials.

9 *E.g.*, provide a brief description of the reason for each Payment, coordination or solicitation and any other relevant facts or circumstances. Attach additional pages if space provided is inadequate.

Schedule of Required Books and Records

General Policy

NOTE: The Company maintains all required books and records electronically, unless such books and records are specifically required by the Advisers Act to be maintained in hard copy. For those books and records required to be maintained in hard copy form, the chart below has indicated that the Company will maintain those records as such. Unless otherwise specified, all books and records are maintained in electronic form.

	DOCUMENT	REQUIRED LENGTH OF RETENTION	STATUTORY AUTHORITY (where not specified, Rules are SEC Rules)	RESPONSIBLE DEPARTMENT	LOCATION
Company Organizational Documents					
1	**Company formation and Organizational Documents,** Limited Liability Company Agreement, Operating Agreement or equivalent and any Amendments.	Termination of the Entity or any successor + 3 years	Rule 204-2(e)(2)	Legal	Westwood Office
2	**Governance Documents.** Internal governance records.	Termination + 3 (minimum 5 years)	Rule 204-2(e)(2)	Legal	Westwood Office
3	**Entity Ownership Records.** Evidence of entity ownership.	Termination + 3 (minimum 5 years)	Rule 204-2(e)(2)	Legal	Westwood Office
Accounting Records					
1	**Journals,** All journals including cash and disbursement records and also including records of original entry that form the basis of all ledger entries.	5 years*	Rule 204-2(a)(1)	Finance	Westwood Office

	DOCUMENT	REQUIRED LENGTH OF RETENTION	STATUTORY AUTHORITY (where not specified, Rules are SEC Rules)	RESPONSIBLE DEPARTMENT	LOCATION
2	**General and auxiliary ledgers** reflecting asset, liability, reserve, capital, income and expense accounts.	5 years*	Rule 204-2(a)(2)	Finance	Westwood Office
3	**Bank account information,** including checkbooks, bank statements, canceled checks and cash reconciliations of the adviser.	5 years*	Rule 204-2(a)(4)	Finance	Westwood Office
4	**Bills and statements,** paid or unpaid, relating to the business of the adviser.	5 years*	Rule 204-2(a)(5)	Finance	Westwood Office
5	**Trial balances.**	5 years*	Rule 204-2(a)(6)	Finance	Westwood Office
6	**Financial statements,** All financial statements relating to the business of the adviser.	5 years*	Rule 204-2(a)(6)	Finance	Westwood Office
7	**Internal audit working papers.**	5 years*	Rule 204-2(a)(6)	Finance	Westwood Office
Account Management Records					
	Trade Blotter which records: ✔ Whether the transaction is a purchase or sale ✔ Any instruction received from the Investment Consultant or Client concerning the transaction and any	5 years*	Rule 204-2(a)(3)		Westwood Office

	DOCUMENT	REQUIRED LENGTH OF RETENTION	STATUTORY AUTHORITY (where not specified, Rules are SEC Rules)	RESPONSIBLE DEPARTMENT	LOCATION
	modification or cancellation of the order or instruction ✔ Terms and conditions of the order, instruction, modification or cancellation ✔ The Investment Consultant who recommended the trade and the trader that placed the trade ✔ The account for which the order was entered ✔ The date and time of entry ✔ The bank, broker or dealer by or through whom the order was executed ✔ As applicable, whether the order is a principal transaction, soft dollar trade or step-out transaction ✔ The allocation for aggregated trades ✔ Whether trades are discretionary. If all trades are discretionary then it should be so indicated. Should the Company effect nondiscretionary trades in the future, the blotter will indicate whether the trade is nondiscretionary.				
	Trade Tickets. A memorandum of (i) each order given by the adviser for the purchase or sale of any security; (ii) any instruction received by the adviser concerning the purchase, sale, receipt or	5 years*	Rule 204-2(a)(3)	Client Service	Westwood Office

	DOCUMENT	REQUIRED LENGTH OF RETENTION	STATUTORY AUTHORITY (where not specified, Rules are SEC Rules)	RESPONSIBLE DEPARTMENT	LOCATION
	delivery of a particular security and (iii) any modification of any such order or instruction. Each memorandum must: • Show the terms and conditions of the order, instruction, modification, or cancellation; • Identify the person connected with the adviser who recommended the transaction to the client and the person who placed the order. • Show the client account for which the transaction was entered, the date of entry and the bank, broker or dealer by or through whom the transaction was executed; and • Indicate any orders entered pursuant to the exercise of discretionary power. The trade ticket must reflect the terms of the execution (i.e., shares, price, broker, commission, etc.). Trade tickets should also reflect the information provided in the Company's compliance policies relating to Portfolio Management and Trading, including whether the order is a cross trade, soft dollar trade or step-out transaction and any trade allocation for aggregated trades.				

	DOCUMENT	REQUIRED LENGTH OF RETENTION	STATUTORY AUTHORITY (where not specified, Rules are SEC Rules)	RESPONSIBLE DEPARTMENT	LOCATION
	Trade Error Documentation. All Trade Errors must be documented in writing and reported to the Compliance Department. This includes Trade Errors resolved by trade cancellation or reallocation. Such record should include: • name of the person responsible for the Trade Error; • amount involved; • name of the security involved; • action taken to correct the Trade Error; and • such other information as may be appropriate under the circumstances.	5 years*	204-2(a)(3)	Client Service Compliance	Westwood Office
	Research Files. Documentation relating to securities selected for investment, as well as any memorandum or analysis by the adviser's personnel. For the purposes of this policy, the scope of the required documents shall include investment research that Investment Consultants or their supporting associates use or generate for purposes of making investment decisions or recommendations. Information available through electronic means	5 years*	Generally, Rule 204-2(a)(7)	Investment Consultants/ Operations	Westwood Office

	DOCUMENT	REQUIRED LENGTH OF RETENTION	STATUTORY AUTHORITY (where not specified, Rules are SEC Rules)	RESPONSIBLE DEPARTMENT	LOCATION
	is not required to be maintained in hard copy. Should reflect what is described on Form ADV, if the firm is registered, as basis for making investment decisions.				
Client Relationship Records					
1	**Form ADV - Part II** (the "Brochure"). A *copy* of Form ADV and each amendment or revision to the Form ADV given or sent to any client or prospective client as required by Rule 204-3, as well as a *record of the date* that each Form ADV and each amendment or revision, was given or offered to be given to any client or prospective client who became an actual client (including the required annual written offer to existing clients).	5 years*	Rule 204-2(a)(14)	Compliance	Westwood Office
2	**Advisory and Other Contracts.** An original or copy of each written agreement entered into by the adviser with any client. An original or copy of each written agreement entered into by the adviser with any fund. The advisory contract should include, in its body or as an attachment, (a) a fee schedule and (b) investment objectives (i.e., investment management agreements and PPMs). A copy of any fund directed-brokerage agreements (if not part of the advisory agreements).	5 years* (after termination of the contract)	Rule 204-2(a)(10)	Legal	Westwood Office

	DOCUMENT	REQUIRED LENGTH OF RETENTION	STATUTORY AUTHORITY (where not specified, Rules are SEC Rules)	RESPONSIBLE DEPARTMENT	LOCATION
3	**Fee Schedules.** A list of fee schedules, if not part of the advisory contracts.	5 years* (after termination of the contract)	Rule 204-2(a)(10)	Compliance Department	Westwood Office
4	**Client Investment Objectives.** A list of each client's investment objectives, if not part of the advisory contracts (i.e. investment policy).	5 years* (after termination of the contract)	Rule 204-2(a)(10) generally	Client Service	Westwood Office
6	**Discretionary Power.** All powers of attorney and other evidences of the granting of discretionary authority by any client to the adviser (or copies) (including Board Resolutions incumbencies).	5 years*	Rule 204-2(a)(8)	Legal	Westwood Office
7	**Written Communications.** Originals of all written communications including e-mail received and copies of all written communications sent by the adviser relating to: (a) Any recommendations or advice made or proposed to be made; (b) Any receipt, disbursement or delivery of funds or securities; or (c) The placing or execution of any order to purchase or sell any security. These communications include:	5 years* (from time of last publication or dissemination for marketing and similar materials)	Rule 204-2(a)(7)	IT/Compliance/Marketing	Westwood Office

	DOCUMENT	REQUIRED LENGTH OF RETENTION	STATUTORY AUTHORITY (where not specified, Rules are SEC Rules)	RESPONSIBLE DEPARTMENT	LOCATION
	Materials sent to clients and potential clients, circulars and research reports; Periodic statements sent to clients; Fee invoices; and Principal and agency transaction consents, if any.				
8	**Complaint File.** A client correspondence or complaint file that would include e-mail. For customer complaints, records of any action taken by the adviser in connection with the complaint.	5 years*	Rule 204-2(a)(7), generally.	Compliance	Westwood Office
9	**Privacy Notice.** A copy of the initial privacy notice and/or opt out notice, any amendment to the policy and the annual notice sent to Clients.	5 years from the end of the fiscal year when last used.	Reg S-P Rule 204-2(a)(11) Rule 204-2(e)(3) and Best Practices.	Legal/Compliance	Westwood Office
	Communications and Performance				
1	**Notices and Advertisements.** A copy of each notice, circular, advertisement, newspaper article, investment letter, bulletin or other communication including e-mails that the adviser circulates or distributes to ten or more people. Copies of all advertising, sales	5 years from the end of the fiscal year when last used.	Rule 204-2(a)(11) Rule 204-2(e)(3)	Marketing	Westwood Office

	DOCUMENT	REQUIRED LENGTH OF RETENTION	STATUTORY AUTHORITY (where not specified, Rules are SEC Rules)	RESPONSIBLE DEPARTMENT	LOCATION
	literature and options education material issued by the Company together with the names of the persons who prepared and/or approved the material and the source of any recommendations contained therein.				
3	**Performance Numbers.** *(a) Requirement*. All accounts, books, internal working papers and any other records or documents that are necessary to form the basis for or demonstrate the calculation of the performance or rate of return of any or all managed accounts or securities recommendations in any notice, circular, advertisement, newspaper article, investment letter, bulletin or other communication that the investment manager circulates or distributes to 1 or more persons. (b) Satisfactory Records. With respect to the performance of managed accounts, an manager may limit its retention of documents to (1) all account statements, provided the statements reflect all debits, credits and other transactions in a fund's account for the period of the statement; and (2) all worksheets necessary to demonstrate the calculation of the performance or rate of return of all managed accounts.	5 years from the end of the fiscal year when performance numbers were last disseminated.	Rule 204-2(a)(16) Rule 204-2(e)(3)	Finance /Marketing/Client Service	Westwood Office
Personal Securities Transactions					

	DOCUMENT	REQUIRED LENGTH OF RETENTION	STATUTORY AUTHORITY (where not specified, Rules are SEC Rules)	RESPONSIBLE DEPARTMENT	LOCATION
1	**Registered advisers must have record of which persons are "Access Persons."** A list of all persons currently or within the past six years were "Access Persons." This list is included in the "Supervised Person" list which will indicate which of such persons is also an "Access Person" and the date he or she became an "Access Person." (1) *Access Person* includes all the Company's officers, members and management committee members and additionally any of the Company's Supervised Persons. Please note, all Supervised Persons of the Company are considered Access Persons. (A) Who have access to nonpublic information regarding any clients' purchase or sale of securities, or nonpublic information regarding the portfolio holdings of any fund registered under the Investment Company Act of 1940 that the Company or a control affiliate of the Company serves as an investment adviser for, or that a control affiliate acts as principal underwriter for, or (B) Who is involved in making securities recommendations to clients, or who has access to such recommendations that are nonpublic. Supervised Persons include employees, officers, members,	5 years from termination.	Rule 204-2(a)(13)(ii)	Compliance	Westwood Office

	DOCUMENT	REQUIRED LENGTH OF RETENTION	STATUTORY AUTHORITY (where not specified, Rules are SEC Rules)	RESPONSIBLE DEPARTMENT	LOCATION
	directors (or persons occupying a similar status or performing a similar function) and persons providing advice on behalf of the Company and under the supervision and control of the Company. Some firms for purposes of the Code of Ethics and Manual provide that the term "Supervised Person" will also include persons working for or with Supervised Persons in the Company's offices and all other persons determined by the Compliance Department to be subject to the Code of Ethics and Compliance Policies and Procedures Manual.				
2	**Limited Offering Purchase Approvals.** A copy of any decision and reasons supporting the decision to allow an Access Person to purchase a "limited offering." Limited Offerings include transactions exempt from registration under the Securities Act of 1933 pursuant to Section 4(2) or 4(6) of that Act or Rules 504, 505 or 506 promulgated thereunder.	Five years from end of fiscal year in which approval was granted.	Section 204-2(a)(13)(iii)	Compliance	Westwood Office
3	**Restricted List.** When applicable, copies of each version of the list of securities for which Investment Consultants and traders must obtain written approval from the Compliance Department before executing transactions in client or Company proprietary accounts and	5 years*	Section 204A Best Practices and to demonstrate efforts at fulfilling duty to supervise (see Section	Compliance	Westwood Office

	DOCUMENT	REQUIRED LENGTH OF RETENTION	STATUTORY AUTHORITY (where not specified, Rules are SEC Rules)	RESPONSIBLE DEPARTMENT	LOCATION
	all Supervised Persons must obtain written permission before executing transactions in Personal Accounts. Also, the record should indicate the period the particular Restricted List was in effect.		203(e)(6)) and 204A-1.		
5	**Exemptions Granted from Restricted List.** A list of all the exceptions granted to Supervised Persons to purchase or sell securities on the Restricted List and the basis for doing so.	5 years after fiscal year end of the year in which approval was granted.	204-2(a)(13)(iii) (Use the retention period of the Rule which applies to IPO and private placement approvals as a best practice).	Compliance	Westwood Office
6	**Access Person Holding Report, Transaction Reports and Account Disclosure Forms.** A record containing a copy of each executed and dated Access Person's Access Person Holding Report and Account Disclosure Form.	5 years*	204-2(a)(13)(i) 204A-1	Compliance	Westwood Office
Internal Control Records					
	Functions and Responsibilities. Organizational charts and personnel lists.	5 years	Best practices	Human Resources	Westwood Office
	Written Policies and Procedures for the Prevention of Insider Trading, including any related memoranda.	Permanently	Section 204A Rule 204-2(a)(17)(i)	Compliance	Westwood Office

	DOCUMENT	REQUIRED LENGTH OF RETENTION	STATUTORY AUTHORITY (where not specified, Rules are SEC Rules)	RESPONSIBLE DEPARTMENT	LOCATION
			Rule 206(4)-7 requires Compliance Procedures.		
	Compliance Manuals or other written materials that contain: Supervisory and Compliance policies and procedures, as evidence of performance of the adviser's duty to supervise. Also, a record of the person designated Chief Compliance Officer. The adviser should also maintain copies of any related policies and procedures or related memoranda in effect during the past six years.	5 years after the procedures were last in effect. Procedures currently in effect and all those in effect in the past Five years.	Rule 206(4)-7 Rule 204-2(a)(17)(i)	Compliance	Westwood Office
	Code of Ethics. Code of Ethics Rule only applies to registered advisers, but many provisions are arguably Best Practices. A copy of the Code of Ethics in effect currently and all those in effect during the past six years.	5 years after it was last in effect.	204A-1 204-2(a)(12)(i)	Compliance Legal	Westwood Office
	Code of Ethics Violations. A record of any violation of the Code of Ethics and any action taken as a result of the violation.	5 years*	Rule 204-2(a)(12)(ii)	Compliance	Westwood Office
	Annual Compliance Review of Procedures. Records of the review by the Compliance Department and the Compliance Committee of the adequacy and effectiveness of the procedures, including consideration	5 years*	Rule 204-2(a)(17)(ii)	Compliance	Westwood Office

	DOCUMENT	REQUIRED LENGTH OF RETENTION	STATUTORY AUTHORITY (where not specified, Rules are SEC Rules)	RESPONSIBLE DEPARTMENT	LOCATION
	of any compliance matters that arose in the prior year, changes in the Company's activities and any relevant changes in the Adviser's Act or Rules. Also records of any interim review during the year.				
	Annual Acknowledgement and/or Certification. Annual Supervised Person certifications of receipt of the compliance policies and procedures Manual (including Code of Ethics) and Compliance Acknowledgement form and Annual Certification of Personal Trading Compliance.	Rule requires the Company keep copies of acknowledgement and certification of receipt of and compliance with the Code of Ethics for each person that is now or was a Supervised Person during the past Five years.	Rule 204-2(a)(12)(iii) Rule 204A-1 and Best Practices.	Compliance	Westwood Office
	Other Manuals. Personnel and Other Employee-Related Manuals, including any related memoranda.	Permanently	Best practices	Compliance	Westwood Office
	Personnel Records, including for each employee, officer and director (as applicable): Employee contracts; Dates of employment; Addresses and social security number; Percentage of ownership of adviser's outstanding securities; and	Permanently	Best practices	Human Resources/ Compliance	Westwood Office

	DOCUMENT	REQUIRED LENGTH OF RETENTION	STATUTORY AUTHORITY (where not specified, Rules are SEC Rules)	RESPONSIBLE DEPARTMENT	LOCATION
	Disciplinary history. All records of licensing with CFTC and NFA and records supporting certification made in connection with registration. Records of CFTC Ethics requirement training.				
	Litigation File. A record of past, present and pending litigation involving the adviser or its officers, directors, members, supervised persons or Supervised Persons that may have a material effect on the adviser or otherwise trigger disclosure obligations.	Permanently	Best practices	Compliance Department	Westwood Office
	Business Contracts. All written agreements (or copies) entered into by the adviser relating to the business of the adviser as such, including for example: Rental agreements and property leases; and Contracts with pricing services and other service providers.	5 years*	Rule 204-2(a)(10)	Compliance Finance	Westwood Office
SEC Filings and Correspondence					
1	**Form ADV**, including all amendments.	Permanently	Rule 204-2(a)(14) for Part II of Form ADV	Compliance	Westwood Office
Records for Investment Supervisory or Management Service.					

	DOCUMENT	REQUIRED LENGTH OF RETENTION	STATUTORY AUTHORITY (where not specified, Rules are SEC Rules)	RESPONSIBLE DEPARTMENT	LOCATION
"Investment Supervisory Service" means the giving of continuous advice regarding the investment of assets based on the individual needs of each client.					
1	**Client Records**. Separate records (i.e., a journal) for each client who receives investment supervisory or management service that show the securities purchased and sold and the date, amount and price of each transaction.	5 years*	Rule 204-2(c)(1)(i)	Client Service	Westwood Office
Proxy Voting Procedures					
1	**Policies.** Copies of Proxy Voting Policies & Procedures and any amendments thereto.	5 years*	Rule 204-2(c)(2)(i) Rule 206(4)-6	Compliance	Westwood Office
2	**Proxy Statements.** Copies of Proxy Statements received regarding client securities.	5 years*	Rule 204-2(c)(2)(ii)	Compliance	Westwood Office May rely on EDGAR.
3	**Vote**. Record of each vote cast on behalf of client.	5 years*	Rule 204-2(c)(2)(iii)	Compliance	Westwood Office
4	**Record of Basis for Decision**. A copy of any document created by adviser memorializing the basis for the voting decision.	5 years*	Rule 204-2(c)(2)(iv)	Compliance	Westwood Office
5	**Client Requests**. A copy of any written client request for information on how the adviser voted and any written response to	5 years*	Rule 204-2(c)(2)(v)	Compliance	Westwood Office

	DOCUMENT	REQUIRED LENGTH OF RETENTION	STATUTORY AUTHORITY (where not specified, Rules are SEC Rules)	RESPONSIBLE DEPARTMENT	LOCATION
	either an oral or written request by a client.				
6	**Third Party Qualification**. Copies of the records to show the qualifications and representations made by any Third Party selected to make proxy voting decisions in cases of material conflicts of interest.	5 years*	Rule 204-2(c)(2)(iv)	Compliance	Westwood Office
Records Where the Adviser Maintains Custody or possession of Client Funds or Securities					
1	A journal showing all purchases, sales, receipts and deliveries or securities (including certificate numbers) for accounts over which the adviser maintains custody and all other debits and credits to these accounts.	5 years*	Rule 204-2(b)(1)	Client Service	Westwood Office
2	**A separate blotter or record** for each of these clients showing: All purchases, sales, receipts and deliveries of securities; The date and price of each purchase and sale; and All debits and credits.	5 years*	Rule 204-2(b)(2)	Client Service	Westwood Office
3	**Confirmations**. Copies of confirmations of all transactions for the clients.	5 years*	Rule 204-2(b)(3);	Client Service	Westwood Office

	DOCUMENT	REQUIRED LENGTH OF RETENTION	STATUTORY AUTHORITY (where not specified, Rules are SEC Rules)	RESPONSIBLE DEPARTMENT	LOCATION
4	**Position Records.** A record for each security in which any custody client has a position, with the record showing: The names of each client having any interest in the security; The amount or interest of each client; and The location of the security.	5 years*	Rule 204-2(b)(4)	Client Service	Westwood Office
5	**Monthly Statements, Annual Audits.** Copies of quarterly reports sent to clients.	5 years*	Rules 204-2(a)(7) 204-2(b) and 206(4)-2	Client Service	Westwood Office

Exhibit E

Representative Client List

MEKETA

Client List

As of December 31, 2020

We currently provide consulting services to a number of distinguished clients. The following is a representative list of our clients, as some wish to remain confidential. Please note that asset data is as of June 30, 2020 or at date of hire, as December 31, 2020 assets are not yet available. Dates that are asterisked (*) represent clients who joined the firm as part of the merger with PCA on March 15, 2019. These dates are the original hire date with PCA.

Public Funds	Month/Year Hired	Total Assets ($mm)	Assets Under Advisement ($mm)	Type of Service	Relationship (Retainer or Project)
California Public Employees' Retirement System	12/1992 (PCA) 3/2009 (Meketa)	389,000	389,000	Private Equity Board Consultant Infrastructure Board Consultant Real Estate Board Consultant Member of Board Governance Spring Fed Pool Member of Project Pool, General	Retainer
California State Teachers' Retirement System	1990 (PCA) 6/2014 (Meketa)	246,000	246,000	General Consulting and Private Equity Board Consultant	Retainer
New York State Common Retirement Fund	11/2008*	216,300	39,849	Private Equity and Real Estate Project Consulting	Project
State Board of Administration of Florida	10/2018	203,747	NA - Project	General Consulting Project Pool of Consultants	Project
Washington State Investment Board	2003 (PCA) 6/2012 (Meketa)	145,383	NA - Project	Project Real Assets Consulting and General Consulting Project Pool Consultant	Project
Oregon Public Employees' Retirement System	1/1992*	79,382	79,382	General Consulting and Real Estate Consulting	Retainer
Minnesota State Board of Investment	7/1992*	71,053	71,053	General Consulting Board Consultant and Special Projects Consulting	Retainer
Los Angeles County Employees Retirement Association	1/2016	58,222	58,222	General Consulting	Retainer
Teachers' Retirement System of the State of Illinois	7/2020	57,000	NA -Project	Private Equity Co-Investment Project Pool of Consultants	Project
Maryland State Retirement and Pension System	7/2014	54,767	54,767	General Consulting	Retainer
Arizona State Retirement System	6/2007	40,493	40,493	Private Equity/Debt Consulting Project Consulting Project Real Estate	Retainer
Connecticut Retirement Plans and Trust Funds	7/2017	35,910	35,910	General Consulting Alternative Consulting	Retainer
South Carolina Retirement System Investment Commission	6/2017	30,982	30,982	General Consulting	Retainer
Nevada 529 College Savings Plans	1/2011*	29,456	29,456	General Consulting	Retainer
Employees' Retirement System of Texas	12/2017*	29,000	2,400	Real Estate Consulting	Retainer
State of South Carolina Treasurer's Office	7/2012*	24,391	24,391	General Consulting	Retainer

Client List

As of December 31, 2020

Public Funds	Month/Year Hired	Total Assets ($mm)	Assets Under Advisement ($mm)	Type of Service	Relationship (Retainer or Project)
U.S. International Development Finance Corporation	4/2015	23,000	23,000	Private Markets Due Diligence Private Equity Program Advisor	Project
Kansas Public Employees Retirement System	1/1998*	20,190	20,190	General Consulting	Retainer
Illinois State Board of Investment	11/2015	19,803	19,803	General Consulting	Retainer
Illinois State Universities Retirement System	3/2018*	19,537	19,537	General Consulting	Retainer
State of Hawaii Employees' Retirement System	1/2007*	17,158	17,158	General Consulting Private Markets Consulting	Retainer
Orange County Employees Retirement System	6/2016	17,054	17,054	General Consulting	Retainer
Teachers' Retirement System of Oklahoma	8/2019	16,897	2,889	Private Markets Back Office Administration	Retainer
Finance Authority of Maine	1/2012*	11,214	11,214	General Consulting	Retainer
ScholarShare Investment Board of California	1/2000*	9,991	9,991	General Consulting	Retainer
Colorado CollegeInvest 529 College Savings Plan	7/2005*	9,063	9,063	General Consulting	Retainer
District of Columbia Retirement Board	6/2010	8,534	8,534	General Consulting Alternative Consulting	Retainer
State of Wyoming, Wyoming Retirement System	8/2016	8,515	8,515	General Consulting	Retainer
Rhode Island State Investment Commission	8/2008*	8,469	8,469	General Consulting Real Estate Consulting	Retainer
Missouri State Employees Retirement System	1/2019*	8,000	7,000	Public Markets Manager Consulting Services	Retainer
Kansas State Treasurer	9/2017*	7,592	7,592	General Consulting	Retainer
Massachusetts Educational Financing Authority	2/2013*	6,058	6,058	General Consulting	Retainer
South Carolina College Savings Program	7/2012*	4,361	4,361	General Consulting	Retainer
City of San Jose Police and Fire Department	3/2017	3,886	3,886	General Consulting Private Markets Consulting	Retainer
San Joaquin County Employees' Association	3/2015*	3,139	3,139	General Consulting	Retainer
City of Phoenix Employees' Retirement System	7/2015	2,693	2,693	General Consulting	Retainer
San Jose Federated City Employees' Retirement System	8/2009	2,490	2,490	General Consulting Private Markets Consulting	Retainer
New Mexico Education Trust Board	7/2001*	2,462	2,462	General Consulting	Retainer
City of Baltimore Retirement Systems	3/2017*	2,402	239	Alternatives Consulting	Retainer

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Client List

As of December 31, 2020

Public Funds	Month/Year Hired	Total Assets ($mm)	Assets Under Advisement ($mm)	Type of Service	Relationship (Retainer or Project)
Denver Employees Retirement Plan	9/2018	2,095	2,095	General Consulting	Retainer
Dallas Police and Fire Pension System	4/2018	1,982	1,982	General Consulting	Retainer
East Bay Municipal Utility District	4/2005*	1,853	1,853	General Consulting	Retainer
CalOptima	9/2014	1,693	1,693	General Consulting	Retainer
City of Miami Fire Fighters' and Police Officers' Retirement Trust	8/2019	1,533	1,533	General Consulting	Retainer
El Paso Firemen & Policemen's Pension Fund	6/2009	1,352	174	General Consulting Private Equity Consulting	Retainer
City of Hartford Municipal Employees Retirement Fund	11/2001*	1,022	66	Private Equity Consulting	Retainer
Plymouth County Retirement Association	12/2015	993	993	General Consulting Alternative Consulting	Retainer
Austin Fire Fighters Relief & Retirement Fund	3/2014	979	979	General Consulting	Retainer
Worcester Retirement System	1/2000	951	951	General Consulting	Retainer
City of Newport News	7/2019	948	948	General Consulting	Retainer
Merced County Employees Retirement Association	3/2018	912	912	General Consulting	Retainer
Municipal Employees' Retirement System of Louisiana	5/2013	905	905	General Consulting	Retainer
Montana University System	9/2016	882	882	General Consulting	Retainer
District of Columbia's Office of Finance & Treasury	4/2019	837	837	General Consulting	Retainer
Tri-County Metropolitan Transportation District of Oregon	4/2010*	705	705	General Consulting	Retainer
City of Ann Arbor Employees' Retirement System	2/2011	703	703	General Consulting	Retainer
New Mexico Public Employees Retirement Association's Deferred Compensation Plan	10/2015	662	662	General Consulting	Retainer
City and County of San Francisco Retiree Health Care Trust Funds	7/2013	510	510	General Consulting	Retainer
Employees' Retirement System of the Government of the U.S. Virgin Islands	2/2012	484	484	General Consulting	Retainer
Fire and Police Retiree Health Care Fund, San Antonio	12/2012	400	400	General Consulting	Retainer
Oakland Police and Fire Retirement System	7/2004*	383	383	General Consulting	Retainer

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Client List

As of December 31, 2020

Public Funds	Month/Year Hired	Total Assets ($mm)	Assets Under Advisement ($mm)	Type of Service	Relationship (Retainer or Project)
City of Quincy Retirement System	10/2002	335	335	General Consulting Private Equity Consulting	Retainer
Industrial Commission of Arizona	5/2016	321	321	General Consulting	Retainer
Regional Transportation Authority	7/2017	288	288	General Consulting	Retainer
California's Valued Trust	11/2008	193	193	General Consulting	Retainer
Bloomington Fire Department Relief Association Pension Fund, MN	2/2016	188	188	General Consulting	Retainer
City of Marlborough Contributory Retirement System	5/1998	177	177	General Consulting	Retainer
Town of Lexington Contributory Retirement System	1/2003	176	176	General Consulting	Retainer
Irving Firemen's Relief & Retirement Fund	6/2019	174	174	General Consulting	Retainer
Massachusetts Housing Finance Agency Employees' Retirement System	1/2004	169	169	General Consulting	Retainer
Town of Norwood Retirement System	4/2011	163	163	General Consulting	Retainer
Hingham Contributory Retirement System	7/2013	123	123	Overseer of PRIT	Retainer
Rhode Island Resource Recovery Corporation	1/2013	121	121	General Consulting	Retainer
Oregon Growth Board	8/2018	100	100	Private Equity	Retainer
Town of Wellesley OPEB Trust	3/2008	75	75	General Consulting	Retainer
Massachusetts Housing Finance Agency OPEB Trust	3/2010	38	38	General Consulting	Retainer
California ABLE Act Board	4/2017*	22	22	General Consulting	Retainer
Town of Arlington OPEB Trust	9/2010	15	15	General Consulting	Retainer
California Secure Choice Retirement Savings Investment Board	1/2018	5	5	General Consulting	**Retainer**

Healthcare, Endowment, and Non-Profit	Month/Year Hired	Total Assets ($mm)	Assets Under Advisement ($mm)	Type of Service	Relationship (Retainer or Project)
The Texas A&M University System	8/2019	5,377	5,377	General Consulting Private Markets Consulting	Retainer
California State University	12/2017	4,730	4,730	General Consulting	Retainer

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Client List

As of December 31, 2020

Healthcare, Endowment, and Non-Profit	Month/Year Hired	Total Assets ($mm)	Assets Under Advisement ($mm)	Type of Service	Relationship (Retainer or Project)
Rady Children's Hospital and Health Center	11/2005	2,224	2,224	General Consulting	Retainer
California Community Foundation	1/2017	1,145	1,145	General Consulting Private Markets Consulting	Retainer
Arizona State University	5/2013	909	909	General Consulting	Retainer
Jackson Health System	8/2016	830	830	General Consulting	Retainer
Monument Health, Inc.	11/2015	658	658	General Consulting	Retainer
American University of Beirut	11/2020	765	765	General Consulting	Retainer
University of Wyoming Foundation	6/2015	589	589	General Consulting Private Markets Consulting	Retainer
South Shore Hospital	1/1990	510	510	General Consulting	Retainer
Massachusetts Medical Society	6/2007	475	475	General Consulting	Retainer
Florida International University	9/2016	431	431	General Consulting	Retainer
Illinois Wesleyan University	12/2014	327	73	Discretionary Private Equity	Retainer
San Diego State University - The Campanile Foundation	4/2017	319	319	Discretionary Consulting	Retainer
The City University of New York	10/2017	303	303	Discretionary Consulting	Retainer
CHRISTUS St. Vincent Regional Health System and SVHsupport Funds	4/2017	282	282	General Consulting	Retainer
Utah State University	12/2012	198	198	General Consulting	Retainer
Community College League of California	3/2015	169	169	General Consulting	Retainer
Santa Barbara Foundation	3/2017	163	163	General Consulting	Retainer
Society for Human Resource Management, Inc.	11/2017	157	157	General Consulting	Retainer
United States Polo Association, Inc.	8/2015	156	156	General Consulting	Retainer
The Marshall University Foundation, Inc.	1/2020	151	151	Discretionary Consulting	Retainer
Order of Carmelites	11/2015	132	132	General Consulting	Retainer
Utah Valley University Foundation	4/2015	116	58	Discretionary Consulting	Retainer
Y&H Soda Foundation	8/2012*	101	101	General Consulting	Retainer
Neighborhood Health Plans of Rhode Island, Inc.	10/2007	98	98	General Consulting	Retainer
Albuquerque Academy	3/2003	84	84	General Consulting	Retainer

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Client List

As of December 31, 2020

Healthcare, Endowment, and Non-Profit	Month/Year Hired	Total Assets ($mm)	Assets Under Advisement ($mm)	Type of Service	Relationship (Retainer or Project)
Pfaffinger Foundation	6/2009	77	77	General Consulting	Retainer
Coe College	11/2015	64	64	General Consulting	Retainer
Warren Wilson College	1/2015	50	50	Discretionary Consulting	Retainer
The William Gumpert Foundation	8/2009	40	40	Discretionary Consulting	Retainer
Museum of Science and Industry	7/2020	118	30	Discretionary Private Equity	Retainer
Oregon Episcopal School	7/2019	30	30	Discretionary Consulting	Retainer
Wells College	7/2014	30	30	General Consulting	Retainer
San Diego State University Research Foundation Retiree Medical Voluntary Employees' Benefit Association Trust	11/2017	12	12	Discretionary Consulting	Retainer
Joint Center for Radiation Therapy	1/1995	11	11	General Consulting	Retainer
Monastery of Mount Carmel	11/2015	3	3	General Consulting	Retainer
USA Volleyball Foundation	3/2016	3	3	Discretionary Consulting	Retainer
League of Voluntary Hospitals and Homes of New York	4/2003	2	2	General Consulting	Retainer
Peralta Community College District Board OPEB Trust II	2/2019	1	1	Discretionary Consulting	Retainer

Corporate and Other for Profit	Month/Year Hired	Total Assets ($mm)	Assets ($mm)	Type of Service	Relationship (Retainer or Project)
Freeport-McMoRan, Inc.	6/2019	1,693	1,693	Discretionary Consulting	Retainer
Hu-Friedy Mfg. Co., LLC	11/2015	61	61	General Consulting Partial Discretionary - Core Fund	Retainer
Fitch Even Tabin & Flannery	11/2015	32	32	General Consulting	Retainer
Marnell Companies, LLC	2/2004	30	30	Discretionary Consulting	Retainer
Dedert Corporation	11/2015	19	19	General Consulting	Retainer
Solymar, Inc.	1/2009	14	14	General Consulting	Retainer
Marnell Sher Companies Associates, Inc.	7/2007	7	7	Discretionary Consulting	Retainer
Jet.Com	1/2019	4	4	General Consulting	Retainer

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Client List

As of December 31, 2020

VEBA	Month/Year Hired	Total Assets ($mm)	Assets ($mm)	Type of Service	Relationship (Retainer or Project)
VEBA for Retirees of Kaiser Aluminum	7/2013	816	816	General Consulting	Retainer
Retirees of the Goodyear Tire & Rubber Company	4/2008	690	690	General Consulting	Retainer
Union Pacific Railroad Employes Health Systems	6/2017	119	119	General Consulting	Retainer
National Steel Corporation Represented Retirees Benefit Trust	6/2014	35	35	General Consulting	Retainer

Multi-Employer and Taft-Hartley	Month/Year Hired	Total Assets ($mm)	Assets ($mm)	Type of Service	Relationship (Retainer or Project)
Pacific Maritime Association	3/2019	6,974	6,974	Project Consulting	Retainer & Project
North Atlantic States Carpenters Benefit Funds	3/1997	5,597	5,597	General Consulting Discretionary Private Equity	Retainer
Southern California United Food & Commercial Workers Unions	7/2004	4,653	4,653	General Consulting	Retainer
Laborers Trust Funds for Northern California	7/2017	4,632	4,632	Discretionary Consulting	Retainer
Building Service 32BJ Benefit Funds	4/2006	4,194	4,194	General Consulting	Retainer
Hawaii Employer-Union Health Benefits Trust Fund	5/2011*	3,699	3,699	General Consulting, and Private Equity and Real Estate Consulting	Retainer
Massachusetts Laborers' Benefit Funds	1/1982	3,666	3,666	General Consulting	Retainer
Producer-Writers Guild of America	10/2002	3,544	3,544	General Consulting and Discretionary Private Markets	Retainer
Minnesota Laborers Fringe Benefit Funds	6/2000	2,789	2,789	General Consulting	Retainer
AFTRA Retirement Fund	6/2010	2,452	2,452	General Consulting	Retainer
Laborers' District Council & Contractors of Ohio	1/1978	2,319	2,319	General Consulting and Discretionary Private Markets	Retainer
I.A.T.S.E. National Benefit Funds	1/2009	2,118	2,118	General Consulting	Retainer
PACE Industry-Union Management	3/2019	1,861	1,861	Discretionary Consulting	Retainer
New York State Teamsters Benefit Funds	10/2005	1,766	1,766	General Consulting and Discretionary Private Markets	Retainer
Michigan Laborers' Fringe Benefit Funds	1/2001	1,127	1,127	General Consulting and Discretionary Private Markets	Retainer
North Atlantic States Carpenters Annuity Fund	1/2018	1,044	1,044	General Consulting	Retainer

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Client List

As of December 31, 2020

Multi-Employer and Taft-Hartley	Month/Year Hired	Total Assets ($mm)	Assets ($mm)	Type of Service	Relationship (Retainer or Project)
Southern California Pipe Trades	1/2014	942	942	General Consulting - Overseer	Retainer
Painters and Allied Trades District Council No. 35	4/2012	928	928	General Consulting	Retainer
Plumbers Local Union No. 1 Trust Funds	7/2003	890	890	General Consulting	Retainer
Sheet Metal Workers' Local 10	11/2015	743	743	General Consulting	Retainer
Western States Insulators and Allied Workers	7/2007	725	725	General Consulting	Retainer
Twin City Iron Workers Fringe Funds	9/2005	617	617	General Consulting	Retainer
Iron Workers District Council of New England	1/2017	539	539	General Consulting	Retainer
Airconditioning and Refrigeration Industry	7/2007	510	510	General Consulting	Retainer
Iron Workers of Western Pennsylvania	4/2006	468	468	General Consulting	Retainer
American Maritime Officers	11/2018	462	462	General Consulting	Retainer
Service Employees 32BJ North	3/2007	420	420	General Consulting	Retainer
International Brotherhood of Electrical Workers Local No. 150	11/2015	413	413	General Consulting	Retainer
Construction Industry Retirement Fund of Rockford, Illinois	11/2015	392	392	General Consulting	Retainer
Office Clerical Unit of the Marine Clerks Association Local 63	1/2008	385	385	General Consulting	
SAG-AFTRA Health Plan	1/2017	375	375	General Consulting	Retainer
NECA-IBEW Local 364	11/2015	373	373	General Consulting	Retainer
Communications Workers of America	1/2015	316	316	General Consulting	Retainer
UNITE HERE Local 25 and Hotel Association of Washington, D.C.	7/2011	309	309	Discretionary Consulting	Retainer
Sheet Metal Workers Local Union No. 100	5/2017	307	307	Discretionary Consulting	Retainer
Retail Food Employers and UFCW Local 711	10/2012	294	294	General Consulting	Retainer
New York State Nurses Association	8/1995	291	291	General Consulting	Retainer
California School Employees Association Retirement Plan	7/2020	275	275	General Consulting	
Northwest Ohio Carpenters	5/2001	262	262	General Consulting	Retainer
I.A.T.S.E. Local 33	4/2005	229	229	General Consulting	Retainer
International Union of Operating Engineers Local No. 98	6/2007	225	225	General Consulting	Retainer

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Client List

As of December 31, 2020

Multi-Employer and Taft-Hartley	Month/Year Hired	Total Assets ($mm)	Assets ($mm)	Type of Service	Relationship (Retainer or Project)
Alaska United Food and Commercial Workers Trust Funds	6/2014	205	205	General Consulting	Retainer
California School Employees Association	4/2020	201	201	General Consulting	Retainer
Minnesota Teamsters Construction Division	7/2003	195	195	General Consulting	Retainer
Teamsters Union 25	9/2002	194	194	General Consulting	Retainer
Lucent Supplemental Healthcare Benefits Trust for Formerly Represented Retirees	7/2012	194	194	General Consulting	Retainer
IBEW Local 117	11/2015	186	186	General Consulting	Retainer
SEIU Local 32BJ, District 36 Building Operators	8/2018	179	179	General Consulting	Retainer
Southwest Carpenters Annuity Fund	3/2003	178	178	General Consulting	Retainer
Massachusetts Service Employees' Pension Fund	7/2020	174	174	General Consulting	Retainer
Social Service Employees Union Local 371	11/2003	173	173	General Consulting	Retainer
Sheet Metal Workers' Local No. 9	1/2001	167	167	General Consulting	Retainer
Sheet Metal Workers' Local 219	11/2015	137	137	General Consulting	Retainer
Michigan BAC Fringe Benefit Funds	11/2015	134	134	General Consulting and Discretionary Alternatives	Retainer
Heat & Frost Insulators Local 6	6/2006	131	131	General Consulting	Retainer
IBEW Local No. 9 and Line Clearance Contractors	11/2015	122	122	General Consulting	Retainer
UA Local 125	11/2015	116	116	General Consulting	Retainer
IBEW Local Union No. 461	11/2015	114	114	General Consulting	Retainer
Local Union No. 131 International Brotherhood of Electrical Workers	11/2015	83	83	General Consulting	Retainer
Southern California Plastering Institute	9/2012	83	83	General Consulting	Retainer
Teamsters Local 251	6/2015	78	78	General Consulting	Retainer
Local 6 Club Employees Pension Fund	10/2000	75	75	General Consulting	Retainer
Heat and Frost Insulators and Allied Workers Local 25	11/2015	73	73	General Consulting and Discretionary Alternatives	Retainer
Teamsters Union Local 170	7/2012	60	60	General Consulting	Retainer
Heat & Frost Insulators Local No. 33	1/2020	45	45	General Consulting	Retainer
Heat & Frost Insulators Local 47	11/2015	43	43	General Consulting	Retainer
NY State Teamsters Council - UPS Retiree Health Fund	5/2014	32	32	General Consulting	Retainer

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Client List

As of December 31, 2020

Multi-Employer and Taft-Hartley	Month/Year Hired	Total Assets ($mm)	Assets ($mm)	Type of Service	Relationship (Retainer or Project)
North Atlantic States Carpenters Labor Management Program	11/2020	30	30	General Consulting	Retainer
North Atlantic States Carpenters Training Fund	11/2018	23	23	General Consulting	Retainer
Five Rivers Carpenters	11/2015	18	18	General Consulting	Retainer
Plumbers & Pipefitters, Local Union #51	4/2007	17	17	General Consulting	Retainer
Massachusetts Construction Advancement Program	11/2015	3	3	General Consulting	Retainer
Labor Relations Division of Construction Industries of Massachusetts	7/2019	2	2	General Consulting	Retainer

Exhibit F

Public Fund References

The Board may contact the following clients as references. We kindly ask to be notified prior to contacting these individuals.

Client Name:	San Joaquin County Employees' Retirement Association
Contact and Title:	Ms. Johanna Shick, Chief Executive Officer
Address:	6 South El Dorado Street, Suite 400 Stockton, CA 95202
Telephone Number:	(209) 468-2163

Client Name:	Oakland Police and Fire Retirement System
Contact and Title:	Mr. David Jones, Treasury Administrator
Address:	Hearing Room 1 1 Frank H Ogawa Plaza Oakland, CA 94612
Telephone Number:	(510) 238-6508

Client Name:	East Bay Municipal Utility District
Contact and Title:	Ms. Sophia Skoda, Finance Director
Address:	375 11th Street Oakland, CA 94607
Telephone Number:	(510) 287-0231

Exhibit G

Sample Asset Allocation and Asset/Liability Modeling Study

MEKETA INVESTMENT GROUP

Client Example

Asset Allocation Review

Portions of this document have been redacted to ensure the security of certain confidential or sensitive information.

Introduction

Introduction

- This document evaluates the current asset allocation policy and presents alternative asset allocation options for the Fund to consider.
- We provide various approaches to assessing risk in order to provide a “mosaic” of the risks faced by the Fund.
- The goal of this review is not to declare one portfolio the “right” choice or the only prudent choice, but to highlight the risk and return tradeoffs of different policy portfolios.
- The asset allocation review process highlights the natural tension between long-term goals and short-term risks, and should allow the Fund to make more informed decisions regarding portfolio positioning.

Asset Allocation Overview

Asset Allocation

What is Asset Allocation?

Asset allocation refers to the distribution of assets across a number of asset classes that exhibit different correlations with each other. Each asset class exhibits a unique combination of risk and reward. The expected and realized long-term returns vary by asset class, as does the interim volatility of those returns. Some asset classes, like equities, exhibit high degrees of volatility, but also offer high returns over time. Other asset classes, like cash, experience very little volatility, but offer limited return potential.

Why is Asset Allocation important?

The distribution of assets across various asset classes exerts a major influence on the return behavior of the aggregate pool over short and long time periods.

How does Asset Allocation affect aggregate performance?

In addition to exhibiting unique characteristics, each asset class interacts differently with other asset classes. Because of low correlations, the likelihood that any two asset classes will move together in the same direction is limited, with the movement of one asset class often offsetting another's. Combining asset classes allows investors to control more fully the aggregate risk and return of their portfolios, and to benefit from the reduction in volatility that stems from diversification.

Developing Investment Objectives

What is the Fund's long-term return objective?

- Meet or exceed Policy Benchmark.
- Meet or exceed actuarial assumed rate of return of 7.34%.
- Achieve and maintain a fully funded plan.
- Others?

What are the Fund's risk objectives?

- Minimize volatility in asset values and contribution levels from year to year.
- Limit the risk and/or extent of short-term losses.
- Minimize the risk of permanent capital impairment.
- Others?

Developing Investment Constraints

What is the overall time horizon for the Fund?

- On-going concern, with long-term time horizon for majority of assets.

What are the liquidity needs of the Fund?

- Net cash outflows of approximately $87 million per-year last two fiscal years.
- Obligations for future private market commitments.
- Net cash outflows are likely to increase as the plan demographics age and there are more retirees.

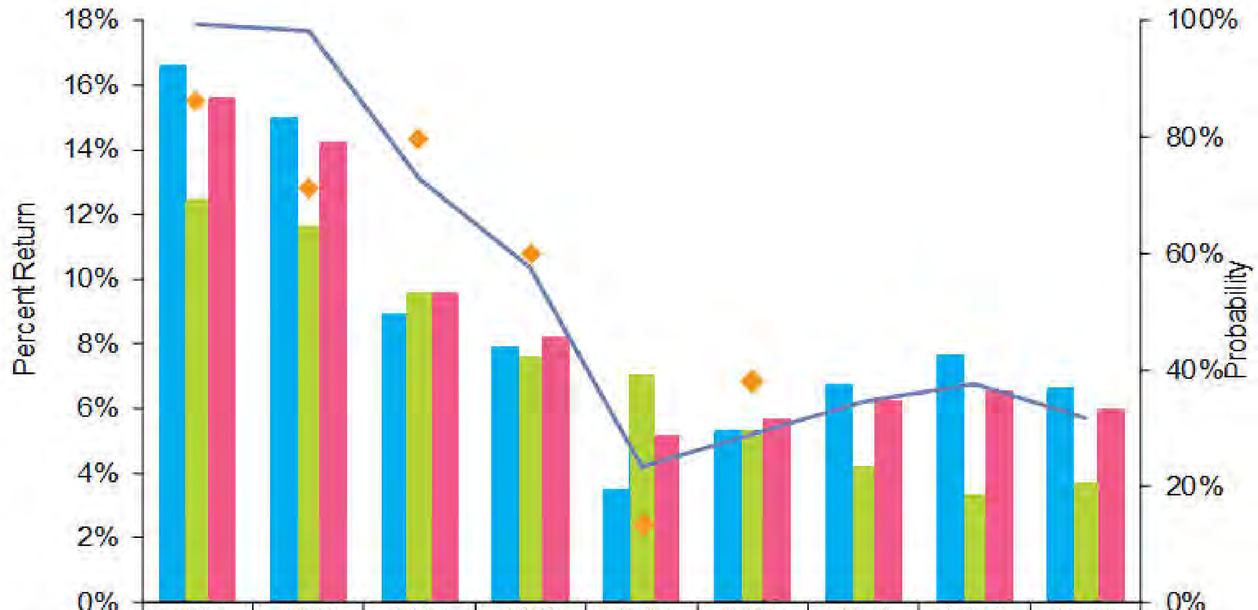
What are the legal and regulatory constraints under which the Fund operates?

- State laws.

Are there any other considerations that must be evaluated?

- Ratio of active to retired participants in the Fund.
- Fiscal and budget status?
- Willingness/ability to adjust contribution rates in the future if needed.

The Secular Decline in Investment Returns[1]

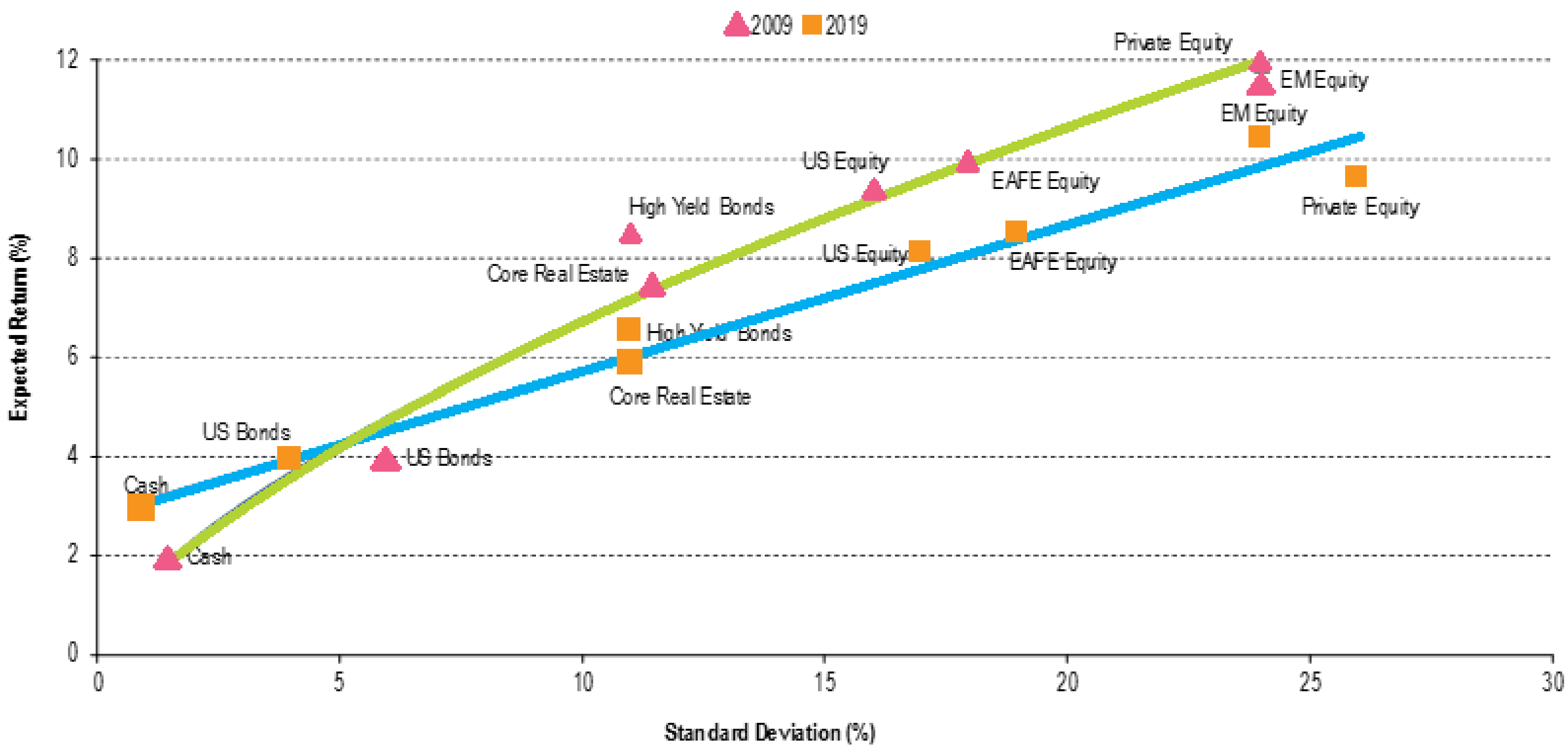


	1980	1985	1990	1995	2000	2005	2010	2015	2019
Equity Expected Return	16.6%	15.0%	8.9%	7.9%	3.5%	5.3%	6.7%	7.6%	6.6%
Bond Expected Return	12.4%	11.6%	9.6%	7.6%	7.0%	5.3%	4.2%	3.3%	3.7%
65/35 Eq/Bond Exp. Ret.	15.6%	14.2%	9.5%	8.2%	5.1%	5.7%	6.2%	6.5%	6.0%
Actual 10-year Return	15.5%	12.8%	14.3%	10.8%	2.4%	6.9%			
Probability of earning 7.5%	99%	98%	73%	58%	23%	29%	35%	38%	32%

- The chart above illustrates that a portfolio comprising of 65% domestic stocks and 35% investment grade bonds has produced diminishing expected returns as well as actual returns over the past 30 years.

1 Expected return assumptions for 1) Bonds equals the yield of the ten-year Treasury plus 100 basis points, and 2) Equities equals the dividend yield plus the earnings yield of the S&P 500 index (using the inflation-adjusted trailing 10-year earnings). Probability calculation is for the subsequent ten years.

Investable Universe over Time: Less Return for the Same or More Risk[1]



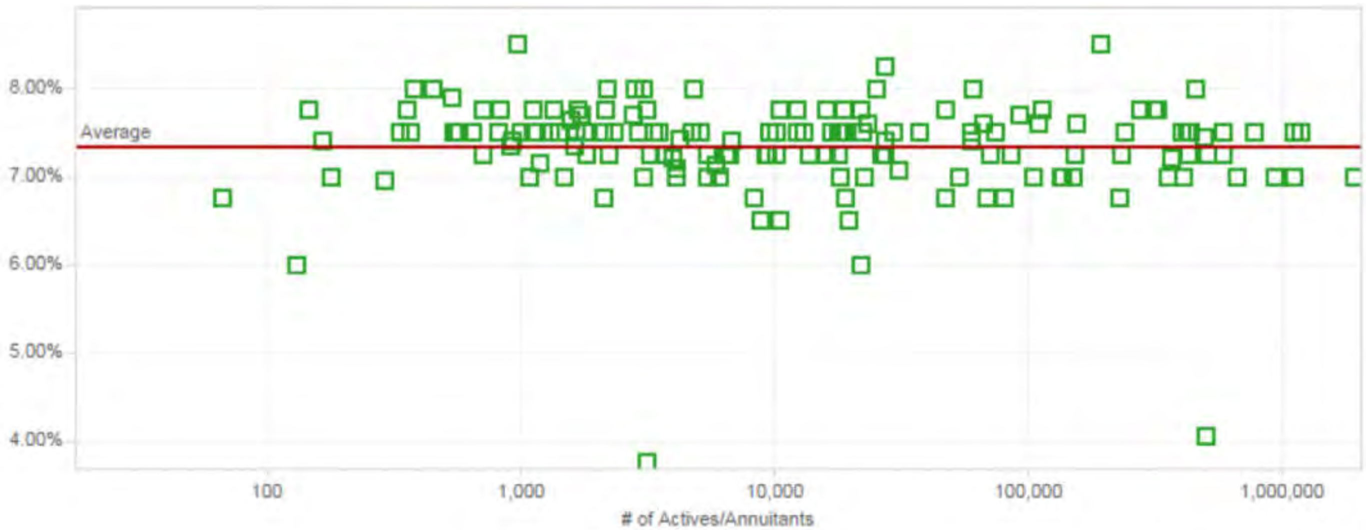
- A positive relationship exists between long-term return expectations and the level of risk accepted.
- However, this relationship is not static.

[1] Expected return and standard deviation are based upon Meketa Investment Group's Annual Asset Study.

Industry Trends

- Every year the National Conference on Public Employee Retirement Systems ("NCPERS") conducts a comprehensive study of national state and local pension plans.
- The most recent report (2018) cited that 83% of funds in the survey have reduced their actuarial target return assumption or were considering doing so.
- The 2018 average investment assumption was 7.3%. Down from 7.5% in 2017.

Distribution of Investment Assumption from NCPERS Survey



Setting Capital Market Expectations

Mean Variance Optimization (MVO)

- MVO is the traditional starting point for determining asset allocation.
- MVO mathematically determines an "efficient frontier" of policy portfolios with the highest risk-adjusted returns.
- All asset classes exhibit only three characteristics, which serve as inputs to the model:
  - Expected return
  - Expected volatility
  - Expected covariance with all other assets
- The model assumes:
  - Normal return distribution
  - Stable volatility and covariances over time
  - Returns are not serially correlated
- The MVO model tends to underestimate the risks of large negative events.

Overview of Annual Asset Study Methodology

- In order to construct an optimal portfolio from a risk-return standpoint, conventional financial wisdom dictates that one develop return, volatility, and correlation expectations over the relevant investing horizon.
- Meketa Investment Group's process relies on both quantitative and qualitative methodologies.
- First, we employ a large set of quantitative models to arrive at a set of baseline expected ten-year annualized returns for major asset classes.
- These models attempt to forecast a gross "beta" return for each *public market* asset class; that is, we specifically do not model "alpha," nor do we apply an estimate for management fees or other operational expenses.[1]
- Our models are fundamentally based (based on some theoretically defined return relationship with current observable factors).
- Some of these models are more predictive than others. For this reason, we next overlay a qualitative analysis, which takes the form of a data-driven deliberation among the research team and our Investment Policy Committee.
- Return assumptions for hard-to-predict asset classes as well as those with limited data will be influenced more heavily by our qualitative analysis.

[1] Our expectations are net of fees where passive management is not available (e.g., private markets and hedge funds).

Overview of Annual Asset Study Methodology (continued)

- As a result of this process, we form our ten-year annualized return expectations, which serve as the primary foundation of our longer-term, twenty-year expectations.
- We form our twenty-year annualized return expectations by systematically considering historical returns on an asset class by asset class level. Specifically, we construct a weighted average of our ten-year expectations and average historical returns in each asset class.
- The weights are determined by a qualitative assessment of the value of the historical data. Generally, if we have little confidence that the historical average return is representative of what an investor can expect,[1] we will weight our ten-year forecast more heavily. Therefore, the weight on our ten-year forecasts ranges from 0.5 to 0.9.
- We develop our twenty-year volatility and correlation expectations differently. We rely primarily on historical averages, with an emphasis given to the experience of the trailing ten years.
- Qualitative adjustments, when applied, usually serve to increase the correlations and volatility over and above the historical estimates (e.g., using the higher correlations usually observed during a volatile market).
- We also make adjustments to the volatility based on the historical skewness of each asset class (e.g., increasing the volatility for an asset class that has been negatively skewed).

[1] For example, we have less confidence in historical data that do not capture many possible market scenarios or that are overly polluted by survivorship bias.

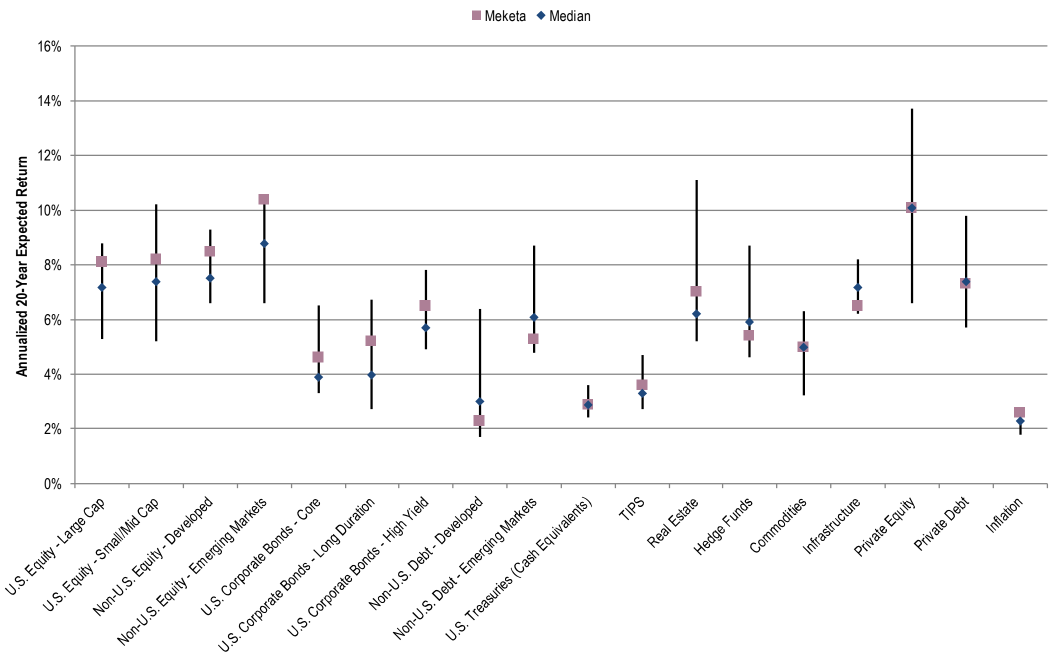
Overview of Annual Asset Study Methodology (continued)

- In the case of private markets and other illiquid asset classes where historical volatility and correlations have been artificially dampened, we seek public market equivalents on which to base our estimates before applying any qualitative adjustments.
- These volatility and correlation expectations are then combined with our twenty-year return expectations to assist us in subsequent asset allocation work, including mean-variance optimization and scenario analyses.

Peer Industry Review

- Annually the Horizon Actuarial Survey compares asset class assumptions for over 30 investment consulting firms. The analysis is a good “sanity-check” to compare our forecasts to the forecasts of our industry peers.

Meketa Asset Study vs. Horizon 2019 Survey



Horizon Survey Participants

- The following firms participated in the 2019 Horizon Survey:

Arthur J. Gallagher & Co.	Marquette Associates
Alan D. Biller and Associates	Meketa Investment Group
AndCo Consulting, LLC	Mercer
Aon Hewitt	Merrill Lynch Global Institutional Consulting
The Atlanta Consulting Group	Morgan Stanley Wealth Management
Bank of New York Mellon	NEPC
BlackRock	PFM Asset Management, LLC
Callan Associates	Research Affiliates
Cambridge Associates	RVK
CapTrust	Segal Marco Advisors
Ellwood Associates	SEI
Envestnet	Sellwood Consulting
Goldman Sachs Asset Management	Summit Strategies Group
Graystone Consulting	Suntrust
Investment Performance Services, LLC (IPS)	UBS
Janney Montgomery Scott, LLC	Verus
J.P. Morgan Asset Management	Voya Investment Management
	Willis Towers Watson

Policy Options

IPS Target vs. Current Exposure[1]

	IPS Target (%)	9/30/19 Exposure[2] (%)	Over/Under Target (%)
Growth	**47%**	**55%**	**+8%**
US Equity	26	29	+3
Developed Market Equity (non-US)	17	20	+3
Private Equity Fund of Funds	4	6	+2
Risk Mitigating	**30%**	**22%**	**-8%**
Investment Grade Bonds	19	22[3]	+3
Absolute Return Fixed Income	11	0	-11
Diversifiers	**23%**	**23%**	**-**
High Yield Bonds	7	5	-2
Bank Loans	3	2	-1
Real Estate	11	14	+3
Non-Core Infrastructure	2	2	-
Expected Return (20 years)	**7.3**	**7.6**	**+0.3**
Standard Deviation	**11.0**	**11.9**	**+0.9**
Probability of Achieving 7.34% over 20 Years	**49.2%**	**53.8%**	**+4.6%**

- As of September 30, 2019 the total portfolio was positioned more aggressively than the IPS Target policy.

1 Expected return and standard deviation are based upon Meketa Investment Group's 2019 Annual Asset Study. Throughout this document, returns for periods longer than one year are annualized.
2 The 4% exposure in the Blackrock Liquid Policy Portfolio is distributed based on the underlying exposure (2% US Equity, 1% Developed Market Equity, 1% Investment Grade Bonds).
3 Includes current allocation to cash equivalents.

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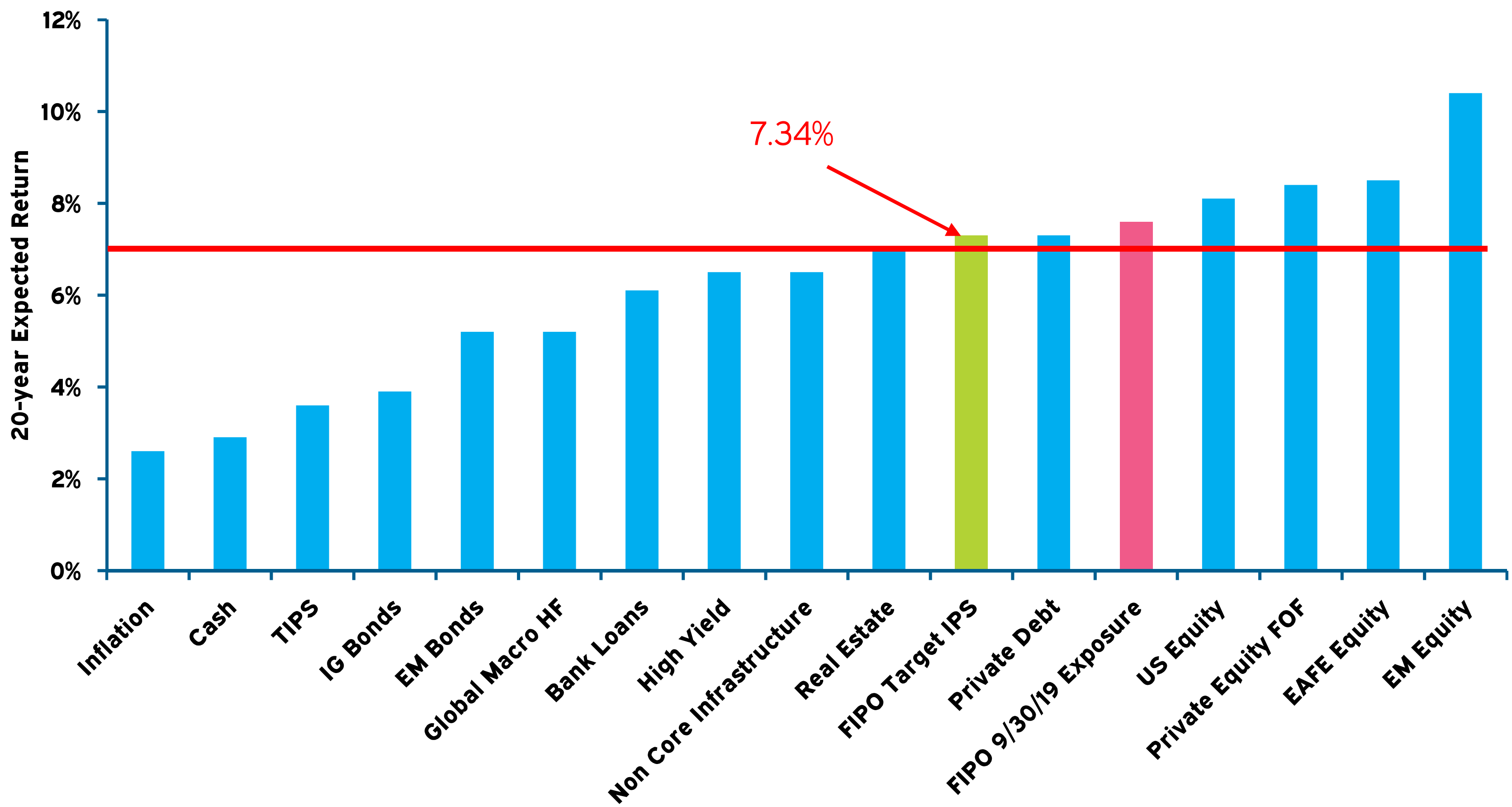
Fund Relative to Individual Asset Classes [1]



[1] Expected return and standard deviation are based upon Meketa Investment Group's 2019 Annual Asset Study. Throughout this document, returns for periods longer than one year are annualized.

Commentary on IPS Target vs. Current Exposure

- The existing IPS Target mix (as detailed in the most recent investment policy statement) is expected to generate a long-term expected return of 7.3% (on average) over a twenty-year period.
- This results in roughly a 50/50 chance that returns will be above or below the actuarial target of 7.34%.
- Current exposure as of 9/30/19 is more aggressive (with +8% overweight to growth assets offset by a -8% underweight to risk mitigating assets).
- This results in:
  - A higher expected long term return projection.
  - Higher probability of achieving the actuarial target return of 7.34%.
  - But comes with higher expected volatility (standard deviation of 11.9% vs. 11.0%).

Fund Relative to Individual Asset Classes[1]

- There are very few assets classes with an expected return above 7.34%. All of them come with significant volatility risk.

[1] Expected return and standard deviation are based upon Meketa Investment Group's 2019 Annual Asset Study. Throughout this document, returns for periods longer than one year are annualized.

New Asset Allocation Policy Options

- We prepared three alternative asset mixes for the Board to consider.
- The Mixes (A, B, and C) have been designed with the goal of achieving the same (or better) return than the current exposure but with less volatility.
- Each is based on the bar-bell approach we previously discussed; with growth assets offset by risk mitigating assets. A smaller portion of the total fund remains in diversifying assets in all mixes (predominantly in real assets).
- The degree of the bar-ball increases as you progress from Mix A ⟶ Mix B ⟶ Mix C.
- In addition, the number of changes required increases as you progress from Mix A ⟶ Mix B ⟶ Mix C.
- Overall we believe all three mixes have a higher probability of achieving a +7.34% return over the long term.

New Asset Allocation Policy Options[1]

	IPS Target (%)	Mix A (%)	Mix B (%)	Mix C (%)
Growth	**47%**	**55%**	**60%**	**61%**
US Equity	26	31	32	32
Developed Market Equity (non-US)	17	20	22	19
Emerging Market Equity	0	0	0	4
Private Equity Fund of Funds	4	4	4	4
Private Debt	0	0	2	2
Risk Mitigating	**30%**	**25%**	**25%**	**27%**
Investment Grade Bonds	19	16	16	16
Treasuries	0	5	5	5
Risk Mitigating Hedge Funds	0	4	4	6
Absolute Return Fixed Income	11	0	0	0
Diversifiers	**23%**	**20%**	**15%**	**12%**
High Yield Bonds	7	4	2	0
Bank Loans	3	4	2	2
Real Estate	11	10	9	8
Non-Core Infrastructure	2	2	2	2
Expected Return (20 years)	**7.3**	**7.6**	**7.7**	**7.8**
Standard Deviation	**11.0**	**11.4**	**11.7**	**11.8**
Probability of Achieving 7.34% over 20 Years	**49.2%**	**53.3%**	**54.4%**	**56.0%**

[1] Expected return and standard deviation are based upon Meketa Investment Group's 2019 Annual Asset Study. Throughout this document, returns for periods longer than one year are annualized.

New Asset Allocation Policy Options

General Themes

Themes	Mix A (%)	Mix B (%)	Mix C (%)
Increase in public equity	✔	✔	✔
Introduction of risk mitigating hedge funds	✔	✔	✔
Introduction of private debt		✔	✔
Introduction of emerging market equity			✔
Reduction in real estate helps to increase public equity exposure	✔	✔	✔
Rotation from broad investment grade bonds into U.S. Treasuries helps offset some of the increased public equity risk	✔	✔	✔
Rotation from HY bonds into risk mitigating hedge funds and Treasuries provides risk reduction	✔	✔	✔

The Benefit of Uncorrelated Assets

Asset Class	Expected to Correlation to Public Equities
Treasuries	-0.25
Investment Grade Bonds	0.05
Risk Mitigating Hedge Funds	0.20
Real Estate	0.45
Absolute Return Fixed Income Hedge Funds	0.55
Private Debt	0.70
Private Equity Fund of Funds	0.80

- Assets with negative or low correlation to public equities help reduce overall volatility, which can result in shallower drawdowns in market corrections.
- The addition of Treasuries and risk mitigating hedge funds should be beneficial to the Fund in most adverse market environments.

Relative Change of Each Proposed Mix vs. Current Exposure[1]

	9.30.19 Exposure (%)	Mix A (%)	Mix B (%)	Mix C (%)
US Equity	29	+2	+3	+3
Developed Market Equity (non-US)	20	-	+2	-1
Emerging Market Equity	0	-	-	+4
Private Equity Fund of Funds	6	-2	-2	-2
Private Debt	0	-	+2	+2
Investment Grade Bonds	22[2]	-6	-6	-6
Treasuries	0	+5	+5	+5
Risk Mitigating Hedge Funds	0	+4	+4	+6
High Yield Bonds	5	-1	-3	-5
Bank Loans	2	+2	-	-
Real Estate	14	-4	-5	-6
Non-Core Infrastructure	2	-	-	-

1 Expected return and standard deviation are based upon Meketa Investment Group's 2019 Annual Asset Study. Throughout this document, returns for periods longer than one year are annualized.
2 Includes current allocation to cash equivalents.

Implementation Thoughts– Impact on Manager Roster

	Mix A	Mix B	Mix C	Expected timeframe	Impact on costs
US Equity	Rebalance (passive)	Rebalance (passive)	Rebalance (passive)	No restrictions	-
Developed Market Equity (non-US)	-	Rebalance	Rebalance	No restrictions	-
Emerging Market Equity	-	-	Search required	Search within 1 year	↑
Private Equity Fund of Funds	Wait for distributions	Wait for distributions	Wait for distributions	3+ years	↓
Private Debt	-	Search required	Search required	1-3 years	↑
Investment Grade Bonds	Rebalance	Rebalance	Rebalance	No restrictions	↑
Treasuries	Hire passive index	Hire passive index	Hire passive index	No restrictions	↓
Risk Mitigating Hedge Funds	Searches required	Searches required	Searches required	Search within 1 year	↑
High Yield Bonds	Rebalance	Rebalance	Termination	Minimal restrictions	↓
Bank Loans	Rebalance	-	-	Minimal restrictions	-
Real Estate	Redemptions	Redemptions	Redemptions	1-3 years	↓
Non-Core Infrastructure	-	-	-		-

Relative to the Current IPS Target:

- All three mixes are expected to produce a higher return than the current IPS target.
- All three mixes are expected to have higher volatility (as measured by standard deviation).
- All three mixes have a higher probability of achieving the actuarial target over the long term.
- All three mixes embrace the "bar-bell" approach of growth assets and risk mitigating assets.

Relative to Current Exposure:

Mix A	Mix B	Mix C
Same expected return as the current exposure but with 0.50% less expected volatility	Higher expected return than the current exposure but with 0.20% less expected volatility	Highest expected return of all the mixes while still having 0.10% less expected volatility relative to the current exposure
Requires fewest changes relative to current exposure	Requires more changes than Mix A relative to current exposure	Requires the largest degree of changes relative to current exposure

IPS Target vs. Mix D

	IPS Target (%)	Mix D (%)
Growth	**47%**	**52%**
US Equity	26	28
Developed Market Equity (non-US)	17	20
Private Equity Fund of Funds	4	4
Risk Mitigating	**30%**	**36%**
Investment Grade Bonds	19	25
Treasuries	0	5
Risk Mitigating Hedge Funds	0	6
Absolute Return Fixed Income	11	0
Diversifiers	**23%**	**12%**
High Yield Bonds	7	0
Bank Loans	3	0
Real Estate	11	10
Non-Core Infrastructure	2	2
Expected Return (20 years)	**7.3**	**7.3**
Standard Deviation	**11.0**	**10.4**
Probability of Achieving 7.34% over 20 Years	**49.2%**	**49.2%**

- Mix D is expected to have 0.60% less standard deviation than the current IPS Target.

General Thoughts

- There is no "right mix" or "wrong mix." Each mix comes with a variety of trade-offs for the Board to consider.
- There is a natural tension between seeking more return but accepting more potential volatility.
- The Board could adopt a mix similar to Mix A, Mix B, or Mix C that seeks to maximize probability of beating the actuarial target return.
- Or the Board could gravitate towards a mix closer to Mix D that seeks to minimize volatility while still potentially achieving the actuarial target return.
- Some of the tradeoffs to consider are highlighted in the next section (diversification and risk analysis) through scenario and stress test analysis.

Summary – All Mixes[1]

	IPS Target (%)	9.30.19 Exposure[2] (%)	Mix A (%)	Mix B (%)	Mix C (%)	Mix D (%)
Growth	**47**	**55**	**55**	**60**	**61**	**52**
US Equity	26	29	31	32	32	28
Developed Market Equity (non-US)	17	20	20	22	19	20
Emerging Market Equity	0	0	0	0	4	0
Private Equity Fund of Funds	4	6	4	4	4	4
Private Debt	0	0	0	2	2	0
Risk Mitigating	**30**	**22**	**25**	**25**	**27**	**36**
Investment Grade Bonds	19	22[3]	16	16	16	25
Treasuries	0	0	5	5	5	5
Risk Mitigating Hedge Funds	0	0	4	4	6	6
Absolute Return Fixed Income	11	0	0	0	0	0
Diversifiers	**23**	**23**	**20**	**15**	**12**	**12**
High Yield Bonds	7	5	4	2	0	0
Bank Loans	3	2	4	2	2	0
Real Estate	11	14	10	9	8	10
Non-Core Infrastructure	2	2	2	2	2	2
Expected Return (20 years)	**7.3**	**7.6**	**7.6**	**7.7**	**7.8**	**7.3**
Standard Deviation	**11.0**	**11.9**	**11.4**	**11.7**	**11.8**	**10.4**
Probability of 7.34% over 20 Years	**49.2**	**53.8%**	**53.3**	**54.4**	**56.1**	**49.2**

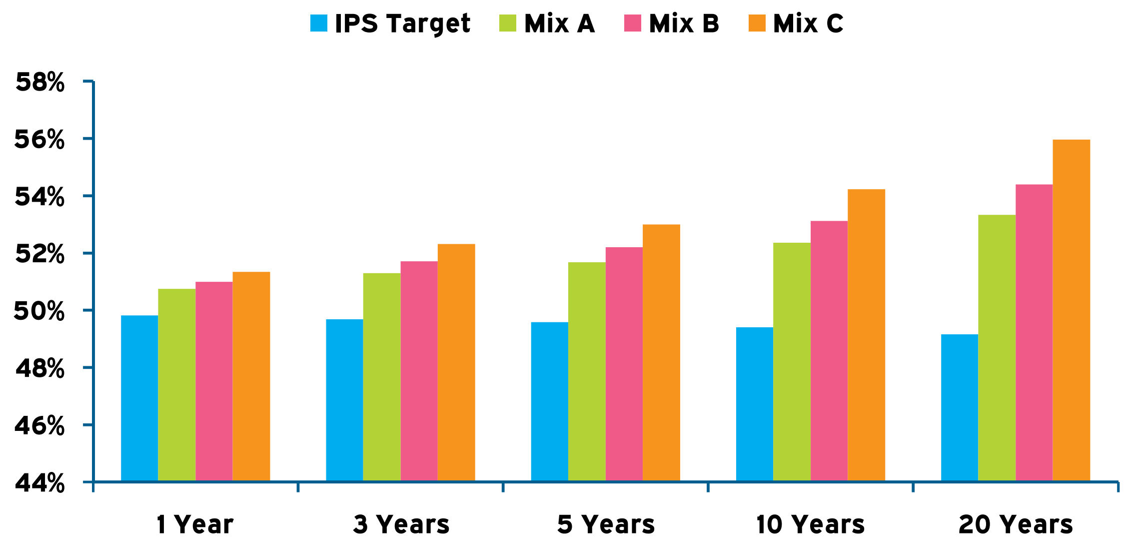
1 Expected return and standard deviation are based upon Meketa Investment Group's 2019 Annual Asset Study. Throughout this document, returns for periods longer than one year are annualized.
2 The 4% exposure in the Benchmark Liquid Policy Portfolio is distributed based on the underlying exposure (2% US Equity, 1% Developed Market Equity, 1% Investment Grade Bonds).
3 Includes current allocation to cash equivalents.

Diversification and Risk Analysis

Diversification

- The primary motive for diversifying a portfolio is to reduce risk.
- Diversification is the sole "free lunch" available to investors. That is, it represents the only way to reduce risk without reducing expected returns.
- Therefore, investments should be allocated across multiple classes of assets, based in part on the expected correlation of their returns.
- Within each asset type, investments should be distributed across strategies and risk factors to further reduce volatility.

Probability of Achieving Target Returns[1]

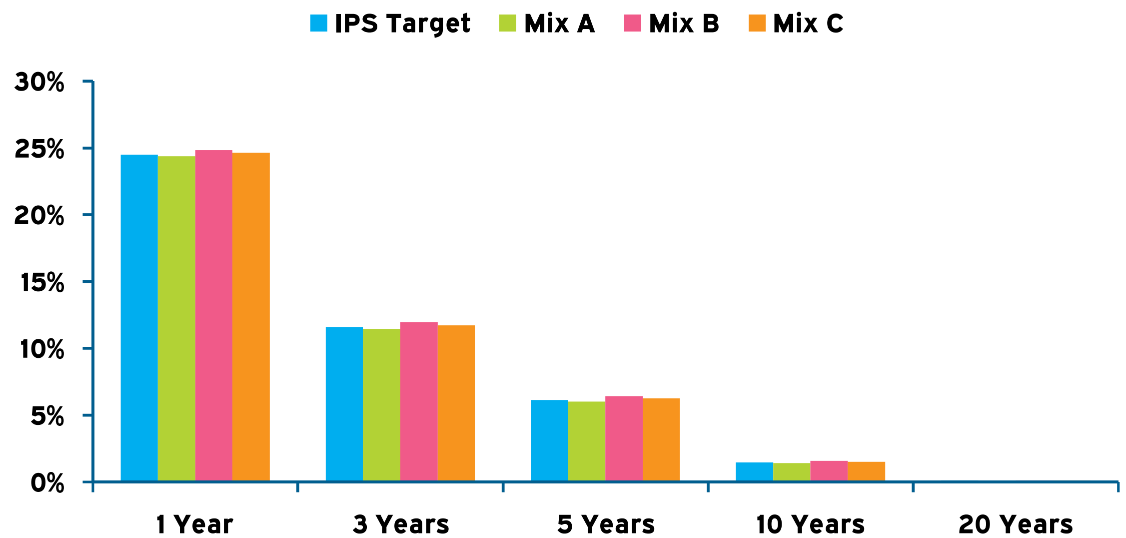


	IPS Target (%)	Mix A (%)	Mix B (%)	Mix C (%)
One Year	49.8	50.7	51.0	51.3
Three Years	49.7	51.3	51.7	52.3
Five Years	49.6	51.7	52.2	53.0
Ten Years	49.4	52.4	53.1	54.2
Twenty Years	49.2	53.3	54.4	56.0

- Mix C has the highest likelihood of producing the target return over a twenty-year period.

[1] Represents the probability of achieving a 7.34% return over the specified time horizon.

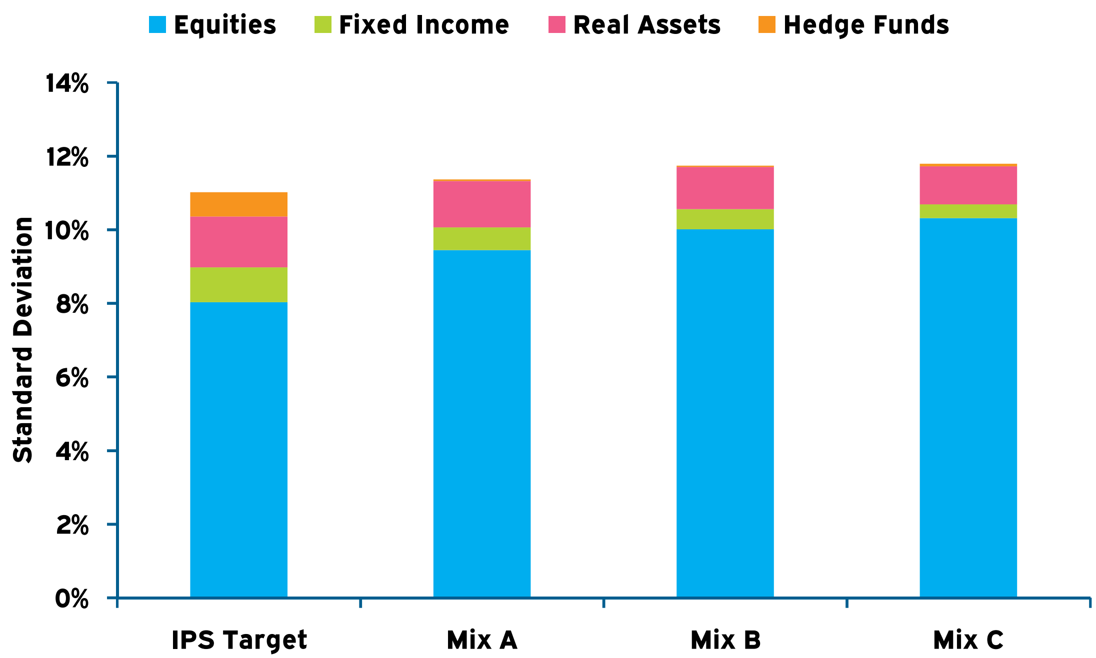
Probability of Experiencing Negative Returns



	IPS Target (%)	Mix A (%)	Mix B (%)	Mix C (%)
One Year	24.5	24.4	24.8	24.6
Three Years	11.6	11.4	12.0	11.7
Five Years	6.1	6.0	6.4	6.2
Ten Years	1.4	1.4	1.6	1.5
Twenty Years	0.1	0.1	0.1	0.1

- All mixes are likely to produce a negative return roughly 1 out of every 4 years.
- Over longer horizons the likelihood of a negative return diminishes (as positive years > negative years).

