



# Notice of Public Meeting

## The Board of Retirement of the San Mateo County Employees' Retirement Association will meet on **Tuesday, January 26, 2021 at 10:00 A.M.**

In accordance with the Governor's Executive Order N-29-20 (3) 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/97395657617>
- To join the meeting via telephone, dial: (669) 900-9128, and enter Meeting ID: 973 9565 7617

### 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](mailto: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**
- 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 December 8, 2020

# Notice of Public Meeting

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#### **4. Approval of the Consent Agenda\***

- 4.1 Disability Retirements (none)
- 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 Acceptance of Semi-Annual Compliance Certification Statements for the Period Ended December 31, 2020

#### **5. Benefit & Actuarial Services**

- 5.1 Consideration of Agenda Items, if any, Removed from the Consent Agenda
- 5.2 Approval of a Resolution Adopting Cost of Living Adjustments (COLAs) for 2021

#### **6. Investment Services**

- 6.1 Report on Preliminary Monthly Portfolio Performance Report for the Period Ended December 31, 2020
- 6.2 Approval of Updated Asset Allocation Policy Portfolio

#### **7. Board & Management Support**

- 7.1 Report on March 23, 2021 Virtual Board-Staff Retreat Planning
- 7.2 Approval to fill the Chief Legal Counsel Position

#### **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

#### **9. Report on Actions Taken in Closed Session**

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### 10. Adjournment in Memory of the Following Deceased Members:

Maggy, Bradley	November 12, 2020	Personnel
Taylor, Lois	November 15, 2020	Chope Hospital
Burns, Dorothy	November 19, 2020	Children's Services
Tillotson, Christina	November 21, 2020	Mental Health
Hekker, Janice	November 22, 2020	Chope Hospital
Sanfelice, Caterina	November 23, 2020	Hospital
Durchslag, Joanne	November 27, 2020	Mental Health
West, Dorothy	December 2, 2020	Library
Evans, Laura	December 4, 2020	Chope Hospital
Zahradnik, David	December 12, 2020	Sheriff's
Kamiya, Stanley	December 12, 2020	Mosquito & Vector Control
McManners, Jeanne	December 12, 2020	Chope Hospital
Barela, Frank	December 18, 2020	Courts
Barretta, Steven	December 21, 2020	Sheriff's
Kong, Georgette	December 26, 2020	Library
Yakushi, Chiyo	December 28, 2020	Courts
Kuhn, Jack	December 29, 2020	Parks Dept
Emmerich, Joann	January 1, 2021	General Services



Scott Hood, Chief Executive Officer

Posted: January 21, 2021

(\* 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](http://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.

**SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION**

DECEMBER 8, 2020 – REGULAR BOARD MEETING MINUTES

**2012.1 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 present: Susan Lee and Alma Salas.

Staff: Brenda Carlson, Michael Coultrip, Lili Dames, Scott Hood, Elizabeth LeNguyen, Doris Ng, Gladys Smith and Anne Trujillo.

Consultants and speakers: Joe Abdou, Margaret Jadallah, John Nicolini and Faraz Shooshani (Verus); Ashley Casey (Brown Armstrong).

**2012.2.1 Oral Communications from the Board:** Ms. Salas shared with the Board that she completed the SACRS Virtual Sexual Harassment training.

**2012.2.2 Oral Communications from the Public:** Mr. David asked if there was any public comment from those individuals participating on the telephone or via Zoom. There were no public comments. Ms. Trujillo reported there were no written comments received ahead of the meeting.

**2012.3.1 Approval of Regular Board Meeting Minutes from October 27, 2020:** Mr. David asked if there were any changes or corrections, or objections, to the meeting minutes from the Board meeting held on October 27, 2020.

**Action:** Mr. Hackelman moved to approve the minutes from the Board meeting on October 27, 2020. 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.

**2012.3.2 Approval of Audit Committee Minutes from October 27, 2020:** Mr. David asked if there were any changes or corrections, or objections, to the meeting minutes from the Audit Committee meeting held on October 27, 2020.

**Action:** Mr. Bowler moved to approve the minutes from the Audit Committee meeting on October 27, 2020. 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.

**2012.4.0 Approval of the Consent Agenda:** Mr. David asked if there were any items to be removed for discussion from the Consent Agenda. No items were removed.

**Action:** Mr. Hackleman moved to approve the items on the Consent Agenda. The motion was seconded by Mr. Hoefer 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.

**2012.4.1 Disability Retirements:** None.

**2012.4.2 Survivor Death Benefits:** None.

2012.4.3 **Service Retirements:**

<b>Name</b>	<b>Effective Retirement Date</b>	<b>Department</b>
Armsby, Aimee	September 12, 2020	County Counsel
Ayala, Janine	September 28, 2020	Human Resources
Corkery, John	September 6, 2020	Sheriff's Office
Dayter, Zoya	October 1, 2020	San Mateo County Health
Guier, Brent	October 1, 2020	Environmental Health
Hernandez, Rosemarie	September 21, 2020	QDRO
Horne, Gary	September 5, 2020	San Mateo County Health
Kennedy, Catherine	September 22, 2020	Def'd - Human Services Agency
Lee Lung, Fung	September 26, 2020	San Mateo County Health
Luna, Anna	September 22, 2020	Human Services Agency
Macaraeg, Girley	October 1, 2020	Public Health
Martin, Lenda	September 28, 2020	Def'd - San Mateo County Health
Masis, Agnes	September 23, 2020	San Mateo County Health
Parnainfar, Saman	September 27, 2020	Probation
Spiller, Denise	September 18, 2020	Sheriff's Office
Thompson, Barry	October 1, 2020	Probation
Willers, Patricia	September 19, 2020	San Mateo County Health
Wong-Sing, Douglas	September 11, 2020	Deferred - Health Services

2012.4.4 **Continuances:**

<b>Survivor's Name</b>	<b>Beneficiary of:</b>
Lesui, Ato	Lesui, Clark
Liikane, Meeri	Liikane, Juhan

2012.4.5 **Deferred Retirements:**

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

<b>Name</b>	<b>Retirement Plan Type</b>
Chung, Diana	G4, Vested - Auto Defer - Code 31700
Duffy, Danae	G7, Non-vested - Reciprocity
Elliot, Robin	G4, Vested
Giovannoni, Kevin	S4, Vested - Auto Defer - Code 31700
Harte, Virginia	S7, Vested - Reciprocity
Hirst, Deborah	G4, Vested - Auto Defer - Code 31700
Huynh, Michael	G7, Vested - Reciprocity
Kmak, Rocelia	G1, Vested - Reciprocity
Leos, Monica	G7, Vested - Auto Defer - Code 31700
McCulley, Dylan	G5, Vested - Auto Defer - Code 31700
Mon, Kristen	G7, Vested
Pasini, Nicole	G4, Vested - Auto Defer - Code 31700
Sandoval, Patricia	G4, Vested - Auto Defer - Code 31700
Sharma, Shaneil	G7, Vested - Auto Defer - Code 31700
Silva, Teresa	G5, Vested - Reciprocity
Velasquez, Jose	S4, Vested

2012.4.6 **Member Account Refunds:**

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

<b>Name</b>	<b>Retirement Plan Type</b>
Allee, Andrew (FBO: Allee, Robert)	G4, Vested
Dabbagh, Elizabeth	G7, Non-vested
O'Leary, Brandon	S7, Non-vested
Solis, Gabriela	G7, Non-vested
Tyrell, Jolly	G4, Vested
Villanueva, Christine	G7, Vested

2012.4.7 **Member Account Rollovers:**

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

<b>Name</b>	<b>Retirement Plan Type</b>
Bunoan, Tomas (FBO: Eufrecina Bunoan)	G4, Non-vested
Coke, Simone	G4, Non-vested
Dahlberg, Christina	G7, Non-vested
Martinez, Virginia (FBO: Isidro Martinez) <i>Marriage license submitted to prove surviving spouse entitled to lump sum.</i>	G7, Non-vested
Pagarigan, Rey (FBO: Maria Gina Pagarigan)	G4, Vested

2012.4.8 **Member Account Redeposits:** None.

2012.4.9 **Acceptance of Trustees' Reports of Educational Activities:** None.

2012.4.10 **Reaffirm Education Policy:** The Board reaffirmed the Board's Education Policy.

2012.4.11 **Reaffirm Procedures for Auditing Employer Data:** The Board reaffirmed the "Board of Retirement Procedures for Auditing of Employer Data and Information to Determine Correctness of Member's Retirement Benefits, Reportable Compensation, Enrollment in and Reinstatement to, the Retirement System."

2012.4.12 **Reaffirm Procedure for Assessment of Elements of Compensation:** The Board reaffirmed the "Board Procedures for Assessment and Determination of Whether an Element of Compensation Was Paid to Enhance a Member's Pension Benefit."

2012.5.1 **Consideration of Agenda Items, if any, Removed from the Consent Agenda:** None.

2012.6.1 **Report on Preliminary Monthly Portfolio Performance Report for the Period Ended October 31, 2020:** Mr. Coultrip reported that SamCERA's net preliminary return for October was 1.0% bringing the preliminary trailing twelve month return ending October 2020 to 4.3% net, which is above SamCERA's Plan Benchmark return of 4.1% but below SamCERA's Actuarial Assumed Earnings Rate of 6.5%. This item was informational and for discussion only, no action was taken.

2012.6.2 **Report on Quarterly Investment Performance for the Period Ended September 30, 2020:** Mr. Coultrip reported that the 3<sup>rd</sup> quarter net total return for the SamCERA portfolio was +5.2%, which was 20 bps lower than the +5.4% policy benchmark return. Alternatives and fixed income were the main contributors of performance, while domestic equity and inflation hedge (private real assets)

were the main detractors. Ms. Jadallah and Mr. Abdou provided further analysis of the quarterly performance report for the period ended September 30, 2020. This item was informational and for discussion only, no action was taken.

- 2012.6.3 **Approval of Change to SamCERA's Policy Benchmark:** Mr. Coultrip discussed staff's recommendation to change the absolute return benchmark and the absolute return portion of the policy benchmark from LIBOR +4% to SOFR +4% and answered questions from the Board.

**Action:** Mr. Hackleman motioned to approve changing the absolute return benchmark and the absolute return portion of the policy benchmark from LIBOR +4% to SOFR +4%. The motion was seconded by Mr. Raw and carried by a vote of 9-0, with trustees Arnott, Battey, Bowler, David, Hackleman, Hoefer, O'Malley, Raw and Tashman all in favor; none opposed.

- 2012.6.4 **Approval of Resolution Amending the Investment Policy Statement:** Mr. Coultrip highlighted the proposed amendments to the Investment Policy Statement.

**Action:** Ms. Arnott motioned to approve a resolution amending the SamCERA Investment Policy Statement. The motion was seconded by Ms. O'Malley and carried by a vote of 9-0, with trustees Arnott, Battey, Bowler, David, Hackleman, Hoefer, O'Malley, Raw and Tashman all in favor; none opposed.

- 2012.6.5 **Presentation of Private Asset Semi-Annual Performance Reports as of June 30, 2020:** Ms. Dames reported that as of June 30, 2020, SamCERA's private equity portfolio had a total market value of \$342.4 million (7.3% of SamCERA's total fund). She also reported that as of fiscal year end, SamCERA's private real assets portfolio had a total market value of \$96.1 million (2.1% of SamCERA's total fund). Mr. Shooshani and Mr. Nicolini further discussed the private equity and private real asset performance report as of June 30, 2020. This item was informational and for discussion only, no action was taken.

The Board was adjourned for break at 11:27 a.m. and reconvened at 11:35 a.m.

- 2012.6.6 **Report on Investment Consultant Annual Review:** Ms. Ng went over the results of Verus' annual review. She reported that Verus received average/high ratings from Board and staff. Ms. Ng also shared strategic and educational topics suggested for the upcoming year. This item was informational and for discussion only, no action was taken.

- 2012.6.7 **Approval of Proposed Alternative Investments (to be heard in Closed Session):** The Board adjourned into Closed Session at 11:41 a.m. to hear item 6.6 then reconvened in Open Session at 12:02 p.m. See Closed Session report under C2.

- 2012.7.1 **Annual Review of Brown Armstrong:** Ms. Smith shared the results of Brown Armstrong's annual performance report to Ms. Casey and the Board. Ms. Smith reported that Brown Armstrong received above average ratings overall from both Board and staff. She and Mr. Hood thanked Ms. Casey and her team for the great work they have done for SamCERA this year. This item was informational only, no action was taken.

- 2012.7.2 **Discussion of 2021 Board-Staff Retreat Topics:** Mr. Hood went over a list of suggested retreat topics for the 2021 Board-Staff Retreat and gave the Board an opportunity to provide their feedback. This item was informational only, no action was taken.

- 2012.7.3 **Report on 2020 Legislative Update and Direction to Staff:** Mr. Hood reviewed the five CERL amendments and noted the legislation will become effective January 1, 2021. This item was informational only, no action was taken.
- 2012.8.1 **Chief Executive Officer's Report:** Mr. Hood shared that the PAFR is now available and thanked staff for their efforts in putting it together. He noted that the County had reverted to a "Purple" status, Tier 1 of the state's four-tiered, color-coded reopening system. He added that San Mateo County is one of the few that have not implemented the early lockdown and that staff is prepared to readjust office procedures pertaining to mail if County guidance changes. Mr. Hood shared a few items for the January meeting including the COLA, continued discussion of topics for the Board-Staff Retreat and noted that the budget report will be presented at the February meeting.
- 2012.8.2 **Assistant Executive Officer's Report:** Ms. Smith informed the Board that during the last round of negotiations, the County agreed to providing employees with 16 hours of winter recess (holiday) therefore, the SamCERA office will be closed on December 28th and 31st. She reported that staff is in preparation of year-end tasks such as 1099's. Ms. Smith thanked Ms. Salas for her participation with the mobile app testing. She also shared that the County will be holding a virtual Service Awards ceremony at 3 p.m. which includes honoring two of SamCERA staff members, Mr. Hood and Ms. Amacker, for their 20 years of service. Ms. Trujillo informed Board members about upcoming educational events.
- 2012.8.3 **Chief Investment Officer's Report:** Mr. Coultrip informed the Board of rebalancing activities in the portfolio during the past month. He informed the Board that pursuant to the Board's process for certain alternative investments purchases, a potential private equity opportunity was discussed with Mr. David and Mr. Battey via phone on November 9<sup>th</sup> and that a \$15 million commitment was made to Canvas Ventures III. Mr. Coultrip stated that staff plans to discuss the portfolio's asset allocation with the Board in the coming months.
- 2012.8.4 **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 6.6):** Ms. Carlson reported that the Board approved a motion to invest \$20 million in Endeavor Fund VIII, L.P. The motion passed a vote of 9-0, with trustees Arnott, Battey, Bowler, David, Hackleman, Hoefler, O'Malley, Raw and Tashman all in favor; none opposed. The Board also approved a motion to increase the current investment in Blackrock Direct Lending Fund IX from \$35 million to \$45 million. The motion passed a vote of 9-0, with trustees Arnott, Battey, Bowler, David, Hackleman, Hoefler, O'Malley, Raw and Tashman all in favor; none opposed.
- C3 **Public Employee Performance Evaluation, in accordance with Gov. Code § 54957, Title: Chief Executive Officer (to be heard in Closed Session Confidential Under Gov. Code §54957):** The Board adjourned into Closed Session at 12:18 p.m. to hear item C3 then reconvened in Open Session at 1:00 p.m.
- Ms. Carlson reported that no reportable action was taken.
- 2012.10 **Adjournment:** Mr. David adjourned the meeting at 1:01 p.m. in memory of the deceased members listed below.

Allen, Geraldine  
Ruiz, Christina

September 9, 2020  
October 5, 2020

Mental Health  
DPW



King, Violet	October 8, 2020	Probation
Logue, Amelia	October 10, 2020	Chope Hospital
Moore, Dorothy	October 15, 2020	Hospital
Ferrando, Orlene	October 19, 2020	Controller's
Noerager, Gloria	October 19, 2020	Engineering - Roads
Abramson, Catherine	October 22, 2020	Library
Dodson, Martha	October 27, 2020	Library
Nodson, Julie	November 11, 2020	Human Services
Grossetti, Judy	November 11, 2020	DPW
Bixby, Patricia	November 22, 2020	Mental Health

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Al David  
Board Chair

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
**Board of Retirement**

January 26, 2021

Agenda Items 4.1- 4.8

**TO:** Board of Retirement

**FROM:** Elizabeth LeNguyen, Retirement Benefits Manager



**SUBJECT:** Approval of Consent Agenda Items 4.1 – 4.8

**4.1 Disability Retirements**

None.

**4.2 Survivor Death Benefits**

None.

**4.3 Service Retirements**

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

<b>Name</b>	<b>Effective Retirement Date</b>	<b>Department</b>
Akiyama, Kathleen	October 22, 2020	Behavioral Health & Recovery Svcs
Alfassa, Helen	October 3, 2020	Superior Court
Arellano, Jessica	November 25, 2020	Deferred - Probation
Chen, Eric	November 14, 2020	Dept. of Public Works
Cornist Dhati, Rodney	October 6, 2020	Deferred - Human Services Agency
DeJesus, Mario	October 7, 2020	Deferred - Human Services Agency
DeTar, Jean	November 25, 2020	Health Services
Fernyak, Susan	October 17, 2020	San Mateo County Health
Fritzsching, Martin	December 1, 2020	Deferred - Probation
Garibaldi, Jeffrey	October 4, 2020	Agriculture - Weights & Measures
Holliday, Justin	November 5, 2020	Deferred - Sheriff's Office
Homman, Tonya	October 8, 2020	Deferred - Sheriff's Office
Leon, Lourdes	November 5, 2020	Deferred - Courts
LeVack, Cathy	October 3, 2020	Assessor's Office
McCavitt, Thomas	October 2, 2020	Deferred - San Mateo County Health
Meyers, William	October 16, 2020	San Mateo County Health

Mihos, David	October 17, 2020	Probation
Miller, Gregory	November 1, 2020	Deferred - Sheriff's Office
Munsey, John	November 15, 2020	Sheriff's Office
Narag, Perla	October 31, 2020	Health Services
Pacia, Michael	October 2, 2020	Human Services Agency
Peavey, Chindi	November 1, 2020	Mosquito District
Perkins, Brian	October 19, 2020	Deferred - Board of Supervisors
Reed, Robert	November 23, 2020	Health Services
Reyes, Jeremy	November 4, 2020	Controller's Office
Rothaus, Gregory	November 2, 2020	Sheriff's Office
Schalch, Pamela	November 29, 2020	San Mateo County Health
Shuttleworth, La Donna	October 5, 2020	Sheriff's Office
Simpson, Judy	October 31, 2020	Aging & Adult Service
Velez, Gerardo	October 18, 2020	Human Services Agency
Wettstein, Sandra	November 28, 2020	Health Services
Witt, Charles	October 1, 2020	Deferred - Sheriff's Office
Yuson, Maria Teresa	October 31, 2020	Human Services Agency

#### 4.4 Continuances

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

<b>Survivor's Name</b>	<b>Beneficiary of:</b>
Brinkman, Laurel	Brinkman, John
Daw, Michael	Daw, Margaret
Hassell, Chris	Hassell, Mark
Marich, Paul	Rinonos, Maria
Monto, Marian	Monto, Alexander
Ruiz, Martha	Maggy, Bradley
Tillotson, James	Tillotson, Christina
Wong, Judy	Wong, Donald

#### 4.5 Deferred Retirements

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

<b>Name</b>	<b>Retirement Plan Type</b>
Bonilla, Barbara	G5, Vested - Auto Defer - Code 31700
Bui, Jennifer	G5, Vested - Auto Defer - Code 31700
Chen, Cindy	G7, Non-vested - Reciprocity
Chu, Chiu Ming	G7, Non-vested - Reciprocity
Cleofas, Richard	G7, Non-vested - Reciprocity
Contreras, Daniel	S7, Non-vested - Reciprocity
Glynn, Gretchen	G4, Vested - Reciprocity
Haskell, Deanna	G4, Vested
Hoang, John C	G4, Vested - Reciprocity
Joya, Emrick	S7, Non-vested - Reciprocity
Mihos, Elizabeth	P4, Vested
Nguyen, Linda	G7, Vested - Auto Defer - Code 31700
Oh, Brian	G7, Vested - Reciprocity
Slaughter, Matthew	G5, Vested - Auto Defer - Code 31700

#### 4.6 Member Account Refunds

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

<b>Name</b>	<b>Retirement Plan Type</b>
Corzantes, Juan	S7, Non-vested
Glutz, James	S7, Non-vested

#### 4.7 Member Account Rollovers

<b>Name</b>	<b>Retirement Plan Type</b>
Hawkins, Christopher	G4, Non-vested

#### 4.8 Member Account Redeposits

<b>Name</b>	<b>Retirement Plan Type</b>
Castaneda, Rogelio	G4, Vested

#### 4.9 Acceptance of Trustees' Reports of Educational Activities


None

**SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION**  
**Board of Retirement**

January 26, 2021

Agenda Item 4.10

**TO:** Board of Retirement

**FROM:** Doris Ng, Investment Analyst 

**SUBJECT:** Semi-Annual Compliance Certification Statements for Period Ended December 31, 2020

**Recommendation**

Accept the semi-annual Compliance Certification Statements for SamCERA's non-alternative investment managers and investment consultant, as of December 31, 2020.

**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 consultants are in compliance with SamCERA's Investment Policy as of December 31, 2020. 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 and will be included in the February board packet.

**Attachments**

Compliance Certification Statement Matrix 12-2020

**SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION**  
**Board of Retirement**

Compliance Certification Statements (14)

- A. Domestic Equity: Acadian, PanAgora, QMA
- B. International Equity: Baillie Gifford, Mondrian
- C. Fixed Income: 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

## Compliance Certification Statement Matrix – December 31, 2020

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
<b>Domestic Equity</b>					
<b>Acadian</b>		No Concerns	Not Applicable	No Concerns	<ul style="list-style-type: none"> <li>• Largest single security Synopsys 1.47%</li> <li>• Largest single industry Pharmaceuticals, Biotechnology &amp; Life Sciences 20.23% vs bmk 7.11%</li> <li>• 2.7% Small Cap</li> </ul>
<b>BlackRock Russell 1000</b>	Pending				
<b>DE Shaw</b>	<i>Confidential under California Gov. Section Code §6254.26</i>				
<b>PanAgora (Low Volatility strategy)</b>		No Concerns	Not Applicable	No Concerns	<ul style="list-style-type: none"> <li>• Largest single security by risk weight is Apache Corp 2.56%</li> <li>• Largest sector risk weight is Communication Services 11.40% v. R1000 bmk 10%</li> </ul>
<b>QMA</b>		No Concerns	Not Applicable	No Concerns	<ul style="list-style-type: none"> <li>• Largest holding, Darling Ingredients Inc. 1.15%</li> <li>• Largest industry: Biotechnology 10.46% vs. Russell 2000 bmk 11.25%</li> </ul>

## Compliance Certification Statement Matrix – December 31, 2020

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
<b>International Equity</b>					
<b>Baillie Gifford</b>		No Concern	No Concern	No Concern	<ul style="list-style-type: none"> <li>• 8.21% ADR</li> <li>• 25% Emerging Market</li> </ul>
<b>Blackrock MSCI ACWI ex US IMI</b>	Pending				
<b>Mondrian</b>		No Concern	No Concern	No Concern	<ul style="list-style-type: none"> <li>• 29.73% Emerging Market MIP LP</li> </ul>
<b>Fixed Income</b>					
<b>Angelo Gordon (Credit Solutions Fund)</b>	<i>Confidential under California Gov. Section Code §6254.26</i>				
<b>Angelo Gordon (Credit Solutions Annex Dislocation Fund)</b>	<i>Confidential under California Gov. Section Code §6254.26</i>				
<b>Beach Point</b>	<i>Confidential under California Gov. Section Code §6254.26</i>				
<b>Blackrock Intermediate Government Bond Index</b>	Pending				



## Compliance Certification Statement Matrix – December 31, 2020

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
<b>Blackrock (Direct Lending Fund VIII)</b>	<i>Confidential under California Gov. Section Code §6254.26</i>				
<b>Blackrock (Direct Lending Fund IX)</b>	<i>Confidential under California Gov. Section Code §6254.26</i>				
<b>Brigade</b>	<i>Confidential under California Gov. Section Code §6254.26</i>				
<b>DoubleLine</b>		<ul style="list-style-type: none"> <li>July 2020-Letitia Acosta, Dir of Human Resources, retired, replaced by Joan Elam. No impact to portfolio management.</li> </ul>	No Concerns	No Concerns	<ul style="list-style-type: none"> <li>36.64% in Rule 144a securities</li> </ul>
<b>Fidelity Institutional Asset Management (FIAM) BMD Bond</b>		<ul style="list-style-type: none"> <li>Dec 2020 – Adam Joffe joined as Hd of Compliance, Risk &amp; Biz Ops</li> <li>Oct 2020-John Houston new role in Fixed Income/ ESG investing</li> </ul>	No Concerns	No Concerns	<ul style="list-style-type: none"> <li>0.18% below inv grade (inv grade at purchase)</li> <li>11.45% in Rule 144A securities</li> </ul>

## Compliance Certification Statement Matrix – December 31, 2020

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
<b>Franklin Templeton</b>		<ul style="list-style-type: none"> <li>• Dec 2020-Michael Messmer, trader, departed firm</li> <li>• Oct 2020-Franklin Templeton Multi-Assets and QS Investors (quant focus, part of Legg Mason merger) formed FTIS</li> <li>• July 2020-Franklin acquisition of Legg Mason completed. No impact to investments.</li> <li>• July 2020-FAV and affiliated IA reached SEC settlement regarding U.S. investment company limit violations in certain Franklin Templeton fnds</li> </ul>	No Concerns	No Concerns	<ul style="list-style-type: none"> <li>• 13.82% Cash &amp; Equiv.</li> <li>• 9.46% Rule 144A</li> <li>• 13.75% non-rated or below IG</li> <li>• 8.51% Korea Treasury Bond, Sr. Note 1.375%, 12/10/29</li> </ul>
<b>NISA</b>		<ul style="list-style-type: none"> <li>• Jan 2021-CEO transition from Jess Yawitz to David Eichhorn. Jess remain as NISA chairman and mbr</li> </ul>	Not Applicable	No Concerns	<ul style="list-style-type: none"> <li>• 5.37% Rule 144A securities</li> </ul>

## Compliance Certification Statement Matrix – December 31, 2020

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
		of investment committee.			
<b>PIMCO (Diversified Income Fund)</b>	Pending				
<b>PIMCO (Private Income Fund)</b>	<i>Confidential under California Gov. Section Code §6254.26</i>				
<b>Western</b>		<ul style="list-style-type: none"> <li>July 2020-Franklin acquisition of Legg Mason completed. No impact to investments.</li> </ul>	<ul style="list-style-type: none"> <li>Largest cntrprty exposure to JPM 0.23%</li> </ul>	No Concerns	<ul style="list-style-type: none"> <li>18.83% Rule 144A securities</li> </ul>
<b>White Oak</b>	<i>Confidential under California Gov. Section Code §6254.26</i>				
<b>Real Estate</b>					
<b>Harrison Street (Core Property Fund)</b>		Dec 2020-Dean Egerter, firm partner, retired but serve as adviser. In conjunction, Brian Mutchler became Chair of Firm’s Capital Mkts Committee, Rob Cook become Hd of US Opport Port and Paul Bahir replace Dean on	Not Applicable	No Concerns	No Concerns

## Compliance Certification Statement Matrix – December 31, 2020

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
		European investment committee.			
<b>Invesco (U.S. Core Real Estate Fund)</b>		No Concerns	Not Applicable	No Concerns	No Concerns
<b>Invesco (U.S. Value-Add Fund IV)</b>	<i>Confidential under California Gov. Section Code §6254.26</i>				
<b>Invesco (U.S. Value-Add Fund V)</b>	<i>Confidential under California Gov. Section Code §6254.26</i>				
<b>PGIM (US Real Estate Debt)</b>	<i>Confidential under California Gov. Section Code §6254.26</i>				
<b>Real Assets</b>					
<b>State Street Global Advisors (Custom Real Asset Account)</b>	Pending				
<b>Overlay</b>					
<b>Parametric Portfolio Associates</b>		<ul style="list-style-type: none"> <li>Oct 2020-EVC to be acquired by Morgan Stanley Inv Mgmt, to close in 2Q2021. No change to Parametric structure, operating</li> </ul>	No Concerns	No Concerns	No Concerns

## Compliance Certification Statement Matrix – December 31, 2020

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
		model, initiatives/priorities, exec and investment leadership or any planned staff reductions.			
<b>Investment Consultant</b>					
<b>Verus Advisory</b>		<ul style="list-style-type: none"> <li>• Dec 2020-Max Giolitti, Chief Risk Officer, left</li> <li>• Past 13mos-Added 4 new consultants, 2 retired in 2020</li> <li>• Jul 2020-Expanded firm ownership w/ add'tl 14 new shareholders.</li> <li>• Mgmt committee added 2 Mng Dir in 2019 &amp; 2020</li> <li>• May 2020-opened Pittsburg office</li> <li>• Mar 2020-Added Kin Lam to Private Mkts Research</li> </ul>	Not Applicable	Not Applicable	Not Applicable

31 Total | 14 Completed | 5 Pending Information | 12 Confidential

***Acadian Asset Management U.S. Managed Volatility – December 31, 2020***

***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](mailto:Investments@samcera.org)) by **Wednesday, January 13, 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**  
\*While not significant, there was an update to the account's guideline for to the single issuer level constraint
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?   
**Yes: Please explain.** /  **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?  
 **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**

### **Derivative 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. Are the investment purposes for a derivative investment consistent with the four purposes stated in *SamCERA's* policies?  **Yes** /  **No: Please explain.**

- a) Has the firm developed any new purposes for derivative investments?  **Yes: Please explain.** /  **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**

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**



## 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.

## Domestic Equity Portfolio (Large, Mid & Small)

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

<i>Common Stock</i>	<i>99.57%</i>
<i>Preferred Stock</i>	<i>0%</i>
<i>Convertible Securities</i>	<i>0%</i>
<i>ADRs</i>	
<i>Cash &amp; Equivalents</i>	<i>0.43%</i>

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

<i>Large-Cap</i>	<i>42.98%</i>
<i>Mid-Cap</i>	<i>53.81%</i>
<i>Small-Cap</i>	<i>2.70%</i>

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.

<i>ADRs</i>	<i>0%</i>
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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.


<i>Security</i>	<i>Cusip</i>	<i>Portfolio Weight</i>
SYNOPSIS INC COM	87160710	<i>1.47%</i>

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%.

<i>Industry</i>	<i>Portfolio Weight</i>	<i>Benchmark Weight</i>
Pharmaceuticals, Biotechnology & Life Sciences	20.23%	7.11%

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?

	<i>SamCERA* %</i>
<i>Firm AUM</i>	0.18%
<i>U.S Managed Volatility Strategy</i>	52.20%

Signed by: 

Dated: 1/12/2021

Name of Firm Acadian Asset Management LLC

***PanAgora Asset Management Defensive Equity U.S. Low Volatility –***

***December 31, 2020***

***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](mailto:Investments@samcera.org))

**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 differently than 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**
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?  
 **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: 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.**

### **Derivative 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. 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?  **Yes: Please explain.** /  **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**

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**

## 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.

## Domestic Equity Portfolio (Large, Mid & Small)

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

<i>Common Stock</i>	<i>99.70%</i>
<i>Preferred Stock</i>	<i>0%</i>
<i>Convertible Securities</i>	<i>0%</i>
<i>ADRs</i>	<i>0%</i>
<i>Cash &amp; Equivalents</i>	<i>0.30%</i>

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

<i>Large-Cap</i>	<i>79.80%</i>
<i>Mid-Cap</i>	<i>20.20%</i>
<i>Small-Cap</i>	<i>0%</i>

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 Apache Corp (APA US) 2.56%.**

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 Communication Services 11.40%. The benchmark's risk weight percentage for Communication Services is 10.00%.**

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 1.06% of the total AUM of the firm. SamCERA's account comprises 98.9% of the total product assets.**

Signed by: Chris Tsapatsaris, Sr. Investment Compliance Analyst

Dated: January 7<sup>th</sup>, 2021

Name of Firm: PanAgora Asset Management, Inc.

## ***Quantitative Management Associates U.S. Small Cap Core – December 31, 2020***

### ***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](mailto:Investments@samcera.org)) by **Wednesday, January 13, 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?   
**Yes: Please explain.** /  **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?  
 **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**

### **Derivative 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?  **Yes** /  **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 *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.
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 six months.  **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.**

### **Domestic Equity Portfolios (Large, Mid & Small)**

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

<i>Common Stock</i>	<i>99.75%</i>
<i>Preferred Stock</i>	<i>0%</i>
<i>Convertible Securities</i>	<i>0%</i>
<i>Cash &amp; Equivalents</i>	<i>0.25%</i>

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

<i>Large-Cap (&gt;=\$10BN)</i>	<i>0.16%</i>
<i>Mid-Cap (\$2BN-\$10BN)</i>	<i>58.66%</i>
<i>Small-Cap(&lt;=\$2BN)</i>	<i>41.18%</i>

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 1.15% for Darling Ingredients Inc**

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 10.46% and the benchmark is 11.25%. No industry 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?

<b>Account</b>	<b>As of 9/30/2020 (\$M)</b>	<b>% of Firm AUM</b>
<b>US Small Cap Core</b>	\$1,712.9	1.55%
<b>SamCERA</b>	\$74.1	0.07%
<b>Firm</b>	\$110.158	100%

Signed by: Patrick McMenamin  
Dated: 1/13/2021  
Name of Firm QMA, LLC

***Baillie Gifford Overseas International Growth – December 31, 2020***

*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](mailto:Investments@samcera.org)) by **Wednesday, January 13, 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**
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**
6. Have there have been any industry or regulatory disciplinary actions taken against the firm?  
 **Yes: Please explain.** /  **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.**

## 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**

## Derivative 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. 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?  **Yes: Please explain.** /  **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**

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**

## 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

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

<i>Foreign Ordinary Shares</i>	<i>91.51%</i>
<i>ADR's</i>	<i>8.21%</i>
<i>Cash &amp; Equivalents (Foreign)</i>	<i>0%</i>
<i>Cash &amp; Equivalents (Domestic)</i>	<i>1.06%</i>

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

<i>Large-Cap</i>	<i>79.07%</i>
<i>Mid-Cap</i>	<i>20.56%</i>
<i>Small-Cap</i>	<i>0.37%</i>

3. Is the firm monitoring the country, currency, sector and security selection risks associated with its portfolio?  Yes /  No: Please explain
4. Does the portfolio invest in emerging and/or frontier markets?  Yes /  No
- a) If Yes, please specify the percentage(s) of the portfolio invested in emerging and/or frontier markets.
- b)
- 25.0% 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-December 2020 is not yet available. We will provide a revised certification once it is. In the meantime, please find end-September 2020 figures below.*

*As at 30 September 2020, the ACWI ex US All Cap Strategy comprised 4.0% of the firm's total AUM. Within the strategy, San Mateo County Employees Retirement Association held \$328m representing 2.2% of the total strategy.*

Signed by: *Fraser Thomson*

Dated: 01/13/2021

Name of Firm: Baillie Gifford Overseas Limited

***Mondrian Investment Partners International Value – December 31, 2020***

***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](mailto:Investments@samcera.org)) by **Wednesday, January 13, 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?  
 **Yes: Please explain.** /  **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?  
 **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**

## Derivative 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. 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?  **Yes: Please explain.** /  **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**

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**

## 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

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

<i>Foreign Ordinary Shares</i>	<i>69.35%</i>
<i>ADR's</i>	<i>NIL</i>
<i>MIP Limited Partnership</i>	<i>29.73%</i>
<i>Cash &amp; Equivalents (Foreign)</i>	<i>0.58%</i>
<i>Cash &amp; Equivalents (Domestic)</i>	<i>0.34%</i>

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

<i>Large-Cap &gt;11bn</i>	<i>89.11%</i>
<i>Mid-Cap 3.5bn-11bn</i>	<i>6.86%</i>
<i>Small-Cap &lt;3.5bn</i>	<i>2.93%</i>

3. Is the firm monitoring the country, currency, sector and security selection risks associated with its portfolio?  Yes /  No: Please explain
4. Does the portfolio invest in emerging and/or frontier markets?  Yes /  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 31<sup>st</sup> December the portfolio held 29.73% 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? **8.24%**  
What size does SamCERA's account comprise of total product assets? **5.12%**

A handwritten signature in black ink, appearing to read "Ed Lambert". The signature is fluid and cursive, with a large initial "E" and "L".

