



Notice of Public Meeting

The Board of Retirement of the San Mateo County Employees' Retirement Association will meet on **Tuesday, January 29, 2019, at 10:00 A.M.**

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 Regular Board Meeting Minutes from December 4, 2018
- 4. Approval of the Consent Agenda***

4.1 Disability Retirements (3) <ul style="list-style-type: none">• Christina Giusti• Paquito Lim• Babette Pruessner	4.7 Member Account Rollovers
4.2 Survivor Death Benefits	4.8 Member Account Redeposit
4.3 Service Retirements	4.9 Acceptance of Trustees' Reports of Educational Activities Through Outside Provider
4.4 Continuances	4.10 Acceptance of Semi-Annual Compliance Certification Statements for the Period Ended December 31, 2018
4.5 Deferred Retirements	4.11 Approval of Resolution Authorizing Contract for Legal Counsel for Disability Cases
4.6 Member Account Refunds	
- 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 2019
- 6. Investment Services**
 - 6.1 Report on Preliminary Monthly Portfolio Performance for the Period Ended December 31, 2018
 - 6.2 Educational Presentation on Timberland
 - 6.3 Approval to Transition TIPs Separate Account to Commingled Fund
 - 6.4 Presentation on the SamCERA Risk Dashboard
- 7. Board & Management Support**
 - 7.1 Report on April 24 and 25, 2019 Board-Staff Retreat Planning
 - 7.2 Report on Upcoming Trustee Elections and Appointments
 - 7.3 Report on Staff's Strategic Plan Implementation
- 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

Notice of Public Meeting

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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

10. Adjournment in Memory of the Following Deceased Members:

Coulman, Mary	November 7, 2018	Mental Health
Sain, Grace	November 10, 2018	Library
Velasquez, Emma	November 24, 2018	District Attorney's Office
Willson, Lewis	November 30, 2018	Human Resources
Del Bianco, Nilda	December 5, 2018	Courts
Lubke, Alan	December 7, 2018	Clerk-Recorder
Mills, Moses	December 7, 2018	Health Services
Andre, Edward	December 17, 2018	Probation
Duval, Kenneth	December 23, 2018	Public Works
Schweizer, Marc	December 26, 2018	Sheriff
Orcutt, John	January 3, 2019	Sheriff



Scott Hood, Chief Executive Officer

Posted: January 23, 2019

(* 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 MEETS AT 100 MARINE PARKWAY, SUITE 160, WHICH IS LOCATED ON THE SE CORNER OF TWIN DOLPHIN & MARINE PARKWAY IN REDWOOD CITY. Detailed directions are available on the "Contact Us" page of the website www.samcera.org. Free Parking is available in all lots in the vicinity of the building. A copy of the Board of Retirement's open session agenda packet is available for review at the SamCERA offices and on our website unless the writings are privileged or otherwise exempt from disclosure under the provisions of the California Public Records Act. Office hours are Monday through Thursday 7 a.m. – 6 p.m.

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

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
DECEMBER 4, 2018 – REGULAR BOARD MEETING MINUTES

1812.1 Call to Order, Roll Call and Miscellaneous Business

Call to Order: Ms. Sandie Arnott, Chair, called the Regular Meeting of the Board of Retirement to order at 10:00 a.m.

Roll Call:

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

Absent: Ben Bowler.

Alternates present: Susan Lee and Alma Salas.

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

Consultants and speakers: Margaret Jadallah, Francis Griffin, John Nicolini and Faraz Shooshani (Verus).

1812.2.1 Oral Communications from the Board: None.

1812.2.2 Oral Communications from the Public: None.

1812.3.1 Approval of the Minutes: Ms. Arnott asked if there were any changes or corrections, or objections, to the meeting minutes from the Board meeting held on October 30, 2018.

Action: Mr. Hackleman moved to approve the minutes from the Board Meeting on October 30, 2018. The motion was seconded by Mr. David and carried with a vote of 7-0, with trustees Arnott, Battey, David, Hackleman, O'Malley, Raw and Tashman all in favor; Hoefer abstained; none opposed.

1812.4.0 Approval of the Consent Agenda: Ms. Arnott asked if there were any items to be removed for discussion from the Consent Agenda. No items were removed.

Action: Mr. David moved to approve the Consent Agenda, and the motion was seconded by Mr. Tashman. The motion carried with a vote of 8-0, with trustees Arnott, Battey, David, Hackleman, Hoefer, O'Malley, Raw and Tashman all in favor; none opposed.

1812.4.1 Disability Retirements:

a) The Board (1) accepted the proposed findings and recommendations of the Hearing Officer, (2) found that **Melvin Hinshaw** is permanently incapacitated from the performance of his usual and customary duties as a Deputy Sheriff, (3) found that his disability was the result of an injury arising out of and in the course of his employment and (4) granted his application for a service-connected disability retirement.

b) The Board found that **Suzanne Mattocks** is (1) permanently incapacitated from the performance of her usual and customary duties as a Deputy Sheriff, (2) found that her disability was the result of an injury arising out of and in the course of her employment and (3) granted her application for a service-connected disability retirement.

c) The Board found that **Patrick McTaggart** is (1) permanently incapacitated from the performance of his usual and customary duties as a Sheriff Sergeant, (2) found that his disability was the result of an injury arising out of and in the course of his employment and (3) granted his application for a service-connected disability retirement.

d) The Board found that **Christine Pantoja** is (1) permanently incapacitated from the performance of her usual and customary duties as a Deputy Court Clerk Specialist, (2) found that her disability was the result of an injury arising out of and in the course of her employment and (3) granted her application for a service-connected disability retirement.

1812.4.2 **Survivor Death Benefits:** None.

1812.4.3 **Service Retirements:**

Member Name	Effective Retirement Date	Department
Aguilar, Vilma	September 6, 2018	Human Services Agency
Blanchard, Barbara	September 8, 2018	Deferred from Library
Carlson, James	August 15, 2018	Deferred from Public Health
Demee, Joseph	September 29, 2018	Treasurer/Tax Collector
Dunsmore-Bertoni, Dinora	October 1, 2018	Parks
Hogerheide, Louise	September 23, 2018	Parks
Klimas, Catarina	September 28, 2018	Public Health
Koenig, Douglas	September 7, 2018	Public Works
Magett, Patricia	September 8, 2018	Deferred from Courts
Makino, Michelle	September 29, 2019	Aging & Adult Services
McLaughlin, Kathie	September 29, 2019	Business Systems
McNeely, Julia	September 29, 2019	Superior Court
Moala, Samisoni	September 25, 2019	Probation
Okereke, Kingsley	September 28, 2019	Deferred from Courts
Sandoval, Patricia	September 11, 2019	Deferred from HOS Call Center
Shabatura, Sam	September 6, 2019	Deferred from Sheriff's
VanderLans, Nancy	September 5, 2019	Library

1812.4.4 **Continuances:**

The Board ratifies the actions as listed below for the following members regarding continues:

Survivor's Name	Beneficiary of:
Dana, Judith	Dana, Paul
Morimoto, Junko	Morimoto, Fred
O'Connor, Mary	O'Connor, James
Trade, Sherry	Trade, Daniel

1812.4.5 **Deferred Retirements:**

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

Member Name	Retirement Plan Type
Lingfelder, Matthew	G7, Vested - Reciprocity
Lopez, Teresa P.	G4, Vested – Auto Defer – Code 31700
Mclaughlin, Julia M.	G4, Vested – Auto Defer – Code 31700
Monheit, Juliette C.	G4, Vested
Murillo, Norma	G4, Vested – Auto Defer – Code 31700
Ramirez, Lucy	G4, Vested
Ruiz-Girmay, Christina	G4, Vested – Auto Defer – Code 31700
Scruggs, Shaunda	G5 Vested
Sparks, Marni	G4, Vested
Thornton, Lorna M	G4, Vested – Auto Defer – Code 31700

1812.4.6 Member Account Refunds:

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

Member Name	Retirement Plan Type
Bermudez, Corina	G4, Vested
Deponte, Amanda	G7, Non-vested
Grover, Sumit	G7, Non-vested
Johnson-Silk, Michael	G7, Non-vested
Jones, Jacob	G7, Non-vested
Mabry, Charice	G7, Non-vested
Manuel, Christopher	G7, Non-vested
Morton, Kevin	S7, Non-vested
Ogburn, Katherine	G7, Non-vested
Pardini, Judy	G7, Non-vested
Peyton, Michael (FBO: Peyton, Amelia)	G4, Vested
Peyton, Michael (FBO: Peyton, Ava)	G4, Vested
Pons, Jeremiah	G7, Non-vested
Price, Jessica	G5, Non-vested
Wilcox, Carrie	G4, Vested
Yazir, Melissa	G7, Non-vested

1812.4.7 Member Account Rollovers:

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

Member Name	Retirement Plan Type
Ahearn-Brown, Kerry	G7, Non-vested
Caraotta, Lauren	G7, Non-vested
Jajeh, Richard	G7, Non-vested
Nierenberg, Sandra	G7, Non-vested
Li, Peng	G7, Non-vested
Maravilla-Rosales, Sonia	G7, Non-vested
Rodriguez, Alvaro	G7, Non-vested

1812.4.8 Member Account Redeposits: None.

1812.4.9 Acceptance of Trustees' Reports of Educational Activities: The Board accepted the submitted reports for educational activities attended by Mr. Hackleman and Ms. Lee.

1812.4.10 Approval of a Resolution Reaffirming Education Policy: The Board reaffirmed the Board's Education Policy.

1812.4.11 Approval of a Resolution Amending Travel Reimbursement Policy: The Board approved the resolution amending the Board's "Policy for Reimbursement of Travel and Other Official Expenses for Trustees and Staff."

1812.5.1 Consideration of Agenda Items, if any, removed from the Consent Agenda: None.

1812.6.1 **Report on Preliminary Monthly Portfolio Performance for the Period Ended 10/31/18:** Mr. Coultrip discussed the preliminary monthly performance report with the Board. He reported that SamCERA's net preliminary return for October 2018 was -4.0%, while the preliminary trailing twelve-month return ending October 2018 was -0.2% net. This item was informational and for discussion only, no action was taken.

1812.6.2 **Report on Quarterly Investment Performance for the Period Ended 09/30/18:** Ms. Jadallah reviewed the quarterly performance report with the Board. She reviewed managers performance, market trends and discussed additional information from the report. The 3rd quarter net total return for SamCERA's portfolio was +2.0%, which was 50 bps lower than the +2.5% policy benchmark return. She advised risk parity was the main detractor of relative performance during the quarter. This item was informational only, no action was taken.

1812.6.3 **Report on Absolute Return and Risk Parity Annual Manager Reviews:** Ms. Ng reviewed the meeting notes from the annual review of SamCERA's absolute return and risk parity managers. Staff and consultant met at SamCERA's office with Aberdeen Standard, AQR, and PanAgora on October 11, 2018. Ms. Ng reported on the discussion that took place with AQR regarding the recent drawdown and underperformance over the last few quarters in the Delta strategy. This item was informational only, no action was taken.

1812.6.4 **Presentation of Private Asset Semi-Annual Performance Reports as of June 30, 2018:** Mr. Nicolini and Mr. Shooshani reviewed the private real assets and private equity performance reports and associated roadmaps in detail and answered questions from the Board. This item was informational only, no action was taken.

The meeting was adjourned for break at 11:19 a.m. and reconvened at 11:27 a.m.

1812.6.5 **Report on Investment Consultant Annual Review:** Mr. Coultrip summarized the results of the Investment Consultant Annual Review completed by trustees and staff. He also summarized Trustee feedback regarding potential educational topics for the upcoming year. This item was informational only, no action was taken.

The Board adjourned into Closed Session at 11:34 a.m. to hear item 6.6 then reconvened in Open Session at 12:36 p.m.

1812.6.6 **Approval of Proposed Alternative Investments (to be heard in Closed Session, Confidential Under Gov. Code §54956.81 and §6254.26):** Ms. Carlson reported that the Board approved an investment of up to \$30 million in EQT Infrastructure IV LP. The motion passed with a vote of 7-0.

Ayes: Arnott, Battey, David, Hoefer, O'Malley, Raw and Tashman.

Noes: None.

The Board also approved an investment of up to \$40 million in PIMCO Private Income Fund. The motion passed with a vote of 5-3.

Ayes: Arnott, Battey, O'Malley, Raw and Salas for Hackleman.

Noes: David, Hoefer and Tashman.

A report of said votes was made in open session.

1812.7.1 **Approval of Resolution Authorizing CEO to Enter into an Agreement for Actuarial Services:** Mr. Hood reported that the Evaluation Committee had completed their review of the proposals submitted in response to the RFP for Actuarial Services and reference checks. Mr. Hood presented the Committee's recommendation to the Board to select Milliman Inc.

Action: Mr. David motioned to approve a resolution authorizing the CEO to execute agreement with Milliman, Inc. for actuarial services not to exceed \$650,000. The motion was seconded by Mr. Hoefer and carried a vote of 8-0 with trustees Arnott, Battey, David, Hackleman, Hoefer, O'Malley, Raw and Tashman all in favor; none opposed.

1812.7.2 **Discussion of Board/Staff Retreat Topics:** Mr. Hood reviewed a list of topics to discuss for the 2019 Board/Staff Retreat and received feedback from Board members. This item was informational and for discussion only, no action was taken.

1812.8.1 **Chief Executive Officer's Report:** Mr. Hood called attention to the PAFR and SamCERA Travel Tips found in the Board's Day Of folder. He extended his thanks to staff involved in these projects. Mr. Hood also reported he will have an opportunity to provide feedback to the County regarding the fiscal impact on disability retirements. Lastly, Mr. Hood mentioned next month's meeting agenda would include the approval of the COLA and strategic plan update, as well as continued topic discussions for the Board/Staff retreat.

1812.8.2 **Assistant Executive Officer's Report:** Ms. Smith provided the Board with an update on SamCERA's vacant positions due to retirements. She also thanked the Benefits and Finance Team for their diligent work throughout these vacancies.

1812.8.3 **Chief Investment Officer's Report:** Mr. Coultrip reported staff is progressing with the low volatility equity implementation. He also reported Verus plans to provide an educational presentation on timberland investments in January.

1812.8.4 **Chief Legal Counsel's Report:** Ms. Carlson reported that the oral argument for the Cal Fire case before the California Supreme Court will occur on December 5, 2018 in Los Angeles.

C1 **Consideration of Disability Items, if any, removed from the Consent Agenda:** None.

C2 **Approval of Proposed Alternative Investments:** Please refer to agenda item 1812.6.6

C3 **Public Employee Performance Evaluation**, in accordance with Gov. Code § 54957, Title: Chief Executive Officer (*Confidential Under Gov. Code §54957*): The Board adjourned into Closed Session at 1:39 p.m. and the meeting reconvened at 2:11 p.m. Ms. Arnott reported that no reportable action was taken by the Board in Closed Session.

1812.10 **Adjournment:** Ms. Arnott adjourned the meeting at 2:12 p.m. in memory of the deceased members listed below.

Peyton, Michael	September 7, 2018	Mental Health
Lucas, Ruby	October 5, 2018	Courts
Lehto, Lila	October 12, 2018	Social Services
Nill, Marya	October 17, 2018	Social Services
Kodakari, Kazuyo	October 18, 2018	Clerk Recorder's
Brahy, Gayle	October 25, 2018	Information Technology
Eaneff, Gladys Joyce	November 3, 2018	District Attorney's Office

Burdick, James
Fulton, Kiyoko
Geiger, Dorothy
Timberlake, Nathaniel
Minty, Edith

November 8, 2018
November 8, 2018
November 11, 2018
November 13, 2018
November 17, 2018

Veteran Service Office
Human Services Agency
Mental Health
Public Works
General Services

Scott Hood
Chief Executive Officer

Anne Trujillo
Retirement Executive Secretary

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

January 29, 2019

Agenda Items 4.1- 4.9

TO: Board of Retirement

FROM: Elizabeth LeNguyen, Retirement Benefits Manager



SUBJECT: Approval of Consent Agenda Items 4.1 – 4.9

4.1 Disability Retirements

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

- b) Staff recommends that the Board: (1) Terminate the disability retirement application submitted by **Paquito Lim** per Article VI, section 6.5 and 6.6 of the Board Regulation regarding Disability Retirement.

- c) The Board find that **Babette Pruessner** is (1) permanently incapacitated from the performance of her usual and customary duties as a Benefits Analyst II, (2) find that her disability was the result of an injury arising out of and in the course of her employment and (3) grant her application for a service-connected disability retirement.

4.2 Survivor Death Benefits

None.

4.3 Service Retirements

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

Name	Effective Retirement Date	Department
Adams, David	December 1, 2018	Deferred from HOS
Aguilar-Terrazas, Norma	October 5, 2018	Behavioral Health
Antrea, George	November 27, 2018	Courts
Arnaudo, Robert	October 28, 2018	Sheriff's
Ashe, Rebecca	October 20, 2018	HOS - Coastside Clinic
Bazan, Deborah	December 1, 2018	County Manager

Campos, Marco	December 1, 2018	Sheriff's
Carnock, Maryann	March 28, 2018	Deferred from Medical Center
Castillon, Monica	December 1, 2018	D.A.O.
Catalano, Rodina	October 20, 2018	Courts
Darrow, Andrew	October 30, 2018	Deferred from DPW
Drake, Ronald	October 4, 2018	Deferred from Sheriff's
Edwards, Barbara	October 5, 2018	SamCERA
Evans, Robert	November 29, 2018	Deferred from Mental Health
Ferenz, Brian	November 3, 2018	Environmental Health
Garcia, Maria J.	November 1, 2018	Juvenile Probation
Gatt, Mariavictoria	November 1, 2018	Deferred from HOS
Guidotti, Karen	November 3, 2018	D.A.O.
Johnson, Joyce	October 29, 2018	Deferred from Probation
Kon, Cyrus	December 1, 2018	Courts
Konstantinidis, Manuel	October 28, 2018	Deferred from General Services
Lee, Lorraine	November 22, 2018	Deferred from HOS - Pharmacy
Maltbie, John	November 3, 2018	County Manager
Marcello, Rosa	September 29, 2018	Child Support Services
Miller, Marie	November 10, 2018	Probation
Pascual, Marilyn	November 1, 2018	HOS - Outpatient Bus Services
Pellizzer, John	December 1, 2018	Deferred from DPW
Robinson, Elonda	October 17, 2018	HOS - Acute Medical Surgery
Stevens, Barbara	October 20, 2018	Deferred from Library
Walsh, Patricia	October 6, 2018	Family Health
Williams, Nanette	October 31, 2018	D.A.O.
Wong, Mabel	October 5, 2018	SamCERA
Yu, Josephine	October 3, 2018	H.S.A.

4.4 Continuances

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

Survivor's Name	Beneficiary of:
Brahy, John	Brahy, Gayle
Ware, Frederica	Dobson-Ware, Gary

The Board denies the request for a continuance by the following individual:

Beneficiary's Name	Beneficiary of:
Robert Del Bianco	Nilda Del Bianco

4.5 Deferred Retirements

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

Name	Retirement Plan Type
Carvajal, Cecilia A.	G4, Vested - Reciprocity
Perez, Kristina M.	G5, Vested - Reciprocity
Santiago, Ana M.	G2, Vested - Reciprocity
Moore, Nyischa M.	G7, Non-vested - Reciprocity
Tatar, Greg	G7, Non-vested - Reciprocity
Compton, Louise M.	G7, Non-vested - Reciprocity
Mahar, Adrienne	G7, Non-vested - Reciprocity
Cardenas, Hector	G4, Vested - Reciprocity
Arrighi, Jason D.	G7, Non-vested - Reciprocity

4.6 Member Account Refunds

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

Name	Retirement Plan Type
Acosta, Maria	G7, Non-vested
Ibarra, Jose	G7, Non-vested
Izaguirre, Diana	G7, Non-vested
Malta, Luis	G4, Vested
Panduro, Maria	G7, Non-vested
Renteria, Oscar	G7, Non-vested
Thayer, Irene	G5, Non-vested

4.7 Member Account Rollovers

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

Name	Retirement Plan Type
Dub, Ana	G7, Non-vested
Turcios, Margoth	G7, Non-vested

4.8 Member Account Redeposits

None.

4.9 Acceptance of Trustees' Reports of Educational Activities Through Outside Provider

None.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

January 29, 2019

Agenda Item 4.10

TO: Board of Retirement

FROM: Doris Ng, Retirement Investment Analyst 

SUBJECT: Semi-Annual Compliance Certification Statements for Period Ended December 31, 2018

Recommendation

Accept the semi-annual Compliance Certification Statements for SamCERA's non-alternative investment managers and investment consultant, as of December 31, 2018.

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, risk parity and cash overlay investment managers on a semi-annual basis. The association's investment consultant also completes the certification. These statements are used to update SamCERA on any firm-wide compliance issues and to provide strategic-level information regarding such things as derivatives and portfolio positioning. For investment managers whose investments are considered "alternative investment vehicles" per the California Government Section Code §6254.26, the Compliance Certification Statements are not provided in the public board packet and will be sent separately to the Board.

Discussion

The attached Compliance Certification Statements report that SamCERA's investment managers and investment consultant are in compliance with SamCERA's Investment Policy as of December 31, 2018. There were no reported significant developments in portfolio construction, investment approach, or firm ownership of concern. 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. Any items that raise concern will be brought to the manager's or investment consultant's attention and will be thoroughly vetted by staff.

In January 2019, Western Asset Management's Head of Mortgage and Asset-Backed securities departed from the firm. SamCERA staff has scheduled a call with Western Asset Management at the end of this month to discuss the personnel change.

Please note the Compliance Certification Statement for State Street Global Advisors was not received in time to be included in the mailing, but will be included in the February board packet.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

Attachments

Compliance Certification Statement Matrix 12-2018

Compliance Certification Statements (16)

- A. Domestic Equity: Blackrock, QMA
- B. International Equity - Developed: Baillie Gifford, Blackrock, Mondrian
- C. Emerging Markets Equity: Eaton Vance Parametric
- D. Fixed Income: Blackrock, Brown Brothers Harriman, Fidelity Institutional Asset Management (FIAM), PIMCO, Western Asset Management, Franklin Templeton
- E. Real Estate: INVESCO
- F. Real Assets: Cushing Asset Management
- G. Cash Overlay: Parametric Portfolio Associates
- H. Investment Consultant: Verus Advisory

Compliance Certification Statement Matrix – December 31, 2018

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
Domestic Equity					
BlackRock Russell 1000		<ul style="list-style-type: none"> No Concerns 	No Concerns	No Concerns	<ul style="list-style-type: none"> Largest single security Microsoft Corp 3.30% Largest single industry Information Technology 20.16% vs bmk 20.32%
DE Shaw	<i>Confidential under California Gov. Section Code §6254.26</i>				
QMA		<ul style="list-style-type: none"> 1Q2019-Acquisition of Wadhvani Asset Management LP (WAM) to close, expand QMA's European presence 	<ul style="list-style-type: none"> Largest exposure to single-counterparty: JP Morgan 1.85% of the fund 	No Concerns	<ul style="list-style-type: none"> Largest holding, Haemonetics Corp. 1.09% Largest industry: Financial industry 17.37% vs. Russell 2000 bmk 18.24% Derivatives 1.85%
International Equity - Developed					
Baillie Gifford		<ul style="list-style-type: none"> Sept 2018-Tom Walsh, PCG mbr trsf'd to other inv team. Team of specialist reps formed to maximize collaboration & idea 	Not Applicable	No Concerns	<ul style="list-style-type: none"> 8.20% ADRs 26.2% Emerging Markets

Compliance Certification Statement Matrix – December 31, 2018

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
		flow across investment teams (Global Tech & Hlthcare, Positive Change, Global Discovery)			
BlackRock EAFE		No Concerns	No Concerns	No Concerns	<ul style="list-style-type: none"> • 0.19% ADRs
Mondrian		<ul style="list-style-type: none"> • 4Q2018-Liz Desmond, Director & CIO took title Deputy CEO of Mondrian Inv Prtnrs. Remain focused on managing int'l eqty products. 	Not Applicable	No Concerns	<ul style="list-style-type: none"> • 25.43% Emerging Markets (MIP Ltd Prtnshp)
Emerging Market Equity					
Eaton Vance Parametric		No Concerns	<ul style="list-style-type: none"> • P-notes exposure 4.72% 	No Concerns	<ul style="list-style-type: none"> • 7.77% ADRs • 1.31% GDRs • 4.72% Derivatives • 6.85% in Frontier Markets • Non-benchmark 26.68%

Compliance Certification Statement Matrix – December 31, 2018

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
Fixed Income					
Beach Point	<i>Confidential under California Gov. Section Code §6254.26</i>				
BlackRock Intermediate Government Bond Index		No Concerns	Not Applicable	No Concerns	No Concerns
Brigade	<i>Confidential under California Gov. Section Code §6254.26</i>				
Brown Brothers Harriman		No Concerns	No Concerns	No Concerns	No Concerns
Fidelity Institutional Asset Management (FIAM) BMD Bond		<ul style="list-style-type: none"> Eff Dec 2018-Angelo Manioudakis, CIO Global Asset Allocation left firm. Vadim Zlotnikov, Presid Global Asset Alloc assumed CIO title. 	No Concerns	No Concerns	<ul style="list-style-type: none"> 0.8% below inv grade (inv grade at purchase) 2.60% in Rule 144A securities
Franklin Templeton		<ul style="list-style-type: none"> Dec 2018-Chris Molumphy, EVP, CIO of Franklin Templeton Fixed Inc Grp, succeeded by 	No Concerns	No Concerns	<ul style="list-style-type: none"> No Concerns

Compliance Certification Statement Matrix – December 31, 2018

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
		Dr. Sonal Desai. Dr. Calvin Ho promoted to Deputy Director of Research for Templeton Global Macro.			
PIMCO		<ul style="list-style-type: none"> Oct 2018-PIMCO to acquire Gurtin Municipal Bond Management (specialist muni bond mgr) 	No Concerns	No Concerns	No Concerns
Tennenbaum Capital Partners					
<i>Confidential under California Gov. Section Code §6254.26</i>					
Western		<ul style="list-style-type: none"> Jan 2019-Anup Agarwal, CIO of mortgage and asset-backed securities, left with Sean Johnson and Dennis McNamara appointed interim Co-CIOs. Mar 2019-Carl Eichstaedt, PM, Broad Mkt Inv Team to retire Dec 2018-Kenneth Winston, Chief Risk 	No Concerns	No Concerns	<ul style="list-style-type: none"> 20.97% Rule 144A securities

Compliance Certification Statement Matrix – December 31, 2018

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
White Oak		Officer retired, succeeded by Ahmet Kocagil.			
	•	<i>Confidential under California Gov. Section Code §6254.26</i>			
Real Estate					
Invesco (U.S. Core Real Estate Fund)		No Concerns	Not Applicable	No Concerns	No Concerns
Invesco (U.S. Value-Add Fund IV)	<i>Confidential under California Gov. Section Code §6254.26</i>				
Invesco (U.S. Value-Add Fund V)	<i>Confidential under California Gov. Section Code §6254.26</i>				
PGIM (US Real Estate Debt)	<i>Confidential under California Gov. Section Code §6254.26</i>				
Real Assets					
State Street Global Advisors (Custom Real Asset Account)	Pending				
Cushing Asset Management (MLP Alpha Total Return)		<ul style="list-style-type: none"> Sept 2018-Firm settled with SEC regarding order issued Aug 2018. 	Not Applicable	No Concerns	<ul style="list-style-type: none"> 2.87% Rule 144A securities Largest single security: 6.83% MPLX LP

Compliance Certification Statement Matrix – December 31, 2018

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
		Firm has reviewed protocols and invested in new programs to prevent future violations.			
Risk Parity					
AQR	<i>Confidential under California Gov. Section Code §6254.26</i>				
PanAgora	<i>Confidential under California Gov. Section Code §6254.26</i>				
Cash Overlay					
Parametric Portfolio Associates		No Concerns	No Concerns	No Concerns	No Concerns
Investment Consultant					
Verus Advisory		No Concerns	Not Applicable	Not Applicable	Not Applicable

27 Total | 16 Completed | 1 Pending Information | 10 Confidential

BlackRock Russell 1000 Index – December 31, 2018

Compliance Certification Statement

San Mateo County

Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (Investments@samcera.org) by **Monday, January 14, 2019.**

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 the organizational structure in the past year ending 31 December 2018.

BlackRock constantly looks for ways to better serve clients, increase efficiency in our organization and develop talent. Periodically we take a fresh look at the firm to determine how we should evolve our organization in anticipation of changing market dynamics and client needs and to position the firm so that we can maximize our fullest potential for BlackRock and our clients.

In March 2018, we created a new investment pillar, Client Portfolio Solutions ("CPS"). CPS was previously organized under our client business. To support these investment teams with premier research we reorganized our professionals focused on Portfolio Research within our BlackRock Investment Institute ("BII"). This capitalizes on our competitive advantages in portfolio construction by building, investing in, and scaling a portfolio construction and asset allocation ecosystem across three primary areas of excellence: investments, research, and client delivery.

Global Executive Committee Changes

In 2010, BlackRock created the Global Executive Committee ("GEC") to provide oversight of operations and business performance, strategy and planning, talent development and retention, risk management, and external affairs.

There were no material changes to the GEC in the fourth quarter ending 31 December 2018.

Please refer to the link below for biographies of the firm's current GEC members.

<http://www.blackrock.com/corporate/en-us/about-us/leadership>

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

Yes: Please explain. / No

BlackRock has followed the same investment philosophy of Total Performance Management for index strategies since 1971.

3. Have there have been any industry or regulatory disciplinary actions taken against the firm? Yes: Please explain. / No

As a global investment manager, BlackRock Inc., and its various subsidiaries including BTC may be subject to regulatory oversight in numerous jurisdictions including examinations and various requests for information. BTC's regulators routinely provide it with comment letters at the conclusion of these examinations in which they request that BTC correct or modify certain of its practices. In all such instances, BTC has addressed, or is working to address, these requests to ensure that it continues to operate in compliance with applicable laws, statutes and regulations.

BTC also receives subpoenas or requests for information in connection with regulatory inquiries and/or investigations by its various regulators, some of which are ongoing. None of these matters has had or is expected to have any adverse impact on BTC's ability to manage its clients' assets. Please refer to BlackRock's Form ADV and SEC disclosures for additional information on regulatory matters concerning BTC or BlackRock as a whole. The recent fines related to BlackRock Inc. or BTC's investment advisory responsibilities are set forth below. These matters do not include fines paid to non-US regulators relating to the late filing of issuer-specific holdings reports.

On 8 March 2012, BlackRock Institutional Trust Company, N.A. ("BTC") entered into an Offer of Settlement (the "Agreement") with the CFTC and consented to the entry of an Order, which makes findings and imposes remedial sanctions against BTC. Without admitting or denying wrongdoing, BTC agreed to the imposition of a \$250,000 penalty and the entry of the Order to resolve allegations by the CFTC that two trades by BTC violated Section 4c(a)(1) of the Commodity Exchange Act and CFTC Regulation 1.38(a). BTC also agreed to refrain from any further violations of the above-mentioned statutory provisions. The CFTC did not allege that any clients of BTC, BlackRock or any related affiliate were harmed in any way in the execution of these two trades.

On 11 September 2012, the UK Financial Services Authority ("FSA") issued a Final Notice against BlackRock Investment Management (UK) Limited ("BIMUK"), following a settlement agreement reached between the FSA and BIMUK. The FSA found that BIMUK had breached certain provisions of the FSA's Client Money Rules and Principles, during the period 1 October 2006 to 31 March 2010, by not having trust letters in place for client money placed on money market deposit and not having adequate systems and controls for the identification and protection of client money in this respect. BIMUK agreed to a settlement payment of GBP 9,533,100 for the breach, which it had self-reported to the FSA in April 2010. The FSA final order acknowledged that no client of BIMUK (or BlackRock or any related affiliate) suffered any harm and that BIMUK had remedied the situation and put in place robust systems and controls relating to client money protection.

On 3 October 2012, BlackRock Financial Management Inc. ("BFM") reached an agreement with the U.S. Department of Labor ("DOL") to reimburse clients \$2,661,513 in connection with certain trades the DOL alleged violated Title I of the Employee Retirement Income Security Act ("ERISA"). BFM also agreed to pay to the DOL a \$266,151 penalty.

On 8 January 2014, BlackRock Inc. reached a settlement with the New York Attorney General's office ("AG") pursuant to which the AG found BlackRock's use of analyst surveys violated New York's Martin Act and Executive Law. The settlement did not involve the payment of any fine or other penalty although BlackRock paid \$400,000 to cover the AG's costs of investigation. BlackRock neither admitted nor denied the allegations, but agreed to stop using analyst surveys.

On 8 May 2014, the primary Italian securities regulator ("CONSOB") fined BlackRock Investment Management (UK) Limited ("BIMUK") 150,000 EURO (approximately \$205,826 USD) for negligent market manipulation. The fine was based on BIMUK's filing, on behalf of the BlackRock group of companies, a

large shareholder report regarding its holdings in Unicredit S.p.A. to CONSOB in December 2011, that turned out to be incorrect.

On 16 September 2014, BlackRock Institutional Trust Company, N.A. ("BTC") entered into an agreement with the SEC to resolve allegations relating to three alleged violations of an SEC regulation prohibiting short sales of an equity security during the restricted period preceding a public offering. The three trades at issue occurred in 2010 and 2011. As part of the approximately \$1.7 million settlement, BTC agreed to disgorge profits from each of the violations and to pay interest and a civil penalty. BTC also agreed to cease and desist from any future violations of the rule in question.

On 20 April 2015, BlackRock Advisors, LLC ("BAL") reached a settlement with the Securities and Exchange Commission ("SEC") regarding BlackRock's handling of a former portfolio manager's personal investments and involvement in a family business, Rice Energy LP and related entities. As part of the settlement, BAL agreed to pay a \$12 million penalty and retained an independent compliance consultant to review BlackRock's policies and procedures regarding the outside activities of BlackRock's employees. There was neither an allegation by the SEC of any loss to any BlackRock investors, nor did this settlement have any adverse impact on BlackRock's ability to manage its clients' funds.

On 17 January 2017, BlackRock Inc. reached an agreement with the SEC resolving a matter regarding a provision in an old version of BlackRock's form employee separation agreement that the SEC believed violated Dodd Frank's whistleblower provisions. The settlement with the SEC included a \$340,000 payment and BlackRock agreed it would not include the provision in future agreements. In addition, BlackRock agreed to notify by letter, certain former employees who signed the agreement between October 2011 and March 2016.

On 25 April 2017, BlackRock Fund Advisors ("BFA") reached an agreement with the SEC resolving a matter regarding whether one BFA-managed ETF (the iShares MSCI Russia Capped ETF) was covered by certain exemptive relief the SEC previously granted BFA and other iShares funds. BFA, which did not admit or deny any of the SEC's findings, agreed to resolve the matter for a civil monetary penalty of \$1.5 million.

BlackRock, Inc. and its various subsidiaries, including BTC, also have been subject to certain business litigation that has arisen in the normal course of their business. Our litigation has included a variety of claims, some of which are investment-related. None of BlackRock's prior litigation has had, and none of its pending litigation currently is expected to have, an adverse impact on BlackRock's ability to manage client accounts.

In past years, BlackRock has acquired organizations that provide investment-related services, including, but not limited to, State Street Research & Management Company, Merrill Lynch Investment Managers, the fund of funds business of Quellos Group, LLC, and Barclays Global Investors. This response does not address any regulatory or litigation that arose out of conduct within the acquired organizations prior to their acquisition by BlackRock. It also does not address any regulatory or litigation unrelated to BlackRock or BTC's investment management responsibilities.

4. Have proxy ballots been voted in accordance with the best economic interest of SamCERA? Yes / No: Please explain.

As a fiduciary investor and acting in the best long-term economic interest of our clients, we see voting at a company annual general meeting and special meetings as one of our responsibilities. Voting is an essential part of our efforts to protect and enhance shareholder value. It is the most broad-based form of engagement we have with companies, and provides a channel for feedback to the board and management about investor perceptions of their performance and governance practices. BlackRock votes annually at more than 17,000 shareholder meetings. We take a case-by-case approach to the business put to a shareholder vote. Our analysis is informed by our internally-developed proxy voting guidelines, our company engagements, research, and the situation at a particular company.

We intend to vote at all shareholder meetings of companies in which our clients are invested. In cases where there are significant obstacles to voting, such as share blocking or requirements for a power of attorney, we will review the resolutions to assess the extent of the restrictions on voting against the potential benefits. We generally prefer to engage in the first instance where we have concerns, and give management time to address or resolve the issue. We will vote in favor of proposals where we support the approach taken by a company's management or where we have engaged on matters of concern and anticipate management will address them. BlackRock will vote against management proposals where we believe the board or management may not have adequately acted to protect and advance the interests of long-term investors. We will abstain on proposals where we wish to indicate to the company we are concerned about its approach to certain issues and expect them to be responsive to investors' views. In all situations the economic interests of our clients will be paramount.

Our market-specific voting guidelines are available on our website at <https://www.blackrock.com/corporate/about-us/investment-stewardship/voting-guidelines-reports-position-papers#guidelines>.

Our voting guidelines are intended to help clients and companies understand our thinking on key governance matters. They are the benchmark against which we assess a company's approach to corporate governance and the items on the agenda for the shareholder meeting. We apply our guidelines pragmatically, taking into account a company's unique circumstances where relevant. We take vote decisions to achieve the outcome that we believe best protects our clients' long-term economic interests. We review our voting guidelines annually and update them as necessary to reflect changes in market standards, evolving governance practice and insights gained from engagement over the prior year.

BlackRock voting guidelines:

- Australian securities
- Hong Kong securities
- Asia ex Japan and Hong Kong securities
- Latin America securities
- Canadian securities
- New Zealand securities
- Europe, Middle Eastern and African (EMEA) securities
- US securities
- Chinese securities (in English and Simplified Chinese)
- Japanese securities (in English and Japanese)

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

Yes / No: Please explain.

BlackRock maintains the following types of global insurance coverage:

Type
<u>Investment Advisers Professional Liability (aka Errors & Omissions Liability)</u>
<u>Fidelity Bond (aka Crime or Financial Institution Bond)</u>

Although we do not disclose the insurer information and level of coverage, BlackRock only places insurance with insurers rated "Excellent" by AM Best and maintains coverage at levels that are commercially reasonable and consistent with industry peers.

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.

We typically use exchange traded equity index futures in our strategies for the purposes of efficient portfolio management. Futures are not used for speculative or leveraged positions in the portfolio and we keep cash to fully cover all outstanding futures positions.

Exchange traded futures are employed to equitize dividend accruals as well as to manage day-to-day cash flows generated from clients trades, dividends, interest received and other activity associated with securities in the portfolio. Specifically, futures contracts are purchased to provide immediate market exposure proportionate to cash accruals and investable cash within the portfolio. While we seek to remain fully invested, a small amount of spendable cash is retained to minimize trading and transactions costs. Skillful cash management and cash equitization are critical to minimizing the potential impact of cash drag and ensure tight tracking to the benchmark.

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.

N/A

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.

N/A

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.
- What is the largest exposure to a single counter-party within the portfolio?
 - Please specify the name of the counter-party and the amount of exposure.
 - Have there been any changes to the investment manager's list of approved counter-parties over the past six months?**

Managing Counterparty Credit Risk

BlackRock's philosophy is to manage counterparty credit risk conservatively. As such, the firm actively monitors counterparty credit risk exposures globally and evaluates counterparty credit quality on a continuous basis. We believe that our policies and procedures for counterparty risk management are robust and thorough.

In 2005, BlackRock established the Counterparty & Concentration Risk Group, a dedicated team of professionals that leads the global process for managing counterparty risk. The Group is responsible for managing credit risk in all trading relationships with counterparties and to that end coordinates with Credit Research, Investment Strategies, Trading & Liquidity Strategies, Legal & Compliance, Operations, and data integrity functions across the organization. The Group monitors and assesses counterparty exposures arising from both bilateral and centrally-cleared products that include derivatives, mortgage TBAs, foreign exchange, financing trades (repo and securities lending), equities, fixed income securities and other forward-settling transactions. Reporting is generated to show aggregate risk exposures by counterparty and by portfolio.