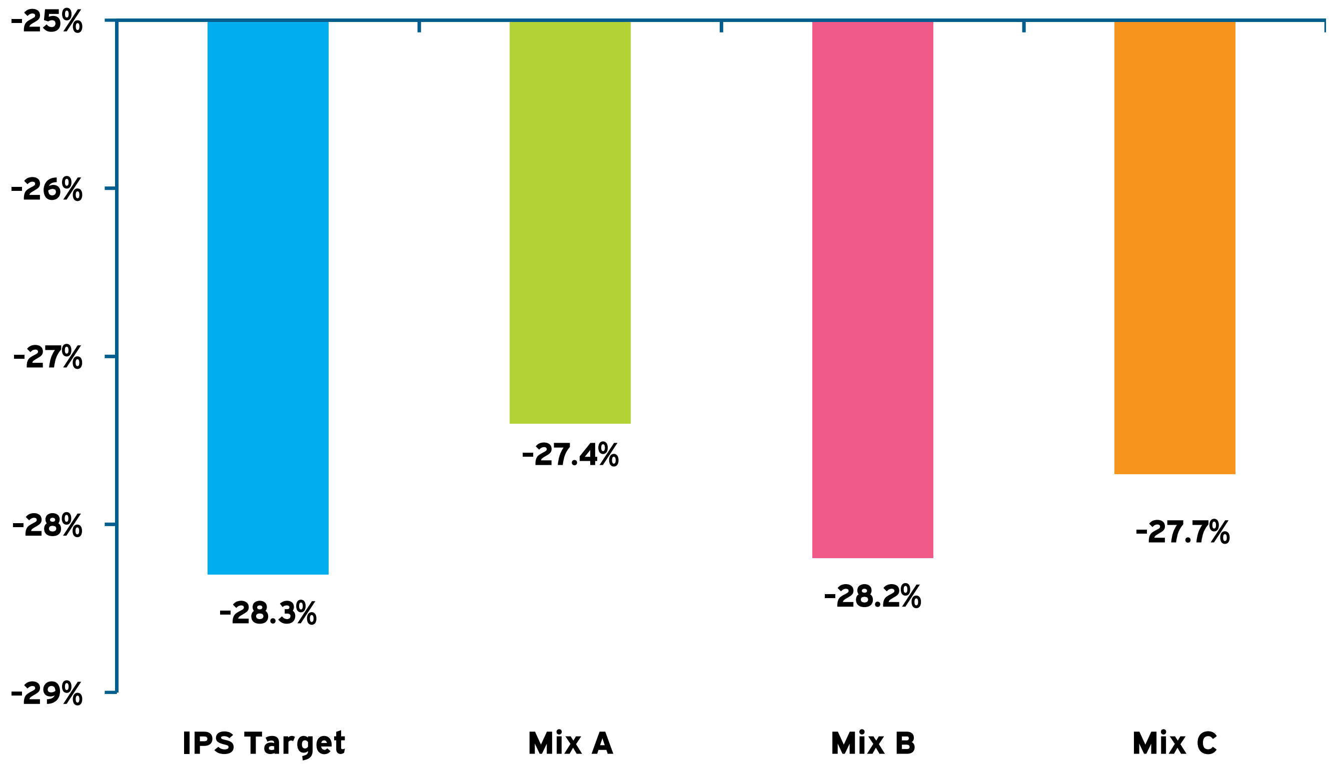
Risk Budgeting Analysis[1] (Absolute Contribution to Risk)



- In each policy option, equity risk dominates the risk profile of the portfolio.
- The risk mitigating hedge funds are expected to contribute much less to total standard deviation than the absolute return fixed income asset class.
- Mix C has the highest return potential but comes with the highest expected standard deviation.

[1] Contribution to risk is calculated by multiplying the weight of the asset class by its standard deviation and its correlation with the total portfolio.

Historical Negative Scenario Analysis: Global Financial Crisis (4Q07 thru 1Q09)
(Cumulative Return)



- In an extended down market environment (e.g., the GFC), the new mixes defend better than the IPS Target because of the inclusion of dedicated Treasury strategies and risk mitigating hedge funds.

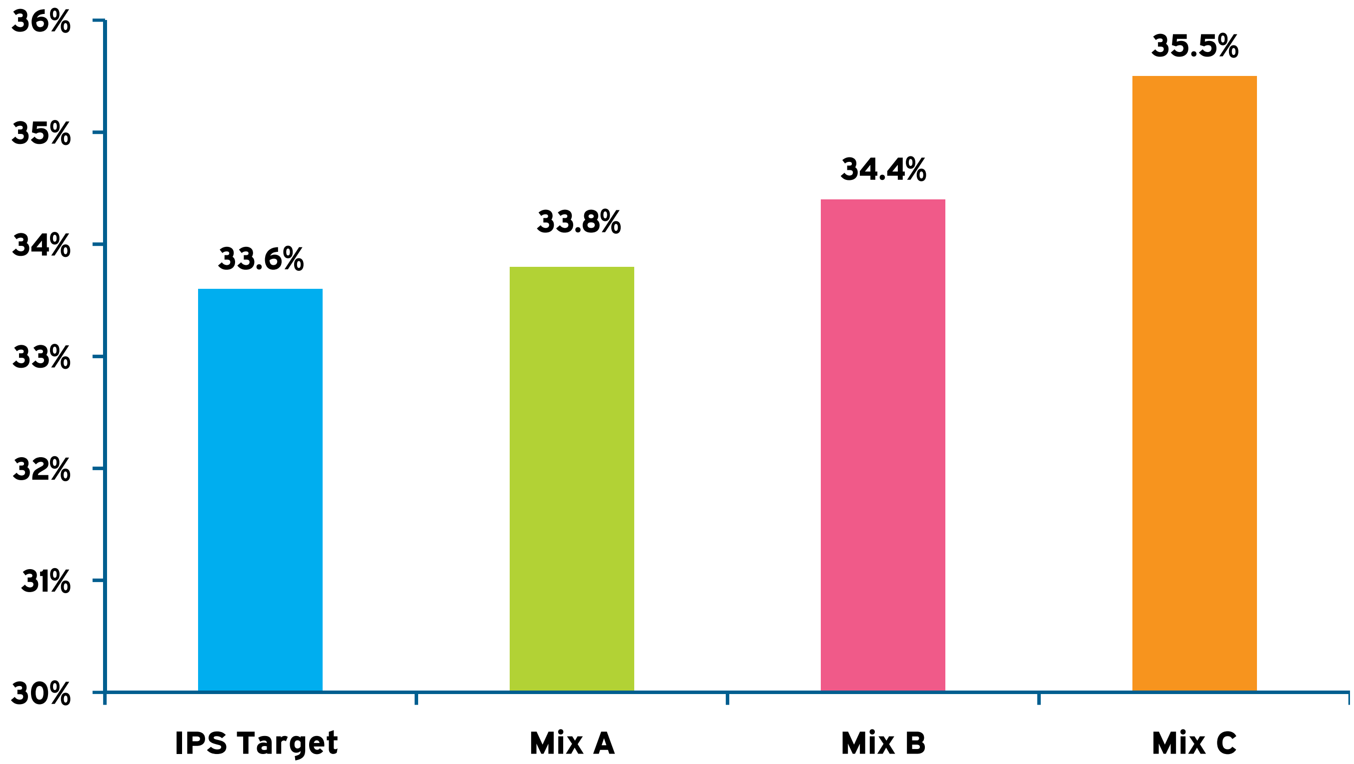
Other Negative Historical Scenario Analysis [1]
(*Cumulative* Return)

Scenarios	IPS Target (%)	Mix A (%)	Mix B (%)	Mix C (%)
Taper Tantrum (May - Aug 2013)	-0.2	-0.5	-0.4	-0.8
Global Financial Crisis (Oct 2007 - Mar 2009)	-28.3	-27.4	-28.2	-27.7
2008 Calendar Year	-24.6	-23.0	-23.4	-23.3
Popping of the TMT Bubble (Apr 2000 - Sep 2002)	-8.2	-11.2	-13.2	-13.7
LTCM (Jul - Aug 1998)	-7.0	-7.0	-7.4	-8.0
Asian Financial Crisis (Aug 1997 - Jan 1998)	3.6	3.2	3.0	1.7
Rate spike (1994 Calendar Year)	1.5	1.3	1.3	0.7
Crash of 1987 (Sep - Nov 1987)	-10.4	-11.8	-12.4	-12.8
Strong dollar (Jan 1981 - Sep 1982)	5.6	5.8	5.1	5.4
Stagflation (Jan - Mar 1980)	-3.8	-3.9	-4.1	-3.8
Stagflation (Jan 1973 - Sep 1974)	-20.1	-21.4	-22.1	-22.0

- We evaluated the proposed mixes and the existing IPS Target against a variety of negative historical events.

[1] See the Appendix for our scenario inputs. In periods where the ideal benchmark was not yet available we used the next closest benchmark(s) as a proxy.

Historical Positive Scenario Analysis: Recovery From Global Financial Crisis (3/09-11/09)
(Cumulative Return)



- The new mixes would also likely have outperformed the IPS Target in a rebound from the GFC because of the higher allocation to public equities.

Asset Liability Study

Other Historical Positive Scenario Analysis[1]

(Cumulative Return)

Scenarios	IPS Target (%)	Mix A (%)	Mix B (%)	Mix C (%)
Global Financial Crisis Recovery (Mar 2009 - Nov 2009)	33.6	33.8	34.4	35.5
Best of Great Moderation (Apr 2003 - Feb 2004)	27.1	28.6	29.8	31.0
Peak of the TMT Bubble (Oct 1998 - Mar 2000)	28.7	32.1	33.8	36.3
Pre-Recession (Jun - Oct 1990)	-7.5	-6.3	-6.3	-6.1
Plummeting Dollar (Jan 1986 - Aug 1987)	50.4	57.1	59.8	60.6
Volcker Recovery (Aug 1982 - Apr 1983)	31.1	34.3	34.8	35.7
Bretton Wood Recovery (Oct 1974 - Jun 1975)	26.9	29.5	30.2	30.9

- We evaluated the proposed mixes and the existing IPS Target against a variety of positive historical events as well.

[1] See the Appendix for our scenario inputs. In periods where the ideal benchmark was not yet available we used the next closest benchmark(s) as a proxy.

Stress Testing: Impact of Negative Market Movements (Expected Return under Stressed Conditions)[1]

Scenarios	IPS Target (%)	Mix A (%)	Mix B (%)	Mix C (%)
10-year Treasury Bond rates rise 100 bps	4.4	4.1	4.3	4.3
10-year Treasury Bond rates rise 200 bps	1.3	0.7	0.9	1.2
10-year Treasury Bond rates rise 300 bps	-0.5	-1.7	-1.6	-1.3
Baa Spreads widen by 50 bps, High Yield by 200 bps	-0.7	0.0	-0.1	-0.1
Baa Spreads widen by 300 bps, High Yield by 1000 bps	-20.6	-19.9	-20.2	-20.1
Trade Weighted Dollar gains 10%	-0.9	-0.6	-0.8	-0.9
Trade Weighted Dollar gains 20%	-0.6	0.6	0.4	0.1
US Equities decline 10%	-4.9	-5.0	-5.3	-5.3
US Equities decline 25%	-14.5	-14.6	-15.1	-15.2
US Equities decline 40%	-25.3	-25.2	-25.8	-25.7

- The new mixes have slightly higher sensitivity to interest rates, as evidenced in the top three negative rate environment scenarios.

[1] Assumes that assets not directly exposed to the factor are affected nonetheless. See the Appendix for further details.

Stress Testing: Impact of Positive Market Movements (Expected Return under Stressed Conditions)[1]

Scenarios	IPS Target (%)	Mix A (%)	Mix B (%)	Mix C (%)
10-year Treasury Bond rates drop 100 bps	5.5	6.2	6.1	6.2
10-year Treasury Bond rates drop 200 bps	14.6	16.8	17.1	17.2
Baa Spreads narrow by 30bps, High Yield by 100 bps	7.7	7.8	8.0	7.9
Baa Spreads narrow by 100bps, High Yield by 300 bps	14.1	13.1	13.1	13.4
Trade Weighted Dollar drops 10%	6.1	6.8	7.0	7.2
Trade Weighted Dollar drops 20%	16.3	19.2	20.1	20.6
US Equities rise 10%	6.2	6.4	6.6	6.7
US Equities rise 30%	15.6	16.8	17.2	17.6

- The new mixes would likely outperform the existing IPS target if interest rates dropped, if the US dollar weakened, or if US equities rise.

[1] Assumes that assets not directly exposed to the factor are affected nonetheless. See the Appendix for further details.

MIX D - Historical Negative Scenario Analysis[1]
(Cumulative Return)

Scenarios	IPS Target (%)	Mix D (%)
Taper Tantrum (May - Aug 2013)	-0.2	-1.0
Global Financial Crisis (Oct 2007 - Mar 2009)	-28.3	-23.2
2008 Calendar Year	-24.6	-19.0
Popping of the TMT Bubble (Apr 2000 - Sep 2002)	-8.2	-6.9
LTCM (Jul - Aug 1998)	-7.0	-6.2
Asian Financial Crisis (Aug 1997 - Jan 1998)	3.6	3.2
Rate spike (1994 Calendar Year)	1.5	0.5
Crash of 1987 (Sep - Nov 1987)	-10.4	-10.5
Strong dollar (Jan 1981 - Sep 1982)	5.6	8.8
Stagflation (Jan - Mar 1980)	-3.8	-4.1
Stagflation (Jan 1973 - Sep 1974)	-20.1	-18.1

- Mix D would have performed the best in environments of declining equity markets, due to its more conservative positioning.

[1] See the Appendix for our scenario inputs. In periods where the ideal benchmark was not yet available we used the next closest benchmark(s) as a proxy.

Mix D - Historical Positive Scenario Analysis[1]
(Cumulative Return)

Scenarios	IPS Target (%)	Mix D (%)
Global Financial Crisis Recovery (Mar 2009 - Nov 2009)	33.6	29.8
Best of Great Moderation (Apr 2003 - Feb 2004)	27.1	27.0
Peak of the TMT Bubble (Oct 1998 - Mar 2000)	28.7	30.6
Pre-Recession (Jun - Oct 1990)	-7.5	-4.5
Plummeting Dollar (Jan 1986 - Aug 1987)	50.4	55.7
Volcker Recovery (Aug 1982 - Apr 1983)	31.1	33.8
Bretton Wood Recovery (Oct 1974 - Jun 1975)	26.9	27.6

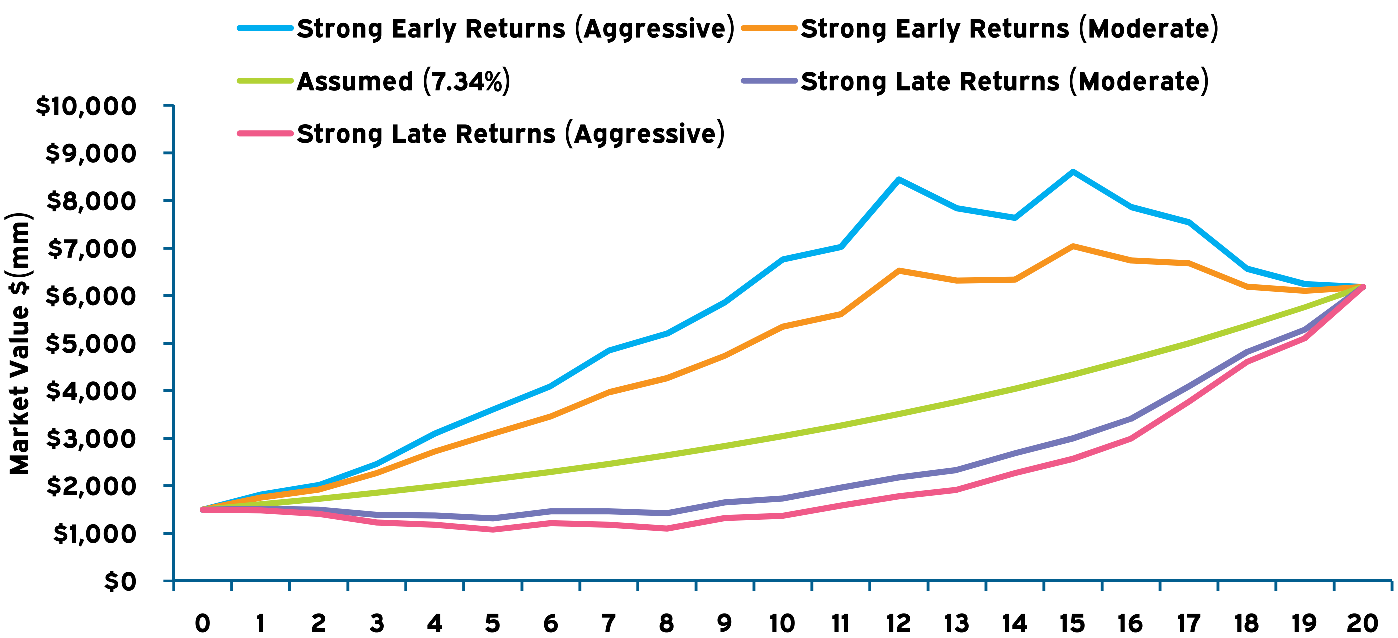
- Mix D would likely not rally as strongly as Mixes A, B and C in a strong equity market like the recovery from the Global Financial Crisis.

[1] See the Appendix for our scenario inputs. In periods where the ideal benchmark was not yet available we used the next closest benchmark(s) as a proxy.

Liquidity Analysis

Sequence of Returns – Does Not Matter if No Cash Flows

- This analysis reviews five return scenarios that achieve the same twenty-year annualized return of 7.34% but that take very different paths to arrive at this destination.[1]
- The "Strong Early Returns" and "Strong Late Returns" scenarios produce the same returns but the order in which the returns are generated is reversed. The third scenario assumes 7.34% is earned every year.
- If net cash flow is $0, the ending value is the same for all scenarios.



[1] Note: Assumes $0 cash flow over the 20-year period.

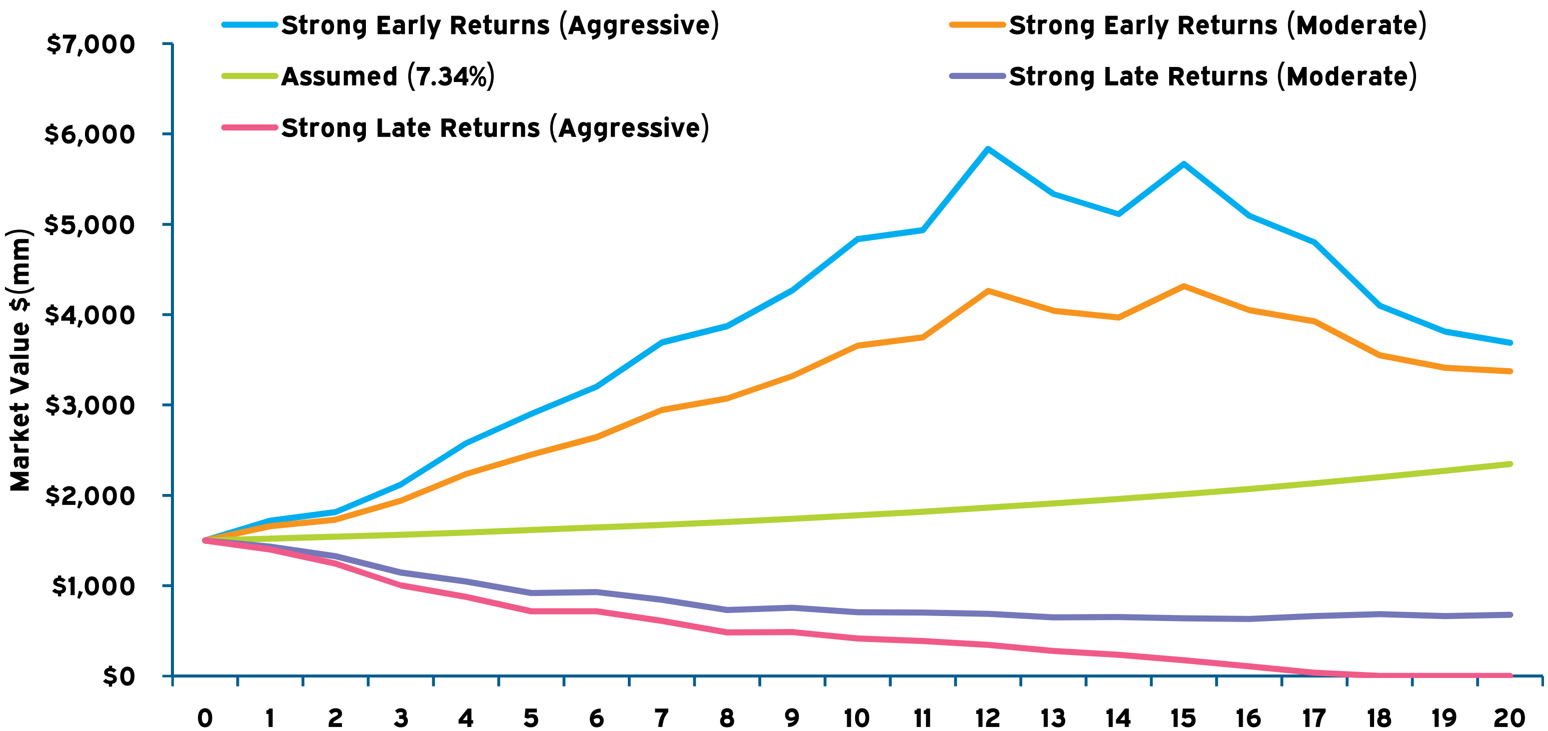
Corresponding Data – Sequence of Returns with No Cash Flows

	Year																				
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Market Values ($mm)																					
Strong Early Returns (Aggressive)	1500	1817	2014	2459	3101	3608	4097	4844	5200	5858	6761	7027	8443	7840	7640	8607	7864	7541	6565	6245	6185
Strong Early Returns (Moderate)	1500	1753	1926	2264	2723	3094	3455	3971	4263	4734	5349	5612	6523	6321	6337	7038	6743	6684	6188	6099	6185
Assumed (7.34%)	1500	1610	1728	1855	1991	2137	2294	2463	2644	2838	3046	3269	3509	3767	4043	4340	4659	5001	5368	5762	6185
Strong Late Returns (Moderate)	1500	1521	1499	1388	1376	1318	1464	1468	1422	1653	1734	1960	2176	2336	2685	2999	3407	4098	4818	5291	6185
Strong Late Returns (Aggressive)	1500	1486	1413	1230	1180	1078	1214	1183	1099	1320	1372	1584	1784	1915	2264	2571	2992	3772	4606	5106	6185
Cash Flows ($mm)																					
Net Cash Flow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Returns (%)																					
Strong Early Returns (Aggressive)	0.0	21.1	10.9	22.1	26.1	16.3	13.6	18.2	7.3	12.7	15.4	3.9	20.2	-7.1	-2.5	12.7	-8.6	-4.1	-12.9	-4.9	-1.0
Strong Early Returns (Moderate)	0.0	16.9	9.8	17.6	20.3	13.6	11.7	14.9	7.3	11.1	13.0	4.9	16.2	-3.1	0.3	11.1	-4.2	-0.9	-7.4	-1.4	1.4
Strong Late Returns (Moderate)	0.0	1.4	-1.4	-7.4	-0.9	-4.2	11.1	0.3	-3.1	16.2	4.9	13.0	11.1	7.3	14.9	11.7	13.6	20.3	17.6	9.8	16.9
Strong Late Returns (Aggressive)	0.0	-1.0	-4.9	-12.9	-4.1	-8.6	12.7	-2.5	-7.1	20.2	3.9	15.4	12.7	7.3	18.2	13.6	16.3	26.1	22.1	10.9	21.1

- All the return paths are different but result in an annualized 7.34%.
- The market values all end up at the exact value at the end of twenty years if there are no cash flows into or out of the Fund.

Sequence of Returns - Significant Impact with Negative Cash Flows

- Negative cash flows make it much harder for the Fund to recover after a market downturn. The larger the cash outflows are, the more severe the impact.
- Inserting an estimate of $87 mm per year in negative net cash flows (average of last two fiscal years), the ending market value (year 20) would be $3.7 billion higher if strong returns are experienced in the first ten years as opposed to years eleven through twenty.



Corresponding Data – Sequence of Returns with Estimated Negative Cash Flows

	Year																				
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Market Values ($mm)																					
Strong Early Returns (Aggressive)	1500	1721	1816	2120	2576	2902	3203	3692	3873	4271	4835	4937	5836	5335	5113	5667	5095	4801	4098	3813	3690
Strong Early Returns (Moderate)	1500	1659	1731	1940	2237	2449	2644	2945	3071	3319	3657	3748	4262	4044	3968	4315	4048	3926	3551	3414	3374
Assumed (7.34%)	1500	1520	1541	1564	1589	1615	1644	1674	1707	1742	1780	1820	1863	1910	1960	2014	2071	2133	2199	2271	2347
Strong Late Returns (Moderate)	1500	1433	1326	1144	1048	919	928	844	732	757	705	703	690	650	653	638	632	664	686	662	680
Strong Late Returns (Aggressive)	1500	1399	1246	1003	877	718	716	612	485	486	417	387	344	279	235	174	108	38	0	0	0
Cash Flows ($mm)																					
Net Cash Flow	**0**	**-87**	**-87**	**-87**	**-87**	**-87**	**-87**	**-87**	**-87**	**-87**	**-87**	**-87**	**-87**	**-87**	**-87**	**-87**	**-87**	**-87**	**-87**	**-87**	**-87**
Returns (%)																					
Strong Early Returns (Aggressive)	0.0	21.1	10.9	22.1	26.1	16.3	13.6	18.2	7.3	12.7	15.4	3.9	20.2	-7.1	-2.5	12.7	-8.6	-4.1	-12.9	-4.9	-1.0
Strong Early Returns (Moderate)	0.0	16.9	9.8	17.6	20.3	13.6	11.7	14.9	7.3	11.1	13.0	4.9	16.2	-3.1	0.3	11.1	-4.2	-0.9	-7.4	-1.4	1.4
Strong Late Returns (Moderate)	0.0	1.4	-1.4	-7.4	-0.9	-4.2	11.1	0.3	-3.1	16.2	4.9	13.0	11.1	7.3	14.9	11.7	13.6	20.3	17.6	9.8	16.9
Strong Late Returns (Aggressive)	0.0	-1.0	-4.9	-12.9	-4.1	-8.6	12.7	-2.5	-7.1	20.2	3.9	15.4	12.7	7.3	18.2	13.6	16.3	26.1	22.1	10.9	21.1

- "Strong Early Returns" (inclusive of estimated negative cash flows) results in an estimated ending market value of $3.7 billion.
- "Strong Late Returns" (inclusive of estimated negative cash flows) could put the Fund on the path to insolvency.

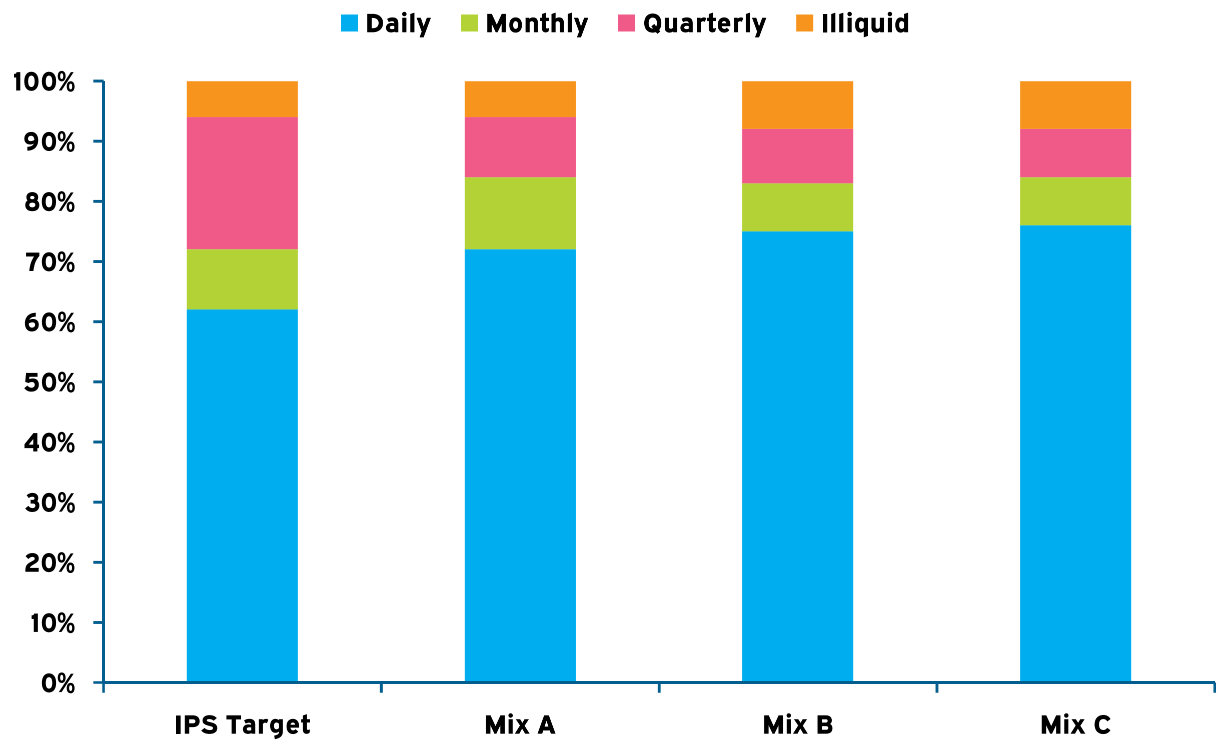
Managing Uncertainty in Sequence of Returns

- No one can predict the market (nor control it) and consequently we cannot control the path of returns.
- The optimal scenarios are obviously the top two lines in the charts (early strong returns).
- The worst case scenarios are the bottom two lines (strong late returns).
- In a real-world-environment presumably any pension plan would consider structural changes (contribution rates, benefit adjustments, asset allocation changes) if it was on the bottom line path (many years of negative returns).
- The bar-belled asset allocation approach is designed to help mitigate the impact of negative early returns with a negative cash flow plan.
- In negative return years, the risk mitigating hedge funds and Treasuries could be a source of cash for benefit payments (on the assumption they preserve value well).
- In positive return years, the public equities could be a source of cash for benefit payments (trim winners after-market appreciation).
- Overall this should help avoid locking in losses to pay benefit payments if assets needed to be sold at distressed prices.

Liquidity Analysis

- Liquidity risk is a meaningful risk that is generally not captured in traditional asset allocation processes.
- The Fund must maintain adequate liquidity to satisfy benefit payments and to avoid having to sell illiquid assets at distressed prices if possible.

Liquidity Profile[1]



- Each new mix would have slight improvement on liquidity (on the assumption the absolute return fixed income allocation had quarterly liquidity).

[1] For this analysis, we assume that bank loans, high yield and risk mitigating hedge funds are monthly, absolute return fixed income hedge funds are quarterly, real estate is quarterly on average, and private equity, private debt, and non-core infrastructure are all illiquid.

Liquidity Stress Test Introduction

- We conducted an extreme stress test to analyze the Fund's liquidity. Specifically, we evaluated whether the Fund could:
  - Continue to meet its benefit obligations and expenses,
  - While staying within its target allocation ranges,
  - And at what cost (i.e., to what extent would it be forced to sell stressed or distressed assets)?
- The scenario is designed to be extreme.
  - In Years 1 – 3, we use the returns produced by each asset class in 4Q07, 2008, and 1Q09, respectively. In Years 4 – 5, we assume flat (0%) returns for each asset class (i.e., no rebound).
  - We assume net outflows of $87 million per year.
  - We assume closed-end funds offer no liquidity.
  - We assume open-end and hedge funds offer no liquidity in years 1 – 3, and limited liquidity in years 4 - 5.
  - We assume the Fund would rebalance toward its policy targets each year.
- We show the results for Mix C on the following pages, as it is the portfolio with the highest risk/return of the three mixes.

Liquidity Stress Test: Summary (for Mix C)

Metric	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Ending Market Value	1500.0	1413.8	997.0	835.2	748.2	661.2
Liquid Assets Market Value	1380.0	1289.7	900.8	742.9	655.9	568.9
Illiquid Assets Market Value	120.0	124.1	96.2	92.3	92.3	92.3
Net flows	0.0	-87.0	-87.0	-87.0	-87.0	-87.0
Flows as percentage of Market Value	0%	-6%	-6%	-9%	-10%	-12%
Percentage of Illiquid Assets	8%	9%	10%	11%	12%	14%
Portfolio Return	0.0%	0.1%	-23.0%	-7.8%	0.0%	0.0%

- Even under this extreme scenario, Mix C (and all of the mixes) would maintain sufficient liquidity to pay benefits and other expenses.
- The annual cash flow requirement becomes an increasingly larger proportion of the total Fund during the market correction (i.e. as the total market value of the Fund decreases).

Recommendation

Recommendation

- Meketa Investment Group recommends the Trustees adopt one of the mixes presented.
- We are prepared to discuss the pros/cons of each mix during the December Board meeting.

Appendix:
Setting Capital Market Expecations

Each year, we review and set our capital market expectations via our Asset Study.

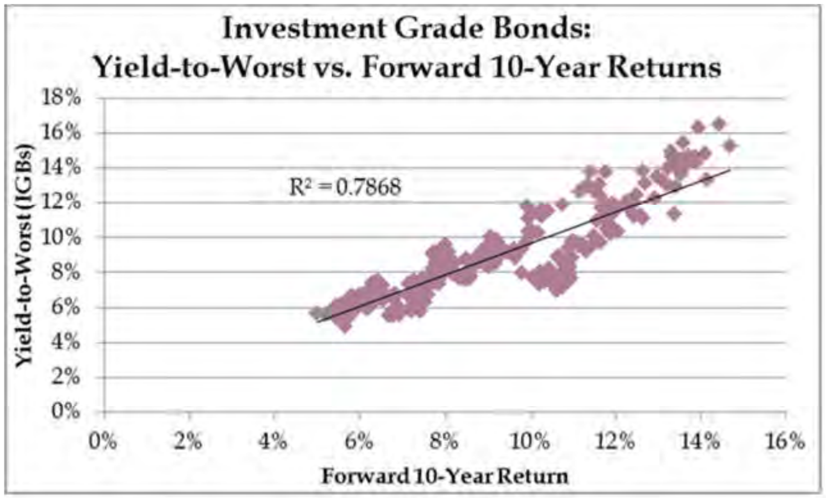
- This involves setting long-term expectations for a variety of asset classes for:
  - Returns
  - Standard Deviation
  - Correlations
- Our process relies on both quantitative and qualitative methodologies.

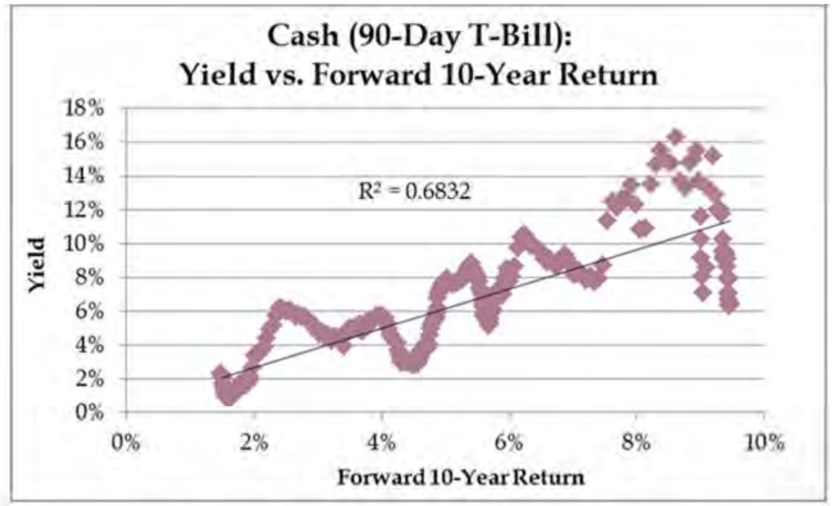
Our Process

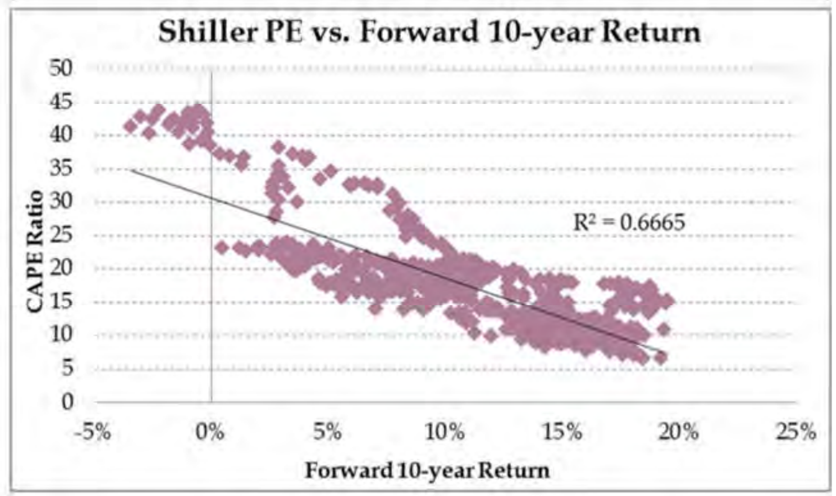
- The first step is to build our 10-year forecasts.
  - Our fundamental models are primarily valuation based.
- Each model falls in one of eight groups, based on the most important factors that drive their returns:

Asset Class Category	Major Factors
Equities	Dividend Yield, GDP Growth, Valuation
Bonds	Yield to worst, Default Rate, Recovery Rate
Commodities	Collateral Yield, Roll Yield, Inflation
Infrastructure	Public IS Valuation, Income, Growth
Natural Resources	Price per Acre, Income, Public Market Valuation
Real Estate	Cap Rate, Yield, Growth
Private Equity	EBITDA Multiple, Debt Multiple, Public VC Valuation
Hedge Funds and Other	Leverage, Alternate Betas

Some models are naturally more predictive than others.







The next step is to move from ten-year to our twenty-year forecasts.

- We do this by combining our ten-year forecasts with the historical returns for each asset class.
  - How much we apply to each depends on our confidence in them (both the model and the data).
- The ten-year model weighting varies between 50% and 100%.
- It only hits 100% when there is a lack of reliable historical data.
- We then infer a forecast of ten-year returns in ten years (i.e., years 11-20).
  - This allows us to test our assumptions with finance theory.
  - Essentially, we assume mean-reversion over the first ten years, then consistency with CAPM thereafter.

The final step is to make any qualitative adjustments.

- The Investment Committee reviews the output and may make adjustments due to:
  - Quality of the underlying data.
  - Confidence in the model.
  - External inputs (e.g., perceived risks).

Capital Market Assumption Development Example

Equities

- We use a fundamental model for equities that combines income and capital appreciation.

$$E(R) = \textit{Dividend Yield} + \textit{Expected Earnings Growth} + \textit{Multiple Effect} + \textit{Currency Effect}$$

- Meketa Investment Group evaluates historical data statistically to develop expectations for dividend yield, earnings growth, the multiple effect, and currency effect.
- Our models assume that there is a reversion to the mean over long time periods.

Bonds

- The short version for investment grade bond models is:

$$E(R) = \textit{Current YTW (yield to worst)}$$

- Our models assume that there is a reversion to the mean for spreads (though not yields).
- For TIPS, we add the real yield of the TIPS index to the breakeven inflation rate.
- As with equities, we make currency adjustments when necessary for foreign bonds.
- For bonds with credit risk, Meketa Investment Group estimates default rates and loss rates, in order to project an expected return:

$$E(R) = YTW - (\textit{Annual Default Rate} * \textit{Loss Rate})$$

The other inputs: standard deviation and correlation.

- Standard Deviation:
  - We review the trailing ten-year standard deviation, as well as the trailing ten-year skewness.
  - Historical standard deviation serves as the base for our assumptions.
  - We increase or decrease the assumptions based on the size and sign of the historical skewness.

Asset Class	Standard Deviation	Skewness	Assumption
Bank Loans	6.6%	-2.3	9.0%

  - We consider performance during the GFC to see if further changes are warranted (e.g., hedge funds).
  - We also adjust for private market asset classes with “smoothed” return streams.
- Correlation:
  - We use trailing ten-year correlations as our guide.
  - Again, we make adjustments for performance during the GFC and “smoothed” return streams.
- Most of our adjustments are conservative in nature (i.e., they increase the standard deviation and correlation).

Notes and Disclaimers

1 The returns shown in the Policy Options and Risk Analysis sections rely on estimates of expected return, standard deviation, and correlation developed by Meketa Investment Group. To the extent that actual return patterns to the asset classes differ from our expectations, the results in the table will be incorrect. However, our inputs represent our best unbiased estimates of these simple parameters.

2 The returns shown in the Policy Options and Risk Analysis sections use a lognormal distribution, which may or may not be an accurate representation of each asset classes' future return distribution. To the extent that it is not accurate in whole or in part, the probabilities listed in the table will be incorrect. As an example, if some asset classes' actual distributions are even more right-skewed than the lognormal distribution (i.e., more frequent low returns and less frequent high returns), then the probability of the portfolio hitting a given annual return will be lower than that stated in the table.

3 The standard deviation bars in the chart in the Risk Analysis section do not indicate the likelihood of a 1, 2, or 3 standard deviation event—they simply indicate the return we expect if such an event occurs. Since the likelihood of such an event is the same across allocations regardless of the underlying distribution, a relative comparison across policy choices remains valid.

Scenario Return Inputs

Asset Class	Benchmark Used
Investment Grade Bonds	Barclays Aggregate
TIPS	Barclays U.S. TIPS
Intermediate-term Government Bonds	Barclays Treasury Intermediate
Long-term Government Bonds	Barclays Long U.S. Treasury
EM Bonds (local)	JPM GBI-EM Global Diversified Composite
Bank Loans	CSFB Leveraged Loan
High Yield Bonds	Barclays High Yield
Direct Lending - First Lien	Cliffwater Direct Lending Index
Direct Lending - Second Lien	Cliffwater Direct Lending Index
Mezzanine Debt	Cambridge Associates Mezzanine
Distressed Debt	Cambridge Associates Distressed Debt Index
Core Real Estate	NCREIF Property
Value-Added RE	NCREIF Townsend Value Added
Opportunistic RE	NCREIF Townsend Opportunistic
REITs	NAREIT Equity
Infrastructure (private)	S&P Global Infrastructure
Natural Resources (private)	S&P Global Natural Resources
Timber	NCREIF Timberland
Commodities	Bloomberg Commodity Index
US Equity	Russell 3000
Public Foreign Equity (Developed)	MSCI EAFE
Public Foreign Equity (Emerging)	MSCI Emerging Markets
Private Equity	Cambridge Associates Private Equity Composite
Long-short Equity	HFRI Equity Hedge
Global Macro	HFRI Macro
Hedge Funds	HFRI Fund Weighted Composite
Private Debt	Weighted average of Distressed Debt, Mezzanine Debt and Direct Lending (2nd Lien)

Negative Historical Scenario Returns - Sample Inputs

	Taper Tantrum (May - Aug 2013)	Global Financial Crisis (Oct 2007 - Mar 2009)	2008 Calendar Year	Popping of the TMT Bubble (Apr 2000 - Sep 2002)	LTCM (Jul - Aug 1998)	Asian Financial Crisis (Aug 1997 - Jan 1998)	Rate spike (1994 Calendar Year)	Crash of 1987 (Sep - Nov 1987)	Strong dollar (Jan 1981 - Sep 1982)	Stagflation (Jan - Mar 1980)	Stagflation (Jan 1973 - Sep 1974)
Cash Equivalents	0.0	3.1	1.7	9.9	0.8	2.4	3.9	1.4	24.4	2.9	13.5
Short-term Investment Grade Bonds	-0.1	8.7	5.0	21.9	1.6	3.5	0.5	2.3	29.9	-2.6	4.3
Investment Grade Bonds	-3.7	9.3	5.2	28.6	1.8	4.9	-2.9	2.2	29.9	-8.7	7.9
Long-term Corporate Bonds	-9.3	-9.4	-5.2	26.9	-0.6	5.4	-5.8	1.5	29.6	-14.1	-12.0
Long-term Government Bonds	-11.6	24.5	24.0	35.5	4.1	8.6	-7.6	2.6	28.4	-13.6	-1.8
TIPS	-8.5	9.6	-2.4	37.4	0.7	2.0	-7.5	2.8	15.6	-7.8	4.3
Global ILBs	-7.4	-1.5	-7.7	39.7	0.7	2.2	-7.9	2.9	16.5	-8.3	4.5
High Yield Bonds	-2.0	-20.7	-26.2	-6.3	-5.0	5.6	-1.0	-3.6	6.9	-2.3	-15.5
Bank Loans	0.8	-22.5	-28.8	6.3	0.7	3.3	10.3	-1.7	3.3	-1.1	-7.5
Direct Lending - First Lien	3.4	-2.1	-5.8	-0.7	-0.7	1.7	0.7	-0.2	2.0	-0.6	-4.4
Direct Lending - Second Lien	4.6	-2.9	-7.8	-1.0	-0.9	2.3	1.0	-0.3	2.6	-0.8	-5.9
Foreign Bonds	-3.2	5.3	4.4	8.5	3.5	3.3	5.3	-0.3	34.8	-6.5	-1.4
Mezzanine Debt	4.6	-25.5	-25.9	-2.0	-2.6	10.3	7.6	0.4	3.2	-1.0	-7.2
Distressed Debt	4.6	-25.5	-25.9	-2.0	-2.6	10.3	7.6	0.4	3.2	-1.0	-7.2
Emerging Market Bonds (major)	-11.5	-2.7	-9.7	6.3	-28.2	-1.8	-18.9	-9.2	-1.6	-2.6	-20.2
Emerging Market Bonds (local)	-14.3	-2.3	-5.2	7.2	-34.1	-2.4	-22.8	-11.0	-2.0	-3.2	-23.9
US Equity	3.0	-43.8	-37.0	-43.8	-15.4	3.6	1.3	-29.5	-2.3	-4.1	-42.6
Developed Market Equity (non-US)	-2.2	-49.6	-43.4	-46.7	-11.5	-5.8	7.8	-14.5	-18.0	-7.0	-36.3
Emerging Market Equity	-9.4	-45.8	-53.3	-43.9	-26.7	-31.8	-7.3	-25.3	-12.1	-6.6	-44.2
Global Equity	-0.7	-46.6	-42.2	-46.7	-14.0	-3.2	5.0	-21.5	-11.2	-5.8	-39.3
Private Equity/Debt	5.7	-25.6	-27.2	-23.4	-3.2	15.7	13.2	0.6	-2.7	-2.5	-18.2
Private Equity	5.8	-25.8	-27.6	-26.0	-3.3	16.7	14.2	0.6	-3.9	-2.7	-20.1
Private Debt Composite	4.6	-21.3	-22.5	-1.7	-2.3	8.7	6.2	0.2	3.0	-1.0	-6.9
REITs	-13.3	-61.3	-37.7	45.4	-15.3	9.8	-3.5	-19.5	2.5	-3.6	-33.9
Core Private Real Estate	3.6	-7.3	-6.5	23.6	2.3	8.5	6.4	0.7	23.9	5.5	-4.4
Value-Added Real Estate	3.8	-18.0	-13.4	177.0	1.8	11.4	11.2	1.2	44.2	9.6	-7.6
Opportunistic Real Estate	4.0	-24.7	-21.8	21.4	1.5	20.0	18.8	0.9	30.7	7.0	-5.6
Natural Resources (Private)	2.5	-26.2	-34.1	-3.9	-16.9	-7.8	12.6	-10.8	-9.4	-9.2	19.3
Timberland	1.3	25.4	9.5	-1.5	0.5	12.0	15.4	3.8	23.6	-7.4	5.5
Farmland	3.3	30.2	15.8	11.4	0.8	3.9	9.4	2.2	13.3	-4.2	3.1
Commodities (naïve)	-2.4	-31.8	-35.6	18.5	-12.0	-6.2	16.6	1.8	-16.0	-9.6	139.5
Core Infrastructure	3.7	0.2	-0.6	24.8	-0.3	6.1	-11.5	0.0	-0.2	-0.1	-0.5
Hedge Funds	-0.4	-15.6	-19.0	-2.1	-9.4	1.7	4.1	-7.8	-3.8	-1.9	-15.7
Long-Short	1.0	-24.0	-26.6	-8.8	-8.3	7.9	2.6	-10.0	-4.9	-2.5	-19.8
Hedge Fund of Funds	-0.5	-17.8	-21.4	-0.4	-7.7	0.5	-3.5	-5.7	-2.7	-1.4	-11.5

Positive Historical Scenario Returns - Sample Inputs

	Global Financial Crisis Recovery (Mar 2009 - Nov 2009)	Best of Great Moderation (Apr 2003 - Feb 2004)	Peak of the TMT Bubble (Oct 1998 - Mar 2000)	Pre-Recession (Jun - Oct 1990)	Plummeting Dollar (Jan 1986 - Aug 1987)	Volcker Recovery (Aug 1982 - Apr 1983)	Bretton Wood Recovery (Oct 1974 - Jun 1975)
Cash Equivalents	0.1	0.9	6.7	3.3	10.0	6.0	4.5
Short-term Investment Grade Bonds	4.3	2.8	5.3	4.5	13.2	15.4	5.0
Investment Grade Bonds	9.0	4.6	1.7	3.8	14.4	26.4	9.2
Long-term Corporate Bonds	28.8	11.3	-3.1	1.5	15.9	42.1	17.5
Long-term Government Bonds	2.0	4.9	-2.3	2.4	15.4	33.6	11.8
TIPS	14.3	9.1	6.3	2.2	10.2	11.5	4.1
Global ILBs	24.7	9.6	6.6	2.3	10.8	12.1	4.3
High Yield Bonds	49.1	21.8	2.1	-12.9	24.9	23.3	19.3
Bank Loans	32.9	10.1	6.1	-6.1	11.1	10.4	8.7
Direct Lending - First Lien	10.6	5.7	1.1	-1.9	5.8	5.0	5.1
Direct Lending - Second Lien	14.3	7.7	1.4	-2.5	7.8	6.7	6.8
Foreign Bonds	23.4	15.2	-7.0	15.8	44.5	32.3	17.9
Mezzanine Debt	30.8	23.7	26.8	0.7	5.4	8.2	8.3
Distressed Debt	30.8	23.7	26.8	0.7	5.4	8.2	8.3
Emerging Market Bonds (major)	27.0	20.6	49.0	-8.7	38.9	21.6	21.0
Emerging Market Bonds (local)	37.5	25.2	61.0	-10.5	48.4	26.5	25.7
US Equity	51.6	37.2	50.2	-14.7	64.8	59.3	55.1
Developed Market Equity (non-US)	60.5	56.7	53.0	-9.7	140.0	29.6	34.6
Emerging Market Equity	94.6	79.4	101.3	-15.9	126.5	52.1	53.4
Global Equity	59.9	46.2	54.8	-11.1	108.4	43.0	44.6
Private Equity/Debt	15.4	23.3	84.6	4.6	19.1	13.7	18.4
Private Equity	13.0	23.7	92.1	5.5	21.7	14.8	20.2
Private Debt Composite	27.5	20.4	21.4	0.1	5.9	7.9	8.0
REITs	82.5	44.6	-5.2	-15.6	51.8	47.4	42.5
Core Private Real Estate	-16.4	9.0	18.1	1.9	13.1	6.8	4.5
Value-Added Real Estate	-32.7	11.4	19.6	3.2	23.6	11.9	7.8
Opportunistic Real Estate	-19.0	13.6	27.9	0.4	16.7	8.6	5.7
Natural Resources (Private)	57.8	36.1	22.2	6.0	78.3	30.2	14.8
Timberland	-3.3	8.5	20.5	5.7	28.6	20.0	8.7
Farmland	5.4	9.6	10.4	3.3	15.9	11.3	5.0
Commodities (naïve)	28.9	30.6	17.1	43.5	27.6	6.2	-20.2
Core Infrastructure	2.1	8.5	33.0	0.0	1.4	0.6	0.6
Hedge Funds	20.1	22.4	52.8	-1.9	30.6	13.8	14.5
Long-Short	25.9	25.3	81.4	5.1	40.8	18.0	18.9
Hedge Fund of Funds	10.3	13.3	36.8	11.9	21.3	9.7	10.3

'Anti' Stress Test Return Assumptions - Sample Inputs[1]

	10-year Treasury Bond rates drop 100 bps	10-year Treasury Bond rates drop 200 bps	Baa Spreads narrow by 30bps, High Yield by 100 bps	Baa Spreads narrow by 100bps, High Yield by 300 bps	Trade Weighted Dollar drops 10%	Trade Weighted Dollar drops 20%	U.S. Equities rise 10%	U.S. Equities rise 30%
Cash Equivalents	1.4	1.6	0.3	0.2	1.6	3.3	1.6	2.4
Short-term Investment Grade Bonds	3.8	5.7	0.9	2.4	2.1	3.5	1.4	2.7
Investment Grade Bonds	8.8	14.8	2.2	4.6	3.1	7.6	2.0	4.5
Long-term Corporate Bonds	18.5	32.4	6.0	15.8	6.0	12.3	3.5	8.0
Long-term Government Bonds	20.4	38.0	2.4	0.1	4.0	16.2	2.9	6.9
TIPS	8.1	13.9	2.5	6.6	4.3	5.3	1.9	3.4
Global ILBs	3.0	4.2	3.6	8.1	6.2	5.5	2.3	4.7
High Yield Bonds	7.0	11.6	8.2	26.8	5.7	6.3	5.6	12.6
Bank Loans	2.8	2.2	4.7	17.1	2.6	1.1	3.1	7.0
Direct Lending - First Lien	1.9	1.2	6.6	8.1	1.0	6.1	2.4	4.1
Direct Lending - Second Lien	2.4	2.1	8.9	10.9	1.5	9.1	3.6	6.2
Foreign Bonds	8.6	16.5	3.5	8.5	10.7	15.5	3.0	7.7
Mezzanine Debt	4.4	5.4	9.1	17.7	5.0	10.6	6.5	8.9
Distressed Debt	4.3	5.7	9.2	18.1	5.3	12.5	6.9	10.1
Emerging Market Bonds (major)	6.2	10.3	7.1	17.0	6.9	13.2	5.8	12.3
Emerging Market Bonds (local)	7.3	10.0	6.7	18.9	9.6	16.6	6.9	15.6
US Equity	6.7	20.1	11.1	17.5	6.1	22.5	10.0	30.0
Developed Market Equity (non-US)	1.5	19.6	11.3	19.3	14.8	35.0	7.5	19.5
Emerging Market Equity	3.8	19.9	11.9	36.6	17.6	38.5	11.7	28.4
Global Equity	4.3	19.6	11.1	21.2	11.1	29.5	9.5	26.0
Private Equity/Debt	5.5	9.5	10.0	11.9	6.6	18.4	9.7	16.6
Private Equity	5.8	10.7	10.2	11.4	6.7	19.4	10.2	18.4
Private Debt Composite	3.8	4.7	8.9	15.8	4.1	10.7	5.7	8.5
REITs	6.9	18.3	12.1	27.3	7.2	24.5	11.6	28.6
Core Private Real Estate	4.0	6.0	4.8	4.2	2.5	8.5	3.1	3.4
Value-Added Real Estate	6.3	11.9	4.7	3.4	3.1	14.9	5.1	6.8
Opportunistic Real Estate	5.4	11.1	4.1	3.8	1.7	15.6	4.4	5.6
Natural Resources (Private)	2.7	15.5	10.8	19.7	13.1	19.3	9.5	19.3
Timberland	6.6	13.3	4.1	3.3	4.5	14.4	5.5	5.9
Farmland	4.5	7.6	7.4	6.6	4.0	11.5	4.8	5.2
Commodities (naïve)	0.2	1.5	3.7	9.4	10.2	2.6	3.7	4.7
Core Infrastructure	3.5	2.4	6.7	4.3	4.0	6.5	2.4	3.8
Hedge Funds	6.6	9.3	5.7	11.7	5.0	8.3	6.0	11.0
Long-Short	6.6	10.4	6.4	12.6	6.3	13.2	7.1	14.0
Hedge Fund of Funds	5.3	7.9	4.4	10.1	3.7	6.9	4.7	9.5

[1] Assumptions are based on performance for each asset class during historical periods that resembled these situations.

Meketa Investment Group 2019 Annual Asset Study
Twenty-Year Annualized Return and Volatility Expectations for Major Asset Classes

Asset Class	Annualized Compounded Return (%)	Annualized Standard Deviation (%)
Rate Sensitive		
Cash Equivalents	2.9	1.0
Investment Grade Bonds	3.9	4.0
Long-term Government Bonds	3.7	12.0
TIPS	3.6	7.0
Credit		
High Yield Bonds	6.5	11.0
Bank Loans	6.1	9.0
Emerging Market Bonds (major; unhedged)	5.2	11.0
Emerging Market Bonds (local; unhedged)	5.3	14.0
Direct Lending - First Lien	6.7	11.0
Direct Lending - Second Lien	7.9	15.0
Mezzanine Debt	7.2	15.0
Distressed Debt	7.3	20.0
Equities		
Public U.S. Equity	8.1	17.0
Public Developed Market Equity	8.5	19.0
Public Emerging Market Equity	10.4	24.0
Private Equity Composite	10.1	26.0
Real Assets		
REITs	7	26.0
Core Private Real Estate	5.8	11.0
Value Added Real Estate	7.5	18.0
Opportunistic Real Estate	9.1	24.0
High Yield Real Estate Debt	6.8	18.0
Natural Resources (Private)	9.5	21.0
Commodities	5	17.0
Infrastructure (Core)	6.5	14.0
Infrastructure (Non-Core)	8.8	22.0
Other		
Hedge Funds	5.4	7.0

Meketa Investment Group 2019 Annual Asset Study: Correlation Expectations

	Investment Grade Bonds	TIPS	High Yield Bonds	US Equity	Developed Market Equity	Emerging Market Equity	Private Equity	Real Estate	Natural Resources (private)	Commodities	Core Infrastructure (private)	Hedge Funds
Investment Grade Bonds	1.00											
TIPS	0.80	1.00										
High Yield Bonds	0.20	0.30	1.00									
US Equity	0.05	0.00	0.70	1.00								
Developed Market Equity	0.05	0.15	0.70	0.90	1.00							
Emerging Market Equity	0.05	0.15	0.70	0.80	0.90	1.00						
Private Equity	0.05	0.05	0.65	0.85	0.80	0.75	1.00					
Real Estate	0.20	0.10	0.50	0.50	0.45	0.40	0.45	1.00				
Natural Resources (private)	0.10	0.10	0.45	0.65	0.60	0.60	0.55	0.45	1.00			
Commodities	0.05	0.30	0.40	0.35	0.55	0.60	0.30	0.15	0.65	1.00		
Core Infrastructure (private)	0.30	0.30	0.60	0.55	0.55	0.50	0.45	0.60	0.60	0.35	1.00	
Hedge Funds	0.05	0.20	0.70	0.80	0.85	0.85	0.65	0.45	0.65	0.65	0.60	1.00

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Client Example

Asset Liability Study and Risk Analysis

Portions of this report have been redacted to ensure the security of certain confidential or sensitive information.

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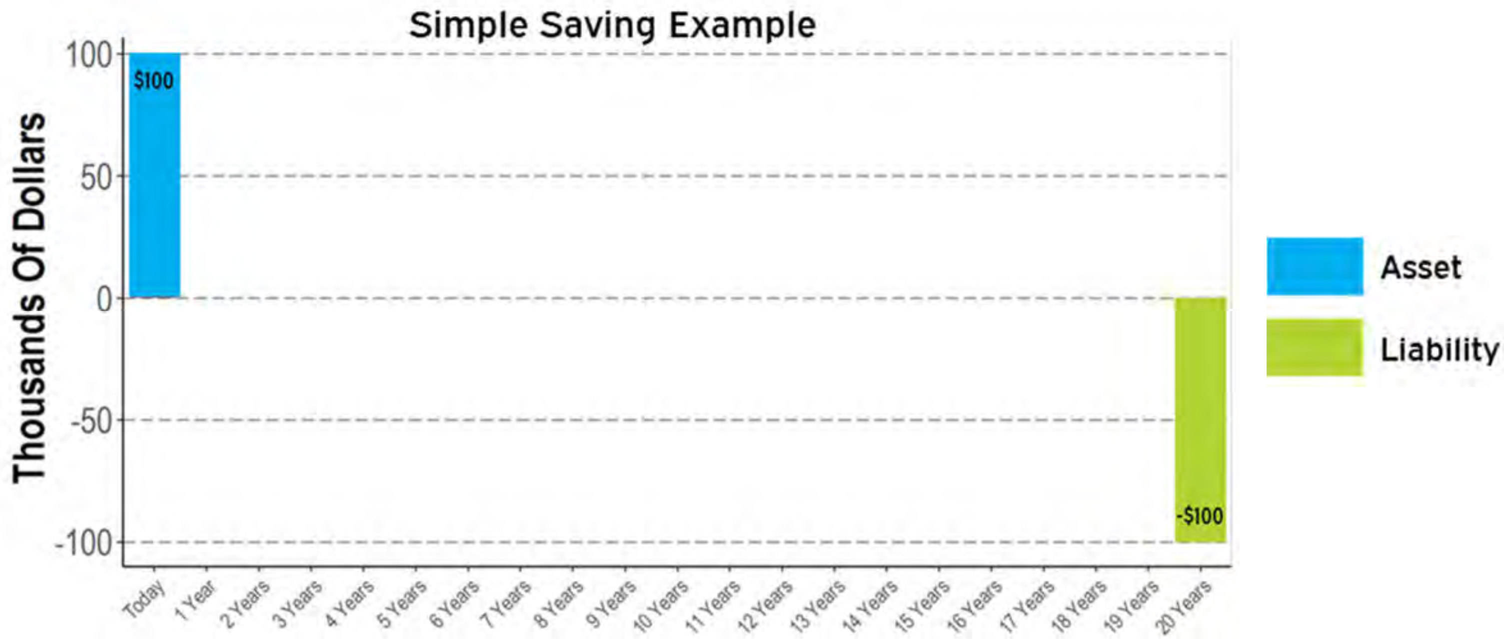
Introduction

Introduction

- This document evaluates the current asset allocation policy and presents alternative asset allocation options for the Fund. Liabilities are reviewed as well throughout the process.
- We provide various approaches to assessing risk in order to provide a “mosaic” of the risks faced by the Fund.
- The goal of this review is not to declare one portfolio the “right” choice or the only prudent choice, but to highlight the risk and return tradeoffs of different policy portfolios.
- The asset liability study highlights the natural tension between long-term goals and short-term risks, and should allow the Fund to make more informed decisions regarding portfolio positioning.

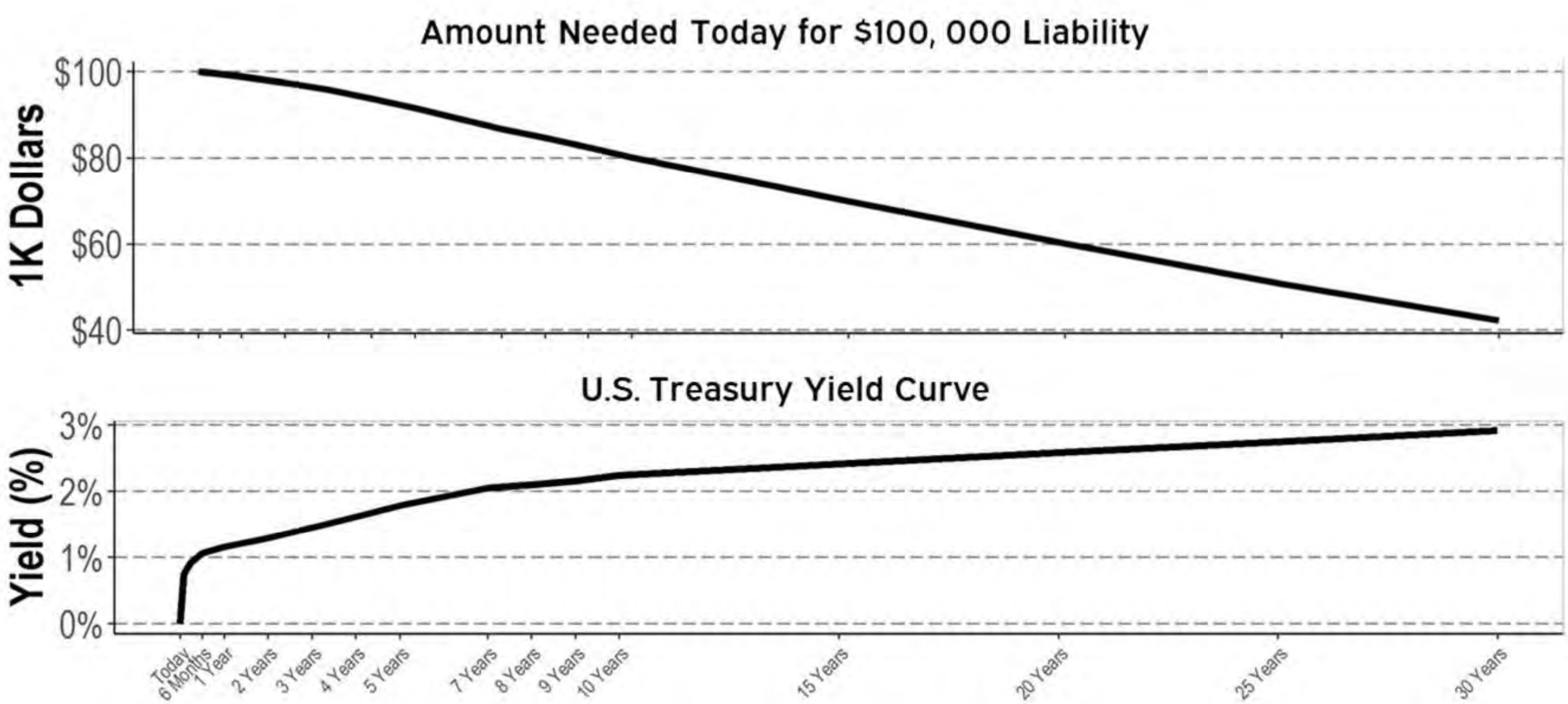
Uncertainty and Time: A Simple Saving Example

- Core idea of assets & liabilities is a simple one.
  - Goal: Accumulate $100,000 in 20 years.



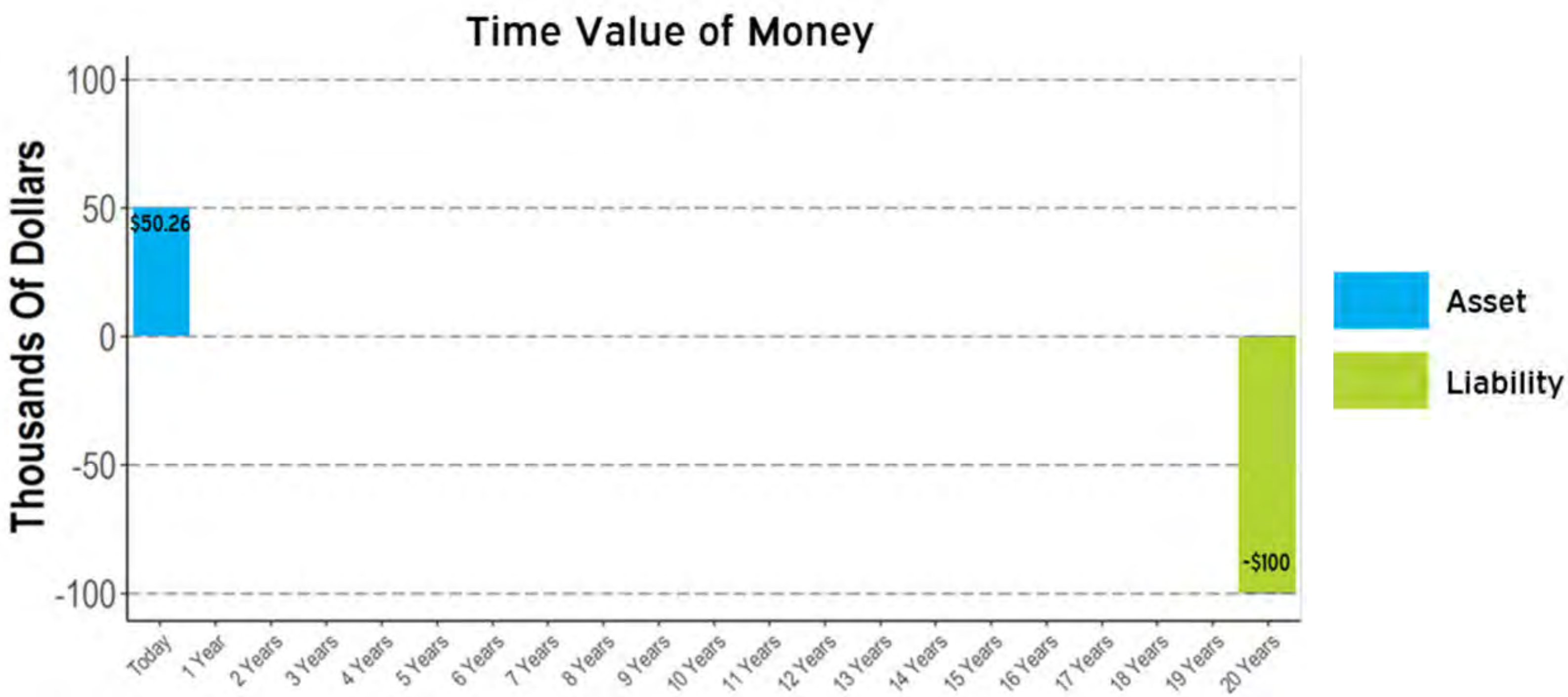
Uncertainty and Time: How Does Time Have Value?

- But: Time has value ➔ Government (the issuer of money) pays a yield for savings.
  - This is referred to as the "risk-free" rate and can be considered to have zero uncertainty.
    - However, government could default, but then money would be worthless anyhow.
  - We use "default-free" terminology to bridge this "lingo."



Uncertainty and Time: Time Value of Money

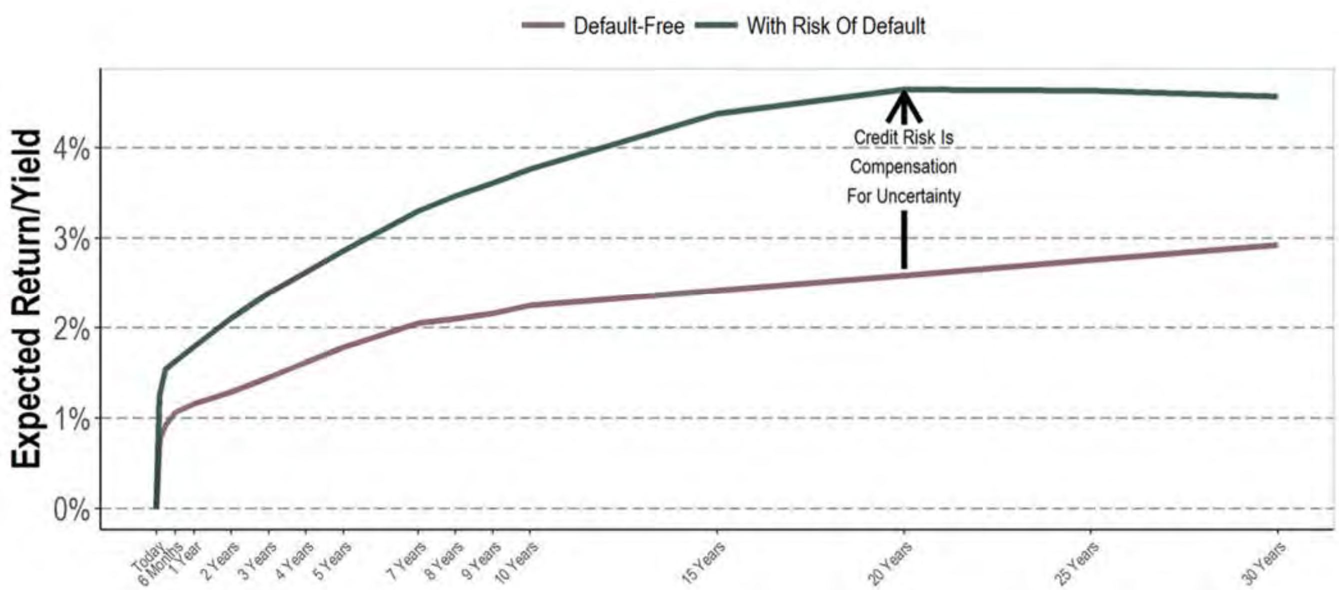
- "Time is money" not just a famous quote ➔ Core principles of managing assets and liabilities.
  - Time value of money ➔ less than full value of the obligation (liability) needs to be invested today.
  - Core concept applies if paying a pension or a lump sum.



Getting Paid for Uncertainty

- When investing today, to meet future obligations, investors that accept uncertainty expect to be compensated for that risk.
- One example of uncertainty ➔ Credit risk:
  - Greater credit risk ➔ higher return expectations, however…

Compensation for Added Uncertainty



Core Asset-Liability Management (ALM) Concepts
Understanding the Trade-offs

How much Asset-Liability Mismatch Risk to take

- A fund could potentially invest in default-free securities to meet future payments (i.e., liabilities):
  - Half a century ago, Deferred Annuity Contracts were the only financing vehicle.
  - Benefit security is extremely high, however…
  - For many Funds, this is neither practical nor the most efficient use of capital.
- By accepting uncertainty (risk), the fund can "budget" less capital today. The riskier the portfolio:
  - The greater the asset-liability mismatch risk.
  - The greater potential for gains (surplus assets) or losses (deficits).
  - Benefit security is reduced.
- We determine this Asset-Liability (mismatch) risk via our Hedge Ratio. A Fund invested in:
  - Default-free fixed income securities (similar profile to future payments) ➔ Very high hedge ratio.
  - All Equity investments ➔ Very low hedge ratio.

Asset Allocation Overview

Asset Allocation

What is Asset Allocation?

Asset allocation refers to the distribution of assets across a number of asset classes that exhibit different correlations with each other. Each asset class exhibits a unique combination of risk and reward. The expected and realized long-term returns vary by asset class, as does the interim volatility of those returns. Some asset classes, like equities, exhibit high degrees of volatility, but also offer high returns over time. Other asset classes, like cash, experience very little volatility, but offer limited return potential.

Why is Asset Allocation important?

The distribution of assets across various asset classes exerts a major influence on the return behavior of the aggregate pool over short and long time periods.

How does Asset Allocation affect aggregate performance?

In addition to exhibiting unique characteristics, each asset class interacts differently with other asset classes. Because of low correlations, the likelihood that any two asset classes will move together in the same direction is limited, with the movement of one asset class often offsetting another's. Combining asset classes allows investors to control more fully the aggregate risk and return of their portfolios, and to benefit from the reduction in volatility that stems from diversification.

Reviews of Objectives

Long-Term return objectives

- All of the following return objectives are important in our view:
  - Improve funded status and solvency.
  - Meet or exceed actuarial assumed rate of return.
  - Control costs and expenses.

Long-Term risk tolerance objectives

- Common risk minimization objectives include:
  - Minimize the risk of permanent capital impairment.
  - Minimize volatility in asset values.
  - Given the net cash flow position, limit the extent of short-term losses.

Managing Investment Constraints

What is the overall time horizon for the Fund?

- On-going concern, with long-term time horizon.

What are the liquidity needs of the Fund?

- Net cash outflows of approximately $95 million in fiscal year 20yy, increasing up to roughly $137 million at the peak in 20yy[1].
- Obligations for future private market commitments of approximately $200 million.
- Obligations for benefit payments are projected to be $240 million in fiscal year 20yy, growing to over $350 million by 20yy.

What are the legal and regulatory constraints under which the Fund operates?

- State laws and City Revised Municipal Code.

Are there any other considerations that must be evaluated?

- Funded ratio of about 66%.
- Approximately 23.2% of the Fund comprised of illiquid (e.g., private markets) assets, per latest IPS (33% if accounting for core real estate and hedge funds).
- Due to funded status and cash flow position, path of returns matters to the Fund. Therefore, avoiding early losses is important.

[1] Liability data throughout the presentation provided by the actuary.

Asset Liability Study Process

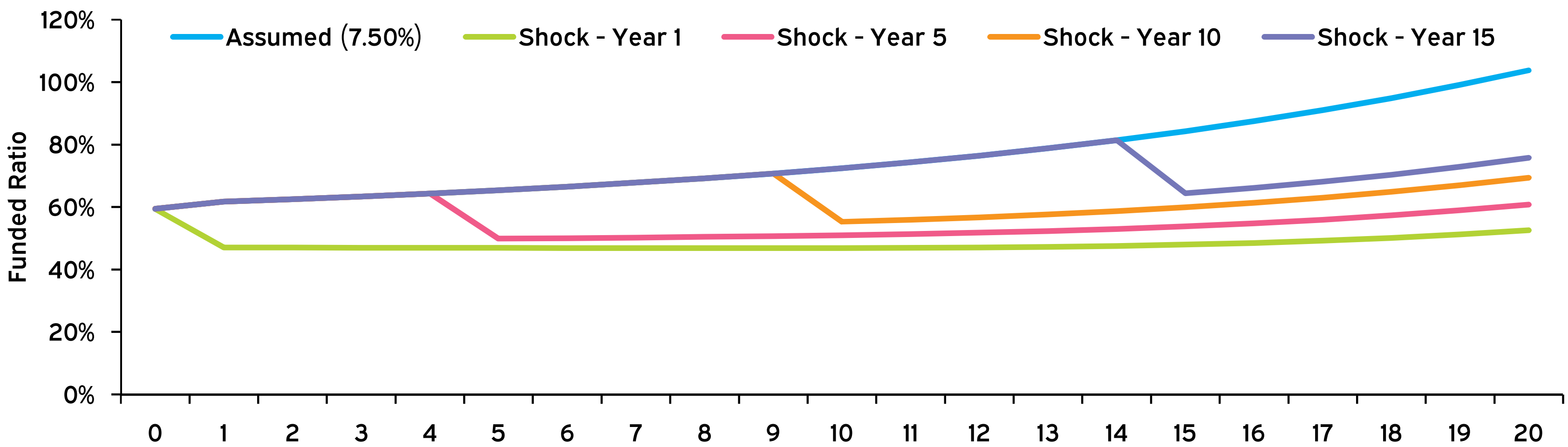
- Review the spectrum of asset allocation options, ranging from conservative to aggressive. Account for liabilities throughout the process.
- Choose a portfolio with expected returns and risk that are appropriate for the financial position of the Fund.
- Accept equity risk as means of achieving an acceptable long-term return, or consider lower returns and higher contributions that come with less equity risk.

Caveats

- Based on current funded status and expected net cash outflows (approximately 5% per year for benefit payments and expenses, net of contributions), the Fund is in a delicate situation.
- A near term large market correction or significant loss in assets could theoretically put the Fund on a path to insolvency.
- In this document, we highlight the potential impact to the Fund's funded status under a variety of scenarios.
- A key risk the Fund is exposed to is "Volatility / Path of Returns": There are an infinite number of potential paths of returns that the Fund can follow, yet only one will materialize in the future. This future path is unknown today. The greater the volatility of the portfolio, the greater the risk of generating a loss in the early years. The greater this early loss, the greater the risk of insolvency. Therefore, controlling for volatility and mitigating large drawdowns would be important for the Fund's solvency. Increasing the hedge ratio of the portfolio is also a desirable output.

Stress Test - Impact on Funded Status (Mix P - Policy Allocation)[1] (Equities Down 25%)

- This analysis assumes the expected return is earned each year except for a -25% equity shock in the year shown below.[2]
- The graph below illustrates how an early shock will have a longer recovery period than if the shock took place in the future.



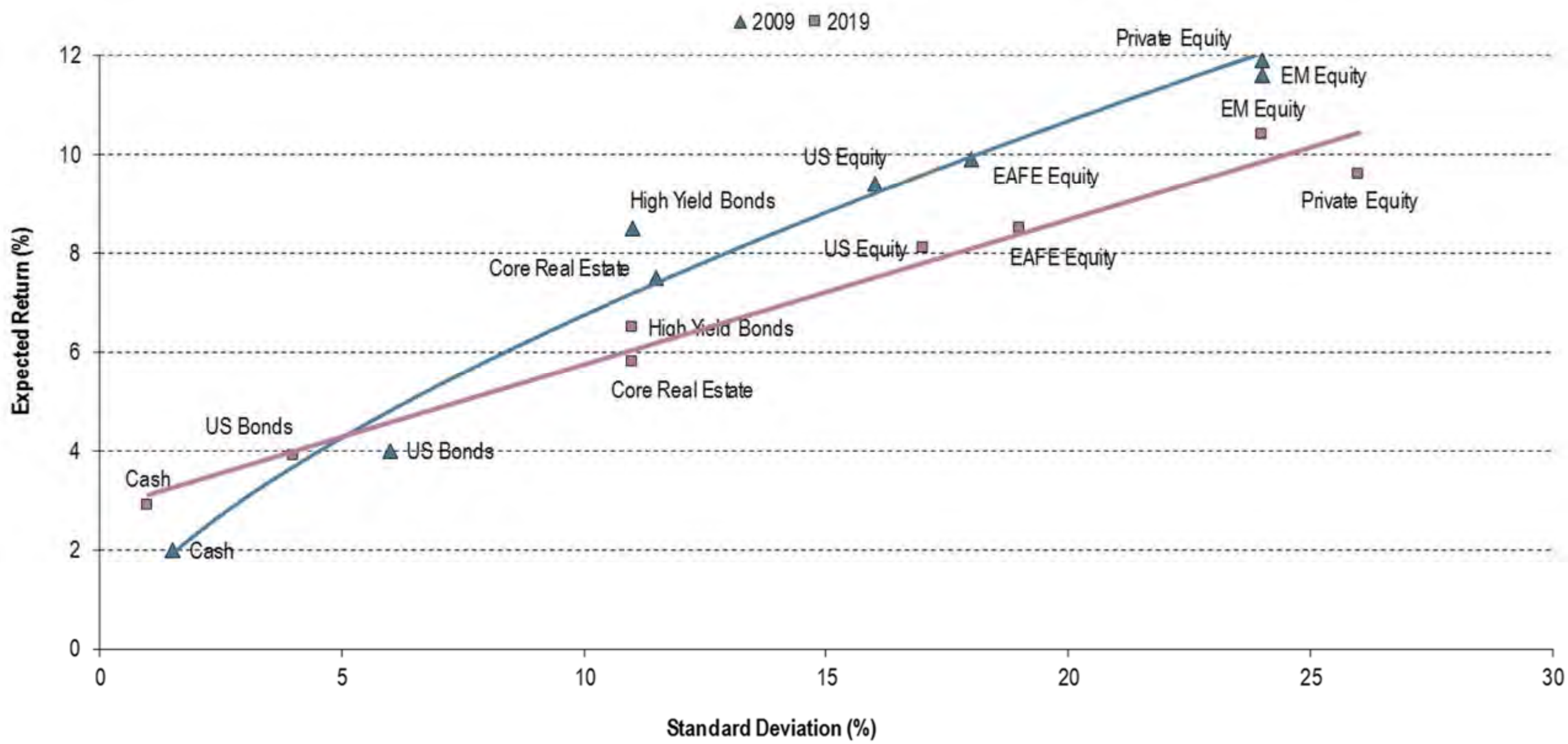
[1] Funded status and liabilities reflect those for the Fund.

[2] Assumes that a -25% equity shock would result in approximately −17.0% return for the Fund.

Mean-Variance Optimization (MVO)

- MVO is the traditional starting point for determining asset allocation.
- MVO mathematically determines an "efficient frontier" of policy portfolios with the highest risk-adjusted returns.
- All asset classes exhibit only three characteristics, which serve as inputs to the model:
  - Expected return
  - Expected volatility
  - Expected covariance with all other assets
- The model assumes:
  - Normal return distribution
  - Stable volatility and covariance over time
  - Returns are not serially correlated
- The MVO model tends to underestimate the risks of large negative events.

Efficient Frontier over Time: Less Return for the Same or More Risk[1]

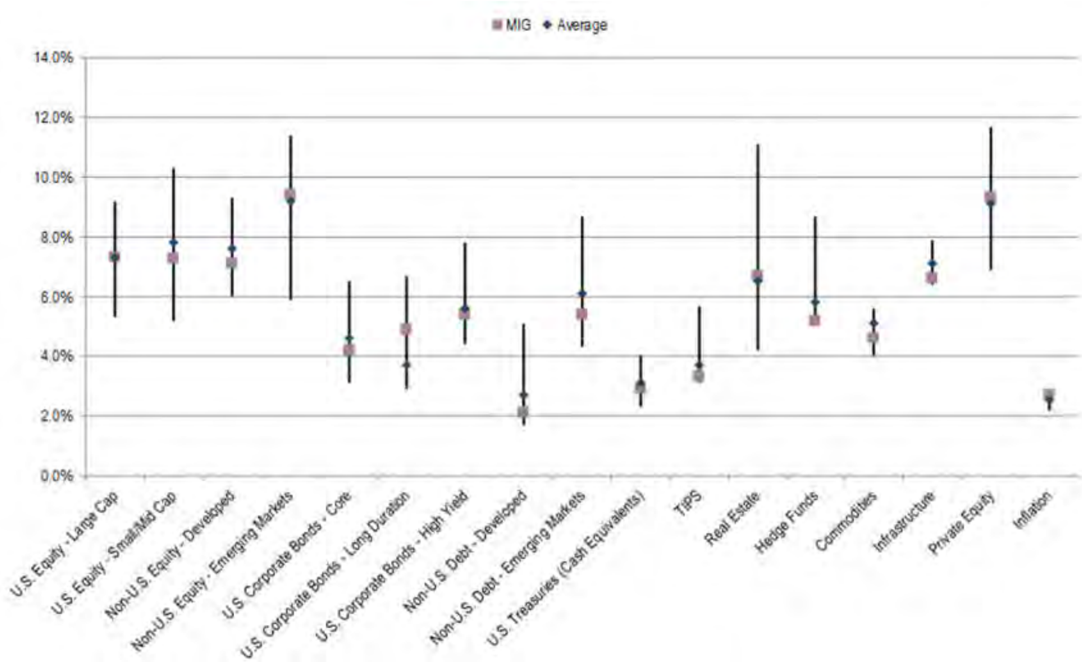


- A positive relationship exists between long-term return expectations and the level of risk accepted.
- However, this relationship is not static.

[1] Expected return and standard deviation are based upon Meketa Investment Group's Annual Asset Study.

