

Notice of Public Meeting

The Board of Retirement

of the San Mateo County Employees' Retirement Association will meet on

Tuesday, July 27, 2021, at 10:00 A.M.

In accordance with the Governor's Executive Order N-29-20 (3) and Executive Order N-08-21 (42) the Members of the Board will be participating via Zoom video conference and teleconference. Pursuant to Government Code §54954.3, members of the public, to the extent required by law, will have the opportunity to directly address the Board concerning matters within the jurisdiction of the Board. The public can participate and provide comment using the instructions below:

To Join the Meeting

- To join the meeting via video conference, click here: https://zoom.us/j/94049235790
- To join the meeting via telephone, dial: (669) 900-9128, and enter Meeting ID: 940 4923 5790

Public Comment During the Meeting

Persons wishing to address the Board should follow the steps below:

- If joining via video conference, please use the "raise your hand" feature in Zoom during the Oral Communications from the Public period.
- If joining via teleconference dial in, please dial *9 to "raise your hand" during the Oral Communications from the Public period.

You will be called on at the appropriate time. At the beginning of your comment, please state your name.

Public Comment Prior to the Meeting

Persons who wish to address the Board may submit written comments via email to samcera@samcera.org at least 30 minutes before the start of the Board meeting. Please include your name, agenda item, and your comment. The Board will have the email read into the record and attached to the minutes.

For help joining a Zoom meeting, see: https://support.zoom.us/hc/enus/articles/201362193

PUBLIC SESSION – The Board will meet in Public Session at 10:00 a.m.

1. Call to Order, Roll Call and Miscellaneous Business

- 1.1 Administration of the Oath of Office
- 1.2 Election of Board Officers
- 1.3 Announcement of Appointment of Board Committees

2. Oral Communications

- 2.1 Oral Communications from the Board
- 2.2 Oral Communications from the Public

3. Approval of the Minutes

3.1 Approval of Board Meeting Minutes from May 25, 2021

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4. Approval of the Consent Agenda*

- 4.1 Disability Retirements (1)
 - Esmirna Atijera
- 4.2 Survivor Death Benefits
- 4.3 Service Retirements
- 4.4 Continuances
- 4.5 Deferred Retirements
- 4.6 Member Account Refunds
- 4.7 Member Account Rollovers

- 4.8 Member Account Redeposits
- 4.9 Acceptance of Trustees' Reports of Educational Activities
- 4.10 Report on Gov Code Section 7514.7 Annual Disclosure for 2020
- 4.11 Acceptance of Semi-Annual Compliance Certification Statements for Period Ended June 30, 2021
- 4.12 Approval of Questions for Annual Review of Milliman, Inc.
- 4.13 Reaffirmation of Code of Conduct

5. Benefit & Actuarial Services

5.1 Consideration of Agenda Items, if any, Removed from the Consent Agenda

6. Investment Services

- 6.1 Report on Preliminary Monthly Portfolio Performance Report for the Period Ended June 30, 2021
- 6.2 Presentation of Private Asset Semi-Annual Performance Reports as of December 31, 2020
- 6.3 Report on Core Equity and Low Volatility Equity Manager Annual Reviews
- 6.4 Report on International Equity Manager Annual Reviews
- 6.5 Report on Fixed Income Manager Annual Reviews
- 6.6 Approval of Proposed Alternative Investment (to be heard in closed session, Confidential Under Gov. Code §54956.81 and §6254.26, see item C2)

7. Board & Management Support

8. Management Reports

- 8.1 Chief Executive Officer's Report
- 8.2 Assistant Executive Officer's Report
- 8.3 Chief Investment Officer's Report
- 8.4 Chief Legal Counsel's Report

CLOSED SESSION – The Board may meet in closed session prior to adjournment

- C1 Consideration of Disability Items, if any, removed from the Consent Agenda
- C2 Approval of Proposed Alternative Investment (to be heard in Closed Session, Confidential Under Gov. Code § 54956.81 and §6254.26, see item 6.6)

9. Report on Actions Taken in Closed Session

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10. Adjournment in Memory of the Following Deceased Members:

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Franklin-Shakoor, Ernestine	April 17, 2021	Hospital
Harrington, Hertha	May 17, 2021	Probation
Arthur, Richard	May 22, 2021	Human Services Agency
Coppock, Charles	May 22, 2021	Courts
Catalano, Teresa	May 23, 2021	Human Services Agency
Avery, Bernice	May 31, 2021	Chope Hospital
Ndegwa, Tom	May 31, 2021	Environmental Health
Lewis, Jeffrey	June 10, 2021	Aging & Adult Services
Cook, Randall	June 11, 2021	Medical Center
Minudri, Regina	June 18, 2021	Library
Hollomon, Carl	June 21, 2021	Child Support Services
Hatfield, Mary	June 26, 2021	Nursing
Littlewood, Charlotte	June 26, 2021	Probation
Fischer, Brian	June 27, 2021	Probation
Caulkins, Margaret	June 28, 2021	Public Health
Gatto, Catherine	July 3, 2021	Hospital
Greenberg, Gloria	July 7, 2021	Mental Health
Pitlock, Gregory	July 12, 2021	Sheriff's

Scott Hood, Chief Executive Officer

(* ALL ITEMS ON THE CONSENT AGENDA ARE APPROVED BY ONE ROLL CALL MOTION UNLESS A REQUEST IS MADE BY A BOARD MEMBER THAT AN ITEM BE WITHDRAWN OR TRANSFERRED TO THE REGULAR AGENDA. ANY ITEM ON THE REGULAR AGENDA MAY BE TRANSFERRED TO THE CONSENT AGENDA. ANY 4.1 ITEMS REMOVED FROM THE CONSENT AGENDA WILL BE TAKEN UP UNDER CLOSED SESSION; ALL OTHER ITEMS REMOVED FROM THE CONSENT AGENDA WILL BE TAKEN UP UNDER ITEM 5.1.)

The Board Normally Meets at 100 Marine Parkway, Suite 160, which is located on the SE Corner of Twin Dolphin & Marine Parkway in Redwood City. Detailed directions are available on the "Contact Us" page of the website www.samcera.org. Free Parking is available in all lots in the vicinity of the building. A copy of the Board of Retirement's open session agenda packet is available for review at the SamCERA offices and on our website unless the writings are privileged or otherwise exempt from disclosure under the provisions of the California Public Records Act. Office hours are Monday through Thursday 7 a.m.—6 p.m.

In COMPLIANCE WITH THE CALIFORNIA GOVERNMENT CODE AND THE AMERICANS WITH DISABILITIES ACT: SamCERA's facilities and board and committee meetings are accessible to individuals with disabilities. Contact SamCERA at (650) 599-1234 at least three business days prior to the meeting if (1) you need special assistance or a disability-related modification or accommodation, including auxiliary aids or services, in order to participate in this meeting; or (2) you have a disability and wish to receive the agenda, meeting notice, agenda packet or other writings that may be distributed at the meeting in an alternative format. Notification in advance of the meeting will enable SamCERA to make reasonable arrangements to ensure full accessibility to this meeting and the materials related to it.

Posted: July 21, 2021

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

July 27, 2021 Agenda Item 1.1

TO: Board of Retirement

FROM: Scott Hood, Chief Executive Officer

SUBJECT: Administration of the Oath of Office to Newly Elected Trustees

In this agenda item, the Trustee Oath of Office will be given to **Robert Raw**, **Katherine O'Malley** and **Susan Lee**, reelected to the Board.

Enclosure

Elections Officer Certification

CERTIFICATE OF CHIEF ELECTIONS OFFICER

State of California

SS.

County of San Mateo

I, MARK CHURCH, Chief Elections Officer of the County of San Mateo,
State of California, do hereby certify that:

WHEREAS, the number of nominees for the Office of Second General Member, Governing Board do not exceed the number of offices required by law to be filled at the San Mateo County Employees' Retirement Association Election within the SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION, to be held on June 14, 2021.

NOW, THEREFORE, pursuant to the Regulations of the Board of Retirement Article 4 §4.8, the following qualified persons as listed below, are required to be each appointed to one (1) seat for a three (3) year term:

Second General Member:

Katherine O'Malley

Mary Church

IN WITNESS WHEREOF, I hereunto affix my hand and seal this 11th day of May 2021, and file this date with the San Mateo County Employees' Retirement Association.

MARK CHURCH

Chief Elections Officer & Assessor-County Clerk-Recorder

CERTIFICATE OF THE CHIEF ELECTIONS OFFICER

In the matter of the CANVASS OF VOTES CAST)
at the SAN MATEO COUNTY BOARD OF)
RETIREMENT REGULAR ELECTION held on June 14, 2021)

I, MARK CHURCH, Chief Elections Officer of the County of San Mateo, State of California hereby certify:

THAT a regular election was held on Monday, June 14, 2021 for the purpose of electing one (1) SAFETY MEMBER to the SEVENTH position on the SAN MATEO COUNTY BOARD OF RETIREMENT; and I caused to have processed and recorded the votes from the canvass of all ballots cast at said election.

I HEREBY FURTHER CERTIFY that the record of votes cast at said election are set forth in Exhibit "A" attached hereto and incorporated herein by reference as though fully set forth at length.

NOW, THEREFORE, pursuant to Regulation 4.17, the following qualified persons are declared the winners and are required to be seated on the Board of Retirement as the Seventh Members:

Robert Raw, Seventh Member
Susan Lee, Alternate Seventh Member

IN WITNESS WHEREOF, I hereunto affix my hand and seal this 18th day of June, 2021, and file this date with the Chief Executive Officer of the SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION.

Mark Church

Chief Elections Officer & Assessor-County Clerk-Recorder

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

July 27, 2021 Agenda Item 1.2

TO: Board of Retirement

FROM: Ad Hoc Nominating Committee – Kurt Hoefer (Chair), Katherine O'Malley and

Susan Lee

SUBJECT: Election of 2021-2022 Board Officers

Recommendation

Accept report of the Ad Hoc Nominating Committee and hold election for Board Officers.

Background

Pursuant to the Board's Regulations, an election of Board officers is to be held at the first regular meeting in July.

The Board Chair, Al David, appointed an Ad Hoc Nominating Committee to recommend a nomination slate for the Board of Retirement officer positions for the 2021-2022 term.

Discussion

The Ad Hoc Nominating Committee met and now recommends that the Board:

- Ask for a motion and a second to place the Committee's following slate of candidates in nomination:
 - o Robert Raw, Chair
 - o Katherine O'Malley, Vice chair
 - Mark Battey, Secretary
- Open the floor to additional nominations, and
- Conduct a vote for the officer positions

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

July 27, 2021 Agenda Item 1.3

TO: Board of Retirement

FROM: Scott Hood, Chief Executive Officer

SUBJECT: Announcement of Appointment of Board Committees

Recommendation

Chair announces appointments to the Investment Committee and the Audit Committee as the Chair deems appropriate.

Background

The Board Chair is authorized by the Regulations of the Board of Retirement to appoint all committees.

"2.1 Election of Chair: At the first regular meeting in July, the Board of Retirement shall elect one of its members chair for a term of one year or until his or her successor is duly elected and qualified. The Chair shall preside at all meetings of the Board, **shall appoint all committees** (*emphasis added*) and shall perform all duties incidental to that office."

Committee assignments for FY20-21 were as follows:

Standing Committees:

- Audit Committee: Kurt Hoefer, Robert Raw and Alma Salas, Chair
- Investment Committee: Ben Bowler, Susan Lee, Katherine O'Malley and Mark Battey, Chair

Ad Hoc Committee:

 CEO Evaluation Committee: Kurt Hoefer, Katherine O'Malley and Sandie Arnott, Chair

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

May 25, 2021 – Regular Board Meeting Minutes

2105.1 Call to Order, Roll Call and Miscellaneous Business

Call to Order: Mr. David, Chair, called the Regular Meeting of the Board of Retirement to order at 10:00 a.m. via Zoom.

Roll Call:

Present: Sandie Arnott, Mark Battey, Ben Bowler, Al David, Paul Hackleman, Kurt Hoefer, Katherine O'Malley, Robert Raw, and Eric Tashman.

Absent: None.

Alternates: Susan Lee and Alma Salas.

Staff: Michael Coultrip, Lili Dames, Scott Hood, Elizabeth LeNguyen, JulieAnne Nagal, Doris Ng, Paul Okada, Gladys Smith, and Anne Trujillo.

Consultants and speakers: Nick Collier and Craig Glyde (Milliman, Inc.); and Joe Abdou, Margaret Jadallah, and Faraz Shooshani (Verus).

- 2105.1.1 **Appointment by Chair of Ad Hoc Nominating Committee for Board Officers:** Mr. David informed the Board that he will be reaching out to Board members within the next few days regarding appointments to the Ad-Hoc Nominating Committee.
- 2105.2.1 **Oral Communications from the Board:** Mr. Hood read a resolution honoring and thanking Mr. Tashman for his service to the Board of Retirement and SamCERA. Several Board members personally shared their gratitude and well wishes to Mr. Tashman. There were no other oral communications from the Board.
- 2105.2.2 **Oral Communications from the Public:** None.
- 2105.3.1 Approval of Regular Board Meeting Minutes from April 27, 2021: Mr. David asked if there were any changes or corrections, or objections, to the meeting minutes from the Board meeting held on April 27, 2021. Ms. Arnott requested to amend Agenda Item 2104.5.2 by removing Mr. Hackleman and Mr. Tashman's arrival time as it was already stated in the Roll Call. Ms. O'Malley also requested a change to the vote on Agenda Item 2104.7.1. The vote should include O'Malley instead of Lee.

Action: Mr. Hackleman moved to approve the April meeting minutes as noted from the Board. The motion was seconded by Ms. Arnott and carried with a vote of 9-0, with trustees Arnott, Battey, Bowler, David, Hackleman, Hoefer, O'Malley, Raw, and Tashman all in favor; none opposed.

2105.4.0 **Approval of the Consent Agenda:** Mr. David asked if there were any items to be removed for discussion from the Consent Agenda. Ms. Smith informed the Board that Patrina Sudano's disability application will be continued to the July Board meeting. No additional items were removed.

Action: Mr. Hoefer moved to approve the remaining items on the Consent Agenda. The motion was seconded by Mr. Raw and carried with a vote of 9-0, with trustees Arnott, Battey, Bowler, David, Hackleman, Hoefer, O'Malley, Raw, and Tashman all in favor; none opposed.

2105.4.1 **Disability Retirements:**

- a) The Board found that **Norman Aleman** (1) is permanently incapacitated from the performance of his usual and customary duties as a Veterans Services Officer, (2) found that his disability arose out of and in the course of his employment and such employment contributed substantially to his disability and (3) granted his application for a service-connected disability retirement.
- b) The Board found that **Eyal Graif** (1) is permanently incapacitated from the performance of his usual and customary duties as an IS Application Support Analyst III, (2) found that his disability was the result of an injury arising out of and in the course of his employment and (3) granted his application for a service-connected disability retirement.

2105.4.2 **Survivor Death Benefits:** None.

2105.4.3 **Service Retirements:**

Name	Effective Retirement Date	Department
Andres, Joshua	March 31, 2021	San Mateo County Health
Bernstein, Michele	April 1, 2021	Public Works
Bohnet, Juliene	April 1, 2021	San Mateo County Health
Bow, Catherine	March 31, 2021	Sheriff's Office
Carey, Sarah	April 1, 2021	Child Support Services
Carlson, Brenda	April 1, 2021	SamCERA
Cassidy-White, Nichol	March 21, 2021	Deferred - Library
Cepello, Dennis A	April 1, 2021	Information Services
Chong-Jeung, Aileen	April 1, 2021	Deferred - Environmental Health
Cuevas, Victor	April 1, 2021	San Mateo County Health
De Gabe, Herminia (DOB	March 31, 2021	Public Health
verified by citizenship docs)		
DeiRossi, Robert	April 1, 2021	Behavioral Health
Ebora, Julie	April 1, 2021	San Mateo County Health
Estrin, Sandra	March 27, 2021	Environmental Health
Feeley, Duane	March 27, 2021	Behavioral Health
Feirman, Nina	March 20, 2021	San Mateo County Health
Firenze, Harrilyn	March 20, 2021	Probation
Fitch, Dina	March 20, 2021	Human Services Agency
Fong, Wallace	March 28, 2021	Sheriff's Office
Gillespie, Helen	April 1, 2021	Superior Court
Graffe, Steve	March 20, 2021	Public Works
Grgich, Laura	March 28, 2021	San Mateo County Health
Griffiths, Julie	April 1, 2021	San Mateo County Health
Gutter, LaSaundra	March 27, 2021	Probation
Hancock, Lois	April 1, 2021	QDRO
Hancock, Miles	April 1, 2021	Deferred – Planning & Building
Higareda, Robert	April 1, 2021	Sheriff's Office
Horgan, Timothy	April 1, 2021	Mental Health
Ibarrientos, Glenn	April 1, 2021	Family Health Services
Karagianes, Alex	March 27, 2021	Sheriff's Office
Kingore-Huffman, Kyra	March 31, 2021	Deferred from Agriculture
Kirik, Inna	March 27, 2021	San Mateo County Health
Kirkpatrick, Scott	March 26, 2021	Sheriff's Office

Kueffner, Jamie	March 31, 2021	Deferred - Information Services
LaClair, Joseph	March 31, 2021	Planning & Building
Laurent, Jenifer	March 27, 2021	Health IT
Laya, Ruth	March 31, 2021	Probation
Lopez, Guillermo	April 1, 2021	Behavioral Health
Lopez, Victor	March 21, 2021	Sheriff's Office
Maragoulas, Theresa	April 1, 2021	Superior Court
Marin, Isagani	March 27, 2021	San Mateo County Health
Martinez, Moises	March 7, 2021	Deferred - Social Services
McKague, Brian	April 1, 2021	Sheriff's Office
Mendoza, Rita	March 12, 2021	Children's Health Services
Merat, Shiva	March 14, 2021	San Mateo County Health
O'Connell, Michael	March 31, 2021	Planning & Building
Peterson, Patrick	March 27, 2021	Tax Collection
Phillips, Thomas	April 1, 2021	Superior Court
Pratap, Robin	March 27, 2021	Probation
Pronske, Robert	March 20, 2021	Sheriff's Office
Rodgers, Karen	April 1, 2021	County Manager's Office
Romero, Manuel	April 1, 2021	Public Works
Rumbaua, Lorda	April 10, 2018	San Mateo County Health
Schwartz, Jennifer	March 6, 2021	Sheriff's Office
Solorzano, Maria	March 13, 2021	San Mateo County Health
Sommer, Torsten	March 31, 2021	Sheriff's Office
Soto, Mario	March 6, 2021	Deferred - Sheriff's Office
Stein, Nelly	March 6, 2021	Human Services Agency
Tang, Kwok-Leung	April 1, 2021	Public Works
Tatola, Pelelina	April 1, 2021	Sheriff's Office
Turner, Aaron	March 31, 2021	Probation
Vasquez, Vincent	March 21, 2021	Sheriff's Office
Ventura, Ana	April 1, 2021	San Mateo County Health
Warren, John	March 31, 2021	District Attorney's Office
Willett, Robert	March 31, 2021	Sheriff's Office
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2105.4.4 **Continuances:**

Survivor's Name

Batara, Laura Emmerich, Alfred Goodwin, Sandra

Beneficiary of:

Hudson, Byron Emmerich, Jo Ann Goodwin, Earl

2105.4.5 **Deferred Retirements:**

The Board ratified the actions as listed below for the following members regarding deferred retirements:

Name	Retirement Plan Type
Cameron, Jaclyn	G7, Vested
Fung, Nga Yew Lucy	G4, Vested - Auto Defer - Code 31700
Kahn, Hannah	P4, Vested - Auto Defer - Code 31700
Nunez, Jacqueline	G7, Non-vested - Reciprocity
Vielman-Reeves, Paula	G7. Vested - Auto Defer - Code 31700

2105.4.6 **Member Account Refunds:**

The Board ratified the actions as listed below for the following members regarding refunds:

Name	Retirement Plan Type
Anderson, Marc	G7, Non-vested
Meadows, Donovan	G7, Non-vested
Thomas, Donald	G4, Non-vested

2105.4.7 **Member Account Rollovers:**

The Board ratified the actions as listed below for the following members regarding rollovers:

Name	Retirement Plan Type	
Ananda, Renee	G7, Non-vested	
Chen, Jian	G7, Non-vested	
Hutchings, James	S7, Non-vested	
Irby, Daniel	G7, Non-vested	

- 2105.4.8 **Member Account Redeposits:** None.
- 2105.4.9 Acceptance of Trustees' Reports of Educational Activities: None.
- 2105.5.1 Consideration of Agenda Items, if any, Removed from the Consent Agenda: None.
- 2105.5.2 Approval of Economic Assumptions to be used in the June 30, 2021 Actuarial Valuation: Mr. Collier and Mr. Glyde discussed Milliman Inc.'s recommended actuarial assumptions with the Board. They suggested it would be reasonable to lower SamCERA's assumed earnings rate to 6.25%, retain the remaining economic assumptions used in the June 30, 2020 annual valuation and phase in the employer rates over a three-year period to minimize the short-term impact to the employer contribution expense.

Action: Mr. Battey moved to approve the economic assumptions as follows: Investment return at 6.25%, inflation at 2.5%, wage at 3%, and payroll growth at 3%; the COLA assumption for Plans 1 and 2 be set in accordance with the inflation assumption; and the employer contribution rates be phased in over a three-year period. The motion was seconded by Mr. Hackleman and carried with a vote of 8-1, with trustees Arnott, Battey, Bowler, David, Hackleman, Hoefer, O'Malley and Tashman all in favor; Mr. Raw opposed.

- 2105.6.1 Report on Preliminary Monthly Portfolio Performance Report for the Period Ended April 30, 2021: Mr. Coultrip reported that SamCERA's net preliminary return for April was 2.6% bringing the preliminary trailing twelve month return ending April 2021 to 24.5% net, which is above SamCERA's Plan Benchmark return of 22.3% and above SamCERA's Actuarial Assumed Earnings Rate of 6.5%. This item was informational and for discussion only, no action was taken.
- 2105.6.2 **Report on Quarterly Investment Performance for the Period Ended March 31, 2021:** Ms. Jadallah and Mr. Abdou reviewed the quarterly performance report with the Board. The 1st quarter net total return for the SamCERA portfolio was +2.6%, which was 100 bps lower than the +3.6% policy benchmark return. Alternatives were the main detractor to performance, while fixed income was the main contributor. This item was informational and for discussion only, no action was taken.
- 2105.6.3 **Report on Real Estate Manager Annual Reviews:** Ms. Ng reviewed the meeting notes from the annual review of SamCERA's real estate manager, PGIM. The meeting was held virtually on April 15th and consisted of a firm/organizational update, investment process review, performance review and attribution, and current positioning/market outlook. There were no significant concerns identified during the review. This item was informational and for discussion only, no action was taken.
- 2105.6.4 **Report on Core Equity and Passive Manager Annual Reviews:** Ms. Ng reviewed meeting notes from the May 6th annual review of SamCERA's index manager, Blackrock, and small-cap core equity manager, Quantitative Management Associates. There were no major concerns identified during the reviews. Ms. Ng also reported that additional annual reviews took place on May 13th with SamCERA's other core equity manager, D.E. Shaw, and low volatility equity managers, PanAgora and Acadian, and that report will be given at the next Board meeting. This item was informational and for discussion only, no action was taken.

The Board adjourned for a short break at 11:19 a.m. and reconvened at 11:25 a.m. in Closed Session with Agenda Item 6.5.

- 2105.6.5 Approval of Proposed Alternative Investment (to be heard in Closed Session, Confidential Under Gov. Code §54956.81 and §6254.26, see item C2): See Closed Session report under C2.
- 2105.8.1 Chief Executive Officer's Report: On behalf of staff, Mr. Hood congratulated Mr. Tashman for completing his 4th term and thanked him for his service on the Board. Mr. Hood provided an update on SamCERA's June 15th office reopening and stated that as the State's reopening progresses, SamCERA will continue to reassess and will also keep the Board updated. Mr. Hood turned it over to Mr. Okada to provide the Board with an update on the Governor's Executive Order N-29-20. Mr. Okada reported that local agency associations have reached out to the Governor regarding the Executive Order, requesting reasonable notice and clarification as to whether the Brown Act restrictions would be lifted upon the state's reopening date of June 15th. He suggested that the Governor's recent announcement that social distancing requirements would be lifted on June 15th has made the continuation of the Executive Order unclear and staff will continue to gather information, keep the Board updated, and plan the July Board meeting accordingly. Mr. Hood previewed a few items on the July agenda including the swearing in of Trustees, the election of Board Officers, appointment of committees and review of the Code of Conduct and Records Retention Policy.
- 2105.8.2 **Assistant Executive Officer's Report:** Ms. Smith provided an update on the Board seats set to expire at the end of June, as well the recruitment for a Senior Retirement Accountant. Ms. Smith also shared that staff is close to launching the SamCERA mobile application and a soft launch is planned among staff to do a final test run. Ms. Trujillo informed Board members about upcoming educational opportunities and reported there were no public comments received before the meeting.

- 2105.8.3 **Chief Investment Officer's Report:** Mr. Coultrip reported on rebalancing activities during the month.
- 2105.8.4 Chief Legal Counsel's Report: None.
 - C1 Consideration of Disability Items, if any, removed from the Consent Agenda: None.
 - C2 Approval of Proposed Alternative Investment (to be heard in Closed Session, Confidential Under Gov. Code §54956.81 and §6254.26, see item 6.5): Mr. Okada reported that the Board approved the recommendation for a "re-up" commitment to ABRY Senior Equity VI, LP in the amount of \$15 million. The motion was approved by a vote of 9-0, with trustees Arnott, Battey, Bowler, David, Hackleman, Hoefer, O'Malley, Raw, and Tashman all in favor; none opposed. No other reportable action was taken.
- 2105.10 **Adjournment:** Mr. David adjourned the meeting at 11:49 a.m. in memory of the deceased members listed below.

Barton, James	April 8, 2021	Sheriff's
Van Pelt, James	April 20, 2021	Information Services
Miller, Abbie	April 20, 2021	Aging & Adult Services
Snowden, Shirley	April 21, 2021	Probation
Luft, John	April 22, 2021	District Attorney's Office
Hernandez, Simon	April 23, 2021	Hospital
Larson, Mary Lou	April 24, 2021	Sheriff's
Stuart, Bette	April 28, 2021	Treasurer's/Retirement Services
Yuki, Dorothy	May 1, 2021	Assessor's
Wong, Edmund	May 9, 2021	Probation

Al David		
Board Chair		

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

July 27, 2021 Agenda Items 4.1- 4.9

TO: Board of Retirement

FROM: Elizabeth LeNguyen, Retirement Benefits Manager

SUBJECT: Approval of Consent Agenda Items 4.1 – 4.9

4.1 Disability Retirements

a) The Board finds that **Esmirna Atijera** (1) is permanently incapacitated from the performance of her usual and customary duties as a Senior Accountant, (2) find that her disability was the result of an injury arising out of and in the course of her employment and (3) grant her application for a service-connected disability retirement.

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4.2 Survivor Death Benefits

None.

4.3 Service Retirements

The Board ratifies the service retirement for the individuals listed below as follows:

Name	Effective Retirement Date	Department
Benda, Jennifer	May 29, 2021	Probation
Bouja, Alexander	May 22, 2021	Deferred - Sheriff's Office
Calderon, Luna	April 27, 2021	Deferred - Mental Health
Caldwell, Lisa	May 22, 2021	Public Safety Communications
Del Carlo, Michael	April 24, 2021	Deferred - Sheriff's Office
Furtado, Josefina	April 24, 2021	District Attorney's Office
Gabriel, Ramona	May 27, 2021	Probation
Garibaldi, Michael	May 29, 2021	Agriculture/Weights & Measures
Gaza, Benedicta	May 29, 2021	Human Services Agency
Janolino, Helen	May 1, 2021	Human Services Agency
Kunkel, Paul	May 2, 2021	Sheriff's Office
McDonald, Kenneth	May 15, 2021	Deferred - Probation
Milano, Deno	May 7, 2021	Environmental Health
Moffatt, Barbara	May 1, 2021	Deferred - Probation
Moore, Tina	May 11, 2021	Probation

Mullin, Amy	May 24, 2021	QDRO
Murphy, Cindy	May 2, 2021	San Mateo County Health
Nitao, Marna	May 14, 2021	Probation
Patricio, Jack	May 29, 2021	Probation
Reeves, Keith	May 2, 2021	San Mateo County Health
Robinson, Stephen	April 28, 2021	Deferred - Sheriff's Office
Skivers, Eric	May 29, 2021	Probation
Tourel, Gilles	May 1, 2021	Public Works
Udui-Mitchell, Michaela	May 15, 2021	Behavioral Health
Wilson, Robert	April 17, 2021	Information Services

4.4 Continuances

The Board ratifies the granting of a continuance to the following individuals:

Survivor's Name	Beneficiary of:
Bolster, Sheila	Bolster, Walter
Cruz, Victoria	Arthur, Richard
Davis, Robert	Costello, Bertha
Duterte, Benjamina	Duterte, Ildefonso
Fernandez, Henry	Fernandez, Gloria
Garvey, Lawrence	Garvey, Christina
Van Pelt, James	Van Pelt, Delia

4.5 Deferred Retirements

The Board ratifies the deferred retirements as listed below for the following individuals:

Name	Retirement Plan Type
Bautista, Ronnie	G5, Vested - Auto Defer - Code 31700
Chuan, Jennie	G4, Vested - Reciprocity
Fournier, Caitlyn	G7, Non-vested - Reciprocity
Frank, Nathanael	G7, Non-vested - Reciprocity
Mrizek, Lori	G7, Vested - Auto Defer - Code 31700
Quezada, Robert	G7, Vested
Taylor, Leah	G5, Vested - Auto Defer - Code 31700

Vanderschaaf, Joshua	G4, Vested - Reciprocity	
Wong, Sandy S	G4, Vested - Reciprocity	

4.6 Member Account Refunds

The Board ratifies the refunds as listed below for the following individuals:

Name	Retirement Plan Type
Bridgeman, Michael (FBO:Johnson, Katherine)	G7, Non-vested
Elmore-Reeder, Chantilli	G4, Vested
Gomez, Ramon	G7, Vested
Gregorio, Melvin	G4, Non-vested
Griswold, Marcus	G7, Non-vested
Hing-Lewis, Janna	G5, Vested
Kahn, Hannah	P4, Vested
Miller, Abbie (FBO: Miller, Mary)	G4, Vested
Miller, Abbie (FBO: Miller, Peter)	G4, Vested
Miller, Abbie (FBO: Miller, William)	G4, Vested
Palla, Piroska	G7, Non-vested
Rodriguez, Gladys	G7, Non-vested
Santiago, Abigail	G7, Non-vested

4.7 Member Account Rollovers

The Board ratifies the rollovers as listed below for the following individuals:

Name	Retirement Plan Type
Cattich, Pamela (FBO: Barrett Hutcherson)	G4, Vested
Chiu, Diana	G7, Non-vested
Kahn, Hannah	P4, Vested
Lecaros, Angelica	G7, Vested
Wood, Ashley	G7, Non-vested

4.8 Member Account Redeposits

None.

4.9 Acceptance of Trustees' Reports of Educational Activities

None.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

July 27, 2021 Agenda Item 4.10

TO: Board of Retirement

FROM: Lilibeth Dames, Investment Analyst Lilibeth Dames

SUBJECT: California Government Code Section 7514.7 Annual Disclosure For 2020

Recommendation

Accept the Report on California Government Code Section 7514.7 Annual Disclosure for 2020.

Background

California Government Code Section 7514.7 requires public pension funds in California to annually disclose certain information regarding their alternative investments. Staff has prepared SamCERA's required disclosure report which covers calendar year 2020.

Discussion

Since 2007, SamCERA has been required, if requested under the Public Records Act, to provide the following information regarding its alternative investments:

- 1. The name, address, and vintage year of each alternative investment vehicle.
- 2. The dollar amount of the commitment made to each alternative investment vehicle by the public investment fund since inception.
- 3. The dollar amount of cash contributions made by the public investment fund to each alternative investment vehicle since inception.
- 4. The dollar amount, on a fiscal yearend basis, of cash distributions received by the public investment fund from each alternative investment vehicle.
- 5. The dollar amount, on a fiscal yearend basis, of cash distributions received by the public investment fund plus remaining value of partnership assets attributable to the public investment fund's investment in each alternative investment vehicle.
- 6. The net internal rate of return of each alternative investment vehicle since inception.
- 7. The investment multiple of each alternative investment vehicle since inception.
- 8. The dollar amount of the total management fees and costs paid on an annual fiscal yearend basis, by the public investment fund to each alternative investment vehicle.
- 9. The dollar amount of cash profit received by public investment funds from each alternative investment vehicle on a fiscal year-end basis.

Under section 7514.7, effective in 2017, SamCERA is required to disclose the above information annually to the Board at a public meeting. The report, which will be provided by the meeting date, will reflect this data for all of our alternative investments.

In addition, SamCERA is required to disclose certain information, if applicable, that is listed below for the alternative investment contracts entered into between January 1, 2017 and December 31, 2020. We are also required to make disclosures for alternative investment contracts entered into before 2017 if an additional capital commitment was made to that investment after 2017. SamCERA made no such additional commitments to these investments.

The report will also reflect the following data for the applicable alternative investments:

- 1. The fees and expenses that the public investment fund pays directly to the alternative investment vehicle, the fund manager, or related parties.
- 2. The public investment fund's pro rata share of fees and expenses not included in paragraph 1 that are paid from the alternative investment vehicle to the fund manager or related parties. The public investment fund may independently calculate this information based on information contractually required to be provided by the alternative investment vehicle to the public investment fund. If the public investment fund independently calculates this information, then the alternative investment vehicle shall not be required to provide the information identified in this paragraph.
- 3. The public investment fund's pro rata share of carried interest distributed to the fund manager or related parties.
- 4. The public investment fund's pro rata share of aggregate fees and expenses paid by all of the portfolio companies held within the alternative investment vehicle to the fund manager or related parties.
- 5. The gross and net rate of return of each alternative investment vehicle, since inception, in which the public investment fund participates.

Similar to last year, not all of our funds had data to report for each of the listed categories due to the maturity of the specific fund. For example, our new funds did not have any carried interest to report at this early stage. We anticipate that future annual reports for these funds will contain more information as the funds mature.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

July 27, 2021 Agenda Item 4.11

TO: Board of Retirement

FROM: Doris Ng, Investment Analyst

SUBJECT: Semi-Annual Compliance Certification Statements for Period Ended

June 30, 2021

Recommendation

Accept the semi-annual Compliance Certification Statements for SamCERA's non-alternative investment managers and investment consultant, as of June 30, 2021.

Background

As part of SamCERA's ongoing due diligence process, the Compliance Certification Statement is completed by each of the association's public equity, fixed income, real estate, real asset and cash overlay investment managers and investment consultant on a semi-annual basis.

These statements are used to update SamCERA on any firm-wide compliance issues and to provide strategic-level information regarding such things as derivatives and portfolio positioning. For investment managers whose investments are considered "alternative investment vehicles" per the California Government Section Code §6254.26, the Compliance Certification Statements are not provided in the public board packet and will be sent separately to the Board.

Discussion

The attached Compliance Certification Statements report that SamCERA's investment managers and investment consultant are in compliance with SamCERA's Investment Policy as of June 30, 2021. There were no reported significant developments in portfolio construction, investment approach, firm ownership or organizational structure of concern relating to the association's public investments. There were no notable issues regarding industry or regulatory actions that impact SamCERA. The managers were also requested to provide data regarding the characteristics and composition of their portfolios. No prominent issues were identified during the review. Any items that raise concern will be brought to the manager's or investment consultant's attention and will be thoroughly vetted by staff.

Please note the fully completed Compliance Certification Statements for BlackRock, PIMCO, and State Street Global Advisors were not received in time to be included in the mailing but will be included in the August board packet.