The Counterparty & Concentration Risk Group developed the firm-wide Counterparty Credit Policies and Procedures, and is responsible for implementing, updating and enforcing them, as follows:

- Assess prospective trading counterparty creditworthiness and approve counterparties;
- Measure and monitor credit exposure to each counterparty, broken out by asset classes;
- Monitor financial performance of counterparties in order to establish, confirm, or adjust exposures as needed;
- Monitor levels of exposure by product, by tenor, and by counterparty, and provide feedback to Trading & Liquidity Strategies when aggregate exposures warrant; and
- Provide guidance and supervision of credit issues for ISDA and other transaction documentation.

The firm has Credit Alert Procedures which serve as a guideline for the action and interaction of key BlackRock constituencies in the case of a counterparty related "credit event." These procedures specifically contemplate the coordination among the Counterparty & Concentration Risk, Investment Strategies, Trading & Liquidity Strategies, Legal, and Operations groups in order to facilitate BlackRock's ability to make timely and informed decisions following the recognition of credit concerns. The major aspects addressed include fact finding, communication, liquidation and close-out, and key roles and responsibilities.

BlackRock's Counterparty Approval Process

BlackRock focuses primarily on counterparty credit risk and counterparty reputation risk. Counterparty credit risk is the potential loss that BlackRock clients' accounts or BlackRock accounts could incur if a counterparty is unable to perform on its trading commitments. Reputation risk is defined as the risk to earnings or capital arising from negative public opinion. The process by which we select broker/dealer counterparties for transaction purposes is outlined below.

Determine the nature of the proposed transaction activity:

What are the securities to be traded? What is the expected volume by security?

Determine the settlement and delivery procedure:

How is our client going to receive monetary compensation in exchange for delivering the particular security in question? If the client is going to receive securities, how is the counterparty going to deliver those securities? Is settlement through an established clearing platform or is there also a physical settlement? From a delivery risk perspective, we view DTC and Fed settlement along with settlement through several other established trading and clearing platforms to be of limited risk. We view settlement via other methodologies as bearing potentially significant risk, and generally limit such activity to investment grade counterparty groupings. OTC derivatives are transacted with major global financial institutions.

Determine if the proposed counterparty settles transactions "directly" or uses a correspondent:

Most "agency" counterparties utilize correspondents to clear securities for them. If they do so, who are they using? On what basis are they clearing, fully disclosed or otherwise? BlackRock will only accept clearing correspondents that are well-capitalized, well-established, and possess a favorable reputation in the marketplace.

Settlement risk tolerance levels:

BlackRock has established certain tolerance levels for aggregate exposure to settlement risk, defined as a credit balance on all trades outstanding but not settled. The level reflects our settlement risk tolerance per counterparty and is monitored by BlackRock's Counterparty & Concentration Risk Group on a daily basis. If the threshold is exceeded, the trade details are reviewed in concert with the counterparty's financial strength in order to determine if any intervention is required.

Financial review:

Our view is that the level and trend of excess regulatory capital, as shown in the financial information, is a key barometer of the financial strength of our trading counterparty. Most brokerage firms are required to calculate and report this figure to regulatory authorities on a periodic basis. We are directly interested in ensuring that the process is maintained.

As previously stated, non-investment grade counterparties are required to clear through well-established clearing correspondents and are generally limited to short settlement trades. Updated regulatory financial filings are reviewed on an ongoing basis. Major financial institutions are additionally monitored as part of BlackRock's internal credit research process and via alert portfolios with market data service providers.

Counterparty Exposure Monitoring

BlackRock prefers to have multiple counterparties for liquidity, risk management, and best execution purposes. The counterparties with which we trade must have broad market coverage. Positions are marked-to-market on a regular basis and exposure to each counterparty is monitored. Transaction documentation is implemented where appropriate to minimize exposure to individual counterparties.

To monitor post-trade counterparty risk, BlackRock has implemented a strong technological infrastructure and proprietary internal review processes. BlackRock also has a number of reporting tools on the Aladdin platform that allow us to manage counterparty exposure, balancing net exposures to our different counterparties. Where necessary, credit risk exposure to counterparties can be adjusted, both at the individual portfolio level and at the aggregate firm-wide level.

Country Risk

Members of the Counterparty & Concentration Risk Group are active participants in BlackRock's Global Country Operating Risk Committee. The Committee includes participants from Legal & Compliance, Business Operations, Fund Services, Product Tax, and Risk & Quantitative Analysis, along with representation from each of the Investment groups.

This Committee meets regularly to consider, inter alia, the legal status, ownership and official recognition of exchanges and clearing houses, trading and settlement practices and procedures and BlackRock's ability to track trades from execution to settlement in the various trading markets. For markets where direct local access to exchanges is deemed to present inappropriately high risks for client portfolios, a range of restrictions may be applied.

6. Specify the security pricing sources used when developing portfolio market value exposures for non-exchange traded derivative positions.

BlackRock's Global Valuation methodologies Committee provides oversight of the valuation of investments for the Funds and certain Accounts. Assets of funds and Accounts are valued in accordance with Financial Accounting Standards Board Accounting Standards Codification ("ASC") 820-10, Fair Value Measurements and Disclosures. ASC 820-10 establishes a fair valuation hierarchy to increase consistency and comparability in fair value measurements and related disclosures. The fair value hierarchy prioritizes inputs to valuation techniques used to measure fair value into three broad levels: Level I, Level II, Level III. Inputs may be based on independent market data ("observable inputs") or they may be internally developed ("unobservable inputs"). See additional details about valuation procedures and external pricing agents/sources in "16 Things You Should Know" attached.

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.

We typically use equity index futures in our strategies for the purpose of efficient portfolio management. Futures are not used for speculative or leveraged positions in the portfolio and we keep cash to fully cover all outstanding futures positions.

Exchange traded futures are employed to equitize dividend accruals as well as to manage day-to-day cash flows generated from clients trades, dividends, interest received and other activity associated with securities in the portfolio. Specifically, futures contracts are purchased to provide immediate market exposure proportionate to cash accruals and investable cash within the portfolio. While we seek to remain fully invested, a small amount of spendable cash is retained to minimize trading and transactions costs. Skillful cash management and cash equitization are critical to minimizing the potential impact of cash drag and ensure tight tracking to the benchmark.

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

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>99.30%</i>
<i>Preferred Stock</i>	<i>%</i>
<i>Convertible Securities</i>	<i>%</i>
<i>Cash & Equivalents</i>	<i>0.70%</i>

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

<i>Large-Cap</i>	<i>84.35%</i>
<i>Mid-Cap</i>	<i>15.57%</i>

<i>Small-Cap</i>	<i>0.08%</i>
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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.

0%

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.

5. 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 5% at the time of purchase, please list and explain why.

Microsoft Corp (3.30% of the total fund).

6. 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%.

Information Technology – 20.16% of portfolio versus 20.32% of benchmark

Signed by:
Dated:
Name of Firm

Cynthia Trindler
1-18-19
Black Rock

Quantitative Management Associates U.S. Small Cap Core – December 31, 2018

Compliance Certification Statement

San Mateo County

Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (Investments@samcera.org) by **Monday, January 14, 2019**.

General Compliance Issues

1. Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel?
 Yes: Please explain. / **No**

We expect the acquisition of London-based Wadhvani Asset Management LP (WAM), to close in the first quarter of 2019, which will enhance the organizational structure and footprint of QMA's European presence. WAM runs both quantitative macro hedge funds and risk premia strategies utilizing an active research-driven approach. Founded by Sushil Wadhvani, PhD, in 2002, WAM caters largely to an institutional client base in the UK, continental Europe, the United States, Australia and Japan.

This acquisition will offer QMA's clients access to industry-leading products with the benefit of geographic reach, operational scale, and improved partnership capabilities with our clients.

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. Have proxy ballots been voted in accordance with the best economic interest of *SamCERA*?
 Yes / **No: Please explain.**
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**

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.

We may use fully collateralized exchange-listed stock index futures or ETFs to remain fully invested.

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.**

N/A. We only utilize exchange-listed derivatives in this strategy.

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

N/A. We only utilize exchange-listed derivatives in this strategy.

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**

N/A. We only utilize exchange-listed derivatives in this strategy.

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?

Futures exposure at JP Morgan accounted for 1.85% of the Fund as of 12/31/2018.

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

The exposure in futures at JP Morgan was \$4,788,950 as of 12/31/2018.

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

Within the last six months, we added Mizuho Securities and removed Williams Capital from our list of approved counter-parties.

6. Specify the security pricing sources used when developing portfolio market value exposures for non-exchange traded derivative positions.

N/A. We do not utilize non-exchange-listed derivatives in this strategy.

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.

Transactions for client accounts must be made through brokers (including prime brokers), futures commission merchants and other counterparties (for example, swap counterparties) on our approved counterparty list.

Counterparties are approved by our chief investment officer. Criteria for approval include:

- **financial and operational stability (including, but not limited to, profitability, liquidity, financial metrics, economic factors, size, market presence, and reputation);**
- **execution, clearance, and settlement capabilities; and**
- **commission rates (if applicable) and other transaction costs.**

In selecting a counterparty for a particular transaction, we also consider factors such as the following:

- **the nature of the portfolio transaction;**
- **the size of the transaction;**
- **the desired timing of the trade;**
- **the activity existing and expected in the market for the particular transaction;**
- **confidentiality – i.e. not revealing details about our trades or trading patterns with other brokers or market participants;**
- **the amount of capital, if any, that would be contributed by firms executing the transaction;**
- **administrative cooperation; and**
- **client or regulatory restrictions on use of certain counterparties.**

A prime brokerage relationship is one in which services such as securities lending, leveraged trade execution and cash management are provided. In QMA, prime brokerage services are integral for investment strategies that require short sales of equity securities. Specific criteria for prime broker selection and approval include depth of shorting availability, strong knowledge of local shorting laws and regular shorting costs updates.

Monitoring of certain counterparties is performed on an ongoing basis by reviewing specific credit metrics such as credit spread and credit rating. Our chief investment officer and head of trading review the metrics to assess potential exposures. Other non-credit metrics reviewed by our risk management function include stock price and collateral posting activity.

QMA maintains an approved counterparty list. In some cases, we set dollar exposure limits on a net basis for a counterparty. Class types and corresponding dollar limits are directly related to the risk of the transaction, transaction collateral, and our opinion regarding the creditworthiness of the counterparty. We analyze the financial and operational stability of approved counterparties, and consider new proposed counterparties from time to time. We may add or remove counterparties from our approved list based on this ongoing review. Our trade management oversight committee, which meets periodically, reviews and assesses counterparty usage data, patterns (if any) relating to counterparty use, and other information relevant to our counterparty selection process.

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

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>97.97%</i>
<i>Preferred Stock</i>	<i>0%</i>
<i>Convertible Securities</i>	<i>0%</i>
<i>Cash & Equivalents</i>	<i>0.18%</i>
<i>Other: Futures / Options / Derivatives</i>	<i>1.85%</i>

Source: QMA
As of 12/31/2018

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

<i>Large-Cap (>\$15b)</i>	<i>0%</i>
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Mid-Cap (\$2b - \$15b)	40.84
Small-Cap (\$100mm - \$2b)	59.16

Source: QMA
As of 12/31/2018

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.

0%

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.
5. 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.

As of 12/31/2018, the largest holding in your account, Haemonetics Corp., made up 1.09% of the market value of your portfolio.

6. 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%.

As of 12/31/2018, the largest industry in your portfolio was the Financial industry, which made up 17.37% of the portfolio. By contrast the Russell 2000® Index held 18.24% in the Financial industry, which is a difference of 0.87%.

**The Russell 2000® Index is a trademark/service mark of the Frank Russell Company. Russell® is a trademark of the Frank Russell Company.*

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?

Account	As of 12/31/2018	% of Firm AUM
US Small Cap Core	\$1,673 million	1.51%
SamCERA	\$75.4 million	0.07%
Firm	\$111,161 million	100%

Signed by: Kevin McGrory
Dated: January 14, 2019
Name of Firm: Quantitative Management Associates, LLC

Baillie Gifford Overseas International Growth – December 31, 2018

Compliance Certification Statement

San Mateo County

Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (Investments@samcera.org) by **Monday, January 14, 2019**.

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**

In September 2018, Tom Walsh, who had been a member of the Portfolio Construction Group (PCG) for almost four years, moved internally to join one of the other Baillie Gifford international investment strategies. This change came about due to the forthcoming retirement of an investment manager on the other international strategy. The International Focus PCG previously had dual coverage of the European Market through Tom and Moritz Sitte, and it was deemed unnecessary to add another decision maker to the group. Therefore, the PCG now consists of five members.

The International Focus team had been considering ways to build on its existing strong resources and to maximise the flow of new investment ideas. To reflect the evolution of the investment department at Baillie Gifford over recent years, we were keen to strengthen and formalize our existing strong collaboration with several other, newer, non-regional investment strategies. To that end, links were formalized with four 'specialist reps' from across the firm's investment teams, namely Hamish Dingwall, Julia Angeles, Kate Fox and Svetlana Viteva – representing our Global Technology and Healthcare sectors, and Positive Change and Global Discovery strategies respectively. As of the end of December, each of the specialist reps had attended a formal portfolio meeting with the PCG.

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 differently than 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>89.61%</i>
<i>ADR's</i>	<i>8.20%</i>
<i>Cash & Equivalents (Foreign)**</i>	<i>0.03%</i>
<i>Cash & Equivalents (Domestic)</i>	<i>0.54%</i>

*Note that we have defined Foreign Ordinary Shares as: Shares of companies domiciled outside the US plus GDR's.

**Domestic = USD.

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

<i>Large-Cap</i>	<i>69.67%</i>
<i>Mid-Cap</i>	<i>30.10%</i>
<i>Small-Cap</i>	<i>0.23%</i>

Large = >\$10b, Mid = \$1.5b to \$10b, Small = \$0 to \$1.5b

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.

26.2% of SamCERA's portfolio was invested in Emerging Markets as at 31 December 2018.

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?

As at 30 September 2018, firm-wise assets under management were \$256,030 million, whilst the ACWI ex-US Focus Strategy held \$11,270 million.

On the same date, SamCERA's portfolio held \$251 million, comprising 2.2% of the strategy.

We are happy to provide data to end December 2018 when it becomes available, if that's something you require.

Signed by: Philip Scott

Dated: 11 January 2019

Name of Firm: Baillie Gifford Overseas Limited

BlackRock EAFE Index – December 31, 2018

Compliance Certification Statement

San Mateo County

Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (Investments@samcera.org) by **Monday, January 14, 2019**.

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 the organizational structure in the past year ending 31 December 2018.

BlackRock constantly looks for ways to better serve clients, increase efficiency in our organization and develop talent. Periodically we take a fresh look at the firm to determine how we should evolve our organization in anticipation of changing market dynamics and client needs and to position the firm so that we can maximize our fullest potential for BlackRock and our clients.

In March 2018, we created a new investment pillar, Client Portfolio Solutions ("CPS"). CPS was previously organized under our client business. To support these investment teams with premier research we reorganized our professionals focused on Portfolio Research within our BlackRock Investment Institute ("BII"). This capitalizes on our competitive advantages in portfolio construction by building, investing in, and scaling a portfolio construction and asset allocation ecosystem across three primary areas of excellence: investments, research, and client delivery.

Global Executive Committee Changes

In 2010, BlackRock created the Global Executive Committee ("GEC") to provide oversight of operations and business performance, strategy and planning, talent development and retention, risk management, and external affairs.

There were no material changes to the GEC in the fourth quarter ending 31 December 2018.

Please refer to the link below for biographies of the firm's current GEC members.

<http://www.blackrock.com/corporate/en-us/about-us/leadership>

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

Yes: Please explain. / No

BlackRock has followed the same investment philosophy of Total Performance Management for index strategies since 1971.

3. Have there have been any industry or regulatory disciplinary actions taken against the firm? Yes: Please explain. / No

As a global investment manager, BlackRock Inc., and its various subsidiaries including BTC may be subject to regulatory oversight in numerous jurisdictions including examinations and various requests for information. BTC's regulators routinely provide it with comment letters at the conclusion of these examinations in which they request that BTC correct or modify certain of its practices. In all such instances, BTC has addressed, or is working to address, these requests to ensure that it continues to operate in compliance with applicable laws, statutes and regulations.

BTC also receives subpoenas or requests for information in connection with regulatory inquiries and/or investigations by its various regulators, some of which are ongoing. None of these matters has had or is expected to have any adverse impact on BTC's ability to manage its clients' assets. Please refer to BlackRock's Form ADV and SEC disclosures for additional information on regulatory matters concerning BTC or BlackRock as a whole. The recent fines related to BlackRock Inc. or BTC's investment advisory responsibilities are set forth below. These matters do not include fines paid to non-US regulators relating to the late filing of issuer-specific holdings reports.

On 8 March 2012, BlackRock Institutional Trust Company, N.A. ("BTC") entered into an Offer of Settlement (the "Agreement") with the CFTC and consented to the entry of an Order, which makes findings and imposes remedial sanctions against BTC. Without admitting or denying wrongdoing, BTC agreed to the imposition of a \$250,000 penalty and the entry of the Order to resolve allegations by the CFTC that two trades by BTC violated Section 4c(a)(1) of the Commodity Exchange Act and CFTC Regulation 1.38(a). BTC also agreed to refrain from any further violations of the above-mentioned statutory provisions. The CFTC did not allege that any clients of BTC, BlackRock or any related affiliate were harmed in any way in the execution of these two trades.

On 11 September 2012, the UK Financial Services Authority ("FSA") issued a Final Notice against BlackRock Investment Management (UK) Limited ("BIMUK"), following a settlement agreement reached between the FSA and BIMUK. The FSA found that BIMUK had breached certain provisions of the FSA's Client Money Rules and Principles, during the period 1 October 2006 to 31 March 2010, by not having trust letters in place for client money placed on money market deposit and not having adequate systems and controls for the identification and protection of client money in this respect. BIMUK agreed to a settlement payment of GBP 9,533,100 for the breach, which it had self-reported to the FSA in April 2010. The FSA final order acknowledged that no client of BIMUK (or BlackRock or any related affiliate) suffered any harm and that BIMUK had remedied the situation and put in place robust systems and controls relating to client money protection.

On 3 October 2012, BlackRock Financial Management Inc. ("BFM") reached an agreement with the U.S. Department of Labor ("DOL") to reimburse clients \$2,661,513 in connection with certain trades the DOL alleged violated Title I of the Employee Retirement Income Security Act ("ERISA"). BFM also agreed to pay to the DOL a \$266,151 penalty.

On 8 January 2014, BlackRock Inc. reached a settlement with the New York Attorney General's office ("AG") pursuant to which the AG found BlackRock's use of analyst surveys violated New York's Martin Act and Executive Law. The settlement did not involve the payment of any fine or other penalty although BlackRock paid \$400,000 to cover the AG's costs of investigation. BlackRock neither admitted nor denied the allegations, but agreed to stop using analyst surveys.

On 8 May 2014, the primary Italian securities regulator ("CONSOB") fined BlackRock Investment Management (UK) Limited ("BIMUK") 150,000 EURO (approximately \$205,826 USD) for negligent market manipulation. The fine was based on BIMUK's filing, on behalf of the BlackRock group of companies, a large shareholder report regarding its holdings in Unicredit S.p.A. to CONSOB in December 2011, that turned out to be incorrect.

On 16 September 2014, BlackRock Institutional Trust Company, N.A. ("BTC") entered into an agreement with the SEC to resolve allegations relating to three alleged violations of an SEC regulation prohibiting short sales of an equity security during the restricted period preceding a public offering. The three trades at issue occurred in 2010 and 2011. As part of the approximately \$1.7 million settlement, BTC agreed to disgorge profits from each of the violations and to pay interest and a civil penalty. BTC also agreed to cease and desist from any future violations of the rule in question.

On 20 April 2015, BlackRock Advisors, LLC ("BAL") reached a settlement with the Securities and Exchange Commission ("SEC") regarding BlackRock's handling of a former portfolio manager's personal investments and involvement in a family business, Rice Energy LP and related entities. As part of the settlement, BAL agreed to pay a \$12 million penalty and retained an independent compliance consultant to review BlackRock's policies and procedures regarding the outside activities of BlackRock's employees. There was neither an allegation by the SEC of any loss to any BlackRock investors, nor did this settlement have any adverse impact on BlackRock's ability to manage its clients' funds.

On 17 January 2017, BlackRock Inc. reached an agreement with the SEC resolving a matter regarding a provision in an old version of BlackRock's form employee separation agreement that the SEC believed violated Dodd Frank's whistleblower provisions. The settlement with the SEC included a \$340,000 payment and BlackRock agreed it would not include the provision in future agreements. In addition, BlackRock agreed to notify by letter, certain former employees who signed the agreement between October 2011 and March 2016.

On 25 April 2017, BlackRock Fund Advisors ("BFA") reached an agreement with the SEC resolving a matter regarding whether one BFA-managed ETF (the iShares MSCI Russia Capped ETF) was covered by certain exemptive relief the SEC previously granted BFA and other iShares funds. BFA, which did not admit or deny any of the SEC's findings, agreed to resolve the matter for a civil monetary penalty of \$1.5 million.

BlackRock, Inc. and its various subsidiaries, including BTC, also have been subject to certain business litigation that has arisen in the normal course of their business. Our litigation has included a variety of claims, some of which are investment-related. None of BlackRock's prior litigation has had, and none of its pending litigation currently is expected to have, an adverse impact on BlackRock's ability to manage client accounts.

In past years, BlackRock has acquired organizations that provide investment-related services, including, but not limited to, State Street Research & Management Company, Merrill Lynch Investment Managers, the fund of funds business of Quellos Group, LLC, and Barclays Global Investors. This response does not address any regulatory or litigation that arose out of conduct within the acquired organizations prior to their acquisition by BlackRock. It also does not address any regulatory or litigation unrelated to BlackRock or BTC's investment management responsibilities.

4. Have proxy ballots been voted in accordance with the best economic interest of SamCERA? Yes / No: Please explain.

As a fiduciary investor and acting in the best long-term economic interest of our clients, we see voting at a company annual general meeting and special meetings as one of our responsibilities. Voting is an essential part of our efforts to protect and enhance shareholder value. It is the most broad-based form of engagement we have with companies, and provides a channel for feedback to the board and management about investor perceptions of their performance and governance practices. BlackRock votes annually at more than 17,000 shareholder meetings. We take a case-by-case approach to the business put to a shareholder vote. Our analysis is informed by our internally-developed proxy voting guidelines, our company engagements, research, and the situation at a particular company.

We intend to vote at all shareholder meetings of companies in which our clients are invested. In cases where there are significant obstacles to voting, such as share blocking or requirements for a power of attorney, we will review the resolutions to assess the extent of the restrictions on voting against the potential benefits. We generally prefer to engage in the first instance where we have concerns, and give management time to address or resolve the issue. We will vote in favor of proposals where we support the approach taken by a company's management or where we have engaged on matters of concern and anticipate management will address them. BlackRock will vote against management proposals where we believe the board or management may not have adequately acted to protect and advance the interests of long-term investors. We will abstain on proposals where we wish to indicate to the company we are concerned about its approach to certain issues and expect them to be responsive to investors' views. In all situations the economic interests of our clients will be paramount.

Our market-specific voting guidelines are available on our website at <https://www.blackrock.com/corporate/about-us/investment-stewardship/voting-guidelines-reports-position-papers#guidelines>.

Our voting guidelines are intended to help clients and companies understand our thinking on key governance matters. They are the benchmark against which we assess a company's approach to corporate governance and the items on the agenda for the shareholder meeting. We apply our guidelines pragmatically, taking into account a company's unique circumstances where relevant. We take vote decisions to achieve the outcome that we believe best protects our clients' long-term economic interests. We review our voting guidelines annually and update them as necessary to reflect changes in market standards, evolving governance practice and insights gained from engagement over the prior year.

BlackRock voting guidelines:

- Australian securities
- Hong Kong securities
- Asia ex Japan and Hong Kong securities
- Latin America securities
- Canadian securities
- New Zealand securities
- Europe, Middle Eastern and African (EMEA) securities
- US securities
- Chinese securities (in English and Simplified Chinese)
- Japanese securities (in English and Japanese)

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

Yes / No: Please explain.

BlackRock maintains the following types of global insurance coverage:

Type
<u>Investment Advisers Professional Liability (aka Errors & Omissions Liability)</u>
<u>Fidelity Bond (aka Crime or Financial Institution Bond)</u>

Although we do not disclose the insurer information and level of coverage, BlackRock only places insurance with insurers rated "Excellent" by AM Best and maintains coverage at levels that are commercially reasonable and consistent with industry peers.

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.

We typically use exchange traded equity index futures in our strategies for the purposes of efficient portfolio management. Futures are not used for speculative or leveraged positions in the portfolio and we keep cash to fully cover all outstanding futures positions.

Exchange traded futures are employed to equitize dividend accruals as well as to manage day-to-day cash flows generated from clients trades, dividends, interest received and other activity associated with securities in the portfolio. Specifically, futures contracts are purchased to provide immediate market exposure proportionate to cash accruals and investable cash within the portfolio. While we seek to remain fully invested, a small amount of spendable cash is retained to minimize trading and transactions costs. Skillful cash management and cash equitization are critical to minimizing the potential impact of cash drag and ensure tight tracking to the benchmark.

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.

N/A

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.

N/A

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.

N/A

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?**

Managing Counterparty Credit Risk

BlackRock's philosophy is to manage counterparty credit risk conservatively. As such, the firm actively monitors counterparty credit risk exposures globally and evaluates counterparty credit quality on a continuous basis. We believe that our policies and procedures for counterparty risk management are robust and thorough.

In 2005, BlackRock established the Counterparty & Concentration Risk Group, a dedicated team of professionals that leads the global process for managing counterparty risk. The Group is responsible for managing credit risk in all trading relationships with counterparties and to that end coordinates with Credit Research, Investment Strategies, Trading & Liquidity Strategies, Legal & Compliance, Operations, and data integrity functions across the organization. The Group monitors and assesses counterparty exposures arising from both bilateral and centrally-cleared products that include derivatives, mortgage TBAs, foreign exchange, financing trades (repo and securities lending), equities, fixed income securities and other forward-settling transactions. Reporting is generated to show aggregate risk exposures by counterparty and by portfolio.

The Counterparty & Concentration Risk Group developed the firm-wide Counterparty Credit Policies and Procedures, and is responsible for implementing, updating and enforcing them, as follows:

- Assess prospective trading counterparty creditworthiness and approve counterparties;
- Measure and monitor credit exposure to each counterparty, broken out by asset classes;
- Monitor financial performance of counterparties in order to establish, confirm, or adjust exposures as needed;
- Monitor levels of exposure by product, by tenor, and by counterparty, and provide feedback to Trading & Liquidity Strategies when aggregate exposures warrant; and
- Provide guidance and supervision of credit issues for ISDA and other transaction documentation.

The firm has Credit Alert Procedures which serve as a guideline for the action and interaction of key BlackRock constituencies in the case of a counterparty related "credit event." These procedures specifically contemplate the coordination among the Counterparty & Concentration Risk, Investment Strategies, Trading & Liquidity Strategies, Legal, and Operations groups in order to facilitate BlackRock's ability to make timely and informed decisions following the recognition of credit concerns. The major aspects addressed include fact finding, communication, liquidation and close-out, and key roles and responsibilities.

BlackRock's Counterparty Approval Process

BlackRock focuses primarily on counterparty credit risk and counterparty reputation risk.

Counterparty credit risk is the potential loss that BlackRock clients' accounts or BlackRock accounts could incur if a counterparty is unable to perform on its trading commitments. Reputation risk is defined as the risk to earnings or capital arising from negative public opinion. The process by which we select broker/dealer counterparties for transaction purposes is outlined below.

Determine the nature of the proposed transaction activity:

What are the securities to be traded? What is the expected volume by security?

Determine the settlement and delivery procedure:

How is our client going to receive monetary compensation in exchange for delivering the particular security in question? If the client is going to receive securities, how is the counterparty going to deliver those securities? Is settlement through an established clearing platform or is there also a physical settlement? From a delivery risk perspective, we view DTC and Fed settlement along with settlement through several other established trading and clearing platforms to be of limited risk. We view settlement via other methodologies as bearing potentially significant risk, and generally limit such activity to investment grade counterparty groupings. OTC derivatives are transacted with major global financial institutions.

Determine if the proposed counterparty settles transactions "directly" or uses a correspondent:

Most "agency" counterparties utilize correspondents to clear securities for them. If they do so, who are they using? On what basis are they clearing, fully disclosed or otherwise? BlackRock will only accept clearing correspondents that are well-capitalized, well-established, and possess a favorable reputation in the marketplace.

Settlement risk tolerance levels:

BlackRock has established certain tolerance levels for aggregate exposure to settlement risk, defined as a credit balance on all trades outstanding but not settled. The level reflects our settlement risk tolerance per counterparty and is monitored by BlackRock's Counterparty & Concentration Risk Group on a daily basis. If the threshold is exceeded, the trade details are reviewed in concert with the counterparty's financial strength in order to determine if any intervention is required.

Financial review:

Our view is that the level and trend of excess regulatory capital, as shown in the financial information, is a key barometer of the financial strength of our trading counterparty. Most brokerage firms are required to calculate and report this figure to regulatory authorities on a periodic basis. We are directly interested in ensuring that the process is maintained.

As previously stated, non-investment grade counterparties are required to clear through well-established clearing correspondents and are generally limited to short settlement trades. Updated regulatory financial filings are reviewed on an ongoing basis. Major financial institutions are additionally monitored as part of BlackRock's internal credit research process and via alert portfolios with market data service providers.

Counterparty Exposure Monitoring

BlackRock prefers to have multiple counterparties for liquidity, risk management, and best execution purposes. The counterparties with which we trade must have broad market coverage. Positions are marked-to-market on a regular basis and exposure to each counterparty is monitored. Transaction documentation is implemented where appropriate to minimize exposure to individual counterparties.

To monitor post-trade counterparty risk, BlackRock has implemented a strong technological infrastructure and proprietary internal review processes. BlackRock also has a number of reporting tools on the Aladdin platform that allow us to manage counterparty exposure, balancing net exposures to our different counterparties. Where necessary, credit risk exposure to counterparties can be adjusted, both at the individual portfolio level and at the aggregate firm-wide level.

Country Risk

Members of the Counterparty & Concentration Risk Group are active participants in BlackRock's Global Country Operating Risk Committee. The Committee includes participants from Legal & Compliance, Business Operations, Fund Services, Product Tax, and Risk & Quantitative Analysis, along with representation from each of the Investment groups.

This Committee meets regularly to consider, inter alia, the legal status, ownership and official recognition of exchanges and clearing houses, trading and settlement practices and procedures and BlackRock's ability to track trades from execution to settlement in the various trading markets. For markets where

direct local access to exchanges is deemed to present inappropriately high risks for client portfolios, a range of restrictions may be applied.

6. Specify the security pricing sources used when developing portfolio market value exposures for non-exchange traded derivative positions.

BlackRock's Global Valuation methodologies Committee provides oversight of the valuation of investments for the Funds and certain Accounts. Assets of funds and Accounts are valued in accordance with Financial Accounting Standards Board Accounting Standards Codification ("ASC") 820-10, Fair Value Measurements and Disclosures. ASC 820-10 establishes a fair valuation hierarchy to increase consistency and comparability in fair value measurements and related disclosures. The fair value hierarchy prioritizes inputs to valuation techniques used to measure fair value into three broad levels: Level I, Level II, Level III. Inputs may be based on independent market data ("observable inputs") or they may be internally developed ("unobservable inputs"). See additional details about valuation procedures and external pricing agents/sources in "16 Things You Should Know" attached.

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.

We typically use equity index futures in our strategies for the purpose of efficient portfolio management. Futures are not used for speculative or leveraged positions in the portfolio and we keep cash to fully cover all outstanding futures positions.

Exchange traded futures are employed to equitize dividend accruals as well as to manage day-to-day cash flows generated from clients trades, dividends, interest received and other activity associated with securities in the portfolio. Specifically, futures contracts are purchased to provide immediate market exposure proportionate to cash accruals and investable cash within the portfolio. While we seek to remain fully invested, a small amount of spendable cash is retained to minimize trading and transactions costs. Skillful cash management and cash equitization are critical to minimizing the potential impact of cash drag and ensure tight tracking to the benchmark.

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

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>98.71%</i>
<i>ADR's</i>	<i>0.19%</i>
<i>Cash & Equivalents (Foreign)</i>	<i>%</i>
<i>Cash & Equivalents (Domestic)</i>	<i>1.10%</i>

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

<i>Large-Cap</i>	<i>86.3%</i>
<i>Mid-Cap</i>	<i>13.6%</i>
<i>Small-Cap</i>	<i>0.00%</i>

3. Is the firm monitoring the country, currency, sector and security selection risks associated with its portfolio? Yes / No: **Please explain.**

The importance of risk control at BlackRock is one of our greatest competitive advantages. All of BlackRock's index strategies utilize risk control at every stage of the investment process, from the creation of expected return forecasts through the portfolio construction and trade execution processes. We pursue the risk control objective by minimizing all investment (and operational) risks that are not associated with producing reliable returns. Aladdin, our proprietary investment and risk analytics platform, incorporates client cash flows, securities positions, futures and currency positions, pending corporate actions, and risk tools. It also receives daily index data direct from benchmark providers. Aladdin allows portfolio engineers to efficiently manage portfolios with a high degree of risk control, providing a seamless platform whereby every step of the investment process is handled electronically from the time a client order is placed to the time any required trades go out to market.

The portfolio engineers review exception-based reports for compliance with internal and client guidelines on a daily basis. We use an automated screen, whereby portfolio engineers' final trade lists are cross-checked against a database containing portfolio guidelines and client restrictions on separate accounts prior to being released to the trading room. Duties are segregated and supervision is appropriate to each type of activity. Through these efforts, BlackRock ensures that the portfolio remains risk-controlled, fully invested and positioned at all times to achieve optimal performance.

In addition, all Index portfolios are monitored monthly by an Investment Review Committee ("IRC"). This committee formally reviews portfolio performance and its attribution. The IRC is an internal committee composed of senior management, portfolio engineers, performance analysts and risk specialists, who meet monthly to discuss investment policy and other operational issues that relate to the management of our portfolios. The IRC is responsible for reviewing all BlackRock portfolios to ensure that they are operating according to their portfolio mandates. All portfolio exceptions are reported to the IRC.

A team of RQA professionals has specialized knowledge of index equity strategies and works side-by-side with portfolio engineers to ensure that all portfolio risks are well-understood and appropriately managed. RQA works with portfolio engineers on both day-to-day activities and special projects designed to improve our models and practices.

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.

Signed by:
Dated:
Name of Firm

Curtis Jindl
1-18-19
Black Rock

Mondrian Investment Partners International Value – December 31, 2018

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

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (Investments@samcera.org) by **Monday, January 14, 2019.**

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**

During Q4 2018, Liz Desmond, Director and CIO – International Equities, took on the title of Deputy CEO Mondrian Investment Partners. The title reflects Liz's seniority and experience as a board director for over 20 years. The role of Deputy CEO will help provide resilience and depth in the management of the firm. Liz's day-to-day responsibilities will remain focused on the management of international equity products.

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

In accordance with the terms of Clause 2.2 of the investment management agreement, during the term of the agreement, Mondrian has not agreed to charge any other institutional client an effective fee lower than the fees charged to SamCERA for an account substantially similar to the SamCERA assets in terms of size, investment objectives and guidelines and degree of services provided.

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.

Foreign Ordinary Shares	73.21%
ADR's	0%
MIP Limited Partnership	25.43%
Cash & Equivalents (Foreign)	0.93%
Cash & Equivalents (Domestic)	0.43%

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

Large-Cap >11bn	78.41%
Mid-Cap 3.5bn-11bn	19.67%
Small-Cap <3.5bn	1.92%

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 31st December the portfolio held 25.43% 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? 9.27%

What size does SamCERA's account comprise of total product assets? 3.84%

Signed by: 

Dated: **8 January 2019**

Name of Firm: **Mondrian Investment Partners Limited**

***Eaton Vance Parametric Emerging Markets Core Fund – December 31,
2018***

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

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of SamCERA's investment managers on a semi-annual basis. These statements must be e-mailed to SamCERA's office (Investments@samcera.org) by **Monday, January 14, 2019**.

General Compliance Issues

1. Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel?
 Yes: Please explain. / **No**

Saudi Arabia was added as a tier III market during the quarter, with an EOQ weight of 1.63%.

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. Have proxy ballots been voted in accordance with the best economic interest of SamCERA?
 Yes / **No: Please explain.**

Please provide a copy of your firm's proxy policy to Investments@samcera.org.

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**

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.

Derivative exposure in the portfolio is limited to participatory notes ("p-notes"), which are notes from a counterparty committing them to provide the exact returns of the underlying equity with a delta of one. These p-notes involve zero leverage and no collateral/mark-to-market requirements.

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?

All exposures as follows:

HSBC Bank PLC @ 3.04%

JP Morgan Structured Products @ 1.51%

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

See all counterparty exposures above

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

No

6. Specify the security pricing sources used when developing portfolio market value exposures for non-exchanged traded derivative positions.

Broker-provided, checked against underlying equity price from Bloomberg @ 1:1 + FX Rate conversion (delta-one p-notes).

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.

Liquidity mirrors underlying equity exposure at 1:1 for p-notes (delta-one p-notes).

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

International Equity Portfolios - Emerging

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

<i>Foreign Ordinary Shares</i>	<i>85.69%</i>
<i>ADR's</i>	<i>7.77%</i>
<i>GDR's</i>	<i>1.31%</i>
<i>Derivatives*</i>	<i>4.72%</i>
<i>Cash & Equivalent (Foreign)</i>	<i>0.25%</i>

<i>Cash & Equivalents (Domestic)</i>	<i>0.25%</i>
--	--------------

**PNotes only*

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

<i>Large-Cap</i>	<i>65.16%</i>
<i>Mid-Cap</i>	<i>22.30%</i>
<i>Small-Cap</i>	<i>12.54%</i>

3. Specify the allocation to frontier markets and to non-benchmark holdings in the portfolio (list both by country).

<i>FRONTIER</i>	<i>6.85%</i>
<i>China Shanghai</i>	<i>0.77%</i>
<i>China Shenzhen</i>	<i>0.75%</i>
<i>Kuwait</i>	<i>1.63%</i>
<i>Vietnam</i>	<i>1.56%</i>
<i>Saudi Arabia</i>	<i>1.63%</i>

<i>NON-BENCHMARK</i>	<i>26.68%</i>
<i>Thailand</i>	<i>3.20%</i>
<i>Russia</i>	<i>2.14%</i>
<i>China</i>	<i>2.12%</i>
<i>Kuwait</i>	<i>1.64%</i>
<i>Saudi Arabia</i>	<i>1.64%</i>
<i>Vietnam</i>	<i>1.57%</i>
<i>Brazil</i>	<i>1.37%</i>
<i>Taiwan</i>	<i>1.15%</i>
<i>South Africa</i>	<i>1.11%</i>
<i>Turkey</i>	<i>1.11%</i>
<i>Mexico</i>	<i>0.98%</i>
<i>Philippines</i>	<i>0.78%</i>
<i>Pakistan</i>	<i>0.77%</i>
<i>Poland</i>	<i>0.73%</i>
<i>Chile</i>	<i>0.71%</i>
<i>Indonesia</i>	<i>0.69%</i>
<i>Greece</i>	<i>0.67%</i>
<i>Malaysia</i>	<i>0.66%</i>
<i>India</i>	<i>0.63%</i>
<i>Peru</i>	<i>0.60%</i>
<i>Colombia</i>	<i>0.52%</i>

Egypt	0.41%
Qatar	0.34%
United Kingdom	0.30%
U.A.E.	0.28%
Korea	0.26%
Czech Republic	0.16%
China Shanghai	0.07%
Hungary	0.05%
China Shenzhen	0.02%

4. Is the firm monitoring the country, currency, sector and security selection risks associated with its portfolio? Yes / No: Please explain.
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?