Peer Industry Review

- Annually the Horizon Actuarial Survey compares asset class assumptions for over 30 investment consulting firms. The analysis is a good "sanity-check" to compare Meketa Investment Group's asset class forecasts to the forecasts of our industry peers.
- Below is the summary of last year's survey. The 2019 version is typically released in August.
- Meketa 2018 Asset Study vs. Horizon 2018 Survey:



Peer Study

- Annually, Horizon Actuarial Services, LLC publishes a survey of capital market assumptions that they collect from various investment advisors.
  - In the 2018[1] survey, there were 34 respondents.
- The Horizon survey is a useful tool for Board members to determine whether their consultant's expectations for returns (and risk) are reasonable.

Asset Class	10-Year Average (%)	20-Year Average (%)	MIG 20-Year (%)
US Equity (large cap)	6.1	7.4	7.4
Non-US – Developed	6.7	7.7	7.1
Non-US – Emerging	7.6	8.8	9.4
US Corporate Bonds – Core	3.4	4.5	4.2
US Corporate Bonds – High Yield	4.8	5.8	5.4
Non-US Debt – Developed	2.2	3.2	2.1
Non-US Debt – Emerging	5.0	6.1	5.4
US Treasuries (cash)	2.5	3.1	2.9
TIPS	2.9	4.0	3.3
Real Estate	5.9	6.7	6.7
Hedge Funds	5.0	6.2	5.2
Commodities	4.0	4.9	4.6
Infrastructure	6.6	7.1	6.6
Private Equity	8.3	9.5	9.3
Inflation	2.2	2.5	2.7

[1] The 10-year horizon includes all 34 respondents and the 20-year horizon includes 13 respondents.

Peer Study Participants

- The following firms participated in the 2018 Horizon Survey.

Arthur J. Gallagher & Co.	Marquette Associates
Alan D. Biller and Associates	Meketa Investment Group
AndCo Consulting, LLC	Merrill Lynch Global Institutional Consulting
Aon Hewitt	Morgan Stanley Wealth Management
The Atlanta Consulting Group	New England Pension Consultants (NEPC)
Bank of New York Mellon	Pavilion Advisory Group
BlackRock	Pension Consulting Alliance
Callan Associates	PFM Asset Management, LLC
Cambridge Associates	RVK
CapTrust	Segal Marco Advisors
Ellwood Associates	SEI
Envestnet	Sellwood Consulting
Goldman Sachs Asset Management	Summit Strategies Group
Graystone Consulting	UBS
Investment Performance Services, LLC (IPS)	Verus
Janney Montgomery Scott, LLC	Voya Investment Management
J.P. Morgan Asset Management	Willis Towers Watson

Capital Market Expectations

	2019 E(R) (%)	2018 E(R) (%)	Δ from 2018 (%)	Notes
Equities				
US Equity	8.1	7.3	0.8	Better valuations (lower prices and strong earnings in 2018)
Dev. Market Equity (non-US)	8.5	7.1	1.4	Higher dividend, better valuations (strong earnings in 2018)
Emerging Market Equity	10.4	9.4	1.0	Higher dividend, better valuations (strong earnings 2018)
Private Equity	10.1	9.3	0.8	Lower fee impact and lower prices
Fixed Income				
Cash Equivalents	2.9	2.9	0.0	N/A
Short-Term Investment Grade Bonds	3.4	3.1	0.3	Higher yields
Investment Grade Bonds	3.9	3.6	0.3	Higher yields
Intermediate Government Bonds	3.1	2.7	0.4	Higher yields
Long-term Government Bonds	3.7	3.5	0.2	Higher yields
High Yield Bonds	6.5	5.4	1.2	Higher yields and wider spreads
Emerging Market Bonds (local)	5.3	5.4	-0.1	Slightly lower yields
Private Debt Composite	7.3	6.7	0.6	Higher yields and lower fee impact
Real Assets				
Real Estate	7.0	6.7	0.3	More leverage and lower fee impact expected
Natural Resources (Public)	9.0	7.2	1.8	Much lower prices
Natural Resources (Private)	9.5	8.8	0.7	Lower prices

Select Asset Allocation Policy Options

Asset Allocation Policy Options[1]

	Mix P[2] (%)	Mix A (%)	Mix B (%)	Mix C (%)	Mix D (%)
Equities	53.0	49.0	43.0	41.0	39.0
US Large Cap	19.0	17.0	14.0	12.5	12.0
US Small Cap	3.5	4.0	3.0	3.0	3.0
Developed Market Equity (non-US)	15.5	13.0	11.0	10.0	9.0
Emerging Market Equity	8.0	8.0	8.0	7.5	7.0
Private Equity	7.0	7.0	7.0	8.0	8.0
Credit	9.0	8.5	10.5	9.5	12.5
Direct Lending (First Lien)	4.0	4.0	4.0	4.0	6.0
Distressed Debt	2.5	2.5	3.0	3.0	3.0
Emerging Market Bonds (local)	2.5	2.0	3.5	2.5	3.5
Rate Sensitive	11.5	17.0	20.0	25.0	30.0
Short-term Investment Grade Bonds	0.0	6.0	5.0	10.0	15.0
Investment Grade Bonds	6.5	0.0	0.0	0.0	0.0
Intermediate Government Bonds	5.0	5.0	5.0	5.0	5.0
Long Duration Fixed Income	0.0	6.0	10.0	10.0	10.0
Real Assets	21.5	20.5	16.5	19.5	18.5
Real Estate	8.0	8.0	8.0	9.0	8.0
Natural Resources (Private)	6.5	5.5	5.5	5.5	5.5
MLPs	7.0	7.0	3.0	5.0	5.0
Other	5.0	5.0	10.0	5.0	0.0
Hedge Funds	5.0	5.0	10.0	5.0	0.0
Expected Return (10 years)	7.87	7.79	7.46	7.48	7.34
Expected Return (20 years)	*8.45*	*8.37*	*8.07*	*8.05*	*7.89*
Standard Deviation	*13.59*	*12.57*	*11.45*	*11.17*	*10.68*
Probability of Achieving 7.5% over 20 Years	*61.9*	*61.8*	*58.4*	*58.3*	*56.1*

- Mix A is the recommended asset allocation option from both Staff and Meketa.

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[1] Expected return and standard deviation are based upon Meketa Investment Group's 2019 Annual Asset Study. Throughout this document, returns for periods longer than one year are annualized.
[2] "Mix P" is the Policy Allocation for the Fund.

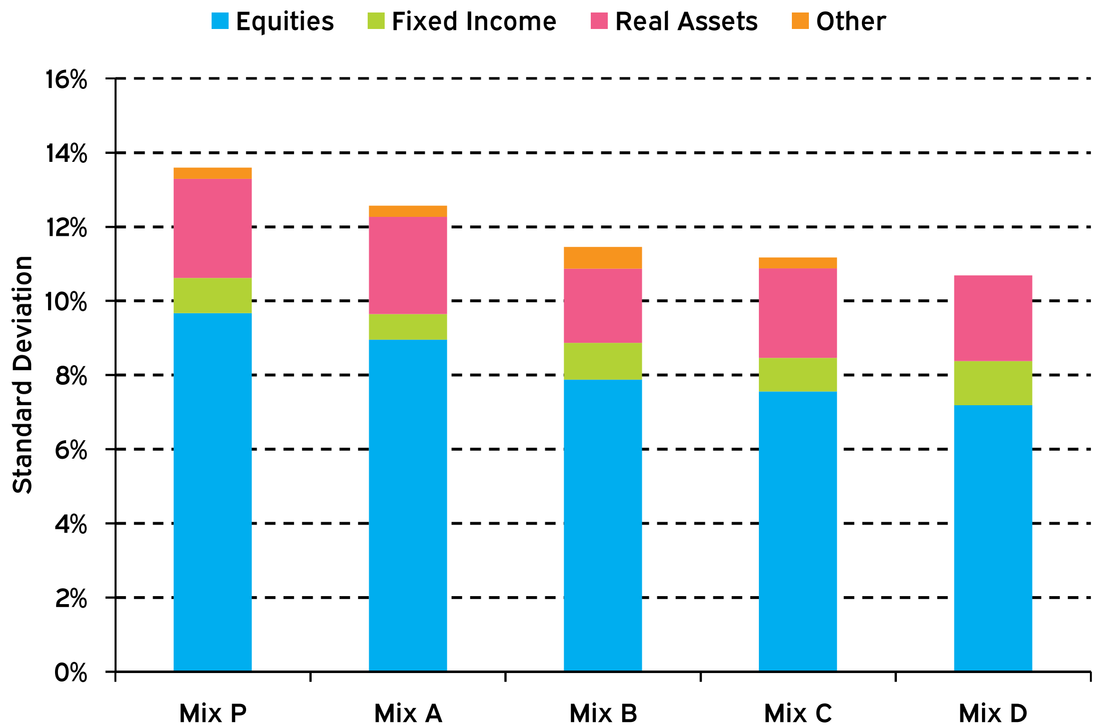
Diversification and Risk Analysis

Diversification and Types of Risk

- The primary motive for diversifying a portfolio is to reduce risk.
- Diversification is the sole "free lunch" available to investors. That is, it represents the only way to reduce risk without reducing expected returns.
- Therefore, investments should be allocated across multiple classes of assets, based in part on the expected correlation of their returns.
- Within each asset type, investments should be distributed across strategies and risk factors to further reduce volatility.
- Risk budgeting[1]
  - Attributes overall portfolio risks to specific asset classes.
  - Highlights the source and scale of portfolio-level risk.
- MVO-based risk analytics
  - Includes worst-case return expectations.
  - Relies on assumptions underlying MVO.
- Scenario analysis
  - Stress tests policy portfolios using actual historical examples.
  - Stress tests policy portfolios under specific hypothetical scenarios.

[1] Risk budgeting seeks to decompose the aggregate risk of a portfolio into different sources (in this case, by asset class), with risk defined as standard deviation.

Risk Budgeting Analysis[1]
(Absolute Contribution to Risk)



- In each policy option, equity risk dominates the risk profile of the portfolio.

[1] Contribution to risk is calculated by multiplying the weight of the asset class by its standard deviation and its correlation with the total portfolio.

MVO-Based Risk Analysis

Scenario:	Mix P (%)	Mix A (%)	Mix B (%)	Mix C (%)	Mix D (%)
Worst Case Returns (1)					
One Year	-18.7	-17.1	-15.4	-14.9	-14.2
Three Years (annualized)	-8.2	-7.2	-6.2	-5.9	-5.5
Five Years (annualized)	-4.7	-3.9	-3.2	-2.9	-2.6
Ten Years (annualized)	-1.0	-0.4	0.0	0.2	0.3
Twenty Years (annualized)	1.6	2.0	2.3	2.4	2.5
Probability of Experiencing Negative Returns					
One Year	25.7	24.3	23.1	22.6	22.1
Three Years	13.0	11.4	10.1	9.6	9.1
Five Years	7.3	6.0	5.0	4.6	4.3
Ten Years	2.0	1.4	1.0	0.9	0.7
Twenty Years	0.2	0.1	0.1	0.0	0.0
Probability of Achieving at least a 7.5% Return					
One Year	52.7	52.7	51.9	51.9	51.4
Three Years	54.7	54.6	53.3	53.2	52.4
Five Years	56.0	56.0	54.2	54.2	53.1
Ten Years	58.5	58.4	56.0	55.9	54.3
Twenty Years	61.9	61.8	58.4	58.3	56.1

- Mix D is structured to be the most defensive portfolio. However, it is the least likely to reach the target return over the long term.

Historical Negative Scenario Analysis[1]
(*Cumulative* Return)

Scenarios	Mix P (%)	Mix A (%)	Mix B (%)	Mix C (%)	Mix D (%)
Taper Tantrum (May - Aug 2013)	-0.3	-1.0	-1.7	-1.6	-1.6
Global Financial Crisis (Oct 2007 - Mar 2009)	-31.2	-27.5	-23.1	-21.5	-19.1
2008 Calendar Year	-28.4	-24.5	-20.1	-18.9	-16.8
Popping of the TMT Bubble (Apr 2000 - Sep 2002)	-9.6	-6.3	-4.7	-0.9	0.6
LTCM (Jul - Aug 1998)	-10.8	-9.9	-9.4	-8.3	-7.7
Asian Financial Crisis (Aug 1997 - Jan 1998)	0.5	1.3	1.6	2.3	2.5
Rate spike (1994 Calendar Year)	3.2	2.5	1.5	1.8	1.3
Crash of 1987 (Sep - Nov 1987)	-12.7	-11.7	-10.3	-9.1	-8.3
Strong dollar (Jan 1981 - Sep 1982)	0.1	2.9	4.9	7.0	8.7
Stagflation (Jan - Mar 1980)	-4.5	-5.1	-5.5	-5.4	-5.4
Stagflation (Jan 1973 - Sep 1974)	-20.4	-19.2	-18.4	-16.1	-14.5

- Mix D would have performed the best in environments of declining equity markets, due to its more conservative positioning.
- Mix D would have fared worst during periods of rising rates; however, the losses in these environments are dwarfed by the losses during an equity downturn.

[1] See the Appendix for our scenario inputs. In periods where the ideal benchmark was not yet available we used the next closest benchmark(s) as a proxy.

Historical Positive Scenario Analysis[1] (Cumulative Return)

Scenarios	Mix P (%)	Mix A (%)	Mix B (%)	Mix C (%)	Mix D (%)
Global Financial Crisis Recovery (Mar 2009 - Nov 2009)	40.0	37.0	33.7	31.6	30.1
Best of Great Moderation (Apr 2003 - Feb 2004)	35.4	33.3	31.0	29.2	27.3
Peak of the TMT Bubble (Oct 1998 - Mar 2000)	40.6	38.0	38.9	34.9	31.7
Pre-Recession (Jun - Oct 1990)	-5.8	-5.2	-4.7	-3.7	-3.3
Plummeting Dollar (Jan 1986 - Aug 1987)	60.6	56.8	53.2	50.1	47.2
Volcker Recovery (Aug 1982 - Apr 1983)	32.3	33.0	32.5	31.4	30.9
Bretton Wood Recovery (Oct 1974 - Jun 1975)	28.8	27.8	26.3	24.6	23.5

- The Mix P (Policy Allocation) would have been the best option for capturing most of the upside in strongly positive markets.

[1] See the Appendix for our scenario inputs. In periods where the ideal benchmark was not yet available we used the next closest benchmark(s) as a proxy.

Stress Testing: Impact of Market Movements (Expected Return under Stressed Conditions)[1]

Scenarios	Mix P (%)	Mix A (%)	Mix B (%)	Mix C (%)	Mix D (%)
10-year Treasury Bond rates rise 100 bps	6.2	4.7	3.3	3.1	2.7
10-year Treasury Bond rates rise 200 bps	3.6	0.9	-1.3	-1.5	-1.9
10-year Treasury Bond rates rise 300 bps	1.6	-2.2	-5.5	-5.7	-6.1
Baa Spreads widen by 50 bps, High Yield by 200 bps	-1.2	-0.6	0.1	0.2	0.4
Baa Spreads widen by 300 bps, High Yield by 1000 bps	-22.8	-20.6	-18.1	-17.2	-15.9
Trade Weighted Dollar gains 10%	-2.6	-1.7	-1.0	-0.6	-0.4
Trade Weighted Dollar gains 20%	-4.5	-3.3	-2.1	-2.0	-1.9
US Equities decline 10%	-5.9	-5.2	-4.5	-4.0	-3.7
US Equities decline 25%	-16.7	-15.2	-13.6	-12.6	-11.7
US Equities decline 40%	-28.9	-26.1	-22.9	-21.7	-20.2

- Each policy portfolio has a different sensitivity to four major risk factors: interest rates, credit spreads, currency fluctuations, and equity values.
- The Fund's primary risk factors would continue to be an equity market decline and a widening of credit spreads, no matter the policy.

[1] Assumes that assets not directly exposed to the factor are affected nonetheless. See the Appendix for further details.

Stress Testing: Impact of Positive Market Movements (Expected Return under Stressed Conditions)[1]

Scenarios	Mix P (%)	Mix A (%)	Mix B (%)	Mix C (%)	Mix D (%)
10-year Treasury Bond rates drop 100 bps	4.9	6.1	7.2	7.1	6.9
10-year Treasury Bond rates drop 200 bps	14.3	16.1	17.5	16.9	16.4
Baa Spreads narrow by 30bps, High Yield by 100 bps	8.7	8.2	7.8	7.5	7.2
Baa Spreads narrow by 100bps, High Yield by 300 bps	16.8	15.5	14.2	13.6	13.0
Trade Weighted Dollar drops 10%	8.0	7.7	7.6	7.2	6.9
Trade Weighted Dollar drops 20%	20.0	20.1	19.9	19.1	18.4
US Equities rise 10%	7.3	7.2	7.0	6.7	6.4
US Equities rise 30%	18.1	17.6	16.7	15.9	15.1

- The portfolio with the least downside risk is likewise the portfolio that participates least in upside scenarios.

[1] Assumes that assets not directly exposed to the factor are affected nonetheless. See the Appendix for further details.

Asset-Liability Analysis

Historical Negative Scenario Analysis (Resulting Funded Status)[1]

Scenarios	Mix P (%)	Mix A (%)	Mix B (%)	Mix C (%)	Mix D (%)
Taper Tantrum (May - Aug 2013)	65.8	65.4	64.8	65.0	64.9
Global Financial Crisis (Oct 2007 - Mar 2009)	45.4	47.9	50.8	51.8	53.4
2008 Calendar Year	47.2	49.9	52.7	53.6	54.9
Popping of the TMT Bubble (Apr 2000 - Sep 2002)	59.7	61.8	62.9	65.4	66.4
LTCM (Jul - Aug 1998)	58.9	59.5	59.8	60.5	60.9
Asian Financial Crisis (Aug 1997 - Jan 1998)	66.4	66.8	67.1	67.5	67.6
Rate spike (1994 Calendar Year)	68.1	67.6	67.0	67.2	66.9
Crash of 1987 (Sep - Nov 1987)	57.6	58.3	59.2	60.0	60.5
Strong dollar (Jan 1981 - Sep 1982)	66.1	67.9	69.3	70.6	71.7
Stagflation (Jan - Mar 1980)	63.0	62.7	62.4	62.5	62.5
Stagflation (Jan 1973 - Sep 1974)	52.6	53.3	53.9	55.4	56.4

- Mix D protects better against most negative (and fairly short-lived) shocks.

[1] The present value of liabilities is based on actuarial assumptions. It uses the most recently available data for Funded status (66%).

Stress Testing: Impact of Market Movements (Funded Status under Stressed Conditions)[1]

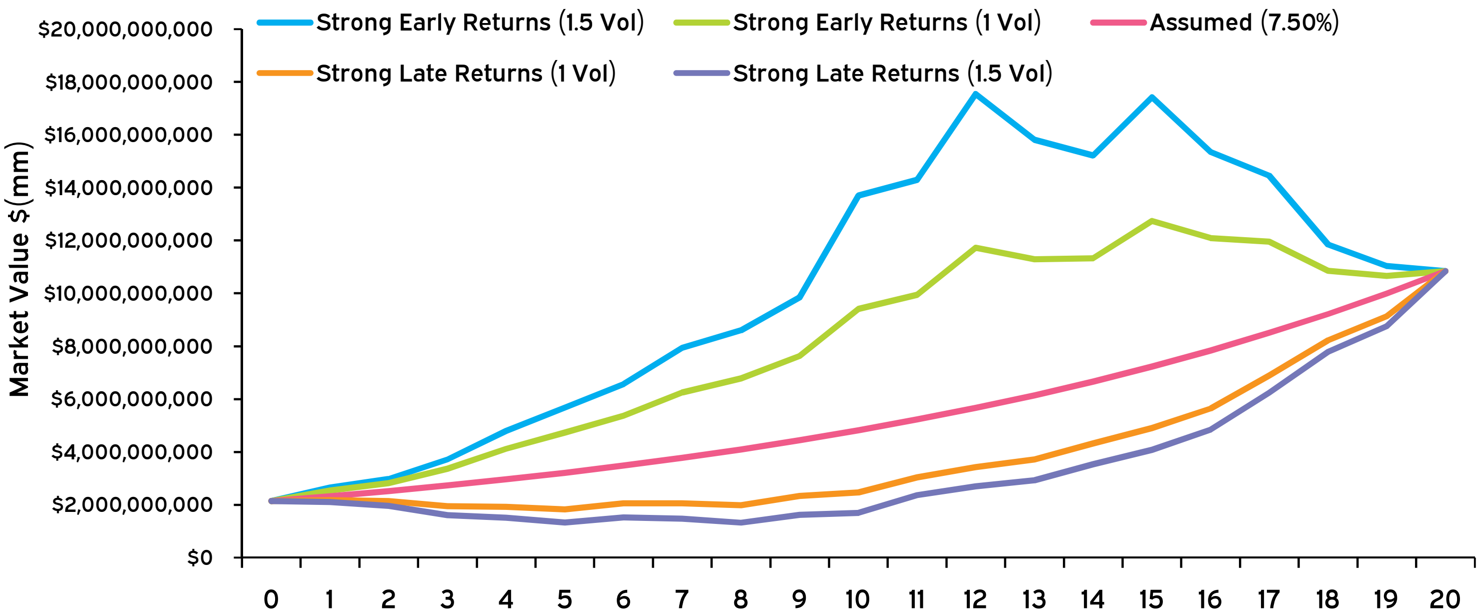
Scenarios	Mix P (%)	Mix A (%)	Mix B (%)	Mix C (%)	Mix D (%)
10-year Treasury Bond rates rise 100 bps	70.1	69.1	68.2	68.0	67.8
10-year Treasury Bond rates rise 200 bps	68.4	66.6	65.1	65.0	64.7
10-year Treasury Bond rates rise 300 bps	67.0	64.5	62.4	62.2	62.0
Baa Spreads widen by 50 bps, High Yield by 200 bps	65.2	65.6	66.1	66.2	66.3
Baa Spreads widen by 300 bps, High Yield by 1000 bps	51.0	52.4	54.0	54.7	55.5
Trade Weighted Dollar gains 10%	64.3	64.9	65.4	65.6	65.7
Trade Weighted Dollar gains 20%	63.0	63.8	64.6	64.7	64.8
US Equities decline 10%	62.1	62.6	63.0	63.3	63.6
US Equities decline 25%	55.0	56.0	57.1	57.7	58.3
US Equities decline 40%	47.0	48.8	50.9	51.7	52.7

- By shifting more assets to longer-duration bonds, the Fund reduces the impact of major market movements (e.g., bear markets) on its Funded Status.

1 Assumes that assets not directly exposed to the factor are affected nonetheless. See the Appendix for further details. The present value of liabilities is based on actuarial assumptions. It uses the most recently available data for Funded Status (66%).

Sequence of Returns – Does Not Matter with No Cash Flows (Policy Allocation)

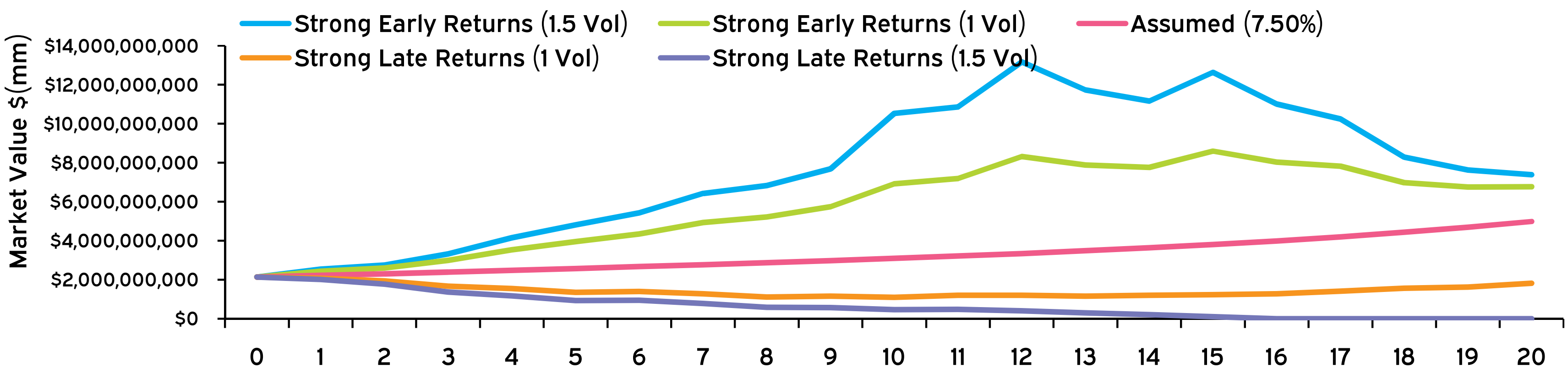
- This analysis reviews three scenarios that achieve the same twenty-year annualized return of 7.50% but that take very different paths to arrive at this destination.[1]
- The "Strong Early Returns" and "Strong Late Returns" scenarios produce the same returns but the order in which the returns are generated is reversed. The third scenario assumes 7.50% is earned every year.
- If net cash flow is $0, the ending value is the same for all three scenarios.



[1] Note: Assumes $0 cash flow over the 20-year period.

Sequence of Returns - Significant Impact with Negative Cash Flows (Mix P[1] - Policy Allocation)

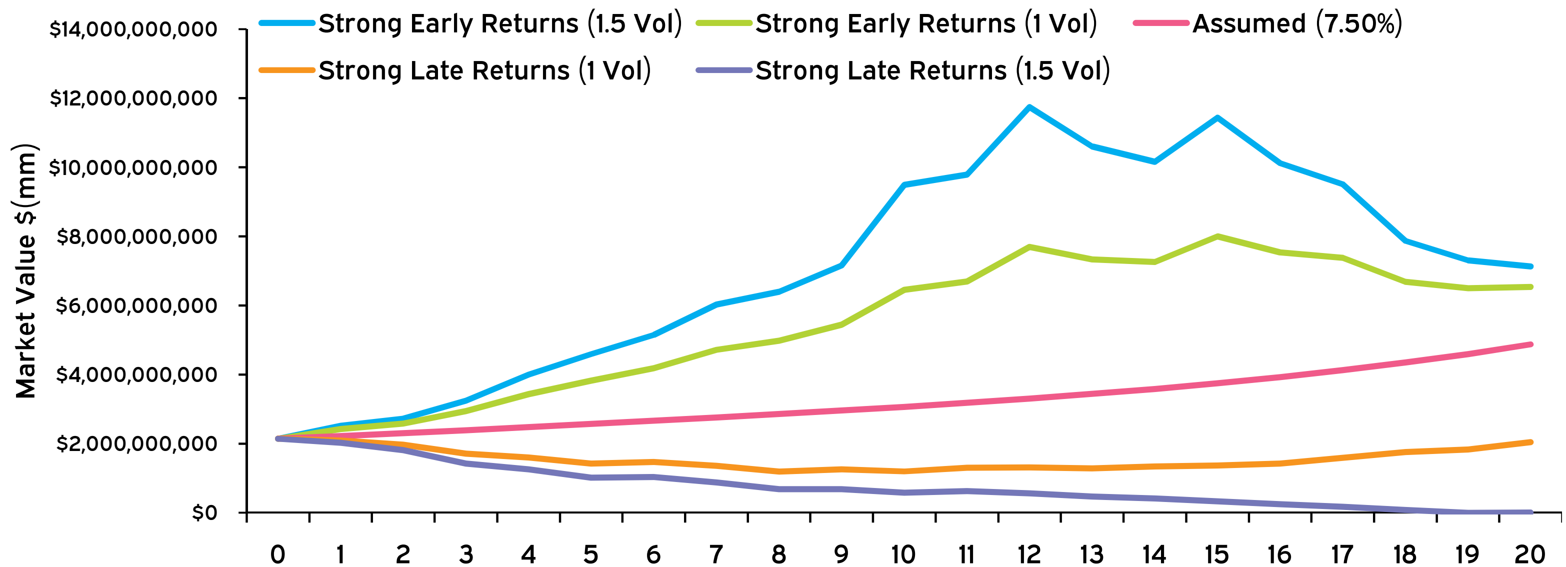
- Negative cash flows make it much harder for a Fund to recover after a market downturn; the larger the cash outflows are, the more severe the impact.
- There are possible investment scenarios where the Fund would become insolvent, absent any changes to contributions, benefits, or the investment mix of the portfolio.



	Year 20
Market Values ($mm)	
Strong Early Returns (1.5 Vol)	7,384,702,831
Strong Early Returns (1 Vol)	6,762,945,580
Assumed (7.50%)	4,983,709,696
Strong Late Returns (1 Vol)	1,814,868,789
Strong Late Returns (1.5 Vol)	0

[1] Mix P is the riskiest portfolio option of the various asset mixes included in this presentation.

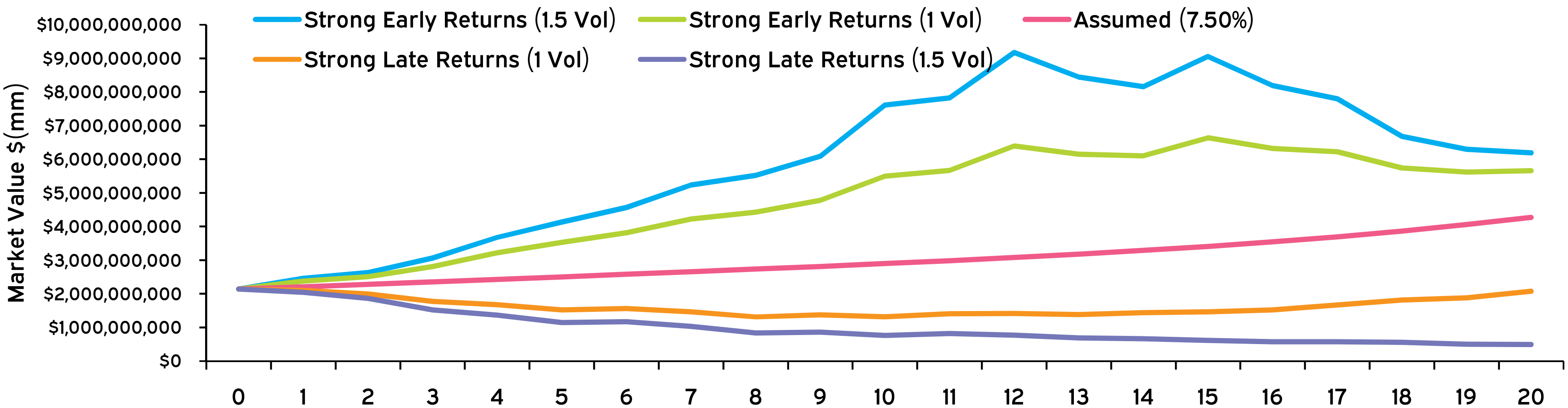
Sequence of Returns - Significant Impact with Negative Cash Flows (Mix A[1])



	Year 20
Market Values ($mm)	
Strong Early Returns (1.5 Vol)	7,127,888,230
Strong Early Returns (1 Vol)	6,532,158,524
Assumed (7.50%)	4,872,778,745
Strong Late Returns (1 Vol)	2,039,948,143
Strong Late Returns (1.5 Vol)	0

[1] Mix A is the recommended asset mix for both Staff and Meketa.

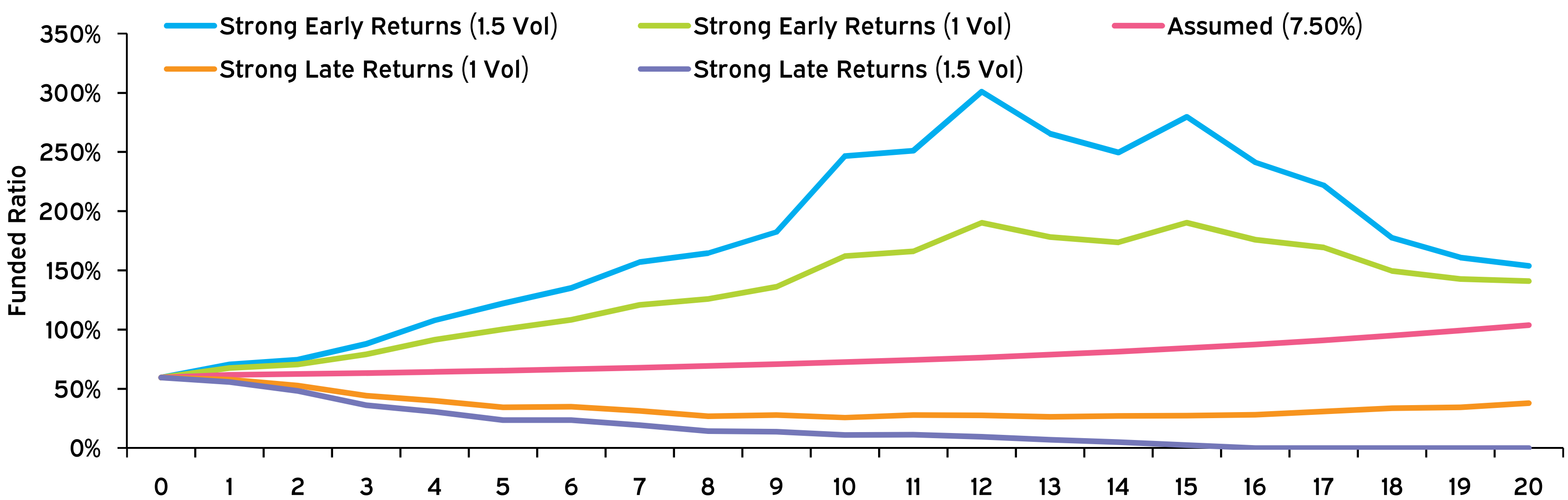
Sequence of Returns - Significant Impact with Negative Cash Flows (Mix D[1])



	Year 20
Market Values ($mm)	
Strong Early Returns (1.5 Vol)	6,186,946,650
Strong Early Returns (1 Vol)	5,662,377,327
Assumed (7.50%)	4,270,633,957
Strong Late Returns (1 Vol)	2,072,613,461
Strong Late Returns (1.5 Vol)	493,797,934

[1] Mix D is the most conservative option of the various asset mixes and it is shown for comparison versus the risker allocation in the prior slide.

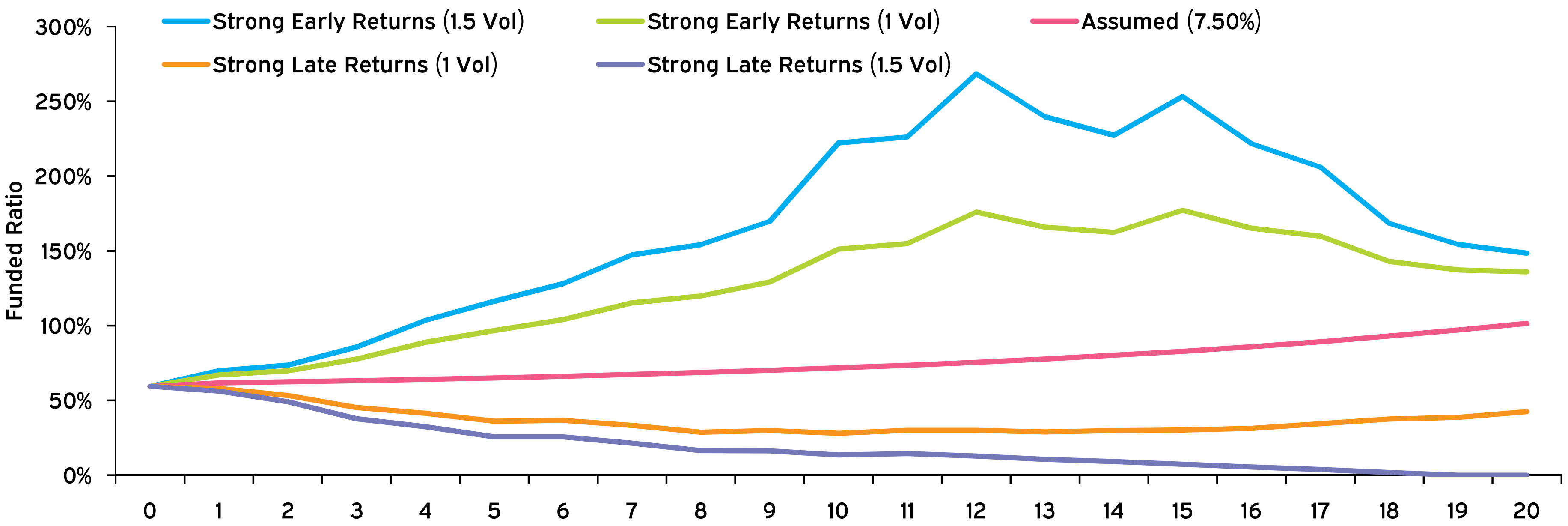
Sequence of Returns - Impact on Funded Status (Mix P - Policy Allocation)



- The ending (year 20) Funded status[1] could range from 0% to 154% for this same hypothetical scenario.

[1] Funded status figures use estimated market values (not smoothed asset values).

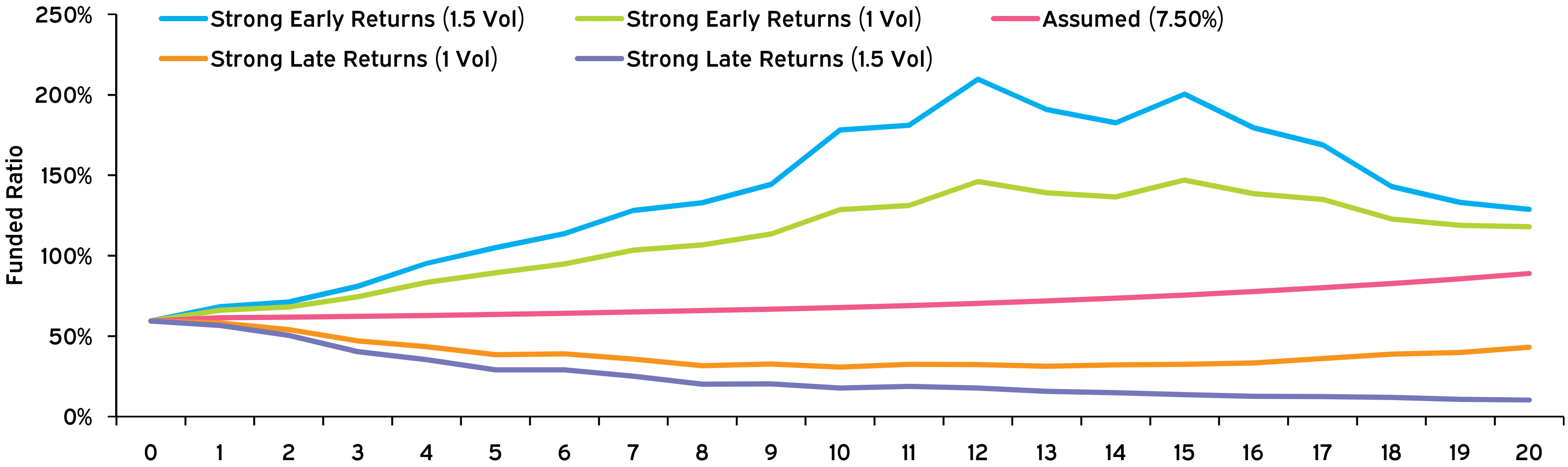
Sequence of Returns - Impact on Funded Status (Mix A)



- The ending (year 20) funded status[1] could range from 0% to 148% for this same hypothetical scenario.

[1] Funded status figures use estimated market values (not smoothed asset values).

Sequence of Returns - Impact on Funded Status (Mix D)

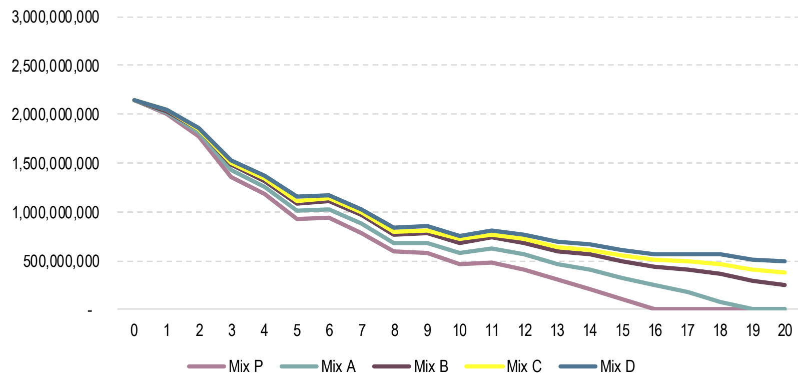


- The ending (year 20) funded status[1] could range from 10% to 129% for this same hypothetical scenario.

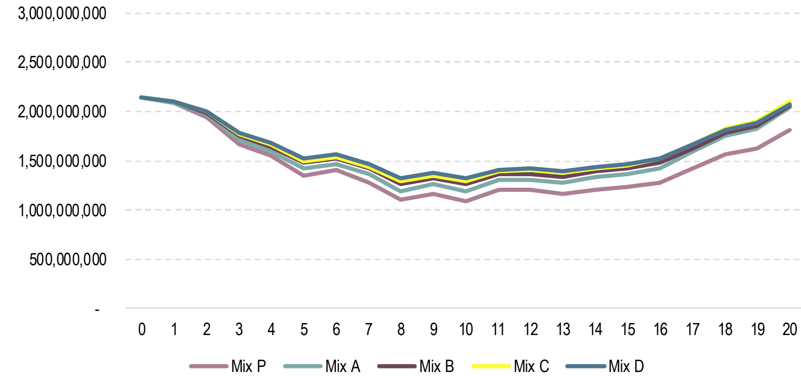
[1] Funded status figures use estimated market values (not smoothed asset values).

Sequence of Returns - Significant Impact with Negative Cash Flows (All Mixes)

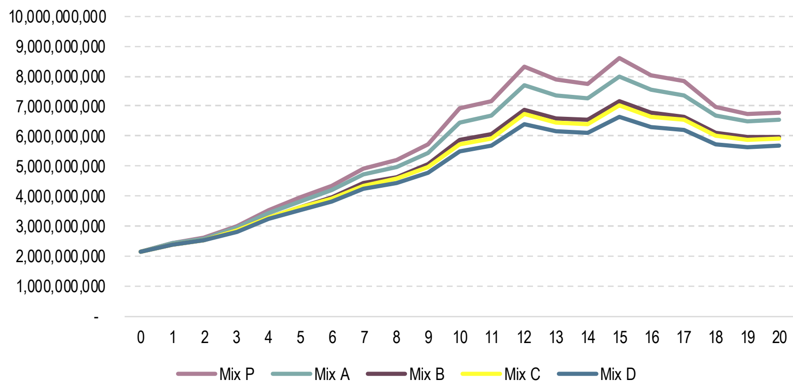
Strong Late Returns (1.5 Vol.)



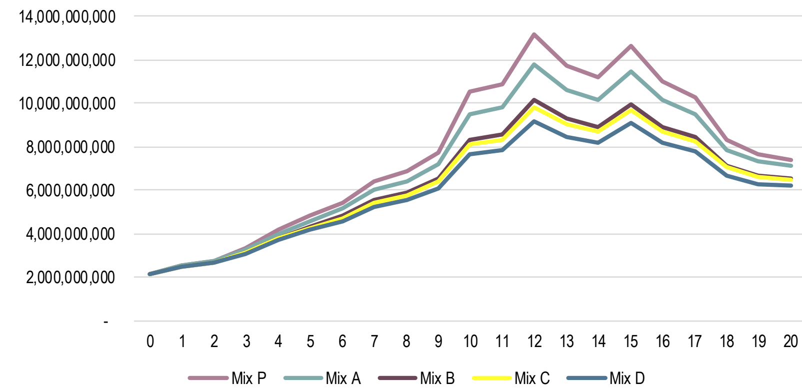
Strong Late Returns (1.0 Vol.)



Strong Early Returns (1.0 Vol.)



Strong Early Returns (1.5 Vol.)

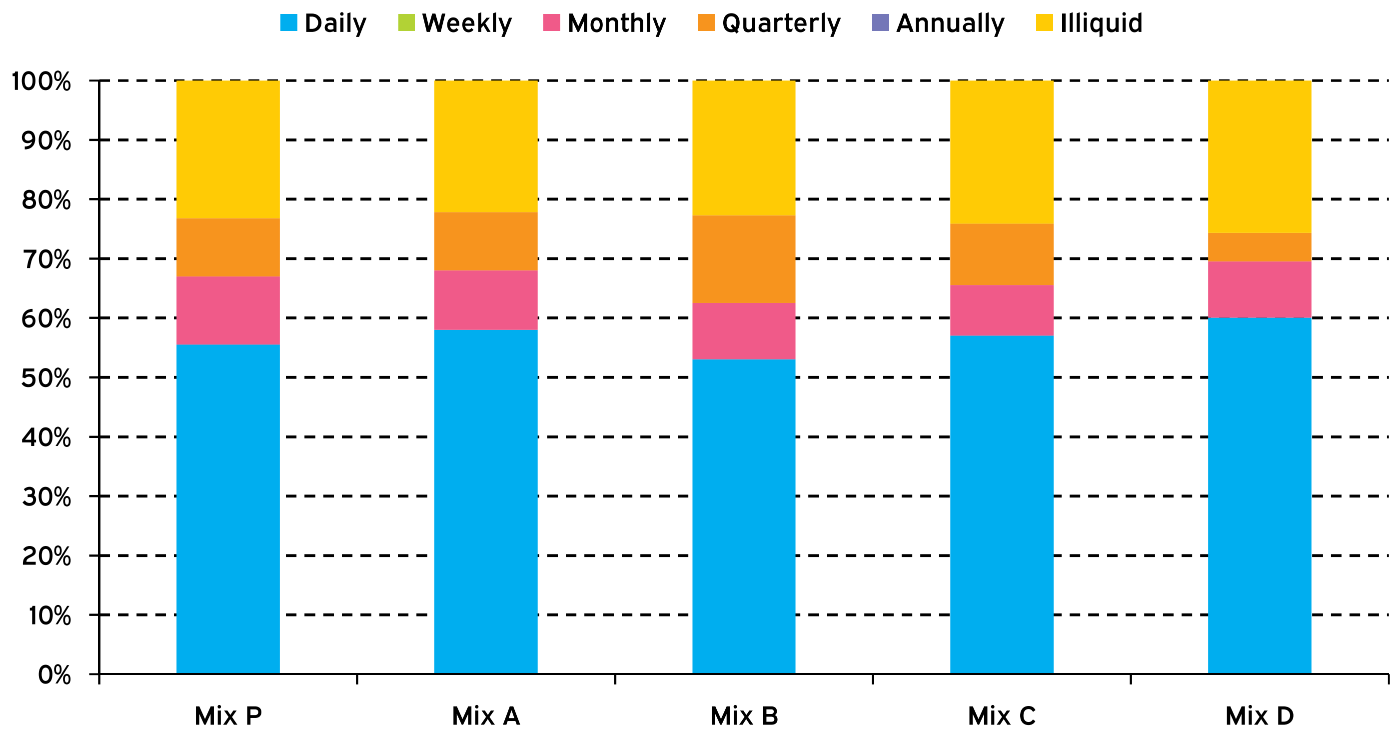


- As shown, the more aggressive portfolios perform well when strong returns occur early; however, the more conservative allocations protect the overall portfolio value when strong returns occur later in the 20-year period.

Liquidity Analysis

- Liquidity risk is a meaningful risk that is generally not captured in traditional asset allocation processes.
- The Fund must maintain adequate liquidity to satisfy benefit payments and to avoid having to sell illiquid assets at distressed prices if possible.

Liquidity Profile[1]



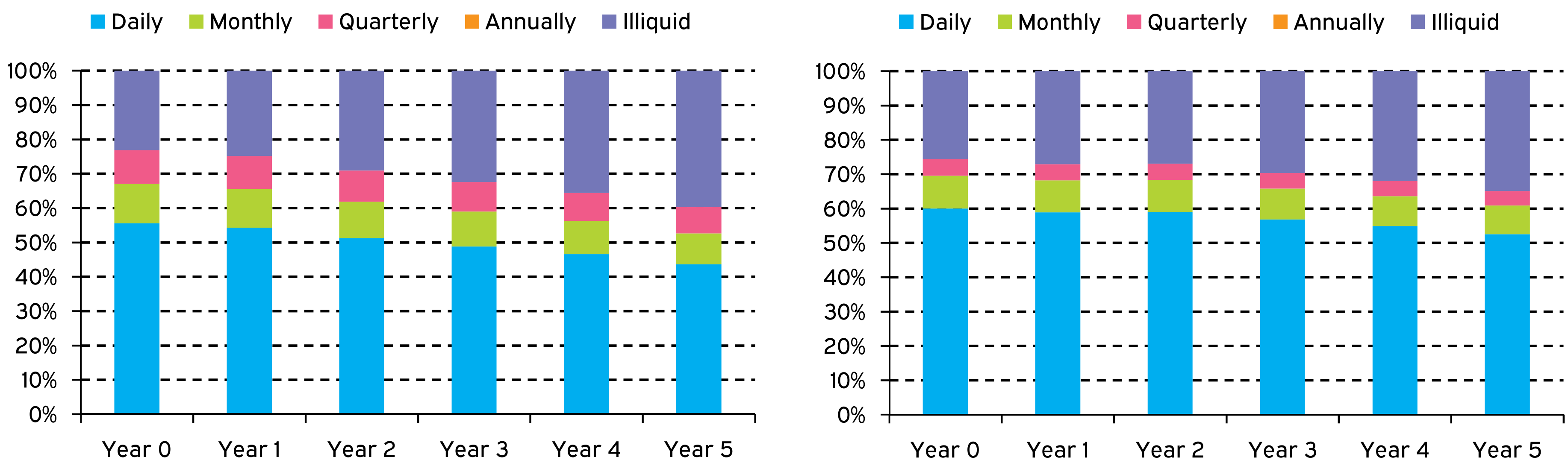
- Each policy portfolio has at least 50% allocated to daily-liquid assets.

[1] For this analysis, we assume that emerging market debt provides monthly liquidity; core real estate and core infrastructure provide quarterly liquidity; and private equity, opportunistic debt, non-core real estate, and non-core infrastructure are illiquid.

Liquidity Stress Test Introduction

- We conducted an extreme stress test to analyze the Fund's liquidity. Specifically, we evaluated whether the Fund could:
  - Continue to meet its benefit obligations and expenses,
  - While staying within its target allocation ranges,
  - And at what cost (i.e., to what extent would it be forced to sell stressed or distressed assets)?
- The scenario is designed to be extreme.
  - In Years 1-3, we use the returns produced by each asset class in 4Q07, 2008, and 1Q09, respectively. In Years 4-5, we assume flat (0%) returns for each asset class (i.e., no rebound).
  - We assume net outflows of $97.3 million in Year 1, $101.8 million in Year 2, $105.4 million in Year 3, $109.3 million in Year 4, and $114.8 million in Year 5 (based on actuary projections).
  - We assume closed-end Funds offer no liquidity in Years 1-4, and very limited liquidity in Year 5.
  - We assume open-end and hedge funds offer no liquidity in Years 1-3, and limited liquidity in Years 4-5.
  - We assume the Fund would rebalance toward its policy targets each year.
- We show the results for "Mix P" vs. "Mix D", as it compares the riskiest (Mix P) to most conservative (Mix D) asset mixes from the various portfolio allocation options.

Liquidity Stress Test: Liquidity Profile
(Mix P vs. Mix D)



- At the trough, Mix P (left) would have roughly 45% of its assets in daily liquid vehicles, whereas Mix D (right) would have just over 50% of its assets with daily liquidity.

Liquidity Stress Test: Summary

Results for Mix P (Policy Allocation)	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Ending Market Value	2,140,471,000	2,054,980,974	1,377,153,194	1,206,554,090	1,099,403,090	986,634,090
Net flows	0.0	(94,706,000)	(99,317,000)	(103,031,000)	(107,151,000)	(112,769,000)
Flows as percentage of Market Value (%)	0.0	4.4	4.8	7.5	8.9	10.3
Assets Sold in Duress	0.0	0.0	(71,886,459)	(83,284,300)	(87,618,266)	(92,212,151)
Percentage of Outflows sold in duress (%)	0.0	0.0	72	81	82	82
Percentage of Assets sold in duress (%)	0.0	0.0	3.5	6.0	7.3	8.4
Remaining liquid Market Value	1,643,881,728	1,543,162,949	975,809,284	814,906,553	707,755,553	594,986,553
Percentage of Illiquid Assets (%)	23	25	29	32	36	40

Results for Mix D	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Ending Market Value	2,140,471,000	2,081,815,885	1,633,458,398	1,452,007,815	1,344,856,815	1,232,087,815
Net flows	0.0	(94,706,000)	(99,317,000)	(103,031,000)	(107,151,000)	(112,769,000)
Flows as percentage of Market Value (%)	0.0	4.4	4.8	6.3	7.4	8.4
Assets Sold in Duress	0.0	0.0	(38,780,196)	(55,670,468)	(58,839,311)	(61,924,296)
Percentage of Outflows sold in duress (%)	0.0	0.0	39	54	55	55
Percentage of Assets sold in duress (%)	0.0	0.0	2.0	3.4	4.1	4.6
Remaining liquid Market Value	1,590,369,953	1,516,942,921	1,192,790,632	1,021,368,130	914,217,130	801,448,130
Percentage of Illiquid Assets (%)	26	27	27	30	32	35

- As shown, both options would maintain sufficient liquidity to pay benefits and other expenses.
- However, the analysis confirms the more conservative option (Mix D) provides better protection in extreme down markets and ultimately results in less assets sold in duress to satisfy the various obligations for the Fund.

Appendices

Setting Capital Market Expectations

Overview of Annual Asset Study Methodology

- In order to construct an optimal portfolio from a risk-return standpoint, conventional financial wisdom dictates that one develop return, volatility, and correlation expectations over the relevant investing horizon.
- Given the uncertainty surrounding financial and economic forecasts, expectations development is challenging, and any of several methodological approaches may meaningfully contribute to this complex task.
- Meketa Investment Group's process relies on both quantitative and qualitative methodologies.
- First, we employ a large set of quantitative models to arrive at a set of baseline expected ten-year annualized returns for major asset classes.
- These models attempt to forecast a gross "beta" return for each *public market* asset class; that is, we specifically do not model "alpha," nor do we apply an estimate for management fees or other operational expenses.[1]
- Our models are fundamentally based (based on some theoretically defined return relationship with current observable factors).
- Some of these models are more predictive than others. For this reason, we next overlay a qualitative analysis, which takes the form of a data-driven deliberation among the research team and our Investment Policy Committee.

[1] Our expectations are net of fees where passive management is not available (e.g., private markets and hedge funds).

Overview of Annual Asset Study Methodology (continued)

- Return assumptions for hard-to-predict asset classes as well as those with limited data will be influenced more heavily by our qualitative analysis.
- As a result of this process, we form our ten-year annualized return expectations, which serve as the primary foundation of our longer-term, twenty-year expectations.
- We form our twenty-year annualized return expectations by systematically considering historical returns on an asset class by asset class level. Specifically, we construct a weighted average of our ten-year expectations and average historical returns in each asset class.
- The weights are determined by a qualitative assessment of the value of the historical data. Generally, if we have little confidence that the historical average return is representative of what an investor can expect,[1] we will weight our ten-year forecast more heavily. Therefore, the weight on our ten-year forecasts ranges from 0.5 to 0.9.
- We develop our twenty-year volatility and correlation expectations differently. We rely primarily on historical averages, with an emphasis given to the experience of the trailing ten years.
- Qualitative adjustments, when applied, usually serve to increase the correlations and volatility over and above the historical estimates (e.g., using the higher correlations usually observed during a volatile market).

[1] For example, we have less confidence in historical data that do not capture many possible market scenarios or that are overly polluted by survivorship bias.

Overview of Annual Asset Study Methodology (continued)

- We also make adjustments to the volatility based on the historical skewness of each asset class (e.g., increasing the volatility for an asset class that has been negatively skewed).
- In the case of private markets and other illiquid asset classes where historical volatility and correlations have been artificially dampened, we seek public market equivalents on which to base our estimates before applying any qualitative adjustments.
- These volatility and correlation expectations are then combined with our twenty-year return expectations to assist us in subsequent asset allocation work, including mean-variance optimization and scenario analyses.

Each year, we review and set our capital market expectations via our Asset Study.

- This involves setting long-term expectations for a variety of asset classes for:
  - Returns
  - Standard Deviation
  - Correlations
- Our process relies on both quantitative and qualitative methodologies.

Asset Class Definitions

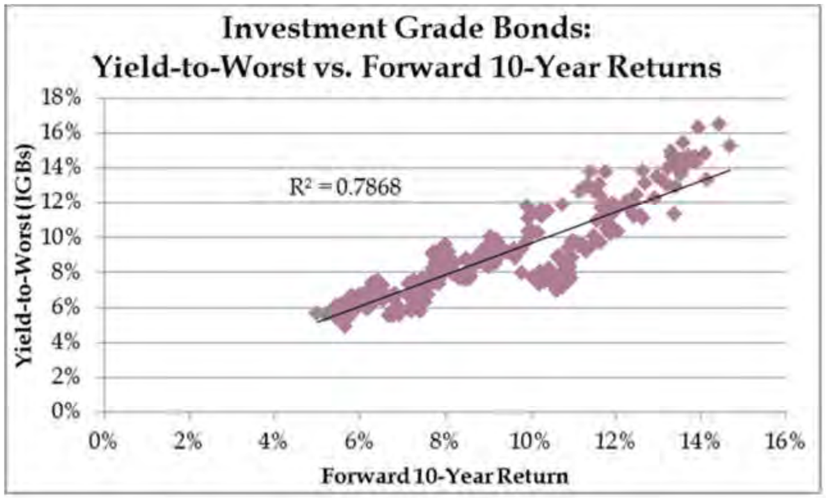
- Meketa Investment Group utilizes an approach that identifies asset classes that are appropriate for long-term allocation of Funds, and that also are investable.
- Three considerations influence this process: unique return behavior, an observable historical track record, and a robust market.
- We then make forecasts for each unique asset class.

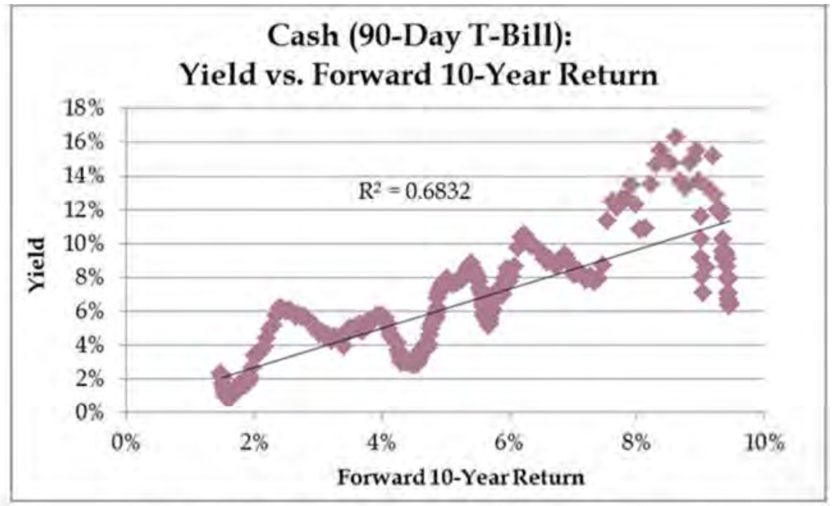
Our Process

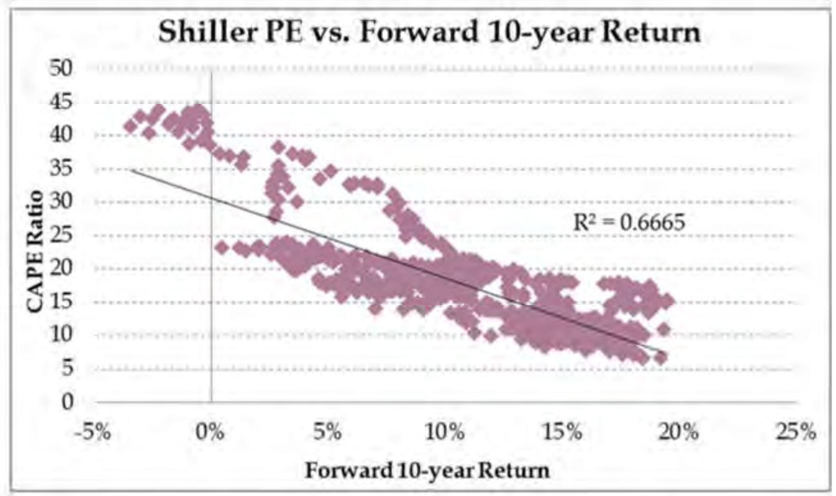
- The first step is to build our 10-year forecasts.
  - Our Fundamental models are primarily valuation based.
- Each model falls in one of eight groups, based on the most important factors that drive their returns:

Asset Class	Major Factors
Equities	Dividend Yield, GDP Growth, Valuation
Bonds	Yield to Worst, Default Rate, Recovery Rate
Commodities	Collateral Yield, Roll Yield, Inflation
Infrastructure	Public IS Valuation, Income, Growth
Natural Resources	Price per Acre, Income, Public Market Valuation
Real Estate	Cap Rate, Yield, Growth
Private Equity	EBITDA Multiple, Debt, Multiple, Public VC Valuation
Hedge Funds and Other	Leverage, Alternative Betas

Some models are naturally more predictive than others.







The next step is to move from ten-year to our twenty-year forecasts.

- We do this by combining our ten-year forecasts with the historical returns for each asset class.
  - How much we apply to each depends on our confidence in them (both the model and the data).
- The ten-year model weighting varies between 50% and 100%.
- It only hits 100% when there is a lack of reliable historical data.
- We then infer a forecast of ten-year returns in ten years (i.e., years 11-20).
  - This allows us to test our assumptions with finance theory.
  - Essentially, we assume mean-reversion over the first ten years, then consistency with CAPM thereafter.

The final step is to make any qualitative adjustments.

- The Investment Committee reviews the output and may make adjustments due to:
  - Quality of the underlying data.
  - Confidence in the model.
  - External inputs (e.g., perceived risks).

Capital Market Assumption Development Example

Equities

- We use a Fundamental model for equities that combines income and capital appreciation.

$$E(R) = \text{Dividend Yield} + \text{Expected Earnings Growth} + \text{Multiple Effect} + \text{Currency Effect}$$

- Meketa Investment Group evaluates historical data statistically to develop expectations for dividend yield, earnings growth, the multiple effect, and currency effect.
- Our models assume that there is a reversion to the mean over long time periods.

Bonds

- The short version for investment grade bond models is:

$$E(R) = \text{Current YTW (yield to worst)}$$

- Our models assume that there is a reversion to the mean for spreads (though not yields).
- For TIPS, we add the real yield of the TIPS index to the breakeven inflation rate.
- As with equities, we make currency adjustments when necessary for foreign bonds.
- For bonds with credit risk, Meketa Investment Group estimates default rates and loss rates, in order to project an expected return:

$$E(R) = YTW - (\text{Annual Default Rate} * \text{Loss Rate})$$

The other inputs: standard deviation and correlation.

- Standard Deviation:
  - We review the trailing ten-year standard deviation, as well as the trailing ten-year skewness.
  - Historical standard deviation serves as the base for our assumptions.
  - We increase or decrease the assumptions based on the size and sign of the historical skewness.

Asset Class	Standard Deviation	Skewness	Assumption
Bank Loans	6.6%	-2.3	9.0%

  - We consider performance during the GFC to see if further changes are warranted (e.g., Hedge Funds).
  - We also adjust for private market asset classes with "smoothed" return streams.
- Correlation:
  - We use trailing ten-year correlations as our guide.
  - Again, we make adjustments for performance during the GFC and "smoothed" return streams.
- Most of our adjustments are conservative in nature (i.e., they increase the standard deviation and correlation).

Notes and Disclaimers

1 The returns shown in the Policy Options and Risk Analysis sections rely on estimates of expected return, standard deviation, and correlation developed by Meketa Investment Group. To the extent that actual return patterns to the asset classes differ from our expectations, the results in the table will be incorrect. However, our inputs represent our best unbiased estimates of these simple parameters.

2 The returns shown in the Policy Options and Risk Analysis sections use a lognormal distribution, which may or may not be an accurate representation of each asset classes' future return distribution. To the extent that it is not accurate in whole or in part, the probabilities listed in the table will be incorrect. As an example, if some asset classes' actual distributions are even more right-skewed than the lognormal distribution (i.e., more frequent low returns and less frequent high returns), then the probability of the portfolio hitting a given annual return will be lower than that stated in the table.

3 The standard deviation bars in the chart in the Risk Analysis section do not indicate the likelihood of a 1, 2, or 3 standard deviation event—they simply indicate the return we expect if such an event occurs. Since the likelihood of such an event is the same across allocations regardless of the underlying distribution, a relative comparison across policy choices remains valid.

Scenario Return Inputs

Asset Class	Benchmark Used
Investment Grade Bonds	Barclays Aggregate
TIPS	Barclays U.S. TIPS
Intermediate-term Government Bonds	Barclays Treasury Intermediate
Long-term Government Bonds	Barclays Long U.S. Treasury
EM Bonds (local)	JPM GBI-EM Global Diversified Composite
Bank Loans	CSFB Leveraged Loan
High Yield Bonds	Barclays High Yield
Direct Lending - First Lien	Cliffwater Direct Lending Index
Direct Lending - Second Lien	Cliffwater Direct Lending Index
Mezzanine Debt	Cambridge Associates Mezzanine
Distressed Debt	Cambridge Associates Distressed Debt Index
Core Real Estate	NCREIF Property
Value-Added RE	NCREIF Townsend Value Added
Opportunistic RE	NCREIF Townsend Opportunistic
REITs	NAREIT Equity
Infrastructure (private)	S&P Global Infrastructure
Natural Resources (private)	S&P Global Natural Resources
Timber	NCREIF Timberland
Commodities	Bloomberg Commodity Index
US Equity	Russell 3000
Public Foreign Equity (Developed)	MSCI EAFE
Public Foreign Equity (Emerging)	MSCI Emerging Markets
Private Equity	Cambridge Associates Private Equity Composite
Long-short Equity	HFRI Equity Hedge
Global Macro	HFRI Macro
Hedge Funds	HFRI Plan Weighted Composite
Private Debt	Weighted average of Distressed Debt, Mezzanine Debt and Direct Lending (2nd Lien)

Negative Historical Scenario Returns - Sample Inputs

	Taper Tantrum (May - Aug 2013)	Global Financial Crisis (Oct 2007 - Mar 2009)	2008 Calendar Year	Popping of the TMT Bubble (Apr 2000 - Sep 2002)	LTCM (Jul - Aug 1998)	Asian Financial Crisis (Aug 1997 - Jan 1998)	Rate spike (1994 Calendar Year)	Crash of 1987 (Sep - Nov 1987)	Strong dollar (Jan 1981 - Sep 1982)	Stagflation (Jan - Mar 1980)	Stagflation (Jan 1973 - Sep 1974)
Cash Equivalents	0.0	3.1	1.7	9.9	0.8	2.4	3.9	1.4	24.4	2.9	13.5
Short-term Investment Grade Bonds	-0.1	8.7	5.0	21.9	1.6	3.5	0.5	2.3	29.9	-2.6	4.3
Investment Grade Bonds	-3.7	9.3	5.2	28.6	1.8	4.9	-2.9	2.2	29.9	-8.7	7.9
Long-term Corporate Bonds	-9.3	-9.4	-5.2	26.9	-0.6	5.4	-5.8	1.5	29.6	-14.1	-12.0
Long-term Government Bonds	-11.6	24.5	24.0	35.5	4.1	8.6	-7.6	2.6	28.4	-13.6	-1.8
TIPS	-8.5	9.6	-2.4	37.4	0.7	2.0	-7.5	2.8	15.6	-7.8	4.3
Global ILBs	-7.4	-1.5	-7.7	39.7	0.7	2.2	-7.9	2.9	16.5	-8.3	4.5
High Yield Bonds	-2.0	-20.7	-26.2	-6.3	-5.0	5.6	-1.0	-3.6	6.9	-2.3	-15.5
Bank Loans	0.8	-22.5	-28.8	6.3	0.7	3.3	10.3	-1.7	3.3	-1.1	-7.5
Direct Lending - First Lien	3.4	-2.1	-5.8	-0.7	-0.7	1.7	0.7	-0.2	2.0	-0.6	-4.4
Direct Lending - Second Lien	4.6	-2.9	-7.8	-1.0	-0.9	2.3	1.0	-0.3	2.6	-0.8	-5.9
Foreign Bonds	-3.2	5.3	4.4	8.5	3.5	3.3	5.3	-0.3	34.8	-6.5	-1.4
Mezzanine Debt	4.6	-25.5	-25.9	-2.0	-2.6	10.3	7.6	0.4	3.2	-1.0	-7.2
Distressed Debt	4.6	-25.5	-25.9	-2.0	-2.6	10.3	7.6	0.4	3.2	-1.0	-7.2
Emerging Market Bonds (major)	-11.5	-2.7	-9.7	6.3	-28.2	-1.8	-18.9	-9.2	-1.6	-2.6	-20.2
Emerging Market Bonds (local)	-14.3	-2.3	-5.2	7.2	-34.1	-2.4	-22.8	-11.0	-2.0	-3.2	-23.9
US Equity	3.0	-43.8	-37.0	-43.8	-15.4	3.6	1.3	-29.5	-2.3	-4.1	-42.6
Developed Market Equity (non-US)	-2.2	-49.6	-43.4	-46.7	-11.5	-5.8	7.8	-14.5	-18.0	-7.0	-36.3
Emerging Market Equity	-9.4	-45.8	-53.3	-43.9	-26.7	-31.8	-7.3	-25.3	-12.1	-6.6	-44.2
Global Equity	-0.7	-46.6	-42.2	-46.7	-14.0	-3.2	5.0	-21.5	-11.2	-5.8	-39.3
Private Equity/Debt	5.7	-25.6	-27.2	-23.4	-3.2	15.7	13.2	0.6	-2.7	-2.5	-18.2
Private Equity	5.8	-25.8	-27.6	-26.0	-3.3	16.7	14.2	0.6	-3.9	-2.7	-20.1
Private Debt Composite	4.6	-21.3	-22.5	-1.7	-2.3	8.7	6.2	0.2	3.0	-1.0	-6.9
REITs	-13.3	-61.3	-37.7	45.4	-15.3	9.8	-3.5	-19.5	2.5	-3.6	-33.9
Core Private Real Estate	3.6	-7.3	-6.5	23.6	2.3	8.5	6.4	0.7	23.9	5.5	-4.4
Value-Added Real Estate	3.8	-18.0	-13.4	177.0	1.8	11.4	11.2	1.2	44.2	9.6	-7.6
Opportunistic Real Estate	4.0	-24.7	-21.8	21.4	1.5	20.0	18.8	0.9	30.7	7.0	-5.6
Natural Resources (Private)	2.5	-26.2	-34.1	-3.9	-16.9	-7.8	12.6	-10.8	-9.4	-9.2	19.3
Timberland	1.3	25.4	9.5	-1.5	0.5	12.0	15.4	3.8	23.6	-7.4	5.5
Farmland	3.3	30.2	15.8	11.4	0.8	3.9	9.4	2.2	13.3	-4.2	3.1
Commodities (naïve)	-2.4	-31.8	-35.6	18.5	-12.0	-6.2	16.6	1.8	-16.0	-9.6	139.5
Core Infrastructure	3.7	0.2	-0.6	24.8	-0.3	6.1	-11.5	0.0	-0.2	-0.1	-0.5
Hedge Funds	-0.4	-15.6	-19.0	-2.1	-9.4	1.7	4.1	-7.8	-3.8	-1.9	-15.7
Long-Short	1.0	-24.0	-26.6	-8.8	-8.3	7.9	2.6	-10.0	-4.9	-2.5	-19.8
Hedge Fund of Funds	-0.5	-17.8	-21.4	-0.4	-7.7	0.5	-3.5	-5.7	-2.7	-1.4	-11.5

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Positive Historical Scenario Returns - Sample Inputs

	Global Financial Crisis Recovery (Mar 2009 - Nov 2009)	Best of Great Moderation (Apr 2003 - Feb 2004)	Peak of the TMT Bubble (Oct 1998 - Mar 2000)	Pre-Recession (Jun - Oct 1990)	Plummeting Dollar (Jan 1986 - Aug 1987)	Volcker Recovery (Aug 1982 - Apr 1983)	Bretton Wood Recovery (Oct 1974 - Jun 1975)
Cash Equivalents	0.1	0.9	6.7	3.3	10.0	6.0	4.5
Short-term Investment Grade Bonds	4.3	2.8	5.3	4.5	13.2	15.4	5.0
Investment Grade Bonds	9.0	4.6	1.7	3.8	14.4	26.4	9.2
Long-term Corporate Bonds	28.8	11.3	-3.1	1.5	15.9	42.1	17.5
Long-term Government Bonds	2.0	4.9	-2.3	2.4	15.4	33.6	11.8
TIPS	14.3	9.1	6.3	2.2	10.2	11.5	4.1
Global ILBs	24.7	9.6	6.6	2.3	10.8	12.1	4.3
High Yield Bonds	49.1	21.8	2.1	-12.9	24.9	23.3	19.3
Bank Loans	32.9	10.1	6.1	-6.1	11.1	10.4	8.7
Direct Lending - First Lien	10.6	5.7	1.1	-1.9	5.8	5.0	5.1
Direct Lending - Second Lien	14.3	7.7	1.4	-2.5	7.8	6.7	6.8
Foreign Bonds	23.4	15.2	-7.0	15.8	44.5	32.3	17.9
Mezzanine Debt	30.8	23.7	26.8	0.7	5.4	8.2	8.3
Distressed Debt	30.8	23.7	26.8	0.7	5.4	8.2	8.3
Emerging Market Bonds (major)	27.0	20.6	49.0	-8.7	38.9	21.6	21.0
Emerging Market Bonds (local)	37.5	25.2	61.0	-10.5	48.4	26.5	25.7
US Equity	51.6	37.2	50.2	-14.7	64.8	59.3	55.1
Developed Market Equity (non-US)	60.5	56.7	53.0	-9.7	140.0	29.6	34.6
Emerging Market Equity	94.6	79.4	101.3	-15.9	126.5	52.1	53.4
Global Equity	59.9	46.2	54.8	-11.1	108.4	43.0	44.6
Private Equity/Debt	15.4	23.3	84.6	4.6	19.1	13.7	18.4
Private Equity	13.0	23.7	92.1	5.5	21.7	14.8	20.2
Private Debt Composite	27.5	20.4	21.4	0.1	5.9	7.9	8.0
REITs	82.5	44.6	-5.2	-15.6	51.8	47.4	42.5
Core Private Real Estate	-16.4	9.0	18.1	1.9	13.1	6.8	4.5
Value-Added Real Estate	-32.7	11.4	19.6	3.2	23.6	11.9	7.8
Opportunistic Real Estate	-19.0	13.6	27.9	0.4	16.7	8.6	5.7
Natural Resources (Private)	57.8	36.1	22.2	6.0	78.3	30.2	14.8
Timberland	-3.3	8.5	20.5	5.7	28.6	20.0	8.7
Farmland	5.4	9.6	10.4	3.3	15.9	11.3	5.0
Commodities (naïve)	28.9	30.6	17.1	43.5	27.6	6.2	-20.2
Core Infrastructure	2.1	8.5	33.0	0.0	1.4	0.6	0.6
Hedge Funds	20.1	22.4	52.8	-1.9	30.6	13.8	14.5
Long-Short	25.9	25.3	81.4	5.1	40.8	18.0	18.9
Hedge Fund of Funds	10.3	13.3	36.8	11.9	21.3	9.7	10.3

‘Anti’ Stress Test Return Assumptions - Sample Inputs[1]

	10-year Treasury Bond rates drop 100 bps	10-year Treasury Bond rates drop 200 bps	Baa Spreads narrow by 30bps, High Yield by 100 bps	Baa Spreads narrow by 100bps, High Yield by 300 bps	Trade Weighted Dollar drops 10%	Trade Weighted Dollar drops 20%	U.S. Equities rise 10%	U.S. Equities rise 30%
Cash Equivalents	1.4	1.6	0.3	0.2	1.6	3.3	1.6	2.4
Short-term Investment Grade Bonds	3.8	5.7	0.9	2.4	2.1	3.5	1.4	2.7
Investment Grade Bonds	8.8	14.8	2.2	4.6	3.1	7.6	2.0	4.5
Long-term Corporate Bonds	18.5	32.4	6.0	15.8	6.0	12.3	3.5	8.0
Long-term Government Bonds	20.4	38.0	2.4	0.1	4.0	16.2	2.9	6.9
TIPS	8.1	13.9	2.5	6.6	4.3	5.3	1.9	3.4
Global ILBs	3.0	4.2	3.6	8.1	6.2	5.5	2.3	4.7
High Yield Bonds	7.0	11.6	8.2	26.8	5.7	6.3	5.6	12.6
Bank Loans	2.8	2.2	4.7	17.1	2.6	1.1	3.1	7.0
Direct Lending - First Lien	1.9	1.2	6.6	8.1	1.0	6.1	2.4	4.1
Direct Lending - Second Lien	2.4	2.1	8.9	10.9	1.5	9.1	3.6	6.2
Foreign Bonds	8.6	16.5	3.5	8.5	10.7	15.5	3.0	7.7
Mezzanine Debt	4.4	5.4	9.1	17.7	5.0	10.6	6.5	8.9
Distressed Debt	4.3	5.7	9.2	18.1	5.3	12.5	6.9	10.1
Emerging Market Bonds (major)	6.2	10.3	7.1	17.0	6.9	13.2	5.8	12.3
Emerging Market Bonds (local)	7.3	10.0	6.7	18.9	9.6	16.6	6.9	15.6
US Equity	6.7	20.1	11.1	17.5	6.1	22.5	10.0	30.0
Developed Market Equity (non-US)	1.5	19.6	11.3	19.3	14.8	35.0	7.5	19.5
Emerging Market Equity	3.8	19.9	11.9	36.6	17.6	38.5	11.7	28.4
Global Equity	4.3	19.6	11.1	21.2	11.1	29.5	9.5	26.0
Private Equity/Debt	5.5	9.5	10.0	11.9	6.6	18.4	9.7	16.6
Private Equity	5.8	10.7	10.2	11.4	6.7	19.4	10.2	18.4
Private Debt Composite	3.8	4.7	8.9	15.8	4.1	10.7	5.7	8.5
REITs	6.9	18.3	12.1	27.3	7.2	24.5	11.6	28.6
Core Private Real Estate	4.0	6.0	4.8	4.2	2.5	8.5	3.1	3.4
Value-Added Real Estate	6.3	11.9	4.7	3.4	3.1	14.9	5.1	6.8
Opportunistic Real Estate	5.4	11.1	4.1	3.8	1.7	15.6	4.4	5.6
Natural Resources (Private)	2.7	15.5	10.8	19.7	13.1	19.3	9.5	19.3
Timberland	6.6	13.3	4.1	3.3	4.5	14.4	5.5	5.9
Farmland	4.5	7.6	7.4	6.6	4.0	11.5	4.8	5.2
Commodities (naïve)	0.2	1.5	3.7	9.4	10.2	2.6	3.7	4.7
Core Infrastructure	3.5	2.4	6.7	4.3	4.0	6.5	2.4	3.8
Hedge Funds	6.6	9.3	5.7	11.7	5.0	8.3	6.0	11.0
Long-Short	6.6	10.4	6.4	12.6	6.3	13.2	7.1	14.0
Hedge Fund of Funds	5.3	7.9	4.4	10.1	3.7	6.9	4.7	9.5

[1] Assumptions are based on performance for each asset class during historical periods that resembled these situations.

Stress Test Return Assumptions - Sample Inputs[1]

	10-year Treasury Bond rates rise 100 bps	10-year Treasury Bond rates rise 200 bps	10-year Treasury Bond rates rise 300 bps	Baa Spreads widen by 50 bps, High Yield by 200 bps	Baa Spreads widen by 300 bps, High Yield by 1000 bps	Trade Weighted Dollar gains 10%	Trade Weighted Dollar gains 20%	U.S. Equities decline 10%	U.S. Equities decline 25%	U.S. Equities decline 40%
Cash Equivalents	1.0	0.7	0.5	2.2	1.0	4.3	0.6	2.0	1.6	0.1
Short-term Investment Grade Bonds	0.0	-1.9	-3.9	2.7	2.0	4.2	1.0	1.6	1.4	0.6
Investment Grade Bonds	-3.1	-9.1	-15.1	3.6	-0.5	4.9	3.2	2.2	1.3	0.3
Long-term Corporate Bonds	-9.1	-22.8	-36.5	1.9	-12.1	3.6	3.8	0.3	-6.2	-12.9
Long-term Government Bonds	-14.4	-31.7	-48.9	6.4	7.8	7.0	12.5	5.0	6.4	12.0
TIPS	-3.3	-9.0	-14.7	2.6	-1.5	1.2	-1.7	2.0	-0.5	-8.8
Global ILBs	-1.5	-5.3	-12.2	2.0	-11.3	-0.2	-6.0	1.9	-3.0	-15.1
High Yield Bonds	1.8	-2.6	-5.2	-2.2	-22.9	-1.1	-4.0	-3.7	-12.2	-20.7
Bank Loans	3.8	3.4	3.1	-1.8	-19.3	-1.2	-1.4	-2.5	-8.7	-14.8
Direct Lending - First Lien	3.1	2.7	2.7	-0.4	-7.8	-0.7	2.2	-2.5	-5.4	-5.0
Direct Lending - Second Lien	4.1	3.4	3.7	-0.3	-10.8	-0.6	2.9	-3.2	-7.4	-7.0
Foreign Bonds	-7.0	-14.8	-22.6	4.3	-2.8	-6.3	-13.5	1.4	-3.0	-8.6
Mezzanine Debt	5.7	4.2	3.1	-0.9	-20.1	-1.6	-2.9	-4.2	-12.5	-17.7
Distressed Debt	5.6	4.2	4.3	-1.2	-22.1	-2.2	-4.4	-4.9	-14.3	-19.5
Emerging Market Bonds (major)	1.1	-2.7	-3.3	0.6	-13.7	1.5	-4.7	-2.7	-10.1	-16.5
Emerging Market Bonds (local)	-0.2	-3.1	-3.5	0.0	-13.0	-6.4	-16.7	-3.0	-12.2	-22.1
US Equity	7.7	4.4	5.9	-1.6	-29.5	-0.7	2.0	-10.0	-25.0	-40.0
Developed Market Equity (non-US)	8.0	6.7	1.9	-3.4	-34.1	-8.9	-9.5	-9.1	-23.5	-42.8
Emerging Market Equity	8.5	9.0	4.6	-5.3	-41.2	-10.1	-17.5	-11.5	-30.1	-49.0
Global Equity	7.7	6.0	4.3	-3.0	-32.8	-5.3	-6.0	-9.9	-25.4	-42.6
Private Equity/Debt	8.1	4.2	0.7	0.9	-22.6	-1.9	-3.1	-7.6	-18.1	-22.2
Private Equity	8.8	4.3	0.2	1.3	-22.9	-1.7	-3.1	-8.2	-18.9	-23.0
Private Debt Composite	5.1	3.9	3.7	-0.9	-18.1	-1.7	-1.8	-4.2	-11.5	-15.2
REITs	4.3	1.7	3.8	-4.4	-38.5	-0.7	4.3	-8.2	-28.9	-55.8
Core Private Real Estate	5.4	6.1	7.5	2.8	-7.2	4.6	7.8	0.2	-4.3	-14.0
Value-Added Real Estate	6.7	9.7	11.3	5.9	-13.4	7.5	10.8	0.2	-6.8	-22.2
Opportunistic Real Estate	6.4	9.4	9.9	3.8	-20.6	2.4	16.6	-1.3	-9.8	-24.9
Natural Resources (Private)	14.4	9.2	3.3	-1.9	-23.4	-5.3	-18.5	-4.8	-16.5	-31.0
Timberland	5.1	4.1	-0.8	5.1	6.6	2.8	9.4	1.3	2.8	2.5
Farmland	5.2	2.2	-1.3	5.1	10.7	2.2	10.3	1.5	4.0	7.8
Commodities (naïve)	11.4	8.1	0.3	-3.9	-23.6	-6.6	-27.3	2.3	-7.0	-31.1
Core Infrastructure	3.9	1.0	0.5	3.5	-0.3	0.4	2.5	-0.5	-3.5	-9.0
Hedge Funds	4.6	2.8	0.1	0.2	-13.2	0.0	-1.3	-3.3	-9.5	-14.0
Long-Short	4.7	3.0	0.5	1.0	-19.3	-0.5	-3.5	-5.5	-14.0	-21.4
Hedge Fund of Funds	3.4	1.6	-0.9	-0.8	-14.2	-1.1	-2.3	-4.3	-10.8	-15.8

[1] Assumptions are based on performance for each asset class during historical periods that resembled these situations.