Signed by: **Ed Lambert**  
Dated: **11 January 2021**  
Name of Firm **Mondrian Investment Partners Limited**

***DoubleLine Securitized Income – December 31, 2020***

***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](mailto:Investments@samcera.org)) by **Wednesday, January 13, 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**  
  
Leticia Acosta, DoubleLine's Director of Human Resources and a member of the firm's Executive Committee, retired effective July 31, 2020. Joan Elam, who reported to Ms. Acosta, was promoted to Director and became a member of the Executive Committee. This change does not affect the management of the portfolio.
  
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?  
 **Yes: Please explain.** /  **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.

## Derivative Investments

**\*NOTE ON DERIVATIVES: Pursuant to Section 1.3 of our Investment Manager Agreement, we are exempt from the Derivatives Investment Policy (Appendix B to Exhibit A).**

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.**  **Not applicable. Exchange traded Futures only**

To the extent any mortgage securities are considered derivatives, while we always evaluate counterparties as we would with any other securities trades, the primary evaluation we perform is on the security and its issuer. Accordingly, we have answered the questions concerning counterparties and non-exchange traded derivatives "Not applicable", as the only true derivatives we do for this portfolio are exchange traded futures.

4. For non-exchange traded derivative transactions, were the counter-parties broker/dealers?

**Yes** /  **No**  **Not applicable. Exchange traded Futures only**

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**  **Not applicable. Exchange traded Futures only**

**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.**  
 **Not applicable. Exchange traded Futures only**
- 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?  **Yes /**  **No: Please explain. However, please see “\*NOTE ON DERIVATIVES”, above.**
- a) Has the firm developed any new purposes for derivative investments?  
 **Yes: Please explain. /**  **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.**  
**Not Applicable - Please see “\*NOTE ON DERIVATIVES”, above.**
9. State if any restricted derivative investments are held in *SamCERA's* portfolios.  
 **Yes /**  **No**  
**Not Applicable - Please see “\*NOTE ON DERIVATIVES”, above.**
- a) If yes, state if the total of these restricted derivative investments represents more than 20% of the portfolio's market value?  **Yes: Please explain. /**  **No**  
**Not Applicable = Please see “\*NOTE ON DERIVATIVES”, above.**
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.**  
**Not Applicable - Please see “\*NOTE ON DERIVATIVES”, above.**
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.**  
**Not Applicable - Please see “\*NOTE ON DERIVATIVES”, above.**

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

**Not Applicable - Please see “\*NOTE ON DERIVATIVES”, above.**

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.

**Not Applicable - Please see “\*NOTE ON DERIVATIVES”, above.**

13. State if the legal and regulatory risk associated with portfolio derivative investments have changed over the past six months.  **Yes: Please explain.** /  **No**

**Not Applicable - Please see “\*NOTE ON DERIVATIVES”, above.**

**Investment 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**

The portfolio is short treasury futures for duration management purposes.

**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.**

**Domestic Fixed Income Portfolios**

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

<i>Certificates of Deposit</i>	<i>0%</i>
<i>Commercial Paper</i>	<i>0%</i>
<i>Other High Grade Short-term securities</i>	<i>0%</i>
<i>U.S. Government &amp; Agency securities</i>	<i>52.46%</i>
<i>Corporate Bonds</i>	<i>0%</i>
<i>Non-Agency Mortgage- and asset-backed securities (incl CLOs)</i>	<i>45.11%</i>
<i>Yankee bond securities</i>	<i>0%</i>
<i>Others (Cash)</i>	<i>2.43%</i>



2. Is the firm monitoring the country, currency, sector and security selection risks associated with its portfolio?  **Yes** /  **No: Please explain**
3. Does the firm conduct horizon analysis testing?  **Yes** /  **No: Please explain.**
4. Are any holdings below investment grade?  **Yes** /  **No**

a) If **Yes**, why are they held in the portfolio?

DoubleLine was given a 10% high yield allowance to be used on an opportunistic basis. The exposure was 1.71% as of 12/31/20.

5. 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.

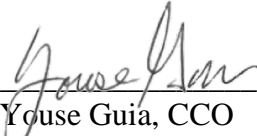
6. What percentage of the portfolio is held in Rule 144A securities? 36.64%

7. 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 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<sup>th</sup> calendar day following the end of the quarter.

Signature 

Signed by: Youse Guia, CCO

Dated: January 13, 2021

DoubleLine Capital

## San Mateo County Employees' Retirement Association I Due Diligence Questionnaire

**Compliance Certification Statement**

January 2021

**FIAM Broad Market Duration**

<b>Firm Name</b>	FIAM LLC
<b>Product Name</b>	FIAM Broad Market Duration
<b>Asset Class</b>	Investment Grade Fixed Income
<b>Respondent/Contact</b>	Art Greenwood, Senior Vice President, Relationship Manager
<b>Address</b>	900 Salem Street, Smithfield, RI 02917
<b>Telephone</b>	401-292-4729
<b>Email Address</b>	<a href="mailto:Art.Greenwood@fmr.com">Art.Greenwood@fmr.com</a>

*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****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**

Since the last Compliance Certification statement, the following material senior leadership changes have taken place:

- Effective December 2020, Adam Joffe joined Fidelity as head of Compliance, Risk & Business Operations (CRBO), succeeding Bob Minicus. Mr. Minicus joined Geode Capital Management in January 2021 as its new president and CEO.
- Effective October 1, 2020, John Houston took on a new role leading our ESG investing efforts within Fixed Income. He is responsible for thoughtful coordination across Fidelity in the areas of thought leadership and product development inclusive of piloting sustainable strategies and coordinating workflows that impact the needs of our investment teams.

**San Mateo County Employees' Retirement Association I Due Diligence Questionnaire****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?** 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

FIAM generally does not discuss the specifics of errors with individual pool participants; however, to the extent an error occurs, the FIAM policy is to identify and resolve the error promptly.

**7. Has the firm's insurance coverage been sustained?** Yes /  No: Please explain.

## San Mateo County Employees' Retirement Association I Due Diligence Questionnaire

### 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

### Derivative 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 the 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?

**San Mateo County Employees' Retirement Association I** Due Diligence Questionnaire

- 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?  Yes /  No: Please explain.

- a) Has the firm developed any new purposes for derivative investments?  Yes: Please explain. /  No

- 8. List all limited allocation derivative investments individually and the percentage of the portfolio's assets represented by each investment.

As of December 31, 2020, 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.  Yes /  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?  Yes /  No: Please explain.

As of December 31, 2020, 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?  Yes /  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).

**San Mateo County Employees' Retirement Association I Due Diligence Questionnaire****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.  Yes: Please explain. /  No****Investment 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

**Domestic Fixed Income Portfolios****1. State the percentage of the portfolio held in each of the following types of securities:**

<i>Certificates of Deposit</i>	<i>%</i>
<i>Commercial Paper</i>	<i>%</i>
<i>Other High Grade Short-term securities</i>	<i>3.18%</i>
<i>U.S. Government &amp; Agency securities</i>	<i>29.86%</i>
<i>Corporate Bonds</i>	<i>35.87%</i>
<i>Mortgage- and asset-backed securities</i>	<i>28.98%</i>
<i>Yankee bond securities</i>	<i>2.11%</i>

**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?  Yes /  No****a) If Yes, why are they held in the portfolio?**

As of December 31, 2020, 0.18% 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.

**San Mateo County Employees' Retirement Association I** Due Diligence Questionnaire

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?**

11.45%


6. **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.**

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 December 31, 2020, 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

DocuSigned by:  
  
3B8B588B3CA94ED...  
**Dated:** 1/13/2021

**Name of Firm:** FIAM LLC



**RESPONSE TO COMPLIANCE CERTIFICATION STATEMENT FROM  
San Mateo County Employees' Retirement Association**

Franklin Templeton Global Multisector Plus (Master) Fund, Ltd. (3c7)  
*Review Period: July 1, 2020 – December 31, 2020*

**Bill Deakyne, CFA**

Senior Vice President – Head of US Institutional Client Relations  
Franklin Templeton

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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 there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel?

Yes       No

If yes, please explain.

### Personnel

The investment team responsible for managing the Franklin Templeton Global Multisector Plus (Master) Fund, Ltd. is Templeton Global Macro. Please refer to the table below for the team changes during the past six months ending December 31, 2020.

### Departures

Name	Role	Addition Date
Michael Messmer	Trader	Dec 2020

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 July 31, 2020, Franklin Templeton announced it completed the acquisition of Legg Mason, Inc. and its specialist investment managers, establishing Franklin Templeton as one of the world's largest independent, specialized investment managers with assets under management of US\$1.4 trillion. The combined footprint significantly deepened the firm's presence in key geographies and created an expansive investment platform well balanced between institutional and retail client AUM. The transaction, originally announced in February, also brought notable added leadership and strength in core fixed income, equities and alternatives, and expanded Franklin Templeton's multi-asset solutions capabilities. Legg Mason's specialist investment managers (SIMs) offer complementary strengths to Franklin Templeton's investment teams, providing clients with a broader and more diversified range of strategies to meet their specific needs.

On October 1, 2020, Franklin Templeton Multi-Asset Solutions and QS Investors combined to form Franklin Templeton Investment Solutions (FTIS). Leveraging a broad spectrum of investment capabilities from fundamental to quantitative, FTIS brings together complementary client bases, geographical footprints, and investment strengths, also adding scale, expertise, and cutting-edge technology to deliver best-in-class solutions for clients. QS Investors—which became one of Franklin Templeton's SIMs following the acquisition of Legg Mason on July 31, 2020—is known for its innovative quantitative, factor-based equity and asset allocation strategies as well as customized portfolio construction capabilities.

Ed Perks leads the newly combined FTIS solutions business, continuing in his role as President and CIO. The firm also announced the following senior leadership appointments:

- Adam Petryk, Executive Vice President and Head of Solutions Strategy and Development for FTIS, leads solutions strategy and management, digital engagement, investment technology, business management and client engagement as well as trading and operations. He also continues to serve as President and CEO of QS Investors.
- Wylie Tollette continues in his role as Executive Vice President and Head of Client Investment Solutions, leading FTIS' portfolio management and client investment solutions functions.

- Gene Podkaminer, Executive Vice President and Head of Research, leads the combined research teams of fundamental and quantitative research across strategies.

**2. Have there been any changes in the firm's investment approach?**

Yes       No

If yes, please explain.

**3. Have there have been any industry or regulatory disciplinary actions taken against the firm?**

Yes       No

If yes, please explain.

Yes, in July 2020, Franklin Advisers, Inc. (FAV) and another Franklin Templeton investment adviser were the subject of an order issued by the U.S. Securities and Exchange Commission (SEC) instituting administrative and cease-and-desist proceedings, making findings, and imposing remedial sanctions relating to instances in which the investment advisers caused certain Franklin Templeton funds to exceed U.S. investment limits. As described further in Appendix 1: Franklin Advisers, Inc. Regulatory History. for purposes of settlement, FAV consented to the entry of the order and a censure and agreed to pay a civil monetary penalty of \$250,000. For a summary of *investment-related proceedings, findings* or *orders* brought or issued by any such regulatory entity against FAV and/or certain of its *advisory affiliates* in the past 10 years ended September 30, 2020 (unless otherwise indicated), as well as certain other regulatory matters, please see Appendix 1: Franklin Advisers, Inc. Regulatory History. In addition, from time to time, FAV and its *advisory affiliates* receive subpoenas and inquiries, including requests for documents or information, from governmental authorities or regulatory bodies, and also are the subject of governmental or regulatory examinations or investigations. *Investment-related proceedings, findings* or *orders* resulting from such subpoenas, inquiries, examinations or investigations, if any, will be reported, to the extent required and permitted by law, on FAV's Form ADV filed with the SEC. (Italicized terms are as defined on Form ADV.)

**4. Has the firm's insurance coverage been sustained?**

Yes       No

If 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       No

If yes, please explain.

## 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 counter-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 six 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 and regulatory risk associated with portfolio derivative investments have changed over the past six months.

Yes       No

If yes, please explain.

## INVESTMENT MANAGER GUIDELINES

1. 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 commodities?

Yes       No

If yes, please explain.



## GLOBAL FIXED INCOME PORTFOLIOS

### 1. State the percentage of the portfolio held in each of the following types of securities (please sub-total 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 December 31, 2020.

Sector	Region	MV%
Certificates of Deposit (by region)		0.00
Cash & Cash Equivalents		13.82
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	7.05
	Non-US	81.82
Agency Securities (by region)	US	0.00
	Non-US	0.01
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		-2.78
Bank Loans		0.00
Other		0.00
<b>Total</b>		<b>100.00</b>

Region	Percentage (%)
Americas	32.41
Asia	42.43
Europe	9.51
Middle-East/Africa	4.53
Supranational	0.08
Cash & Cash Equivalents	13.82
Other (currency derivatives)	-2.78
<b>Total</b>	<b>100.00</b>

### 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 December 31, 2020. During the quarter, 13.75% of the portfolio consisted of holdings that were below investment grade or not rated.

## San Mateo County Employees' Retirement Association

Range	IG/Non-IG	Percentage
AAA	IG	15.17
AA	IG	15.67
A+	IG	17.47
A-	IG	0.00
BBB+	IG	11.45
BBB	IG	12.33
BBB-	IG	3.11
BB-	Non-IG	3.99
B	Non-IG	3.75
B-	Non-IG	2.24
CCC	Non-IG	3.76
NR	Non-IG	0.00
N/A	Non-IG	-2.78
Cash & Cash Equivalents	IG	13.82

**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.**

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 December 31, 2020:

Date	Bond	MV%
7/31/2020	Korea Treasury Bond, senior note, 1.375%, 12/10/29	8.05
8/31/2020	Korea Treasury Bond, senior note, 1.375%, 12/10/29	8.08
9/30/2020	Korea Treasury Bond, senior note, 1.375%, 12/10/29	8.27
10/31/2020	Korea Treasury Bond, senior note, 1.375%, 12/10/29	8.41
11/30/2020	Korea Treasury Bond, senior note, 1.375%, 12/10/29	8.63
12/31/2020	Korea Treasury Bond, senior note, 1.375%, 12/10/29	8.51

**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 December 31, 2020:

Date	144A (Total %)
7/31/2020	9.49%
8/31/2020	10.02%
9/30/2020	8.84%
10/31/2020	8.62%

Date	144A (Total %)
11/30/2020	9.33%
12/31/2020	9.46%

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 November 30, 2020 was US \$989.02 million, which makes up 0.07% of total firm AUM.

SamCERA's account assets make up 5.81% of Franklin Templeton Global Multisector Plus (Master) (estimated) Fund Ltd's total assets as of December 31, 2020.

Signed By: 

**Name:** Breda Beckerle

**Title:** Chief Compliance Officer

**Dated:** January 13, 2021

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

### 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](http://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 – December 31, 2020***

***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](mailto:Investments@samcera.org)) by **Wednesday, January 13, 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**

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 Q4 2020, there were no material changes to NISA's ownership structure.

Effective January 1, 2021, ownership interests in NISA, LLC were granted to additional members of NISA's existing senior management team.

During Q4 2020, there were no senior team additions or departures.

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.

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?  
 **Yes: Please explain.** /  **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**

### **Derivative 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.**

While the current guidelines allow for the use of derivative instruments as part of the investment strategy, the NISA-managed SamCera portfolio did not utilize derivative instruments during the period ending 12/31/2020 pertaining to this questionnaire.

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 *SamCERA's* policies?  **Yes** /  **No: Please explain.**  
a) Has the firm developed any new purposes for derivative investments?  **Yes: Please explain.** /  **No**
8. 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.**
9. Have all derivative investments been made in a manner consistent with the derivative investment process specified in the policy statement?  **Yes** /  **No: Please explain.**
10. Specify the security pricing sources used when developing portfolio market value exposures for limited allocation derivatives.
11. 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.
12. 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**

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**

### 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.**

### Domestic Fixed Income Portfolios

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

<i>Certificates of Deposit</i>	<i>0%</i>
<i>Commercial Paper</i>	<i>0%</i>
<i>Other High Grade Short-term securities</i>	<i>0.82%</i>
<i>U.S. Government &amp; Agency securities</i>	<i>38.84%</i>
<i>Corporate Bonds*</i>	<i>31.74%</i>
<i>Mortgage- and asset-backed securities</i>	<i>27.43%</i>
<i>Yankee bond securities</i>	<i>1.17%</i>

\*Corporate Bonds includes 1.09% in taxable municipals.

2. Is the firm monitoring the country, currency, sector and security selection risks associated with its portfolio?  **Yes** /  **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?

5. 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.

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

As of 12/31/2020, 5.37% 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.  Yes /  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 12/31/2020, NISA's Short/Core Duration Product (\$28.4bn) makes up approximately 11.2% of NISA's total, physical AUM (\$252.9bn).

As of 12/31/2020, the NISA-managed SamCera Portfolio (\$215.8mm) makes up approximately 0.76% of NISA's Short/Core Duration Product (\$28.4bn).

Signed by:   
Richard M. Dolson  
Chief Compliance Officer

Dated: 01/11/2021

Name of Firm: NISA Investment Advisors, LLC

***PIMCO Diversified Income Fund – December 31, 2020***

***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](mailto:Investments@samcera.org)) by **Wednesday, January 13, 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**

*Please refer to the attached Quarterly Firm Report.*

2. Have there been any changes in the firm's investment approach?

**Yes: Please explain.** /  **No**

*Please refer to the attached Fund Prospectus and/or Statement of Additional Information.*

3. Have there have been any industry or regulatory disciplinary actions taken against the firm?

**Yes: Please explain.** /  **No**

*Please reference the attached compliance letter.*

4. Has the firm's insurance coverage been sustained?

**Yes** /  **No: Please explain.**

*Please reference the attached compliance letter.*

**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**

*Please refer to the attached Fund Prospectus and/or Statement of Additional Information.*

## Derivative 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.**

*Please refer to the attached Fund Prospectus and/or Statement of Additional Information.*

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.**

*Please refer to the attached Diversified Income Fund Annual Report.*

3. For non-exchange traded derivative transactions, were the counter-parties broker/dealers?  
 **Yes /**  **No**

*Please refer to the attached Diversified Income Fund Annual Report.*

**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)?  
 **Yes /**  **No**

*Please refer to the attached Diversified Income Fund Annual Report.*

**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?  **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?

*Please refer to the attached Diversified Income Fund Annual Report.*

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

*Please refer to the attached PIMCO Pricing Policy.*

- 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.

*Please refer to the attached PIMCO's Use of Derivatives.*

- State if the legal and regulatory risk associated with portfolio derivative investments have changed over the past six months.  **Yes: Please explain.** /  **No**

*Please refer to the attached PIMCO's Use of Derivatives.*

### **Investment Manager Guidelines**

- Are portfolio holdings well-diversified, and made in liquid securities?  
 **Yes** /  **No: Please explain.**

*Please refer to the attached Bond Statistics Report.*

- Has the firm engaged in short selling, use of leverage or margin and/or investments in commodities?  **Yes: Please explain.** /  **No**

*The Fund is permitted to engage in short sales as allowed by the Fund's Prospectus and Statement of Additional Information, which are attached for reference.*

### **Fixed Income Portfolios**

- State the percentage of the portfolio held in each of the following types of securities

<i>Treasury</i>	<i>%</i>
<i>Agency</i>	<i>%</i>
<i>Inflation-Linked</i>	<i>%</i>
<i>Mortgage-Backed</i>	<i>%</i>
<i>Asset-Backed</i>	<i>%</i>
<i>Investment-Grade Credit</i>	<i>%</i>
<i>High-Yield Credit</i>	<i>%</i>
<i>Bank Loan</i>	<i>%</i>
<i>Non-US</i>	<i>%</i>
<i>EM Government</i>	<i>%</i>
<i>EM Local Currency</i>	<i>%</i>

<i>EM Corporate</i>	<i>%</i>
<i>Cash &amp; Equivalents</i>	<i>%</i>
<i>Total</i>	<i>%</i>

*Please reference the attached Bond Statistics Report.*

2. 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.

*Please reference the attached Holdings Report.*

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

*Please reference the attached compliance letter.*

4. At the time of purchase, was there any single industry which represented more than 15% of the market value of the account.  **Yes** /  **No**

*Please reference the attached Holdings Report.*

a) If **Yes**, please specify the name of the industry, percentage amount and size relative to benchmark.

5. 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 9/30/2020, the Fund represented 0.38% of the Firm assets.*

*As of 9/30/2020, SamCERA's investment represented 2.17% of Fund assets.*

Signed by: 

Dated:  
1/13/2021

Name of Firm:  
PIMCO

## ***Western Asset Management Total Return Unconstrained – December 31, 2020***

### ***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](mailto:Investments@samcera.org)) by **Wednesday, January 13, 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**

There have been no significant changes to portfolio developments, organizational structure and personnel changes during the semi-annual period ending December 31, 2020.

As it relates to major changes to the firm ownership, in February 2020 Franklin Templeton and Legg Mason, Inc. (Legg Mason) announced that they had entered into an agreement under which Franklin Templeton would acquire Legg Mason and its affiliates, including Western Asset. The transaction closed on July 31, 2020, and Western Asset continues to maintain its organizational autonomy and investment independence.

- 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?**

**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**

#### **Derivative 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?**  
 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.

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: Please explain.

5. **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?**

0.23% of The Fund is exposed to JPM.

b) **Please specify the name of the counter-party and the amount of exposure.**

Name of the counter-party is JP Morgan Chase, 0.23%.

c) **Have there been any changes to the investment manager's list of approved counter-parties over the past six months?**

No material changes within derivative counterparties.

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

The pricing sources used for derivatives will vary depending on the derivative instrument and clearing method. For example, for exchange traded instruments such as futures, Bloomberg is used to receive the settlement price from the exchange the derivative contract is traded on. For OTC derivatives which are cleared, Western Asset will receive the valuations from the exchange the derivative is cleared. For non-cleared OTC derivatives, Western Asset's primary pricing vendor is Markit. The Firm will consider secondary sources such as Bloomberg swap models, mark-to-market counter party statements or internal model methodology if Markit does not cover an OTC derivative instrument.

Western Asset's Pricing Group 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 FTID (aka IDC) for fixed-income cash bonds, and Markit for derivatives. 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 six months.**

Yes: Please explain. /  No

**Investment 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

### Fixed Income Portfolios

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

<i>Treasury</i>	<i>14.25%</i>
<i>Agency</i>	<i>0.43%</i>
<i>Inflation-Linked</i>	<i>1.88%</i>
<i>Mortgage-Backed</i>	<i>11.34%</i>
<i>Asset-Backed</i>	<i>4.64%</i>
<i>Investment-Grade Credit</i>	<i>7.72%</i>
<i>High-Yield Credit</i>	<i>9.51%</i>
<i>Bank Loan</i>	<i>10.32%</i>
<i>Non-US</i>	<i>13.68%</i>
<i>EM Government</i>	<i>1.36%</i>
<i>EM Local Currency</i>	<i>12.57%</i>
<i>EM Corporate</i>	<i>3.27%</i>
<i>Cash &amp; Equivalents</i>	<i>9.04%</i>
<i>Total</i>	<i>100.00%</i>

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.

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

18.83%

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 SamCERA's account comprise of total product assets?**

As of December 31, 2020, Western Asset's Total Return Unconstrained (TRU) Bond product makes up 1.00% of Firmwide AUM, and SamCERA's account comprises 4.13% of total TRU Bond product assets.

*Jeremy Henningsen*

Signed by: Jeremy Henningsen, Compliance Officer  
Dated: 1/12/2021  
Name of Firm: Western Asset Management Company, LLC

***Harrison Street Core Property Fund, LP – December 31, 2020***

***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](mailto:Investments@samcera.org)) by **Wednesday, January 13, 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**

Effective December 31, 2020, Dean Egerter, a partner at the firm, retired and stepped down from full-time work and now continues to serve Harrison Street in an advisory capacity. Dean served many roles during his years with the Firm including (but not limited to) capital raising, Capital Markets Officer, and Head of Opportunistic Portfolio Management. Over the past few years, Dean transitioned his managerial duties to numerous team members across the organization. In conjunction with Dean's retirement, the following is effective immediately:

- Brian Mutchler, Senior Managing Director, became the Chair of the Firm's Capital Markets Committee.
- Rob Cook, Senior Managing Director and Head of US Opportunistic Portfolio Management, replaced Dean as a Key Man for Harrison Street Real Estate Partners Fund VIII. The Fund's first closing took place in December 2020.
- At this time, Dean will not be replaced on the Investment Committee for North America real estate and social infrastructure investments. Paul Bahir, CEO – Europe, will replace Dean on the Investment Committee for European transactions.
- Dean will not be replaced on the Executive Committee at this time.

Further, effective December 31, 2020, Dean sold his 2.5% ownership interest in the Firm. While Colliers, the Firm's majority owner, has an obligation to purchase this interest, Chris Merrill – Co-Founder, President and CEO of Harrison Street – has a Right of First Offer which he exercised and subsequently offered to members of the firm. This included members of the Investment Committee and added the following new equity owners: Mike Gordon, Joey Lansing and Geoff Regnery.

HS is happy to provide additional detail upon request.

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.** /  **No**
5. 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**

### **Investment Manager Guidelines**

1. Are portfolio holdings well-diversified?  **Yes** /  **No: Please explain.**
2. Has the firm used leverage?  **Yes** /  **No**
  - a) If yes, is the portfolio leverage within the 40% of overall loan to value guideline?  
 **Yes** /  **No: Please explain.**

### **Cash & Equivalents**

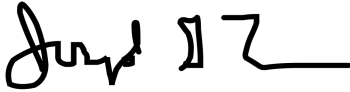
1. Does the firm directly invest in short term fixed income investments?  **Yes** /  **No**
  - a) If **Yes**, do the investments comply with the policies?  **Yes** /  **No: Please explain.**

### **Real 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 December 31, 2020 will not be published until after the due date of this request. As of September 30, 2020, Core Fund assets comprised 44.4% 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 December 31, 2020 if required.



Signed by: [Joseph G. Lansing](#), as Authorized Signatory  
Dated: [January 6, 2021](#)  
Name of Firm: [Harrison Street Real Estate Capital, LLC](#)

***INVESCO Core Real Estate – December 31, 2020***

*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](mailto:Investments@samcera.org)) by **Wednesday, January 13, 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.** /  **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.**

**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**

**Investment Manager Guidelines**

1. Are portfolio holdings well-diversified?  **Yes** /  **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?  Yes /  No: Please explain.

## Real 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 September 30, 2020, the Fund's since inception net return of 7.65% exceeds the NFI ODCE index of 7.45%.**
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?  Yes: Please explain. /  No
4. Has the firm used leverage?  Yes /  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 September 30, 2020, the Fund's leverage was 25.7%.**
5. What proportion of total AUM do the assets in this product make-up of the firm? - **17.4% (as of September 30, 2020)** What size does SamCERA's account comprise of total product assets? - **2.50% (as of September 30, 2020)**

### General Partner:

IRI Core I, L.P.

By: IRI Core-GP, LLC, its general partner

By: Invesco Realty, Inc., its sole member



Name: William C Grubbs Jr  
Title: Vice President



***The Parametric Portfolio Associates LLC Cash & Currency Hedge Overlay –  
December 31, 2020***

***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](mailto:Investments@samcera.org)) by **Wednesday, January 13, 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**

**On October 8, 2020, Parametric's parent company, Eaton Vance Corp. (EVC), announced that it had entered into a definitive agreement to be acquired by Morgan Stanley for an equity value of approximately \$7 billion. The combination of EVC and Morgan Stanley Investment Management (MSIM) will create one of the world's largest and most important global asset managers, with approximately \$1.2 trillion of assets under management and expertise spanning the global capital markets. Bringing EVC and MSIM together creates a uniquely powerful set of investment solutions to serve both institutional and retail clients in the U.S. and internationally. The acquisition is subject to customary closing conditions, and is expected to close in the second quarter of 2021. This transaction will not change the structure or operating model of Parametric. Refer to the attached press release for more details (Attachment A).**

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?  
 **Yes** /  **No: Please explain.**
5. Have there been any investment guideline breaches during the past 6 months?  
 **Yes: Please explain.** /  **No**

## Investment Management Fees

1. Is *SamCERA*'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**

## Derivative 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.**

**Not applicable – Exchange traded derivatives only used in this account.**

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.**

**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?  **Yes** /  **No: Please explain.**

a) Has the firm developed any new purposes for derivative investments?  **Yes: Please explain.** /  **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.

**Not applicable – No limited allocation derivatives used in this account.**

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.**

**Not applicable – No limited allocation derivatives used in this account.**

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.

**Not applicable – No limited allocation derivatives used in this account.**

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.

**See Attachment B for response.**

14. State if the legal and regulatory risk associated with portfolio derivative investments have changed over the past six months.  **Yes: Please explain.** /  **No**

Signed by:   
Benjamin Hammes, Deputy Chief Compliance Officer

Dated: January 12, 2021

Name of Firm: Parametric Portfolio Associates LL

October 8, 2020 – FOR IMMEDIATE RELEASE

## Morgan Stanley to Acquire Eaton Vance

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- Creates a Leading Asset Manager Positioned for Growth
- Advances Morgan Stanley's Strategic Transformation

**NEW YORK/BOSTON** – Morgan Stanley (NYSE: MS) and Eaton Vance Corp. (NYSE: EV) have entered into a definitive agreement under which Morgan Stanley will acquire Eaton Vance, a leading provider of advanced investment strategies and wealth management solutions with over \$500 billion in assets under management (AUM), for an equity value of approximately \$7 billion. The acquisition advances Morgan Stanley's strategic transformation with three world-class businesses of scale: Institutional Securities, Wealth Management and Investment Management.

Morgan Stanley Investment Management (MSIM) will be a leading asset manager with approximately \$1.2 trillion of AUM and over \$5 billion of combined revenues. MSIM and Eaton Vance are highly complementary with limited overlap in investment and distribution capabilities. Eaton Vance is a market leader in key secular growth areas, including in individual separate accounts, customized investment solutions through Parametric, and responsible ESG investing through Calvert. A leader in value-add fixed income solutions, Eaton Vance fills product gaps and delivers quality scale to the MSIM franchise. The combination will also enhance client opportunities, by bringing Eaton Vance's leading U.S. retail distribution together with MSIM's international distribution.

"Eaton Vance is a perfect fit for Morgan Stanley," said James P. Gorman, Chairman and Chief Executive Officer of Morgan Stanley. "This transaction further advances our strategic transformation by continuing to add more fee-based revenues to complement our world-class investment banking and institutional securities franchise. With the addition of Eaton Vance, Morgan Stanley will oversee \$4.4 trillion of client assets and AUM across its Wealth Management and Investment Management segments."

"Over many years, Eaton Vance has delivered above-market growth by aligning our business with leading trends in asset management," said Thomas E. Faust, Jr., Chief Executive Officer of Eaton Vance. "By joining Morgan Stanley, we will be able to further accelerate our growth by building upon our common values and strengths, which are focused on our commitment to investment excellence, innovation and client service. Bringing

Eaton Vance's leading brands and capabilities under Morgan Stanley creates a uniquely powerful set of investment solutions to serve both institutional and retail clients in the U.S. and internationally."

"Eaton Vance brings strong brand recognition and high quality complementary platforms in key secular growth areas, providing numerous incremental opportunities to increase the reach of our asset management franchise and our value proposition for clients," said Dan Simkowitz, Head of MSIM. "These two businesses have limited overlap and are combining from positions of strength to create one of the leading asset managers in the world. We look forward to this partnership."

The transaction is attractive for shareholders and will deliver long-term financial benefits. Both companies have demonstrated industry-leading organic growth and have strong cultural alignment. The combination will better position Morgan Stanley to generate attractive financial returns through increased scale, improved distribution, cost savings of \$150MM – or 4% of MSIM and Eaton Vance expenses – and revenue opportunities. By financing the transaction with 50% cash, Morgan Stanley will utilize approximately 100bps of excess capital, and the Firm's common equity tier 1 ratio is expected to remain approximately 300bps above the Firm's stress capital buffer (SCB) requirement of 13.2%. The transaction is expected to be breakeven to earnings per share immediately and marginally accretive thereafter, with fully phased-in cost synergies, and add approximately 100bps to return on tangible common equity.

Under the terms of the merger agreement, Eaton Vance shareholders will receive \$28.25 per share in cash and 0.5833x of Morgan Stanley common stock, representing a total consideration of approximately \$56.50 per share. Based on the \$56.50 per share, the aggregate consideration paid to holders of Eaton Vance's common stock will consist of approximately 50% cash and 50% Morgan Stanley common stock. The merger agreement also contains an election procedure allowing each Eaton Vance shareholder to seek all cash or all stock, subject to a proration and adjustment mechanism. In addition, Eaton Vance common shareholders will receive a one-time special cash dividend of \$4.25 per share to be paid pre-closing by Eaton Vance to Eaton Vance common shareholders from existing balance sheet resources. It is anticipated that the transaction will not be taxable to Eaton Vance shareholders to the extent that they receive Morgan Stanley common stock as consideration. The transaction has been approved by the voting trust that holds all of the voting common stock of Eaton Vance.

The acquisition is subject to customary closing conditions, and is expected to close in the second quarter of 2021.

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A conference call to discuss the announced transaction will be held today at 8:30 a.m. ET, hosted by Morgan Stanley Chairman and CEO, James Gorman; Morgan Stanley CFO, Jonathan Pruzan; Morgan Stanley Head of Investment Management, Dan Simkowitz; and Eaton Vance Chairman and CEO, Thomas E. Faust, Jr.. The call and presentation will be available at [www.morganstanley.com](http://www.morganstanley.com) or by dialing 1-877-895-9527 (domestic) and 1-706-679-2291 (international); the passcode is 5966816. To listen to the playback, please visit our website or dial: 1-855-859-2056 (domestic) or 1-404-537-3406 (international); the passcode is 7276598.

### **About Eaton Vance**

Eaton Vance provides advanced investment strategies and wealth management solutions to forward-thinking investors around the world. Through principal investment affiliates Eaton Vance Management, Parametric, Atlanta Capital, Calvert and Hexavest, the Company offers a diversity of investment approaches, encompassing bottom-up and top-down fundamental active management, responsible investing, systematic investing and customized implementation of client-specified portfolio exposures. As of July 31, 2020, Eaton Vance had consolidated assets under management of \$507.4 billion. Exemplary service, timely innovation and attractive returns across market cycles have been hallmarks of Eaton Vance since 1924. For more information visit [eatonvance.com](http://eatonvance.com).