Attachments

Compliance Certification Statement Matrix 6-2021 Compliance Certification Statements (14)

- A. Domestic Equity: Acadian, PanAgora, QMA
- B. International Equity: Baillie Gifford, Mondrian
- C. <u>Fixed Income</u>: DoubleLine, FIAM LLC, Franklin Templeton, NISA Investment Advisors, Western Asset Management
- D. Real Estate: Harrison Street, INVESCO
- E. Overlay: Parametric Portfolio Associates
- F. Investment Consultant: Verus Advisory

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
Domestic Equity					
Acadian		 Jun 2022-Co-CEO John Chisolm expect to retire, Co- CEO Ross Dowd remain as sole CEO Dec 2021-Chief Tech Officer Peter Noll expect to retire Andy Moniz join as Director of Responsible Investing 	Not Applicable	No Concerns	 Largest single security Microsoft 4.55% Largest single industry Pharmaceuticals, Biotechnology & Life Sciences 21.15% vs bmk 6.94% 3.96% Small Cap
BlackRock Russell 1000	Pending				
DE Shaw		Confidentia	l under California Gov. S	Section Code §6254.26	
PanAgora (Low Volatility strategy)		No Concerns	Not Applicable	No Concerns	 Largest single security by risk weight is OXY US 1.75% Largest sector risk weight is Health Care 11.35% v. R1000 bmk 10.86%
QMA		No Concerns	Not Applicable	No Concerns	Largest holding, EME 0.97%

Investment Manager	Mandate	General Compliance Issues	Instruments	Investment Manager Guidelines	Mandate Specific
					 Largest industry: Biotechnology 9.4% vs. Russell 2000 bmk 10.2%
International Equity					
Baillie Gifford		No Concern	No Concern	No Concern	8.2% ADR26.9% Emerging Market
Blackrock MSCI ACWI ex US IMI	Pending				
Mondrian		 1Q21-Hamish Parker, Director, retired, responsibilities transitioned to team over time. 	No Concern	No Concern	29.46% Emerging Market MIP LP
Fixed Income					
Angelo Gordon (Credit Solutions Fund)		Confidential	under California Gov. Sec	tion Code §6254.26	
Angelo Gordon (Credit Solutions Annex Dislocation Fund)		Confidential	under California Gov. Sec	ction Code §6254.26	

Investment Manager	Mandate	General Compliance Issues	Instruments	Investment Manager Guidelines	Mandate Specific
Beach Point		Confidential	under California Gov. Sec	tion Code §6254.26	
Blackrock (Direct Lending Fund VIII)		Confidential	under California Gov. Sed	ction Code §6254.26	
Blackrock (Direct Lending Fund IX)		Confidential	under California Gov. Sec	tion Code §6254.26	
Brigade		Confidential	under California Gov. Sec	tion Code §6254.26	
DoubleLine		No Concerns	No Concerns	No Concerns	• 34.99% in Rule 144A securities
Fidelity Institutional Asset Management (FIAM) BMD Bond		No Concerns	No Concerns	No Concerns	 0.17% below inv grade (inv grade at purchase) 13.03% in Rule 144A securities
Franklin Templeton		Feb 2021-Stephen Dover Hd of newly formed Franklin Templeton Investment Institute-research &	No Concerns	No Concerns	 8.78% Cash & Equiv. 7.06% Rule 144A 19.33% non-rated or below IG 5.92% Korea Monetary Stabilization Bond, Sr

Investment Manager	Mandate	General Compliance Issues	Instruments	Investment Manager Guidelines	Mandate Specific
		knowledge share across firm March 2021- Michelle Auger, new global ESG director June 2021-Ben Seidlich, new co-Hd of Inv Risk Mgmt (IRM)			Unsecured 0.905%, 4/02/23
NISA		 Jan 2021-CEO transition from Jess Yawitz to David Eichhorn. Jess remain as NISA chairman and mbr of investment committee. 	Not Applicable	No Concerns	• 6.83% Rule 144A securities
PIMCO (Diversified Income Fund)	Pending				
PIMCO (Private Income Fund)		Confidential	l under California Gov. Sec	tion Code §6254.26	
Western		 Aug 2021-New COO hired to replace current COO who will leave firm in Dec 2021 	 Largest cntrprty exposure to Morgan Stanley 0.07% 	No Concerns	• 19.4% Rule 144A securities

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
		 June 2022- Current General counsel to retire, search for replacement underway 			
White Oak Yield Spectrum Fund (Fund IV)		Confidential under California Gov. Section Code §6254.26			
White Oak Yield Spectrum Fund V		Confidential	under California Gov. Se	ection Code §6254.26	
Real Estate					
Harrison Street (Core Property Fund)		No Concerns	Not Applicable	No Concerns	No Concerns
Invesco (U.S. Core Real Estate Fund)		No Concerns	Not Applicable	No Concerns	No Concerns
Invesco (U.S. Value-Add Fund IV)	Confidential under California Gov. Section Code §6254.26				
Invesco (U.S. Value-Add Fund V)		Confidential	under California Gov. Se	ection Code §6254.26	
PGIM (US Real Estate Debt)		Confidential	under California Gov. Se	ection Code §6254.26	

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
Real Assets					
State Street Global Advisors (Custom Real Asset Account)	Pending				
Overlay					
Parametric Portfolio Associates		No Concerns	No Concerns	No Concerns	No Concerns
Investment Consultant					
Verus Advisory		 General Consulting 3 new hires, 2 retirements Private Mkts Consulting & Rsrch 2 new hire and 1 departure 	Not Applicable	Not Applicable	Not Applicable
	31 Total	14 Completed 4	4 Pending Information	13 Confidential	

Acadian Asset Management U.S. Managed Volatility – June 30, 2021

Compliance Certification Statement San Mateo County Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of SamCERA's investment managers on a semi-annual basis. These statements must be e-mailed to SamCERA's office (Investments@samcera.org) by Monday, July 12, 2021.

Ge	eneral Compliance Issues
1.	Has the firm acted as a fiduciary and invested its assets for the sole benefit of SamCERA? ∑ Yes / ☐ No: Please explain.
2.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel? Yes: Please explain. / No
	Acadian made the decision to close its affiliate office in Tokyo, Japan effective January 31, 2021.
	Acadian's co-CEO John Chisholm will be retiring next year, at the end of June 2022. Co-CEO Ross Dowd will continue as sole CEO following John's retirement. We anticipate a seamless transition with no material impact to the business as a result of John's departure. Acadian's team-based philosophy, strong senior management, and established succession plan mitigate the risk of any single key person's departure.
	Chief Technology Officer, Peter Noll, will be retiring effective December 31, 2021, after 40 years in the industry, including the last eight with Acadian. In the interim, Pete will be actively involved in choosing his successor, and we anticipate a smooth transition with no change to

Investment Team Changes

Additions:

We are thrilled to announce that Andy Moniz has joined Acadian Asset Management (U.K.) Limited as Director of Responsible Investing. In this role, Andy will lead Acadian's ESG initiatives globally and help further shape our responsible investing approach. We look forward to working with Andy to advance Acadian's research and leadership in this important domain.

the structure of the IT function that Pete currently oversees or to the overall organization.

Departures:

	Yury Tsitkou, SVP, Lead Analyst, Implementation, left to pursue other opportunities on February 26, 2021.
	Mark Webster, SVP, Portfolio Manager, left to pursue other opportunities on March 31, 2021.
	Devin Nial, SVP, Portfolio Manager, Research left to pursue other opportunities on April 9, 2021.
3.	Have there been any changes in the firm's investment approach? Yes: Please explain. / No
4.	Do SamCERA's guidelines require your firm to manage the portfolio significantly different from other similar portfolios? Yes: Please explain. / No
5.	Have there been any industry or regulatory disciplinary actions taken against the firm? \square Yes: Please explain. / \boxtimes No
6.	Have proxy ballots been voted in accordance with the best economic interest of <i>SamCERA</i> and in a manner consistent with the Board's proxy policies? Yes / No: Please explain.
7.	Have there been any investment guideline breaches during the prior 6 months? ☐ Yes: Please explain. / ☑ No
8.	Has the firm's insurance coverage been sustained? Yes / No: Please explain.
Inv	vestment Management Fees
1.	Is SamCERA's investment management fee schedule higher than those charged other institutional clients who hold an account investment substantially similar to ours? Yes: Please explain. / No
De	rivative Investments
1.	Are derivatives used in the management of the investment strategy? Yes: Please ANSWER the remaining questions in this section. No: Please SKIP the remaining questions in this section.
2.	Are derivative investments in compliance with SamCERA's investment policies? Yes / No: Please explain.

3.	. If the firm entered into a non-exchange traded derivative, was the general nature and associated risks of the counter-party fully evaluated? Yes / No: Please explain.	
4.	. For non-exchange traded derivative transactions, were the counter-parties broker/dealers? \[\subseteq \text{Yes} / \subseteq \text{No} \]	
	If Yes: a) Do the counter-parties have investment grade debt? Yes/ No No Are the counter-parties registered with the SEC and do they have net capital to protect against potential adverse market circumstances? Yes/ No: Please explain.	
5.	For non-exchange traded derivative transactions, were the counter-parties financial institutions (banks)? Yes / No	
	 If Yes: a) Do the counter-parties have investment grade debt? ☐ Yes/ ☐ No b) Do the counter-parties have total assets in excess of \$1 billion, and significant net capital to protect against potential adverse market circumstances? ☐ Yes/ ☐ No: Please explain. 	
6.	 Is individual counter-party exposure well diversified? Yes/ No: Please explain. a) What is the largest exposure to a single counter-party within the portfolio? b) Please specify the name of the counter-party and the amount of exposure. c) Have there been any changes to the investment manager's list of approved counter-parties over the past six months? 	
7.	Are the investment purposes for a derivative investment consistent with the four purposes stated in <i>SamCERA's</i> policies?	
	a) Has the firm developed any new purposes for derivative investments? \square Yes: Please explain. $/$ \square No	
8.	List all limited allocation derivative investments individually and the percentage of the portfolio's assets represented by each investment.	
	 a) State if the firm has evaluated the exposure to market value losses that can occur from each of these derivatives. Yes / No: Please explain. b) State if these derivative investments in total represent more than 5% of the portfolio's market value. If more than 5%, please explain. 	
9.	State if any restricted derivative investments are held in <i>SamCERA's</i> portfolios.	

	a) If any are held, state the percentage of the portfolio's assets held in such derivatives and why the firm is not in compliance with the investment policies.		
10.	For derivative investments with allocation limits, has the firm tested and measured these investments' sensitivities to changes in key risk factors? Yes / No: Please explain.		
11.	. Have all derivative investments been made in a manner consistent with the derivative investment process specified in the policy statement? Yes / No: Please explain.		
12.	Specify the security pricing sources used when developing portfolio market value exposures for limited allocation derivatives.		
13.	Provide a statement regarding the liquidity of the derivative investments. Provide a general statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.		
14.	State if the legal and regulatory risk associated with portfolio derivative investments have changed over the past \underline{six} months. \square Yes: Please explain. $/\square$ No		
Inv	restment Manager Guidelines		
1.	 Are portfolio holdings well-diversified, and made in liquid securities? ✓ Yes / ☐ No: Please explain. 		
2.	. Has the firm engaged in short selling, use of leverage or margin and/or investments in commodities? Yes: Please explain. / No		
Ca	sh & Equivalents		
1.	Does the firm directly invest in short term fixed income investments? \square Yes / \boxtimes No		
	a) If Yes, do the investments comply with the policies? \[\subseteq Yes / \[\subseteq No: Please explain.		
Do	mestic Equity Portfolio (Large, Mid & Small)		
1.	Specify the percentage of the portfolio held in each of the following types of securities:		
	Common Start 200 4507		
	Common Stock 99.45% Preferred Stock 0%		
	Convertible Securities 0%		
	ADDa		

Cash & Equivalents

0.55%

2. Specify the large, mid and small capitalization exposure of the portfolios.

Large-Cap	43.85%
Mid-Cap	51.64%
Small-Cap	3.96%

3. Specify the percentage of the portfolio that is invested in American Depository Receipts (ADR's). Also, specify the percentage of the portfolio invested in ADR securities that are 144A securities. If greater than 10%, explain why.

4. What is the largest percentage of the portfolio represented by a single security? Please specify the security and percentage amount. If any securities were above benchmark weight at the time of purchase, please list and explain why.

Security	Cusip	Portfolio Weight
MICROSOFT CORP COM	59491810	4.55%

5. What is the largest percentage of the portfolio represented by a single industry? Specify the name of the industry, percentage amount and size relative to benchmark. Please specify all industries above 15%.

Industry	Portfolio Weight	Benchmark Weight
Pharmaceuticals,	21.15%	6.94%
Biotechnology &		
Life Sciences		

6. What proportion of total AUM do the assets in this product make-up of the firm? What size does SamCERA's account comprise of total product assets?

	SamCERA* %
Firm AUM	0.19%
U.S Managed Volatility Strategy	0.54%

Signed by:

Dated: June 12, 2021

Name of Firm Acadian Asset Management LLC

Wary & Bidgood

PanAgora Asset Management Defensive Equity U.S. Low Volatility – June 30, 2021

Compliance Certification Statement San Mateo County Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (<u>Investments@samcera.org</u>) by <u>Monday</u>, **July 12, 2021**.

General Compliance Issues

1.	Has the firm acted as a fiduciary and invested its assets for the sole benefit of SamCERA? Yes No: Please explain.
2.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel? ☐ Yes: Please explain. / ☒ No
3.	Have there been any changes in the firm's investment approach? Yes: Please explain. / No
4.	Do SamCERA's guidelines require your firm to manage the portfolio significantly different from other similar portfolios? Yes: Please explain. / No
5.	Have there have been any industry or regulatory disciplinary actions taken against the firm? \square Yes: Please explain. / \boxtimes No
5.	Have proxy ballots been voted in accordance with the best economic interest of <i>SamCERA</i> and in a manner consistent with the Board's proxy policies? Yes / No: Please explain.
7.	Have there been any investment guideline breaches during the prior 6 months? ☐ Yes: Please explain. / ☒ No
3.	Has the firm's insurance coverage been sustained? No: Please explain.

Investment Management Fees

1.	Is SamCERA's investment management fee schedule higher than those charged other institutional clients who hold an account investment substantially similar to ours? Yes: Please explain. / No: The investment management fee schedule applicable to SamCERA's investment in Defensive U.S. Large Cap Low Volatility represents the most beneficial (lowest) fee schedule offered to other institutional clients who hold a substantially similar account investment in such investment strategy.
_	Are derivatives used in the management of the investment strategy? Yes: Please ANSWER the remaining questions in this section. No: Please SKIP the remaining questions in this section.
2.	Are derivative investments in compliance with SamCERA's investment policies? Yes / No: Please explain.
3.	If the firm entered into a non-exchange traded derivative, was the general nature and associated risks of the counter-party fully evaluated? Yes / No: Please explain.
4.	For non-exchange traded derivative transactions, were the counter-parties broker/dealers? Yes / No
	If Yes: a) Do the counter-parties have investment grade debt? Yes/ No b) Are the counter-parties registered with the SEC and do they have net capital to protect against potential adverse market circumstances? Yes/ No: Please explain.
5.	For non-exchange traded derivative transactions, were the counter-parties financial institutions (banks)? Yes / No
	 If Yes: a) Do the counter-parties have investment grade debt? ☐ Yes/ ☐ No b) Do the counter-parties have total assets in excess of \$1 billion, and significant net capital to protect against potential adverse market circumstances? ☐ Yes/ ☐ No: Please explain.
6.	 Is individual counter-party exposure well diversified? Yes/ No: Please explain. a) What is the largest exposure to a single counter-party within the portfolio? b) Please specify the name of the counter-party and the amount of exposure. c) Have there been any changes to the investment manager's list of approved counter-parties over the past six months?

7.	Are the investment purposes for a derivative investment consistent with the four purposes stated in $SamCERA's$ policies? \square Yes / \square No: Please explain.
	a) Has the firm developed any new purposes for derivative investments? \square Yes: Please explain. $/ \square$ No
8.	List all limited allocation derivative investments individually and the percentage of the portfolio's assets represented by each investment.
	 a) State if the firm has evaluated the exposure to market value losses that can occur from each of these derivatives. Yes / No: Please explain. b) State if these derivative investments in total represent more than 5% of the portfolio's market value. If more than 5%, please explain.
9.	State if any restricted derivative investments are held in SamCERA's portfolios. No
	a) If any are held, state the percentage of the portfolio's assets held in such derivatives and why the firm is not in compliance with the investment policies.
10.	. For derivative investments with allocation limits, has the firm tested and measured these investments' sensitivities to changes in key risk factors? Yes / No: Please explain.
11.	. Have all derivative investments been made in a manner consistent with the derivative investment process specified in the policy statement? \square Yes / \square No: Please explain.
12.	. Specify the security pricing sources used when developing portfolio market value exposures for limited allocation derivatives.
13.	Provide a statement regarding the liquidity of the derivative investments. Provide a general statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.
14.	. State if the legal and regulatory risk associated with portfolio derivative investments have changed over the past six months. Yes: Please explain. / No
	vestment Manager Guidelines Are portfolio holdings well-diversified, and made in liquid securities? Yes / No: Please explain.
2.	Has the firm engaged in short selling, use of leverage or margin and/or investments in commodities? ☐ Yes: Please explain. / ⋈ No

Cash & Equivalents

1. Does the firm directly invest in short term fixed income investments? \square Yes / \boxtimes No

a) If Yes, do the investments comply with the policies? \(\subseteq \text{Yes} / \subseteq \text{No: Please explain.} \)

Domestic Equity Portfolio (Large, Mid & Small)

1. Specify the percentage of the portfolio held in each of the following types of securities:

Common Stock	99.83%
Preferred Stock	0%
Convertible Securities	0%
ADRs	0%
Cash & Equivalents	0.17%

2. Specify the large, mid and small capitalization exposure of the portfolios.

Large-Cap	82.26%
Mid-Cap	17.74%
Small-Cap	0%

- 3. Specify the percentage of the portfolio that is invested in American Depository Receipts (ADR's). Also, specify the percentage of the portfolio invested in ADR securities that are 144A securities. If greater than 10%, explain why. The account holds 0% in ADR's and ADR securities that are 144A's.
- 4. What is the largest percentage of the portfolio represented by a single security? Please specify the security and percentage amount. If any securities were above 4% at the time of purchase, please list and explain why. The largest security risk weight percentage held in the account is Occidental Petroleum Corp (OXY US) 1.75%.
- 5. What is the largest percentage of the portfolio represented by a single industry? Specify the name of the industry, percentage amount and size relative to benchmark. Please specify all industries above 15%. The largest sector risk weight percentage held in the account is Health Care 11.35%. The benchmark's risk weight percentage for Health Care is 10.86%.
- 6. What proportion of total AUM do the assets in this product make-up of the firm? What size does SamCERA's account comprise of total product assets? PanAgora's Defensive U.S. Low Volatility products make up 0.56% of the total AUM of the firm. SamCERA's account comprises 99.08% of the total product assets.

Signed by: Chris Tsapatsaris, Sr. Investment Compliance Analyst

Dated: July 8th, 2021

Name of Firm: PanAgora Asset Management, Inc.

Quantitative Management Associates U.S. Small Cap Core – June 30, 2021

Compliance Certification Statement San Mateo County Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (<u>Investments@samcera.org</u>) by **Monday, July 12, 2021**.

General Compliance Issues

1.	Has the firm acted as a fiduciary and invested its assets for the sole benefit of SamCERA? ∑ Yes / ☐ No: Please explain.
2.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel? Yes: Please explain. / No
3.	Have there been any changes in the firm's investment approach? Yes: Please explain. / No
4.	Do SamCERA's guidelines require your firm to manage the portfolio significantly different from other similar portfolios? Yes: Please explain. / No
5.	Have there been any industry or regulatory disciplinary actions taken against the firm? \square Yes: Please explain. / \bowtie No
6.	Have proxy ballots been voted in accordance with the best economic interest of SamCERA and in a manner consistent with the Board's proxy policies? Yes / No: Please explain.
7.	Have there been any investment guideline breaches during the prior 6 months? Yes: Please explain. / No
8.	Has the firm's insurance coverage been sustained? No: Please explain.

Investment Management Fees

1.	Is SamCERA's investment management fee schedule higher than those charged other institutional clients who hold an account investment substantially similar to ours? Yes: Please explain. / No
De	rivative Investments
1.	Are derivatives used in the management of the investment strategy? ☐ Yes: Please ANSWER the remaining questions in this section. ☐ No: Please SKIP the remaining questions in this section.
2.	Are derivative investments in compliance with SamCERA's investment policies? Yes / No: Please explain.
3.	If the firm entered into a non-exchange traded derivative, was the general nature and associated risks of the counter-party fully evaluated? Yes / No: Please explain.
4.	For non-exchange traded derivative transactions, were the counter-parties broker/dealers? Yes / No
	If Yes: a) Do the counter-parties have investment grade debt? Yes/ No b) Are the counter-parties registered with the SEC and do they have net capital to protect against potential adverse market circumstances? Yes/ No: Please explain.
5.	For non-exchange traded derivative transactions, were the counter-parties financial institutions (banks)? Yes / No
	 If Yes: a) Do the counter-parties have investment grade debt? ☐ Yes/ ☐ No b) Do the counter-parties have total assets in excess of \$1 billion, and significant net capital to protect against potential adverse market circumstances? ☐ Yes/ ☐ No: Please explain.
6.	 Is individual counter-party exposure well diversified? Yes/ No: Please explain. a) What is the largest exposure to a single counter-party within the portfolio? b) Please specify the name of the counter-party and the amount of exposure. c) Have there been any changes to the investment manager's list of approved counter-parties over the past six months?
7.	Specify the security pricing sources used when developing portfolio market value exposures for non-exchange traded derivative positions.

8.	Are the investment purposes for a derivative investment consistent with the four purposes stated in $SamCERA's$ policies? \square Yes $/ \square$ No: Please explain.
	a) Has the firm developed any new purposes for derivative investments? Yes: Please explain. / No
9.	List all limited allocation derivative investments individually and the percentage of the portfolio's assets represented by each investment.
	 a) State if the firm has evaluated the exposure to market value losses that can occur from each of these derivatives. Yes / No: Please explain. b) State if these derivative investments in total represent more than 5% of the portfolio's market value. If more than 5%, please explain.
10.	State if any restricted derivative investments are held in <i>SamCERA's</i> portfolios.
	a) If any are held, state the percentage of the portfolio's assets held in such derivatives and why the firm is not in compliance with the investment policies.
11.	For derivative investments with allocation limits, has the firm tested and measured these investments' sensitivities to changes in key risk factors? Yes / No: Please explain.
12.	Have all derivative investments been made in a manner consistent with the derivative investment process specified in the policy statement? Yes / No: Please explain.
13.	Provide a statement regarding the liquidity of the derivative investments. Provide a general statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.
14.	State if the legal and regulatory risk associated with portfolio derivative investments have changed over the past \underline{six} months. \square Yes: Please explain. $/ \square$ No
Ca	sh & Equivalents
1.	Does the firm directly invest in short term fixed income investments? \boxtimes Yes / \square No
	a) If Yes, do the investments comply with the policies? Xes / No: Please explain.
Do	mestic Equity Portfolios (Large, Mid & Small)

1. Please state the percentage of the portfolio held in each of the following types of securities

Common Stock	99.8%
Preferred Stock	%
Convertible Securities	%
Cash & Equivalents	0.2%

2. Specify the large, mid and small capitalization exposure of the portfolios? Please specify percentages.

Large-Cap	0%
Mid-Cap	2%
Small-Cap	98%

3. Specify the percentage of the portfolio that is invested in American Depository Receipts (ADR's). Also, specify the percentage of the portfolio invested in ADR securities that are 144A securities. If greater than 10%, explain why.

No ADRs Held

4. What is the largest percentage of the portfolio represented by a single security? Specify the name of the security and percentage amount. If any securities were above 5% at the time of purchase, please list and explain why.

The largest percentage of portfolio represented by a single security amounts to 0.97% for EMCOR Group Inc. (EME)

5. What is the largest percentage of the portfolio represented by a single industry? Specify the industry, percentage amount and size relative to benchmark. Please specify all industries above 15%.

Biotechnology was 9.4% and the benchmark was 10.2%. No industry was above 15% in the portfolio.

6. What proportion of total AUM do the assets in this product make-up of the firm? What size does SamCERA's account comprise of total product assets?

Account	3/31/21 AUM (\$MM)	% Firm AUM
SaMCERA	\$110.1	0.09%
US Small Cap Core	\$1,994.4	1.68%
Firm	\$118,834.7	100.00%

Signed by: Patrick McMenamin

Dated: 7/12/2021
Name of Firm QMA LLC

Baillie Gifford Overseas International Growth – June 30, 2021

Compliance Certification Statement San Mateo County Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (Investments@samcera.org) by Monday, July 12, 2021.

General Compliance Issues

1.	Has the firm acted as a fiduciary and invested its assets for the sole benefit of SamCERA? Yes / No: Please explain.
2.	Are SamCERA's market benchmarks in the respective asset class areas acceptable to the firm? Yes / No: Please explain.
3.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel? ☐ Yes: Please explain. / ☒ No
	There have been no significant changes. The main changes each year occur when partners retire or are appointed, which alters the direct ownership of Baillie Gifford & Co.
	In May 2021, Dave Bujnowski, Investment Manager in our North American equities team, Catherine Flockhart, a Director in the firm's Clients Department, and Colin Lennox, head of IT Infrastructure and Support operations, were promoted to the Baillie Gifford partnership. At the same time, two of our existing partners, Charles Plowden and Bill Pacula, retired. The number of partners therefore rose to 47.
4.	Have there been any changes in the firm's investment approach? Yes: Please explain. / No
5.	Do SamCERA's guidelines require your firm to manage the portfolio significantly different from other similar portfolios? Yes: Please explain. / No
5.	Have there have been any industry or regulatory disciplinary actions taken against the firm? \square Yes: Please explain. / \boxtimes No

7.	Have proxy ballots been voted in accordance with the best economic interest of SamCERA and in a manner consistent with the Board's proxy policies? Yes / No: Please explain.
8.	Have there been any investment guideline breaches during the prior 6 months? Yes: Please explain. / No
9.	Has the firm's insurance coverage been sustained? Yes / No: Please explain.
In	vestment Management Fees
1.	Is SamCERA's investment management fee schedule higher than those charged other institutional clients who hold an account investment substantially similar to ours? Yes: Please explain. / No
De	rivative Investments
1.	Are derivatives used in the management of the investment strategy? Yes: Please ANSWER the remaining questions in this section. No: Please SKIP the remaining questions in this section.
2.	Are derivative investments in compliance with SamCERA's investment policies? Yes / No: Please explain.
3.	If the firm entered into a non-exchange traded derivative, was the general nature and associated risks of the counter-party fully evaluated? Yes / No: Please explain.
4.	For non-exchange traded derivative transactions, were the counter-parties broker/dealers? Yes / No
	If Yes: a) Do the counter-parties have investment grade debt? Yes/ No No No No: Please explain.
5.	For non-exchange traded derivative transactions, were the counter-parties financial institutions (banks)? Yes / No
	If Yes: a) Do the counter-parties have investment grade debt? Yes/ No

	b) Do the counter-parties have total assets in excess of \$1 billion, and significant net capital to protect against potential adverse market circumstances? Yes/ No: Please explain.
6.	 Is individual counter-party exposure well diversified? Yes/ No: Please explain. a) What is the largest exposure to a single counter-party within the portfolio? b) Please specify the name of the counter-party and the amount of exposure. c) Have there been any changes to the investment manager's list of approved counter-parties over the past six months?
7.	Are the investment purposes for a derivative investment consistent with the four purposes stated SamCERA's policies? Yes / No: Please explain.
	a) Has the firm developed any new purposes for derivative investments? \square Yes: Please explain. $/$ \square No
8.	List all limited allocation derivative investments individually and the percentage of the portfolio's assets represented by each investment.
	 a) State if the firm has evaluated the exposure to market value losses that can occur from each of these derivatives. Yes / No: Please explain. b) State if these derivative investments in total represent more than 5% of the portfolio's market value. If more than 5%, please explain.
9.	State if any restricted derivative investments are held in SamCERA's portfolios. Yes / No
	a) If any are held, state the percentage of the portfolio's assets held in such derivatives and why the firm is not in compliance with the investment policies.
10.	For derivative investments with allocation limits, has the firm tested and measured these investments' sensitivities to changes in key risk factors? Yes / No: Please explain.
11.	Have all derivative investments been made in a manner consistent with the derivative investment process specified in the policy statement? Yes / No: Please explain.
12.	Specify the security pricing sources used when developing portfolio market value exposures for limited allocation derivatives.
13.	Provide a statement regarding the liquidity of the derivative investments. Provide a general statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.

14. State if the legal and regulatory risk associated with portfolio derivative investments have changed over the past six months. Yes: Please explain. / No
Investment Manager Guidelines
 Are portfolio holdings well-diversified, and made in liquid securities? Yes / No: Please explain.
2. Has the firm engaged in short selling, use of leverage or margin and/or investments in commodities? Yes: Please explain. / No
Cash & Equivalents
1. Does the firm directly invest in short term fixed income investments? Yes / No
a) If Yes, do the investments comply with the policies? Yes / No: Please explain.
 International Equity Portfolios - Developed Specify the percentage of the portfolio held in each of the following types of securities:
Foreign Ordinary Shares 91.0% ADR's 8.2% Cash & Equivalents (Foreign) 0.0% Cash & Equivalents (Domestic) 0.8%
2. Specify the large, mid and small capitalization exposure of the portfolios.
Large-Cap 81.71% Mid-Cap 17.31% Small-Cap 0.98%
3. Is the firm monitoring the country, currency, sector and security selection risks associated with its portfolio? Xes / No: Please explain
4. Does the portfolio invest in emerging and/or frontier markets? Xes / No
a) If Yes, please specify the percentage(s) of the portfolio invested in emerging and/or frontier markets.
26.9% is invested in Emerging Markets
5. Does the portfolio currently employ a currency hedging strategy? Yes / No

6. What proportion of total AUM do the assets in this product make-up of the firm? What size does SamCERA's account comprise of total product assets?

Baillie Gifford AUM as at end-June 2021 is not yet available. We will provide a revised certification once it is. In the meantime, please find end-March 2021 figures below.

As at 31 March 2021, the ACWI ex US All Cap Strategy comprised 3.7% of the firm's total AUM. Within the strategy, San Mateo County Employees Retirement Association held \$359m representing 2.2% of the total strategy.

Signed by: Richard Gall Dated: 07/12/2021

Name of Firm Baillie Gifford Overseas Limited



Mondrian Investment Partners International Value – June 30, 2021

Compliance Certification Statement San Mateo County Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (<u>Investments@samcera.org</u>) by **Monday, July 12, 2021**.

General Compliance Issues

1.	Has the firm acted as a fiduciary and invested its assets for the sole benefit of $SamCERA$? \square Yes / \square No: Please explain.
2.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel? ✓ Yes: Please explain. / ☐ No
	As previously advised, Mr. Hamish Parker - Director, retired from Mondrian in the first quarter of 2021. Hamish made significant contributions to the firm over his career. His responsibilities have been transitioned over time to several individuals with whom he has worked closely. Alex Simcox, Senior Portfolio Manager - International Equities, will assume his role as Chair of the ESG Steering Committee.
3.	Have there been any changes in the firm's investment approach? ☐ Yes: Please explain. / ☒ No
4.	Do SamCERA's guidelines require your firm to manage the portfolio significantly different from other similar portfolios? ☐ Yes: Please explain. / ☒ No
5.	Have there have been any industry or regulatory disciplinary actions taken against the firm? \square Yes: Please explain. / \boxtimes No
5.	Have proxy ballots been voted in accordance with the best economic interest of <i>SamCERA</i> and in a manner consistent with the Board's proxy policies? Yes / No: Please explain.
7.	Have there been any investment guideline breaches during the prior 6 months? ☐ Yes: Please explain. / ☒ No

8.	Has the firm's insurance coverage been sustained? ✓ Yes / ✓ No: Please explain.
In	vestment Management Fees
1.	Is SamCERA's investment management fee schedule higher than those charged other institutional clients who hold an account investment substantially similar to ours? Yes: Please explain. / No
De	rivative Investments
1.	Are derivatives used in the management of the investment strategy? Yes: Please ANSWER the remaining questions in this section. No: Please SKIP the remaining questions in this section.
2.	Are derivative investments in compliance with <i>SamCERA's</i> investment policies? Yes / No: Please explain.
3.	If the firm entered into a non-exchange traded derivative, was the general nature and associated risks of the counter-party fully evaluated? Yes / No: Please explain.
4.	For non-exchange traded derivative transactions, were the counter-parties broker/dealers? Yes / No
	If Yes: a) Do the counter-parties have investment grade debt? Yes/ No No Are the counter-parties registered with the SEC and do they have net capital to protect against potential adverse market circumstances? Yes/ No: Please explain.
5.	For non-exchange traded derivative transactions, were the counter-parties financial institutions (banks)? \square Yes / \square No
	If Yes: a) Do the counter-parties have investment grade debt? Yes/ No b) Do the counter-parties have total assets in excess of \$1 billion, and significant net capital to protect against potential adverse market circumstances? Yes/ No: Please explain.
6.	Is individual counter-party exposure well diversified? Yes/ No: Please explain. a) What is the largest exposure to a single counter-party within the portfolio? b) Please specify the name of the counter-party and the amount of exposure.

	c) Have there been any changes to the investment manager's list of approved counter-parties over the past <u>six</u> months?
7.	Are the investment purposes for a derivative investment consistent with the four purposes stated SamCERA's policies?
	a) Has the firm developed any new purposes for derivative investments? \square Yes: Please explain. $/ \square$ No
8.	List all limited allocation derivative investments individually and the percentage of the portfolio's assets represented by each investment.
	 a) State if the firm has evaluated the exposure to market value losses that can occur from each of these derivatives. Yes / No: Please explain. b) State if these derivative investments in total represent more than 5% of the portfolio's market value. If more than 5%, please explain.
9.	State if any restricted derivative investments are held in <i>SamCERA's</i> portfolios. Yes / No a) If any are held, state the percentage of the portfolio's assets held in such derivatives and why the firm is not in compliance with the investment policies.
10.	For derivative investments with allocation limits, has the firm tested and measured these investments' sensitivities to changes in key risk factors? Yes / No: Please explain.
11.	Have all derivative investments been made in a manner consistent with the derivative investment process specified in the policy statement? \square Yes / \square No: Please explain.
12.	Specify the security pricing sources used when developing portfolio market value exposures for limited allocation derivatives.
13.	Provide a statement regarding the liquidity of the derivative investments. Provide a general statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.
14.	State if the legal and regulatory risk associated with portfolio derivative investments have changed over the past \underline{six} months. \square Yes: Please explain. $/\square$ No
Inv	vestment Manager Guidelines
1.	Are portfolio holdings well-diversified, and made in liquid securities? Yes / No: Please explain.

2.	Has the firm engaged in short selling, use of leverage or margin and/or investments in commodities? Yes: Please explain. / No	
Ca	sh & Equivalents	
1.	Does the firm directly invest in short term fixed income investments? \square Yes / \boxtimes No	
	a) If Yes, do the investments comply with the policies? \[Yes / \[No: Please explain.	
Int	ternational Equity Portfolios - Developed	
1.	Specify the percentage of the portfolio held in each of the following types of securities.	
	Foreign Ordinary Shares 68.56%	
	ADR's NIL	
	MIP Limited Partnership 29.46%	
	Cash & Equivalents (Foreign) 0.73%	
	Cash & Equivalents 1.25%	
	(Domestic)	
2.	Specify the large, mid and small capitalization exposure of the portfolios.	
3.	. Is the firm monitoring the country, currency, sector and security selection risks associated with its portfolio? Xes/ No: Please explain	
4.	Does the portfolio invest in emerging and/or frontier markets? \boxtimes Yes / \square No	
	a) If Yes , please specify the percentage(s) of the portfolio invested in emerging and/or frontier markets The portfolio gains exposure to emerging markets through the Mondrian Emerging Markets Equity Fund L.P. As at 30th June the portfolio held 29.46% in this fund.	
5.	Does the portfolio currently employ a currency hedging strategy? Yes / No	
6.	What proportion of total AUM do the assets in this product make-up of the firm? 8.11%	
	What size does SamCERA's account comprise of total product assets? 5.32%	

Signed by: Ed Lambert
Dated: 9 July 2021
Name of Firm Mondrian Investment Partners Limited

DoubleLine Securitized Income – June 30, 2021

Compliance Certification Statement San Mateo County Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (<u>Investments@samcera.org</u>) by <u>Monday</u>, <u>July 12, 2021</u>.

General Compliance Issues

1.	Has the firm acted as a fiduciary and invested its assets for the sole benefit of $SamCERA$? \boxtimes Yes / \square No: Please explain.
2.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel? ☐ Yes: Please explain. / ☒ No
3.	Have there been any changes in the firm's investment approach? Yes: Please explain. / No
4.	Do SamCERA's guidelines require your firm to manage the portfolio significantly different from other similar portfolios? Yes: Please explain. / No
5.	Have there been any industry or regulatory disciplinary actions taken against the firm? \square Yes: Please explain. / \boxtimes No
6.	Have there been any investment guideline breaches during the prior 6 months? Yes: Please explain. / No
7.	Has the firm's insurance coverage been sustained? ✓ Yes / ☐ No: Please explain.

Investment Management Fees

1.	Is SamCERA's investment management fee schedule higher than those charged other institutional clients who hold an account investment substantially similar to ours? Yes: Please explain. / No
	Where SamCERA's investment management fee schedule results in a higher fee charged than the fee charged to another institutional client who holds an account that is substantially similar to SamCERA's in terms of investment objectives and guidelines, that other client commenced its account with DoubleLine prior to the effective date of SamCERA's investment manager agreement with DoubleLine, and therefore, such fee arrangement is in compliance with the "most favored nations" clause (Section 2.2) of SamCERA's investment manager agreement.
De	erivative Investments
1.	Are derivatives used in the management of the investment strategy? ✓ Yes: Please ANSWER the remaining questions in this section. ✓ No: Please SKIP the remaining questions in this section.
2.	Are derivative investments in compliance with SamCERA's investment policies? Yes / No: Please explain.
In	vestment Manager Guidelines
1.	Are portfolio holdings well-diversified, and made in liquid securities? Yes / No: Please explain.
2.	Has the firm engaged in short selling, use of leverage or margin and/or investments in commodities? Yes: Please explain. / No
Ca	ash & Equivalents
1.	Does the firm directly invest in short term fixed income investments? Xes / No
	a) If Yes, do the investments comply with the policies? \boxtimes Yes / \square No: Please explain.
Do	omestic Fixed Income Portfolios
1.	State the percentage of the portfolio held in each of the following types of securities:

Certificates of Deposit	%
Commercial Paper	%

Other High Grade Short-term	%
securities	
U.S. Government & Agency securities	53.28%
Corporate Bonds	%
Mortgage- and asset-backed	43.11%
securities	
Yankee bond securities	%
Others (Cash)	3.61%

2.	its portfolio? Yes / No: Please explain
3.	Does the firm conduct horizon analysis testing? Xes / No: Please explain.
4.	Are any holdings below investment grade? Xes / No
	a) If Yes , does the percentage of investments held below investment grade represent more than 10% of the portfolio? \square Yes / \boxtimes No
	Excluding U. S. Government and Agency bond holdings, did any individual bond issue present more than 5% of the market value of the portfolio? \square Yes / \bowtie No
	a) If Yes, please specify the bond issue and percentage amount.
6.	What percentage of the portfolio is held in Rule 144A securities? 34.99%
7.	At the time of purchase, was there any single industry which represented more than 15% of the market value of the account. \square Yes / \boxtimes No
	a) If Yes , please specify the name of the industry, percentage amount and size relative to the benchmark.
8.	What proportion of total AUM do the assets in this product make-up of the firm? What size does SamCERA's account comprise of total product assets?
	DoubleLine finalizes AUM figures on the 14 th calendar following the end of quarter.

