



Notice of Public Meeting

The Board of Retirement

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

Tuesday, June 7, 2016, 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

- 1.1 Appointment by Chair of Ad Hoc Nominating Committee for Board Officers

2. Oral Communications

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

3. Approval of the Minutes

- 3.1 Approval of Board Meeting Minutes from April 26, 2016
3.2 Approval of Board Meeting Minutes from April 27, 2016

4. Approval of the Consent Agenda*

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|--------------------------------|--------------------------------------|
| 4.1 Disability Retirements (7) | 4.2 Service Retirements |
| • Fletcher, David | 4.3 Continuances |
| • Macapagal, Linda | 4.4 Deferred Retirements |
| • Pakadaman, Shahrokh | 4.5 Member Account Refunds |
| • Strobeck, Paul | 4.6 Member Account Rollovers |
| • Welker, Irene | 4.7 Report on Prepayment of Employer |
| • Wilson, Anna | Contributions |
| • Underwood, Randy | |

5. Benefit & Actuarial Services

- 5.1 Consideration of Agenda Items, if any, Removed from the Consent Agenda
5.2 Approval of Actuarial Assumptions for the June 30, 2016 Actuarial Valuation

6. Investment Services

- 6.1 Preliminary Monthly Portfolio Performance Report for the Period Ended April 30, 2016
6.2 Quarterly Investment Performance Report for the Period Ended March 31, 2016
6.3 Report on Real Estate Annual Review
6.4 Report on Core Equity Annual Reviews
6.5 Presentation of Private Asset Semi-Annual Performance Reports as of December 31, 2015
6.6 Approval of Proposed Alternative Investment (*to be heard in Closed Session, Confidential Under Gov. Code §54956.81 and §6254.26, see item C2.*)
6.7 Report on Small-Capitalization Core Equity Manager Search
6.8 Discussion on SamCERA's Risk Tolerance and Direction to Staff
6.9 Report on Proxy Voting Summary for the Period Ended March 31, 2016

7. Board & Management Support

- 7.1 Approval of SamCERA Fiscal Year 2016-17 Budget
7.2 Approval of SamCERA's Updated Strategic Plan
7.3 Approval of a Resolution Amending the Procurement Policy
7.4 Report on SamCERA's PASS Project
7.5 Approval of Change to the July Board Meeting Date

Notice of Public Meeting

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8. Management Reports

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

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

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

9. Report on Actions Taken in Closed Session

10. Adjournment in Memory of the Following Deceased Members:

Magulac, Ruth	April 1, 2016	Hospital
Franklyn, Bernard	April 8, 2016	Aging & Adult Services
Sharp, Nellie	April 11, 2016	Courts
Volkman, Ida	April 11, 2016	Chope Hospital
Heimann, Bonita	April 14, 2016	Courts
Amores, R. E.	April 19, 2016	Social Services
Morton, Harry	April 21, 2016	Treasurer
Brewer, Shay	April 25, 2016	Human Services
Murphy, Richard	April 27, 2016	Parks
Orosco, Maxine	April 28, 2016	Superior Court
Lombardo, Joseph	April 29, 2016	General Services
Selk, Jack	May 3, 2016	Juvenile Hall
Henderson, Beatrice	May 8, 2016	Public Health
Ward, Bernice	May 10, 2016	Social Services



Scott Hood, Chief Executive Officer

Posted: June 1, 2016

(* 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
Board of Retirement

June 7, 2016

Agenda Item 1.1

TO: Board of Retirement 
FROM: Scott Hood, Chief Executive Officer
SUBJECT: Appointment by Chair of Ad Hoc Nominating Committee for Board Officers

Staff Recommendation

Appointment by the Chair of an Ad Hoc Committee to nominate Board officers for the 2016-2017 fiscal year to be presented for election at the July meeting.

Background

At the June meeting, the Chair appoints an Ad Hoc Committee to nominate Board officers for the next fiscal year. The election of Board officers takes place at the first meeting in July. Article 1 of the *Regulations of the Board of Retirement* provides for the election of three Board officers: Chair, Vice Chair and Secretary, as follows:

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

1.2. Election of Vice Chair: At the first regular meeting in July, the Board of Retirement shall elect one of its members vice chair for a term of one year or until his or her successor is duly elected and qualified. In the Chair's absence or inability to act, the Vice Chair shall take the place and perform the duties of that office.

1.3. Election of Secretary: At the first regular meeting in July, the Board of Retirement shall elect one of its members secretary for a term of one year or until his or her successor is duly elected and qualified. The Secretary shall attest to Resolutions and other such documents for the Board. In the Chair's and Vice Chair's absence or inability to act, the Secretary shall take the place and perform the duties of the Chair.