Meketa Investment Group 2019 Annual Asset Study
Twenty-Year Annualized Return and Volatility Expectations for Major Asset Classes

Asset Class	Annualized Compounded Return (%)	Annualized Average Return (%)	Annualized Standard Deviation (%)
Rate Sensitive			
Cash Equivalents	2.9	2.9	1.0
Investment Grade Bonds	3.9	4.0	4.0
Long-term Government Bonds	3.7	4.4	12.0
TIPS	3.6	3.8	7.0
Credit			
High Yield Bonds	6.5	7.1	11.0
Bank Loans	6.1	6.5	9.0
Emerging Market Bonds (major; unhedged)	5.2	5.8	11.0
Emerging Market Bonds (local; unhedged)	5.3	6.3	14.0
Direct Lending - First Lien	6.7	7.3	11.0
Direct Lending - Second Lien	7.9	9.0	15.0
Mezzanine Debt	7.2	8.3	15.0
Distressed Debt	7.3	9.3	20.0
Equities			
Public US Equity	8.1	9.5	17.0
Public Developed Market Equity	8.5	10.3	19.0
Public Emerging Market Equity	10.4	13.3	24.0
Private Equity Composite	10.1	13.5	26.0
Real Assets			
REITs	7.0	10.4	26.0
Core Private Real Estate	5.8	6.4	11.0
Value Added Real Estate	7.5	9.1	18.0
Opportunistic Real Estate	9.1	12.0	24.0
High Yield Real Estate Debt	6.8	8.4	18.0
MLPs	9.0	11.0	20.0
Natural Resources (Private)	9.5	11.7	21.0
Commodities	5.0	6.4	17.0
Infrastructure (Core)	6.5	7.5	14.0
Infrastructure (Non-Core)	8.8	11.2	22.0
Other			
Hedge Funds	5.4	5.7	7.0

Meketa Investment Group 2019 Annual Asset Study: Correlation Expectations

	Investment Grade Bonds	TIPS	High Yield Bonds	US Equity	Developed Market Equity	Emerging Market Equity	Private Equity	Real Estate	Natural Resources (private)	Commodities	Core Infrastructure (private)	Hedge Funds
Investment Grade Bonds	1.00											
TIPS	0.80	1.00										
High Yield Bonds	0.20	0.30	1.00									
US Equity	0.05	0.00	0.70	1.00								
Developed Market Equity	0.05	0.15	0.70	0.90	1.00							
Emerging Market Equity	0.05	0.15	0.70	0.80	0.90	1.00						
Private Equity	0.05	0.05	0.65	0.85	0.80	0.75	1.00					
Real Estate	0.20	0.10	0.50	0.50	0.45	0.40	0.45	1.00				
Natural Resources (private)	0.10	0.10	0.45	0.65	0.60	0.60	0.55	0.45	1.00			
Commodities	0.05	0.30	0.40	0.35	0.55	0.60	0.30	0.15	0.65	1.00		
Core Infrastructure (private)	0.30	0.30	0.60	0.55	0.55	0.50	0.45	0.60	0.60	0.35	1.00	
Hedge Funds	0.05	0.20	0.70	0.80	0.85	0.85	0.65	0.45	0.65	0.65	0.60	1.00

Exhibit H

Five Years of Capital Markets Assumptions

MEKETA
INVESTMENT GROUP

2020 Asset Study Excerpt

Introduction

In order to construct the best portfolio from a risk-return standpoint, conventional financial wisdom dictates that one develops return, volatility, and correlation expectations over the relevant investing horizon. Because of its impact on our clients' wealth, the development of these expectations is one of Meketa Investment Group's (MIG) most important fiduciary roles. However, given the uncertainty surrounding financial and economic forecasts, expectations development is challenging, and any of several methodological approaches may meaningfully contribute to this complex task.

Our process relies on both quantitative and qualitative methodologies. First, we employ a large set of quantitative models to arrive at a set of baseline expected ten-year annualized returns for major asset classes. These models attempt to forecast a gross "beta" return for each *public market* asset class—that is, we explicitly do not model "alpha," nor do we apply an estimate for management fees or other operational expenses.[1] Our models may be econometrically derived (based on a historical return relationship with current observable factors), factor-based (based on a historical return relationship with predicted factors), or fundamentally based (based on some theoretically defined return relationship with current observable factors). Some of these models are more predictive than others: for example, the model for U.S. investment grade bonds, which relies on yields, is much more accurate in forecasting future returns than the model for U.S. equities, which relies on fundamental valuation metrics. For this reason, we next overlay a qualitative analysis, which takes the form of a deliberation among the research team and our Investment Policy Committee. We ask: Why are different models within the same asset class leading to different conclusions? Are the assumptions consistent across asset classes? What are our models missing about the possible evolution of the next ten years? Naturally, return assumptions for hard-to-predict asset classes will be influenced more heavily by our qualitative analysis.

Our ten-year expectations serve as the primary foundation for our longer-term, twenty-year expectations. We form our twenty-year annualized return expectations by combining our ten-year expectations for each asset class with the observed historical returns for each asset class. We do this by performing a weighted average of our ten-year expectations with average historical returns in each asset class, with the weights determined by a qualitative assessment of the value of the long-term historical data. Generally, if we have little confidence that the historical average return is representative of what an investor can expect in the not-too-distant future[2], we will weight our ten-year forecasts more heavily. If we have great confidence in the historical average, we will weigh the ten-year forecasts and historical average equally. Therefore, the weight on our ten-year forecasts ranges from 0.5 to 0.9 (with an average of 0.8). Generally, the weights are similar within broad asset class categories, such as public equities, fixed income, or hedge funds. Finally, we discuss the results with the wider consultant community at MIG, who pose questions to the research team and help us refine our models and assumptions.

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1 Our expectations are net of fees where passive management is not available (e.g., private markets and hedge funds).

2 For example, we have less confidence in historical data that do not capture many possible market scenarios or are overly polluted by survivorship bias.

We develop our twenty-year volatility and correlation expectations slightly differently. For these parameters, we do not first develop separate ten-year expectations. Instead, we rely primarily on historical averages, with an emphasis given to the experience of the trailing fifteen years[1]. Qualitative adjustments, when applied, usually serve to increase the correlations and volatility over and above the historical estimates (e.g., using the higher correlations usually observed during a volatile market). In the case of private markets and other illiquid assets, where historical volatility and correlations have been artificially dampened, we seek public market equivalents on which to base our estimates before applying any qualitative adjustments. These volatility and correlation expectations are then combined with our twenty-year return expectations to assist us in subsequent asset allocation work, including mean-variance optimization and scenario analyses.

Throughout the process, we remind ourselves of our overarching goals:

- Consistency of results with historical experience and fundamentals
- Consistency of results with macroeconomic reality
- Consistency of results across asset classes
- Recognition of forecasting error and its implications

The rest of this document is organized as follows. In tables 1 and 2, we present our twenty-year return, volatility, and correlation expectations for all covered asset classes. Following this, we further discuss our quantitative models and how we bridge from ten-year return expectations to twenty-year expectations.

[1] From a risk management perspective, the research group made the decision in 2019 to expand the historical window from 10 to 15 years in order to continue accounting for the effects of the Global Financial Crisis (2008).

Introduction

In this section, we present our twenty-year annualized return, volatility,[4] and correlation expectations for a set of significant asset classes. Table 1 contains our expectations for return (geometrically compounded) and volatility, while Table 2 contains our correlation expectations for a subset of major asset classes[5].

Table 1. Twenty-Year Annualized Return and Volatility Expectations

Asset Class	Expected Return (%)	Volatility (%)
Fixed Income		
Cash Equivalents	2.9	1.0
Short-term Investment Grade Bonds	2.6	1.0
Investment Grade Bonds	3.0	4.0
Investment Grade Corporate Bonds	3.6	7.0
Long-term Government Bonds	3.2	12.0
Long-term STRIPS	3.4	19.0
TIPS	2.9	7.0
High Yield Bonds	5.2	11.0
Bank Loans	5.0	9.0
Foreign Bonds	2.4	8.0
Emerging Market Bonds (major)	4.5	11.0
Emerging Market Bonds (local)	4.8	14.0
Equities		
U.S. Equity	7.4	17.0
Developed Market Equity	7.9	19.0
Emerging Market Equity	9.1	24.0
Frontier Market Equity	10.0	21.0
Global Equity	7.8	17.0
Private Equity/Debt	9.1	23.0
Buyouts	9.4	24.0
Venture Capital	9.3	34.0
Mezzanine Debt	7.0	15.0
Distressed Debt	7.0	20.0
Real Assets		
Real Estate	7.5	15.0
REITs	7.0	26.0
Core Private Real Estate	6.3	11.0
Value Added Real Estate	8.4	18.0
Opportunistic Real Estate	9.9	24.0
Natural Resources (Public)	8.3	22.0
Natural Resources (Private)	8.8	21.0
Commodities (naïve)	4.3	17.0
Infrastructure (Public)	7.5	17.0
Core Infrastructure (Private)	6.7	14.0
Non-Core Infrastructure (Private)	9.1	22.0
Other		
Hedge Funds	4.9	7.0
Long-Short	4.3	9.0
Event-Driven	5.8	8.0
Global Macro	4.6	5.0
Risk Parity (10% vol)	5.4	10.0
Tactical Asset Allocation	4.4	10.0

4 We measure volatility in terms of annualized standard deviation.

5 For a complete list of inputs, please contact the MIG research team.

Table 2. Correlation Expectation for Major Asset Classes

	Investment Grade Bonds	TIPS	High Yield Bonds	U.S. Equity	Developed Market Equity	Emerging Market Equity	Private Equity/Debt	Real Estate	Natural Resources (private)	Commodities	Core Infrastructure (private)	Hedge Funds
Investment Grade Bonds	1.00											
TIPS	0.80	1.00										
High Yield Bonds	0.20	0.30	1.00									
U.S. Equity	0.05	0.00	0.70	1.00								
Developed Market Equity	0.05	0.15	0.70	0.90	1.00							
Emerging Market Equity	0.05	0.15	0.70	0.80	0.90	1.00						
Private Equity/Debt	0.05	0.05	0.65	0.85	0.80	0.75	1.00					
Real Estate	0.20	0.10	0.50	0.50	0.45	0.40	0.45	1.00				
Natural Resources (private)	0.10	0.10	0.45	0.65	0.60	0.60	0.55	0.45	1.00			
Commodities	0.05	0.30	0.40	0.35	0.55	0.60	0.30	0.15	0.65	1.00		
Core Infrastructure (private)	0.30	0.30	0.60	0.55	0.55	0.50	0.45	0.60	0.60	0.35	1.00	
Hedge Funds	0.05	0.20	0.70	0.80	0.85	0.85	0.65	0.45	0.65	0.65	0.60	1.00

BOSTON MA
CHICAGO IL
MIAMI FL
PORTLAND OR
SAN DIEGO CA
LONDON UK

MEKETA INVESTMENT GROUP

2019 ASSET STUDY

EXCERPT

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INTRODUCTION

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Our ten-year expectations serve as the primary foundation for our longer-term, twenty-year expectations. We form our twenty-year annualized return expectations by combining our ten-year expectations for each asset class with the observed historical returns for each asset class. We do this by performing a weighted average of our ten-year expectations with average historical returns in each asset class, with the weights determined by a qualitative assessment of the value of the long-term historical data. Generally, if we have little confidence that the historical average return is representative of what an investor can expect in the not-too-distant future,[2] we will weight our ten-year forecasts more heavily. If we have great confidence in the historical average, we will weigh the ten-year forecasts and historical average equally. Therefore, the weight on our ten-year forecasts ranges from 0.5 to 0.9 (with an average of 0.8). Generally, the weights are similar within broad asset class categories, such as public equities, fixed income, or hedge funds. Finally, we discuss the results with the wider consultant community at MIG, who pose questions to the research team and help us refine our models and assumptions.

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2 For example, we have less confidence in historical data that do not capture many possible market scenarios or are overly polluted by survivorship bias.

We develop our twenty-year volatility and correlation expectations slightly differently. For these parameters, we do not first develop separate ten-year expectations. Instead, we rely primarily on historical averages, with an emphasis given to the experience of the trailing fifteen years[3]. Qualitative adjustments, when applied, usually serve to increase the correlations and volatility over and above the historical estimates (e.g., using the higher correlations usually observed during a volatile market). In the case of private markets and other illiquid assets, where historical volatility and correlations have been artificially dampened, we seek public market equivalents on which to base our estimates before applying any qualitative adjustments. These volatility and correlation expectations are then combined with our twenty-year return expectations to assist us in subsequent asset allocation work, including mean-variance optimization and scenario analyses.

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The rest of this document is organized as follows. In tables 1 and 2, we present our twenty-year return, volatility, and correlation expectations for all covered asset classes. Following this, we further discuss our quantitative models and how we bridge from ten-year return expectations to twenty-year expectations.

[3] From a risk management perspective the research group made the decision in 2019 to expand the historical window from 10 to 15 years in order to continue accounting for the effects of the Global Financial Crisis (2008).

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In this section, we present our twenty-year annualized return, volatility,[4] and correlation expectations for a set of significant asset classes. Table 1 contains our expectations for return (geometrically compounded) and volatility, while Table 2 contains our correlation expectations for a subset of major asset classes.[5]

Table 1. Twenty-Year Annualized Return and Volatility Expectations

Asset Class	Expected Return (%)	Volatility (%)
Fixed Income		
Cash Equivalents	2.9	1.0
Short-term Investment Grade Bonds	3.4	1.0
Investment Grade Bonds	3.9	4.0
Investment Grade Corporate Bonds	4.6	7.0
Long-term Government Bonds	3.7	12.0
Long-term STRIPS	3.9	19.0
TIPS	3.6	7.0
High Yield Bonds	6.5	11.0
Bank Loans	6.1	9.0
Foreign Bonds	2.3	8.0
Emerging Market Bonds (major)	5.2	11.0
Emerging Market Bonds (local)	5.3	14.0
Equities		
U.S. Equity	8.1	17.0
Developed Market Equity	8.5	19.0
Emerging Market Equity	10.4	24.0
Frontier Market Equity	10.3	21.0
Global Equity	8.6	17.0
Private Equity/Debt	9.8	23.0
Buyouts	10.1	24.0
Venture Capital	10.0	34.0
Mezzanine Debt	7.2	15.0
Distressed Debt	7.3	20.0
Real Assets		
Real Estate	7.0	15.0
REITs	7.0	26.0
Core Private Real Estate	5.8	11.0
Value Added Real Estate	7.5	18.0
Opportunistic Real Estate	9.1	24.0
Natural Resources (Public)	9.0	22.0
Natural Resources (Private)	9.5	21.0
Commodities (naïve)	5.0	17.0
Infrastructure (Public)	8.2	17.0
Core Infrastructure (Private)	6.5	14.0
Non-Core Infrastructure (Private)	8.8	22.0
Other		
Hedge Funds	5.4	7.0
Long-Short	5.0	9.0
Event-Driven	6.3	8.0
Global Macro	5.2	6.0
Risk Parity (10% vol)	6.2	10.0
Tactical Asset Allocation	5.1	10.0

[4] We measure volatility in terms of annualized standard deviation.

[5] For a complete list of inputs, please contact the MIG research team.

Table 2. Correlation Expectations for Major Asset Classes

	Investment Grade Bonds	TIPS	High Yield Bonds	U.S. Equity	Developed Market Equity	Emerging Market Equity	Private Equity/Debt	Real Estate	Natural Resources (private)	Commodities	Core Infrastructure (private)	Hedge Funds
Investment Grade Bonds	1.00											
TIPS	0.80	1.00										
High Yield Bonds	0.20	0.30	1.00									
U.S. Equity	0.05	0.00	0.70	1.00								
Developed Market Equity	0.05	0.15	0.70	0.90	1.00							
Emerging Market Equity	0.05	0.15	0.70	0.80	0.90	1.00						
Private Equity/Debt	0.05	0.05	0.65	0.85	0.80	0.75	1.00					
Real Estate	0.20	0.10	0.50	0.50	0.45	0.40	0.45	1.00				
Natural Resources (private)	0.10	0.10	0.45	0.65	0.60	0.60	0.55	0.45	1.00			
Commodities	0.05	0.30	0.40	0.35	0.55	0.60	0.30	0.15	0.65	1.00		
Core Infrastructure (private)	0.30	0.30	0.60	0.55	0.55	0.50	0.45	0.60	0.60	0.35	1.00	
Hedge Funds	0.05	0.20	0.70	0.80	0.85	0.85	0.65	0.45	0.65	0.65	0.60	1.00

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Meketa Investment Group

2018 Asset Study

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Table 1. Twenty-Year Annualized Return and Volatility Expectations

Asset Class	Expected Return (%)	Volatility (%)
Fixed Income		
Cash Equivalents	2.9	1.0
Short-term Investment Grade Bonds	3.1	1.5
Investment Grade Bonds	3.6	4.0
Investment Grade Corporate Bonds	4.2	7.0
Long-term Government Bonds	3.5	13.0
Long-term STRIPS	3.7	20.0
TIPS	3.3	7.5
High Yield Bonds	5.4	12.5
Bank Loans	5.0	10.0
Foreign Bonds	2.1	9.0
Emerging Market Bonds (major)	4.9	11.5
Emerging Market Bonds (local)	5.4	14.5
Equities		
U.S. Equity	7.3	18.0
Developed Market Equity	7.1	20.0
Emerging Market Equity	9.4	25.0
Frontier Market Equity	8.9	23.0
Global Equity	7.5	19.0
Private Equity/Debt	8.9	24.0
Buyouts	9.3	25.0
Venture Capital	9.2	35.0
Mezzanine Debt	6.6	17.0
Distressed Debt	6.6	22.0
Real Assets		
Real Estate	6.7	18.0
REITs	6.8	28.5
Core Private Real Estate	5.5	12.0
Value Added Real Estate	6.9	19.0
Opportunistic Real Estate	8.5	25.0
Natural Resources (Public)	7.2	23.0
Natural Resources (Private)	8.8	23.0
Commodities (naïve)	4.6	18.0
Infrastructure (Public)	7.2	18.0
Core Infrastructure (Private)	6.6	15.0
Non-Core Infrastructure (Private)	8.5	23.0
Other		
Hedge Funds	5.2	8.5
Long-Short	4.4	10.0
Event-Driven	5.9	9.0
Global Macro	5.3	8.0
Risk Parity (10% vol)	5.6	11.0
Tactical Asset Allocation	4.6	12.5

[3] We measure volatility in terms of annualized standard deviation.

[4] For a complete list of inputs, please contact the MIG research team.

Table 2. Correlation Expectations for Major Asset Classes

	TIPS	Investment Grade Bonds	High Yield Bonds	U.S. Equity	Developed Market Equity	Emerging Market Equity	Private Equity	Real Estate	Natural Resources (private)	Commodities	Core Infrastructure (private)	Hedge Funds
TIPS	1.00											
Investment Grade Bonds	0.80	1.00										
High Yield Bonds	0.30	0.20	1.00									
U.S. Equity	0.00	0.05	0.70	1.00								
Developed Market Equity	0.15	0.05	0.70	0.90	1.00							
Emerging Market Equity	0.15	0.05	0.70	0.80	0.90	1.00						
Private Equity/Debt	0.05	0.05	0.65	0.85	0.80	0.75	1.00					
Real Estate	0.10	0.20	0.50	0.50	0.45	0.40	0.45	1.00				
Natural Resources (private)	0.10	0.10	0.45	0.65	0.60	0.60	0.55	0.45	1.00			
Commodities	0.35	0.05	0.40	0.35	0.55	0.60	0.30	0.15	0.65	1.00		
Core Infrastructure (private)	0.30	0.30	0.60	0.55	0.55	0.50	0.45	0.60	0.60	0.35	1.00	
Hedge Funds	0.20	0.05	0.70	0.80	0.85	0.85	0.65	0.45	0.65	0.65	0.60	1.00

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2017 Asset Study

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Table 1. Twenty-Year Annualized Return and Volatility Expectations

Asset Class	Expected Return (%)	Volatility (%)
Fixed Income		
Cash Equivalents	2.8	1.0
Short-term Investment Grade Bonds	3.0	2.0
Investment Grade Bonds	3.5	4.0
Investment Grade Corporate Bonds	4.2	7.0
Long-term Government Bonds	3.8	12.5
Long-term STRIPS	4.0	20.0
TIPS	3.5	7.5
High Yield Bonds	6.0	12.5
Bank Loans	5.5	10.0
Foreign Bonds	2.4	9.0
Emerging Market Bonds (major)	5.5	12.0
Emerging Market Bonds (local)	5.9	14.5
Equities		
U.S. Equity	7.5	18.0
Developed Market Equity	7.3	20.0
Emerging Market Equity	9.8	26.0
Frontier Market Equity	9.5	24.0
Global Equity	7.9	19.0
Private Equity/Debt	9.2	24.0
Buyouts	9.6	25.0
Venture Capital	9.5	35.0
Mezzanine Debt	6.8	20.0
Distressed Debt	6.9	24.0
Real Assets		
Real Estate	6.9	18.0
REITs	6.5	29.0
Core Private Real Estate	5.7	12.5
Value Added Real Estate	7.2	19.0
Opportunistic Real Estate	8.9	25.0
Natural Resources (Public)	7.0	24.0
Natural Resources (Private)	8.4	23.0
Commodities (naïve)	4.5	19.5
Infrastructure (Public)	7.4	19.0
Core Infrastructure (Private)	6.8	16.0
Non-Core Infrastructure (Private)	8.8	23.0
Other		
Hedge Funds	5.3	9.5
Long-Short	4.6	11.0
Event-Driven	6.0	10.0
Global Macro	5.5	8.0
Risk Parity (10% vol)	5.7	11.0
Tactical Asset Allocation	4.7	12.5

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	TIPS	Investment Grade Bonds	High Yield Bonds	U.S. Equity	Developed Market Equity	Emerging Market Equity	Private Equity	Real Estate	Natural Resources (private)	Commodities	Core Infrastructure (private)	Hedge Funds
TIPS	1.00											
Investment Grade Bonds	0.80	1.00										
High Yield Bonds	0.30	0.20	1.00									
U.S. Equity	0.00	0.05	0.70	1.00								
Developed Market Equity	0.15	0.05	0.70	0.90	1.00							
Emerging Market Equity	0.15	0.05	0.70	0.80	0.90	1.00						
Private Equity/Debt	0.05	0.05	0.65	0.85	0.80	0.75	1.00					
Real Estate	0.10	0.20	0.50	0.50	0.45	0.40	0.45	1.00				
Natural Resources (private)	0.10	0.10	0.45	0.65	0.60	0.60	0.55	0.45	1.00			
Commodities	0.35	0.05	0.40	0.35	0.55	0.60	0.30	0.15	0.65	1.00		
Core Infrastructure (private)	0.30	0.30	0.60	0.55	0.55	0.50	0.45	0.60	0.60	0.35	1.00	
Hedge Funds	0.20	0.05	0.70	0.80	0.85	0.85	0.65	0.45	0.65	0.65	0.60	1.00

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[1] Our expectations are net of fees where passive management is not available (e.g., private markets and hedge funds).

[2] For example, we have less confidence in historical data that do not capture many possible market scenarios or are overly polluted by survivorship bias.

We develop our twenty-year volatility and correlation expectations slightly differently. For these parameters, we do not first develop separate ten-year expectations. Instead, we rely primarily on historical averages, with an emphasis given to the experience of the trailing ten years. Qualitative adjustments, when applied, usually serve to increase the correlations and volatility over and above the historical estimates (e.g., using the higher correlations usually observed during a volatile market). In the case of private markets and other illiquid assets, where historical volatility and correlations have been artificially dampened, we seek public market equivalents on which to base our estimates before applying any qualitative adjustments. These volatility and correlation expectations are then combined with our twenty-year return expectations to assist us in subsequent asset allocation work, including mean-variance optimization and scenario analyses.

Throughout the process, we remind ourselves of our overarching goals:

- Consistency of results with historical experience and fundamentals
- Consistency of results with macroeconomic reality
- Consistency of results across asset classes
- Recognition of forecasting error and its implications

The rest of this document is organized as follows. In tables 1 and 2, we present our twenty-year return, volatility, and correlation expectations for all covered asset classes. Following this, we further discuss our quantitative models and how we bridge from ten-year return expectations to twenty-year expectations.

INTRODUCTION

In this section, we present our twenty-year annualized return, volatility,[3] and correlation expectations for a set of significant asset classes. Table 1 contains our expectations for return (geometrically compounded) and volatility, while Table 2 contains our correlation expectations for a subset of major asset classes.[4]

Table 1. Twenty-Year Annualized Return and Volatility Expectations

Asset Class	Expected Return (%)	Volatility (%)
Fixed Income		
Cash Equivalents	2.3	1.0
Short-term Investment Grade Bonds	2.9	2.0
Investment Grade Bonds	3.6	4.5
Investment Grade Corporate Bonds	4.4	7.0
Long-term Government Bonds	3.6	12.5
TIPS	3.3	7.5
High Yield Bonds	6.8	12.5
Bank Loans	5.7	10.0
Foreign Bonds	2.6	9.0
Emerging Market Bonds (major)	5.9	13.0
Emerging Market Bonds (local)	6.3	14.0
Equities		
US Equity	7.8	18.0
Developed Market Equity	8.1	20.0
Emerging Market Equity	10.5	26.5
Frontier Market Equity	9.5	25.0
Global Equity	8.2	19.5
Private Equity	9.4	24.0
Buyouts	9.8	25.0
Venture Capital	9.5	35.0
Mezzanine Debt	6.9	20.0
Distressed Debt	7.7	27.0
Real Assets		
Real Estate	7.1	18.0
REITs	6.6	29.0
Core Private Real Estate	5.9	12.5
Value Added Real Estate	7.5	20.0
Opportunistic Real Estate	9.2	25.0
Natural Resources (Public)	7.8	24.0
Natural Resources (Private)	8.4	22.0
Commodities (naïve)	4.1	21.0
Infrastructure (Public)	7.8	19.5
Core Infrastructure (Private)	6.7	16.0
Non-Core Infrastructure (Private)	9.1	23.0
Other		
Hedge Funds	5.6	10.5
Long-Short	4.7	12.0
Event-Driven	6.5	11.0
Global Macro	5.8	8.5
Risk Parity (10% vol)	5.8	11.0
Tactical Asset Allocation	5.0	12.5

[3] We measure volatility in terms of annualized standard deviation.
[4] For a complete list of inputs, please contact the MIG research team.

Table 2. Correlation Expectations for Major Asset Classes

	TIPS	Investment Grade Bonds	High Yield Bonds	U.S. Equity	Developed Market Equity	Emerging Market Equity	Private Equity	Real Estate	Natural Resources (private)	Commodities	Core Infrastructure (private)	Hedge Funds
TIPS	1.00											
Investment Grade Bonds	0.80	1.00										
High Yield Bonds	0.30	0.20	1.00									
U.S. Equity	0.00	0.05	0.70	1.00								
Developed Market Equity	0.15	0.05	0.70	0.90	1.00							
Emerging Market Equity	0.15	0.05	0.70	0.80	0.90	1.00						
Private Equity	0.05	0.05	0.65	0.85	0.80	0.75	1.00					
Real Estate	0.10	0.20	0.50	0.50	0.45	0.40	0.45	1.00				
Natural Resources (private)	0.10	0.10	0.45	0.65	0.60	0.60	0.55	0.45	1.00			
Commodities	0.35	0.05	0.40	0.35	0.55	0.60	0.30	0.15	0.65	1.00		
Core Infrastructure (private)	0.30	0.30	0.60	0.55	0.55	0.50	0.45	0.60	0.60	0.35	1.00	
Hedge Funds	0.20	0.05	0.70	0.80	0.85	0.85	0.65	0.45	0.65	0.65	0.60	1.00

Exhibit I

Sample Quarterly Performance Report and Flash Report

MEKETA INVESTMENT GROUP

Client Example

Fourth Quarter 2019

Fund Evaluation Report

Portions of this report have been redacted to ensure the security of certain confidential or sensitive information.

1. Executive Summary
2. 4Q19 Investment Report
3. Appendices
   - 4Q19 Global Macro Outlook
   - Disclaimer, Glossary, and Notes

Executive Summary

4Q19 Executive Summary

Category	Results	Notes
Total Fund Performance	Positive	+4.7% (~ +$47 mm unrealized gain)
Performance vs. Benchmarks	Outperformed	+4.7% vs. +4.6% (static) and +4.0% (dynamic)
Performance vs. Peers[1]	Underperformed	+4.7% vs. +5.1% median (71st percentile)
Asset Allocation Attribution Effects	Negative	Underweight U.S. equity detracted, overweight PE detracted
Active Public Managers vs. Benchmarks	Outperformed	9 of 12 active managers beat respective benchmarks (after fees)
Active Public Managers vs. Peer Groups	Outperformed	8 of 11[2] active managers beat peer group median (after fees)
Compliance with Targets	In Compliance	All exposure within policy ranges

1 InvMetrics Public DB > $1 billion net.

2 Excludes Aberdeen EMD. No appropriate peer group for Aberdeen blended currency emerging market debt. Peer groups only exist for local currency or USD strategies.

2019 Executive Summary

Category	Results	Notes
Total Fund Performance	Positive	+15.7% (~ +$143 mm unrealized gain)
Performance vs. Benchmarks	Matched/Outperformed	+15.7 vs. +15.7% (static) and +14.2% (dynamic)
Performance vs. Peers[1]	Underperformed	+15.7% vs. +17.0% median (73rd percentile)
Asset Allocation Attribution Effects	Negative	Underweight U.S. equity detracted, overweight PE detracted
Active Public Managers vs. Benchmarks	Outperformed	8 of 11[2] active managers beat respective benchmarks (after fees)
Active Public Managers vs. Peer Groups	Outperformed	7 of 10[3] active managers beat peer group median (after fees)

1 InvMetrics Public DB > $1 billion net.

2 Excludes TT Emerging Market equity. Less than one year performance history.

3 Excludes Aberdeen EMD. No appropriate peer group for Aberdeen blended currency emerging market debt. Peer groups only exist for local currency or USD strategies. Excludes TT Emerging Market equity. Less than one year performance history.

Peer Rankings

- The Fund typically outperforms peers in negative or flat equity markets (because of the lower exposure to public equities).
- The Fund's 3-year and 5-year rankings have stayed very consistent (in the top quartile), despite significant volatility in short term quarterly rankings. We also note the consistent improvement in the 10-year ranking.

4Q19 - - (S&P 500 was +9.1%)

As of 12/31/19	4Q 19	1 YR	3 YR	5 YR	10 YR
Peer Ranking[1]	71	73	19	19	45

3Q19 - - (S&P 500 was +1.7%)

As of 9/30/19	3Q 19	1 YR	3 YR	5 YR	10 YR
Peer Ranking	7	13	24	21	46

2Q19 - - (S&P 500 was +4.3%)

As of 6/30/19	2Q 19	1 YR	3 YR	5 YR	10 YR
Peer Ranking	84	51	30	25	62

1Q19 - - (S&P 500 was +13.6%)

As of 3/31/19	1Q 19	1 YR	3 YR	5 YR	10 YR
Peer Ranking	98	79	19	21	65

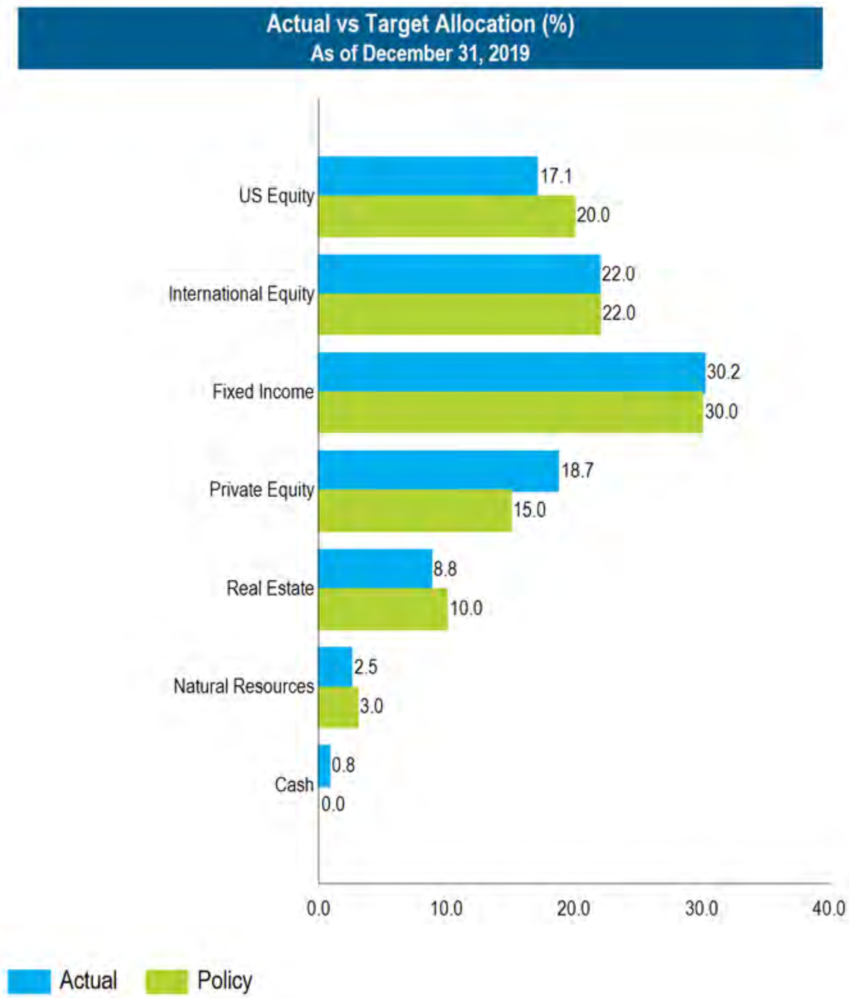
4Q18 - - (S&P 500 was -13.5%)

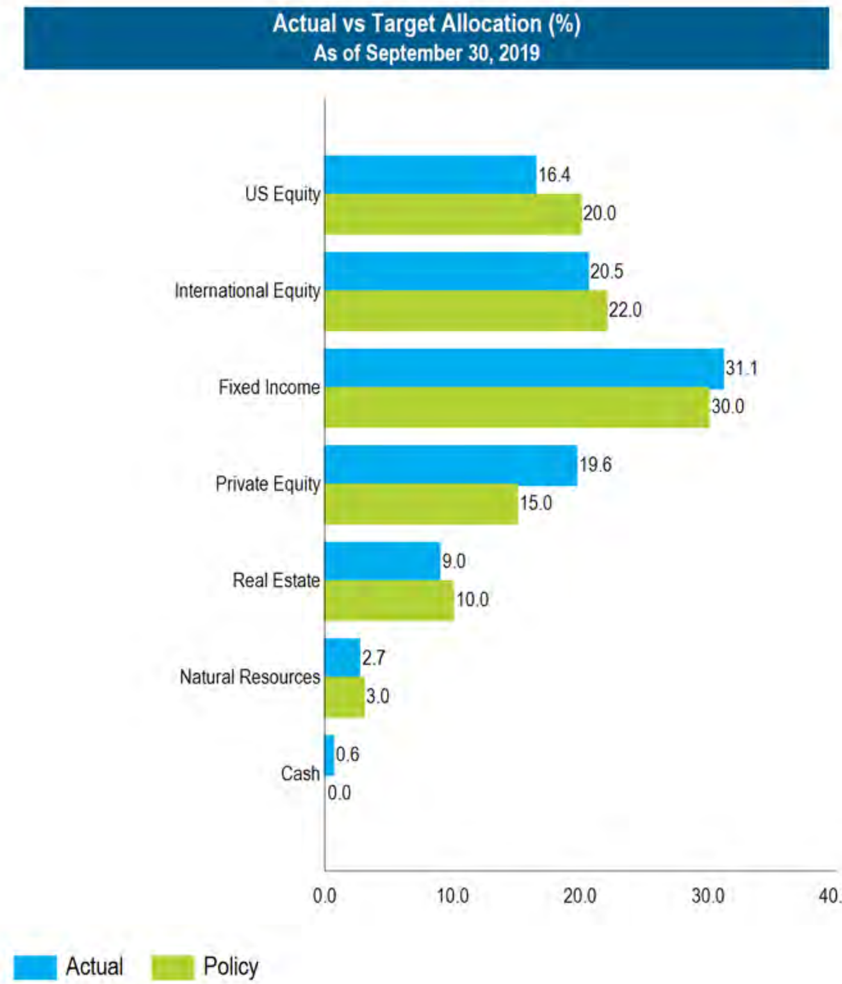
As of 12/31/18	4Q 18	1 YR	3 YR	5 YR	10 YR
Peer Ranking	5	2	1	11	70

[1] Peer group switched to InvMetrics Public DB > $1 billion net, for the 12/31/19 rankings. Rankings prior were not revised and are reflective of the $250 mm - $1 bb peer group.

4Q19 Investment Report

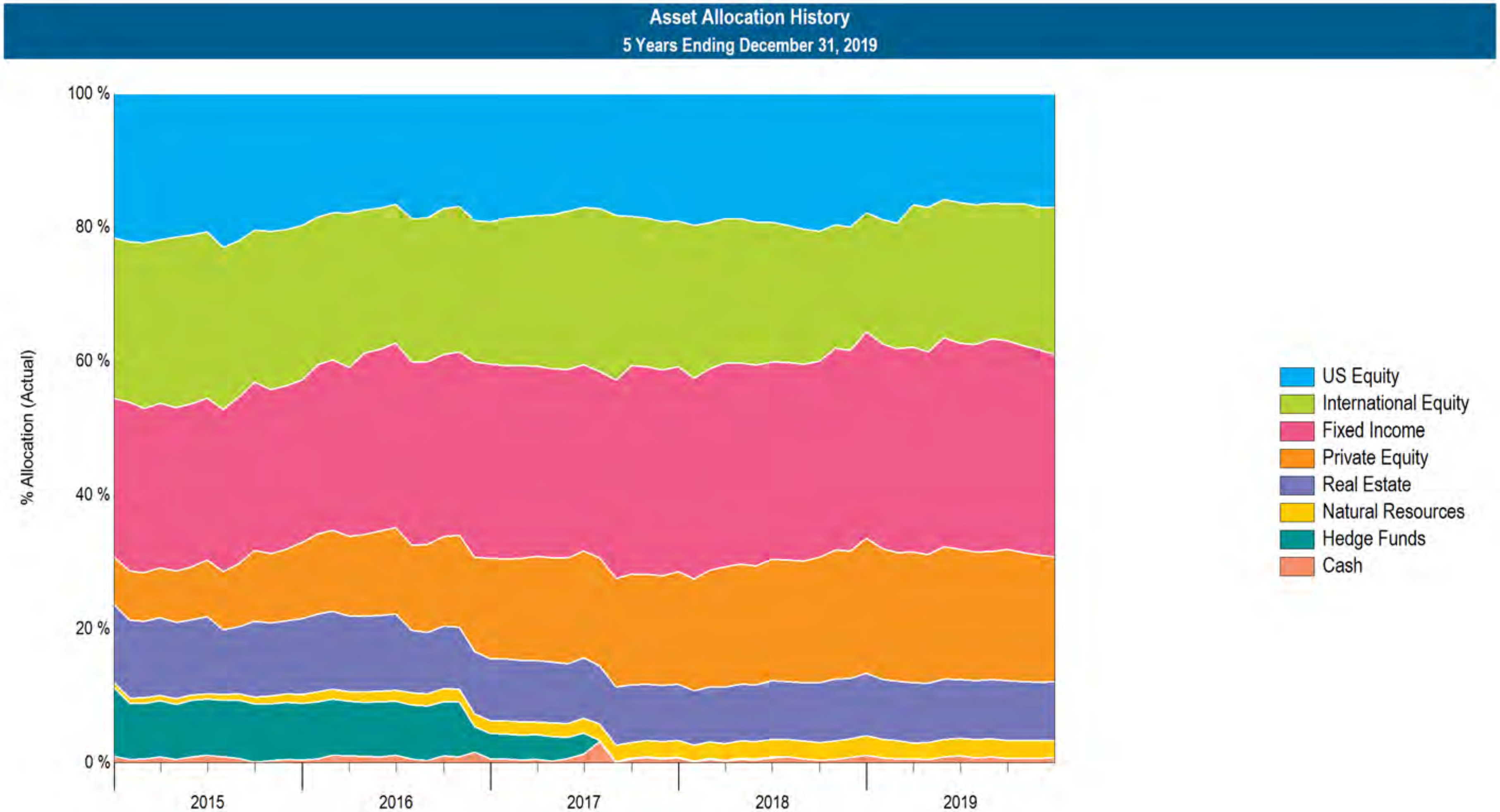
Fund Summary

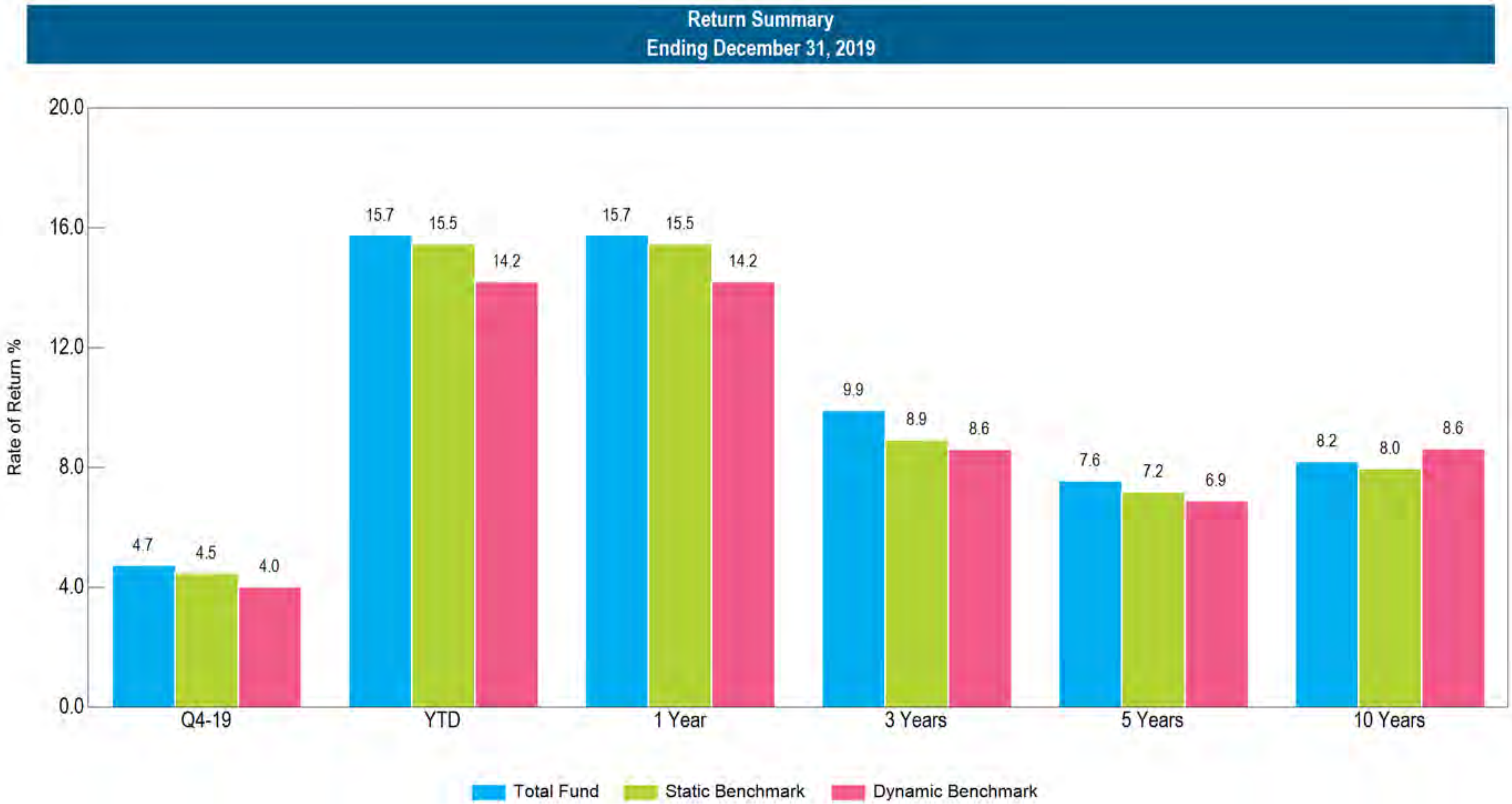

Actual vs Target Allocation (%)
As of December 31, 2019
US Equity
International Equity
Fixed Income
Private Equity
Real Estate
Natural Resources
Cash
17.1
20.0
22.0
22.0
30.2
30.0
18.7
15.0
8.8
10.0
2.5
3.0
0.8
0.0
0.0
10.0
20.0
30.0
40.0
Actual
Policy


Actual vs Target Allocation (%)
As of September 30, 2019
US Equity
International Equity
Fixed Income
Private Equity
Real Estate
Natural Resources
Cash
16.4
20.0
20.5
22.0
31.1
30.0
19.6
15.0
9.0
10.0
2.7
3.0
0.6
0.0
0.0
10.0
20.0
30.0
40.0
Actual
Policy

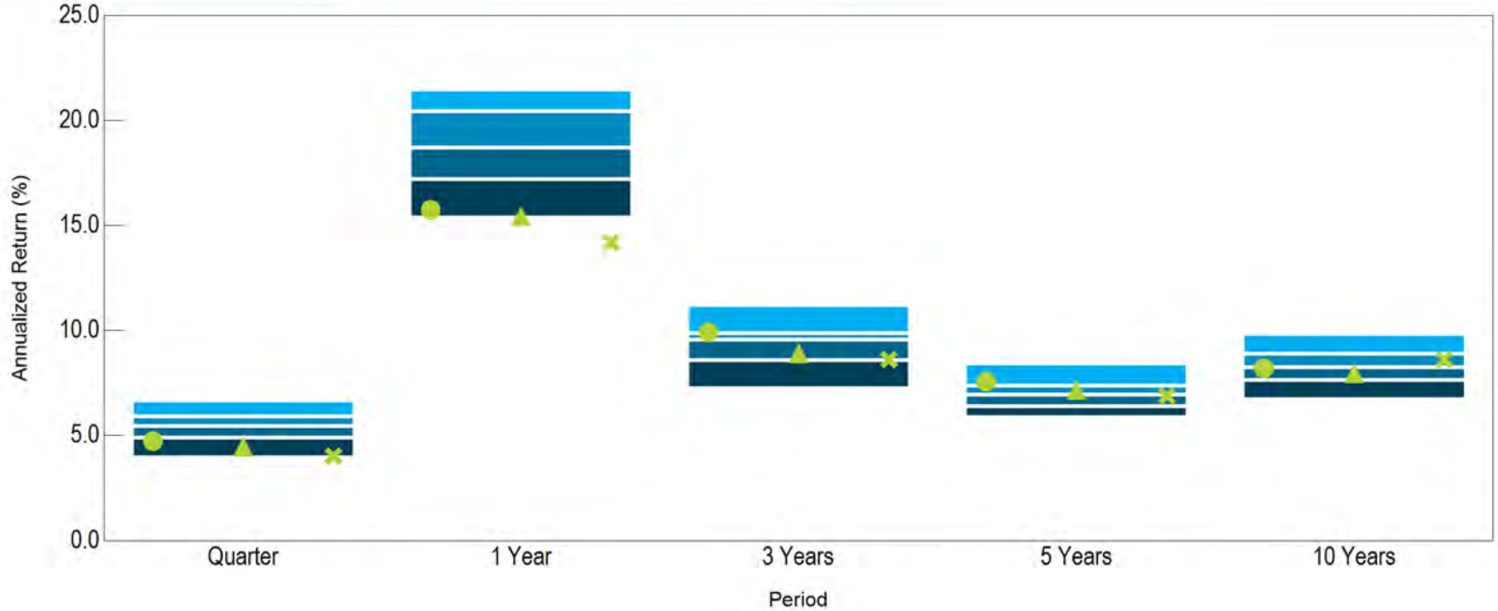
Allocation vs. Targets and Policy

	Current Balance	Current Allocation	Policy	Policy Range	Within IPS Range?
US Equity	$175,140,367	17%	20%	13% - 27%	Yes
International Equity	$225,316,725	22%	22%	15% - 29%	Yes
Fixed Income	$309,667,730	30%	30%	20% - 40%	Yes
Private Equity	$192,030,377	19%	15%	5% - 25%	Yes
Real Estate	$89,845,231	9%	10%	0% - 20%	Yes
Natural Resources	$25,995,149	3%	3%	0% - 5%	Yes
Cash	$8,214,221	1%	0%	0% - 5%	Yes
Total	**$1,026,209,799**	**100%**	**100%**		


Asset Allocation History
5 Years Ending December 31, 2019
100 %
80 %
60 %
40 %
20 %
0 %
% Allocation (Actual)
2015
2016
2017
2018
2019
US Equity
International Equity
Fixed Income
Private Equity
Real Estate
Natural Resources
Hedge Funds
Cash

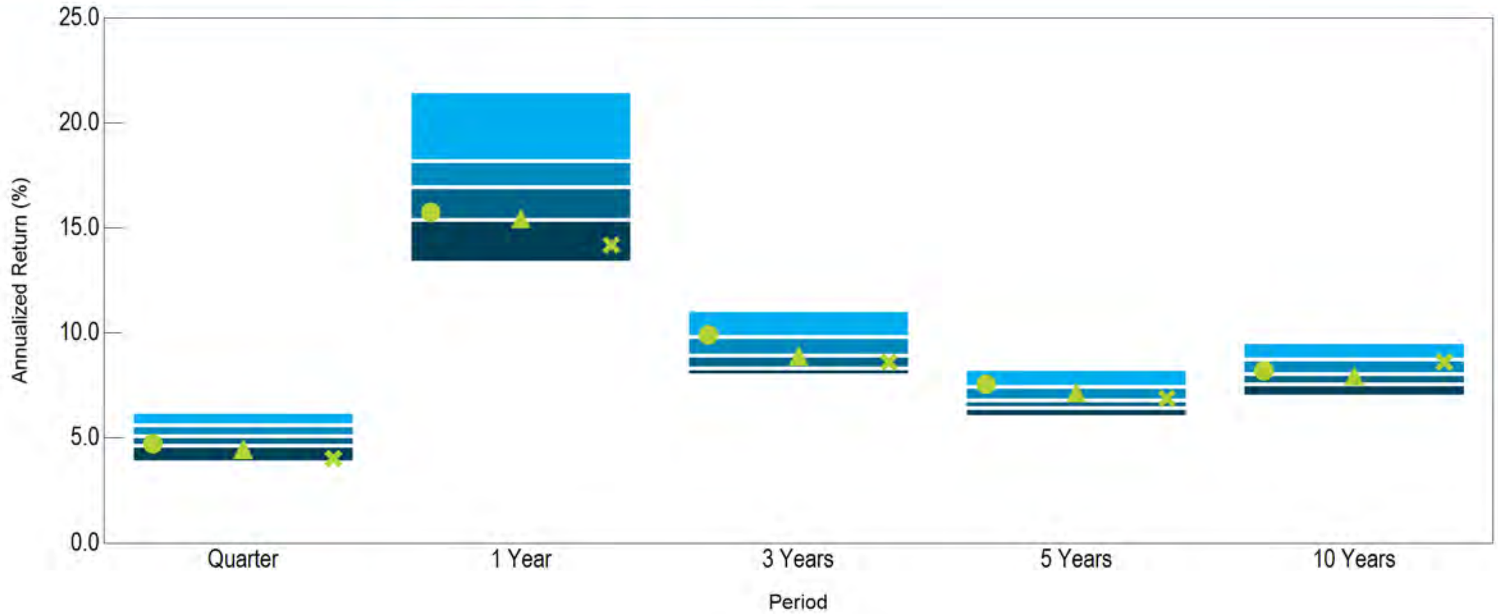

Return Summary
Ending December 31, 2019
Rate of Return %
20.0
16.0
12.0
8.0
4.0
0.0
4.7
4.5
4.0
15.7
15.5
14.2
15.7
15.5
14.2
9.9
8.9
8.6
7.6
7.2
6.9
8.2
8.0
8.6
Q4-19
YTD
1 Year
3 Years
5 Years
10 Years
Total Fund
Static Benchmark
Dynamic Benchmark

InvMetrics Public DB $250mm-$1B Net Accounts

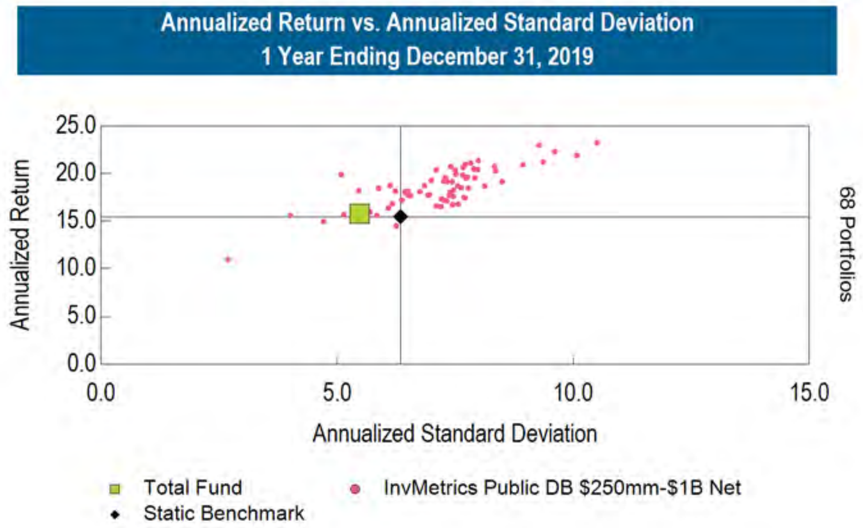


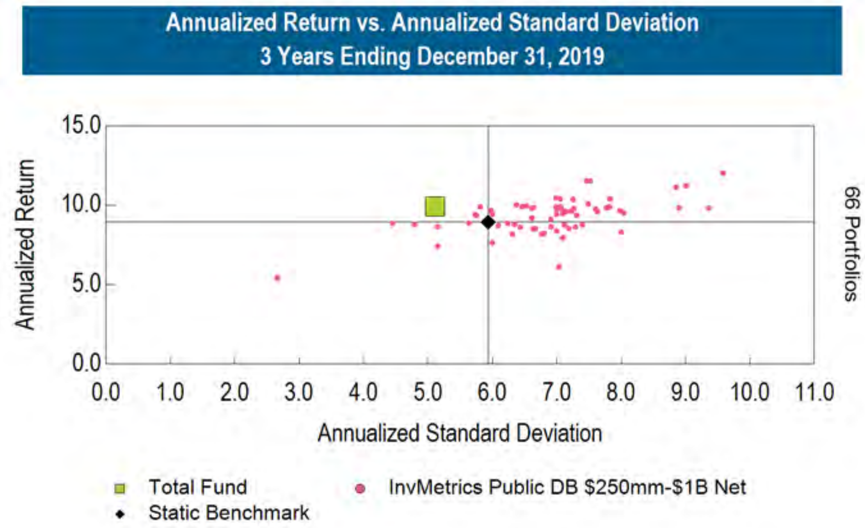
	Return (Rank)									
5th Percentile	6.6		21.5		11.2		8.4		9.8	
25th Percentile	5.9		20.5		9.9		7.4		8.9	
Median	5.5		18.7		9.6		6.9		8.3	
75th Percentile	4.9		17.2		8.6		6.4		7.7	
95th Percentile	4.0		15.4		7.3		5.9		6.8	
# of Portfolios	77		77		75		68		53	
Total Fund	4.7	(82)	15.7	(92)	9.9	(24)	7.6	(22)	8.2	(53)
Static Benchmark	4.5	(87)	15.5	(95)	8.9	(67)	7.2	(38)	8.0	(60)
Dynamic Benchmark	4.0	(95)	14.2	(99)	8.6	(75)	6.9	(54)	8.6	(35)

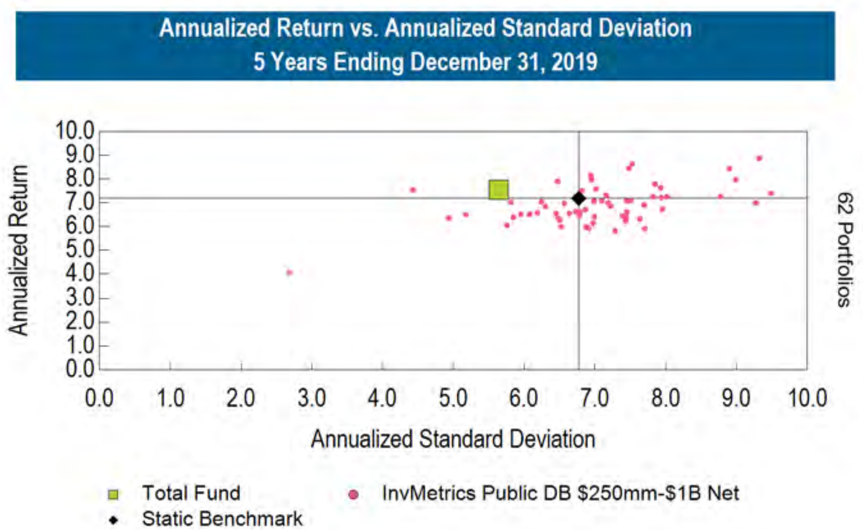
InvMetrics Public DB > $1B Net Accounts

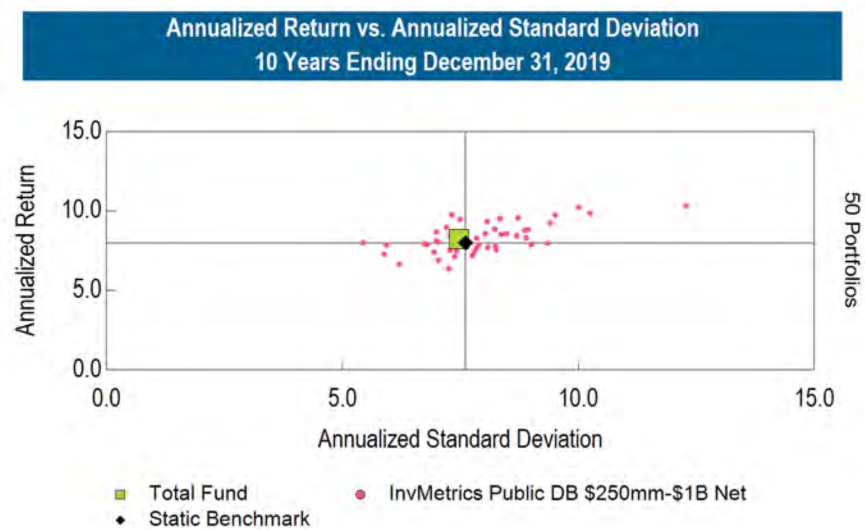


Return (Rank)	Quarter		1 Year		3 Years		5 Years		10 Years	
5th Percentile	6.2		21.5		11.1		8.3		9.6	
25th Percentile	5.6		18.2		9.8		7.4		8.8	
Median	5.1		17.0		8.9		6.8		8.1	
75th Percentile	4.6		15.4		8.3		6.4		7.6	
95th Percentile	3.9		13.4		8.0		6.0		7.0	
# of Portfolios	69		69		69		67		59	
Total Fund	4.7	(71)	15.7	(73)	9.9	(19)	7.6	(19)	8.2	(45)
Static Benchmark	4.5	(80)	15.5	(75)	8.9	(51)	7.2	(37)	8.0	(55)
Dynamic Benchmark	4.0	(91)	14.2	(95)	8.6	(63)	6.9	(44)	8.6	(31)

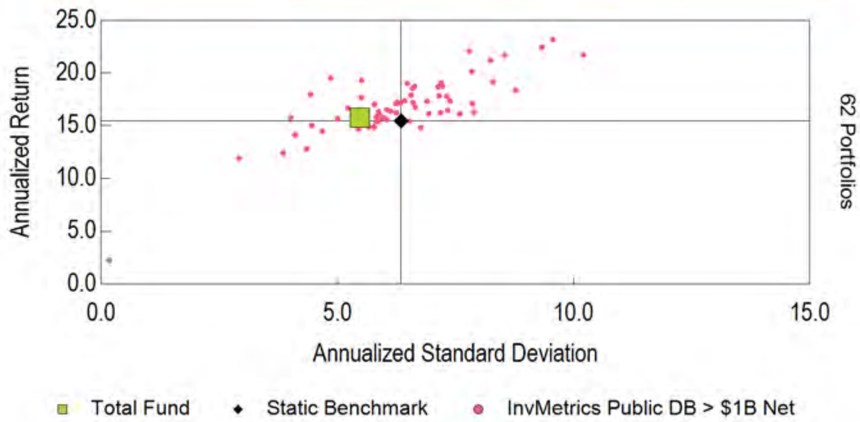

Annualized Return vs. Annualized Standard Deviation
1 Year Ending December 31, 2019
Annualized Return
25.0
20.0
15.0
10.0
5.0
0.0
0.0
5.0
10.0
15.0
Annualized Standard Deviation
68 Portfolios
Total Fund
Static Benchmark
InvMetrics Public DB $250mm-$1B Net


Annualized Return vs. Annualized Standard Deviation
3 Years Ending December 31, 2019
Annualized Return
15.0
10.0
5.0
0.0
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
Annualized Standard Deviation
66 Portfolios
Total Fund
Static Benchmark
InvMetrics Public DB $250mm-$1B Net

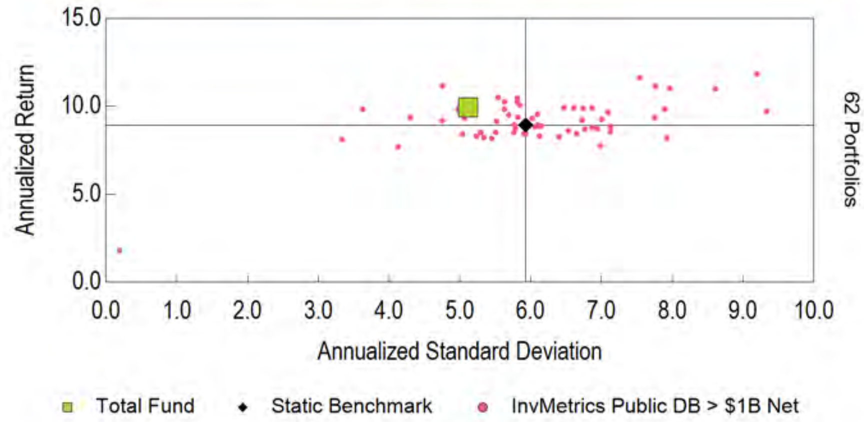

Annualized Return vs. Annualized Standard Deviation
5 Years Ending December 31, 2019
Annualized Return
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
Annualized Standard Deviation
62 Portfolios
Total Fund
Static Benchmark
InvMetrics Public DB $250mm-$1B Net


Annualized Return vs. Annualized Standard Deviation
10 Years Ending December 31, 2019
Annualized Return
15.0
10.0
5.0
0.0
0.0
5.0
10.0
15.0
Annualized Standard Deviation
50 Portfolios
Total Fund
Static Benchmark
InvMetrics Public DB $250mm-$1B Net

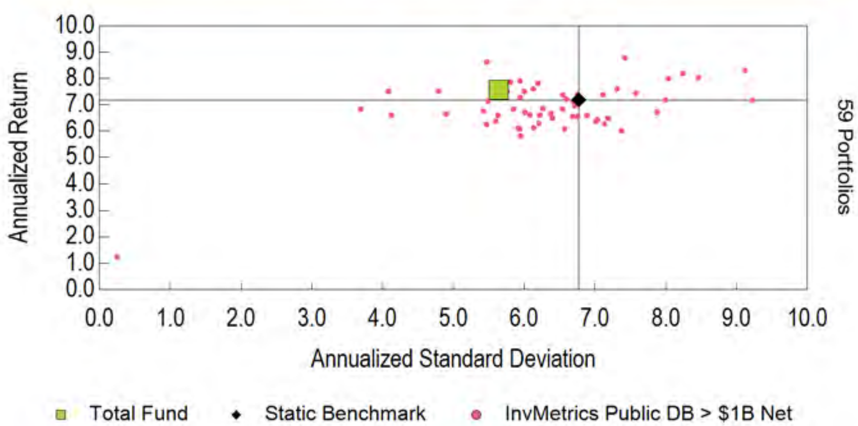
**Annualized Return vs. Annualized Standard Deviation
1 Year Ending December 31, 2019**



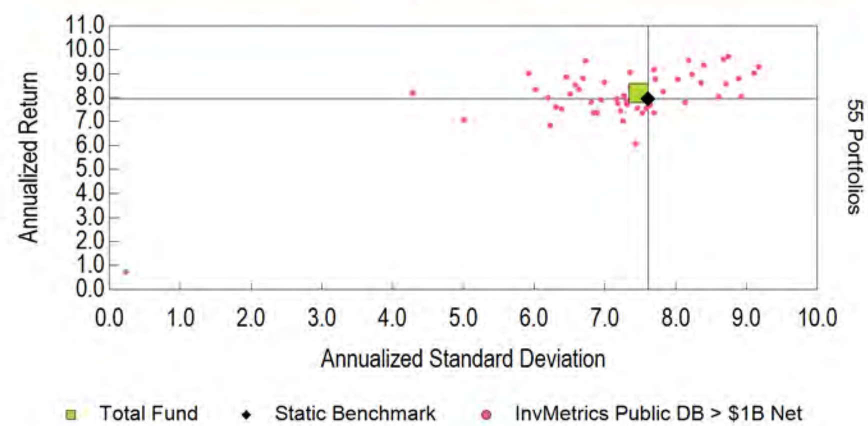
**Annualized Return vs. Annualized Standard Deviation
3 Years Ending December 31, 2019**



**Annualized Return vs. Annualized Standard Deviation
5 Years Ending December 31, 2019**



**Annualized Return vs. Annualized Standard Deviation
10 Years Ending December 31, 2019**



Asset Class Performance Summary (Net of Fees)

	Market Value ($)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Total Fund	**1,026,209,799**	**100.0**	**4.7**	**15.7**	**9.9**	**7.6**	**8.2**	**7.0**	**Mar-97**
Static Benchmark			*4.5*	*15.5*	*8.9*	*7.2*	*8.0*	*--*	*Mar-97*
Dynamic Benchmark			*4.0*	*14.2*	*8.6*	*6.9*	*8.6*	*--*	*Mar-97*
Domestic Equity	**175,140,367**	**17.1**	**8.1**	**29.4**	**13.2**	**9.9**	**12.3**	**8.3**	**Mar-97**
Russell 3000			*9.1*	*31.0*	*14.6*	*11.2*	*13.4*	*8.8*	*Mar-97*
International Equity	**225,316,725**	**22.0**	**11.5**	**22.4**	**11.3**	**6.7**	**6.0**	**6.1**	**Mar-97**
Spliced International Equity Benchmark			*8.9*	*21.5*	*9.9*	*5.5*	*5.0*	*5.6*	*Mar-97*
Private Equity	**192,030,377**	**18.7**	**3.4**	**16.1**	**16.5**	**14.3**	**--**	**15.6**	**May-10**
Private Equity Benchmark			*0.0*	*1.4*	*9.7*	*9.7*	*--*	*14.9*	*May-10*
Fixed Income	**309,667,730**	**30.2**	**1.0**	**10.5**	**4.6**	**3.7**	**3.9**	**5.0**	**Mar-97**
BBgBarc US Aggregate TR			*0.2*	*8.7*	*4.0*	*3.0*	*3.7*	*5.2*	*Mar-97*
Real Estate	**89,845,231**	**8.8**	**1.8**	**5.6**	**7.2**	**8.5**	**10.6**	**3.2**	**Dec-07**
NCREIF Property Index			*1.6*	*6.4*	*6.7*	*8.2*	*10.2*	*6.2*	*Dec-07*
Natural Resources	**25,995,149**	**2.5**	**-3.6**	**-13.4**	**0.7**	**0.8**	**--**	**1.6**	**Feb-13**
S&P North American Natural Resources TR			*7.5*	*17.6*	*-2.0*	*-1.4*	*1.4*	*-1.0*	*Feb-13*
Cash	**8,214,221**	**0.8**							

Spliced international equity benchmark is MSCI ACWI-ex U.S. for all periods except 1/1/1997-1/1/1999. MSCI ACWI-ex U.S. is not available during this time period so the MSCI EAFE Index was used.

Private Equity Benchmark consists of the S&P 500 Index +3% prior to 3/31/2018, and the MSCI ACWI Index + 2% (Quarter Lagged) thereafter.

Trailing Net Performance

	Market Value ($)	% of Portfolio	% of Sector	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Total Fund	**1,026,209,799**	**100.0**	**--**	**4.7**	**15.7**	**9.9**	**7.6**	**8.2**	**7.0**	**Mar-97**
Static Benchmark				*4.5*	*15.5*	*8.9*	*7.2*	*8.0*	*--*	*Mar-97*
Dynamic Benchmark				*4.0*	*14.2*	*8.6*	*6.9*	*8.6*	*--*	*Mar-97*
InvMetrics Public DB $250mm-$1B Net Median				*5.5*	*18.7*	*9.6*	*6.9*	*8.3*	*7.0*	*Mar-97*
InvMetrics Public DB $250mm-$1B Net Rank				*82*	*92*	*24*	*22*	*53*	*51*	*Mar-97*
Domestic Equity	**175,140,367**	**17.1**	**17.1**	**8.1**	**29.4**	**13.2**	**9.9**	**12.3**	**8.3**	**Mar-97**
Russell 3000				*9.1*	*31.0*	*14.6*	*11.2*	*13.4*	*8.8*	*Mar-97*
Westwood Capital Large Cap Value	49,041,260	4.8	28.0	5.8	27.3	13.1	9.9	11.7	8.9	Oct-01
Russell 1000 Value				*7.4*	*26.5*	*9.7*	*8.3*	*11.8*	*8.1*	*Oct-01*
eV US Large Cap Value Equity Net Median				*7.7*	*26.3*	*10.3*	*8.2*	*11.3*	*8.4*	*Oct-01*
eV US Large Cap Value Equity Net Rank				*88*	*40*	*15*	*20*	*40*	*28*	*Oct-01*
Westfield Small/Mid Cap Growth	48,947,486	4.8	27.9	14.3	35.2	17.9	10.2	14.1	13.1	Nov-02
Russell 2500 Growth				*10.6*	*32.7*	*15.2*	*10.8*	*14.0*	*12.0*	*Nov-02*
eV US Small-Mid Cap Growth Equity Net Median				*8.5*	*31.3*	*16.7*	*10.9*	*13.5*	*11.8*	*Nov-02*
eV US Small-Mid Cap Growth Equity Net Rank				*6*	*25*	*40*	*59*	*34*	*14*	*Nov-02*
Vaughan Nelson Small Cap Value	46,138,663	4.5	26.3	3.8	25.0	4.7	--	--	8.5	Jan-16
Russell 2000 Value				*8.5*	*22.4*	*4.8*	*7.0*	*10.6*	*10.9*	*Jan-16*
eV US Small Cap Value Equity Net Median				*7.8*	*23.8*	*4.5*	*6.5*	*11.0*	*9.8*	*Jan-16*
eV US Small Cap Value Equity Net Rank				*96*	*35*	*47*	*--*	*--*	*70*	*Jan-16*

MEKETA

	Market Value ($)	% of Portfolio	% of Sector	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
SSgA S&P 500	31,012,958	3.0	17.7	9.1	31.5	15.3	11.7	13.5	9.0	Feb-04
S&P 500				*9.1*	*31.5*	*15.3*	*11.7*	*13.6*	*9.0*	*Feb-04*
eV US Large Cap Equity Net Median				*8.3*	*28.9*	*13.3*	*10.1*	*12.6*	*9.1*	*Feb-04*
eV US Large Cap Equity Net Rank				*36*	*35*	*36*	*28*	*25*	*53*	*Feb-04*
International Equity	**225,316,725**	**22.0**	**22.0**	**11.5**	**22.4**	**11.3**	**6.7**	**6.0**	**6.1**	**Mar-97**
Spliced International Equity Benchmark				*8.9*	*21.5*	*9.9*	*5.5*	*5.0*	*5.6*	*Mar-97*
Baillie Gifford International Growth Fund	39,219,146	3.8	17.4	14.1	37.3	18.2	10.2	9.1	12.0	May-09
MSCI ACWI ex USA				*8.9*	*21.5*	*9.9*	*5.5*	*5.0*	*8.0*	*May-09*
MSCI EAFE				*8.2*	*22.0*	*9.6*	*5.7*	*5.5*	*8.2*	*May-09*
eV ACWI ex-US All Cap Core Eq Net Median				*9.7*	*24.6*	*10.4*	*5.8*	*6.5*	*9.3*	*May-09*
eV ACWI ex-US All Cap Core Eq Net Rank				*1*	*1*	*1*	*3*	*5*	*6*	*May-09*
Sanderson International Value	48,705,562	4.7	21.6	9.8	20.5	7.5	3.8	--	5.6	Feb-13
MSCI EAFE				*8.2*	*22.0*	*9.6*	*5.7*	*5.5*	*5.6*	*Feb-13*
eV EAFE All Cap Value Net Median				*9.0*	*18.1*	*7.4*	*4.0*	*6.1*	*5.3*	*Feb-13*
eV EAFE All Cap Value Net Rank				*21*	*31*	*42*	*66*	*--*	*36*	*Feb-13*
Highclere International Small Cap	46,139,666	4.5	20.5	12.8	23.5	9.5	9.0	9.1	9.0	Dec-09
MSCI EAFE Small Cap				*11.5*	*25.0*	*10.9*	*8.9*	*8.7*	*8.7*	*Dec-09*
eV EAFE Small Cap Equity Net Median				*12.1*	*23.8*	*10.6*	*8.4*	*9.3*	*9.3*	*Dec-09*
eV EAFE Small Cap Equity Net Rank				*32*	*54*	*63*	*41*	*61*	*63*	*Dec-09*
SSgA MSCI EAFE Fund	27,404,409	2.7	12.2	8.2	22.4	9.9	6.0	--	5.9	Feb-13
MSCI EAFE				*8.2*	*22.0*	*9.6*	*5.7*	*5.5*	*5.6*	*Feb-13*
eV EAFE Core Equity Net Median				*9.0*	*22.2*	*9.3*	*6.3*	*7.0*	*6.5*	*Feb-13*
eV EAFE Core Equity Net Rank				*69*	*49*	*46*	*57*	*--*	*64*	*Feb-13*

	Market Value ($)	% of Portfolio	% of Sector	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
DFA Emerging Markets Value	31,220,632	3.0	13.9	9.7	9.6	8.9	4.7	2.1	2.5	Dec-09
MSCI Emerging Markets Value NR USD				*9.9*	*12.0*	*8.6*	*3.7*	*2.2*	*2.6*	*Dec-09*
MSCI Emerging Markets				*11.8*	*18.4*	*11.6*	*5.6*	*3.7*	*4.0*	*Dec-09*
eV Emg Mkts All Cap Value Equity Net Median				*10.9*	*17.7*	*9.9*	*5.6*	*3.6*	*4.1*	*Dec-09*
eV Emg Mkts All Cap Value Equity Net Rank				*85*	*98*	*68*	*69*	*94*	*94*	*Dec-09*
TT Emerging Markets Equity	32,627,309	3.2	14.5	13.6	--	--	--	--	8.8	Apr-19
MSCI Emerging Markets				*11.8*	*18.4*	*11.6*	*5.6*	*3.7*	*7.7*	*Apr-19*
eV Emg Mkts Equity Net Median				*11.4*	*19.3*	*10.7*	*5.5*	*4.4*	*8.4*	*Apr-19*
eV Emg Mkts Equity Net Rank				*9*	*--*	*--*	*--*	*--*	*48*	*Apr-19*
Private Equity	**192,030,377**	**18.7**	**18.7**	**3.4**	**16.1**	**16.5**	**14.3**	**--**	**15.6**	**May-10**
Private Equity Benchmark				*0.0*	*1.4*	*9.7*	*9.7*	*--*	*14.9*	*May-10*
Fixed Income	**309,667,730**	**30.2**	**30.2**	**1.0**	**10.5**	**4.6**	**3.7**	**3.9**	**5.0**	**Mar-97**
BBgBarc US Aggregate TR				*0.2*	*8.7*	*4.0*	*3.0*	*3.7*	*5.2*	*Mar-97*
SSgA Bond Fund	76,297,345	7.4	24.6	0.2	8.7	4.0	3.0	3.6	4.1	Jan-04
BBgBarc US Aggregate TR				*0.2*	*8.7*	*4.0*	*3.0*	*3.7*	*4.2*	*Jan-04*
eV US Core Fixed Inc Net Median				*0.2*	*9.0*	*4.1*	*3.1*	*4.0*	*4.3*	*Jan-04*
eV US Core Fixed Inc Net Rank				*47*	*70*	*64*	*70*	*80*	*74*	*Jan-04*
Loomis Sayles Core Plus Fixed Income	59,398,451	5.8	19.2	0.5	9.4	4.7	--	--	4.0	Jul-15
BBgBarc US Aggregate TR				*0.2*	*8.7*	*4.0*	*3.0*	*3.7*	*3.4*	*Jul-15*
eV US Core Plus Fixed Inc Net Median				*0.4*	*9.8*	*4.5*	*3.6*	*4.7*	*4.0*	*Jul-15*
eV US Core Plus Fixed Inc Net Rank				*42*	*63*	*29*	*--*	*--*	*43*	*Jul-15*

Fund Summary | As of December 31, 2019

	Market Value ($)	% of Portfolio	% of Sector	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Aberdeen Emerging Markets Bond Fund	63,082,394	6.1	20.4	2.5	15.1	6.4	5.8	--	4.9	Dec-14
JP Morgan EMBI Global Diversified				*1.8*	*15.0*	*6.7*	*6.2*	*6.9*	*5.6*	*Dec-14*
50% JPM EMBI GD, 25% JPM GBI EM GD, 25% CMBI Broad				*2.7*	*14.2*	*6.8*	*5.8*	*5.9*	*5.0*	*Dec-14*
SSGA TIPS	52,759,620	5.1	17.0	0.8	8.3	3.3	2.6	--	1.8	Aug-14
BBgBarc US TIPS TR				*0.8*	*8.4*	*3.3*	*2.6*	*3.4*	*2.0*	*Aug-14*
eV US TIPS / Inflation Fixed Inc Net Median				*0.8*	*8.5*	*3.3*	*2.5*	*3.2*	*1.8*	*Aug-14*
eV US TIPS / Inflation Fixed Inc Net Rank				*59*	*59*	*57*	*48*	*--*	*38*	*Aug-14*
Pyramis Tactical Bond Fund	39,447,648	3.8	12.7	1.5	13.2	5.9	5.2	--	5.1	Aug-13
BBgBarc US Aggregate TR				*0.2*	*8.7*	*4.0*	*3.0*	*3.7*	*3.3*	*Aug-13*
eV US Core Plus Fixed Inc Net Median				*0.4*	*9.8*	*4.5*	*3.6*	*4.7*	*3.8*	*Aug-13*
eV US Core Plus Fixed Inc Net Rank				*2*	*1*	*2*	*1*	*--*	*2*	*Aug-13*
Pacific Asset Management Bank Loans	18,682,271	1.8	6.0	--	--	--	--	--	1.0	Dec-19
Credit Suisse Leveraged Loans				*1.7*	*8.2*	*4.5*	*4.5*	*5.2*	*1.6*	*Dec-19*
Bank Loan MStar MF Median				*1.6*	*8.0*	*3.9*	*4.0*	*4.8*	*1.6*	*Dec-19*
Bank Loan MStar MF Rank				*--*	*--*	*--*	*--*	*--*	*93*	*Dec-19*
Real Estate	**89,845,231**	**8.8**	**8.8**	**1.8**	**5.6**	**7.2**	**8.5**	**10.6**	**3.2**	**Dec-07**
NCREIF Property Index				*1.6*	*6.4*	*6.7*	*8.2*	*10.2*	*6.2*	*Dec-07*
Manager A	66,557,988	6.5	74.1	1.8	6.3	7.8	9.7	11.7	6.0	Apr-05
NCREIF ODCE Equal Weighted (Net)				*1.3*	*5.2*	*6.5*	*8.3*	*10.5*	*6.5*	*Apr-05*

	Market Value ($)	% of Portfolio	% of Sector	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Natural Resources	**25,995,149**	**2.5**	**2.5**	**-3.6**	**-13.4**	**0.7**	**0.8**	**--**	**1.6**	**Feb-13**
S&P North American Natural Resources TR				*7.5*	*17.6*	*-2.0*	*-1.4*	*1.4*	*-1.0*	*Feb-13*
Cash	**8,214,221**	**0.8**	**0.8**							
Cash	8,214,221	0.8	100.0							

Calendar Year Performance	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
Total Fund	**15.7**	**-2.0**	**17.0**	**7.1**	**1.3**	**4.8**	**16.1**	**13.3**	**-2.6**	**13.8**
Static Benchmark	*15.5*	*-3.9*	*16.4*	*9.6*	*-0.1*	*5.7*	*15.1*	*12.6*	*-1.0*	*12.2*
Dynamic Benchmark	*14.2*	*-3.4*	*16.1*	*8.4*	*0.4*	*5.4*	*21.2*	*14.2*	*-2.1*	*14.9*
Domestic Equity	**29.4**	**-7.9**	**21.8**	**9.9**	**0.2**	**10.0**	**31.3**	**16.9**	**-0.5**	**18.2**
Russell 3000	*31.0*	*-5.2*	*21.1*	*12.7*	*0.5*	*12.6*	*33.6*	*16.4*	*1.0*	*16.9*
Westwood Capital Large Cap Value	27.3	-5.7	20.4	10.9	-0.1	11.9	29.6	16.0	-0.7	13.2
Russell 1000 Value	*26.5*	*-8.3*	*13.7*	*17.3*	*-3.8*	*13.5*	*32.5*	*17.5*	*0.4*	*15.5*
Westfield Small/Mid Cap Growth	35.2	-7.6	31.0	3.4	-4.1	7.8	37.2	19.5	-0.1	30.4
Russell 2500 Growth	*32.7*	*-7.5*	*24.5*	*9.7*	*-0.2*	*7.1*	*40.6*	*16.1*	*-1.6*	*28.9*
Vaughan Nelson Small Cap Value	25.0	-14.1	6.8	20.7	--	--	--	--	--	--
Russell 2000 Value	*22.4*	*-12.9*	*7.8*	*31.7*	*-7.5*	*4.2*	*34.5*	*18.0*	*-5.5*	*24.5*
SSgA S&P 500	31.5	-4.4	21.8	12.0	1.4	13.7	32.3	15.9	2.2	15.0
S&P 500	*31.5*	*-4.4*	*21.8*	*12.0*	*1.4*	*13.7*	*32.4*	*16.0*	*2.1*	*15.1*
International Equity	**22.4**	**-15.9**	**34.0**	**5.0**	**-4.4**	**-4.4**	**19.7**	**18.1**	**-16.2**	**14.2**
Spliced International Equity Benchmark	*21.5*	*-14.2*	*27.2*	*4.5*	*-5.7*	*-3.9*	*15.3*	*16.8*	*-13.7*	*11.2*
Baillie Gifford International Growth Fund	37.3	-17.3	45.5	1.4	-2.9	-6.4	29.9	17.6	-11.6	16.6
MSCI ACWI ex USA	*21.5*	*-14.2*	*27.2*	*4.5*	*-5.7*	*-3.9*	*15.3*	*16.8*	*-13.7*	*11.2*
MSCI EAFE	*22.0*	*-13.8*	*25.0*	*1.0*	*-0.8*	*-4.9*	*22.8*	*17.3*	*-12.1*	*7.8*
Sanderson International Value	20.5	-18.2	26.1	2.5	-5.5	-2.3	--	--	--	--
MSCI EAFE	*22.0*	*-13.8*	*25.0*	*1.0*	*-0.8*	*-4.9*	*22.8*	*17.3*	*-12.1*	*7.8*

	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
Highclere International Small Cap	23.5	-18.8	30.9	10.3	6.5	-4.4	24.6	20.2	-9.5	19.5
MSCI EAFE Small Cap	*25.0*	*-17.9*	*33.0*	*2.2*	*9.6*	*-4.9*	*29.3*	*20.0*	*-15.9*	*22.0*
SSgA MSCI EAFE Fund	22.4	-13.5	25.3	1.3	-0.6	-4.7	--	--	--	--
MSCI EAFE	*22.0*	*-13.8*	*25.0*	*1.0*	*-0.8*	*-4.9*	*22.8*	*17.3*	*-12.1*	*7.8*
DFA Emerging Markets Value	9.6	-11.9	33.8	19.8	-18.8	-4.4	-4.4	18.7	-26.1	21.6
MSCI Emerging Markets Value NR USD	*12.0*	*-10.7*	*28.1*	*14.9*	*-18.6*	*-4.1*	*-5.1*	*15.9*	*-17.9*	*19.8*
MSCI Emerging Markets	*18.4*	*-14.6*	*37.3*	*11.2*	*-14.9*	*-2.2*	*-2.6*	*18.2*	*-18.4*	*18.9*
TT Emerging Markets Equity	--	--	--	--	--	--	--	--	--	--
MSCI Emerging Markets	*18.4*	*-14.6*	*37.3*	*11.2*	*-14.9*	*-2.2*	*-2.6*	*18.2*	*-18.4*	*18.9*
Private Equity	**16.1**	**15.8**	**17.7**	**9.4**	**12.7**	**23.3**	**7.7**	**6.2**	**21.7**	--
Private Equity Benchmark	*1.4*	*3.8*	*25.4*	*15.3*	*4.4*	*17.1*	*36.3*	*19.4*	*5.2*	*--*
Fixed Income	**10.5**	**-2.0**	**5.6**	**6.9**	**-2.1**	**3.1**	**-2.4**	**8.3**	**5.1**	**6.6**
BBgBarc US Aggregate TR	*8.7*	*0.0*	*3.5*	*2.6*	*0.5*	*6.0*	*-2.0*	*4.2*	*7.8*	*6.5*
SSgA Bond Fund	8.7	0.0	3.5	2.6	0.5	5.9	-2.2	4.2	7.5	6.4
BBgBarc US Aggregate TR	*8.7*	*0.0*	*3.5*	*2.6*	*0.5*	*6.0*	*-2.0*	*4.2*	*7.8*	*6.5*
Loomis Sayles Core Plus Fixed Income	9.4	-0.4	5.4	6.9	--	--	--	--	--	--
BBgBarc US Aggregate TR	*8.7*	*0.0*	*3.5*	*2.6*	*0.5*	*6.0*	*-2.0*	*4.2*	*7.8*	*6.5*
Aberdeen Emerging Markets Bond Fund	15.1	-7.5	13.0	13.3	-2.7	--	--	--	--	--
JP Morgan EMBI Global Diversified	*15.0*	*-4.3*	*10.3*	*10.2*	*1.2*	*7.4*	*-5.3*	*17.4*	*7.3*	*12.2*
50% JPM EMBI GD, 25% JPM GBI EM GD, 25% CMBI Broad	*14.2*	*-3.9*	*10.9*	*10.4*	*-1.3*	*3.1*	*-5.2*	*16.8*	*4.0*	*13.1*

	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
SSGA TIPS	8.3	-1.3	3.0	4.6	-1.5	--	--	--	--	--
BBgBarc US TIPS TR	*8.4*	*-1.3*	*3.0*	*4.7*	*-1.4*	*3.6*	*-8.6*	*7.0*	*13.6*	*6.3*
Pyramis Tactical Bond Fund	13.2	-0.9	5.9	10.4	-1.8	5.3	--	--	--	--
BBgBarc US Aggregate TR	*8.7*	*0.0*	*3.5*	*2.6*	*0.5*	*6.0*	*-2.0*	*4.2*	*7.8*	*6.5*
Pacific Asset Management Bank Loans	--	--	--	--	--	--	--	--	--	--
Credit Suisse Leveraged Loans	*8.2*	*1.1*	*4.2*	*9.9*	*-0.4*	*2.1*	*6.2*	*9.4*	*1.8*	*10.0*
Real Estate	**5.6**	**8.6**	**7.5**	**7.8**	**13.1**	**10.5**	**10.5**	**9.4**	**17.0**	**16.5**
NCREIF Property Index	*6.4*	*6.7*	*7.0*	*8.0*	*13.3*	*11.8*	*11.0*	*10.5*	*14.3*	*13.1*
Manager A	6.3	9.2	8.0	9.3	15.7	12.3	11.8	9.9	17.7	18.0
NCREIF ODCE Equal Weighted (Net)	*5.2*	*7.3*	*6.9*	*8.3*	*14.2*	*11.4*	*12.4*	*9.9*	*15.0*	*15.1*
Natural Resources	**-13.4**	**2.1**	**15.7**	**8.6**	**-6.3**	**6.7**	--	--	--	--
S&P North American Natural Resources TR	*17.6*	*-21.1*	*1.2*	*30.9*	*-24.3*	*-9.8*	*16.5*	*2.2*	*-7.4*	*23.9*
Cash										
Cash										