Signature: Jawa Jawa Signed by: Youse Guia, CCO Dated: July 9, 2021 DoubleLine Capital

Compliance Certification Statement

July 2021

FIAM Broad Market Duration

Firm Name	FIAMULO
FIIII Name	FIAM LLC
Product Name	FIAM Broad Market Duration
Asset Class	Investment Grade Fixed Income
Respondent/Contact	Art Greenwood, Senior Vice President, Relationship Manager
Address	900 Salem Street, Smithfield, RI 02917
Telephone	401-292-4729
Email Address	Art.Greenwood@fmr.com

Information provided in this document is for informational and educational purposes only. To the extent any investment information in this material is deemed to be a recommendation, it is not meant to be impartial investment advice or advice in a fiduciary capacity and is not intended to be used as a primary basis for you or your client's investment decisions. Fidelity and its representatives may have a conflict of interest in the products or services mentioned in this material because they have a financial interest in them, and receive compensation, directly or indirectly, in connection with the management, distribution, and/or servicing of these products or services, including Fidelity funds, certain third-party funds and products, and certain investment services.

General Compliance Issues

	Has the firm acted as a fiduciary and invested its assets for the sole benefit of SamCERA? Yes / \square No: Please explain.
2.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel?
\boxtimes	Yes: Please explain. / No
	nce the last Compliance Certification statement, the following material senior leadership changes have taken ce:
•	Effective May 17, 2021, Chad Renfro took on a dedicated role leading Fidelity's COVID response efforts. Adam Ely succeeded him in his role as head of Enterprise Cybersecurity.
	Have there been any changes in the firm's investment approach? Yes: Please explain. / \boxtimes No



4. Do SamCERA's guidelines require your firm to manage the portfolio significantly different from other similar portfolios?
☐ Yes: Please explain. / ⊠ No
5. Have there have been any industry or regulatory disciplinary actions taken against the firm?
☐ Yes: Please explain. / ☐ No
FIAM LLC:
From time to time, in the regular course of its business, FIAM LLC may receive inquiries (including subpoenas and voluntary requests for information) from regulatory authorities or law enforcement. A regulator may conduct an on-site examination or may commence an investigation. The Firm does not make public comment about such inquiries, examinations, or investigations unless and until enforcement proceedings are initiated.
To the extent that FIAM LLC or its securities affiliates have been sanctioned, fined, or cited by the Securities and Exchange Commission (SEC), Financial Industry Regulatory Authority (FINRA), or any other regulatory body, any such sanction, fine, or citation has been disclosed in its or its affiliates' Forms BD and/or Forms ADV in accordance with the requirements of such forms.
Fidelity Institutional Asset Management Trust Company:
From time to time, in the normal course of its business, the Firm may receive inquiries (including subpoenas and voluntary requests for information) from regulatory authorities or law enforcement. A regulator may conduct an onsite examination or may commence an investigation. The Firm generally does not make public comment about such inquiries, examinations or investigations unless and until enforcement proceedings are initiated. Moreover, certain regulators prohibit disclosure of any examination results.
To the extent the Firm's securities affiliates have been sanctioned, fined, or cited by the Securities and Exchange Commission (SEC), Financial Industry Regulatory Authority (FINRA), or any other regulatory body, any such sanction, fine or citation has been disclosed in its affiliates' Forms BD and/or Forms ADV in accordance with the requirements of such forms.
6. Have there been any investment guideline breaches during the prior 6 months?
☐ Yes: Please explain. / ⊠ No
7. Has the firm's insurance coverage been sustained?
⊠ Yes / ☐ No: Please explain.



Investment Management Fees

1.	Is SamCERA's investment management fee schedule higher than those charged other institutional clients who hold an account investment substantially similar to ours?
	Yes: Please explain. / 🖂 No
De	erivative Investments
1.	Are derivatives used in the management of the investment strategy?
\boxtimes	Yes: Please ANSWER the remaining questions in this section.
	No: Please SKIP the remaining questions in this section.
2.	Are derivative investments in compliance with SamCERA's investment policies?
\boxtimes	Yes / ☐ No: Please explain.
3.	If the firm entered into a non-exchange traded derivative, was the general nature and associated risks of the counter-party fully evaluated?
\boxtimes	Yes / 🗌 No: Please explain.
4.	For non-exchange traded derivative transactions, were the counter-parties broker/dealers?
\boxtimes	Yes / No
If Y	'es:
a)	Do the counter-parties have investment grade debt? $igtriangle$ Yes / $igcap$ No
b)	Are the counter-parties registered with the SEC and do they have net capital to protect against the potential adverse market circumstances? \boxtimes Yes/ \square No: Please explain.
5.	For non-exchange traded derivative transactions, were the counter-parties financial institutions (banks)?
\boxtimes	Yes / 🗌 No
If Y	'es:
a)	Do the counter-parties have investment grade debt? $oximes$ Yes / $oximes$ No
b)	Do the counter-parties have total assets in excess of \$1 billion, and significant net capital to protect against potential adverse market circumstances? \boxtimes Yes/ \square No: Please explain.
6.	Is individual counter-party exposure well diversified? $igthick{igthiggthiggthighthighthighthighthighth$
a)	What is the largest exposure to a single counter-party within the portfolio?



- b) Please specify the name of the counter-party and the amount of exposure.
- c) Have there been any changes to the investment manager's list of approved counter-parties over the past six months?

We consider this information to be proprietary and are therefore unable to disclose.

7.	Are the investment purposes for a derivative investment consistent with the four purposes stated in $SamCERA$'s policies? \boxtimes Yes / \square No: Please explain.
a) ł	Has the firm developed any new purposes for derivative investments? \Box Yes: Please explain. / $oxed{oxed}$ No
8.	List all limited allocation derivative investments individually and the percentage of the portfolio's assets represented by each investment.
As	of June 30, 2021, the portfolio held no derivative securities.
a)	State if the firm has evaluated the exposure to market value losses that can occur from each of these derivatives. \square Yes / \square No:
Not	applicable.
b)	State if these derivative investments in total represent more than 5% of the portfolio's market value. If more than 5%, please explain.
Not	applicable.
9.	State if any restricted derivative investments are held in SamCERA's portfolios.
	Yes / ⊠ No
a)	If any are held, state the percentage of the portfolio's assets held in such derivatives and why the firm is not in compliance with the investment policies.
10.	For derivative investments with allocation limits, has the firm tested and measured these investments' sensitivities to changes in key risk factors? \square Yes / \square No: Please explain.
As	of June 30, 2021, the portfolio held no derivative securities.
11.	Have all derivative investments been made in a manner consistent with the derivative investment process specified in the policy statement? \boxtimes Yes / \square No: Please explain.
12.	Specify the security pricing sources used when developing portfolio market value exposures for non-exchanged traded derivative positions.

Fidelity Fund and Investment Operations (FFIO) utilizes a combination of sources for derivatives pricing. Primary source for most derivative instruments are third-party pricing vendors, including Markit, Pricing Direct, Refinitiv, and Bloomberg (Refinitiv is our primary source on futures).



13. Provide a statement regarding the liquidity of the derivative investments. Provide a general statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.

All derivative instruments used in the portfolio are liquid. Given the minimum role they play in the portfolio and the extensive research conducted by the Counterparty Risk Team and the large team of in-house and external lawyers that support these efforts, we feel the legal and regulatory risks are minimal.

14.	State if the legal and regulatory risk associated with portfolio derivative investments have changed over the past six months. \square Yes: Please explain. / \boxtimes No
Inv	estment Manager Guidelines
	Are portfolio holdings well-diversified, and made in liquid securities? Yes/ No: Please explain.
	Has the firm engaged in short selling, use of leverage or margin and/or investments in commodities? Yes: Please explain. / \boxtimes No
Do	mestic Fixed Income Portfolios

1. State the percentage of the portfolio held in each of the following types of securities:

Certificates of Deposit	%
Commercial Paper	%
Other High Grade Short-term securities	6.93%
U.S. Government & Agency securities	35.26%
Corporate Bonds	28.69%
Mortgage- and asset-backed securities	21.57%
Yankee bond securities	7.55%

2. Does the firm conduct horizon analysis testing? ⊠ Yes/ ☐ No: Please explain.

Scenario Analysis is performed at both the security and portfolio level. We perform scenario analysis on a daily basis for most fixed-income securities in our universe. There are 13 interest-rate scenarios consisting of unchanged, shift, and twist yield curve movements. We also allow for interactive analysis, incorporating spread changes into the estimated scenarios.

- 3. Are any holdings below investment grade? \boxtimes Yes / \square No
- a) If Yes, why are they held in the portfolio?

As of June 30, 2021, 0.17% of holdings in the portfolio were below investment grade. Purchased as investment grade, these holdings have been downgraded due to increased leverage or other fundamental credit criteria. We still feel they hold relative value, although we are monitoring these securities closely.



- 4. Excluding U. S. Government and Agency bond holdings, did any individual bond issue represent more than 5% of the market value of the portfolio? ☐ Yes / ☒ No
- a) If Yes, please specify the bond issue and percentage amount.
- 5. What percentage of the portfolio is held in Rule 144A securities?

13.03%

- 6. At the time of purchase, was there any single industry which represented more than 15% of the market value of the account. \square Yes / \boxtimes No
- a) If Yes, please specify the name of the industry, percentage amount and size relative to benchmark.
- 7. What proportion of total AUM do the assets in this product make-up of the firm? What size does SamCERA's account comprise of total product assets?

As of June 30, 2021, the SamCERA Broad Market Duration account represents <1% of the assets in the Broad Market Duration strategy and less than 1% of total FIAM assets.

Signed by: Mark Botelho

3B8B588B3CA94ED...

Dated: 7/12/2021

DocuSigned by:

Name of Firm: FIAM LLC





Franklin Templeton Global Multisector Plus (Master) Fund, Ltd. (3c7) Review Period: January 1, 2021 – June 30, 2021

Bill Deakyne, CFA

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APPENDIX 1

FRANKLIN ADVISERS, INC. REGULATORY HISTORY

Please note that the San Mateo Employees' Retirement account is in a 3c7 fund and is no longer managed in a separately managed account within the guidelines of an investment management agreement (IMA).

As such, any references to the terms, guideline(s) and policy statement(s) within this questionnaire refer to the Franklin Templeton Global Multisector Plus (Master) Fund, Ltd.'s offering documents and/or private placement memorandum.

GENERAL COMPLIANCE ISSUES

1.	Have th	here	been	any	significant	portfolio	developments,	major	changes	in	firm	ownership
	organiz	ation	al stru	icture	and persor	nnel?						

If yes, please explain.

Personnel

The investment team responsible for managing the Franklin Templeton Global Multisector Plus (Master) Fund, Ltd. is Templeton Global Macro. The following tables show the additions and departures in the last six months ending June 30, 2021, for portfolio managers, research analysts and traders dedicated to Templeton Global Macro strategies.

Additions

Date joined the team	Name	Investment Function		
Mar 2021	Christopher Kennedy*	Institutional Portfolio Communications Manager		

^{*} Internal transfer

Departures

There was no departure from the team in the last six months ending June 30, 2021.

Note: Templeton Global Macro also has a research associate program for junior analysts who work with the team for two to four years.

Organizational Structure

- On February 1, 2021, Stephen Dover took on a new role as Chief Market Strategist and Head of the newly formed Franklin Templeton Investment Institute, an innovative hub for research and knowledge sharing across the firm's multiple autonomous specialist investment managers. Terrence Murphy expanded his leadership role to become Head of Equities for Franklin Templeton, as well as joining the Executive Committee, while retaining his existing role as CEO at ClearBridge Investments.
- In support of the firm's ESG growth strategy, we are bringing together the strength and expertise of our collective ESG capabilities to form our new Stewardship and Sustainability Council. The Council will connect our dedicated ESG leaders from across our 19 specialist investment managers (SIMs) to guide the continued evolution of our ESG infrastructure and best practices.
- After eight years with the firm, Julie Moret, Global Head of ESG, has decided to leave the firm on March 17 to pursue another opportunity. Michelle Auger was appointed as our Global ESG Strategy Director, who will lead the Global Sustainability Strategy Team (GSST) with a focus on two key priorities climate strategy and sustainability data.
- Tilak Lal, previously Co-Head of Investment Risk Management (IRM), departed from the firm effective June 18, 2021. Ben Seidlich was appointed Co-Head of IRM alongside Suzanne Akers to oversee investment risk management for the legacy Legg Mason specialist investment managers (SIMs), as well as supporting Solutions, ETFs, Alternatives, and Global Macro.

2.	Have there bee	Have there been any changes in the firm's investment approach?					
	☐ Yes	⊠ No					
	If yes, please ex	xplain.					
3.	Have there have	e been any industry or regulatory disciplinary actions taken against the firm?					
	☐ Yes	⊠ No					
	related proceeding financial regulator. For a summary of against FAV and/or regulatory matters FAV and its advis governmental authinvestigations. In examinations or in	a months ended June 30, 2021, Franklin Advisers Inc. (FAV) was not the subject of any <i>investment-gs</i> , <i>findings</i> or <i>orders</i> brought or issued by any U.S. federal or state regulatory agency, <i>foreign ry authority</i> or <i>self-regulatory organization</i> . Investment-related proceedings, findings or orders brought or issued by any such regulatory entity or certain of its <i>advisory affiliates</i> in the past 10 years ended March 31, 2021, as well as certain others, please see Appendix 1: Franklin Advisers, Inc. Regulatory History. In addition, from time to time ory affiliates receive subpoenas and inquiries including requests for documents or information, from norities or regulatory bodies and also are the subject of governmental or regulatory examinations or <i>investment-related proceedings</i> , <i>findings</i> or <i>orders</i> resulting from such subpoenas, inquiries investigations if any, will be reported, to the extent required and permitted by law, on FAVs Form the U.S. Securities and Exchange Commission. (Italicized terms are as defined on Form ADV.)					
4.	Has the firm's i	nsurance coverage been sustained?					
	⊠ Yes	□ No					
	If no, please ex	plain.					

INVESTMENT MANAGEMENT FEES

1.		investment management fee schedule higher than those charged other institutional d an account investment substantially similar to ours?
	☐ Yes	⊠ No
	If yes, please ex	xplain.

DERIVATIVE INVESTMENTS

1.	Are derivatives used in the management of the investment strategy?
	⊠ Yes □ No
	If Yes, please answer the remaining questions in this section. If No, please skip the remaining questions in this section.
2.	If the firm entered into a non-exchange traded derivative, was the general nature and associated risks of the counter-party fully evaluated?
	⊠ Yes □ No
	If no, please explain.
3.	For non-exchange traded derivative transactions, were the counter-parties broker/dealers?
	⊠ Yes □ No
	If yes:
	a) Do the counter-parties have investment grade debt?
	⊠ Yes □ No
	b) Are the counter-parties registered with the SEC and do they have net capital to protect against potential adverse market circumstances?
	⊠ Yes □ No
	If no, please explain.
4.	For non-exchange traded derivative transactions, were the counter-parties financial institutions (banks)?
	⊠ Yes □ No
	If yes:
	a) Do the counter-parties have investment grade debt?
	⊠ Yes □ No
	b) Do the counter-parties have total assets in excess of \$1 billion, and significant net capital to protect against potential adverse market circumstances?
	⊠ Yes □ No

If no, please explain.

5.	Is individual co	unter-party exposure well diversified?
	⊠ Yes	□ No

If No, please explain.

- a) What is the largest exposure to a single counter-party within the portfolio?
- b) Please specify the name of the counter-party and the amount of exposure.
- c) Have there been any changes to the investment manager's list of approved counter-parties over the past <u>six</u> months?
- 6. Specify the security pricing sources used when developing portfolio market value exposures for non-exchange traded derivatives.

Typically, there are readily available market quotations for certain kinds of derivative instruments, like those traded on recognized exchanges, and those instruments are valued accordingly. Over-the-counter (OTC) derivatives are valued using quotations from independent third-party vendors and sources that may apply fair value techniques. OTC derivatives contracts may not trade frequently. Our vendors may use valuation techniques including fair value pricing models to determine Net Present Value (NPV). The vendors' evaluated prices (NPV) are derived using the attributes described in the instrument terms and conditions, relevant credit or interest rate curves derived from contributed data from a network of market participants and current broker-dealer quotations. If a current market quotation cannot be established or a market event occurs that calls into question the reliability of current market quotations, the pricing department will initiate fair value procedures. Fair valuation might include an internal fair valuation by management appraisal. All fair value management appraisals are documented and the Valuation Committee reviews and approves them.

7. Provide a statement regarding the liquidity of the derivative investments. Provide a general statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.

The Franklin Templeton Global Multisector Plus (Master) Fund, Ltd. is predominantly made up of cash bonds and cash. Derivatives are used to manage interest rate, credit, and currency risk exposures as needed. In particular:

- Interest rate futures and swaps may be used to implement positive and negative views on interest rates, quickly adjust portfolio duration, or efficiently handle cash flows.
- The strategy uses currency forward contracts and/or currency options to express positive and negative currency views.
- Credit default swaps may be used to hedge sovereign credit risk. They are not currently used in Templeton Global Macro strategies.

Derivatives may be exchange traded or traded over-the-counter. Compared with cash bonds, the types of derivatives used are typically more flexible, more liquid, and often have lower transaction costs.

All portfolio risk exposures, including those associated with derivatives, are monitored by Templeton Global Macro as well as by the Investment Risk Management Group.

8.	State if the legal over the past s	al and regulatory risk associated with portfolio derivative investments have changed <u>ix</u> months.
	☐ Yes	⊠ No
	If yes, please e	xplain.

INVESTMENT MANAGER GUIDELINES

١.	Are portfolio holdings well-diversified, and made in liquid securities?					
	⊠ Yes	□ No				
	If no, please explain.					
2. Has the firm engaged in short selling, use of leverage or margin and/or investments in commodit						
	☐ Yes	⊠ No				
	If yes, please e	xplain.				

GLOBAL FIXED INCOME PORTFOLIOS

1. State the percentage of the portfolio held in each of the following types of securities (please subtotal each by region):

The following table represents the sector and region breakdown for the Franklin Templeton Global Multisector Plus (Master) Fund, Ltd. (3c7) as of June 30, 2021.

Sector	Region	MV%
Certificates of Deposit (by region)		0.00
Cash & Cash Equivalents		8.78
Preferred Stock		0.00
Commercial Paper (by region)		0.00
Other high grade short-term securities (by region)		0.00
Government securities (by region)	US	2.63
	Non-US	81.21
Agency Securities (by region)	US	0.00
	Non-US	6.63
Investment Grade Corporate Bonds (by region)	US	0.00
	Non-US	0.00
High Yield Corporate Bonds (by region)	US	0.00
	Non-US	0.00
Mortgage and asset-backed securities (by region)		0.00
Supranational		0.08
Derivatives		0.67
Bank Loans		0.00
Other		0.00
Total		100.00

Region	Percentage (%)
Americas	24.83
Asia	51.85
Europe	7.99
Middle-East/Africa	5.80
Supranational	0.08
Cash & Cash Equivalents	8.78
Other (currency derivatives)	0.67
Total	100.00

2. Please list any holdings that are below investment grade or not-rated

The table below represents the quality allocation breakdown for the Franklin Templeton Global Multisector Plus (Master) Fund, Ltd. (3c7) as of June 30, 2021. During the quarter, 19.33% of the portfolio consisted of holdings that were below investment grade or not rated.

Range	IG/Non-IG	Percentage
AAA	IG	12.16
AA	IG	19.56
A+	IG	11.52
BBB+	IG	8.33
BBB	IG	10.53
BBB-	Non-IG	9.13
BB-	Non-IG	5.95
В	Non-IG	4.54
B-	Non-IG	3.50
CCC+	Non-IG	0.39
CCC-	Non-IG	4.94
NR	Non-IG	0.00
N/A	Non-IG	0.67
Cash & Cash Equivalents	IG	8.78

3. Excluding U. S. Government and Agency bond holdings, did any individual bond issue represent more than 5% of the market value of the portfolio?

\boxtimes	Yes	No

a) If yes, please specify the bond issue and percentage amount.

The following table lists bond issue and percentage amount which represent more than 5% of the market value of the portfolio during the six month period ended June 30, 2021:

Date	Bond	MV%
1/31/2021	Korea Treasury Bond, senior note, 1.375%, 12/10/29	8.38%
2/28/2021	Korea Treasury Bond, senior note, 1.375%, 12/10/29	8.28%
3/31/2021	Korea Treasury Bond, senior note, 1.375%, 12/10/29	8.35%
4/30/2021	No any individual bond issue represent more than 5% of the market value of the portfolio	NA
5/31/2021	No any individual bond issue represent more than 5% of the market value of the portfolio	NA
6/30/2021	Korea Monetary Stabilization Bond, SR LINSECURED, Sr LInsecured, 2304, 905%, 4/02/23	5 92%

4. What percentage of the portfolio is held in Rule 144A securities?

The following table lists the percentage of portfolio is held in Rule 144A securities during the six month period ended June 30, 2021:

Date	144A (Total %)
1/31/2021	9.64%
2/28/2021	9.58%
3/31/2021	9.72%
4/30/2021	8.91%

Date	144A (Total %)
5/31/2021	6.91%
6/30/2021	7.06%

5.	At the time of purchase, was there any single industry which represented more than 15% of the
	market value of the account.

☐ Yes ⊠ No

- a) If yes, please specify the name of the industry, percentage amount and size relative to benchmark.
- 6. What proportion of total AUM do the assets in this product make-up of the firm? What size does the SamCERA's account comprise of total product assets?

The total AUM of the Franklin Templeton Global Multisector Plus (Master) Fund Ltd. as of May 31, 2021 was US \$899.23 million, which makes up 0.06% of total firm AUM.

SamCERA's account assets make up 8.74% of Franklin Templeton Global Multisector Plus (Master) (final) Fund Ltd's total assets as of May 31, 2021.

San Mateo County Employees' Retirement Association

Signed By: Chucke Cecleele

Name: Breda Beckerle

Title: Chief Compliance Officer

Dated: July 9, 2021

Name of Firm: Franklin Advisers, Inc. (FAV)

San Mateo County Employees' Retirement Association

IMPORTANT NOTES

This response (the Response) is based on the information provided in the Due Diligence Questionnaire (the Questionnaire). To the extent any such information in the Questionnaire is incomplete or inaccurate, Franklin Templeton reserves the right to alter, amend or delete any information it has provided in the Response. Franklin Templeton has prepared the Response in good faith and, to the best of its knowledge, all information provided in the Response is accurate as of the date submitted. Information, including all data, provided in the Response is unaudited, unless otherwise indicated. Additionally, any information relating to assets under management (AUM) is being provided in response to the particular request contained in the Questionnaire and the figures provided may, therefore, be categorized differently than those reported for regulatory or other disclosure purposes. AUM includes assets for which the firm provides various investment management services as described in Franklin Resources, Inc.'s current Form 10K (See Item I, "Business". A copy of the current Form 10K as well as the most recent Annual Report can be located at www.franklintempleton.com). The way we calculate our AUM may change from time to time based on such factors as changes in industry standards, regulatory requirements or specific requests. Any information from third-party sources is believed to be reliable, but Franklin Templeton cannot guarantee its accuracy or completeness. Information set forth in the Response is subject to change and Franklin Templeton does not undertake any duty to update the Response after its issuance nor does it accept responsibility for any modifications made to the Response after its date of issue. Responses may include a general description of the types of services Franklin Templeton may provide to its clients and may not be applicable or tailored to the Questionnaire. Data shown for currency exposure, country exposure, maturity, duration, coupon allocation, sector allocation and asset allocation may reflect certain derivatives held in the portfolio (or their underlying reference assets). Breakdowns may not total 100% or may be negative due to rounding, use of derivatives, unsettled trades or other factors. When performance for either the portfolio or its benchmark has been converted into another currency, different foreign exchange (FX) closing rates may be used for the conversion of the portfolio and benchmark performance.

The information contained in the Response is solely for the purpose of responding to the Questionnaire, shall be treated as confidential, and shall be distributed internally on an as-needed basis only. Subject to applicable regulatory requirements, it shall not be distributed or otherwise communicated to third parties (other than any consultant engaged by the issuer of the Questionnaire to assist in connection therewith) without the prior written consent of Franklin Templeton. Any such consultant shall likewise be obligated to treat the Response as confidential.

Investing may involve a high degree of risk. The issuer of the Questionnaire is deemed to be an experienced institutional investor or consultant and is expected to make its own independent assessment of the appropriateness and the associated risks of investing. Franklin Templeton shall not be held liable for any losses or damages arising out of any person's reliance upon the information contained in the Response. Except as expressly provided in the Response, no person, firm, or corporation has been authorized to give any information or to make any representation other than those contained in the Response.

All investors should inform themselves as to the legal and other requirements applicable to them with respect to any investments, holdings, and/or disposition of any investments. Franklin Templeton takes no responsibility for informing or advising investors of any applicable laws or regulations.

Views or opinions expressed in the Response do not constitute investment, legal, tax, financial or other advice. The Response is neither an offer for a particular security nor a recommendation to purchase any investments. The way Franklin Templeton implements its investment strategies and the resulting portfolio holdings may change depending on a variety of factors such as market and economic conditions, as well as client account guidelines and restrictions, if applicable. The information provided in the Response is not a complete analysis of every aspect of any market, country, industry, security, strategy or portfolio. Past performance does not guarantee future results and results may differ over future time periods.

By accepting these materials, you confirm your acceptance of the above terms.

NISA Investment Advisors, LLC – June 30, 2021

Compliance Certification Statement San Mateo County Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of SamCERA's investment managers on a semi-annual basis. These statements must be e-mailed to SamCERA's office (Investments@samcera.org) by Monday, July 12, 2021.

Ge	neral Compliance Issues
1.	Has the firm acted as a fiduciary and invested its assets for the sole benefit of SamCERA? ✓ Yes / ☐ No: Please explain.
2.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel? ☐ Yes: Please explain. / ☒ No
	NISA Investment Advisors, LLC is a wholly owned subsidiary of NISA, LLC. NISA, LLC is 100 percent employee-owned through membership interests in NISA, LLC. During Q2 2021, there were no material changes to NISA's ownership structure.
	NISA has been engaged in a multi-year planned succession and the last transition became effective 1/1/2021 with Jess Yawitz stepping down as NISA's CEO and David Eichhorn becoming NISA's CEO. In anticipation of this transition, effective 6/1/2020, David became the Chair of NISA's Investment Committee. Anthony Pope and Ken Lester assumed the role of Vice Chairs of the Investment Committee. Jess remains NISA's Chairman as well as a member of NISA's Investment Committee.
	In addition, as part of the succession plan and in connection with the CEO transition, NISA's Executive Committee, which was primarily focused on growth initiatives, ceased on 1/1/2021, and its duties were assumed by the Management Committee.
	Effective January 1, 2021, ownership interests in NISA, LLC were granted to additional members of NISA's existing senior management team.
3.	Have there been any changes in the firm's investment approach? ☐ Yes: Please explain. / ☒ No

4.	Do SamCERA's guidelines require your firm to manage the portfolio significantly different from other similar portfolios? Yes: Please explain. / No
5.	Have there have been any industry or regulatory disciplinary actions taken against the firm? \square Yes: Please explain. / \boxtimes No
6.	Have there been any investment guideline breaches during the prior 6 months? ☐ Yes: Please explain. / ☒ No
7.	Has the firm's insurance coverage been sustained? ✓ Yes / No: Please explain.
Inv	vestment Management Fees
1.	Is SamCERA's investment management fee schedule higher than those charged other institutional clients who hold an account investment substantially similar to ours? Yes: Please explain. / No
De	rivative Investments
1.	Are derivatives used in the management of the investment strategy? ✓ Yes: Please ANSWER the remaining questions in this section. ✓ No: Please SKIP the remaining questions in this section.
2.	Are derivative investments in compliance with SamCERA's investment policies? Yes / No: Please explain.
3.	If the firm entered into a non-exchange traded derivative, was the general nature and associated risks of the counter-party fully evaluated? Yes / No: Please explain.
	N/A.
4.	For non-exchange traded derivative transactions, were the counter-parties broker/dealers? \square Yes / \square No
	N/A.
	If Yes: a) Do the counter-parties have investment grade debt? Yes/ No b) Are the counter-parties registered with the SEC and do they have net capital to protect against potential adverse market circumstances? Yes/ No: Please explain.

5.	For non-exchange traded derivative transactions, were the counter-parties financial institutions (banks)? \square Yes / \square No	
	N/A.	
	If Yes: a) Do the counter-parties have investment grade debt? ☐ Yes/☐ No b) Do the counter-parties have total assets in excess of \$1 billion, and significant net capital to protect against potential adverse market circumstances? ☐ Yes/☐ No: Please explain.	
6.	Is individual counter-party exposure well diversified? \boxtimes Yes/ \square No: Please explain. N/A.	
	a) What is the largest exposure to a single counter-party within the portfolio?	
	The NISA-managed SamCera Portfolio holds exchange traded, U.S. Treasury futures contracts with JP Morgan as the FCM. As of 6/30/2021, the gross notional futures exposure with JP Morgan was \$1,926,875.	
	b) Please specify the name of the counter-party and the amount of exposure.	
	The NISA-managed SamCera Portfolio holds exchange traded, U.S. Treasury futures contracts with JP Morgan as the FCM. As of 6/30/2021, the gross notional futures exposure with JP Morgan was \$1,926,875. This is the only futures position in the Portfolio.	
	c) Have there been any changes to the investment manager's list of approved counter-parties over the past <u>six</u> months?	
	Credit Suisse and JP Morgan were added as approved counterparties as of 1/8/2021 and 1/13/2021, respectively.	
7.	Are the investment purposes for a derivative investment consistent with the four purposes stated $SamCERA's$ policies? \boxtimes Yes / \square No: Please explain.	
	a) Has the firm developed any new purposes for derivative investments? \square Yes: Please explain. $/ \boxtimes N_0$	
8.	List all limited allocation derivative investments individually and the percentage of the portfolio's assets represented by each investment.	

	a)	State if the firm has evaluated the exposure to market value losses that can occur from each of these derivatives. \square Yes / \square No: Please explain.
		N/A. The NISA-managed SamCera Portfolio only holds exchange traded futures contracts, which falls under the 'Allowable Derivative Instruments' in the SamCera IPS.
	b)	State if these derivative investments in total represent more than 5% of the portfolio's market value. If more than 5%, please explain.
		N/A. The NISA-managed SamCera Portfolio only holds exchange traded futures contracts, which falls under the 'Allowable Derivative Instruments' in the SamCera IPS.
9.		the if any restricted derivative investments are held in $SamCERA's$ portfolios. Yes / \boxtimes No
	a)	If any are held, state the percentage of the portfolio's assets held in such derivatives and why the firm is not in compliance with the investment policies.
		N/A.
10.		r derivative investments with allocation limits, has the firm tested and measured these estments' sensitivities to changes in key risk factors? Yes / No: Please explain.
		N/A.
11.		we all derivative investments been made in a manner consistent with the derivative restment process specified in the policy statement? $\boxtimes Yes / \square$ No: Please explain.
12.	_	ecify the security pricing sources used when developing portfolio market value exposures limited allocation derivatives.
		N/A.
13.	sta	ovide a statement regarding the liquidity of the derivative investments. Provide a general tement discussing the legal and regulatory risks associated with the portfolio manager's estments in derivatives.
	Th	e Treasury futures held in the NISA-managed SamCERA portfolio are highly liquid

instruments. For these exchange traded instruments, initial margin is posted to an FCM and variation margin is exchanged daily. For risk management purposes, NISA generally seeks to limit the amount of excess cash and securities on deposit with a FCM by transferring funds to

N/A. The NISA-managed SamCera Portfolio only holds exchange traded futures contracts,

which falls under the 'Allowable Derivative Instruments' in the SamCera IPS.

	or from the account daily, if needed. In addition, NISA negotiated provisions with FCMs that include limits on margin requirements (i.e., clearing member excess margin requirements), notice (e.g., position limits, termination, fee changes), acceptance of offsetting trades, and default (e.g., limit what constitutes default, opportunity to cure).		
14.	State if the legal and regulatory risk associated with portfolio derivative investments have changed over the past \underline{six} months. \square Yes: Please explain. $/ \boxtimes$ No		
Inv	restment Manager Guidelines		
1.	Are portfolio holdings well-diversified, and made in liquid securities? ✓ Yes / No: Please explain.		
2.	Has the firm engaged in short selling, use of leverage or margin and/or investments in commodities? \square Yes: Please explain. $/ \boxtimes$ No		
Ca	Cash & Equivalents		
1.	Does the firm directly invest in short term fixed income investments? \boxtimes Yes / \square No		
	a) If Yes, do the investments comply with the policies? \boxtimes Yes / \square No: Please explain.		
Domestic Fixed Income Portfolios			

1. State the percentage of the portfolio held in each of the following types of securities:

Certificates of Deposit	0.00%
Commercial Paper	0.00%
Other High Grade Short-term	0.84%
securities	
U.S. Government & Agency securities	35.60%
Corporate Bonds*	33.61%
Mortgage- and asset-backed	28.16%
securities	
Yankee bond securities	1.79%

^{*}Corporate Bonds include 0.40% in taxable municipals.

2.	Is the firm monitoring the country, currency, sector and security selection risks associated with its portfolio? \boxtimes Yes / \square No: Please explain
3.	Does the firm conduct horizon analysis testing? Yes / No: Please explain.

While not part of any formal process or "test", when making investment decisions NISA does consider factors such as ex ante tracking error associated with current and potential positions as well as the impact that various market events (e.g. Treasury Curve changes, Economic shocks) could have on the portfolios return.

4.	Are any holdings below investment grade? Yes / No
	a) If Yes , why are they held in the portfolio?
	Excluding U. S. Government and Agency bond holdings, did any individual bond issue present more than 5% of the market value of the portfolio? \square Yes / \boxtimes No
	a) If Yes, please specify the bond issue and percentage amount.
6.	What percentage of the portfolio is held in Rule 144A securities?
	As of 06/30/2021, 6.83% of the portfolio's market value was held in 144A securities.
7.	At the time of purchase, was there any single industry which represented more than 15% of the market value of the account. \square Yes / \boxtimes No
	a) If Yes , please specify the name of the industry, percentage amount and size relative to benchmark.
8.	What proportion of total AUM do the assets in this product make-up of the firm? What size does SamCERA's account comprise of total product assets?

As of 06/30/2021, NISA's Short/Core Duration Product (\$33.2bn) makes up approximately 10.8% of NISA's total, physical AUM (\$307.1bn).

As of 06/30/2021, the NISA-managed SamCera Portfolio (\$237.6mm) makes up approximately 0.72% of NISA's Short/Core Duration Product (\$33.2bn).

Signed by: Michael M. Dhr

Dated: 7/12/2021

Name of Firm: NISA Investment Advisors,

LLC

Western Asset Management Total Return Unconstrained – June 30, 2021

Compliance Certification Statement San Mateo County Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (Investments@samcera.org) by Monday, July 12, 2021.

General Compliance Issues

l.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel? Yes: Please explain. / No
	There have been no significant changes to portfolio developments, firm ownership, and organizational structure during the semi-annual period ending June 30, 2021.
	As it relates to personnel changes, after having served as Western Asset's Director of Finance and Administration and Chief Financial Officer (CFO) since March 1999, Mr. Bruce Alberts retired effective June 1, 2020. Mr. David Hugh was named Global Head of Finance for Western Asset effective March 31, 2021. In this role, he reports directly to Ms. Murphy and leads the Firm's Corporate Finance Team. Mr. Hugh has been with Western Asset since 2010 and was previously responsible for leading the Firm's Financial Planning & Analysis Team.
	In addition, as disclosed in a recent client distribution, Western Asset informed SamCERA of two future leadership team changes. The Firm's Chief Operating Officer (COO), Ms. Jennifer Murphy, will be leaving the Firm at the end of this year and Western Asset's General Counsel, Mr. Tony Ruys de Perez, has announced his retirement next year, effective in June 2022. Western Asset initiated an exhaustive search to fill the COO position, and on August 2nd, Mr. Drew Bowden will be joining the Firm and will work with Ms. Murphy through the end of the year to ensure a smooth transition as Mr. Bowden will assume all of Ms. Murphy's current responsibilities, including the role on the Executive Committee. Mr. Bowden will work with Mr. Ruys de Perez to identify and interview candidates for the replacement of Western Assets General Counsel position as the year progresses.
2.	Have there been any changes in the firm's investment approach? ☐ Yes: Please explain. / ☒No
3.	Have there have been any industry or regulatory disciplinary actions taken against the firm? \square Yes: Please explain. / \boxtimes No
1.	Has the firm's insurance coverage been sustained? ☐ Yes / ☐ No: Please explain.