AUM of this product on 12/31/18 was \$329,577,772.24 USD, while the firm AUM was approximately \$216.7 B which makes the proportion of this product 0.15%. Also as of 12/31/18 SAMCERA consisted of 8,011,840.765 shares worth \$ \$82,916,150.46 or 25.16% of this product.



Signed by: Randall Hegarty

Dated: January 16th, 2018

Parametric Portfolio Associates LLC

BlackRock Intermediate Government Bond Index – December 31, 2018

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

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (Investments@samcera.org) by **Monday, January 14, 2019.**

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 the organizational structure in the past year ending 31 December 2018.

BlackRock constantly looks for ways to better serve clients, increase efficiency in our organization and develop talent. Periodically we take a fresh look at the firm to determine how we should evolve our organization in anticipation of changing market dynamics and client needs and to position the firm so that we can maximize our fullest potential for BlackRock and our clients.

In March 2018, we created a new investment pillar, Client Portfolio Solutions ("CPS"). CPS was previously organized under our client business. To support these investment teams with premier research we reorganized our professionals focused on Portfolio Research within our BlackRock Investment Institute ("BII"). This capitalizes on our competitive advantages in portfolio construction by building, investing in, and scaling a portfolio construction and asset allocation ecosystem across three primary areas of excellence: investments, research, and client delivery.

Global Executive Committee Changes

In 2010, BlackRock created the Global Executive Committee ("GEC") to provide oversight of operations and business performance, strategy and planning, talent development and retention, risk management, and external affairs.

There were no material changes to the GEC in the fourth quarter ending 31 December 2018.

Please refer to the link below for biographies of the firm's current GEC members.

<http://www.blackrock.com/corporate/en-us/about-us/leadership>

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

Yes: Please explain. / No

BlackRock has followed the same investment philosophy of Total Performance Management for index strategies since 1971.

3. Have there have been any industry or regulatory disciplinary actions taken against the firm? Yes: Please explain. / No

As a global investment manager, BlackRock Inc., and its various subsidiaries including BTC may be subject to regulatory oversight in numerous jurisdictions including examinations and various requests for information. BTC's regulators routinely provide it with comment letters at the conclusion of these examinations in which they request that BTC correct or modify certain of its practices. In all such instances, BTC has addressed, or is working to address, these requests to ensure that it continues to operate in compliance with applicable laws, statutes and regulations.

BTC also receives subpoenas or requests for information in connection with regulatory inquiries and/or investigations by its various regulators, some of which are ongoing. None of these matters has had or is expected to have any adverse impact on BTC's ability to manage its clients' assets. Please refer to BlackRock's Form ADV and SEC disclosures for additional information on regulatory matters concerning BTC or BlackRock as a whole. The recent fines related to BlackRock Inc. or BTC's investment advisory responsibilities are set forth below. These matters do not include fines paid to non-US regulators relating to the late filing of issuer-specific holdings reports.

On 8 March 2012, BlackRock Institutional Trust Company, N.A. ("BTC") entered into an Offer of Settlement (the "Agreement") with the CFTC and consented to the entry of an Order, which makes findings and imposes remedial sanctions against BTC. Without admitting or denying wrongdoing, BTC agreed to the imposition of a \$250,000 penalty and the entry of the Order to resolve allegations by the CFTC that two trades by BTC violated Section 4c(a)(1) of the Commodity Exchange Act and CFTC Regulation 1.38(a). BTC also agreed to refrain from any further violations of the above-mentioned statutory provisions. The CFTC did not allege that any clients of BTC, BlackRock or any related affiliate were harmed in any way in the execution of these two trades.

On 11 September 2012, the UK Financial Services Authority ("FSA") issued a Final Notice against BlackRock Investment Management (UK) Limited ("BIMUK"), following a settlement agreement reached between the FSA and BIMUK. The FSA found that BIMUK had breached certain provisions of the FSA's Client Money Rules and Principles, during the period 1 October 2006 to 31 March 2010, by not having trust letters in place for client money placed on money market deposit and not having adequate systems and controls for the identification and protection of client money in this respect. BIMUK agreed to a settlement payment of GBP 9,533,100 for the breach, which it had self-reported to the FSA in April 2010. The FSA final order acknowledged that no client of BIMUK (or BlackRock or any related affiliate) suffered any harm and that BIMUK had remedied the situation and put in place robust systems and controls relating to client money protection.

On 3 October 2012, BlackRock Financial Management Inc. ("BFM") reached an agreement with the U.S. Department of Labor ("DOL") to reimburse clients \$2,661,513 in connection with certain trades the DOL alleged violated Title I of the Employee Retirement Income Security Act ("ERISA"). BFM also agreed to pay to the DOL a \$266,151 penalty.

On 8 January 2014, BlackRock Inc. reached a settlement with the New York Attorney General's office ("AG") pursuant to which the AG found BlackRock's use of analyst surveys violated New York's Martin Act and Executive Law. The settlement did not involve the payment of any fine or other penalty although BlackRock paid \$400,000 to cover the AG's costs of investigation. BlackRock neither admitted nor denied the allegations, but agreed to stop using analyst surveys.

On 8 May 2014, the primary Italian securities regulator ("CONSOB") fined BlackRock Investment Management (UK) Limited ("BIMUK") 150,000 EURO (approximately \$205,826 USD) for negligent market manipulation. The fine was based on BIMUK's filing, on behalf of the BlackRock group of companies, a large shareholder report regarding its holdings in Unicredit S.p.A. to CONSOB in December 2011, that turned out to be incorrect.

On 16 September 2014, BlackRock Institutional Trust Company, N.A. ("BTC") entered into an agreement with the SEC to resolve allegations relating to three alleged violations of an SEC regulation prohibiting short sales of an equity security during the restricted period preceding a public offering. The three trades at issue occurred in 2010 and 2011. As part of the approximately \$1.7 million settlement, BTC agreed to disgorge profits from each of the violations and to pay interest and a civil penalty. BTC also agreed to cease and desist from any future violations of the rule in question.

On 20 April 2015, BlackRock Advisors, LLC ("BAL") reached a settlement with the Securities and Exchange Commission ("SEC") regarding BlackRock's handling of a former portfolio manager's personal investments and involvement in a family business, Rice Energy LP and related entities. As part of the settlement, BAL agreed to pay a \$12 million penalty and retained an independent compliance consultant to review BlackRock's policies and procedures regarding the outside activities of BlackRock's employees. There was neither an allegation by the SEC of any loss to any BlackRock investors, nor did this settlement have any adverse impact on BlackRock's ability to manage its clients' funds.

On 17 January 2017, BlackRock Inc. reached an agreement with the SEC resolving a matter regarding a provision in an old version of BlackRock's form employee separation agreement that the SEC believed violated Dodd Frank's whistleblower provisions. The settlement with the SEC included a \$340,000 payment and BlackRock agreed it would not include the provision in future agreements. In addition, BlackRock agreed to notify by letter, certain former employees who signed the agreement between October 2011 and March 2016.

On 25 April 2017, BlackRock Fund Advisors ("BFA") reached an agreement with the SEC resolving a matter regarding whether one BFA-managed ETF (the iShares MSCI Russia Capped ETF) was covered by certain exemptive relief the SEC previously granted BFA and other iShares funds. BFA, which did not admit or deny any of the SEC's findings, agreed to resolve the matter for a civil monetary penalty of \$1.5 million.

BlackRock, Inc. and its various subsidiaries, including BTC, also have been subject to certain business litigation that has arisen in the normal course of their business. Our litigation has included a variety of claims, some of which are investment-related. None of BlackRock's prior litigation has had, and none of its pending litigation currently is expected to have, an adverse impact on BlackRock's ability to manage client accounts.

In past years, BlackRock has acquired organizations that provide investment-related services, including, but not limited to, State Street Research & Management Company, Merrill Lynch Investment Managers, the fund of funds business of Quellos Group, LLC, and Barclays Global Investors. This response does not address any regulatory or litigation that arose out of conduct within the acquired organizations prior to their acquisition by BlackRock. It also does not address any regulatory or litigation unrelated to BlackRock or BTC's investment management responsibilities.

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

Yes / No: Please explain.

BlackRock maintains the following types of global insurance coverage:

Type
<u>Investment Advisers Professional Liability (aka Errors & Omissions Liability)</u>
<u>Fidelity Bond (aka Crime or Financial Institution Bond)</u>

Although we do not disclose the insurer information and level of coverage, BlackRock only places insurance with insurers rated "Excellent" by AM Best and maintains coverage at levels that are commercially reasonable and consistent with industry peers.

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.

Futures are only used, where permitted by clients' guidelines, to ensure efficient portfolio management, not for speculative or leveraged positions in the portfolio.

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.

N/A

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.

N/A

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?
 - 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?

Managing Counterparty Credit Risk

BlackRock's philosophy is to manage counterparty credit risk conservatively. As such, the firm actively monitors counterparty credit risk exposures globally and evaluates counterparty credit quality on a continuous basis. We believe that our policies and procedures for counterparty risk management are robust and thorough.

In 2005, BlackRock established the Counterparty & Concentration Risk Group, a dedicated team of professionals that leads the global process for managing counterparty risk. The Group is responsible for managing credit risk in all trading relationships with counterparties and to that end coordinates with Credit Research, Investment Strategies, Trading & Liquidity Strategies, Legal & Compliance, Operations, and data integrity functions across the organization. The Group monitors and assesses counterparty exposures arising from both bilateral and centrally-cleared products that include derivatives, mortgage TBAs, foreign exchange, financing trades (repo and securities lending), equities, fixed income securities and other forward-settling transactions. Reporting is generated to show aggregate risk exposures by counterparty and by portfolio.

The Counterparty & Concentration Risk Group developed the firm-wide Counterparty Credit Policies and Procedures, and is responsible for implementing, updating and enforcing them, as follows:

- Assess prospective trading counterparty creditworthiness and approve counterparties;
- Measure and monitor credit exposure to each counterparty, broken out by asset classes;
- Monitor financial performance of counterparties in order to establish, confirm, or adjust exposures as needed;
- Monitor levels of exposure by product, by tenor, and by counterparty, and provide feedback to Trading & Liquidity Strategies when aggregate exposures warrant; and
- Provide guidance and supervision of credit issues for ISDA and other transaction documentation.

The firm has Credit Alert Procedures which serve as a guideline for the action and interaction of key BlackRock constituencies in the case of a counterparty related "credit event." These procedures specifically contemplate the coordination among the Counterparty & Concentration Risk, Investment Strategies, Trading & Liquidity Strategies, Legal, and Operations groups in order to facilitate BlackRock's ability to make timely and informed decisions following the recognition of credit concerns. The major aspects addressed include fact finding, communication, liquidation and close-out, and key roles and responsibilities.

BlackRock's Counterparty Approval Process

BlackRock focuses primarily on counterparty credit risk and counterparty reputation risk.

Counterparty credit risk is the potential loss that BlackRock clients' accounts or BlackRock accounts could incur if a counterparty is unable to perform on its trading commitments. Reputation risk is defined as the risk to earnings or capital arising from negative public opinion. The process by which we select broker/dealer counterparties for transaction purposes is outlined below.

Determine the nature of the proposed transaction activity:

What are the securities to be traded? What is the expected volume by security?

Determine the settlement and delivery procedure:

How is our client going to receive monetary compensation in exchange for delivering the particular security in question? If the client is going to receive securities, how is the counterparty going to deliver those securities? Is settlement through an established clearing platform or is there also a physical settlement? From a delivery risk perspective, we view DTC and Fed settlement along with settlement through several other established trading and clearing platforms to be of limited risk. We view settlement via other methodologies as bearing potentially significant risk, and generally limit such activity to investment grade counterparty groupings. OTC derivatives are transacted with major global financial institutions.

Determine if the proposed counterparty settles transactions "directly" or uses a correspondent:

Most "agency" counterparties utilize correspondents to clear securities for them. If they do so, who are they using? On what basis are they clearing, fully disclosed or otherwise? BlackRock will only accept clearing correspondents that are well-capitalized, well-established, and possess a favorable reputation in the marketplace.

Settlement risk tolerance levels:

BlackRock has established certain tolerance levels for aggregate exposure to settlement risk, defined as a credit balance on all trades outstanding but not settled. The level reflects our settlement risk tolerance per counterparty and is monitored by BlackRock's Counterparty & Concentration Risk Group on a daily basis. If the threshold is exceeded, the trade details are reviewed in concert with the counterparty's financial strength in order to determine if any intervention is required.

Financial review:

Our view is that the level and trend of excess regulatory capital, as shown in the financial information, is a key barometer of the financial strength of our trading counterparty. Most brokerage firms are required to calculate and report this figure to regulatory authorities on a periodic basis. We are directly interested in ensuring that the process is maintained.

As previously stated, non-investment grade counterparties are required to clear through well-established clearing correspondents and are generally limited to short settlement trades. Updated regulatory financial filings are reviewed on an ongoing basis. Major financial institutions are additionally monitored as part of BlackRock's internal credit research process and via alert portfolios with market data service providers.

Counterparty Exposure Monitoring

BlackRock prefers to have multiple counterparties for liquidity, risk management, and best execution purposes. The counterparties with which we trade must have broad market coverage. Positions are marked-to-market on a regular basis and exposure to each counterparty is monitored. Transaction documentation is implemented where appropriate to minimize exposure to individual counterparties.

To monitor post-trade counterparty risk, BlackRock has implemented a strong technological infrastructure and proprietary internal review processes. BlackRock also has a number of reporting tools on the Aladdin platform that allow us to manage counterparty exposure, balancing net exposures to our different counterparties. Where necessary, credit risk exposure to counterparties can be adjusted, both at the individual portfolio level and at the aggregate firm-wide level.

Country Risk

Members of the Counterparty & Concentration Risk Group are active participants in BlackRock's Global Country Operating Risk Committee. The Committee includes participants from Legal & Compliance, Business Operations, Fund Services, Product Tax, and Risk & Quantitative Analysis, along with representation from each of the Investment groups.

This Committee meets regularly to consider, inter alia, the legal status, ownership and official recognition of exchanges and clearing houses, trading and settlement practices and procedures and BlackRock's ability to track trades from execution to settlement in the various trading markets. For markets where direct local access to exchanges is deemed to present inappropriately high risks for client portfolios, a range of restrictions may be applied.

6. Specify the security pricing sources used when developing portfolio market value exposures for non-exchange traded derivative positions.

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.

As stated above, we typically use futures where permitted in our strategies for the purpose of efficient portfolio management. Futures are not used for speculative or leveraged positions in the portfolio.

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

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>Commercial Paper</i>	%
<i>Other high grade short-term securities</i>	0.06%
<i>U.S. Government & Agency securities</i>	99.94%
<i>Corporate Bonds</i>	%
<i>Mortgage and asset-backed securities</i>	%
<i>Yankee bond securities</i>	%
<i>Other (please specify)</i>	%

2. Is the firm monitoring the country, currency, sector and security selection risks associated with its portfolio? Yes / No: Please explain

Signed by:

Dated:

Name of Firm

Courtney Jindl
1-18-19
Black Rock

Brown Brothers Harriman Inflation Indexed Securities – December 31, 2018

Compliance Certification Statement

San Mateo County

Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (Investments@samcera.org) by **Monday, January 14, 2019**.

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**

From time to time BBH becomes involved in litigation and regulatory matters typical of similar service providers in the industry. BBH currently has no pending litigation or regulatory matters that would materially affect its ability to provide the services requested.

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.
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.**

BBH did not enter into any non-exchange traded derivatives in the past 6 months.

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

Not applicable.

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.

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.
 - a) What is the largest exposure to a single counter-party within the portfolio? **Not applicable.**
 - b) Please specify the name of the counter-party and the amount of exposure. **Not applicable.**

c) Have there been any changes to the investment manager's list of approved counter-parties over the past six months? **Not applicable.**

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.

BBH has not invested in "limited allocation derivative investments" in the SamCERA portfolio.

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.

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.**

Not applicable. BBH has not invested in "limited allocation derivative investments" in the SamCERA portfolio.

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.

BBH has not invested in "limited allocation derivative investments" in the SamCERA portfolio.

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.

BBH uses two derivative instruments in its Inflation Indexed Strategy, U.S. Treasury futures and foreign exchange forward contracts. U.S. Treasury futures are utilized to manage the portfolio duration independently from security selection. Typically, the duration of the portfolio is maintained in a range of +/-0.50 years relative to the benchmark. In the SamCERA portfolio, U.S. Treasury futures are further utilized to maintain the duration of the TIPS portfolio consistent with that of the Barclay's Aggregate Index. Foreign exchange forward contracts are utilized to mitigate the currency risk associated with tactical positions in non-U.S. inflation linked debt.

U.S. Treasury futures are among the most liquid investments and because they are exchange traded are not subject to counterparty risk. The foreign exchange market is highly liquid with several trillion dollars of currency traded daily and a wide variety of active market participants worldwide. Within the foreign exchange market, the currencies of the forwards used in the SamCERA portfolio (EUR and GBP versus USD) are among the most actively traded.

Hedging activity or use of forward currency contracts may reduce the risk of loss from currency revaluations, but also may reduce or limit the opportunity for gain and involves counter party risk, which is the risk that the contracting party will not fulfill its contractual obligation to deliver the currency contracted for at the agreed upon price. Because typically no money changes hands at the outset of a forward currency contract, the counter party risk is limited to the profit or loss on the contract, it is not the notional value of the contract.

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 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>%</i>
<i>U.S. Government & Agency securities</i>	<i>100%</i>
<i>Corporate Bonds</i>	<i>%</i>
<i>Mortgage and asset-backed securities</i>	<i>%</i>
<i>Yankee bond securities</i>	<i>%</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**

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?

0% as of December 31, 2018.

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 November 30, 2018, BBH U.S. TIPS strategy assets made up 7.2% of BBH total AUM and the SamCERA account was 1.0% of BBH U.S. TIPS strategy assets.

Signed by: John Ackler, CFA

Dated: January 2019

Name of Firm Brown Brothers Harriman & Co.

SamCERA I Compliance Certification Questionnaire**Compliance Certification Statement**

FIAM U.S. Core Bonds – December 31, 2018

FIAM Broad Market Duration**December 31, 2018**

Firm Name	Fidelity Institutional Asset Management Trust Company (FIAMTC)
Product Name	FIAM Broad Market Duration
Asset Class	Investment Grade Fixed Income
Respondent/Contact	Melissa Boissy, Senior Account Executive
Address	900 Salem Street, Smithfield, RI 02917
Telephone	401-292-7816
Email Address	Melissa.Boissy@fmr.com

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General Compliance Issues**1. 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 at FIAM and Fidelity:

- Effective December 31, 2018, Angelo Manioudakis, CIO, Global Asset Allocation left the firm. Vadim Zlotnikov, President, Global Asset Allocation took on the CIO role in addition to his role as president of the division.
- Effective December 31, 2018, Charlie Morrison, president of the Asset Management retired. Steve Neff, who previously served as head of Technology and Global services succeeded him. Steve is a 22-year Fidelity veteran with a broad range of leadership experience both within and outside of Fidelity, and has exhibited outstanding leadership capabilities in his current and past roles.
- In July 2018, Joe Nedder, previously Chief Operating Officer moved to Human Resources to drive learning strategy and the learning culture across Fidelity reporting to Bill Ackerman. He also assists Devonshire Investors in their efforts to enter the workplace education market.
- Also in July 2018, Linda Wondrack, previously Head of Asset Management Compliance, took on the newly created role of Head of Compliance for Advice Solutions, reporting to David Morse, Fidelity's Chief Compliance Officer. Bob Minicus, previously the Head of Global Equity Trading, took on a new

SamCERA I Compliance Certification Questionnaire

role as Head of AM Compliance, Risk and Business Operations. Finally, Kevin Meagher, who previously led the Fixed Income Legal team, took on the role of AM Chief Compliance Officer reporting to Bob Minicus.

- Also in July 2018, Brian Ward, previously Chief Risk Officer for Fidelity Enterprise Risk Management, moved to Asset Management as Asset Management Chief Risk Officer, reporting to Bob Minicus.
- In May 2018, Ben Harrison was named managing director of research for the High Income Division succeeding Matt Born.
- In January 2018, Bill Irving, previously a portfolio manager in Fidelity's Fixed Income division, was appointed Managing Director of Research in Fidelity's Global Asset Allocation (GAA) division. In this role, Bill has oversight of the GAA Quantitative Research and Counterparty Research teams.

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

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.

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.

SamCERA I Compliance Certification Questionnaire

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 the 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?

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.

6. Specify the security pricing sources used when developing portfolio market value exposures for non-exchanged traded derivative positions.

Fidelity Fund and Investment Operations (FFIO), formally FPCMS, utilizes a combination of sources for derivatives pricing. Primary source for various swap instruments are 3rd party pricing vendors, including Markit, Pricing Direct, Reuters, and Bloomberg. Reuters is the primary source on futures.

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.

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.

SamCERA I Compliance Certification Questionnaire

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

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>Commercial Paper</i>	%
<i>Other High Grade Short-term securities</i>	0.9%
<i>U.S. Government & Agency securities</i>	44.6%
<i>Corporate Bonds</i>	23.9%
<i>Mortgage- and asset-backed securities</i>	26.2%
<i>Yankee bond securities</i>	4.4%

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. We also test for technical market variables such as reduced liquidity. The diversification of our portfolios is designed for different parts of the portfolio to respond in varying, complementary fashions to different economic and interest rate outcomes.

3. Are any holdings below investment grade? Yes / No

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

As of December 31, 2018, 0.8% of holdings in the portfolio were below investment grade. Purchased as investment grade, these holdings have been downgraded due to increased leverage or other fundamental credit criteria. We still feel they hold relative value, although we are monitoring these securities closely.

4. Excluding U. S. Government and Agency bond holdings, did any individual bond issue represent more than 5% of the market value of the portfolio? Yes / No

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

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

2.60%

SamCERA I Compliance Certification Questionnaire

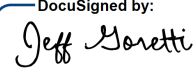
6. At the time of purchase, was there any single industry which represented more than 15% of the market value of the account. Yes / No

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, 2018, the SamCERA Broad Market Duration pool account represents <1% of the assets in the Broad Market Duration strategy and less than 1% of total FIAM assets.

Signed by: Jeff Goretti

DocuSigned by:

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Dated: 1/14/2018

Name of Firm: FIAMTC



FRANKLIN TEMPLETON
INVESTMENTS

January 14, 2019

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, 2018 – December 31, 2018

Bill Deakyne, CFA

Senior Vice President – Director of Institutional Client Relations

tel: (650) 312-2270

email: bill.deakyne@franklintempleton.com

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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.

Portfolio Developments

There have been no significant developments to the Franklin Templeton Global Multisector Plus (Master) Fund, Ltd. over the last six months ended December 31, 2018.

Firm Ownership

There have been no material changes to the ownership structure of Franklin Resources, Inc. (Parent Company) during the past six months ended December 31, 2018.

Organizational Structure and Personnel Changes

Please refer to the below changes within the Franklin Templeton business organization during the past six months ended December 31, 2018.

- The following changes were effective December 31, following Chris Molumphy, EVP, CIO of Franklin Templeton Fixed Income Group (FTFIG)'s retirement after 30 years of service to the firm and 18 years as CIO.
 - Dr. Sonal Desai, formerly SVP and Director of Research for Templeton Global Macro (TGM), was promoted to EVP, CIO of FTFIG and was also added as a portfolio manager to several FTFIG strategies focused on multi-sector and global sovereign exposure.
 - Dr. Calvin Ho, VP, Deputy Director of Research for TGM, replaced Dr. Desai's as SVP, Director of Research for TGM, and assumed Dr. Desai's former portfolio management responsibilities within TGM. Dr. Ho reports directly to Dr. Michael Hasenstab.
 - Dr. Hasenstab, EVP, CIO, continues to oversee Templeton Global Macro, as well as serving as the economic advisor to the CEO of Franklin Resources, Inc., and maintaining all of his existing portfolio management responsibilities.

While FTFIG and TGM remain independent and distinct investment groups, Dr. Desai and Dr. Hasenstab continue to partner closely as colleagues in support of Franklin Templeton's commitment to a collaborative investment management culture.

- Effective December 31, 2018, Coleen Barbeau, SVP and Director of Equity Portfolio Management, retired from the firm. John Rimmert, SVP and portfolio manager, who co-lead the Franklin Global Large Cap Team with Coleen since its inception in 2004, continues to lead the team, helping to ensure strong continuity of management. Ed Lugo, SVP and portfolio manager for the Franklin Global Small Cap Team, and Mr. Rimmert, both report directly to Michael McCarthy, CIO for Franklin Equity Group.

There have been no significant developments to the Franklin Templeton Global Multisector Plus (Master) Fund, Ltd. over the last six months ended December 31, 2018.

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.

No. During the period of July 1, 2018 through December 31, 2018, Franklin Advisers Inc. (FAV) was not the subject of any *investment-related proceedings, findings or orders* brought or made by any U.S. federal or state regulatory agency, *foreign financial regulatory authority or self-regulatory organization*.

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, 2018, 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 FAVs Form ADV filed with the U.S. Securities and Exchange Commission. (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**

The risk exposure to a single counterparty in an OTC derivative transaction may not exceed 10%.

Counterparty credit risk is managed at the firm-wide level. All potential counterparties are subject to initial approval and ongoing review by Franklin Templeton's Counterparty Credit Committee (CCC). This process evaluates a variety of different metrics for assessing creditworthiness, including each counterparty's credit rating, credit default swap spread, and stock price, as well as Franklin Templeton's money market and trading desk input.

The CCC and Franklin Templeton's Investment Risk Management Group are responsible for ongoing monitoring of counterparties' creditworthiness and firm-wide exposure to counterparties. The Investment Risk Management Group calculates exposure to each counterparty across Franklin Templeton mandates daily, and on an as-needed basis, based on market conditions. Total exposure is compared to monetary limits that may vary due to the size and creditworthiness of the counterparty.

The majority of our counterparty relationships are collateralized daily. Collateral is ring-fenced and protected from the balance sheet of either firm. Therefore, should one of our counterparties go out of business overnight, it would have minimal impact on value of the trade, as the trade's cash value would be in the collateral account and protected from creditors.

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?**

Counter-party exposure cannot be released under fair disclosure rules.

Changes to our approved list of counter-parties routinely occur nearly every month.

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.

Derivatives will only be used when client guidelines permit and Franklin Templeton's risk management systems enable us to properly model derivative instruments and fully understand portfolio risk. Derivative instruments are used for hedging purposes and for efficient portfolio management when we determine that it is more cost or tax efficient to use a derivative instrument rather than investing directly in the underlying bond or currency market. Compared with cash bonds, derivatives can be more flexible and more liquid, and may have lower transaction costs. In those strategies that employ derivative instruments, or when clients request the use of derivatives to achieve certain investment objectives, we may also seek to gain exposure through the use of exchange-traded and/or over-the-counter derivatives.

As an opportunistic strategy, the Templeton Global Multisector Plus Strategy (the investment strategy of the Franklin Templeton Global Multisector Plus (Master) Fund, Ltd.) utilizes a wide variety of instruments to gain exposure to various fixed income sectors and achieve strategy objectives. For example, foreign exchange forward contracts are frequently used in the implementation of its overall strategy, either for hedging purposes and/or to express positive and negative currency views. We may also engage in cross hedging as an efficient method of implementing the portfolio's optimal currency structure. Interest rate swaps may also be used to implement views on interest rates, quickly adjust portfolio duration, or efficiently handle cash flows.

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

As an essential part of the investment process, liquidity risk is researched in the security selection stage. Our research analysts and traders partner to ensure that any required liquidity provisions can be met given the risk parameters of the underlying mandate. In the event that, within the confines of the account structure, we invest in securities that have limited liquidity, we seek to ensure that investors are being adequately compensated for any liquidity risk. On an ongoing basis, analysts are required to ensure that current market prices reflect attractive valuations. Liquidity risk is further controlled by monitoring aggregate ownership levels to help ensure that they remain prudent.

The global government bond and foreign currency markets in which the fund invests are among the largest and most liquid markets in the world. We generally seek to avoid holding assets in which we believe forced selling could occur at stressed levels due to liquidity constraints. Historically, the fund has never experienced any significant issues with liquidity, and we do not believe that liquidity issues going forward are likely to be of great concern, regardless of the economic environment.

It is also important to note that at a firm level, we have our Global Credit Facility, an unsecured, senior committed line of credit, if required as a source of funds for temporary and emergency purposes to meet unanticipated or unusually large redemption requests by shareholders. In the case that this facility would be needed, this would provide the portfolio managers with added flexibility in managing redemptions without disrupting our ability to meet our investment objectives and serve the long-term interests of our shareholders. Currently, it is undrawn.

If no, please explain.

2. Has the firm engaged in short selling, use of leverage or margin and/or investments in commodities?

Yes No

The Templeton Global Multisector Plus Strategy does not engage in short selling, employ leverage, margins or investments in commodities.

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, 2018.

Sector	Region	MV%
Certificates of Deposit (by region)		0.00
Cash & Cash Equivalents		13.91
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	0.00
	Non-US	81.63
Agency Securities (by region)	US	0.00
	Non-US	3.09
Investment Grade Corporate Bonds (by region)	US	0.00
	Non-US	0.00
High Yield Corporate Bonds (by region)	US	0.01
	Non-US	0.01
Mortgage and asset-backed securities (by region)		0.00
Supranational		0.05
Derivatives		-0.27
Bank Loans		0.00
Other ^[1]		1.57
Total		100.00

^[1] Other includes 1.55% Sovereign and 0.02% Equity.

Region	Percentage (%)
Americas	46.07
Asia	35.76
Europe	0.36
Middle-East/Africa	3.84
Supranational	0.05
Cash & Cash Equivalents	13.91
Total	100.00

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

The table below represents the quality allocation breakdown for the Franklin Templeton Global Multisector Plus (Master) Fund, Ltd. (3c7) as of December 31, 2018. During the quarter ended December 31, 2018, 39.25% of the portfolio consisted of holdings that were below investment grade or not rated.

Range	IG/Non-IG	Percentage
AAA	IG	0.05
AA+	IG	0.00
AA	IG	10.26
AA-	IG	0.00
A+	IG	0.00
A	IG	0.00
A-	IG	21.16
BBB+	IG	4.66
BBB	IG	14.36
BBB-	IG	10.26
BB+	Non-IG	0.00
BB	Non-IG	0.00
BB-	Non-IG	12.87
B+	Non-IG	0.23
B	Non-IG	12.13
B-	Non-IG	0.35
CCC+	Non-IG	0.00
CCC	Non-IG	0.00
CCC-	Non-IG	0.00
CC+	Non-IG	0.00
C	Non-IG	0.00
NR	Non-IG	0.02
N/A	Non-IG	-0.26
Cash & Cash Equivalents	Non-IG	13.91

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?

As of December 31, 2018, the portfolio did not hold any Rule 144A securities.

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?

Franklin Templeton Global Multisector Plus (Master) Fund Ltd. total AUM as of December 31, 2018 was US\$1,270.67 million, this makes up 0.20% of total firm AUM.

SamCERA's account assets makes up 3.23% of Franklin Templeton Global Multisector Plus (Master) Fund Ltd's total assets as of December 31, 2018.

Signed By: 
Name: Breda Beckerle
Title: Chief Compliance Officer
Dated: Monday, January 14, 2019
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). 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.

PIMCO Diversified Income Fund – December 31, 2018

Compliance Certification Statement

San Mateo County

Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of SamCERA's investment managers on a semi-annual basis. These statements must be e-mailed to SamCERA's office (Investments@samcera.org) by **Monday, January 14, 2019**.

General Compliance Issues

The Fund you are invested in is an investment company registered under the Investment Company act of 1940 ("1940 Act"), which prohibits selective disclosure of information to some investors and not to others. Therefore, we cannot respond directly to your inquiry.

For additional information please reference the attached compliance letter, Fund Prospectus and Statement of Additional Information.

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

Yes: Please explain. / **No**

During the six months ending December 31, 2018, there have been no material changes to the firm's ownership or organizational structure. Please refer below for announcements regarding strategic enhancements and hiring:

In October 2018, PIMCO announced the acquisition of Gurtin Municipal Bond Management (Gurtin), a specialist municipal bond manager. Combined, PIMCO and Gurtin will manage \$38 billion in dedicated municipal bond assets and offer clients a more extensive and enhanced suite of strategies and services, backed by broader municipal credit research, enhanced technology and outstanding client service.

In September 2018, PIMCO appointed Markus Aakko as Global Head of Transformation. Mr. Aakko, an Executive Vice President, previously served as PIMCO's Head of Strategy, and has been with the firm since 2010. In this newly created role, Mr. Aakko will lead a team of PIMCO professionals to execute strategic initiatives globally. He will report to Co-Chief Operating Officer Peter Strelow, and will continue to be based in Newport Beach.

In September of 2018, PIMCO announced hiring John Studzinski as Managing Director and Vice Chairman in the Executive Office. John will be based in PIMCO's New York office and will report directly to Emmanuel Roman, the firm's CEO. John will take a leading role in supporting and advancing PIMCO's global strategy and serve as a key strategic advisor to PIMCO's clients around the world. John brings over 30 years of experience as a trusted

financial and strategic advisor to the world's leaders in business, finance, government and NGOs, to PIMCO.

In July 2018, PIMCO expanded the firm's presence in Asia by opening an office in Taipei, Taiwan. PIMCO Taiwan Limited intends to act as the master agent for the firm's 13 PIMCO Funds: Global Investors Series plc ("PIMCO GIS Funds"), which are registered for general sale to local Taiwan investors and directly manage its local distribution partners, pending further regulatory approval for the master agent transfer. In addition to the new Taipei office, PIMCO has four other offices in Asia including Hong Kong, Singapore, Sydney and Tokyo.

In July 2018, PIMCO appointed Sapna Shah as Head of Corporate Responsibility. Ms. Shah, an Executive Vice President, previously served as PIMCO's Inclusion, Diversity and Culture Officer, and has been with the firm since 2007. In this newly created role, Ms. Shah will drive the development and implementation of PIMCO's corporate responsibility platform "Purpose at PIMCO". The platform consists of three main pillars to support meaningful social change – PIMCO Gives (grant making), PIMCO Acts (volunteerism) and PIMCO Advocates (corporate policies, partnerships and thought leadership). Through the platform, she will lead a range of initiatives that support PIMCO's corporate and social goals, including the firm's focus on gender equality and hunger as well as corporate ESG policies and IDC efforts.

In July 2018, PIMCO expanded the firm's presence in the U.S. by opening a third office in Austin, Texas. This office enables PIMCO to expand its reach to clients, access new pools of talent and skills and build out technological innovation and implementation across the firm globally. PIMCO is initially building up the office's staffing level to around 200 employees by the end of 2019, with the majority of these being new hires. Alongside a significant technology presence, other functions including U.S. Global Wealth Management, Institutional Client Management and Marketing will be present in the new office.

In May 2018, PIMCO announced a strategic partnership with Beacon Platform Incorporated, a financial technology company specializing in the development of cloud-based, end-to-end development and production platforms. The platform will be deployed globally and aid in delivering quantitative research and analytics to support the firm's 240+ portfolio managers around the world. The partnership is part of a broader strategic effort to further integrate technology and quantitative research into PIMCO's investment process.

In May 2018, Keami Lewis joined PIMCO as an Executive Vice President and Head of Talent and Organizational Development (T&OD). Keami drives the design and execution of PIMCO's firm-wide talent management initiatives to support the continued development and engagement of PIMCO employees around the world. PIMCO is committed to employing and recruiting top talent from a diverse range of industries, geographies and backgrounds that bring new ideas and fresh thinking to our firm. Our people are our most valuable asset and Keami's broad range of talent management skills are instrumental in providing our employees with the necessary tools they need to develop in their careers while providing the best ideas and solutions to our clients.

In April 2018, Gavin Power joined PIMCO as an Executive Vice President and Chief, International Affairs and Sustainable Development, as part of the firm's efforts to grow its Environmental, Social and Governance (ESG) platform for investors seeking attractive returns in socially responsible investments. Gavin is part of PIMCO's Executive Office, reporting to Libby Cantrill, Managing Director and Head of Public Policy. Gavin works closely with PIMCO's ESG investment team and broader investment professionals on international policy development and strategy.

In March of 2018, PIMCO hired Joshua Bolten to its Global Advisory Board. Joshua, a former White House Chief of Staff, has previously served as a consultant to PIMCO. His talents, expertise and invaluable insights into U.S. public policy will enhance PIMCO's group of unrivaled macroeconomic thinkers and former policy makers, which includes former Federal Reserve Chairman Ben Bernanke.

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

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.

Please refer to the attached Diversified Income Fund Annual Report.

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.

Please refer to the attached Diversified Income Fund Annual Report.

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.

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

Please refer to the attached PIMCO Pricing Policy.

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.

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

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**

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.

Domestic Fixed Income Portfolios

1. 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 & Equivalents</i>	<i>%</i>
<i>Total</i>	<i>%</i>

Please refer to 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**

Please refer to the attached Holdings Report as of 9/30/2018.

- a) If **Yes**, please specify the bond issue and percentage amount.

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 refer to the attached Holdings Report as of 9/30/2018.

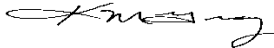
a) If **Yes**, please specify the name of the industry, percentage amount and size relative to benchmark.

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 9/30/2018, the Fund represented 0.18% of the Firm's AUM.

As of 12/31/2018, SamCERA's account represented 2.55% of Fund assets.

Signed by:



Dated: 1/10/2019

Name of Firm : PIMCO

Western Asset Management Total Return Unconstrained – December 31, 2018

Compliance Certification Statement

San Mateo County

Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (Investments@samcera.org) by **Monday, January 14, 2019**.

General Compliance Issues

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

Yes: Please explain. / **No**

As noted in June, the following personnel changes were announced:

- Mr. Carl L. Eichstaedt, Portfolio Manager and member of the Firm's Broad Market investment team, has announced his plans to retire in March 2019 after 23 years of service at Western Asset. Mr. Eichstaedt will continue to play a role in the management of the portfolios and will work to transition his responsibilities to the broader Broad Market portfolio management team during the transition period.
- After serving as Chief Risk Officer (CRO) since October 2008, Mr. Kenneth Winston retired December 31, 2018. Western Asset is pleased to announce the appointment of Mr. Ahmet Kocagil as Mr. Winston's successor. Mr. Kocagil joined the Firm in January 2017 as a member of the risk team focusing specifically on credit risk and has been working closely with the broader risk, investment and client service professionals to continue to enhance risk tools and insights. Over the last year, Mr. Winston and Mr. Kocagil worked closely together to ensure a smooth transition and continued enhancement of the Firm's best-in-class risk team and processes, quantitative solutions and proprietary risk system (WISER). Mr. Kocagil assumed full CRO responsibilities in June of 2018.

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?
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?
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 has a formal pricing policy, which outlines the pricing process in greater detail and 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, Western Asset has 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**

Domestic Fixed Income Portfolios

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

<i>Treasury</i>	<i>15.15%</i>
<i>Agency</i>	<i>0.01%</i>
<i>Inflation-Linked</i>	<i>2.10%</i>
<i>Mortgage-Backed</i>	<i>11.35%</i>
<i>Asset-Backed</i>	<i>3.68%</i>
<i>Investment-Grade Credit</i>	<i>14.72%</i>
<i>High-Yield Credit</i>	<i>8.24%</i>
<i>Bank Loan</i>	<i>1.85%</i>
<i>Non-US</i>	<i>11.20%</i>
<i>EM Government</i>	<i>4.01%</i>
<i>EM Local Currency</i>	<i>11.02%</i>
<i>EM Corporate</i>	<i>6.22%</i>
<i>Cash & Equivalents</i>	<i>10.45%</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?