Statistics Summary

5 Years Ending December 31, 2019

	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Sharpe Ratio	Tracking Error
Total Fund	7.6%	5.6%	0.2	1.2	2.1%
Static Benchmark	7.2%	6.8%	--	0.9	0.0%
Domestic Equity	9.9%	12.6%	-0.7	0.7	1.9%
Russell 3000	11.2%	12.2%	--	0.8	0.0%
Westwood Capital Large Cap Value	9.9%	10.8%	0.5	0.8	3.1%
Russell 1000 Value	8.3%	12.0%	--	0.6	0.0%
Westfield Small/Mid Cap Growth	10.2%	16.5%	-0.1	0.6	4.5%
Russell 2500 Growth	10.8%	15.9%	--	0.6	0.0%
SSgA S&P 500	11.7%	12.0%	0.4	0.9	0.0%
S&P 500	11.7%	12.0%	--	0.9	0.0%
International Equity	6.7%	13.6%	0.5	0.4	2.5%
Spliced International Equity Benchmark	5.5%	12.5%	--	0.4	0.0%
Baillie Gifford International Growth Fund	10.2%	17.3%	0.6	0.5	7.4%
MSCI ACWI ex USA	5.5%	12.5%	--	0.4	0.0%
Sanderson International Value	3.8%	13.1%	-0.6	0.2	3.3%
MSCI EAFE	5.7%	12.2%	--	0.4	0.0%
Highclere International Small Cap	9.0%	12.2%	0.1	0.7	3.2%
MSCI EAFE Small Cap	8.9%	12.6%	--	0.6	0.0%
SSgA MSCI EAFE Fund	6.0%	12.2%	2.3	0.4	0.1%

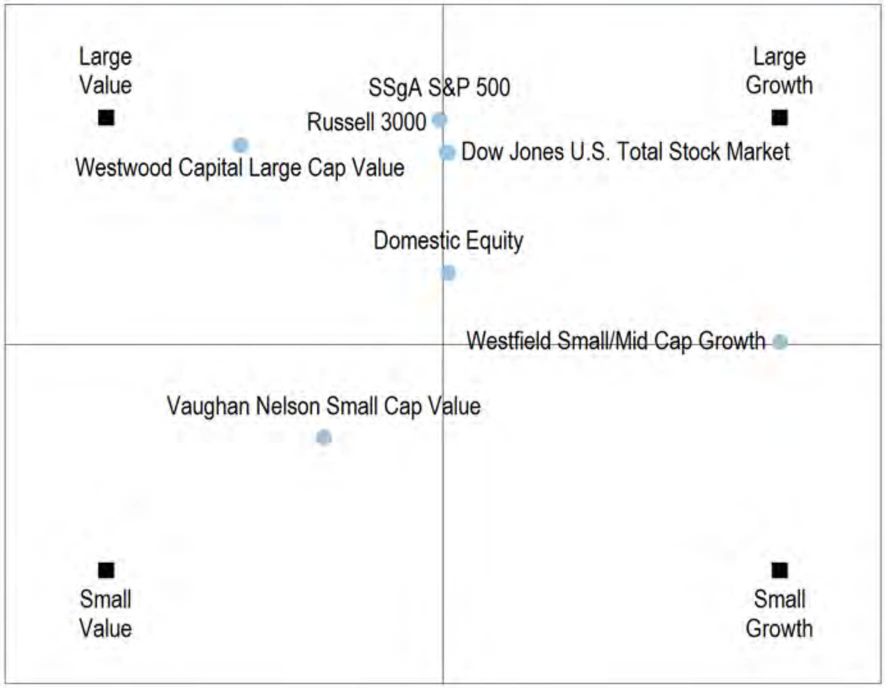
	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Sharpe Ratio	Tracking Error
MSCI EAFE	5.7%	12.2%	--	0.4	0.0%
DFA Emerging Markets Value	4.7%	16.6%	0.4	0.2	2.4%
MSCI Emerging Markets Value NR USD	3.7%	16.3%	--	0.2	0.0%
Private Equity	14.3%	5.0%	0.3	2.6	13.7%
Private Equity Benchmark	9.7%	11.9%	--	0.7	0.0%
Fixed Income	3.7%	3.1%	0.3	0.8	2.2%
BBgBarc US Aggregate TR	3.0%	3.1%	--	0.7	0.0%
SSgA Bond Fund	3.0%	3.1%	-1.9	0.6	0.0%
BBgBarc US Aggregate TR	3.0%	3.1%	--	0.7	0.0%
Aberdeen Emerging Markets Bond Fund	5.8%	6.9%	-0.2	0.7	2.5%
JP Morgan EMBI Global Diversified	6.2%	5.3%	--	1.0	0.0%
SSGA TIPS	2.6%	3.4%	-1.1	0.4	0.1%
BBgBarc US TIPS TR	2.6%	3.4%	--	0.5	0.0%
Pyramis Tactical Bond Fund	5.2%	3.4%	0.8	1.2	2.9%
BBgBarc US Aggregate TR	3.0%	3.1%	--	0.7	0.0%
Real Estate	8.5%	3.8%	0.1	2.0	1.9%
NCREIF Property Index	8.2%	3.5%	--	2.0	0.0%
Manager A	9.7%	4.4%	0.8	2.0	1.6%
NCREIF ODCE Equal Weighted (Net)	8.3%	3.7%	--	2.0	0.0%
Natural Resources	0.8%	11.2%	0.1	0.0	23.1%
S&P North American Natural Resources TR	-1.4%	20.2%	--	-0.1	0.0%

Fund Detail

Domestic Equity

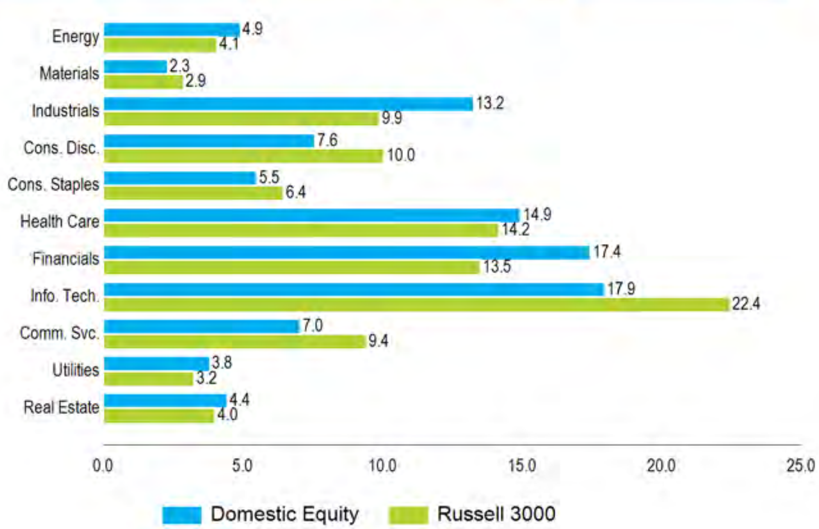
Asset Allocation on December 31, 2019	Actual	Actual
Westwood Capital Large Cap Value	$49,041,260	28.0%
Westfield Small/Mid Cap Growth	$48,947,486	27.9%
Vaughan Nelson Small Cap Value	$46,138,663	26.3%
SSgA S&P 500	$31,012,958	17.7%
Total	**$175,140,367**	**100.0%**

Domestic Equity Style Map
3 Years Ending December 31, 2019



Domestic Equity Characteristics	Portfolio Q4-19	Index Q4-19	Portfolio Q3-19
Market Value			
Market Value ($M)	175.1	--	161.9
Number Of Holdings	627	2992	631
Characteristics			
Weighted Avg. Market Cap. ($B)	107.1	230.5	93.6
Median Market Cap ($B)	19.3	1.8	17.8
P/E Ratio	21.9	22.8	20.8
Yield	1.6	1.8	1.6
EPS Growth - 5 Yrs.	14.2	13.1	14.2
Price to Book	3.2	3.6	3.1

Sector Allocation (%) vs Russell 3000



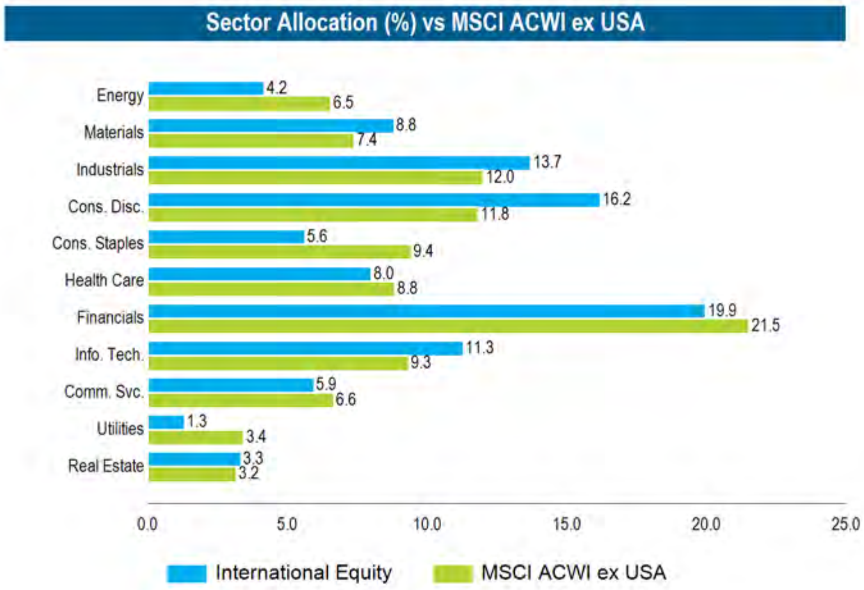
Top 10 Holdings	
MICROSOFT	1.7%
JP MORGAN CHASE & CO.	1.4%
ISHARES RUSSELL 2000 VALUE ETF	1.3%
BANK OF AMERICA	1.2%
APPLE	1.2%
CACI INTERNATIONAL 'A'	1.2%
JOHNSON & JOHNSON	1.2%
AT&T	1.2%
NEXSTAR MEDIA GROUP CL.A	1.0%
WELLS FARGO & CO	1.0%
Total	**12.4%**

International Equity

Asset Allocation on December 31, 2019	Actual	Actual
Baillie Gifford International Growth Fund	$39,219,146	17.4%
Sanderson International Value	$48,705,562	21.6%
Highclere International Small Cap	$46,139,666	20.5%
SSgA MSCI EAFE Fund	$27,404,409	12.2%
DFA Emerging Markets Value	$31,220,632	13.9%
TT Emerging Markets Equity	$32,627,309	14.5%
Total	**$225,316,725**	**100.0%**

International Equity Style Map
3 Years Ending December 31, 2019

Total International Equity Characteristics	Portfolio Q4-19	Index Q4-19	Portfolio Q3-19
Market Value			
Market Value ($M)	225.3	--	202.1
Number Of Holdings	3556	2379	3646
Characteristics			
Weighted Avg. Market Cap. ($B)	52.2	74.1	44.1
Median Market Cap ($B)	1.2	8.2	1.0
P/E Ratio	15.5	16.3	14.3
Yield	2.7	3.0	2.9
EPS Growth - 5 Yrs.	9.3	9.1	9.4
Price to Book	2.3	2.4	2.2



Top 10 Holdings	
ALIBABA GROUP HOLDING ADR 1:8	1.9%
PING AN INSURANCE (GROUP) OF CHINA 'H'	1.5%
ASML HOLDING	1.5%
TENCENT HOLDINGS	1.4%
SAMSUNG ELTN.PREF.	1.3%
FERRARI (MIL)	1.1%
AIA GROUP	0.8%
KERING	0.8%
M3	0.8%
NESTLE 'N'	0.7%
Total	**11.7%**

Total International Equity Region Allocation

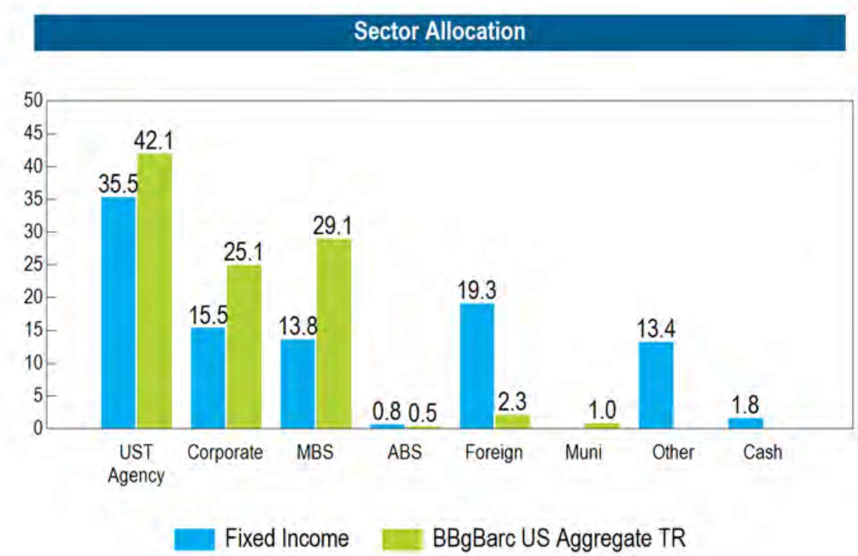
vs MSCI ACWI ex USA

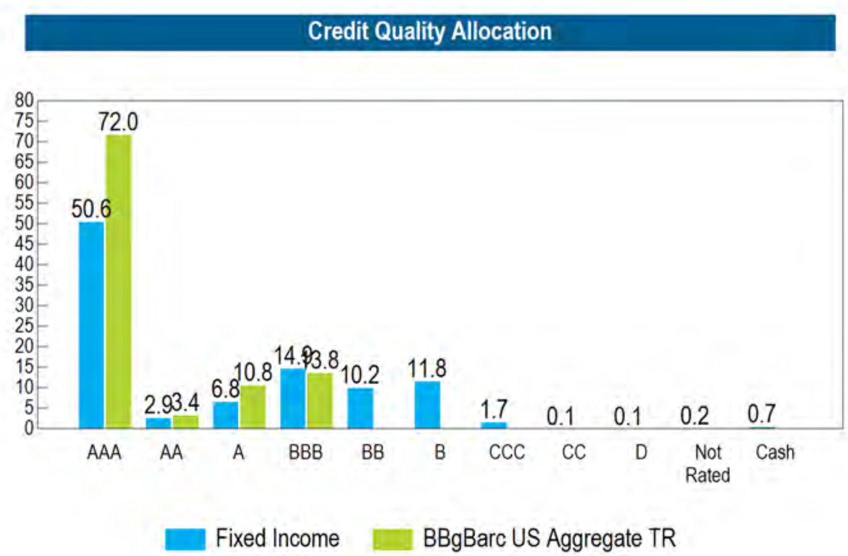
Region	% of Total	% of Bench	% Diff
North America ex U.S.	0.0%	6.7%	-6.7%
United States	2.1%	0.0%	2.1%
Europe Ex U.K.	26.2%	30.8%	-4.6%
United Kingdom	13.6%	10.9%	2.7%
Pacific Basin Ex Japan	9.8%	7.8%	2.0%
Japan	17.9%	16.2%	1.7%
Emerging Markets	29.6%	27.2%	2.4%
Other	0.8%	0.4%	0.4%
Total	**100.0%**	**100.0%**	**0.0%**

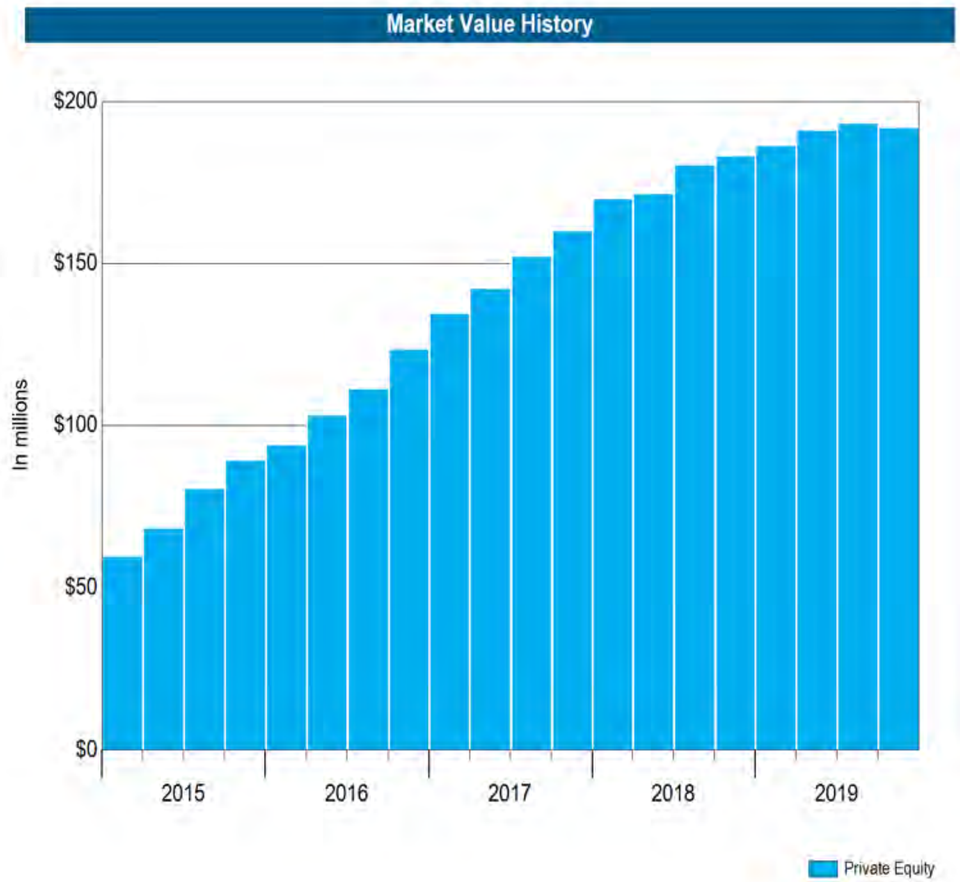
Fixed Income

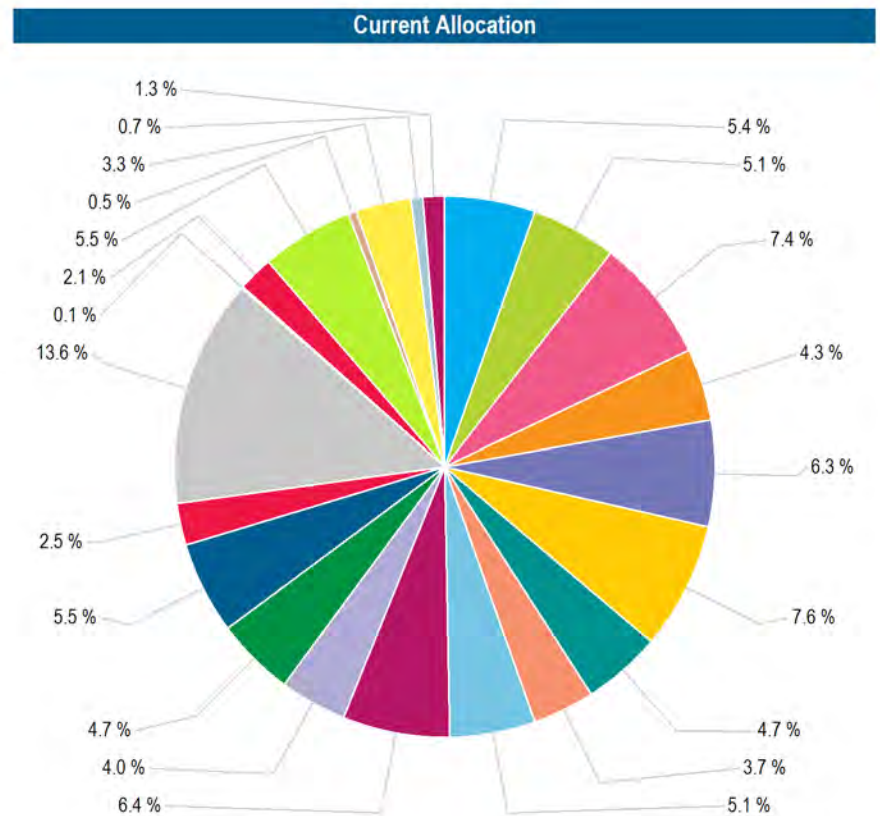
Asset Allocation on December 31, 2019	Actual	Actual
SSgA Bond Fund	$76,297,345	24.6%
Loomis Sayles Core Plus Fixed Income	$59,398,451	19.2%
Aberdeen Emerging Markets Bond Fund	$63,082,394	20.4%
SSGA TIPS	$52,759,620	17.0%
Pyramis Tactical Bond Fund	$39,447,648	12.7%
Pacific Asset Management Bank Loans	$18,682,271	6.0%
Total	**$309,667,730**	**100.0%**

Total Fixed Income Characteristics vs. BBgBarc US Aggregate TR	Portfolio Q4-19	Index Q4-19	Portfolio Q3-19
Fixed Income Characteristics			
Yield to Maturity	3.3	2.3	3.4
Average Duration	5.5	6.3	4.8
Average Quality	A	AA	A
Weighted Average Maturity	8.6	13.1	8.5

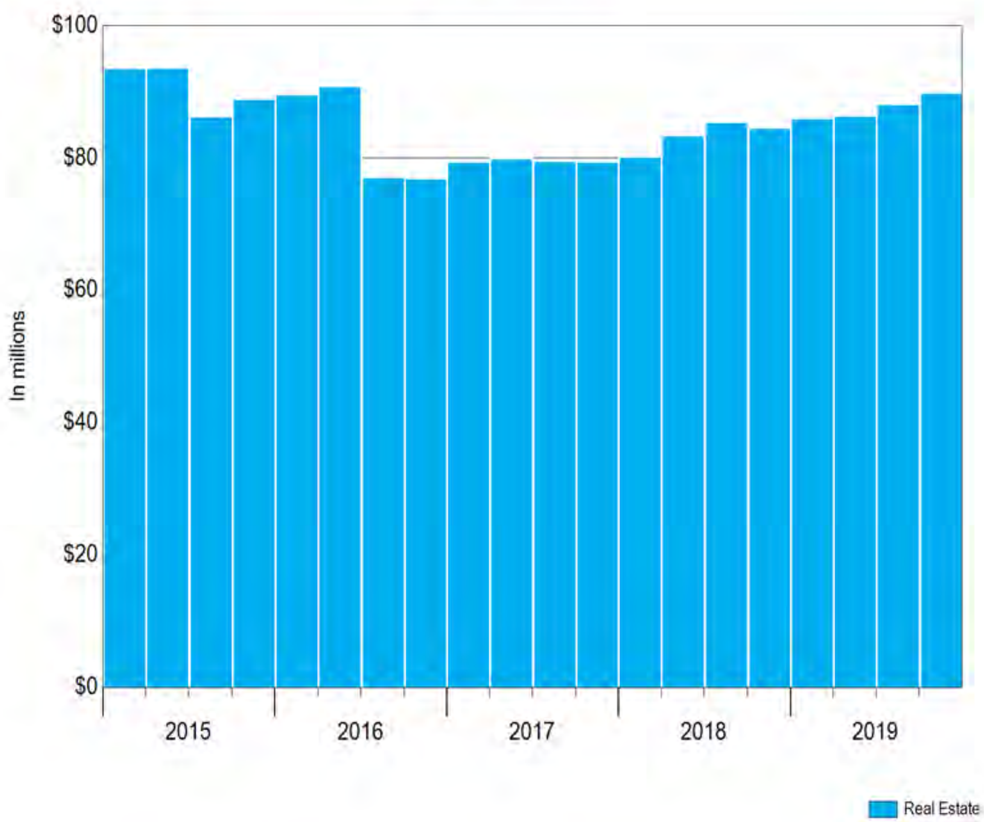




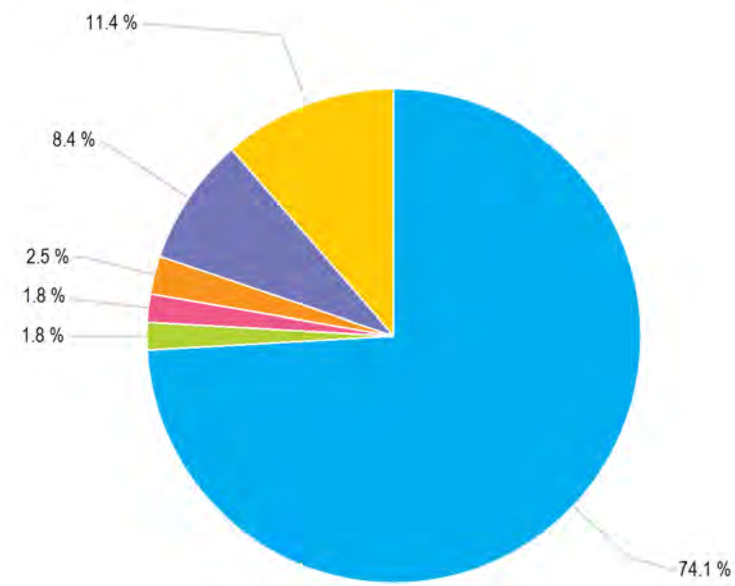

Market Value History
$200
$150
$100
$50
$0
In millions
2015
2016
2017
2018
2019
Private Equity


Current Allocation
1.3 %
0.7 %
3.3 %
0.5 %
5.5 %
2.1 %
0.1 %
13.6 %
2.5 %
5.5 %
4.7 %
4.0 %
6.4 %
5.4 %
5.1 %
7.4 %
4.3 %
6.3 %
7.6 %
4.7 %
3.7 %
5.1 %

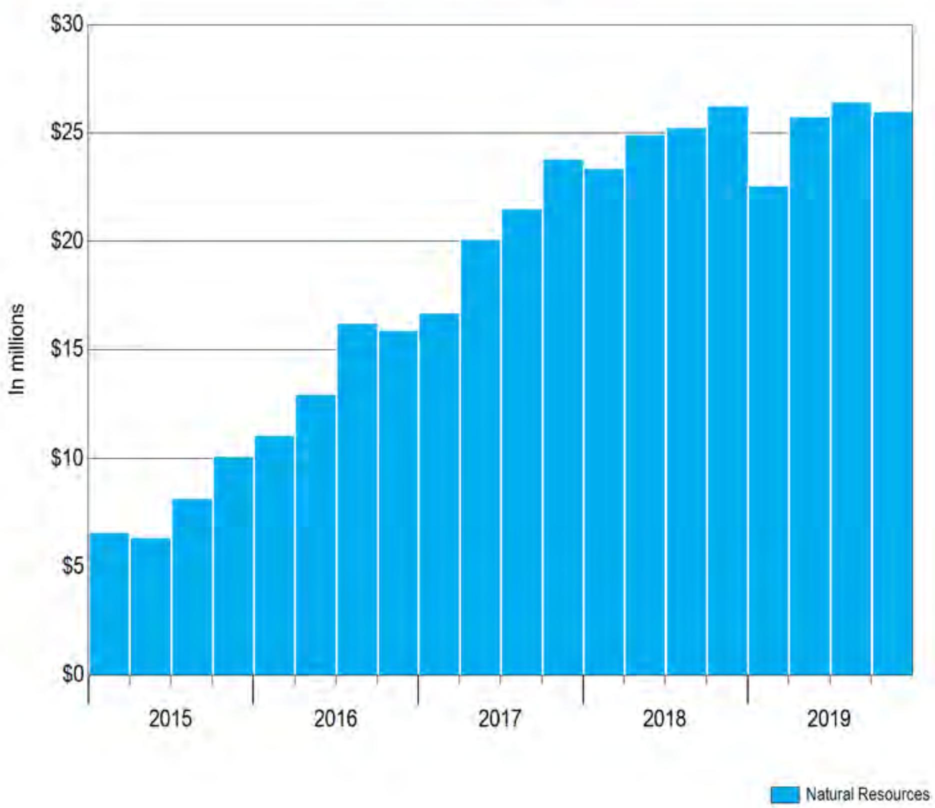
Market Value History



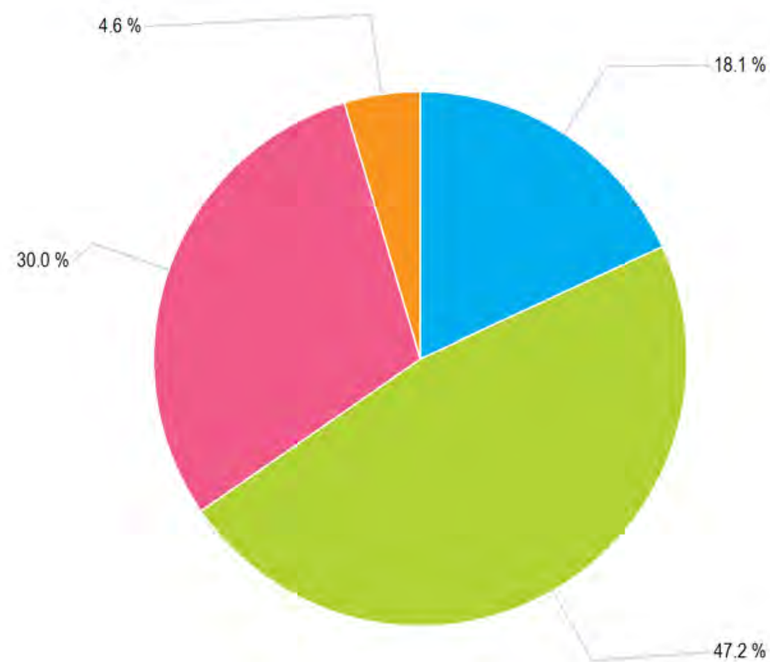
Current Allocation



Market Value History



Current Allocation



Portfolio Reviews

Westwood Capital Large Cap Value | As of December 31, 2019

Account Information

Account Name	**Westwood Capital Large Cap Value**
Account Structure	**Separate Account**
Investment Style	**Active**
Inception Date	**10/01/01**
Account Type	**US Equity**
Benchmark	**Russell 1000 Value**
Universe	**eV US Large Cap Value Equity Net**

Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Westwood Capital Large Cap Value	5.8	27.3	27.3	13.1	9.9	11.7	8.9	Oct-01
Russell 1000 Value	*7.4*	*26.5*	*26.5*	*9.7*	*8.3*	*11.8*	*8.1*	*Oct-01*
eV US Large Cap Value Equity Net Median	*7.7*	*26.3*	*26.3*	*10.3*	*8.2*	*11.3*	*8.4*	*Oct-01*
eV US Large Cap Value Equity Net Rank	*88*	*40*	*40*	*15*	*20*	*40*	*28*	*Oct-01*

Top 10 Holdings

JP MORGAN CHASE & CO.	3.7%
BANK OF AMERICA	3.7%
AT&T	3.5%
MICROSOFT	3.4%
JOHNSON & JOHNSON	3.3%
CVS HEALTH	3.1%
HONEYWELL INTL.	3.1%
WELLS FARGO & CO	3.0%
CHEVRON	2.9%
WALT DISNEY	2.9%
Total	**32.6%**

Westwood Capital Large Cap Value Characteristics

	Portfolio Q4-19	Index Q4-19	Portfolio Q3-19
Market Value			
Market Value ($M)	49.0	--	46.3
Number Of Holdings	45	764	45
Characteristics			
Weighted Avg. Market Cap. ($B)	196.8	123.3	170.9
Median Market Cap ($B)	71.4	9.6	68.3
P/E Ratio	21.5	18.5	19.1
Yield	2.2	2.5	2.3
EPS Growth - 5 Yrs.	9.1	6.7	9.1
Price to Book	2.9	2.3	2.7
Sector Distribution			
Energy	7.3	8.2	7.1
Materials	0.0	4.3	0.0
Industrials	13.3	9.7	12.1
Consumer Discretionary	4.1	5.9	4.6
Consumer Staples	8.0	8.9	8.3
Health Care	15.8	13.0	16.2
Financials	20.2	23.9	20.2
Information Technology	8.8	6.3	8.5
Communication Services	9.6	8.2	9.5
Utilities	7.8	6.6	8.2
Real Estate	5.0	5.2	5.3

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Client Example

Westfield Small/Mid Cap Growth | As of December 31, 2019

Account Information

Account Name	**Westfield Small/Mid Cap Growth**
Account Structure	**Separate Account**
Investment Style	**Active**
Inception Date	**11/01/02**
Account Type	**US Equity**
Benchmark	**Russell 2500 Growth**
Universe	**eV US Small-Mid Cap Growth Equity Net**

Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Westfield Small/Mid Cap Growth	14.3	35.2	35.2	17.9	10.2	14.1	13.1	Nov-02
Russell 2500 Growth	*10.6*	*32.7*	*32.7*	*15.2*	*10.8*	*14.0*	*12.0*	*Nov-02*
eV US Small-Mid Cap Growth Equity Net Median	*8.5*	*31.3*	*31.3*	*16.7*	*10.9*	*13.5*	*11.8*	*Nov-02*
eV US Small-Mid Cap Growth Equity Net Rank	*6*	*25*	*25*	*40*	*59*	*34*	*14*	*Nov-02*

Top 10 Holdings

BIO-RAD LABORATORIES 'A'	2.7%
TELEDYNE TECHS.	2.5%
DEXCOM	2.4%
ARTHUR J GALLAGHER	2.2%
HUBSPOT	2.2%
QUEST DIAGNOSTICS	2.1%
FORTINET	2.0%
FIVE BELOW	1.9%
BRIXMOR PROPERTY GROUP	1.9%
BLACK KNIGHT	1.9%
Total	**21.9%**

Westfield Small/Mid Cap Growth Characteristics

	Portfolio Q4-19	Index Q4-19	Portfolio Q3-19
Market Value			
Market Value ($M)	48.9	--	42.8
Number Of Holdings	69	1409	69
Characteristics			
Weighted Avg. Market Cap. ($B)	9.2	5.9	8.8
Median Market Cap ($B)	7.1	1.3	6.5
P/E Ratio	26.3	28.4	27.1
Yield	0.7	0.7	0.6
EPS Growth - 5 Yrs.	20.7	15.9	21.5
Price to Book	4.6	5.5	4.6
Sector Distribution			
Energy	3.5	0.5	3.6
Materials	3.4	3.6	4.8
Industrials	15.3	17.3	15.9
Consumer Discretionary	11.9	12.9	7.6
Consumer Staples	1.5	2.2	1.5
Health Care	22.2	24.3	22.7
Financials	8.3	6.1	8.0
Information Technology	24.4	25.0	27.1
Communication Services	3.2	3.2	1.8
Utilities	0.0	0.8	0.0
Real Estate	2.8	4.2	3.9

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Vaughan Nelson Small Cap Value | As of December 31, 2019

Account Information

Account Name	**Vaughan Nelson Small Cap Value**
Account Structure	**Separate Account**
Investment Style	**Active**
Inception Date	**1/01/16**
Account Type	**US Equity**
Benchmark	**Russell 2000 Value**
Universe	**eV US Small Cap Value Equity Net**

Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Vaughan Nelson Small Cap Value	3.8	25.0	25.0	4.7	--	--	8.5	Jan-16
Russell 2000 Value	*8.5*	*22.4*	*22.4*	*4.8*	*7.0*	*10.6*	*10.9*	*Jan-16*
eV US Small Cap Value Equity Net Median	*7.8*	*23.8*	*23.8*	*4.5*	*6.5*	*11.0*	*9.8*	*Jan-16*
eV US Small Cap Value Equity Net Rank	*96*	*35*	*35*	*47*	*--*	*--*	*70*	*Jan-16*

Top 10 Holdings

ISHARES RUSSELL 2000 VALUE ETF	4.9%
CACI INTERNATIONAL 'A'	3.4%
CABOT MICROELS.	2.9%
NEXSTAR MEDIA GROUP CL.A	2.5%
ELEMENT SOLUTIONS	2.5%
MGIC INVESTMENT	2.4%
BRADY NONVOTING A	2.3%
ENTEGRIS	2.3%
TEGNA	2.3%
LANDSTAR SYSTEM	2.2%
Total	**27.7%**

Vaughan Nelson Small Cap Value Characteristics

	Portfolio Q4-19	Index Q4-19	Portfolio Q3-19
Market Value			
Market Value ($M)	46.1	--	44.3
Number Of Holdings	66	1402	66
Characteristics			
Weighted Avg. Market Cap. ($B)	4.0	2.2	4.0
Median Market Cap ($B)	2.9	0.7	2.9
P/E Ratio	19.0	16.3	19.1
Yield	1.6	2.1	1.4
EPS Growth - 5 Yrs.	16.3	7.4	15.1
Price to Book	2.3	1.7	2.5
Sector Distribution			
Energy	4.1	5.8	2.9
Materials	3.3	4.7	2.1
Industrials	13.7	12.6	13.2
Consumer Discretionary	5.2	9.7	5.0
Consumer Staples	6.0	2.7	7.3
Health Care	6.7	5.4	8.1
Financials	27.1	30.2	24.5
Information Technology	17.4	9.7	21.2
Communication Services	6.1	2.2	5.3
Utilities	3.9	5.9	4.6
Real Estate	6.5	11.1	5.8

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Client Example

SSgA S&P 500 | As of December 31, 2019

Account Information

Account Name	**SSgA S&P 500**
Account Structure	**Commingled Fund**
Investment Style	**Passive**
Inception Date	**2/01/04**
Account Type	**US Equity**
Benchmark	**S&P 500**
Universe	**eV US Large Cap Equity Net**

Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
SSgA S&P 500	9.1	31.5	31.5	15.3	11.7	13.5	9.0	Feb-04
S&P 500	*9.1*	*31.5*	*31.5*	*15.3*	*11.7*	*13.6*	*9.0*	*Feb-04*
eV US Large Cap Equity Net Median	*8.3*	*28.9*	*28.9*	*13.3*	*10.1*	*12.6*	*9.1*	*Feb-04*
eV US Large Cap Equity Net Rank	*36*	*35*	*35*	*36*	*28*	*25*	*53*	*Feb-04*

Top 10 Holdings

APPLE	4.6%
MICROSOFT	4.5%
AMAZON.COM	2.9%
FACEBOOK CLASS A	1.8%
BERKSHIRE HATHAWAY 'B'	1.7%
JP MORGAN CHASE & CO.	1.6%
ALPHABET A	1.5%
ALPHABET 'C'	1.5%
JOHNSON & JOHNSON	1.4%
VISA 'A'	1.2%
Total	**22.7%**

SSgA S&P 500 Characteristics

	Portfolio Q4-19	Index Q4-19	Portfolio Q3-19
Market Value			
Market Value ($M)	31.0	--	28.4
Number Of Holdings	505	505	505
Characteristics			
Weighted Avg. Market Cap. ($B)	269.8	272.0	230.6
Median Market Cap ($B)	23.6	23.6	22.4
P/E Ratio	23.0	23.0	20.6
Yield	1.9	1.8	2.0
EPS Growth - 5 Yrs.	12.9	12.8	13.4
Price to Book	3.9	3.9	3.7
Sector Distribution			
Energy	4.3	4.2	4.5
Materials	2.6	2.6	2.7
Industrials	9.1	9.0	9.3
Consumer Discretionary	9.7	10.1	10.1
Consumer Staples	7.2	7.8	7.6
Health Care	14.2	13.8	13.7
Financials	13.0	13.3	13.0
Information Technology	23.2	22.8	22.0
Communication Services	10.4	10.4	10.4
Utilities	3.3	3.2	3.6
Real Estate	2.9	2.8	3.2

Account Information

Account Name	**Baillie Gifford International Growth Fund**
Account Structure	**Mutual Fund**
Investment Style	**Active**
Inception Date	**5/01/09**
Account Type	**Non-US Stock Developed**
Benchmark	**MSCI ACWI ex USA**
Universe	**eV ACWI ex-US All Cap Core Eq Net**

Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Baillie Gifford International Growth Fund	14.1	37.3	18.2	10.2	9.1	12.0	May-09
MSCI ACWI ex USA	*8.9*	*21.5*	*9.9*	*5.5*	*5.0*	*8.0*	*May-09*
MSCI EAFE	*8.2*	*22.0*	*9.6*	*5.7*	*5.5*	*8.2*	*May-09*
eV ACWI ex-US All Cap Core Eq Net Median	*9.7*	*24.6*	*10.4*	*5.8*	*6.5*	*9.3*	*May-09*
eV ACWI ex-US All Cap Core Eq Net Rank	*1*	*1*	*1*	*3*	*5*	*6*	*May-09*

Top 10 Holdings

ASML HOLDING	7.7%
FERRARI (MIL)	5.9%
TENCENT HOLDINGS	4.9%
ALIBABA GROUP HOLDING ADR 1:8	4.7%
M3	4.4%
KERING	4.4%
AIA GROUP	4.0%
ZALANDO	3.9%
SOFTBANK GROUP	3.6%
INDITEX	3.4%
Total	**46.9%**

Baillie Gifford EAFE Fund Characteristics

	Portfolio Q4-19	Index Q4-19	Portfolio Q3-19
Market Value			
Market Value ($M)	39.2	--	34.4
Number Of Holdings	56	918	56
Characteristics			
Weighted Avg. Market Cap. ($B)	94.5	63.7	78.1
Median Market Cap ($B)	14.7	10.8	13.2
P/E Ratio	25.9	17.2	23.0
Yield	1.0	3.2	1.1
EPS Growth - 5 Yrs.	17.8	7.1	18.5
Price to Book	4.6	2.4	4.0
Sector Distribution			
Energy	0.0	4.9	0.0
Materials	4.6	7.1	4.5
Industrials	7.6	15.1	8.3
Consumer Discretionary	38.1	11.6	36.1
Consumer Staples	3.4	11.3	3.8
Health Care	10.9	12.2	10.1
Financials	10.6	18.6	11.6
Information Technology	12.2	7.0	12.4
Communication Services	12.6	5.2	13.2
Utilities	0.0	3.7	0.0
Real Estate	0.0	3.4	0.0

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Client Example

Sanderson International Value | As of December 31, 2019

Account Information

Account Name	**Sanderson International Value**
Account Structure	**Commingled Fund**
Investment Style	**Active**
Inception Date	**2/01/13**
Account Type	**Non-US Stock Developed**
Benchmark	**MSCI EAFE**
Universe	**eV EAFE All Cap Value Net**

Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Sanderson International Value	9.8	20.5	7.5	3.8	--	5.6	Feb-13
MSCI EAFE	*8.2*	*22.0*	*9.6*	*5.7*	*5.5*	*5.6*	*Feb-13*
eV EAFE All Cap Value Net Median	*9.0*	*18.1*	*7.4*	*4.0*	*6.1*	*5.3*	*Feb-13*
eV EAFE All Cap Value Net Rank	*21*	*31*	*42*	*66*	*--*	*36*	*Feb-13*

Top 10 Holdings

PING AN INSURANCE (GROUP) OF CHINA 'H'	5.7%
CASH - USD	4.2%
CRH	2.8%
GLAXOSMITHKLINE	2.7%
SANOFI	2.4%
LLOYDS BANKING GROUP	2.4%
TRAVIS PERKINS	2.2%
OVERSEA-CHINESE BKG.	2.2%
DEUTSCHE POST	2.1%
NESTLE 'N'	2.0%
Total	**28.6%**

Sanderson International Value Characteristics

	Portfolio Q4-19	Index Q4-19	Portfolio Q3-19
Market Value			
Market Value ($M)	48.7	--	44.3
Number Of Holdings	77	918	80
Characteristics			
Weighted Avg. Market Cap. ($B)	48.4	63.7	46.5
Median Market Cap ($B)	13.7	10.8	12.1
P/E Ratio	15.3	17.2	14.3
Yield	3.6	3.2	3.9
EPS Growth - 5 Yrs.	4.2	7.1	4.7
Price to Book	1.9	2.4	1.8
Sector Distribution			
Energy	2.5	4.9	2.7
Materials	10.2	7.1	11.0
Industrials	17.9	15.1	17.7
Consumer Discretionary	6.4	11.6	6.4
Consumer Staples	6.1	11.3	6.1
Health Care	11.0	12.2	10.9
Financials	31.6	18.6	31.8
Information Technology	6.0	7.0	5.8
Communication Services	3.4	5.2	5.0
Utilities	0.7	3.7	0.6
Real Estate	0.0	3.4	0.0

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Client Example

Highclere International Small Cap | As of December 31, 2019

Account Information

Account Name	**Highclere International Small Cap**
Account Structure	**Commingled Fund**
Investment Style	**Active**
Inception Date	**12/01/09**
Account Type	**Non-US Stock Developed**
Benchmark	**MSCI EAFE Small Cap**
Universe	**eV EAFE Small Cap Equity Net**

Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Highclere International Small Cap	12.8	23.5	23.5	9.5	9.0	9.1	9.0	Dec-09
MSCI EAFE Small Cap	*11.5*	*25.0*	*25.0*	*10.9*	*8.9*	*8.7*	*8.7*	*Dec-09*
eV EAFE Small Cap Equity Net Median	*12.1*	*23.8*	*23.8*	*10.6*	*8.4*	*9.3*	*9.3*	*Dec-09*
eV EAFE Small Cap Equity Net Rank	*32*	*54*	*54*	*63*	*41*	*61*	*63*	*Dec-09*

Top 10 Holdings

GRAINGER	1.1%
VIRBAC	1.0%
SHINKO ELEC.INDS.	1.0%
TRANCOM	1.0%
SHIZUOKAGAS	0.9%
ADVANCED CERAMIC X	0.9%
NITTO KOGYO	0.9%
APPLUS SERVICIOS TECHNOLOGICOS	0.9%
CONSORT MEDICAL	0.9%
KINTETSU WORLD EXPRESS	0.9%
Total	**9.5%**

Highclere International Small Cap Characteristics

	Portfolio Q4-19	Index Q4-19	Portfolio Q3-19
Market Value			
Market Value ($M)	46.1	--	40.9
Number Of Holdings	196	2345	187
Characteristics			
Weighted Avg. Market Cap. ($B)	1.2	2.8	1.1
Median Market Cap ($B)	0.9	1.1	0.8
P/E Ratio	16.8	17.0	15.6
Yield	2.5	2.5	2.8
EPS Growth - 5 Yrs.	7.2	11.0	7.1
Price to Book	2.0	2.2	1.9
Sector Distribution			
Energy	2.2	2.5	2.6
Materials	7.3	8.0	8.6
Industrials	23.0	21.6	21.1
Consumer Discretionary	10.6	12.6	10.3
Consumer Staples	8.0	6.1	9.2
Health Care	9.3	7.3	9.5
Financials	7.8	10.8	8.0
Information Technology	17.9	10.2	17.1
Communication Services	4.5	4.6	4.0
Utilities	1.4	2.4	1.6
Real Estate	7.6	13.6	8.0

MEKETA

Client Example

SSgA MSCI EAFE Fund | As of December 31, 2019

Account Information

Account Name	**SSgA MSCI EAFE Fund**
Account Structure	**Commingled Fund**
Investment Style	**Passive**
Inception Date	**2/01/13**
Account Type	**Non-US Stock Developed**
Benchmark	**MSCI EAFE**
Universe	**eV EAFE Core Equity Net**

Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
SSgA MSCI EAFE Fund	8.2	22.4	22.4	9.9	6.0	--	5.9	Feb-13
MSCI EAFE	*8.2*	*22.0*	*22.0*	*9.6*	*5.7*	*5.5*	*5.6*	*Feb-13*
eV EAFE Core Equity Net Median	*9.0*	*22.2*	*22.2*	*9.3*	*6.3*	*7.0*	*6.5*	*Feb-13*
eV EAFE Core Equity Net Rank	*69*	*49*	*49*	*46*	*57*	*--*	*64*	*Feb-13*

Top 10 Holdings

NESTLE 'N'	2.2%
ROCHE HOLDING	1.5%
NOVARTIS 'R'	1.3%
TOYOTA MOTOR	1.1%
HSBC HOLDINGS	1.1%
SAP	0.9%
BP	0.9%
ASTRAZENECA	0.9%
TOTAL	0.9%
ROYAL DUTCH SHELL A(LON)	0.9%
Total	**11.6%**

SSgA MSCI EAFE Fund Characteristics

	Portfolio Q4-19	Index Q4-19	Portfolio Q3-19
Market Value			
Market Value ($M)	27.4	--	25.3
Number Of Holdings	957	918	948
Characteristics			
Weighted Avg. Market Cap. ($B)	63.5	63.7	60.2
Median Market Cap ($B)	10.6	10.8	9.8
P/E Ratio	17.1	17.2	15.9
Yield	3.2	3.2	3.3
EPS Growth - 5 Yrs.	6.8	7.1	7.0
Price to Book	2.4	2.4	2.3
Sector Distribution			
Energy	4.9	4.9	5.1
Materials	7.0	7.1	7.0
Industrials	15.0	15.1	14.6
Consumer Discretionary	11.7	11.6	11.2
Consumer Staples	11.5	11.3	11.9
Health Care	11.6	12.2	11.5
Financials	18.5	18.6	18.5
Information Technology	6.7	7.0	6.7
Communication Services	5.3	5.2	5.2
Utilities	3.7	3.7	3.8
Real Estate	3.6	3.4	3.6

MEKETA

Client Example

DFA Emerging Markets Value | As of December 31, 2019

Account Information

Account Name	**DFA Emerging Markets Value**
Account Structure	**Mutual Fund**
Investment Style	**Active**
Inception Date	**12/01/09**
Account Type	**Non-US Stock Emerging**
Benchmark	**MSCI Emerging Markets Value NR USD**
Universe	**eV Emg Mkts All Cap Value Equity Net**

Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
DFA Emerging Markets Value	9.7	9.6	9.6	8.9	4.7	2.1	2.5	Dec-09
MSCI Emerging Markets Value NR USD	*9.9*	*12.0*	*12.0*	*8.6*	*3.7*	*2.2*	*2.6*	*Dec-09*
MSCI Emerging Markets	*11.8*	*18.4*	*18.4*	*11.6*	*5.6*	*3.7*	*4.0*	*Dec-09*
eV Emg Mkts All Cap Value Equity Net Median	*10.9*	*17.7*	*17.7*	*9.9*	*5.6*	*3.6*	*4.1*	*Dec-09*
eV Emg Mkts All Cap Value Equity Net Rank	*85*	*98*	*98*	*68*	*69*	*94*	*94*	*Dec-09*

Top 10 Holdings

RELIANCE INDUSTRIES	3.6%
CHINA CON.BANK 'H'	2.8%
VALE ON	2.0%
CHINA MOBILE	1.9%
INDL&COML.BOC.'H'	1.5%
HON HAI PRECN.IND.	1.4%
PTRO.BRAO.ADR 1:2	1.2%
PJSC LUKOIL SPON (LON) ADR	1.2%
CNOOC	1.1%
PETROLEO BRASILEIRO PN	1.1%
Total	**17.8%**

DFA Emerging Markets Value Characteristics

	Portfolio Q4-19	Index Q4-19	Portfolio Q3-19
Market Value			
Market Value ($M)	31.2	--	28.5
Number Of Holdings	2336	913	2444
Characteristics			
Weighted Avg. Market Cap. ($B)	30.3	41.4	25.6
Median Market Cap ($B)	0.4	5.3	0.4
P/E Ratio	10.4	11.1	10.0
Yield	3.6	3.9	3.9
EPS Growth - 5 Yrs.	5.9	8.3	6.3
Price to Book	1.5	1.8	1.5
Sector Distribution			
Energy	16.0	12.5	16.2
Materials	14.9	10.6	15.4
Industrials	8.7	5.9	9.0
Consumer Discretionary	6.9	6.4	7.1
Consumer Staples	2.6	3.0	3.1
Health Care	1.3	1.4	1.3
Financials	29.1	34.5	29.0
Information Technology	8.4	10.8	8.3
Communication Services	4.9	6.9	4.9
Utilities	1.5	3.3	1.6
Real Estate	4.8	4.6	4.0

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Client Example

TT Emerging Markets Equity | As of December 31, 2019

Account Information

Account Name	**TT Emerging Markets Equity**
Account Structure	**Commingled Fund**
Investment Style	**Active**
Inception Date	**4/01/19**
Account Type	**Non-US Stock Emerging**
Benchmark	**MSCI Emerging Markets**
Universe	**eV Emg Mkts Equity Net**

Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
TT Emerging Markets Equity	13.6	--	--	--	--	--	8.8	Apr-19
MSCI Emerging Markets	*11.8*	*18.4*	*18.4*	*11.6*	*5.6*	*3.7*	*7.7*	*Apr-19*
eV Emg Mkts Equity Net Median	*11.4*	*19.3*	*19.3*	*10.7*	*5.5*	*4.4*	*8.4*	*Apr-19*
eV Emg Mkts Equity Net Rank	*9*	--	--	--	--	--	*48*	*Apr-19*

Top 10 Holdings

ALIBABA GROUP HOLDING ADR 1:8	7.6%
SAMSUNG ELTN.PREF.	6.5%
NASPERS	4.5%
TENCENT HOLDINGS	3.8%
TAIWAN SEMICON.MNFG.	2.9%
ICICI BANK	2.8%
INDUSIND BANK	2.8%
HCL TECHNOLOGIES	2.3%
LUKOIL OAO SPN.ADR 1:1	2.3%
BANCO DO BRASIL ON	2.3%
Total	**37.7%**

TT Emerging Markets Equity Characteristics

	Portfolio Q4-19	Index Q4-19	Portfolio Q3-19
Market Value			
Market Value ($M)	32.6	--	28.7
Number Of Holdings	65	1371	68
Characteristics			
Weighted Avg. Market Cap. ($B)	91.3	106.2	68.5
Median Market Cap ($B)	9.6	5.9	9.4
P/E Ratio	14.2	15.0	12.9
Yield	2.2	2.7	2.3
EPS Growth - 5 Yrs.	16.4	13.1	16.4
Price to Book	2.6	2.6	2.3
Sector Distribution			
Energy	2.3	7.4	5.8
Materials	9.5	7.3	9.5
Industrials	5.2	5.3	8.6
Consumer Discretionary	25.2	14.3	19.9
Consumer Staples	2.0	6.2	2.3
Health Care	1.3	2.7	1.6
Financials	23.0	24.5	25.5
Information Technology	15.5	15.6	13.4
Communication Services	5.3	11.0	6.3
Utilities	1.3	2.6	0.0
Real Estate	4.7	3.0	3.2

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Client Example

SSgA Bond Fund | As of December 31, 2019

Account Information

Account Name	**SSgA Bond Fund**
Account Structure	**Commingled Fund**
Investment Style	**Passive**
Inception Date	**1/01/04**
Account Type	**US Fixed Income Investment Grade**
Benchmark	**BBgBarc US Aggregate TR**
Universe	**eV US Core Fixed Inc Net**

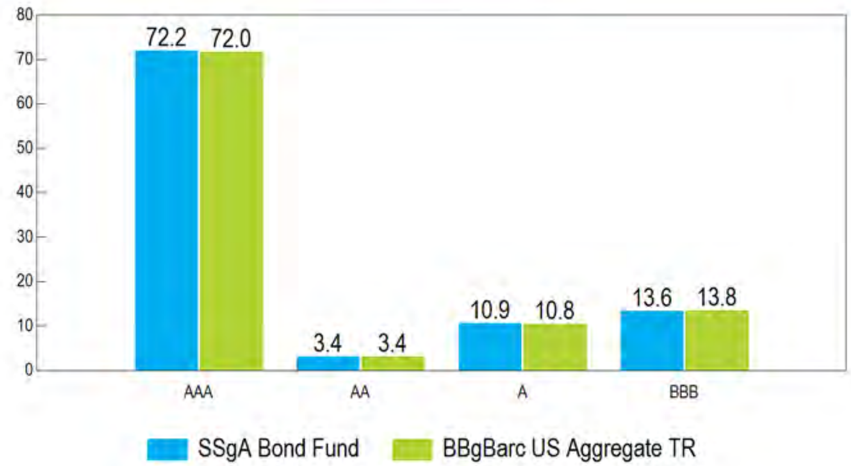
Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
SSgA Bond Fund	0.2	8.7	4.0	3.0	3.6	4.1	Jan-04
BBgBarc US Aggregate TR	*0.2*	*8.7*	*4.0*	*3.0*	*3.7*	*4.2*	*Jan-04*
eV US Core Fixed Inc Net Median	*0.2*	*9.0*	*4.1*	*3.1*	*4.0*	*4.3*	*Jan-04*
eV US Core Fixed Inc Net Rank	*47*	*70*	*64*	*70*	*80*	*74*	*Jan-04*

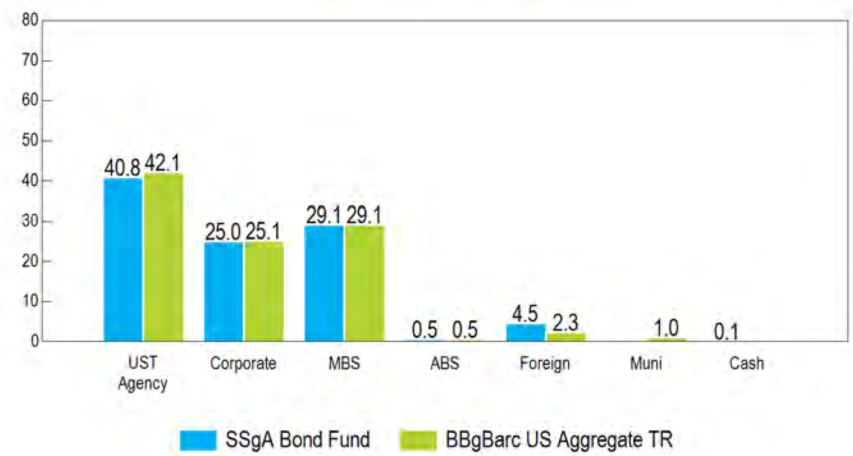
SSgA Bond Fund Characteristics vs. BBgBarc US Aggregate TR

	Portfolio Q4-19	Index Q4-19	Portfolio Q3-19
Fixed Income Characteristics			
Yield to Maturity	2.3	2.3	2.3
Average Duration	5.9	6.3	5.8
Average Quality	AA	AA	AA
Weighted Average Maturity	7.9	13.1	7.9

Credit Quality Allocation



Sector Allocation



Account Information

Account Name	Loomis Sayles Core Plus Fixed Income
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	7/01/15
Account Type	US Fixed Income Investment Grade
Benchmark	BBgBarc US Aggregate TR
Universe	eV US Core Plus Fixed Inc Net

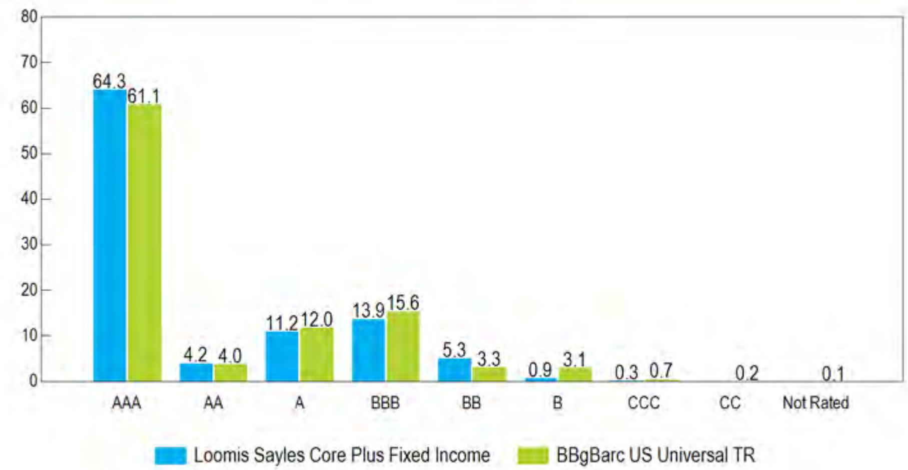
Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Loomis Sayles Core Plus Fixed Income	0.5	9.4	4.7	--	--	4.0	Jul-15
BBgBarc US Aggregate TR	*0.2*	*8.7*	*4.0*	*3.0*	*3.7*	*3.4*	*Jul-15*
eV US Core Plus Fixed Inc Net Median	*0.4*	*9.8*	*4.5*	*3.6*	*4.7*	*4.0*	*Jul-15*
eV US Core Plus Fixed Inc Net Rank	*42*	*63*	*29*	*--*	*--*	*43*	*Jul-15*

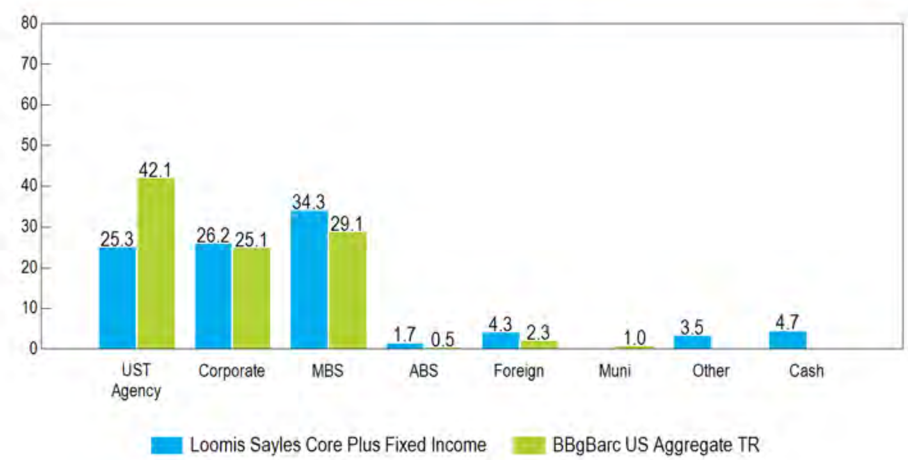
Loomis Sayles Core Plus Fixed Income Characteristics vs. BBgBarc US Aggregate TR

	Portfolio Q4-19	Index Q4-19	Portfolio Q3-19
Fixed Income Characteristics			
Yield to Maturity	2.9	2.3	3.0
Average Duration	6.2	6.3	6.3
Average Quality	A	AA	A
Weighted Average Maturity	8.4	13.1	8.4

Credit Quality Allocation



Sector Allocation



Aberdeen Emerging Markets Bond Fund | As of December 31, 2019

Account Information

Account Name	**Aberdeen Emerging Markets Bond Fund**
Account Structure	**Commingled Fund**
Investment Style	**Active**
Inception Date	**12/01/14**
Account Type	**International Emerging Market Debt**
Benchmark	**JP Morgan EMBI Global Diversified**
Universe	

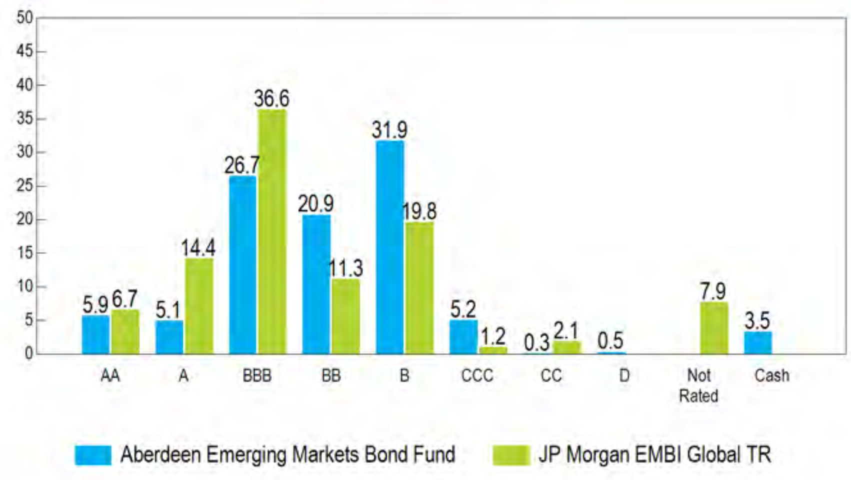
Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Aberdeen Emerging Markets Bond Fund	2.5	15.1	6.4	5.8	--	4.9	Dec-14
JP Morgan EMBI Global Diversified	*1.8*	*15.0*	*6.7*	*6.2*	*6.9*	*5.6*	*Dec-14*
50% JPM EMBI GD, 25% JPM GBI EM GD, 25% CMBI Broad	*2.7*	*14.2*	*6.8*	*5.8*	*5.9*	*5.0*	*Dec-14*

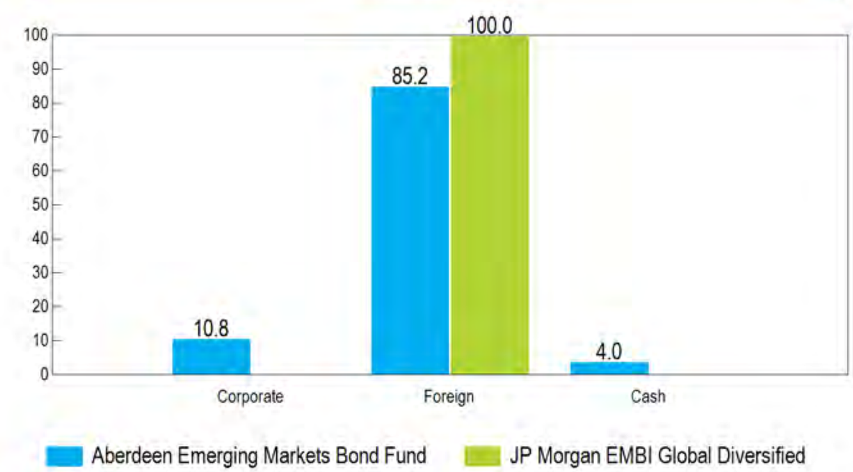
Aberdeen Emerging Markets Bond Fund Characteristics vs. JP Morgan EMBI Global TR

	Portfolio Q4-19	Index Q4-19	Portfolio Q3-19
Fixed Income Characteristics			
Yield to Maturity	5.1	4.7	5.4
Average Duration	6.9	7.7	6.9
Average Quality	BB	BBB	BB
Weighted Average Maturity	10.9	12.7	11.0

Credit Quality Allocation



Sector Allocation



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Client Example

SSGA TIPS | As of December 31, 2019

Account Information	
Account Name	**SSGA TIPS**
Account Structure	**Commingled Fund**
Investment Style	**Passive**
Inception Date	**8/01/14**
Account Type	**US Inflation Protected Fixed**
Benchmark	**BBgBarc US TIPS TR**
Universe	**eV US TIPS / Inflation Fixed Inc Net**

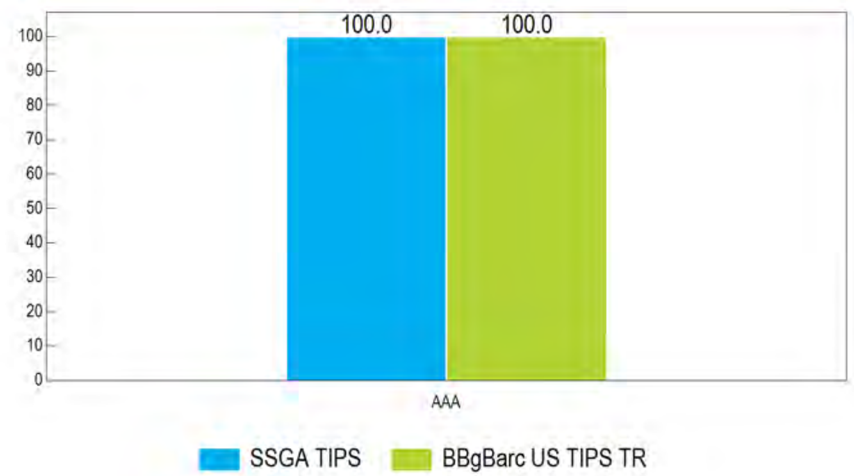
Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
SSGA TIPS	0.8	8.3	8.3	3.3	2.6	--	1.8	Aug-14
BBgBarc US TIPS TR	*0.8*	*8.4*	*8.4*	*3.3*	*2.6*	*3.4*	*2.0*	*Aug-14*
eV US TIPS / Inflation Fixed Inc Net Median	*0.8*	*8.5*	*8.5*	*3.3*	*2.5*	*3.2*	*1.8*	*Aug-14*
eV US TIPS / Inflation Fixed Inc Net Rank	*59*	*59*	*59*	*57*	*48*	*--*	*38*	*Aug-14*

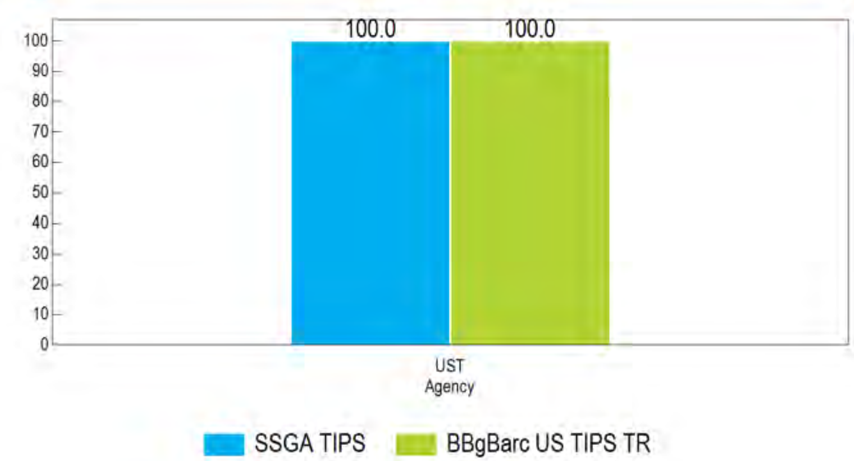
SSGA TIPS Characteristics
vs. BBgBarc US TIPS TR

	Portfolio Q4-19	Index Q4-19	Portfolio Q3-19
Fixed Income Characteristics			
Yield to Maturity	2.0	0.2	1.9
Average Duration	4.7	7.4	1.2
Average Quality	AAA	AAA	AAA
Weighted Average Maturity	8.0	8.0	8.4

Credit Quality Allocation



Sector Allocation



Account Information

Account Name	Pyramis Tactical Bond Fund
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	8/01/13
Account Type	US Fixed Income High Yield
Benchmark	BBgBarc US Aggregate TR
Universe	eV US Core Plus Fixed Inc Net

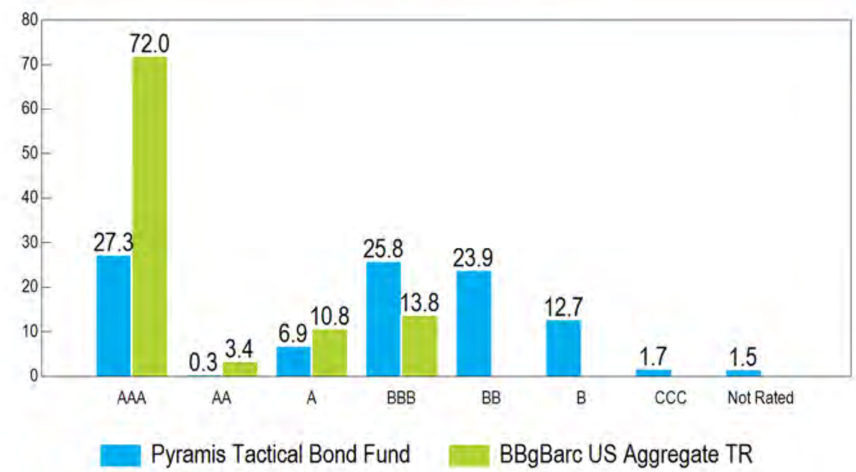
Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Pyramis Tactical Bond Fund	1.5	13.2	13.2	5.9	5.2	--	5.1	Aug-13
BBgBarc US Aggregate TR	*0.2*	*8.7*	*8.7*	*4.0*	*3.0*	*3.7*	*3.3*	*Aug-13*
eV US Core Plus Fixed Inc Net Median	*0.4*	*9.8*	*9.8*	*4.5*	*3.6*	*4.7*	*3.8*	*Aug-13*
eV US Core Plus Fixed Inc Net Rank	*2*	*1*	*1*	*2*	*1*	*--*	*2*	*Aug-13*

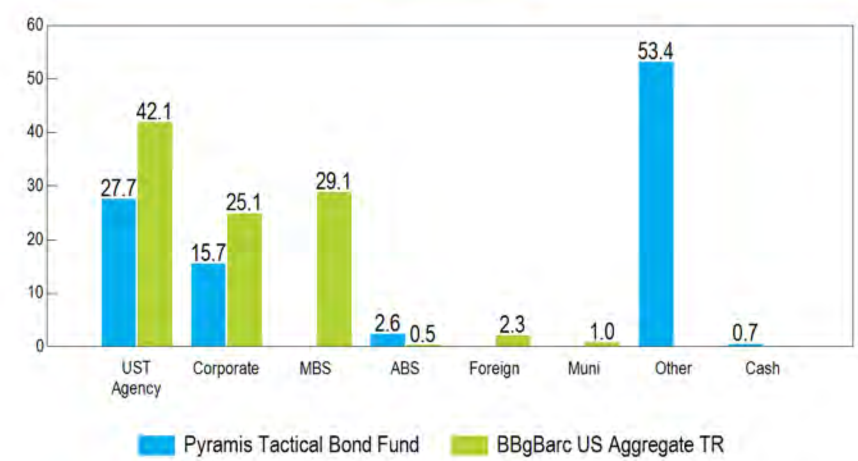
Pyramis Tactical Bond Fund Characteristics vs. BBgBarc US Aggregate TR

	Portfolio Q4-19	Index Q4-19	Portfolio Q3-19
Fixed Income Characteristics			
Yield to Maturity	4.1	2.3	4.3
Average Duration	4.9	6.3	4.7
Average Quality	BBB	AA	BBB
Weighted Average Maturity	8.9	13.1	9.1

Credit Quality Allocation



Sector Allocation



Pacific Asset Management Bank Loans | As of December 31, 2019

Account Information

Account Name	**Pacific Asset Management Bank Loans**
Account Structure	**Mutual Fund**
Investment Style	**Passive**
Inception Date	**12/01/19**
Account Type	**US Fixed Income**
Benchmark	**Credit Suisse Leveraged Loans**
Universe	**Bank Loan MStar MF**

Portfolio Performance Summary

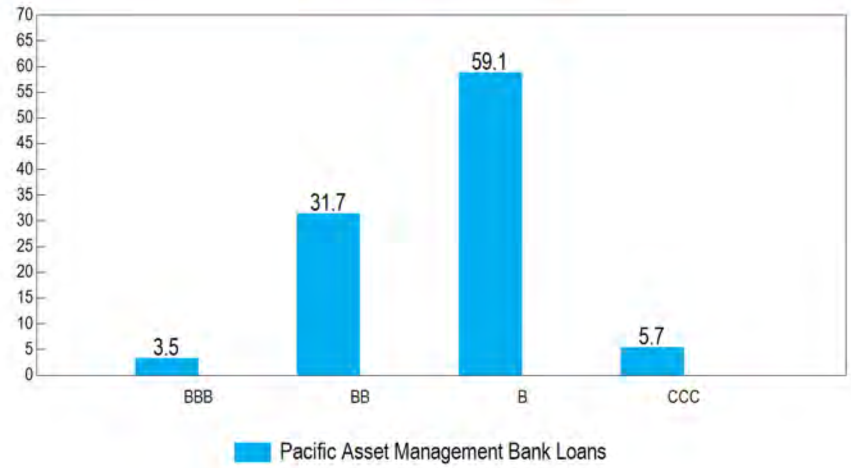
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Pacific Asset Management Bank Loans	--	--	--	--	--	--	1.0	Dec-19
Credit Suisse Leveraged Loans	*1.7*	*8.2*	*8.2*	*4.5*	*4.5*	*5.2*	*1.6*	*Dec-19*
Bank Loan MStar MF Median	*1.6*	*8.0*	*8.0*	*3.9*	*4.0*	*4.8*	*1.6*	*Dec-19*
Bank Loan MStar MF Rank	--	--	--	--	--	--	*93*	*Dec-19*

Pacific Asset Management Bank Loans Characteristics

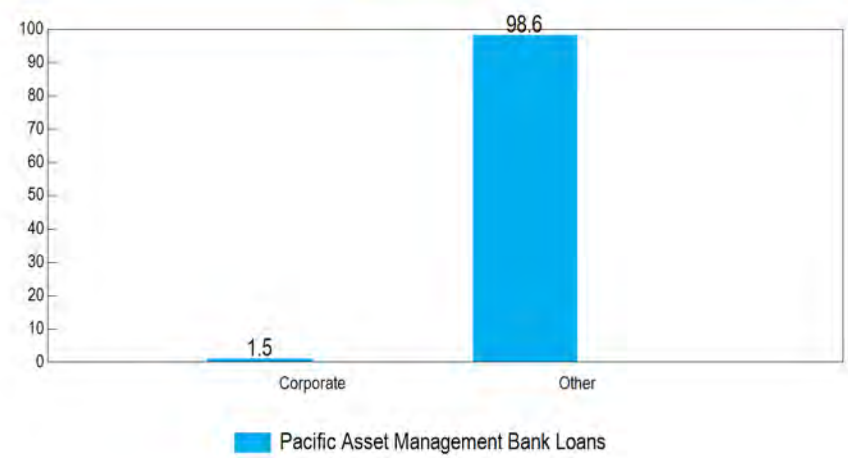
	Portfolio Q4-19
Fixed Income Characteristics	
Yield to Maturity	5.1
Average Duration	0.3
Average Quality	B
Weighted Average Maturity	4.7

Characteristics not available for the Credit Suisse Leveraged Loan Index.

Credit Quality Allocation



Sector Allocation

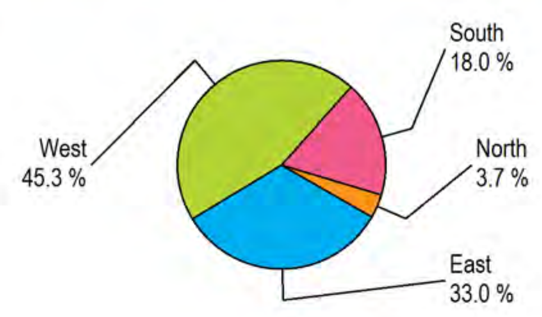


Clarion Partners Lion Properties Fund | As of December 31, 2019

Account Information

Account Name	**Clarion Partners Lion Properties Fund**
Account Structure	**Commingled Fund**
Investment Style	**Active**
Inception Date	**4/01/05**
Account Type	**Real Estate**
Benchmark	**NCREIF ODCE Equal Weighted (Net)**
Universe	

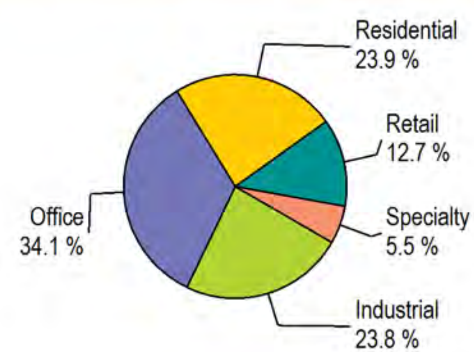
Geographic Diversification
Allocation as of December 31, 2019



Portfolio Performance Summary

	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Clarion Partners Lion Properties Fund	1.8	6.3	6.3	7.8	9.7	11.7	6.0	Apr-05
NCREIF ODCE Equal Weighted (Net)	*1.3*	*5.2*	*5.2*	*6.5*	*8.3*	*10.5*	*6.5*	*Apr-05*

Property Type Allocation
Allocation as of December 31, 2019



Investment Expense Analysis
As Of December 31, 2019

Name	Market Value	% of Portfolio	Estimated Fee	Estimated Fee Value
Westwood Capital Large Cap Value	$49,041,260	6.9%	0.55%	$269,727
Westfield Small/Mid Cap Growth	$48,947,486	6.9%	0.22%	$107,684
Vaughan Nelson Small Cap Value	$46,138,663	6.5%	0.93%	$429,679
SSgA S&P 500	$31,012,958	4.4%	0.02%	$4,652
Baillie Gifford International Growth Fund	$39,219,146	5.5%	0.61%	$239,237
Sanderson International Value	$48,705,562	6.9%	0.80%	$389,086
Highclere International Small Cap	$46,139,666	6.5%	1.18%	$545,036
SSgA MSCI EAFE Fund	$27,404,409	3.9%	0.06%	$16,443
DFA Emerging Markets Value	$31,220,632	4.4%	0.57%	$177,958
TT Emerging Markets Equity	$32,627,309	4.6%	0.80%	$261,018
SSgA Bond Fund	$76,297,345	10.7%	0.03%	$22,889
Loomis Sayles Core Plus Fixed Income	$59,398,451	8.4%	0.28%	$168,496
Aberdeen Emerging Markets Bond Fund	$63,082,394	8.9%	0.45%	$283,871
SSGA TIPS	$52,759,620	7.4%	0.03%	$15,828
Pyramis Tactical Bond Fund	$39,447,648	5.6%	0.34%	$134,122
Pacific Asset Management Bank Loans	$18,682,271	2.6%	0.41%	$76,597
Total	**$710,124,821**	**100.0%**	**0.44%**	**$3,142,323**

Private Equity Assets

Client Example

Private Equity Assets

Partnership	Focus	Type	Vintage Year
Manager A	Special Situations	Fund of Funds	2009
Manager B	Secondary Market	Fund of Funds	2009
Manager C	Secondary Market	Fund of Funds	2009
Manager D	Venture	Fund of Funds	2010
Manager E	Buyout	Fund of Funds	2011
Manager F	Venture	Fund of Funds	2011
Manager G	Diversified	Fund of Funds	2011
Manager H	Buyout	Fund of Funds	2012
Manager I	Secondary Market	Fund of Funds	2012
Manager J	Co-investments	Fund of Funds	2013
Manager K	Co-investments	Fund of Funds	2013
Manager L	Venture	Fund of Funds	2013
Manager M	Buyout	Fund of Funds	2012
Manager N	Venture	Fund of Funds	2013
Manager O	Buyout	Fund of Funds	2014
Manager P	Secondary Market	Fund of Funds	2014
Manager Q	Buyout	Fund of Funds	2015
Manager R	Private Debt	Direct Fund	2015
Manager S	Special Situations	Fund of Funds	2015
Manager T	Diversified	Fund of Funds	2016
Manager U	Co-investments	Fund of Funds	2017
Manager V	Venture	Fund of Funds	2018

MEKETA

Client Example

Private Equity Assets

Partnership	Committed ($mm)	Called ($mm)	Distributed ($mm)	Fair Value ($mm)	nIRR[1] (%)	Vintage Year	TVPI Multiple
Manager A	7.0	6.2	7.7	1.0	11.3	2009	1.4
Manager B	3.0	2.5	4.1	0.3	17.9	2009	1.8
Manager C	3.0	3.0	1.4	1.4	-1.5	2009	0.9
Manager D	12.5	11.7	6.7	14.5	14.4	2010	1.8
Manager E	10.0	9.1	4.8	10.6	12.0	2011	1.7
Manager F	7.5	7.1	4.3	9.9	21.9	2011	2.0
Manager G	10.0	9.8	1.2	10.3	4.8	2011	1.2
Manager H	8.6	7.0	5.6	4.9	13.9	2012	1.5
Manager I	10.0	7.2	6.2	4.1	12.6	2012	1.4
Manager J	10.0	10.3	9.4	6.3	12.8	2013	1.5
Manager K	10.0	9.7	10.2	7.8	20.5	2013	1.9
Manager L	7.5	6.3	1.1	9.1	17.0	2013	1.6
Manager M	10.0	9.8	6.2	9.7	17.9[2]	2012	1.6
Manager N	7.5	6.8	1.2	12.4	24.1	2013	2.0
Manager O	15.0	13.9	5.7	12.2	16.0[3] | 17.5[4]	2014	1.3
Manager P	10.0	8.8	4.7	7.2	17.5	2014	1.4
Manager Q	15.0	13.5	3.9	14.2	21.1[3]	2015	1.3
Manager R	20.0	18.1	11.6	8.2	7.9	2015	1.2
Manager S	10.0	8.5	0.8	10.5	11.8	2015	1.3
Manager T	40.0	24.5	3.0	26.1	9.2	2016	1.2
Manager U	10.0	8.1	1.7	9.0	15.9	2017	1.3
Manager V	10.0	1.5	0.0	2.4	NM	2018	1.6
Total	**246.6**	**203.4**	**101.5**	**192.1**			**1.4x**

1 All performance figures are reported directly from managers, net of fees, as of 9/30/19, unless otherwise noted.
2 Performance as of 6/30/2019.
3 Manager O.
4 Manager W.

Natural Resources Assets

Partnership	Vintage Year	Committed (mm)	Called (mm)	Distributed (mm)	Fair Value (mm)	Net IRR[1] %	TVPI Multiple
Manager A	2012	$7.5	$7.4	$2.7	$4.7	-0.1	1.0
Manager B	2013	$15.0	$13.6	$2.2	$12.3	1.5	1.1
Manager C	2016	$10.0	$7.0	$0.4	$7.8	7.2	1.2
Manager D	2018	$10.0	$1.3	$0.0	$1.2	N/A	0.9
Total		**$42.5**	**$29.3**	**$5.3**	**$26.0**		**1.1x**

[1] Performance figures are reported directly from manager, net of fees, as of 9/30/2019.

Real Estate Assets

MEKETA

Partnership	Focus	Type	Vintage Year	TVPI Multiple
Manager A	U.S. Distressed	Fund of Funds	2009	1.4
Manager B	Real Estate Debt	Fund of Funds	2009	1.3
Manager C	Global	Fund of Funds	2011	1.4
Manager D	Global	Fund of Funds	2015	1.2
Manager E	Global	Fund of Funds	2017	1.3
				1.3x

Partnership	Committed (mm)	Called (mm)	Distributed (mm)	Fair Value (mm)	nIRR[1] (%)
Manager A	$12.0	$11.2	$13.8	$1.6	7.8
Manager B	$12.0	$11.3	$13.3	$1.6	9.3
Manager C	$6.7	$5.6	$5.7	$2.3	8.5
Manager D	$15.0	$12.6	$5.3	$10.3	11.8
Manager E	$15.0	$5.6	$0.0	$7.5	14.1
Total	**$60.7**	**$46.3**	**$38.1**	**$23.3**	

[1] Performance figures are reported directly from manager, net of fees, as of 9/30/2019.