Investment Management Fees

1.	Is SamCERA's investment management fee schedule higher than those charged other institutional clients who hold an account investment substantially similar to ours? ☐ Yes: Please explain. / ☒ No	
De	rivative Investments	
1.	 Are derivatives used in the management of the investment strategy? ✓ Yes: Please ANSWER the remaining questions in this section. ✓ No: Please SKIP the remaining questions in this section. 	
2.	If the firm entered into a non-exchange traded derivative, was the general nature and associated risks of the counter-party fully evaluated? Yes / No: Please explain.	
3.	For non-exchange traded derivative transactions, were the counter-parties broker/dealers? \boxtimes Yes / $\ \square$ No	
	If Yes: a) Do the counter-parties have investment grade debt? ☐ Yes/☐ No b) Are the counter-parties registered with the SEC and do they have net capital to protect against potential adverse market circumstances? ☐ Yes/☐ No: Please explain.	
4.	For non-exchange traded derivative transactions, were the counter-parties financial institutions (banks)? \boxtimes Yes / \square No	
	If Yes: a) Do the counter-parties have investment grade debt? ☐ Yes/☐ No b) Do the counter-parties have total assets in excess of \$1 billion, and significant net capital to protect against potential adverse market circumstances? ☐ Yes/☐ No: Please explain.	
5.	 Is individual counter-party exposure well diversified? 	
	b) Please specify the name of the counter-party and the amount of exposure. Name of the counter-party is Morgan Stanley, 0.07%.	
	c) Have there been any changes to the investment manager's list of approved counter-parties over the past <u>six</u> months? No material changes within derivative counterparties.	

6. Specify the security pricing sources used when developing portfolio market value exposures for limited allocation derivatives.

Western Asset's Pricing Group, an independent entity within the Risk Management & Quantitative Solutions Department, is responsible for obtaining prices from independent pricing vendors and brokers and assigning values to securities in accordance with the approved pricing hierarchies. Western Asset's primary pricing vendor is ICE Data Services for fixed-income cash bonds, and Markit for derivatives.

If prices for a particular security are not readily available from an independent pricing vendor, Western Asset's Pricing Group will obtain and use as market values from at least one independent bid from broker dealers if dual broker dealer bids are not available. The Pricing Group will attempt to obtain such bids from the trading broker. Western Asset's price will be the average of two broker bids if made available, or otherwise will be reflective of a single broker dealer bid.

If at any time it is determined by Western Asset's Pricing Group or a sector specialist that reliable market quotations from a pricing vendor, dealer or general market data is not readily available for a particular security, the Pricing Committee will determine the fair valuation for that particular investment. Western Asset's Pricing Policies and Valuation Process provides further details on fair valuation determination.

Western Asset's Pricing Committee is responsible for approving the Firm's pricing policies, sources used, and any exceptions to them. It consists of senior members from the Investment Management unit and the Client Service, Legal & Compliance, Risk Management and Investment Operation teams. The Committee meets at least monthly to review monthly reports compiled by the Pricing Group and to consider any changes to the pricing policies as the need arises.

Western Asset's Pricing Policies and Valuation Process is provided in Appendix A.

7. Provide a statement regarding the liquidity of the derivative investments. Provide a general statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.

Western Asset's management style focuses on adding incremental value without taking on excessive risk. To ensure that the Firm's use of derivative instruments is consistent with this investment philosophy, the Firm developed the following guidelines—listed below along with a brief description of their rationale—which form the basis of every decision to employ derivatives in the Firm's investment portfolios:

- The duration contribution of derivatives will not bring the portfolio's duration outside the portfolio's specific duration band.
- Where a portfolio enters into forward foreign exchange contracts the aggregate underlying exposure of the portfolio attained through such contracts shall not exceed 100% of the portfolio's market value.
- A portfolio's gross exposure to forward foreign exchange contracts shall not exceed 50% with any single counterparty and net exposure shall not exceed 25% with any single counterparty. Net exposure is defined as the value (in account base currency terms) of open forward foreign exchange purchase contracts less forward foreign exchange sale contracts. Gross exposure is defined as the value (in account base currency terms) of open forward foreign exchange purchase contracts plus forward foreign exchange sale contracts.
- The net notional exposure to index and credit default swaps will count at their full notional value as exposure to the underlying asset. Concentration limits for a particular name or asset class will apply based on the net sum of its cash and derivative security holdings.

- Short (written) options positions will always be covered, either with current security holdings, other options or futures positions. Mortgage derivatives with significant short option characteristics will not exceed 5% of the portfolio, and will generally be a) offset by positions in other mortgage derivatives (e.g., floaters and inverse floaters), or b) offset by other portfolio positions (e.g., IOs and long duration bonds).
- Futures and options contracts will be limited to liquid instruments actively traded on major exchanges or, if over-the-counter, executed with major dealers.
- Swap contracts are considered over-the-counter contracts between two parties and have counterparty credit risk different from exchange traded derivatives. Western Asset tries to limit its counterparty risk by executing swaps with the strongest financial counterparties. The vast majority of these counterparties are rated is A- or better. In addition, collateral agreements will be in place to trigger margin movement whenever the current mark-to-market amount to be paid or received by either counterparty exceeds a threshold amount.
- Finally, under no circumstances will the derivative positions change the characteristics of the portfolio so that it violates any guideline set forth in the Investment Management Agreement.

8.	State if the legal and regulatory risk associated with portfolio derivative investments have changed over the past \underline{six} months. \square Yes: Please explain. $/ \boxtimes$ No	1V(
Inv	vestment Manager Guidelines	
1.	Are portfolio holdings well-diversified, and made in liquid securities? ⊠ Yes / □ No: Please explain.	
2.	Has the firm engaged in short selling, use of leverage or margin and/or investments commodities? \square Yes: Please explain. $/ \boxtimes$ No	in

Fixed Income Portfolios

1. State the percentage of the portfolio held in each of the following types of securities

Treasury	19.15%
•	
Agency	0.80%
Inflation-Linked	0.04%
Mortgage-Backed	8.80%
Asset-Backed	1.62%
Investment-Grade Credit	9.83%
High-Yield Credit	9.27%
Bank Loan	10.38%
CLO	4.28%
Non-US	2.19%
EM Government	1.01%
EM Local Currency	16.42%
EM Corporate	2.78%
Cash & Equivalents	13.43%
Total	100%

2.	Does the firm conduct horizon analysis testing? ☑ Yes / ☐ No: Please explain.
	Western Asset's investment management team estimates horizon excess returns under various market scenarios, including best, worst and likely cases. Particular attention is paid to diversifying strategies
	under each scenario. The horizon for risk management is the same as that for investment management, as the risk effort is closely integrated into the investment process. The firm's tracking error model calculates predicted tracking errors based on 18 months of historical data. Western Asset also generates scenario analysis results daily for representative accounts. These results estimate horizon durations given various interest rate shocks. The horizon is generally instantaneous as Western Asset evaluates one day extreme movements in rates for duration hedging purposes. The Firm's systems allow for any time horizon and can output a wide array of horizon performance or analytics related statistics.
3.	Excluding U. S. Government and Agency bond holdings, did any individual bond issue represent more than 5% of the market value of the portfolio? Yes / No
	a) If Yes, please specify the bond issue and percentage amount. Not Applicable.
4.	What percentage of the portfolio is held in Rule 144A securities? 19.4%
5.	At the time of purchase, was there any single industry which represented more than 15% of the market value of the account. \square Yes / \boxtimes No
	 a) If Yes, please specify the name of the industry, percentage amount and size relative to benchmark. Not Applicable.
6.	What proportion of total AUM do the assets in this product make-up of the firm? What size does

6. What proportion of total AUM do the assets in this product make-up of the firm? What size does SamCERA's account comprise of total product assets?

As of May 31, 2021, Western Asset's Total Return Unconstrained (TRU) Bond product makes up 1.14% of Firmwide AUM, and SamCERA's account comprises 4.02% of total TRU Bond product assets.

Signed by: <u>Jeremy Henningsen, Compliance Officer</u>

Jeremy Henningsen

Dated: 7/12/2021

Name of Firm: Western Asset Management Company, LLC

Harrison Street Core Property Fund, LP - June 30, 2021

Compliance Certification Statement San Mateo County Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of SamCERA's investment managers on a semi-annual basis. These statements must be e-mailed to SamCERA's office (Investments@samcera.org) by Monday, July 12, 2021.

General Compliance Issues

1.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel? Yes: Please explain. / No
2.	Have there been any changes in the firm's investment approach? Yes: Please explain. / No
3.	Have there have been any industry or regulatory disciplinary actions taken against the firm? Yes: Please explain. / No
4.	Has the firm's insurance coverage been sustained? Xes / No: Please explain.
In	vestment Management Fees
1.	Is SamCERA's investment management fee schedule higher than those charged other institutional clients who hold an account investment substantially similar to ours? Yes: Please explain. / No
In	vestment Manager Guidelines
1.	Are portfolio holdings well-diversified? Xes / No: Please explain.
2.	Has the firm used leverage? Xes / No
	 a) If yes, is the portfolio leverage within the 40% of overall loan to value guideline? Xes / No: Please explain.

Cash & Equivalents

1.	Does the firm directly invest in short term fixed income investments? Yes / No
	a) If Yes, do the investments comply with the policies?
Re	eal Estate Portfolios
1.	Is the portfolio diversified as to region, property type, industry, and economic base? Yes / No
	a) If No, do the investments comply with the policies?
2.	Is the portfolio achieving a total time-weighted rate of return, net of fees, which equals or exceeds, the NFI ODCE index? Yes / No: Please explain.
3.	Does the core fund concentration exceed 40% (by value) in any single property type, 15% (by value) in any single investment, or 30% in any single metropolitan statistical area, determined as of the date of the acquisition of the property? Yes: Please explain. / No
4.	What proportion of total AUM do the assets in this product make-up of the firm? What size does SamCERA's account comprise of total product assets?
	Please note firm and fund level AUM figures and ownership percentages as of June 30, 2021 will not be published until after the due date of this request. As of March 31, 2021, Core Fund assets comprised 39.9% of total Firm AUM, and SamCERA's ownership percentage of the Core Fund was 0.67%. The Firm is happy to subsequently provide figures as of June 30, 2021 if required.
	Letyland
Da	ned by: Joseph G. Lansing, as Authorized Signatory ted: 7/08/21 me of Firm: Harrison Street Real Estate Capital, LLC

INVESCO Core Real Estate – June 30, 2021

Compliance Certification Statement San Mateo County Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (<u>Investments@samcera.org</u>) by <u>Monday</u>, July 12, 2021.

General Compliance Issues

1.	Are SamCERA's market benchmarks in the respective asset class areas acceptable to the firm? Yes / No: Please explain.
2.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel? Yes: Please explain. / No
3.	Have there been any changes in the firm's investment approach? ☐ Yes: Please explain. / ☒ No
4.	Have there have been any industry or regulatory disciplinary actions taken against the firm? Yes: Please explain. / \boxtimes No - We note that this response solely pertains to Invesco Core Real Estate – U.S.A., L.P. and those managing such entity.
5.	Has the firm's insurance coverage been sustained? Yes / No: Please explain.
In	vestment Management Fees
1.	Is SamCERA's investment management fee schedule higher than those charged other institutional clients who hold an account investment substantially similar to ours? Yes: Please explain. / No
In	vestment Manager Guidelines
1.	Are portfolio holdings well-diversified? Xes / No: Please explain.

Cash & Equivalents

1.	Does the firm directly invest in short term fixed income investments? \square Yes / \boxtimes No
	a) If Yes, do the investments comply with the policies? Yes / No: Please explain.
Re	eal Estate Portfolios
1.	Is the portfolio diversified as to region, property type, industry, and economic base? ✓ Yes / No
	a) If No , do the investments comply with the policies?
2.	Is the portfolio achieving a total time-weighted rate of return, net of fees, which equals or exceeds, the NFI ODCE index? Yes / No: Please explain As of March 31, 2021, the Fund's since inception net return of 6.80% exceeds the NFI ODCE index of 6.46%
3.	Does the core fund concentration exceed 40% (by value) in any single property type or 35% in any single metropolitan statistical area, determined as of the date of the acquisition of the property? \square Yes: Please explain. $/ \square$ No
4.	Has the firm used leverage? Xes / No
	a) Is the portfolio leverage within the 35% of overall loan to value guideline? Yes / No: Please explain The maximum leverage for the Fund is 35%. As of March 31, 2021, the Fund's leverage was 26.1%.
5.	What proportion of total AUM do the assets in this product make-up of the firm? - 17.4% (as of March 31, 2021) What size does SamCERA's account comprise of total product assets? - 2.49% (as of March 31, 2021)
	General Partner:
	IRI Core I, L.P.
	By: IRI Core-GP, LLC, its general partner

Name: William C Grubbs Jr Title: Vice President

By: Invesco Realty, Inc., its sole member

The Parametric Portfolio Associates LLC Cash & Currency Hedge Overlay – June 30, 2021

Compliance Certification Statement San Mateo County Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (<u>Investments@samcera.org</u>) by <u>Monday</u>, <u>July 12, 2021</u>.

General Compliance Issues

1.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel? \square Yes: Please explain. / \square No
2.	Have there been any changes in the firm's investment approach? ☐ Yes: Please explain. / No
3.	Have there have been any industry or regulatory disciplinary actions taken against the firm? \square Yes: Please explain. / \boxtimes No
4.	Has the firm's insurance coverage been sustained? Yes / No: Please explain.
5.	Have there been any investment guideline breaches during the past 6 months? ☐ Yes: Please explain. / No
Inv	vestment Management Fees
1.	Is <i>SamCERA</i> 's investment management fee schedule less favorable than those charged other institutional clients who hold an account investment substantially similar to ours? Yes: Please explain. / No
De	rivative Investments
1.	Are derivatives used in the management of the investment strategy? Yes: Please ANSWER the remaining questions in this section. No: Please SKIP the remaining questions in this section.

2.	Are derivative investments in compliance with $SamCERA's$ investment policies? \boxtimes Yes / \square No: Please explain.
3.	If the firm entered into a non-exchange traded derivative, was the general nature and associated risks of the counter-party fully evaluated? Yes / No: Please explain.
	Not applicable – Exchange traded derivatives only used in this account.
4.	For non-exchange traded derivative transactions, were the counter-parties broker/dealers? \square Yes / \square No
	If Yes : a) Do the counter-parties have investment grade debt?
	Not applicable – Exchange traded derivatives only used in this account.
5.	For non-exchange traded derivative transactions, were the counter-parties financial institutions (banks)? Yes / No
	If Yes: a) Do the counter-parties have investment grade debt? Yes/ No b) Do the counter-parties have total assets in excess of \$1 billion, and significant net capital to protect against potential adverse market circumstances? Yes/ No: Please explain.
	Not applicable – Exchange traded derivatives only used in this account.
6.	 Is individual counter-party exposure well diversified? Yes/ No: Please explain. a) What is the largest exposure to a single counter-party within the portfolio? b) Please specify the name of the counter-party and the amount of exposure. c) Have there been any changes to the investment manager's list of approved counter-parties over the past six months?
7.	Are the investment purposes for a derivative investment consistent with the four purposes stated in $SamCERA's$ policies? \boxtimes Yes / \square No: Please explain.
	a) Has the firm developed any new purposes for derivative investments? \square Yes: Please explain. $/ \boxtimes No$

8.		at all limited allocation derivative investments individually and the percentage of the rtfolio's assets represented by each investment.
	ŕ	State if the firm has evaluated the exposure to market value losses that can occur from each of these derivatives. Yes / No: Please explain. State if these derivative investments in total represent more than 5% of the portfolio's market value. If more than 5%, please explain.
		Not applicable – No limited allocation derivatives used in this account.
9.		the if any restricted derivative investments are held in <i>SamCERA's</i> portfolios. Yes / No If any are held, state the percentage of the portfolio's assets held in such derivatives and why the firm is not in compliance with the investment policies.
10.		r derivative investments with allocation limits, has the firm tested and measured these restments' sensitivities to changes in key risk factors? Yes / No: Please explain.
		Not applicable – No limited allocation derivatives used in this account.
11.		we all derivative investments been made in a manner consistent with the derivative restment process specified in the policy statement? \boxtimes Yes / \square No: Please explain.
12.	•	ecify the security pricing sources used when developing portfolio market value exposures limited allocation derivatives.
		Not applicable – No limited allocation derivatives used in this account.
13.	sta	ovide a statement regarding the liquidity of the derivative investments. Provide a general tement discussing the legal and regulatory risks associated with the portfolio manager's restments in derivatives.
		See Attachment A for response.
14.		ate if the legal and regulatory risk associated with portfolio derivative investments have anged over the past \underline{six} months. \square Yes: Please explain. $/ \square$ No
Na Da	me/ ted:	Title: Benjamin Hammes, Chief Deputy Compliance Officer July 12, 2021 of Firm: Parametric Portfolio Associates LLC

ATTACHMENT A RESPONSE TO QUESTION NO. 13

Parametric seeks to only hold investment instruments that would be deemed liquid. Futures provide a transparent and relatively low risk investment exposure management vehicle to use in managing overlay strategies. There are currently numerous liquid global equity, fixed income, commodity, and currency exchange-traded index futures available for use in an overlay program. Before specific futures contracts to be included in a client's overlay portfolio are approved, the instrument is evaluated and screened to ensure adequate liquidity, focusing on open interest, average daily trading volume, bid/ask spread, and liquidity of the underlying index. As Parametric manages approximately over 180 overlay programs and has relationships with numerous counterparties trading in global markets, we have developed deep knowledge of liquidity levels of markets throughout the world. The primary gauges of liquidity are the average daily volume (ADV) and open interest metrics. Parametric carefully monitors liquidity and estimated costs internally and through external (i.e. broker) sources. As a general rule, the greater the amount ADV and open interest, the greater the liquidity and lower the transaction costs.

Parametric continuously monitors these metrics and will only use contracts which have sufficient liquidity to support the required positions. Parametric will also tailor the instruments employed in the overlay program based upon each client's unique needs and objectives.

Parametric's compliance program is designed to reasonably address all known conflicts of interests and other additional specific risks that have been identified through an annual risk assessment or a change in business or regulatory matters. These include legal and regulatory risks. Adherence to all legal and regulatory matters is considered to be an integral part of each employee's primary job functions. Every employee is required to share in maintaining and enforcing compliance with all applicable internal and external rules.

Verus Advisory, Inc. - June 30, 2021

Compliance Certification Statement San Mateo County Employees' Retirement Association

Please complete the following compliance certification statement and e-mail to SamCERA (Investments@samcera.org) by Monday, July 12, 2021.

G	eneral Complian	ce Issues					
1.	Have there been	any significant	changes in fi	rm ownership	, organizational	structure	and firm

Hires	Departures	Reason for Departure
Stuart Odell, Jr.	John Meier, CFA, Senior Consultant	Retired
Ted Hermann, Business Development	Barry Dennis, Senior Consultant	Retired
Mark Brubaker, Senior Consultant		
Chris Shelby, Director	Francis Griffin, Director	Relocated to the east coast
Kin Lam, Associate Director		
	Max Giolitti, Chief Risk Officer	Left due to personal reasons
1	Ted Hermann, Business Development Mark Brubaker, Senior Consultant Chris Shelby, Director Kin Lam, Associate	Ted Hermann, Business Development Mark Brubaker, Senior Consultant Chris Shelby, Director Kin Lam, Associate Director Senior Consultant Barry Dennis, Senior Consultant Francis Griffin, Director Max Giolitti, Chief

5. Has the firm's insurance coverage been sustained?
∑ Yes / ☐ No: Please explain.
Fees
1. Is SamCERA's fee structure less favorable than other clients with the same level of service and
access to investment opportunities?
☐ Yes: Please explain. / ⊠ No
11/1/1/1/101/11
1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/
Cional Kuy Wilman Croncon Child Wares Officel
Signed by: Warren Spencer, Chief Compliance Officel
Dated: July 1, 2021
Name of Firm: Verus Advisory, Inc.

July 27, 2021 Agenda Item 4.12

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TO: Board of Retirement

FROM: Gladys Smith, Assistant Executive Officer

SUBJECT: Questions for Annual Review of Milliman Inc.

Recommendation

Approve the evaluation questions in the "Questions for Annual Actuarial Consultant Evaluation."

Discussion

The questions in the attached document will be submitted to SamCERA's actuary, Milliman Inc., prior to the annual review, which will be scheduled for the September 28, 2021, Board meeting. In addition, there will be a survey of trustees and staff regarding Milliman's performance.

Staff will provide Milliman's responses to the questionnaire as well as the survey results at the September meeting.

Attachment

Questions for Annual Actuarial Consultant Evaluation

Questions for Annual Actuarial Consultant Evaluation

Please provide information about the following events and activities and whether they occurred during Fiscal Year 2020-21.

Organizational Update

- 1) Has the ownership structure of your firm changed? If so, describe.
- 2) Provide an update on your firm's organization, with particular emphasis on (a) changes to your management structure over the past eighteen months, and (b) clients gained or lost in the past eighteen months. All significant changes should be accompanied by an explanation. An organizational chart should accompany this response.
- 3) Has your firm's policy regarding adding public pension plan clients and other actuarial business changed, if so how?
- 4) Update all significant personnel changes or expected changes to the "SamCERA Team." Describe the relative strength and longevity of your staff.
- 5) Please confirm if there were any lawsuits or legal proceedings requiring notification to SamCERA under section 16 of our agreement. If yes, please described.
- 6) Has any of your operations related to your services provided to SamCERA been outsourced? If the answer is yes, provide details regarding the firm(s) with which your firm has contracted.
- 7) Other than the actuarial audit performed by SamCERA's actuarial auditor on your SamCERA actuarial services, was an actuarial audit been performed on any of your firm's actuarial products? If yes, discuss the audit and the findings. Any material findings or recommendations must be accompanied by an explanation.
- 8) Has Milliman experienced any problems with its "mission critical" systems? Were any upgrades made and if not, when were these systems implemented and when were they last upgraded? Do you anticipate any changes to these systems in the next twelve months?
- 9) Please describe how your firm monitored and managed cyber security risks as they relate to SamCERA's Confidential Information. Were there any problems with cyber security? If so, was your cyber security breach policy applied? If not, why not? Have your procedures for cyber security been updated? Please describe. Please confirm that there has not been any release of SamCERA Confidential Information requiring notification to SamCERA as set forth in Schedule A Section 5(E).
- 10) Please describe any changes to Milliman's business continuity plan.

Actuarial Process

- 11) Provide a description, in detail, of your actuarial process used when providing services to SamCERA and highlight any changes to the process.
- 12) Provide a description, in detail, of the peer review procedures you used when providing services to SamCERA and include whether and the extent it involves other actuarial firms, highlight any changes to that process.

Outlook Beyond Fiscal Year 2020-21

- 13) What current issues are your clients concerned with regarding products, services, education and governance?
- 14) Describe your assessment of the relationship between your firm and SamCERA. How can SamCERA better assist you in accomplishing the goals it has established for your firm? How can we better utilize your firm's capabilities?

Conclusion

- 15) What actuarial related changes should SamCERA consider?
- 16) Relative to your expertise, what trends are occurring in the public pension industry that SamCERA should be tracking?

July 27, 2021 Agenda Item 4.13

TO: Board of Retirement

FROM: Scott Hood, Chief Executive Officer

SUBJECT: Code of Conduct

Recommendation

Reaffirm the Board of Retirement's Code of Conduct.

Background

The Board has 24 policies which it has adopted at various times to govern the Board in its activities and to guide staff's administration of the system. Staff brings these polices to the Board for periodic reaffirmation or amendment on an as needed basis. The policy before the Board today is its Code of Conduct which is in substantially the same form as the policy approved in 2018 with minor modifications for readability. A copy of the revised Code of Conduct which shows the revisions made to the 2018 policy is attached.

Discussion

The Board has a fiduciary obligation to the retirement fund to conserve assets and protect the integrity of the fund for the benefit of the members and beneficiaries of SamCERA. Additionally, Board members must comply with several areas of the Government Code including the Brown Act, the Public Records Act, the Political Reform Act, the regulations of the California Fair Political Practices Commission (FPPC), and SamCERA's "Conflict of Interest Code." The values behind these laws can be summarized as: trustworthiness, responsibility, and loyalty. The Board's current Code of Conduct identifies and proscribes behavior that promotes these ethical principles. Staff recommends that it be reaffirmed by the Board.

Attachment

Code of Conduct

San Mateo County Employees Retirement Association

BOARD OF RETIREMENT CODE OF CONDUCT

The Board of Retirement is the governing body of SamCERA and has exclusive control and fiduciary responsibility for management of the benefits and investments of the retirement fund for the members and beneficiaries of SamCERA. As public officials and as fiduciaries, Board members are expected to be careful stewards of taxpayer and member resources.

The Board is governed by the California Constitution, the County Employees Retirement Law of 1937, the California Public Employees' Pension Reform Act of 2013, and the regulations, procedures, and policies adopted by the Board. In addition, Board members must comply with all applicable federal, state, and local laws, including all laws and regulations applicable to public agencies (such as the Brown Act pertaining to open meetings and the Public Records Act), and laws and regulations applicable to public officials (such as disclosure of economic interests and avoidance of conflict of interests) as set forth in the Government Code and the regulations of the California Fair Political Practices Commission (FPPC).

Board members are also subject to SamCERA's "Conflict of Interest Code" and must sign an "Acknowledgment of Financial Conflict of Interest Laws" and an "Acknowledgment of Confidential Records and Information."

The general rationale behind these laws and policies reflects the ethical principles of public service which can be summarized as: Trustworthiness, Responsibility, and Loyalty.

In furtherance of these obligations and beliefs, the Board hereby adopts the following Code of Conduct for its members:

As a member of the Board, you must:

- 1. Discharge your duties solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries.
- 2. Act in good faith and in the best interest of members, beneficiaries, and the fund as a whole.
- 3. Act with skill, care, and diligence.
- 4. Carry out your duties is a manner consistent with your fiduciary duties.
- 5. Carry out your duties consistent with <u>applicable federal</u>, <u>state</u>, <u>and local law</u>, <u>including all</u>the laws and regulations regarding conflicts of interest, gifts, financial disclosures, ethics, and prohibited practices, and avoid appearances of impropriety.
- 6. Refrain from using your position and avoid the appearance that you are using your position, on the Board for private gain or the advantage of another.
- 7. Understand what information is to be kept confidential and maintain that confidentiality.
- 8. Refrain from using confidential information acquired by virtue of SamCERA activities for private gain or advantage of another, including but not limited to, insider trading.

- 9. Seek or gather specialized advice or knowledge through education and training to assist you in making prudent decisions.
- 10. Become familiar with Board regulations, policies, and procedures and consistently follow them to carry out the Board's responsibilities.
- 11. Communicate in a respectful, straightforward, honest, and constructive manner during all meetings of the Board and its committees.
- 12. Make a good faith effort to prepare for, attend, and participate in all meetings of the Board and of committees on which you serve.
- 13. Treat all participants and beneficiaries fairly, objectively, and impartially.
- 14. Strive to carry out the business of the Board and committee meetings in the most efficient and effective manner possible.
- 15. Refrain from having any *ex parte* communication with any SamCERA member regarding the determination of a member's benefit until the Board's decision has become final and the time to file a Court challenge has run.
- 16. Refrain from communicating with any investment management firm, or other vendor, regarding any product or search during the period beginning when the selection process is commenced (request for services is released or search process commenced) and ending when the selection process is deemed completed by the Board.

July 27, 2021 Agenda Item 6.1

TO: Board of Retirement

FROM: Michael Coultrip, Chief Investment Officer Michael R. Coultrip

SUBJECT: Preliminary Monthly Portfolio Performance Report for the Period Ended

June 30, 2021

Recommendation

Accept the preliminary performance report dated June 30, 2021.

Background

This preliminary report is intended to provide a high-level view of the portfolio and its trends. It is not intended to provide short-term performance upon which the Board would act. The quarterly performance metrics are not yet available for our private equity, private credit, private real asset, and real estate portfolios. The performance for these portfolios will be reflected in the quarterly performance report generated by Verus.

The attached performance report shows both net and gross of fee returns for the total plan on page one, with net composite returns on page two and net manager returns (pages 3-9) also shown.

Discussion

The fund's net preliminary return for June was 0.8%, bringing the preliminary trailing twelvemonth net return ending June 2021 to 24.2%. The preliminary twelve-month net return is above both SamCERA's Plan Benchmark return of 22.1% and SamCERA's Actuarial Assumed Earnings Rate of 6.25%.

U.S. equity markets continued their drive higher while international equity lagged in part due to a stronger U.S. Dollar. The U.S. equity market (measured by the S&P 500 Index) was up 2.3%, finishing at an all-time high at month-end. Small-capitalization stocks were also up 1.9% on the month. Developed international equity (as measured by MSCI EAFE) was down 1.1% while emerging markets were slightly higher by 0.2%.

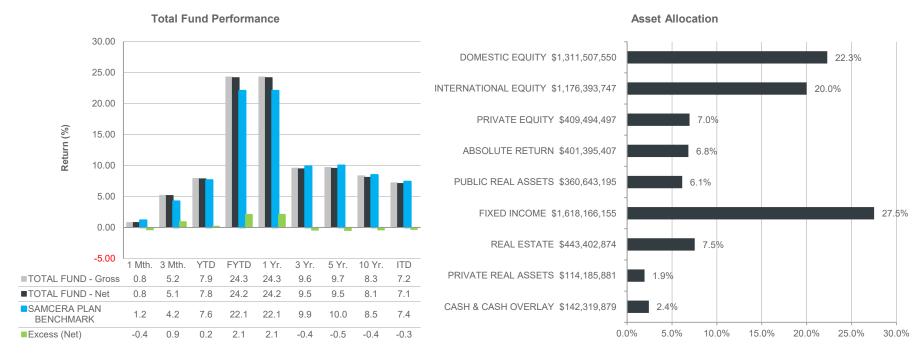
Economic data was positive as the economic recovery continued to gain momentum. Manufacturing was moderately positive during the month, but weaker than previous months. Consumer confidence also surged and showed the highest reading in 18 months. The U.S. labor market also showed strength, gaining 850,000 new jobs, which was higher than the 720,000 expected. The Consumer Price Index rose 0.6% in May after rising 0.8% in April. Over the past twelve months the CPI Index has increased by 5.0%, its largest one-year increase in 13 years.

The general U.S. fixed income market was higher by 0.7% as interest rates fell. The 10-year U.S. Treasury yield was lower by 13 basis points during the month and ended at 1.47% by month-end. High Yield returns were up 1.3% as high-yield credit spreads continued to narrow. The Bloomberg Commodity Index also rose by 1.9% during June.

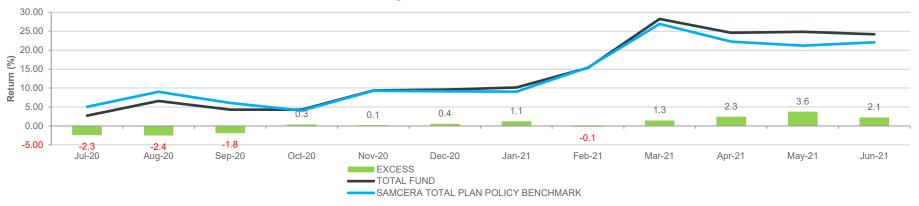
Attachments

Northern Trust Monthly Preliminary Performance Report Verus Capital Market Update





Rolling Month End Annual Returns



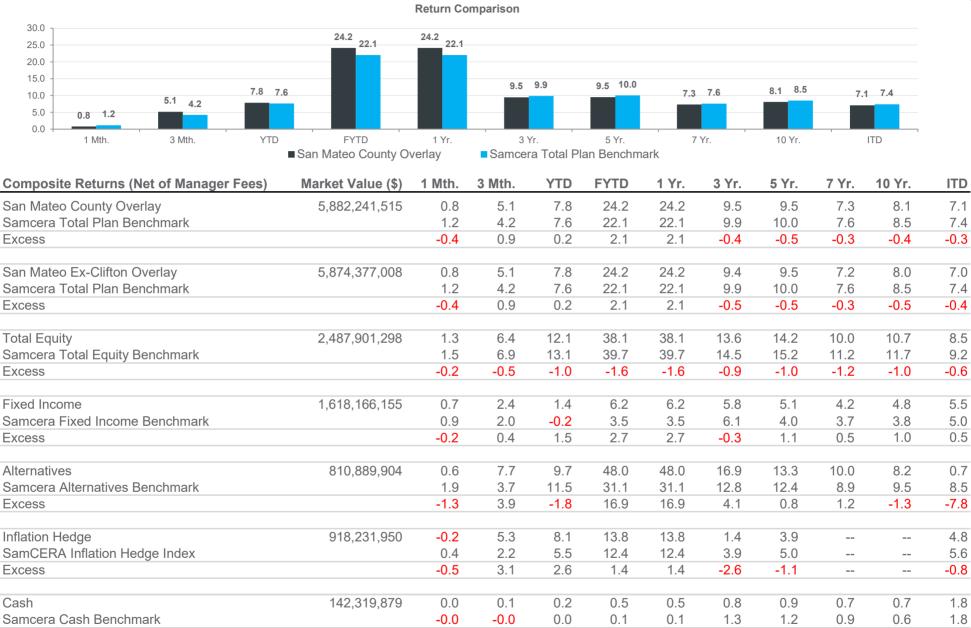


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San Mateo County Composite Return Summary

June 30,2021







Excess

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0.1

0.2

0.4

0.0

-0.5

-0.3

-0.2

0.1

0.0

0.4

San Mateo County Composite Return Summary June 30,2021



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Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Total Equity	2,487,901,298	1.3	6.4	12.1	38.1	38.1	13.6	14.2	10.0	10.7	8.5
Samcera Total Equity Benchmark	2,407,301,230	1.5	6.9	13.1	39.7	39.7	14.5	15.2	11.2	11.7	9.2
Excess		-0.2	-0.5	-1.0	-1.6	-1.6	-0.9	-1.0	-1.2	-1.0	-0.6
EX0033		0.2	0.0	1.0	1.0	1.0	0.0	1.0	1.2	1.0	0.0
Domestic Equity	1,311,507,550	1.7	7.2	13.5	39.0	39.0	15.5	16.2	12.5	13.2	9.5
Samcera Dom. Equity Benchmark		2.5	8.2	15.1	44.2	44.2	18.7	17.9	13.8	14.5	10.2
Excess		-0.8	-1.1	-1.6	-5.1	-5.1	-3.2	-1.8	-1.3	-1.3	-0.6
Large Cap Equity	1,185,258,911	1.8	7.4	12.8	37.3	37.3	16.2	16.7	13.3	13.8	10.2
Russell 1000		2.5	8.5	15.0	43.1	43.1	19.2	18.0	14.2	14.9	10.8
Excess		-0.7	-1.1	-2.2	-5.8	-5.8	-2.9	-1.3	-0.8	-1.1	-0.6
Blackrock Russell 1000	530,596,488	2.5	8.5	14.9	43.7	43.7	19.4				18.2
Russell 1000		2.5	8.5	15.0	43.1	43.1	19.2				18.0
Excess		-0.0	-0.0	-0.0	0.6	0.6	0.2				0.2
DE Shaw Commingled Fund	198,489,016	2.0	7.7	10.8	40.9	40.9	16.1	17.1			14.2
Russell 1000	, ,	2.5	8.5	15.0	43.1	43.1	19.2	18.0			14.4
Excess		-0.5	-0.8	-4.2	-2.2	-2.2	-3.1	-0.9			-0.2
Acadian US MGD V-SL	223,919,722	1.6	6.8	11.1	27.0	27.0					16.3
Russell 1000	, ,	2.5	8.5	15.0	43.1	43.1					27.6
Excess		-0.9	-1.7	-3.8	-16.1	-16.1					-11.3
Panagora Defuseq -SL	232,253,685	0.3	5.3	11.0	27.8	27.8					18.7
Russell 1000		2.5	8.5	15.0	43.1	43.1					27.6
Excess		-2.2	-3.2	-3.9	-15.3	-15.3					-8.9
Domestic Equity Overlay	11,578,280	1.9	46.1	99.4	167.9	167.9					165.5
ICE BofAML US 3-Month Treasury Bill	,,	-0.0	-0.0	0.0	0.1	0.1					0.1
Excess		1.9	46.1	99.4	167.8	167.8					165.4
Small Cap Equity	114,670,360	0.4	4.2	21.5	58.3	58.3	7.7	11.3	6.9	9.4	7.0
Russell 2000	, , , , , , , , , , , , , , , , , , , ,	1.9	4.3	17.5	62.0	62.0	13.5	16.5	11.4	12.3	9.1
Excess		-1.6	-0.1	4.0	-3.7	-3.7	-5.8	-5.2	-4.5	-3.0	-2.1



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San Mateo County Composite Return Summary