Board officers traditionally serve one-year terms. Also by tradition, the Board attempts to alternate between appointed and elected trustees in each officer position. In general, the officers tend to move up "through the steps" to eventually become Chair. Exceptions have occurred when a trustee does not serve a full term or do not continue on the Board for an additional term. (See the table below.)

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

SamCERA Board Officer History

	<u>Chair</u>	<u>Vice-Chair</u>	<u>Secretary</u>
2001-02	Bill Cottle	Tom Bryan	Bette Stuart
2002-03	Tom Bryan	Donna Colson	Alma Salas
2003-04	Donna Colson	Alma Salas	Bette Stuart
2004-05	Alma Salas	Ken Lewis	Tom Bryan
2005-06	Ken Lewis	Tom Bryan	Emily Tashman
2006-07	Tom Bryan	Emily Tashman	Bette Stuart
2007-08	Tom Bryan	Emily Tashman	Jim Hooley
2008-09	Emily Tashman	David Wozniak	Sandie Arnott
2009-10	Margaret Jadallah	Al David	Sandie Arnott
2010-11*	Al David	Sandie Arnott	Natalie Kwan Lloyd
2011-12	Al David	Sandie Arnott	Natalie Kwan Lloyd
2012-13	Sandie Arnott	Natalie Kwan Lloyd	Lauryn Agnew
2013-14	Natalie Kwan Lloyd	Lauryn Agnew	Paul Hackleman
2014-15	Lauryn Agnew	Paul Hackleman	Michal Settles
2015-16	Paul Hackleman	Michael Settles	Natalie Kwan Lloyd

*beginning October 2010

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
APRIL 26, 2016 – SPECIAL BOARD MEETING MINUTES

1604.1 **Call to Order, Roll Call and Miscellaneous Business**

Call to Order: Ms. Michal Settles, Vice Chair, called the Special Meeting of the Board of Retirement to order at 9:01 a.m.

Roll Call:

Present: Sandie Arnott, Mark Battey, Ben Bowler (arrived at 9:12 a.m.), Natalie Kwan Lloyd (arrived at 9:04 a.m.), Michal Settles, David Spinello, Alma Salas (for Paul Hackleman), Eric Tashman and Shirley Tourel.

Excused: Paul Hackleman.

Alternates present: Susan Lee.

Staff: Scott Hood, Michael Coultrip, Brenda Carlson, Gladys Smith, Tat-Ling Chow, Doris Ng, Elizabeth LeNguyen and Barbara Edwards.

Consultants: Margaret Jadallah, Stephen Quirk, John Nicolini (*Verus*).

1604.2.1 **Oral Communications from the Board:** Ms. Settles and Mr. Spinello reported their attendance at Pension Bridge. Mr. Spinello also reported he attended an educational due diligence meeting in San Francisco.

1604.2.2 **Oral Communications from the Public:** None.

1604.2.3 **Retreat Presentations:**

Mr. Hood welcomed the Board, and went over the schedule for the day. The retreat presentations began at 9:10 a.m.

Board Governance and Innovation - Ashby Monk, Executive Director, Global Projects Center, Stanford University, presented and discussed with the Board the need for innovation with regard to Institutional Investment and provided examples of internal and external innovations.

The meeting was adjourned for a 15-minute break from 10:30a.m. – 10:45 a.m.

Team Building - Ms. Smith led the members of the Board in a team building exercise.

Deep Dive - Michael Coultrip, SamCERA CIO, along with Margaret Jadallah and Stephen Quirk from Verus, provided the Board information with regards to the fund's historical portfolio performance and trends; individual manager performance; fund's risk dashboards; rebalancing activities; and liquidity analysis.

The Board adjourned for a break at 12:13 p.m. and reconvened at 12:47 p.m.

Deep Dive (continued) – Mr. Coultrip continued the deep dive discussion with the Board.

All the retreat items presented were for discussion and information only, and no action by the Board was taken. The retreat presentations were concluded at 1:15 p.m., and the following agenda items were heard in the order listed below.

1604.3.1 **Approval of Regular Board Meeting Minutes from March 22, 2016:** Ms. Settles asked if there were any changes or corrections to the Regular Board Meeting minutes from March 22, 2016, and none were noted.