20.97%

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, 2018, Western Asset's Total Return Unconstrained (TRU) Bond product makes up 1.1% of Firmwide AUM, and SamCERA's account comprises 2.8% of total TRU Bond product assets.

Signed by: Laura Terrones

Dated: January 11, 2019

Name of Firm: Western Asset Management Company, LLC

bINVESCO Core Real Estate – December 31, 2018

Compliance Certification Statement

San Mateo County

Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of SamCERA's investment managers on a semi-annual basis. These statements must be e-mailed to SamCERA's office (Investments@samcera.org) by **Monday, January 14, 2019**.

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.**
2. Has the firm used leverage? Yes: **Please explain.** / No - **The maximum leverage for the Fund is 35%. As of September 30, 2018, the Fund's leverage was 23.8%.**

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, 2018, the Fund's since inception net return of 7.56% exceeds the NFI ODCE index of 7.04%.**
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. Is the portfolio leverage within the 35% of overall loan to value guideline?
 Yes / No: Please explain.
5. What proportion of total AUM do the assets in this product make-up of the firm? – **20.8% (as of September 30, 2018)** What size does SamCERA's account comprise of total product assets? – **2.69% (as of September 30, 2018)**

Signed by:



Dated: January 14, 2019

Name of Firm: Invesco Realty, Inc. parent of Invesco Core Real Estate – U.S.A., L.P.'s general partner

Cushing Asset Management MLP Alpha Total Return – December 31, 2018

Compliance Certification Statement

San Mateo County

Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (Investments@samcera.org) by **Monday, January 14, 2019**.

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**

On August 28, 2018, the Firm entered into an Offer of Settlement with the Securities and Exchange Commission ("SEC"), which resulted in an order being issued by the SEC ("Order") on September 14, 2018. The Order resolves the SEC's allegations that the Firm caused its client's violations of Section 17(a)(1) of the Investment Company Act of 1940 ("Investment Company Act") in connection with two undisclosed cross trades on December 20, 2012. Cushing cooperated fully with the SEC's inquiry and, solely for the purpose of settling the matter, the Firm consented to the Order without admitting or denying the matters therein (except the SEC's jurisdiction). The Order requires the Firm to cease and desist from committing or causing any violations and any future violations of Section 17(a)(1) of the Investment Company Act and required the Firm to pay a civil money penalty of \$100,000, which the Firm paid on September 14, 2018. Since the time of the trades under review, the Firm has since reviewed its protocols, invested in new compliance programs, people, and training.

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. 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 Portfolios

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

<i>Foreign Ordinary Shares</i>	<i>0.00%</i>
<i>ADR's</i>	<i>0.00%</i>
<i>MLP Limited Partnership*</i>	<i>96.47%</i>
<i>Other</i>	<i>0.00%</i>
<i>Cash & Equivalents (Domestic)</i>	<i>3.53%</i>

*Includes midstream companies and their affiliates organized either as qualified publicly traded partnerships (MLPs) or as traditional c-corporations for tax purposes.

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

<i>Large-Cap</i>	<i>59.49%</i>
<i>Mid-Cap</i>	<i>40.51%</i>
<i>Small-Cap</i>	<i>0.00%</i>

*Amounts are grossed to 100% of the portfolio's market-value.

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

2.87%.

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 7% at the time of purchase, please list and explain why.

MPLX LP (NYSE: MPLX): 6.83%.


5. What is the largest percentage of the portfolio represented by a single issuer? Please specify the security and percentage amount. If any exposure to a single issuer was above 15% at time of purchase, please list and explain why.

MPLX LP (NYSE: MPLX): 6.83%.

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?

Cushing MLP Alpha Total Return Strategy Assets as a % of firm AUM: 27.69%
SamCERA % of Cushing MLP Alpha Total Return Strategy AUM: 8.51%

Signed by:


Geoffrey G. Crumrine,
Partner, Head of Distribution

Dated: January 10, 2019

Name of Firm : Cushing Asset Management, LP

***The Parametric Portfolio Associates LLC Cash & Currency Hedge Overlay –
December 31, 2018***

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

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (Investments@samcera.org) by **Monday, January 14, 2019.**

General Compliance Issues

1. Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel?
 Yes: Please explain. / No
2. Have there been any changes in the firm's investment approach?
 Yes: Please explain. / No
3. Have there have been any industry or regulatory disciplinary actions taken against the firm?
 Yes: Please explain. / No
4. Has the firm's insurance coverage been sustained?
 Yes / No: Please explain.
5. Have there been any investment guideline breaches during the past 6 months?
 Yes / No: Please explain.

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.

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.
None

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.

N/A

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.

N/A

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 derivatives used are exchange traded broad based securities.

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

There is very limited legal and regulatory risks in these futures contracts.

Signed by:



Ben Hammes
Deputy Chief Compliance Officer
Minneapolis and Westport

Dated: January 4, 2019

Name of Firm Parametric Portfolio Associates LLC

Verus Advisory, Inc. – December 31, 2018

Compliance Certification Statement

San Mateo County

Employees' Retirement Association

Please complete the following compliance certification statement and e-mail to *SamCERA* (Investments@samcera.org) by **Monday, January 14, 2019**.

General Compliance Issues

1. Have there been any significant changes in firm ownership, organizational structure and firm leadership team personnel?
 Yes: Please explain. / **No**
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**

Date hired	Name	Title
6/22/2018	Ling Zhang	Risk Analyst (part-time)
9/10/2018	Frank Luplow	Research Coordinator, Public Markets
10/15/2018	Florentina Furtuna	Associate Director, Private Markets
11/12/2018	Will Jones	Risk Analyst
12/11/2018	Galen Haws	Director, Portfolio Management

Date left	Name	Title	Reason for departure
6/14/2018	Pavel Golyshev	Associate Director, Public Markets	Pursued another opportunity
6/19/2018	Zoey Yan	Associate Director, Risk	Moved back to China
9/21/2018	Nick Pursley	Consulting Associate	Relocated for spouse's job
9/21/2018	Ping Zhu	Associate Director, Private Markets	Relocated for spouse's job
10/19/2018	Andrew Kogan	Consulting Associate	Laid off
11/21/2018	Tonye Wokoma	Consulting Associate	Pursued another opportunity

Note that the team servicing SamCERA has experienced no change.

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: Warren Spencer, CCO
Dated: 11 January 2019
Verus Advisory, Inc.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

January 29, 2019

Agenda Item 4.11

TO: Board of Retirement

FROM: Scott Hood, Chief Executive Officer 

SUBJECT: Agreement with Byers/Richardson for Disability Retirement Counsel Services.

Recommendation

Approve a resolution authorizing the Chief Executive Officer to execute an agreement with Byers/ Richardson for disability retirement counsel services.

Background

The disability retirement application process can involve hearings before a hearing officer who makes recommendations and findings for the Board's consideration. Additionally, a final Board decision can be challenged in court. As our Chief Legal Counsel sits with the Board when the matters are presented, the Chief Legal Counsel does not handle either of these disability hearings. They are handled by a separate counsel.

Discussion

Currently, the County Counsel's Office represents SamCERA in these proceedings. From time to time, due to staffing and case load demands, the County Counsel's Office reassigns its deputies who perform our work. We have received notice of an upcoming reassignment and we have discussed with the County Counsel that this would be an appropriate time to switch to private counsel.

Patrick Richardson, of Byers/Richardson, skillfully handled a couple matters for SamCERA when County Counsel had a conflict. He represents Marin County Employees' Retirement Association (15 years), Sonoma County Employees' Retirement Association (10 years), and Alameda County Employees' Retirement Association (2 years) in these matters. He has presented at several SACRS attorneys' disability retirement breakout sessions.

The proposed retainer agreement sets a billing rate of \$225 per hour and runs through June 30, 2022, with the standard 30-day termination clause. The resolution authorizes the Chief Executive Officer to execute the agreement at an amount not to exceed \$175,000 and to amend that agreement up to \$25,000 total, throughout the term, as fluctuations in case load can occur. This amount is consistent with the amount budgeted for County Counsel services.

Attachment

Resolution Authorizing the Chief Executive Officer to enter into an agreement with Byers/ Richardson for Disability Retirement Counsel Services

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

RESOLUTION ____-__

RESOLUTION AUTHORIZING CHIEF EXECUTIVE OFFICER TO EXECUTE AN AGREEMENT WITH BYERS/RICHARDSON FOR DISABILITY RETIREMENT LEGAL SERVICES.

WHEREAS, Article XVI, §17 of the Constitution of the State of California vests the Board with plenary authority and fiduciary responsibility for the investment of moneys and the administration of the system; and

WHEREAS, Government Code section 31529.9 authorizes the Board to contract with private counsel; and

WHEREAS, the Board has determined that it is in its best interest to enter into an agreement with Byers/Richardson, to provide legal services for disability retirement applications; and

WHEREAS, the legal services agreement would provide that Patrick Richardson of Byers/Richardson would provide legal services through June 30, 2022, at a total amount not to exceed \$175,000.

THEREFORE, BE IT RESOLVED, that the Board of Retirement authorizes the Chief Executive Officer to execute an agreement with Byers/Richardson, for disability retirement legal services in an amount not to exceed \$175,000.

BE IT FURTHER RESOLVED, that the Chief Executive Officer is hereby authorized and directed to execute any subsequent amendments and minor modifications in an amount not to exceed \$25,000.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

Board of Retirement

January 29, 2019

Agenda Item 5.2

TO: Board of Retirement

FROM: Scott Hood, Chief Executive Officer



SUBJECT: Adoption of Cost of Living Adjustments (COLAs) for 2019

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 3.87% during 2018. Rounded to the nearest one half of one percent, this yields a COLA of 4.0% for Plan 1 General and Safety members, a COLA of 3% for Plan 1 Probation and Plan 2 members and a COLA of 2% for Plan 4, 5, 6 and 7 if they retire before April 2, 2019.

Probation Plan 1 members will have 1% deposited into their COLA bank.

All COLAs will be paid beginning with the April 2019 benefit payments.

Attachments

January 15, 2019 letter from Milliman, Inc.

Resolution Adopting Cost of Living Adjustments Effective April 1, 2018 as Recommended by Milliman, Inc.



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

Tel +1 206 624 7940
Fax +1 206 623 3485

milliman.com

VIA EMAIL ONLY

January 15, 2019

Mr. 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 2019

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 2019.

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 1st 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-San Jose area (Base Period: 1982-84=100) as the basis for making the annual adjustments. This index increased by 3.87% during the 2018 calendar year, from an index value of 274.924 in 2017 to an index value of 285.550 in 2018.

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.

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 2019:

- COLA percentage

- Plan 1. Each retiree and beneficiary who retired on or before April 1, 2019 will receive a Cost-of-Living Adjustment in accordance with the following table.

Date of Retirement	General	Safety	Probation
All Dates	4.0%	4.0%	3.0%

- Plan 2. Each retiree and beneficiary who retired on or before April 1, 2019 will receive a Cost-of-Living Adjustment of 3.0%.
- 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, 2019 will receive a Cost-of-Living Adjustment of 2.0%, the maximum increase under CERL 31870.

- COLA Bank

- Plan 1. Each retiree and beneficiary who retired on or before April 1, 2019 will have his or her COLA Bank increased in accordance with the following table:

Date of Retirement	General	Safety	Probation
All Dates	0.0%	0.0%	1.0%

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 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 pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

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.

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,

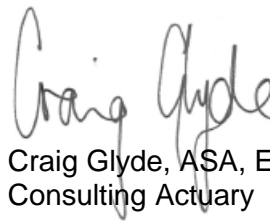


Nick Collier, ASA, EA, MAAA
Consulting Actuary

NC/CG/nlo

Attachments

cc: Ms. 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-San Jose area (Base Period: 1982-84=100)

Retirement during 12-month period ended April 1 2019 or earlier	Accumulated COLA Bank April 1, 2019 0.0%	Accumulated COLA Bank April 1, 2018 0.0%	2019 Annual COLA 4.0%
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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-San Jose area (Base Period: 1982-84=100)

Retirement during 12-month period ended April 1 2019 or earlier	Accumulated COLA Bank April 1, 2019 1.0%	Accumulated COLA Bank April 1, 2018 0.0%	2019 Annual COLA 3.0%
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SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

RESOLUTION 2019- __

**RESOLUTION ADOPTING COST OF LIVING ADJUSTMENTS EFFECTIVE APRIL 1, 2019
AS RECOMMENDED BY MILLIMAN, INC.**

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, 2019, 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, 2019, letter from Nick J. Collier, Consulting Actuary, 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, 2019. 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.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

January 29, 2019

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, 2018

Recommendation

Accept the preliminary performance report dated December 31, 2018.

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. As discussed previously, preliminary performance estimates are now included for AQR Risk Parity, AQR Delta, PanAgora Risk Parity, and Beach Point Select. 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 4-9) also shown.

Discussion

The fund's net preliminary return for December was -3.1%, bringing the preliminary trailing twelve-month return ending December 2018 to -4.4% net. The preliminary twelve-month net return is below both SamCERA's Plan Benchmark return of -3.4% and SamCERA's Actuarial Assumed Earnings Rate of 6.75%.

December was a negative month for risk assets as market sentiment plunged. Concerns about tighter global monetary policies, trade wars, slower earnings growth in the U.S., and softening global economic conditions all contributed to the negative sentiment. In U.S. equity markets, the broad U.S. equity market (as measured by the Russell 3000 Index) was down 9.3%. International markets were also down on the month, with developed international equity (as measured by MSCI EAFE) down 4.9%, while emerging markets were down 2.7%.

As expected, the U.S. Federal Reserve raised its target range for its benchmark interest rate by 25 basis points to 2.25% - 2.5%. However, while it provided guidance of lowered expectations for hikes in 2019 from three to two, the Fed failed to reassure markets that it would be data dependent in terms of future hiking actions. Economic data was mixed in December. U.S. Real

GDP grew at a revised annual rate of 3.4% (down from the original 3.5% estimate) in the 3rd quarter. Consumer confidence fell in December while the labor market continued to show strength. Manufacturing activity slowed again in December due to concerns about tariffs but remained in positive territory. In addition, core inflation (CPI) rose 2.2% on an annualized basis.

The general U.S. fixed income market returned 1.8% during the month as Treasury yields were lower across the board in the risk-off environment. The 10-year U.S. Treasury yield was lower during the month, with the yield decreasing 30 basis points and ending at 2.7% by month-end.

Attachments

Northern Trust Performance Report

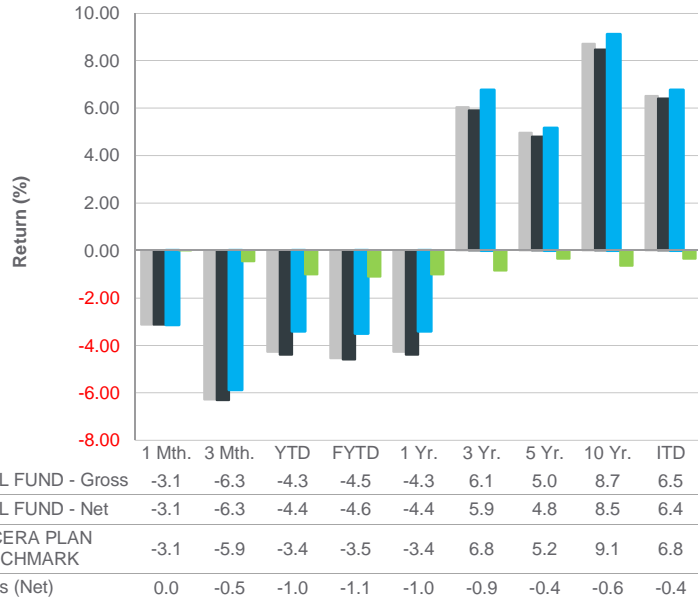
Verus Capital Markets Update

San Mateo County Composite Return Summary

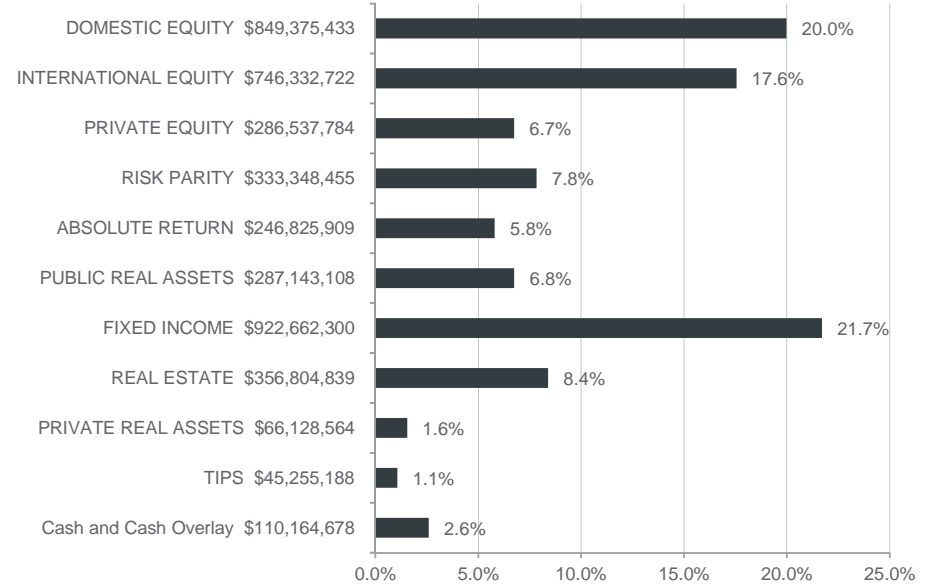
12/31/2018



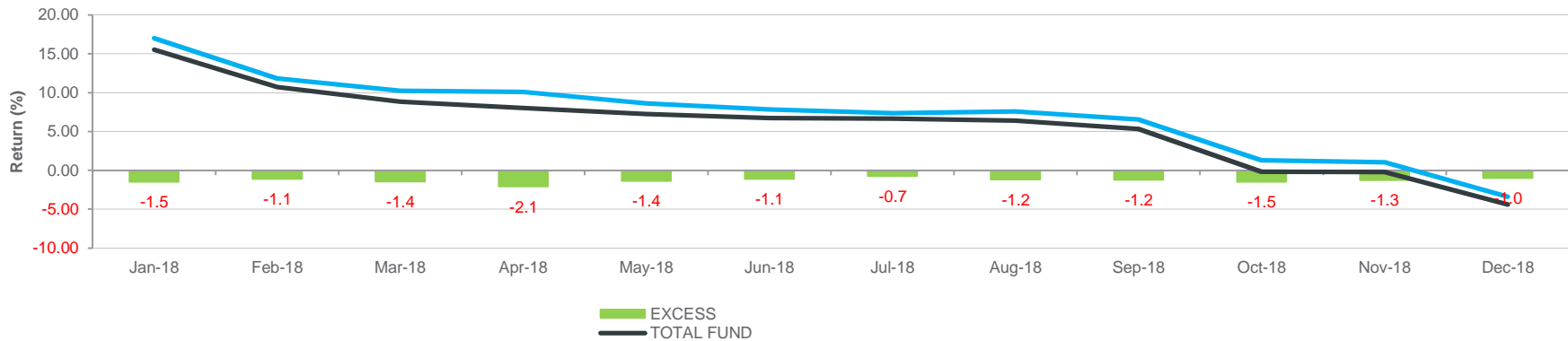
Total Fund Performance



Asset Allocation

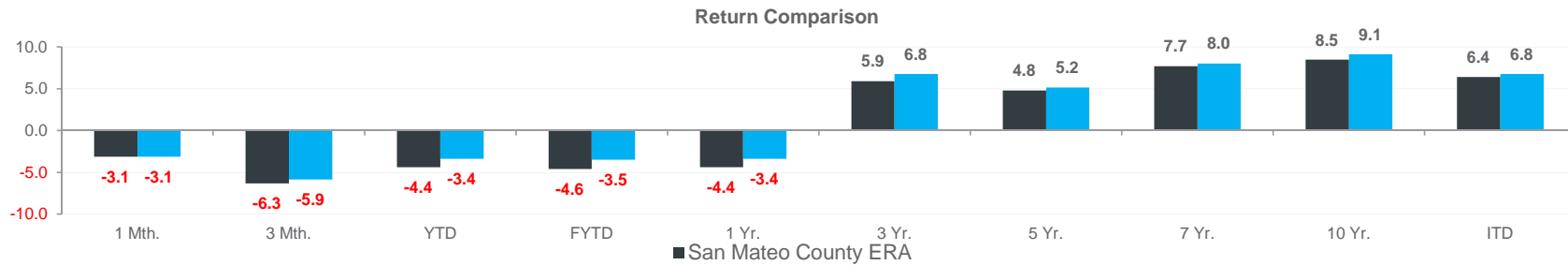


Rolling Month End Annual Returns



San Mateo County Composite Return Summary

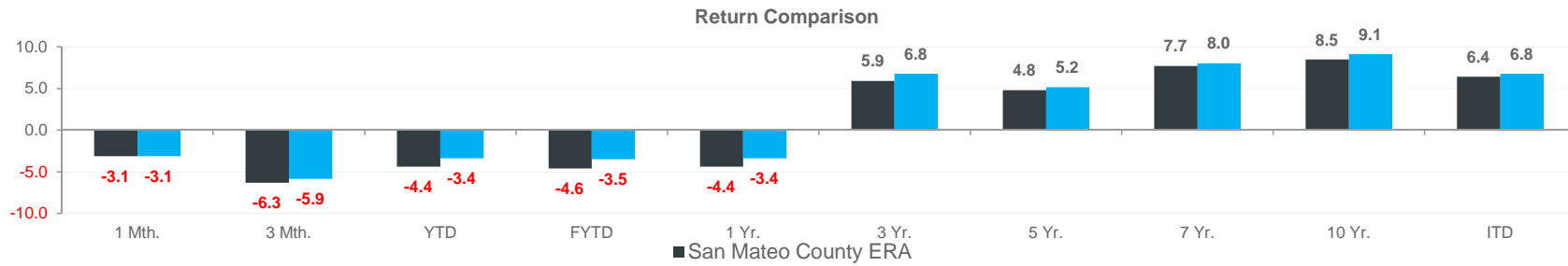
December 31, 2018



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 ERA	4,250,578,980	-3.1	-6.3	-4.4	-4.6	-4.4	5.9	4.8	7.7	8.5	6.4
Samcera Total Plan Benchmark		-3.1	-5.9	-3.4	-3.5	-3.4	6.8	5.2	8.0	9.1	6.8
Excess		0.0	-0.5	-1.0	-1.1	-1.0	-0.9	-0.4	-0.3	-0.6	-0.4
San Mateo Ex-Clifton Overlay	4,237,517,211	-3.1	-6.3	-4.4	-4.6	-4.4	5.8	4.7	7.6	8.4	6.3
Samcera Total Plan Benchmark		-3.1	-5.9	-3.4	-3.5	-3.4	6.8	5.2	8.0	9.1	6.8
Excess		0.0	-0.5	-1.0	-1.1	-1.0	-0.9	-0.5	-0.4	-0.7	-0.4
Total Equity	1,595,708,156	-6.7	-12.9	-9.2	-9.5	-9.2	6.8	5.0	9.5	10.1	7.2
Samcera Total Equity Benchmark		-7.2	-13.2	-9.6	-9.7	-9.6	7.8	6.1	10.5	11.4	7.8
Excess		0.5	0.3	0.4	0.2	0.4	-1.0	-1.1	-1.0	-1.3	-0.6
Fixed Income	922,662,300	0.9	0.7	0.8	1.4	0.8	4.8	3.7	4.4	6.4	5.4
Samcera Fixed Income Benchmark		0.8	0.2	-0.6	1.0	-0.6	3.1	2.7	2.3	3.7	4.8
Excess		0.1	0.5	1.4	0.5	1.4	1.6	0.9	2.1	2.7	0.6
Risk Parity	333,348,455	-0.6	-4.0	-6.6	-5.1	-6.6	6.1	4.7	5.1	--	5.0
Samcera Risk Parity Benchmark		-3.8	-7.7	-5.5	-5.3	-5.5	6.1	5.7	8.3	--	7.4
Excess		3.2	3.7	-1.0	0.2	-1.0	0.1	-1.1	-3.2	--	-2.4

San Mateo County Composite Return Summary

December 31, 2018



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	533,363,693	-0.5	-0.8	0.5	1.9	0.5	5.2	5.1	5.6	-7.5	-2.3
Samcera Alternatives Benchmark		0.4	4.9	9.8	8.2	9.8	12.0	7.8	9.8	10.7	7.9
Excess		-0.9	-5.6	-9.3	-6.3	-9.3	-6.8	-2.7	-4.3	-18.2	-10.2
Inflation Hedge	755,331,699	-2.1	-3.3	-1.3	-3.9	-1.3	--	--	--	--	6.2
SamCERA Inflation Hedge Index		-1.2	-3.1	-0.9	-2.1	-0.9	--	--	--	--	5.6
Excess		-0.9	-0.2	-0.3	-1.8	-0.3	--	--	--	--	0.6
Cash	97,102,909	0.0	0.3	0.9	0.5	0.9	0.8	0.7	0.6	0.8	1.9
Samcera Cash Benchmark		0.2	0.6	1.9	1.1	1.9	1.0	0.6	0.5	0.4	1.8
Excess		-0.1	-0.3	-1.0	-0.6	-1.0	-0.2	0.1	0.2	0.4	0.1

San Mateo County Composite Return Summary

December 31, 2018



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Total Equity	1,595,708,156	-6.7	-12.9	-9.2	-9.5	-9.2	6.8	5.0	9.5	10.1	7.2
Samcera Total Equity Benchmark		-7.2	-13.2	-9.6	-9.7	-9.6	7.8	6.1	10.5	11.4	7.8
Excess		0.5	0.3	0.4	0.2	0.4	-1.0	-1.1	-1.0	-1.3	-0.6
Domestic Equity	849,375,433	-9.0	-14.4	-5.3	-8.4	-5.3	8.8	7.4	12.0	12.7	8.2
Samcera Dom. Equity Benchmark		-9.3	-14.3	-5.2	-8.2	-5.2	9.0	7.6	12.3	13.1	8.5
Excess		0.3	-0.1	-0.1	-0.2	-0.1	-0.2	-0.3	-0.4	-0.5	-0.3
Large Cap Equity	774,045,517	-8.7	-13.7	-4.6	-7.3	-4.6	9.4	8.4	12.7	12.8	8.9
Russell 1000		-9.1	-13.8	-4.8	-7.4	-4.8	9.1	8.2	12.6	13.3	9.2
Excess		0.5	0.1	0.2	0.1	0.2	0.3	0.2	0.1	-0.5	-0.3
Blackrock Russell 1000	405,600,329	-9.1	-13.8	-4.8	-7.4	-4.8	--	--	--	--	7.1
Russell 1000		-9.1	-13.8	-4.8	-7.4	-4.8	--	--	--	--	7.0
Excess		0.0	0.0	0.0	0.0	0.0	--	--	--	--	0.1
DE Shaw Commingled Fund	125,663,837	-7.6	-14.1	-4.7	-8.0	-4.7	10.6	--	--	--	8.6
Russell 1000		-9.1	-13.8	-4.8	-7.4	-4.8	9.1	--	--	--	7.0
Excess		1.5	-0.3	0.1	-0.6	0.1	1.5	--	--	--	1.6
SAMCERA - Acadian US MGD V-SL	121,771,078	--	--	--	--	--	--	--	--	--	1.7
Russell 1000		--	--	--	--	--	--	--	--	--	0.9
Excess		--	--	--	--	--	--	--	--	--	0.8
SAMCERA - Panagora Defuseq -SL	121,010,273	--	--	--	--	--	--	--	--	--	1.7
Russell 1000		--	--	--	--	--	--	--	--	--	0.9
Excess		--	--	--	--	--	--	--	--	--	0.8
Small Cap Equity	75,329,916	-11.8	-20.6	-12.8	-17.9	-12.8	4.0	1.6	8.2	11.8	5.6
Russell 2000		-11.9	-20.2	-11.0	-17.3	-11.0	7.4	4.4	10.4	12.0	7.1
Excess		0.1	-0.4	-1.8	-0.5	-1.8	-3.4	-2.8	-2.3	-0.1	-1.5
QMA US Small Cap	75,329,916	-11.8	-20.6	-12.8	-17.9	-12.8	--	--	--	--	4.5
Russell 2000		-11.9	-20.2	-11.0	-17.3	-11.0	--	--	--	--	5.1
Excess		0.1	-0.4	-1.8	-0.5	-1.8	--	--	--	--	-0.7
International Equity	746,332,722	-4.3	-11.4	-13.8	-11.0	-13.8	4.2	1.3	5.2	5.3	4.9
MS AC WldxUS IMI Nt		-4.7	-11.9	-14.8	-11.5	-14.8	4.4	0.8	5.1	7.0	4.5

San Mateo County Composite Return Summary

December 31, 2018



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Excess		0.4	0.5	0.9	0.6	0.9	-0.2	0.4	0.1	-1.7	0.4
Developed Markets Equity	663,416,572	-4.5	-12.0	-13.8	-11.5	-13.8	3.8	1.4	5.5	5.6	3.8
MS AC WldxUS IMI Nt		-4.7	-11.9	-14.8	-11.5	-14.8	4.4	0.8	5.1	7.0	4.2
Excess		0.1	-0.2	1.0	-0.0	1.0	-0.6	0.6	0.5	-1.4	-0.4
Baillie Gifford	213,761,751	-5.1	-15.3	-16.7	-16.4	-16.7	3.3	1.8	--	--	5.3
MSCI ACWI ex US Growth		-4.6	-12.2	-14.1	-12.3	-14.1	4.6	2.1	--	--	4.6
Excess		-0.6	-3.1	-2.6	-4.0	-2.6	-1.2	-0.3	--	--	0.7
Blackrock EAFE Index Fund	214,588,077	-4.8	-12.5	-13.5	-11.3	-13.5	3.3	0.8	--	--	0.8
MSCI EAFE ND		-4.9	-12.5	-13.8	-11.4	-13.8	2.9	0.5	--	--	0.5
Excess		0.0	0.0	0.3	0.0	0.3	0.4	0.3	--	--	0.3
Mondrian Investment Partners	227,739,257	-3.7	-8.9	-12.0	-7.6	-12.0	4.3	1.1	4.5	5.7	4.6
MSCI ACWI ex US Value		-4.4	-10.6	-13.4	-9.0	-13.4	5.4	0.2	4.6	6.6	4.4
Excess		0.7	1.7	1.4	1.4	1.4	-1.1	0.9	-0.2	-0.8	0.2
Emerging Markets Equity	82,916,151	-2.1	-5.9	-13.8	-6.1	-13.8	7.5	-0.0	--	--	0.8
MSCI Emerging Markets ND		-2.7	-7.5	-14.6	-8.5	-14.6	9.2	1.6	--	--	1.4
Excess		0.6	1.6	0.8	2.4	0.8	-1.7	-1.7	--	--	-0.6
EV Parametric EM	82,916,151	-2.1	-5.9	-13.8	-6.1	-13.8	7.5	--	--	--	3.1
MSCI Emerging Markets GD		-2.6	-7.4	-14.2	-8.3	-14.2	9.7	--	--	--	4.8
Excess		0.5	1.5	0.4	2.2	0.4	-2.1	--	--	--	-1.7
Fixed Income	922,662,300	0.9	0.7	0.8	1.4	0.8	4.8	3.7	4.4	6.4	5.4
Samcera Fixed Income Benchmark		0.8	0.2	-0.6	1.0	-0.6	3.1	2.7	2.3	3.7	4.8
Excess		0.1	0.5	1.4	0.5	1.4	1.6	0.9	2.1	2.7	0.6
Core Fixed Income	617,564,053	1.6	1.4	-0.1	1.5	-0.1	3.1	3.3	3.2	5.7	5.1
BB Barclays U.S. Aggregate		1.8	1.6	0.0	1.7	0.0	2.1	2.5	2.1	3.5	4.7
Excess		-0.2	-0.2	-0.1	-0.2	-0.1	1.1	0.8	1.1	2.2	0.4
FIAM Core Bond	263,327,350	1.5	1.0	-0.2	1.2	-0.2	2.8	2.9	2.8	5.2	4.4
BB Barclays U.S. Aggregate		1.8	1.6	0.0	1.7	0.0	2.1	2.5	2.1	3.5	4.0
Excess		-0.3	-0.6	-0.2	-0.5	-0.2	0.7	0.4	0.7	1.7	0.4

San Mateo County Composite Return Summary

December 31, 2018



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Western Total Return	129,612,705	2.1	0.7	-2.7	0.9	-2.7	4.1	--	--	--	3.4
BB Barclays U.S. Aggregate		1.8	1.6	0.0	1.7	0.0	2.1	--	--	--	1.8
Excess		0.2	-0.9	-2.7	-0.8	-2.7	2.0	--	--	--	1.6
Blackrock Inter Gov	224,623,998	1.5	2.2	1.6	2.2	1.6	--	--	--	--	1.4
BB Barclays U.S. Aggregate		1.8	1.6	0.0	1.7	0.0	--	--	--	--	1.8
Excess		-0.4	0.6	1.6	0.5	1.6	--	--	--	--	-0.4
Opportunistic Credit	305,098,246	-0.4	-0.6	2.8	1.3	2.8	8.5	6.0	8.9	--	8.9
BB Barc BA Intermediate HY Ind		-1.3	-2.7	-1.9	-0.5	-1.9	5.2	3.9	5.4	--	6.6
Excess		0.9	2.1	4.7	1.8	4.7	3.3	2.1	3.5	--	2.3
AG Opportunistic Whole Loan	6,427,038	6.0	6.0	40.5	17.2	40.5	19.0	--	--	--	11.7
BB Barc BA Intermediate HY Ind		-1.3	-2.7	-1.9	-0.5	-1.9	5.2	--	--	--	3.4
Excess		7.3	8.7	42.4	17.6	42.4	13.8	--	--	--	8.3
Angelo Gordon	5,650,720	0.0	7.3	28.1	13.0	28.1	18.3	15.0	--	--	14.3
BB Barc BA Intermediate HY Ind		-1.3	-2.7	-1.9	-0.5	-1.9	5.2	3.9	--	--	4.2
Excess		1.3	9.9	30.0	13.5	30.0	13.0	11.2	--	--	10.1
Beach Point Select Fund	49,973,133	-0.9	-1.4	3.3	0.0	3.3	9.0	--	--	--	7.8
BB Barc BA Intermediate HY Ind		-1.3	-2.7	-1.9	-0.5	-1.9	5.2	--	--	--	3.5
Excess		0.4	1.3	5.2	0.5	5.2	3.7	--	--	--	4.3
Brigade Cap Mngmt	76,776,721	-1.7	-2.9	1.9	-0.7	1.9	10.5	4.2	6.2	--	6.4
BB Barc BA Intermediate HY Ind		-1.3	-2.7	-1.9	-0.5	-1.9	5.2	3.9	5.4	--	5.9
Excess		-0.4	-0.2	3.8	-0.2	3.8	5.3	0.3	0.8	--	0.5
SAMCERA - White Oak Yield Spec	25,012,741	1.3	1.3	9.2	3.8	9.2	--	--	--	--	--
BB Barc BA Intermediate HY Ind		-1.3	-2.7	-1.9	-0.5	-1.9	--	--	--	--	1.4
Excess		2.6	4.0	11.1	4.3	11.1	--	--	--	--	--
SAMCERA-PIMCO Div. Income Fund	80,085,677	0.0	-1.3	-1.0	0.4	-1.0	--	--	--	--	0.5
BB Barc BA Intermediate HY Ind		-1.3	-2.7	-1.9	-0.5	-1.9	--	--	--	--	-0.7
Excess		1.3	1.4	0.9	0.9	0.9	--	--	--	--	1.2
TCP Direct Lending VIII	20,131,970	0.0	1.5	2.8	4.4	2.8	--	--	--	--	--
BB Barc BA Intermediate HY Ind		-1.3	-2.7	-1.9	-0.5	-1.9	--	--	--	--	3.7

San Mateo County Composite Return Summary

December 31, 2018



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Excess		1.3	4.2	4.7	4.8	4.7	--	--	--	--	--
Franklin Templeton	41,040,246	-0.6	2.1	0.0	2.4	0.0	3.8	1.7	4.5	--	3.7
BB Barclays Multiverse Index		1.9	1.0	-1.4	0.2	-1.4	3.0	1.2	1.2	--	1.8
Excess		-2.5	1.1	1.4	2.2	1.4	0.9	0.5	3.3	--	2.0
Risk Parity	333,348,455	-0.6	-4.0	-6.6	-5.1	-6.6	6.1	4.7	5.1	--	5.0
Samcera Risk Parity Benchmark		-3.8	-7.7	-5.5	-5.3	-5.5	6.1	5.7	8.3	--	7.4
Excess		3.2	3.7	-1.0	0.2	-1.0	0.1	-1.1	-3.2	--	-2.4
AQR Global Risk III	169,402,098	-0.2	-3.9	-5.5	-3.9	-5.5	6.3	3.5	4.2	--	4.2
Samcera Risk Parity Benchmark		-3.8	-7.7	-5.5	-5.3	-5.5	6.1	5.7	8.3	--	7.4
Excess		3.6	3.8	0.0	1.4	0.0	0.2	-2.3	-4.1	--	-3.2
Panagora	163,946,357	-1.1	-4.1	-7.6	-6.1	-7.6	6.0	--	--	--	3.9
Samcera Risk Parity Benchmark		-3.8	-7.7	-5.5	-5.3	-5.5	6.1	--	--	--	5.1
Excess		2.7	3.6	-2.0	-0.8	-2.0	-0.1	--	--	--	-1.2
Alternatives	533,363,693	-0.5	-0.8	0.5	1.9	0.5	5.2	5.1	5.6	-7.5	-2.3
Samcera Alternatives Benchmark		0.4	4.9	9.8	8.2	9.8	12.0	7.8	9.8	10.7	7.9
Excess		-0.9	-5.6	-9.3	-6.3	-9.3	-6.8	-2.7	-4.3	-18.2	-10.2
Private Equity	286,537,784	-0.8	1.3	13.4	7.7	13.4	12.7	13.7	13.5	--	-17.9
Samcera PE Benchmark		-9.1	-13.6	-2.4	-6.8	-2.4	12.2	11.1	15.8	--	15.0
Excess		8.2	14.9	15.8	14.5	15.8	0.5	2.6	-2.3	--	-32.9
Absolute Return	246,825,909	-0.1	-3.1	-11.6	-4.3	-11.6	-2.2	2.5	3.5	--	2.8
Samcera LIBOR + 4%		0.5	1.5	6.0	3.1	6.0	5.2	4.8	4.6	--	4.6
Excess		-0.6	-4.6	-17.6	-7.4	-17.6	-7.4	-2.2	-1.1	--	-1.8
AQR Delta XN	150,269,155	0.4	-3.6	-15.1	-6.0	-15.1	-3.2	2.0	3.1	--	2.5
Samcera LIBOR + 4%		0.5	1.5	6.0	3.1	6.0	5.2	4.8	4.6	--	4.6
Excess		-0.1	-5.2	-21.1	-9.0	-21.1	-8.3	-2.8	-1.5	--	-2.1
SamCERA-Aberdeen Std GARS	96,556,754	-1.0	-2.2	-5.7	-1.7	-5.7	-1.4	--	--	--	-1.4
Samcera LIBOR + 4%		0.5	1.5	6.0	3.1	6.0	5.2	--	--	--	5.1
Excess		-1.5	-3.8	-11.7	-4.8	-11.7	-6.5	--	--	--	-6.5