Appendices

Global Macroeconomic Outlook
December 2019

Global Economic Outlook

Slowing in some emerging economies, particularly India, led the IMF to continue to reduce growth projections.

- The IMF now forecasts global growth of 2.9% in 2019 and 3.3% in 2020 both 0.1% lower than the last estimate.
- In advanced economies, growth is projected to slow from the 1.7% estimate for 2019 to 1.6% in 2020. Growth in the US is forecasted to slow from an estimated 2.3% in 2019 to 2.0% in 2020 as the impact of fiscal support wanes and further monetary support is not expected. Growth in the euro area and Japan are both projected to be much lower than the US this year.
- Growth projections continue to be revised down for emerging and developing economies due to China's slowing economy and the impact of trade tensions. Growth is forecasted to increase from the 3.7% estimate for 2019 to 4.4% in 2020, 0.2% lower than the last estimate. China's growth is expected to continue to slow given structural issues with the recent trade deal providing some relief in the near-term.
- Overall, inflation is projected to increase in 2020 but remain close to long-term averages.

	Real GDP (%)[1]			Inflation (%)[1]		
	IMF 2019 Forecast	IMF 2020 Forecast	Actual 10 Year Average	IMF 2019 Forecast	IMF 2020 Forecast	Actual 10 Year Average
World	2.9	3.3	3.4	3.4	3.6	3.5
Advanced Economies	1.7	1.6	1.5	1.5	1.8	1.4
US	2.3	2.0	1.8	1.8	2.3	1.6
Euro Area	1.2	1.3	0.8	1.2	1.4	1.3
Japan	1.0	0.7	0.7	1.0	1.3	0.3
Emerging Economies	3.7	4.4	5.0	4.7	4.8	5.2
China	6.1	6.0	5.8	2.3	2.4	2.2

[1] Source: IMF. World Economic Outlook. GDP as of January 2020 Update. Inflation as of October 2019 update. "Actual 10 Year Average" represents data from 2009 to 2018.

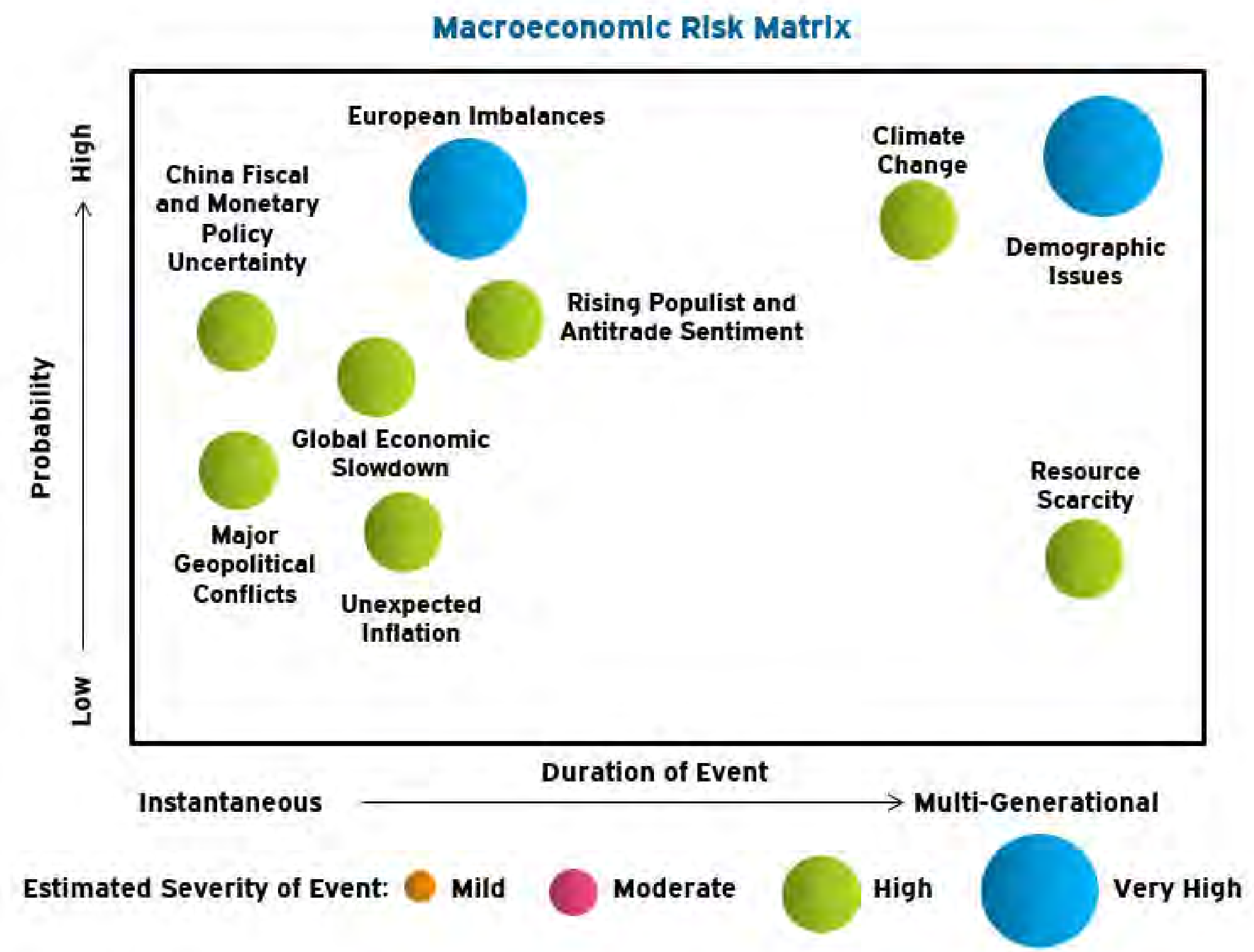
Global Economic Outlook (continued)

With global growth slowing compounded by trade tensions, major central banks pivoted toward more accommodative policies, but the likelihood of further support is low.

- Following two interest rate cuts in the third quarter, the Federal Reserve cut interest rates one more time in late October, with the federal funds rate at 1.50% – 1.75%. The Fed signaled that they would not be further reducing rates for now, as they felt the recent "insurance" cuts were sufficient to support growth.
- The Bank of Japan (BOJ) is showing no signs of pulling back from its unprecedented monetary stimulus, as inflation remains well below target, growth is slowing globally, and the consumption tax increase may further dampen growth. At their recent meeting, the BOJ made no changes to their simulative efforts, keeping bank deposit rates negative (-0.1%) and continuing to target a 0% yield on the 10-year government bond.
- At Christine Largarde's first meeting as the head of the European Central Bank (ECB), rates were kept unchanged with the main deposit rate at -0.5% and the marginal lending facility rate at 0.25%. They reiterated that rates would remain at current levels, or lower, until a meaningful impact in inflation was seen, and that recent quantitative easing (~$22 billion/month) would continue as long as needed.
- Fiscal and monetary policy remain supportive in China in an effort to stimulate growth, as the trade war with the US weighs on the slowing economy. The People's Bank of China (PBOC) continues to cut bank reserve requirements, bringing them to the lowest levels since the Global Financial Crisis. They also recently pledged to deepen financial reforms, help small companies looking for financing, and allow markets to play a larger role in the exchange rate.

Several issues are of primary concern: 1) uncertainty related to the US economy and policies; 2) declining growth in China, along with uncertain fiscal and monetary policies; and 3) political uncertainty in Europe and East Asia, and risks related to the UK's exit from the European Union.

Macroeconomic Risk Matrix



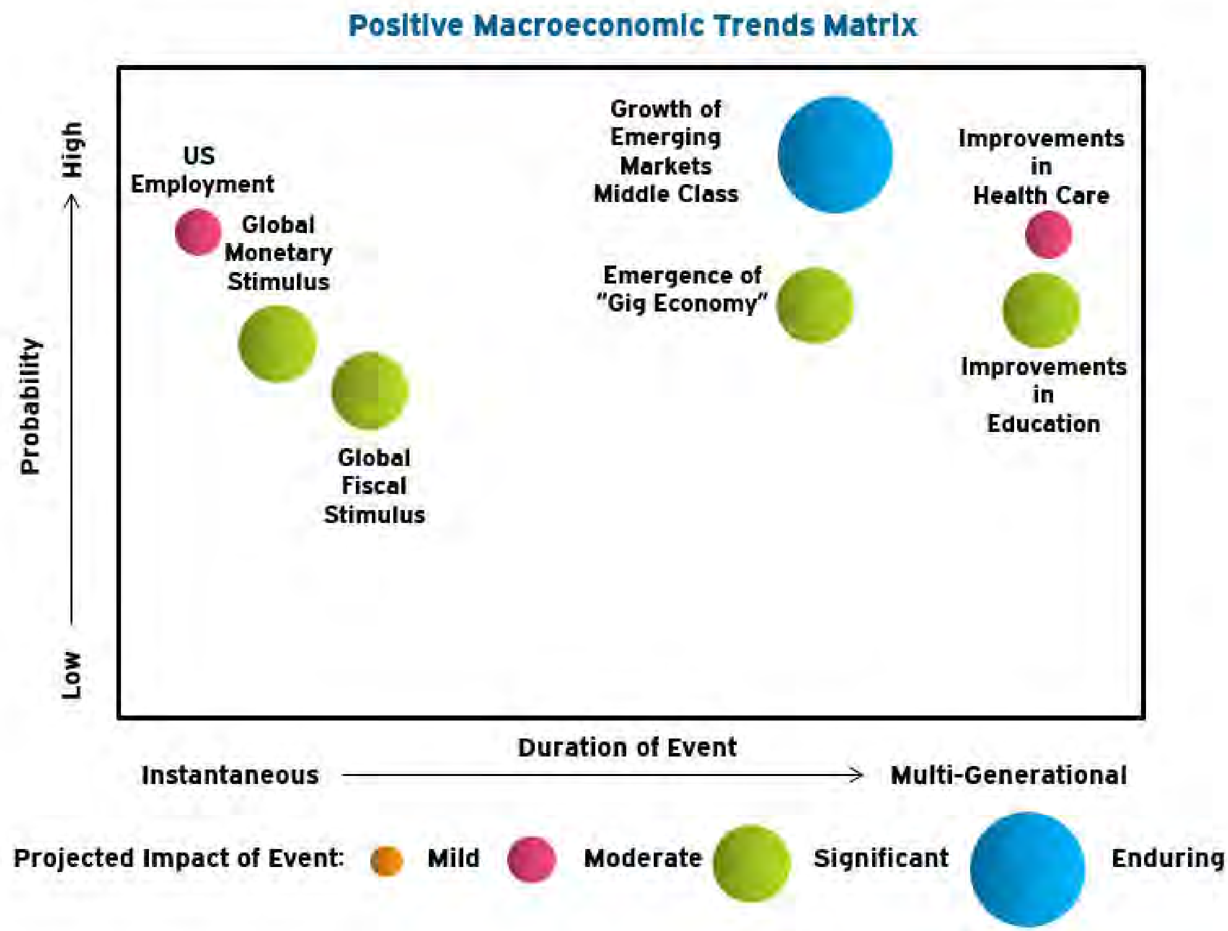
Macroeconomic Risk Overviews

China Fiscal and Monetary Policy Uncertainty	The process of transitioning from a growth model based on fixed asset investment by the government to a model of consumption-based growth will be difficult. Some progress has been made on trade tensions with the US, but many issues still need to be resolved with the impact remaining on China's economy. The management of capital outflows is another key issue in China with officials tightening regulations to stem outflows. The hot property market and the growing mountain of debt in the corporate sector remain other key risks. As China tries to manage a smooth economic transition through fiscal and monetary policies, heightened financial risks exist. The recent outbreak of the coronavirus in China could further weigh on the economy, and others, going forward.
Climate Change	The earth's average temperature has been increasing since preindustrial times with the pace accelerating over the last 35 years. Increased levels of greenhouse gases like carbon dioxide have been the main cause of higher temperatures as they trap heat in the atmosphere. Warmer temperatures have led to the melting of glaciers and polar ice and increased precipitation in wet regions and reduced it in dry regions. The economic impacts of climate change are many, including declining crop yields, effects on livestock health, shifts in tourism, damage to infrastructure (rising sea levels and more extreme weather), and higher levels of disease and malnutrition.
Demographic Issues	In Japan and Europe, birth rates have declined for decades, resulting in populations becoming older and smaller relative to the rest of the world. In China, their so-called "one child" policy helped to reduce population growth, but has created other issues for the government. As life expectancy increases, the prior policy creates complications with a low working base left to support a relatively large and aging population. These demographic trends will have negative long-term impacts on GDP growth and fiscal budgets, amplifying debt problems.
European Imbalances	The crisis is rooted in structural issues in the Eurozone related to the combination of a single currency and monetary authority combined with 17 fiscal authorities. Within the European Union, tensions exist, as highlighted by political changes in Italy and the prior UK referendum, related to policies on immigration, laws, and budgetary issues. "Brexit" happened making the next year crucial to negotiating the terms by the year-end deadline. Failure to do so, barring any extensions, would lead to a very disruptive "no-deal Brexit" that would be particularly impactful to businesses.
Global Economic Slowdown	Despite forecasts for a slight pick-up in growth given recent monetary support and a reduction in trade tensions, growth has slowed from recent levels and the post Global Financial Crisis expansion remains historically long. Recessions are not forecasted in the short-term for most major economies, but the risk remains. The pivot of major central banks to an easing focus in response could support growth and markets in the short-term but could also encourage excessive risk taking by market participants and increase systemic risk.

Macroeconomic Risk Overviews (continued)

Major Geopolitical Conflicts	The ongoing protests in Hong Kong continue to threaten stability in East Asia. These protests began after Hong Kong's Chief Executive, Carrie Lam, attempted to introduce an extradition bill (the Fugitive Offenders amendment) that would allow mainland China to arrest citizens of Hong Kong. As a result of ongoing protests, Hong Kong's economy shrank by 3.2% in the third quarter of 2019, and Hong Kong officially entered a recession as a result. Continued uncertainty stemming from this conflict will weigh on growth in Hong Kong until Ms. Lam's government resolves the dispute with its citizens and the Chinese government, and could have spillover effects for regional politics and economic growth. Additionally, tension in the Middle East has grown, after the US assassination of Iran's top security and intelligence commander, Qassem Soleimani. Iran responded by launching missiles at two US bases in Iraq, which resulted in no causalities. It seems both sides have stood down on direct conflict for the time being, but a re-escalation could increase market volatility and impact oil prices. Other outstanding issues include the ongoing conflict between Russia and the Ukraine, trade and military tensions in the South China Sea between the US and China, and North Korea's nuclear aspirations.
Resource Scarcity	The growing world population, urbanization, and a growing middle class, particularly in emerging economies, could all lead to a scarcity of resources, including food, water, land, energy, and minerals. As natural resource demand continues to grow, rising commodity prices may hurt the living standards of many and increase the risk of geopolitical conflicts.
Rising Populist and Antitrade Sentiment	Tariffs started by the US against China and some of its allies, along with elections/votes in the US, Europe, UK, and Mexico highlight the growing populist/antitrade sentiment. The "yellow vest" protests in France were yet another example of unrest related to social inequality and ultimately led to President Macron promising tax reforms. Stagnant wages, growing inequality, and the perception of jobs being lost abroad are key contributors to ongoing unrest. Reducing trade and imposing tariffs will likely lead to higher inflation, reduced efficiencies, and heightened tensions between countries. If the upcoming round of trade talks between the US and EU stall or result in additional tariffs the situation could only get worse.
Unexpected Inflation	Developed countries across the world are struggling to generate inflation despite record low (or negative) interest rates and monetary and fiscal stimulus. Most traditional measures of inflation remain near or below central bank targets, despite traditionally stimulative efforts, declining unemployment, and wage growth. With expectations for a significant increase in inflation low, an unexpected rise in inflation could be disruptive leading to higher rates and lower growth and valuations.

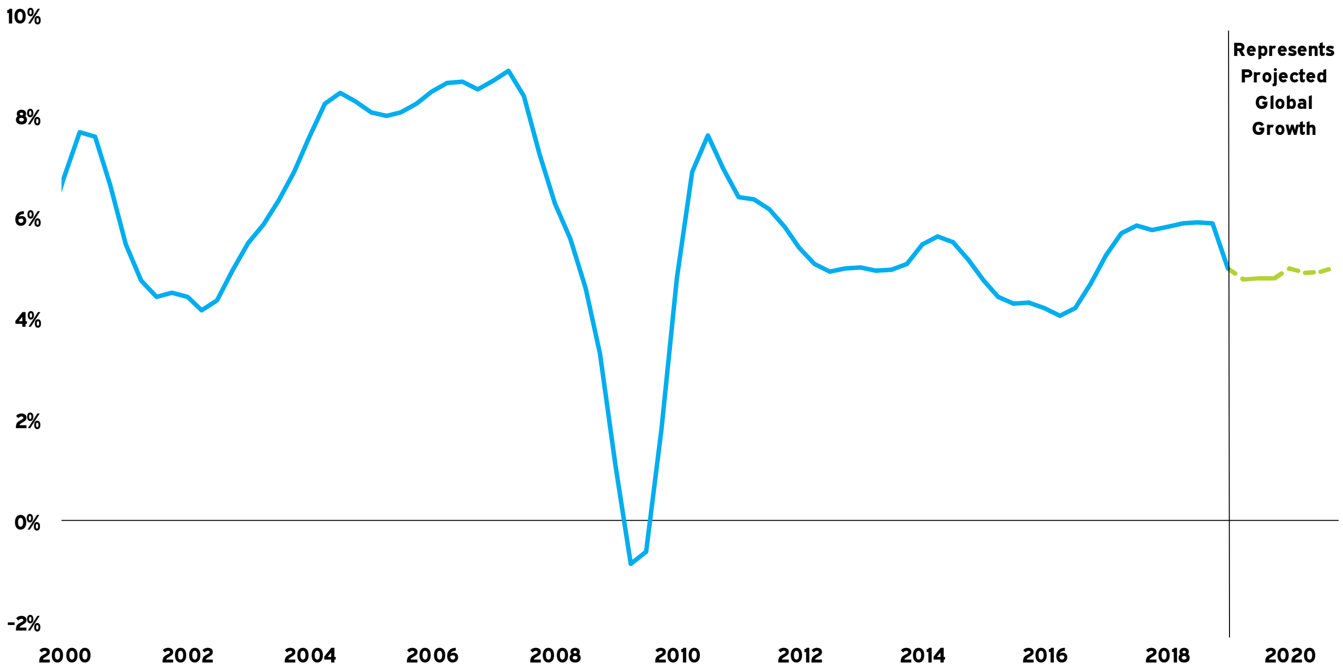
Positive Macroeconomic Trends Matrix



Positive Macroeconomic Trends Overviews

Emergence of "Gig Economy"	The "gig economy" continues to grow with over a third of workers considering themselves working independently. The new structure allows workers flexibility in the jobs they take, their schedules, and offers the ability to work outside of a traditional office. For companies, it has led to lower labor and overhead costs (more employees are working remotely), flexibility in hiring workers temporarily, and lower recruiting and training costs.
Global Monetary Stimulus	Given slowing global growth compounded by trade tensions, major central banks pivoted to a more dovish tone. The US cut rates three times, the ECB has maintained a very accommodative stance with low rates, and the BOJ continues its massive monetary support. These policies have been a major boost to the markets and could support continued global growth. The key questions remain whether or not central banks are pivoting to aggressive, accommodative, policies too early and if the recent rally in risk assets can continue to be supported by monetary policy alone.
Global Fiscal Stimulus	Given that global growth remains weak in spite of accommodative monetary policy, there could be an increase in fiscal stimulus. US tax cuts would support growth domestically and abroad, particularly for key trading partners barring any overwhelming headwinds from tariffs. Policymakers in Europe, including officials at the European Central Bank, have indicated that coordinated fiscal spending in the Eurozone could boost economic growth. China has also recently reduced bank reserve requirements and announced fiscal stimulus policies. With interest rates still relatively low, borrowing for infrastructure investments is affordable. Increased fiscal stimulus could support economic growth while reducing the reliance on monetary policy.
Growth of Emerging Markets Middle Class	In emerging economies, the middle class is projected to grow significantly over the next twenty years. This growing middle class should increase consumption globally, which in turn will drive GDP growth and create jobs.
Improvements in Education/Health Care	Literacy rates and average life spans have increased globally, particularly in emerging economies. Higher literacy rates will drive future growth, helping people learn new skills and improve existing skills. Longer lives increase incentives for long-term investments in education and training, resulting in a more productive work force and ultimately more growth.
US Employment	The US unemployment rate has steadily declined since its post Global Financial Crisis peak. Hourly earnings growth has not reached levels that it has in prior recoveries, but has increased from its lows. Improvements in the US labor market, along with the tax cuts, should stimulate consumption and growth for both US and foreign goods. A lower unemployment rate and higher consumption will also lead to higher tax revenue that should partly offset the deficit pressures from tax reforms.

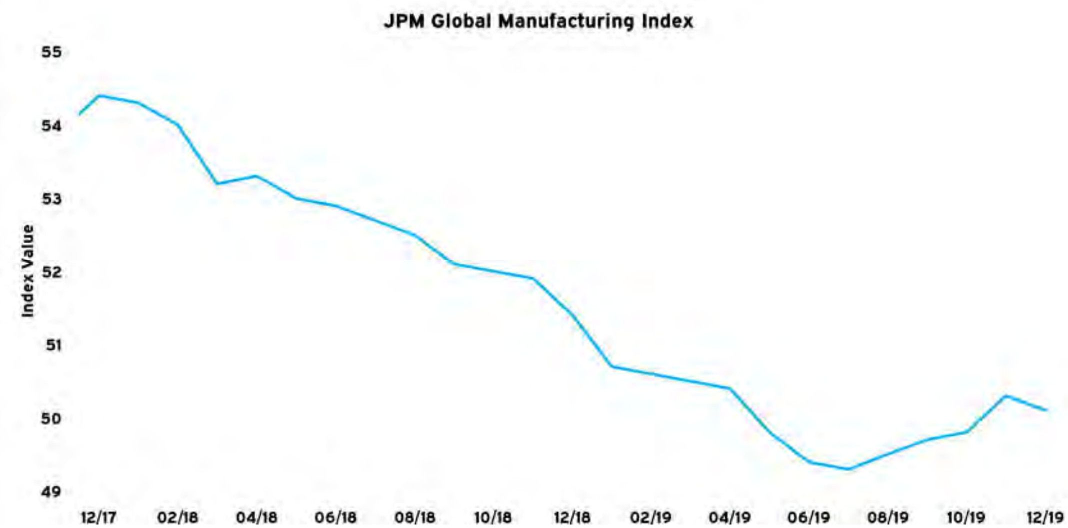
Global Nominal Gross Domestic Product (GDP) Growth[1]



- After the recent period of synchronized global economic growth, economic activity has declined due to continued trade tensions, a slowing Europe and uncertainties related to Brexit, and a slowing China.
- Growth is forecasted to slightly pick up in 2020 and 2021 supported by accommodative monetary policy, the "Phase One" US/China trade deal, and reduced fears of a no-deal Brexit.
- Risks to the downside remain including ongoing trade issues, recent tensions between the US and Iran, and social unrest including in Hong Kong.

[1] Source: Oxford Economics. Updated October 2019. GDP data after Q4 2018 are estimates.

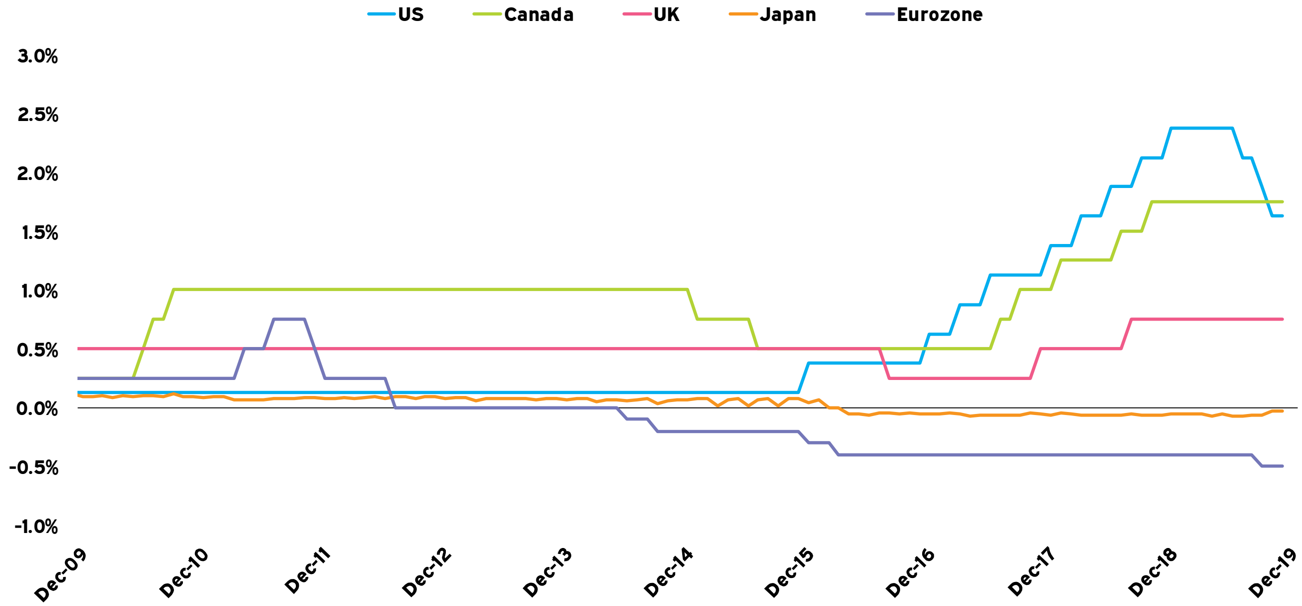
Global Manufacturing[1]



- The manufacturing sector is an important driver of global growth as it creates jobs, supports new technologies, and generates revenues through exports.
- Manufacturing steadily declined since the end of 2017 as global economic growth slowed and trade tensions weighed on the sector.
- In the fourth quarter the manufacturing sector showed marginal improvements with new orders and production increases leading to less job cuts. Exports continued to slow though, consistent with trade barriers.
- Despite the recent improvements, concerns remain that the slowdown in the manufacturing sector could increase trade tensions and potentially spillover into the larger service sector.

[1] Source: JP Morgan. Data is as of December 31, 2019.

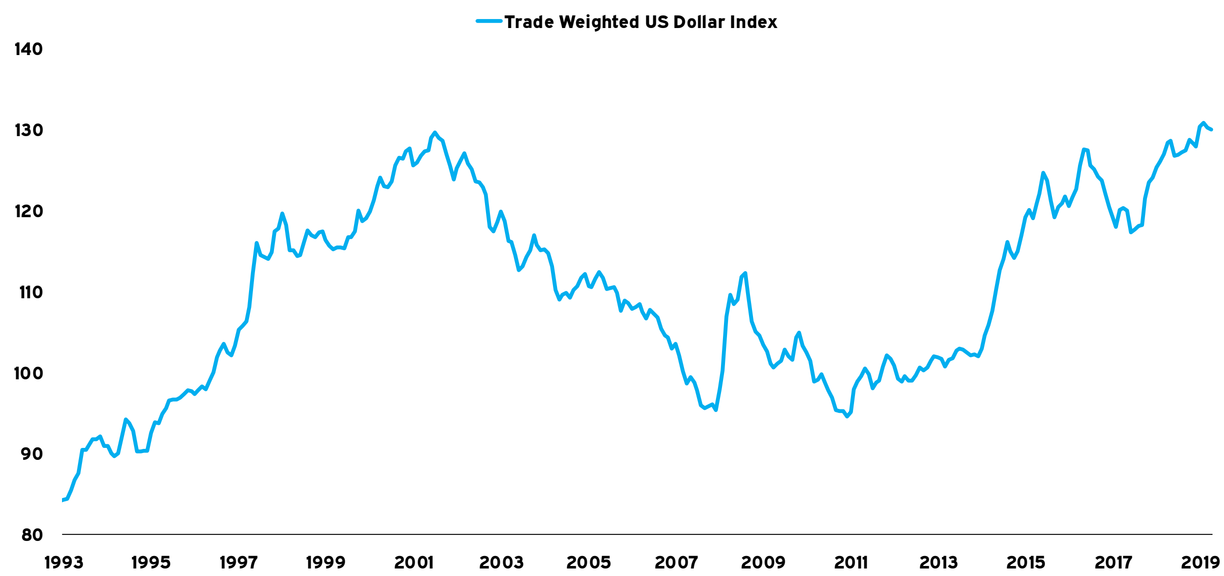
Central Bank Interest Rates[1]



- After increasing rates over the last several years from record lows, major central banks are shifting to a more accommodative stance given slowing global growth.
- A majority of central banks globally cut interest rates last year, dramatically increasing liquidity.
- Of all the central banks, the US has the most room to lower rates, while Japan and Europe are already in negative territory.
- Given the limited ability to reduce rates, we could see a return to other policies like quantitative easing (QE) or increased fiscal support if the global slowdown escalates.

[1] Source: Bloomberg. Data is as of December 31, 2019.

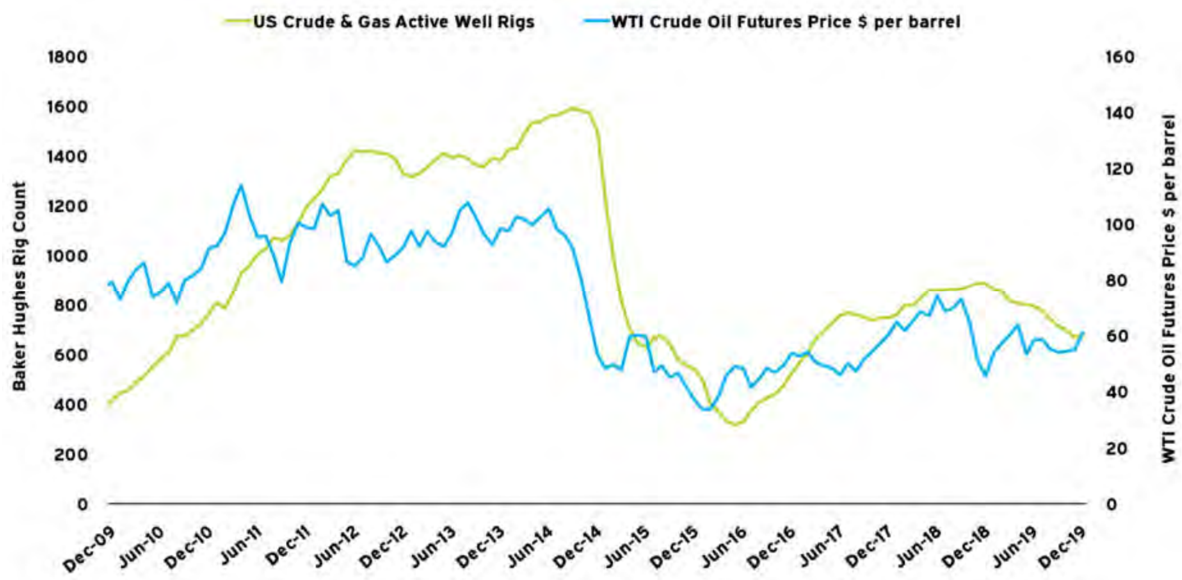
US Dollar versus Broad Currencies[1]



- The US dollar declined by 1.1% during the quarter as interest rates fell and frustrations were expressed by the US administration on the strength of the dollar. For the calendar year, the US dollar increased by slightly less than 1%.
- Since 2011, the dollar significantly increased in value, helped by the relative strength of the US economy and higher interest rates compared to the rest of the world.
- If US rates remain low, growth slows, and the trade deficit continues to rise, the dollar could weaken, particularly given its overextended levels. This would benefit US investments in foreign denominated currencies, as well as US exporters.

[1] Source: Bloomberg. Data is as of December 31, 2019.

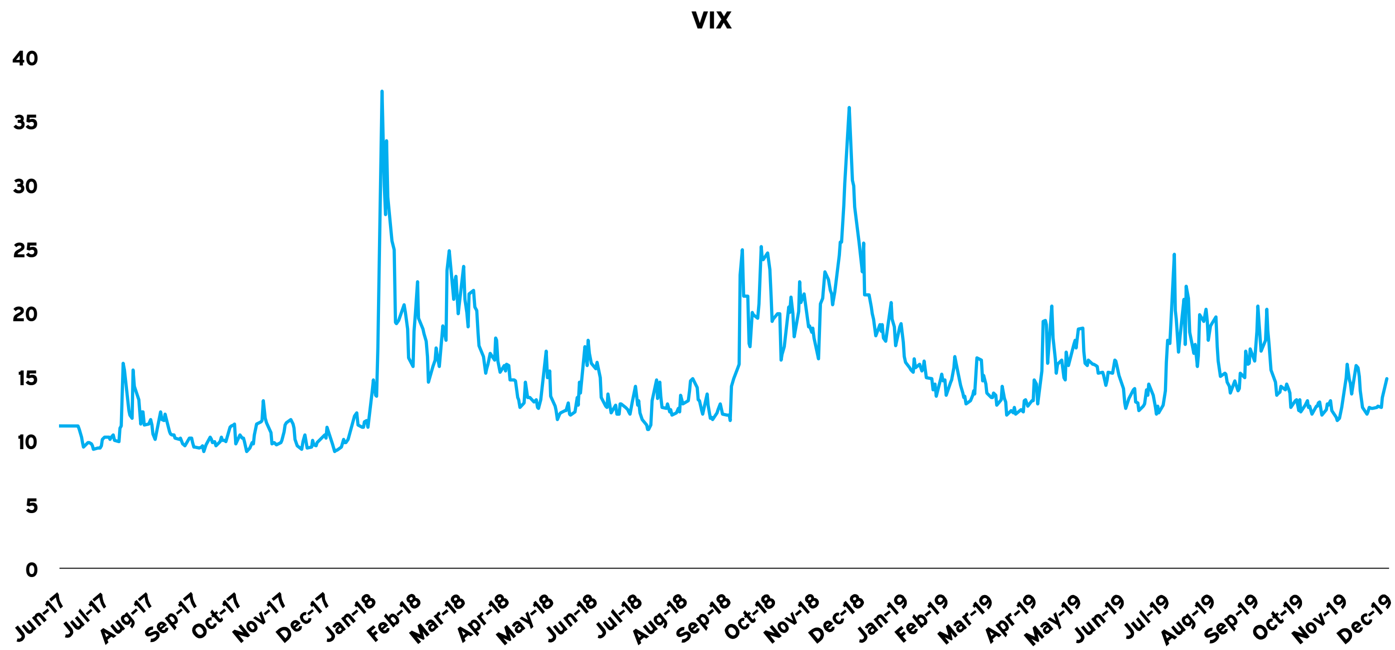
Oil Price and Rig Activity[1]



- At the end of the fourth quarter, crude was priced at $61 compared to $54 at the start of the quarter and $45 at the end of 2018.
- After quarter-end, the US attack on the Iranian general Qasem Soleimani caused oil prices to spike but they quickly retraced to levels below the 2019 year-end finish.
- Pledged cuts from OPEC countries, and allies like Russia, along with the US shale boom have created balancing forces in the oil market and led to the recent range bound prices.

[1] Source: Bloomberg. Data is as of December 31, 2019.

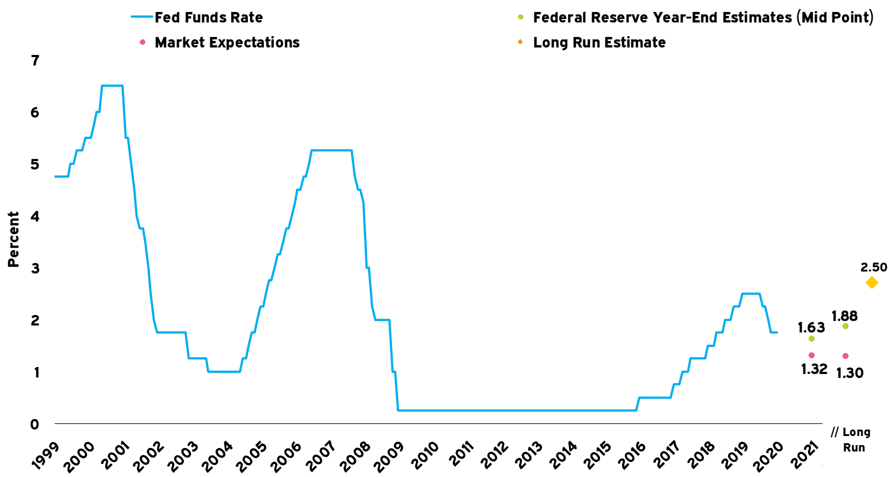
Volatility[1]

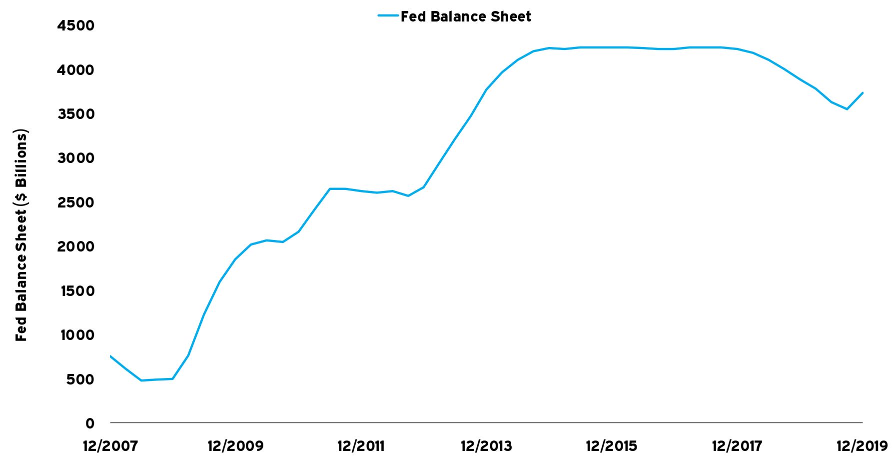


- After a spike in volatility (the VIX) in August given the US yield curve inversion and signs of trade tensions weighing on growth, volatility declined and finished the year slightly below 14, well below the long-term average.
- The potential for renewed volatility remains given the late cycle dynamics in the US, the long equity market expansion, and the many unresolved political and trade issues globally.

[1] Bloomberg. Represents daily VIX data and is as of December 31, 2019.

US Monetary Policy[1,2]

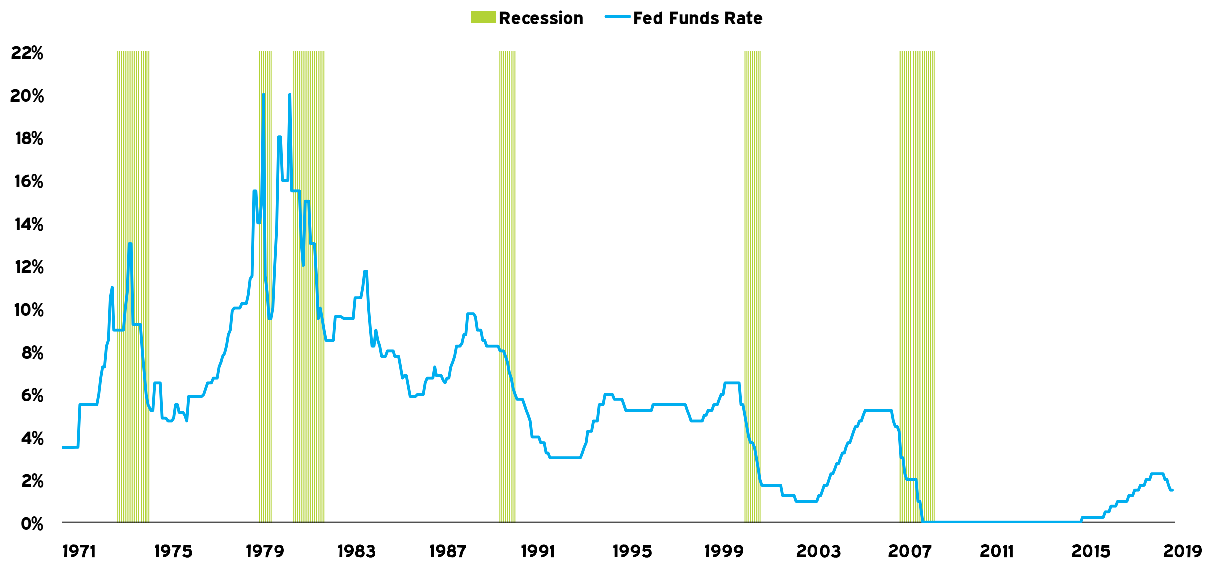




- In October, the Federal Reserve cut interest rates for their third time in 2019. The Fed also expanded its balance sheet as a means of supporting the repo market, which experienced stress recently due to low liquidity. They are emphasizing that it is not quantitative easing, but that is up for debate.
- The recent “insurance” rate cuts were an effort to maintain stable growth in the US with the Fed saying it will “pause” here and not make a move in either direction unless they see a material change in the outlook. Expectations by the market are for up to one cut this year.
- Going forward, we will have to wait and see the impact of the recent rate cuts with the Fed saying it is willing to let the economy and inflation to run a little “hot”. The future of the Fed’s balance sheet also remains in question.

1 Source for Monetary Policy: Bloomberg. Data is as of December 31, 2019.
2 Source for Balance Sheet: Bloomberg

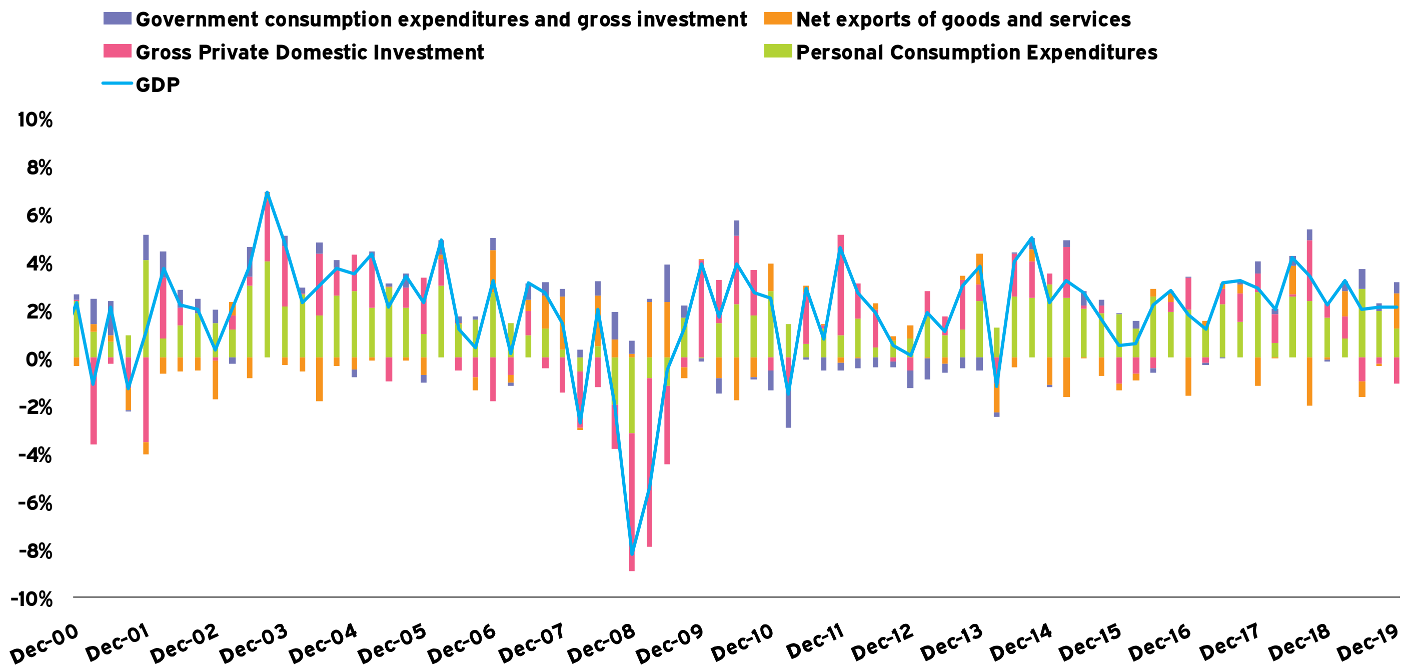
Historical Rate Easing Cycles[1]



- In prior periods where the Federal Reserve reduced interest rates to support growth, they cut rates on average by 5% to 6%.
- Given the current low level of rates, they do not have that room this time. The US does have more policy flexibility though compared to other major central banks.
- Some are speculating given the low level of rates that the Fed will resort to quantitative easing again or other policies to support the economy or that fiscal stimulus will play a larger role.
- A key difference in prior easing periods was that inflation and rates were much higher.

[1] Source: Bloomberg. Data is as of December 31, 2019.

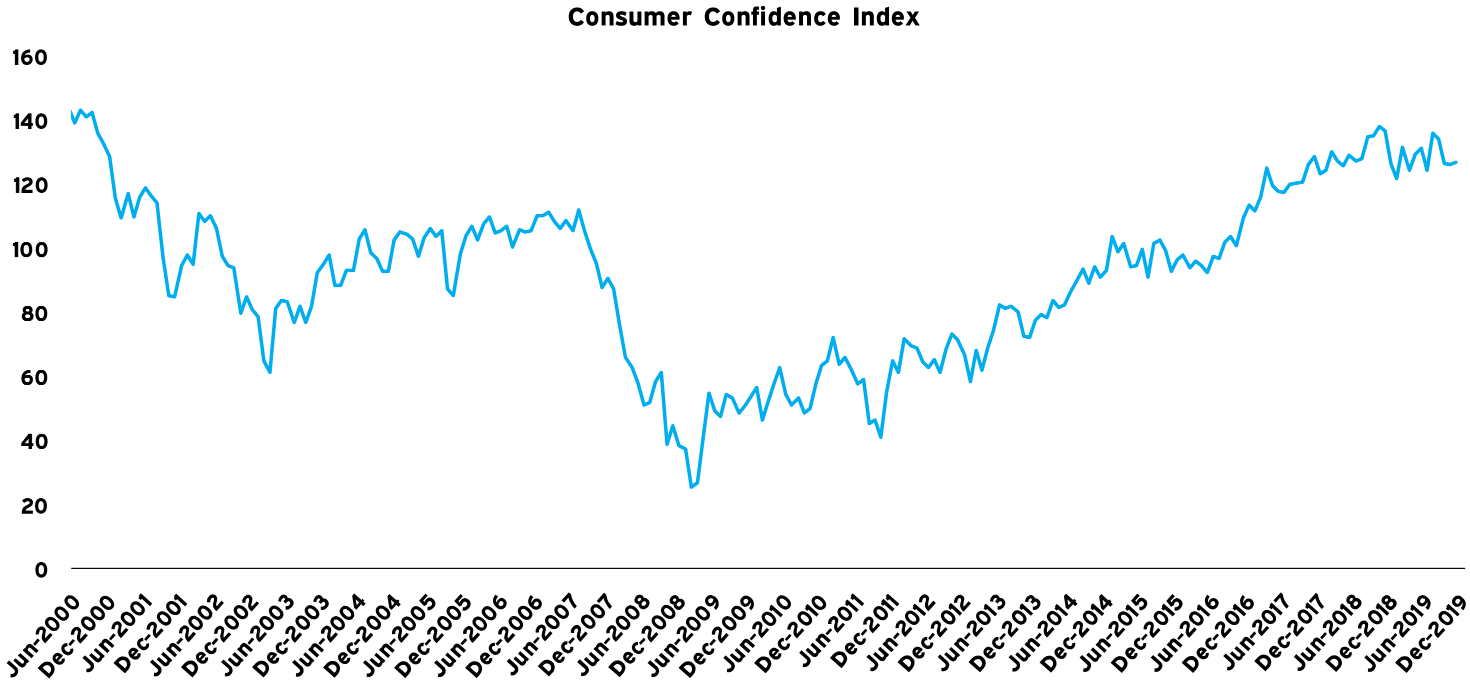
US Real Gross Domestic Product (GDP) Growth[1]



- The first estimate of GDP for the fourth quarter in the US came in at an annualized rate of 2.1%, the same as the prior quarter and matching estimates.
- Falling imports given trade tensions led to net trade making the largest contribution to growth, while consumer spending was positive but lower than the last quarter.
- Business spending declined as trade tensions persist and over concerns of a manufacturing slowdown.

1 Source: US Bureau of Economic Analysis. Data is as of the fourth quarter of 2019 and represents the first estimate.

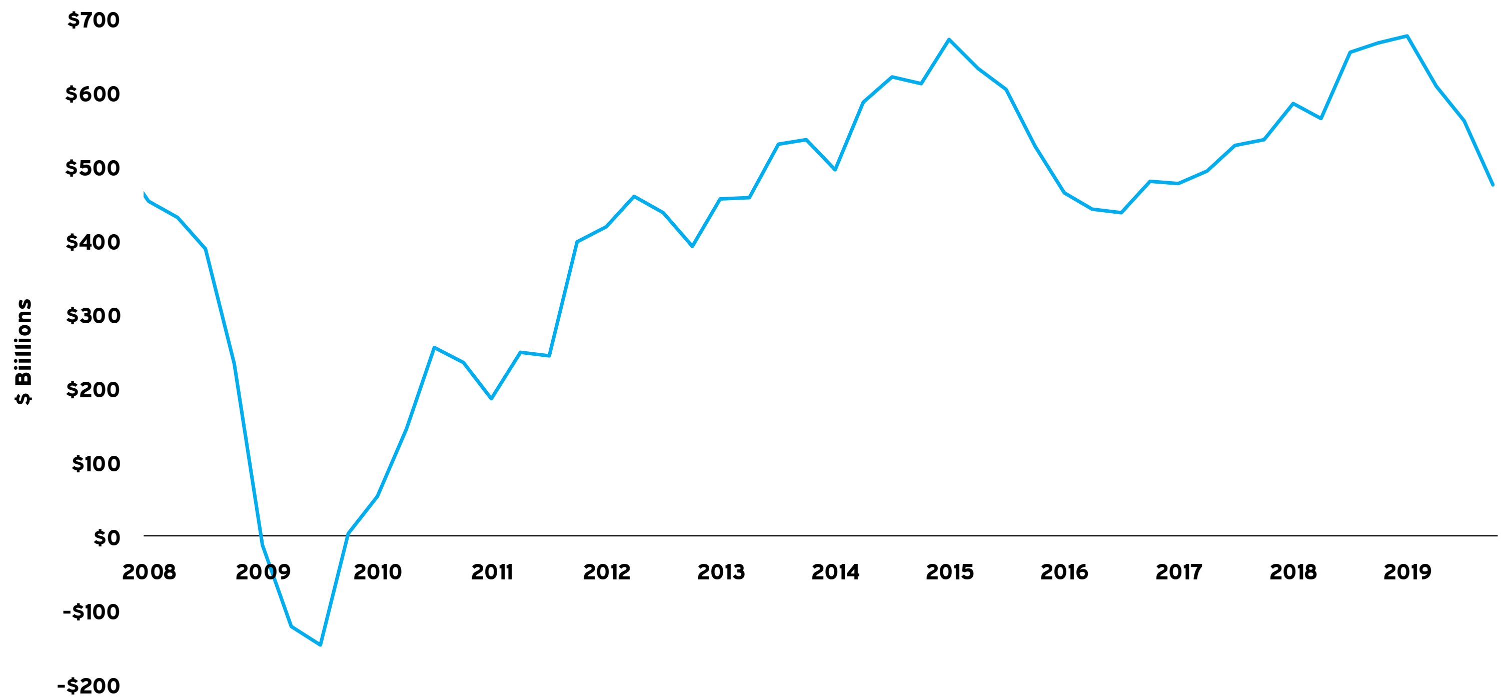
Conference Board Consumer Confidence[1]



- Consumer spending comprises roughly two-thirds of US GDP, making the attitudes of consumers an important driver of economic growth.
- Since the Global Financial Crisis, consumer confidence has steadily increased as economic conditions have improved and unemployment has declined.

[1] Source: Bloomberg and Conference Board. Data is as of December 31, 2019.

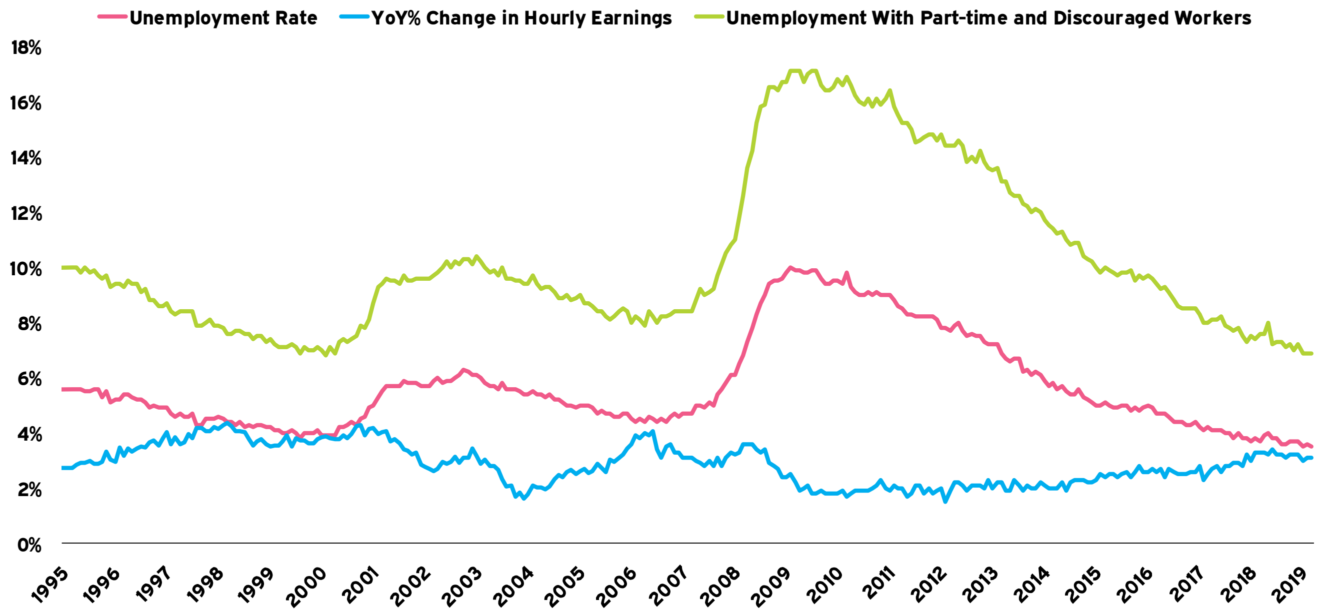
US Capital Spending[1]



- After increasing in 2017 and 2018 from the lows of 2016, capital spending declined in 2019.
- Uncertainty related to economic growth, trade tensions, and political and geopolitical issues weighed on companies willingness to spend and invest.

[1] Source: FRED. Represents private domestic business spending. Data for December 31, 2019 is not yet available. Data is as of September 30, 2019.

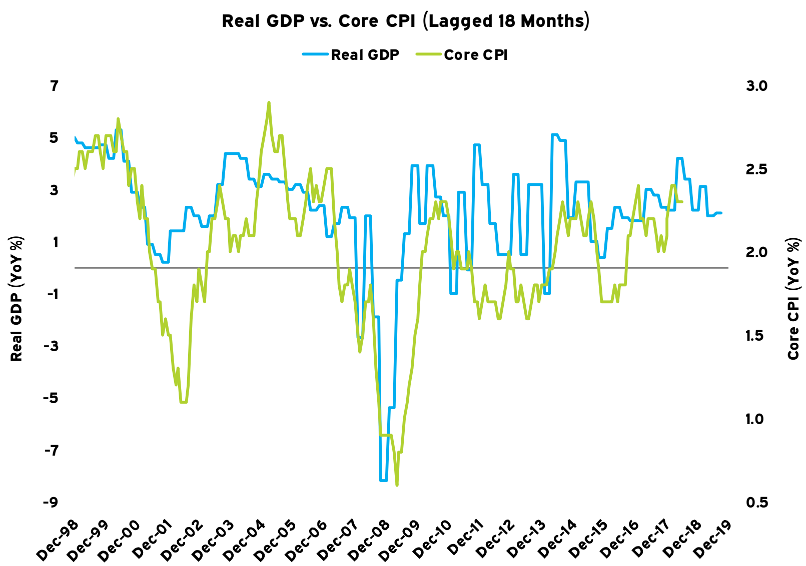
US Employment & Wages[1]

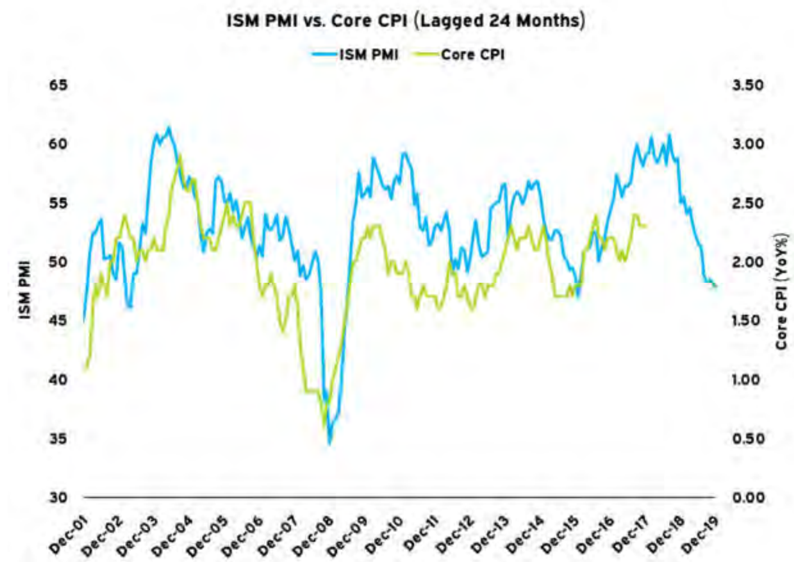


- The unemployment rate finished the quarter at 3.5%, the same level as the prior quarter-end and close to 50-year lows.
- The broader measure of unemployment (U6) that includes discouraged and underemployed workers continued to fall, reaching 6.7% at quarter-end.
- Wage growth finished the quarter at 2.9%, down slightly from last quarter's 3.0% finish. Although wage growth has not increased to the approximate 4.0% level of prior recoveries, the increase could limit corporate profit margins going forward.

[1] Source: Bureau of Labor Statistics. Data is as of December 31, 2019.

US Inflation[1,2]



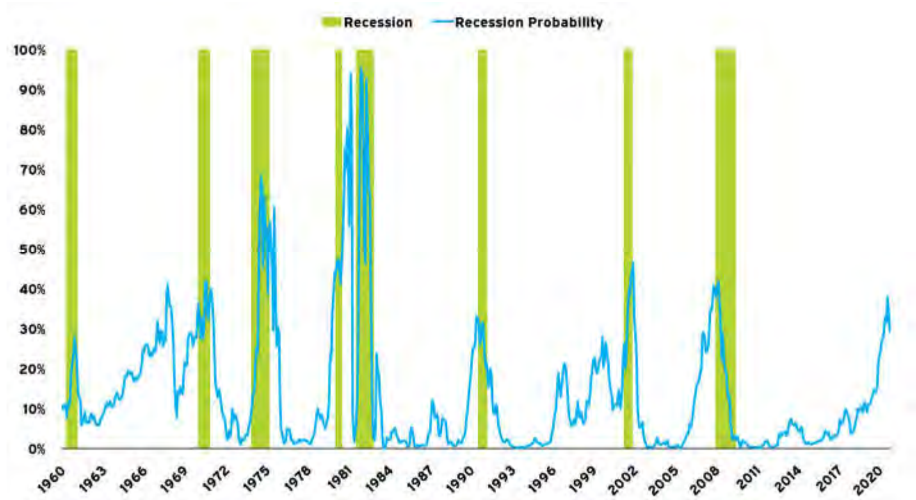


- Inflation is considered a lagging indicator, representing past economic conditions.
- This leads to economic conditions today being a means of forecasting future inflation levels.
- Real GDP and manufacturing indicators, like the ISM Purchasing Managers Index, have historically been useful indicators of future inflation.
- Recently, manufacturing data and GDP declined from their peaks, contributing to the Fed's recent decision to lower rates. As the impact of lower rates makes its way through the economy, we could see pick-ups in growth and inflation.

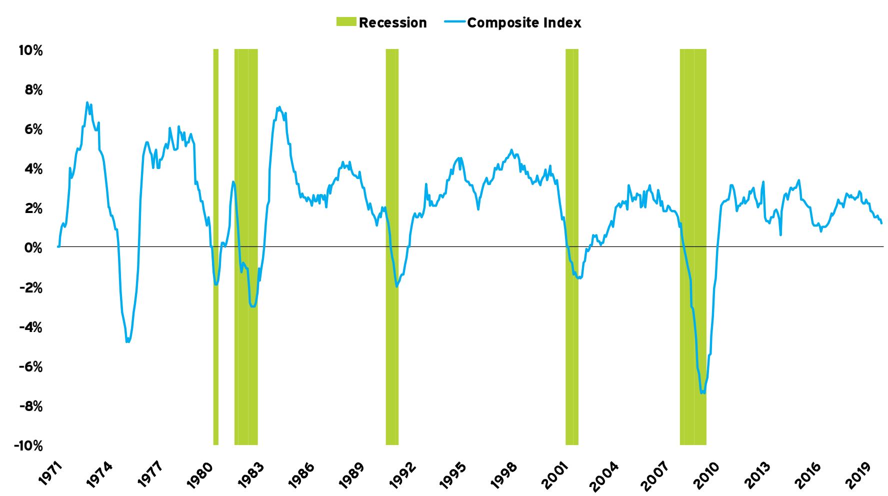
1 Source: Bloomberg. Data is as of December 31, 2019 for ISM PMI and as of the fourth quarter (advance estimate) for US Real GDP.
2 The last data point for Core CPI represents the December 31, 2019 value compared to 18 months prior for Real GDP and 24 months prior for ISM PMI.

Recession Watch in the US

Probability of US Recession 12-mo. (%)[1]



Composite of Four Coincident Indicators[2]

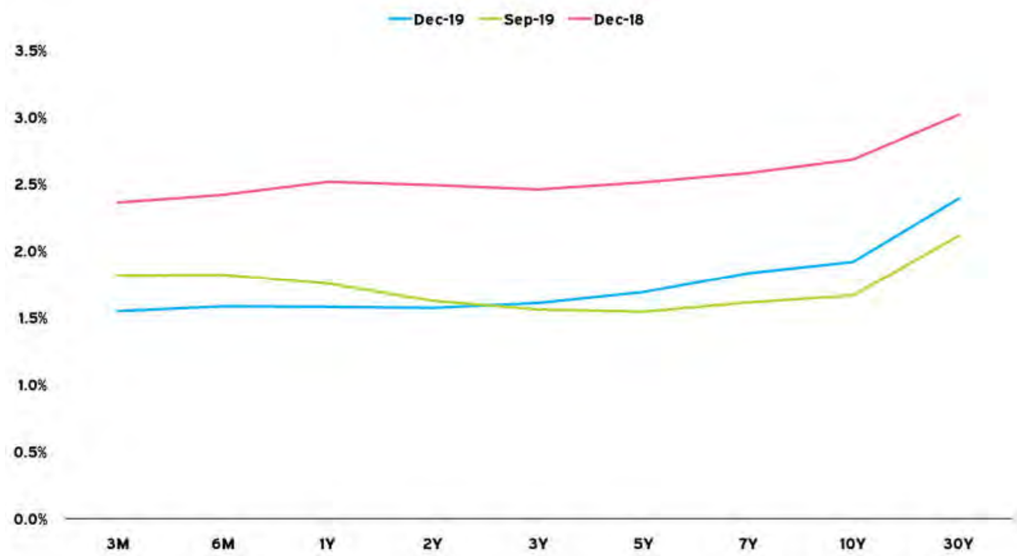


- Coincidental indicators, which provide a strong perspective of the current state of the economy, are signaling that the US is not in a recession.
- Going forward, economic conditions are expected to slow in the US, but the risk of entering a recession in the short-term appears low.

[1] Source: New York Federal Reserve. The NY Fed's model uses the spread between 10-year and 3-month Treasury rates to calculate the probability of a recession in the US twelve months ahead. Data is as of December 31, 2019.

[2] Source: Conference Board. Consists of employees on nonagricultural payrolls, personal income less transfer payments, industrial production, manufacturing, and trade sales. Data is as of December 31, 2019.

US Yield Curve[1]

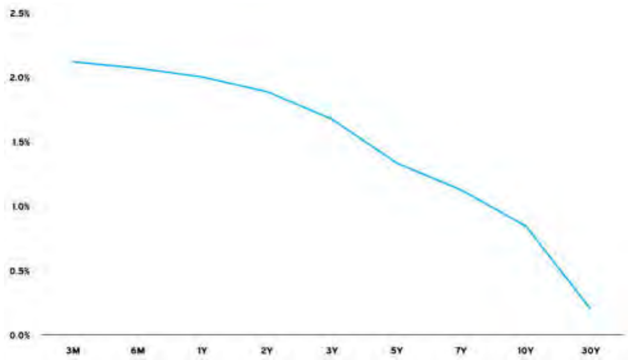


- Over the quarter short-term rates declined and long-term rates increased causing the yield curve to steepen.
- The Federal Reserve's rate cuts drove this dynamic by lowering rates at the front end of the yield curve and their potential impact on future growth causing the back-end of the curve to increase.
- Going forward, if the Federal Reserve does "pause" this year the front end of the yield curve should remain anchored around the current level. If growth and inflation pick-up, long-term rates could increase with relatively higher rates in the US and the safe haven quality acting as a competing force.

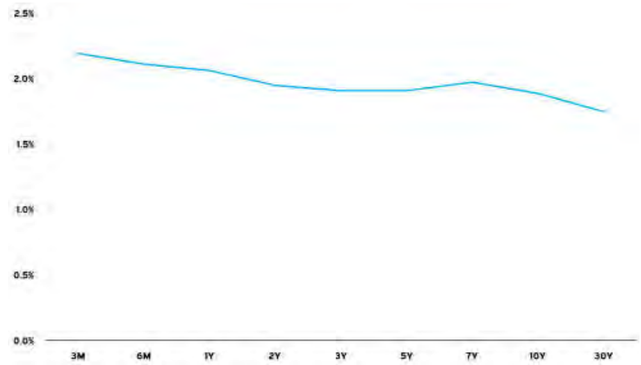
[1] Source: Bloomberg. Data is as of December 31, 2019. Numbers represent month-end values.

Government Bond Yield Curves[1]

US/Italy Rate Differential



US/Japan Rate Differential

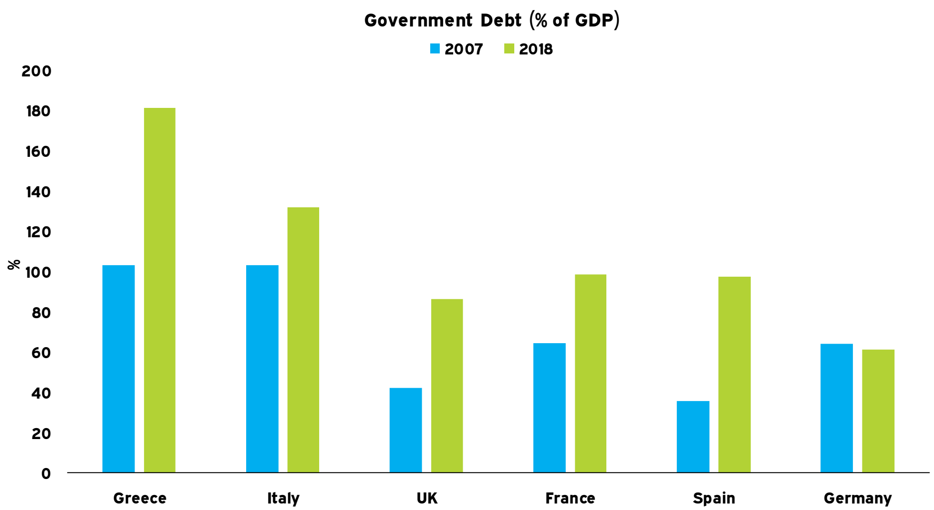


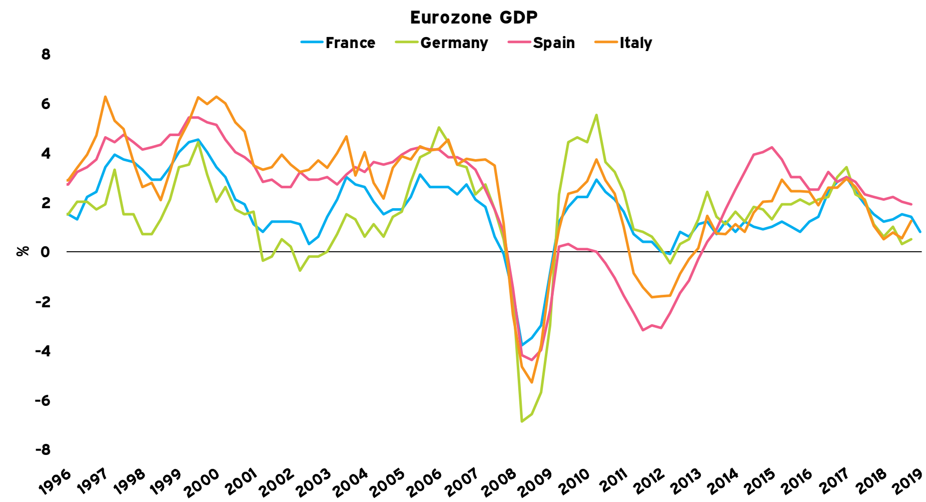
US/Germany Rate Differential

- Compared to Germany, Japan, and Italy rates in the US remain higher.
- Higher rates in the US contribute to the strength of the US dollar and could provide a balance to longer-term rates increasing if inflation and growth pick-up.
- Given concerns over slowing growth, government bonds have attracted capital due to their safe-haven quality, leaving large parts of the yield curves in Italy, Japan, and Germany in negative territory.

1 Source: Bloomberg. Data is as of December 31, 2019. Rate differential data represents the differences in the yield for a US Treasury at each maturity versus the respective similar bond for each country.

European Economic Conditions[1]

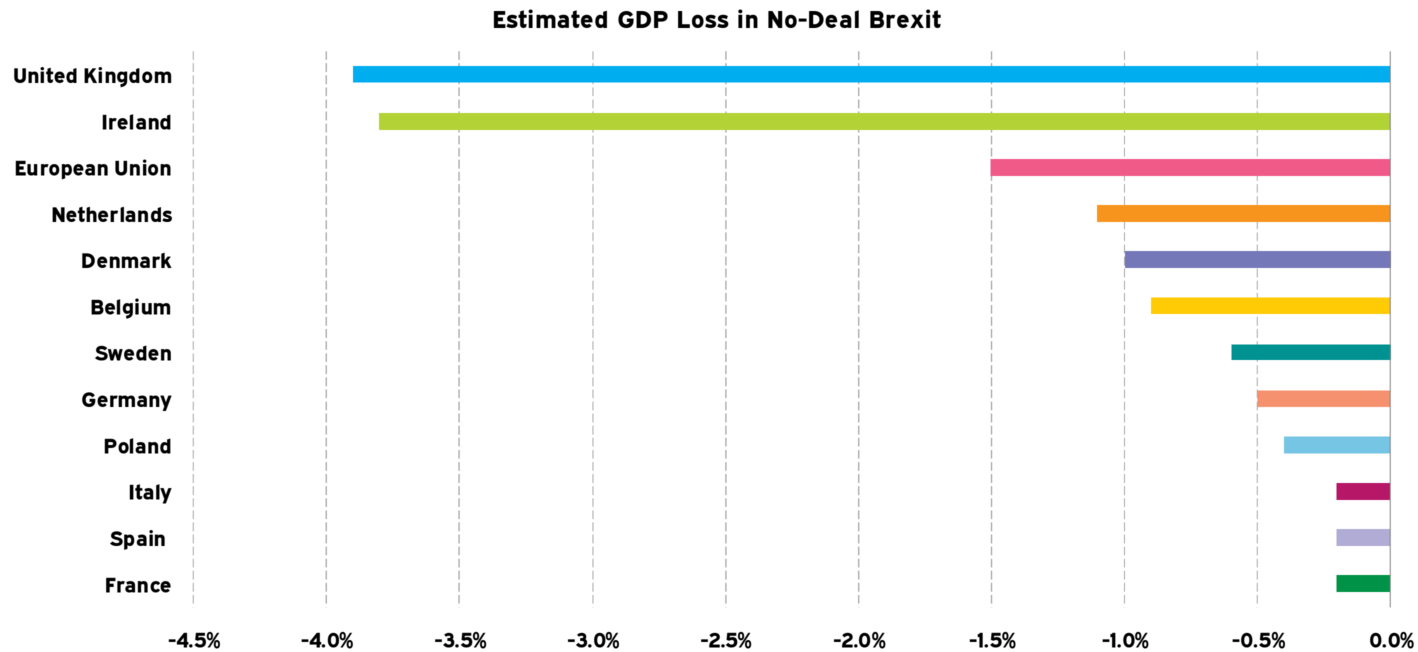




- Growth declined in Europe recently given the slowdown in Germany, uncertainties related to Brexit, and trade tensions. Going forward, a slight pick-up is projected but at levels below the US.
- Growth has been uneven in Europe, with Germany experiencing much stronger growth after the Global Financial Crisis, and lower declines in 2012 and 2013, compared to Italy and Spain.
- High debt burdens have weighed on Italy and Greece's economies, given their inability to devalue their currencies and the limits on fiscal expansion.
- Structural tensions remain given fiscal policy rests at the country level and monetary policy with one central bank.

1 Source: Bloomberg. Data for government debt as a percent of GDP is as of December 31, 2018. Eurozone GDP data is not yet available through December 31, 2019. Data is as of September 30, 2019.

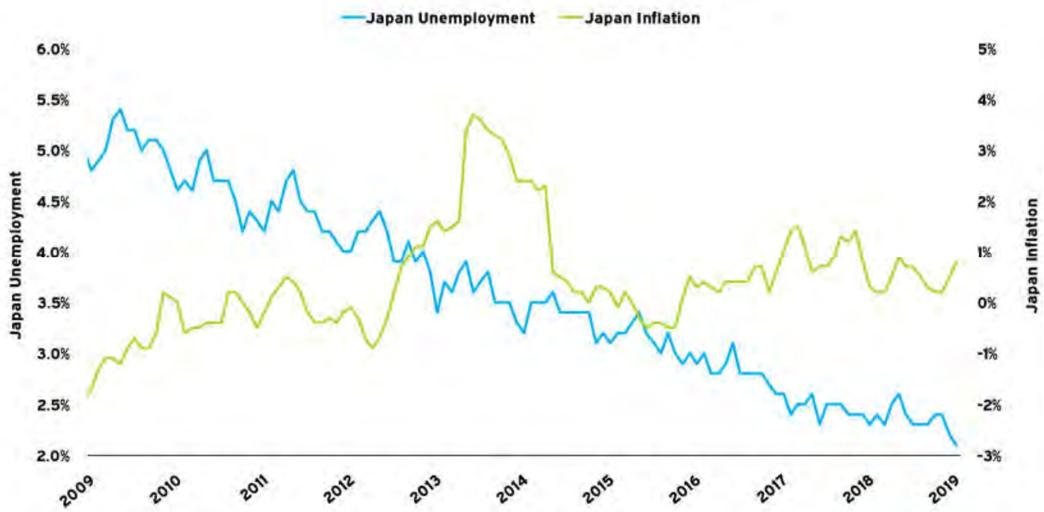
Brexit[1]



- Brexit occurred at the end of January, starting the clock for the two sides to negotiate the terms of trade, security, and other items going forward with a deadline of the end of 2020.
- If the terms of the separation are not agreed upon by the end of the year, and an extension is not granted, this could lead to a "no-deal Brexit". This would be particularly impactful, weighing most on the UK and Irish economies, and with varied impacts across other countries.

[1] Source: IMF via The Guardian.

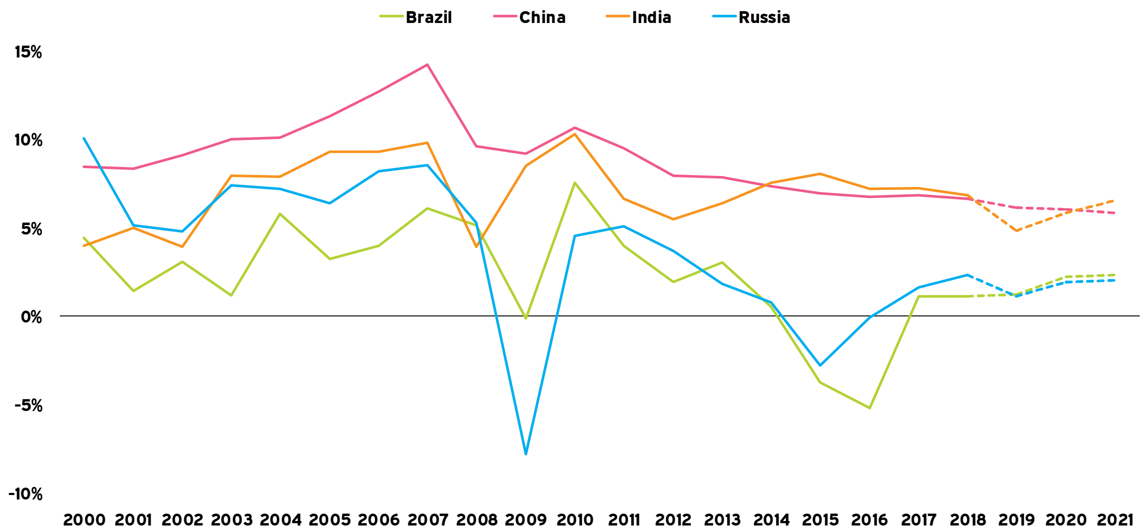
Japanese Economic Conditions[1]



- Inflation in Japan remains well below the central bank's 2% target and has largely bounced between 0% and 1% over recent years.
- Largely driven by Japan's aging workforce, unemployment continued its decline (2.1%) and is at its lowest level since October 1992. There is some hope that tight labor markets could translate into wage growth sufficient to spur inflation higher.
- Of all the major economies, Japan's central bank maintains the largest simulative effort.
- The consumption tax in Japan was raised from 8% to 10%, to help finance social programs including pensions, medical, and to care for the aging population. The government is planning to introduce fiscal measures to try to reduce the impact the tax will have on spending.

1 Source: Bloomberg. Data is as of December 31, 2019.

Emerging Market GDP[1]

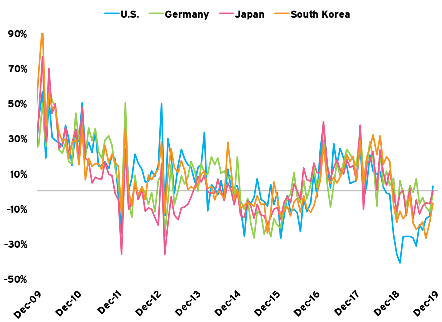


- Growth in emerging economies generally remains higher than developed economies but is uneven, with tariffs, debt levels, and slowing developed economies remaining key risks and more dovish central bank policies providing support.
- The recent trade deal with the US should reduce the projected pace of slowing in China but it is not a complete solution and domestic issues remain. India remains a bright spot with growth forecasted to accelerate to over 6% by 2021 given fiscal and monetary support, but a recent unexpected slowing of domestic demand caused estimates of growth to be lowered by 1.2% in 2020 and by 0.9% in 2021.
- The IMF projects growth from Russia and Brazil, an improvement from the contractions in 2015 and 2016. The forecast for Brazil's 2020 growth improved given recent reforms related to pensions.

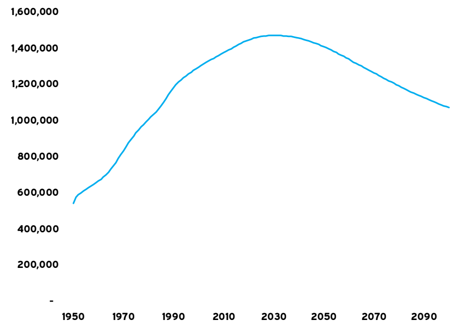
[1] Source: IMF. World Economic Outlook. January update. Estimates start after 2018.

China[1, 2, 3]

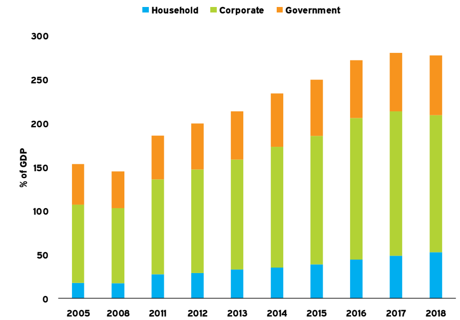
Chinese Imports YoY% Change



China Population Projections (Thousands)



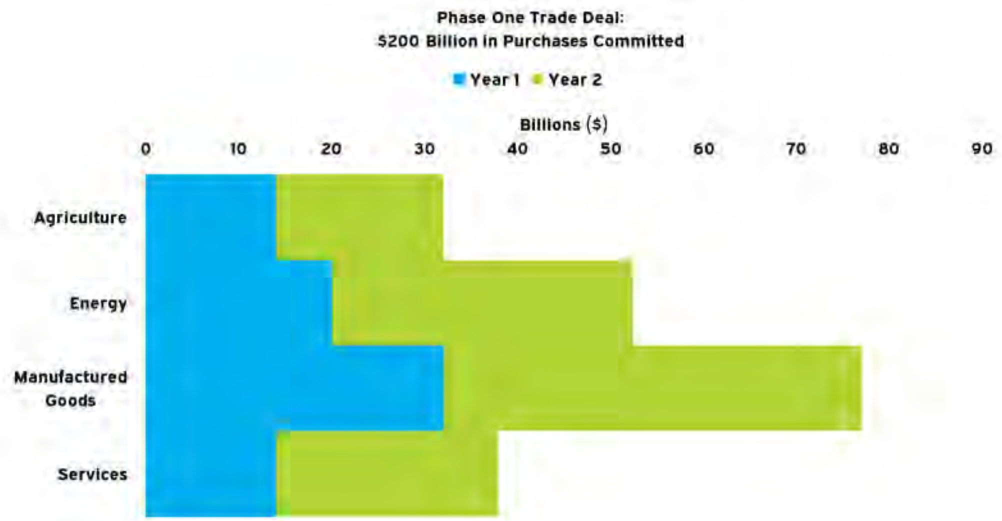
China Debt as % of GDP



- In the coming years, China will need to manage the process of transitioning to an economy based more on consumption than investment, while continuing to reduce debt levels and dealing with financial risks. The recent trade deal with the US reduces some of the pressures in the short-term.
- Imports (above) recently picked-up above estimates driven by imports of copper and iron, as well as crude oil, natural gas, soybeans, and pork. The trade deal with the US calls for commitments of $200 billion in imports over the next two years in an effort to reduce the trade deficit.
- A focus on deleveraging has been put on hold given the sluggish economic conditions, with supportive fiscal and monetary policies likely continuing in 2020 to support the economy.
- China's population is projected to decline due to the "one child" policy. This creates further issues going forward as a relatively smaller work force needs to support a large retirement age population.
- The recent coronavirus could also further weigh on growth, production, and consumption in the short-term.

1 Source for China Imports: Bloomberg. Data as of December 31, 2019.
2 Source for China Population: United Nations "World Population Prospects 2019".
3 Source for China Debt: Oxford Economics/CEIC data.

US/China - Phase One Trade Deal[1]



- Recently, the US and China came to a so-called "Phase One" trade deal.
- The deal includes the US reducing tariffs on $110 billion in consumer goods (15% to 7.5%) and delaying tariffs scheduled for the end of 2019 on an additional $160 billion in consumer goods. China agreed to import more from the US (above), more actively police intellectual property rights, stop requiring foreign companies to transfer technology, and be more transparent about interventions in the currency market.
- Uncertainties remain about the $200 billion in goods China committed to purchase from the US including questions about Chinese follow through and the ability to supply the additional targets.
- The trade deal is a step in the right direction, but by no means a complete solution. Tariffs remain on the majority of US imports from China and trade tensions remain with other countries.

[1] Source: "Economic and Trade Agreement between the United States of America and People's Republic of China: Phase One.", White House.

Summary

Three primary concerns face the global economy: 1) uncertainty related to the US economy and policies; 2) declining growth in China, along with uncertain fiscal and monetary policies; and 3) political uncertainty in Europe and East Asia, and risks related to the UK's exit from the European Union.

- The US has experienced largely stable growth since the end of the financial crisis, but at levels below prior recoveries. The economic expansion has been long and it is inevitable that growth will slow in the US, particularly as the impact of the tax cuts wane. The markets have largely cheered the Fed's recent pivot in monetary policy, but questions remain including whether this will lead to borrowers taking on more risk, is it too early to stop tightening policy, and how long can the rally in risk assets be sustained without supporting earnings growth. Gridlock remains in Washington as seen by the government shutdown last year with uncertainty related to tariffs, immigration, and the upcoming presidential election.
- China continues to manage a repositioning and slowing of its economy, which could have a meaningful impact on countries that depend on its trade. High debt, particularly in the corporate sector, and the on-going trade issues with the US, remain key issues. The additional policy support could help the economy in the short-term, but may undermine efforts to reduce debt. The recent coronavirus further complicates the situation.
- Now that Brexit has officially happened, the next year will be key in negotiating the terms of the separation between the UK and Europe with a "no-deal Brexit" being particularly disruptive. Recent protests in France related to pension reforms and Italy's recent elections highlight that social unrest remains elsewhere in Europe. Ongoing protests in Hong Kong, triggers initially by concerns regarding an extradition bill, have driven Hong Kong's economy into recession. The ongoing conflict between the pro-China Hong Kong government and protesters seeking to preserve the status quo of the "one country, two systems" relationship between China and Hong Kong threatens regional stability.