Action: Ms. Kwan Lloyd moved to approve the minutes from the Regular Meeting of March 22, 2016, and the motion was seconded by Ms. Salas. The motion carried with a vote of 7-0; with trustees Arnott, Battey, Bowler, Kwan Lloyd, Salas (for Hackleman), Settles, Spinello, Tashman and Tourel all in favor; none opposed.

1604.6.1 **Preliminary Monthly Portfolio Performance Report for the Period Ending March 31, 2016:** Mr. Coultrip discussed the preliminary monthly performance report with the Board. He reported the fund's net preliminary return for March was 4.2%, while the preliminary trailing twelve-month return ending March 2016 was -0.8% net. This report was informational and for discussion only; no action was taken.

1604.7.2 **Approval of SamCERA Voting Delegates and Direction for Voting at SACRS Spring Conference:** Mr. Hood discussed the selection of SamCERA's voting delegates for the upcoming SACRS Spring Conference, May 10-13, 2016 in Costa Mesa. Staff recommended the Board designate Sandie Arnott, as the Voting Delegate, with Alma Salas as the First Delegate; and Mr. Hood as the Second Delegate Alternate.

Action: Mr. Battey moved to approve the voting delegates as proposed. The motion was seconded by Mr. Tashman and carried with a vote of 9-0, with trustees Arnott, Battey, Bowler, Kwan Lloyd, Salas (for Hackleman), Settles, Spinello, Tashman and Tourel all in favor; none opposed.

1604.7.1 **Introduction of SamCERA's 2016-17 Budget:** Ms. Chow provided the Board with an update of SamCERA's budget preparation for Fiscal Year 2016-17. This report was informational and for discussion only; no action was taken.

1604.4.0 **Approval of the Consent Agenda:** Ms. Settles asked if there were any items to be removed from the Consent Agenda. The disability application of Tully Vogt was removed, and Ms. Vogt was present. Ms. Carlson stated there was a change to the resolution attached to item 4.8 (Approval of Required Documentation for Baillie Gifford Overseas Limited's Separate Account for Investments in Indian Securities) and asked for item 4.8 to also be removed from the Consent Agenda.

Action: Ms. Salas moved to approve the remaining items on the Consent Agenda, and the motion was seconded by Mr. Spinello. The motion carried with a vote of 9-0, with trustees Arnott, Battey, Bowler, Kwan Lloyd, Salas (for Hackleman), Settles, Spinello, Tashman and Tourel all in favor; none opposed.

1604.4.1 **Disability Retirements:**

- 1) The Board found that Patrick Galindo is (1) permanently incapacitated from the performance of his usual and customary duties as a Correctional Officer, (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.
- 2) The Board found that Voytek Golda is (1) permanently incapacitated from the performance of his usual and customary duties as a Correctional Officer, (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.

1604.4.2 **Service Retirements:**

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

Member Name	Effective Retirement Date	Department
Brumfield, Duane	February 28, 2016	Sheriff's
David, Sonia	February 7, 2016	Deferred from Medical Center
Johnson, Lily	February 28, 2016	Sheriff's

Service Retirements (con't):

Member Name	Effective Retirement Date	Department
Jumper, Janice	February 16, 2016	Human Services Agency
Lillie, Mark	February 29, 2016	Deferred from District Attorney
Manjarrez, Kathleen	March 1, 2016	District Attorney
McClure, Christopher	February 27, 2016	Probation
Melendy, Laura	February 27, 2016	Probation
Narayan, Yattra	February 8, 2016	Deferred from Medical Center
Ottolini, Jennifer	February 22, 2016	Deferred from Superior Court
Pedrini, Pamela	February 27, 2016	Superior Court
Peralta, Sandra	February 22, 2016	Medical Center
Piamonte, Cesario	February 26, 2016	Probation
Sanchez, Ana	January 24, 2016	Sheriff's
Saraza, Feliciano	March 1, 2016	Deferred from Medical Center
Stanfield, Timothy	February 27, 2016	Public Works
Tsang, Raymond	February 27, 2016	Assessor's

1604.4.3 **Continuances:**

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

Survivor's Name	Beneficiary of:
Browning, Linda Marsh	Browning Jr., James
De Angelis, Antoinette	De Angelis, Gennaro
Ferree, Janet	Ferree, David
Forbes, Phillys	Forbes, Glenn
Fristup, Jean	Fristup, Carroll
O'Rourke, Marie	O'Rourke, Thomas
Overstreet, Lorraine	Sims, Lorraine
Sims-Bzoskie, Lianne	Sims, Lorraine
Springer, Richard	Springer, Gerda