### **About Morgan Stanley**

Morgan Stanley is a leading global financial services firm providing a wide range of investment banking, securities, wealth management and investment management services. With offices in more than 41 countries, the Firm's employees serve clients worldwide including corporations, governments, institutions and individuals. For further information about Morgan Stanley, please visit [www.morganstanley.com](http://www.morganstanley.com).

**###**

### **Important Information about the Transaction and Where to Find It**

In connection with the proposed transaction between Morgan Stanley and Eaton Vance Corp. ("Eaton Vance"), Morgan Stanley and Eaton Vance will file relevant materials with the Securities and Exchange Commission (the "SEC"), including a Morgan Stanley registration statement on Form S-4 that will include a prospectus of Morgan Stanley. BEFORE MAKING ANY VOTING OR INVESTMENT DECISION, INVESTORS AND SECURITY HOLDERS OF MORGAN STANLEY AND EATON VANCE ARE URGED TO READ THE REGISTRATION STATEMENT AND ANY OTHER RELEVANT DOCUMENTS THAT ARE FILED OR WILL BE FILED WITH THE SEC, AS WELL AS ANY AMENDMENTS OR SUPPLEMENTS TO THESE DOCUMENTS, CAREFULLY AND IN THEIR ENTIRETY WHEN THEY BECOME AVAILABLE BECAUSE THEY CONTAIN OR

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WILL CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED TRANSACTION AND RELATED MATTERS. Investors and security holders may obtain free copies of the registration statement (when it becomes available), as well as other filings containing information about Morgan Stanley or Eaton Vance, without charge at the SEC's Internet website (<http://www.sec.gov>) or by contacting the investor relations department of Morgan Stanley or Eaton Vance at the following:

Morgan Stanley

1585 Broadway  
New York, NY 10036  
Media Relations: 212-761-2448  
[mediainquiries@morganstanley.com](mailto:mediainquiries@morganstanley.com)  
Investor Relations: 1-212-762-8131  
[investorrelations@morganstanley.com](mailto:investorrelations@morganstanley.com)

Eaton Vance

Two International Place  
Boston, MA 02110  
Media Relations: 617-672-8940  
[rtice@eatonvance.com](mailto:rtice@eatonvance.com)  
Investor Relations: 617-672-6744  
[esenay@eatonvance.com](mailto:esenay@eatonvance.com)

### **No Offer or Solicitation**

This communication is for informational purposes and is not intended to, and shall not, constitute an offer to sell or the solicitation of an offer to sell or the solicitation of an offer to buy any securities or a solicitation of any vote of approval, nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction.

### **Forward-Looking Statements**

This communication contains "forward-looking statements" within the meaning of the federal securities laws, including Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. In this context, forward-looking statements often address expected future business and financial performance and financial condition, and often contain words such as "expect," "anticipate," "intend," "plan," "believe," "seek," "see," "will," "would," "target," similar expressions, and variations or negatives of these words. Forward-looking statements by their nature address matters that are, to different degrees, uncertain, such as statements about the consummation of the proposed transaction and the anticipated benefits thereof. All such forward-looking statements are subject to risks, uncertainties and assumptions that could cause actual results to differ materially from those expressed in such forward-looking statements. Important risk factors that may cause such a difference include, but are not limited to, (i) the completion of the proposed transaction on anticipated terms and timing, including obtaining required regulatory approvals, anticipated tax treatment, unforeseen liabilities, future capital expenditures, revenues, expenses, earnings, synergies, economic performance, indebtedness, financial condition, losses, future prospects, business and management strategies for the management, expansion and growth of the combined company's operations and other conditions to the completion of the acquisition, including the possibility that any of the anticipated benefits of the proposed transaction will not be realized or will not be realized within the expected time period, (ii) the ability of Morgan Stanley and Eaton Vance to integrate the business successfully and to achieve anticipated synergies,

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risks and costs, (iii) potential litigation relating to the proposed transaction that could be instituted against Morgan Stanley, Eaton Vance or their respective directors, (iv) the risk that disruptions from the proposed transaction will harm Morgan Stanley's and Eaton Vance's business, including current plans and operations, (v) the ability of Morgan Stanley or Eaton Vance to retain and hire key personnel, (vi) potential adverse reactions or changes to business relationships resulting from the announcement or completion of the acquisition, (vii) continued availability of capital and financing and rating agency actions, (viii) legislative, regulatory and economic developments, (ix) potential business uncertainty, including changes to existing business relationships, during the pendency of the acquisition that could affect Morgan Stanley's and/or Eaton Vance's financial performance, (x) certain restrictions during the pendency of the acquisition that may impact Morgan Stanley's or Eaton Vance's ability to pursue certain business opportunities or strategic transactions, (xi) unpredictability and severity of catastrophic events, including, but not limited to, acts of terrorism or outbreak of war or hostilities, as well as Morgan Stanley's or Eaton Vance's management's response to any of the aforementioned factors, (xii) dilution caused by Morgan Stanley's issuance of additional shares of its common stock in connection with the proposed transaction, (xiii) the possibility that the transaction may be more expensive to complete than anticipated, including as a result of unexpected factors or events, (xiv) those risks described in Item 1A of Morgan Stanley's most recently filed Annual Report on Form 10-K and subsequent reports on Forms 10-Q and 8-K, (xv) those risks described in Item 1A of Eaton Vance's most recently filed Annual Report on Form 10-K and subsequent reports on Forms 10-Q and 8-K and (xvi) those risks that will be described in the registration statement on Form S-4 available from the sources indicated above. These risks, as well as other risks associated with the proposed acquisition, will be more fully discussed in the registration statement on Form S-4 that will be filed with the SEC in connection with the proposed acquisition. While the list of factors presented here is, and the list of factors to be presented in the registration statement on Form S-4 will be, considered representative, no such list should be considered to be a complete statement of all potential risks and uncertainties. Unlisted factors may present significant additional obstacles to the realization of forward-looking statements. Consequences of material differences in results as compared with those anticipated in the forward-looking statements could include, among other things, business disruption, operational problems, financial loss, legal liability to third parties and similar risks, any of which could have a material adverse effect on Morgan Stanley's or Eaton Vance's consolidated financial condition, results of operations, credit rating or liquidity. Neither Morgan Stanley nor Eaton Vance assumes any obligation to publicly provide revisions or updates to any forward-looking statements, whether as a result of new information, future developments or otherwise, should circumstances change, except as otherwise required by securities and other applicable laws.

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**ATTACHMENT B**  
**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. – December 31, 2020***

*Compliance Certification Statement  
San Mateo County  
Employees' Retirement Association*

Please complete the following compliance certification statement and e-mail to *SamCERA* ([Investments@samcera.org](mailto:Investments@samcera.org)) by **Wednesday, January 13, 2021**.

**General Compliance Issues**

1. Have there been any significant changes in firm ownership, organizational structure and firm leadership team personnel?

**Yes: Please explain.** /  **No**

- In July 2020, Verus added 14 new shareholders, bringing the total of employee owners to 29, which represents more than 1/3 of total personnel. The new owners were selected from the following areas of the firm: consulting, research, risk advisory, performance measurement, and marketing.
- Verus' Management Committee added two Managing Directors of the firm in 2019 and 2020.
- In May 2020, we opened an office in Pittsburgh, PA, as part of our regional expansion efforts to the East Coast and the Midwest, which is being manned by new senior-level hires, Mark Brubaker and Ted Hermann, who had worked together for over 15 years at Wilshire Associates.

2. Have there been any changes to the general consulting, private markets consulting & research, public markets research, or risk advisory personnel?

**Yes: Please explain.** /  **No**

- Four new senior consultants joined Verus during the past 13 months: John Teramana (LA Office), Stuart Odell (SF Office), Mark Brubaker, and Ted Hermann (both from Pittsburgh Office).
- Two senior consultants from the San Francisco Office retired in 2020: Barry Dennis and John Meier.
- Kin Lam joined the Private Markets Team in March 2020 as Associate Director.
- In December 2020, Chief Risk Officer Max Giolitti left Verus for personal reasons. The Risk Advisory Group is now led by Risk Director Danny Sullivan under the supervision of CIO Ian Toner.

3. Have there have been any industry or regulatory non-routine investigations, examinations, complaints, disciplinary actions or other proceeding against the firm or any investment professionals employed by the firm?  Yes: Please explain. /  No
4. Has the firm maintained its status as a Registered Investment Advisory under the Investment Advisors Act of 1940?  
 Yes /  No: Please explain.
5. Has the firm's insurance coverage been sustained?  
 Yes /  No: Please explain.

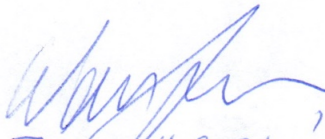
**Fees**

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

Signed by:

Dated:

Name of Firm

 , Chief Compliance Officer  
January 11, 2021  
Verus Advisory, Inc

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

**Board of Retirement**

January 26, 2021

Agenda Item 5.2

**TO:** Board of Retirement

**FROM:** Scott Hood, Chief Executive Officer



**SUBJECT:** Adoption of Cost of Living Adjustments (COLAs) for 2021

**Recommendation**

Approve resolution adopting the Cost of Living Adjustments as recommended by Milliman, Inc.

**Discussion**

Annual COLAs to SamCERA benefits are calculated pursuant to the County Employees Retirement Law (CERL) which requires that COLAs be based on the change in the Consumer Price Index for the Bay Area provided by the U.S. Bureau of Labor Statistics and rounded to the nearest one half of one percent.

Milliman, Inc. has calculated the annual COLAs for each retirement tier and plan for approval by the Board. As reflected in the attached letter, Milliman reports that the CPI increased 1.72% during 2020. Rounded to the nearest one half of one percent, this yields a COLA of 1.5% for all Plan 1, 2, 4, 5, 6 and 7 members if they retire before April 2, 2021.

Due to the Probation Plan 1 COLA Bank, COLA for Probation Plan 1 members will vary between 1.5% and 3% depending on retirement date and COLA Bank:

Retired on or before 04/01/2019, COLA will be 3%

Retired between 04/02/2019 – 04/01/2020, COLA will be 2%

Retired between 04/02/2020 – 04/01/2021, COLA will be 1.5%

Probation Plan 1 members receiving more than 1.5% are utilizing the remaining balance in their COLA Bank and now have a balance of 0.

All COLAs will be paid beginning with the April 2021 benefit payments.

**Attachments**

January 15, 2021 Letter from Milliman, Inc.

Resolution Adopting Cost of Living Adjustments Effective April 1, 2021 as Recommended by Milliman, Inc.



1301 Fifth Avenue  
Suite 3800  
Seattle, WA 98101-2605  
USA

Tel +1 206 624 7940

milliman.com

January 15, 2021

Scott Hood  
Chief Executive Officer  
San Mateo County Employees' Retirement Association  
100 Marine Parkway, Suite 125  
Redwood Shores, CA 94065-5208

Re: Annual COLA Payable in 2021

Dear Scott:

The San Mateo County Employees' Retirement Association (SamCERA) provides a Cost-of-Living Adjustment (COLA) to retirees and beneficiaries who retired on or before April 1 of each year in accordance with Article 16.5 of the County Employees' Retirement Law of 1937 (CERL). This letter outlines the COLA percentage and changes to the COLA Bank to be adopted by the Board and effective in April of 2021.

### **Inflation Index**

The first step in the calculation process is the measurement of inflation. The calculation of the annual COLA is specified in the CERL. For Plan 1 General and Safety members, the COLA is governed by Section 31870.2. For Plan 1 Probation and all Plan 2 members, the details of the COLA are provided under Section 31870.1. For Plan 4-7 members, the COLA is governed by Section 31870. Plan 3 members do not receive any COLA under Article 16.5 of the CERL.

Section 31870.2 says that the COLA should be calculated using...

...the cost of living as of January 1<sup>st</sup> of each year as shown by the then current Bureau of Labor Statistics Consumer Price Index for All Urban Consumers for the area in which the county seat is situated...

Identical language appears in Sections 31870 and 31870.1 of the CERL. The Retirement Board has adopted the Annual Average Consumer Price Index for All Urban Consumers (CPI-U) for the San Francisco-Oakland-Hayward area (Base Period: 1982-84=100) as the basis for making the annual adjustments. This index increased by 1.72% during the 2020 calendar year, from an index value of 295.004 in 2019 to an index value of 300.084 in 2020.

**COLA and COLA Bank**

The annual COLA that SamCERA retirees and beneficiaries are eligible to receive is based on the change in the consumer price index rounded to the nearest one-half of one percent (subject to the maximum COLAs specified in relevant sections of the CERL). We recommend that the SamCERA Board adopt the following items to take effect in April 2021:

- COLA percentage

- Plan 1. Each retiree and beneficiary who retired on or before April 1, 2021 will receive a Cost-of-Living Adjustment in accordance with the following table.

<b>Date of Retirement</b>	<b>General</b>	<b>Safety</b>	<b>Probation</b>
On or before 04/01/2019	1.5%	1.5%	3.0%
04/02/2019 – 04/01/2020	1.5%	1.5%	2.0%
04/02/2020 – 04/01/2021	1.5%	1.5%	1.5%

- Plan 2. Each retiree and beneficiary who retired on or before April 1, 2021 will receive a Cost-of-Living Adjustment of 1.5%.
- Plan 3. No Cost-of-Living Adjustment is provided to Plan 3 retirees and beneficiaries.
- All Other Plans. Each retiree and beneficiary who retired on or before April 1, 2021 will receive a Cost-of-Living Adjustment of 1.5%, the maximum increase under CERL 31870.

- COLA Bank

- Plan 1. Each retiree and beneficiary who retired on or before April 1, 2021 will have his or her COLA Bank decreased in accordance with the following table:

<b>Date of Retirement</b>	<b>General</b>	<b>Safety</b>	<b>Probation</b>
On or before 04/01/2019	0.0%	0.0%	1.5%
04/02/2019 – 04/01/2020	0.0%	0.0%	0.5%
04/02/2020 – 04/01/2021	0.0%	0.0%	0.0%

COLA Bank accumulations for Plan 1 retirees and beneficiaries are shown in the attached exhibits.

- All Other Plans. In accordance with Section 31874.4 of the CERL, retirees and beneficiaries of plans 2 through 7 do not accumulate COLA Banks.

**Certification**

Milliman's work product was prepared exclusively for the use or benefit of SamCERA for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning SamCERA's operations. It is not for the use or benefit of any third party

This work product was prepared solely for SamCERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.

The consultants who worked on this assignment are retirement actuaries. Milliman's advice is not intended to be a substitute for qualified legal, investment, or accounting counsel.

The signing actuaries are independent of the plan sponsors. We are not aware of any relationship that would impair the objectivity of our work.

We are members of the American Academy of Actuaries and Associates of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Please let us know if you have any questions or need any additional information.

Sincerely,

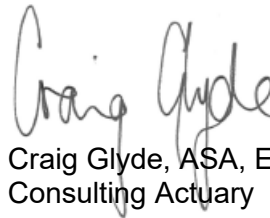


Nick Collier, ASA, EA, MAAA  
Consulting Actuary

NC/CG/dla

Attachments

cc: Gladys Smith



Craig Glyde, ASA, EA, MAAA  
Consulting Actuary



**San Mateo County Employees' Retirement Association  
Plan 1 COLA Bank Accumulations  
General and Safety**

Based on the Consumer Price Index for All Urban Consumers (CPI-U) for the San Francisco-Oakland-Hayward area (Base Period: 1982-84=100)

<b>Retirement during 12-month period ended April 1 2021 or earlier</b>	<b>Accumulated COLA Bank April 1, 2021 0.0%</b>	<b>Accumulated COLA Bank April 1, 2020 0.0%</b>	<b>2021 Annual COLA 1.5%</b>
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**San Mateo County Employees' Retirement Association  
Plan 1 COLA Bank Accumulations  
Probation**

Based on the Consumer Price Index for All Urban Consumers (CPI-U) for the  
San Francisco-Oakland-Hayward area (Base Period: 1982-84=100)

<b>Retirement during 12-month period ended April 1</b>	<b>Accumulated COLA Bank April 1, 2021</b>	<b>Accumulated COLA Bank April 1, 2020</b>	<b>2021 Annual COLA</b>
2019 or earlier	0.0%	1.5%	3.0%
2020	0.0%	0.5%	2.0%
2021	0.0%	0.0%	1.5%

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

**Board of Retirement**

**RESOLUTION ADOPTING COST OF LIVING ADJUSTMENTS EFFECTIVE APRIL 1, 2021  
AS RECOMMENDED BY MILLIMAN, INC.**

RESOLUTION 2020-\_\_

**WHEREAS**, Government Code Sections 31870, 31870.1, 31870.2 and 31874.4 authorize the Board to grant cost of living adjustments on an annual basis to recipients of SamCERA benefits; and

**WHEREAS**, the Board has retained Milliman, Inc. to provide actuarial services to the Board; and

**WHEREAS**, Milliman, Inc., by its letter dated January 15, 2021, has provided the appropriate annual cost of living adjustments for benefits based on the member's retirement tier, date of retirement; and applicable County Employees Retirement Law (CERL) statute, therefore, be it

**RESOLVED**, that the Board adopts the schedules of cost of living adjustments set forth in the attached January 15, 2021, letter from Nick J. Collier and Craig Glyde, Consulting Actuaries, Milliman, Inc., to Chief Executive Officer Scott Hood, therefore, be it

**FURTHER RESOLVED**, that the Board hereby adopts said cost of living adjustments effective April 1, 2021, therefore be it

**FURTHER RESOLVED**, that the Chief Executive Officer is hereby authorized and directed to take all actions necessary to provide for the payment of cost of living adjustments in accordance with the adopted schedules.

\* \* \* \* \*

Regularly passed and adopted, by the San Mateo County Employees' Retirement Association, Board of Retirement, on January 26, 2021.

Ayes, Trustees:

Noes, Trustees:

Absent, Trustees:

Abstain, Trustees:

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Katherine O'Malley  
Board Secretary

**SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION**  
**Board of Retirement**

January 26, 2021

Agenda Item 6.1

**TO:** Board of Retirement

**FROM:** Michael Coultrip, Chief Investment Officer 

**SUBJECT:** Preliminary Monthly Portfolio Performance Report for the Period Ended December 31, 2020

**Recommendation**

Accept the preliminary performance report dated December 31, 2020.

**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 (pages 2-3) and net manager returns (pages 4-11) also shown.

**Discussion**

The fund's net preliminary return for December was 2.2%, bringing the preliminary trailing twelve-month net return ending December 2020 to 9.6%. The preliminary twelve-month net return is above SamCERA's Plan Benchmark return of 9.0% and above SamCERA's Actuarial Assumed Earnings Rate of 6.5%.

Global markets continued their risk-on rally in December around optimism of COVID-19 vaccines and additional fiscal stimulus in the U.S. The U.S. equity market (measured by the S&P 500 Index) was up 3.8% (+18.4% YTD). Small-cap stocks were up an impressive 8.7% (+20.0% YTD). International markets were also higher on the month. Developed international equity (as measured by MSCI EAFE) was up 4.6% (+7.8% YTD), while emerging markets were up 7.4% (+18.3% YTD).

Economic data was generally positive, with both manufacturing and services output higher. Consumer confidence surveys were mixed, while improvement in the U.S. labor market continued to slow.

The general U.S. fixed income market was slightly higher by 0.1% as interest rates rose (and the yield curve steepened), while credit spreads contracted. The 10-year U.S. Treasury yield was higher

by 7 basis points during the month and ended at 0.91% by month-end. High Yield returns were up 1.9% as credit spreads narrowed.

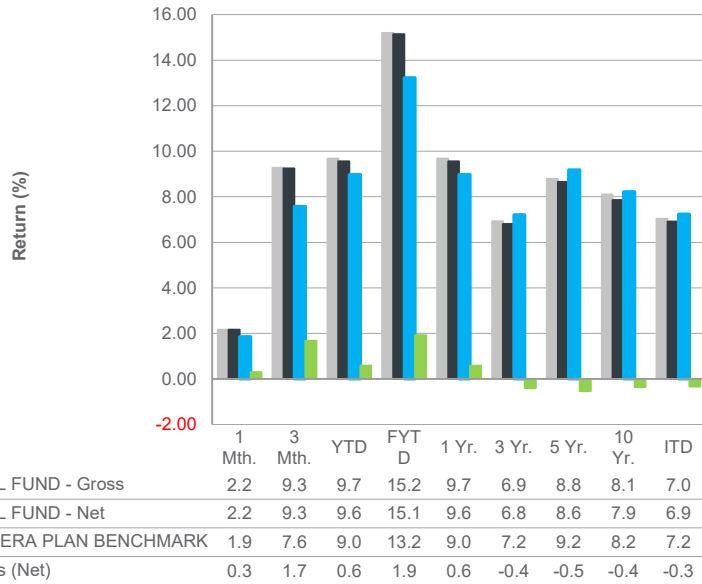
**Attachments**

Northern Trust Monthly Preliminary Performance Report  
Verus Capital Market Update

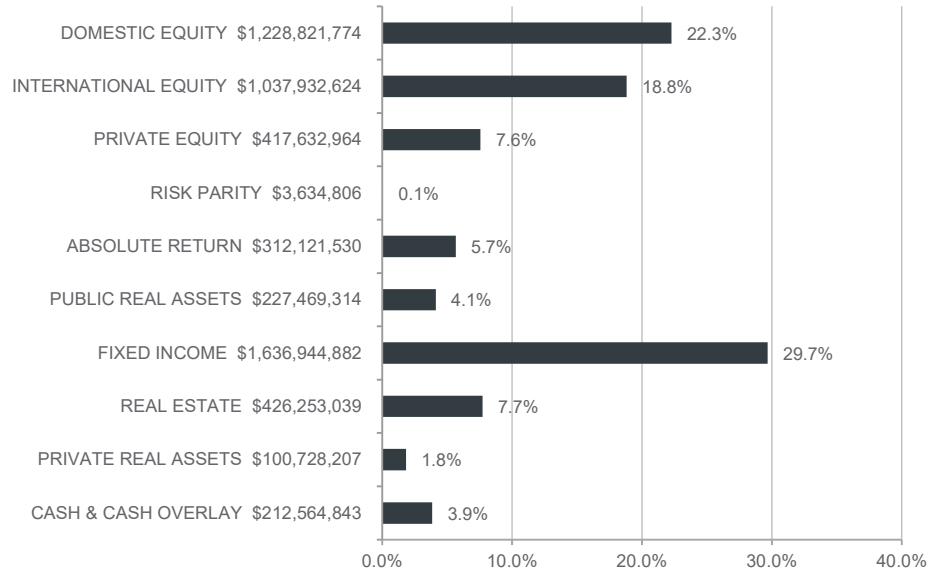
# San Mateo County Composite Return Summary December 31, 2020



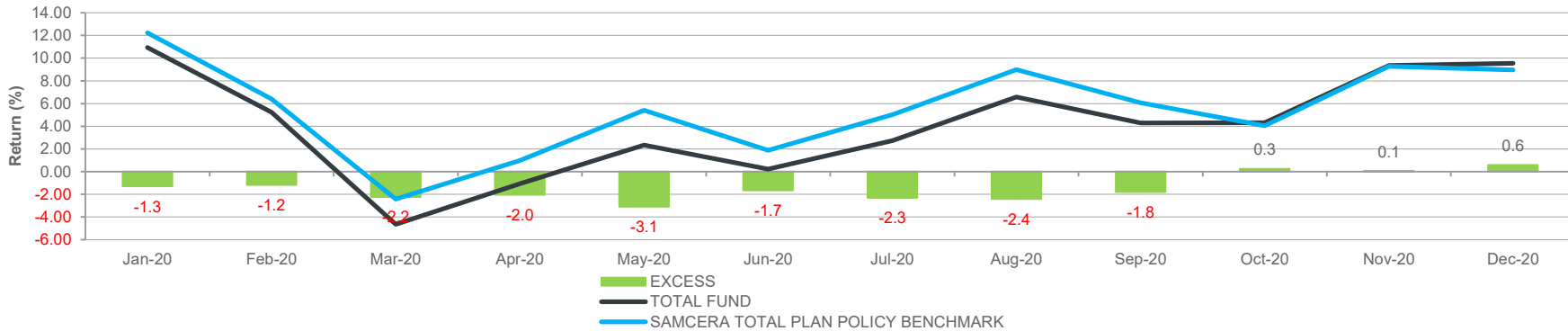
**Total Fund Performance**



**Asset Allocation**



**Rolling Month End Annual Returns**

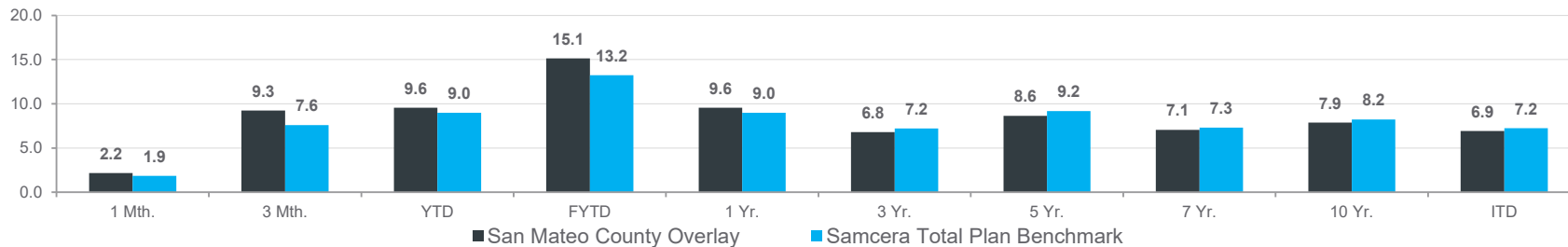


# San Mateo County Composite Return Summary

December 31, 2020



Return Comparison



Composite Returns (Net of Manager Fees)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
San Mateo County Overlay	5,517,674,730	2.2	9.3	9.6	15.1	9.6	6.8	8.6	7.1	7.9	6.9
Samcera Total Plan Benchmark		1.9	7.6	9.0	13.2	9.0	7.2	9.2	7.3	8.2	7.2
Excess		0.3	1.7	0.6	1.9	0.6	-0.4	-0.5	-0.3	-0.4	-0.3
San Mateo Ex-Clifton Overlay	5,509,765,575	2.2	9.2	9.5	15.1	9.5	6.7	8.5	6.9	7.8	6.8
Samcera Total Plan Benchmark		1.9	7.6	9.0	13.2	9.0	7.2	9.2	7.3	8.2	7.2
Excess		0.3	1.7	0.6	1.9	0.6	-0.5	-0.7	-0.4	-0.4	-0.4
Total Equity	2,266,754,399	4.5	15.1	14.5	23.3	14.5	9.5	12.0	9.1	10.0	8.2
Samcera Total Equity Benchmark		4.6	14.9	15.7	23.5	15.7	9.9	13.0	10.2	10.9	8.8
Excess		-0.1	0.3	-1.2	-0.3	-1.2	-0.4	-1.0	-1.1	-0.9	-0.6
Fixed Income	1,636,944,882	0.7	2.4	7.0	4.8	7.0	5.1	5.8	4.7	5.0	5.6
Samcera Fixed Income Benchmark		0.5	2.0	7.0	3.7	7.0	5.6	5.4	4.5	4.2	5.2
Excess		0.2	0.4	-0.0	1.1	-0.0	-0.5	0.4	0.2	0.8	0.4
Risk Parity	3,634,806	0.0	0.0	-8.5	-0.0	-8.5	1.5	6.0	5.0	--	5.2
Samcera Risk Parity Benchmark		3.1	9.7	13.9	16.2	13.9	8.6	10.1	8.7	--	9.2
Excess		-3.1	-9.7	-22.4	-16.2	-22.4	-7.1	-4.1	-3.7	--	-4.0

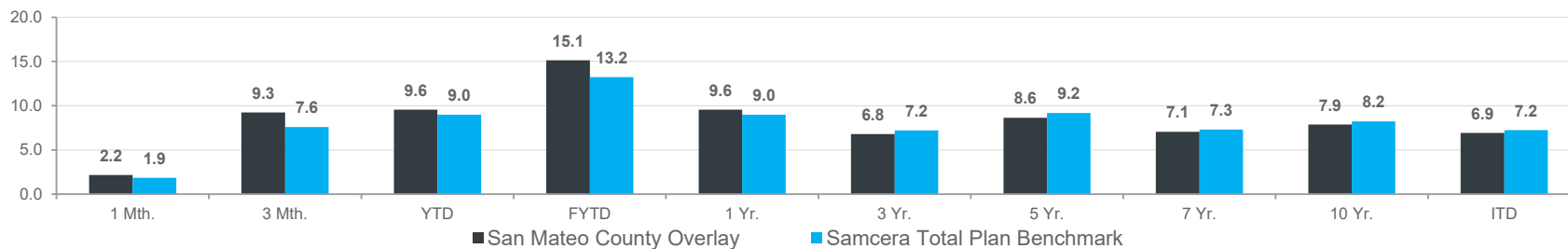


# San Mateo County Composite Return Summary

December 31, 2020



Return Comparison



Composite Returns (Net of Manager Fees)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Alternatives	729,754,494	0.1	17.0	30.9	34.9	30.9	12.8	10.7	9.0	7.7	0.2
Samcera Alternatives Benchmark		-1.5	5.4	11.9	17.5	11.9	9.3	10.8	8.2	8.8	8.1
Excess		1.6	11.6	18.9	17.4	18.9	3.5	-0.1	0.9	-1.2	-7.9
Inflation Hedge	754,450,560	1.1	3.5	-7.2	5.2	-7.2	-0.3	--	--	--	3.6
SamCERA Inflation Hedge Index		0.5	2.9	-2.3	5.7	-2.3	2.2	--	--	--	4.9
Excess		0.6	0.6	-4.9	-0.5	-4.9	-2.6	--	--	--	-1.3
Cash	212,564,843	0.0	0.2	0.7	0.3	0.7	0.9	0.9	0.8	0.7	1.8
Samcera Cash Benchmark		0.0	0.0	0.7	0.1	0.7	1.6	1.2	0.9	0.6	1.8
Excess		-0.0	0.1	0.0	0.2	0.0	-0.7	-0.3	-0.1	0.1	0.0





# San Mateo County Composite Return Summary

December 31, 2020



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Total Equity	2,266,754,399	4.5	15.1	14.5	23.3	14.5	9.5	12.0	9.1	10.0	8.2
Samcera Total Equity Benchmark		4.6	14.9	15.7	23.5	15.7	9.9	13.0	10.2	10.9	8.8
Excess		-0.1	0.3	-1.2	-0.3	-1.2	-0.4	-1.0	-1.1	-0.9	-0.6
Domestic Equity	1,228,821,774	4.4	14.2	15.2	22.5	15.2	12.0	13.8	11.3	12.5	9.2
Samcera Dom. Equity Benchmark		4.5	14.7	20.9	25.2	20.9	14.5	15.5	12.6	13.6	9.8
Excess		-0.1	-0.5	-5.7	-2.7	-5.7	-2.5	-1.6	-1.2	-1.2	-0.6
Large Cap Equity	1,107,795,766	4.3	13.1	16.0	21.7	16.0	12.8	14.5	12.3	13.1	9.9
Russell 1000		4.2	13.7	21.0	24.5	21.0	14.8	15.6	13.0	14.0	10.4
Excess		0.0	-0.5	-4.9	-2.7	-4.9	-2.0	-1.1	-0.7	-0.9	-0.5
Blackrock Russell 1000	524,329,890	4.3	14.2	21.7	25.0	21.7	15.0	--	--	--	16.5
Russell 1000		4.2	13.7	21.0	24.5	21.0	14.8	--	--	--	16.3
Excess		0.0	0.5	0.7	0.5	0.7	0.2	--	--	--	0.2
DE Shaw Commingled Fund	192,880,873	6.9	17.6	20.3	27.2	20.3	13.5	15.8	--	--	13.5
Russell 1000		4.2	13.7	21.0	24.5	21.0	14.8	15.6	--	--	13.0
Excess		2.7	3.9	-0.7	2.7	-0.7	-1.3	0.2	--	--	0.5
Acadian US MGD V-SL	191,477,933	3.7	9.4	3.0	14.3	3.0	--	--	--	--	14.5
Russell 1000		4.2	13.7	21.0	24.5	21.0	--	--	--	--	26.4
Excess		-0.6	-4.3	-18.0	-10.2	-18.0	--	--	--	--	-11.9
Panagora Defuseq -SL	199,107,070	2.4	10.0	5.2	15.1	5.2	--	--	--	--	17.5
Russell 1000		4.2	13.7	21.0	24.5	21.0	--	--	--	--	26.4
Excess		-1.8	-3.7	-15.8	-9.4	-15.8	--	--	--	--	-8.9
Domestic Equity Overlay	26,658,300	8.6	30.9	--	34.3	--	--	--	--	--	56.7
ICE BofAML US 3-Month Treasury Bill		0.0	0.0	--	0.1	--	--	--	--	--	0.1
Excess		8.5	30.8	--	34.3	--	--	--	--	--	56.6
Small Cap Equity	94,367,708	6.3	27.5	2.6	30.3	2.6	3.0	7.1	4.4	8.1	6.2
Russell 2000		8.7	31.4	20.0	37.9	20.0	10.2	13.3	9.3	11.2	8.5
Excess		-2.4	-3.9	-17.4	-7.6	-17.4	-7.3	-6.2	-4.9	-3.1	-2.3



# San Mateo County Composite Return Summary

December 31, 2020



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	94,367,708	6.3	27.5	2.6	30.3	2.6	3.0	--	--	--	7.8
Russell 2000		8.7	31.4	20.0	37.9	20.0	10.2	--	--	--	12.8
Excess		-2.4	-3.9	-17.4	-7.6	-17.4	-7.3	--	--	--	-5.0
International Equity	1,037,932,624	4.5	16.3	13.6	24.1	13.6	6.4	9.6	5.9	5.7	6.0
SamCERA Custom Hedge Intl		4.7	15.1	9.5	21.4	9.5	4.4	8.7	4.8	4.9	5.4
Excess		-0.2	1.2	4.1	2.7	4.1	2.0	0.9	1.0	0.8	0.6
Baillie Gifford	358,270,630	5.1	17.3	34.1	32.8	34.1	14.2	14.6	10.1	--	11.3
MSCI ACWI ex USA Growth		5.3	14.0	22.6	25.6	22.6	10.4	12.4	8.2	--	--
Excess		-0.2	3.4	11.5	7.2	11.5	3.8	2.2	1.9	--	--
Blackrock MSCI ACWI ex US IMI	334,258,481	5.6	17.3	--	25.2	--	--	--	--	--	21.0
MS AC WldxUS IMI Nt		5.6	17.2	--	25.2	--	--	--	--	--	21.4
Excess		0.0	0.1	--	-0.0	--	--	--	--	--	-0.3
Mondrian Investment Partners	329,618,427	5.0	19.3	0.0	23.6	0.0	1.6	6.2	3.3	4.4	5.2
MSCI ACWI xUSA Value		5.6	20.5	-0.2	23.4	-0.2	0.2	6.3	2.3	3.4	4.9
Excess		-0.6	-1.2	0.2	0.1	0.2	1.4	-0.2	1.0	1.0	0.3
Currency Hedge Futures	363,156,498	2.0	4.0	--	7.4	--	--	--	--	--	8.8
ICE BofAML US 3-Month Treasury Bill		0.0	0.0	--	0.1	--	--	--	--	--	0.1
Excess		2.0	4.0	--	7.3	--	--	--	--	--	8.8
Currency Hedge Futures Offsets	363,156,498	0.0	-0.0	--	0.0	--	--	--	--	--	0.0
ICE BofAML US 3-Month Treasury Bill		0.0	0.0	--	0.1	--	--	--	--	--	0.1
Excess		-0.0	-0.0	--	-0.1	--	--	--	--	--	-0.1
International Equity Overlay	15,785,087	2.5	12.1	--	24.7	--	--	--	--	--	39.9
ICE BofAML US 3-Month Treasury Bill		0.0	0.0	--	0.1	--	--	--	--	--	0.1
Excess		2.5	12.0	--	24.6	--	--	--	--	--	39.9
Fixed Income	1,636,944,882	0.7	2.4	7.0	4.8	7.0	5.1	5.8	4.7	5.0	5.6
Samcera Fixed Income Benchmark		0.5	2.0	7.0	3.7	7.0	5.6	5.4	4.5	4.2	5.2
Excess		0.2	0.4	-0.0	1.1	-0.0	-0.5	0.4	0.2	0.8	0.4