Disclaimer, Glossary, and Notes

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MEKETA
INVESTMENT GROUP

Client Example

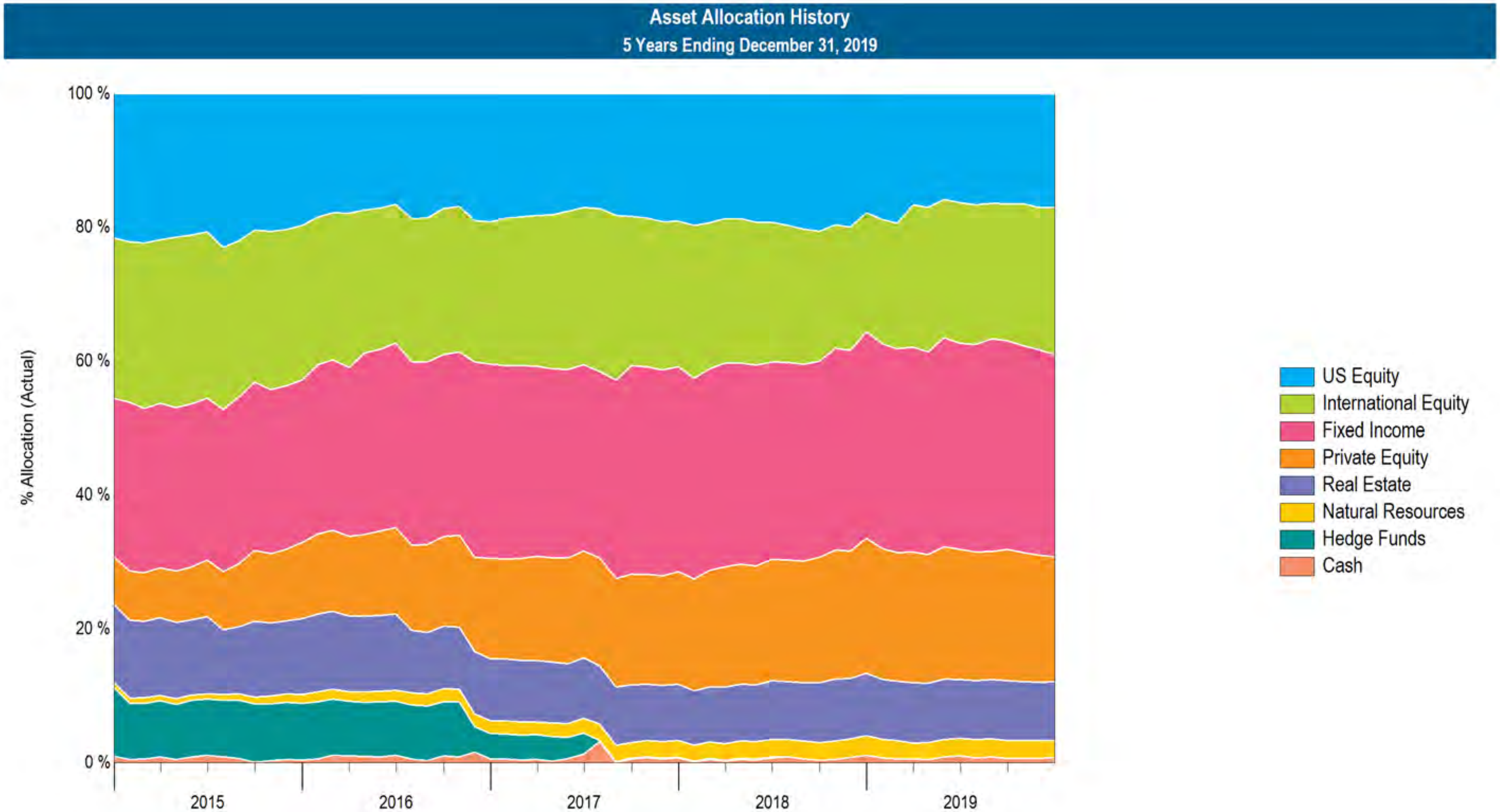
Interim Report

Fund Evaluation Report

Portions of this report have been redacted to ensure the security of certain confidential or sensitive information.

Allocation vs. Targets and Policy

	Current Balance	Current Allocation	Policy	Policy Range	Within IPS Range?
US Equity	$175,140,367	17%	20%	13% - 27%	Yes
International Equity	$225,316,725	22%	22%	15% - 29%	Yes
Fixed Income	$309,667,730	30%	30%	20% - 40%	Yes
Private Equity	$192,030,377	19%	15%	5% - 25%	Yes
Real Estate	$89,845,231	9%	10%	0% - 20%	Yes
Natural Resources	$25,995,149	3%	3%	0% - 5%	Yes
Cash	$8,214,221	1%	0%	0% - 5%	Yes
Total	**$1,026,209,799**	**100%**	**100%**		


Asset Allocation History
5 Years Ending December 31, 2019
100 %
80 %
60 %
40 %
20 %
0 %
% Allocation (Actual)
2015
2016
2017
2018
2019
US Equity
International Equity
Fixed Income
Private Equity
Real Estate
Natural Resources
Hedge Funds
Cash

MEKETA

Client Example

Fund Summary | As of December 31, 2019

Asset Class Performance Summary (Net of Fees)

	Market Value ($)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Total Fund	**1,026,209,799**	**100.0**	**4.7**	**15.7**	**9.9**	**7.6**	**8.2**	**7.0**	**Mar-97**
Static Benchmark			*4.5*	*15.5*	*8.9*	*7.2*	*8.0*	*--*	*Mar-97*
Dynamic Benchmark			*4.0*	*14.2*	*8.6*	*6.9*	*8.6*	*--*	*Mar-97*
Domestic Equity	**175,140,367**	**17.1**	**8.1**	**29.4**	**13.2**	**9.9**	**12.3**	**8.3**	**Mar-97**
Russell 3000			*9.1*	*31.0*	*14.6*	*11.2*	*13.4*	*8.8*	*Mar-97*
International Equity	**225,316,725**	**22.0**	**11.5**	**22.4**	**11.3**	**6.7**	**6.0**	**6.1**	**Mar-97**
Spliced International Equity Benchmark			*8.9*	*21.5*	*9.9*	*5.5*	*5.0*	*5.6*	*Mar-97*
Private Equity	**192,030,377**	**18.7**	**3.4**	**16.1**	**16.5**	**14.3**	**--**	**15.6**	**May-10**
Private Equity Benchmark			*0.0*	*1.4*	*9.7*	*9.7*	*--*	*14.9*	*May-10*
Fixed Income	**309,667,730**	**30.2**	**1.0**	**10.5**	**4.6**	**3.7**	**3.9**	**5.0**	**Mar-97**
BBgBarc US Aggregate TR			*0.2*	*8.7*	*4.0*	*3.0*	*3.7*	*5.2*	*Mar-97*
Real Estate	**89,845,231**	**8.8**	**1.8**	**5.6**	**7.2**	**8.5**	**10.6**	**3.2**	**Dec-07**
NCREIF Property Index			*1.6*	*6.4*	*6.7*	*8.2*	*10.2*	*6.2*	*Dec-07*
Natural Resources	**25,995,149**	**2.5**	**-3.6**	**-13.4**	**0.7**	**0.8**	**--**	**1.6**	**Feb-13**
S&P North American Natural Resources TR			*7.5*	*17.6*	*-2.0*	*-1.4*	*1.4*	*-1.0*	*Feb-13*
Cash	**8,214,221**	**0.8**							

Spliced international equity benchmark is MSCI ACWI-ex U.S. for all periods except 1/1/1997-1/1/1999. MSCI ACWI-ex U.S. is not available during this time period so the MSCI EAFE Index was used.

Private Equity Benchmark consists of the S&P 500 Index +3% prior to 3/31/2018, and the MSCI ACWI Index + 2% (Quarter Lagged) thereafter.

Trailing Net Performance	Market Value ($)	% of Portfolio	% of Sector	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Total Fund	**1,026,209,799**	**100.0**	**--**	**4.7**	**15.7**	**9.9**	**7.6**	**8.2**	**7.0**	**Mar-97**
Static Benchmark				*4.5*	*15.5*	*8.9*	*7.2*	*8.0*	*--*	*Mar-97*
Dynamic Benchmark				*4.0*	*14.2*	*8.6*	*6.9*	*8.6*	*--*	*Mar-97*
InvMetrics Public DB $250mm-$1B Net Median				*5.5*	*18.7*	*9.6*	*6.9*	*8.3*	*7.0*	*Mar-97*
InvMetrics Public DB $250mm-$1B Net Rank				*82*	*92*	*24*	*22*	*53*	*51*	*Mar-97*
Domestic Equity	**175,140,367**	**17.1**	**17.1**	**8.1**	**29.4**	**13.2**	**9.9**	**12.3**	**8.3**	**Mar-97**
Russell 3000				*9.1*	*31.0*	*14.6*	*11.2*	*13.4*	*8.8*	*Mar-97*
Westwood Capital Large Cap Value	49,041,260	4.8	28.0	5.8	27.3	13.1	9.9	11.7	8.9	Oct-01
Russell 1000 Value				*7.4*	*26.5*	*9.7*	*8.3*	*11.8*	*8.1*	*Oct-01*
eV US Large Cap Value Equity Net Median				*7.7*	*26.3*	*10.3*	*8.2*	*11.3*	*8.4*	*Oct-01*
eV US Large Cap Value Equity Net Rank				*88*	*40*	*15*	*20*	*40*	*28*	*Oct-01*
Westfield Small/Mid Cap Growth	48,947,486	4.8	27.9	14.3	35.2	17.9	10.2	14.1	13.1	Nov-02
Russell 2500 Growth				*10.6*	*32.7*	*15.2*	*10.8*	*14.0*	*12.0*	*Nov-02*
eV US Small-Mid Cap Growth Equity Net Median				*8.5*	*31.3*	*16.7*	*10.9*	*13.5*	*11.8*	*Nov-02*
eV US Small-Mid Cap Growth Equity Net Rank				*6*	*25*	*40*	*59*	*34*	*14*	*Nov-02*
Vaughan Nelson Small Cap Value	46,138,663	4.5	26.3	3.8	25.0	4.7	--	--	8.5	Jan-16
Russell 2000 Value				*8.5*	*22.4*	*4.8*	*7.0*	*10.6*	*10.9*	*Jan-16*
eV US Small Cap Value Equity Net Median				*7.8*	*23.8*	*4.5*	*6.5*	*11.0*	*9.8*	*Jan-16*
eV US Small Cap Value Equity Net Rank				*96*	*35*	*47*	*--*	*--*	*70*	*Jan-16*

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	Market Value ($)	% of Portfolio	% of Sector	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
SSgA S&P 500	31,012,958	3.0	17.7	9.1	31.5	15.3	11.7	13.5	9.0	Feb-04
S&P 500				*9.1*	*31.5*	*15.3*	*11.7*	*13.6*	*9.0*	*Feb-04*
eV US Large Cap Equity Net Median				*8.3*	*28.9*	*13.3*	*10.1*	*12.6*	*9.1*	*Feb-04*
eV US Large Cap Equity Net Rank				*36*	*35*	*36*	*28*	*25*	*53*	*Feb-04*
International Equity	**225,316,725**	**22.0**	**22.0**	**11.5**	**22.4**	**11.3**	**6.7**	**6.0**	**6.1**	**Mar-97**
Spliced International Equity Benchmark				*8.9*	*21.5*	*9.9*	*5.5*	*5.0*	*5.6*	*Mar-97*
Baillie Gifford International Growth Fund	39,219,146	3.8	17.4	14.1	37.3	18.2	10.2	9.1	12.0	May-09
MSCI ACWI ex USA				*8.9*	*21.5*	*9.9*	*5.5*	*5.0*	*8.0*	*May-09*
MSCI EAFE				*8.2*	*22.0*	*9.6*	*5.7*	*5.5*	*8.2*	*May-09*
eV ACWI ex-US All Cap Core Eq Net Median				*9.7*	*24.6*	*10.4*	*5.8*	*6.5*	*9.3*	*May-09*
eV ACWI ex-US All Cap Core Eq Net Rank				*1*	*1*	*1*	*3*	*5*	*6*	*May-09*
Sanderson International Value	48,705,562	4.7	21.6	9.8	20.5	7.5	3.8	--	5.6	Feb-13
MSCI EAFE				*8.2*	*22.0*	*9.6*	*5.7*	*5.5*	*5.6*	*Feb-13*
eV EAFE All Cap Value Net Median				*9.0*	*18.1*	*7.4*	*4.0*	*6.1*	*5.3*	*Feb-13*
eV EAFE All Cap Value Net Rank				*21*	*31*	*42*	*66*	*--*	*36*	*Feb-13*
Highclere International Small Cap	46,139,666	4.5	20.5	12.8	23.5	9.5	9.0	9.1	9.0	Dec-09
MSCI EAFE Small Cap				*11.5*	*25.0*	*10.9*	*8.9*	*8.7*	*8.7*	*Dec-09*
eV EAFE Small Cap Equity Net Median				*12.1*	*23.8*	*10.6*	*8.4*	*9.3*	*9.3*	*Dec-09*
eV EAFE Small Cap Equity Net Rank				*32*	*54*	*63*	*41*	*61*	*63*	*Dec-09*
SSgA MSCI EAFE Fund	27,404,409	2.7	12.2	8.2	22.4	9.9	6.0	--	5.9	Feb-13
MSCI EAFE				*8.2*	*22.0*	*9.6*	*5.7*	*5.5*	*5.6*	*Feb-13*
eV EAFE Core Equity Net Median				*9.0*	*22.2*	*9.3*	*6.3*	*7.0*	*6.5*	*Feb-13*
eV EAFE Core Equity Net Rank				*69*	*49*	*46*	*57*	*--*	*64*	*Feb-13*

	Market Value ($)	% of Portfolio	% of Sector	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
DFA Emerging Markets Value	31,220,632	3.0	13.9	9.7	9.6	8.9	4.7	2.1	2.5	Dec-09
MSCI Emerging Markets Value NR USD				*9.9*	*12.0*	*8.6*	*3.7*	*2.2*	*2.6*	*Dec-09*
MSCI Emerging Markets				*11.8*	*18.4*	*11.6*	*5.6*	*3.7*	*4.0*	*Dec-09*
eV Emg Mkts All Cap Value Equity Net Median				*10.9*	*17.7*	*9.9*	*5.6*	*3.6*	*4.1*	*Dec-09*
eV Emg Mkts All Cap Value Equity Net Rank				*85*	*98*	*68*	*69*	*94*	*94*	*Dec-09*
TT Emerging Markets Equity	32,627,309	3.2	14.5	13.6	--	--	--	--	8.8	Apr-19
MSCI Emerging Markets				*11.8*	*18.4*	*11.6*	*5.6*	*3.7*	*7.7*	*Apr-19*
eV Emg Mkts Equity Net Median				*11.4*	*19.3*	*10.7*	*5.5*	*4.4*	*8.4*	*Apr-19*
eV Emg Mkts Equity Net Rank				*9*	*--*	*--*	*--*	*--*	*48*	*Apr-19*
Private Equity	**192,030,377**	**18.7**	**18.7**	**3.4**	**16.1**	**16.5**	**14.3**	**--**	**15.6**	**May-10**
Private Equity Benchmark				*0.0*	*1.4*	*9.7*	*9.7*	*--*	*14.9*	*May-10*
Fixed Income	**309,667,730**	**30.2**	**30.2**	**1.0**	**10.5**	**4.6**	**3.7**	**3.9**	**5.0**	**Mar-97**
BBgBarc US Aggregate TR				*0.2*	*8.7*	*4.0*	*3.0*	*3.7*	*5.2*	*Mar-97*
SSgA Bond Fund	76,297,345	7.4	24.6	0.2	8.7	4.0	3.0	3.6	4.1	Jan-04
BBgBarc US Aggregate TR				*0.2*	*8.7*	*4.0*	*3.0*	*3.7*	*4.2*	*Jan-04*
eV US Core Fixed Inc Net Median				*0.2*	*9.0*	*4.1*	*3.1*	*4.0*	*4.3*	*Jan-04*
eV US Core Fixed Inc Net Rank				*47*	*70*	*64*	*70*	*80*	*74*	*Jan-04*
Loomis Sayles Core Plus Fixed Income	59,398,451	5.8	19.2	0.5	9.4	4.7	--	--	4.0	Jul-15
BBgBarc US Aggregate TR				*0.2*	*8.7*	*4.0*	*3.0*	*3.7*	*3.4*	*Jul-15*
eV US Core Plus Fixed Inc Net Median				*0.4*	*9.8*	*4.5*	*3.6*	*4.7*	*4.0*	*Jul-15*
eV US Core Plus Fixed Inc Net Rank				*42*	*63*	*29*	*--*	*--*	*43*	*Jul-15*

	Market Value ($)	% of Portfolio	% of Sector	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Aberdeen Emerging Markets Bond Fund	63,082,394	6.1	20.4	2.5	15.1	6.4	5.8	--	4.9	Dec-14
JP Morgan EMBI Global Diversified				*1.8*	*15.0*	*6.7*	*6.2*	*6.9*	*5.6*	*Dec-14*
50% JPM EMBI GD, 25% JPM GBI EM GD, 25% CMBI Broad				*2.7*	*14.2*	*6.8*	*5.8*	*5.9*	*5.0*	*Dec-14*
SSGA TIPS	52,759,620	5.1	17.0	0.8	8.3	3.3	2.6	--	1.8	Aug-14
BBgBarc US TIPS TR				*0.8*	*8.4*	*3.3*	*2.6*	*3.4*	*2.0*	*Aug-14*
eV US TIPS / Inflation Fixed Inc Net Median				*0.8*	*8.5*	*3.3*	*2.5*	*3.2*	*1.8*	*Aug-14*
eV US TIPS / Inflation Fixed Inc Net Rank				*59*	*59*	*57*	*48*	*--*	*38*	*Aug-14*
Pyramis Tactical Bond Fund	39,447,648	3.8	12.7	1.5	13.2	5.9	5.2	--	5.1	Aug-13
BBgBarc US Aggregate TR				*0.2*	*8.7*	*4.0*	*3.0*	*3.7*	*3.3*	*Aug-13*
eV US Core Plus Fixed Inc Net Median				*0.4*	*9.8*	*4.5*	*3.6*	*4.7*	*3.8*	*Aug-13*
eV US Core Plus Fixed Inc Net Rank				*2*	*1*	*2*	*1*	*--*	*2*	*Aug-13*
Pacific Asset Management Bank Loans	18,682,271	1.8	6.0	--	--	--	--	--	1.0	Dec-19
Credit Suisse Leveraged Loans				*1.7*	*8.2*	*4.5*	*4.5*	*5.2*	*1.6*	*Dec-19*
Bank Loan MStar MF Median				*1.6*	*8.0*	*3.9*	*4.0*	*4.8*	*1.6*	*Dec-19*
Bank Loan MStar MF Rank				*--*	*--*	*--*	*--*	*--*	*93*	*Dec-19*
Real Estate	**89,845,231**	**8.8**	**8.8**	**1.8**	**5.6**	**7.2**	**8.5**	**10.6**	**3.2**	**Dec-07**
NCREIF Property Index				*1.6*	*6.4*	*6.7*	*8.2*	*10.2*	*6.2*	*Dec-07*
Manager A	66,557,988	6.5	74.1	1.8	6.3	7.8	9.7	11.7	6.0	Apr-05
NCREIF ODCE Equal Weighted (Net)				*1.3*	*5.2*	*6.5*	*8.3*	*10.5*	*6.5*	*Apr-05*

	Market Value ($)	% of Portfolio	% of Sector	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Natural Resources	**25,995,149**	**2.5**	**2.5**	**-3.6**	**-13.4**	**0.7**	**0.8**	**--**	**1.6**	**Feb-13**
S&P North American Natural Resources TR				*7.5*	*17.6*	*-2.0*	*-1.4*	*1.4*	*-1.0*	*Feb-13*
Cash	**8,214,221**	**0.8**	**0.8**							
Cash	8,214,221	0.8	100.0							

Disclaimer, Glossary, and Notes

WE HAVE PREPARED THIS REPORT FOR THE SOLE BENEFIT OF CLIENT EXAMPLE.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Exhibit J

Sample White Paper/Research Report
& List of Recent Research Generated

MEKETA
INVESTMENT GROUP

Moving Toward a New Portfolio Framework

WORKING PAPER
DECEMBER 2020

A Meketa/practitioner roundtable: considerations for investing in a low interest rate environment

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Background

The discussions regarding the impact of low interest rates and what to do about them have been the focus of the Meketa Low Interest Rate (LIR) Working Group[1] since March 2020. Contemporaneously, many clients have initiated their own discussions and research on this topic.

The potential impacts on funded status, return goals, discount rates, etc., are well explored. It is now, in our opinion, time to seek potential solutions. One approach is to structure portfolios in a manner that maximizes the risk/return characteristics for any given investor. Different investors have a range of return goals, and no one structure is universally appropriate. No matter the investor's return objective, maximizing the efficiency of their portfolio may require looking at strategic asset allocation through a new lens.

This paper explores the barbell approach to asset allocation (described later) and how it can potentially mitigate some of the impacts of low interest rates on client portfolios. Please note that the barbell approach has pros and cons, and it may not be appropriate for all investors and situations (e.g., stagflation scenario).

August 2020 report

In August, Meketa released a ten-page report entitled: "*Investing in a Low Rate Environment: A Conversation about the Future*".

Potential considerations identified in this report, included:

- The clear distinction between risk and uncertainty
- The barbell approach: mixing low and high-risk assets
- Continuing to accept, and potentially increase, risk exposures
- Turning low rates to your advantage via leverage
- Being opportunistic…and patient

[1] The LIR Working Group is composed of Meketa professionals, clients, asset management firms with expertise in asset/liability management, and academics.

An historical context and practical considerations

In our August 2020 report, we highlighted the distinction between "Risk" and "Uncertainty". In short, while the COVID pandemic's impact on the economy has arguably increased risk in the capital markets, it has undoubtedly also increased uncertainty about future returns. The number of unprecedented conditions in the capital markets (e.g., historically low interest rates, unprecedented fiscal and monetary stimulus, and growing debt loads on governments and corporations) reduces one's confidence in relying on past relationships and behaviors of asset classes to guide forward-looking investment strategy. We acknowledge this increase in uncertainty, and, as a consequence, approach planning for the future with the appropriate amount of humility regarding the range of returns that are possible.

September 2020 conference call with LIR working group

In September, Meketa held a conference call with the LIR Working Group to discuss the core ideas raised in our August release. Some of the key items raised on this call, and the focus of our next steps, included:

- → How do historically low interest rates impact the setting and ultimate achievement of our clients' assumed or target rate of return?
- → What has been the long-term correlation between equities and bonds? Has this dynamic changed? How does a potential regime shift in this relationship impact investment strategy and asset allocation from here?
- → What is/are the best definition(s) of a barbell asset allocation strategy? Are there superior approaches to leverage and liquidity in this future LIR environment?

Bridging expected returns with historically low interest rates

Whether it is an actuarial assumed rate of return for a pension plan, the spending policy of an endowment or foundation, the expectation for what a portfolio will earn is anchored in the rules, regulations and adopted practices that have been institutionalized in those specific channels. In the table below, we outline the average target returns in these channels.

Plan Type	Rate Type	Rate
Public Pension	Median Assumed Rate of Return[2]	7.25%
Taft-Hartley Pension	Median Assumed Rate of Return[3]	7.25%
Corporate Pension	Median Expected Return on Assets[4]	7.0%
Private Foundations	Median Long-term Return Objective[5]	7.3%
University Endowments	Long-term Return Objective[6]	7.0%

[2] Source: NASRA, as of February 2020.

[3] Source: IFEBP The Multiemployer Retirement Plan landscape: A 15 year look (2003-2017).

[4] Source: NISA PSRX Index of 100 largest corporate pension plans. Note: the average discount rate (source: FTSE Liability Index as of October 31, 2020) is 2.78%.

[5] Source: Council on Foundations–Commonfund, 2019 Study of Foundations.

[6] Source: 2019 NACUBO-TIAA Study of Endowments.

However, the conditions that made these returns achievable historically – namely, higher bond yields and lower price multiple on equities – are distant memories. The gradual march downward of interest rates led unprecedented gains for bond investors. And, despite two "once in a century" events, stocks have produced exceptionally strong returns, and equity valuation have elevated to very high levels. As we look to turn the page on 2020, interest rates are at record lows and equities are trading at very high valuations relative to historical averages.

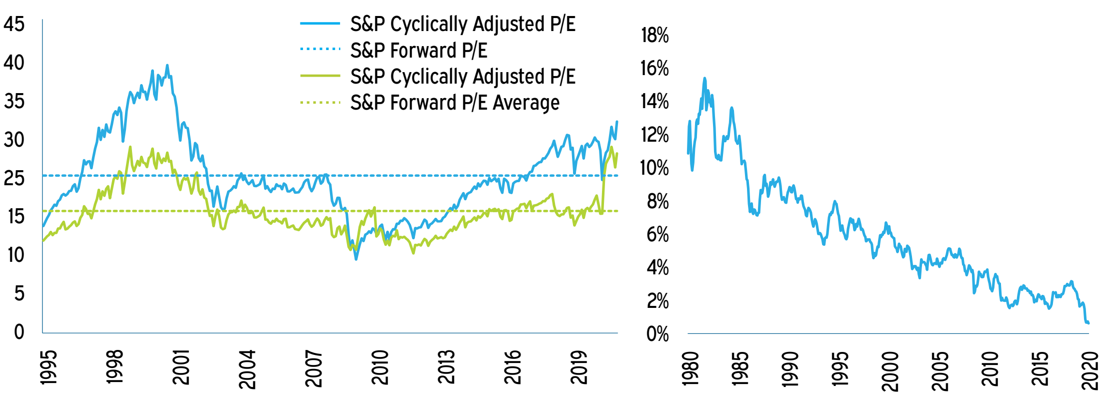

FIGURE 1

US Equity Valuations (left)[7]

US Treasury 10-Year Rates (right)[8]

[7] Source: Bloomberg. Data is as of October 31, 2020 for the S&P 500 index.

[8] Source: FRED, Multpl.com. Data is as of July 2020.

Framing these facts in a manner that assists decision makers in making major investment and policy decisions on a wide range of matters is no easy task. The implications on costs, spending, funding levels, and risk management are daunting.

The reason we care so much about the level of interest rates and equity valuations is because they greatly influence future returns. As the charts below indicate, low interest rates beget low future returns for bonds, and high valuations imply below-average returns for equities.

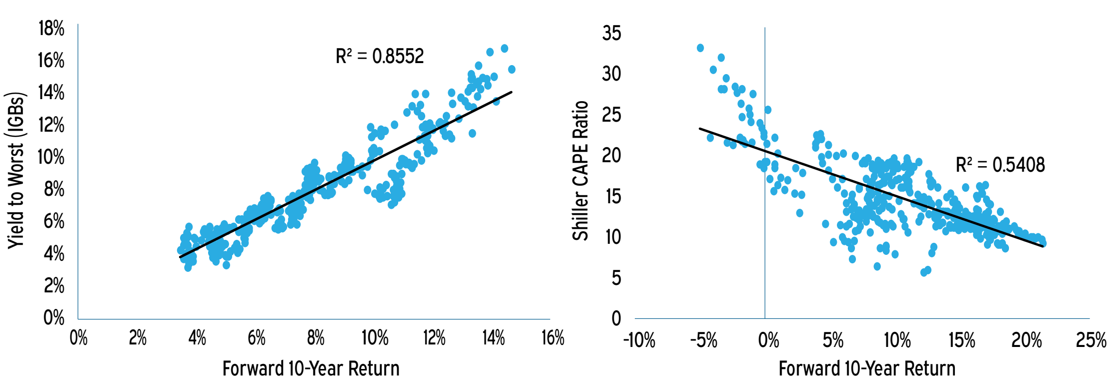

FIGURE 2

Investment Grade Bonds Yield to Worst vs. Forward 10-Year Returns (left)

US Equities Shiller CAPE vs. Forward 10-Year Returns (right)

The combination of historically low interest rates, and risky assets, such as US equities, that are generally valued above historical norms, does not bode well for prospective returns. Lower expected returns are the common challenge that all investors are facing right now. For example, in the chart below, we present our capital markets assumptions from this year and compare them to our assumptions from ten years ago. What it shows is that for every major asset class, the expected return has declined.

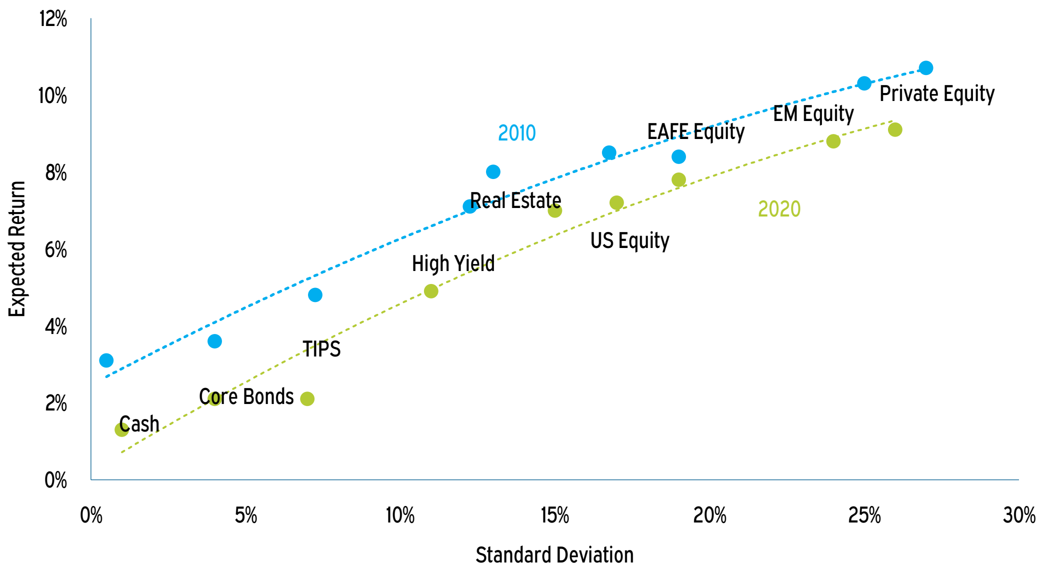

FIGURE 3

Less Return for the Same Risk[9]

[9] Expected return and standard deviation are based upon Meketa Investment Group's January 2010 and July 2020 Capital Markets Expectations.

Examining the relationship between equities and bonds

Over the last 40 years, stocks and bonds rallied, and during periods of economic stress (i.e., recessions), high quality bonds provided both a safe haven and superior rates of return. This "best of both worlds" environment is unlikely to continue as the current level of interest rates make the outsized returns for bonds - from constantly falling interest rates - unrealistic. Moreover, stocks and bonds were, on average, negatively correlated over the last 20 years.[10]

[10] Equities are proxied by the S&P 500 index and bonds by the Ibbotson Associates Long-Term Government Bond series.

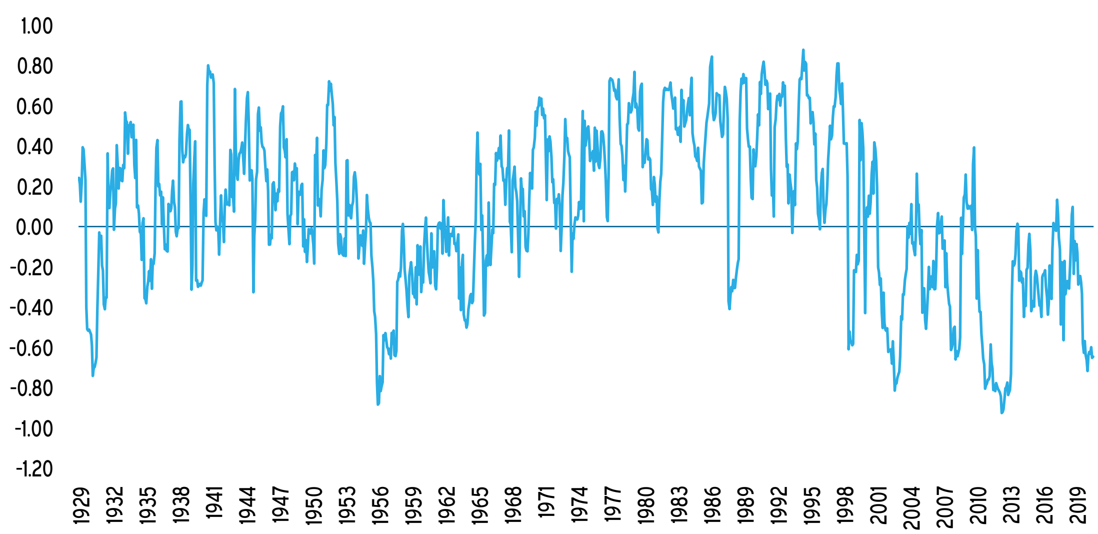

FIGURE 4

12-month Rolling Stock-Bond Correlation: 3/1928—9/2020

Arguably, rising interest rates are one of the biggest risk factors for equities today. Thus, the assumption of a negative correlation between stocks and bonds during periods of stress should be questioned. We may be entering a regime where Equity/Bond correlations do not resemble the last 20 years. The implications of both a possible change in the pattern of returns, combined with lower expected rates of return, presents challenges that investors have not faced in modern times.

Defining the barbell approach

As we look at the expected returns available to investors and the output from a litany of our asset allocation exercises, a common recommended outcome has been that of a "barbell" portfolio.

There are two fundamental drivers behind the barbell construct: 1) the increased emphasis on potentially very bad portfolio outcomes (i.e., higher concerns about "tail risk") and 2) the continued need to pursue a long-term return goal which, at times, can be seen as challenging to achieve.

These two diametric drivers lead to portfolio construction that includes a combination of higher-risk, total-return-oriented classes barbelled by high-impact diversifiers which, depending on the investment type, exhibit "insurance-like" characteristics.[11]

[11] See, for example, "Tail Risk Constraints and Maximum Entropy;" Geman, Geman, and Taleb; December, 2014.

The motivation for this type of structure has been driven largely by the challenging funded status and/or financial conditions many institutions currently face and have faced since the Global Financial Crisis. In many respects, the "optimal" portfolio solution turns out to mirror the challenge an institution faces: achieving a long-term return objective coupled with avoiding some form of a financial catastrophe. What we have found through a significant amount of empirical work is that the traditional (i.e., more-than-a-dozen-asset-classes) portfolio approach may not handle extreme downside outcomes as well as a barbelled portfolio framework.

Under the barbell approach, assets that typically have a high correlation to public equity, but with less expected volatility and lower expected returns, tend to be excluded or only allocated to at a minimum level. These typically include certain public credit strategies, such as high yield bonds and bank loans, tactical asset allocation strategies, and equity-biased hedge funds.

Further, the barbelled portfolios tend to place more emphasis on assets such as private equity, real estate, private credit, and public equity, combined with classes, segments and/or strategies that tend to perform well when the above equity-oriented classes are experiencing significant drawdowns. We call these types of investments Risk Mitigating Strategies[12], or "RMS." As a group, they are designed to act as a significant counterweight in the portfolio.

[12] We attach our research on Risk Mitigating Strategies for background.

To be clear, when building a barbell portfolio, average correlation is not of principal concern. Rather, it is performance during times of market stress that matters. What investors seek with this strategy are assets that are expected to be negatively correlated with equities during such a period, and ideally with a level of volatility that would be beneficial in such a scenario.

Long-term Treasuries have been the most reliable hedge against severe equity declines. Treasuries are also highly liquid in stressed markets, allowing them to be tapped to fund spending. And unlike more explicit forms of insurance, bonds pay investors income for holding them.

TABLE 1
Cumulative Returns in Stressed Markets

Historical Scenario	Cash (%)	IGB (Agg) (%)	LT Treasury (%)	US Equity (%)
Global Financial Crisis (Oct 2007—Mar 2009)	3.1	9.3	24.2	-43.8
Popping of the TMT Bubble (Apr 2000—Sep 2002)	9.9	28.6	35.5	-43.8
LTCM (Jul—Aug 1998)	0.8	1.8	4.1	-15.4
Asian Financial Crisis (Aug 1997—Jan 1998	2.4	4.9	8.6	3.6
Crash of 1987 (Sep—Nov 1987)	1.4	2.2	2.6	-29.5

A primary component of a barbell portfolio is high quality bonds, and in particular, Treasury bonds. Traditionally, investors have kept high quality bonds in their portfolio to act as an "anchor to windward."

However, not everyone thinks this is still a good idea. With the 10-year Treasury currently yielding less than 1%, any investment in government bonds would appear to act as a drag on a portfolio that is trying to achieve its return objectives. And for the past decade, many investors have worried aloud about the potentially harmful effects of holding bonds in their portfolio if interest rates were to rise, which a number of market participants presumed was inevitable.

Perhaps the most informative example we can look to for the kind of low rate environment we are facing is Japan. The Japanese central bank instituted a "Zero Interest Rate Policy", otherwise known as ZIRP, in 1999. For the past twenty years, short-term Japanese government bond yields have been effectively zero.

The result has been steady, if modest returns for Japanese government bonds. Over that period, the worst 12-month return for government bonds was -4%. And their average return was, unsurprisingly, consistent with their yield (+1.9%).

But many investors have understandably begun to wonder if bonds can still provide a hedge against equity risk, given the record low level of interest rates. There has to be some lower bound for yields, even if it isn't necessarily zero.

Here again, we look to the case study of ZIRP in Japan. The following chart shows the worst drawdowns in Japanese equities over the past twenty years (the blue bars). It also shows how government bonds performed during each of those drawdowns. (The green bars show the performance of the broad government bond index, and the orange bars indicate the performance of long-term government bonds).

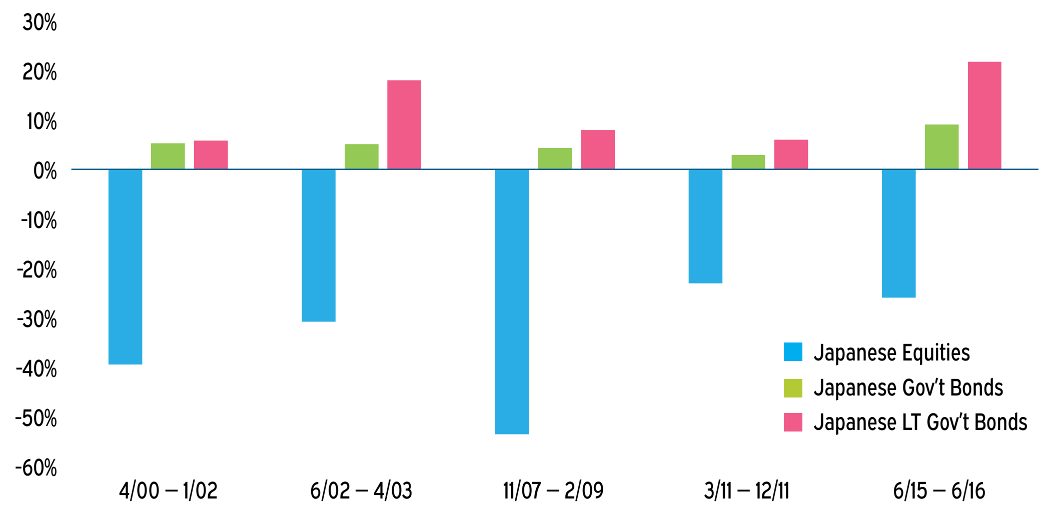

FIGURE 5
Worst Drawdowns During ZIRP (Cumulative Return)[13]

[13] Data Source for JGB returns is the ICE BofA Japan Government Index and its components; for equities, the source is MSCI Japan (local currency).

What it illustrates is that during each of these bear markets, government bonds consistently served as a hedge, and long-term government bonds served as an even better hedge. The 2015-16 drawdown is particularly informative, as the 10-year rate at the start of the period was just 0.46%, and it declined to -0.23%, as long government bonds produced a return in excess of 20%.

So yes, we still have faith in long-term government bonds as a hedge. They performed exactly as we would have hoped earlier this year, blunting the trauma of the fastest bear market in US history. We see them as a key part of a diversified portfolio going forward.

Summary

As practitioners, institutional investors, asset management firms, individuals and consultants continue to explore strategies to address the challenges presented by persistent low interest rates, the need to collaborate is critical.

Sharing ideas and experiences from a wide range of points of view (as our previous Low Interest Rate survey and follow up Zoom call indicated) will advance our collective and individual ability to consider what, if any, new approaches may be considered by policy makers.

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Nothing in this document should be interpreted to state or imply that past results are an indication of future performance. Investing involves substantial risk. It is highly unlikely that the past will repeat itself. Selecting an advisor, fund, or strategy based solely on past returns is a poor investment strategy. Past performance does not guarantee future results.

Title / Topic of the Research	Authors	Publication Date
The 2020 US Elections and the Markets: What Can History Tell Us?	*Newsletter – Global Macroeconomic Group*	*10/2020*
Portable Alpha	Frank Benham, Colin Bebee, Ryan Lobdell, W. Brian Dana, Gloria Hazard	10/2020
Signals for Active Management	Josh Brough, Frank Benham,	9/2020
Investing in a Low-Rate Environment	Allan Emkin, Orray Taft ,Frank Benham, Ryan Lobdell, Gordon Latter, Neil Rue	8/2020
Insurance-linked Securities	Colin Bebee, Frank Benham	8/2020
Investment Grade Bonds	Alan Spatrick, Frank Benham, Javier Gonzalez	8/2020
Real Estate Investment Trusts	Matthew Curran, David Glickman, Frank Benham	8/2020
Target Date Funds	David Suh, Hannah Schriner, Paul Cowie, David Smith	8/2020
Timberland	Adam Toczylowski, Gerald Chew, Frank Benham	8/2020
Risk Mitigating Strategies: Universe Analysis	Neil Rue, Brian Dana, Frank Benham	6/2020
TALF 2.0 Overview	Mark McKeown, Brandon Colón	6/2020
Factor Exposure Analysis	Frank Benham, Roberto Obregon	4/2020
Infrastructure	Lisa Bacon, Adam Toczylowski, Frank Benham	4/2020
TIPS: Strategic Allocation	Steve MacLellan, Zach Stevens, Frank Benham	4/2020
True Believers and Pretenders: A Summary of How Meketa Incorporates ESG Analysis Into Manager Research	Mitch Dynan	3/2020
The Case for Quality, Stability, and Income®	Daniel Dynan, Shawn Bowen, Eric Larsen, Timur Kaya Yontar	2/2020
Modern Monetary Theory - Flipping the Current Monetary Policy on its Head	*Newsletter – Global Macroeconomic Group*	*1/2020*
Persistence of Public Markets Manager Skill	Rose Smith, Frank Benham, Roberto Obregon	12/2019

Research Papers and Newsletters

2015 – 2020 YTD

Title / Topic of the Research	Authors	Publication Date
Agriculture	Gerald Chew, John Haggerty	12/2019
Stable Value Funds	Paul Cowie, Timur Kaya Yontar, Frank Benham	11/2019
Long-Short Equity	Brian Dana, Frank Benham, Zachary Driscoll, Maria Faleyev	11/2019
Today's Low Interest Rate Environment — Zero Bound and Down	*Newsletter – Global Macroeconomic Group*	*11/2019*
Manager Alpha: Does Active Management Add Value?	Rose Smith, Frank Benham, Roberto Obregon	10/2019
Investment Beliefs	Stephen McCourt, Leandro Festino, Timur Kaya Yontar, Frank Benham	10/2019
Endowment & Foundation Spending Policy	Laura Wirick, Larry Witt, Timur Kaya Yontar, Frank Benham	10/2019
Private Markets Fee Primer	Blaze Cass, Andrew Gilboard, John Haggerty	10/2019
Operational Due Diligence	Emily Agnew	10/2019
Foreign Small Cap Equities	Gloria Hazard, Frank Benham	10/2019
10/30 Long-Short Equity Strategies	Timur Kaya Yontar, Maria Faleyev, Frank Benham, Leandro Festino	9/2019
Risk Mitigating Strategies	Roberto Obregon, Neil Rue, Colin Bebee, Brian Dana, Frank Benham	9/2019
Midstream Energy Investments	Adam Toczylowski, John Haggerty	9/2019
Taxable Investing	Edmund Walsh, Timur Kaya Yontar, Frank Banham	9/2019
Performance-Based Fees	Frank Benham, Natalee Sohn	9/2019
The Yield Curve	Roberto Obregon, Frank Banham	7/2018
Research Note - Bank Loan Credit Quality	Tim Atkinson, Frank Benham	7/2019
Transition Management	Mika Malone, Frank Benham, Bradley Gretsch	7/2019
Dynamic Asset Allocation – Health and Welfare Plans	Frank Benham, Zachary Driscoll, Timur Kaya Yontar	7/2019
Research Note – The Yield Curve	Roberto Obregon, Frank Benham	7/2019
China A Shares	David Smith, Frank Benham	7/2019

Title / Topic of the Research	Authors	Publication Date
Research Note – Secondary Market	Steve Hartt, John Haggerty, Frank Benham	6/2019
How Did We Get Here and Where Are We Going – A Brexit Update	*Newsletter – Global Macroeconomic Group*	*6/2019*
Equity Style and Strategic Investment Policy	Frank Benham, William Duryea, Timur Kaya Yontar	6/2019
Bank Loans: Strategic Allocation	Timothy Atkinson, Frank Benham, Zachary Stevens, Timur Kaya Yontar	5/2019
The Dual Portfolio Framework	Gordon Latter, Timur Kaya Yontar, Frank Benham	5/2019
High Yield: Strategic Allocation	Frank Benham, Timothy Atkinson, Zachary Stevens, Edmund Walsh, Timur Kaya Yontar	5/2019
Artificial Intelligence	Edmund Walsh, Timur Kaya Yontar, Roberto Obregon, Frank Benham	3/2019
Total Portfolio Benchmarking	Timur Kaya Yontar, Frank Benham	1/2019
Decreasing Number of Public Companies	Roberto Obregon, Frank Benham	1/2019
Frontier Markets	Edmund Walsh, Timur Kaya Yontar, Roberto Obregon, Frank Benham	12/2018
Risk Parity	Roberto Obregon, Timur Kaya Yontar, Frank Benham	10/2018
Mezzanine Debt	Todd Silverman, Mark Watson, John Haggerty, Frank Benham	10/2018
Communication Infrastructure	Adam Toczylowski, Lisa Bacon, John Haggerty, Frank Benham	10/2018
Is the Performance of Active Equity Managers Still Cyclical?	Joshua Brough, Frank Benham, Timur Kaya Yontar	7/2018
Commitment Pacing	Jess Downer, John Haggerty	7/2018
Natural Resources	Adam Toczylowski	7/2018
Health Care: An Evaluation of the Investment Opportunity Set	Lily White, Brandon Colón	7/2018
Is Europe on the Verge of Another Devastating Crisis	*Newsletter - Global Macroeconomic Group*	*7/2018*
Hedge Fund Operating Expenses	Brandon Colón, Brian Dana	5/2018

Title / Topic of the Research	Authors	Publication Date
Globalization and the Escalation of Trade Tensions	*Newsletter - Global Macroeconomic Group*	*5/2018*
Sustainability Equity Indexes	Sarah Bernstein, Ph.D	5/2018
Understanding Tail-Risk	Edmund Walsh Frank Benham	5/2018
Real Assets	Adam Toczylowski, Lisa Bacon, Gerald Chew, John Haggerty, Timur Kaya Yontar	3/2018
Defining ESG Investing	John Haggerty, Colleen Smiley, Gustavo, Bikkesbakker, Mika Malone, Mary Mustard, David Eisenberg	4/2018
Option-Based Equity Strategies	Roberto Obregon	2/2018
Long-Term Treasuries in a Diversified Portfolio	Timur Kaya Yontar	2/2018
What to Expect from the Tax Cuts and Jobs Act"	*Newsletter - Global Macroeconomic Group*	*2/2018*
Small- and Middle-Market Buyouts	Jess Downer, Jed Constantino, John Haggerty, Timur Kaya Yontar	1/2018
Navigating the Low Inflation Mystery	*Newsletter - Global Macroeconomic Group*	*11/2017*
Non-Core Real Estate	Christy Gahr, John Humphreys, Derek Proctor, Timur Kaya Yontar	11/2017
Core Real Estate	Christy Gahr, John Humphreys, Derek Proctor, Timur Kaya Yontar	11/2017
Global Macro	Roberto Obregon, Brian Dana	11/2017
The Economic Impact of Climate Change	*Newsletter - Global Macroeconomic Group*	*10/2017*
Direct Lending	Timothy Atkinson	10/2017
Derivatives: Primer	Timur Kaya Yontar	9/2017
The Big Unwind	*Newsletter - Global Macroeconomic Group*	*8/2017*
Currency Hedging	Research Team	5/2017
Evaluating Donald Trump's Economic Impact	*Newsletter - Global Macroeconomic Group*	*12/2016*
Brexit	*Newsletter - Global Macroeconomic Group*	*12/2016*
Public Natural Resources	Research Team	6/2016
Negative Rates: Monetary Policy 2.0?	*Newsletter - Global Macroeconomic Group*	*6/2016*
Brexit – What Happens Next?	*Newsletter - Global Macroeconomic Group*	*6/2016*
U.S. Small Cap Equity: Which Benchmark is Best?	Research Team	4/2016
Alternative Beta Strategies	Research Team	2/2016

Title / Topic of the Research	Authors	Publication Date
Private Equity Primer	Research Team	11/2015
Master Limited Partnerships	Research Team	10/2015
Economic Regime Management®	Research Team	9/2015
China's Devaluation and The August 2015 Global Market Rout	*Newsletter - Global Macroeconomic Group*	*8/2015*
The Dollar Rally	*Newsletter - Global Macroeconomic Group*	*7/2015*
Best Practice for Selecting an Investment Consultant/OCIO	Research Team	7/2015
China & Greece: Is it Time to Worry?	*Newsletter - Global Macroeconomic Group*	*7/2015*
The Recent Oil Price Decline	*Newsletter - Global Macroeconomic Group*	*7/2015*
Have U.S. Equity Market Valuations Reached Bubble Levels?	*Newsletter - Global Macroeconomic Group*	*6/2015*
Evaluating Commodity Exposure Opportunities	Research Team	5/2015
Emerging Markets Revisited	*Newsletter - Global Macroeconomic Group*	*1/2015*

Exhibit K

Sample Investment Manager Research/Due Diligence Report

MEKETA

INVESTMENT GROUP

Public Markets Manager Analysis Memorandum

Manager A

Long Gov't/Credit
Long Credit Only

May 22, 2020

Portions of this document have been redacted to ensure the security of certain confidential or sensitive information.

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Table of Contents

RATING SCALE | 5-EXCELLENT | 4-GOOD | 3-AVERAGE | 2-BELOW AVERAGE | 1-WEAK

Executive Summary & Conclusions

Overall Manager Rating: [Redacted]

Firm	Manager B Formerly Manager B	
Primary Contact	Mr. A Telephone Email	
Product	Long Gov't Credit Long Credit.	
Portfolio Manager	Team	
Strategy Synopsis	Long Duration Fixed Income	
Overall Manager Rating	[Redacted]	
Factor Ratings Summary	Organization:	[Redacted]
	Investment Team:	[Redacted]
	Investment Philosophy:	[Redacted]
	Investment Process:	[Redacted]
	Performance:	[Redacted]
	Fees	[Redacted]
Meketa Analyst	Mark McKeown	
Date	May 22, 2020	
Original or Update	Original	
ESG Rating	C	

→ Manager A is a compelling option for Long Duration Government/Credit active fixed income management. Additionally, due to the team approach taken at Manager A, there are no material differences in the investment philosophy, process, or team when managing Long Credit Only portfolios. Therefore, we would also consider Manager A as a compelling option in all Long Duration categories.

→ Manager A's Long Duration strategies are research-driven, low trading turnover strategies that drive alpha almost completely from bottom up security selection with very little attempt to achieve alpha from duration management or yield curve positioning. The strategies typically exhibit slightly lower average credit quality and tend to be opportunistic in taking modest high yield positions and overweight BBB positions. Returns over the trailing periods and most calendar years have been top quartile. The strategies rank highly in information ratio and Sharpe ratio in the peer universe, with impressive risk management resulting in excellent downside capture ratio rankings vs. peers.

→ The **Long Government/ Credit** strategy targets 100-150 basis points of gross alpha (before fees) over a cycle with tracking error in the 100-150 basis points range. Corporate bonds can be in a range of 30-90% of the portfolio and government securities can be 10-70%. The strategy can hold up to 5% in structured products and up to 15% non-index "plus" sectors. The strategy is offered in a separately managed accounts. It is also offered as a collective investment trust (CIT) vehicle which is not yet funded.

→ As of the March 31, 20yy, the composite **Long Government/ Credit** strategy had a one-notch lower credit quality (A+) than the benchmark (AA-) attributable to the 4% high yield exposure and overweight of triple-B exposure. Overall the strategy was closely matched to the benchmark with a modest overweight to corporate credit and in-line Treasury exposure which was high compared to historical levels of exposure. There was no exposure to securitized and no off-benchmark exposure to assets like municipal securities.

→ The **Long Credit** strategy targets 75-125 basis points of gross alpha (before fees) over a cycle with tracking error in the 100-125 basis points range. Corporate bonds can be in a range of 80-100% of the portfolio and government securities can be 0-20%. The strategy can hold up to 8% in structured products and up to 15% non-index "plus" sectors. The strategy is offered in a separately managed accounts as well as a CIT vehicle.

→ As of the March 31, 20yy, the composite **Long Credit** strategy had a defensive positioning with an average credit quality (A3) equal to the benchmark despite a 5% high yield exposure and a modest overweight of triple-B exposure. Overall the strategy was closely matched to the benchmark with an equal weight to corporate credit. There was underweight exposure to sovereign bonds and non-corporate bonds in favor of an off-benchmark defensive 9% Treasury exposure which was historically high. The only other off-benchmark exposure was 1% to municipal securities.

→ The firm manages over $600 billion including the general account of the [Redacted]company parent. The Public Fixed Income team manages over $48 billion as of March 31, 20yy. The largest concentration of fixed income assets are in the firm's $23 billion Long Duration business (49% of fixed income assets). Average client size in long duration is $400 million.

→ The 45-member investment grade fixed income team, led by Mr. B, includes a deep pool of experienced portfolio managers, fixed income analysts, and traders. Senior team members have largely worked together for two decades.

Important Issues & Risks

→ Manager A is 100% owned by its parent which is a publicly traded financial services company. While this is not typically our favorite ownership structure because it can imply the investment team has no "skin in the game", there are several aspects about the Manager A structure that assuage our concerns such as (1) the parent company is an [Redacted] company rather than an investor or asset gathering financial services firm; (2) the investment team remains intact; (3) the former Manager B team controls the larger Public Fixed Income team managing the general account at Manager A; and (4) it has been over three years and Meketa has followed the development throughout given there are many Meketa client assets already at Manager A via other strategies for many years. The investment team has consistently communicated the integration transparently and proven to have integrated well with the parent company while staying a reasonably independent group within the firm. Finally, there is a long-term equity incentive program intended to create the opportunity for long-term alignment with shareholder return and employee retention (skin in the game).

→ Having an [Redacted] company parent typically would cause some concerns given the potential for [Redacted] losses in the general account. After the Great Financial Crisis, some [Redacted] companies were in danger of failing due to large equity losses in the general account coupled with retail [Redacted] products that contained high guaranteed minimums that obligated to be paid to [Redacted] customers. We are less concerned about the broader risk of this particular company due to institutional [Redacted] product offerings. In 20yy, Manager A spun out its US retail [Redacted] business which began trading publicly as Company A. That business was deemed a Systemically Important Financial Institution (SIFI), or "Too Big To Fail", by U.S. federal regulators. It required higher capital requirements and more expensive regulatory maintenance which Manager A was no longer interested in maintaining.

→ Like many long duration managers, Manager A will tend to be overweight credit vs. the Government/Credit benchmark.

Organization

Factor Rating: [Redacted]

INVESTMENT STRATEGIES
As of 3/31/20yy

	Assets ($ billions)	Mandates
Long Credit/Long Corporate	13.8	
Long Government/Credit	3.4	
Long Credit/Long Corporate A+ & Better	2.3	
Liability Hedging	4.1	
Total Long Duration	23.6	59
Core	3.5	22
Corporate Only	5.4	23
Short/Intermediate Duration	7.6	62
Emerging Markets Debt	4.1	16
High Yield	2.0	15
Bank Loan	1.3	3
Multi-Sector	0.3	4
Other (Structured Product/Government)	0.4	3
Total Public Fixed Income (Third Party)	48.2	207
Private Capital and Real Estate	89.9	
Total Institutional (Third Party)	142.6	
General Account	463.3	
Total Firm Assets	601.4	

→ Manager A acquired Manager B in September 20yy. Manager A manages Public Fixed Income, Private Capital and Real Estate assets for institutional investors only. Its parent company is publicly traded Manager A and has over $600 billion in total assets under management including the general account of the parent [Redacted] company which is over $460 billion as of March 31, 20yy.

→ Manager A's Long Duration focus is partly exhibited by the fact that Long Duration accounts for the largest group of assets in the firm. Manager A manages $143 billion in total "Third Party" AUM which is how they categorize outside capital that is separate from the [Redacted] company's general account. There is $94 billion in private debt and real estate included in that. Public Fixed Income assets managed for third-party investors is more than $48 billion across 200 mandates. Included in that, Manager A manages over $23 billion in Long Duration assets across 59 mandates ($400 million average size), making this category the firm's largest area of focus, comprising nearly half of the Fixed Income assets managed and 29% of its Fixed Income mandates.

→ Approximately 44% of the client mandates are corporate, 22% sub-advisory, 13% [Redacted]/financial, 9% public plans, and the rest are other client types.

→ Manager A is 100% owned by its parent which is a publicly traded financial services company. The firm was founded as Manager B in 20yy by Mr. B who left Manager C and brought his senior fixed income team members with him. Manager B was sold to Manager E in 20yy. Manager E would later divest Manager B as Manager E prepared to sell itself to Company D in 20yy. At that point, Manager A acquired 100% of Manager B which became Manager A's new Public Fixed Income team.

→ On April 20yy, Manager B, located in [Redacted] and Manager A, located at headquarters in [Redacted], combined their investment research, trading and operations.

→ The Public Fixed Income team has 135 employees including 18 portfolio managers, 74 analysts (36 credit and municipal analysts, 29 regional credit and sovereign analysts located in four international cities), 8 structured products analysts, and one Short Duration specialist/analyst), 24 traders, and other supporting roles. Many of these employees are helping to manage the general account primarily in the headquarters.

→ The investment grade team consists of 45 investment professionals managing Core-related strategies, Long Duration, Short Duration, etc. This team consists of four portfolio managers, four traders, three portfolio and risk analysts, and two credit strategists, supported by over 30 credit analysts divided by industry specialty. Our onsite due diligence visit allowed us a chance to meet key members of the team from various strategies across Public Fixed Income and across various different roles including portfolio management, trading, research, and operations.

Investment Team

Factor Rating: [Redacted]

Key Professional(s)	Investment Role	Year Started Industry	Year Joined Firm
Mr. B	Head of Public Fixed Income, Founder Manager B	19yy	20yy
Mr. C, CFA	Head of Long Duration	20yy	20yy
Mr. D	Head of Credit Research	19yy	20yy
Mr. E	Head of Investment Grade Credit	19yy	20yy

→ The investment team has managed Long Duration fixed income strategies since October of 20yy at Manager C before spinning out to form Manager B in 20yy. Manager B continued to manage Long Duration strategies since then despite ownership changes (Manager E and Manager A).

→ Mr. B is the head of Manager A Public Fixed Income. He joined Manager A in September 20yy, in the acquisition of Manager B where he was the chief executive officer and chief investment officer. Prior to founding Manager B in 20yy, he was the president and chief executive officer of Manager C; joining the firm in 20yy as the head of fixed income. Prior to joining Manager C, Mr. B was senior vice president of the fixed income group and director of investment processes at Manager D from 19yy to 20yy. He was previously a managing director of Company B, head of utility trading for Company C, and began his career as a portfolio manager at Manager D. Mr. B has 35 years of industry experience.

→ Manager A acquired 100% of Manager B which became Manager A's new Public Fixed Income team. The senior members of the Manager B team took over key positions at Manager A and Mr. B and his team would be given responsibility for managing the fixed income team of the general account at Manager A.

→ We note that the Manager C team not only remains intact, which was part of the deal its senior members made while at Manager E, but the senior members of Manager B now run all of Public Fixed Income and the Investment Grade team. As a result, the senior members of the Investment team have worked together on fixed income portfolios for 19 years.

- The Long Duration team is led by Mr. C who also in charge of risk / duration management of core-based and credit mandates. Mr. C joined Manager A in September 20yy, in the acquisition of Manager B. Prior to joining Manager B in 20yy, he worked on the long duration portfolio management team at Manager C. Prior to joining Manager B, he worked at Manager F where he created custom liability indices and performed asset/liability studies. Mr. C has 19 years of industry experience.
- Mr. D is the head of credit research for Manager A Public Fixed Income. In this role he overseas research for the corporate and municipal sectors. Mr. D joined Manager A in September 20yy, in the acquisition of Manager B by Manager A. Prior to joining Manager B in 20yy, he was the director of research for the fixed income team at Manager C. Prior to joining Manager C, Mr. D served as a research analyst for Manager C's fixed income group, specializing in paper, forest products, chemicals, and special situations regarding distressed debt analysis. He has 23 years of industry experience.
- Mr. E is the head of investment grade credit for Manager A. He is responsible for high grade credit across all core-based, corporate and long / short credit strategies. Mr. E joined Manager A in September 20yy, in the acquisition of Manager B. Prior to joining Manager B in 20yy, he was a member of the portfolio management team at Manager C where he was responsible for core-based and high-grade products from 20yy to 20yy. He has 20 years of industry experience.
- The investment grade team consists of 45 investment professionals. Research consists of 31 credit analysts covering corporates, five muni analysts, and three credit strategists. Credit analysts are organized by sector coverage and led by a sector team leader. Each analyst covers 50-75 companies and closely monitors 20-25 companies. Traders are dedicated to specific sectors.
- Compensation consists of salary and discretionary bonus. Bonus compensation for senior investment professionals comprises a majority of their total compensation. This portion of compensation is determined subjectively based on qualitative and quantitative factors. Senior level employees are eligible to receive long-term equity incentives intended to create the opportunity for long-term alignment with shareholder return and employee retention. Senior team members are currently in the final stages of developing the next iteration of the long-term incentive program for Manager A's Public Fixed Income team.

Investment Philosophy & Strategy

Factor Rating: [Redacted]

→ Manager A believes fixed income markets are efficient with respect to interest rate risk, but regularly misprice securities that are exposed to credit, default and liquidity risks. They believe the long duration space is particularly inefficient in those regards. They seek excess returns from bottom up fundamental credit research. They seek alpha from security selection and sector allocation with very little attribution from yield curve or duration positioning.

→ Manager A follows a team approach that is primarily bottom-up and research-driven and leverage extensive resources in credit research, along with an active trading desk in relative value focused portfolios.

Investment Process & Portfolio Construction

Factor Rating: [Redacted]

→ The first step in the investment process is idea generation. Trading ideas can be generated by any investment professional in research, trading or PMs. The majority of investment decisions are generated and discussed openly among relevant team members. In addition to collaboration with traders and analysts on idea generation, portfolio managers generate ideas from broader perspectives on sector relative value, market risk factors and overall investment outlook.

→ In the second step, the research team reviews risk and investment appropriate ideas, incorporating quantitative, fundamental, and qualitative analysis into their research. In-depth fundamental research is the cornerstone of Manager A's investment process. As such, they place great emphasis on the quality of research efforts and have a large team. Analysts are responsible for conducting in-depth research to build a comprehensive understanding of a particular security. Each of sector team leader has a team of research analysts who specialize in a manageable number of industries/sectors. Each analyst covers 50-75 companies and closely monitors 20-25 companies.

→ The third step is security selection. The process is largely qualitative in nature, emphasizing fundamental research and valuation. Quantitative tools are used to help support the analysis of securities under different scenarios and to evaluate total portfolio risks. Once the Research department endorses a security, the investment team reviews the security to ensure it meets relative value, total return potential and horizon analysis requirements. Aladdin portfolio management software is used to calculate detailed monthly attribution.

→ The fourth step is maintaining a strong sell discipline. The sale of a security would result from: (1) research identifying a negative change in fundamentals (weak earnings, industry trends, M&A, capitalization changes, etc.) ; (2) securities reach price targets or (3) better opportunities arise (relative value).

→ The fifth and final step is risk management / portfolio review. Manager A's superior ranking in downside capture ratios point to the team's success in this area. As a bottom-up, fundamental research manager, Manager A utilizes risk management systems in an effort to neutralize interest rate risk and term structure risk so that alpha generation may be derived primarily from the mispricing in credit risk, liquidity risk and default risk. Buy and sell decisions are made by consensus on a bond-by-bond relative basis; however, the ultimate decision-making authority resides with the portfolio managers. Each portfolio manager works with a separate team called the Portfolio and Risk Analytics (PAR) team which is an independent function that monitors and assesses investments risks in client portfolios to assist Portfolio Managers in understanding the aggregated risk exposures at the portfolio level. The investment team utilizes BlackRock Solutions portfolio management system as the basis for risk analytics data.

→ In terms of capacity for the long duration strategies, the team views the current level as well below what capacity could be. Capacity is considered from the standpoint of (a) how quickly assets are being raised and (b) how willing the team is to participate up to one-third of a new long credit issuance in the primary market. For example, they are willing to participate in up to $165mn of a new $500mn bond deal. The team says that Manager A's Long Duration capacity would only be constrained if they were raising assets so quickly that they had to participate in a higher than one-third allocation to new deals. When they extrapolate these moving factors to the new issue market, they believe they are nowhere near concerned at these levels of assets under management.

→ **Other Long Duration Strategies: There are no material differences between the team that is responsible for Long Credit versus Long Government/Credit.** We believe the Manager A Long Duration team is also a good option for other Long Duration strategies such as Long Credit Only and Long Corporate Only, given that the team has been together managing all of these types of strategies for a long time.

LONG DURATION GOVERNMENT / CREDIT STRATEGY
PORTFOLIO CHARACTERISTICS[1]
As of 3/31/20yy

	Manager A Long Duration Government/Credit	Bloomberg Barclays – Long Duration Gov / Credit Index
Effective Duration (years)	16.4	16.1
Yield to Maturity (%)	3.2	2.7
Number of Holdings	242	2,566
Annual Turnover (%)	71	
Average Quality	A+	AA-
Credit Quality Breakdown:		
AAA	45	48
AA	1	5
A	18	21
BBB	32	25
Below BBB	4	0
Unrated	0	0
Cash	1	0
Sector Exposure:		
Treasury	44	45
Agency	1	1
Corporate	52	47
Municipal	0	0
MBS	0	0
CMBS	0	0
ABS	0	0
Sovereign[2]	1	4
Non-Corporate	3	3
Other	0	0
Cash and Equivalents	1	0
Geographic Exposure:		
EMD Sovereign (Hard)	1	0
EMD Sovereign (Local)	0	3
EMD Corporate	0	1
EMD Quasi	1	

[1] Allocations may not add to 100 due to rounding.
[2] Sovereign Includes Supranational.

LONG DURATION CREDIT ONLY STRATEGY
PORTFOLIO CHARACTERISTICS[3]
As of 3/31/20yy

	Manager A Long Duration Credit	Bloomberg Barclays – Long Duration Credit Index
Effective Duration (years)	14.3	14.3
Yield to Maturity (%)	4.2	3.9
Number of Holdings	294	2,482
Annual Turnover (%)	65	32
Average Quality	A3	A3
Credit Quality Breakdown:		
AAA	10	3
AA	2	10
A	29	40
BBB	53	47
Below BBB	5	0
Unrated	0	0
Cash	1	0
Sector Exposure:		
Treasury	9	0
Agency	0	0
Corporate	87	87
Municipal	1	0
MBS	0	0
CMBS	0	0
ABS	0	0
Sovereign[4]	2	7
Non-Corporate	0	6
Other	0	0
Cash and Equivalents	0	0
Geographic Exposure:		
EMD Sovereign (Hard)	1	0
EMD Sovereign (Local)	0	6
EMD Corporate	0	1
EMD Quasi	1	

[3] Allocations may not add to 100 due to rounding.
4 Sovereign Includes Supranational

Investment Performance

Factor Rating: [Redacted]

LONG DURATION GOVERNMENT / CREDIT STRATEGY
Composite Performance & Risk Statistics
From September 30, 20yy – March 31, 20yy

→ Performance is gross of fees as of 3/31/20yy; index is currently the Bloomberg Barclays Long Duration Government Credit Index.

Trailing Period Returns (%)	YTD	1 Yr.	3 Yr.	5 Yr.	10 yr.	SI
Manager A Long Duration Gov/Credit	7.4	21.4	10.7	7.2	9.8	10.0
Bloomberg Barclays Long Duration Gov / Credit Index	6.2	*19.3*	*9.7*	*6.0*	8.1	7.7
Excess Returns	1.2	2.1	1.0	1.2	1.8	2.3
Peer Ranking – eV Long Gov/Cred	19	12	9	6	4	1

Calendar Year Returns (%)	20yy	20yy	20yy	20yy	20yy	20yy	20yy	20yy	20yy	20yy
Manager A Long Duration Gov/Credit	21.3	-4.8	11.8	9.8	-4.0	19.3	-6.3	13.7	24.2	14.1
Bloomberg Barclays Long Duration Gov/Credit Index	*19.6*	*-4.7*	*10.7*	*6.7*	*-3.3*	*19.3*	*-8.8*	*8.8*	*22.5*	*10.2*
Excess Returns	1.7	-0.1	1.1	3.2	-0.7	0.0	2.5	4.9	1.7	3.9
Peer Ranking – eV Long Gov/Cred	19	52	22	5	84	44	15	6	8	6

Risk Statistics	3 Yr.	5 Yr.	10 Yr.	SI
Standard Deviation (%)	9.2	8.9	9.2	10.0
Standard Deviation – Index (%)	9.4	9.0	9.4	9.8
Information Ratio	1.2	1.2	1.6	0.7
Sharpe Ratio	1.0	0.7	1.0	0.8
Tracking Error (%)	0.8	1.0	1.1	3.2
Beta	0.96	0.97	0.96	0.95
Correlation	1.00	0.99	0.99	0.94
Upside Capture (%)	100	103	103	104
Downside Capture (%)	88	91	86	83
Jensen's Alpha (%)	1.3	1.3	2.0	2.6
Semi-deviation (%)	4.0	4.4	4.6	5.4
Best Three Month Return (%)	12.0	12.0	14.1	17.6
Worst Three Month Return (%)	-4.5	-8.7	-9.2	-15.2
Skewness	0.7	0.3	0.1	0.1
Kurtosis	0.8	0.8	0.1	2.7

LONG DURATION GOVERNMENT / CREDIT STRATEGY
Composite Risk Statistics Peer Rankings[1][2][3]
As of March 31, 20yy

Risk Statistics[4]	3 Yr.	5 Yr.	10 Yr.	SI
Excess Returns	9	6	4	1
Standard Deviation	14	20	31	50
Information Ratio	2	2	1	20
Sharpe Ratio	3	2	1	1
Tracking Error	34	33	25	80
Beta	79	65	61	100
Correlation	33	32	24	79
Upside Capture	42	21	9	30
Downside Capture	8	11	10	1
Jensen's Alpha	8	4	1	1
Semi-deviation	12	17	14	30
Skewness	22	21	48	40
Kurtosis	45	57	69	10

1 Risk Index is the Bloomberg Barclays U.S. Long Duration Gov / Credit Index
2 eVestment universe is the U.S. Long Duration – Gov/Cred Fixed Income
3 Peer Rankings were sourced from eVestment using the Manager A Long Duration Government/Credit Composite gross of fees.
4 Standard deviation, tracking error, downside capture, and semi-deviation are ranked from low to high, one being the lowest value and 100 being the highest value. Information ratio, Sharpe ratio, beta, correlation, upside capture, Jensen's alpha, skewness and kurtosis are ranked from high to low, one being the highest value and 100 being the lowest value.

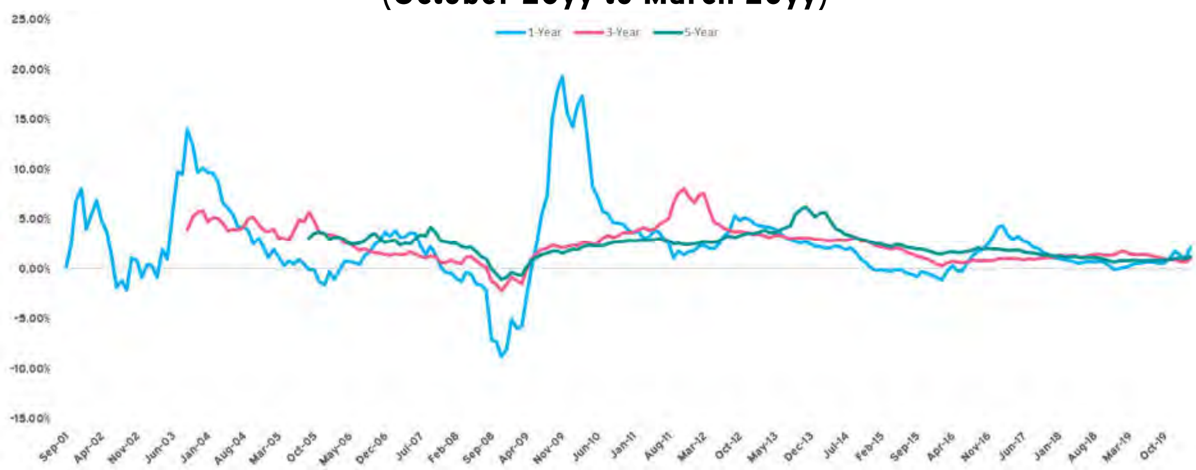
LONG DURATION GOVERNMENT / CREDIT STRATEGY

→ While the strategy underperformed on a gross of fees basis in 20yy, 20yy, and 20yy returns over the trailing periods and most calendar years have been top quartile. The Long Duration Government/Credit composite ranks highly in information ratio and Sharpe ratio in the peer universe, with impressive downside capture ratio rankings vs. peers.

→ The Long Duration Government/Credit strategy's rolling period excess returns has historically been consistent. Gross of fees, the strategy has outperformed in 79%, 96%, and 96% of rolling one-, three- , and five-year periods, by an average of 2.4%, 2.4% and 2.3%, respectively.

→ Manager A's Long Duration Government/Credit strategy exhibits attractive downside capture ratios, generally performing well in up markets and only capturing around 90% of the market on the downside.

Rolling Period Excess Returns (Gross)[5]
(October 20yy to March 20yy)



Rolling Period	Total Periods	Periods Outperformed	Percent of Periods Outperformed (%)	Average Ann. Excess Ret. (%)	Median Ann. Excess Ret. (%)	Max (%)	Min (%)	Range (%)
1-Year	223	176	79	2.4	1.8	19.3	-8.8	28.1
3-Year	199	191	96	2.4	2.1	8.0	-2.3	10.3
5-Year	175	168	96	2.3	2.4	6.2	-1.0	7.3

[5] Separate Account Composite Gross of Fees Returns provided by Manager A.

LONG DURATION CREDIT ONLY STRATEGY

→ As noted earlier, we believe Manager A's Long Duration Credit Only Strategy also offers a compelling option in the credit category. The team is largely the same as the Government/Credit team. The portfolio characteristics, returns, and statistics are listed on the following pages.

LONG DURATION CREDIT ONLY STRATEGY
PORTFOLIO CHARACTERISTICS[6]
As of March 31, 20yy

	Manager A Long Duration Credit	Bloomberg Barclays – Long Duration Credit Index
Effective Duration (years)	14.3	14.3
Yield to Maturity (%)	4.2	3.9
Number of Holdings	294	2,482
Annual Turnover (%)	65	32
Average Quality	A3	A3
Credit Quality Breakdown:		
AAA	10	3
AA	2	10
A	29	40
BBB	53	47
Below BBB	5	0
Unrated	0	0
Cash	1	0
Sector Exposure:		
Treasury	9	0
Agency	0	0
Corporate	87	87
Municipal	1	0
MBS	0	0
CMBS	0	0
ABS	0	0
Sovereign[7]	2	7
Non-Corporate	0	6
Other	0	0
Cash and Equivalents	0	0
Geographic Exposure:		
EMD Sovereign (Hard)	1	0
EMD Sovereign (Local)	0	6
EMD Corporate	0	1
EMD Quasi	1	

[6] Allocations may not add to 100 due to rounding.
[7] Sovereign Includes Supranational

LONG DURATION CREDIT ONLY STRATEGY
Performance and Risk Statistics
From October 31, 20yy – March 31, 20yy

→ Performance is gross of fees as of 3/31/20yy; index is currently the Bloomberg Barclays Long Duration Credit Index.

Trailing Period Returns (%)	YTD	1 Yr.	3 Yr.	5 Yr.	10 Yr.	SI
Manager A Long Duration Credit	-2.2	12.4	8.0	6.3	9.5	12.4
Bloomberg Barclays US Long Duration Credit Index	*-4.7*	*9.0*	*6.6*	*4.7*	*7.3*	*9.8*
Excess Returns	2.5	3.3	1.5	1.7	2.2	2.5
Peer Ranking – eV Long Credit	23	14	10	2	1	1

Calendar Year Returns (%)	20yy	20yy	20yy	20yy	20yy	20yy	20yy	20yy	20yy	20yy
Manager A Long Duration Credit	24.3	-6.2	13.6	13.5	-4.7	17.7	-4.0	17.3	20.0	14.8
Bloomberg Barclays US Long Duration Credit Index	*23.4*	*-6.8*	*12.2*	*10.2*	*-4.6*	*16.4*	*-6.6*	*12.7*	*17.1*	*10.7*
Excess Returns	0.9	0.6	1.4	3.2	-0.2	1.4	2.7	4.6	2.9	4.1
Peer Ranking – eV Long Credit	32	29	3	3	82	14	8	5	4	9

Risk Statistics	3 Yr.	5 Yr.	10 Yr.	SI
Standard Deviation (%)	9.3	8.9	8.9	10.5
Standard Deviation – Index (%)	10.1	9.2	9.0	10.4
Information Ratio	1.2	1.5	2.2	2.2
Sharpe Ratio	0.7	0.6	1.0	1.1
Tracking Error (%)	1.2	1.1	1.0	1.1
Beta	0.91	0.95	0.97	0.99
Correlation	0.99	0.99	0.99	0.99
Upside Capture (%)	102	106	108	109
Downside Capture (%)	88	91	89	88
Jensen's Alpha (%)	1.9	1.8	2.5	2.6
Semi-deviation (%)	6.7	5.7	5.3	5.4
Best Three Month Return (%)	11.5	11.5	11.5	18.6
Worst Three Month Return (%)	-4.6	-7.0	-8.8	-8.8
Skewness	-1.0	-0.6	-0.5	0.6
Kurtosis	3.8	2.2	1.2	4.4

LONG DURATION CREDIT ONLY STRATEGY
Composite Risk Statistics Peer Rankings[8][9][10]
As of March 31, 20yy

Risk Statistics[11]	3 Yr.	5 Yr.	10 Yr.	SI
Excess Returns	10	2	1	1
Standard Deviation	18	28	12	20
Information Ratio	4	1	1	1
Sharpe Ratio	14	2	1	1
Tracking Error	56	50	32	34
Beta	77	69	82	73
Correlation	53	49	34	39
Upside Capture	33	3	5	1
Downside Capture	14	14	10	1
Jensen's Alpha	14	2	1	1
Semi-deviation	24	23	28	1
Skewness	29	28	37	19
Kurtosis	65	68	67	40

8 Risk Index is the Bloomberg Barclays U.S. Long Duration Credit Index
9 eVestment universe is the U.S. Long Duration – Credit Fixed Income
10 Peer Rankings were sourced from eVestment using the Manager A Long Credit Fixed Income Composite gross of fees.
11 Standard deviation, tracking error, downside capture, and semi-deviation are ranked from low to high, one being the lowest value and 100 being the highest value. Information ratio, Sharpe ratio, beta, correlation, upside capture, Jensen's alpha, skewness and kurtosis are ranked from high to low, one being the highest value and 100 being the lowest value.

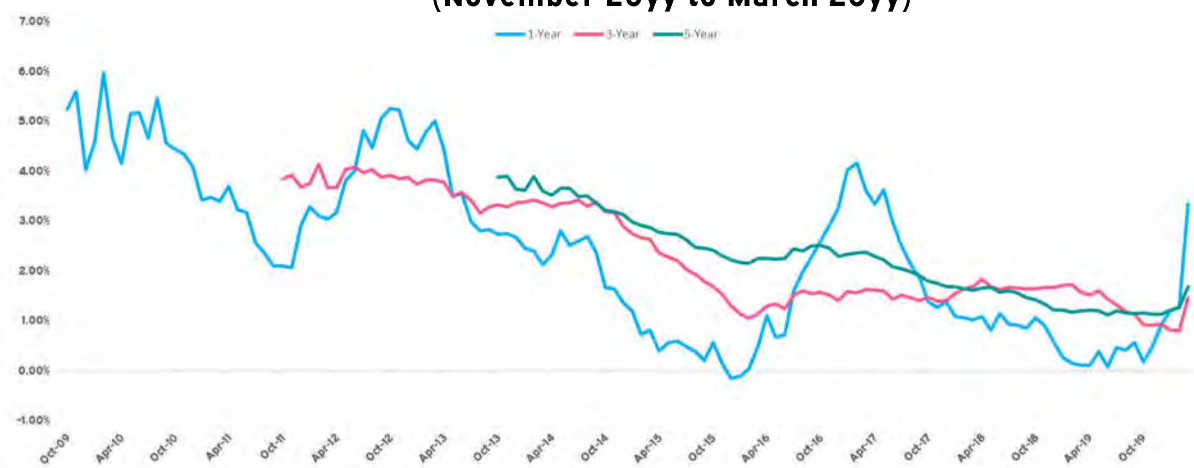
LONG DURATION CREDIT ONLY STRATEGY

→ While the strategy underperformed in 20yy, on a gross of fees basis returns over the trailing periods and most calendar years have been top quartile. The Long Duration Credit composite ranks highly in information ratio and Sharpe ratio in the peer universe, with impressive downside capture ratio rankings vs. peers.

→ The Long Duration Credit strategy's rolling period excess returns has historically been consistent. Gross of fees, the strategy has outperformed in 98%, 100%, and 100% of rolling one-, three-, and five-year periods, by an average of 2.4%, 2.3% and 2.2%, respectively.

→ Manager A's Long Duration Credit strategy exhibits attractive upside/downside capture ratios, generally outperforming in up markets and only capturing around 90% of the market on the downside.

Rolling Period Excess Returns (Gross)[12]
(November 20yy to March 20yy)



Rolling Period	Total Periods	Periods Outperformed	Percent of Periods Outperformed (%)	Average Ann. Excess Ret. (%)	Median Ann. Excess Ret. (%)	Max (%)	Min (%)	Range (%)
1-Year	126	124	98	2.4	2.4	6.0	-0.2	6.1
3-Year	102	102	100	2.3	1.7	4.1	0.8	3.3
5-Year	78	78	100	2.2	2.2	3.9	1.1	2.8

[12] Separate Account Composite Gross of Fees Returns provided by Manager A.

Fees

Factor Rating: [Redacted]

Investment Vehicle	Minimum Investment ($ mm)	Fee
Separate Account	$25 million	30 bps on the first $100 million 25 bps on the next $150 million 20 bps on assets over $250 million
Collective Investment Trust (CIT)	None	Long Duration Gov/Credit[17]: 24 bps (all-in fee) Long Duration Credit: 25 bps (all-in fee)

→ The above fee schedule applies to both Long Duration Gov/Credit and Long Duration Credit Only portfolios. We would note that these are standard listed fees. Since Meketa knows Manager A is negotiable, we rate the fee category favorably with a [Redacted].

→ The separate account fee does not include custody fees. The CIT structure's fee does include custody fees.

→ The separate account fees for a $250 million account rank in the 86th percentile of the US Long Duration – Gov/Cred Fixed Income eVestment universe and the 89th percentile of the US Long Duration – Credit Fixed Income eVestment universe.

→ The Long Duration Gov/Credit Collective Investment Trust (CIT) account fees for a $250 million account rank in the 64th percentile of commingled funds in the US Long Duration – Gov/Cred Fixed Income eVestment universe.

→ The Long Duration Credit Collective Investment Trust (CIT) account fees for a $250 million account rank in the 86th percentile of commingled funds in the US Long Duration – Credit Fixed Income eVestment universe.

[17] Long Duration Government/Credit Collective trust is available but not yet funded.

Meeting Log

Date	Meeting Type	MIG Attendees	Manager Attendees	Product Discussed
9/20yy	On-site	Mark McKeown	Mr. C Mr. F Mr. E Mr. A	Long Duration Capabilities
7/20yy	MIG West	Mark McKeown Gordon Latter Alma Marmolejo	Mr. C Mr. A	Long Duration Capabilities
2/20yy	MIG West	Mark McKeown Gordon Latter Alma Marmolejo	Mr. C Mr. F Mr. E	Long Duration Capabilities
2/20yy	Conference Call	Mark McKeown Gordon Latter Alma Marmolejo	Mr. C Mr. F Mr. G Mr. A	Long Duration Capabilities

Ratings Descriptions

OVERALL RATINGS

Rating	Description
5 – Excellent	Manager has all the qualities that the Public Markets Research Team is looking for. One of our highest conviction names in the sector. This manager should be seriously considered in all applicable searches.
4 – Good	Manager has many of the qualities that the Public Markets Research Team is looking for along with a few identifiable concerns. This manager should be considered in all applicable searches.
3 – Average	Manager is acceptable and may be retained by the client, but better options may be available.
2 – Below Average	Manager has a number of areas of concern to us, and replacement may be advisable.
1 – Weak	Manager should be replaced.

ESG RATINGS

Rating	Description
A	The manager completely incorporates ESG principles into their investment philosophy, due diligence effort, and investment process. The manager supports shareholder initiatives and resolutions promoting ESG principles and is a signatory to the UNPRI initiative. The firm manages client mandates according to ESG principles.
B	The manager incorporates ESG principles on a limited basis into their due diligence effort and investment process, and may exclude certain stocks or industries deemed not socially responsible. They may occasionally support shareholder initiatives and resolutions promoting ESG principles. The firm may manage mandates for clients that incorporate some ESG principles or some socially responsible/mission related guidelines and may be a UNPRI signatory.
C	The manager currently does not incorporate ESG principles into any aspect of their investment process. They may have limited, or no, knowledge of ESG principles. Some managers in this group may express a willingness to manage portfolios according to ESG principles.