1604.4.4 **Deferred Retirements:**

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

Member Name	Retirement Plan Type
Antony Anthanatt, Anupama	G4, Vested
Carr, Kacy	G4, Vested - Reciprocity
Cassidy-White, Nicole	G4, Non-Vested - Reciprocity
Espinoza, Cirilo C.	G4, Vested
Fischer, Jacqueline A.	G4, Vested
Hassel Shearer, Meaghan	G5, Non-Vested - Reciprocity
Hernandez, Hector A.	G7, Non-Vested - Reciprocity
Jimenez, Chellee L.	G4, Vested
Mahoney, Brian	G7, Non-Vested - Reciprocity
Melendrez, Jorge	G4/S4, Vested
Pasos, Addy K.	G4, Vested
Rusmisl, Benjamin	G4, Vested
Torres, Jane M.	G4, Vested
Webb, Tequila L.	P4, Vested

1604.4.5 **Member Account Refunds:**

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

Member Name	Retirement Plan Type
Bevis, Donna	G7, Non-vested
Bradshaw, Charlotte	G2/Plan 3, Vested
Chuey, Mandy	G4, Vested
Fathi, Maryam	G7, Non-vested
Flores, Lydia	G5, Non-vested
Giannini, Michael (FBO: Hope Firenze)	G4, Vested
Jurow, Jason	S4, Vested
Misculin, Guido (FBO: Lavinia Accioly)	G4/Plan 3, Vested
Misculin, Guido (FBO: Lorena Misculin)	G4/Plan 3, Vested
Misculin, Guido (FBO: Marina Misculin)	G4/Plan 3, Vested
Mroz, Matthew	S7, Non-vested
Sonntag, Roberta	G2, Non-vested
Stillwell, Debra	G7, Non-vested
Williams, Sara	G4, Vested
Zamora, Yecenia	G7, Non-vested

1604.4.6 **Member Account Rollovers:**

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

Member Name	Retirement Plan Type
Enriquez, Robert	G7, Non-vested
Hinkamp, James	G7, Non-vested
Miller, Christina	G5, Non-vested

1604.4.7 **Report on Audit Work Plan for the 2015-16 Fiscal Year Financial Audit:** The Board accepted the Financial Audit Work Plan for the fiscal year ending June 30, 2016 as outlined in the staff report.

1604.4.9 **Approval of Fiduciary Liability Insurance Policy:** The Board authorized the County's Risk Manager to renew the fiduciary liability insurance coverage with AIG (National Union Fire Insurance Company) through May 27, 2017.

1604.5.1 **Consideration of Agenda Items, if any, removed from the Consent Agenda:**

The Board adjourned into closed session at 2:28 p.m. to consider the disability application of Tully Vogt.

Mr. Bowler was excused at 2:57 p.m. and left during the closed session.

The meeting reconvened into public session at 3:07 p.m., and Ms. Carlson reported the following action, related to Ms. Vogt, taken by the Board in closed session.

Action: Ms. Carlson reported there were two motions made on this matter.

- 1) Mr. Spinello moved to grant Ms. Vogt's application for a service-connected disability retirement; and the motion was seconded by Ms. Salas. The motion failed with a vote of 4-4; with trustees Salas (for Hackleman), Settles, Spinello, and Tashman, in favor; and trustees Arnott, Battey, Kwan Lloyd and Tourel, opposed.
- 2) Ms. Arnott moved to approve staff's recommendation to refer this matter to a hearing officer for proposed findings and recommendations; and the motion was seconded by Mr. Battey. The motion carried with a vote of 6-2; with trustees Arnott, Battey, Kwan Lloyd, Settles, Tashman and Tourel, in favor; and trustees, Salas (for Hackleman) and Spinello opposed.

- 1604.4.8 **Approval of Required Documentation for Baillie Gifford Overseas Limited’s Separate Account for Investments in Indian Securities:** Mr. Hood explained that the resolution in the agenda packet was slightly changed, to meet the criteria required by SamCERA’s custodian. The revised resolution was presented in the “Day of Meeting” folder to the Board.
Action: Mr. Battey moved to approve the revised resolution authorizing investments in securities in India and authorizing the Chief Executive Officer to execute documents necessary to effectuate such investments, and the motion was seconded by Ms. Kwan Lloyd. The motion carried with a vote of 8-0; with trustees Arnott, Battey, Kwan Lloyd, Settles, Tashman and Tourel, all in favor; none opposed.
- 1604.6.2 **Educational Presentation on Mining Opportunities in Private Real Assets:** John Nicolini from Verus, provided an educational overview presentation on mining opportunities. He discussed the risks and benefits with the Board and answered questions. This presentation was informational and for discussion only; no action was taken.
- 1604.6.3 **Discussion of Proposed Alternative Investments (to be heard in Closed Session, Confidential Under Gov. Code §54956.81 and §6254.26, see item C2):** While the Board was in closed session from 3:48 p.m. to 3:56 p.m., the Board discussed Item 6.3.