June 30,2021

Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
QMA US Small Cap	114,670,360	0.4	4.2	21.5	58.3	58.3	7.7				11.4
Russell 2000	114,070,300	1.9	4.3	17.5	62.0	62.0	13.5				15.2
Excess		-1.6	-0.1	4.0	-3.7	-3.7	-5.8				-3.9
International Equity	1,176,393,747	0.8	5.4	10.4	37.0	37.0	11.2	11.6	6.4	6.3	6.3
SamCERA Custom Hedge Intl		0.3	5.2	10.8	34.5	34.5	9.4	11.2	5.5	5.6	5.7
Excess		0.5	0.2	-0.4	2.5	2.5	1.8	0.4	0.9	0.7	0.6
Baillie Gifford	383,954,782	1.5	6.6	6.9	42.0	42.0	17.0	16.1	10.3		11.5
MSCI ACWI ex USA Growth		0.4	6.7	6.7	34.1	34.1	13.6	13.8	8.4		
Excess		1.1	-0.1	0.2	8.0	8.0	3.4	2.4	1.9		
Blackrock MSCI ACWI ex US IMI	372,152,063	-0.5	5.7	9.7	37.3	37.3					30.7
MS AC WIdxUS IMI Nt	072,102,000	-0.6	5.6	9.6	37.2	37.2					30.9
Excess		0.1	0.1	0.1	0.1	0.1					-0.2
Mondrian Investment Partners	267 511 760	1.0	4.6	11.0	37.1	37.1	6.0	8.0	3.5	4.0	<i>5</i> 7
MSCI ACWI xUSA Value	367,511,768	-1.2 -1.7	4.5	12.1	38.3	38.3	6.9 5.8	9.2	3.0	4.8	5.7 5.5
Excess		0.5	0.0	-1.1	-1.2	-1.2	1.1	-1.2	0.5	0.7	0.2
EXCESS		0.5	0.0	-1.1	-1.2	-1.2	1.1	-1.2	0.5	0.7	0.2
Currency Hedge Futures	415,520,910	-2.5	0.4	-3.1	4.0	4.0					4.6
ICE BofAML US 3-Month Treasury Bill		-0.0	-0.0	0.0	0.1	0.1					0.1
Excess		-2.5	0.4	-3.2	4.0	4.0					4.5
Currency Hedge Futures Offsets	415,520,910	0.0	0.0	0.0	0.0	0.0					0.0
ICE BofAML US 3-Month Treasury Bill		-0.0	-0.0	0.0	0.1	0.1					0.1
Excess		0.0	0.0	-0.0	-0.1	-0.1					-0.1
International Equity Overlay	52,775,134	-4.5	-4.8	2.9	28.3	28.3					36.6
ICE BofAML US 3-Month Treasury Bill	02,170,104	-0.0	-0.0	0.0	0.1	0.1					0.1
Excess		-4.5	-4.8	2.8	28.2	28.2					36.5
Fixed Income	1,618,166,155	0.7	2.4	1.4	6.2	6.2	5.8	5.1	4.2	4.8	E E
Samcera Fixed Income Benchmark	1,010,100,133	0.7	2.4	-0.2	3.5	3.5	6.1	4.0	3.7	3.8	5.5 5.0
Excess		-0.2	0.4	1.5	2.7	2.7	-0.3	1.1	0.5	1.0	0.5
EY0699		-0.2	0.4	1.0	۷.۱	۷.۱	-0.3	1.1	0.5	1.0	0.5



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San Mateo County Composite Return Summary



June 30,2021

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Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Core Fixed Income	1,022,988,710	0.8	2.2	-0.7	1.8	1.8	5.4	3.8	3.8	4.2	5.2
BBG Barclays US Aggregate	1,022,300,710	0.7	1.8	-1.6	-0.3	-0.3	5.3	3.0	3.3	3.4	4.9
Excess		0.1	0.3	0.9	2.1	2.1	0.1	0.8	0.5	0.8	0.4
LXCCCC		0.1	0.0	0.0	۷.۱	2.1	0.1	0.0	0.0	0.0	0.4
FIAM B Core Bond	269,063,479	0.9	2.2	-1.0	1.9	1.9	6.5	4.1			4.7
BBG Barclays US Aggregate		0.7	1.8	-1.6	-0.3	-0.3	5.3	3.0			3.5
Excess		0.2	0.4	0.6	2.2	2.2	1.1	1.1			1.2
Western Total Return	224,383,667	0.5	2.0	-0.1	6.6	6.6	5.6	5.3			4.6
BBG Barclays US Aggregate		0.7	1.8	-1.6	-0.3	-0.3	5.3	3.0			3.4
Excess		-0.2	0.2	1.5	6.9	6.9	0.3	2.2			1.2
DoubleLine	260,988,274	0.8	2.4	-0.2	1.7	1.7					4.0
BBG Barclays US Aggregate		0.7	1.8	-1.6	-0.3	-0.3					1.5
Excess		0.1	0.6	1.4	2.0	2.0					2.5
NISA Core Bond	237,639,033	0.8	2.0	-1.5	-0.1	-0.1					1.3
BBG Barclays US Aggregate		0.7	1.8	-1.6	-0.3	-0.3					0.7
Excess		0.1	0.1	0.1	0.2	0.2					0.6
Core Fixed Income Overlay	30,914,258	0.7	2.2	-3.2	-4.1	-4.1					-3.0
ICE BofAML US 3-Month Treasury Bill		-0.0	-0.0	0.0	0.1	0.1					0.1
Excess		0.7	2.2	-3.3	-4.2	-4.2					-3.1
Opportunistic Credit	595,177,445	0.6	2.8	5.3	15.3	15.3	6.5	7.7	5.8	7.5	8.6
BB Barc BA Intermediate HY Ind	, , -	1.2	2.4	2.5	11.5	11.5	8.0	6.7	5.5	6.4	7.3
Excess		-0.5	0.4	2.8	3.8	3.8	-1.5	1.0	0.3	1.1	1.3
Pimco Private Income	53,168,388	0.0	3.3	9.3	23.3	23.3					9.0
BB Barc BA Intermediate HY Ind	00,100,000	1.2	2.4	2.5	11.5	11.5					7.8
Excess		-1.2	0.9	6.8	11.8	11.8					1.3
AG CREDIT SOL FU LP	13,556,274	0.0	9.7	19.7	36.9	36.9					28.4
BB Barc BA Intermediate HY Ind	10,000,217	1.2	2.4	2.5	11.5	11.5					6.8
Excess		-1.2	7.4	17.2	25.5	25.5					21.5



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San Mateo County Composite Return Summary



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
AG CSF ANX DISLOC FD	6,899,652	0.0	7.4	18.3	31.1	31.1					24.2
BB Barc BA Intermediate HY Ind	3,330,002	1.2	2.4	2.5	11.5	11.5					17.8
Excess		-1.2	5.0	15.8	19.6	19.6					6.4
AG Opportunistic Whole Loan	2,096,863	5.2	5.2	25.3	46.8	46.8	14.3	16.5	11.7		11.2
BB Barc BA Intermediate HY Ind	2,090,003	1.2	2.4	25.5	11.5	11.5	8.0	6.7	5.5		5.6
Excess		4.0	2.8	22.8	35.3	35.3	6.2	9.8	6.2		5.5
Angelo Gordon	1	0.0	0.0	-12.8	53.9	53.9	21.7	22.2	16.5		16.1
BB Barc BA Intermediate HY Ind		1.2	2.4	2.5	11.5	11.5	8.0	6.7	5.5		5.8
Excess		-1.2	-2.4	-15.3	42.5	42.5	13.6	15.5	11.0		10.2
Blackrock Direct Lending Feede	12,509,121	0.3	1.1	1.9	12.4	12.4					1.9
BB Barc BA Intermediate HY Ind		1.2	2.4	2.5	11.5	11.5					8.3
Excess		-0.9	-1.2	-0.6	0.9	0.9					-6.4
Beach Point Select Fund	92,531,427	1.6	3.4	9.7	26.8	26.8	10.0	10.2			9.4
BB Barc BA Intermediate HY Ind		1.2	2.4	2.5	11.5	11.5	8.0	6.7			5.9
Excess		0.5	1.0	7.2	15.4	15.4	1.9	3.5			3.5
Brigade Cap Mngmt	107,261,688	1.3	3.7	10.6	27.2	27.2	6.5	7.9	5.1	6.4	6.8
BB Barc BA Intermediate HY Ind		1.2	2.4	2.5	11.5	11.5	8.0	6.7	5.5	6.4	6.8
Excess		0.1	1.4	8.1	15.8	15.8	-1.5	1.3	-0.4	-0.1	0.0
White Oak YSF V	34,010,426	0.0	0.0	0.6							0.6
BB Barc BA Intermediate HY Ind		1.2	2.4	2.5							3.8
Excess		-1.2	-2.4	-1.9							-3.2
White Oak Yield Spec	32,964,449	0.0	1.6	3.2	7.6	7.6	6.2				
BB Barc BA Intermediate HY Ind	02,001,110	1.2	2.4	2.5	11.5	11.5	8.0				6.3
Excess		-1.2	-0.8	0.7	-3.9	-3.9	-1.9				
PIMCO Div. Income Fund	134,577,606	1.0	2.8	0.5	7.5	7.5	6.5				5.0
BB Barc BA Intermediate HY Ind	134,377,000	1.2	2.4	2.5	11.5	11.5	8.0				6.0
Excess		-0.2	0.4	-2.0	-3.9	-3.9	-1.6				-1.0
LXGGGG		0.2	0т	2.0	0.0	0.0	1.0				1.0



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San Mateo County Composite Return Summary



June 30,2021 Composite Returns (NET) 3 Mth. YTD **FYTD** 1 Yr. 3 Yr. 5 Yr. Market Value (\$) 1 Mth.

Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
TCP Direct Lending VIII	27,962,036	1.1	2.1	4.5	10.4	10.4	7.3				
BB Barc BA Intermediate HY Ind	2.,002,000	1.2	2.4	2.5	11.5	11.5	8.0	6.7			6.7
Excess		-0.0	-0.3	2.0	-1.1	-1.1	-0.7				
Franklin Templeton	77,639,513	-1.2	1.4	-1.8	-1.5	-1.5	-2.0	0.3	-0.3	1.5	2.0
BB Barclays Multiverse Index		-0.8	1.4	-3.0	3.2	3.2	4.3	2.6	2.0	2.2	2.5
Excess		-0.4	-0.1	1.2	-4.7	-4.7	-6.3	-2.2	-2.2	-0.7	-0.5
Alternatives	810,889,904	0.6	7.7	9.7	48.0	48.0	16.9	13.3	10.0	8.2	0.7
Samcera Alternatives Benchmark		1.9	3.7	11.5	31.1	31.1	12.8	12.4	8.9	9.5	8.5
Excess		-1.3	3.9	-1.8	16.9	16.9	4.1	0.8	1.2	-1.3	-7.8
Private Equity	409,494,497	1.0	13.1	17.1	87.7	87.7	37.0	28.1	23.4	17.8	-6.7
Samcera PE Benchmark	,,	3.8	7.0	23.4	65.9	65.9	20.3	19.1	15.7	17.0	17.5
Excess		-2.8	6.1	-6.3	21.7	21.7	16.7	9.0	7.7	0.9	-24.2
Absolute Return	401,395,407	0.3	2.4	2.4	7.6	7.6	-4.4	-2.5	0.5	1.2	1.2
Samcera SOFR + 4%	101,000,101	0.3	1.0	2.0	4.1	4.1	5.4	5.3	5.0	4.7	4.7
Excess		-0.1	1.5	0.4	3.5	3.5	-9.8	-7.8	-4.5	-3.6	-3.6
Aberdeen Std GARS	79,934,665	0.1	0.4	-1.7	5.9	5.9	4.5	3.0			1.8
Samcera SOFR + 4%		0.3	1.0	2.0	4.1	4.1	5.4	5.3			5.1
Excess		-0.2	-0.6	-3.7	1.8	1.8	-0.9	-2.2			-3.3
Graham Global Investment	90,042,825	0.8	4.4	2.8	10.3	10.3					4.6
Samcera SOFR +4%		0.3	1.0	2.0	4.1	4.1					4.4
Excess		0.5	3.4	0.8	6.3	6.3					0.3
PIMCO MAARS Fund L.P.	71,121,946	-0.1	-0.7	0.8	1.2	1.2					2.5
Samcera SOFR +4%	.,,.	0.3	1.0	2.0	4.1	4.1					4.2
Excess		-0.4	-1.7	-1.2	-2.9	-2.9					-1.7
Acadian MAAR Fund LLC	72,000,012	1.8	1.3	1.2							3.0
Samcera SOFR +4%	-,000,012	0.3	1.0	2.0							3.0
Excess		1.5	0.3	-0.8							-0.0



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San Mateo County Composite Return Summary



June 30,2021

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Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
CFM SYS Global Macro Fund	88,295,960	-1.2	6.3	10.2							15.9
Samcera SOFR +4%	00,290,900	0.3	1.0	2.0							3.0
Excess		-1.5	5.3	8.2							12.9
Inflation Hedge	918,231,950	-0.2	5.3	8.1	13.8	13.8	1.4	3.9			4.8
SamCERA Inflation Hedge Index		0.4	2.2	5.5	12.4	12.4	3.9	5.0			5.6
Excess		-0.5	3.1	2.6	1.4	1.4	-2.6	-1.1			-0.8
Real Estate	443,402,874	-0.0	1.6	3.6	3.9	3.9	4.4	5.7			6.4
Samcera NCREIF ODCE EW (gross)	, ,	0.0	0.0	2.3	4.3	4.3	4.6	6.1			6.2
Excess		-0.0	1.6	1.3	-0.3	-0.3	-0.2	-0.3			0.2
Invesco Core Real Estate	264,373,278	0.0	1.4	3.0	3.5	3.5	3.4	5.2	7.6	8.5	7.1
Samcera NCREIF ODCE EW (gross)		0.0	0.0	2.3	4.3	4.3	4.6	6.1	8.1	9.3	7.2
Excess		0.0	1.4	0.7	-0.8	-0.8	-1.2	-0.8	-0.5	-0.8	-0.1
Invesco US Val IV	13,255,440	0.0	0.1	5.8	1.9	1.9	8.9	9.3			10.3
Samcera NCREIF ODCE EW (gross)	10,200,110	0.0	0.0	2.3	4.3	4.3	4.6	6.1			6.9
Excess		0.0	0.1	3.5	-2.3	-2.3	4.3	3.2			3.3
PGIM Real Estate US Debt Fund	85,152,107	0.4	1.5	3.6	4.9	4.9	5.6				4.9
Samcera NCREIF ODCE EW (gross)	, -	0.0	0.0	2.3	4.3	4.3	4.6				5.6
Excess		0.4	1.5	1.3	0.6	0.6	1.0				-0.6
Invesco US VAL V	23,890,872	0.0	9.5	15.4	10.3	10.3					7.3
Samcera NCREIF ODCE EW (gross)	, ,	0.0	0.0	2.3	4.3	4.3					
Excess		0.0	9.5	13.1	6.0	6.0					
Harrison Street Core Property	52,275,886	0.0	1.4	2.6	3.4	3.4					3.0
Samcera NCREIF ODCE EW (gross)	, ,	0.0	0.0	2.3	4.3	4.3					2.6
Excess		0.0	1.4	0.3	-0.8	-0.8					0.5
Stockbridge Value IV	4,455,291	-9.4									-9.4
Samcera NCREIF ODCE EW (gross)	.,,	0.0									0.0
Excess		-9.4									-9.4



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San Mateo County Composite Return Summary June 30,2021



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Public Real Assets	360,643,195	-0.5	6.1	11.4	29.2	29.2	-2.0				
SamCera Liquid Real Asset Inde	300,043,193	-0.5	6.2	11.6	29.8	29.8	3.9	5.6			7.1
		-0.4	-0.1	-0.2	-0.6	-0.6					
Excess		-0.0	-0.1	-0.2	-0.0	-0.6	-5.8				
SSGA CST REAL ASSET NL	360,643,195	-0.5	6.1	11.4	29.2	29.2	3.3				
SamCera Liquid Real Asset Inde		-0.4	6.2	11.6	29.8	29.8	3.9				6.0
Excess		-0.0	-0.1	-0.2	-0.6	-0.6	-0.6				
Private Real Assets	114,185,881	0.3	18.9	19.7	26.5	26.5	3.3	6.7			9.2
SamCERA Private Real Asset Idx	, ,	2.0	3.1	11.9	22.0	22.0	4.1	5.5			6.2
Excess		-1.7	15.8	7.8	4.4	4.4	-0.9	1.2			3.1
Cash Overlay	7,864,507	-0.0	0.0	0.1	0.2	0.2					0.3
ICE BofAML US 3-Month Treasury Bill		-0.0	-0.0	0.0	0.1	0.1					0.1
Excess		-0.0	0.0	0.1	0.1	0.1					0.2
General Account	69,994,181	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.0	0.7	1.9
County Treasury Pool	8,624,047	0.0	0.4	0.6	1.4	1.4	1.7	1.5	1.2	1.1	2.6
Currency Hedge Cash Overlay	55,837,135	0.0	0.0	0.0	0.1	0.1					0.2
San Mateo County Overlay	5,882,241,515	0.8	5.1	7.8	24.2	24.2	9.5	9.5	7.3	8.1	7.1
Samcera Total Plan Benchmark		1.2	4.2	7.6	22.1	22.1	9.9	10.0	7.6	8.5	7.4
Excess		-0.4	0.9	0.2	2.1	2.1	-0.4	-0.5	-0.3	-0.4	-0.3



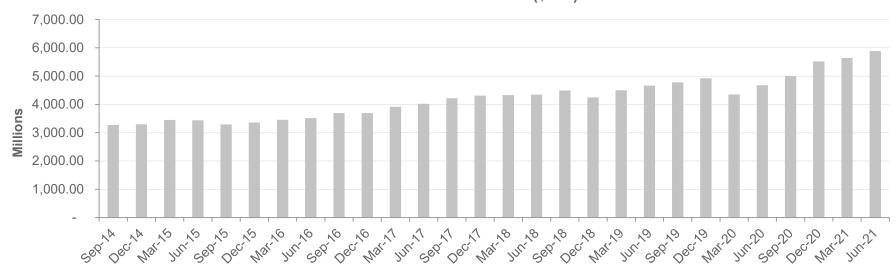
NTAC:3NS-20 9 of 14



Record of Asset Growth

	Three Months	One Year
TOTAL FUND		
Beginning Market Value	5,644,918,663	4,676,086,096
Contributions	37,120,949	499,154,246
Withdrawals	-90,787,815	-529,322,380
Income Received	27,931,181	79,360,710
Gain/Loss	263,385,792	1,076,161,036
Ending Market Value	5,882,241,515	5,882,241,515

Net Asset Values Over Time (\$000)

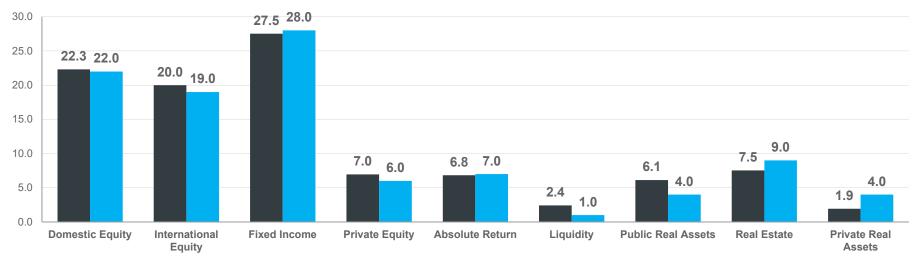




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Actual vs Target Weights



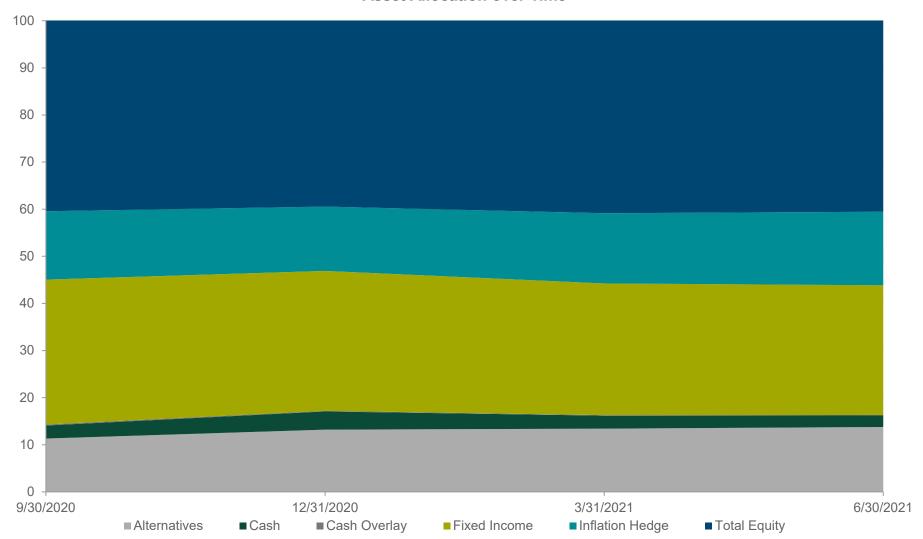
Actual	Target
-, (0 (0)0)	- 101901

	Min	Actual	Target	Deviation	Max
Domestic Equity	20.0	22.3	22.0	0.3	24.0
International Equity	17.0	20.0	19.0	1.0	21.0
Fixed Income	26.0	27.5	28.0	-0.5	30.0
Private Equity	4.0	7.0	6.0	1.0	8.0
Absolute Return	5.0	6.8	7.0	-0.2	9.0
Liquidity	0.0	2.4	1.0	1.4	2.0
Public Real Assets	2.0	6.1	4.0	2.1	6.0
Real Estate	7.0	7.5	9.0	-1.5	11.0
Private Real Assets	2.0	1.9	4.0	-2.1	6.0

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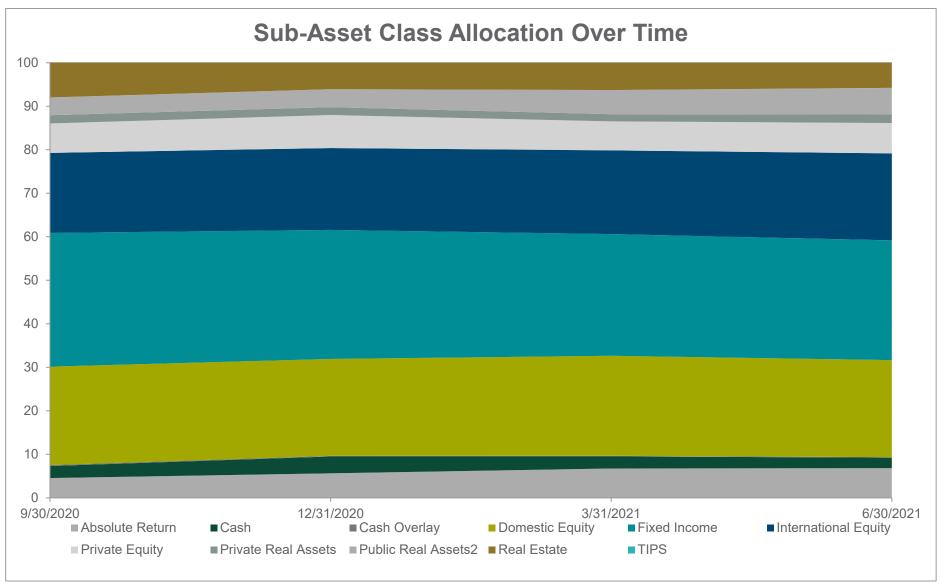
Asset Allocation over Time





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U.S. ECONOMICS

- U.S. non-farm payroll growth trended upward in June and 850,000 jobs were added. However, the unemployment rate ticked up from 5.8% to 5.9% as a result of a large increase in the number of people actively seeking work. The question remains whether those new job seekers will help to ameliorate the labor market shortages dealt with by employers, who have had a hard time finding qualified workers.
- The ISM Manufacturing PMI dipped from 61.2 to 60.6 in June, below analysts' projections of 60.9, but still well above the neutral level of 50, indicating expansion in manufacturing sector activity. Within the index, the Prices Paid component increased to 92.1, a level not seen since 1979. Logistical bottlenecks, rising commodity prices and skilled labor shortages continued to weigh on manufacturers.
- The Conference Board Consumer Confidence Index edged up to 127.3 in June, just 5.3 points below its pre-pandemic level. The rise in the index was driven by expectations from survey-takers that business conditions broadly, as well as their own financial prospects will continue to brighten in the months ahead.

U.S. EQUITIES

- The S&P 500 Price Index closed the month at a new high level of 4298 following a mid-month Federal Reserve meeting which contributed to a sell-off in cyclical stocks and commodities.
- The S&P 500 has surged 15.3% since the beginning of the year. The S&P has only had 11 better starts to begin the year since 1970 and on average gained another 5.4% in the next six months.
- Per FactSet, the bottom-up 12-month price target for the S&P 500
 Index based on company-level earnings estimates and an assumption of steady valuations, representing an 11.6% gain over the next year.

U.S. FIXED INCOME

- Various participants from the June FOMC meeting felt that conditions to reduce asset purchases would be "met earlier than anticipated" while others were still wanting to take a more patient approach. A "substantial majority" of the officials agreed that the Fed needs to be prepared to act if inflations risks materialize.
- Long-duration Treasuries outperformed (BBgBarc US Treasury Long +3.6%) following the Fed's hawkish pivot in June.
 Expectations for shorter-term rate hikes increased, resulting in a rerating of longer-term growth and inflation expectations.
- President Biden announced that he expects a vote on his Bipartisan Infrastructure agreement in September, a bill which includes \$579 billion of proposed spending. Some members of Congress have expressed openness to deficit-spending to finance the bill. Increased spending would be contingent on an increase to the debt ceiling that would open the door for additional Treasury supply in the global bond market.

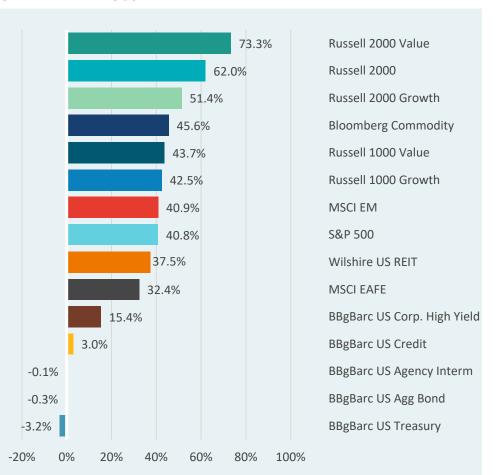
INTERNATIONAL MARKETS

- The Bloomberg Dollar Spot Index advanced 2.3% in part due to less hawkish than expected stances from the Bank of England and the European Central Bank.
- European equities (MSCI Europe +0.7%) outperformed the neighboring United Kingdom equities (MSCI UK -2.4%) in June.
- Latin American equities (MSCI EM Latin American +2.7%)
 posted strong performance in June and were a bright spot within
 the emerging market equity (MSCI EM +0.2%) opportunity set.
 The rebound in emerging countries has been slowed by a
 lackluster rollout of vaccines.

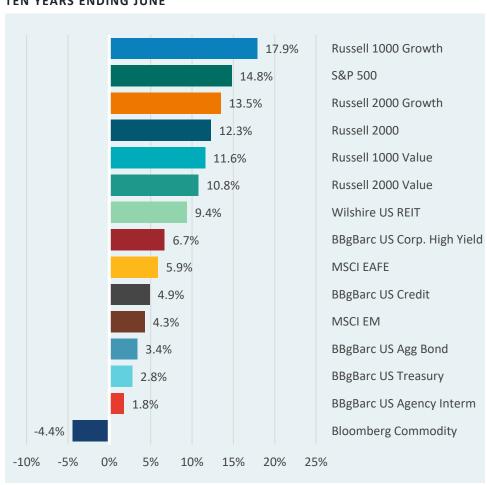


Major asset class returns

ONE YEAR ENDING JUNE



TEN YEARS ENDING JUNE



*Only publicly traded asset performance is shown here. Performance of private assets is typically released with a 3- to 6-month delay.

Source: Morningstar, as of 6/30/21

Source: Morningstar, as of 6/30/21



U.S. large cap equities

- The S&P 500 Index posted a positive 2.3% return, marking its fifth consecutive positive monthly gain. The Information Technology (+7.0%) and Energy (+4.6%) sectors helped to move the index higher while Materials (-5.3%) and Financials (-3.0%) lagged.
- Implied volatility levels have remained subdued, although equity market skew – a measure of how expensive bearish bets are relative to bullish bets – has been hovering at all time highs indicating that the relative price of downside insurance relative to upside participation has never been higher.
- The Federal Reserve's language around the timetable for tapering and rate hikes spurred a rotation out of the 'reflation' trade and back to long-duration Treasuries, large-cap stocks, and the growth factor. The S&P 500 Index is showing unusually narrow breadth with less than 50% of stocks trading above their 50-day moving average, the lowest level since 1999.
- Per FactSet, Q2 earnings estimates for companies in the S&P 500 have been more optimistic than normal.
 At month-end, 64% of companies issued positive EPS guidance, well above the five-year average of 37%.

S&P 500 PRICE INDEX



IMPLIED VOLATILITY (VIX INDEX)



Source: CBOE, as of 6/30/21

S&P 500 VALUATION SNAPSHOT



Source: Bloomberg, as of 6/30/21

Domestic equity size and style

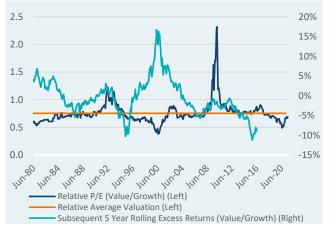
- Growth stocks (Russell 3000 Growth +6.2%)
 outperformed value stocks (Russell 3000 Value -1.1%)
 in June. The growth-oriented sectors such as
 Information Technology posted strong returns and
 value-tilted sectors such as Materials gave back recent
 gains which weighed on relative performance.
- Large-cap equities (Russell 1000 Index 2.5%)
 outperformed small-cap equities (Russell 2000 Index +1.9%) for the fourth consecutive month. Small-cap equities' continued underperformance has largely been attributed to relatively poor performance of small companies within the Health Care sector.
- Facebook, Amazon, Apple and Google (NYSE FANG +5.9%).

 High dividend paving sectors such as Materials (-5.

 Large cap stock performance was dominated by a narrower group of mega-cap tech stocks, such as

— High dividend-paying sectors such as Materials (-5.7%), Financials (-3.1%), and Utilities (-1.5%) lagged the broader market (Russell 3000 +2.5%). Companies that have higher dividend yields tend to carry heavier debt loads and as a result, they are often more sensitive to expectations for increases in interest rates which could increase their respective debt service burdens.

VALUE VS. GROWTH RELATIVE VALUATIONS



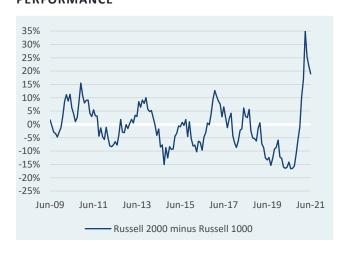
Source: FTSE, Bloomberg, as of 6/30/21

VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE, Bloomberg, as of 6/30/21

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE

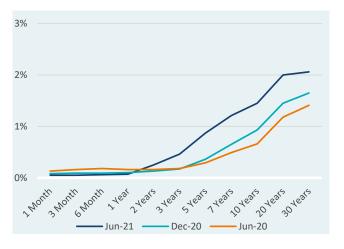




Fixed income

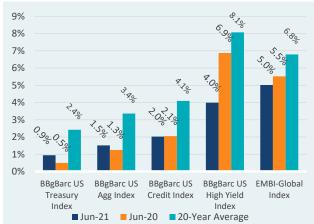
- Junk bond yield spreads relative to Treasuries tightened 30 basis points to 3.04%. High-yield spreads touched their lowest level in 10 years and shrugged off both climbing price pressures as well as the Fed's hawkish pivot in the most recent June meeting.
- The spread between the 30- and 5-year Treasury yields fell 28 basis points to 1.20%, the lowest level since November 2020. The compression in the term spread was supported not only by falling longer-term yields, but also increasing shorter-term yields.
- The Federal Open Market Committee kept the fed funds range steady at 0.00% - 0.25%, in line with expectations. The committee affirmed that they were now "talking about talking about tapering", but are not expected to introduce a potential reduction in the pace of asset purchases until perhaps the fourth quarter.
- The June edition of the Federal Open Market Committee's dot plot indicated a shift in the median expectation for the number of fed funds rate hikes by the end of 2023 from zero to two. Of the 18 members on the committee, seven members are now calling for at least one hike next year, up from four back in March.

U.S. TREASURY YIELD CURVE



Source: Bloomberg, as of 6/30/21

NOMINAL YIELDS



Source: Morningstar, as of 6/30/21

BREAKEVEN INFLATION RATES

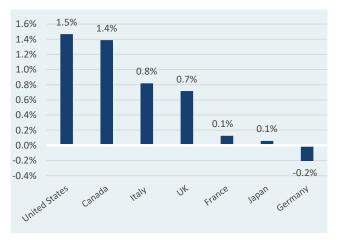




Global markets

- Global equities (MSCI ACWI +1.3%) advanced in June, primarily driven by U.S. large caps (S&P 500 +2.3%).
 Emerging market equities (MSCI EM +0.2%) edged higher and international developed equities (MSCI EAFE -1.1%) fell in U.S. dollar terms.
- Developed market currencies broadly depreciated relative to the U.S. dollar, bolstering U.S. equity (S&P 500 +2.3%) outperformance of world indices in U.S. dollar-terms. The Pound Sterling (-2.8%) and the Euro (-3.0%) depreciated significantly against the greenback.
- Hard-currency denominated emerging market debt (JPM EMBI Global Diversified Index +0.7%) outperformed local-currency denominated emerging market debt (J.P. Morgan GBI-EM -1.2%).
- The Organization for Economic Co-operation and Development reported that as many as 22 million jobs have been lost in advanced economies due to the Covid-19 pandemic. The OECD expects overall employment across member countries to recover by Q3 2023 but warned that low skilled workers displaced by the pandemic may struggle to find new jobs.

GLOBAL SOVEREIGN 10-YEAR YIELDS



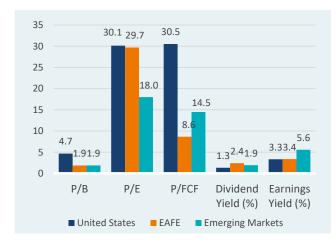
Source: Bloomberg, as of 6/30/21

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 6/30/21

MSCI VALUATION METRICS (3-MONTH AVG)





Commodities

- The Bloomberg Commodity Index rose 1.9% in June. The largest weighted component of the index, Energy, rose 11.4% and carried the overall commodity index higher. The Precious Metals and Industrials Metals sub-indexes presented headwinds and declined -6.9% and -3.2% respectively.
- Oil prices rose due to strong demand from the continued reopening of the economy, as well as a sixth consecutive week of U.S. crude stockpile declines. WTI crude oil climbed to \$73.47 per barrel, up +10.2% from the prior month, bringing its year-to-date return to +51.4%.

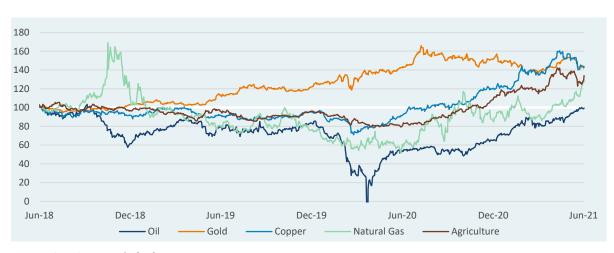
INDEX AND SECTOR PERFORMANCE

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	1.9	13.3	21.1	45.6	3.9	2.4	(4.4)
Bloomberg Agriculture	(0.2)	12.8	20.4	63.6	10.6	0.4	(3.1)
Bloomberg Energy	11.4	23.2	44.6	54.2	(10.5)	(3.8)	(12.2)
Bloomberg Grains	(0.1)	11.3	20.5	65.3	11.6	0.9	(2.7)
Bloomberg Industrial Metals	(3.2)	9.4	17.6	49.4	7.6	11.0	(1.6)
Bloomberg Livestock	(2.8)	(1.5)	8.8	26.9	(6.7)	(4.9)	(4.0)
Bloomberg Petroleum	8.4	20.9	48.4	76.5	(6.8)	2.2	(7.7)
Bloomberg Precious Metals	(6.9)	3.9	(5.7)	4.1	11.6	4.8	(0.5)
Bloomberg Softs	0.2	18.7	16.9	43.8	3.4	(4.6)	(8.3)

Source: Morningstar, as of 6/30/21

- The Bloomberg Precious Metals Sub-Index fell -6.9% as gold posted its worst month since November 2016 and closed June at \$1,778 per ounce. Investors were likely concerned over the Federal Reserve's hawkish shift, which could mean higher interest rates, translating to a higher opportunity cost of holding non-yielding assets like gold.
- The Bloomberg Industrial Metals Sub-Index fell -3.2% as metals including copper and aluminum faced headwinds from tightening U.S. monetary policy. China also said it would begin to sell some of its industrial metals from stockpiles in an effort to curb rising prices which are stoking fears of global inflation.