# San Mateo County Composite Return Summary

December 31, 2020



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	1,082,325,244	0.4	1.2	7.6	2.6	7.6	5.1	5.0	4.6	4.6	5.4
BBG Barclays US Aggregate		0.1	0.7	7.5	1.3	7.5	5.3	4.4	4.1	3.8	5.1
Excess		0.3	0.5	0.1	1.3	0.1	-0.2	0.5	0.5	0.7	0.3
FIAM B Core Bond	271,724,105	0.5	1.4	10.0	2.9	10.0	6.4	--	--	--	5.4
BBG Barclays US Aggregate		0.1	0.7	7.5	1.3	7.5	5.3	--	--	--	4.2
Excess		0.3	0.7	2.5	1.6	2.5	1.0	--	--	--	1.2
Western Total Return	199,438,034	1.1	4.2	6.6	6.7	6.6	4.4	5.7	--	--	5.1
BBG Barclays US Aggregate		0.1	0.7	7.5	1.3	7.5	5.3	4.4	--	--	4.1
Excess		1.0	3.6	-0.9	5.4	-0.9	-1.0	1.3	--	--	1.0
Blackrock Inter Gov	120,272,410	0.0	-0.2	6.0	0.1	6.0	4.3	--	--	--	3.5
BBG Barclays US Aggregate		0.1	0.7	7.5	1.3	7.5	5.3	--	--	--	5.0
Excess		-0.1	-0.9	-1.5	-1.2	-1.5	-1.1	--	--	--	-1.4
DoubleLine	231,202,223	0.4	0.1	--	1.9	--	--	--	--	--	5.5
BBG Barclays US Aggregate		0.1	0.7	--	1.3	--	--	--	--	--	3.6
Excess		0.2	-0.6	--	0.6	--	--	--	--	--	1.9
NISA Core Bond	215,702,605	0.1	0.7	--	1.4	--	--	--	--	--	3.0
BBG Barclays US Aggregate		0.1	0.7	--	1.3	--	--	--	--	--	2.4
Excess		-0.0	0.0	--	0.1	--	--	--	--	--	0.6
Core Fixed Income Overlay	43,985,867	0.2	-0.6	--	-0.9	--	--	--	--	--	-0.3
ICE BofAML US 3-Month Treasury Bill		0.0	0.0	--	0.1	--	--	--	--	--	0.1
Excess		0.2	-0.7	--	-1.0	--	--	--	--	--	-0.4
Opportunistic Credit	554,619,638	1.2	5.0	6.0	9.5	6.0	5.2	7.7	6.1	7.3	8.5
BB Barc BA Intermediate HY Ind		1.3	4.9	7.7	8.7	7.7	6.6	7.6	5.9	6.6	7.4
Excess		-0.1	0.1	-1.8	0.7	-1.8	-1.4	0.1	0.2	0.7	1.1
Pimco Private Income	40,863,927	0.0	5.2	7.9	12.8	7.9	--	--	--	--	6.2
BB Barc BA Intermediate HY Ind		1.3	4.9	7.7	8.7	7.7	--	--	--	--	8.6
Excess		-1.3	0.3	0.2	4.1	0.2	--	--	--	--	-2.3



**San Mateo County**  
**Composite Return Summary**  
 December 31, 2020



<b>Composite Returns (NET)</b>	<b>Market Value (\$)</b>	<b>1 Mth.</b>	<b>3 Mth.</b>	<b>YTD</b>	<b>FYTD</b>	<b>1 Yr.</b>	<b>3 Yr.</b>	<b>5 Yr.</b>	<b>7 Yr.</b>	<b>10 Yr.</b>	<b>ITD</b>
AG CREDIT SOL FU LP	12,098,241	0.0	7.3	21.5	14.4	21.5	--	--	--	--	21.5
BB Barc BA Intermediate HY Ind		1.3	4.9	7.7	8.7	7.7	--	--	--	--	7.7
Excess		-1.3	2.4	13.8	5.7	13.8	--	--	--	--	13.8
AG CSF ANX DISLOC FD	16,130,037	0.0	4.6	--	10.8	--	--	--	--	--	10.8
BB Barc BA Intermediate HY Ind		1.3	4.9	--	8.7	--	--	--	--	--	19.8
Excess		-1.3	-0.4	--	2.0	--	--	--	--	--	-9.0
AG Opportunistic Whole Loan	2,273,002	0.0	7.3	-9.0	17.2	-9.0	12.6	11.4	--	--	8.3
BB Barc BA Intermediate HY Ind		1.3	4.9	7.7	8.7	7.7	6.6	7.6	--	--	5.7
Excess		-1.3	2.3	-16.7	8.4	-16.7	6.0	3.8	--	--	2.7
Angelo Gordon	34,271	10.8	10.8	51.4	76.6	51.4	32.8	24.8	20.5	--	19.1
BB Barc BA Intermediate HY Ind		1.3	4.9	7.7	8.7	7.7	6.6	7.6	5.9	--	5.9
Excess		9.5	5.9	43.7	67.9	43.7	26.2	17.2	14.6	--	13.3
Blackrock Direct Lending Feede	9,275,073	0.0	4.4	2.0	10.3	2.0	--	--	--	--	1.3
BB Barc BA Intermediate HY Ind		1.3	4.9	7.7	8.7	7.7	--	--	--	--	9.3
Excess		-1.3	-0.5	-5.7	1.5	-5.7	--	--	--	--	-8.0
Beach Point Select Fund	84,338,009	2.5	8.3	12.4	15.6	12.4	7.8	9.4	--	--	8.6
BB Barc BA Intermediate HY Ind		1.3	4.9	7.7	8.7	7.7	6.6	7.6	--	--	6.0
Excess		1.2	3.4	4.7	6.8	4.7	1.2	1.8	--	--	2.5
Brigade Cap Mngmt	97,013,974	2.5	8.4	7.1	15.1	7.1	3.9	8.2	4.4	5.9	6.1
BB Barc BA Intermediate HY Ind		1.3	4.9	7.7	8.7	7.7	6.6	7.6	5.9	6.6	6.9
Excess		1.3	3.5	-0.6	6.3	-0.6	-2.7	0.7	-1.5	-0.8	-0.7
White Oak YSF V	33,713,789	0.0	--	--	--	--	--	--	--	--	0.0
BB Barc BA Intermediate HY Ind		1.3	--	--	--	--	--	--	--	--	1.3
Excess		-1.3	--	--	--	--	--	--	--	--	-1.3
White Oak Yield Spec	34,191,325	-0.0	1.5	5.7	4.2	5.7	6.8	--	--	--	--
BB Barc BA Intermediate HY Ind		1.3	4.9	7.7	8.7	7.7	6.6	--	--	--	6.5
Excess		-1.3	-3.4	-2.0	-4.5	-2.0	0.2	--	--	--	--



# San Mateo County Composite Return Summary

December 31, 2020



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
PIMCO Div. Income Fund	133,909,807	0.8	4.2	6.1	7.0	6.1	5.8	--	--	--	5.6
BB Barc BA Intermediate HY Ind		1.3	4.9	7.7	8.7	7.7	6.6	--	--	--	6.1
Excess		-0.5	-0.7	-1.7	-1.7	-1.7	-0.8	--	--	--	-0.5
TCP Direct Lending VIII	32,062,830	0.9	2.5	6.0	5.6	6.0	5.2	--	--	--	--
BB Barc BA Intermediate HY Ind		1.3	4.9	7.7	8.7	7.7	6.6	--	--	--	6.9
Excess		-0.4	-2.4	-1.7	-3.1	-1.7	-1.4	--	--	--	--
Franklin Templeton	58,715,354	0.6	0.7	-7.4	0.3	-7.4	-2.2	0.9	0.2	2.3	2.3
BB Barclays Multiverse Index		1.4	3.5	9.0	6.3	9.0	4.8	5.0	3.1	3.0	3.0
Excess		-0.8	-2.8	-16.4	-6.0	-16.4	-7.0	-4.1	-2.9	-0.7	-0.7
Risk Parity	3,634,806	0.0	0.0	-8.5	-0.0	-8.5	1.5	6.0	5.0	--	5.2
Samcera Risk Parity Benchmark		3.1	9.7	13.9	16.2	13.9	8.6	10.1	8.7	--	9.2
Excess		-3.1	-9.7	-22.4	-16.2	-22.4	-7.1	-4.1	-3.7	--	-4.0
Panagora	3,634,806	0.0	0.0	-5.2	0.0	-5.2	2.3	6.6	--	--	5.0
Samcera Risk Parity Benchmark		3.1	9.7	13.9	16.2	13.9	8.6	10.1	--	--	8.5
Excess		-3.1	-9.7	-19.1	-16.2	-19.1	-6.3	-3.5	--	--	-3.5
Alternatives	729,754,494	0.1	17.0	30.9	34.9	30.9	12.8	10.7	9.0	7.7	0.2
Samcera Alternatives Benchmark		-1.5	5.4	11.9	17.5	11.9	9.3	10.8	8.2	8.8	8.1
Excess		1.6	11.6	18.9	17.4	18.9	3.5	-0.1	0.9	-1.2	-7.9
Private Equity	417,632,964	-1.8	26.8	68.6	60.2	68.6	32.2	23.9	21.3	-0.3	-8.5
Samcera PE Benchmark		-3.4	9.7	18.0	34.4	18.0	12.2	15.4	13.6	15.4	16.0
Excess		1.5	17.1	50.6	25.8	50.6	20.0	8.5	7.7	-15.7	-24.5
Absolute Return	312,121,530	2.8	2.9	-7.8	5.1	-7.8	-7.6	-3.6	0.2	--	1.0
Samcera LIBOR + 4%		0.3	1.0	4.7	2.0	4.7	5.7	5.3	5.0	--	4.8
Excess		2.5	1.8	-12.4	3.0	-12.4	-13.3	-8.9	-4.8	--	-3.8
AQR Delta XN	5,045,643	0.0	0.0	-26.8	0.2	-26.8	-18.0	-10.0	-4.6	--	-2.6
Samcera LIBOR + 4%		0.3	1.0	4.7	2.0	4.7	5.7	5.3	5.0	--	4.8
Excess		-0.3	-1.0	-31.5	-1.9	-31.5	-23.7	-15.3	-9.6	--	-7.3



# San Mateo County Composite Return Summary

December 31, 2020



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Aberdeen Std GARS	81,329,076	1.6	3.6	8.1	7.8	8.1	3.6	2.5	--	--	2.3
Samcera LIBOR + 4%		0.3	1.0	4.7	2.0	4.7	5.7	5.3	--	--	5.3
Excess		1.2	2.6	3.5	5.7	3.5	-2.0	-2.8	--	--	-2.9
Graham Global Investment	77,797,966	2.6	4.6	--	7.4	--	--	--	--	--	3.7
Samcera LIBOR +4%		0.3	1.0	--	2.1	--	--	--	--	--	4.2
Excess		2.3	3.6	--	5.3	--	--	--	--	--	-0.4
PIMCO MAARS Fund L.P.	70,566,146	3.4	0.5	--	0.4	--	--	--	--	--	2.3
Samcera LIBOR +4%		0.3	1.0	--	2.1	--	--	--	--	--	3.2
Excess		3.0	-0.5	--	-1.6	--	--	--	--	--	-0.9
Acadian MAAR Fund LLC	45,822,221	3.1	1.8	--	--	--	--	--	--	--	1.8
Samcera LIBOR +4%		0.3	1.0	--	--	--	--	--	--	--	1.0
Excess		2.8	0.8	--	--	--	--	--	--	--	0.8
CFM SYS Global Macro Fund	31,560,477	5.6	5.2	--	--	--	--	--	--	--	5.2
Samcera LIBOR +4%		0.3	1.0	--	--	--	--	--	--	--	1.0
Excess		5.3	4.2	--	--	--	--	--	--	--	4.2
Inflation Hedge	754,450,560	1.1	3.5	-7.2	5.2	-7.2	-0.3	--	--	--	3.6
SamCERA Inflation Hedge Index		0.5	2.9	-2.3	5.7	-2.3	2.2	--	--	--	4.9
Excess		0.6	0.6	-4.9	-0.5	-4.9	-2.6	--	--	--	-1.3
Real Estate	426,253,039	0.0	0.2	0.5	0.3	0.5	5.1	--	--	--	6.3
Samcera NCREIF ODCE EW (gross)		0.0	0.0	0.2	0.6	0.2	4.8	--	--	--	6.1
Excess		0.0	0.2	0.3	-0.2	0.3	0.3	--	--	--	0.2
Invesco Core Real Estate	260,402,233	0.0	-0.4	-1.3	0.5	-1.3	4.6	6.1	7.9	9.3	7.2
Samcera NCREIF ODCE EW (gross)		0.0	0.0	0.2	0.6	0.2	4.8	6.3	8.4	9.9	7.2
Excess		0.0	-0.4	-1.5	-0.1	-1.5	-0.2	-0.1	-0.5	-0.6	-0.1
Invesco US Val IV	14,146,677	0.0	0.9	1.5	-3.7	1.5	8.3	11.3	--	--	10.1
Samcera NCREIF ODCE EW (gross)		0.0	0.0	0.2	0.6	0.2	4.8	6.3	--	--	6.9
Excess		0.0	0.9	1.3	-4.2	1.3	3.6	5.0	--	--	3.2



# San Mateo County Composite Return Summary

December 31, 2020



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
PGIM Real Estate US Debt Fund	84,093,265	0.0	1.3	4.7	1.3	4.7	5.3	--	--	--	4.6
Samcera NCREIF ODCE EW (gross)		0.0	0.0	0.2	0.6	0.2	4.8	--	--	--	5.3
Excess		0.0	1.3	4.5	0.7	4.5	0.6	--	--	--	-0.7
Invesco US VAL V	16,671,772	0.0	-0.6	1.0	-4.4	1.0	--	--	--	--	1.3
Samcera NCREIF ODCE EW (gross)		0.0	0.0	0.2	0.6	0.2	--	--	--	--	--
Excess		0.0	-0.6	0.8	-5.0	0.8	--	--	--	--	--
Harrison Street Core Property	50,939,092	0.0	1.1	1.9	0.8	1.9	--	--	--	--	1.9
Samcera NCREIF ODCE EW (gross)		0.0	0.0	0.2	0.6	0.2	--	--	--	--	0.2
Excess		0.0	1.1	1.7	0.2	1.7	--	--	--	--	1.7
Public Real Assets	227,469,314	3.8	11.5	-15.8	15.9	-15.8	-5.5	--	--	--	--
SamCera Liquid Real Asset Inde		3.7	11.7	-4.2	16.3	-4.2	0.1	--	--	--	5.4
Excess		0.0	-0.2	-11.6	-0.4	-11.6	-5.7	--	--	--	--
SSGA CST REAL ASSET NL	227,469,314	3.8	11.5	-5.1	15.9	-5.1	-0.5	--	--	--	--
SamCera Liquid Real Asset Inde		3.7	11.7	-4.2	16.3	-4.2	0.1	--	--	--	4.0
Excess		0.0	-0.2	-0.9	-0.4	-0.9	-0.6	--	--	--	--
Private Real Assets	100,728,207	-0.2	1.4	0.3	5.7	0.3	-1.5	--	--	--	6.1
SamCERA Private Real Asset Idx		-2.0	1.3	-4.6	9.1	-4.6	0.5	--	--	--	4.3
Excess		1.8	0.1	4.9	-3.4	4.9	-2.0	--	--	--	1.8
Cash Overlay	7,909,155	0.0	0.0	--	0.1	--	--	--	--	--	0.2
ICE BofAML US 3-Month Treasury Bill		0.0	0.0	--	0.1	--	--	--	--	--	0.1
Excess		0.0	0.0	--	0.1	--	--	--	--	--	0.1
General Account	48,147,634	0.0	0.0	0.5	-0.0	0.5	1.6	1.3	1.0	0.8	1.9
County Treasury Pool	122,782,248	0.0	0.6	1.5	0.8	1.5	1.8	1.4	1.2	1.1	2.6
Currency Hedge Cash Overlay	33,725,797	0.0	0.0	--	0.1	--	--	--	--	--	0.1



# San Mateo County Composite Return Summary

December 31, 2020



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
San Mateo County Overlay	5,517,674,730	2.2	9.3	9.6	15.1	9.6	6.8	8.6	7.1	7.9	6.9
Samcera Total Plan Benchmark		1.9	7.6	9.0	13.2	9.0	7.2	9.2	7.3	8.2	7.2
Excess		0.3	1.7	0.6	1.9	0.6	-0.4	-0.5	-0.3	-0.4	-0.3

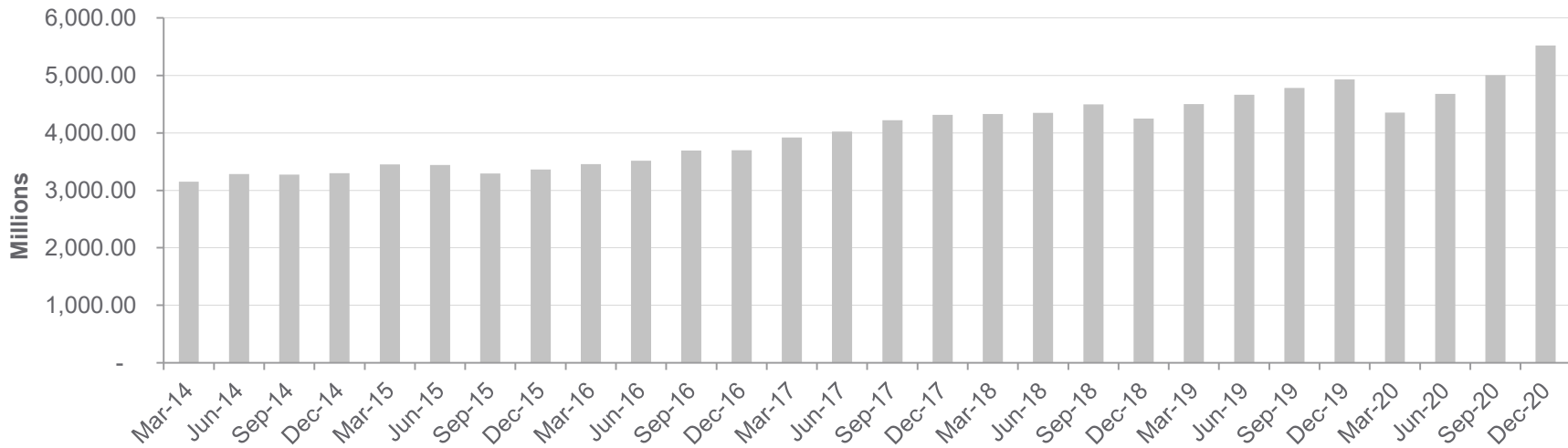




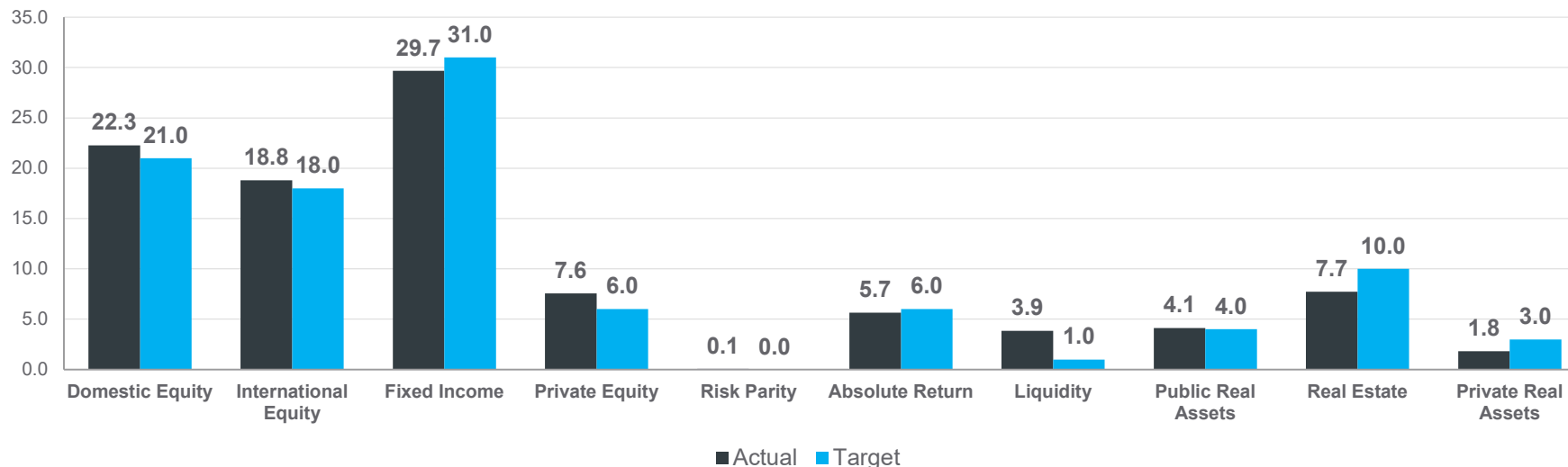
**Record of Asset Growth**

	Three Months	One Year
<b>TOTAL FUND</b>		
Beginning Market Value	5,002,987,296	4,926,505,492
Contributions	116,185,910	806,237,054
Withdrawals	-63,335,889	-772,397,797
Income Received	16,253,395	64,552,874
Gain/Loss	446,171,786	411,872,451
Ending Market Value	5,517,674,730	5,517,674,730

**Net Asset Values Over Time (\$000)**

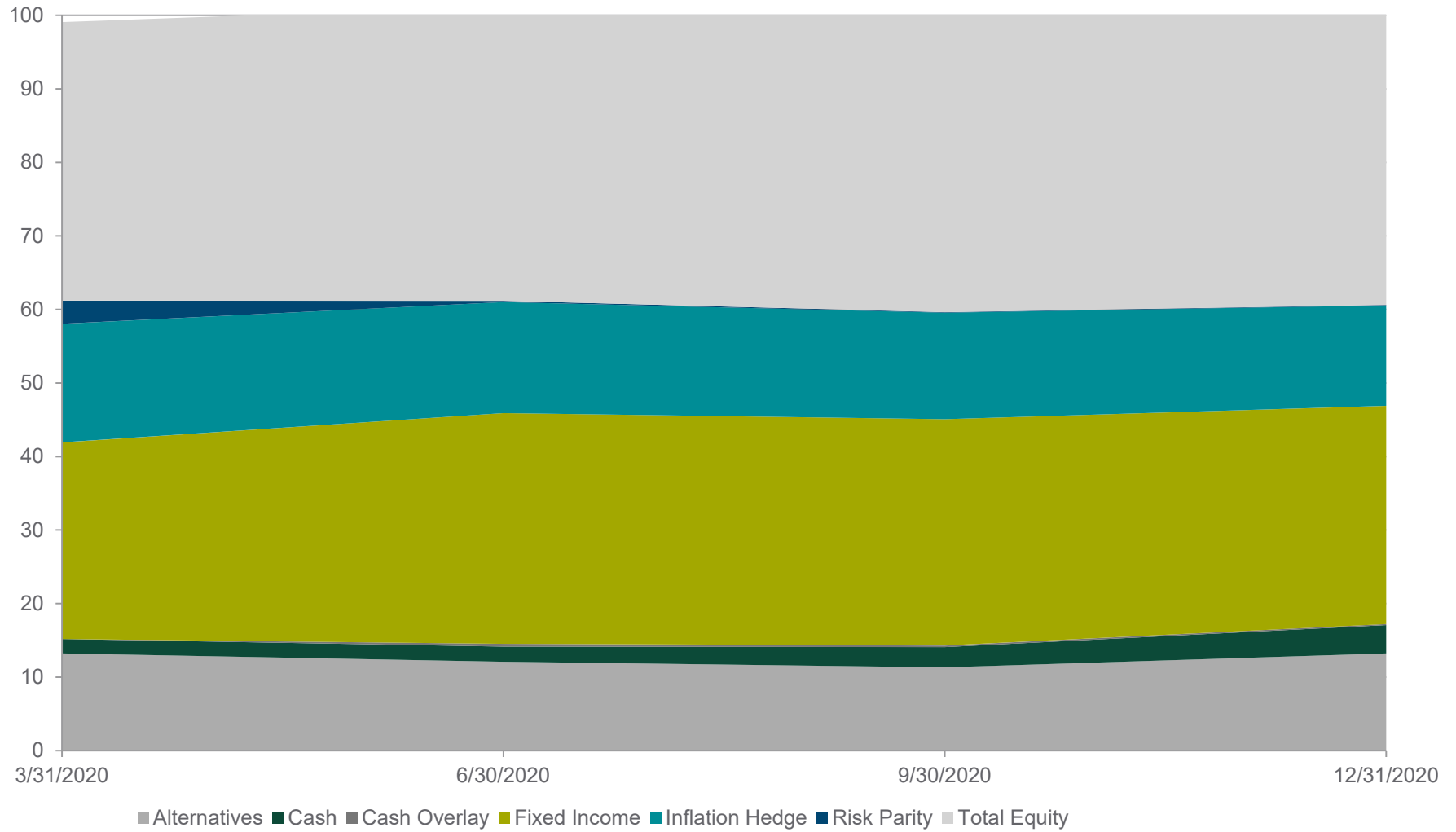


Actual vs Target Weights

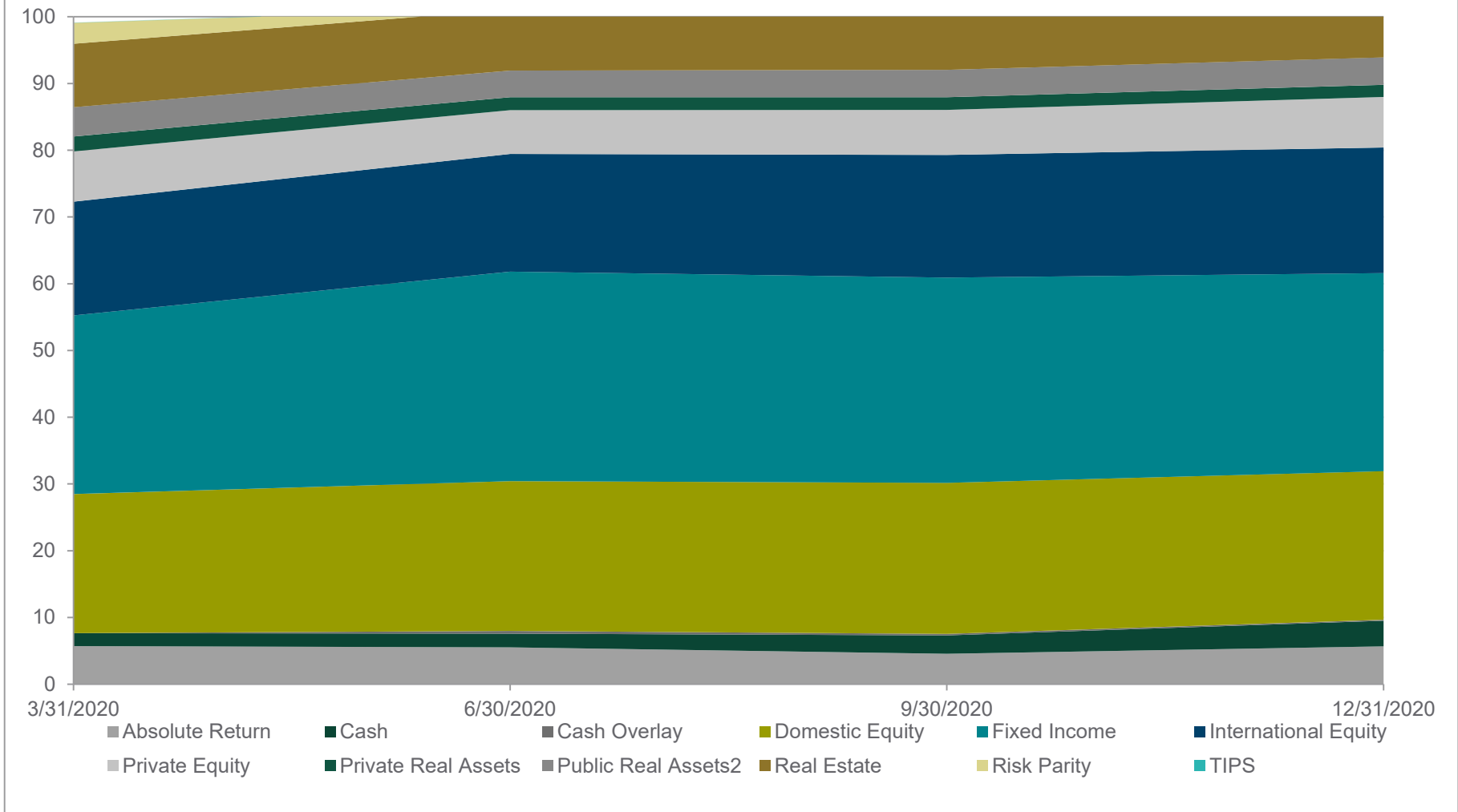


	Min	Actual	Target	Deviation	Max
<b>Domestic Equity</b>	19.0	22.3	21.0	1.3	23.0
<b>International Equity</b>	16.0	18.8	18.0	0.8	20.0
<b>Fixed Income</b>	29.0	29.7	31.0	-1.3	33.0
<b>Private Equity</b>	4.0	7.6	6.0	1.6	8.0
<b>Risk Parity</b>	0.0	0.1	0.0	0.1	0.0
<b>Absolute Return</b>	4.0	5.7	6.0	-0.3	8.0
<b>Liquidity</b>	0.0	3.9	1.0	2.9	2.0
<b>Public Real Assets</b>	2.0	4.1	4.0	0.1	6.0
<b>Real Estate</b>	8.0	7.7	10.0	-2.3	12.0
<b>Private Real Assets</b>	1.0	1.8	3.0	-1.2	5.0

Asset Allocation over Time



### Sub-Asset Class Allocation Over Time



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**PERSPECTIVES  
THAT DRIVE  
ENTERPRISE  
SUCCESS**

DECEMBER 2020  
Capital Markets Update

# Market commentary

## U.S. ECONOMICS

- Nonfarm payrolls shed 140,000 jobs in December, a greater loss than the median estimate of a gain of 50,000 jobs. The unexpected drop in employment was driven by a surge in Covid-19 cases which resulted in a 498,000 plunge in hospitality sector employment. On a brighter note, the number of permanent job losers declined by 348,000 over the month, the biggest monthly decrease since December 2010.
- Consumer confidence indicators ticked up in December as people became more optimistic with the rollout of vaccines across the world. The University of Michigan's Consumer Sentiment Index rose from 76.9 to 80.7, shy of the consensus estimate of 81.3.
- The ISM Non-Manufacturing PMI expanded in December to 57.2, from 55.9 the month before. The services sector saw its strongest growth in three months as new orders and inventories rose faster than in the month before. Price pressures eased and weighed on the print as shutdowns continued to negatively impact companies.

## U.S. EQUITIES

- The S&P 500 Price Index delivered a total return of +3.8% in December. The Index closed the month at a record high level of 3,756.
- The CBOE VIX Index of implied volatility ticked up from 20.6 to 22.8, indicating an increase in expectations for 30-day forward S&P 500 Index volatility.
- For the third consecutive calendar year, the S&P 500 Index (+18.4%) delivered a total return greater than both the MSCI EM (+18.3%) and MSCI EAFE (+7.8%) indices, in U.S. dollar terms.

## U.S. FIXED INCOME

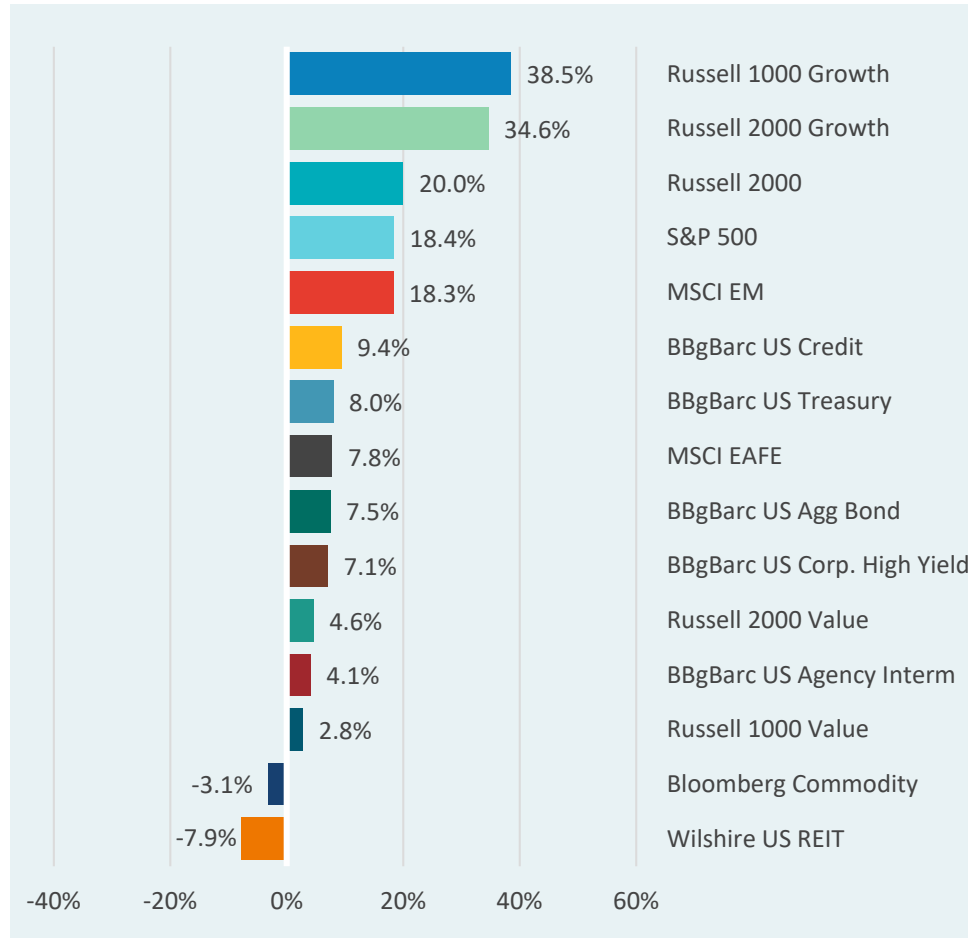
- President Trump signed into law a \$900 billion pandemic relief package which was attached to \$1.4 trillion in funding for government operations through the end of the fiscal year. The major items included in the stimulus bill were small business assistance, direct payments to individuals, additional unemployment benefits, and education and healthcare funding.
- The Federal Open Market Committee (FOMC) held interest rates near zero and strengthened its commitment to maintain a \$120 billion monthly pace for bond purchases. From December 15th-16th meeting minutes, Federal Reserve officials unanimously backed holding the pace of asset purchases steady. A couple participants indicated that they were open to weighting purchases of Treasury securities toward longer-dated maturities.
- The FOMC indicated that the Federal Reserve will do what it can to give the markets plenty of notice before it decides to scale back its bond purchases in hopes of preventing unnecessary disruption.