 After the meeting was reconvened into public session, Ms. Carlson reported that the Board discussed item 6.3 in the closed session but that no reportable action was taken.
- 1604.7.3 **Report on Status of SamCERA’s 2016-17 Strategic Plan:** Mr. Hood presented SamCERA’s 2016-17 Strategic Plan to the Board. This report was informational and for discussion only; no action was taken.
- 1604.8.1 **Chief Executive Officer’s Report:** Mr. Hood updated the Board on the status of lease negotiations with the landlord of 100 Marine Parkway, and stated that additional space will not be sought at this time. He alerted the Board to upcoming items expected on the June 7th Board meeting agenda.
- 1604.8.2 **Assistant Executive Officer’s Report:** Ms. Smith reminded Board members to submit payment for non-recourse insurance. She also provided an update on the upcoming Board Elections and Appointments.
- 1604.8.3 **Chief Investment Officer’s Report:** Mr. Coultrip reported that staff had received the questionnaires from the small cap finalists and would be reviewing them. He also reported that he and Verus had on-site due diligence meetings with both opportunistic credit candidate managers, and that the meetings were productive.
- 1604.8.4 **Chief Legal Counsel’s Report:** None.

CLOSED SESSION

- C1 **Consideration of Disability Items, if any, Removed from the Consent Agenda:** None.
- C2 **Discussion of Proposed Alternative Investments (to be heard in Closed Session, Confidential Under Gov. Code §54956.81 and §6254.26, see item C2) –** No reportable action was taken, see item 6.3.
- 1604.9 **Report on Actions Taken in Closed Session:** See items 6.3, and 5.1.
- 1604.10 **Adjournment:** Ms. Settles adjourned the meeting at 4:14 p.m. in memory of the deceased members listed below.

Schowengerdt, Harold	March 3, 2016	Courts
Kenyon, Lana	March 11, 2016	Probation
McReynolds, Sol	March 14, 2016	Public Works
Wilcox, Dorothy	March 17, 2016	County Clerk
Scotch, George	March 19, 2016	Controller's
Hanson, Mildred	March 20, 2016	Social Services
Kato, Grayce	March 27, 2016	Human Services Agency
Schmidt, Paul	March 27, 2016	Planning & Building
Pedrini, Pamela	March 30, 2016	Superior Court
Caldwell, Karen	March 31, 2016	Superior Court
Glomb, Margaret	March 31, 2016	Library

Scott Hood
Chief Executive Officer

Kristina Perez
Retirement Executive Secretary

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
APRIL 27, 2016 – SPECIAL BOARD MEETING MINUTES

1604.1 **Call to Order, Roll Call and Miscellaneous Business**

Call to Order: Mr. Hackleman, Chair, called the Special Meeting of the Board of Retirement to order at 9:01 a.m.

Roll Call:

Present: Sandie Arnott, Mark Battey, Paul Hackleman, Natalie Kwan Lloyd, Michal Settles, David Spinello, Eric Tashman and Shirley Tourel.

Excused: Ben Bowler.

Alternates present: Susan Lee and Alma Salas.

Staff: Scott Hood, Michael Coultrip, Brenda Carlson and Gladys Smith

1604.2.1 **Oral Communications from the Board:** None.

1604.2.2 **Oral Communications from the Public:** None.

1604.2.3 **Retreat Presentations:**

Overview of the 2016 Asset/Liability Process - Margaret Jadallah, Verus and Michael Coultrip, SamCERA Chief Investment Officer provided an overview of the asset/liability study process.

Mandated Ethics Training – Brenda Carlson, SamCERA Chief Legal Counsel, gave a one-hour ethics training presentation to the Board members in accordance with AB1234.

The meeting was adjourned for a break from 10:30 a.m. to 10:45 a.m.; and the Ethics training continued until the lunch break at 11:23 a.m. The meeting was reconvened at 12:49 p.m.

Long Term Effects of Lowering the Assumed Rate of Return - Nick Collier, from Milliman, Inc. presented on this topic and answered questions from the Board.

The meeting was adjourned for a break at 2:02 p.m. and reconvened at 2:20 p.m. Mr. Spinello was excused during the break, and was gone for the remainder of the meeting.