COMMODITY PERFORMANCE





Appendix

Periodic table of returns

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	YTD	5-Year	10-Year
Small Cap Value	66.4	31.8	14.0	25.9	56.3	26.0	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	13.3	31.7	37.3	6.7	36.4	38.5	26.7	23.7	17.9
Commodities	43.1	22.8	8.4	10.3	48.5	22.2	21.4	26.9	16.2	1.4	37.2	26.9	7.8	18.1	38.8	13.2	5.7	21.3	30.2	1.9	31.4	34.6	21.1	18.8	14.9
Small Cap Equity	33.2	12.2	7.3	6.7	47.3	20.7	20.1	23.5	15.8	-6.5	34.5	24.5	2.6	17.9	34.5	13.0	0.9	17.3	25.0	0.0	28.5	21.0	17.5	18.0	13.5
Large Cap Value	27.3	11.6	3.3	1.6	46.0	18.3	14.0	22.2	11.8	-21.4	32.5	19.2	1.5	17.5	33.5	11.8	0.6	12.1	22.2	-1.5	26.5	20.0	17.0	16.5	12.3
Large Cap Equity	26.5	7.0	2.8	1.0	39.2	16.5	7.5	18.4	11.6	-25.9	28.4	16.8	0.4	16.4	33.1	6.0	0.0	11.8	21.7	-3.5	25.5	18.3	15.0	13.6	11.6
Large Cap Growth	21.3	4.1	-2.4	-6.0	29.9	14.3	6.3	15.5	10.3	-33.8	23.3	16.1	-2.1	15.3	23.3	4.9	-0.8	11.2	14.6	-6.0	22.4	14.0	13.0	13.0	10.8
Small Cap Growth	24.3	6.0	2.5	-5.9	30.0	14.5	7.1	16.6	10.9	-28.9	27.2	16.7	0.1	16.3	32.5	5.6	-0.4	11.3	17.1	-4.8	22.0	10.3	9.0	11.9	8.8
International Equity	20.9	-3.0	-5.6	-11.4	29.7	12.9	5.3	15.1	7.0	-35.6	20.6	15.5	-2.9	14.6	12.1	4.2	-1.4	8.0	13.7	-8.3	18.6	7.8	8.8	10.3	6.9
Emerging Markets Equity	13.2	-7.3	-9.1	-15.5	25.2	11.4	4.7	13.3	7.0	-36.8	19.7	13.1	-4.2	11.5	11.0	3.4	-2.5	7.1	7.8	-9.3	18.4	7.5	7.4	9.8	5.9
60/40 Global Portfolio	11.4	-7.8	-9.2	-15.7	23.9	9.1	4.6	10.4	5.8	-37.6	18.9	10.2	-5.5	10.5	9.0	2.8	-3.8	5.7	7.7	-11.0	8.7	4.6	6.0	6.1	4.3
Hedge Funds of Funds	7.3	-14.0	-12.4	-20.5	11.6	6.9	4.6	9.1	4.4	-38.4	11.5	8.2	-5.7	4.8	0.1	0.0	-4.4	2.6	7.0	-11.2	7.8	2.8	4.7	5.8	3.8
Real Estate	4.8	-22.4	-19.5	-21.7	9.0	6.3	4.2	4.8	-0.2	-38.5	5.9	6.5	-11.7	4.2	-2.0	-1.8	-7.5	1.0	3.5	-12.9	7.7	0.5	1.7	3.0	3.4
Cash	-0.8	-22.4	-20.4	-27.9	4.1	4.3	3.2	4.3	-1.6	-43.1	0.2	5.7	-13.3	0.1	-2.3	-4.5	-14.9	0.5	1.7	-13.8	6.4	0.5	0.0	2.4	0.6
US Bonds	-1.5	-30.6	-21.2	-30.3	1.0	1.4	2.4	2.1	-9.8	-53.2	-16.9	0.1	-18.2	-1.1	-9.5	-17.0	-24.7	0.3	0.9	-14.6	2.1	-3.1	-1.6	1.1	-4.4

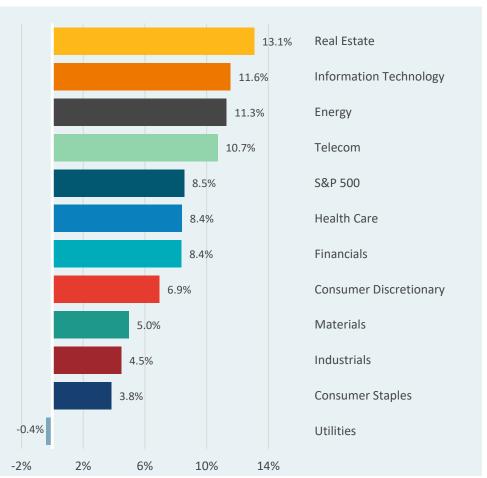


Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, BBgBarc US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, BBgBarc Global Bond. NCREIF Property Index performance data as of 3/31/21.

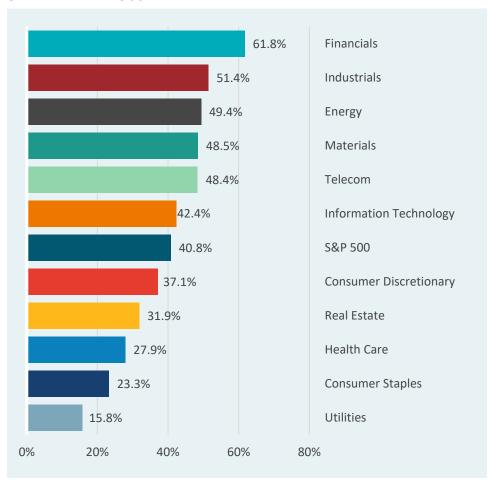


S&P 500 sector returns

Q2 2021



ONE YEAR ENDING JUNE



Source: Morningstar, as of 6/30/21

Source: Morningstar, as of 6/30/21



Detailed index returns

DOMESTIC EQUITY								FIXED INCOME							
	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year		Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index								Broad Index							
S&P 500	2.3	8.5	15.3	40.8	18.7	17.6	14.8	BBgBarc US TIPS	0.6	3.2	1.7	6.5	6.5	4.2	3.4
S&P 500 Equal Weighted	0.1	6.9	19.2	50.7	16.4	15.7	13.8	BBgBarc US Treasury Bills	(0.0)	0.0	0.0	0.1	1.4	1.2	0.7
DJ Industrial Average	0.0	5.1	13.8	36.3	15.0	16.7	13.5	BBgBarc US Agg Bond	0.7	1.8	(1.6)	(0.3)	5.3	3.0	3.4
Russell Top 200	2.9	8.9	14.5	40.8	20.2	18.9	15.6	BBgBarc US Universal	0.7	2.0	(1.1)	1.1	5.6	3.5	3.7
Russell 1000	2.5	8.5	15.0	43.1	19.2	18.0	14.9	Duration							
Russell 2000	1.9	4.3	17.5	62.0	13.5	16.5	12.3	BBgBarc US Treasury 1-3 Yr	(0.2)	(0.0)	(0.1)	0.1	2.7	1.6	1.2
Russell 3000	2.5	8.2	15.1	44.2	18.7	17.9	14.7	BBgBarc US Treasury Long	3.6	6.5	(7.9)	(10.6)	8.0	3.1	6.7
Russell Mid Cap	1.5	7.5	16.2	49.8	16.4	15.6	13.2	BBgBarc US Treasury	0.6	1.7	(2.6)	(3.2)	4.7	2.2	2.8
Style Index								Issuer							
Russell 1000 Growth	6.3	11.9	13.0	42.5	25.1	23.7	17.9	BBgBarc US MBS	(0.0)	0.3	(0.8)	(0.4)	3.8	2.3	2.6
Russell 1000 Value	(1.1)	5.2	17.0	43.7	12.4	11.9	11.6	BBgBarc US Corp. High Yield	1.3	2.7	3.6	15.4	7.4	7.5	6.7
Russell 2000 Growth	4.7	3.9	9.0	51.4	15.9	18.8	13.5	BBgBarc US Agency Interm	(0.1)	0.5	(0.6)	(0.1)	3.3	1.9	1.8
Russell 2000 Value	(0.6)	4.6	26.7	73.3	10.3	13.6	10.8	BBgBarc US Credit	1.5	3.3	(1.3)	3.0	7.4	4.6	4.9
INTERNATIONAL FOLLITY								OTHER							
INTERNATIONAL EQUITY Broad Index								Index							
MSCI ACWI	1.3	7.4	12.3	39.3	14.6	14.6	9.9	Bloomberg Commodity	1.9	13.3	21.1	45.6	3.9	2.4	(4.4)
MSCI ACWI ex US	(0.6)	5.5	9.2	35.7	9.4	11.1	5.4	Wilshire US REIT	3.1	12.8	22.8	37.5	10.1	6.4	9.4
MSCI EAFE	(1.1)	5.2	8.8	32.4	8.3	10.3	5.9	CS Leveraged Loans	0.4	1.4	3.5	11.7	4.4	5.0	4.5
MSCI EM	0.2	5.0	7.4	40.9	11.3	13.0	4.3	Alerian MLP	5.2	21.2	47.8	64.0	(1.1)	(2.0)	1.3
MSCI EAFE Small Cap	(1.7)	4.3	9.0	41.0	8.4	12.0	8.4	Regional Index	3.2	21.2	47.0	04.0	(1.1)	(2.0)	1.5
Style Index	(=,				• • •			JPM EMBI Global Div	0.7	4.1	(0.7)	7.5	6.7	4.9	5.7
MSCI EAFE Growth	0.0	7.4	6.8	31.0	12.5	12.5	7.8	JPM GBI-EM Global Div	(1.2)	3.5	(3.4)	6.6	4.1	3.2	0.5
MSCI EAFE Value	(2.3)	3.0	10.7	33.5	3.8	7.8	3.9	Hedge Funds	(1.2)	0.5	(3)	0.0		0.2	0.0
Regional Index	(- /							HFRI Composite	0.4	4.0	10.0	27.4	8.7	7.9	5.1
MSCI UK	(2.4)	6.0	12.5	31.3	1.9	5.7	3.7	HFRI FOF Composite	0.3	2.7	4.7	18.1	6.2	6.1	3.8
MSCI Japan	(0.3)	(0.3)	1.3	24.8	7.2	10.2	7.2	Currency (Spot)							
MSCI Europe	0.7	6.7	(1.1)	1.1	5.6	3.5	3.7	Euro	(3.0)	0.9	(3.1)	5.6	0.5	1.3	(2.0)
MSCI EM Asia	0.1	3.8	6.0	41.0	13.1	15.3	7.0	Pound Sterling	(2.8)	0.1	1.1	11.8	1.5	0.7	(1.5)

Source: Morningstar, HFRI, as of 6/30/21



Detailed private market returns

Comparison to public market index returns

Private Equity Pooled IRRs	1 Year	3 Year	5 Year	10 Year
Global Private Equity FoFs & Secondary Funds	24.5	15.6	13.1	12.1
Global Private Equity Direct Funds *	32.2	19.9	17.5	14.8
U.S. Private Equity Direct Funds *	33.5	21.6	17.9	16.1
Europe Private Equity Direct Funds *	30.8	19.1	20.1	13.2
Asia Private Equity Direct Funds *	28.1	14.8	14.1	12.9
Public Index Time-weighted Returns				
MSCI World	15.9	10.5	12.2	9.9
S&P 500	18.4	14.2	15.2	13.9
MSCI Europe	5.4	3.6	6.8	5.3
MSCI AC Asia Pacific	19.7	7.3	11.3	6.4
Private Real Estate Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Real Estate	1.6	6.6	8.0	11.8

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U.S. All Private Debt **	9.7	8.3	10.0	10.2
Public Index Time-weighted Returns				
S&P / LSTA U.S. Leveraged Loan 100 Index	2.8	4.2	5.3	4.0
Private Real Assets Pooled IRRs	1 Year	3 Year	5 Year	10 Year
Private Real Assets Pooled IRRs Global Nature Resources ***	1 Year (13.4)	3 Year (6.9)	5 Year (0.2)	10 Year (0.0)
Global Nature Resources ***	(13.4)	(6.9)	(0.2)	(0.0)
Global Nature Resources *** Global Infrastructure	(13.4)	(6.9)	(0.2)	(0.0)

(5.8)

1 Year 3 Year 5 Year 10 Year

6.5

Private Credit Pooled IRRs

S&P Global Infrastructure

Source: Pooled IRRs are from Thompson Reuters C/A and Time-weighted Returns are from Investment Metrics, as of December 31st, 2020. All returns in U.S. Dollars.

(8.0)

Public Index Time-weighted Returns

FTSE NAREIT Equity REIT

^{***} Includes Private Equity Energy, Timber and Upstream Energy & Royalties.



^{*} Includes Buyout, Growth Equity and Venture Capital.

^{**} Includes Control-Oriented Distressed, Credit Opportunities, Senior Debt and Subordinated Capital.

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SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

July 27, 2021 Agenda Item 6.2

TO: Board of Retirement

FROM: Lilibeth Dames, Investment Analyst Lilibeth Dames

SUBJECT: Presentation of Private Asset Semi-Annual Performance Reports as of December

31, 2020

Recommendation

Accept and review Verus' semi-annual private equity and private real assets performance reports as of December 31, 2020.

Background

Verus provides a semi-annual private equity and private real asset performance report as of June 30th and December 31st each year.

Discussion

As of December 31, 2020, SamCERA's private equity portfolio had a total market value of \$384.0 million (6.9% of SamCERA's total fund). SamCERA's target allocation for Private Equity is 6.0%.

The private equity portfolio has a 21.83% net IRR since inception, 477 bps above the same cash flow invested in the Russell 3000 Total Return Index. For the six-month period from July 1, 2020 through December 31, 2020, SamCERA made three additional commitments in private equity, totaling \$65 million. As of December 31st, SamCERA had a total of thirty funds with \$522.5 million in committed capital across twenty private equity managers.

As of December 31, 2020, SamCERA's private real assets portfolio had a total market value of \$114.1 million (2.1% of SamCERA's total fund). SamCERA's target asset allocation to private real assets as of December 31, 2020 was 3.0%. The board subsequently approved a new target allocation from 3.0% to 4.0% at the January 2021 board meeting.

The private real assets portfolio has a 2.23% net IRR since inception. For the six-month period from July 1, 2020 through December 30, 2020, SamCERA committed to one new fund for a total of \$25 million. As of December 31, 2020, there were thirteen private asset funds in the portfolio with \$259.8 million in committed capital across ten private real asset managers.

John Nicolini will review the performance reports with the Board and be available for questions.

Attachments

Verus Semi-Annual Private Equity Performance Report for Period Ending 12/31/2020 Verus Semi-Annual Private Real Assets Performance Report for Period Ending 12/31/2020







PERIOD ENDING DECEMBER 31, 2020

Private Equity Review

San Mateo County Employees' Retirement Association

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PE Portfolio Diversification by Geography
PE Portfolio Diversification by Industry

PE Portfolio Diversification by Vintage Year



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 PE Portfolio Diversification by Strategy 		

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DEBT RELATED

- HY issuance was up and leveraged loan issuance was down. In 2020, US high yield issuance was up 54.2% at a record high of \$411.6 billion compared to 2019¹. Leverage loan issuance volume was \$711 billion in 2020, down 12.0% from the same time last year¹.
- HY Credit Index and BB index spreads loosened, while CCC index spreads tightened. US HY Credit Index and BB index spreads loosened by 20 bps and 43 bps in 2020 (+5.4% and +16.4 from 2019, respectively)². At the same time, CCC index tightened by 198 bps (-14.5% versus 2019 levels)². B spreads remained flat, tightening by 1bp ².
- With decline in LBO debt issuance, interest coverage increased significantly in US. Total leverage averaged 5.7x (Debt / EBITDA) in 2020 for US new issue loans, down 3.0% from 2019³. Interest coverage averaged 3.5x (EBITDA / Cash Interest), up 27.8% from 2019³. In Europe with 2020 LBO Loan volume at \$43.8 billion down 17.5% from 2019 and down 68.2% from \$137.7 billion peak in 2007¹¹, leverage multiples nudged up 4.5% to 5.9x in 2020¹⁰, still below 6.1x peak in 2007¹¹.

GLOBAL

- Investment activity was down, average deal size was up. During 2020, global PE firms invested in \$810.1 billion worth of deals, up 6.3% from the same time prior year and closed on 24,482 transactions, down 5.1% from same time in 2019⁶.
- PE dry powder continued to surge globally. In 2020, global total PE dry powder was at \$1.75 trillion, up 10.6% from 2019⁴. US total PE was up by 12.5% to \$970.7 billion; Europe total PE increased by 6.6% to \$329.5 billion; Asia total PE was up by 7.8% to \$363.1 billion; and the rest of world total PE was up by 3.6% to \$57.6 billion⁴. By sub-asset, VC dry powder grew most in the US (26.5%), Europe (23.0%), and Asia (17.8%)⁴.

US BUYOUTS

- Dry powder increased. In 2020, US buyout dry powder was \$525.3 billion, up by 8.2% from the same time in 2019⁴.
- Fundraising activity was down significantly. In 2020, US firms across all buyout strategies raised \$172.0 billion, down by 39.5% from same time prior year⁵. Average fund size decreased 30.3%, from \$1.79 billion in 2019 to \$1.25 billion in 2020⁵.
- Investment activity was up, average deal size was down. During 2020, US buyout firms invested in \$241.1 billion worth of deals (-4.7% from 2019) into 3,244 deals (+2.9%)⁶.



- LBO price multiples were up. As of December 31, 2020, US LBO purchase price multiples (Enterprise Value / EBITDA) were at 11.4x, a 2.2% increase from end of 2019⁷.
- Exit activity increased, but with smaller transactions. During 2020, US buyout firms exited 3,244 companies, representing \$241.1 billion in total transaction value¹². This represented a 2.9% increase in the number of exits and a 4.7% decrease in total transaction value compared to the same time last year¹².

US VENTURE CAPITAL

- Dry powder increased. In 2020, US VC dry powder was at \$153.6 billion, up 26.5% from 2019⁴.
- **Fundraising activity slowed down, but average fund size increased.** US VC firms raised \$77.3 billion during 2020, a 45.3% increase from the same period last year ⁵. 459 funds closed in 2020, a 13.1% decrease from the same period last year ⁵. The average US VC fund size increased to \$168.4million by 67.1% versus the same period last year ⁵.
- Investment activity was down, average deal size was up. US VC firms deployed \$181.8 billion in capital in 2020, a 28.8% increase from 2019 as deal activity skewed from early to late stage⁶. The number of rounds closed at 6,384, a 10.2% decrease from the same time last year⁶. The average investment per deal increased to \$35.7 million, a 43.4% increase from prior year⁶.
- Seed stage valuation was down, but Early and Late VC valuations increased. Compared to December 31, 2020, the average pre-money valuations decreased for Seed-stage VC in 2020, down 16.7% at from \$6.0 million to \$5.0 million⁸. The average pre-money valuations increased for both early VC and late VC stages in 2020: up 7.1% at \$30.0 million for Early-stage VC, and 18.3% at \$76.9 million for Late-stage⁸. Over the past 3 years, the average pre-money valuations of Seed-, Early- and Late-stage investments were up 16.7%, 66.7%, and 61.8%, respectively⁹.
- Exit activity increased significantly with larger transactions. US VC firms exited 998 companies in 2020, up by 47.9% from last year and 47.6% from three years ago⁶. This represented the record high \$241.0 billion in transaction value, up by 201.3% from the same period last year and 366.1% from three years ago⁶. Largest sectors exited were Technology Services and Health Technology.



EX US

- Dry powder grew ex-US, but absolute level still less than in the US. PE dry powder outside the US grew to \$776.9 billion for 2020, an 8.4% increase versus last year⁴. However, dry powder outside the US was still 20% less than dry powder in the US (\$970.7 billion)⁴.
 - Europe VC and buyout dry powders both up. VC at \$37.5 billion and buyout at \$218.6 billion were up 23.0% and 8.2% from 2019, respectively⁴.
 - In Asia, VC dry powder increase paralleled US and Europe. Growth equity dry powder decreased as buyout saw increase. VC dry powder at \$124.0 billion was up 17.8% from 2019⁴. Growth equity declined to \$116.2 billion (-4.8% from 2019), but with larger funds raised targeting control deals, buyout dry powder increased to \$99.7 billion (+16.7%)⁴. In aggregate, growth equity and buyout dry powder was \$215.9 billion, up 4.2% from 2019⁴.
- Ex-US fundraising down, driven by a significant drop in Asia. In 2020, ex-US fundraising dropped 12.9% from 2019 to \$274.3 billion⁵. The decrease was caused by Asian funds which raised \$95.5 billion, down 44.7%⁵. Fundraising in Europe and ROW increased by 24.4% and 34.7% from 2019 to \$155.5 billion and \$23.3 billion, respectively⁵.
- Capital deployment increased in all but European buyouts.
 - In both Europe and Asia, VCs invested more capital into fewer deals. Investment activity declined by 3.6% and 7.1% in Europe and Asia from 2019⁶. But capital deployed increased by 11.9% to \$46.2 billion and by 26.5% to \$119.8 billion, respectively, in Europe and Asia⁶.
 - Buyout deal activity and capital deployment declined in Europe, but rose in Asia. In Europe, buyout firms transacted invested \$115.5 billion in aggregate value (-14.6% from 2019) in 2,038 deals (-3.1%)⁶. Asia buyout firms invested \$75.8 billion in aggregate value (+18.1%) in 494 deals (+6.5%)⁶.
- Europe purchase price multiples dropped. As of December 31, 2020, Europe median purchase price multiples dropped 7.6% from 8.7x to 8.1x
 EBITDA from the same time last year¹.
- Similar to US, exit activity strengthened in Asia and Europe. Exits were smaller in Asia, but larger in Europe. Europe PE aggregate exit value amounted to \$184.8 billion, a 31.5% increase from 2019, while Asia PE exit value declined by 6.5% to \$105.1 billion⁶.



Outlook

- PE allocations likely to continue rising steadily. A recent survey of institutional investors conducted in December 2020 indicated that 39% intend to increase their allocation for private equity compared to 45% during the same period last year; 38% intend to maintain their allocation for private equity compared to 36% during the same period last year; 2% intend to commit less capital to private equity compared to 2% during the same period last year¹².
- Institutional investors most interested in investing in North America and like small- to mid-market buyouts. Based on the survey conducted in December 2020, institutional investors view North America as the most attractive location to invest in the current economic climate with 91% choosing it as their preferred developed market investment destination, followed by Western Europe (82%) and Asia (68%) ¹². China (58%) and India (27%) are the top two desired countries in the emerging markets for investors ¹². In the same survey, North American respondents were heavily focused on U.S. Middle Market (78%), U.S. Growth Capital Funds (59%), and Small Market Buyouts (56%) with European Middle Market Buyouts (44%) just slightly behind ¹².

Notes

- 1. Leveraged Loan Monthly Thomson Reuters LPC
- 2. Guggenheim High-Yield Bank Loan Outlook
- 3. LCD's Leveraged Buyout Review
- 4. Pregin Dry powder by Geography (Pregin Website) Dry powder includes Buyout, Distressed PE, Growth, Mezzanine, Co-investments, Balanced, and Venture Strategies.
- 5. Pregin Private Equity Historical Fundraising Statistics
- 6. Pregin Pro Buyout and Venture Deals and Exits
- 7. US LBO Review
- 8. PitchBook-NVCA Venture Monitor
- 9. PitchBook's VC Valuations
- 10. LCD European Leveraged Buyout Review
- 11. European Leveraged Lending Review
 - a. Ex US Multiples were estimated utilizing a number of sources including Pregin Private Equity-Backed Buyout Deals and Exits Factsheet, LCD's Leveraged
 - b. Buyout Review, Pitchbook Europe M&A and Leveraged Loan Monthly Thomson Reuters LPC.
- 12. Probitas Partners 2021 Institutional Investors Private Equity Survey



Investment Type	Policy Target	Policy Range	Market Value %	Market Value \$(000)	Unfunded Commitment \$(000)	Market Value + Unfunded \$(000)
SamCERA - Total Plan			100.0%	5,533,847		
Buyout (60% +/- 20%)	3.6%	2.4%-4.8%	3.1%	171,186	142,602	313,788
Venture Capital (20%, 0%-30%)	1.2%	0.0%-1.8%	2.9%	163,025	21,723	184,748
Debt-Related/Special Situations (20% +/- 10%)	1.2%	0.6%-1.8%	0.9%	49,796	30,437	80,233
Total Private Equity*	6.0%	4%-8%	6.9%	384,006	194,762	578,769

^{*} The Private Equity Policy Target of 7.0% was reduced to 6.0% effective 10/1/2018.

Portfolio Summary

- As of December 31, 2020, the Private Equity Portfolio had a total market value of \$384.0M, with \$171.2M in Buyout, \$163.0M in Venture Capital, and \$49.8M in Debt-Related/Special Situations. Total market value is the current reported value of investments, excluding the remaining amount of unfunded commitments.
- Since its initial allocation to Private Equity, SamCERA has contributed \$364.7M towards its Private Equity commitments, with \$214.4M to Buyouts, \$57.4M to Venture Capital, and \$92.9M in Debt-Related / Special Situations. Unfunded commitments total \$194.8M.
- The portfolio exposure at 6.9% is above the 6.0% policy target but within its 4-8% target range. Compared to December 31, 2019, portfolio exposure is up 0.4%, driven by Venture Capital's strong performance. Buyout remains below its policy target, Venture capital above its target and Debt-Related / Special Situations below its policy target but all within policy ranges.

Portfolio Activity

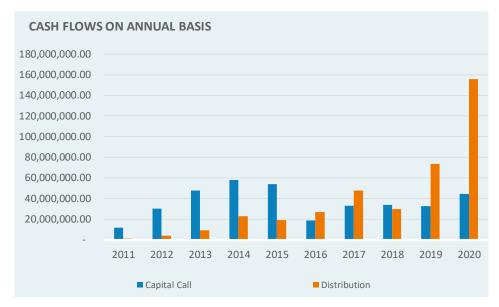
In the second half of 2020, SamCERA committed \$30.0M to CD&R XI, \$20.0M to Endeavor VIII and \$15.0M to Canvas Ventures III in order to maintain exposure to policy over time.

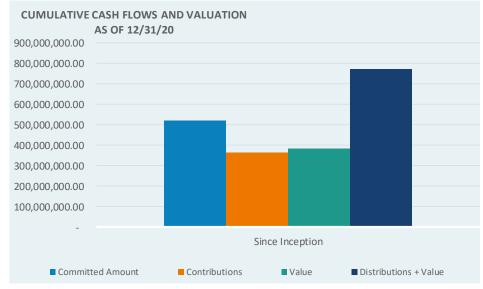
Performance

- The Private Equity portfolio's performance, as measured by net IRR, is 21.83%, 477 bps above the same cash flow invested in Russell 3000 Total Return Index of 17.06%. Capital weighted average investment age of the portfolio is 5.6 years.
- The portfolio is currently valued at \$384.0M. Together with \$390.7M in realized distributions, the Total Value at \$774.7M is approximately \$410.0M above \$364.7M total capital contributions, resulting in a total value multiple of 2.12x and a distribution multiple of 1.07x.
- Distributions surpassed contributions with a ratio of 3.5:1 in 2020 compared to 2.3:1 in 2019, 0.9:1 in 2018 and 1.4:1 in 2017 and 2016.

— Attribution of returns:

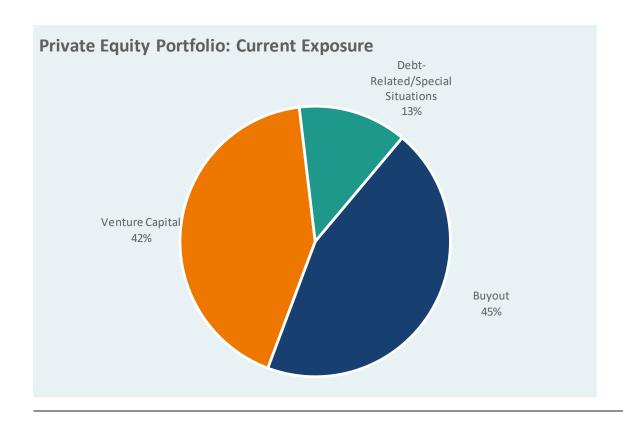
- Buyouts up \$134.8M / +62.8% versus cost (Great Hill V & VI, Sycamore, Warburg Pincus XI, ABRY VII and Cevian II leading), with 83.0% of called capital realized and distributed;
- Venture Capital up \$264.5M / +460.8% versus cost (Emergence Capital III, General Catalyst VI, NEA 14, and Third Rock III leading), with 276.8% of called capital realized and distributed; and
- Debt-related/Special Situations up \$10.7M / +11.5% versus cost (ABRY Advanced Securities II, ABRY Senior V and OHA II leading), with 57.9% of called capital realized and distributed.
- Within Private Equity, the current allocation of market value exposure is 44.6% to Buyout, 42.4% to Venture Capital, and 13.0 % to Debt-Related/Special Situations.





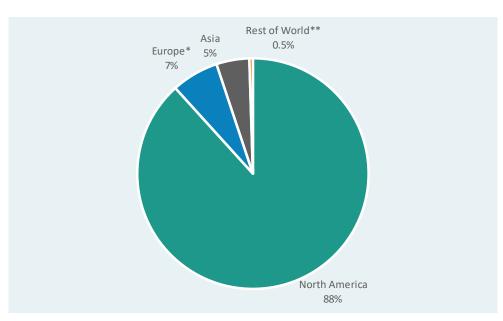
Current Exposure as % of

Investment Type	Commitment	Reported Value	Private Equity
Buyout	329,001,040	171,185,554	44.6%
Venture Capital	79,000,000	163,024,565	42.4%
Debt-Related/Special Situations	114,500,000	49,795,920	13.0%
Total Private Equity	522,501,040	384,006,040	100.0%



Portfolio Diversification

Geography	Current Exposure
North America	339,247,367
Europe*	25,233,317
Asia	17,511,761
Rest of World**	2,013,594
Total Private Equity	384,006,040



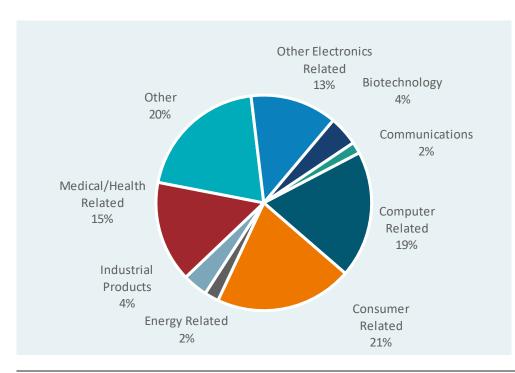
Based on the value of portfolio companies as of December 31, 2020, if provided by the partnerships. Differences between reported value and the total portfolio valuation is due to temporary cash funds, fees, other expenses, and holdings with undisclosed geography breakdown.

^{*} Europe includes 100% market value from Cevian II.

^{**} Rest of World includes Kenya, United Arab Emirates, Turkey, and Brazil.

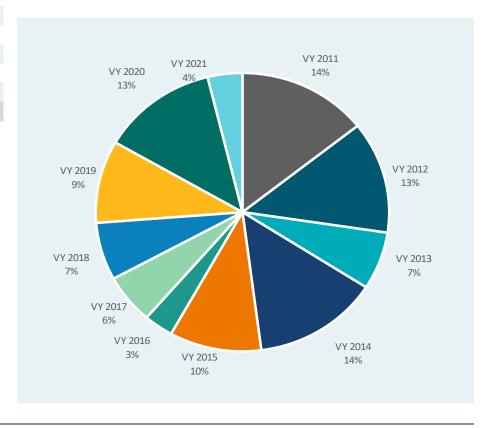
Portfolio Diversification

Industry	Current Exposure
Biotechnology	17,164,059
Communications	6,684,214
Computer Related	73,098,274
Consumer Related	79,239,160
Energy Related	8,244,201
Industrial Products	14,371,611
Medical/Health Related	58,266,776
Other	77,009,611
Other Electronics Related	49,928,132
Total Private Equity	384,006,040



Based on the value of portfolio companies as of December 31, 2020, if provided by the partnerships. Differences between reported value and the total portfolio valuation is due to temporary cash funds, fees, other expenses, and holdings with undisclosed geography breakdown.

Vintage Year	Commitment as of 12/31/2020	% of Portfolio Commitment	Reported Value as of 12/31/2020
2011	75,000,000	14.35%	27,285,431
2012	68,000,000	13.01%	143,930,409
2013	35,000,000	6.70%	39,247,128
2014	72,500,000	13.88%	54,946,710
2015	53,000,000	10.14%	45,317,840
2016	17,000,000	3.25%	11,149,423
2017	30,000,000	5.74%	34,491,076
2018	35,000,000	6.70%	8,844,752
2019	50,000,000	9.57%	17,351,864
2020	67,001,040	12.82%	1,441,407
2021	20,000,000	3.83%	0
Total Private Equity	522,501,040	100%	384,006,040



- As of December 31, 2020, the Private Equity Portfolio exposure at 6.9%, is greater than that of the plan's 6.0% policy target, but within its
 4-8% target range.
 - Compared to December 31, 2019, portfolio exposure is down 0.4%, driven by recent exists from the Venture Capital portfolio in 2020.
 - Venture Capital remains above its policy target, as a result of significant increase in value in two select companies.