## INTERNATIONAL MARKETS

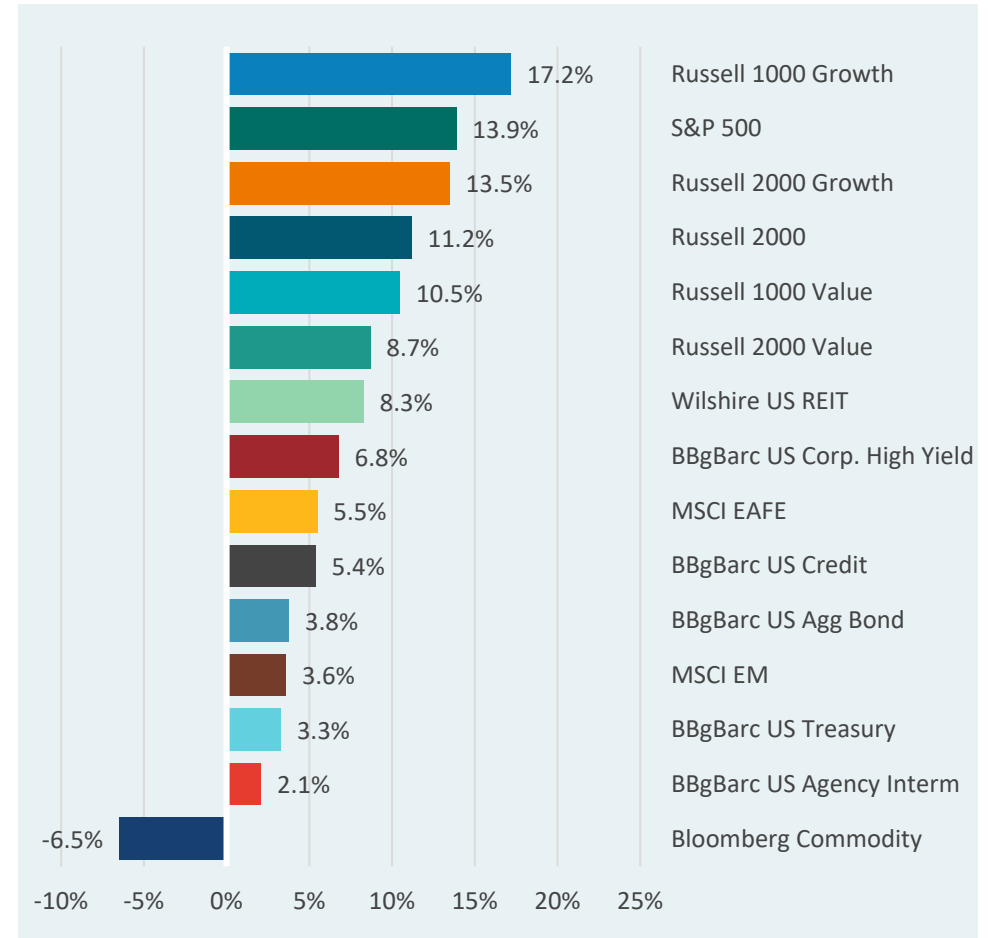
- Seven different vaccines have been made available to the public globally. Roughly 29 million doses have been administered worldwide. Some countries may have to wait until 2022 before supplies are available.
- The IHS Markit Eurozone Composite PMI rose from 45.3 to 49.1 in December. Services sectors continued to present a drag on economic output while manufacturing sector activity expanded.
- Emerging market currencies likely benefited from the global risk-on sentiment, and the J.P. Morgan EMCI returned +2.8%.

# Major asset class returns

ONE YEAR ENDING DECEMBER



TEN YEARS ENDING DECEMBER



\*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 12/31/20

Source: Morningstar, as of 12/31/20



# U.S. large cap equities

- The S&P 500 Index ended the year strong and returned +3.8% over the month of December. The index managed a calendar year return of +18.4% for 2020. Stocks were helped higher by another stimulus bill which was signed into law, and the possibility of the democrats winning a slim majority in the Senate was received positively by markets.
- All 11 major S&P 500 sectors posted a positive return for the second consecutive month in December. The Financial (+6.3%), and Information Technology (+5.7%) sectors outperformed the overall index while Utilities (+0.7%) posted the poorest performance.
- In December, bottom-up earnings-per-share estimates increased 2.3%, marking the fourth quarter out of the last 40 that prices and EPS estimates increased in unison. Companies benefited this quarter from positive news around the start of vaccine distribution and steadily easy monetary policy.
- The trailing 12-month price-to-earnings (P/E) ratio for the S&P 500 rose to 29.9 from 28.3 a month ago, well above the 5-year average P/E ratio of 21.0.

## S&P 500 PRICE INDEX



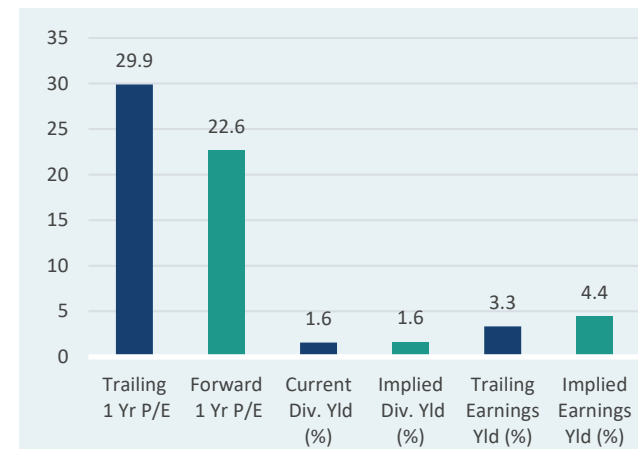
Source: Bloomberg, as of 12/31/20

## IMPLIED VOLATILITY (VIX INDEX)



Source: CBOE, as of 12/31/20

## S&P 500 VALUATION SNAPSHOT

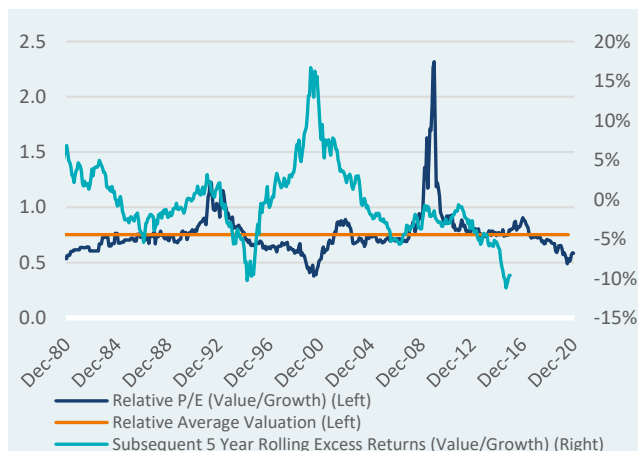


Source: Bloomberg, as of 12/31/20

# Domestic equity size and style

- Growth stocks (Russell 3000 Growth +4.9%) beat value stocks (Russell 3000 Value +4.1%) for the first time in four months. The growth style index was likely helped higher by strong performance from information technology companies.
- In December, growth indexes outperformed value indexes by 1.4% within the small-cap stock universe, and 0.8% within the large-cap universe. Large-cap growth has outperformed large-cap value by 35.7% over the year, and growth has outperformed value by 30.0% within the small-cap universe.
- Small-cap equities (Russell 2000 Index +8.7%) continued to outperform large-cap equities (Russell 1000 Index +4.2%). December marked the fourth consecutive month that small-caps beat out their large-cap counterparts, a pattern associated with higher expectations surrounding economic growth.
- The “small” factor (+7.8%) was the top performer among MSCI’s collection of long-only factor indices in December. The strong performance of Financials, which are weighted more heavily in small-cap indices, supported the outperformance of the small factor.

**VALUE VS. GROWTH RELATIVE VALUATIONS**



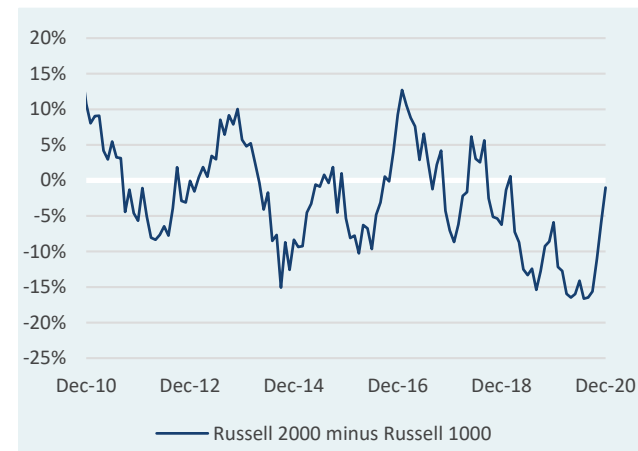
Source: FTSE, Bloomberg, as of 12/31/20

**VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE**



Source: FTSE, Bloomberg, as of 12/31/20

**SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE**

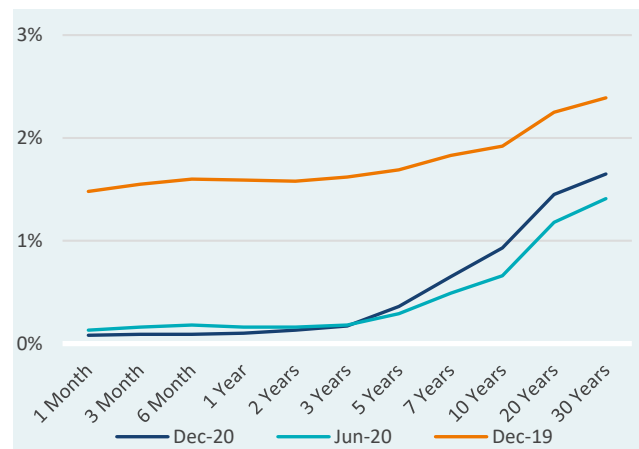


Source: FTSE, Bloomberg, as of 12/31/20

# Fixed income

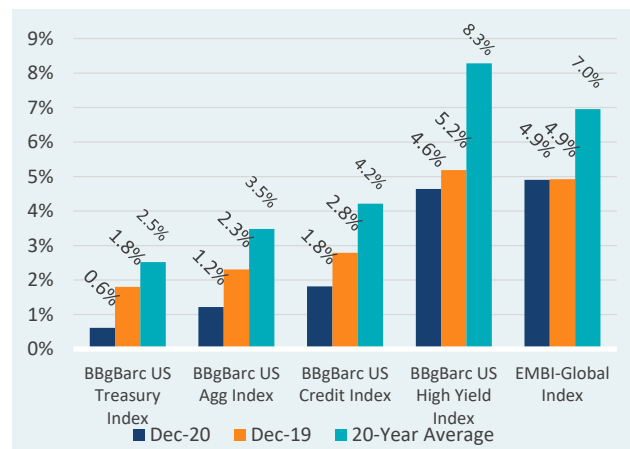
- The Treasury yield curve continued to steepen, as the 30-year U.S. Treasury yield rose seven basis points to 1.64% while the 2-year yield fell three basis points closer to zero and ended the month at 0.12%. This led shorter-duration security indexes (BBgBarc US Treasury 1-3 Yr +0.1%) to outperform longer-duration security indexes (BBgBarc US Treasury Long -1.2%).
- The Bloomberg Barclays US High Yield Index yield fell 41 basis points to 4.64%. Default rates in high yield bonds moved to above-average levels and some analysts believe defaults in the space may reach double digits in the first quarter of 2021.
- The ten-year breakeven inflation rate – a measure of priced inflation expectations – rose again this month and increased 20 basis points to 2.0%. The Bloomberg Barclays US TIPS Index returned +1.1% over the month and ended the year up +11.0%.
- E.U. leaders agreed on a historic €1.8 trillion (\$2.2 trillion) long-term budget to finance operations from 2021 through 2027. Included in the package was €750 billion (\$915 billion) for pandemic relief which will be financed by the issuance of joint debt.

**U.S. TREASURY YIELD CURVE**



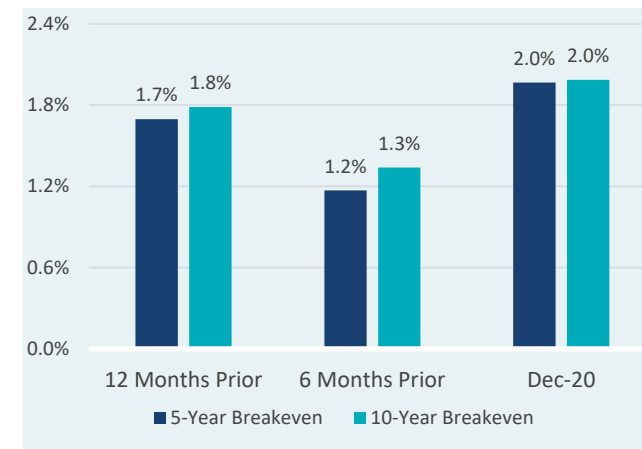
Source: Bloomberg, as of 12/31/20

**NOMINAL YIELDS**



Source: Morningstar, as of 12/31/20

**BREAKEVEN INFLATION RATES**

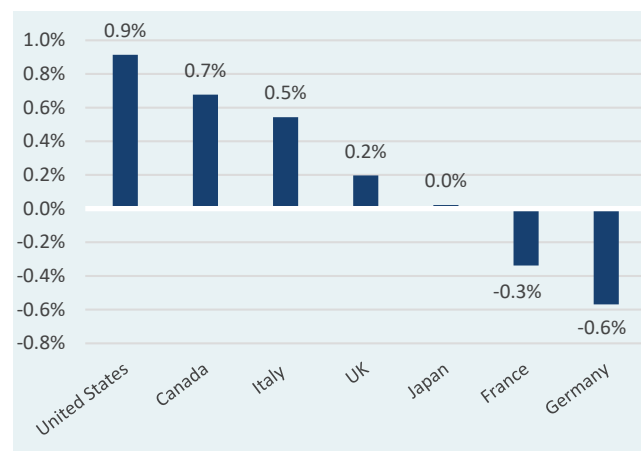


Source: Bloomberg, as of 12/31/20

# Global markets

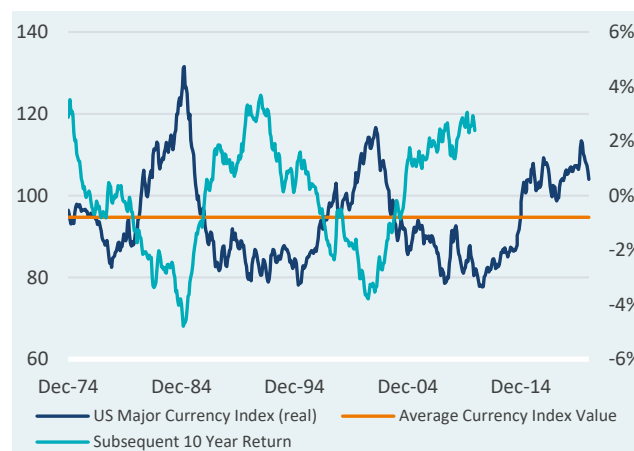
- Global equities (MSCI ACWI +4.6%) extended gains around the world on vaccine optimism. International developed equity (MSCI EAFE +4.6%) returned in-line with the global index, in USD terms. The largest weighted developed country, Japan (MSCI Japan +4.1%) and the third largest, France (MSCI France +2.8%) both weighed on performance for the overall index.
- The pound rose +2.4% against the U.S. dollar in December, resulting in currency tailwinds for U.S. investors in U.K. equities. The MSCI United Kingdom Index, unhedged to U.S. dollars, returned +5.5%, while the hedged index returned +3.1%.
- Emerging market currency appreciation relative to the U.S. dollar helped support outperformance of emerging market equities (MSCI EM +7.4%) over global equities. Latin American countries (MSCI EM Latin American +11.9%) outpaced Asian countries (MSCI EM Asia +7.1%) over the month in USD-terms.
- Unhedged U.S. investors (MSCI EAFE +4.7%) outperformed USD-hedged investors in the MSCI EAFE Index (+2.6%) as the U.S. dollar weakened 2.1% against the embedded currency portfolio of the MSCI EAFE Index.

## GLOBAL SOVEREIGN 10-YEAR YIELDS



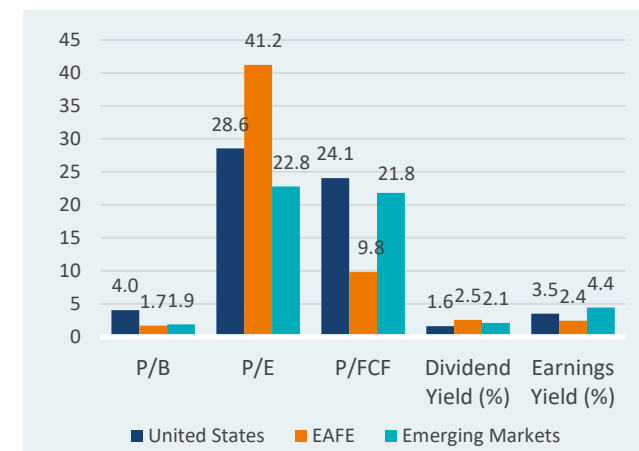
Source: Bloomberg, as of 12/31/20

## U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 12/31/20

## MSCI VALUATION METRICS (3-MONTH AVG)



Source: Bloomberg, as of 12/31/20

# Commodities

- The Bloomberg Commodity Index rose +5.0% in December. Agriculture (+10.4%) and precious metals (+8.8%) helped the overall index higher. Growth-sensitive commodities such as energy (-0.7%) and industrial metals (+0.3%) were the laggards within the overall commodities complex.
- The Bloomberg Agriculture Index continued to be one of the top performing components of the commodities complex and advanced +10.4% over the month. The performance of grains (11.9%), and softs (+6.1%), helped the overall agriculture index higher.

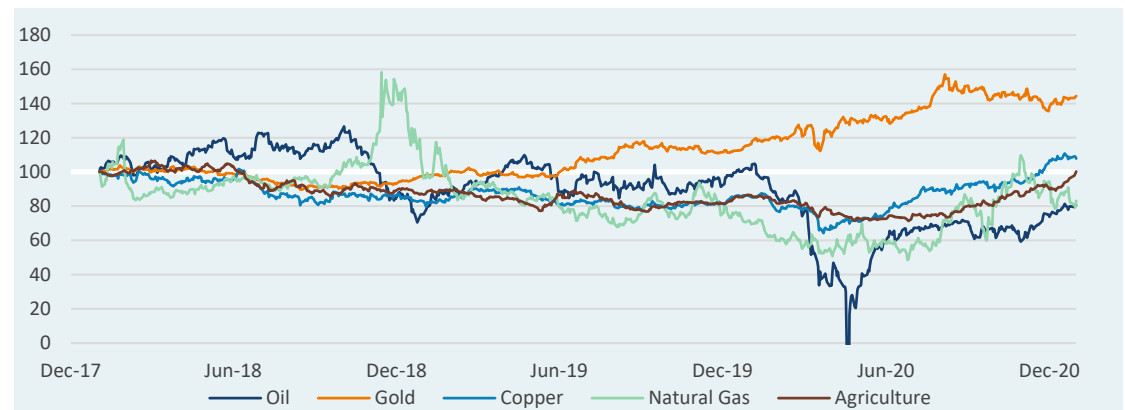
- The Bloomberg Precious Metals Sub-Index advanced +8.8% over the month, making it the second best performing sub-index in December. Silver climbed +16.9% while gold rallied +6.4% and closed the month at \$1,898 per ounce.
- The Bloomberg Petroleum Sub-Index was one of the top performing sub-indexes and advanced +7.8% over the month of December. Petroleum was supported by crude oil prices which gained +6.5% over the month to post-pandemic highs of \$48.63 per barrel.

## INDEX AND SECTOR PERFORMANCE

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	5.0	10.2	(3.1)	(3.1)	(2.5)	1.0	(6.5)
Bloomberg Agriculture	10.4	21.4	16.5	16.5	1.9	(0.8)	(5.6)
Bloomberg Energy	(0.7)	2.2	(42.7)	(42.7)	(17.6)	(9.1)	(15.5)
Bloomberg Grains	11.9	22.2	19.3	19.3	3.7	(1.4)	(5.4)
Bloomberg Industrial Metals	0.3	14.2	16.3	16.3	0.1	9.2	(3.5)
Bloomberg Livestock	2.1	2.4	(23.4)	(23.4)	(10.9)	(6.6)	(5.2)
Bloomberg Petroleum	7.8	20.1	(40.3)	(40.3)	(13.6)	(3.7)	(11.2)
Bloomberg Precious Metals	8.8	2.4	25.6	25.6	11.9	11.2	0.8
Bloomberg Softs	6.1	14.3	2.9	2.9	(5.9)	(4.3)	(9.7)

Source: Morningstar, as of 12/31/20

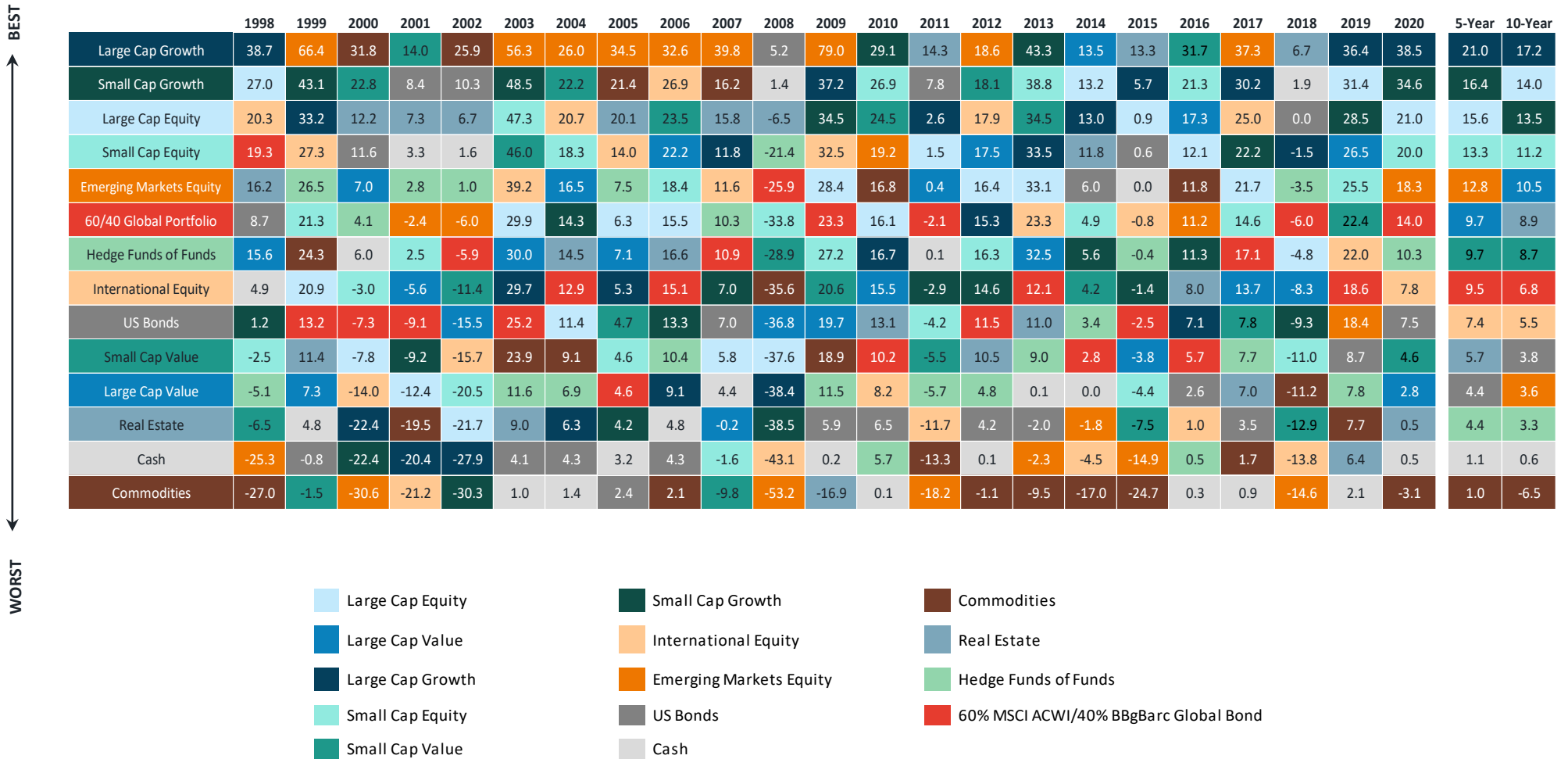
## COMMODITY PERFORMANCE



Source: Bloomberg, as of 12/31/20

# Appendix

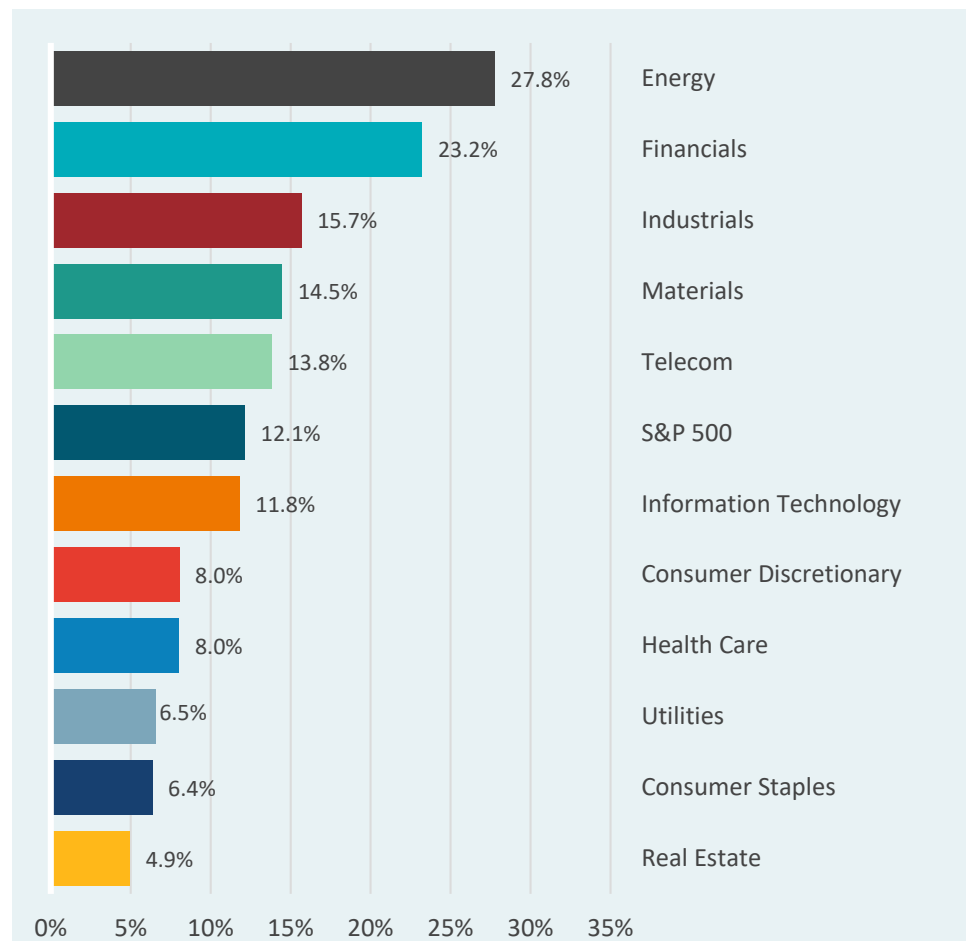
# Periodic table of returns



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 Growth, Russell 2000, Russell 2000 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 9/30/20.

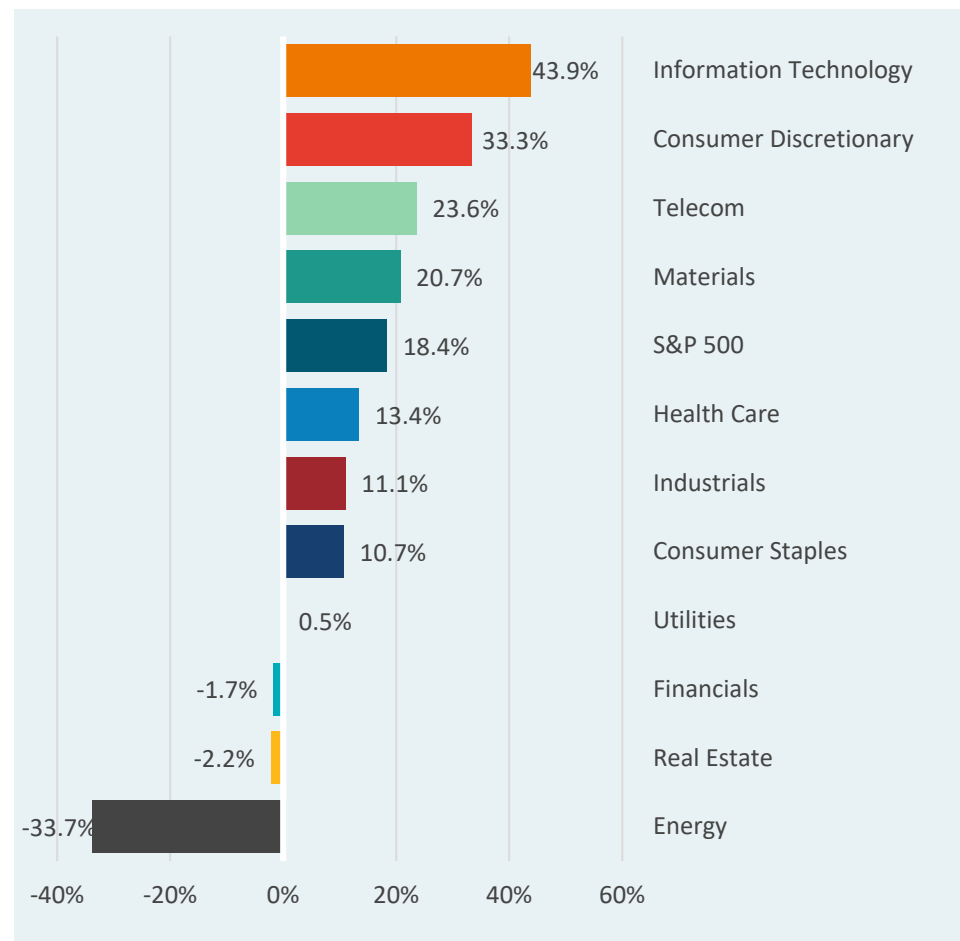
# S&P 500 sector returns

Q4 2020



Source: Morningstar, as of 12/31/20

ONE YEAR ENDING DECEMBER



Source: Morningstar, as of 12/31/20



# Detailed index returns

## DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Core Index</b>							
S&P 500	3.8	12.1	18.4	18.4	14.2	15.2	13.9
S&P 500 Equal Weighted	4.3	18.5	12.8	12.8	10.4	13.0	12.7
DJ Industrial Average	3.4	10.7	9.7	9.7	9.9	14.7	13.0
Russell Top 200	4.1	11.6	22.4	22.4	16.0	16.4	14.6
Russell 1000	4.2	13.7	21.0	21.0	14.8	15.6	14.0
Russell 2000	8.7	31.4	20.0	20.0	10.2	13.3	11.2
Russell 3000	4.5	14.7	20.9	20.9	14.5	15.4	13.8
Russell Mid Cap	4.7	19.9	17.1	17.1	11.6	13.4	12.4
<b>Style Index</b>							
Russell 1000 Growth	4.6	11.4	38.5	38.5	23.0	21.0	17.2
Russell 1000 Value	3.8	16.3	2.8	2.8	6.1	9.7	10.5
Russell 2000 Growth	9.3	29.6	34.6	34.6	16.2	16.4	13.5
Russell 2000 Value	7.9	33.4	4.6	4.6	3.7	9.7	8.7

## INTERNATIONAL EQUITY

<b>Broad Index</b>							
MSCI ACWI	4.6	14.7	16.3	16.3	10.1	12.3	9.1
MSCI ACWI ex US	5.4	17.0	10.7	10.7	4.9	8.9	4.9
MSCI EAFE	4.6	16.0	7.8	7.8	4.3	7.4	5.5
MSCI EM	7.4	19.7	18.3	18.3	6.2	12.8	3.6
MSCI EAFE Small Cap	6.8	17.3	12.3	12.3	4.9	9.4	7.8
<b>Style Index</b>							
MSCI EAFE Growth	4.9	13.1	18.3	18.3	9.7	10.5	7.5
MSCI EAFE Value	4.4	19.2	(2.6)	(2.6)	(1.2)	4.2	3.4
<b>Regional Index</b>							
MSCI UK	5.5	16.9	(10.5)	(10.5)	(2.4)	2.6	3.0
MSCI Japan	4.1	15.3	14.5	14.5	6.1	8.7	6.5
MSCI Euro	4.0	17.2	6.6	6.6	3.1	7.0	5.0
MSCI EM Asia	7.1	18.9	28.4	28.4	9.0	14.4	6.6
MSCI EM Latin American	11.9	34.8	(13.8)	(13.8)	(1.8)	8.9	(3.4)

## FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Broad Index</b>							
BBgBarc US TIPS	1.1	1.6	11.0	11.0	5.9	5.1	3.8
BBgBarc US Treasury Bills	0.0	0.0	0.7	0.7	1.6	1.2	0.7
BBgBarc US Agg Bond	0.1	0.7	7.5	7.5	5.3	4.4	3.8
<b>Duration</b>							
BBgBarc US Treasury 1-3 Yr	0.1	0.0	3.2	3.2	2.8	1.9	1.3
BBgBarc US Treasury Long	(1.2)	(3.0)	17.7	17.7	9.9	7.8	7.8
BBgBarc US Treasury	(0.2)	(0.8)	8.0	8.0	5.2	3.8	3.3
<b>Issuer</b>							
BBgBarc US MBS	0.2	0.2	3.9	3.9	3.7	3.1	3.0
BBgBarc US Corp. High Yield	1.9	6.5	7.1	7.1	6.2	8.6	6.8
BBgBarc US Agency Interm	0.1	0.1	4.1	4.1	3.4	2.5	2.1
BBgBarc US Credit	0.5	2.8	9.4	9.4	6.8	6.4	5.4

## OTHER

<b>Index</b>							
Bloomberg Commodity	5.0	10.2	(3.1)	(3.1)	(2.5)	1.0	(6.5)
Wilshire US REIT	2.8	10.6	(7.9)	(7.9)	3.3	4.3	8.3
CS Leveraged Loans	1.3	3.6	2.8	2.8	4.0	5.2	4.5
Alerian MLP	2.5	32.4	(31.6)	(31.6)	(13.7)	(7.0)	(2.1)
<b>Regional Index</b>							
JPM EMBI Global Div	1.9	5.8	5.3	5.3	5.0	7.1	6.2
JPM GBI-EM Global Div	3.5	9.6	2.7	2.7	3.0	6.7	1.5
<b>Hedge Funds</b>							
HFRI Composite	4.5	10.7	11.6	11.6	5.5	6.1	4.2
HFRI FOF Composite	3.1	7.5	10.3	10.3	4.7	4.4	3.3
<b>Currency (Spot)</b>							
Euro	2.3	4.3	9.0	9.0	0.6	2.4	(0.9)
Pound Sterling	2.4	5.7	3.2	3.2	0.3	(1.5)	(1.3)
Yen	1.0	2.2	5.3	5.3	2.9	3.1	(2.4)

Source: Morningstar, HFRI, as of 12/31/20

# 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	4.0	10.5	8.8	12.0
Global Private Equity Direct Funds *	9.3	13.8	12.1	14.5
U.S. Private Equity Direct Funds *	9.7	14.8	12.3	15.5
Europe Private Equity Direct Funds *	5.1	12.6	14.0	13.5
Asia Private Equity Direct Funds *	13.1	13.0	11.0	13.4

Public Index Time-weighted Returns	1 Year	3 Year	5 Year	10 Year
MSCI World	2.8	6.7	6.9	10.0
S&P 500	7.5	10.7	10.7	14.0
MSCI Europe	(6.8)	0.0	1.5	5.7
MSCI AC Asia Pacific	1.0	3.2	4.0	6.0

Private Real Estate Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Real Estate	(1.4)	6.0	7.7	12.3

Public Index Time-weighted Returns	1 Year	3 Year	5 Year	10 Year
FTSE NAREIT Equity REIT	(13.0)	0.0	4.1	9.1

Private Credit Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Debt **	(1.5)	5.2	6.5	10.0

Public Index Time-weighted Returns	1 Year	3 Year	5 Year	10 Year
S&P / LSTA U.S. Leveraged Loan 100 Index	(0.5)	2.5	3.0	4.1

Private Real Assets Pooled IRRs	1 Year	3 Year	5 Year	10 Year
Global Nature Resources ***	(23.7)	(7.3)	(4.3)	0.5
Global Infrastructure	3.2	8.4	10.0	9.8

Public Index Time-weighted Returns	1 Year	3 Year	5 Year	10 Year
S&P Global Natural Resources	(16.8)	(0.1)	0.9	1.5
S&P Global Infrastructure	(14.8)	(0.9)	2.6	6.9

Source: Pooled IRRs are from Thompson Reuters C/A and Time-weighted Returns are from Investment Metrics, as of June 30<sup>th</sup>, 2020. All returns in U.S. dollars.