San Mateo County Composite Return Summary

December 31, 2018



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Inflation Hedge	755,331,699	-2.1	-3.3	-1.3	-3.9	-1.3	--	--	--	--	6.2
SamCERA Inflation Hedge Index		-1.2	-3.1	-0.9	-2.1	-0.9	--	--	--	--	5.6
Excess		-0.9	-0.2	-0.3	-1.8	-0.3	--	--	--	--	0.6
TIPS	45,255,188	0.1	-0.8	-0.8	-1.2	-0.8	--	--	--	--	1.1
BBG Barclays US TIPS		0.5	-0.4	-1.3	-1.2	-1.3	--	--	--	--	0.7
Excess		-0.5	-0.4	0.5	-0.0	0.5	--	--	--	--	0.4
Brown Brothers Harriman	45,255,188	0.1	-0.8	-0.8	-1.2	-0.8	2.1	1.1	0.5	--	2.2
BBG Barclays US TIPS		0.5	-0.4	-1.3	-1.2	-1.3	2.1	1.7	0.9	--	2.5
Excess		-0.5	-0.4	0.5	-0.0	0.5	0.0	-0.6	-0.3	--	-0.3
Real Estate	356,804,839	0.0	2.4	8.3	2.5	8.3	--	--	--	--	8.4
Samcera NCREIF ODCE EW (gross)		0.0	0.0	6.5	2.1	6.5	--	--	--	--	7.7
Excess		0.0	2.4	1.8	0.4	1.8	--	--	--	--	0.7
Invesco Core Real Estate	264,554,050	0.0	2.5	9.1	2.5	9.1	8.7	10.1	10.4	6.2	7.8
Samcera NCREIF ODCE EW (gross)		0.0	0.0	6.5	2.1	6.5	7.9	10.2	10.8	6.7	7.7
Excess		0.0	2.5	2.6	0.4	2.6	0.9	-0.1	-0.4	-0.5	0.1
Invesco US Val IV	22,111,695	0.0	2.6	8.6	4.2	8.6	13.4	--	--	--	11.3
Samcera NCREIF ODCE EW (gross)		0.0	0.0	6.5	2.1	6.5	7.9	--	--	--	8.8
Excess		0.0	2.6	2.1	2.1	2.1	5.5	--	--	--	2.5
PGIM Real Estate US Debt Fund	70,139,094	0.0	2.0	5.0	2.0	5.0	--	--	--	--	3.4
Samcera NCREIF ODCE EW (gross)		0.0	0.0	6.5	2.1	6.5	--	--	--	--	7.1
Excess		0.0	2.0	-1.6	-0.1	-1.6	--	--	--	--	-3.8
Public Real Assets	287,143,108	-5.4	-11.2	-12.8	-12.6	-12.8	--	--	--	--	--
SamCera Liquid Real Asset Inde		-4.0	-9.0	-9.9	-9.9	-9.9	--	--	--	--	5.3
Excess		-1.4	-2.2	-2.9	-2.7	-2.9	--	--	--	--	--
CUSHING MLP ALPHA TR	64,007,495	-9.9	-17.7	--	-20.0	--	--	--	--	--	-20.0
50% BC US TIPS/50% SamCERA CRA		-1.7	-4.8	--	-5.6	--	--	--	--	--	-5.6
Excess		-8.1	-12.9	--	-14.4	--	--	--	--	--	-14.4
SSGA CST REAL ASSET NL	223,135,612	-4.1	-9.2	-10.4	-10.2	-10.4	--	--	--	--	--
SamCera Liquid Real Asset Inde		-4.0	-9.0	-9.9	-9.9	-9.9	--	--	--	--	2.7

San Mateo County Composite Return Summary

December 31, 2018

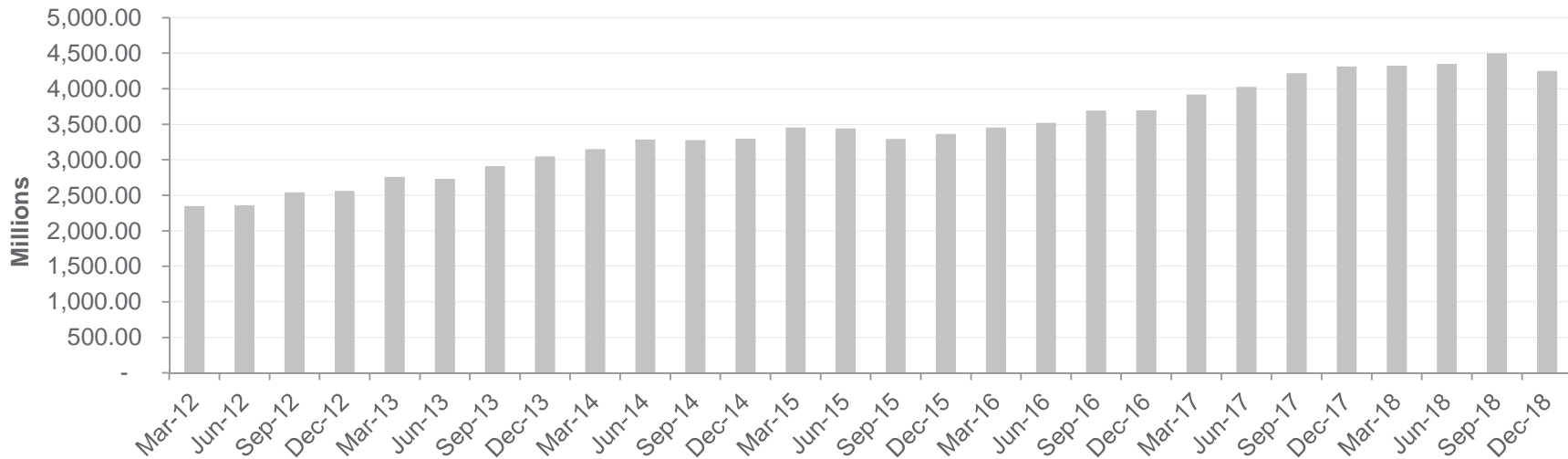


Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Excess		-0.0	-0.1	-0.5	-0.3	-0.5	--	--	--	--	--
Private Real Assets	66,128,564	0.8	3.8	8.4	4.2	8.4	--	--	--	--	16.0
SamCERA Private Real Asset Idx		0.8	0.2	--	4.4	--	--	--	--	--	--
Excess		-0.0	3.6	--	-0.2	--	--	--	--	--	--
Cash	97,102,909	0.0	0.3	0.9	0.5	0.9	0.8	0.7	0.6	0.8	1.9
Samcera Cash Benchmark		0.2	0.6	1.9	1.1	1.9	1.0	0.6	0.5	0.4	1.8
Excess		-0.1	-0.3	-1.0	-0.6	-1.0	-0.2	0.1	0.2	0.4	0.1
SamCera General Account	2,028,884	0.2	0.6	2.0	1.1	2.0	1.2	0.8	0.6	0.5	2.0
SamCera Transition Account	97,066	--	--	--	--	--	--	--	--	--	--
County Treasury Pool	94,976,959	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.6	2.5
San Mateo County ERA	4,250,578,980	-3.1	-6.3	-4.4	-4.6	-4.4	5.9	4.8	7.7	8.5	6.4
Samcera Total Plan Benchmark		-3.1	-5.9	-3.4	-3.5	-3.4	6.8	5.2	8.0	9.1	6.8
Excess		0.0	-0.5	-1.0	-1.1	-1.0	-0.9	-0.4	-0.3	-0.6	-0.4

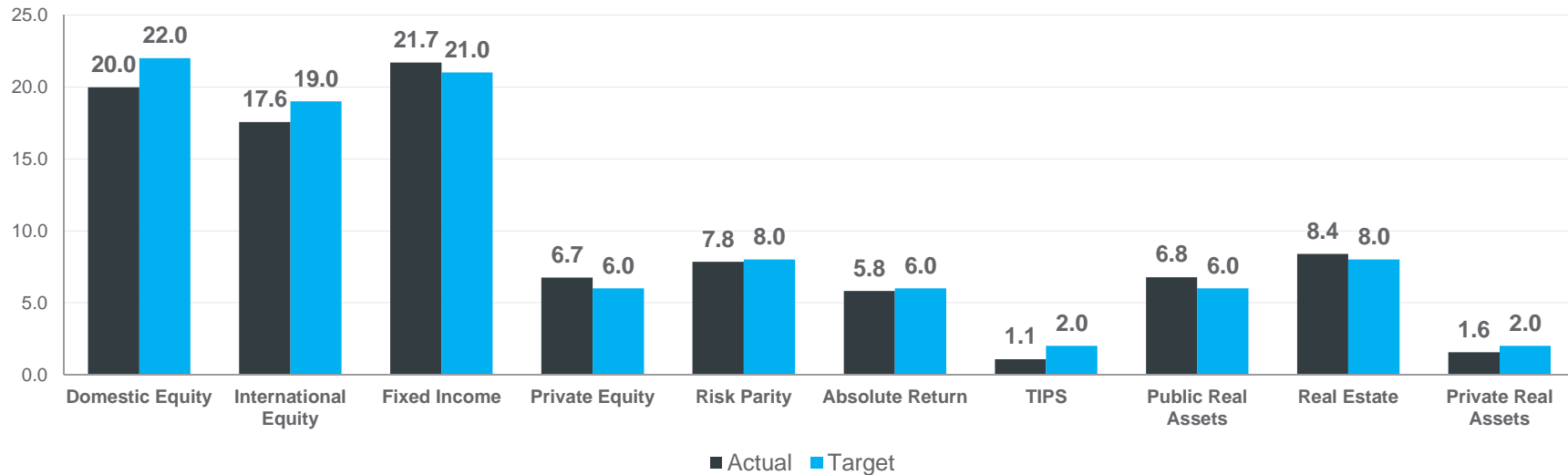
Record of Asset Growth

	Three Months	One Year
TOTAL FUND		
Beginning Market Value	4,495,299,772	4,311,631,453
Contributions	345,006,303	593,095,313
Withdrawals	-309,417,275	-475,879,355
Income Received	11,256,043	41,793,182
Gain/Loss	-293,708,142	-229,554,016
Ending Market Value	4,250,578,980	4,250,578,980

Net Asset Values Over Time (\$'000)

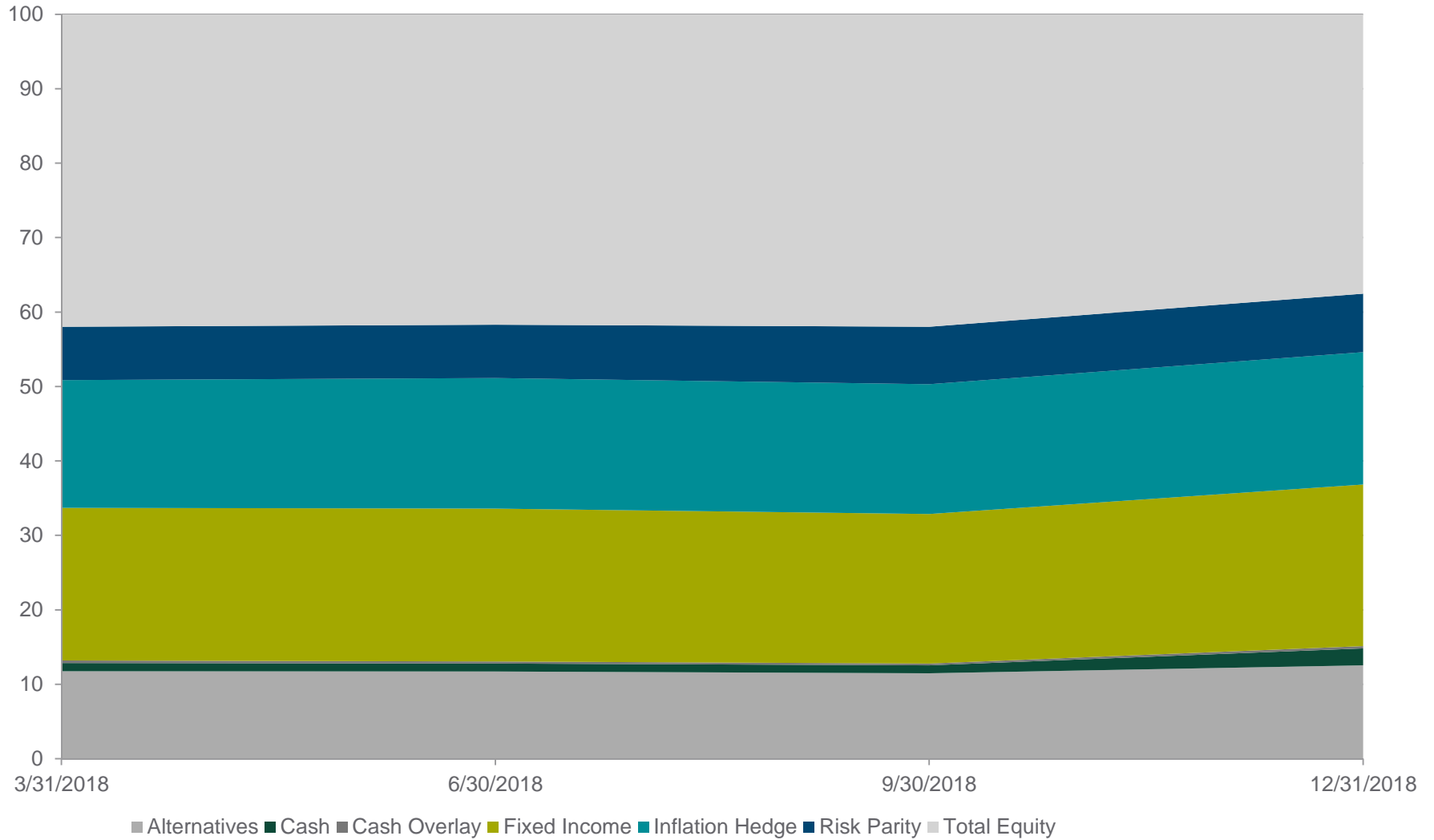


Actual vs Target Weights

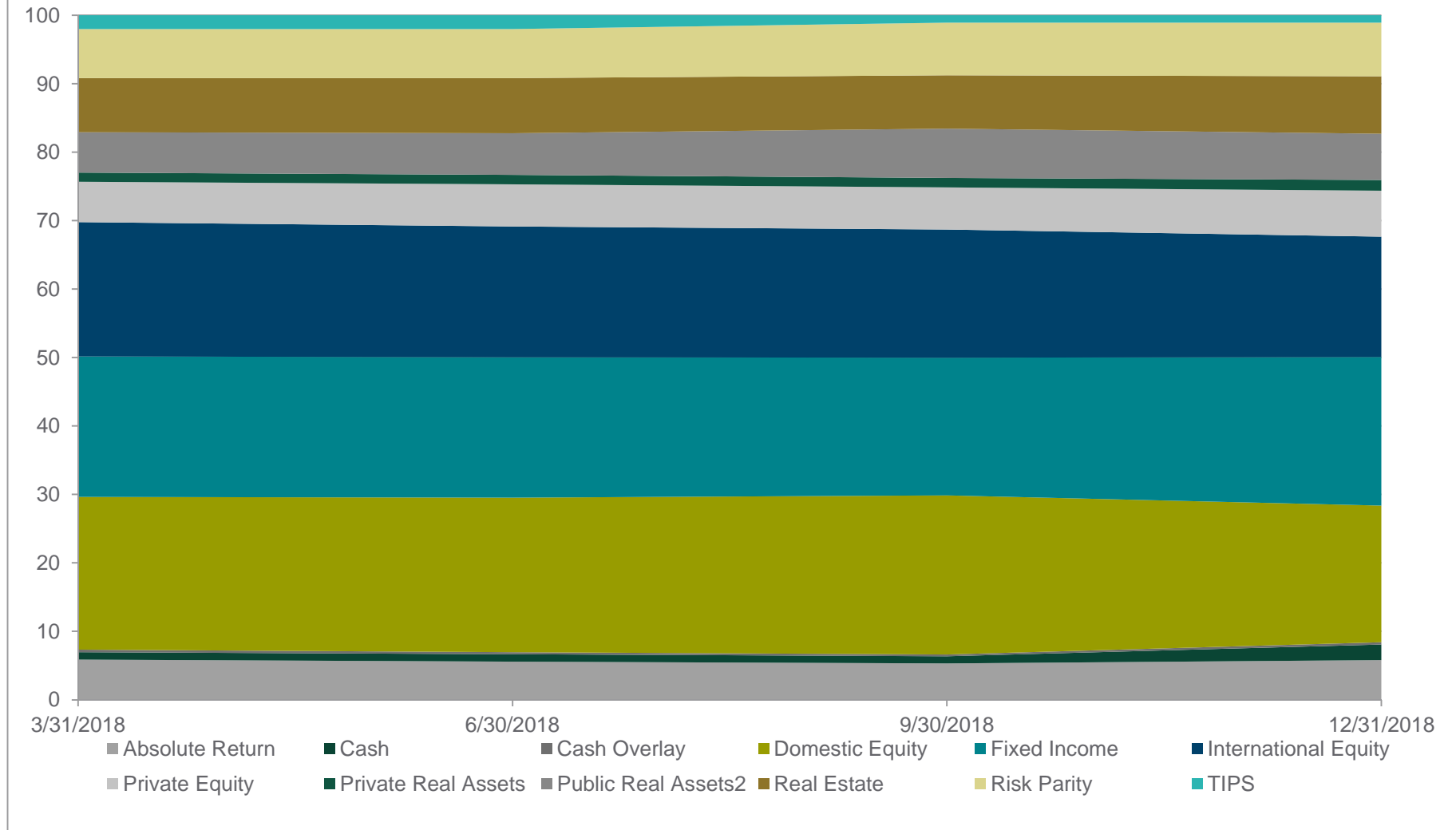


	Min	Actual	Target	Deviation	Max
Domestic Equity	20.0	20.0	22.0	-2.0	24.0
International Equity	17.0	17.6	19.0	-1.4	21.0
Fixed Income	19.0	21.7	21.0	0.7	23.0
Private Equity	4.0	6.7	6.0	0.7	8.0
Risk Parity	6.0	7.8	8.0	-0.2	10.0
Absolute Return	4.0	5.8	6.0	-0.2	8.0
TIPS	0.0	1.1	2.0	-0.9	4.0
Public Real Assets	4.0	6.8	6.0	0.8	8.0
Real Estate	6.0	8.4	8.0	0.4	10.0
Private Real Assets	0.0	1.6	2.0	-0.4	4.0

Asset Allocation over Time



Sub-Asset Class Allocation Over Time



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**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**

DECEMBER 2018
Capital Markets Update

Market commentary

U.S. ECONOMICS

- Nonfarm payrolls jumped by 312,000 in December, well above expectations for a 176,000 increase. The healthcare sector (+50,000) led job creation, while restaurants and bars (+41,000), construction (+38,000), and manufacturing (+32,000) all contributed strong gains.
- The unemployment rate rose a net 0.2% to 3.9%, driven by an increase in the labor force participation rate, which moved up from 53.9% to 63.1%.
- The ISM Purchasing Managers' indices missed expectations and fell materially over the month. The ISM Manufacturing PMI fell from 59.3 to 54.1, missing expectations of 57.9. The ISM Services PMI slipped from 60.7 to 57.6, impacted by slowing employment and price growth in the services sector.

U.S. EQUITIES

- The S&P 500 Index tumbled 9.0%, experiencing its largest monthly decline since February of 2009. Losses were broad-based – the best performing sector was utilities, which fell 4.0%.
- The CBOE VIX Index reached as high as 36.1, a point off year-to-date highs established in February. The implied volatility measure was 25.4 at month-end, above the ten-year average of 18.5.
- Per Factset, the Q4 2018 estimated earnings and revenue growth rates for the S&P 500 are 11.4% and 6.1% respectively. During the fourth quarter, earnings growth estimates for 2019 fell 2.3%.

U.S. FIXED INCOME

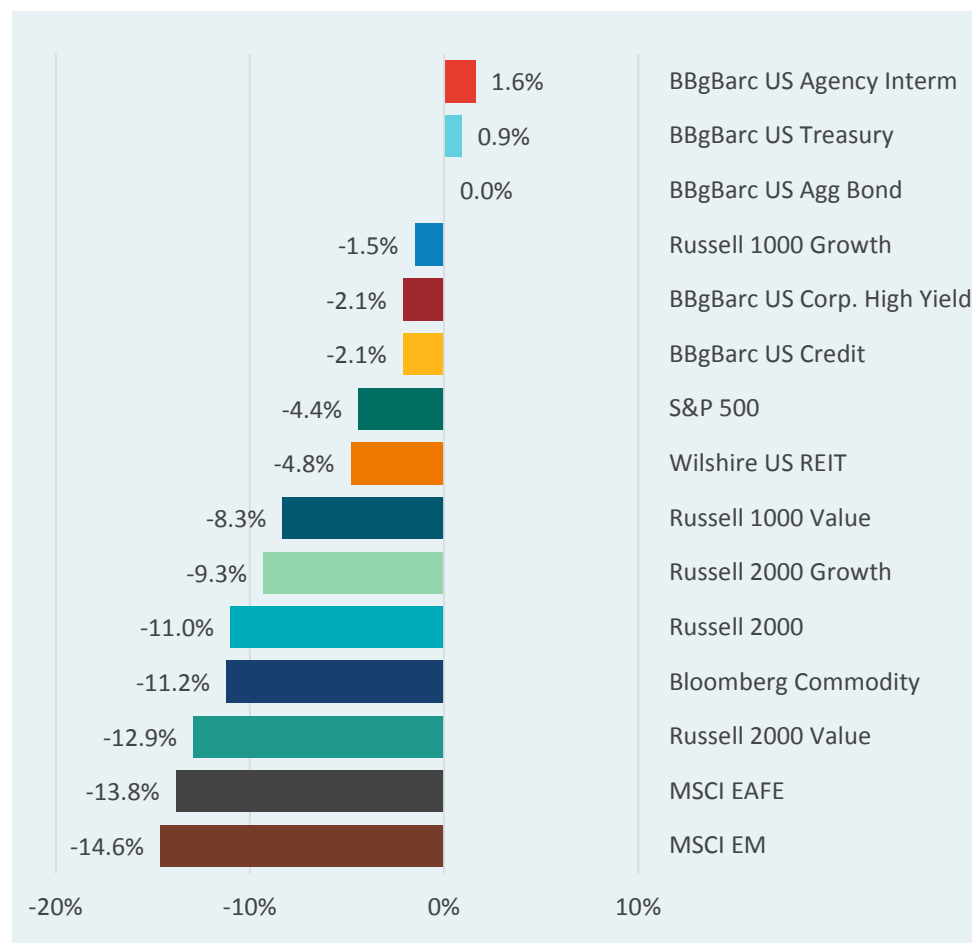
- The Federal Reserve hiked the target range for its benchmark interest rate by 25 basis points to a new range of 2.25% - 2.50%. In line with expectations for a “dovish hike”, central bank officials lowered expectations for hikes in 2019 from three to two.
- Fed Chair Powell largely failed to reassure markets that future policy would develop with consideration of asset prices. Fed messaging concerning the pace of its balance sheet unwind was perceived as rigid, likely contributing to the market sell-off that followed Powell's press conference.
- High yield credit spreads expanded from 4.2% to 5.3% over the period, a level not reached since August of 2016.

INTERNATIONAL MARKETS

- U.S. and Chinese officials agreed to resume trade talks in Beijing during the first week of January. The U.S. delegation, headed by U.S. trade representative Robert Lighthizer, will work in the shadow of the March 2nd deadline after which tariff rates on \$200 billion in Chinese imports are slotted to rise from 10% to 25%.
- The Caixin/Markit Manufacturing PMI fell from 50.2 to 49.7 in December, missing expectations of 50.1, and signaling a contraction in manufacturing activity on mainland China.
- Despite poor absolute returns in global equity markets, emerging markets provided positive relative performance. The MSCI EM Index returned -2.7%, outperforming the MSCI EAFE Index (-4.9%), and the S&P 500 Index (-9.0%).

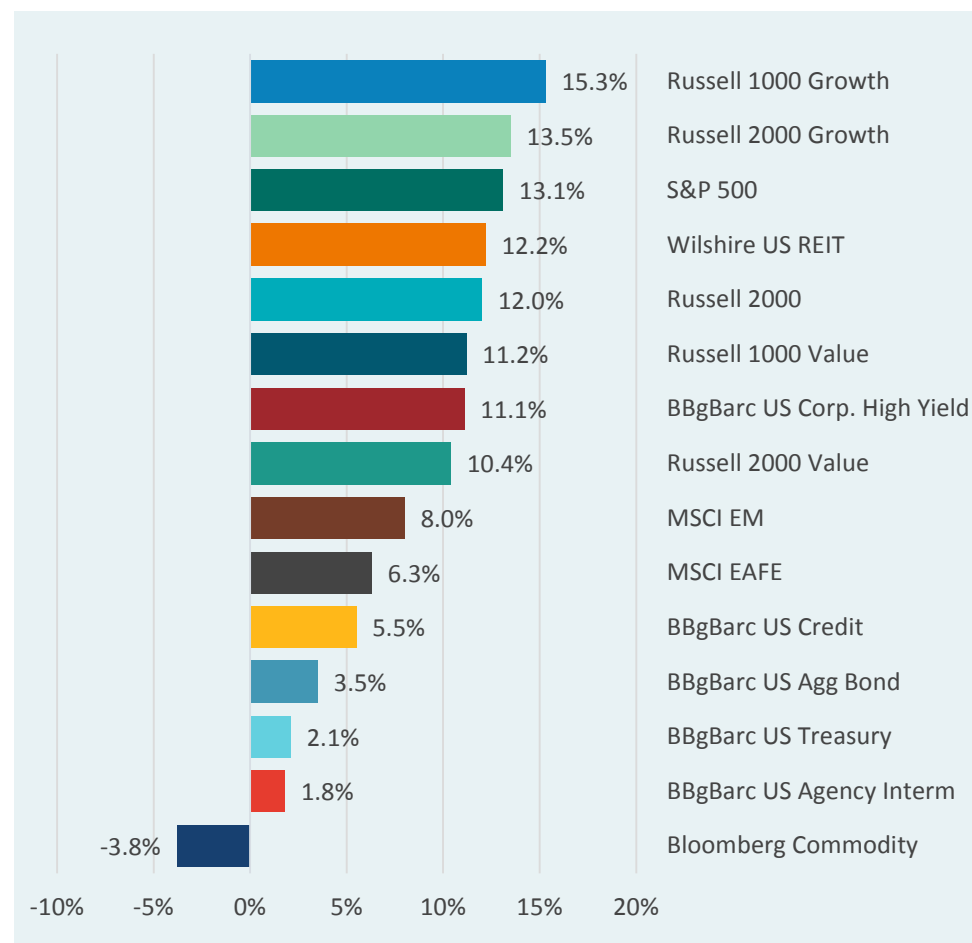
Major asset class returns

ONE YEAR ENDING DECEMBER



Source: Morningstar, as of 12/31/18

TEN YEARS ENDING DECEMBER



Source: Morningstar, as of 12/31/18

U.S. large cap equities

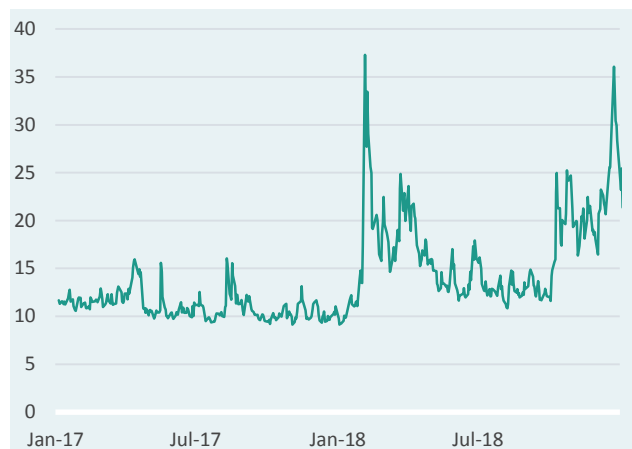
- The S&P 500 Index lost 9.0% and all sectors finished the month with negative returns. Apple, Microsoft, and Amazon were the largest detractors from performance, despite the information technology (-8.5%) and communication services (-7.3%) sectors outperforming slightly.
- Apple lowered its calendar Q4 2018 guidance for revenue from \$89-\$93 billion to \$84 billion, and its gross margin from 38%-38.5% to 38%. Shares fell about 7% on the news, and ended December down 12.2%.
- The trailing 12-month P/E multiple of the S&P 500 continued to compress in December, falling from 18.8x to 17.1x over the month, its lowest level since early 2016, and below the 10-year average of 17.6x.
- Of S&P 500 companies providing Q4 2018 EPS guidance, 72 posted negative guidance and 33 posted positive guidance. The percentage of companies announcing negative guidance (68.5%) was slightly below the five-year average of 70.0%.

S&P 500 PRICE INDEX



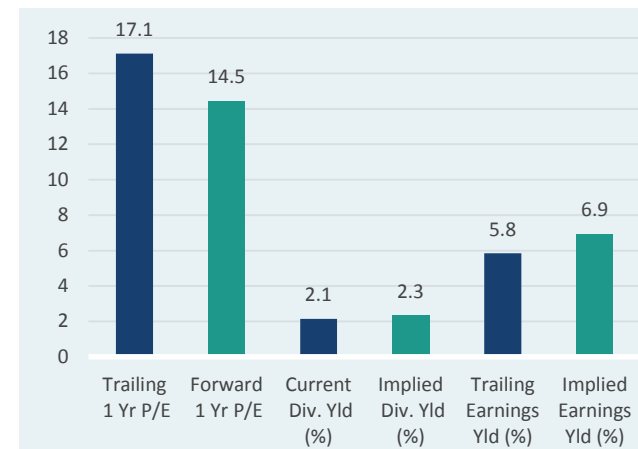
Source: Bloomberg, as of 12/31/18

IMPLIED VOLATILITY (VIX INDEX)



Source: CBOE, as of 12/31/18

S&P 500 VALUATION SNAPSHOT

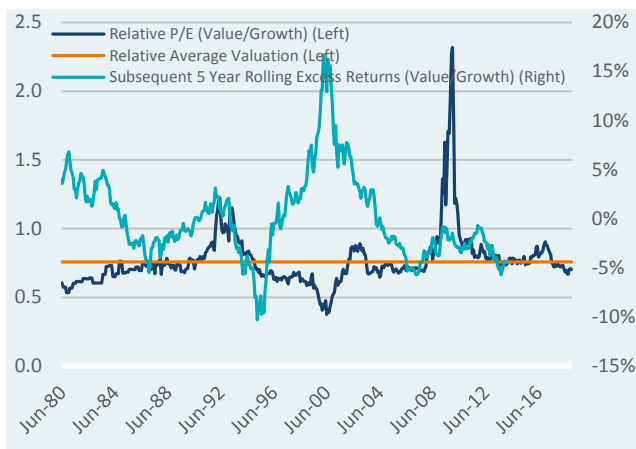


Source: Bloomberg, as of 12/31/18

Domestic equity size and style

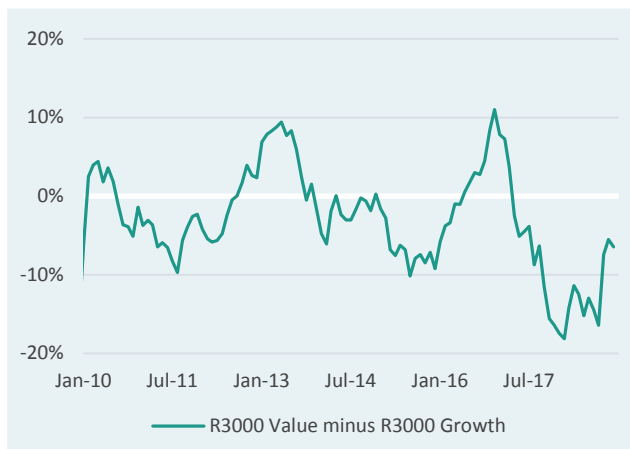
- Large cap stocks outperformed small cap stocks over the period, despite poor absolute performance. The Russell 1000 Index returned -8.6%, outperforming the Russell 2000 Index, which returned -9.6%.
- The Russell 2000 Index fell 11.9%, its worst monthly loss since February 2009, and its second monthly decline of over 10% in three months. In the fourth quarter, small-cap stocks were down 20.2%.
- Growth outperformed value in both large and small cap equities. The Russell 3000 Growth Index (-8.8%) outperformed the Russell 3000 Value Index (-9.8%) by 1.0%.
- Falling crude oil prices presented headwinds for value equities, which are more exposed to energy stocks. The energy sector represented 9.0% of the Russell 3000 Value Index and 0.8% of the Russell 3000 Growth Index on December 31st, and was down 12.7% for the month.

VALUE VS. GROWTH RELATIVE VALUATIONS



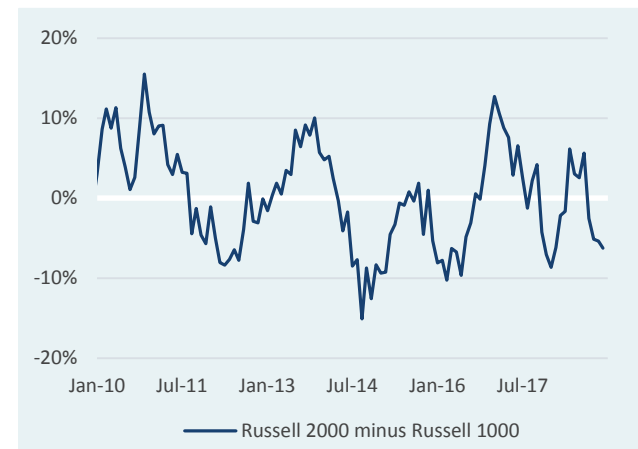
Source: Russell, Bloomberg, as of 12/31/18

VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE, as of 12/31/18

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE

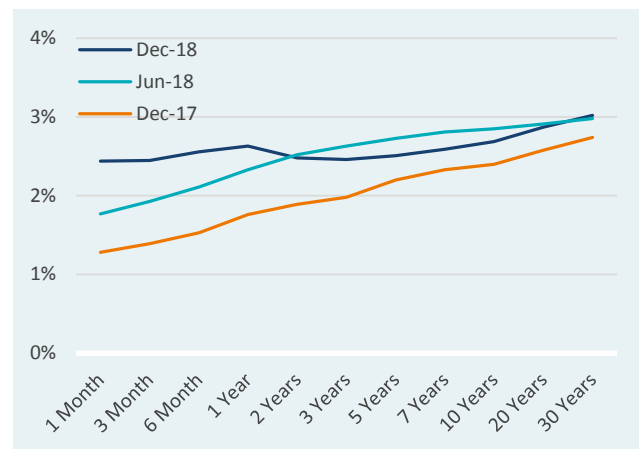


Source: FTSE, as of 12/31/18

Fixed income

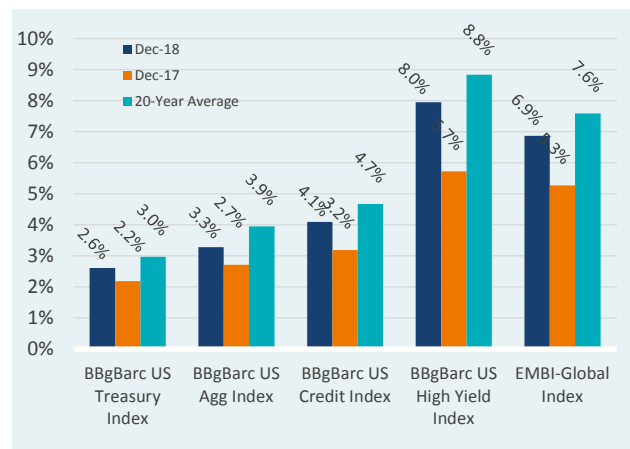
- The ECB officially announced the end of its asset purchase program, and stated it will continue to reinvest maturing securities in full for the foreseeable future. In his statement, ECB President Mario Draghi conveyed a more cautious tone, citing economic risks generally moving to the downside.
- Treasury yields resumed their decline, with 10-year yields falling from 3.0% to 2.7%, and 2-year yields falling from 2.8% to 2.5%. Intra-month, the 10-2 yield spread touched as low as 11 bps, but ended the month little changed around 20 bps.
- Italian 10-year sovereign yields descended from 3.2% to 2.7% in December, down 94 bps from the year-to-date peak of 3.68% reached in October at the height of the fiscal budget deficit negotiations between the Italian government and European Union.
- Breakeven inflation rates continued to trend lower. The 5-year breakeven inflation rate finished the month at 1.5%, its lowest level since October 2016, and 68 bps below May's highs. Falling oil prices likely impacted the decline.

U.S. TREASURY YIELD CURVE



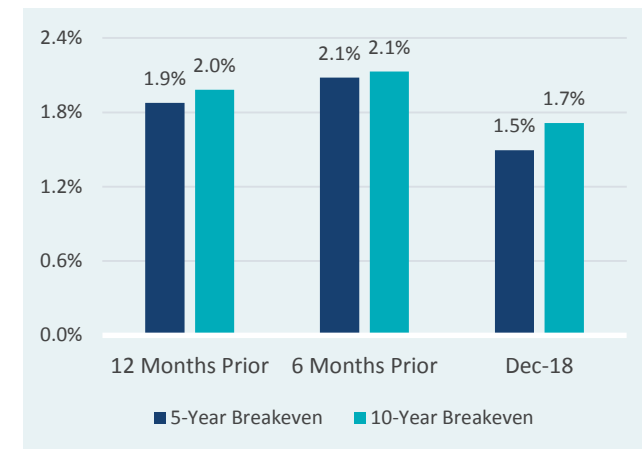
Source: Bloomberg, as of 12/31/18

NOMINAL YIELDS



Source: Morningstar, as of 12/31/18

BREAKEVEN INFLATION RATES

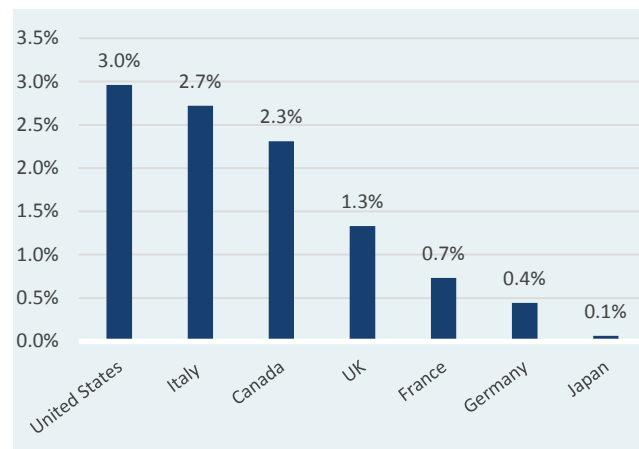


Source: Bloomberg, as of 12/31/18

Global markets

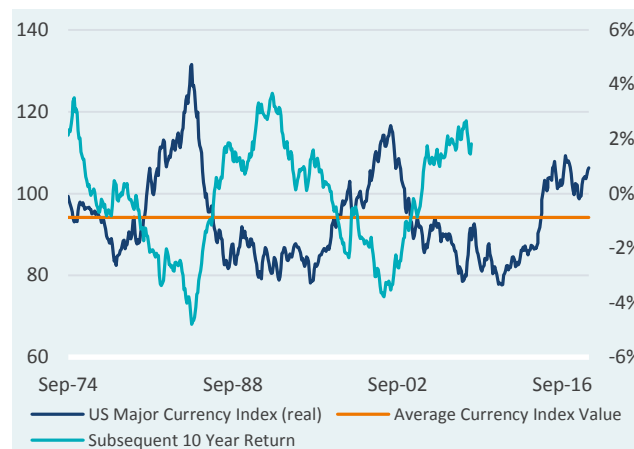
- The Markit France Composite PMI plunged from 54.2 to 48.7, slipping below 50 for the first time since June 2016. The dominant service sector contracted from 55.1 to 49.6, in part due to the weakest level of new business generation since February.
- Theresa May pushed back the U.K. parliament’s vote on her EU-approved Brexit deal to January 14th, due to expectations it would have failed in December. Despite surviving a vote of no confidence, May will need to make significant progress in negotiations with the EU in order to avoid a “no-deal” Brexit on March 29th.
- The forward 12-month P/E ratio of the MSCI EAFE Index touched as low as 11.7 over the month, a level not reached since June of 2012. The Eurozone composite PMI posted it’s fifth consecutive monthly decline, ending the year at 51.1, slightly above neutral.
- The yen appreciated 3.5% relative to the dollar, outperforming both the euro (+1.0%), and the pound sterling (-0.2%). Haven flows over the course of the month and more dovish language from the Federal Reserve, likely pushed the yen higher.