Exhibit L

Sample of “Finals” Report for Recent Public Markets Search

Client Fund

October 2019

Emerging Markets Equity
Manager Search
Board Summary

Portions of this document have been redacted to ensure the security of certain confidential or sensitive information.

Background

Background

- Meketa Investment Group and the Fund recently conducted a review of the Fund's international equity roster. A key conclusion stemming from that review was that Manager G should be reviewed and considered for replacement. Manager G's value proposition, coupled with the strategy's high management fees, diminish the strategy's utility as an active manager on the Fund's roster. We believe higher conviction managers that take more active risk and offer more compelling fees are available.
- Meketa held a meeting on August dd, 20yy with the Investment Sub-Committee, whose task was to review and weigh-in on the potential candidates brought forth. Candidates included:
  - Manager A
  - Manager B
  - Manager C
  - Manager D
- Meketa's analysis considered strengths of the managers on a stand-alone basis, complimentary manager mixes and manager pairings with the existing passive index.
- Detailed information on the four high conviction emerging markets equity managers can be found within the **Appendix**.

Recommendation

Summary and Recommendation

- **Meketa, with the support of the Sub-Committee, recommends hiring two managers**, to replace the Fund's existing emerging markets active manager, Manager G.
  - **Manager A** at a **70%** weight to the Emerging Markets allocation.
  - **Manager D** at a **30%** weight to the Emerging Markets allocation.
- Meketa, together with members of the Investment Sub-Committee believes the pairing of 70% Manager A / 30% Manager D offers the most compelling blend for the emerging market segment of the portfolio for the following reasons:
  - Strong absolute and risk-adjusted returns.
  - Attractive correlations offering increased diversification benefits.
  - Manager A's large cap, more growth focused portfolio complements well with Manager D's small cap, cyclical value tilt.
- Both Manager A and Manager D provide an equally advantageous value proposition, though we believe it is prudent to allocate a reduced weight to Manager D given the strategy's higher risk profile.

Action Item:

- Recommend liquidation of Manager G, valued at approximately $68M in favor of the hiring of Manager A (approx. $47.6M) and Manager D (approx. $20.4M).

Appendix

Manager Overview

Manager A
As of June 30, 20yy

Manager A	
Firm Location	Mid-West
Firm Inception	19yy
Ownership Structure	17% Employee Owned, 66% Publicly Traded, 17% Held by Initial Investors and Former Employees
Assets Under Management (Firm)	$xxx.x billion
Strategy Inception	20yy
Assets Under Management (Strategy)	$x.x billion

Firm Overview

- Manager A is a large, multi-boutique investment management firm based in the Mid-West. The firm consists of nine investment teams that operate autonomously as investment boutiques. The investment teams are located at offices across the globe.
- As of June 20yy, Manager A managed approximately $xxx.x billion in assets in more than 10 distinct investment strategies, with $x.x billion in the Emerging Markets Equity strategy.
- The Team, based on the west coast, manages a single investment product: Manager A Emerging Markets Equity. The strategy was incepted in 20yy. The team's lead portfolio manager, Mr. A, previously managed the Manager H using the same investment approach.

Manager A (continued)

Investment Team Overview

- Lead portfolio manager Mr. A has run the Emerging Markets Equity strategy since its inception. Before joining Manager A, Mr. A man built and managed the Manager H Emerging Markets Equity strategy using the same investment philosophy and process. Prior to that, Mr. A was a senior analyst and co-PM of the Manager H. Mr. A has 20 years of investment experience.
- Mr. A is supported by two dedicated analysts, Mr. B and Ms. C. Mr. B has seven years of investment experience and joined Manager A in 20yy, and Ms. C has seven years of investment experience and joined the team in 20yy. Two of Mr. A's previous analysts, Mr. D and Mr. E, were hired away by a competitor in 20yy.

Manager A (continued)

Investment Philosophy

- The Manager A Emerging Markets investment team believes that earnings growth and compounding business value drives long-term appreciation. The team seeks to invest in financially sound, free-cash flow generative companies with low financial leverage. They believe that companies with these qualities are less likely to impair capital during bouts of market volatility characteristic of emerging markets investing.
- Importantly, Manager A also believes that macroeconomic forces can have a significant impact on emerging markets investment returns. They believe emerging markets investments are uniquely exposed to a number of risk factors that leave these countries vulnerable to capital flight and, in turn, permanent capital impairment during periods of market stress. As such, Manager A seeks to enhance their stock selection process by mitigating the top-down risks inherent in emerging markets.
- The team also seeks to mitigate the volatility of the portfolio through the use of an expanded opportunity set. Manager A will invest in off-benchmark securities and developed market-listed companies with a significant proportion of their revenues/earnings growth coming from emerging markets.

Manager A (continued)

Investment Process

- Manager A takes a traditional, fundamental, research-intensive approach to stock selection, while also appreciating that macroeconomic factors are critical when investing in emerging markets.
- The bottom-up research process begins with investment screens on valuation (price/everything) and quality metrics (ROE, ROA, ROIC, etc.). The team thoroughly reviews attractive businesses with a focus on the sustainability of free cash flow and the potential for fundamental disruption of a company's business model due to changing business conditions. They favor companies that are financially sound and have low leverage.
- The team also seeks to mute the portfolio's absolute volatility by actively managing currency risk. This top down component of the process focuses on economic drivers such as current account balances. The team seeks to understand whether headwinds exist for future local currency performance across the emerging markets opportunity set, and manages individual country exposures accordingly. As a diversification and risk mitigation tool, the team will also invest in developed market-listed companies with significant revenues/earnings growth derived from emerging markets.
- The end result is a concentrated, benchmark-agnostic portfolio of 40 to 70 holdings. Annual portfolio turnover typically averages 30-50% but can range higher, at times.

Manager B
As of June 30, 20yy

Manager B	
Firm Location	Mid-West
Firm Inception	19yy
Ownership Structure	100% Employee Owned
Assets Under Management (Firm)	$x.x billion
Strategy Inception	19yy
Assets Under Management (Strategy)	$x.x billion

Firm Overview

- Founded in 19yy by Mr. F, Manager B is a privately held investment management firm based in the Mid-West. The firm is owned by Mr. F and his family trust. Importantly, this trust is structured as a blind trust, so beneficiaries of the trust would not be involved in Manager B's operations if a change of ownership were to take place.
- Manager B manages domestic, international, and emerging markets equity strategies, as well as alternative investment strategies. Each asset class is managed by an independent investment team. As of June 20yy, the firm had $x.x billion in assets.
- The Manager B Emerging Markets Growth Team manages two strategies (Emerging Markets Growth and Emerging Markets Small Cap Growth) using the same investment philosophy and process. The team manages $x.x billion in the Emerging Markets Growth strategy.

Manager B (continued)

Investment Team Overview

- The Manager B Emerging Markets Growth Team is based in the Mid-West and is led by portfolio manager Mr. F. Mr. F has worked at Manager B since 20yy. Mr. F became the lead portfolio manager of the Emerging Markets Growth strategy in 20yy. He is involved in all stages of the research process and makes all final decisions for the portfolio.
- Mr. F is supported by co-portfolio managers Mr. H and Mr. G. Mr. H joined Manager B in 20yy after earning his MBA at the School A. Prior to that, he worked with the [Redacted]. Mr. I joined Manager B in 20yy. He worked at Company A and Manager F as an economist before coming to Manager B. Mr. H and Mr. I are involved in all phases of the research and portfolio construction process.
- The portfolio managers are supported by five dedicated equity research analysts, all of whom cover specific sectors. One dedicated emerging markets rates/credit/currency analyst is also part of the team.

Manager B (continued)

Investment Philosophy

- Manager B believes that, over the long term, sustainable revenue and earnings growth drive stock prices. Over the short term, however, they believe that analysis of macroeconomic, behavioral, and technical factors are necessary to identify *good growth companies* that are also *timely investments*.
- Manager B invests in companies experiencing a positive trend change in its potential or expected earnings growth trajectory within four defined growth profiles. These are Dynamic Growth, Cyclical Growth, Recovery Growth, and Consistent Growth. The investment team waits until a stock exhibits positive momentum before investing in the company. Additionally, they believe in the importance of responding quickly to change, both positive and negative. The combination of long-term fundamental drivers and shorter-term market factors characterizes the Manager B approach.

Manager B (continued)

Investment Process

- Manager B looks for stocks using an investment process that has three components: Objective Fundamental, Subjective Fundamental, and Security Timeliness. Macroeconomic analysis is embedded in each of these three steps. The Objective Fundamental stage begins with a series of bottom-up screens focused on identifying companies with positive inflections in sales, earnings, and estimate revisions, in conjunction with quality, valuation, macroeconomic and technical factors.
- In the Subjective Fundamental stage, the team conducts fundamental research to assess the magnitude, acceleration, duration and/or sustainability of growth versus what is implied in current market prices. In the Security Timeliness stage, the team will use stock-specific and industry group technical screens to identify stocks that are being rewarded by the market.
- The strategy's focus on shorter-term market factors results in consistent exposure to medium-term momentum and above average portfolio turnover (150% to 300%). Importantly, the portfolio's exposure to momentum and use of portfolio turnover has resulted in lower than average absolute risk (i.e., standard deviation) and a lower than market beta (~0.80-0.90). The portfolio generally holds between 80 and 120 stocks.

Manager C
As of June 30, 20yy

Manager C	
Firm Location	East Coast
Firm Inception	20yy
Ownership Structure	95% employee-owned/ 5% owned by Company C
Assets Under Management (Firm)	$xx.x billion
Strategy Inception	June 20yy
Assets Under Management (Strategy)	$x.x billion

Firm Overview

- Manager C is a boutique asset management firm based on the East Coast. The firm manages concentrated, benchmark-agnostic global equity portfolios. Manager C was founded by Mr. J, former CIO and Co-CEO of Manager E. The firm is 95% employee-owned by nine partners. Mr. J holds 86% of the firm's equity, eight other employees hold 9%, and the remaining 5% of the stock is held by Company C.
- Though Manager C is a new organization, the investment team is fully staffed. Manager C employs approximately 56 individuals including 12 investment team members and 44 business team members. As of June 20yy, the firm managed $xx.x billion in assets across four products, with $x.x billion in the Emerging Markets Equity strategy.

Manager C (continued)

Investment Team Overview

- The Manager C investment team is led by Chairman and CIO, Mr. J. Mr. J makes all final decisions on the Emerging Markets Equity strategy. He has 28 years of investment experience. During his tenure at Manager E, Mr. J served as lead portfolio manager on the Emerging Markets strategy from 19yy to 20yy, and was the lead portfolio manager on the Global and International Equity strategies from 20yy to 20yy. Additionally, Mr. J served as CIO at Manager E beginning in 20yy.
- Mr. J is supported by nine analysts and two traders. Though analysts are afforded autonomy in the company analysis process, Mr. J is involved throughout all stages of research. He considers himself to be an analyst first and portfolio manager second. Mr. J also incorporates skepticism into the research process by assigning an analyst to act as “devil’s advocate” on every stock. By doing so, he promotes a more in-depth and challenging vetting of the investment idea. The analyst is forced to defend the company they are proposing to add to the portfolio.

Manager C (continued)

Investment Philosophy

- Manager C believes that long-term, stable, and superior earnings growth drives investment returns and risk-adjusted outperformance.
- The Manager C team seeks to invest in businesses that are predictable (strong franchise, low capital intensity, shareholder oriented management, etc.), sustainable (able to replicate or exceed past success in terms of growth, operating margins, ROE, ROA, etc.), and trade at an attractive margin of safety (at least a 25% discount to the analyst's assessment of intrinsic value). Mr. J believes in building concentrated portfolios of high conviction positions with little attention paid to the benchmark.

Manager C (continued)

Investment Process

- The Manager C investment process begins with a series of quantitative screens focused on profitability and stability. The team's favored metrics include low amounts of leverage, high ROE/ROA, high free cash flow, and stable earnings.
- Promising companies are then subject to intense fundamental research to assess the quality of the business and its earnings. Manager C believes that quality companies should have a defensible franchise, a consistent and durable business model, strong pricing power, low capital intensity, and transparent accounting. The investment team ultimately seeks to gain an understanding of the predictability (long-term economic characteristics of a business, quality of management team) and sustainability (ability of the company to replicate past success by improving margins and growing ROE/ROA) of companies under review.
- If a company meets these quality criteria, the focus then shifts to valuation. If a company's stock is trading at a significant discount (>25%) to a conservative estimate of its long-term value, it is a candidate for purchase.
- The team manages a concentrated portfolio of approximately 50-80 positions. Manager C has a three- to five-year investment horizon, but will opportunistically trade in to or out of quality businesses depending on the market environment and the team's assessment of macroeconomic factors. Portfolio turnover generally ranges from 30-70% per year, but can range higher at times.

Manager D
As of June 30, 20yy

Manager D	
Firm Location	East Coast
Firm Inception	20yy
Ownership Structure	49% Employee Owned, 41% Owned by Company B, 10% Owned by External Shareholders
Assets Under Management (Firm)	$xx.x billion
Strategy Inception	20yy
Assets Under Management (Strategy)	$x.x billion

Firm Overview

- Manager D is a multi-boutique investment manager based in the UK. The firm was founded in 20yy. Ownership is split amongst employees and Company B. Current employees own 49% of the stock, former employees and external shareholders own 10%, and Company B owns the balance. Company B's organizational influence is limited, as their ownership is considered "non-controlling participation" with voting rights capped at a maximum of 49%.
- As of June 20yy, Manager D had $xx.x billion in assets under management, with $x.x billion in the Emerging Markets Equity strategy, which was launched in 20yy shortly after portfolio manager, Mr. K, and his investment team joined Manager D.

Manager D (continued)

Investment Team Overview

- The Manager D investment team is the former Emerging and Frontier Markets investment team from Manager I. The team joined Manager D in 20yy. The investment team is led by portfolio manager Mr. K. Mr. K has 27 years of industry experience. He is supported by Co-PMs, Mr. L and Mr. M, who have 23 and 37 years of investment experience, respectively.
- The three portfolio managers are supported by a dedicated macroeconomic analyst, Mr. N, who has 22 years of investment experience, and has worked with Messrs. K, L, and M since 20yy. Head of Research, Mr. O, has 22 years of investment experience and first joined the emerging markets team in 20yy. He directs a deep team of 14 research analysts. The analysts on the investment team are seasoned as well; they average 11 years of experience.

Manager D (continued)

Investment Philosophy

- Manager D believes that successful long-term investing in emerging markets requires both a strong macroeconomic framework and access to reliable information flow which often times can greatly affect local prices in the emerging world. They believe that marrying a macroeconomic framework with bottom-up stock selection focused on durable business models, with good growth prospects, trading at reasonable prices is also of critical importance.
- Manager D aims to be geographically flexible within their opportunity set. They believe that building concentrated, nimble, benchmark-agnostic portfolios that reflect their top-down and bottom-up views, will enable their success over time. Manager D targets 300 basis points of outperformance over a full market cycle.

Manager D (continued)

Investment Process

- Manager D's investment process combines top-down and bottom-up investment frameworks. The process begins with a series of liquidity screens, which culls the universe for stocks with greater than $2 billion in market cap and more than $10 million in average daily trading volume.
- From there, the team's top-down analysis, which is driven by their dedicated macroeconomic analyst, scores countries based on monetary policy, political risk factors, currency risk, country valuations, earnings trends, and other leading economic indicators. The result of this analysis is a country "heat map", which is used to inform theme identification and direct the analyst's bottom-up research. Within themes, Manager D attempts to identify longer-term catalysts (although duration of themes can vary) with positive near-term macroeconomic tailwinds.
- Once the team has identified pockets of the market that they believe have thematic and macroeconomic tailwinds, analysts are tasked with identifying companies within these pockets of the market that offer attractive growth prospects and compelling relative valuations. Analysts use a variety of industry-specific screens to find attractive investment candidates. Candidates are then subjected to rigorous fundamental research, which, at a minimum, requires either of meeting or speaking with company management. The final portfolio is concentrated and benchmark-agnostic.
- While Manager D is benchmark-aware, they are benchmark-unconstrained in portfolio construction. The portfolio generally holds 50-60 positions. Manager D is willing to dynamically reposition the portfolio in an effort to keep the portfolio's exposures timely and to manage risk. Portfolio turnover typically ranges between 75-150%.

Manager Portfolio Characteristics

Portfolio Characteristics[1]
As of June 30, 20yy

	Manager A		Manager B		Manager C		Manager D		*MSCI Emerging Markets*	
Price-Earnings Ratio (Trailing)	36.5x		19.0x		22.4x		13.7x		*12.9x*	
Price-Earnings Ratio (Fwd.)	29.9x		18.4x		21.4x		12.9x		*12.8x*	
Earnings Growth (Trailing)	19.4%		19.0%		15.7%		22.4%		*14.8%*	
Est. Earnings Growth (3-5 Yr.)	23.2%		17.0%		16.4%		18.3%		*11.7%*	
Price-Book Value Ratio	9.7x		2.9x		3.1x		1.7x		*1.6x*	
Weighted Average Market Cap	$73.3 billion		$56.6 billion		$38.0 billion		$27.2 billion		*$47.5 billion*	
Median Market Cap	$13.1 billion		$9.9 billion		$11.2 billion		$3.1 billion		*$1.8 billion*	
Number of Holdings	38		97		58		61		*1,194*	
Active Share	89.1%		76.1%		91.3%		90.4%		*NA*	
Turnover (Last 12 Months)	163%		178%		94%[2]		80%		*NA*	
Cash Weight	6.6%		6.9%		2.7%		1.0%		*NA*	
Top 3 Country Weightings:	China	34%	China	22%	India	26%	China	28%	*China*	*32%*
	US	16%	India	12%	China	16%	Korea	10%	*Korea*	*12%*
	India	12%	Brazil	8%	Hong Kong	13%	Taiwan	10%	*Taiwan*	*11%*
Top 3 Sector Weightings:	Cons. Disc.	29%	Financials	29%	Financials	34%	Financials	19%	*Financials*	*25%*
	Info. Tech.	20%	Cons. Disc.	18%	Cons. Stap.	20%	Cons. Disc.	14%	*Info. Tech.*	*14%*
	Financials	20%	Cons. Stap.	13%	Utilities	11%	Info. Tech.	14%	*Cons. Disc.*	*13%*
% of Portfolio in Top 10 Holdings:	46.2%		27.8%		38.7%		33.4%		*23.5%*	

- Manager A manages a concentrated portfolio, with 38 holdings as of June 20yy. The portfolio trades at a significant valuation premium relative to the index, but also offers much higher trailing and forecasted earnings growth. The portfolio's valuation premium can also be attributed to a tilt towards larger cap growth stocks, on a weighted average market cap basis.

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[1] Source: eVestment Alliance Database, MSCI, FactSet, manager data. Weighted Average and Median Market Cap statistics utilize MSCI definition (adjusted for foreign ownership and free float).

[2] As of March 31, 20yy.

- Manager B's portfolio is more diversified than the other candidate managers, with 97 holdings. Manager B utilizes a dynamic, growth-oriented investment approach predicated on diversification across growth typologies. As a result, the portfolio trades at a valuation premium, with more favorable earnings growth than the index.
- Manager C manages a relatively concentrated portfolio of 58 holdings. Manager C's portfolio trades at a valuation premium relative to the index, but that premium is compensated with higher expected earnings growth. This profile is a result of Manager C's emphasis on high quality companies that offer significant growth potential relative to the market. The portfolio tilts slightly down cap relative to the MSCI Emerging Markets Index.
- Manager D manages a concentrated portfolio, with 61 holdings as of June 20yy. The portfolio trades at similar multiples relative to the index, but offers higher trailing and expected earnings growth. While country and sector exposures are similar to those of the index, Manager D's investment approach is opportunistic and those allocations will evolve significantly over time on a relative basis. While the team is mindful of index exposures, they seek to invest in growing companies trading at significant discounts to the investment team's estimate of intrinsic value (e.g., GARP) across emerging and frontier markets, regardless of index characteristics.

Analysis: Manager Stand-Alone

Risk Characteristics[1]
Common Period as of July 31, 20yy[2]

	Manager A	Manager B	Manager C	Manager D	*Manager G*	*MSCI Emerging Markets*
Common Period Performance:						
Common Period Performance (%)	8.8	6.8	5.8	8.1	*4.4*	*3.7*
Best 3 Months (%)	23.0	12.2	13.9	21.7	*14.2*	*13.7*
Worst 3 Months (%)	-16.7	-13.8	-14.2	-20.1	*-17.0*	*-17.9*
Risk Measures:						
Standard Deviation (%)	15.8	13.7	13.9	19.1	*15.4*	*15.4*
Tracking Error (%)	6.9	5.0	7.8	7.3	*3.2*	*NA*
Beta	0.88	0.83	0.76	1.09	*0.97*	*NA*
Correlation to Benchmark	0.90	0.95	0.85	0.92	*0.98*	*1.00*
Downside Deviation (%)	6.6	5.9	6.5	7.6	*6.3*	*6.6*
Upside Capture (%)	101.1	93.1	92.1	120.1	*98.9*	*NA*
Downside Capture (%)	78.1	80.1	83.7	97.0	*95.8*	*NA*
Risk-Adjusted Performance:						
Jensen's Alpha (%)	5.50	3.66	2.89	4.13	*0.85*	*NA*
Sharpe Ratio	0.52	0.45	0.37	0.39	*0.25*	*0.20*
Information Ratio	0.74	0.63	0.28	0.60	*0.24*	*NA*

1 All net of fees returns assume the manager fee schedules stated herein. Manager A's track record includes the team's track record at Manager H, which runs from January 20yy to February 20yy. For the months of March 20yy – June 20yy, MSCI Emerging Markets-ND index returns are used. The Manager A track record begins in 20yy. Manager D's performance includes the team's track record from Manager I, which runs from August 20yy to March 20yy. For the months of April and May 20yy MSCI Emerging Markets-ND index returns are used. The track record at Manager D begins in 20yy. Manager C performance prior to June 20yy is from the Manager E Emerging Markets strategy. Mr. J managed the Manager E Emerging Markets strategy from January 19yy to May 20yy.

2 Common period begins at the inception of the Manager D Emerging Markets Equity strategy, which includes the investment team's Manager I track record and begins in August 20yy.

- All four managers have outperformed the index on an absolute basis over the common period, though their performance and risk profiles are distinct.
- Manager A's opportunistic approach resulted in high tracking error (active risk relative to the index) but the team's emphasis on risk management, and especially currency risk management, resulted in beta of 0.88 and a compelling Jensen's Alpha (5.5%) and information ratio (0.7).
- Manager B's risk profile over the common period, with a standard deviation of 13.7% and a beta of 0.83, confirms that the team's risk management approach proved to be efficacious. While tracking error was lower than the three other candidates, tracking error of 5.0% is still relatively high in absolute, and when compared to peers. Manager B's return of 6.8% versus the index's return of 3.7%, paired with adept risk management (note the strategy's low beta and downside capture), resulted in a favorable Jensen's Alpha (3.7%) and information ratio (0.6).
- Manager C's return profile over the common period is indicative of the team's benchmark agnostic, capital protection-oriented investment approach. The portfolio's beta of 0.76 was the lowest of the candidate managers. Portfolio standard deviation and downside capture were also among the lowest of the candidates. The resulting Jensen's Alpha of 2.9% is compelling. While the portfolio's information ratio is low relative to Manager A, Manager B, and Manager C, this can be partly attributed to the portfolio's tracking error, which was the highest of the candidate strategies.
- Much like the three other candidate strategies, Manager D's tracking error was high relative to the index over the common period. While Manager D is mindful of index risk exposures, their approach is generally benchmark unconstrained. Manager D's absolute risk (standard deviation) and index-relative risk (beta) were higher than the other three candidates as well, but the portfolio's participation in up markets was also substantially higher at 120%. As a result, the strategy has outperformed the index on a risk-adjusted basis.

Trailing and Calendar Year Performance (net of fees) [1]
As of July 31, 20yy

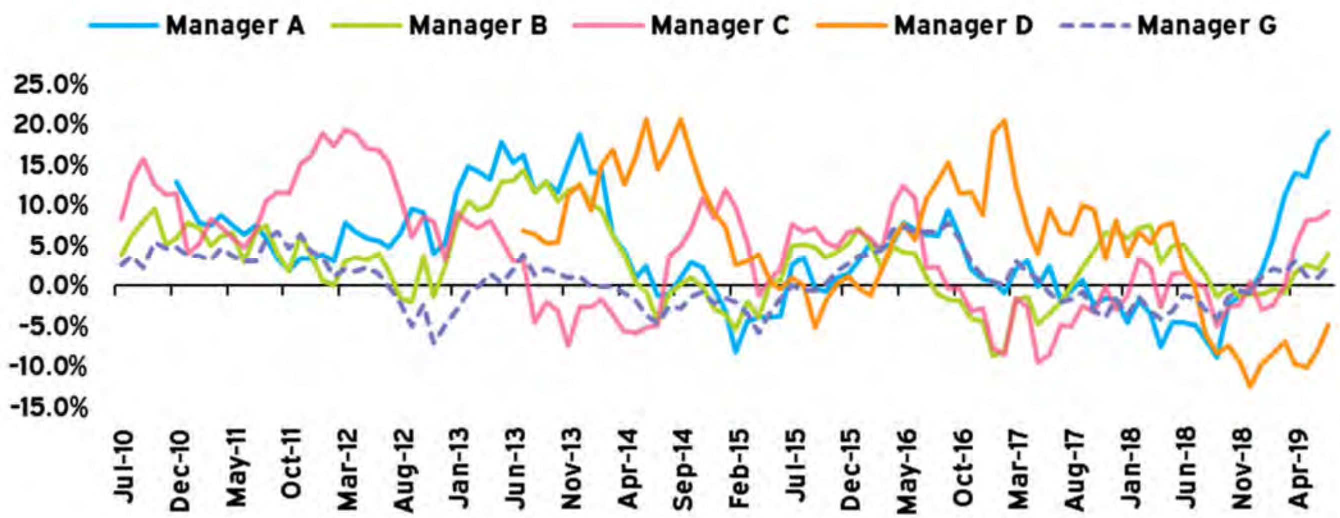
	Manager A	Manager B	Manager C	Manager D	*Manager G*	*MSCI Emerging Markets*
Trailing Period Returns (%):						
1 Year	16.8	1.8	7.0	-7.1	*0.2*	*-2.2*
3 Years	12.6	10.3	10.3	8.3	*8.1*	*8.4*
5 Years	6.1	4.2	5.1	4.1	*3.0*	*1.8*
7 Years	8.8	6.8	5.8	8.1	*4.4*	*3.7*
10 Years	NA	7.9	9.2	NA	*5.6*	*4.6*
Longest Common Period[2]	8.8	6.8	5.8	8.1	*4.4*	*3.7*
Calendar Year Returns (%):						
20yy	-15.4	-15.7	-14.2	-27.1	*-15.5*	*-14.6*
20yy	35.5	44.1	34.3	45.4	*35.6*	*37.3*
20yy	11.9	6.7	8.3	19.9	*12.3*	*11.2*
20yy	-13.5	-9.6	-8.3	-13.9	*-12.3*	*-14.9*
20yy	-2.5	-5.1	6.3	6.9	*-4.5*	*-2.2*
20yy	16.2	9.7	-5.3	10.0	*-1.5*	*-2.6*
20yy	23.4	20.6	21.4	NA	*13.2*	*18.2*
20yy	-15.1	-14.7	-2.4	NA	*-14.2*	*-18.4*
20yy	31.6	24.8	30.3	NA	*23.6*	*18.9*
20yy	NA	72.0	54.7	NA	*74.5*	*78.5*
20yy	NA	-53.9	-46.7	NA	*-47.1*	*-53.3*

[1] All net of fees returns assume the manager fee schedules stated herein. Manager A's track record includes the team's track record at Manager H, which runs from January 20yy to February 20yy. For the months of March 20yy – June 20yy, MSCI Emerging Markets-ND index returns are used. The Manager A track record begins in July 20yy. Manager D's performance includes the team's track record from Manager I, which runs from August 20yy to March 20yy. For the months of April and May 20yy MSCI Emerging Markets-ND index returns are used. The track record at Manager D begins in June 20yy. Manager C performance prior to June 20yy is from the Manager E Emerging Markets strategy. Mr. J managed the Manager E Emerging Markets strategy from January 19yy to May 20yy.

[2] Common period begins at the inception of the Manager D Emerging Markets Equity strategy, which includes the investment team's Manager I track record and begins in August 20yy.

- Manager A, Manager B, and Manager C all outperformed the index over all trailing periods. While Manager D underperformed over the past year, the strategy outperformed significantly over the five- and seven-year trailing periods, and since inception in 20yy.
- Manager A outperformed the index in six of nine calendar years, indicating impressive consistency. Manager B generated consistent results as well, with returns near or better than the index during drawdowns coupled with outperformance during rallies as well.
- Manager C and Manager D stand in contrast on a calendar year basis; Manager C has protected capital in down markets such as 20yy, 20yy, and 20yy, but tends to underperform in calendar year up-markets, while Manager D has experienced larger drawdowns but has tended to outperform in up-markets.

Rolling One-Year Excess Returns[1]
Last Ten Years as of July 31, 20yy vs MSCI Emerging Markets



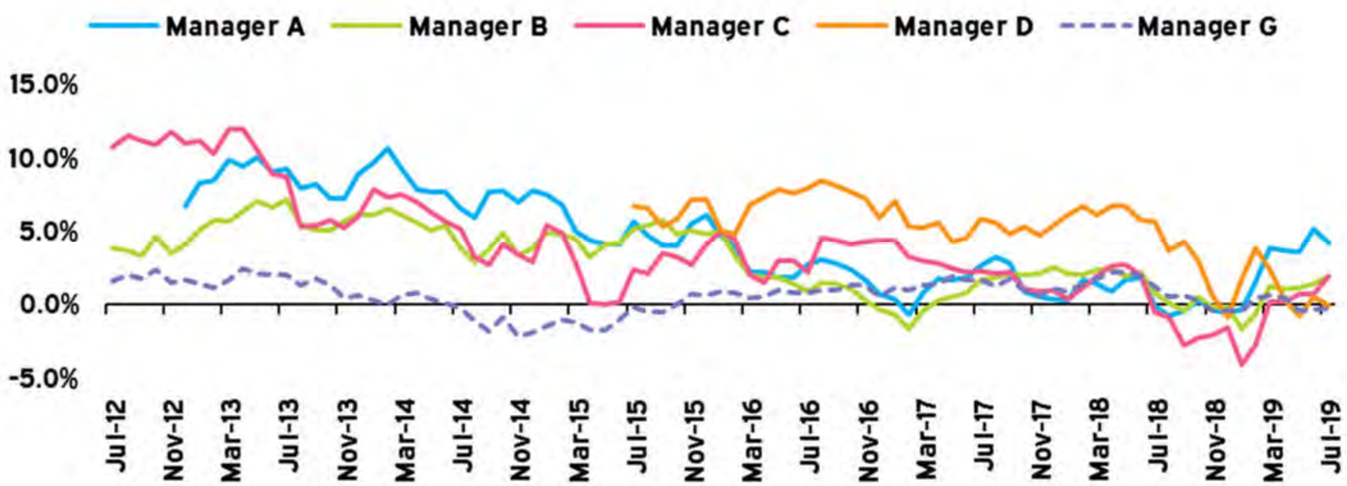
As of 7/31/20yy	Total Periods	Periods Outperformed	Percentage (%)	Average Ann. Excess Return (%)	Max (%)	Min (%)	Range (%)
Manager A	104	74	71.2	4.3	18.9	-8.9	27.8
Manager B	109	77	70.6	3.1	14.3	-8.8	23.1
Manager C	109	71	65.1	4.1	19.4	-9.5	28.9
Manager D	73	54	74.0	5.1	20.6	-12.5	33.1
Manager G	109	60	55.0	0.7	7.8	-7.1	14.9

[1] All net of fees returns assume the manager fee schedules stated herein. Manager A's track record includes the team's track record at Manager H, which runs from January 20yy to February 20yy. For the months of March 20yy – June 20yy, MSCI Emerging Markets-ND index returns are used. The Manager A track record begins in July 20yy. Manager D's performance includes the team's track record from Manager I, which runs from August 20yy to March 20yy. For the months of April and May 20yy, MSCI Emerging Markets-ND index returns are used. The track record at Manager C begins in June 20yy. Manager C performance prior to June 20yy is from the Manager E Emerging Markets strategy. Mr. J managed the Manager E Emerging Markets strategy from January 19yy to May 20yy.

- All four managers outperformed the index in at least 65% of rolling one-year periods, with average annualized excess returns of at least 3.1%.
- All four managers produced a reasonably wide range of rolling one-year excess returns over the common period. Investors in these strategies should be cognizant of the potential for significant short-term deviations relative to the MSCI Emerging Markets Index, both positive and negative.

Rolling Three-Year Excess Returns[1]

Last Ten Years as of July 31, 20yy vs MSCI Emerging Markets



As of 7/31/20yy	Total Periods	Periods Outperformed	Percentage (%)	Average Ann. Excess Return (%)	Max (%)	Min (%)	Range (%)
Manager A	80	73	91.3	4.2	10.6	-0.8	11.4
Manager B	85	76	89.4	3.0	7.2	-1.7	8.9
Manager C	85	76	89.4	3.9	11.9	-4.1	16.0
Manager D	49	46	93.9	5.1	8.5	-0.9	9.4
Manager G	85	64	75.3	0.6	2.4	-2.2	4.6

[1] All net of fees returns assume the manager fee schedules stated herein. Manager A's track record includes the team's track record at Manager H, which runs from January 20yy to February 20yy. For the months of March 20yy – June 20yy, MSCI Emerging Markets-ND index returns are used. The Manager A track record begins in July 20yy. Manager D's performance includes the team's track record from Manager I, which runs from August 20yy to March 20yy. For the months of April and May 20yy, MSCI Emerging Markets-ND index returns are used. The track record at Manager D begins in June 20yy. Manager C performance prior to June 20yy is from the Manager E Emerging Markets strategy. Mr. J managed the Manager E Emerging Markets strategy from January 19yy to May 20yy.

- All of the candidate strategies produced very consistent results on a rolling three-year basis. All four strategies outperformed in at least 89% of rolling three-year periods.
- While the longer rolling intervals reduce the impact of shorter-term performance deviations from the index, note that the range of rolling three-year excess returns remains relatively wide. The range of rolling three-year excess returns suggests that a long-term investment horizon is a prerequisite for investment in these strategies.

Analysis: Blended Options

Analysis of Potential Manager Pairings - Correlation of Excess Returns

Common Period as of 7/31/20yy[1]	Manager A	Manager B	Manager C	Manager D
Manager A	1.00			
Manager B	0.54	1.00		
Manager C	0.37	0.63	1.00	
Manager D	0.33	0.02	-0.20	1.00

- While not all of the four managers we have reviewed should be paired together, in several cases they serve as strong potential complements.
- To provide quantitative justification for manager pairings, the correlation of their excess returns serves as a reasonable starting point. Correlation indicates the extent to which the managers' returns, relative to the index, move together. Ideally, the correlation of excess returns should be low, such that each individual manager would be contributing an uncorrelated potential alpha to the total portfolio.
- The table indicates that incremental diversification benefits might not be gained from pairing Manager A and Manager B, or Manager B and Manager C given that their correlation of excess returns exceeds 0.50. However, Manager D appears to be a strong potential complement to all three competing managers.
- The following slides explore the past performance result of the manager pairings that appear to offer potential diversification benefits. In instances where Manager D is included in the paired manager portfolio, it is included at a 30% weight, while the paired manager (Manager A, Manager B, or Manager C) is included in the two manager portfolio at a 70% weight. We believe this weighting is prudent given Manager D's expected risk profile.

[1] All net of fees returns assume the manager fee schedules stated herein. Manager A's track record includes the team's track record at Manager H, which runs from January 20yy to February 20yy. For the months of March 20yy – June 20yy, MSCI Emerging Markets-ND index returns are used. The Manager A track record begins in July 20yy. Manager D's performance includes the team's track record from Manager I, which runs from August 20yy to March 20yy. For the months of April and May 20yy, MSCI Emerging Markets-ND index returns are used. The track record at Manager D begins in June 20yy. Manager C performance prior to June 20yy is from the Manager E Emerging Markets strategy. Mr. J managed the Manager E Emerging Markets strategy from January 19yy to May 20yy.

Risk Characteristics[1]

Common Period as of July 31, 20yy

	70% Manager A/ 30% Manager D	70% Manager B/ 30% Manager D	70% Manager C/ 30% Manager D	50% Manager C/ 50% Manager A	*MSCI Emerging Markets*
Common Period Performance:					
Common Period Performance (%)	8.7	7.3	6.7	7.4	*3.7*
Best 3 Months (%)	21.3	13.0	13.8	17.2	*13.7*
Worst 3 Months (%)	-17.7	-15.8	-15.0	-13.5	*-17.9*
Risk Measures:					
Standard Deviation (%)	16.4	14.9	14.5	14.2	*15.4*
Tracking Error (%)	6.0	4.2	5.5	6.1	*NA*
Beta	0.95	0.90	0.86	0.82	*NA*
Correlation to Benchmark	0.93	0.96	0.93	0.92	*1.00*
Downside Deviation (%)	6.8	6.2	6.3	6.4	*6.6*
Upside Capture (%)	106.9	101.1	100.6	96.8	*NA*
Downside Capture (%)	83.8	85.2	87.5	80.8	*NA*
Risk-Adjusted Performance:					
Jensen's Alpha (%)	5.16	3.88	3.40	4.27	*NA*
Sharpe Ratio	0.49	0.44	0.41	0.48	*0.20*
Information Ratio	0.84	0.86	0.54	0.61	*NA*

- All four manager pairings generated strong results over the common period, with moderate volatility as measured by standard deviation and beta. The pairing of Manager B and Manager D produced the strongest information ratio, while the combination of Manager A and Manager D produced the strongest Jensen's Alpha.

[1] All net of fees returns assume the manager fee schedules stated herein. Manager A's track record includes the team's track record at Manager H, which runs from January 20yy to February 20yy. For the months of March 20yy – June 20yy, MSCI Emerging Markets-ND index returns are used. The Manager A track record begins in July 20yy. Manager D's performance includes the team's track record from Manager I, which runs from August 20yy to March 20yy. For the months of April and May 20yy, MSCI Emerging Markets-ND index returns are used. The track record at Manager D begins in June 20yy. Manager C performance prior to June 20yy is from the Manager E Emerging Markets strategy. Mr. J managed the Manager E Emerging Markets strategy from January 19yy to May 20yy.

Trailing and Calendar Year Performance (net of fees) [1]
As of July 31, 20yy

	70% Manager A/ 30% Manager D	70% Manager B/ 30% Manager D	70% Manager C/ 30% Manager D	50% Manager C/ 50% Manager A	*MSCI Emerging Markets*
Trailing Period Returns (%):					
1 Year	9.1	-0.9	2.7	11.9	*-2.2*
3 Years	11.3	9.8	9.8	11.5	*8.4*
5 Years	5.6	4.3	5.0	5.7	*1.8*
7 Years (Common Period) [2]	8.7	7.3	6.7	7.4	*3.7*
Calendar Year Returns (%):					
20yy	-19.0	-19.2	-18.1	-14.8	*-14.6*
20yy	38.4	44.5	37.6	34.9	*37.3*
20yy	14.4	10.7	11.9	10.2	*11.2*
20yy	-13.6	-10.9	-9.8	-10.8	*-14.9*
20yy	0.3	-1.6	6.5	1.9	*-2.2*
20yy	14.4	9.8	-0.8	5.0	*-2.6*

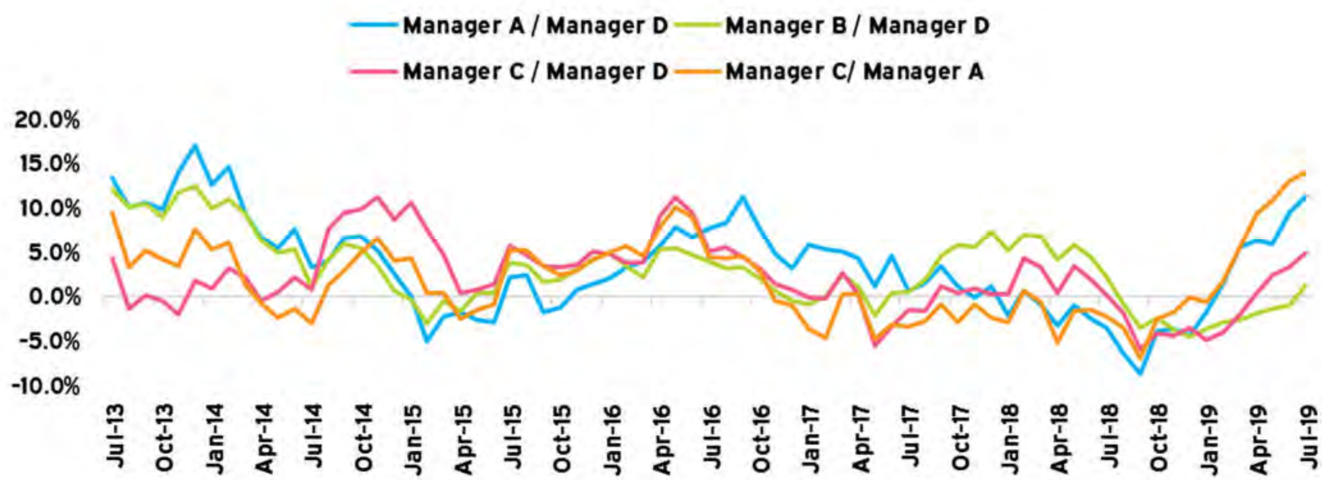
- All four blended portfolios generated compelling trailing period performance, outperforming the MSCI Emerging Markets Index over the trailing one-, three-, five-, and seven-year periods. Significant calendar year dispersion exists in the results, however. While the combination of Manager A and Manager D, and Manager B and Manager D, generated the strongest results in the 20yy rally, they also captured more than 100% of the 20yy drawdown (this is mostly attributable to Manager D's relative performance). Conversely, the combination of Manager C and Manager A proved to be the most effective during market drawdowns in 20yy and 20yy, but lagged during the 20yy rally.

1 All net of fees returns assume the manager fee schedules stated herein. Manager A's track record includes the team's track record at Manager H, which runs from January 20yy to February 20yy. For the months of March 20yy – June 20yy, MSCI Emerging Markets-ND index returns are used. The Manager A track record begins in July 20yy. Manager D's performance includes the team's track record from Manager I, which runs from August 20yy to March 20yy. For the months of April and May 20yy, MSCI Emerging Markets-ND index returns are used. The track record at Manager D begins in June 20yy. Manager C performance prior to June 20yy is from the Manager E Emerging Markets strategy. Mr. J managed the Manager E Emerging Markets strategy from January 19yy to May 20yy.

2 Common period begins at the inception of the Manager D Emerging Markets Equity strategy, which includes the investment team's Manager I track record and begins in August 20yy.

Rolling One-Year Excess Returns[1]

Common Period as of July 31, 20yy vs MSCI Emerging Markets Index



As of 7/31/20yy	Total Periods	Periods Outperformed	Percentage (%)	Average Ann. Excess Return (%)	Max (%)	Min (%)	Range (%)
70% Manager A/ 30% Manager D	73	52	71.2	3.4	17.0	-8.7	25.7
70% Manager B/ 30% Manager D	73	55	75.3	3.0	12.4	-4.6	17.0
70% Manager C/ 30% Manager D	73	55	75.3	2.2	11.2	-6.0	17.2
50% Manager C/ 50% Manager A	73	42	57.5	1.8	14.1	-6.9	21.0

[1] All net of fees returns assume the manager fee schedules stated herein. Manager A's track record includes the team's track record at Manager H, which runs from January 20yy to February 20yy. For the months of March 20yy – June 20yy, MSCI Emerging Markets-ND index returns are used. The Manager A track record begins in July 20yy. Manager D's performance includes the team's track record from Manager I, which runs from August 20yy to March 20yy. For the months of April and May 20yy, MSCI Emerging Markets-ND index returns are used. The track record at Manager D begins in June 20yy. Manager C performance prior to June 20yy is from the Manager E Emerging Markets strategy. Mr. J managed the Manager E Emerging Markets strategy from January 19yy to May 20yy.

- All four manager pairings outperformed the MSCI Emerging Markets Index in more than 57.5% of rolling one-year periods, although the results indicate that the pairings of Manager A and Manager D, and Manager C and Manager A, exhibit the widest dispersion relative to the index, in line with their high tracking error relative to the index. The range of excess returns for these combinations significantly exceeds the pairings of Manager B and Manager D, and Manager C and Manager D.

Rolling Three-Year Excess Returns[1]

Common Period as of July 31, 20yy vs MSCI Emerging Markets

As of 7/31/20yy	Total Periods	Periods Outperformed	Percentage (%)	Average Ann. Excess Return (%)	Max (%)	Min (%)	Range (%)
70% Manager A/ 30% Manager D	49	48	98.0	3.0	6.5	-0.6	7.1
70% Manager B/ 30% Manager D	49	47	95.9	2.7	5.8	-0.6	6.4
70% Manager C/ 30% Manager D	49	43	87.8	2.9	5.8	-2.2	8.1
50% Manager C/ 50% Manager A	49	41	83.7	2.0	5.2	-2.2	7.4

- On a rolling three-year basis, the consistency of excess returns improved relative to rolling one-year results. All four portfolios outperformed in at least 83.7% of rolling three-year periods. The range of excess returns is narrower over these longer rolling periods, but is still significant across the four manager pairings.

[1] All net of fees returns assume the manager fee schedules stated herein. Manager A's track record includes the team's track record at Manager H, which runs from January 20yy to February 20yy. For the months of March 20yy – June 20yy, MSCI Emerging Markets-ND index returns are used. The Manager A track record begins in July 20yy. Manager D's performance includes the team's track record from Manager I, which runs from August 20yy to March 20yy. For the months of April and May 20yy, MSCI Emerging Markets-ND index returns are used. The track record at Manager D begins in June 20yy. Manager C performance prior to June 20yy is from the Manager E Emerging Markets strategy. Mr. J managed the Manager E Emerging Markets strategy from January 19yy to May 20yy.

Management Fees

Management Fees

	Manager A	Manager B	Manager C	Manager D
Vehicle Name	Emerging Markets Equity	Emerging Markets Equity	Emerging Markets Equity	Emerging Markets Equity
Vehicle Type	Collective Investment Trust	Collective Investment Trust	Commingled Fund	Commingled Fund
Minimum Account Size	N/A	$1 million	$1 million	$5 million
Liquidity	Daily	Daily	Weekly	Monthly
Management Fee	1.05%	0.65% on all assets	0.65% on all assets	0.75% on all assets
Other Expenses	NA	NA	NA	0.12%
All-In Fee[1]	1.05%	0.65% on all assets	0.65% on all assets	0.87% on all assets

- Manager B's standard CIT fee is 1.00% on all assets, but the firm has offered Meketa clients a significantly discounted fee schedule. Manager C's standard commingled fund fee is 0.80% on all assets, but the firm has offered Meketa clients a discounted fee schedule as well.
- The median management fee for a sample $50 million commingled fund mandate in the eVestment Global Emerging Markets Equity peer group is 0.85%. Note that manager reported fees in the database often exclude operating expenses so the comparison is made based only on management fees whenever possible.
- Management fees for Manager B and Manager C rank in the top quartile of the peer group, while Manager D's management fee ranks in the second quartile. Manager A's all-in fee of 1.05% ranks in the fourth quartile of the peer group, but is inclusive of operating expenses, so the true ranking including expenses is likely to be more favorable. However, Manager A's fee is high relative to the other candidates.

[1] Assumes mandate size of $50 million.

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

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

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

Jensen's Alpha: The difference between a portfolio's actual return and its statistically derived expected return. Jensen's Alpha is a measure of a manager's ability to achieve returns above those that are purely a reward for bearing market risk (beta).

Tracking Error: This statistic measures the standard deviation of excess returns relative to a benchmark. Tracking error is calculated by multiplying the standard deviation of the monthly excess returns of a portfolio relative to a benchmark by the square root of twelve in order to annualize. The higher the tracking error, the greater the volatility of excess returns relative to a benchmark.

Sources: www.businessdictionary.com

Investment Terminology, International Foundation of Employee Benefit Plans, 1999.

Modern Investment Management, Litterman, Bob, 2003.

The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991.

Investment Manager Analysis, Travers, Frank J., 2004

Exhibit M

Fee Proposal

Fee Proposal

The initial term of the contract is expected to three years in duration with the option for two one-year extensions with contract terms to be established at the outset of the contract. The fee schedule below should represent expected compensation for the first five (5) years of the relationship with TCERA and should be guaranteed for that time period. Proposed fees should include travel, taxes and all expenses.

Proposer should submit an all inclusive annual fee for all services as follows:

All inclusive flat fee – year 1	$260,000
All inclusive flat fee – year 2	$267,500
All inclusive flat fee – year 3	$275,000
Sub Total (Years 1 – 3)	$802,500
All inclusive flat fee – year 4 (if extension is issued)	$282,500
All inclusive flat fee – year 5 (if extension is issued)	$290,000
Total Fees (Years 1-5)	$1,375,000
Special Project Fees if not included above (Manager Searches, Asset/Liability Study, etc.) per Project. Attach separate fee schedule if necessary.	Special Projects are priced at the time of the assignment. Please note that Manager Searches and Asset/Liability Studies are included the fee above.

Please note we would be happy to discuss our fees in more detail and refine based on additional information provided through the RFP process.

The final contract fee should represent the only compensation received by the consultant for services provided to TCERA. There should not be any other benefit, monetary or otherwise, that results from the relationship between the consultant and TCERA.

Exhibit N

Warranties Certification

Tulare County Employees' Retirement Association (TCERA)

WARRANTIES CERTIFICATION

Name of Proposer: Meketa Investment Group, Inc.

The proposer makes the following warranties and representations as a required element of the proposal. The truthfulness of the facts affirmed in the Warranties Certification and the continuing compliance with these requirements are conditions precedent to the award and continuation of contract resulting from this RFP. Any exceptions to the Warranties or the Certification must be described in detail on a separate page attached hereto. TCERA reserves the right to determine in its sole discretion if such exception is substantive and a basis for the reject on the proposal.

WARRANTIES: The Proposer and its key professionals warrant and represent that:

1. Proposer is willing and able to commit sufficient staffing, expertise, services, systems, and any other resources necessary to provide the requires services to TCERA as described in this RFP for the duration of the contract to be awarded as a result of this RFP Process.

2. Proposer is financially stable, has sufficient financial resources to provide services to TCERA, and will provide annual financial statements or Form ADVs to TCERA as proof of its financial condition.

3. Proposer's Fee Proposal submitted in response to this RFP has been arrived at independently, without consultation, communication, or agreement with any other Proposer or with any competitor for the purpose of restricting competition. Proposer has not and will not make any attempt to induce any other person or firm to submit or not to submit a response for the purpose of restricting completion.

4. Neither the Proposer nor any of its principals have, nor could they potentially have, a material conflict of interest in providing consulting services to TCERA. (TCERA's current trustees, staff, and service providers are listed in TCERA's CAFR available on the website www.tcera.org.)

5. Neither the Proposing organization nor any of its officers or employees is currently under investigation by any regulatory agency, state or federal, for any reason.

6. At its own expense, Proposer has or shall obtain insurance coverage that shall remain in full force and effect for the duration of the contract to be awarded as a result of this RFP. Proposer understands required insurance includes professional liability, commercial general liability, and business auto liability. If selected as TCERA's Investment Consultant, upon notice of selection, Proposer is able to and shall promptly furnish Certificate(s) of insurance as evidence of coverage to TCERA.

7. Proposer is able to demonstrate that it has the managerial, physical, and electronic safeguards to prevent unauthorized access to confidential or otherwise sensitive information. Any information concerning the business of TCERA that Proposer collects, acquires, or uses in connection with the services to TCERA shall be used solely for the purpose of providing services to TCERA.

8. Proposer accepts the terms and conditions contained within the RFP and agrees to be bound by the information and representations contained in the proposal submitted by Proposer.

9. The Proposer's proposal is made without collusion or fraud and the Proposer has not offered or received any financial or other inducements from any other proposer, supplier, manufacturer or subcontractor in connection with the proposal, and the Proposer has not conferred on any public employee having official responsibility for this RFP any payment, loan, subscription, advance, deposit of money, services or anything of value, in exchange for procuring the contract to be awarded as a result of this RFP.

PROPOSER'S CERTIFICATION

By affixing my signature below, I declare and certify that all the foregoing warranties and representations made by the Proposer are true and correct and may be relied upon by TCERA:

__X__ without exception. _____ with the exceptions noted in the attached page. (Check one)

Lisa M. Rubin
Signature

Meketa Investment Group, Inc.
Firm

Director of Marketing
Title

January 22, 2021
Date

Exhibit O

Statement of Minimum Qualifications

MANDATORY REQUIREMENTS CERTIFICATION

Name of Proposer: Meketa Investment Group, Inc.

The undersigned Proposer hereby represents and warrants to TCERA that the Proposer meets the Mandatory Requirements described in this RFP as restated below and will provide sufficient information in the response to this RFP to assure TCERA that the Proposer meets these requirements:

1. The investment consulting firm must be a registered advisor under the Investment Company Act of 1940.

2. The investment consulting firm must have provided investment consulting services comparable to the duties contained in this RFP to at least three (3) defined benefit public retirement systems, each of which must have had at least $1 billion in current assets for at least (5) continuous years.

3. The investment consulting firm must be able to maintain a satisfactory data processing interface with TCERA's custodian bank, on-line connection or other electronic means, at the firm's expense, for the purpose of compiling all required reviews and reports. TCERA's current custodian bank is BNY Mellon.

4. The investment consulting firm must agree to disclose all potential, current conflicts of interest as well as potential conflicts as they might occur, and annually disclose all sources of revenue from sources and affiliations other than investment consulting.

5. The investment consulting firm must agree to disclose pending litigation against the firm at the time a suit is filed. The investment consulting firm will confirm annually whether any such litigation exists.

6. The individual assigned to TCERA as the primary consultant must have a minimum of ten (10) total years of experience in the public/private defined benefit pension fund area.

7. The investment consulting firm must be directly responsible for the management of the account, and all personnel responsible for working on the account must be employees of the firm.

8. The investment consulting firm must not have, nor potentially have, a materials conflict of interest to include, but not limited to: TCERA's Board, staff, actuary, auditor, investment managers, or other consultants.

9. The investment consulting firm must carry Errors and Omissions coverage and other insurance as discussed in Section V. Insurance Requirements.

The Proposer confirms that the Proposer will serve in a fiduciary capacity and hereby confirms its fiduciary status with TCERA if the contract is awarded.

Failure to sign and return this statement may disqualify the proposal from further consideration.

Lisa M. Rubin

Signature

January 22, 2021

Date

Lisa M. Rubin

Printed Name

Director of Marketing

Title

Exhibit P

Contract Exceptions

MEKETA
INVESTMENT GROUP

80 University Ave
Westwood, MA 02090

781.471.3500
Meketa.com

MEMORANDUM

TO: Tulare County Employee's Retirement Association ("TCERA")
FROM: Meketa Investment Group, Inc.
DATE: January 19, 2021
RE: General Agreement Terms and Conditions ("Terms")

Our internal counsel has reviewed and considered the Terms. Below please find our comments.

Section 1: Please remove or revise this section. This section is applicable to a time and materials-based arrangement and not a retainer-based arrangement for professional services.

Section 2: Please remove this section. This section is not market.

Section 9: Please revise this section. This section is applicable to a time and materials-based arrangement and not a retainer-based arrangement for professional services. For example, records related to "costs incurred" or "payments to employees" are not appliable. Also, please revise the last sentence to provide that any records will be made available upon reasonble advance notice and during Contractor's normal business hours.

Section 11: Please specify the insurance requirements. Our firm reserves the right to make further comment depending on the nature of such requirements. Also, the first sentence of this section requires grammatical revision.

Section 12: Please replace the text of this section with the following: "The Contractor will indemnify TCERA and its affiliates and their partners, officers, directors and employees for any loss or liability (including reasonable attorneys' fees) arising from any third-party claim ("Loss"), but only to the extent it is determined that such Loss was due to the Contractor's gross negligence or willful misconduct in its provision of the services."

Section 13(a): Please modify this section to provide that Contractor may terminate the Agreement upon ninety (90) days' notice. Please also remove the last sentence of this section. It is not applicable to the contemplated services.

Section 13(b)(5): Please revise this section to read as follows: "Breach a material provision of this Agreement."

Section 13(b)(7): Please subject to TCERA's discretion to "reasonableness" and "good faith".

Section 13(b) (fifth paragraph): Other than the second sentence of this section, please remove this paragraph. It is not applicable to the contemplated services and much of this section duplicates language already present in Section 13(a).

Section 13(c): Please remove the words "to be subject to offset" and make the last sentence mutual.

Section 13(d): Please remove this section. It is not market.

Section 14: Please provide that the Contractor may also immediately terminate the Agreement should funding be reduced or discontinued.

Section 17: Please revise this section to only cover materials delivered to TCERA pursuant to the services.

Section 18: Please remove this section. It is not applicable to the contemplated services.

Section 19: Please revise this section so that it only applies to those services where a time for performance is specified.

Section 20: Please remove the last two sentences of this section.

Section 23: Please remove this section. It is not applicable to the contemplated services.

* * * * *

Appendix A

Diversity and Inclusion Action Plan

MEKETA
INVESTMENT GROUP

100 Lowder Brook Drive
Suite 1100
Westwood, MA 02090

781.471.3500
Meketa.com

MEMORANDUM

FROM: Meketa Investment Group
DATE: June 9, 2020
RE: Diversity and Inclusion Action Plan

Meketa Investment Group is proud of its progress in recent years elevating its corporate values of diversity and inclusion, and we thank all employees who have made this possible. We believe these initiatives improve our business and lead to better investment results for our clients. Therefore, Meketa will be taking additional concrete actions to further advance these values in its business, its industry, and its communities. While we are a small firm, we believe the steps of every organization, and every person, are important. Further, we believe our reputation as a leader in our industry gives us the ability (and the responsibility) to have a beneficial impact.

These additional steps will include:

- Further increasing the priority of our efforts to hire, retain, and grow the careers of diverse employees by:
  - Improving our existing recruiting efforts at historically black colleges and diverse and women based organizations,
  - Enhancing our existing internship program that focuses on bringing female and diverse students into our business, and
  - Developing a formal mentorship program that emphasizes diversity and inclusion
- Reviewing for diversity and inclusion the composition of our corporate and investment committees
- Expanding training to include Unconscious Bias and Diversity and Inclusion training for all employees annually
- Providing employees a library of selected books/podcasts on the history of race relations in the US
  - Management will be strongly encouraging all employees to be familiar with this literature
- Initiating a Diversity Leadership Committee, composed of leaders at Meketa, to meet with diverse financial industry leaders to identify best practices, and to advocate for those diversity and inclusion best practices at Meketa
- Continuing our dedicated effort to identify and evaluate talented diverse and emerging managers in every asset class in order to bring the strongest investment opportunities to our clients

- Continuing to support important industry organizations such as Toigo, NASP, AAAIM, PEWIN, WIIN, WIP, and PWIM, and expand our support to others that facilitate the advancement of diversity and inclusion goals
- Sponsoring a matching donation program to the NAACP Legal Defense Fund
- Requiring that all vendors and business partners of Meketa share our values of diversity and inclusion

Importantly, while we feel that these initial steps above will further advance Meketa's goals of diversity and inclusion, we acknowledge that there is still much work to be done and will continue to develop and enhance our initiatives in the pursuit of a more equitable future.

Appendix B

2019 Corporate Responsibility Report

MEKETA

2019 CORPORATE RESPONSIBILITY REPORT

Table of Contents

Introduction

Meketa Investment Group is pleased to present the 2019 Corporate Responsibility Report. The purpose of this report is to provide an overview of the firm and our commitment to diversity, the work experience of our employees, Meketa's role in the community, and how we can assist our clients as they approach Environmental, Social, and Governance issues at their institutions and within their portfolios.

Mission Statement

Meketa Investment Group's mission is to provide the highest quality investment advisory services to clients globally. We aim to utilize, and continuously hone, the best practices that we have developed over our 40 year history. We seek to be thought leaders by evaluating investment industry information with healthy skepticism and performing value added original research. We pledge to establish lasting relationships with our clients by exceeding their expectations and gaining their trust through exceptional performance, communication, and service.

John Haggerty,
Chair

Sarah
Bernstein

Gustavo
Bikkesbakker

Nancy
LaBier

Mika
Malone

Mary
Mustard

Colleen
Smiley

Background

Meketa Investment Group was incorporated under Massachusetts law in 1978, and the firm became registered with the Securities and Exchange Commission as an investment adviser in 1979.

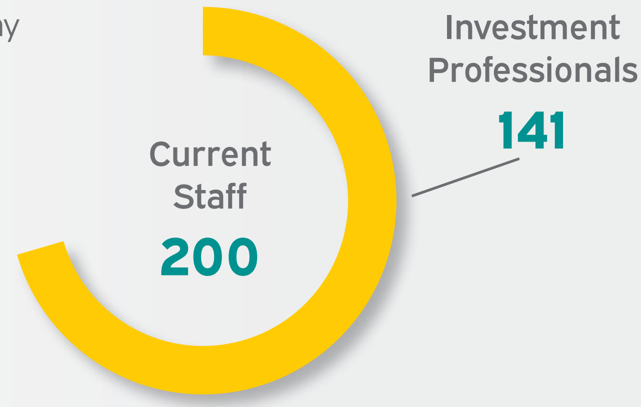
We have been in business continuously for over 40 years. The firm was hired by its first fund client in 1978, a relationship that continues to this day.

Meketa Investment Group is a corporation independently owned by senior professionals who are all active in the firm. Over the past 17 years, the firm has expanded ownership to senior employees, bringing the total number of shareholders to 55 as of December 31, 2019.

Management Structure

Meketa Investment Group has a management structure that includes an Executive Committee, which directs general business operations and strategy, and senior managers who manage day to day operations:

- **Chief Operating Officer**
- **Director of Human Resources**
- **Director of Finance**
- **Chief Legal Counsel**
- **Director of Marketing & Communications**
- **Director of Technology**

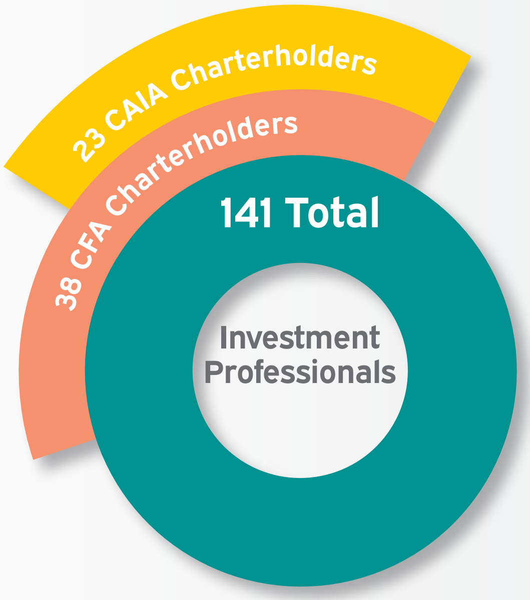


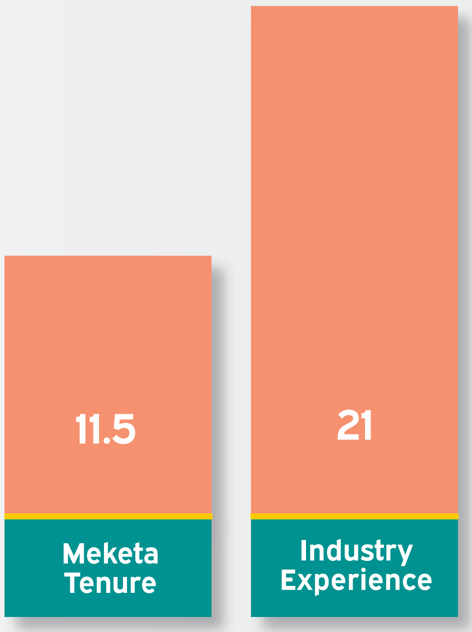
Corporate Culture

Meketa Investment Group provides an academically focused, team oriented work environment, which has contributed positively to our ability to retain employees over time. We strive to provide a challenging, stimulating culture for the best and brightest in the industry. We believe our employees can best serve our clients in an atmosphere where individuals are treated fairly, where professional growth is fostered and encouraged, and where a healthy balance between work and home life is respected and preserved. Therefore, we promote a friendly and collaborative work environment as well as offer our employees flexible work schedules. Our culture has allowed the firm to retain top talent and provide stability for our clients over the years.

At Meketa Investment Group, we strive for excellence and rigor in our recruitment of investment professionals. It is our practice to recruit, hire, train, and promote only the most qualified candidates. Historically, this has led to a bias towards promoting investment professionals from within, yet we continually seek top talent within the industry.

Our investment professionals are encouraged and supported in their pursuit of individual training opportunities aimed at enhancing knowledge in their particular area of focus. Such opportunities include industry conferences, in house research and presentations, graduate level academic work, and vendor-hosted application training. Meketa Investment Group also supports employee participation in seminars and programs sponsored by the CFA Institute and the CAIA Association®.

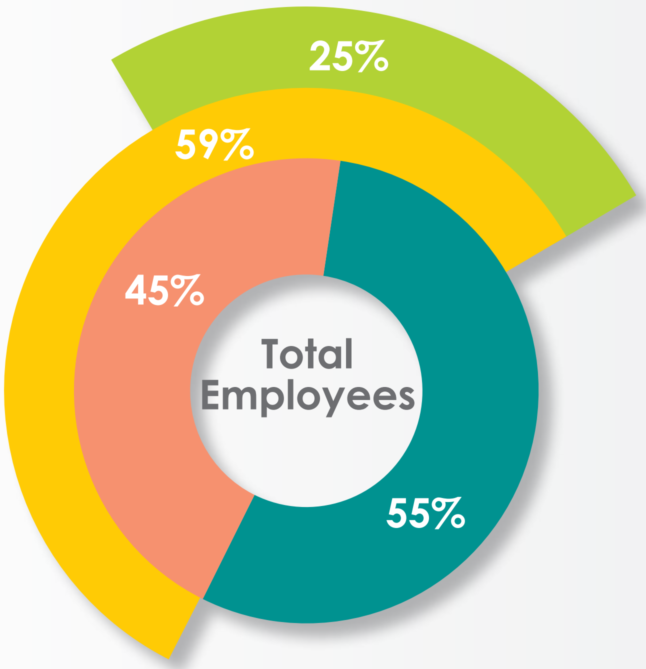


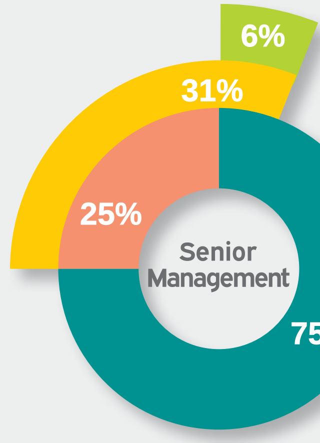


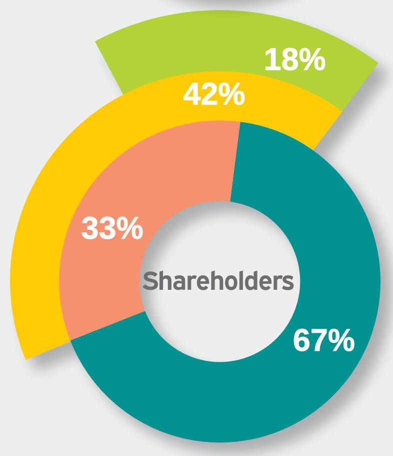
Average Consultants' Years of Experience

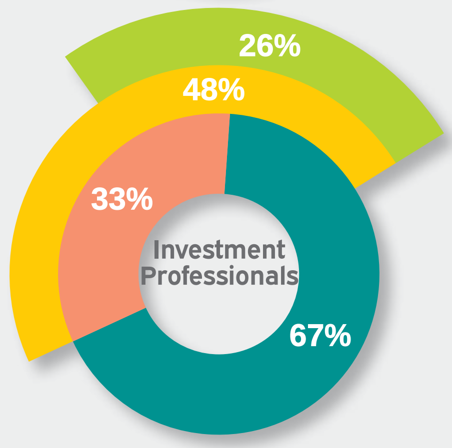
Diversity at Meketa Investment Group

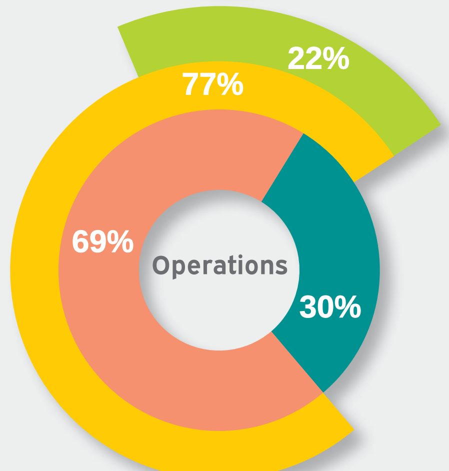
Research has confirmed that diversity of thought results in better organizational decision-making, and Meketa Investment Group continues to enhance our firm's focus on diversity. As of December 31, 2019, Meketa Investment Group was 100% independently owned by 55 senior professionals who have direct equity ownership. 26 of our 55 owners, or 47%, are women or minorities. Further, of the 26 professionals who have become shareholders in the last two years (2018 -2019), 12 of the new owners, or 46%, were women or minorities. Today, Meketa Investment Group is a large, diverse, global institutional investment consulting firm, and more than half of our 200 total employees are women or minorities. Over the last three years, over 50% of the firm's new hires were women or minorities. This represents a growth rate of approximately 20% for the firm as it relates to the overall representation of women or minorities, over the past three years. Additionally, 26% of our employees are multi-lingual, speaking 21 different languages or dialects. We are proud of our success over this time period, and we remain committed to further enhancing our firm's diversity initiatives in the future.











Meketa Investment Group is an equal opportunity employer and affirmatively seeks diversity in the workforce. Meketa Investment Group recruits qualified applicants and advances its employees without regard to race, religious creed, color, national origin, ancestry, sex, physical or mental disability, age, marital status, veteran status, sexual orientation, or any other category protected by law.

Male   **Female or Minority**
Female   **Minority**

Diversity within Investment Manager Selection

Meketa Investment Group is committed to promoting diversity in the investment community. In an effort to continue to expand the diversity of our clients' investment managers, Meketa Investment Group has established an Emerging and Diverse Manager Committee. This Committee is made up of senior professionals at the firm who meet frequently throughout the course of the year to collaborate on strong emerging and diverse investment opportunities, discuss client initiatives in this space, and determine how to accomplish client goals at a high level with respect to hiring emerging and diverse managers. We strategically plan our semi-annual conference events and opportunities to meet new managers to help expand our database. We also identify and collaborate on industry trends occurring in both the public and private funds we have as clients throughout the country.

Over the past five years, in an effort to expand our knowledge of emerging and diverse managers, we have conducted over 400 meetings with such managers. Since the autumn of 2017, we have hosted six different Emerging and Diverse Manager Research Days in our different offices across the US. in an effort to broaden our exposure to small and diverse firms.

Meketa casts a wide net and considers every investment manager for a search. Absent any state or fund regulation that mandates a specific ownership firm status, we develop search criteria and screens to determine the best manager for a specific investment mandate. We strive to include minority- and women-owned managers in these searches, and never discriminate based on ownership status. Our databases include hundreds of diverse and emerging managers including women, minority, and disabled veteran owned firms. Overall, we have specific criteria that we use to identify the best manager candidates for our clients. Among the criteria we use are performance, fees, experience, organizational stability, and trading costs. Should a client have a particular need to conduct a search for a minority- and/or women-owned investment manager, we can customize a select universe to satisfy that particular search, and then work with client to identify the best available manager from a narrowed down list of finalist candidates.

We are excited to share the impact that our employees made in 2019!

Volunteerism

All of Meketa Investment Group's employees are eligible for eight hours of paid volunteer time for opportunities offered by the firm or a pre-approved non-profit entity.

41,518
Dollars Donated

76
Backpacks Donated

26
Participants
2 Days, Habitat for Humanity

60
% Participation

630
Hours Spent
(Volunteer)

Some of the charities that we support through financial and in-kind donations, holiday gifts, and/or attendance at their charity events are:

Backpack Drive

Each year, Meketa Investment Group purchases, and fills with school supplies, backpacks that are given to charitable organizations so that children have what they need to start their school year. We are pleased to report that in 2019 Meketa donated 76 backpacks to students in elementary, middle, and high school.

Veterans Affairs of San Diego/Boston

The mission of Veterans Affairs is to provide professional services for military veterans and their dependents and survivors who are entitled to benefits.

Key Program

The mission of Key Program is to assist troubled youth and their families with developing positive life skills and life experiences so that they may pursue productive and rewarding lives.

Rosie's Place

The mission of Rosie's Place is to provide a safe and nurturing environment that helps poor and homeless women maintain their dignity, seek opportunity, and find security in their lives.

SAY San Diego - Social Advocates for Youth

The mission of SAY San Diego is to partner with children, families, and communities to overcome barriers and create opportunities that enable them to realize and sustain their full potential.

STARR House

Guided by compassion and respect, the STARR House mission is responding to the needs and diversity of the individuals we served, and providing comprehensive services that are individualized, accessible, educational, and strengths-based.

Participation

Meketa actively participates and volunteers with non-profit organizations across the country.

Cycle for Survival

Cycle for Survival's events raise funds that are critical for rare cancer research. 100% of donations to Cycle for Survival are directly allocated to research at Memorial Sloan Kettering Cancer Center, and go to pioneering research and clinical trials, and have already led to new and better treatments for cancer patients worldwide.

Feeding San Diego

Feeding San Diego, a community-driven organization, believes that everyone is entitled to the basic necessity of life — nutritious food. Our nutrition services improve the lives of women, men, and children vulnerable to hunger due to HIV, cancer, or other critical illnesses.

Rady Childrens Hospital

Rady Children's Hospital-San Diego is a nonprofit, 524-bed pediatric-care facility dedicated to excellence in care, research and teaching. They host a St. Patricks Day 10k run or 2-4 mile run/ walk annually around Mission Bay to raise funds that benefit their San Diego location. The Children's Hospital has been providing comprehensive pediatric specialties to patients aged 0-21 years of age since 1954, helping children and families nation-wide.

Parenting with Intent

In December the Portland office raised over $2,500 ($500 donated by Meketa) to purchase gifts for 3 teenagers and 1 family of 6 through the non-profit organization Parenting With Intent (PWI). PWI serves individuals, families and youth who are in need of mental health services, mentorship, parenting education, counseling and support services. PWI clients are faced with many challenges such as poverty, homelessness, addiction, domestic violence, as well as both cognitive and behavioral health challenges. For the holiday season PWI collects wish lists from their clients, and distributed them to volunteering people and organizations in the community who donate the items requested. The Portland office was able to provide personal care items, toys, art supplies, clothing, bikes and helmets, and home electronics and appliances. Marketing Assistant, **Hannah Smargiassi** added that, "My favorite moment was when our office pulled together in less than 1 hour to donate enough money to get bikes, bike locks, and helmets for all of the kids who asked for one, which was 4 bikes, as well as skateboards and bikes for 2 of the kids. We also wrapped all of the gifts before delivering them to PWI. The teens and the family were so excited and grateful for their presents."

Solutions for Change

Solutions for Change is a San Diego-based non-profit organization that transforms lives and communities by permanently solving family homelessness. Their approach is unique, providing a complete and sustainable solution driven by accountability. They have helped over 850 families to date. **Jaclyn Schuppener** noted that, "Volunteering for Solutions for Change was a great experience! It was really eye-opening to meet some of the women the program helps and supports and to hear a little about how the program helps them reunite with their children. The aquaponic farm was pretty interesting too."

Raising Money on Foot

HOOD to COAST

Organized by Consultant, **Mika Malone**, 2 teams from 3 different Meketa offices "Keep Meketa Weird" and "Keep Meketa Weirder" raised a total of $11,157 for the American Cancer Society. Teams consisted of ten Meketa runners , one client, and two family members. It was a cold, wet, and dark (5:30 am) start for the 62 mile journey from Hood River up Mount Hood and back down again. The team saw bears, a little snow, sleet, HEAVY rain, double rainbows, and at least one of us took a detour and ran an extra 2.5 miles in the name of Cancer Research!

Corporate Wellness Events

For 11 years, we have provided in-house CPR training and, to date, have trained and certified over 35 employees. In addition, our Summer Lecture Series has included well-received topics such as Managing Stress, Mindfulness, Positivity, and Multitasking. We have brought cycling and yoga on-site as a fun activity for employees.

YOGA

CYCLING

WELLNESS

CPR

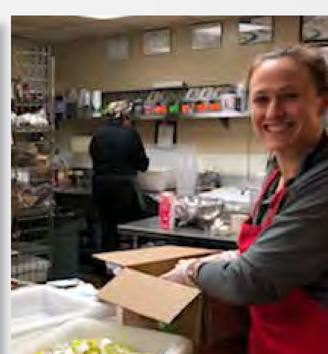
Rosie's Place

Rosie's Place, a sanctuary for poor and homeless women, offers emergency and long-term assistance to women who have nowhere else to turn. Founded in 1974, Rosie's Place welcomes each guest with respect and unconditional love. Rosie's Place accepts no government funds and relies instead on committed volunteers and private supporters to accomplish its effective and innovative work.

In the past, Meketa Investment Group has supported Rosie's Place in a number of different ways. We have donated gift bags in honor of Mother's Day, stockings at the holidays, gently used clothing, backpacks, and annually, we sponsor a table at "Funny Women, Serious Business," their luncheon and primary fundraiser. A group of women investment professionals has attended and listened to interesting keynote addresses as well as inspiring stories of the women.

Earlier this year, 15 volunteers from the Westwood office spent a day at Rosie's Place catering a lunch for up to 150 guests. We prepared all the food – chopping, mixing, and cooking a balanced meal with soup, burgers, veggies, and fruit. After serving the soup and bread, we then plated the main meal and acted as wait staff serving the guests at their tables. The kitchen was run by two individuals who kept all volunteers busy while serving the guests (running the kitchen more efficiently than some restaurants I have worked in!). After lunch, the volunteers cleaned up the kitchen and dining room.

While Meketa has been supporting Rosie's Place for many years, it was an amazing experience to finally volunteer our time and be there and interact with the women. Serving the guests gave us the chance to feel good about giving them a quality meal and one-on-one service that for some, is the only meal they have in a day. Every one of the volunteers left there saying they would do it again, and it was well worth the tears (from the onions!) and burns (from the soup!).



Habitat for Humanity

In the summer of 2019, 22 individuals from Meketa's Boston and Carlsbad offices took part in Habitat for Humanity build days.

In **San Diego**, a team of 11 spent the day in El Cajon, a neighborhood located east of Downtown. Habitat for Humanity's project was to build 4 affordable homes in El Cajon for families meeting the purchase requirements. Qualified purchasers must meet certain family income thresholds and commit to at least 500 hours of work on the house in order to subsidize the cost of the home. Several of the new homeowners are single parents and veterans of the armed forces seeking to provide a better life for their children. The community features drought-tolerant landscaping, use of sustainable building materials, low-flow plumbing fixtures, and energy-efficient appliances.

"It was a long day and hard work, and totally worth it!"

Over the course of a very warm summer day in San Diego, Meketa's employees helped paint indoors and out, install base boards, haul materials, build cabinets, and other assorted tasks.

Jaclyn Schuppener, Client Services, said that she "had a great day volunteering for Habitat for Humanity! I mostly helped mask off trim and doors so they could be painted. It was a long day and hard work – and totally worth it! Since I work at a desk all day, it was nice to get outside and work with my hands helping other people. I hope I can volunteer for it again in 2020! "

Investment Analyst **Jonas Noack** noted that, "During the build day I helped paint shutters, and put a coat of primer on various fences in the backyard. It was a rewarding feeling knowing that I was volunteering my time to help benefit a family, and ultimately help put the final touches on their forever home. Also, it was a good feeling to be on a "team", both with fellow Meketa employees and members from the Habitat for Humanity crew, and work together, in a fun environment, to help a family in need."

"It was a rewarding feeling knowing that I was volunteering my time to help benefit a family, and ultimately help put the final touches on their forever home."

In **Boston**, a team of 10 employees spent the day in Dorchester, revisiting the same site as was worked on in 2017 and 2018! The team joined volunteers from Harvard Business School at Balina Place, working together to complete a variety of tasks to further along the progress at Balina. Volunteers worked on interior and exterior cleaning, painting, adding screens to windows, and building door and window frames for the project starting next door.

Human Resources Manager **Marybeth Van Winter** spent her day painting and spackling. "Two employees and I volunteered to go up on the scaffolding surrounding the roof line of the 3 family home we were working on. We spackled the gaps in the wood and over the nail holes. After lunch, we finished up that project and then worked on painting the windows on the other floors and general clean up. I enjoy volunteering with Habitat for Humanity because it's important to me to be able to give back to the community. Habitat's mission to 'build strength, stability and self-reliance through shelter' resonates with me. I feel that the only way to continue to improve our society is to help those in need."

Director of Technology **Brad Walker** summed up his day: "I always enjoy participating in Habitat build days. I get the opportunity to work closely with employees around the office that I don't normally get to interact with. The tasks that me and my group are assigned are often something that we have no experience with so we are able to learn new skills as well as guide and encourage each other.

It is amazing to me how a group of us having little applicable skills and training are able to contribute to building someone's home in a meaningful way. What we bring to the build is enthusiasm and a desire to increase a family's quality of life. That ambition, along with guidance from other volunteers, is more than enough to get the job done."

Environmental Performance and Sustainability

As an organization whose primary purpose is to provide investment advice, our environmental footprint is fairly low. However, where possible, we have increased our efforts to reduce our environmental exposure. We encourage clients to switch to electronic presentations in order to cut down on the use of paper. To offset the negative environmental effects of printing, we recycled approximately 100,000 pounds of paper in 2019.

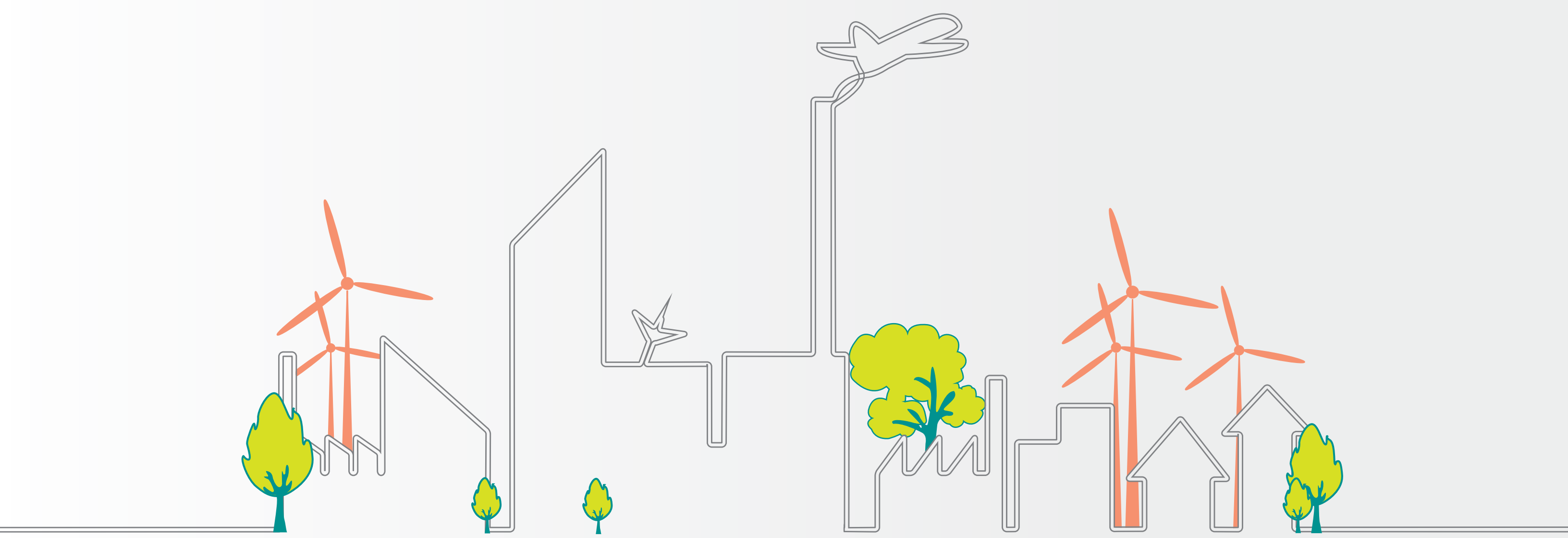
ESG Investing at Meketa Investment Group

Meketa Investment Group's commitment to sustainability extends to the services we offer to clients. The firm's ESG Investing Committee meets monthly to discuss current issues affecting clients and to address new opportunities in both public and private markets.

Meketa Investment Group recognizes that many investors value environmental, social and corporate governance minded (ESG) investing criteria. We see it as our duty to understand the external issues that may impact our clients' investment programs. To ensure efficient and effective implementation of a responsible investment program, we work with clients to evaluate costs, formalize manager guidelines, and monitor compliance. We seek to balance environmental and social objectives with financial and fiduciary requirements through investments in public and private market structures. We consider environmental and social matters to be a core component of investment due diligence and performance, rather than a separate set of considerations, and have assisted clients in the pursuit of these objectives.

United Nations Principles for Responsible Investment

Meketa Investment Group is a signatory of the United Nations backed Principles for Responsible Investment (PRI) initiative. We have joined with a network of international investors working together to put the six Principles of Responsible Investment into practice. The Principles were devised by the investment community. They reflect the view that environmental, social, and corporate governances (ESG) issues can affect the performance of investment portfolios and therefore must be given appropriate consideration by investors if they are to fulfill their fiduciary (or equivalent) duty. The Principles provide a voluntary framework by which all investors can incorporate ESG issues into their decision making and ownership practices and so better align their objectives with those of the society at large.



About Us

About the Corporate Responsibility Committee

The Corporate Responsibility Committee is comprised of senior leadership spanning the breadth of our organization across a variety of departments. We meet on a quarterly basis to discuss on-going initiatives in the areas of ESG as they relate to our external investment practice and our internal corporate social responsibility activities.

Call for Causes!

We're always looking for opportunities to give back to our local communities. If you know of a non-profit that could use some helping hands, we have willing and able bodies who are excited to be able to contribute their expertise or skills to a variety of projects.

Office Locations

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