Private Equity Valuations/Fee Transparency - Faraz Shooshani, of Verus, and David Kushner gave a presentation about transparency and fee structures of private equities. Discussion with the Board followed.

All items presented were for discussion and information only, and no action by the Board was taken.

1604.3 **Adjournment:** Mr. Hackleman adjourned the meeting at 4:01 p.m.

Scott Hood
Chief Executive Officer

Kristina Perez
Retirement Executive Secretary

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

June 7, 2016

Agenda Items 4.1- 4.6

TO: Board of Retirement

FROM: Elizabeth LeNguyen, Retirement Benefits Manager



SUBJECT: Approval of Consent Agenda Items 4.1 – 4.6

4.1 Disability Retirements

- a) The Board find that **Linda Macapagal** is (1) permanently incapacitated from the performance of her usual and customary duties as a Social Worker III, (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) The Board find that that **Shahrokh Pakdaman** is (1) permanently incapacitated from the performance of his usual and customary duties as a Revenue Collector II, (2) find that his disability was not result of an injury arising out of and in the course of his employment and (3) grant his application for a non-service-connected disability retirement.
- c) The Board find that **Paul Strobeck** is (1) permanently incapacitated from the performance of his usual and customary duties as an Information Technology Manager, (2) find that his disability was the result of an injury arising out of and in the course of his employment and (3) grant his application for a service-connected disability retirement.
- d) The Board find that **Randy Underwood** is (1) permanently incapacitated from the performance of his usual and customary duties as a Park Ranger, (2) find that his disability was the result of an injury arising out of and in the course of his employment and (3) grant his application for a service-connected disability retirement.
- e) The Board find that **Anna Wilson** is (1) permanently incapacitated from the performance of her usual and customary duties as a Staff Nurse, (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.
- f) The Board find that **Irene Welker** is (1) permanently incapacitated for the performance of her usual and customary duties as a Legal Word Processor, (2) find that her disability was not a result of an injury arising out of and in the course of her employment, (3) deny her application for a service-connected disability retirement, and (4) grant her a non-service-connected disability retirement.
- g) The Board (1) find the heart presumption contained in Government Code section 31720.5 applies (2) find that there is not sufficient evidence to rebut the presumption; (3) find that **David**

Fletcher’s employment substantially contributed to his death; and (4) grant the application for a service-connected death benefits to his surviving spouse, Kimberly Fletcher.

4.2 Service Retirements

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

Member Name	Effective Retirement Date	Department
Amborn, Susann	March 31, 2016	Aging & Adult Services
Ames, Patricia	April 1, 2016	Behavioral Health
Balestieri, Stephen	April 1, 2016	Public Works
Bautista, Glenn	April 1, 2016	Probation
Bergeson, Wendy	March 31, 2016	Deferred from Medical Center
Bertolozzi, Debra	April 1, 2016	Probation
Bobadilla, Johnny	March 31, 2016	Public Works
Cachuela, Vicente	April 1, 2016	Public Works
Cisneros, Maria T.	April 1, 2016	Medical Center
Coleman, James	March 29, 2016	Probation
Compton, Irma	April 1, 2016	Planning & Building
Contreras, Francisca	March 31, 2016	Planning & Building
Cornell, Gregory	March 26, 2016	Public Works
Crandall, Deborah	April 30, 2016	Human Services Agency
Delgado, Fernando	March 27, 2016	Medical Center
Domeniconi, John	April 1, 2016	Probation
Dominguez, Socorro	April 1, 2016	Medical Center
Downing, Judith	April 1, 2016	Human Services Agency
Duval, Kenneth	April 1, 2016	Public Works
Dwyer, Eleanor	April 1, 2016	Behavioral Health
Erdozaincy, Rose	April 1, 2016	Environmental Health
Foster, Ellis	March 31, 2016	Public Works
Gomar, Jorge	April 1, 2016	Environmental Health
Gordon-Wendt, Margie	March 31, 2016	Aging & Adult Services
Grant, Pamela	March 31, 2016	Behavioral Health