GLOBAL SOVEREIGN 10-YEAR YIELDS



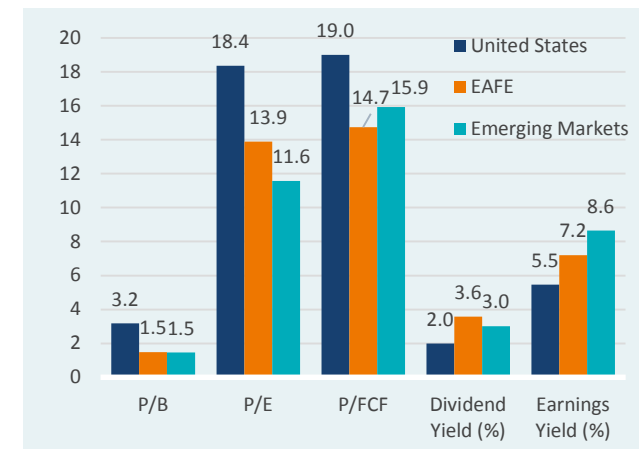
Source: Bloomberg, as of 12/31/18

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 12/31/18

MSCI VALUATION METRICS (3-MONTH AVG)



Source: Bloomberg, as of 12/31/18

Commodities

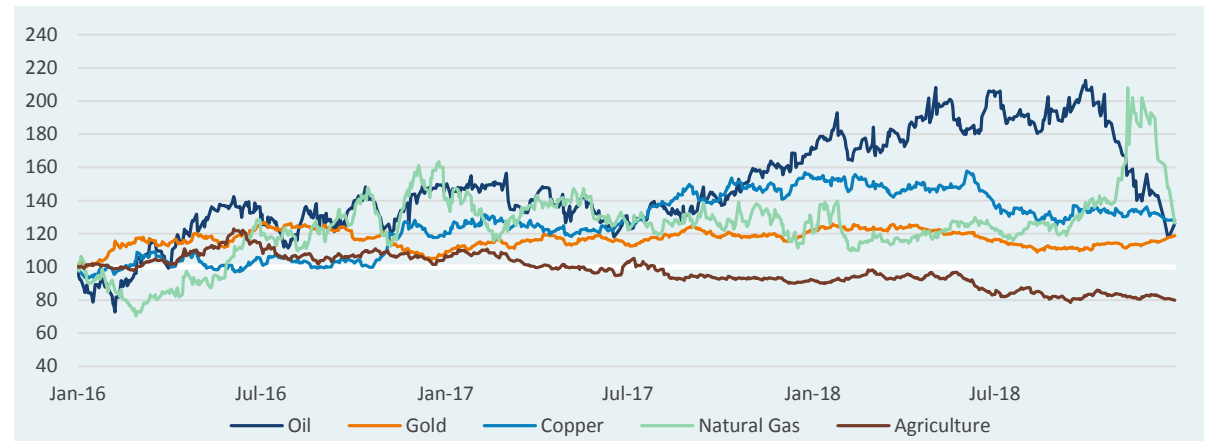
- The Bloomberg Commodity Index fell 6.9%, with most sectors declining over the period. Energy, which targets a 30% weight in the overall index, lost 18.7% and led the decline.
- Crude oil continued its slide in December. Over the course of the month, the price of a barrel of WTI crude fell from \$51.09 to \$45.41, ending the month 44% below the year-to-date high of \$75.96 established in October.
- Precious metals, representing around 16% of the overall index, outperformed, gaining 5.8% in December. Gold (+5.1%) and silver (+9.1%) likely benefitted from haven flows amidst the risk-off sentiment in equity markets.
- Volatility remained the story in natural gas markets. After shooting up 37.7% in November, natural gas futures contracts plummeted 33.5% in December. Relatively low storage levels, speculation on weather conditions, and short-covering dynamics all contributed to the recent elevation in volatility.

INDEX AND SECTOR PERFORMANCE

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	(6.9)	(9.4)	(11.2)	(11.2)	0.3	(8.8)	(3.8)
Bloomberg Agriculture	(2.4)	0.2	(10.8)	(10.8)	(6.8)	(9.1)	(2.9)
Bloomberg Energy	(18.7)	(25.8)	(12.7)	(12.7)	(1.0)	(18.5)	(13.1)
Bloomberg Grains	(1.2)	0.8	(5.5)	(5.5)	(7.6)	(10.4)	(4.7)
Bloomberg Industrial Metals	(5.1)	(8.7)	(19.5)	(19.5)	7.7	(3.2)	1.6
Bloomberg Livestock	(0.9)	0.7	(1.7)	(1.7)	(0.4)	(2.2)	(2.8)
Bloomberg Petroleum	(9.3)	(34.9)	(19.2)	(19.2)	1.2	(18.6)	(7.0)
Bloomberg Precious Metals	5.8	6.8	(4.6)	(4.6)	5.1	(0.9)	3.1
Bloomberg Softs	(6.3)	0.7	(22.3)	(22.3)	(9.2)	(9.5)	(2.5)

Source: Morningstar, as of 12/31/18

COMMODITY PERFORMANCE



Source: Bloomberg, as of 12/31/18

Appendix

Periodic table of returns

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	5-Year	10-Year
Real Estate	38.7	66.4	31.8	14.0	25.9	56.3	26.0	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	13.3	31.7	37.3	5.3	10.4	15.3
Cash	27.0	43.1	22.8	8.4	10.3	48.5	22.2	21.4	26.9	16.2	1.4	37.2	26.9	7.8	18.1	38.8	13.2	5.7	21.3	30.2	1.9	9.0	13.5
US Bonds	20.3	33.2	12.2	7.3	6.7	47.3	20.7	20.1	23.5	15.8	-6.5	34.5	24.5	2.6	17.9	34.5	13.0	0.9	17.3	25.0	0.0	8.2	13.3
Large Cap Growth	19.3	27.3	11.6	3.3	1.6	46.0	18.3	14.0	22.2	11.8	-21.4	32.5	19.2	1.5	17.5	33.5	11.8	0.6	12.1	22.2	-1.5	5.9	12.0
Hedge Funds of Funds	16.2	26.5	7.0	2.8	1.0	39.2	16.5	7.5	18.4	11.6	-25.9	28.4	16.8	0.4	16.4	33.1	6.0	0.0	11.8	21.7	-3.5	5.1	11.2
Large Cap Equity	15.6	24.3	6.0	2.5	-5.9	30.0	14.5	7.1	16.6	10.9	-28.9	27.2	16.7	0.1	16.3	32.5	5.6	-0.4	11.3	17.1	-4.8	4.4	10.4
60/40 Global Portfolio	8.7	21.3	4.1	-2.4	-6.0	29.9	14.3	6.3	15.5	10.3	-33.8	23.3	16.1	-2.1	15.3	23.3	4.9	-0.8	11.2	14.6	-6.0	3.6	8.0
Large Cap Value	4.9	20.9	-3.0	-5.6	-11.4	29.7	12.9	5.3	15.1	7.0	-35.6	20.6	15.5	-2.9	14.6	12.1	4.2	-1.4	8.0	13.7	-8.3	3.1	7.3
Small Cap Growth	1.2	13.2	-7.3	-9.1	-15.5	25.2	11.4	4.7	13.3	7.0	-36.8	19.7	13.1	-4.2	11.5	11.0	3.4	-2.5	7.1	7.8	-9.3	2.5	6.8
Small Cap Equity	-2.5	11.4	-7.8	-9.2	-15.7	23.9	9.1	4.6	10.4	5.8	-37.6	18.9	10.2	-5.5	10.5	9.0	2.8	-3.8	5.7	7.7	-11.0	1.6	6.3
Commodities	-5.1	7.3	-14.0	-12.4	-20.5	11.6	6.9	4.6	9.1	4.4	-38.4	11.5	8.2	-5.7	4.8	0.1	0.0	-4.4	2.6	7.0	-11.2	1.5	3.5
Small Cap Value	-6.5	4.8	-22.4	-19.5	-21.7	9.0	6.3	4.2	4.8	-0.2	-38.5	5.9	6.5	-11.7	4.2	-2.0	-1.8	-7.5	1.0	3.5	-12.9	0.6	3.2
International Equity	-25.3	-0.8	-22.4	-20.4	-27.9	4.1	4.3	3.2	4.3	-1.6	-43.1	0.2	5.7	-13.3	0.1	-2.3	-4.5	-14.9	0.5	1.7	-13.8	0.5	0.4
Emerging Markets Equity	-27.0	-1.5	-30.6	-21.2	-30.3	1.0	1.4	2.4	2.1	-9.8	-53.2	-16.9	0.1	-18.2	-1.1	-9.5	-17.0	-24.7	0.3	0.9	-14.6	-8.8	-3.8

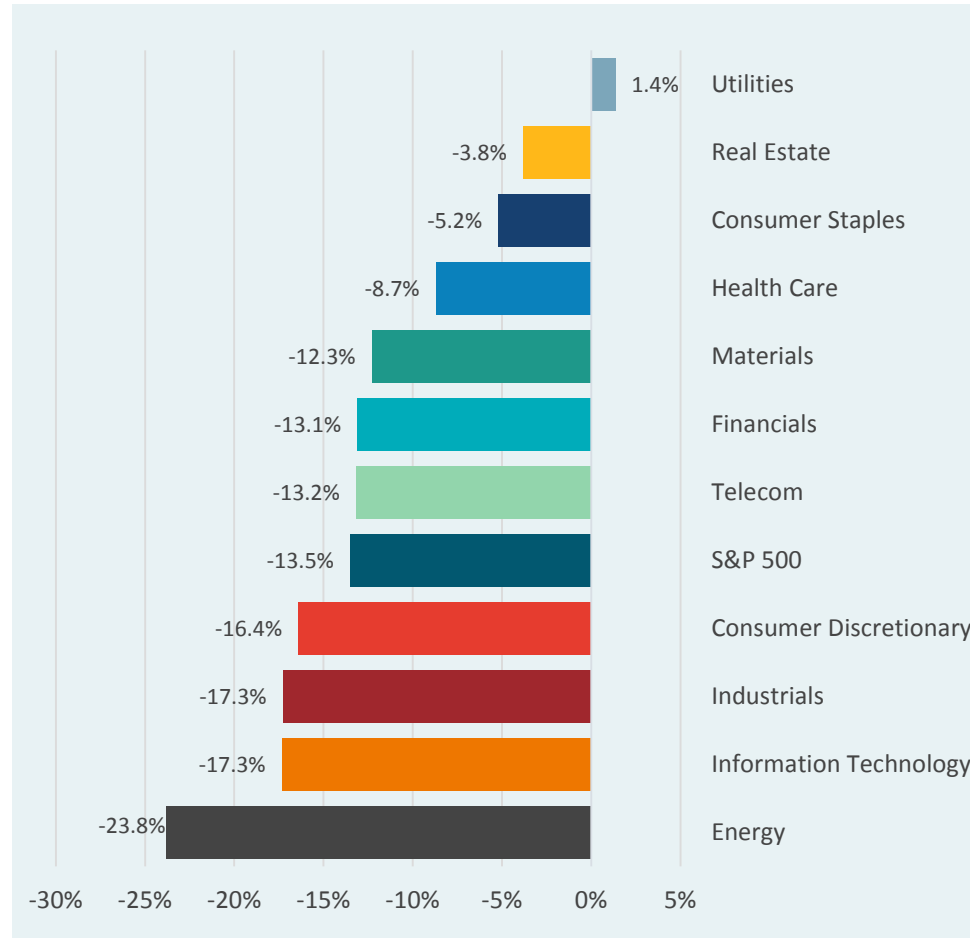
BEST
↑
↓
WORST

- Large Cap Equity
- Small Cap Growth
- Commodities
- Large Cap Value
- International Equity
- Real Estate
- Large Cap Growth
- Emerging Markets Equity
- Hedge Funds of Funds
- US Bonds
- 60% MSCI ACWI/40% BBgBarc Global Bond
- Cash

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 9/30/18.

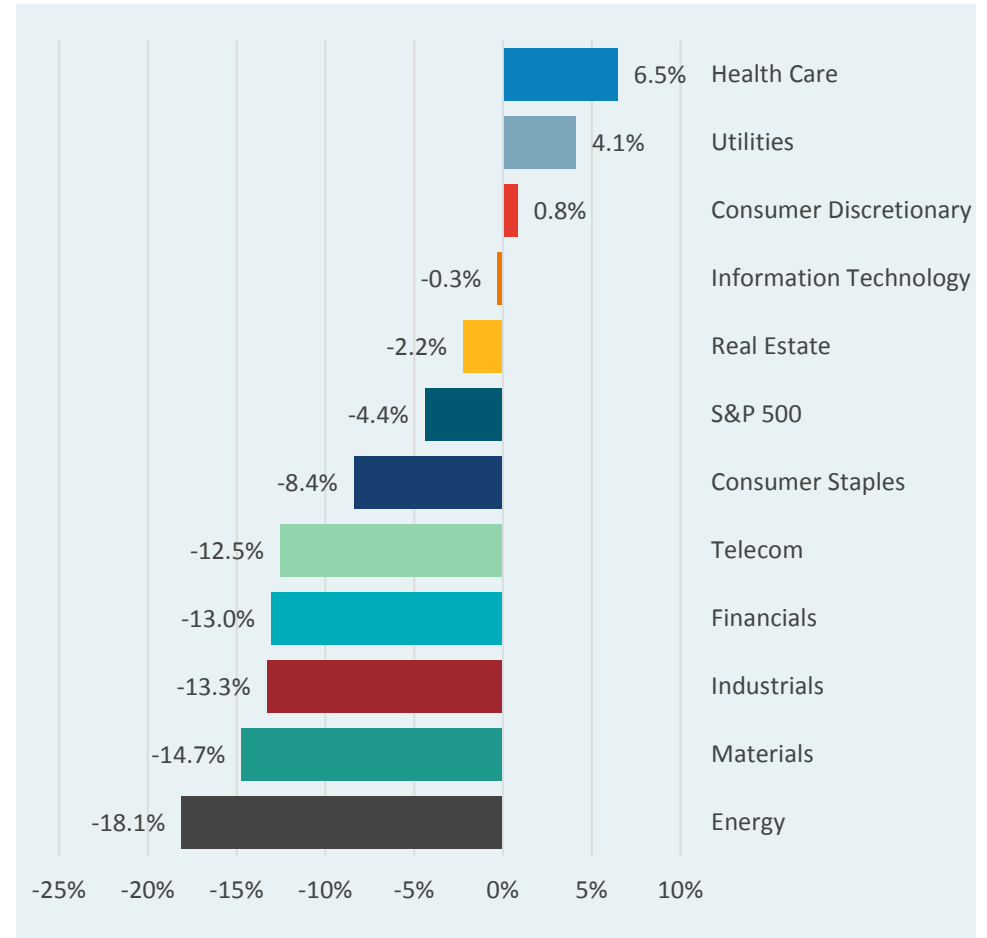
S&P 500 sector returns

QTD



Source: Morningstar, as of 12/31/18

ONE YEAR ENDING DECEMBER



Source: Morningstar, as of 12/31/18

Detailed index returns

DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	(9.0)	(13.5)	(4.4)	(4.4)	9.3	8.5	13.1
S&P 500 Equal Weighted	(9.7)	(13.9)	(7.6)	(7.6)	8.0	7.1	15.0
DJ Industrial Average	(8.6)	(11.3)	(3.5)	(3.5)	12.9	9.7	13.2
Russell Top 200	(8.8)	(13.2)	(3.1)	(3.1)	9.9	9.0	13.0
Russell 1000	(9.1)	(13.8)	(4.8)	(4.8)	9.1	8.2	13.3
Russell 2000	(11.9)	(20.2)	(11.0)	(11.0)	7.4	4.4	12.0
Russell 3000	(9.3)	(14.3)	(5.2)	(5.2)	9.0	7.9	13.2
Russell Mid Cap	(9.9)	(15.4)	(9.1)	(9.1)	7.0	6.3	14.0
Style Index							
Russell 1000 Growth	(8.6)	(15.9)	(1.5)	(1.5)	11.1	10.4	15.3
Russell 1000 Value	(9.6)	(11.7)	(8.3)	(8.3)	7.0	5.9	11.2
Russell 2000 Growth	(11.7)	(21.7)	(9.3)	(9.3)	7.2	5.1	13.5
Russell 2000 Value	(12.1)	(18.7)	(12.9)	(12.9)	7.4	3.6	10.4

INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
MSCI ACWI	(7.0)	(12.8)	(9.4)	(9.4)	6.6	4.3	9.5
MSCI ACWI ex US	(4.5)	(11.5)	(14.2)	(14.2)	4.5	0.7	6.6
MSCI EAFE	(4.9)	(12.5)	(13.8)	(13.8)	2.9	0.5	6.3
MSCI EM	(2.7)	(7.5)	(14.6)	(14.6)	9.2	1.6	8.0
MSCI EAFE Small Cap	(6.4)	(16.0)	(17.9)	(17.9)	3.7	3.1	10.5
Style Index							
MSCI EAFE Growth	(4.8)	(13.3)	(12.8)	(12.8)	2.9	1.6	7.1
MSCI EAFE Value	(4.9)	(11.7)	(14.8)	(14.8)	2.8	(0.6)	5.5
Regional Index							
MSCI UK	(3.8)	(11.8)	(14.2)	(14.2)	1.6	(1.7)	6.8
MSCI Japan	(6.7)	(14.2)	(12.9)	(12.9)	3.4	3.1	5.3
MSCI Euro	(4.8)	(13.2)	(16.4)	(16.4)	2.4	(0.9)	4.4
MSCI EM Asia	(3.2)	(9.3)	(15.5)	(15.5)	8.6	3.9	9.8
MSCI EM Latin American	(0.8)	0.4	(6.6)	(6.6)	14.9	(1.7)	5.0

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
BBgBarc US TIPS	0.5	(0.4)	(1.3)	(1.3)	2.1	1.7	3.6
BBgBarc US Treasury Bills	0.2	0.6	1.9	1.9	1.0	0.6	0.4
BBgBarc US Agg Bond	1.8	1.6	0.0	0.0	2.1	2.5	3.5
Duration							
BBgBarc US Treasury 1-3 Yr	0.8	1.3	1.6	1.6	0.9	0.8	1.0
BBgBarc US Treasury Long	5.5	4.2	(1.8)	(1.8)	2.6	5.9	4.1
BBgBarc US Treasury	2.2	2.6	0.9	0.9	1.4	2.0	2.1
Issuer							
BBgBarc US MBS	1.8	2.1	1.0	1.0	1.7	2.5	3.1
BBgBarc US Corp. High Yield	(2.1)	(4.5)	(2.1)	(2.1)	7.2	3.8	11.1
BBgBarc US Agency Interm	1.0	1.6	1.6	1.6	1.3	1.4	1.8
BBgBarc US Credit	1.5	0.0	(2.1)	(2.1)	3.2	3.2	5.5

OTHER

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Index							
Bloomberg Commodity	(6.9)	(9.4)	(11.2)	(11.2)	0.3	(8.8)	(3.8)
Wilshire US REIT	(8.4)	(6.9)	(4.8)	(4.8)	2.1	7.9	12.2
CS Leveraged Loans	(2.3)	(3.1)	1.1	1.1	5.0	3.3	8.3
Alerian MLP	(8.3)	(16.3)	(11.9)	(11.9)	(1.6)	(6.9)	10.7
Regional Index							
JPM EMBI Global Div	1.3	(1.3)	(4.3)	(4.3)	5.2	4.8	8.2
JPM GBI-EM Global Div	1.3	2.1	(6.2)	(6.2)	5.9	(1.0)	3.5
Hedge Funds							
HFRI Composite	(2.0)	(5.4)	(4.1)	(4.1)	3.2	2.3	5.0
HFRI FOF Composite	(1.2)	(4.4)	(3.5)	(3.5)	1.5	1.5	3.2
Currency (Spot)							
Euro	1.0	(1.6)	(4.8)	(4.8)	1.7	(3.7)	(1.9)
Pound	(0.2)	(2.3)	(5.9)	(5.9)	(4.8)	(5.1)	(1.2)
Yen	3.5	3.5	2.7	2.7	3.1	(0.9)	(1.9)

Source: Morningstar, HFR, as of 12/31/18

Notices & disclosures

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SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

January 29, 2019

Agenda Item 6.2

TO: Board of Retirement
FROM: Michael Coultrip, Chief Investment Officer
SUBJECT: Educational Presentation on Timberland

Michael R. Coultrip

Recommendation

Review the educational presentation on timberland and provide direction to staff as needed.

Background

SamCERA's current policy portfolio has a 2% allocation to Private Real Assets, which will be increased to 4% as we implement the policy changes that were last approved in May 2018. Private Real Assets are composed of two categories in SamCERA's Investment Policy Statement: 1) Infrastructure (Core and Value-Add, Secondary, Midstream Energy, and Power), and 2) Natural Resources (Energy Exploration and Production, Mining, Farmland, Timber, and Water). Each of these two categories has a 50% target allocation.

Discussion

SamCERA has not previously invested in direct timberland investments. John Nicolini from Verus will present the introduction to timberland. He will provide a timberland overview, discuss historical timberland performance, cover ESG impacts, and finish with a summary of the current market opportunity in timberland.

Attachment

Verus Presentation: Introduction to Timberland



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**



DECEMBER 2018

Introduction to Timberland

San Mateo County Employees' Retirement Association

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VERUSINVESTMENTS.COM

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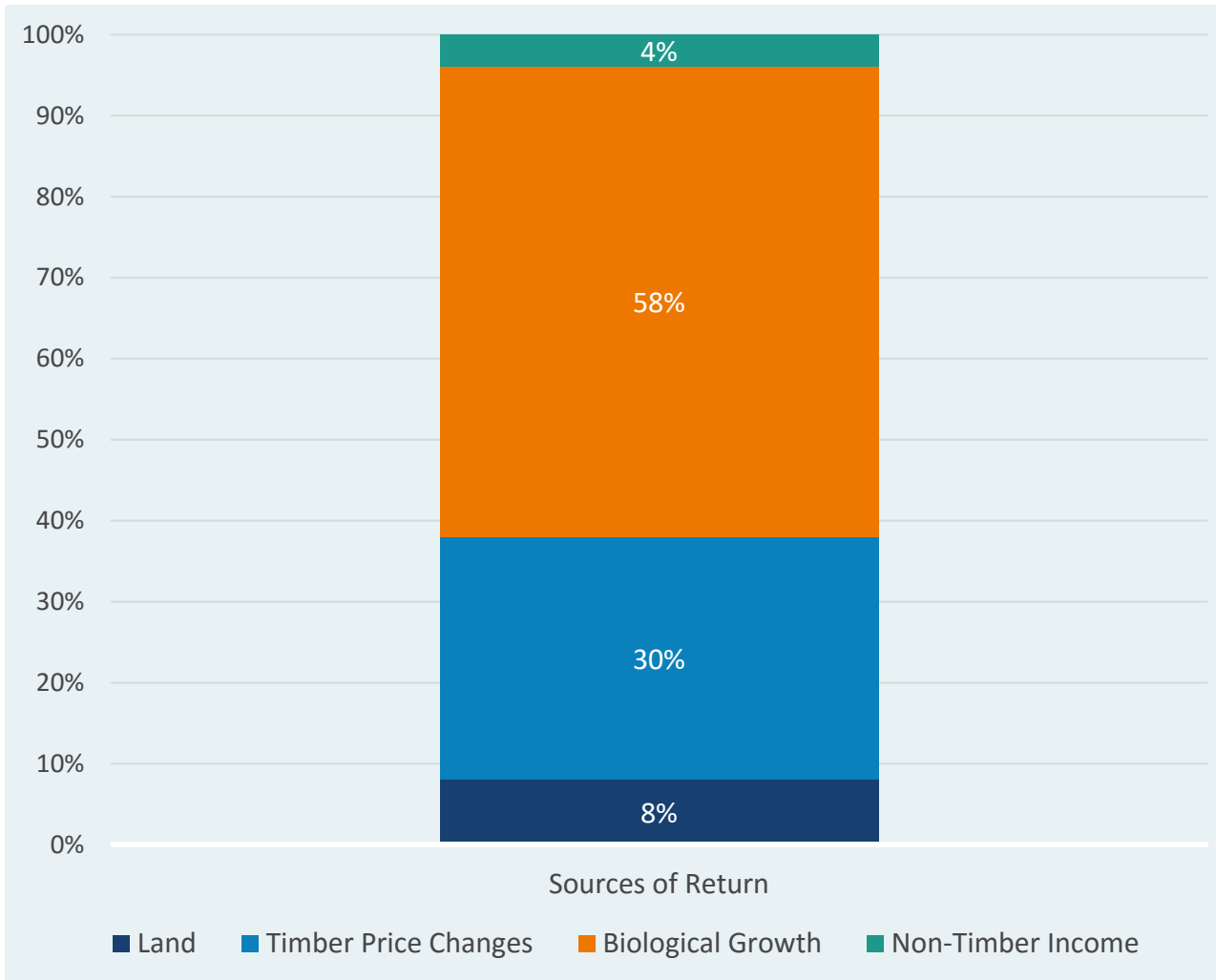
Market opportunity in
timberland 15

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Timberland: What are we talking about?

- Investing in timberland means owning commercial tree plantations
- The two primary tree types are hardwood and softwood
 - Generally, softwood trees dominate the Pacific Northwest and Southeast (Spruce, Pines, Firs, Junipers)
 - Hardwoods are generally grown in the Northeast/North Central regions (Birch, Hickory, Maple, Oak, etc.)
- Returns are driven by the appreciation of the land and trees, income from harvesting the trees and non-timber income
- Timber Investment Management Organizations (TIMOs) are the managers that invest and operate the timberland on behalf of investors
 - TIMOs can add value by improving crop yields, harvesting schedules and seeking higher and better use of the timberland (i.e. mitigation banking, selling to developers, etc.)
- Timber is a global commodity with opportunities to invest beyond North America

Timberland sources of return



Source: Campbell Global

Biological growth is the largest component of return within timberland. As trees mature they increase in volume and value.

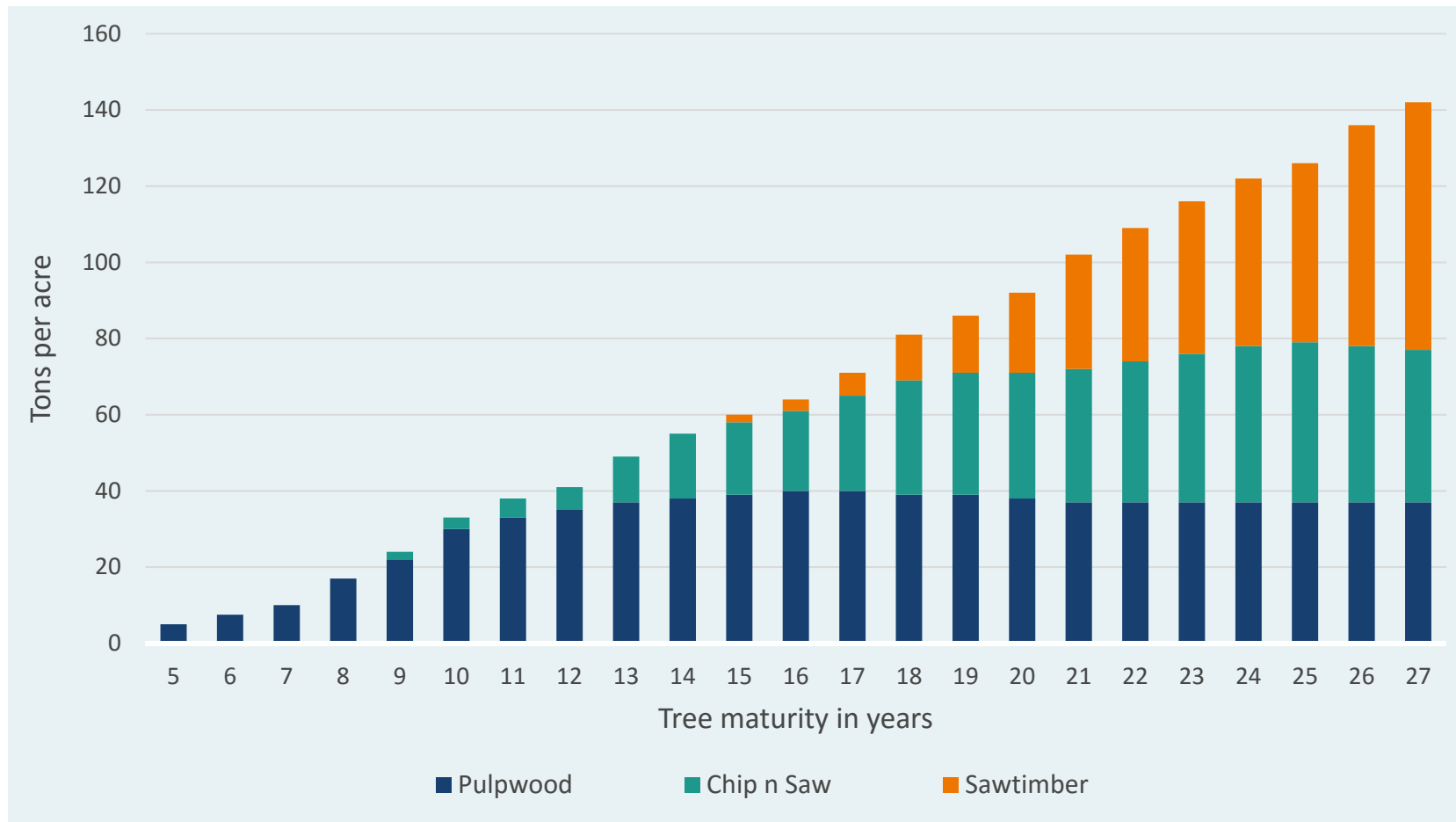
More mature trees can be used for higher value sawtimber

Land returns are in part inflation driven but also higher-and-better-use opportunities (i.e. selling the land to developers or land trusts)

Non-timber income includes recreational leasing, mineral rights, mitigation banking and carbon-offset markets

Value and product changes over time

Hypothetical Yield Curve – Southern Pine



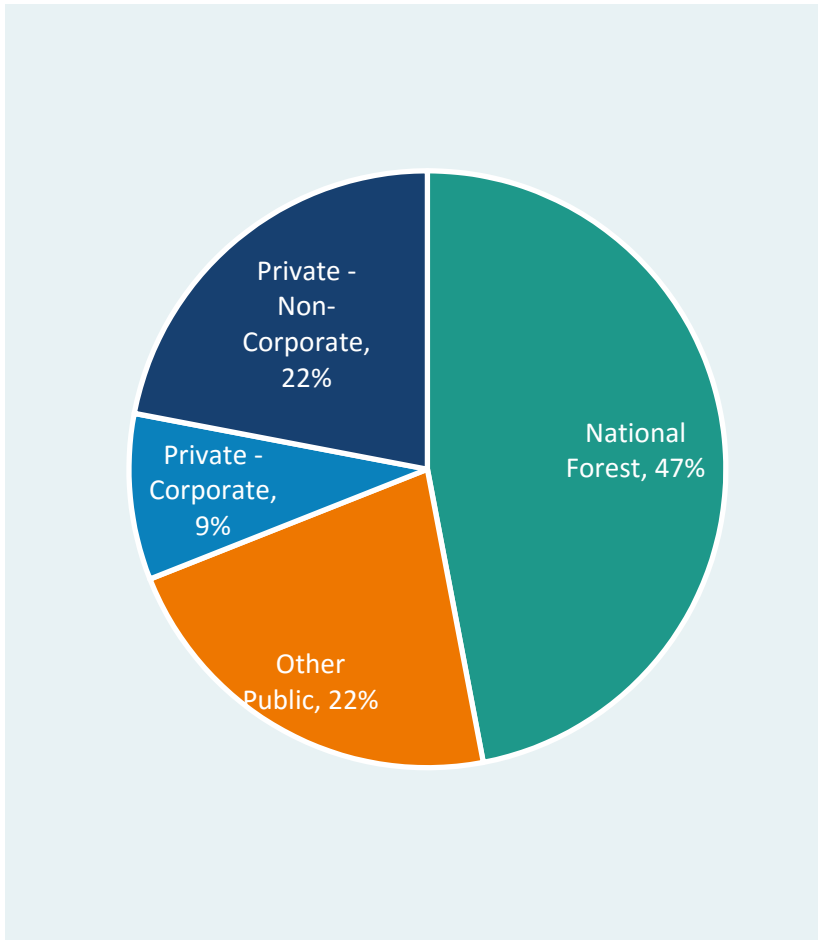
Sawtimber is a higher value product relative to pulpwood

Tree volume is increasing as the tree matures, as well

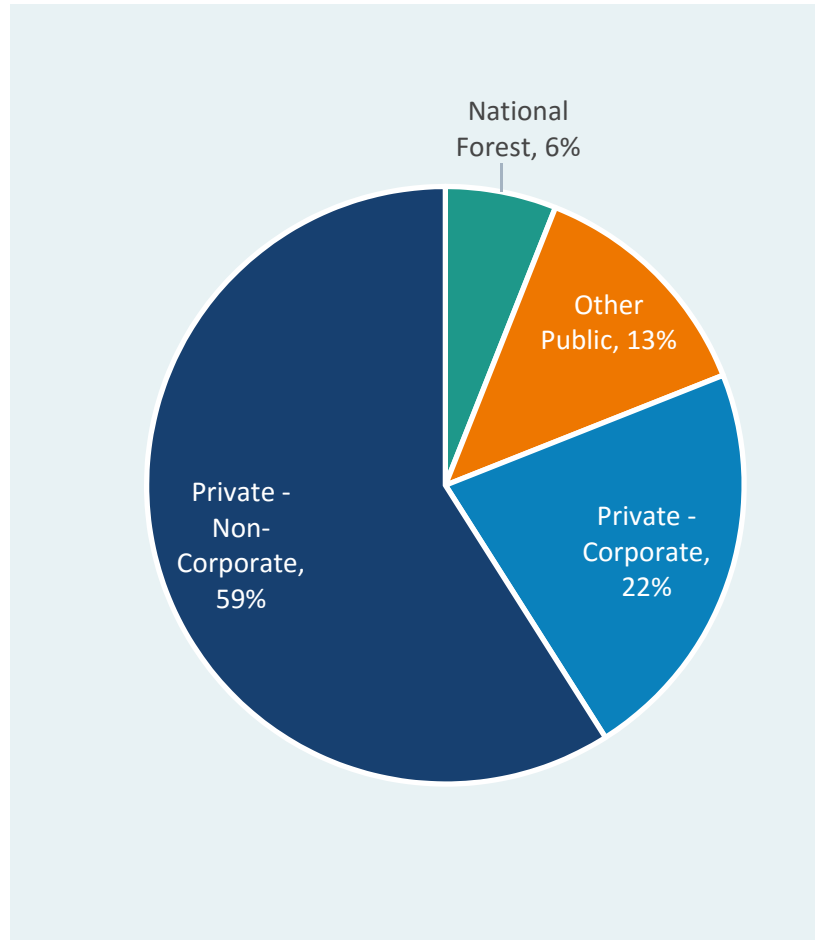
Source: Forestry Research Group

Forestry land ownership in the U.S.