PERIOD ENDING: DECEMBER 31, 2020

Real Assets Review

San Mateo County Employees' Retirement Association

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Real Asset Outlook



Strategy	Current Environment	Potential Risks	Outlook/Implementation	View
Private Real Estate	Transaction volumes are picking up after a slow 2020, which should help price discovery in some sectors. Private market valuations have been slower to adjust than the public markets. Rent collections are back to normal levels for all but retail and hospitality however uncertainty remains on the demand side as the recovery progresses. It will likely take several years to fully understand the impact that work from home will have on office demand.	 Core real estate returns tend to have high correlation to overall GDP growth. Any hiccup to the recovery or reversal in vaccination progress will have an impact. A sharp rise in interest rates could create upward pressure on cap rates, hurting asset values. Increasing e-commerce adoption rates may continue to impact retail. 	Our outlook remains neutral; however, we continue to take a barbell approach. A lagging appraisal process may impact office/retail values, giving us concern over existing traditional core assets. We recommend leaning away from traditional core and diversifying into alternative property types such as self storage, senior/student housing, medical office, life science as well as dedicated industrial. We also continue to recommend deploying fresh capital in non-core closed end funds with value added or opportunistic strategies.	Neutral
REITs	REITs experienced high volatility in 2020, declining almost 40% by April and recovering to down only 10% for the year, yet still underperforming broad equities. Sector dispersion was incredibly high as Covid-19 shutdowns negatively impacted some sectors (retail/office/hospitality), while others benefited (industrial/data centers).	 REITs have higher leverage than core real estate and have higher exposures to non-core sectors such as hotels, self-storage, for-rent residential homes and senior/student housing. Rising interest rates can have a negative effect on REITs and all yield-sensitive assets over short periods. REITs are sensitive to economic decline and general equity market volatility. 	Although performance diverged in 2020 as REITs experienced more pain than private real estate, current premiums to NAV remain high and relatively unattractive. REITs can provide liquid exposure to real estate with the following caveats: high sensitivity to equity market volatility over shorter holding periods, higher leverage and higher exposures to non-core sectors such as hotels, self- storage, for-rent residential. Active management is preferred.	Neutral
Commodities	Commodities futures have had lackluster performance over the last decade. An upward sloping futures curve has been a headwind for the asset class, and, with the exception of oil futures, this condition remains for most commodities today. The current economic recovery and re-opening is creating higher forecasted demand from energy and industrial metals which has led to a strong recent recovery in performance.	 Oversupply issues across energy, metals and agriculture have driven much of the negative performance, that condition could remain. Energy prices remaining at sustainable levels is largely dependent upon a continuation of OPEC led production restraint. Any reversal in the economic recovery or vaccination roll-out will impact demand for energy and industrial metals. 	Futures based commodities strategies continue to face structural headwinds with steep contango and low collateral rates. A strong economic recovery could be bullish for spot prices, however. Futures based commodities potentially offer insurance against an unexpected spike in inflation, although that can be an expensive policy as we've seen over the past decade.	Neutral



Strategy	Current Environment	Potential Risks	Outlook/Implementation	View
TIPS	Declining nominal interest rates have led to positive total returns and recent increases in inflation expectations have caused TIPs to outperform nominal bonds. Breakeven rates have risen sharply during the recovery, although it may be technically driven through government purchases.	 Decreasing inflation expectations or rising nominal interest rates would be a headwind to TIPS. Continued low rates creates a high cost of carry. 	Low absolute current yields and moderate inflation expectations has led to low total return expectations for TIPS, especially relative to other real asset investment opportunities. If inflation continues higher, TIPS could provide protection to portfolios.	Neutral
Core Infrastructure	Performance within infrastructure was mixed for 2020 as several sectors faced Covid-related challenges, while some industries in communication and logistics thrived. With the global economy is set for a recovery, we expect lower risk infrastructure assets will continue to deliver modest high single digit returns. The asset class could see some tailwinds as investors search for income above that available in fixed income. In addition, inflation concerns from some investors may lead to additional capital entering the space.	 We remain cautious on public-private (PPP) infrastructure assets, especially in the U.S and Europe. Assets with high regulatory oversight have had a mixed history of success and the recent political environment has seen an uptick in hostility to private ownership of public goods. Strong fundraising trends in infrastructure has, in part, kept valuations elevated despite the asset classes challenges. For open-end infrastructure funds with mature portfolios, we would pay particular attention to valuations and embedded risks from exposure to energy and transportation assets. 	The asset class offers a compelling return profile that aligns well with long duration pools of capital. We favor private infrastructure funds that have in-house capability to improve operations and manage complex deal structures.	Neutral
Value-add Infrastructure	Similar to core infrastructure, exposure to certain transportation assets and midstream energy likely presented performance challenges in 2020 for infrastructure investors. In addition, the markets desire for high growth assets led to underperformance within traditionally low growth industries like infrastructure. While we would not call infrastructure cheap, on a relative basis, the segment appears attractive.	 Regulatory risk, falling power prices, demand for green energy and Covid-19 are just a sample of the challenges that infrastructure has faced in the past year. Opportunities are also created from those challenges, and we believe with the right manager, value-add infrastructure will be best positioned to take advantage of any disruptions in the industry. 	The asset class offers a compelling return profile that aligns well with long duration pools of capital. Value-add infrastructure comes with higher operational/execution risk than Core so investors should expect a broader range of outcomes and greater emphasis on manager selection.	Positive



Strategy	Current Environment	Potential Risks	Outlook/Implementation	View
Energy Transition	New development projects of renewable assets will continue to accelerate as solar and wind farms are now the cheapest form of new build electricity generation for over two-thirds of the global population. However, there is continued downward pressure on the cost of capital in the sector to mid-single digits. Outside of traditional solar & wind, there are potentially higher returning opportunities for newer technologies such as battery storage.	 Several approaches to a carbon-neutral energy system such as green hydrogen and carbon capture technology are nascent and not yet economically viable. Investments in this space will take venture-like risk and rely on significant cost reductions as well as favorable policy regimes to be successful. 	While the opportunity to achieve an attractive return in solar & wind has passed, we do think there will be potentially attractive opportunities in sectors that still require innovation. However, it is difficult to find areas where investors will be appropriately compensated for risk given the amount of capital in the space.	Neutral
Oil & Gas	The oil & gas industry enters 2021 with hopes for an improved market environment following several years of weak commodity prices. The dual impact of Covid related demand destruction and the disintegration of OPEC+ supply controls sent oil markets into a tailspin last year. Higher commodity prices have begun to breathe some life into publicly-listed upstream companies and likely some areas of the capital markets will return to provide funding for independent drillers. Our belief is that the private markets that funded a lot of the growth in energy production will continue to shrink as institutions shift capital towards cleaner forms of energy.	 The industry could see a rebound in 2021 if prices stabilize around \$65-70/bbl, or higher. Public equity and debt markets could re-open for oil/gas producers as investors look for higher potential returns. We expect fundraising within private markets will remain challenging for carbon-heavy industries. Longer-term, oil demand is expected to decline as non-carbon sources of power outcompete hydrocarbons. Geopolitics and the tension between OPEC and non-OPEC producers presents an additional risk for investors. 	Higher commodity prices have improved the outlook for the energy industry and if prices hold at current levels, or move higher, the sector could rebound sharply. That said, there is still too much uncertainty around oil/gas demand, access to capital, and geopolitics for us to gain comfort in the long-term outlook for the oil/gas industry. As long-term investors, we recommend avoiding the upstream energy market but recognize that performance in the short-term could be exceptional.	Negative
Midstream Energy / MLPs	As in prior years, the MLP/midstream market appears cheap both historically and relative to other areas of the market with a yield above 8.0%. An uptick in drilling rig count and an improving outlook for the broader economy provide some tailwinds for the sector. On the flipside, the Biden administration will likely usher in greater regulatory risk and perhaps hasten the move away from carbon-based forms of energy. We wouldn't be surprised to see midstream energy perform quite well in 2021 but we remain cautious on the long-term outlook for the industry.	 Expectations have improved for the midstream industry and a strong rally in the beaten down sector is highly probable if oil prices stabilize at or above current levels. But the experience of the last several years has taught investors how quickly the tide can shift and how unpredictable those shifts can be. Regulatory risk has gone up considerably in the U.S. with the Biden administration and both houses in Democratic hands. 	We retained a negative outlook for midstream energy, despite the positive tailwinds that higher oil prices and economic growth could bring to this sector in the near-term. Longer-term, we think the unknown risks remain too high for our comfort.	Negative



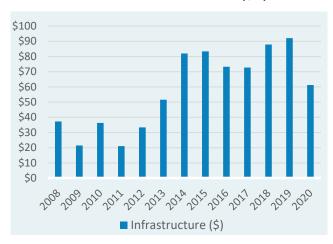
Strategy	Current Environment	Potential Risks	Outlook/Implementation	View
Mining	The mining industry has not suffered quite like the oil & gas market, but it has been a weak sector for several years. Unlike oil, we see growing demand for industrial metals like copper, nickel, zinc and steel inputs as electrification takes market share from carbon-based power generation.	 Global GDP growth and the economy in China are the two biggest risks in the sector. China represents a disproportionately large buyer of industrial metals, so its economy and industrial output have a large impact on metal prices. 	Longer-term, we believe the demand outlook looks favorable for several industrial metals. However, there are a host of idiosyncratic risks in funding mining operations outside of the macroeconomic environment. We will look for skilled GPs with a track record of successfully managing these risks while generating attractive returns.	Positive
Timberland	Timber markets in North America continue to face challenges from excess inventory, low interest rates and unfavorable transaction market. Homebuilding has surged back to life after the initial decline due to the Covid lockdown. Despite the rise in homebuilding and appreciation in lumber prices, stumpage prices for southern pine remained flat. Our outlook on timber has been negative for several years due to the headwinds the asset class has faced. Despite broadly negative sentiment towards the timber industry, we struggle to make a case for returns to reach higher than mid-single digits.	 Coming off trade war headwinds, the timber market hit another bump when Covid-19 stalled exports to Asia and home building activity declined. Exports resumed in the Pacific Northwest and prices have recovered for Douglas Fir. Southern pine stumpage, on the other hand, saw little appreciation. Timber markets outside the U.S. face varying degrees of currency and political risk which in many cases has resulted in disappointing returns for investors. With few exceptions, returns do not justify the additional risk. 	For most investors, high single-digit expected returns for timberland in the U.S. is too low for the illiquidity and risk assumed within the asset class. Fundraising has been slow for several years which has resulted in a slow transaction market and less competition but finding attractive deals remains elusive.	Negative
Agriculture	Farmland prices nationally leveled off after 2014 but remain too expensive for the income and return potential. Rental income yield for permanent crop farmland hovers around 3.5% which after fees/expenses leaves little income return for investors. We are interested in opportunities where we can control more of the value-chain associated with food production.	 Similar to timber markets, we have concerns around valuations and the risk/return proposition for farmland investments. The income potential within farmland is slightly more attractive than timber and the global growth in food is a more compelling macro trend than pulp and paper but we remain bearish on the sector, in general. 	Currently, we find the asset class to be broadly expensive. We are selectively looking at agriculture business investments where crop and land are a component of a broader value-add investment strategy.	Negative



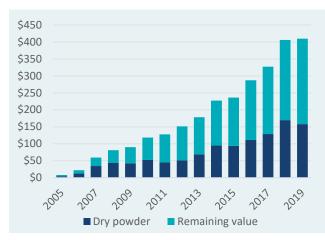
Private infrastructure

- Fundraising within Infrastructure declined in 2020 though most of that was due to challenges with fundraising across all asset classes during a lockdown. With the oil/gas sector out of favor with institutional investors, infrastructure has been a recipient for some of the commitments which used to go into natural resources. One effect of that shift has been a surge in "energy transition" funds from many of the large upstream energy managers as they try and pivot towards clean energy. It's still too early to say how successful that pivot will be, but competition should creep up for renewable energy production and storage assets.
- With deal activity slowing during the pandemic, dry powder ticked up during the year though we expect a robust transaction market in 2021.
- As institutions look for asset classes that can deliver returns above their target rates, private infrastructure should be a consideration for many investors. Historical returns range from 8-12% (net) on average, with income of 4-6% for core infrastructure funds.

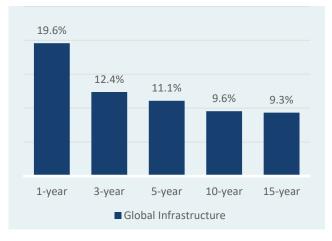
FUNDRAISING IN INFRASTRUCTURE (\$B)



INFRASTRUCTURE DRY POWDER (\$B)



INFRASTRUCTURE PERFORMANCE (NET)



Source: Pitchbook, weighted horizon IRRs as of 12/31/19



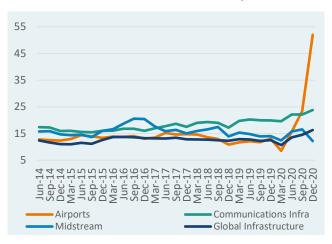
Source: Pregin/Pitchbook

SamCERA June 2021

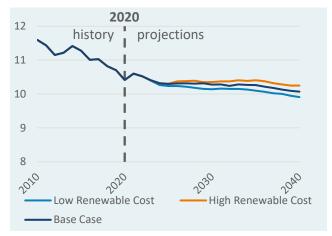
Private infrastructure (cont.)

- One of the industries hardest hit by the pandemic has been transportation infrastructure. Airport passenger traffic fell as much 90% during March/April as the full impact of social distancing orders took effect, and was off 50-60% in 2020, relative to the prior year. With traffic volumes declining in such a short period, revenue and earnings took a major hit causing what appears to be a spike in valuations. In contrast, communications infrastructure has largely been a beneficiary as data usage surged. Despite the challenges within segments of the transportation market, we find better opportunities elsewhere in the infrastructure market.
- Communication infrastructure trades at a considerable premium, 23x vs. 16x for infrastructure broadly, which reflects the stability of their earnings and future growth potential. The macro tailwinds within mobile data usage and video streaming are compelling, though valuations, at least within public markets, appear to be pricing in much of the future growth opportunity. Transactions in private markets for digital infrastructure are growing rapidly as more capital is raised to take advantage of the buildout in data storage and transmission. There are still attractive opportunities globally for digital infrastructure, but returns are coming down and finding managers that can identify underserved markets and successfully develop infrastructure will be an area of focus for our team.
- One challenging area for investors has been power production assets in the U.S. as electricity prices have been marching down for several years. The growth in low-cost renewables and stagnant/declining demand for power has hurt investment returns in both thermal and renewable power. This is a challenge for base load power assets and isn't likely to reverse as more renewables hit the grid. An area that we are seeing opportunities is within battery storage and independent power systems for commercial & industrial customers.

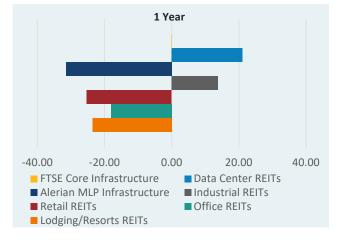
INFRASTRUCTURE VALUATIONS - EV/EBITDA



U.S. AVERAGE ELECTRICITY PRICES (CENTS PER KILOWATT HOUR)



LISTED INFRASTRUCTURE PERFORMANCE



Source: Bloomberg; Dow Jones Brookfield; S&P Indices

Source: EIA

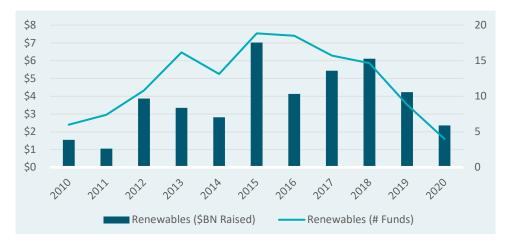
Source: eVestment; FTSE NAREIT; Alerian



Infrastructure – Energy transition

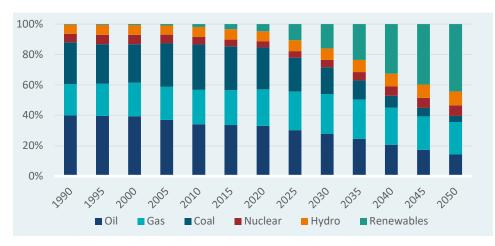
- Fundraising in dedicated renewables moderated in 2020 to \$2.4 billion. However, this universe is not easily defined and excludes funds that invest in renewables or related energy transition assets as a portion of their strategy. Taken as a whole, investment in the sector has been on a consistent upward trend, with only more room to grow as renewables have become the cheapest form of electricity generation in most geographies and costs continue to decline. According to Bloomberg¹, over \$15 trillion of investment in new renewable energy generation and battery storage assets is needed by 2050 in order to meet demand purely from economic considerations, excluding any effects of policy changes to meet emission goals.
- Despite a strong outlook for demand, there are challenges to deploying capital in the space. Returns for owning operating wind and solar assets have compressed to the mid-single digits, and the additional returns for taking development risk are only marginal due to the level of competition and the relatively straight forward operational requirements.
- We recommend investors gain exposure to this space through GPs that can invest opportunistically in projects across the energy transition, as opposed to a dedicated solar & wind development mandate.

FUNDRAISING IN ENERGY TRANSITION (\$B)



Source: Pitchbook

GLOBAL ENERGY SOURCES



Source: BP



^{1.} Bloomberg New Energy Finance, New Energy Outlook 2020.

Midstream energy/MLPs

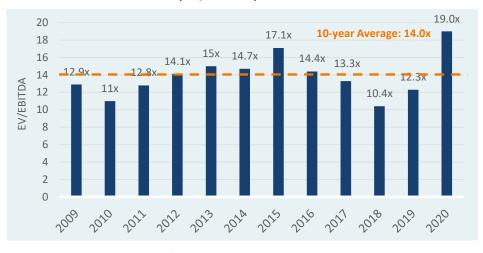
- Midstream energy stocks were down around 30% in 2020. Energy stocks, both upstream and midstream, were down over 50% in the first quarter of 2020 and unlike the broader equity market, failed to recoup those early losses by year-end.
- Yields for listed midstream companies continue to trade at a premium relative to high yield bonds and government bonds but as we cautioned last year that spread comes with an enormous amount of volatility and uncertainty. While higher oil and gas prices have improved the outlook for the upstream and midstream sectors, we remain concerned about the long-term viability of the industry. Like most investors, we've been humbled by the unpredictable nature of the global oil/gas industry. Having informed views on geopolitics, government regulations and social attitudes towards fossil fuels all have an impact on the industry and we do not claim to have special insight into those areas. So, while we recognize that higher commodity prices is a positive development, we think the risks are too great for a tactical investment opportunity in midstream energy.
- Midstream companies on average are trading around 19.0x EV/EBITDA (vs. 13-14.0x long-term average) which would seem to indicate that they are overvalued but much like airports, this is really a function of the denominator deteriorating rapidly in 2020 as earnings took a hit in the oil market sell-off. If you were to normalize earnings, we would expect a discount to historical values but as we've indicated above, cheapness is not enough for us to recommend an allocation.

MLP SPREADS VS HIGH YIELD & TREASURIES



Source: Bloomberg

MIDSTREAM VALUATIONS (EV/EBITDA)



Source: Bloomberg; Alerian MLP Index



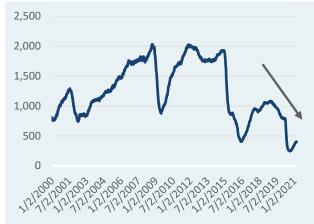
Energy – Oil/gas

- According to Pitchbook, fundraising within Oil/Gas private equity has collapsed and that mirrors our own experience within the asset class.
 Historical performance has been poor, more institutions are adopting standards in ESG, and the long-term outlook for the industry appears unfavorable. We do not see this trend reversing in any meaningful way and it would appear the private energy managers agree as they seek to pivot their business towards energy transition funds.
- Historically, oil/gas production levels in the U.S. followed drilling rig activity. If you look at the weekly drilling rig chart below, you would assume that production fell-off starting around 2016. That is not the case. Production has grown each year, hitting a peak in 2019 at around 12 million barrels/day. 2020 production levels declined by around 1 million barrels, but the U.S. is still producing oil at record levels.
 Without delving into the cause of that divergence, it has frustrated any recovery in oil prices. At some point, if the industry doesn't reinvest in drilling activity, production will fall further but capital spending discipline has not been a strength of the industry.
- For now, we would recommend investors avoid putting new capital into the sector. We recognize that if commodity prices continue to
 move north of \$65/bbl that energy stocks could be in for a strong recovery, but the long-term trends are not in the sectors favor as
 renewable energy continues to take market share.

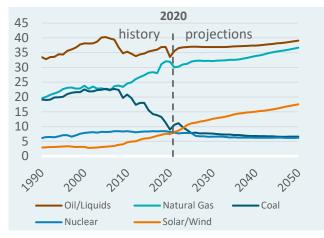
FUNDRAISING IN OIL/GAS



US WEEKLY DRILLING RIG COUNT



ENERGY CONSUMPTION BY FUEL (QUADRILLION BTU)



Source: Baker Hughes Source: EIA



Source: Pitchbook

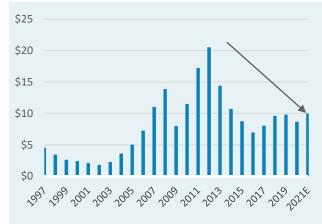
Metals and mining

- Fundraising in the private equity mining segment has been lumpy and quite modest since the GFC, with virtually no private capital raised in the space in 2020. ESG issues in the sector have been a barrier for LPs, but it is possible for fundraising to improve if investors see the benefit of funding the extraction of materials that contribute to our shift away from fossil fuels, such as copper and lithium.
- After a modest recovery from a cyclical low in 2016, mining exploration budgets decreased by 11% in 2020 due to an initial demand shock for industrial metals and lockdown measures put in place in many countries mining companies operate. However, the surge in metal prices that followed along with the persistent low investment over the last several years leading to under-supply is expected to drive an increase in budgets for 2021. Our overall outlook within mining is positive with a notable challenge in finding enough investment opportunities that meet our underwriting criteria.
- On the investment side, we have participated in the mining sector by backing teams with expertise in financing mining projects which
 delivers a high income return with some upside associated with a structured equity security. We are more bullish on base/industrial metals
 which longer-term will benefit from a shift away from fossil fuels. We are less bullish on bulk and energy-related commodities.

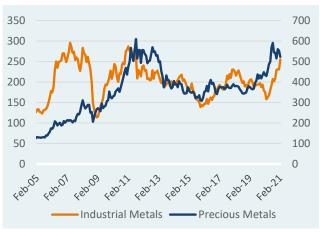
FUNDRAISING IN MINING (\$B)



CAPITAL EXPENDITURE IN MINING (\$B)



METAL PRICES



Source: S&P Global Market Intelligence

Source: Bloomberg, as of 2/26/2021

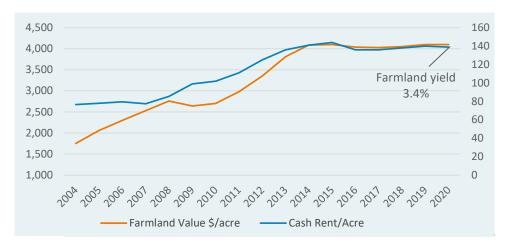


Source: Pitchbook

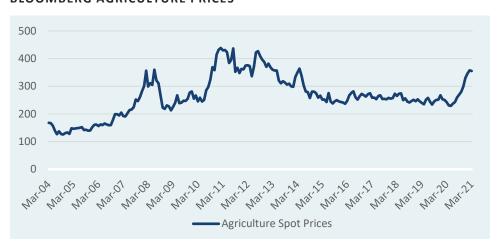
Agriculture

- Farmland values nationally have remained largely flat since 2014, despite a challenging commodity price environment over the last 5 years.
 That has put pressure on investment returns as income yields have been flat-to-down and capital appreciation has not materialized. For new investors, the investment return potential looks disappointing as rental yields remain stubbornly low (3-4% on average) and land values appear expensive.
- In the row crop segment, rental yields hover around 3% which is insufficient in our opinion for most institutional investors. Permanent crops offer the potential of higher income yields but also carry greater risk and operational expertise. There are additional ways to add value through crop selection, improving crop yields and selling land for higher-and-better-use cases. In addition, managers can control a greater share of the food production value-chain which carries higher returns but also higher operational risk.
- We tend to favor agriculture strategies that both own land for crop production and control the operating verticals that bring food to the consumer. Strategies that can capture more value through processing, storage and marketing, offer the potential of higher returns.

U.S. NATIONAL FARMLAND VALUES VS CASH RENTS



BLOOMBERG AGRICULTURE PRICES



Source: USDA Source: Bloomberg, as of 3/31/20

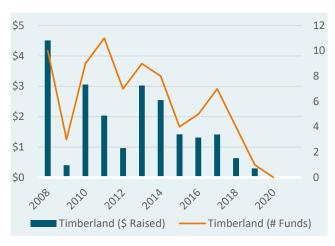


SamCERA June 2021

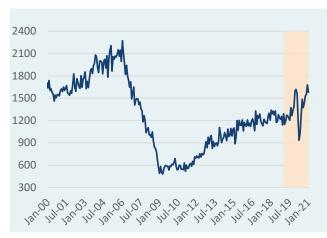
Timberland

- Fundraising has continued to be a challenge within the timber industry. According to Pitchbook, one timber fund was raised in 2019 and there were no reported funds raised in 2020 (Note: this data does not include any separate accounts that may have been raised). Despite a lack of capital being raised by TIMOs, the investment opportunity within timber has not materially improved.
- Housing starts have experienced a slow rebound since the GFC as millennials delayed buying and urban living trends reduced demand for single family homes. There was a surge in housing starts in 2019 but the impact of Covid-19 caused a sharp reversal in the first quarter of 2020. Much like the broader capital markets, housing starts recovered quickly and have surpassed the highs reached pre-Covid.
- As the chart on the bottom right indicates, one of the challenges that timber investors have faced is that the price they received for their trees (southern pine stumpage) began to decline during the GFC and largely never recovered. With housing construction turning around in 2015/16, lumber prices began to respond but the prices that timberland owners received did not. Two critical issues have kept stumpage prices depressed, excess supply of trees in the region and a lack of mill density that has created bottle necks in lumber production.

FUNDRAISING IN TIMBERLAND



US HOUSING STARTS



Source: St. Louis Fed

SOUTHERN PINE STUMPAGE VS SOFTWOOD LUMBER PRICES



Source: St. Louis Fed



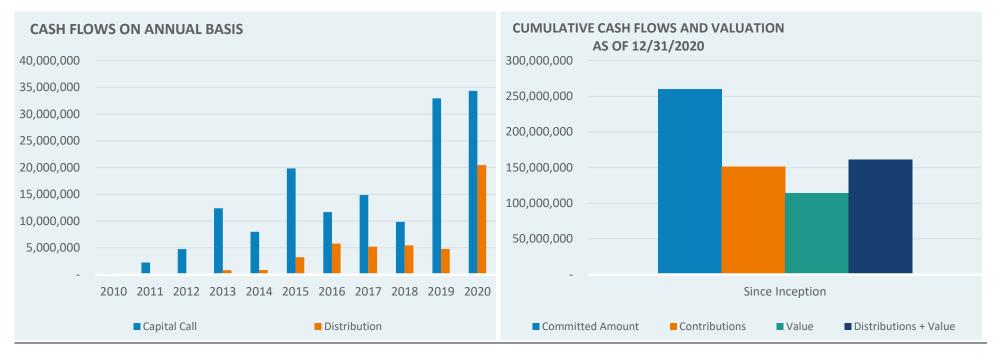
Source: Pregin/Pitchbook

Real Asset Performance



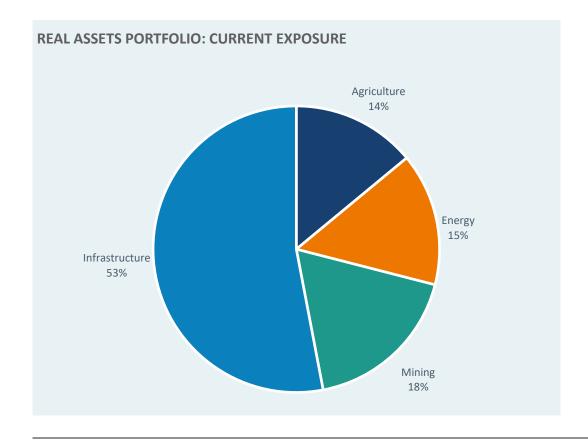
Performance

- The portfolio is currently valued at \$114.1 million. Together with \$46.6 million in realized distributions, the Total Value at \$160.7 million is approximately \$9.5 million above \$151.2 million total capital contributions, resulting in a total value multiple of 1.06x and a net IRR of 2.23%. If we exclude the investment in Sheridan, the portfolio IRR would be 9.7%. Capital weighted average investment age of the portfolio is 3.4 years.
- Within Private Real Assets, the current allocation of market value exposure is 14.0% to Agriculture, 15.2% to Energy, 18.1% to Mining, and 52.7% to Infrastructure. The Portfolio is expected to be diversified over a period of 3 to 5 years.



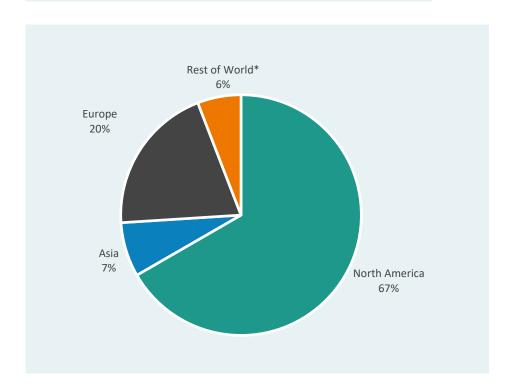


		Current	Current Exposure as %
Investment Type	Commitment	Exposure	of Portfolio
Agriculture	15,000,000	15,988,695	14.0%
Energy	49,800,000	17,327,391	15.2%
Mining	55,000,000	20,683,673	18.1%
Infrastructure	140,000,000	60,116,557	52.7%
Total Portfolio	259,800,000	114,116,316	100.0%



Portfolio Diversification

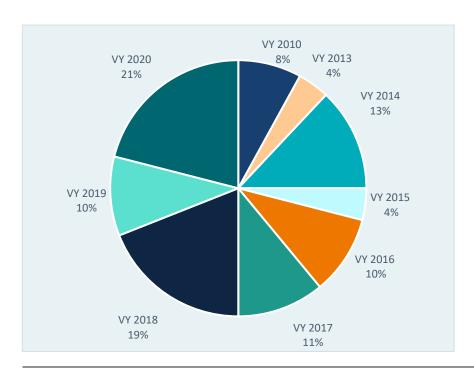
Geography	Reported Fair Value
North America	76,081,993
Asia	8,351,787
Europe	23,003,823
Rest of World*	6,678,713
Total Portfolio	114,116,316



Based on invested capital as of December 31, 2020, if provided by the partnerships. The portfolio is expected to be US-biased given the mandate to hedge domestic inflation.

^{*} Rest of World includes Australia, Chile, Senegal, DRC, and Burkina Faso.

Vintage Year	Commitment as of 12/31/2020	% of Portfolio Commitment	Reported Value as of 12/31/2020
2010	20,000,000	7.7%	0
2013	10,000,000	3.8%	3,405,930
2014	35,000,000	13.5%	24,408,670
2015	10,000,000	3.8%	12,781,086
2016	25,000,000	9.6%	17,506,494
2017	29,800,000	11.5%	18,525,972
2018	50,000,000	19.2%	29,828,977
2019	25,000,000	9.6%	7,659,187
2020	55,000,000	21.2%	0
Total Portfolio	259,800,000	100%	114,116,316



The portfolio is increasingly diversified by vintage year with larger capital commitments expected over the next 2-3 years.

- SamCERA committed \$20.0 million to Vision Ridge Sustainable Asset Fund III within the infrastructure portfolio at the March Investment Committee Meeting.
- Several GPs within SamCERA's portfolio are coming back to market in 2021 so we will be revisiting those opportunities for potential re-ups.
- As the shift away from commodity-oriented sectors continues, we will look opportunistically for strategies in the space, but we expect infrastructure to occupy a larger share of real asset portfolios going forward.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

July 27, 2021 Agenda Item 6.3

TO: Board of Retirement

FROM: Doris Ng, Investment Analyst

SUBJECT: Report on Core Equity and Low Volatility Equity Manager Annual Reviews

Recommendation

Accept and review the report on the annual reviews of SamCERA's Core and Low Volatility equity strategies.

Background

On May 13th, SamCERA staff held annual review meetings virtually for our core equity manager, D.E. Shaw, and our low volatility equity managers, Acadian and PanAgora. Each meeting lasted approximately 1.5 hours, and consisted of a firm/organizational update, investment process review, performance review and attribution, and current positioning/market outlook.

Discussion

The D.E. Shaw U.S. Broad Market Core Alpha Extension Fund, which is a 130/30 large-cap core strategy that seeks to identify market inefficiencies through quantitative analysis, was reviewed first.

Next, PanAgora's Defensive U.S. Equity Low Volatility strategy, which is a risk-based approach that seeks exposure to the low volatility factor by investing in low risk and diversifying stocks while avoiding unintended risk concentrations, was reviewed.

Lastly, we reviewed Acadian's U.S. Managed Volatility Equity strategy, which seeks to capture the "low-risk" anomaly by investing in lower systematic risk stocks that are diversifying and have positive expected excess returns. The firm announced the upcoming retirement of one of its co-CEOs planned for next year.

There were no major concerns identified during the reviews. Meeting notes are attached to this memo summarizing the findings from these annual reviews.

Attachments

D.E. Shaw Annual Review Meeting Notes (confidential)
PanAgora Annual Review Meeting Notes
Acadian Annual Review Meeting Notes

Date of meeting: 5/13/21

Location: Video Conference

Manager Representative(s)

Nicholas Alonso, CFA (Director, Portfolio Manager)

Allison Kiely (Client Service)

Brian Henze (Relationship Manager)

Verus Representative(s)

Margaret Jadallah (Consultant)

Account Assets

\$229.7 million (as of 4/30/21)

Client Representative(s)

Michael Coultrip (CIO)
Doris Ng (Analyst)

Product Description

PanAgora's Defensive Equity strategy seeks to harness the 'low-volatility premium' through a systematic, factor-based investment approach focused on achieving market-like returns with less risk. This is accomplished by leveraging PanAgora's proprietary Risk Parity portfolio construction methodology, which seeks to efficiently capture the equity premium associated with low volatility, while taking minimal unintended risks. Since the firm's inception, PanAgora has been using sophisticated quantitative techniques to integrate fundamental insights with vast amounts of dynamic market data. This blended insight is used to both score individual securities on a factor basis and also on a diversification basis, in the context of a broadly diversified portfolio. The result for the US Defensive Equity strategy is a portfolio expected to have lower volatility (beta around 0.65-0.75), and similar returns relative to the capitalization-weighted benchmark over a full market cycle. PanAgora expects the strategy to participate in approximately 75% of up markets and 55% in down markets.

Organization

PanAgora has been providing investment management services since it began operations as the Structured Investment Products Group of The Boston Company in July 1985. PanAgora Asset Management, Inc. subsequently registered as an independent investment adviser with the SEC in November 1989. At that time, the company was owned by The Boston Company and Nippon Life Insurance Company (NLI) each owning 50% of the company. In September 1992, The Boston Company was sold, and its 50% ownership interest reverted to its parent organization, Lehman Brothers. Putnam Investments acquired Lehman Brothers' 50% position in February 1998 and subsequently purchased an additional 30% interest from NLI in 2004, before being acquired itself by Power Financial Corporation in 2007. In March 2008 PanAgora implemented a Management Equity Plan that offers employees up to 20% ownership in the firm through restricted stock and options. This leaves the remaining 80% with Power Financial Corporation (through its affiliates Great-West Life and Putman Investments).

Today PanAgora is a provider of systematic investment solutions spanning a broad array of asset classes, including Alternatives, Risk Premia, and Traditional Long-Only Equity. The firm has approximately \$39 billion in assets under management as of 3/31/2021. Multi Asset and Risk Parity assets comprise 39% of firm assets which is where low volatility mandates are managed. The Defensive U.S. Equity Low Volatility strategy had \$223 million under management as of 3/31/21 with a manager-estimated capacity of \$20 billion. SamCERA comprises the majority of assets in the strategy but only 8.4% of assets in the broader Defensive Equity/Risk Parity equity sleeve.

Verus Page 1

Investment Team

PanAgora employs a team-based approach across all its strategies, where research and portfolio management are implemented on a collaborative basis. The head of the Multi Asset team is CIO Edward Qian, Ph.D., CFA. Dr. Qian is directly supported by Bryan Belton, CFA (Director, Multi Asset), Nick Alonso, CFA (Director, Multi Asset), and David Liddell, (Director, Multi Asset) in addition to other portfolio managers, analysts and traders who support Multi Asset portfolio construction, research, and implementation. As of 3/31/21, the team was comprised of an 11-member investment team, 7 in trading and implementation and 2 in data science and technology. Nick Alonso is the lead portfolio manager for Defensive Equity.

Investment Strategy

PanAgora articulates the investment process in 3 distinct parts: opportunity set, asset selection, and portfolio construction. The opportunity set is simply the exercise of defining the mandate parameters by orienting the firm's models around the target factor premia mix within the appropriate universe. In this case the low volatility factor is the only target factor. Then in the asset selection, PanAgora will calculate stock specific factor scores and rank the investible universe. Simultaneously and independently, PanAgora will also rank the universe on each stock's diversification score, in the context of the broad portfolio. The portfolio construction process optimizes the portfolio around the intended factor exposure while maintaining equal risk contribution across sectors (ex., overweight utilities and consumer staples, underweight financials and technology). Shorter term volatility and longer term correlation analysis is combined in the approach.

Performance & Positioning

SamCERA funded the Defensive US Low Volatility strategy in late December 2018, and so performance history is still limited. Since inception as of 4/30/21, PanAgora underperformed the broad Russell 1000 Index in a strong up market, returning 19.2% (gross of fees) relative to the benchmark return of 28.3%. In Q1 '20, beta compression at the beginning of the pandemic impacted all risk assets and did not provide the downside protection that would be expected compared to the broad equity index. The unique COVID environment, next favoring growth sectors and then higher volatility value starting in October 2020, was a further headwind to the defensive approach. Over the past year, underweights to Apple and Tesla were the largest detractors from performance. Diversification and risk-balanced considerations helped the portfolio perform better relative to some other low volatility peers.

Conclusion

Verus believes that PanAgora is a skilled manager that offers a differentiated systematic approach to low volatility investing through its risk-balanced approach to portfolio construction. The strong equity market since COVID has resulted in headwinds for the strategy, but their factor and diversification scoring process has served to improve results compared to US low volatility peers.

Verus Page 2

Date of meeting: 5/13/21

Location: Video Conference

Manager Representative(s)

Dan Le (Portfolio Manager) Margaret Jadallah (Consultant)

Hannah Nordstrom (Client service) Mark Osyf (Relationship Manager)

Client Representative(s)

Account Assets Michael Coultrip (CIO) \$217 million (as of 4/30/21) Doris Ng (Analyst)

Product Description

Acadian's investment philosophy for their managed volatility strategies is predicated on extensive proprietary and academic research pointing to a "low-risk" anomaly that can potentially be exploited within equities. Acadian attempts to take advantage of this anomaly by building low-risk equity portfolios that hold predominantly lowvolatility stocks, and then adding information on the correlation structure of equities to help further reduce risk through diversification. Acadian has built a suite of proprietary risk models designed specifically to exploit the low-risk mispricing. SamCERA's portfolio is U.S. focused and uses the Russell 1000 Index as its benchmark.

Verus Representative(s)

Acadian's goal is to build a portfolio focused on absolute return and risk with the aim of achieving an absolute return similar to or better than that of a domestic equity index but with lower volatility over the long term. Acadian targets absolute risk to be 25-35% less than a typical capitalization-weighted benchmark. That said, tracking error is not a major consideration and can appear relatively high due in part to Acadian's comfort with carrying large sector variations versus the benchmark. Acadian seeks to combine the values of all of the security-level factors to determine a peer-relative return forecast for each stock. Separately they make a top-down forecast for the stock's peer group, and then add that forecast to the stock's score.

Acadian's managed volatility strategies utilize the same alpha forecasts as Acadian's active equity strategies but with risk being the initial consideration when constructing portfolios. Alpha forecasts play a modest role relative to the importance of risk estimates but are important to the goal of achieving a higher risk-adjusted return. Incorporation of alpha forecasts generally results in higher exposure to value, size and quality.

Organization

Acadian Asset Management LLC is a Boston based firm founded in 1986. It is a wholly owned subsidiary of BrightSphere Affiliate Holdings LLC. As of March 31, 2021, Acadian managed assets totaling \$111.4 billion, with managed volatility strategies accounting for \$21.6 billion of the firm's total assets under management (AUM). Acadian has 9 managed volatility strategies for various regions, most of which started by client request. The U.S. managed volatility strategy has \$336 million in AUM and was launched in April 2011. Acadian launched their first managed volatility strategy in 2006.

Over the past year, Acadian has been working on developing ESG alpha signals and a suite of dedicated ESG funds. In January 2021, Acadian hired Andy Moniz as Director of Responsible Investing. Moniz joined from Putnam where he created systematic ESG stock selection strategies. Acadian has experience with succession transitions at the senior

Verus Page 1 level due to retirements. After our review meeting, it was announced that John Chisholm, co-CEO, will retire from the firm effective July 1, 2022 with Chisholm's co-CEO Ross Dowd assuming the role of sole CEO. Chisholm is a co-founder of Acadian and has been its co-CEO since 2018, previously serving as CIO. Dowd has been with Acadian since 2004.

Investment Team

The managed volatility team is led by CIO Brendan Bradley, Ph.D. and five portfolio managers who are supported by a dedicated research analyst. In addition, the managed volatility group is supported by the full resources of the broader Acadian investment team. Three of the portfolio managers spend 100% of their time managing volatility-based strategies – Mark Birmingham, Mark Roemer and Dan Le.

Team members typically work in small groups to explore an idea, with frequent feedback from other colleagues and oversight from senior team members. Specific to Acadian's managed volatility approach, Ryan Taliaferro, director, equity strategies, oversees the strategy's research effort and works closely with lead portfolio manager Mark Roemer and the managed volatility team.

Investment Strategy

Acadian's investment process begins with a proprietary database containing detailed financial data on all stocks in the allowable universe. This information forms the basis of the valuation frameworks and risk models that drive Acadian's process. The valuation process uses a wide range of predictive factors to evaluate all securities in the allowable universe and portfolios are built from the bottom up.