\* Includes Buyout, Growth Equity and Venture Capital.

\*\* Includes Control-Oriented Distressed, Credit Opportunities, Senior Debt and Subordinated Capital.

\*\*\* Includes Private Equity Energy, Timber and Upstream Energy & Royalties.

# Notices & disclosures

**Past performance is no guarantee of future results.** This document is provided for informational purposes only and is directed to institutional clients and eligible institutional counterparties only and is not intended for retail investors. Nothing herein constitutes investment, legal, accounting or tax advice, or a recommendation to buy, sell or hold a security or pursue a particular investment vehicle or any trading strategy. This document may include or imply estimates, outlooks, projections and other “forward-looking statements.” No assurance can be given that future results described or implied by any forward looking information will be achieved. Investing entails risks, including possible loss of principal. Verus Advisory Inc. (“Verus”) file a single form ADV under the United States Investment Advisors Act of 1940, as amended. Additional information about Verus Advisory, Inc. available on the SEC’s website at [www.adviserinfo.sec.gov](http://www.adviserinfo.sec.gov).


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**SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION**  
**Board of Retirement**

January 26, 2021

Agenda Item 6.2

**TO:** Board of Retirement

**FROM:** Michael Coultrip, Chief Investment Officer 

**SUBJECT:** Approval of Updated Asset Allocation Policy Portfolio

**Recommendation**

Approve the proposed updated asset allocation policy portfolio after reviewing the attached capital market assumption and asset allocation report from Verus.

**Background**

In 2019, SamCERA undertook a full asset-liability analysis, which resulted in several changes to SamCERA's policy portfolio, including the removal of the risk parity allocation and an increase in fixed income assets. The asset-liability process entailed developing efficient frontier mixes to be used in asset-liability simulations, which were then used to analyze the risk/return portfolio tradeoffs across multiple dimensions. Consistent with SamCERA's Investment Policy, SamCERA undertakes an asset-liability study every three years.

In the years in which a full asset-liability analysis is not performed, the Board will reevaluate the target policy portfolio, incorporating updated capital market assumptions and current market trends, to determine whether to incorporate any smaller asset allocation tweaks to the target policy portfolio.

**Discussion**

The attached report from Verus summarizes their updated asset class capital market assumptions. These are shown on pages 7 through 10. Pages 14 through 17 show SamCERA's current policy portfolio along with a proposed policy portfolio. The proposed policy portfolio tweaks the current portfolio by reducing core fixed by 3% (by removing our intermediate Treasury portfolio), and adding 2% to the growth bucket (1% each to domestic and international equity), while keeping 1% in Diversifying by adding to absolute return. The allocation to Inflation Hedge remains the same but a 1% increase to private real assets is funded by a 1% reduction to real estate.

Page 15 shows the expected return and risk metrics for both portfolios. The proposed policy has a slightly higher expected risk and return profile (with similar risk-adjusted returns) than our current policy portfolio. Pages 16-17 show the risk decomposition and stress cases/historical scenarios for both portfolios.

Margaret Jadallah from Verus will present this report to the Board during the Board meeting.

**Attachment**

Verus Asset Allocation Report



**PERSPECTIVES  
THAT DRIVE  
ENTERPRISE  
SUCCESS**



JANUARY 2021

Asset Allocation Review

**SamCERA**

# Table of Contents



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Overview 3

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SamCERA's Portfolio 13

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Appendix 18

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# Overview

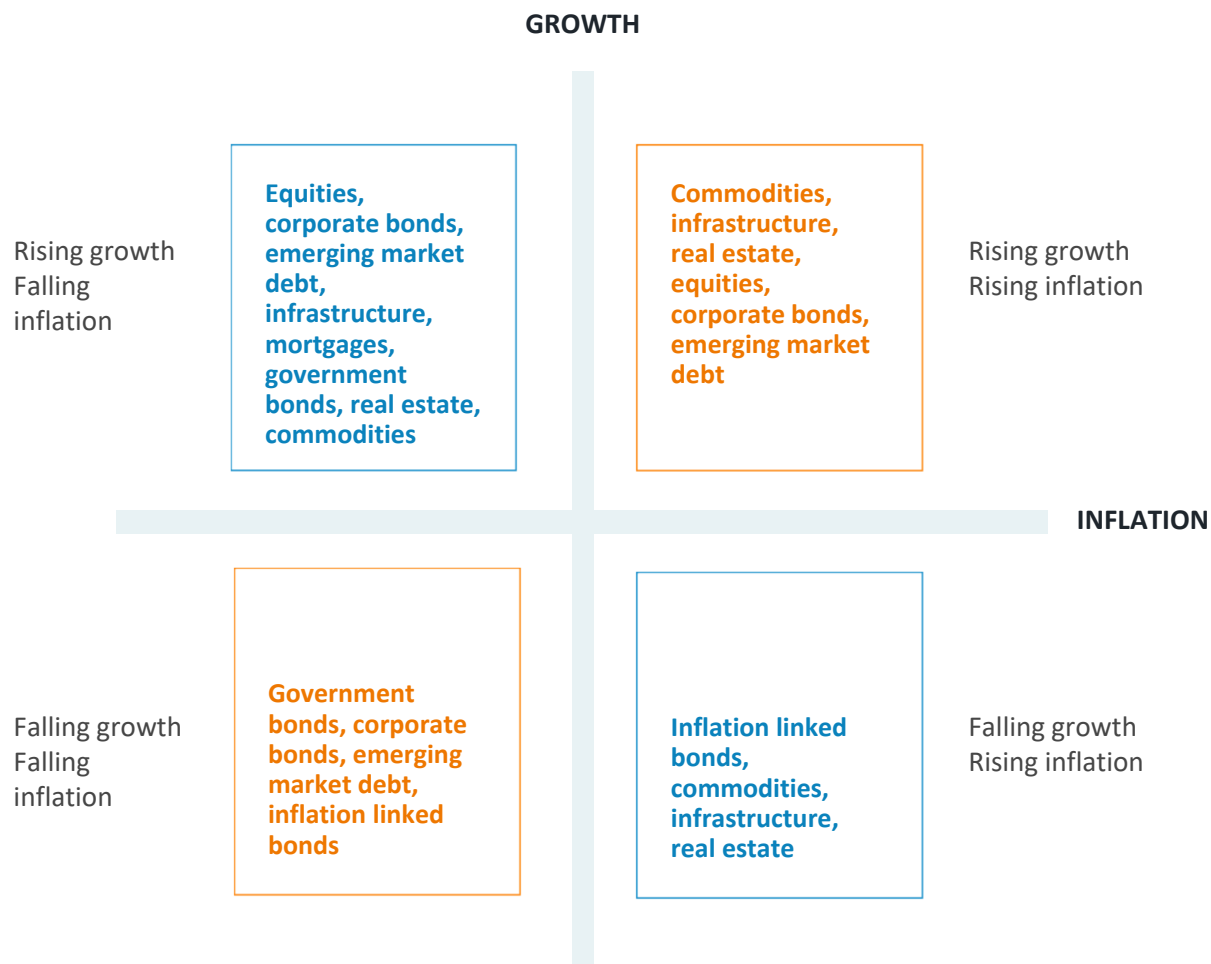
# Introduction

- As fiduciaries we need to periodically review the asset allocation relative to the market environment and the enterprise objectives.
  - 2020 was an unprecedented year with a constantly evolving market environment driven by the global pandemic and its ramifications.
- The goal of this presentation is to review the current asset allocation targets relative to potential alternatives while considering:
  - Risk tolerance/liquidity
  - The market environment
- This review considers small changes to existing asset classes in the SamCERA portfolio.
  - Asset allocation of current policy reflects full implementation of asset allocation adopted during SamCERA's 2019 asset-liability study.
  - The turbulence of 2020 has resulted in a meaningful reduction in 10-year expected returns compared to last year.



# Identifying economic drivers of return

- For each asset class, investors can usually identify the economic environments which are likely to lead to strong, or poor, performance.
- Based on these relationships, investors can work to understand how their overall portfolio is likely to perform if faced with different economic environments.
- Investors may choose to adjust asset allocation so that their portfolio is not overly exposed to one type of future environment.
- Verus recommends diversified portfolios that are designed to weather all economic environments.



# The roles of asset classes

- Why do we invest in various asset classes?
- What is it we practically expect them to contribute to the portfolio over time?
- What will determine whether or not they serve the desired role?

	RETURN ROLES				DIVERSIFICATION & VOLATILITY ROLES			HOW MACRO OUTLOOK/GDP AFFECTS ROLE	
	Benefit from GDP Growth	Earn Risk Premium	Produce Stable Income	Hedge Against Inflation	Low Absolute Volatility	Low Corr. To Other Assets	Reduce Portfolio Volatility	Elements of Return for Asset Class	Sensitivity of Role to GDP
Public Equities	●	◐	◐	◑	○	◐	◐	PEs, Dividends, Earnings Growth	●
Private Equities	●	●	○	○	◐	◑	◑	PEs (exits), Financing, Opportunity Set	◐
Fixed (Treasury)	○	○	●	◑	●	◑	●	Direct Link to Yields	◑
Fixed (Credit)	◑	◐	●	◑	◐	◑	◐	Direct Link to Yields, Credit Spreads	◐
Hedge Funds (Intended role)	○	◐	○	○	●	●	●	Pes, Credit Spreads, Fat Tails	◑
Real Estate	◐	◑	◐	●	◑	◐	◑	Unemployment, Vacancies, Cap Rates	●



Investors are typically looking for a combination of return enhancement and lower correlation.

Complexity is not an advantage unless there are clear reasons why you're taking on additional risks and costs.

# Methodology

## CORE INPUTS

- We use a fundamental building block approach based on several inputs, including historical data and academic research to create asset class return forecasts.
- For most asset classes, we use the long-term historical volatility after adjusting for autocorrelation.
- Correlations between asset classes are calculated based on the last 10 years. For illiquid assets, such as private equity and private real estate, we use BarraOne correlation estimates.

Asset	Return Methodology	Volatility Methodology*
Inflation	25% weight to the University of Michigan Survey 5-10 year ahead inflation expectation and the Survey of Professional Forecasters (Fed Survey), and the remaining 50% to the market's expectation for inflation as observed through the 10-year TIPS breakeven rate	-
Cash	75% * current federal funds rate + 25% * U.S. 10-year Treasury yield	Long-term volatility
Bonds	Nominal bonds: current yield; Real bonds: real yield + inflation forecast	Long-term volatility
International Bonds	Current yield	Long-term volatility
Credit	Current option-adjusted spread + U.S. 10-year Treasury – effective default rate	Long-term volatility
International Credit	Current option-adjusted spread + foreign 10-year Treasury – effective default rate	Long-term volatility
Private Credit	Bank loan forecast + 1.75% private credit premium**	Long-term volatility
Equity	Current yield + real earnings growth (historical average) + inflation on earnings (inflation forecast) + expected P/E change	Long-term volatility
Intl Developed Equity	Current yield + real earnings growth (historical average) + inflation on earnings (intl. inflation forecast) + expected P/E change	Long-term volatility
Private Equity	US large cap domestic equity forecast * 1.85 beta adjustment	1.2 * Long-term volatility of U.S. small cap
Commodities	Collateral return (cash) + spot return (inflation forecast) + roll return (assumed to be zero)	Long-term volatility
Hedge Funds	Return coming from traditional betas + 15-year historical idiosyncratic return	Long-term volatility
Core Real Estate	Cap rate + real income growth – capex + inflation forecast	65% of REIT volatility
REITs	Core real estate	Long-term volatility
Value-Add Real Estate	Core real estate + 2%	Volatility to produce Sharpe Ratio (g) equal to core real estate
Opportunistic Real Estate	Core real estate + 4%	Volatility to produce Sharpe Ratio (g) equal to core real estate
Infrastructure	Current yield + real income growth + inflation on earnings (inflation forecast)	Long-term volatility
Risk Parity	Expected Sharpe Ratio * target volatility + cash rate	Target volatility

\*Long-term historical volatility data is adjusted for autocorrelation (see Appendix)

\*\*The private credit premium is generated by illiquidity, issuer size, and lack of credit rating

# 10-year return & risk assumptions

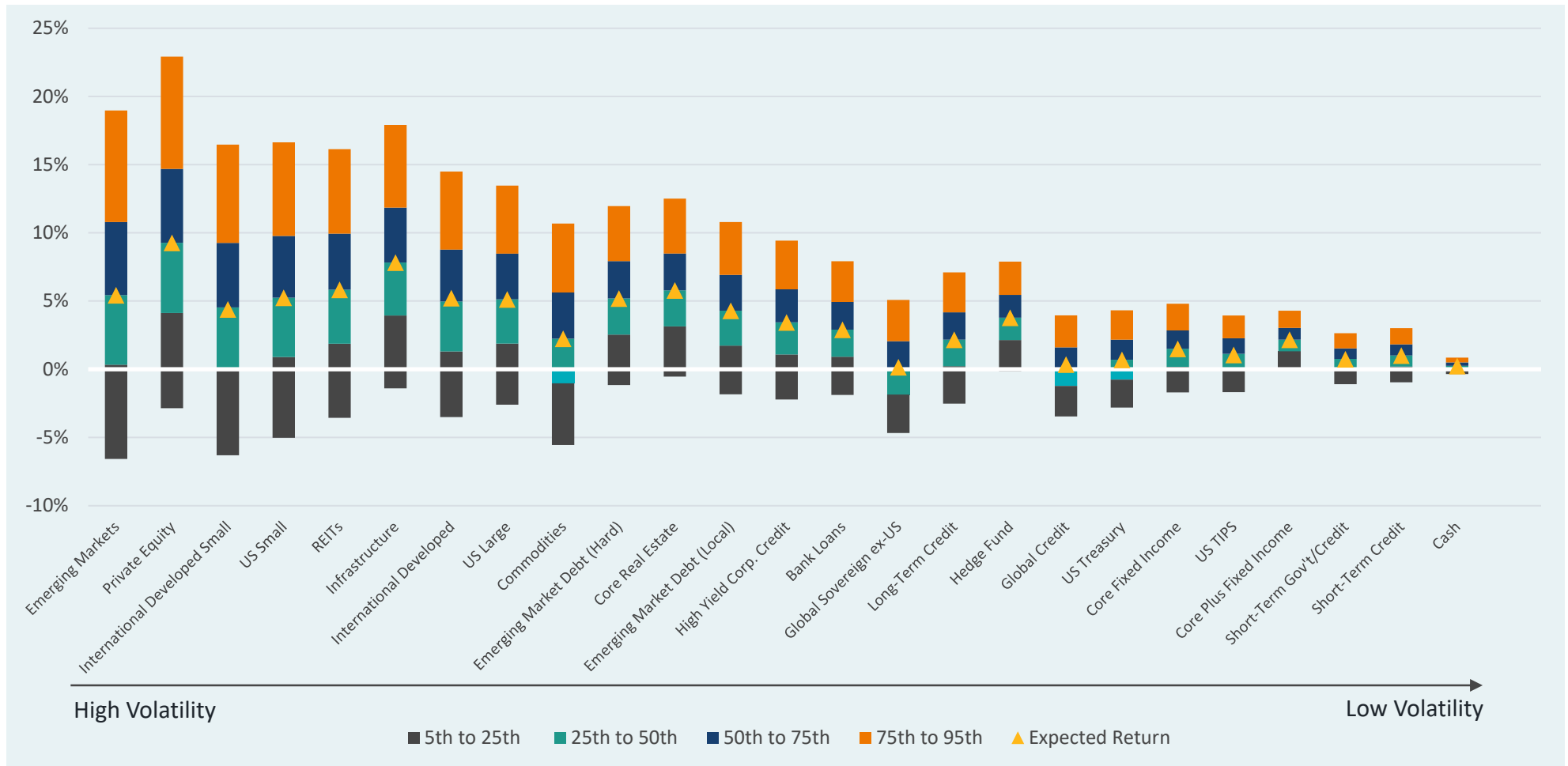
Asset Class	Index Proxy	Ten Year Return Forecast		Standard Deviation Forecast	Sharpe Ratio Forecast (g)	Sharpe Ratio Forecast (a)	10-Year Historical Sharpe Ratio (g)	10-Year Historical Sharpe Ratio (a)
		Geometric	Arithmetic					
<b>Equities</b>								
U.S. Large	S&P 500	5.1%	6.3%	15.7%	0.31	0.38	0.99	0.99
U.S. Small	Russell 2000	5.2%	7.3%	21.4%	0.23	0.33	0.51	0.58
International Developed	MSCI EAFE	5.2%	6.7%	17.9%	0.28	0.36	0.27	0.34
International Small	MSCI EAFE Small Cap	4.4%	6.7%	22.4%	0.19	0.29	0.43	0.49
Emerging Markets	MSCI EM	5.4%	8.3%	25.5%	0.20	0.32	0.11	0.19
Global Equity	MSCI ACWI	5.2%	6.6%	17.3%	0.29	0.37	0.58	0.62
Private Equity*	Cambridge Private Equity	9.3%	12.1%	28.1%	0.35	0.46	-	-
<b>Fixed Income</b>								
Cash	30 Day T-Bills	0.2%	0.2%	1.2%	-	-	-	-
U.S. TIPS	BBgBarc U.S. TIPS 5-10	1.1%	1.2%	5.3%	0.15	0.18	0.66	0.67
U.S. Treasury	BBgBarc Treasury 7-10 Year	0.7%	0.9%	6.7%	0.07	0.10	0.67	0.68
Global Sovereign ex U.S.	BBgBarc Global Treasury ex U.S.	0.2%	0.6%	9.6%	-0.01	0.04	0.09	0.12
Global Aggregate	BBgBarc Global Aggregate	1.1%	1.3%	6.1%	0.14	0.17	0.38	0.39
Core Fixed Income	BBgBarc U.S. Aggregate Bond	1.5%	1.6%	4.0%	0.31	0.36	1.02	1.01
Core Plus Fixed Income	BBgBarc U.S. Universal	2.2%	2.3%	4.0%	0.49	0.50	1.13	1.12
Short-Term Gov't/Credit	BBgBarc U.S. Gov't/Credit 1-3 Year	0.7%	0.8%	3.6%	0.14	0.16	1.23	1.22
Short-Term Credit	BBgBarc Credit 1-3 Year	1.0%	1.1%	3.6%	0.21	0.23	1.23	1.22
Long-Term Credit	BBgBarc Long U.S. Corporate	2.2%	2.6%	9.3%	0.21	0.25	0.76	0.77
High Yield Corp. Credit	BBgBarc U.S. Corporate High Yield	3.4%	4.0%	11.3%	0.28	0.34	0.82	0.83
Bank Loans	S&P/LSTA Leveraged Loan	2.9%	3.2%	9.5%	0.28	0.32	0.66	0.67
Global Credit	BBgBarc Global Credit	0.3%	0.6%	7.4%	0.01	0.05	0.63	0.64
Emerging Markets Debt (Hard)	JPM EMBI Global Diversified	5.2%	6.0%	12.7%	0.39	0.45	0.60	0.63
Emerging Markets Debt (Local)	JPM GBI-EM Global Diversified	4.3%	5.0%	12.2%	0.33	0.39	-0.01	0.05
Private Credit	Bank Loans + 175bps	4.6%	5.2%	11.2%	0.39	0.45	-	-
<b>Other</b>								
Commodities	Bloomberg Commodity	2.2%	3.4%	15.9%	0.13	0.20	-0.47	-0.41
Hedge Funds*	HFRI Fund Weighted Composite	3.8%	4.1%	7.8%	0.46	0.49	0.47	0.49
Real Estate Debt	BBgBarc CMBS IG	2.2%	2.5%	7.5%	0.26	0.30	1.18	1.17
Core Real Estate	NCREIF Property	5.8%	6.5%	12.6%	0.44	0.50	2.06	1.99
Value-Add Real Estate	NCREIF Property + 200bps	7.8%	9.1%	17.1%	0.44	0.52	-	-
Opportunistic Real Estate	NCREIF Property + 400bps	9.8%	11.8%	21.6%	0.44	0.54	-	-
REITs	Wilshire REIT	5.8%	7.5%	19.3%	0.29	0.38	0.46	0.52
Global Infrastructure	S&P Global Infrastructure	7.8%	9.4%	18.8%	0.40	0.49	0.28	0.35
Risk Parity	Risk Parity	5.2%	5.9%	10.0%	0.50	0.56	-	-
Currency Beta	MSCI Currency Factor Index	1.2%	1.3%	3.5%	0.28	0.30	0.15	0.16
Inflation		2.0%	-	-	-	-	-	-

Investors wishing to produce expected geometric return forecasts for their portfolios should use the arithmetic return forecasts provided here as inputs into that calculation, rather than the single-asset-class geometric return forecasts. This is the industry standard approach, but requires a complex explanation only a heavy quant could love, so we have chosen not to provide further details in this document – we will happily provide those details to any readers of this who are interested.

\*Return expectations differ depending on method of implementation

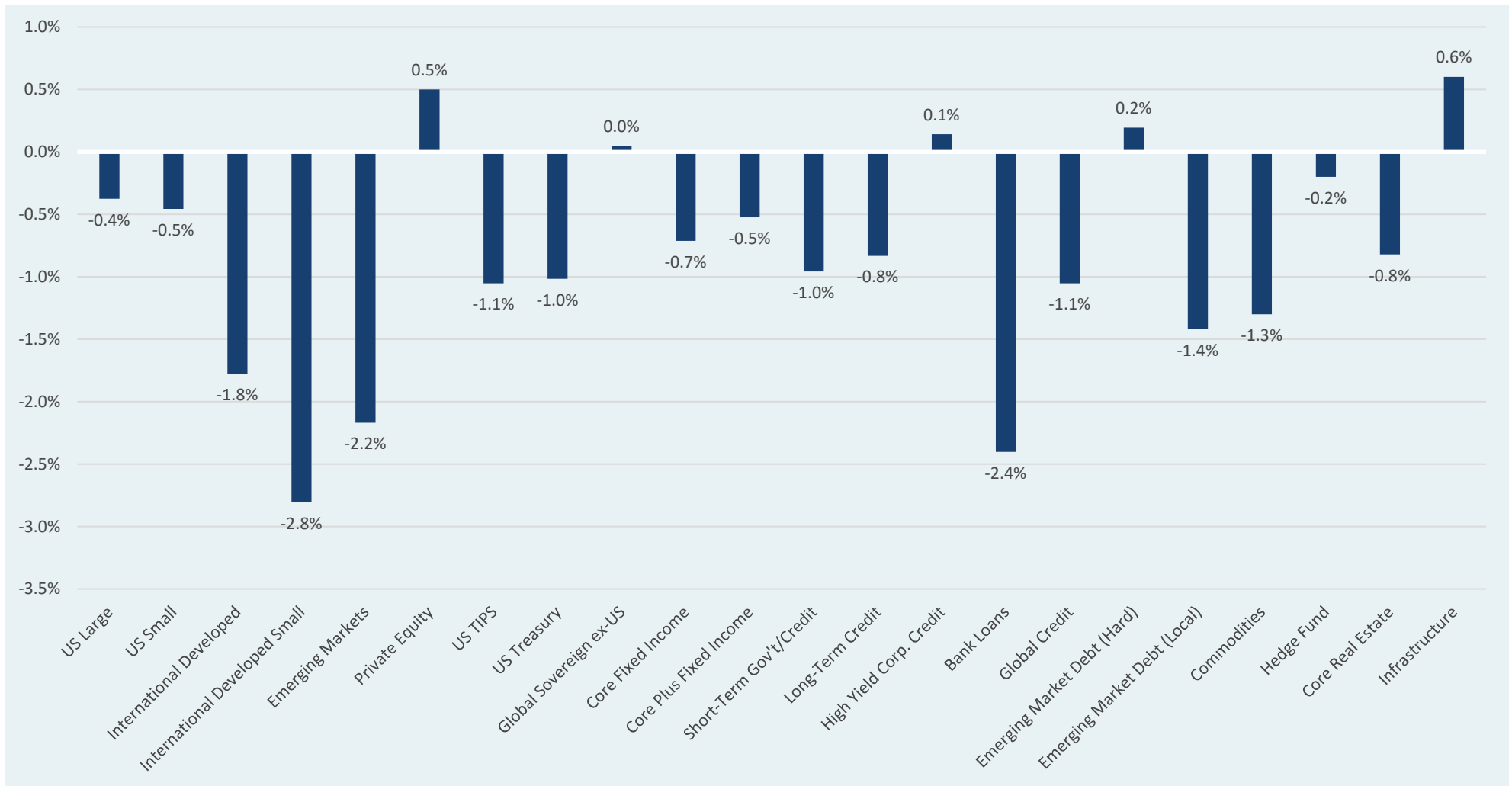
# Range of likely 10-year outcomes

## 10-YEAR RETURN 90% CONFIDENCE INTERVAL



Source: Verus, MPI

# 2021 vs. 2020 return forecasts



Note: year-over-year change of the select group of asset classes above is based on the 2020 CMA methodology

# Which overall risks should an investor accept?

Accept greater volatility

Be truly different from peers

Add portfolio leverage, which can change risk profile

Maintain same risk, but with weaker expected return

Take on illiquidity risk, which may lead to forced selling in stressed markets

Tilt into assets with higher expected return, but forecasts may be wrong

Make portfolio "bets" which might fail to pay off

Rely on active managers who may fail to produce alpha

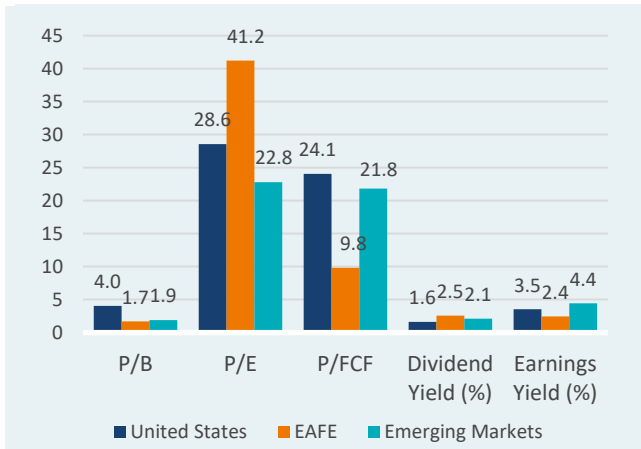
Over-diversify which might reduce return

Source: Bridgewater, Verus

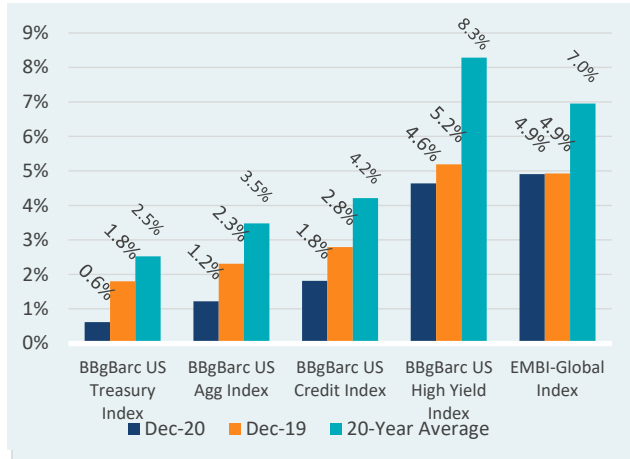
# Market environment

- Stocks broadly are relatively expensive, bolstered by high valuations
- Interest rates are low but with potential for longer term reflation trade
- Credit spreads are relatively tight
- Likelihood for fiscal stimulus under new administration
- Assumption of reopening of the global economy after COVID vaccinations are widely distributed

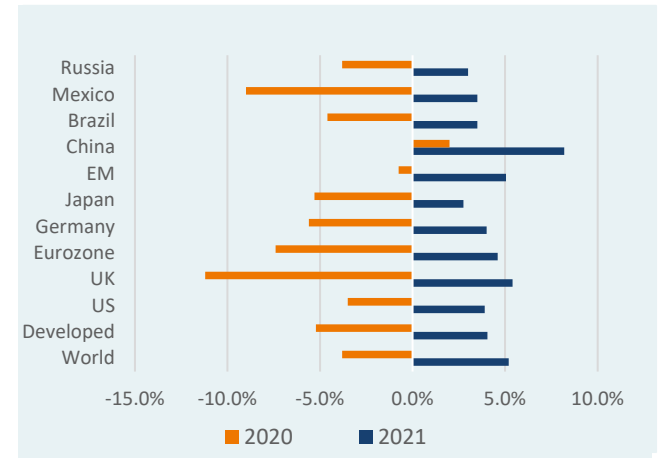
MSCI STOCK VALUATIONS(3-MONTH AVG)



NOMINAL YIELDS



GDP GROWTH EXPECTATIONS (%)



Data as of 12/31/20



# SamCERA's Portfolio

# Asset allocation

	Long Term Policy	Proposed allocation	Return (g)	Standard Deviation	Sharpe Ratio (a)
<b>Growth Assets</b>					
US Large	11.0	12.0	5.1	15.7	0.38
Low Vol	8.0	8.0	4.0	10.9	0.38
US Small	2.0	2.0	5.2	21.4	0.33
<b>Domestic Equity</b>	<b>21.0</b>	<b>22.0</b>			
<b>Int'l Equity</b>	<b>18.0</b>	<b>19.0</b>	<b>5.9</b>	<b>17.5</b>	<b>0.40</b>
<b>Private Equity</b>	<b>6.0</b>	<b>6.0</b>	9.3	28.1	0.46
Public Opportunistic Credit	7.0	7.0	3.4	11.3	0.34
Private Credit	3.0	3.0	4.6	11.2	0.45
<b>Opportunistic Credit</b>	<b>10.0</b>	<b>10.0</b>			
<b>Total Growth Assets</b>	<b>55.0</b>	<b>57.0</b>			
<b>Diversifying Assets</b>					
Core Fixed Income	21.0	18.0	1.5	4.0	0.36
Liquidity	1.0	1.0	0.7	3.6	0.16
Hedge Fund	6.0	7.0	3.8	7.8	0.49
<b>Total Diversifying Assets</b>	<b>28.0</b>	<b>26.0</b>			
<b>Inflation Hedge</b>					
Core Real Estate	10.0	9.0	5.8	12.6	0.50
Public Real Assets	4.0	4.0	3.7	11.7	0.35
Private Real Assets	3.0	4.0	6.7	16.7	0.45
<b>Total Inflation Hedge</b>	<b>17.0</b>	<b>17.0</b>			
<b>Total Allocation</b>	<b>100.0</b>	<b>100.0</b>			

3 percent Treasury allocation is eliminated with 2 percent reallocated to Growth and 1 percent to Absolute Return

Real asset modeling reflects increase to infrastructure

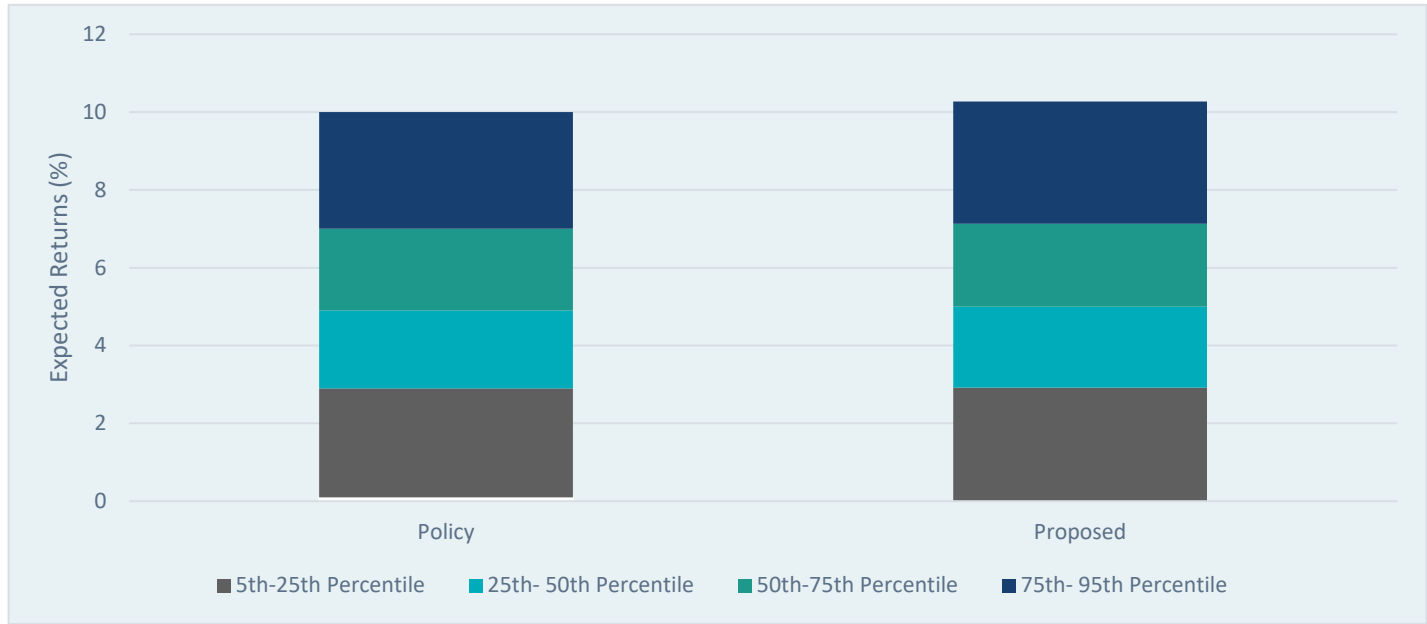
See page 15 for modeling details.