FORESTRY LAND OWNERSHIP IN THE U.S. WEST



FORESTRY LAND OWNERSHIP IN THE U.S. EAST



U.S. South and Northeast have a larger share of available timberland held in private hands

Much of the U.S. West is unavailable for purchase by private investors; off limits for timber harvesting

Source: US Forestry Service

Timberland diversification

CORRELATION MATRIX (1992-2018)

	Bloomberg Barclays Aggregate	NCREIF Farmland	NCREIF ODCE	NCREIF Timberland	Russell 3000
Bloomberg Barclays US Aggregate	1.00	-0.10	-0.11	0.08	-0.20
NCREIF Farmland	-0.10	1.00	0.14	0.40	0.13
NCREIF Property - ODCE	-0.11	0.14	1.00	0.02	0.16
NCREIF Timberland	0.08	0.40	0.02	1.00	0.04
Russell 3000	-0.20	0.13	0.16	0.04	1.00

- Timberland has a unique return driver that does not correlate with any other asset class – biological growth
- Demand drivers for lumber and perhaps wood fiber correlate with economic activity but that can be episodic over short-to-medium time periods (i.e. homebuilding)
- As a component of a portfolio, timberland provides an interesting diversifier but that alone does not make the asset class compelling as an investment

Timberland risks

Operational risk

- Harvest strategy
- Infrastructure/transportation costs
- Financing/Cap structure
- Supply agreements
- Easements/encumbrances
- Non-timber income

Price risk

- Supply/Demand volatility
- Mill density
- Harvest timing/strategy
- Maturity of trees

Risk factors

Loss of inventory

- Weather
- Fire
- Pests
- Regulatory changes

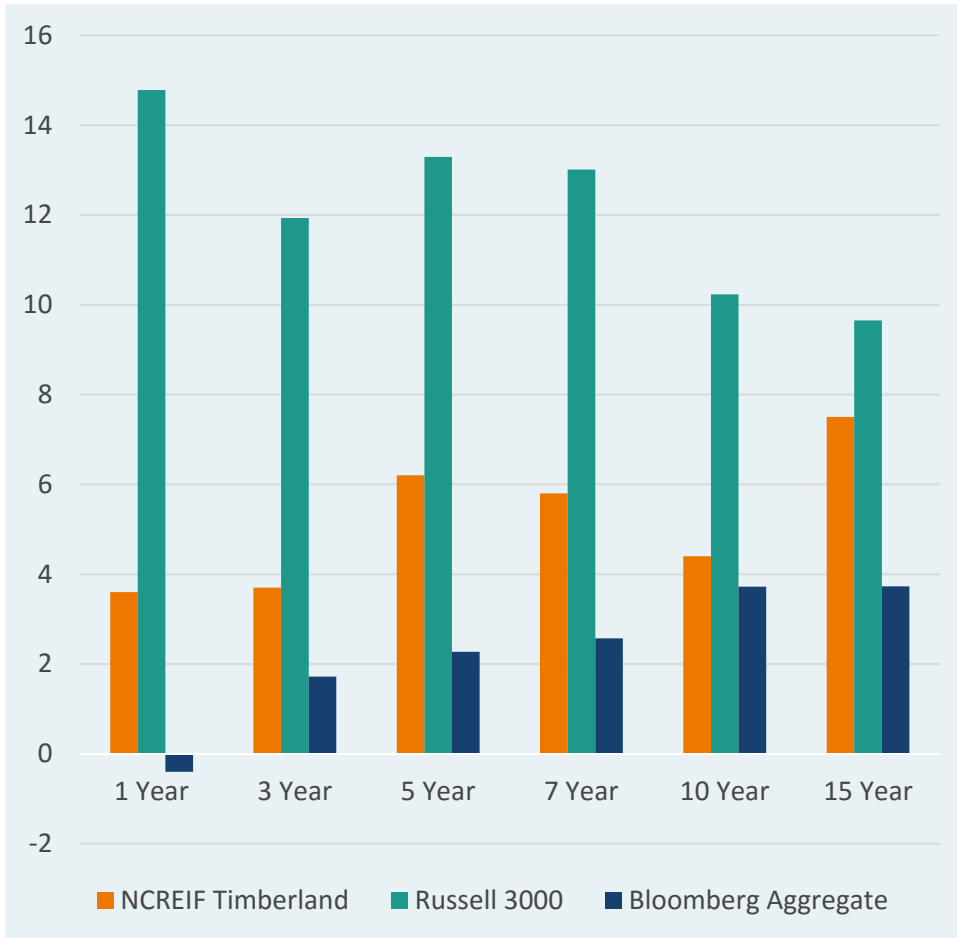
Valuation

- Changes in discount rates
- Liquidity
- Operating margins
- Product obsolescence
- Entry vs Exit valuation

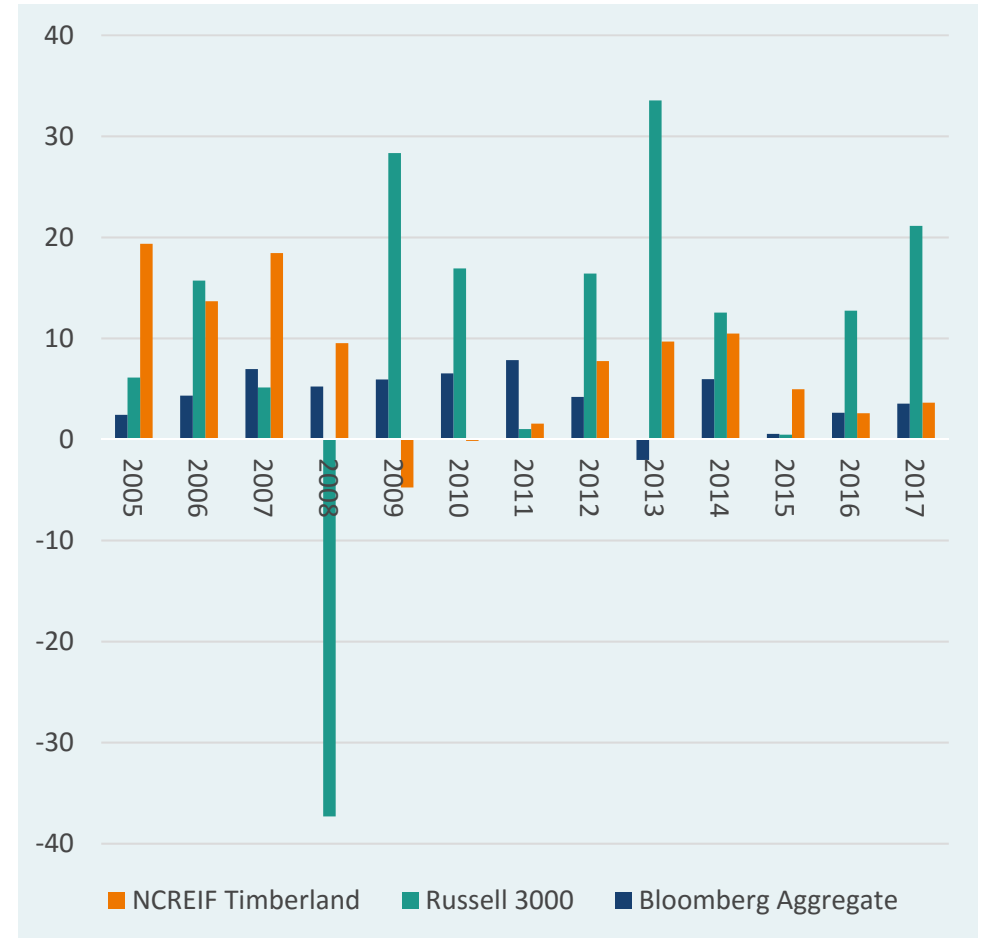
Timberland performance

Timberland performance

TRAILING PERFORMANCE

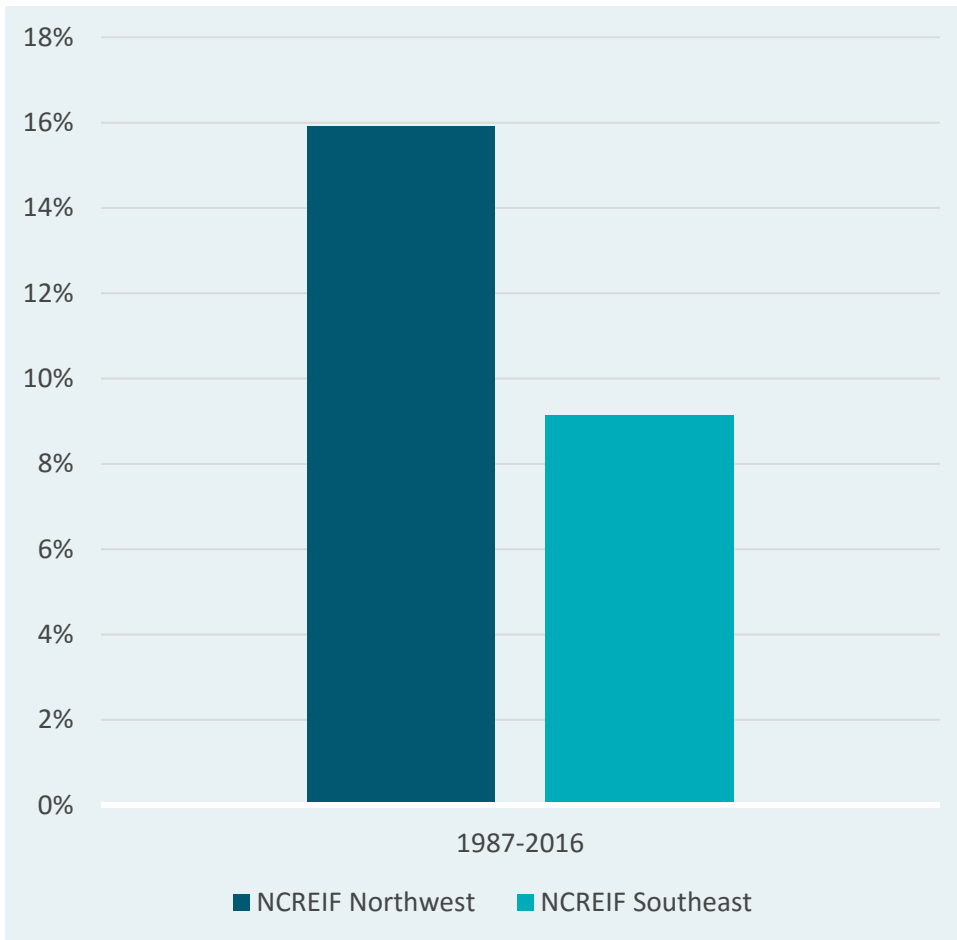


CALENDAR YEAR PERFORMANCE

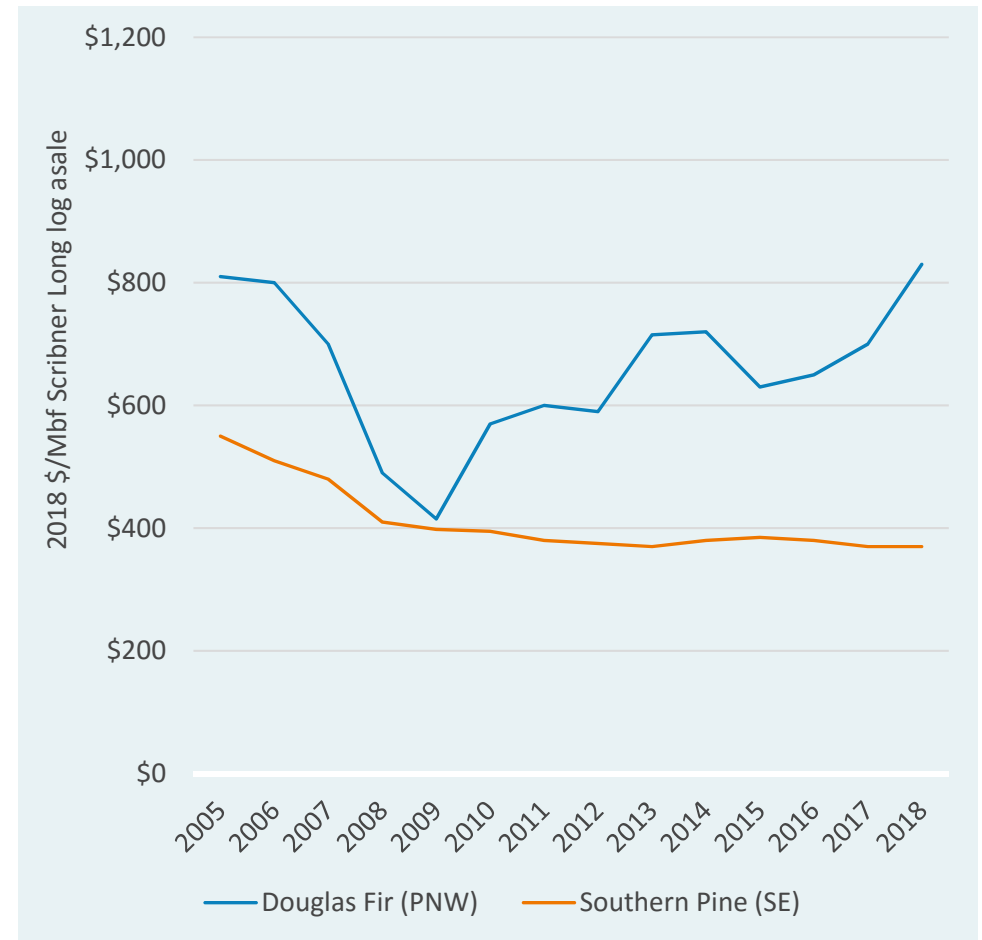


Timberland performance by region

HISTORICAL PERFORMANCE BY REGION



SAWLOG PRICES BY REGION/SPECIES



Source: Campbell Global

Performance challenges since GFC

- Timberland as an asset class has faced several headwinds since the GFC
 - Home building is a primary end market for saw timber which has struggled to recover since the GFC
 - Paper/pulp demand has been challenged by the digitization of our information and increased supply from South America
 - Low interest rates and greater competition from investors have driven valuations higher
- Divergence in performance between Pacific Northwest (PNW) and Southeast timberland
 - Historically, the Pacific Northwest timberland has enjoyed a substantial return premium above Southeast timberland.
 - Douglas Fir has enjoyed strong prices, driven largely by lumber exports to Asia and supply constraints out of Canada and the U.S. from regulatory, weather and pest issues.
 - The availability of timberland and small size of the PNW create a challenge for TIMOs to access acreage of scale. Most TIMOs instead focus on the Southeast where transactions and large acreage positions are more readily available.
 - An abundance of supply in the US South has kept prices flat since the GFC for Southern Pine logs

ESG/Impact

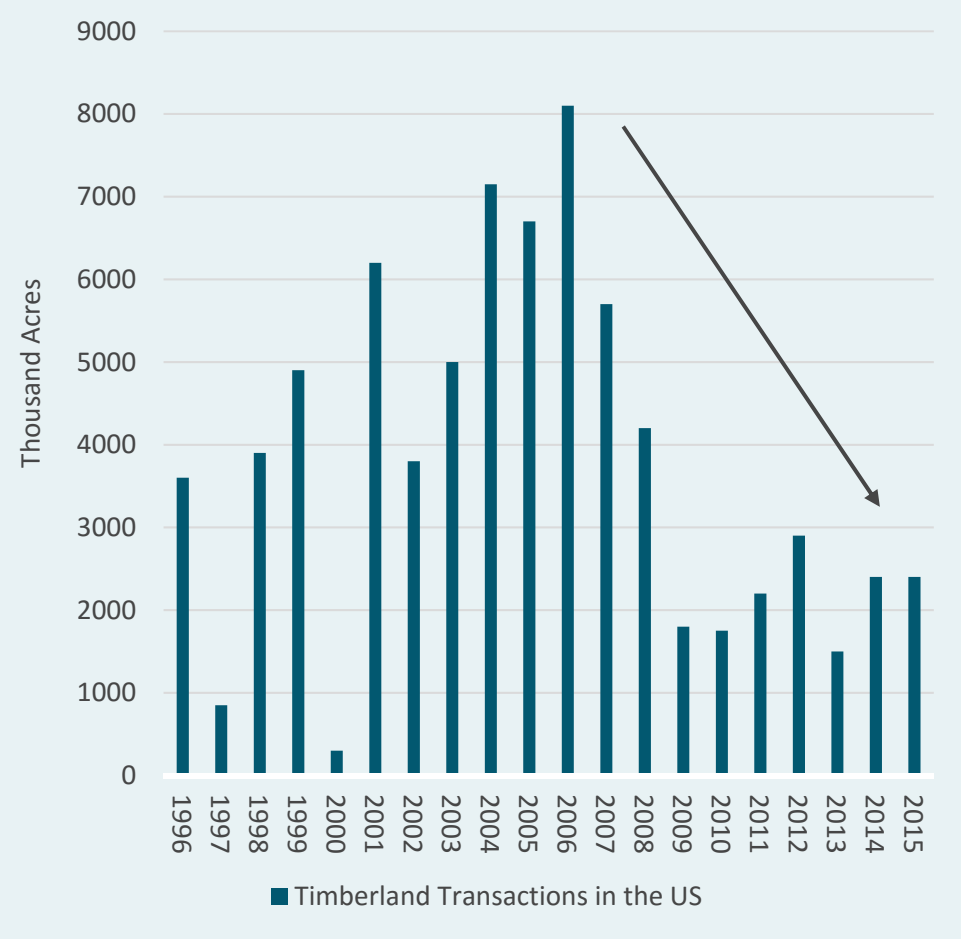
ESG/Impact investing

- Timberland is a compelling asset class for investors interested in Impact and/or ESG investing
 - Plant life and phytoplankton consume CO2 from our atmosphere
 - Trees are particularly important in the regulation of CO2 due to their size and ability to store large amounts of carbon
 - Harvesting trees traps the carbon in lumber/wood products and allows the planting of new trees
 - Younger forests consume several times the amount of carbon dioxide that mature forests consume
- Biomass as a fuel
 - Biomass as a fuel is not carbon-neutral when factoring in transportation and harvesting but is more sustainable and cleaner than fossil fuels
 - Growing biomass fuel industry in the Asia and Europe is creating a demand for wood products
 - U.S. timberland is a growing supplier for wood pellet plants globally

Market opportunity in timberland

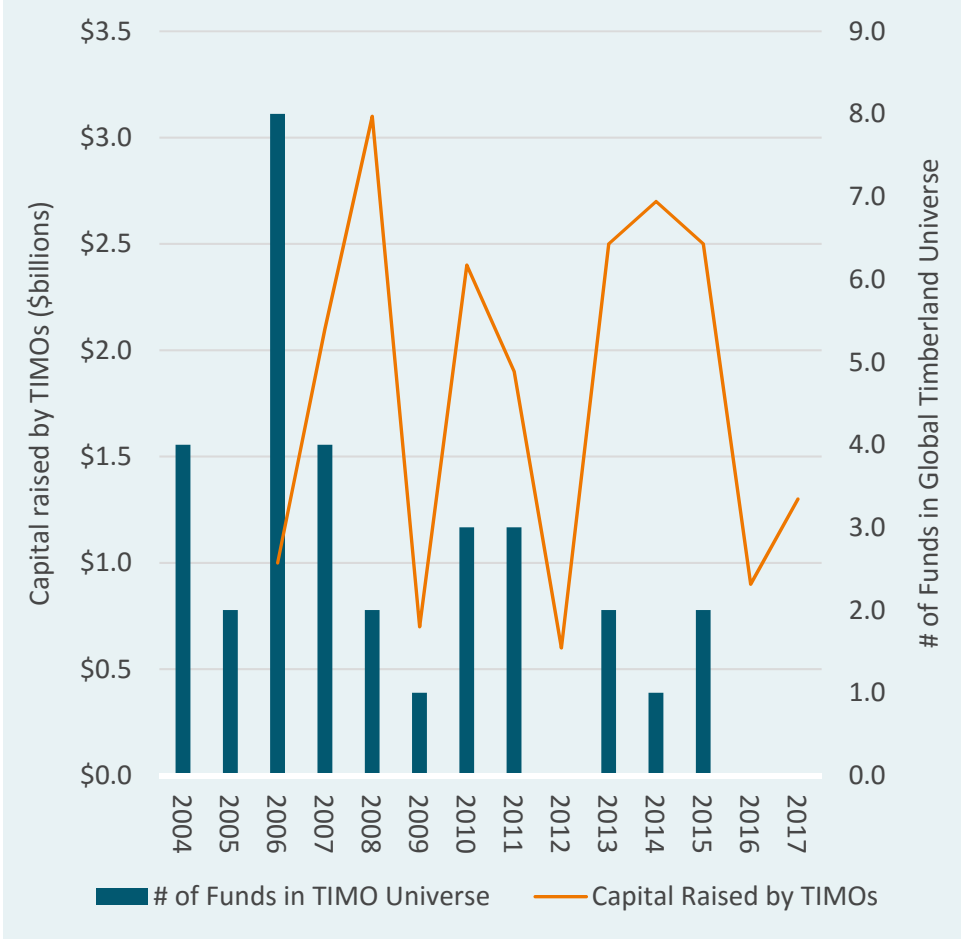
Stalled M&A market

TIMBERLAND TRANSACTIONS IN THE UNITED STATES



Source: Campbell Global

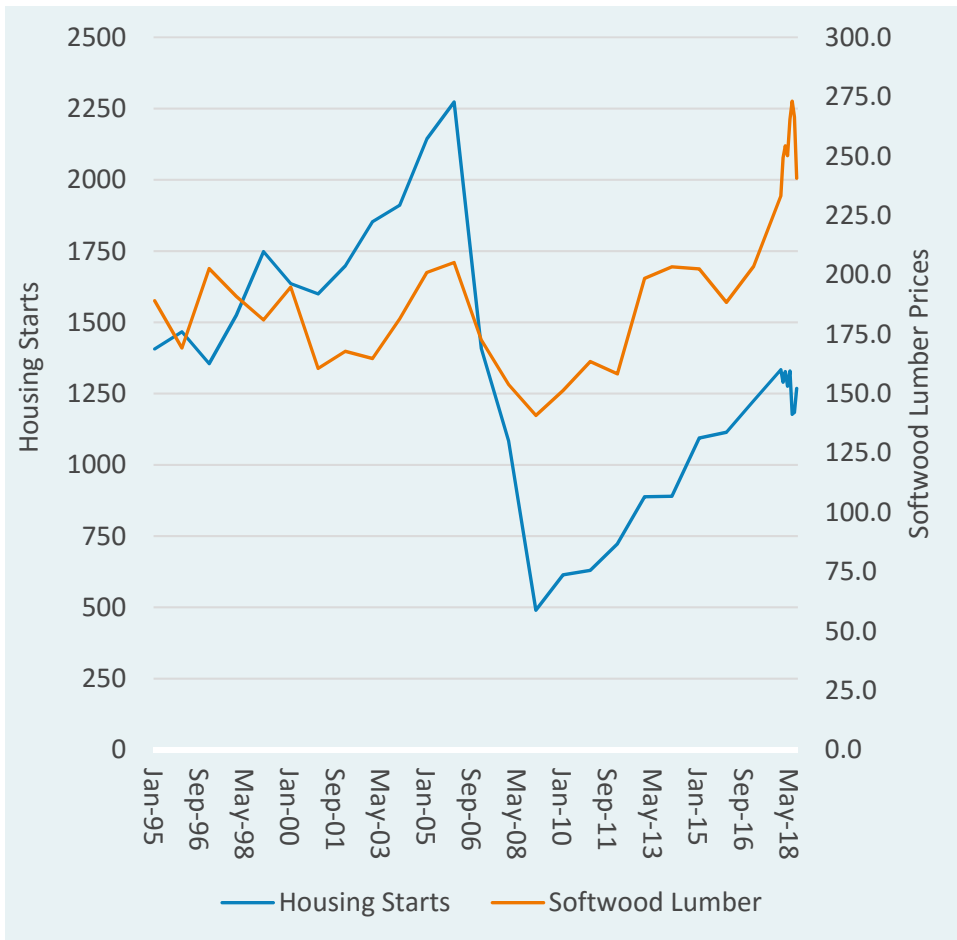
CAPITAL RAISED BY TIMO FUNDS & # OF FUNDS IN TIMO UNIVERSE



Source: Preqin & Cambridge Associates – Global Timberland Manager Universe

Divergence in softwood log vs lumber prices

HOUSING STARTS & SOFTWOOD LUMBER PRICES



SOUTHERN PINE LOGS VS SOFTWOOD LUMBER



Source: St. Louis Fed

Market outlook

— Performance challenges in the asset class

- Home building is a primary end market for saw timber which has struggled to recover since the GFC
- Lumber prices are at historic highs but that has not translated into higher prices at the stump. Oversupply of timber and a shortage of mills has contributed to the price divergence
- Low interest rates have driven cap rates to historic lows

— Demand

- Lumber demand has been strong both domestically and abroad
- New mill construction and expansions will alleviate the bottleneck in Southern Pine milling
- Exports to China slowed in the last couple years but are expected to remain strong in Asia broadly

— Supply

- Excess supply from Southern Pine has depressed prices since the GFC; still working through excess inventory
- Lack of supply in the PNW has driven prices higher for softwood from that region

Market outlook (cont.)

— Interest rates

- Like all financial assets, timberland is exposed to interest rate risk through the discounting of future cash flows
- With discount rates around 5.25-5.5% today, investors should expect to exit at a higher rate in the future

— Trade Policy

- The Trump administration has enacted trade policy initiatives which impact the forest products industry
 - A tariff placed on Canadian timber imports has reduced Canadian softwood imports into the U.S.
 - Exports of U.S. timber to China collapsed in September as retaliatory tariffs from China halted sales of U.S. softwood logs & lumber

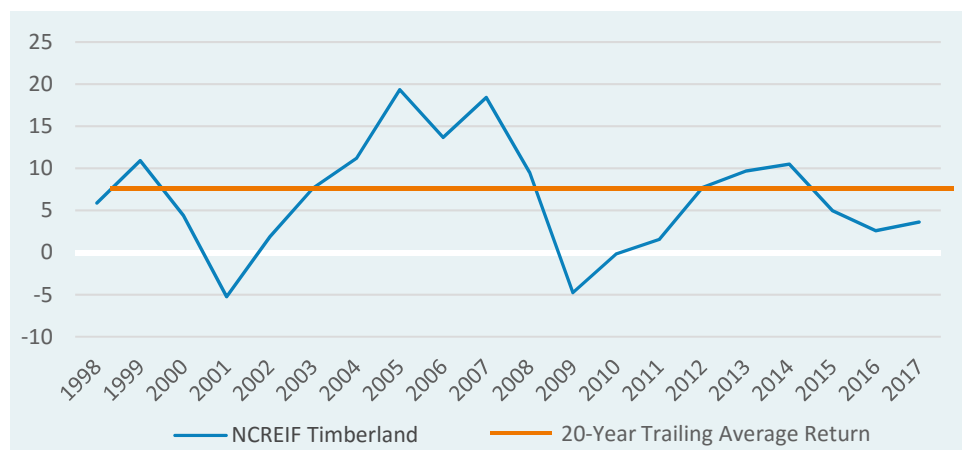
— Exit market uncertainty

- The lack of fundraising success for TIMOs presents an opportunity for buyers today but also presents a risk in the future as investors seek an exit of their own

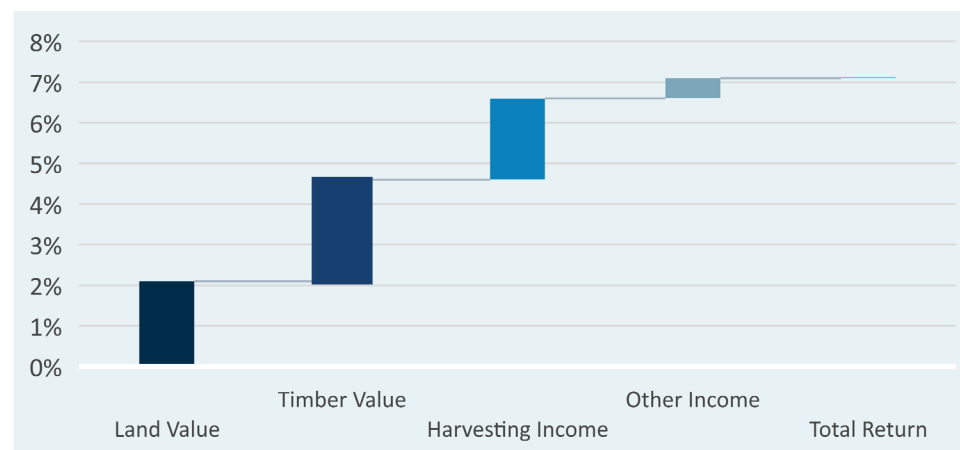
Return expectations

- Depending on your start and end date, timberland has either returned in the low-teens historically or in the mid-to-high single digits. We believe the asset class was undergoing a unique shift in the 90s and early 2000s that drove high double digit returns that aren't repeatable in today's market. Investors should not be looking at timberland as a high return driver for their portfolio, despite the illiquid nature of the asset class.
- Return drivers within timber come from the appreciation of the land (inflation + timber value) and income from both harvesting timber and non-timber income sources (i.e. hunting leases, mineral interest, etc.). Rising discount rates will be a key headwind for the asset class but could be offset by diligent underwriting and rising prices for timber. We are guiding investors toward an expected return within timberland of 7-9% (gross).
- There appears some tailwinds to the timberland story but we are hesitant to invest in an illiquid asset class on those uncertainties. Timberland as an investment is not for everyone and given the modest returns and illiquid nature, we believe is most appropriate for investors with a low cost of capital and an interest in renewable resources.

TIMBERLAND RETURNS HISTORICALLY



TIMBERLAND RETURN BRIDGE



Source: St. Louis Fed, as of 3/31/18

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

January 29, 2019

Agenda Item 6.3

TO: Board of Retirement

FROM: Michael Coultrip, Chief Investment Officer



SUBJECT: Approval to Transition TIPs Separate Account to Commingled Fund

Recommendation

Approve transition from SamCERA's current TIPs separate account managed by Brown Brothers Herriman (BBH) to a commingled fund structure managed by BBH.

Background

SamCERA's new long-term asset allocation policy, which was approved in May 2018, no longer has a dedicated TIPs allocation. SamCERA has been using the dedicated TIPs account, which is managed by BBH, as a source of funds for new investment opportunities within the Inflation Hedge category, and plans are for the wind down to be completed within the year as new investment opportunities are identified. The market value of the TIPs account as of December 31, 2018 was \$45.2 million, which reflects a significant reduction in AUM after \$40 million was withdrawn from the account to help fund the tactical MLP account in the second half of 2018.

Discussion

After speaking with BBH about the plan to wind down the portfolio, BBH recommended transitioning the separate account into a commingled fund managed by BBH to be more efficient and cost effective. The attached memo from Verus provides more detail about the potential transition.

Attachment

Verus Memo on TIPs Transition

Memorandum

To: San Mateo County Employees' Retirement Association
From: Verus
Date: January 22nd, 2019
RE: Transition TIPS Portfolio

Executive Summary

In 2017, SamCERA approved a new long-term asset allocation that will no longer have a dedicated TIPS allocation. SamCERA had a 2% target allocation to TIPS prior to the newly approved asset allocation. As part of the transition to the new long-term asset allocation, SamCERA will sell down the dedicated TIPS portfolio over time as new commitments are made within the real assets portfolio. As of year-end, SamCERA has roughly \$45 million in a separate account TIPS portfolio managed by Brown Brothers Harriman (BBH). After speaking with BBH about the plan to wind down the portfolio, it was determined that a more efficient and cost-effective vehicle structure would be needed if the account was winding down over time.

TIPS Account Transition

BBH has recommended that SamCERA transition their separate account into a TIPS commingled trust account managed by BBH. The commingled trust seeks to provide income and a return consistent with the Bloomberg Intermediate US TIPS Index. The Fund charges a management fee of 15bps, the same fee SamCERA pays for a separate account, and provides daily liquidity to investors. In order to fund the commingled vehicle, BBH will sell the existing portfolio of TIPS and fund the commingled vehicle with cash. BBH was unable to facilitate an in-kind transfer of TIPS from the separate account to the commingled vehicle due to the meaningfully longer maturity of the securities held in the separate account. Given the liquidity within the TIPS market, BBH expects a de minimis cost for selling down the TIPS portfolio (less than 1bps). The commingled vehicle can also be funded the same day as the separate account is liquidated.

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SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

January 29, 2019

Agenda Item 6.4

TO: Board of Retirement

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

SUBJECT: Presentation on SamCERA Risk Dashboard

Recommendation

Review the SamCERA risk dashboard and provide direction to staff as needed.

Background

As part of its enhanced service offering, Verus will be providing semi-annual risk management reporting (SamCERA Risk Dashboard) using index level holdings to better highlight various risk exposures of the plan.

Discussion

Max Giolitti and Jeff MacLean from Verus will introduce the new SamCERA risk dashboard.

Attachment

SamCERA Risk Dashboard



PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS

JANUARY 29, 2019

Risk Management Presentation for

SamCERA

Purpose of risk management review

Risk exposures are a key driver of portfolio results

Risk is more easily forecasted and managed than returns

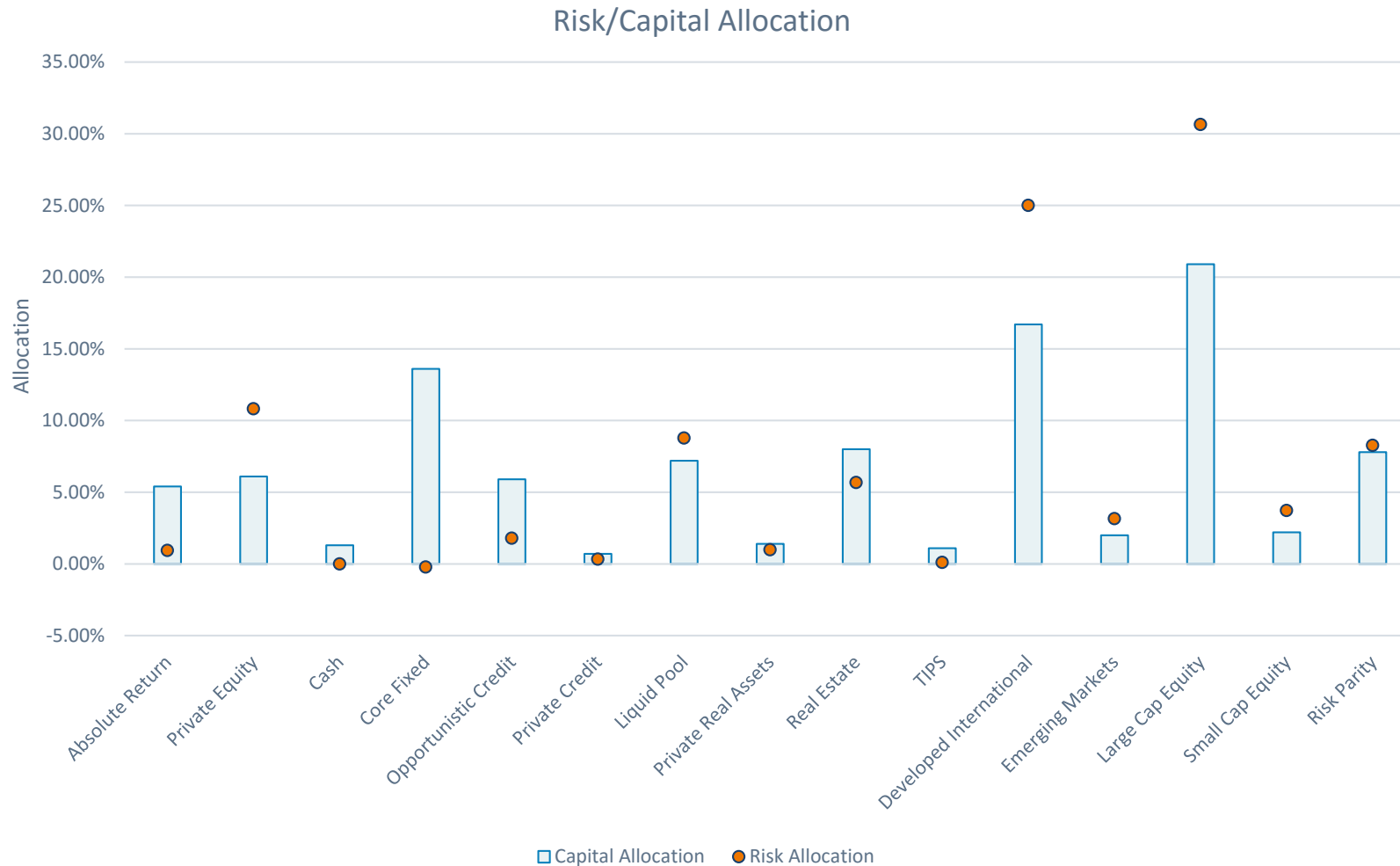
Risk modeling and measurement disaggregates portfolio into components

- Use of MSCI BarraOne
- Current portfolio vs. policy, public plans and 60/40
- Reviews portfolio factor risks
- Measures plan risks on an absolute and relative basis
- Stress tests portfolio under extreme market conditions

Risk Dashboard provides context for current portfolio and can be used as a decision-making tool.

The goal is to optimize risk, not eliminate it

Risk Versus Capital Allocation



San Mateo County Employees' Retirement Association

Portfolio Risk Report

September 30, 2018

1 Portfolio risk



Portfolio: 7.2%



Policy: 7.3%



Average Public Pension: 7.4%



Global 60/40: 6.9%

2 Portfolio equity beta



Portfolio: 0.64



Policy: 0.65



Average Public Pension: 0.66



Global 60/40: 0.61

3 Portfolio interest rate risk - Duration



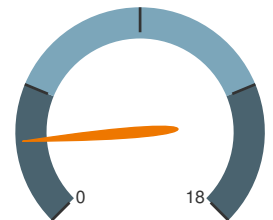
Portfolio: 2.4



Policy: 1.5

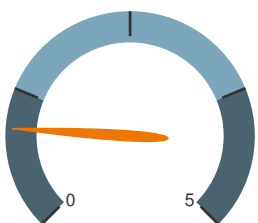


Average Public Pension: 1.4

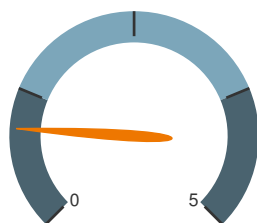


Global 60/40: 2.7

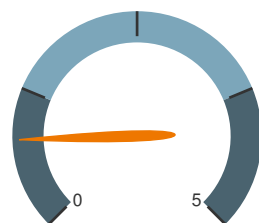
4 Portfolio credit risk - Spread duration



Portfolio: 0.9



Policy: 0.9



Average Public Pension: 0.8

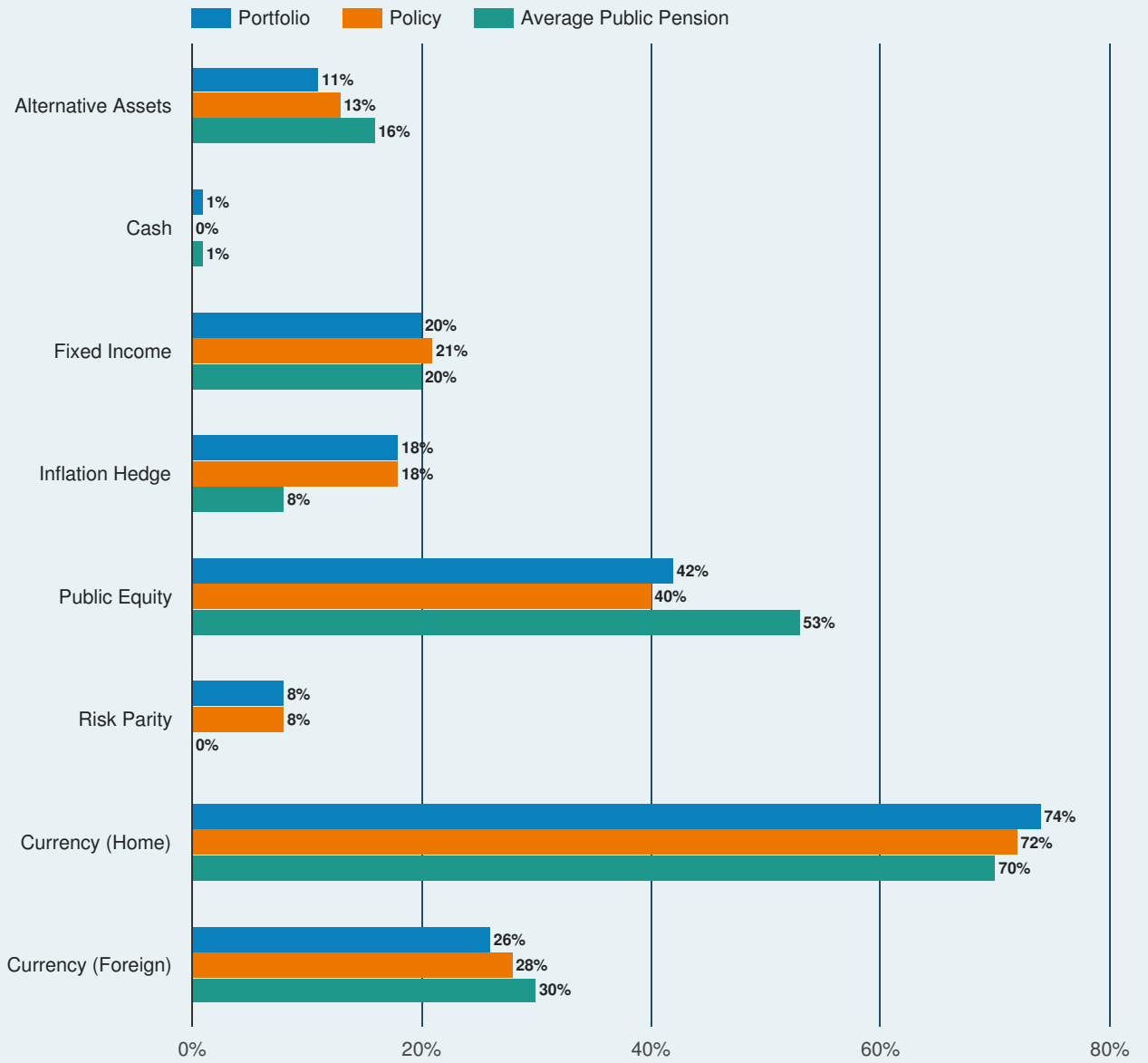


Global 60/40: 1.1

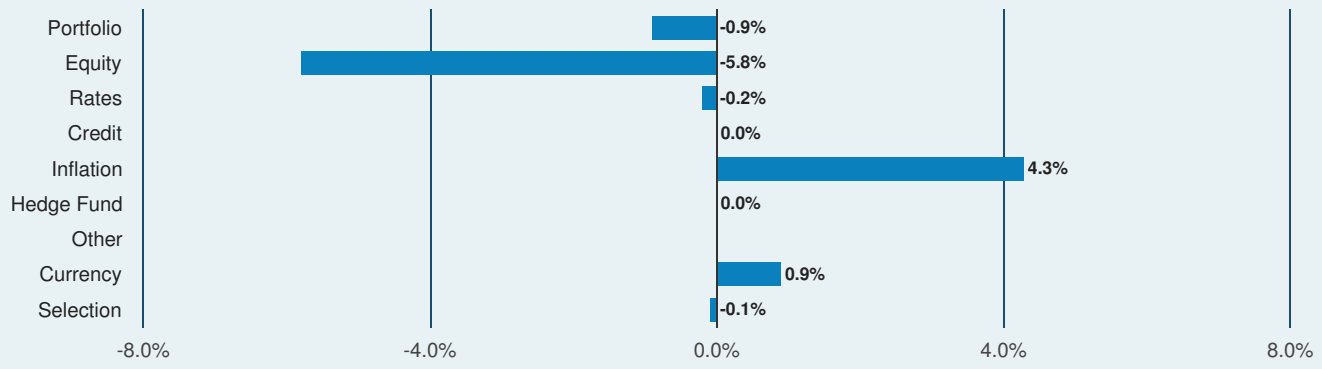
5 Exposure allocation by asset class

		Portfolio	Policy	Average Public Pension
Alternative Assets	Absolute Return	5.4%	6.0%	7.6%
	Private Equity	6.1%	7.0%	8.3%
Alternative Assets Total		11.4%	13.0%	15.9%
Cash	Cash	1.3%		1.3%
Cash Total		1.3%		1.3%
Fixed Income	Private Credit	0.7%		
	Opportunistic Credit	5.9%	7.0%	1.3%
	Core Fixed	13.6%	14.0%	18.6%
Fixed Income Total		20.2%	21.0%	19.9%
Inflation Hedge	TIPS	1.1%	2.0%	
	Private Real Assets	1.4%	2.0%	2.0%
	Liquid Pool	7.2%	6.0%	
	Real Estate	8.0%	8.0%	6.2%
Inflation Hedge Total		17.6%	18.0%	8.2%
Public Equity	Emerging Markets	2.0%	2.0%	3.5%
	Small Cap Equity	2.2%	3.0%	
	Developed International	16.7%	17.0%	23.2%
	Large Cap Equity	20.9%	18.0%	26.0%
Public Equity Total		41.7%	40.0%	52.7%
Risk Parity	Risk Parity	7.8%	8.0%	
Risk Parity Total		7.8%	8.0%	
Total Portfolio		100%	100%	100%