Individual stocks are selected in an effort to achieve the strategy's risk-reduction objective, and all resulting portfolio allocations are a residual of this process. The stock forecasts for risk, return, transaction costs and liquidity all flow into a portfolio optimization system. This system, which also incorporates any additional client- and strategy-specific constraints and objectives, produces a list of buys and sells designed to achieve the optimal tradeoff, net of costs, between risk and expected return. Stocks that are expected to reduce risk and add return (net of costs) are purchased, while less diversifying and riskier stocks with lower expected return are sold. Resulting portfolios tend to be roughly evenly distributed across the capitalization spectrum and generally favor sectors associated with lower volatility like consumer staples, utilities and health care. Risk models combine long term and short term inputs that are both factor-based and statistically-based.

Performance & Positioning

SamCERA funded their U.S. Managed Volatility Equity mandate at the end of December 2018, so the performance history is fairly short. During this period of strong equity markets, Acadian's portfolio underperformed the broad benchmark (since inception as of 4/30/21 15.0% net vs. 27.2% for the Russell 1000). The majority of the shortfall occurred during 2020 (Acadian 2.9% vs. 21.0% for the Russell 1000) when low beta names did poorly and high beta names performed extremely well. The spread between high and low beta names was unusually large during this time period with a 55% spread between first and fifth quintile names in the Russell 1000 in terms of beta and a 29% spread in terms of volatility.

During the first quarter of 2020, the panic drawdown (also referred to as beta compression) affected all risk assets such that the low volatility approach to equity management did not benefit. During the rest of 2020, higher volatility, growthy names (ex. Tesla, Google) performed best whereas lower volatility names and sectors where they are typically overweight, such as consumer staples, underperformed. The cyclical, value-oriented bounce back in Q1 '21 which favored higher volatility sectors (ex., financials, energy) again disadvantaged the more defensively sector-postured U.S. Managed Volatility portfolio. More recently, the portfolio was outperforming the broad market and the minimum volatility index on down market days.

Verus Page 2

The team has been working on enhancements to the managed volatility approach which include building a proprietary risk model specific to managed volatility, the incorporation of stock level interest rate sensitivity into constraints and predictions, a heightened sensitivity to transactions costs, and the introduction of a dynamically weighted process in an attempt at reducing uncompensated idiosyncratic risk.

Conclusion

Verus believes that Acadian is a skilled manager that offers a robust approach to managed volatility investing that combines low systematic risk (low beta) and low total risk (low standard deviation) with an alpha overlay. The U.S. Managed Volatility Equity strategy has underperformed the Russell 1000 benchmark over the relatively brief tenure that SamCERA has been invested; however, the portfolio is adhering to its stated objectives, albeit during a time period of extreme market headwinds.

Verus Page 3

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

July 27, 2021 Agenda Item 6.4

TO: Board of Retirement

FROM: Doris Ng, Investment Analyst

SUBJECT: Report on International Equity Manager Annual Reviews

Recommendation

Review the report on the annual reviews of SamCERA's international equity managers.

Background

SamCERA staff and consultant held annual review meetings virtually with Baillie Gifford and Mondrian on June 3rd.

Each meeting lasted approximately 1.5 hours, and consisted of a firm/organizational update, investment process review, performance review and attribution, and current positioning/market outlook.

Discussion

Baillie Gifford's ACWI ex-US All Cap portfolio, which is a fundamental growth strategy organized by regional teams, was reviewed first.

Next, Mondrian's All Countries World ex-US strategy, which is a value-oriented international equity approach, was reviewed. The firm recently added a new assistant portfolio manager on its team and also noted one retirement.

There were no major concerns identified during the reviews. Meeting notes are attached to this memo summarizing the findings from these annual reviews.

Attachments

Baillie Gifford Annual Review Meeting Notes Mondrian Annual Review Meeting Notes Baillie Gifford Overseas Ltd ACWI ex US All Cap

Date of meeting: 6/3/2021 Location: Video Conference

Manager Representative(s) Verus Representative(s)

Joe Faraday (Member of Portfolio Construction Joseph Abdou

Group, Client Service)

Eoin Anderson – Client Service

Johann Van der Merwe – Client <u>Client Representative(s)</u>

Service

<u>Account Assets</u> Mike Coultrip (CIO), Doris Ng (Analyst)

\$370 mm (4/30/2021)

ACWI ex US All Cap is a fundamental growth strategy. Research is organized by regional teams, and the strategy's Portfolio Construction Group (PCG) includes members from different regional teams. Four global sector groups also contribute to research. Baillie Gifford conducts approximately 2000 company meetings annually both in Edinburgh and onsite. Companies are evaluated on their growth opportunity relative to the average company, their ability to execute on that opportunity, and the degree to which the probability of future success is already valued by the market. Baillie Gifford's basic philosophy is that share prices ultimately follow earnings. They believe that the stock market has a recurring tendency to under-appreciate the value of long-term compounded growth. The process seeks to add value through use of proprietary fundamental research to identify companies exhibiting some combination of sustained above average growth, and attractive financial characteristics. The portfolio generally holds 60-90 stocks, with country and sector weights +/-10% relative to the index and stock weights +/- 5% relative to the index.

At the beginning of 2014, SamCERA converted from the EAFE Plus to the ACWI ex US strategy. This change allowed for additional emerging markets exposure. The portfolio has no direct exposure to stocks within frontier markets; however, they do hold some stocks with revenues derived from frontier markets.

Meeting Notes

Organization

Baillie Gifford remains an independent partnership with no external owners. The firm continues to experience low professional turnover with a small number of planned retirements each year. Historically, all operations were based in Edinburgh, Scotland with small marketing offices in New York and London. More recently however, Baillie Gifford is altering its viewpoint that (almost) all professionals should be based in Edinburgh. The client servicing/marketing team in New York has grown, and the firm is staffing some operations professionals there.

At 3/31/21, firm assets under management were \$447 billion. Baillie Gifford has seen steady outflows as clients have been rebalancing down their equity allocation recently. The all cap strategies have had \$550 million in outflow primarily due to rebalancing.

Baillie Gifford Overseas Ltd ACWI ex US All Cap

Investment Team

The International All Cap Portfolio Construction Group (PCG) contains a mix of portfolio managers from different regional investment backgrounds and with varying levels of experience by design. Diversity of opinions and debate are integral to the decision-making process. The PCG is comprised of Baillie Gifford professionals Gerard Callahan, Joe Faraday, Iain Campbell, Moritz Sitte and Sophie Earnshaw. The members of the PCG serve as both portfolio managers and research analysts. The PCG makes all decisions for the portfolio after debate and discussion as a team. Gavin Grant was added to the analyst team to give input to the PCG specifically for ESG. Given Baillie Gifford is a very long term investor, they put particular emphasis on governance and manager trust. The addition of Gavin's input to the team solidified the importance of these factors in making investment decisions.

Investment Strategy

The investment philosophy and process remains unchanged. Baillie Gifford seeks to identify companies with strong long-term growth prospects and take substantial positions in them. The investment horizon is typically 5 years.

Baillie Gifford summarizes their investment criteria with the following four questions: Will this company be significantly larger in five years?

Are management sensible guardians of our clients' capital?

Why is this growth not reflected in the current share price?

What would make us sell?

Baillie Gifford's bottom up stock selection process looks for durable franchises, well managed companies, aligned management and good valuation. There is no minimum growth hurdle for purchase, and a portfolio typically holds stocks with a variety of growth ranges. Future growth/pre-profitability companies can be bought if they meet the buy criteria.

As a firm, Baillie Gifford will not own more than 15% of a company's outstanding stock. An assessment of management is part of the team's investment strategy, and holding big positions gives them good access to management. An additional liquidity requirement is that a maximum of 15% of the portfolio can be invested in stocks that take more than 10 days to trade in and out of.

Baillie Gifford will let its winners run as opposed to adding and trimming on valuation. The ACWI ex US All Cap portfolio tends to have a lower weighted average market cap than that of the index. Currency hedging is available to portfolio managers but is not typically employed. Instead currency discussions are incorporated in macro-economic analysis prior to investing.

The portfolio invests in the long term with about half of the names held for longer than 5 years. This results to an average turnover of 10-20%. Portfolio managers also look for good management and strong earnings growth potential over 5 years. They increased their sector positioning bands from +/- 10% to +/- 15% as they saw themselves coming close to 10%, and they don't want to be forced to hold names they don't want to if they have better ideas in other sectors.

Baillie Gifford Overseas Ltd ACWI ex US All Cap

Performance & Positioning

On a net of fee basis as of 4/30/21, the Baillie Gifford SamCERA portfolio had outperformed the MSCI ACWI ex-US Index over the 3- year and 5-year periods by 8.1% and 4.5% respectively. Since inception (4/2012), Baillie Gifford has added 310 bps in excess return over the benchmark (SamCERA 11.0% vs. SamCERA blend MSCI EAFE/MSCI ACWI ex-US benchmark of 8.0%). The benchmark changed to ACWI-ex US in January 2014 when SamCERA changed its mandate from EAFE Plus to Focus.

Baillie Gifford continues to stick to its long-term philosophy, which has done well recently. They do not want to get caught up in shorter term noise (GME as an example.) They continue to look for companies with durable growth over a 5 to 10-year period. They reviewed the names in the portfolio and continue discussing whether they are excited about the current holdings. Currently, there are no "problem child" names in the portfolio they are concerned about.

Conclusion

Verus maintains conviction in Baillie Gifford for the international growth mandate. They have outperforming their primary benchmark over longer time periods for SamCERA.

Date of meeting: 6/3/2021

Location: Video Conference

Manager Representative(s)

Jim Brecker (Client Service),

Steven Dutart, CFA (Sr. Portfolio Manager)

Verus Representative(s)

Joseph Abdou

Account Assets

\$360 mm (Q1 2021)

Client Representative(s)

Mike Coultrip (CIO), Doris Ng (Investment Analyst)

Product Description

Mondrian is a value-oriented, defensive manager whose investment philosophy is based on the principle that investments must be evaluated for their fundamental long-term value. The firm's philosophy involves three stated investment objectives: 1) provide a rate of return meaningfully greater than the client's domestic rate of inflation, 2) structure client portfolios that preserve capital during protracted international market declines, and 3) provide portfolio performance that is less volatile than benchmark indices and other international managers. Mondrian applies typical value screening criteria to a universe of 1,500 stocks, from which 500 are selected for more detailed work. Through fundamental research, and the deliberations of the Investment Committee, the universe is further reduced to a list of 150 stocks. The investment team conducts detailed fundamental analysis on the remaining stocks, a process which includes applying the firm's dividend discount model consistently across all markets and industries. Mondrian also uses a purchasing power parity model to give a currency comparison of the value of the stocks under consideration. The firm will only consider buying stocks in countries with good investor protection practices and relatively simple repatriation procedures. A computer based optimization program is employed in the portfolio construction process. Mondrian's portfolio holds 80-125 issues.

Meeting Notes

Organization

Mondrian was founded in 1990 as a boutique international manager. In July 2011, Mondrian's employee partnership purchased the 27.5% minority interest of the company held by private equity firm Hellman and Friedman to become 100% employee owned. As of the end of the first quarter of 2021, the firm was managing \$61 billion in AUM, approximately \$38 billion of which was in developed and ACWI equity mandates. The firm has seen assets decline in 2020 but have increased in 2021. They have lost 10 clients and gained 9 clients for the year ending March 31, 2021. In September 2016, Mondrian became a PRI signer signaling their commitment to responsible investing. In June 2016, Mondrian decided to pay for outside research and stopped using soft dollars.

Hamish Parker retired in Q1 of 2021, this was a planned retirement with significant warning. His responsibilities have been transitioned to several individuals within Mondrian over the past year.

Investment Team

There are approximately 58 investment professionals at Mondrian, all located in the London headquarters. The Global Equity Research Forum is overseen by Group CIO Clive Gillmore and Deputy CIO and CIO of International Equity Elizabeth (Liz) Desmond. The team of 21 includes four International Equity Senior Portfolio Managers, two International Equity Portfolio Managers, an Assistant Portfolio Manager and a Research Analyst. International team head Liz Desmond has committed to remaining with the organization for the foreseeable future and has no near-term retirement plans. There have been no significant departures to the team over the past year.

Investment Strategy

Mondrian employs a long-term dividend discount model for all of the firm's equity strategies. The approach focuses on long term dividend growth after inflation. For each company, they conduct scenario analysis, looking at expected, best and worst case outcomes. These scenarios are modeled based on fundamental research and yield and future real growth inputs derived from company meetings. Currency views based on PPP analysis are incorporated into the forecasts. The emphasis is on downside risk and they prefer a narrow, rather than a broad, range of outcomes. They are looking for at least a 5% real return from owning a stock for the long term and use a 5% discount rate across all markets. They will hedge currencies defensively when the PPP analysis identifies extreme over-valuation. The approach yields a portfolio that will generally preserve value on the downside relative to the market and strives to keeps up in rising markets. The risk, as measured by standard deviation, is lower than peers and the benchmark.

Performance & Positioning

For the year ended 3/31/21, Mondrian underperformed the MSCI ACWI ex US Value Index (45.8% net of fees vs. 48.7% for the benchmark). Mondrian has outperformed over the 3, 5, and 10-year trailing periods by 1.9%, 0.2%, and 1.6% respectively. During Q1 2021, an underweight position in Canada hurt relative performance, as did the underweight to the Canadian Dollar.

Recently, they have been adding exposure to the UK and Japan. They feel emerging markets valuations are on par with developed markets, but with the recent run up in developed markets, they view emerging markets as cheaper now.

Conclusion

Mondrian has outperformed the benchmark for the long-term time periods for SamCERA, and they implement their defensive approach well. Verus clients have used Mondrian for All Country World ex-U.S. Value mandates for multiple years with successful long-term results.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

July 27, 2021 Agenda Item 6.5

TO: Board of Retirement

FROM: Doris Ng, Investment Analyst

SUBJECT: Report on Fixed Income Manager Annual Reviews

Recommendation

Accept the reports on the annual reviews of SamCERA's core bond and opportunistic credit managers.

Background

SamCERA staff and consultant held annual review meetings virtually with our core bond managers, FIAM, NISA Investment Advisors and DoubleLine LP, on June 24th and with our opportunistic credit manager, Franklin Templeton, and core bond manager, Western Asset Management, on July 1st.

Each meeting lasted approximately 1.5 hours, and consisted of a firm/organizational update, investment process review, performance review and attribution, and current positioning/market outlook.

Discussion

On June 24th, the NISA Aggregate Bond strategy, which is an active strategy invested primarily in U.S. Treasuries, agencies, investment grade corporate bonds and structured securities, and managed with a tight tracking error relative to the Barclays Aggregate benchmark, was reviewed first. The firm noted the completion of its multi-year, succession planning with the last step being the transition of the CEO role effective in January 2021.

Next, FIAM's Broad Market Duration strategy, which is also an active strategy invested primarily in U.S. Treasuries, agencies, investment grade corporate bonds, and structured securities, was reviewed. The firm noted one new addition to its team in 2020.

Lastly, DoubleLine's Securitized Income strategy, which is an active strategy that utilizes a barbell approach of investing in interest-rate sensitive agencies and government securities and credit-sensitive structured securities, was reviewed. The firm noted one retirement and one personnel change on its team.

On July 1st, the Franklin Templeton Global Multi-Sector Plus bond strategy, which is a global unconstrained bond mandate managed in an opportunistic fashion using a top-down fundamental framework, was reviewed first. The firm noted one new addition on its research team and a personnel change on its trading team.

Western Asset Management's Total Return Unconstrained (TRU) strategy, which is an unconstrained core product with broad latitude in duration (-3 to +8 years) and asset allocation, was reviewed next.

There were no significant concerns identified during the portfolio reviews. Attached you will find meeting notes from Verus summarizing the findings from these annual reviews.

Attachments

NISA Annual Review Meeting Notes
FIAM Annual Review Meeting Notes
DoubleLine Annual Review Meeting Notes
Franklin Templeton Annual Review Meeting Notes
Western Asset Management Annual Review Meeting Notes

Date of meeting: 6/24/2021

Location: Zoom Meeting

Manager Representative(s)
Cheryl Hanson (Client Service)
Michael Williams (Client Service)
Joe Murphy (Portfolio Manager)
Stephen Douglas (Economic Strategist)

<u>Verus Representative(s)</u> Margaret Jadallah Joseph Abdou

Account Assets \$233 million (3/31/21) <u>Client Representative(s)</u>
Mike Coultrip (CIO), Doris Ng
(Analyst)

Product Description

NISA applies a risk-controlled approach to all of its fixed income portfolios. This approach does not permit large bets or positions that generate significant tracking error versus the benchmark. Instead, NISA invests in a large number of small, diversified, active positions which seek tight tracking error to the chosen benchmark. Benchmark weight is a significant consideration when constructing and managing portfolios. The investment strategy is comprised of strategic (top-down) and tactical (bottom-up) decisions. Strategic decisions include sector selection and yield curve positioning while tactical decisions include industry and security selection and trading activity. Review of both strategic and tactical decisions is continual. The amount of portfolio risk budget devoted to one aspect versus the other will change as market conditions warrant. In general, strategic decisions change relatively infrequently, while tactical decisions, especially security selection, will change fairly often as market conditions provide opportunities. Over a typical market cycle, the bottom-up is expected to contribute to 70% of value-added while top-down is roughly 30%.

Meeting Notes

Organization

NISA registered with the SEC in November 1993 and began managing assets in April 1994. Prior to 1994, several of the firm's key employees were with National Investment Services of America, Inc. ("National"), which reorganized in 1994 to facilitate a change in ownership among employees. National split itself into three separately owned entities in 1994, one of which was NISA, focusing predominantly on fixed income asset management. NISA Investment Advisors, LLC is a wholly owned subsidiary of NISA, LLC which is 100% employee-owned. The firm managed \$417 billion in total assets at 3/31/21, \$230 billion of which was in investment grade fixed income across the maturity spectrum. From this, \$3.4 billion was in Core Broad Market Fixed Income Composite. Notional derivative overlay strategies are another core competency for the firm. Consistent themes across the firm's strategies include risk-controlled asset management, customized, separate accounts, frequent client interaction, and a team-oriented approach.

Effective 1/1/19, the firm's founders Jess Yawitz and Bill Marshall transferred their ownership interests to NISA's existing senior management team in exchange for a non-voting preferred stake in the firm. Direct LLC

ownership among NISA's senior leadership was expanded at that time. Succession to the next generation was further augmented using NISA's Phantom Ownership Plan. NISA expects that its distribution of participation interests in the plan will continue to broaden. NISA has a "promote from within" culture, and many employees start out in the firm's internship program.

Investment Team

All portfolios are managed with a team-approach. NISA's Investment Committee (Jess Yawitz, David Eichhorn, Biswajit Bhattacharya, Ken Lester, Joe Murphy, Anthony Pope, and Dan Scholz) meets monthly and develops strategic themes based on market and economic research including the analysis of monetary policy, expected economic and corporate profit growth, new issue activity, inflationary pressures, Treasury issuance and other macroeconomic factors. At these meetings, targets for sector overweights/underweights are developed and a yield curve strategy is determined.

Investment Strategy

The investment strategy is comprised of strategic (top-down) and tactical (bottom-up) decisions. The amount of the portfolio risk budget devoted to one aspect versus the other will change as market conditions warrant. Over a typical market cycle, the bottom-up is expected to contribute to 70% of value-added while top-down is roughly 30%.

NISA will look for opportunities to trade very similar bonds for small gains at little or no incremental risk. As active traders, they are in constant communication with the brokerage community and analyzing real-time data. NISA uses its risk management tools to monitor each portfolio's exposure relative to the benchmark. Each source of risk is evaluated net of the benchmark to determine active risks and these risks are compared with the expected excess performance associated with the positions. NISA will only implement positions which meet the active risk/reward threshold (either on an individual basis, or when viewed in the context of other active positions).

Performance & Positioning

Performance will tend to be closely matched to the Aggregate benchmark, with the goal of having low tracking error and moderate excess return. They keep portfolios duration-neutral to their respective benchmark(s) (+/- 0.25 years). Low tracking error is a hallmark of the strategy and as such, NISA's fixed income universe is predominately comprised of securities included in the benchmark. This tends to result in high information ratios versus peers. Betas tend to be around 1.0 to the benchmark over time.

For the 1-year ending 3/31/2021, the NISA Core Broad Market Fixed Income composite beat the Benchmark (1.7% vs 0.7%.) SamCERA's portfolio was funded 6/1/2020 and had a since inception gross return of -1.3% through March 31, 2021, beating the benchmark by 20 bps. Their positioning is overweight to the financial sector, as they see banks as healthy as they've ever been. They are also underweight IT as spreads have compressed significantly relative to Treasuries.

Date of meeting: 6/24/2021

Location: Zoom meeting

Manager Representative(s)

Beau Coash (Institutional PM)
Arthur Greenwood (Relationship Manager)

Margaret Jadallah Joseph Abdou

Verus Representative(s)

<u>Account Assets</u> \$266 million (5/31/21) <u>Client Representative(s)</u>
Mike Coultrip (CIO), Doris Ng (Analyst)

Product Description

Fidelity's Broad Market Duration (BMD) investment strategy seeks to achieve absolute and risk-adjusted returns in excess of the Bloomberg Barclays U.S. Aggregate Index, focusing its investments in U.S. Treasuries, agencies, investment grade corporate bonds, mortgage-backed, and asset-backed securities. The strategy can also hold small, opportunistic positions in out-of-benchmark securities, such as inflation-linked bonds. The investable universe includes all U.S. dollar denominated, investment grade debt securities. The BMD investment approach emphasizes issuer and sector valuation and individual security selection. Through the integration of fundamental and quantitative research and trading, the BMD strategy is implemented in a team environment. Risk management technology is utilized to explicitly quantify benchmark exposures on a daily basis, and Fidelity uses the same analytical framework to assess both index and portfolio risk. Tracking error should range between 1.00 - 1.50% per annum over the benchmark, and stringent portfolio construction risk control rules are strictly adhered to.

Meeting Notes

Organization

Last year was a solid year for Fidelity in terms of product demand. The most interest has been in the multi-sector global bond strategy. The strategy has benefited from clients looking for managers to be more tactical in gaining yield in this market environment.

Investment Team

There were no investment team changes specific to BMD in the past year. Ford O'Neil, Jeff Moore, Celso Munoz and Michael Plage are the portfolio managers responsible for the Broad Market Duration strategy. Fidelity has a compensation structure within the team that allows analysts to maintain careers as analysts if they choose not to become portfolio managers. In this way, FIAM analysts can develop insights and differentiated viewpoints on industry credits.

Investment Strategy

Fidelity' Broad Market Duration uses bottom-up issuer and sector selections as its primary sources of alpha. Because Fidelity recognizes that macroeconomic forces have often overwhelmed underlying fundamentals for extended period of time, the BMD team incorporates inputs from both global macro and quantitative analyst teams to guide decisions. Risk management is also a priority and is integrated into the framework in managing this strategy.

Credit analysts cover approximately 2–3 industries across 30–50 names, resulting in a high degree of specialization and focus. Analysts provide their own credit rating for each issuer they cover as well as a numerically ranked (1-strong buy, 6-strong sell) relative value rank for each issuer and sector they cover. This quantitative ranking is incorporated into the portfolio management and risk monitoring systems. Analysts also provide qualitative assessments to portfolio managers. In meetings with the portfolio manager and traders, analysts propose their security recommendations, discuss industry trends, and provide updates on company-specific situations. Outputs from these meetings can include formal ratings changes to both fundamental outlooks and relative value.

While the investment process is rooted in a bottom-up, fundamental approach, FIAM incorporates macroeconomic variables that can influence credit, liquidity and valuation perspectives into their bottom-up process. These global macro perspectives serve a twofold function: (1) they facilitate the risk management process and (2) they represent potential sources of alpha.

Performance & Positioning

As of May 31, 2021, the SamCERA BMD account's trailing 12-month net return outperformed the Bloomberg Barclays U.S. Aggregate benchmark (2.4% versus -0.4% for the Bloomberg Barclays U.S. Aggregate Index). The financial sector has been a significant contributor to returns over the past year. FIAM is also underweight MBS, which were down over the last quarter due to tapper talk and spreads widening slightly. REITs have also been a bright spot in the portfolio as they have come back since Q4 2020.

Currently, FIAM is heavily weighted to BBB's since they believe the market is in early-mid cycle. They aren't currently concerned with defaults given the market and expect more upgrades than downgrades over the next year. As a result, they are ok allocating additional capital to high yield.

Doubleline Securitized Income

Date of meeting: 6/24/2021

Location: Zoom Meeting

Manager Representative(s)
Andrew Hsu (Portfolio Manager)
Stephanie Luh (Consultant Relations)
Ryan Hart (Consultant Relations)
Vitaliy Liberman (Portfolio Manager)
Barbara Ziegler (Client Relations)

<u>Verus Representative(s)</u> Margaret Jadallah Joseph Abdou

Account Assets \$259 million (5/31/21) <u>Client Representative(s)</u>
Mike Coultrip (CIO), Doris Ng
(Analyst)

Product Description

Securitized Income seeks to maximize income and total return by investing across the structured products universe, focusing on agency mortgage-backed securities (MBS) and investment grade securitized credit. Doubleline takes a barbel approach to investing in the securitized market, and they will separate rates from credit and will adjust the allocations to both at the based on the economic cycle and opportunities. Duration positioning is achieved through Agency MBS, Agency CMBS, and treasuries while credit exposure is attained through all areas of structured credit.

Meeting Notes

Organization

DoubleLine is an independent, employee-owned asset management firm founded by Jeffrey Gundlach in 2009. Mr. Gundlach's departure from a previous firm prompted 45 employees to follow him to establish DoubleLine. DoubleLine's senior investment team has worked together for an average of 15 years, with its portfolio managers averaging 22 years of industry experience. The firm's shareholders include the senior securitized team members. The firm is based in Los Angeles with a small client service office in Tokyo. Oaktree owns a minority, non-controlling stake in the company.

Investment Team

The Structured Product committee comprises of Ken Shinoda (chairman), Andrew Hsu, Vitaliy Liberman, Sam Garza, and Morris Chen. The committee reports up to the Fixed Income Asset Allocation Committee, chaired by Jeffrey Gundlach (CEO/CIO.) Doubleline has a deep research team of 109 investment professionals. There have been no changes to the team over the past year. The head of Residential MBS departed last year, but his role didn't affect the strategy SamCERA is invested in.

Doubleline Securitized Income

Investment Strategy

DoubleLine has a Structured Products Committee that meets weekly to review all structured products, including Securitized Income. The committee discusses the securitized markets on a macroeconomic level and identifies structured products sectors with attractive risk/reward opportunities. The firm has specialized structured product sector teams that identify bottom up ideas in their sub sectors. Agency MBS typically comprises 50% of the portfolio with the other half in investment grade structured credit. Asset class exposures are shifted gradually based on sector fundamentals and relative valuation. The primary driver of security selection is scenario analysis. Importantly, future scenarios incorporate the market insights of the specialized team members based on their years of experience investing in the sectors, as opposed to relying on historical data regressions. DoubleLine research covers the full spectrum of securitized products.

The majority of research is internally produced. However, DoubleLine purchases collateral and loan level data and portfolio systems from a number of third parties. The team seeks to "buy convexity" which means that all investments must have an attractive risk/reward profile whereby securities have more upside for a given level of downside. Scenario analyses are run considering numerous interest rate and credit environments and with a view on the current market environment. Within portfolio construction guidelines, the most attractive discounted securities are purchased using their convexity methodology. At the portfolio level, average credit quality can range between AA and AAA. The investment process focuses on purchasing discounted securities and does not hedge portfolio duration which can result in a range between 5 and 10 years depending on their macro outlook and the bottom up opportunity set.

Performance & Positioning

The since inception (3/2020) net performance has outperformed the Bloomberg Barclays Aggregate (2.6% vs - 0.7%). Q1 2021, the portfolio was down -2.7%, but beat the benchmark by 70 bps. During the first 6 months of 2020, the market underestimated the effects of Covid. Doubleline was initially invested in Treasuries and overweight duration. This helped in early 2020, in mid- 2020 the portfolio transitioned to 50-55% Agency RMBS and 45-50% treasuries. The significant allocation in early 2020 to Treasuries and Credit accounted for 300 bps of excess return. The second half of 2020 with a more balanced allocation accounted for 60 bps of outperformance. In the first quarter of 2021, rates went back up, and the portfolio outperformed by 70 bps.

Franklin Templeton Global Multisector Plus

Date of meeting: 7/1/21

Location: Zoom meeting

Manager Representative(s)

Bill Deakyne (Client Relations), Christina Yi (Client Relations), Richard Herbert (Institutional PM Global Macro) Marnie Marciariello (Client Relations) Verus Representative(s)

Joseph Abdou Margaret Jadallah

Client Representative(s)

<u>Account Assets</u> Doris Ng (Analyst)

\$79 million (5/31/21)

Product Description

Franklin Templeton (FT) manages the Global Multisector Plus global bond mandate in an unconstrained fashion using a top-down fundamental framework. FT believes that in the short-term and on a country-by-country basis there are often inefficiencies in global bond and currency markets; however, over the longer term, the market will ultimately price to fundamentals. Thus, FT focuses on fundamental research to identify long-term opportunities and uses short-term market inefficiencies to build positions in such investments. Through its research, FT seeks to identify specific interest rates, currencies and credit exposures that reflect the most attractive investment opportunities, independent of the benchmark. The contribution of the different sources of alpha can vary according to various market environments. However, in aggregate, the risk allocated to each of these areas has typically ranged from 20% to 60% of the risk budget. The Global Multisector Plus approach allows for meaningful amounts of emerging markets and active currency management. The portfolio must maintain at least 50% investment grade exposure.

The format of SamCERA's investment in this strategy was changed from a separate account to a commingled vehicle in June 2014. As a result of SamCERA's fixed income manager structure review in 2017, SamCERA moved FT to the Opportunistic category and redeemed \$70 million from FT to reduce tracking error in the fixed income composite.

Meeting Notes

Organization

As of March 31, 2021, Franklin Templeton managed \$1.5 trillion, of which approximately \$670 billion was in fixed income mandates. The Global Macro team, led by Michael Hasenstab, managed \$11 billion in the Global Multisector Plus style employed in the SamCERA portfolio at 3/31/21, which was a significant year over year decrease from \$25 billion a year ago due to a large Asian client redeeming their \$6 billion portfolio.

In 2020, Franklin Templeton finalized its acquisition of Legg Mason and it's affiliates. Franklin Templeton continues to run each investment sleeve independently, with no future plans to combine investment teams.

Investment Team

Franklin Templeton's Global Macro team consists of 22 investment professionals, including 6 Ph.D.'s who comprise the senior investment management and research team. The Global Macro team is represented by a diverse set of professionals from 14 different countries who speak 17 different languages. The team utilizes additional inputs from

Franklin Templeton Global Multisector Plus

FT's broader Fixed Income Group consisting of a team of more than 150 global fixed income investment professionals located in offices around the world.

Colin Johnson was hired in Q2 2021. He has a political science background. The team puts an important emphasis on political policy when reviewing investments, and Colin's addition shows their dedication to political and macro analysis.

The Global Macro group is structured into regional/country and sector research teams, quantitative analysts and separate and segregated risk analysts. Christine Zhu, Director of Portfolio Construction, is co-portfolio manager for Global Multisector Plus and plays an important role in separate account management. One of the newer analysts to the team, Vivian Guo left to pursue her MBA and is expected to rejoin the team after completing the program.

Investment Strategy

Franklin Templeton (FT) manages the global bond mandate in an unconstrained fashion using a top-down, fundamental framework. As stated above, FT focuses on fundamental research to identify long-term opportunities, using short-term market inefficiencies to build positions. Macroeconomic conditions in the G-3 economies are analyzed first, primarily with respect to how current and projected growth and inflation dynamics are expected to influence monetary policy. This analysis is then extended out to the rest of the industries countries (G-13) as well as emerging markets, which results in broad targets for duration, currencies and the developed/emerging market mix. Credit, while not currently a meaningful part of the portfolio, is part of the investable universe as well.

The investment process integrates inputs from multiple sources within the Global Macro team and the broader FT fixed income team. Global Macro research teams meet weekly and gather local market intelligence from fixed income colleagues from around the globe as part of their due diligence. Analysts pitch their ideas to the portfolio managers, and lead portfolio manager Michael Hasenstab must sign off on them before they are purchased. The risk team assesses the impact any trade will have on the risk of the portfolio. The portfolio is not managed to be similar to the benchmark, and there is little focus on tracking error. But the team is attentive to other multiple risks, such as political and liquidity risk. Franklin models the VaR of the portfolio as well as conditional VaR, which considers tail risks.

The investment philosophy focuses on getting the country selection decision right as the primary driver of portfolio performance. On average and over longer periods of time, risk allocation should be approximately equal across interest rate, currency and credit alpha sources.

Performance & Positioning

The SamCERA portfolio has underperformed the Bloomberg Barclays Multiverse Index 1-year ending 5/31/21 (-0.5% vs 5.0%) and YTD (-0.5% vs -2.15%). Performance was challenged by their defensive positioning, which helped in March of 2020, but hurt during the quick recovery. They continued to be defensive in April and May as they saw Covid as a major problem and underestimated the news of vaccines.

Going forward they like Asia and emerging markets as a reopening trade. With the vaccine rollout they expect the global economy to grow as an example they expect China to grow at 8% pushing rates and currencies higher. Franklin Templeton also unwound many currency hedges, added to South Korea, China, India, and Indonesian currencies.

Franklin Templeton Global Multisector Plus

Date of meeting: 7/1/2021

Location: Zoom Meeting

<u>Manager Representative(s)</u>
Mark Lindbloom (Portfolio Manager)
Frances Coombes (Client Service)

<u>Verus Representative(s)</u> Margaret Jadallah Joseph Abdou

Account Assets \$224 million (6/30/21) <u>Client Representative(s)</u>
Doris Ng
(Analyst)

Product Description

Western Asset's Total Return Unconstrained (TRU) strategy seeks to provide bond-like risk and return over the long term within a benchmark agnostic framework. This allows for asset allocation based purely on fundamental, long term value. The investment approach is active with very broad latitude on duration (-3 to +8 years) and on asset allocation across all of the eligible sectors in an unconstrained bond mandate without having to adhere to the benchmark construction. The portfolio must have at least 50% of its holdings in investment-grade securities. This strategy can be appropriate in all market environments, but may be particularly attractive in rising rate environment, as the flexibility offered by this strategy allows for defensive positioning and opportunistic deployment of capital when value opportunities arise. It also allows the portfolio managers to emphasize (or deemphasize) either credit or rates when one or the other appears to offer greater (or lesser) value.

Western Asset uses a team approach to portfolio management with duration, term structure, and sector allocation decisions developed by U.S. Broad Strategy Committee. The TRU bond portfolio managers are members of this committee which meets weekly to formulate the firm's macroeconomic outlook and broad investment strategies in terms of the strength of the economy, direction of interest rates and shape of the yield curve. This top down viewpoint is then applied in constructing the TRU portfolio.

Meeting Notes

Organization

The Firm's total AUM was \$480 billion as of April 30, 2021. Western Asset is going to be a wholly-owned subsidiary of Franklin Templeton, but maintains its organizational autonomy and investment independence.

Investment Team

There have been no leadership or investment team changes to the strategy since the last SamCERA review. Western TRU is led by Mark Lindbloom and S. Kenneth Leech, each with 40 years of experience. Mark Lindbloom leads the U.S. Broad Strategy team of five senior portfolio managers, and subsets of the senior PMs have been assigned to specific products to promote better client communication. All in, Western Asset has 131 investment professionals in seven offices who contribute to the investment outlook and process.

Investment Strategy

The investment philosophy of Western Asset is long-term fundamental value investing, using multiple diversified strategies. Western Asset combines a top-down macroeconomic view with bottom-up fundamental research and relative value analysis. Portfolio management is directed by the Unconstrained Asset Allocation Committee which sets macro and sector investment themes. The Committee meets weekly to establish a U.S. investment outlook over a 3-6 month time horizon, which provides guidance to the portfolio managers.

Western Asset believes it can identify and capitalize on markets and securities that are priced below fundamental fair value. The firm does this through disciplined and rigorous analysis, comparing prices to the fundamental fair values estimated by its macroeconomic and credit research teams around the globe. The TRU portfolio emphasizes the team's highest conviction ideas. The greater the difference between the firm's view of fair value and market pricing, the bigger the potential value opportunity. The greater the degree of confidence in its view of fundamentals, the greater the emphasis of the strategies in the portfolio.

Western Asset seeks diversified sources of returns. Western Asset's objective is to meet or exceed its investors' performance objectives within their tolerances for risk with TRU investing opportunistically in larger, more liquid sectors of the fixed income market. The firm seeks to diversify investments and add value across interest rate duration, yield curve, sector allocation, security selection, country and currency strategies.

Performance & Positioning

For the year ended May 31, 2021, the portfolio returned 8.4% vs. -0.4% for the Bloomberg Barclays U.S. Aggregate Index. Duration for the portfolio is around 2.6% and is yielding 2.9%.

Western Asset thought rate would stay low but were mistaken in Q1. They underestimated the impact of the government stimulus on long term rates. This hurt Q1 returns. PMs currently like energy, finance, and some retail names. They also added to bank loans which as of the review meeting was 12% of the portfolio. Their bias is towards high quality names and want to avoid CCC, and bank loans are still providing a good yield.

They also see value in Emerging Markets. With the vaccine rollout they expect the commodity demand to go up helping EM. This positioning hurt in Q1 due to EM currency weakness, but they have added to this position due to its attractive risk adjusted return.