# Expected 10-year Forecasts

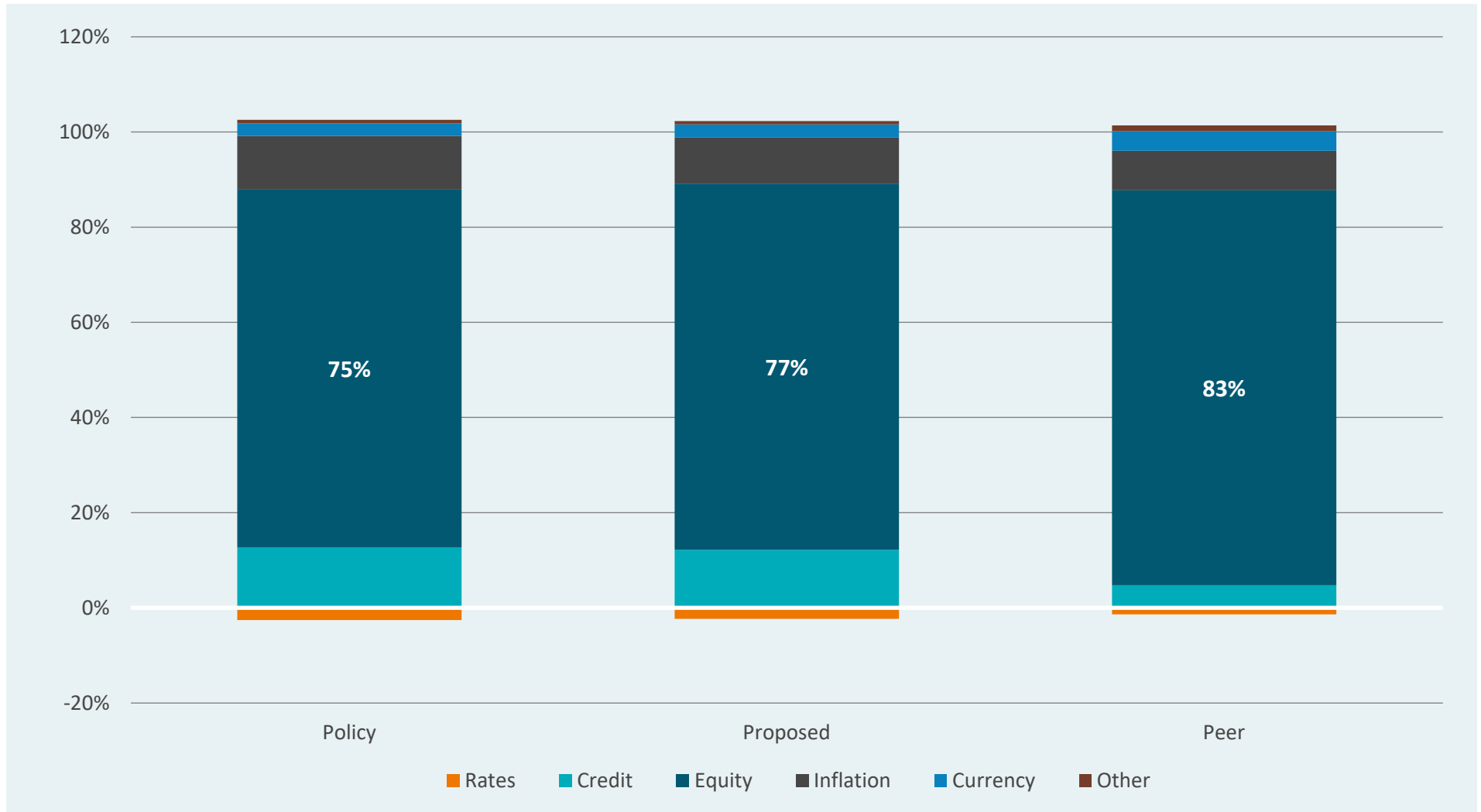
	Long Term Policy	Proposed allocation
<b>Mean Variance Analysis</b>		
<b>Forecast 10 Year Return</b>	<b>4.9</b>	<b>5.0</b>
Standard Deviation	9.5	9.9
<i>Return/Std. Deviation</i>	<i>0.5</i>	<i>0.5</i>
<i>1st percentile ret. 1 year</i>	<i>-15.0</i>	<i>-15.6</i>
Sharpe Ratio	0.51	0.51

Last year's 10-year forecasted return was 5.8%

Approximately 30% change of meeting 6.5%

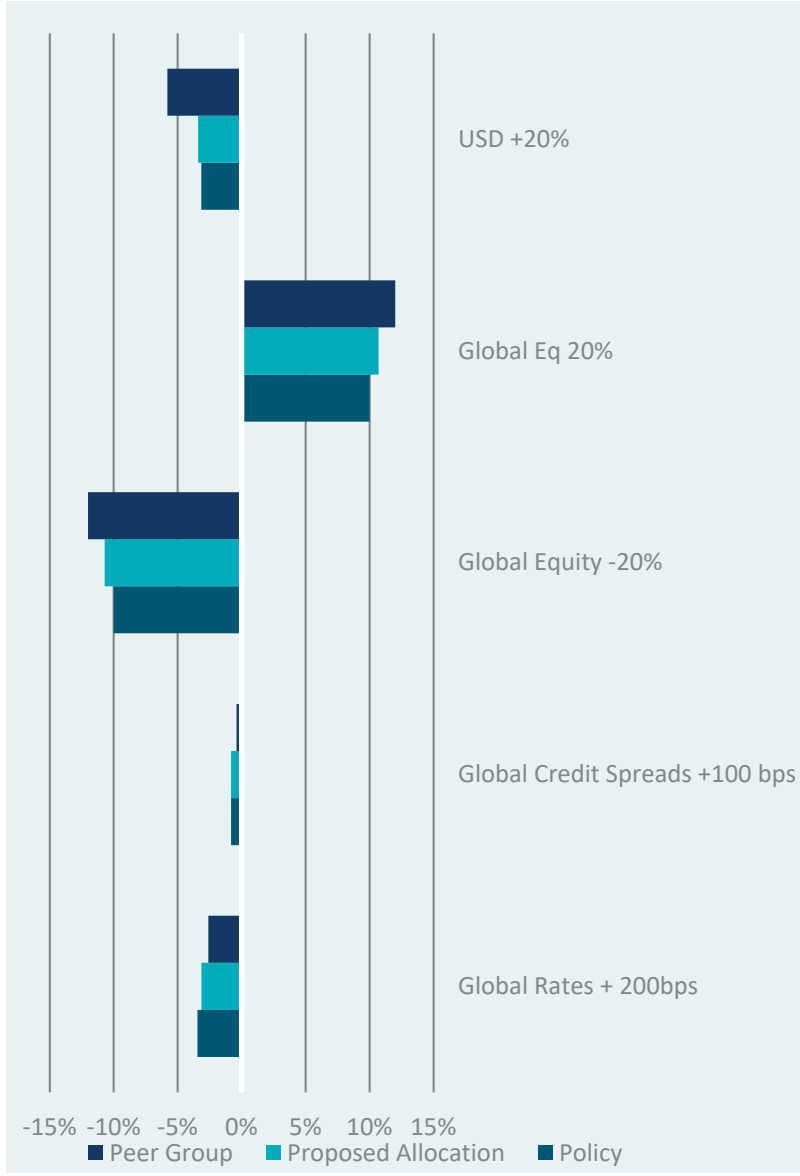
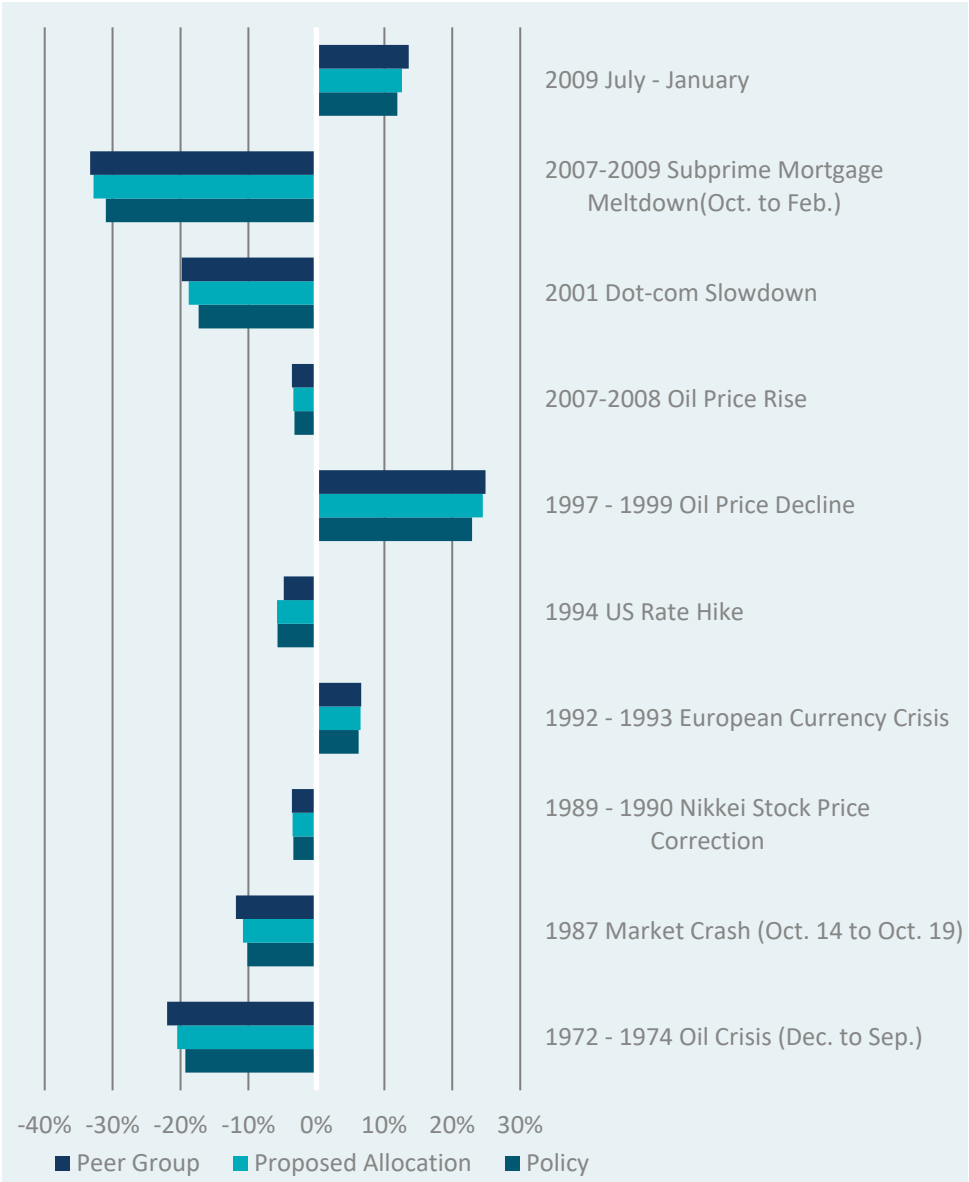


# Risk Decomposition



Peer Group is Investment Metrics Public \$1 billion +

# Scenario Analysis



Peer Group is Investment Metrics Public \$1 billion +

# Appendix

# Correlation assumptions

	Cash	US Large	US Small	Intl Large	Intl Small	EM	Global Equity	PE	US TIPS	US Treasury	Global Sovereign ex-US	US Core	Core Plus	Short-Term Gov't/Credit	Short-Term Credit	Long-Term Credit	US HY	Bank Loans	Global Credit	EMD USD	EMD Local	Commodities	Hedge Funds	Real Estate	REITs	Infrastructure	Risk Parity	Currency Beta			
Cash	1.0																														
US Large	-0.2	1.0																													
US Small	-0.2	0.9	1.0																												
Intl Large	-0.1	0.9	0.8	1.0																											
Intl Small	-0.2	0.9	0.8	1.0	1.0																										
EM	-0.1	0.7	0.7	0.8	0.8	1.0																									
Global Equity	-0.2	1.0	0.9	1.0	0.9	0.9	1.0																								
PE	-0.2	0.6	0.6	0.6	0.6	0.5	0.7	1.0																							
US TIPS	0.0	0.1	0.1	0.2	0.2	0.3	0.2	0.1	1.0																						
US Treasury	0.2	-0.4	-0.5	-0.4	-0.4	-0.3	-0.4	-0.2	0.7	1.0																					
Global Sovereign ex-US	0.1	0.2	0.1	0.3	0.3	0.5	0.3	0.0	0.6	0.3	1.0																				
US Core	0.1	-0.1	-0.2	-0.1	-0.1	0.1	-0.1	0.0	0.8	0.9	0.5	1.0																			
Core Plus	0.1	0.1	0.0	0.1	0.1	0.2	0.1	0.0	0.8	0.7	0.6	0.9	1.0																		
Short-Term Gov't/Credit	0.4	-0.1	-0.2	0.0	-0.1	0.1	0.0	-0.2	0.6	0.7	0.5	0.8	0.8	1.0																	
Short-Term Credit	0.0	0.4	0.4	0.4	0.4	0.5	0.4	0.0	0.5	0.2	0.5	0.5	0.8	0.7	1.0																
Long-Term Credit	0.0	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.7	0.5	0.5	0.8	0.9	0.5	0.6	1.0															
US HY	-0.2	0.8	0.7	0.8	0.8	0.8	0.8	0.5	0.4	-0.2	0.4	0.2	0.4	0.1	0.7	0.5	1.0														
Bank Loans	-0.3	0.7	0.7	0.6	0.7	0.6	0.7	0.4	0.2	-0.3	0.2	0.0	0.2	0.0	0.6	0.4	0.9	1.0													
Global Credit	-0.1	0.6	0.5	0.7	0.7	0.7	0.7	0.4	0.6	0.1	0.7	0.5	0.6	0.4	0.8	0.7	0.8	0.6	1.0												
EMD USD	-0.2	0.5	0.5	0.6	0.6	0.7	0.6	0.4	0.6	0.1	0.5	0.5	0.6	0.3	0.7	0.6	0.8	0.7	0.9	1.0											
EMD Local	0.0	0.5	0.4	0.7	0.7	0.8	0.7	0.4	0.4	0.0	0.6	0.3	0.4	0.3	0.5	0.4	0.7	0.5	0.8	0.8	1.0										
Commodities	-0.1	0.5	0.5	0.6	0.6	0.6	0.6	0.3	0.2	-0.3	0.4	-0.1	0.0	0.0	0.3	0.1	0.6	0.5	0.5	0.5	0.6	1.0									
Hedge Funds	-0.2	0.8	0.8	0.8	0.9	0.7	0.9	0.6	0.2	-0.4	0.2	0.0	0.2	0.0	0.5	0.3	0.8	0.8	0.7	0.6	0.5	0.5	1.0								
Real Estate	-0.1	0.5	0.5	0.4	0.5	0.4	0.5	0.4	0.1	-0.1	0.1	0.0	-0.1	0.0	0.1	0.0	0.3	0.3	0.4	0.3	0.3	0.3	0.4	1.0							
REITs	-0.2	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.4	0.1	0.3	0.4	0.4	0.2	0.5	0.5	0.6	0.6	0.7	0.6	0.5	0.4	0.5	0.8	1.0						
Infrastructure	-0.2	0.8	0.7	0.8	0.8	0.7	0.8	0.7	0.4	-0.2	0.5	0.2	0.4	0.2	0.6	0.5	0.8	0.7	0.8	0.8	0.7	0.5	0.7	0.3	0.7	1.0					
Risk Parity	-0.1	0.6	0.6	0.7	0.6	0.6	0.7	0.3	0.4	0.0	0.4	0.2	0.5	0.3	0.6	0.5	0.8	0.6	0.7	0.7	0.6	0.6	0.7	0.0	0.5	0.7	1.0				
Currency Beta	0.0	0.2	0.2	0.1	0.1	0.1	0.2	0.0	0.0	-0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	1.0			

Note: Correlation assumptions are based on the last ten years. Private Equity and Real Estate correlations are especially difficult to model – we have therefore used BarraOne correlation data to strengthen these correlation estimates.

# Relevant forecast changes

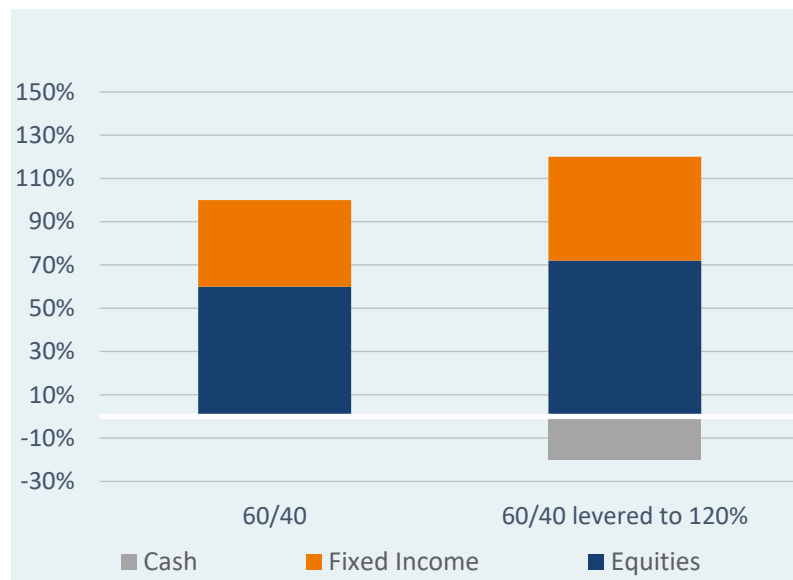
- Fixed income return expectations fell markedly across most asset classes as bond yields headed towards zero. Equity return expectations also fell due to a corporate earnings recession and quick recovery in prices, both of which pushed valuations significantly higher. Most of our fixed income forecasts are 0.5-1.5% lower, while our equity forecasts are 0.4-2.8% lower.
- Inflation expectations were mixed during the year. The U.S. TIPS breakeven inflation rate increased from 1.5% to 1.7%, and household inflation expectations (University of Michigan) rose from 2.4% to 2.7%. However, the Survey of Professional Forecasters moved in the opposite direction, indicating a decrease from 2.20% to 2.04%. Overall, our inflation forecast increased very slightly from 1.9% to 2.0%. Inflation is an important component of the performance of asset classes such as equities, real estate, and commodities. It is important to note that inflation expectations affect *nominal* returns, rather than *real* returns.
- Credit spreads spiked in March and April as the spread of COVID-19 contributed to extreme market volatility. Although spreads later moved back towards normal levels, they remain elevated and supportive of long-term return expectations. Core fixed income spreads increased from 62 bps to 90 bps, and high yield spreads rose from 396 bps to 551 bps.
- The yield curve fell as the Federal Reserve brought interest rates down to zero. The short end of the curve felt most of this move, though the longer end of the curve was also considerably impacted. As indicated by the Federal Reserve, interest rates will likely be kept at 0% for the foreseeable future. The three-month U.S. dollar LIBOR reference rate fell from 2.09% to 0.23%.
- Emerging market hard and local currency debt forecasts were mixed. Hard currency-denominated debt spreads to U.S. Treasury yields jumped from 351 bps to 471 bps, although the broader 1% fall in interest rates brought expectations down commensurately, leading to little overall change. The yield of local-denominated debt fell from 6.0% to 4.6% alongside the broader fixed income market.

All data cited above is as of 9/30/20



# Portfolio level leverage

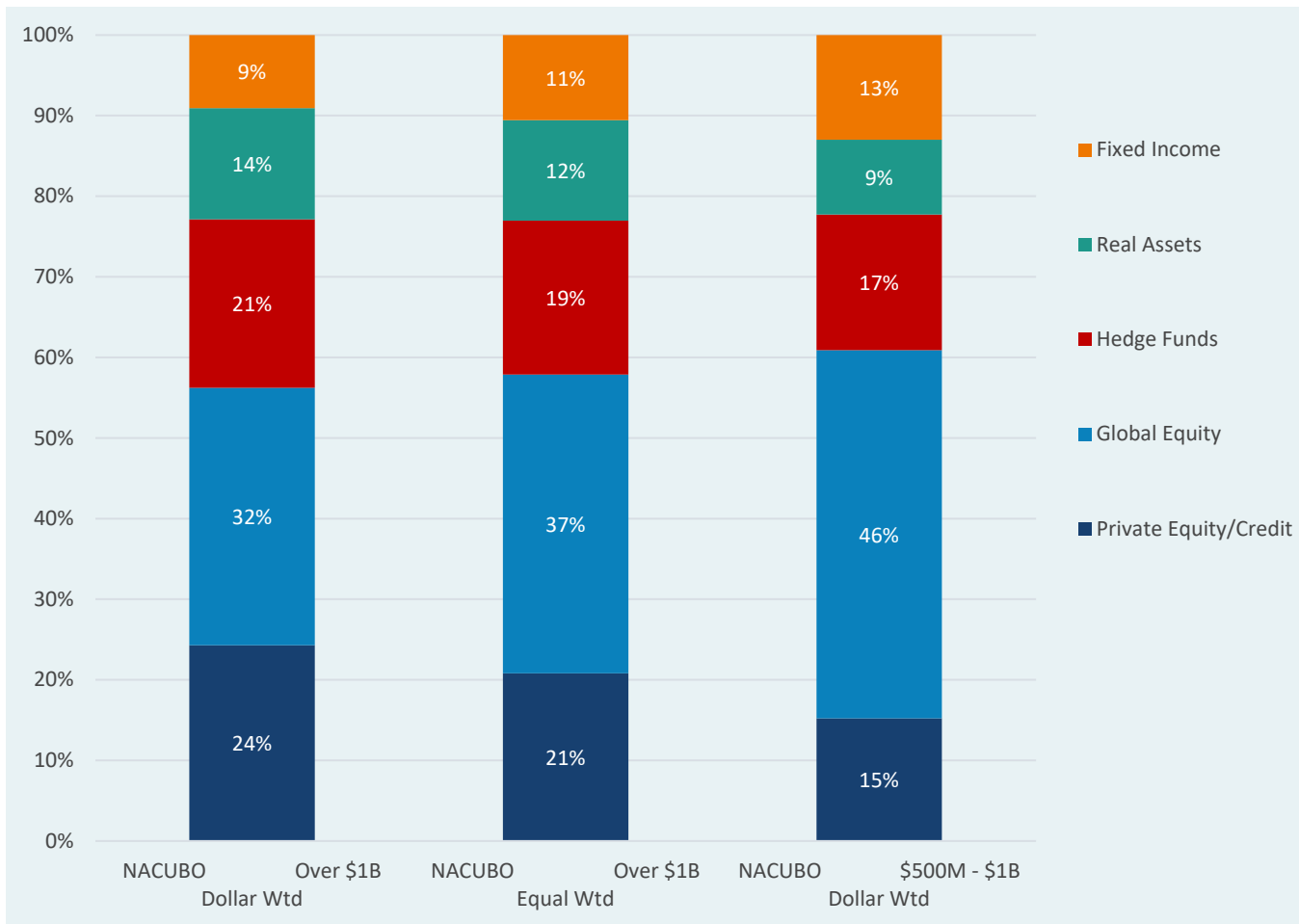
- Increasing the risk return of the portfolio by adding leverage at the total portfolio level
- Increases both the risk and return of the portfolio
- Will need to borrow funds (at cash or at a premium to cash rates)



## 10 Year Forecast

	60/40	60/40 Levered
Risk (Std Dev)	10.79	12.97
Sharpe Ratio	0.38	0.38
50th Percentile Return	5.76	6.36
1st Percentile Return	-19.4	-23.7

# Endowment model-return seeking using illiquid assets



The Endowment Model refers to investors who invest in more alternative assets and hold portfolios that are more illiquid. Large endowments are most identified with portfolios of this ilk.

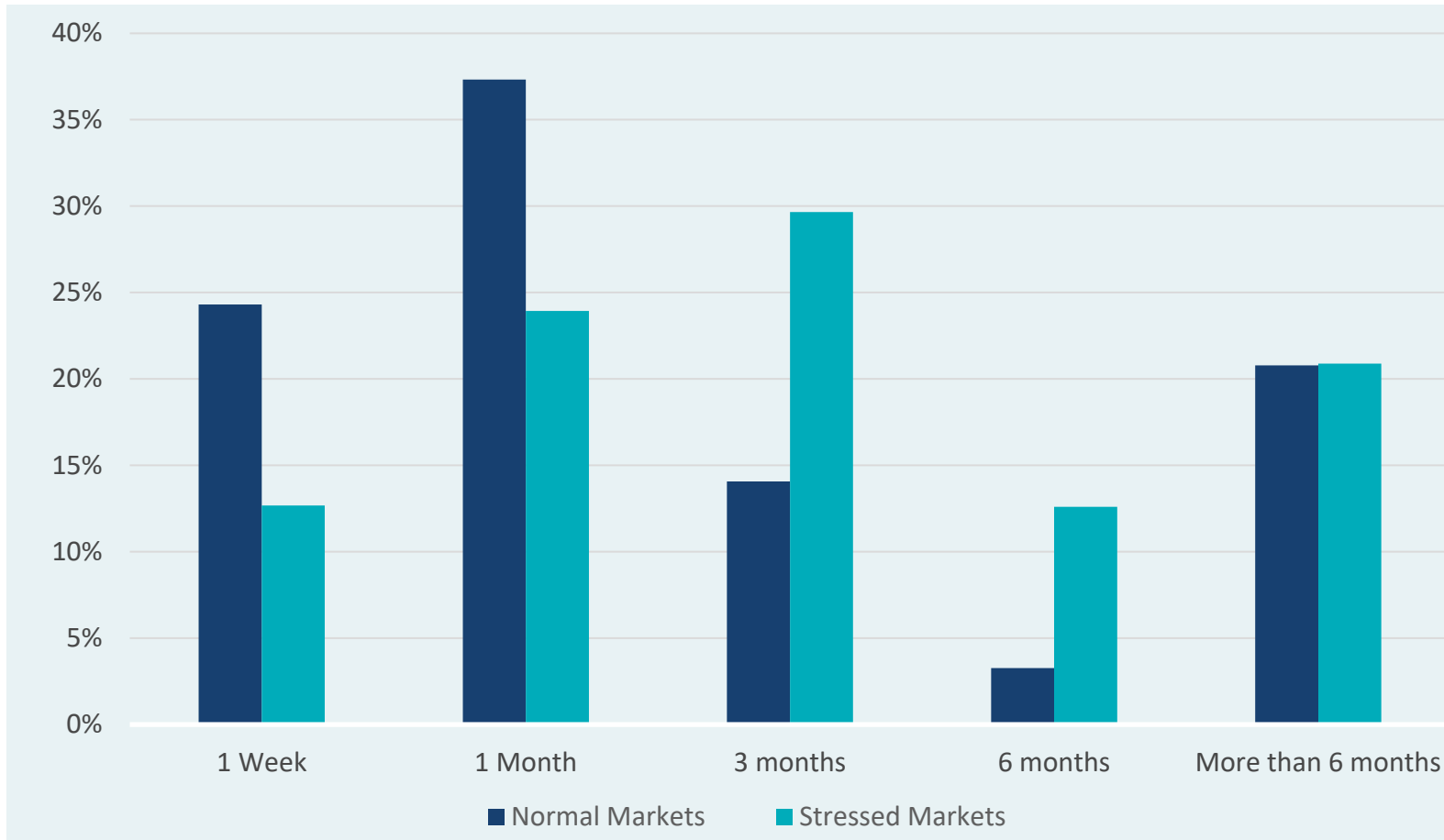
Private equity allocations tend to increase with asset size, likely reflecting the increased internal and external resources available to larger endowments.

Hedge Fund allocations are incrementally higher at larger asset sizes.

Source: NACUBO 2019 and Verus

# Stressed market liquidity

Liquidity can change in stressed periods



Understanding how portfolio liquidity changes in stressed periods allows investors to better anticipate reactions during drawdowns.

Maturing plans need to carefully analyze their liquidity needs.

# SamCERA custom asset class models

- International Equity modelled as 40% hedged developed/40% unhedged develop/20% Emerging Markets
- Low Vol Equities uses the MSCI US Min Vol Index volatility and correlations and has the same Sharpe Ratio as Large Cap
- Absolute Return – Correlations for absolute return are using the HFRI Defensive Index
- Public Real Assets – 25% TIPS, 50% Commodities, 25% Infrastructure
- Private Real Assets – 75% Infrastructure, 25% Commodities

# Inflation

We use a weighted average of market expectations (50%), consumer expectations (25%), and professional forecasts (25%) to create a 10-year inflation forecast. The market's expectations for 10-year inflation can be inferred by taking the difference between the U.S. 10-year Treasury yield and the 10-year Treasury Inflation-Protected (TIPS) yield (referred to as the breakeven inflation rate).

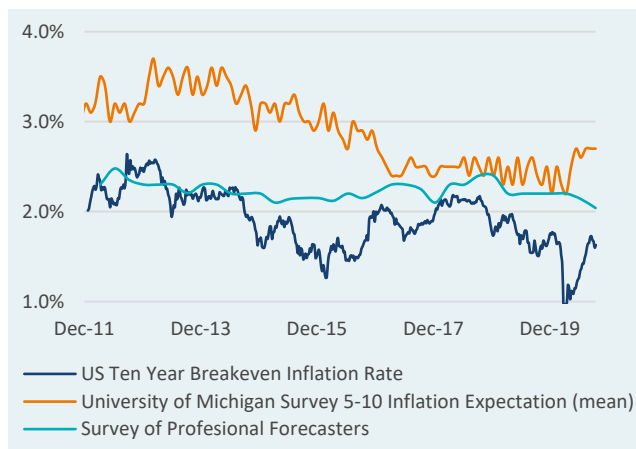
Inflation fell suddenly in the first half of 2020 as COVID-19 led to a global economic slowdown. In the third quarter inflation increased to a normal level as the broader economic recovered. Investors generally expect the

low inflation environment to continue well into the future.

Consumer inflation expectations decoupled from investor inflation expectations during the year. While investors are pricing lower-for-longer inflation, American households are expecting 2.7% long-term inflation—the highest forecast since 2016. Inflation expectations from the Survey of Professional Forecasters fell from 2.20% to 2.04% over the year.

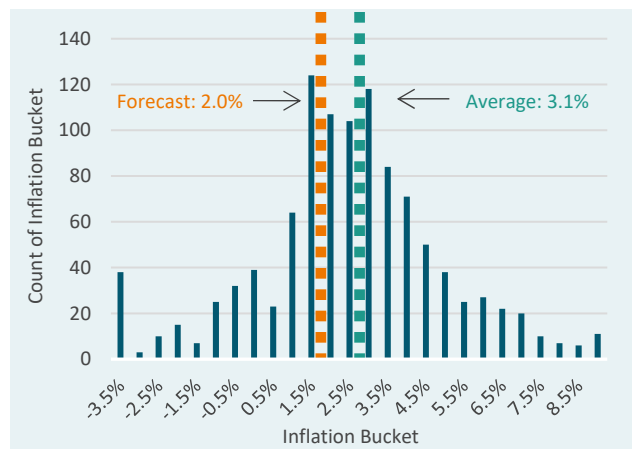
Our inflation forecast increased very slightly from 1.9% to 2.0%.

## INFLATION EXPECTATIONS



Source: U. of Michigan, Philly Fed, as of 9/30/20

## U.S. 10-YR ROLLING AVERAGE INFLATION SINCE 1923



Source: Bloomberg, as of 9/30/20

## FORECAST

	10-Year Forecast
University of Michigan Survey (25% weight)	+2.7%
Survey of Professional Forecasters (25% weight)	+2.0%
US 10-Year TIPS Breakeven Rate (50% weight)	+1.6%
<b>Inflation Forecast</b>	<b>2.0%</b>

Source: Verus, as of 9/30/20

# Cash

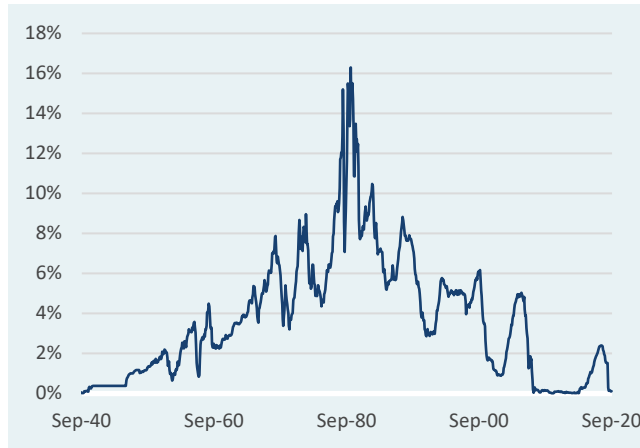
The U.S. Treasury yield curve collapsed to nearly zero in the first half of 2020, but the curve retained steepness similar to that experienced in recent years. Unprecedented monetary policy and central bank involvement in the markets has led bond yields towards zero, or negative, in most developed countries. As indicated by the Federal Reserve, interest rates will likely be kept at 0% for the foreseeable future. This brings the real cash rate deeply negative.

become the new normal. We believe that the current federal funds rate, as well as the steepness of the U.S. Treasury yield curve, may provide guidance regarding the future longer-term cash return. We place a 75% forecasting weight on the current federal funds rate and a 25% weight to the 10-year U.S. Treasury.

Applying these relationships result in a 10-year cash forecast of 0.2%.

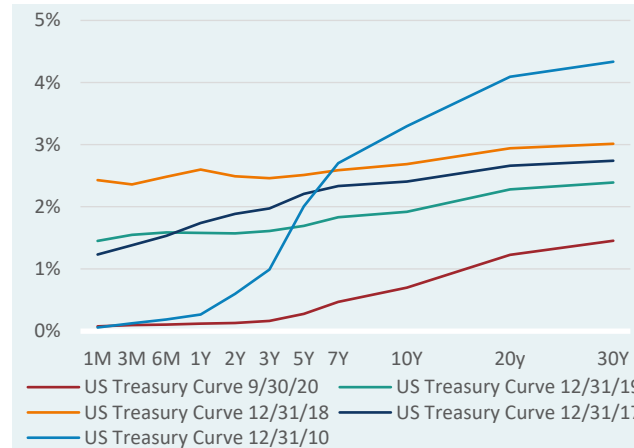
The return of cash seems to have decoupled from the rate of inflation in the current environment, as zero or negative interest rates have

**CASH YIELD (3-MONTH T-BILL)**



Source: FRED, as of 9/30/20

**U.S. TREASURY YIELD CURVE**



Source: Bloomberg, as of 9/30/20

**FORECAST**

	10-Year Forecast
Cash	+0.2%
Inflation Forecast	-2.0%
Real Return	-1.8%

Source: Verus, as of 9/30/20

# Rates

We forecast the return from rates based upon the current 10-year Treasury yield, with all cash flows reinvested at the current yield. The 10-year yield fell from 1.7% to 0.7% through September.