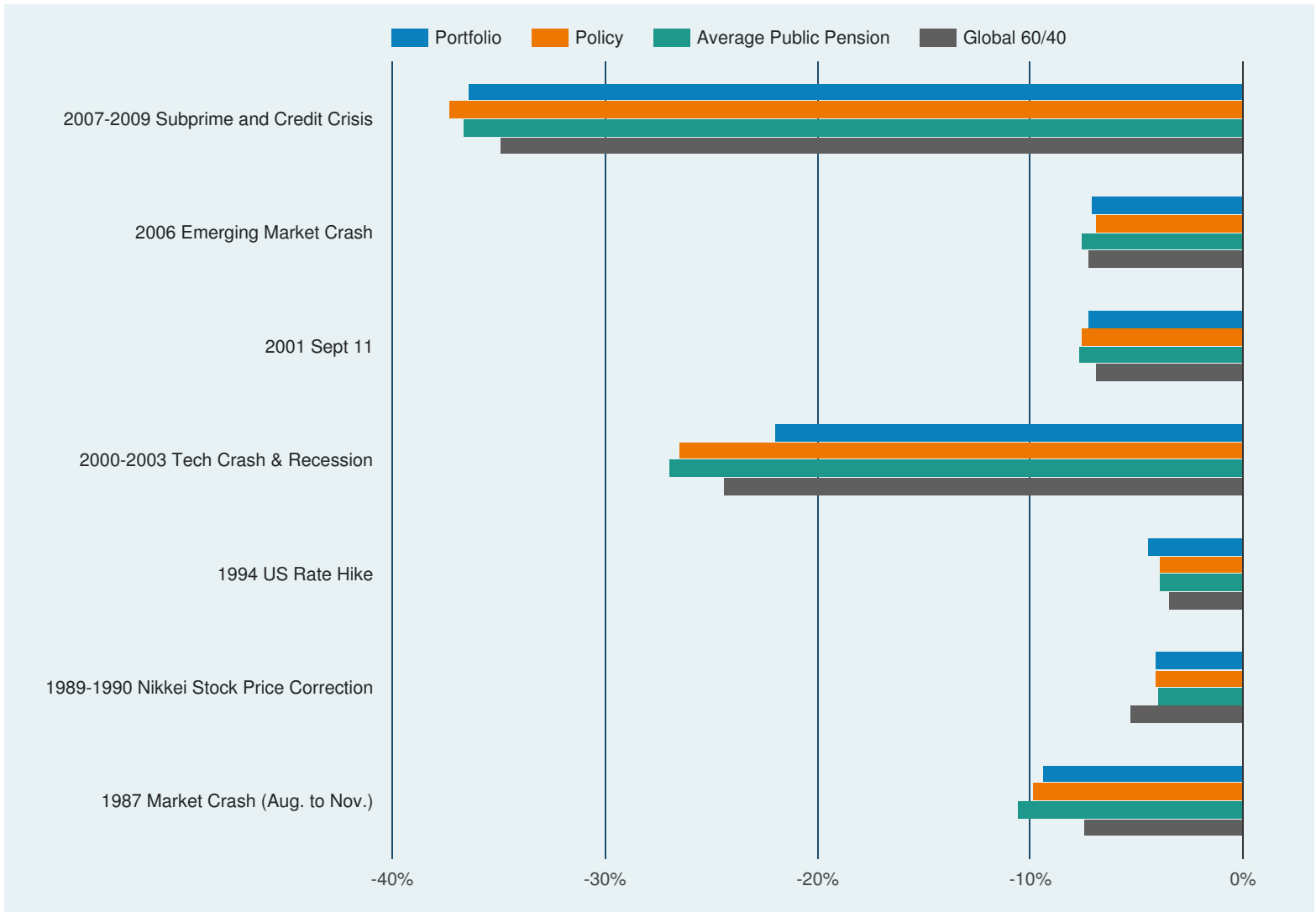
6 Exposure allocation



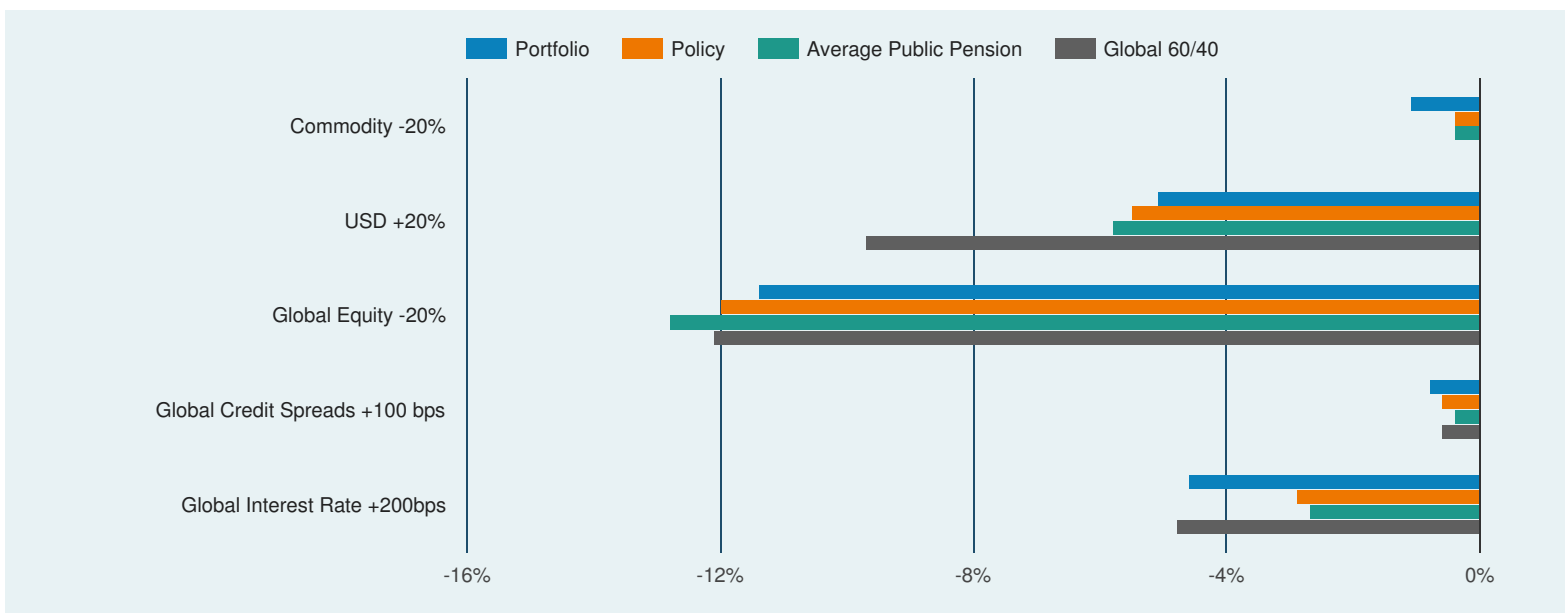
9 Risk factor weight relative to target



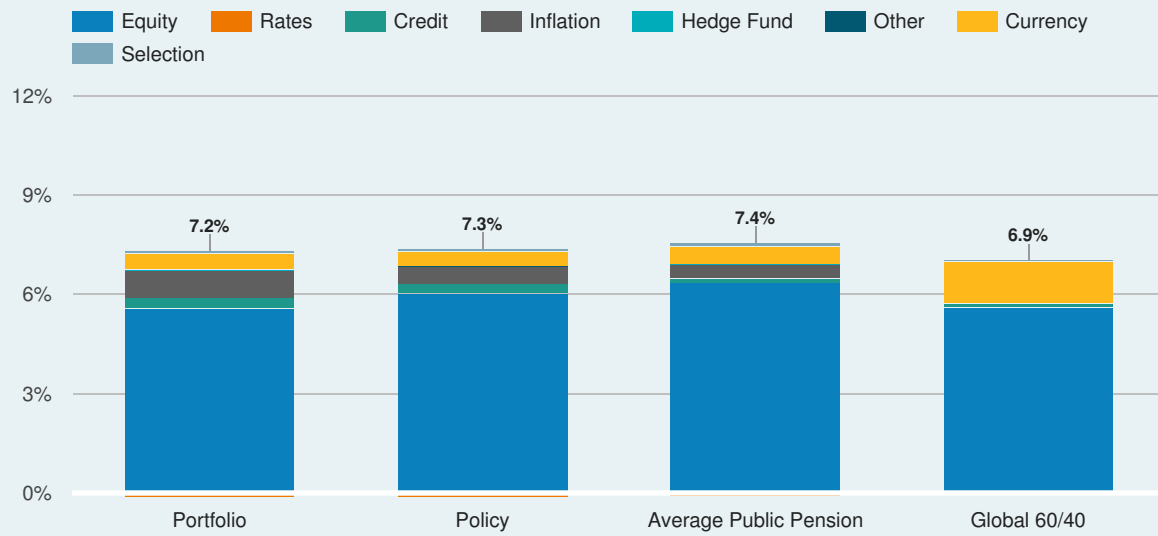
10 Tail risk - Scenario analysis



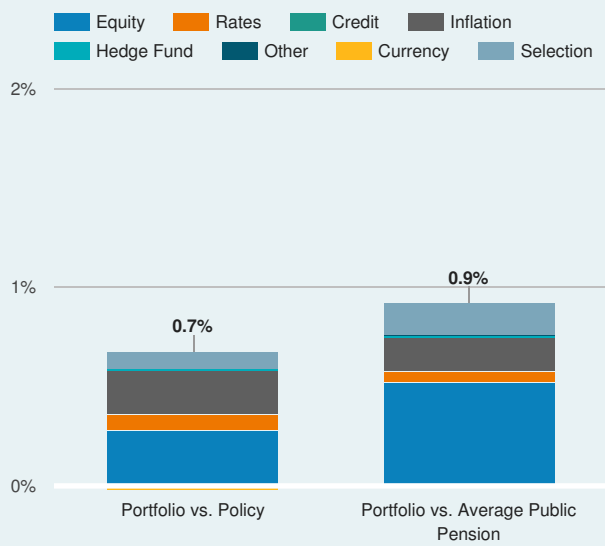
11 Tail risk - Stress tests



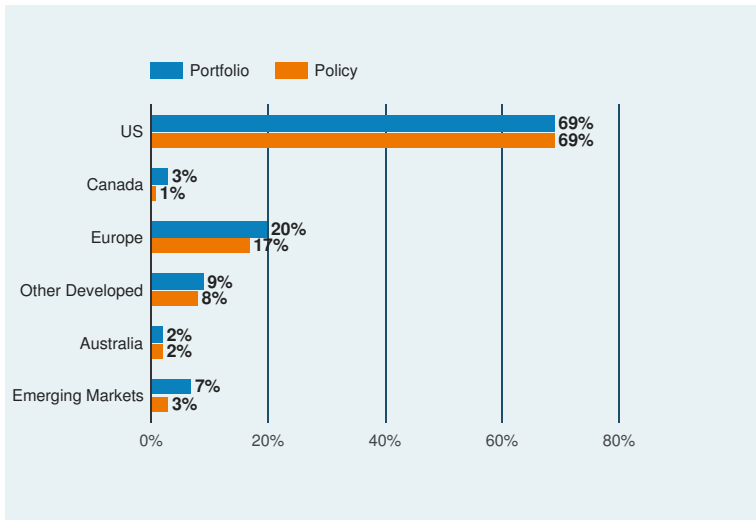
12 Risk contribution by risk factor



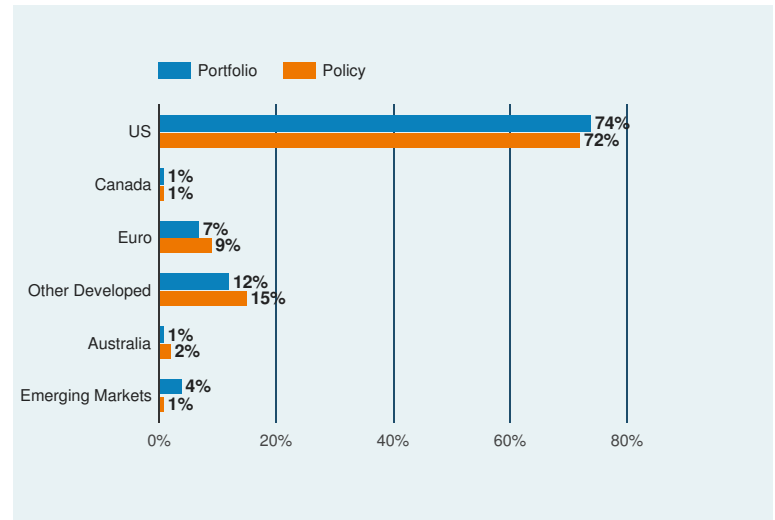
13 Active risk contribution by risk factor



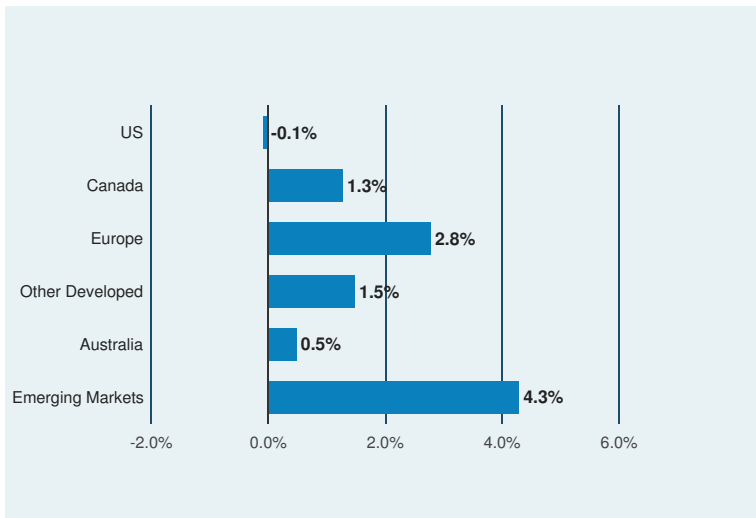
14 Geographic exposure



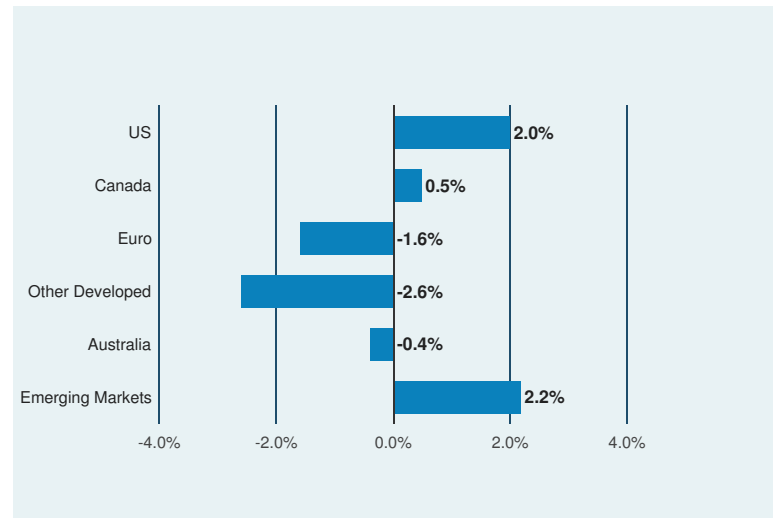
15 Currency exposure



16 Net geographic exposure



17 Net currency exposure



18 Market value summary per BarraOne

Bucket	Asset Class	Account Name	Account	Market Value (millions)
Cash	Cash	Treasury & LAIF	SAMCERA050	36.7
		General Account	SAMCERA049	20.5
Cash Total				57.2
Credit	Global Credit	PIMCO Diversified	SAMCERA064	81.1
		Franklin Templeton	SAMCERA_FRANKTEMP	40.2
	Private Credit	White Oak Yield	SAMCERA062	15.7
		TCP Direct Lending VIII	SAMCERA057	14.9
	US Credit	Brigade Capital	SAMCERA029	79.1
		Beach Point Select	SAMCERA028	50.9
Credit Total				281.8
Equity	EM Equity	Parametric Core	SAMCERA019	88.0
	Global Equity	Baillie Gifford	SAMCERA014	252.0
		Mondrian	SAMCERA017	249.8
		BlackRock EAFE Index	SAMCERA015	245.3
	Private Equity	Private Equity	SAMCERA_PE	272.0
	US Equity	BlackRock Russell 1000	SAMCERA059	767.1
		DE Shaw	SAMCERA004	168.1
		QMA US Small Cap	SAMCERA055	100.4
Equity Total				2,142.6
Hedge Fund	Fund of Funds	Aberdeen Standard GARS	SAMCERA037	93.7
	Hedge Fund	AQR DELTA XN	SAMCERA036	146.4
	Risk Parity	AQR GRP 10% Volatility	SAMCERA052	176.8
		PanAgora	SAMCERA034	171.0
Hedge Fund Total				587.9
Inflation	Commodities	SSgA Custom Real Asset	SAMCERA058	245.5
		Cushing MLP Alpha TR	SAMCERA066	77.7

	Real Estate	Invesco	SAMCERA044	264.6
		PGIM RE US Debt Fund	SAMCERA063	70.1
		Private Real Asset	SAMCERA_RA	62.2
		Invesco US Val IV	SAMCERA045	21.6
	TIPS	Brown Brothers Harriman	SAMCERA053DNU	47.6
Inflation Total				789.3
Rates	US Bonds	FIAM Bond	SAMCERA021	260.5
		BlackRock Intermediate Govt	SAMCERA060	219.7
		Western TRU	SAMCERA022	128.7
		Angelo Gordon Opportunistic	SAMCERA026	7.2
		Angelo Gordon STAR	SAMCERA027	6.6
Rates Total				622.8
Total Portfolio (millions)				4,481.6

Chart Definitions

1 Portfolio risk

Total risk comparison of Portfolio, Policy, and Peer Group. Policy is composed of: 2.0% MSCI Emerging Markets, 7.0% Bloomberg Barclays U.S. Corporate High Yield, 14.0% Bloomberg Barclays Aggregate Index, 2.0% Custom Real Asset Index, 6.0% Custom Real Asset Index, 8.0% NCREIF ODCE, 17.0% MSCI EAFE, 6.0% HFRI FOF Diversified Index, 7.0% Private Equity, 3.2% Bloomberg Barclays Global Aggregate, 4.8% MSCI World, 18.0% Russell 1000 Index, 2.0% Bloomberg Barclays U.S. Treasury: U.S. TIPS, and 3.0% Russell 2000 Index. Average Public Pension consists of: 26.0% S&P 500 Index, 4.0% MSCI ACWI IMI, 16.6% MSCI ACWI ex USA IMI, 2.6% MSCI EAFE, 3.5% MSCI EM, 1.5% Bloomberg Barclays Global Aggregate, 2.0% Bloomberg Barclays Global Treasury ex US, 17.1% Bloomberg Barclays U.S. Aggregate, 1.3% Bloomberg Barclays Emerging Markets, 7.6% HFRI FOF Index, 8.3% Private Equity, 2.0% Bloomberg Commodity Index, 6.2% NCREIF Property Index, and 1.3% Barclays U.S. Treasury Bills 1-3 Months. Average Public Pension is defined as the average allocation of > \$1b InvestorForce Public defined benefit plans. Global 60/40 is composed of 60% MSCI ACWI IMI and 40% Bloomberg Barclays Global Aggregate.

2 Portfolio equity beta

Equity risk presented by equity beta to market. Equity beta is a measure describing the sensitivity of portfolio returns with returns of the equity market (MSCI ACWI).

3 Portfolio interest rate risk - Duration

Interest rate risk presented by duration and dollar movement of portfolios. Duration of a financial asset that consists of fixed cash flows is the weighted average of the times until those fixed cash flows are received (measured in years). It also measures the percentage change in price for a given change in yields (the price sensitivity to yield). DV01 \$ (dollar duration) is the change in price in dollars of a financial instrument resulting from a one basis point change in yield.

4 Portfolio credit risk - Spread duration

Credit risk presented by spread duration and dollar movement of portfolios. Spread duration measures the percentage change in price for a one percentage point change in spreads.

5 Exposure allocation by asset class

Actual exposures to various asset classes and sub-asset classes are as allocated in investment policy and are compared vs a reference benchmark. Assignment to sub-asset classes is at the custodial account level according to manager mandate.

6 Exposure allocation

Exposure allocation among major risk buckets (rates, credit, equity, inflation, currency) and net currency exposure (domestic vs. foreign). Full Cash collateral is assumed for all derivatives.

7 Relative risk vs target by bucket

Comparative riskiness of Portfolio vs. Target on total portfolio and risk bucket levels: For example, equity bucket relative risk compares the riskiness of the Portfolio equity bucket vs the Target equity bucket.

8 Relative risk vs target by risk factor

Disregarding any specific asset class mandates and having a look through on the portfolio decomposing risk in respective risk factor contributions, this measure looks at the relative risk contributions specific factors of the portfolio vs. the reference benchmark. Formula: (factor risk contribution within portfolio / factor risk contribution within reference benchmark) - 1. "Other" includes Country factors and World factors.

9 Risk factor weight relative to target

Contribution by factor to total relative risk of the Portfolio vs the Policy: For example, Equity is equity risk contribution to Portfolio minus equity risk contribution to the Policy, divided by total risk of the Policy. The factor overweights are additive to the total relative risk at the top line. "Other" includes Country factors and World factors.

10 Tail risk - Scenario analysis

Tail risk is a form of risk measurement that considers the possibility that a market will experience losses greater than what the normal distribution would suggest. This graph shows the expected performance under various historical scenarios (described in the appendix at the end of this report). For each historical scenario, the current market value is recalculated to determine return under identical market conditions, assuming an instantaneous shock.

11 Tail risk - Stress tests

This display shows expected performance when individual risk factors are subjected to instantaneous shocks. Directly affected assets are revalued at factor level.

12 Risk contribution by risk factor

Risk contribution by risk factor. Volatility measures the price variation of a portfolio or financial instrument over time.

13 Active risk contribution by risk factor

Active risk in terms of annual tracking error: Tracking Error (TE) measures how closely a portfolio follows its benchmark. It is the standard deviation of the difference between the portfolio and benchmark returns.

14 Geographic exposure

Geographic exposures are calculated using the notional exposure as a percentage of market value, including derivatives, cash securities and currency holdings, but excluding currency derivatives. Any portfolio that uses derivatives may have a total different than 100% because both cash and derivative country exposures are included.

15 Currency exposure

Currency portfolio allocation. Currency exposures from both the underlying securities and the purchasing currency of the futures contract are included.

16 Net geographic exposure

Difference between portfolio and policy allocation among major geographic areas.

17 Net currency exposure

Difference between portfolio and policy allocation among major currencies.

18 Market value summary per BarraOne

Market Value is presented by account and risk bucket in dollars as reported by BarraOne. Some differences may exist due to timing, pricing sources and availability of information on new investments.

-
- 18 **Interest rate bucket**
Coupon yield (nominal yield) of a fixed income security is a fixed percentage of the par value that does not vary with the market price of the security. Yield to Maturity (YTM) is the interest rate of return earned by an investor who buys a fixed-interest security today at the market price and holds it until maturity. Ratings indicate credit quality of a security and the issuer's ability to make payments of interest and principal.
-
- 19 **Rates bucket - Geographic exposure**
Geographic exposures specific to the Rates bucket are calculated using the notional exposure as a percentage of market value, including derivatives, cash securities and currency holdings, but excluding currency derivatives. Any portfolio that uses derivatives may have a total different than 100% because both cash and derivative country exposures are included.
-
- 20 **Rates bucket - Currency exposure**
Currency allocation of interest rate instruments.
-
- 21 **Rates bucket - Security type**
Allocation of interest rate instruments among different security types.
-
- 22 **Credit bucket**
Various characteristics of credit instruments.
-
- 23 **Credit bucket - Geographic exposure**
Geographic exposures specific to the Credit bucket are calculated using the notional exposure as a percentage of market value, including derivatives, cash securities and currency holdings, but excluding currency derivatives. Any portfolio that uses derivatives may have a total different than 100% because both cash and derivative country exposures are included.
-
- 24 **Credit bucket - Currency exposure**
Currency allocation of credit instruments.
-
- 25 **Credit bucket - Security type**
Allocation of credit instruments among different security types.
-
- 26 **Inflation bucket**
Composition of inflation hedging instruments in portfolio and benchmark. Notional duration of real rates instruments is also included.
-
- 27 **Inflation bucket - Geographic exposure**
Geographic exposures specific to the Inflation bucket are calculated using the notional exposure as a percentage of market value, including derivatives, cash securities and currency holdings, but excluding currency derivatives. Any portfolio that uses derivatives may have a total different than 100% because both cash and derivative country exposures are included.
-
- 28 **Inflation bucket - Currency exposure**
Currency allocation of inflation instruments.
-
- 29 **Inflation bucket - Security type**
Allocation of inflation instruments among different security types.
-
- 30 **Equity bucket**
P/E ratio is a valuation ratio of a company's current share price compared to its per-share earnings. Beta measures sensitivity to Global Equities.
-
- 31 **Equity bucket - Geographic exposure**
Geographic exposures specific to the Equity bucket are calculated using the notional exposure as a percentage of market value, including derivatives, cash securities and currency holdings, but excluding currency derivatives. Any portfolio that uses derivatives may have a total different than 100% because both cash and derivative country exposures are included.
-
- 32 **Equity bucket - Currency exposure**
Currency allocation of equity assets.
-
- 33 **Equity bucket - Security type**
Allocation of equity assets among different security types.

Tail Risk Scenario Definitions

-
- 1 **2007-2009 Subprime and Credit Crisis**
(9/30/2007 - 3/4/2009) The burst of the housing bubble in mid-2007 marked the beginning of the years-long subprime mortgage crisis, rooted from the easy credit, low interest rates, and loose regulatory environment in the early 2000s, which made low quality (subprime) mortgaging extremely easy. The contagious meltdown quickly led to plunging asset prices in the financial markets, rising bankruptcies, delinquencies, and foreclosures, and central bank monetary rescues and fiscal interventions by governments around the globe.
-
- 2 **2006 Emerging Market Crash**
(5/10/2006 - 6/14/2006) A number of emerging markets, including Brazil, India, and Argentina, plunged rapidly in May 2006.
-
- 3 **2001 Sept 11**
(9/7/2001 - 9/21/2001) The U.S. stock market was closed for a week upon a series of coordinated suicide attacks upon the United States on September 11, 2001. It plunged sharply over the week upon reopening.
-
- 4 **2000-2003 Tech Crash & Recession**
(1/19/2000 - 3/12/2003) Period of crisis and slowdown for technological firms due to a rapid jump in stock prices when a speculative technology bubble began to burst, triggering a sell-off of companies. The period includes a slowdown for internet companies that went out of business as the stock market plummeted further.
-
- 5 **1994 US Rate Hike**
(1/31/1994 - 12/13/1994) In combating inflation, the U.S. Federal Reserve raised its interest rate from 3.25% in February to 5.5% in November 1994.

6 **1989-1990 Nikkei Stock Price Correction**

(12/29/1989 - 3/30/1990) After hitting the Nikkei stock index's all-time high on December 29, 1989, the Japan financial market crashed and plunged to a low in March 1990.

7 **1987 Market Crash (Aug. to Nov.)**

(8/3/1987 - 11/30/1987) The U.S. stock market began to topple on October 14, 1987 after reaching a record high. It was triggered by reports of a larger trade deficit and the elimination of the tax benefits of financing mergers. The aggravating selling pressure in October 19 from confused and fearful investors and the failing portfolio insurers' models led to a substantial global market sell-off.

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Risk Dashboard takeaways

Portfolio risk allocation to equities greater than capital allocation to equities

- Large contribution to equity risk factor typical for pension plans
- SamCERA allocation to equities less than average pension plan

Risk parity adds duration risk to portfolio through long Treasury exposure

- Adds to Diversifying portion of portfolio

Large absolute and relative inflation hedge risk factor weight

- Enhanced during 2016 asset allocation review

Appendix

Proxies

Client	account_type	Fund	Barra Model Name
San Mateo County Employees' Retirement Association	Portfolio	PGIM RE US Debt Fund	NFI ODCE PRE2 Composite
		White Oak Yield	PROXY BURGISS Private Credit Composite
		BlackRock Intermediate Govt	Bloomberg Barclays Intermediate U.S. Treasury (Ret)
		BlackRock Russell 1000	Russell 1000 Index
		SSgA Custom Real Asset	SamCERA Custom Real Asset Benchmark Composite
		TCP Direct Lending VIII	PROXY BURGISS Private Credit Composite
		QMA US Small Cap	Russell 2000 Index
		Brown Brothers Harriman	Bloomberg Barclays U.S. Treasury: U.S. TIPS (Ret)
		AQR GRP 10% Volatility	Risk Parity BMK 10 Vol Composite
		Treasury & LAIF	Bloomberg Barclays U.S. Treasury Bills: 1-3 Months (Ret)
		General Account	Bloomberg Barclays U.S. Treasury Bills: 1-3 Months (Ret)
		Invesco US Val IV	NFI ODCE PRE2 Composite
		Invesco	NFI ODCE PRE2 Composite
		Aberdeen Standard GARS	HFRI FOF Index
		AQR DELTA XN	AQR Delta XN Fund
		PanAgora	PanAgora Diversified Risk Multi-Asset Fund - Lagged 2 Months Composite
		Brigade Capital	Bloomberg Barclays U.S. Corporate High Yield (Ret)
		Beach Point Select	Bloomberg Barclays U.S. Corporate High Yield (Ret)
		Angelo Gordon STAR	Bloomberg Barclays U.S. Corporate High Yield (Ret)
		Angelo Gordon Opportunistic	Bloomberg Barclays U.S. Corporate High Yield (Ret)
		Western TRU	Bloomberg Barclays U.S. Treasury Bills: 1-3 Months (Ret)
		FIAM Bond	Bloomberg Barclays U.S. Aggregate (Ret)
		Parametric Core	MSEMMF_AD
		Mondrian	MSCI ACWI ex USA VALUE - Daily
		BlackRock EAFE Index	MSCI EAFE - Daily
		Baillie Gifford	MSCI ACWI ex USA - Daily
		DE Shaw	Russell 1000 Index
		Private Real Asset	NFI ODCE PRE2 Composite
		Private Equity	PROXY BURGISS Composite
		Franklin Templeton	Bloomberg Barclays Multiverse (Ret)
		Cushing MLP Alpha TR	Bloomberg Commodity Index - Spot Composite
		PIMCO Diversified	Bloomberg Barclays Global Credit (Ret)

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

January 23, 2018

Agenda Item 7.1

TO: Board of Retirement
FROM: Scott Hood, Chief Executive Officer
SUBJECT: April 2019 Board-Staff Retreat Topics



Recommendation

Provide direction to staff regarding the topics and schedule for the April 2019 Board-Staff Retreat.

Background

This item is to give trustees another opportunity to discuss the upcoming retreat in April. The Board assists with setting the topics to be addressed and provides input regarding the proposed presenters. Following this meeting, staff will finalize the schedule and the presenters.

Discussion

To confirm speakers, staff requests direction from the Board as to the topics, speakers and length of the retreat. Attached are proposed topic options, not in any particular order, for the Board depending upon whether it wants a one day or a two-day retreat. Regardless if the retreat is one or two days, the retreat will start with a short Board meeting consisting mainly of consent agenda items. This should take 45 minutes at most.

If the Board likes the investment topics proposed, all these topics would be presented under either a one or a two-day retreat. However, if the Board does opt for the two-day retreat, there would be additional topics as reflected on the attachment. If the Board elects the one-day retreat, the mandatory Ethics Training will occur at the March meeting. Finally, please note that the topic of SamCERA's disability process will be addressed during the Chief Legal Counsel's Report at a meeting prior to the retreat.

If you have additional topics to suggest or preference for a one day versus two-day retreat, please mention them during this agenda item.

Attachment

Draft Topics List for April 2019 Retreat

TOPICS FOR ONE-DAY AND TWO-DAY RETREATS

ONE DAY RETREAT 8:30 AM-4:00 PM

Board meeting- (consent agenda only)
High level look at the Global Economy Presenter: Ian Toner, Verus
Deep Dive Led by Mike Coultrip
When a Plan Matures Presenter: Jeff MacLean, Verus
Absolute Return Discussion Presenter: Paul Kreiselmaier, Verus

TWO-DAY RETREAT DAY ONE 9:00 AM-4:00 PM

Board meeting- (consent agenda only)
High level look at the Global Economy Presenter: Ian Toner, Verus
Deep Dive Led by Mike Coultrip
Actuarial Discussion- Topic TBD Presenter: Nick Collier, Milliman
Mandated Ethics Training (or during lunch) Presenter: Brenda Carlson

TWO-DAY RETREAT DAY TWO 9:00-1:00 (LUNCH)

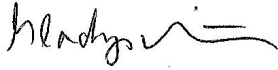
When a Plan Matures Presenter: Jeff MacLean, Verus
Absolute Return Discussion Presenter: Paul Kreiselmaier, Verus
Governance: Manager Selection Discussion Led by: TBD (Staff and Board)
A Look at SamCERA's Historical Data Presenter: Scott Hood
Team Building Activity Led by: Gladys Smith

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

January 29, 2019

Agenda Item 7.2

TO: Board of Retirement

FROM: Gladys Smith, Assistant Executive Officer 

SUBJECT: Report on Upcoming Trustee Elections and Appointments

Recommendation

This is an information-only report. No Board action is required.

Background

The Board has nine members and two alternates. Board membership includes the County Treasurer, appointees of the Board of Supervisors, and elected members chosen by the differing active and retiree SamCERA membership groups. The terms of the Board members, except the Treasurer, are for three years and are staggered.

Discussion

The terms of the elected Third Member, Mr. Al David, the Eighth Member, Mr. Paul Hackleman and Eighth Member Alternate, Ms. Alma Salas, will expire on June 30, 2019. The terms of the appointed Fifth Member and Ninth Member, currently held by Mr. Ben Bowler and Mr. Kurt Hoefler will also expire on June 30, 2019.

Election Process

The election nominating and voting process are set forth in the Board regulations which state that the County Elections Division runs the election. Regulation 4.1, provides that: "Regular Elections shall be held on the second Monday in June of the years in which the terms of elected Trustees expire." Accordingly, elections for the elected seats will be on June 10, 2019. At the February Board meeting, staff will present an election schedule developed with the County Elections Division.

Appointment Process


Staff will notify the Board of Supervisors of the two expiring appointed seats.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

January 29, 2019

Agenda Item 7.3

TO: Board of Retirement

FROM: Scott Hood, Chief Executive Officer 

SUBJECT: Report on Staff's Strategic Plan Implementation

Recommendation

Provide input to staff regarding continued implementation of SamCERA's two-year Strategic Plan for Fiscal Years 2018-19 and 2019-20.

Background

At its July 2018 Board meeting, the Board approved its Five-Year Strategic Plan. Staff continues to develop and work on strategic items identified on their two-year Strategic Plan. The heart of the plan is a matrix that provides more details about the potential actions, timing and status of each item. The Staff Strategic Plan utilizes a numbering system by fiscal year, meaning the first two digits identify items that were initiated in the fiscal year that ends in the year of the digits. For example, item 14-3 was initiated in the fiscal year that ended on June 30, 2014. The number "3" in this case is the sequence number.

Attachment "A" is the updated Strategic Plan Dashboard, which shows by quarter year, whether items have been completed and the anticipated completion period.

Discussion

In preparing the two-year plan in early 2018, staff made estimates on when particular items could be accomplished. Staff will conduct its annual retreat on February 6, 2019 and will review the items on the current strategic plan and discuss integration of the plan with the Board's Strategic Plan. Last year, staff added only one item to the plan, item 19-1, explore Microsoft's Power Business Intelligence. Staff believes there may be an opportunity to utilize the product to create business analytics to study trends in our business with our own data.

The following is a summary of the Strategic Plan items completed so far in FY 2018-2019:

15-1 Offsite Disaster Recovery

Staff worked with the County Information Services Department to replicate our production data at the County's Marshall Street Facility.

17-9 Standardize Private Equity Reporting

Full standardization of reporting will be led by industry-wide effort, most likely using a technology platform to facilitate. The adoption of AB2833 in California provided an opportunity for certain items on alternative manager fees be reported on an annual basis and in a consistent fashion

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

across alternative managers. SamCERA provided its first annual disclosure in the August 2018 Board meeting. In addition to this enhanced fee disclosure, SamCERA also now asks for the ILPA template on a quarterly basis as part of our alternative manager side letter agreements. We have had mixed results on this request but remain committed to communicating the importance of this with GP's by asking for it during our side letter negotiations.

18-2 Redundant Connection to V3

Staff successfully established a secondary method to connect to SamCERA's V3 application using a separate virtual private network connection (VPN). This connection can be utilized in the event a connection to the county is unavailable, providing that an internet connection is still available. This supports SamCERA's business continuity plan.

18-6 Equity Drawdown Solution

SamCERA is looking to take steps to reduce to volatility of the portfolio without changing the overall risk tolerance of the asset liability analysis that was completed in 2016. As part of the just-completed asset allocation review, the Board approved a new policy that included a 6% allocation (to be fund from our passive allocation) to a low volatility equity strategy. This, in addition to implementing a 50% currency hedge, will reduce the expected portfolio volatility. Staff implemented these changes to the portfolio, which should help lessen the impact of a market drawdown.


Attachment

Strategic Plan "Dashboard"

Strategic Plan Dashboard

Project Lead	ITEM	TIMING							
		FY 2018-19				FY 2019-20			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
GS	14-3 Responding to emergencies				X				
GS	14-14 Member Education			X					
TA	15-1 Offsite disaster recovery		X						
GS	16-3 Resource Management Plan				X				
GS/TC	16-12 Internal Controls				X				
GS	17-3 Social Media Policy			X					
TA/MC	17-4 Tech Solution for Investment Info			X					
MC	17-5 Enhanced Risk Analysis				X				
MC	17-9 Standardize Private Eq Reporting		X						
GS	18-1 SamCERA Office Space					X			
TA	18-2 Redundant Connection to V3		X						
GS	18-3 Retain Institutional Knowledge				X				
TA/TC	18-4 Improve GL Capability			X					
MC	18-6 Equity Drawdown Solution	X							
TA	19-1 Explore MS Power BI				X				

as of 1/29/2019


 14-series were developed for FY 2013-14.
 15-series were developed for FY 2014-15.
 16-series were developed for FY 2015-16.
 17-series were developed for FY 2016-17.
 18-series were developed for FY 2017-18
 19-series were developed for FY 2018-19



X = completion date

X = projected completion date
(ongoing project)