Gregory, Vaughn	March 5, 2016	Deferred from Superior Court
Halili, Ricardo	March 19, 2016	Superior Court
Hayward, Mary Linda	April 1, 2016	Sheriff's
Hinshaw, Melville	April 1, 2016	Sheriff's
Huffman, Mark	April 1, 2016	Medical Center
Hult, John	March 30, 2016	Superior Court
Innes, John	April 1, 2016	Assessor's
Javier, Goodwin	April 1, 2016	Assessor's
Javier, Susan	April 1, 2016	Human Services Agency
Jayme, Michael	April 1, 2016	Probation
Johnson, Kathryn	April 1, 2016	Sheriff's
Kataoka, Hal	March 31, 2016	Human Services Agency
Kelly, Cassandra	March 18, 2016	Human Services Agency
Keohane, Darlene	April 1, 2016	Human Services Agency
Khan, Lisa	April 1, 2016	Public Health
Lee, Henry	April 1, 2016	Sheriff's
Lent, William	April 1, 2016	Environmental Health
Lopez, Juan	March 18, 2016	Sheriff's
Low, Karin	April 1, 2016	Aging & Adult Services
Machado, Pamela	March 25, 2016	Public Health
Manuel, Noel	March 26, 2016	Public Works
Masingale, Edmon	April 1, 2016	Superior Court
Mazzetta, James	April 1, 2016	Planning & Building
McKee-Parks, Craig	April 30, 2016	Deferred from Sheriff's
Melnicoe, Shirley	April 17, 2016	Deferred from County Manager's Office
Merritt, Nancy	March 31, 2016	Deferred from Probation
Miller, Theresa	April 1, 2016	District Attorney
Mostert, Suzanne	April 1, 2016	Medical Center
Napior, Linda	March 31, 2016	Library
O'Meara, Patrick	March 26, 2016	Information Services
Perez, Alfredo	April 26, 2016	Deferred from Social Services
Pulido, Minerva	April 1, 2016	Deferred from Medical Center

Risting, Sonia	March 31, 2016	Superior Court
Romero, Elisa	March 31, 2016	Medical Center
Ruggiero, Grazia	March 31, 2016	Public Works
Sajuthi, Sri	March 26, 2016	Medical Center
Schofield, Georgette	April 19, 2016	Deferred from Sheriff's
Snead, Jill	March 31, 2016	Deferred from Medical Center
Solis, Elizabeth	April 1, 2016	Family Health
Stokes, Vicky	March 31, 2016	Information Services
Sumner, Elizabeth	March 19, 2016	Superior Court
Thaw, Robyn	March 30, 2016	Public Health
Thompson, Dorothy	March 31, 2016	Medical Center
Thoresen, Christine	April 1, 2016	District Attorney
Vallero, Maria	April 1, 2016	Aging & Adult Services
Vargas, Janie	April 1, 2016	Public Works
Velasco, Raymond	March 2, 2016	Deferred from Medical Center
Villar, Thelma	March 26, 2016	Housing
Webb, Lois	April 1, 2016	Medical Center
Williams, Lisa	March 31, 2016	Sheriff's
Williams, Vera	March 31, 2016	Family Health
Wise, Terumi	April 1, 2016	Deferred from Sheriff's
Yunker, Naomi	April 1, 2016	Medical Center
Zolotoff, Roxana	April 1, 2016	Medical Center
Zych, Peter	March 31, 2016	Medical Center

4.3 Continuances

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

Survivor's Name	Beneficiary of:
Bodey, Margaret	Bodey, Charles
Kato, Roy	Kato, Grayce
Kelly, Dana	Handley, Chantal
Kennon, Jimmie Ray Sr.	Kennon, Lana
McReynolds, Evia	McReynolds, Sol
Schowengerdt, Sandra	Schowengerdt, Harold
Vice, James	Torburn, Zora-Mae

4.4 Deferred Retirements

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

Member Name	Retirement Plan Type
Gonzalez, Gabriel A.	G7, Non-vested - Reciprocity
Gonzalez, Laura	G4, Vested
Pena, Joe M.	G7, Non-vested - Reciprocity
Pimentel, Scott M.	G4, Vested
Stolte, Stephen W.	G7, Non-vested - Reciprocity
Zaremba, Kecia N.	G4, Vested - Reciprocity

4.5 Member Account Refunds

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

Member Name	Retirement Plan Type
Asbury, Joanne	G4, Vested
Garwin, Marissa	G7, Non-vested
Langi, Maria	G7, Non-vested
Lopez, Jose	G2, Vested
Mendizabal, Maria	G4, Vested
Mendoza, Zaida	G7, Non-vested
Pedrini, Pamela (FBO: Lynn Dowding)	G4, Vested
Pedrini, Pamela (FBO: Rhoda Dowding)	G4, Vested
Sarabi, Pouya	G7, Non-vested
Segura, Tara	G4, Vested
Vergara, Luis	G4, Vested
Villa, Ricardo	G7, Non-vested

4.6 Member Account Rollovers

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

Member Name	Retirement Plan Type
Dominguez, Leslie	G4, Non-vested
Frickle, Cynthia	G7, Non-vested
Marti, Lily	G7, Non-vested
Neal, Jeanette	G5, Non-vested
Takeuchi, Burt	G4, Vested

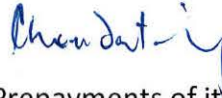
SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

June 7, 2016

Agenda Item 4.7

To: Board of Retirement

From: Tat-Ling Chow, Finance Officer



Subject: Report on County's Semi-Annual Prepayments of its Estimated Employer Contributions for Fiscal Year 2016-17

Staff Recommendation

Accept report on the County's semi-annual prepayments of its estimated employer contribution totaling \$158,255,923 for Fiscal Year 2016-17.