U.S. Treasury yields remain high relative to other developed nations, specifically Japan and Germany, though less so since U.S. rates collapsed during the COVID-19 pandemic. Investors generally believe U.S. yields will stay lower-for-longer, though the Federal Reserve has expressed no interest in bringing rates into negative territory, which may limit significant downward movement from this point. The U.S.

yield curve remains surprisingly flat.

Developed world central banks have begun to recognize the limitations of monetary policy in spurring economic growth, and many have commented on the need for greater fiscal policy support. It appears that interest rates in many countries have hit or are close to hitting a natural floor.

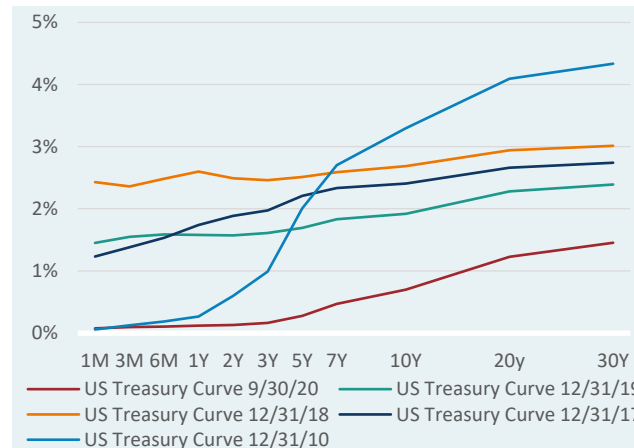
Our expectations are for a 0.7% return over the next ten years, in line with the current U.S. 10-year Treasury yield.

**U.S. 10-YR TREASURY YIELD**



Source: Bloomberg, as of 9/30/20

**U.S. TREASURY YIELD CURVE**



Source: Bloomberg, as of 9/30/20

**FORECAST**

	10-Year Forecast
U.S. 10-Year Treasury	+0.7%
Inflation Forecast	-2.0%
Real Return	-1.3%

Source: Verus, as of 9/30/20

# Real rates

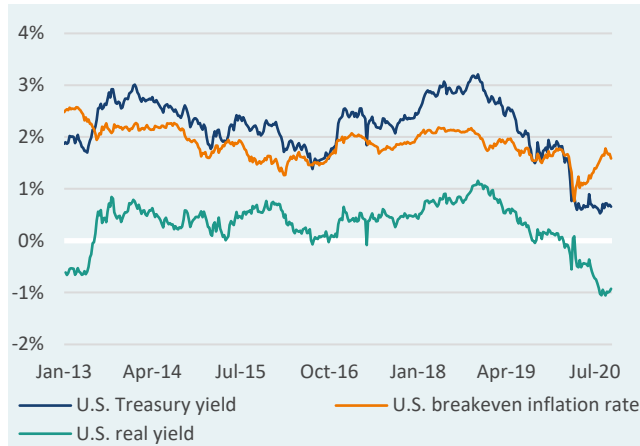
TIPS provide high sensitivity to duration (interest rate risk) over short periods and track inflation (CPI) fairly well over longer periods. Changing inflation expectations, demand for inflation protection, and rate movements contribute to the price volatility of TIPS. Currently, future inflation is expected to be mild, there is low demand for inflation protection, and interest rates arguably cannot move much lower.

The U.S. 10-year real yield fell into deeply negative territory in 2020, along with falling interest rates. While inflation expectations bounced

back in Q3 to prior levels, interest rates have stayed depressed. The breakeven inflation rate bottomed at 0.5% in March, but recovered to 1.64% in the third quarter.

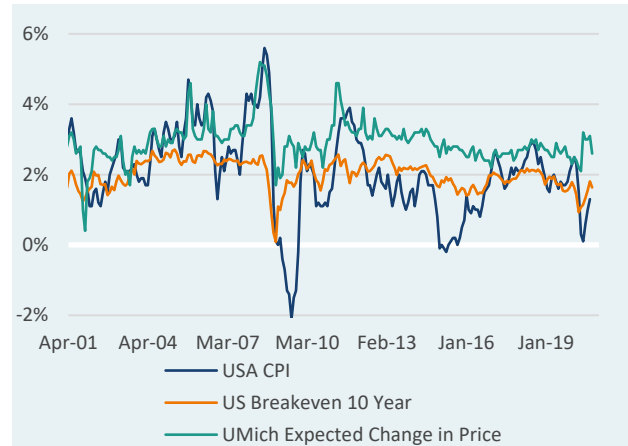
To arrive at a nominal 10-year forecast, we add the current real TIPS yield to our 10-year inflation forecast. Our real rates forecast fell into deeply negative territory from 0.14% to -0.95% as nominal interest rate collapsed and inflation expectations are relatively unchanged from one year prior.

## NOMINAL YIELD VS. REAL



Source: Bloomberg, as of 9/30/20

## INFLATION EXPECTATIONS



Source: Bloomberg, as of 9/30/20

## FORECAST

	10-Year Forecast
U.S. 10-Year TIPS Real Yield	-0.95%
Inflation Forecast	+2.00%
Nominal Return	1.05%

Source: Verus, as of 9/30/20



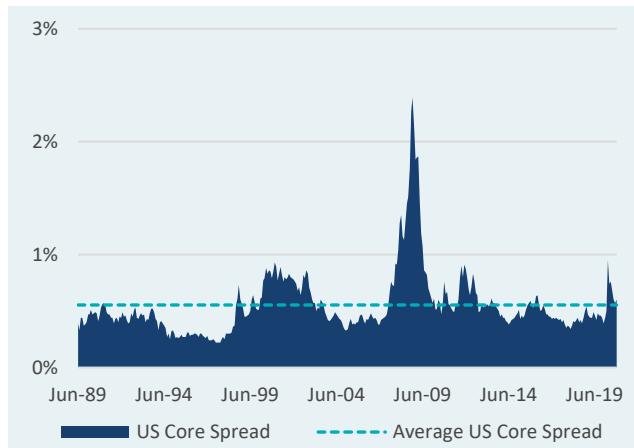
# Core fixed

Credit fixed income return is composed of a bond term premium (duration) and credit spread. The bond term premium is represented by the 10-year U.S. Treasury yield.

We use default rates and credit spreads for each respective fixed income category to provide our 10-year return forecast. Our default rate assumption is derived from a variety of sources, including historical data and academic research. The effective default that is subtracted from the return forecast is based on our assumed default and recovery rates.

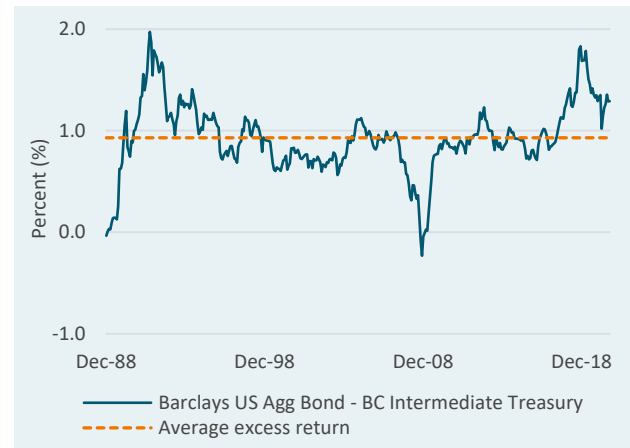
Core fixed income spreads increased from 62 bps to 90 bps over the year, but remain below the 30-year average of 1.25%. Although higher credit spreads have bolstered core fixed income expectations slightly, materially lower interest rates had a greater impact, bringing our forecast from 2.2% to 1.5%.

## U.S. CORE CREDIT SPREAD



Source: Barclays, as of 9/30/20

## ROLLING EXCESS RETURN (10-YR)



Source: Barclays, as of 9/30/20

## FORECAST

	10-Year Forecast
Barclays U.S. Option-Adjusted Spread	+0.9%
Effective Default	-0.1%
U.S. 10-Year Treasury	+0.7%
Nominal Return	1.5%
Inflation Forecast	-2.0%
Real Return	-0.5%

Source: Verus, as of 9/30/20

# Credit summary

	Core	Long-Term Credit	Global Credit	High Yield*	Bank Loans*	EM Debt (USD)	EM Debt (Local)	Private Credit	Real Estate Debt
<b>Index</b>	BBgBarc U.S. Aggregate	BBgBarc Long U.S. Corporate	BBgBarc Global Credit	BBgBarc U.S. High Yield	S&P LSTA	JPM EMBI	JPM GBI-EM	S&P LTSA + 1.75%	BBgBarc CMBS IG
<b>Method</b>	OAS + U.S. 10-Year	OAS + U.S. 10-Year	OAS + Global 10-Year Treasuries	OAS + U.S. 10-Year	LIBOR + Spread	OAS + U.S. 10-Year	Current Yield	Bank Loans+ 1.75% private premium	LIBOR + Spread
<b>Spread to</b>	Intermediate U.S. Treasury	Long-Term U.S. Treasury	Global Long-Term Treasuries	Intermediate U.S. Treasury	LIBOR	Intermediate U.S. Treasury	-	-	LIBOR
<b>Default Assumption</b>	-0.5%	-4.5%	-3.0%	-	-	-0.5%	-0.5%	-	-3.7%
<b>Recovery Assumption</b>	80%	95%	40%	-	-	60%	40%	-	47%
<b>Spread</b>	0.9%	1.7%	1.7%	5.5%	5.3%	4.7%	-	-	4.0%
<b>Yield</b>	-	-	-	-	-	-	4.6%	-	-
<b>Risk Free Yield</b>	0.7%	0.7%	0.4%	0.7%	0.2%	0.7%	-	-	0.2%
<b>Effective Default</b>	-0.1%	-0.2%	-1.8%	-2.8%	-2.6%	-0.2%	-0.3%	-	-2.0%
<b>Nominal Return</b>	1.5%	2.2%	0.3%	3.4%	2.9%	5.2%	4.3%	4.6%	2.2%
<b>Inflation Forecast</b>	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
<b>Real Return</b>	-0.5%	0.2%	-1.6%	1.4%	0.9%	3.2%	2.3%	2.6%	0.2%

\*We assume half of the spread of higher risk credit will be lost to defaults, as this has roughly been the case throughout history.

Source: Verus

# Equities

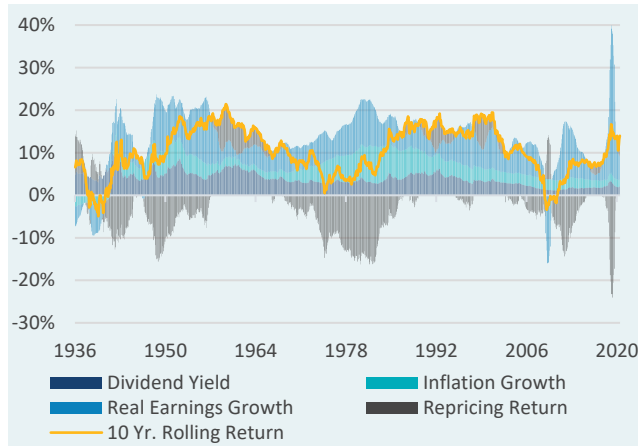
Investment returns in the equity space can be broken down into earnings growth, dividend yield, inflation, and repricing. Over the very long-term, repricing represents a small portion of return to equity investors, but over shorter time frames, the impacts on return can vary considerably.

If investors are willing to pay more for earnings, it could signal that investors are more confident in positive earnings growth going forward, while the opposite is true if investors pay less for earnings. It is somewhat surprising that investor confidence varies so much given that the long-term earnings growth is relatively stable.

Investor confidence in earnings growth can be measured using both the Shiller P/E ratio and the trailing 12-month P/E ratio. We take an average of these two valuations metrics when determining our repricing assumption. In short, if the P/E ratio is too high (low) relative to history, we expect future returns to be lower (higher) than the long-term average. Implicit in this analysis is the assumption that P/E's will exhibit mild mean reversion over 10 years.

We make a conservative repricing estimate given how widely repricing can vary over time. We then skew the repricing adjustment because the percentage change in index price is larger with each incremental rise in valuations when P/E's are low, compared to when they are high.

## TRAILING 10-YR S&P 500 RETURN COMPOSITION



Source: Shiller, Standard & Poor's, as of 6/30/20

## U.S. LARGE SHILLER P/E



Source: Shiller, S&P 500, as of 9/30/20

## P/E REPRICING ASSUMPTION

Average P/E Percentile Bucket	Lower P/E	Upper P/E	Repricing Assumption
Lower 10%	-	10	2.00%
10% - 20%	10	13	1.50%
20% - 30%	13	15	0.75%
30% - 45%	15	18	0.50%
45% - 55%	18	19	0.0%
55% - 70%	19	21	-0.25%
70% - 80%	21	22	-0.50%
80% - 90%	22	24	-0.75%
Top 10%	24	-	-1.00%

Source: Verus

# Equity summary

	U.S. Large	U.S. Small	EAFE	EAFE Small	EM
Index	S&P 500	Russell 2000	MSCI EAFE Large	MSCI EAFE Small	MSCI EM
<b>Method</b>	Building Block Approach: current dividend yield + historical average real earnings growth + inflation on earnings + repricing				
<b>Current Shiller P/E Ratio</b>	30.8	43.1	17.0	-	11.2
<b>Regular P/E Ratio</b>	26.0	13,764**	34.6	28.6	20.1
<b>2020 Shiller P/E Change</b>	+6.2%	-4.4%	-2.9%	-	+6.7%
<b>2020 Regular P/E Change</b>	+33.3%	+33,571%	+207.1%	+53%	+51.1%
<b>Current Shiller P/E Percentile Rank</b>	86%	91%	32%	-	34%
<b>Current Regular P/E Percentile Rank</b>	94%	100%	97%	63%*	93%
<b>Average of P/E Methods' Percentile Rank</b>	90%	95%	64%	63%*	63%
<b>2020 YTD Return</b>	5.6%	-8.7%	-7.1%	-4.2%	-1.2%
<b>Shiller PE History</b>	1982	1988	1982	Not Enough History	2005
<b>Long-Term Average Shiller P/E</b>	23.1	31.4	22.4	-	14.8
<b>Current Dividend Yield</b>	1.8%	1.3%	2.8%	2.3%	2.3%
<b>Long-Term Average Real Earnings Growth</b>	2.4%	2.9%	1.8%	1.6%	1.4%
<b>Inflation on Earnings</b>	2.0%	2.0%	0.8%	0.8%	2.0%
<b>Repricing Effect (Estimate)</b>	-1.0%	-1.0%	-0.3%	-0.3%	-0.3%
<b>Nominal Return</b>	5.1%	5.2%	5.2%	4.4%	5.4%
<b>Inflation Forecast</b>	2.0%	2.0%	0.8%	0.8%	2.0%
<b>Real Return</b>	3.1%	3.2%	4.4%	3.6%	3.4%

Data as of 9/30/20

\*Average trailing P/E from previous 12 months is used

\*\*Earnings have fallen to nearly zero, which is the cause of this extremely high figure (the denominator of the Price/Earnings equation is nearly zero)

NOTE: For all equities, we exclude data prior to 1972, which allows for a more appropriate comparison between data sets

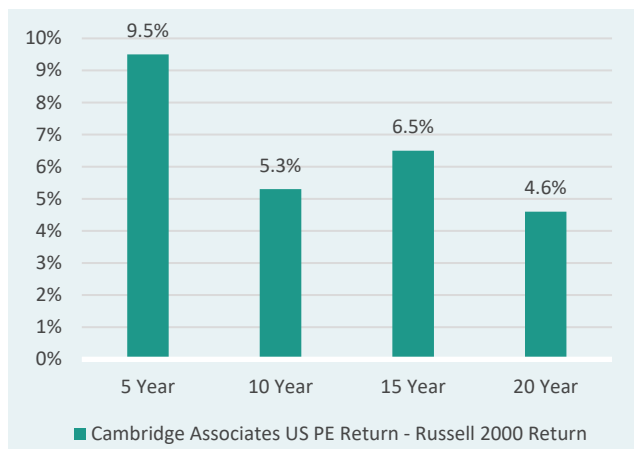
# Private equity

Private equity and public equity returns have been correlated historically because the underlying economic forces driving these asset class returns are quite similar. The return relationship between the two can vary in the short-term, but over the long-term investors have received a premium, driven by leverage, concentrated factor exposure (smaller and undervalued companies), skill, and possibly illiquidity.

Historically, the beta of private equity relative to public equities has been high. We use a beta assumption of 1.85 to U.S. large cap equities in our capital market forecast.

Private equity performance typically differs based on the implementation approach. We provide a 10-year forecast for the entire private equity universe of 9.3%. Direct private equity programs have historically outperformed the broader universe by approximately 1.0%, and we forecast direct private equity accordingly with a forecast of 10.3%. Private equity fund-of-fund (FoF) programs have historically lagged the universe by 1.0%, and we forecast private equity fund-of-funds at 8.3% to reflect this drag.

## PRIVATE EQUITY EXCESS RETURN (PE – U.S. SMALL CAP EQUITY)



Source: Cambridge, Russell, as of 3/31/20

## PRIVATE EQUITY IMPLEMENTATION FORECASTS

	10-Year Forecast
Private Equity Universe Forecast	9.3%
Private Equity FoF Forecast	8.3%
Private Equity Direct Forecast	10.3%

Source: Verus, as of 9/30/20

## PRIVATE EQUITY UNIVERSE FORECAST

	10-Year Forecast
U.S. Large Cap Forecast	+5.1%
1.85 Beta Multiplier	+4.2%
Nominal Return	9.3%
Inflation Forecast	-2.0%
Real Return	7.3%

Source: Verus, as of 9/30/20

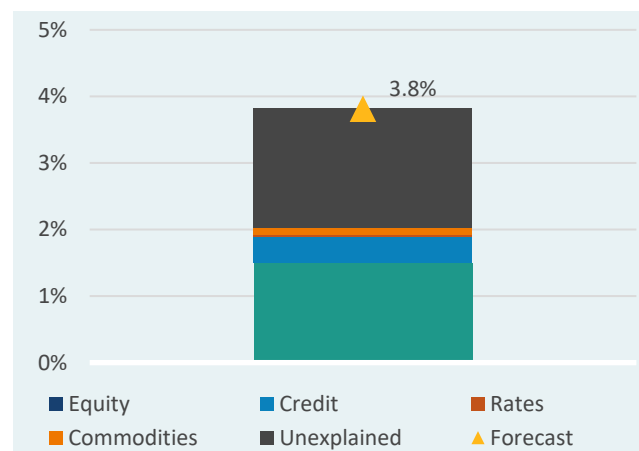
# Hedge funds

Hedge fund performance variation through time can be partly explained by public market betas (ex: equity, rates, credit, etc.) and partly explained by non-public sources of return (ex: alternative betas, skill, luck). Certain hedge funds can be mostly explained by public market betas, while others are driven mostly by non-public sources of return. We do not believe hedge funds should be thought of as an asset class, and in most cases we recommend benchmarking and modeling individual hedge funds in line with the underlying asset class exposure set (equity hedge funds modeled as equity exposure, fixed income hedge funds modeled as fixed income exposure, etc.) Our forecast for “hedge funds” that we show here can be thought of as a forecast of the broad universe of hedge funds.

To forecast hedge fund returns, we identified the portion of historical hedge fund performance that can be attributed to public market betas, and the portion of hedge fund returns that cannot be attributed to public market beta. This means our forecast has two components: the public market return (explained return) and the non-public market return (unexplained return).

To forecast the public market beta portion of hedge funds, we take the historical sensitivity of hedge funds to equity, rates, credit, and commodities and pair these with our current 10-year public market forecasts for each asset class. To forecast the non-public market return portion of hedge funds (unexplained return) we simply assume the historical performance contribution of these sources will continue.

## HEDGE FUND FORECAST



Source: Verus, as of 9/30/20

## HEDGE FUND PUBLIC MARKET SOURCES OF RETURN (EXPLAINED RETURN)

Equity
Rates
Credit
Commodities

## HEDGE FUND NON-PUBLIC SOURCES OF RETURN (UNEXPLAINED RETURN)

Alternative betas
Skill
Luck

Source: Verus

## FORECAST

	10-Year Forecast
Public Market % of Return	+2.0%
Non-Public Market % of Return	+1.8%
<b>Nominal Return</b>	<b>+3.8%</b>
Inflation Forecast	-2.0%
<b>Real Return</b>	<b>+1.8%</b>

Source: Verus, as of 9/30/20

# Private core real estate/REITS

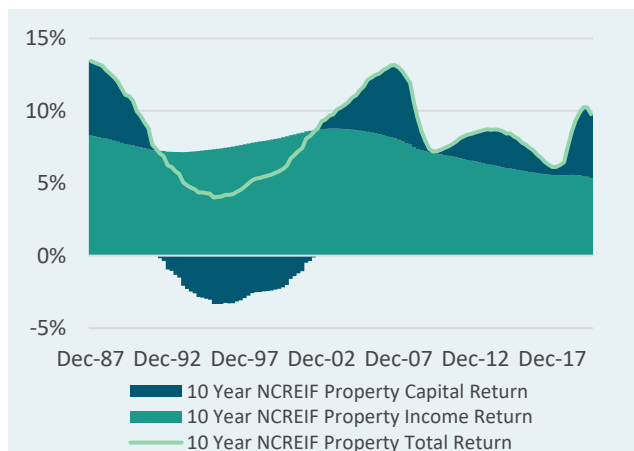
Performance of the NCREIF property index can be decomposed into an income return (cap rate) and capital return. The return coming from income has historically been more stable than the return derived from capital changes.

The cap rate is the ratio of earnings less expenses to price and does not include extraordinary expenses. A more accurate measure of the yield investors receive should include non-recurring capital expenditures; we assume a 2.0% capex expenditure. We also assume income growth will roughly equal the rate of broad economic growth, and we use GDP forecasts as an estimate for future income growth.

Private real estate and REITs have provided very similar returns over the long-term. Investors should be careful when comparing risk-adjusted returns of publicly traded assets to returns of appraisal priced assets, due to data problems and smoothing effects. While private real estate appears to be less volatile than REITs, the true risks to investors are likely very similar.

We assume the effects of leverage and liquidity offset each other. Therefore, our return forecast is the same for private real estate and REITs.

## TRAILING 10-YR NCREIF RETURN COMPOSITION



Source: NCREIF, as of 6/30/20

## PRIVATE REAL ESTATE

	Private Real Estate 10-Year Forecast
Current Cap Rate	+4.1%
Real Income Growth	+1.7%
Capex Assumption	-2.0%
Inflation	+2.0%
Nominal Return	5.8%
Inflation Forecast	-2.0%
Real Return	3.8%

Source: Verus, as of 9/30/20

## REITS

	10-Year Forecast
Nominal Return Forecast	5.8%
Inflation Forecast	-2.0%
Real Return	3.8%

Source: Verus, as of 9/30/20

# Value-add & opportunistic real estate

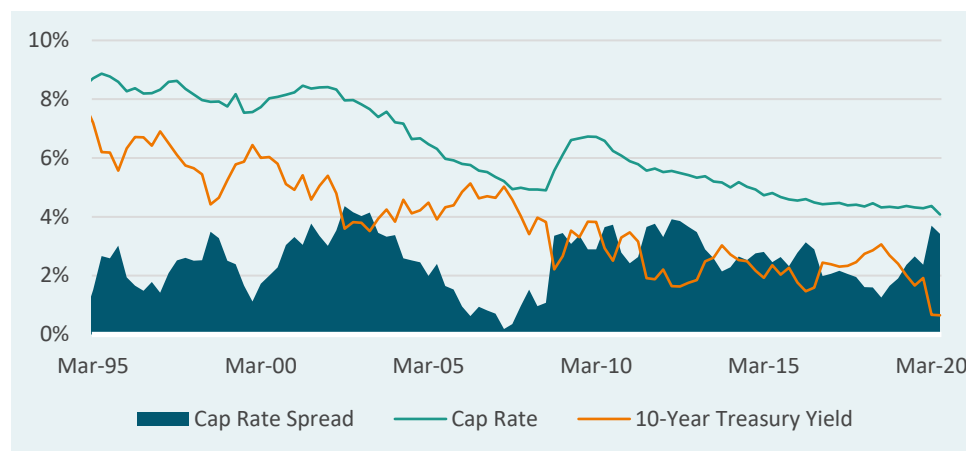
Value-add real estate includes properties which are in need of renovation, repositioning, and/or lease-up. Properties may also be classified as value-add due to their lower quality and/or location. Opportunistic real estate can also include development and distressed or very complex transactions. Greater amounts of leverage are usually employed within these strategies. Leverage increases beta (risk) by expanding the purchasing power of property managers via a greater debt load, which magnifies gains or losses. Increased debt also results in greater interest rate sensitivity. An increase/decrease in interest rates may result in a write-up/write-down of fixed rate debt, since debt holdings are typically marked-to-market.

Performance of value-add real estate is composed of the underlying private

real estate market returns, plus a premium for additional associated risk, which is modeled here as 200 bps above our core real estate return forecast. Performance of opportunistic real estate strategies rests further out on the risk spectrum, and is modeled as 400 bps above the core real estate return forecast.

Additional expected returns above core real estate are justified by the higher inherent risk of properties which need improvement (operational or physical), price discounts built into properties located in non-core markets, illiquidity, and the ability of real estate managers to potentially source attractive deals in this less-than-efficient marketplace.

## CAP RATE SPREADS



Source: NCREIF, Bloomberg, as of 6/30/20

## FORECAST

	Value-Add 10-Year Forecast	Opportunistic 10-Year Forecast
Premium above core	+2.0%	+4.0%
Current Cap Rate	+4.1%	+4.1%
Real Income Growth	+1.7%	+1.7%
Capex Assumption	-2.0%	-2.0%
Inflation	+2.0%	+2.0%
Nominal Return	7.8%	9.8%
Inflation Forecast	-2.0%	-2.0%
Real Return	5.8%	7.8%

Source: Verus, as of 9/30/20



# Infrastructure

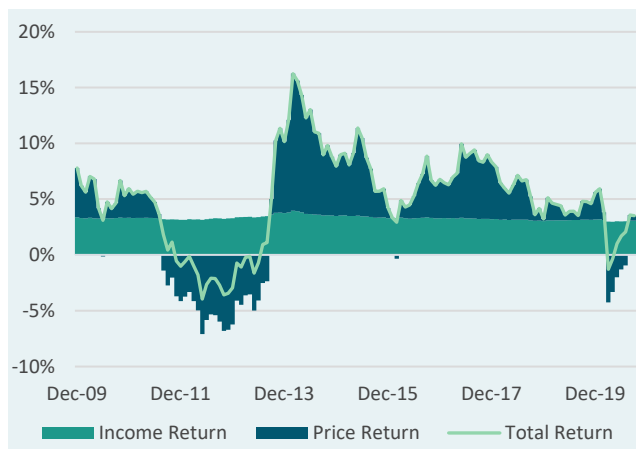
Infrastructure includes a variety of investment types across a subset of industries. There is not one definition for what can be included within infrastructure. The asset class has grown dramatically during the last decade as investors sought assets that might provide more attractive yield relative to fixed income along with the potential for inflation protection.

Similar to real estate investment, income plays a significant role in the returns which investors receive. Income yields are currently lower than average due to higher prices and competition in the space, which

might reasonably be expected to translate into lower expected future returns.

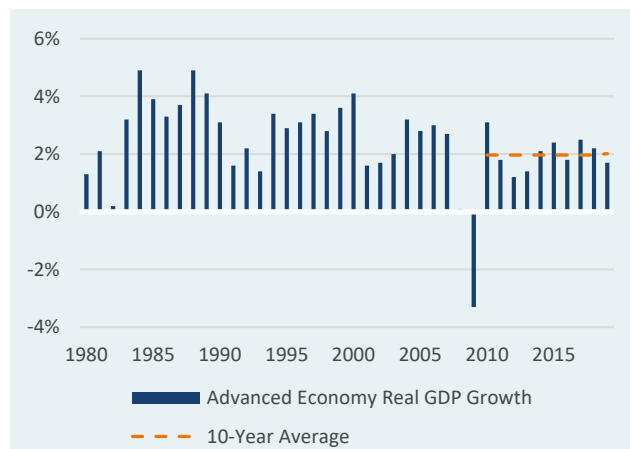
Due to the discount rate effect, infrastructure asset valuations would generally be negatively affected by material increases in interest rates. Because leverage is used in this space, higher interest rates would also impact investors in the form of higher borrowing costs.

**5-YR ROLLING RETURN COMPOSITION**



Source: S&P Global Infrastructure Index, as of 9/30/20

**ADVANCED ECONOMY REAL GDP GROWTH**



Source: IMF, as of 9/30/20

**FORECAST**

	10-Year Forecast
Inflation	1.7%
Yield	4.1%
Income Growth	2.0%
Nominal Return	7.8%
Global Inflation Forecast	-1.7%
Real Return	6.2%

Source: Verus, as of 9/30/20

# Commodities

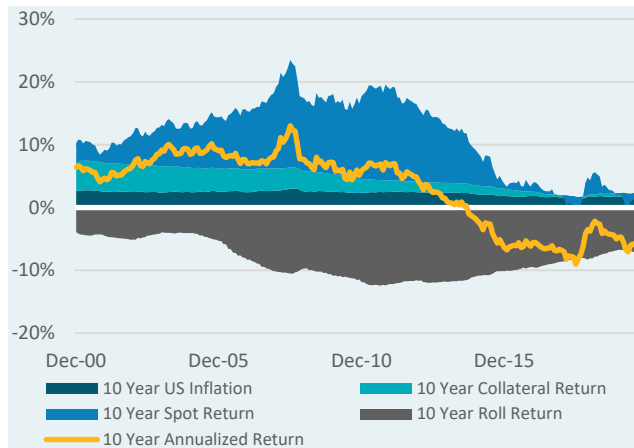
Commodity returns can be decomposed into three sources: collateral return (cash), spot changes (inflation), and roll yield.

Roll return is generated by either backwardation or contango present in futures markets. Backwardation occurs when the futures price is below the spot price, which results in positive yield. Contango occurs when the futures price is above the spot price, and this results in a loss to commodity investors. Historically, futures markets have fluctuated between backwardation and contango but with a net-zero effect over the very long-term (since 1877). Therefore, roll return is assumed to

be zero in our forecast. Over the most recent 10-year period, roll return has been negative, though this is likely the result of multiple commodity crises and a difficult market environment.

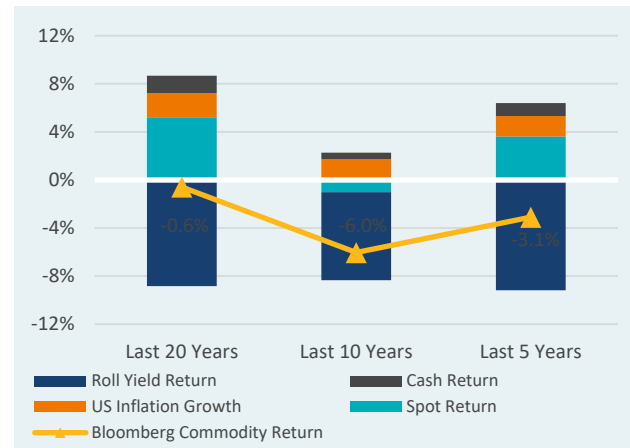
Our 10-year commodity forecast combines collateral (cash) return with spot return (inflation) to arrive at the nominal return, and subtracts out inflation to arrive at the real return.

**TRAILING 10YR BLOOMBERG COMMODITY RETURN COMPOSITION (%)**



Source: MPI, Bloomberg, as of 9/30/20

**BLOOMBERG COMMODITY RETURN COMPOSITION (%)**



Source: MPI, Bloomberg, as of 9/30/20

**FORECAST**

	10-Year Forecast
Collateral Return (Cash)	+0.2%
Roll Return	+0.0%
Spot Return (Inflation)	+2.0%
Nominal Return	2.2%
Inflation Forecast	-2.0%
Real Return	0.2%

Source: Verus, as of 9/30/20

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SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
Board of Retirement

January 26, 2021

Agenda Item 7.1

**TO:** Board of Retirement

**FROM:** Scott Hood, Chief Executive Officer 

**SUBJECT:** 2021 Board-Staff Retreat Topics

**Recommendation**

Provide direction for staff regarding the topics and schedule for the March 23, 2021, Board-Staff Retreat.

**Background**

This item is to give trustees another opportunity to discuss the upcoming retreat on March 23, 2021. The Board assists with setting the topics to be addressed and provides input regarding the proposed presenters. The Board assists on setting the topics to be addressed at the retreat and provides input regarding the proposed presenters. This agenda item gives trustees another opportunity to discuss retreat topics. We will bring this back to Board again prior to finalizing the agenda.

**Discussion**

Last year's retreat was scheduled for one day but was cancelled due to the Covid-19 Pandemic and the beginning of the SamCERA's remote operations. While SamCERA is still operating remotely, we are better positioned to administer a Board retreat with guest speakers through Zoom. The Board already approved a start time of 8:30 a.m. for March 23<sup>rd</sup> and we are proposing this one-day retreat to occur in addition to the regular Board meeting. The retreat portion would have 4 to 5 major topics and time for discussion between topics.

Some suggested topics are included in the following list:

- High level-look at the economy
- Deep Dive into the portfolio
- Further discussion on Plan Maturity
- Impact of Covid-19 on portfolio/asset class/relative value
- Discussion of Actuarial Funding Options

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
Board of Retirement

January 26, 2021

Agenda Item 7.2

**TO:** Board of Retirement

**FROM:** Scott Hood, Chief Executive Officer



**SUBJECT:** Chief Legal Counsel Position

**Recommendation**

Authorize the Chief Executive Officer to hire Paul A. Okada to fill the position of Retirement Chief Legal Counsel.

**Background**

On April 26, 2011, the Board approved the creation of the Chief Legal Counsel position to represent the Board and SamCERA in all legal matters and authorized the Chief Executive Officer (CEO) to hire Brenda Carlson for the position. Ms. Carlson was appointed by and reports to the CEO.

**Discussion**

Ms. Carlson will retire March 31, 2021. As the Chief Legal Counsel has the Board as a “client,” this is a request for authority to directly appoint Paul Okada to fill that position. There will be some overlap of tenure to provide training for Mr. Okada.

Mr. Okada attended UC Berkeley (graduated with Honors) and New York University Law School where he was the Articles Editor of the Law Review. After graduating in 1994, he was a litigator at the Proskauer Rose firm in New York City before moving here to join Wilson Sonsini Goodrich & Rosati where he represented technology companies on a variety of issues.

Mr. Okada joined the County Counsel’s Office in 2003. In 2011, Paul was promoted to Chief Deputy County Counsel. In addition to supervising Deputy County Counsels in the areas of Employment, Finance, Children and Family Services, and Conflicts/Disclosures, he provides legal advice to the Deputy County Manager responsible for Performance Fiscal, Health and Social Services, and the Grand Jury. He has also represented a variety of other departments and agencies, including the Assessment Appeals Board, Controller, District Attorney, and Human Resources. He has significant experience litigating civil cases in state and federal court.

His private and public sector experience will translate well in his representation of the Board and SamCERA. He will also help retain the excellent relationship with the County of San Mateo, which is of high importance. Staff does not believe there can be a better candidate for the position.