Background

In its actuarial valuation for June 30, 2015, Milliman Inc. recommended contribution rates for the participating employers for fiscal year 2016-17. These contribution rates were subsequently approved by this Board and the Board of Supervisors.

Discussion

Staff provided the County with an estimated prepayment amount of \$158,255,923 for its fiscal year 2016-17 employer contributions. The County intends to make two semi-annual payments that will be placed into the Advance County Contribution Account. At the end of each biweekly pay period throughout fiscal year 2016-17, the County Auditor/Controller will certify the employee biweekly payroll and attest to its required contribution amount. After validation, staff will then transfer the County's required contribution amount from the Advance County Contribution Account to the Employer Contribution Account. The remaining balance of the County Advance Payment Account at the end of each biweekly pay period will receive interest at the current annual actuarial interest rate of 7.25%.

If the prepayment received is insufficient to satisfy its annual required contribution, the County will pay the amount still owing. If the prepayment is in excess of its annual required contribution, the County may request the excess either be used as a credit towards its prepayment for fiscal year 2017-18 or be placed in the County Supplementary Contribution Account per the terms of its Memorandum of Understanding with this Board.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

June 7, 2016

Agenda Item 5.2

TO: Board of Retirement

FROM: Scott Hood, Chief Executive Officer



SUBJECT: Assumptions to be used in the June 30, 2016, Actuarial Valuation

Staff Recommendation

Provide direction to Milliman, Inc. regarding the economic actuarial assumptions to be used in the June 30, 2016 actuarial valuation.

Discussion

The Board is to provide guidance to Milliman, Inc. regarding the economic assumptions that Milliman will use in its June 30, 2016, actuarial valuation. Milliman has provided the attached slides which will be presented by Milliman's lead actuary, Nick Collier.

The most significant assumption is the assumed investment return rate. This rate is currently set at 7.25%. A Milliman poll of investment consultants' capital market expectations based on SamCERA's portfolio shows a median return for the next 10 years of about 6.6% (net of investment and administrative costs). Lowering the rate will add to the financial strength and stability of the fund by mitigating the impacts if future returns are lower than current expectations. Up for consideration is lowering the rate (along with the related inflation and wage assumption changes).

Effect on Employer and Member Contribution Rates

Milliman's presentation illustrates the impact to employer and member contribution rates for assumed rates of 6.75% and 7.0%.

For example, reducing the rate to 7.0% would result in an estimated 2.27% of payroll contribution increase for the County and an estimated 1.94% of payroll contribution increase for the San Mateo County Superior Court ("Court") and San Mateo County Mosquito and Vector Control District ("District").

It should be noted that both the County and the District have MOUs with the Board regarding supplemental funding to accelerate the reduction of their separate Unfunded Actuarial Accrued Liability ("UAAL"). Lowering the assumed investment return to 7.0% would initially increase the UAAL but with the County continuing to make the supplemental contributions. Milliman does not project a long-term slow-down in the reduction of the UAAL.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

Milliman's estimated 1.94% of payroll contribution increase for the District does not include the supplemental contribution the District made towards their UAAL last fall. Accordingly, it is anticipated that the District's rates will, in fact, decrease.

Changing these assumptions would increase the vast majority of member contribution rates by anywhere from .16% to .42%, depending on the member's plan and entry age. For non-Plan 7 members, rates may be higher for higher entry ages. Milliman provided some sample calculations in the attached presentation.

If the Board directs Milliman, Inc. to use 7.0% as the assumed investment return rate, staff recommends that the inflation assumption be set at 2.75%, the wage assumption be set at 3.25%, the COLA assumption for Plan 1 be set at 2.75%, and the COLA assumption for Plan 2 be set at 2.65%.

Attachment

Milliman, Inc. Economic Assumptions for the 2016 Valuation Presentation



Economic Assumption to be Used in June 30, 2016 Actuarial Valuation

presented by

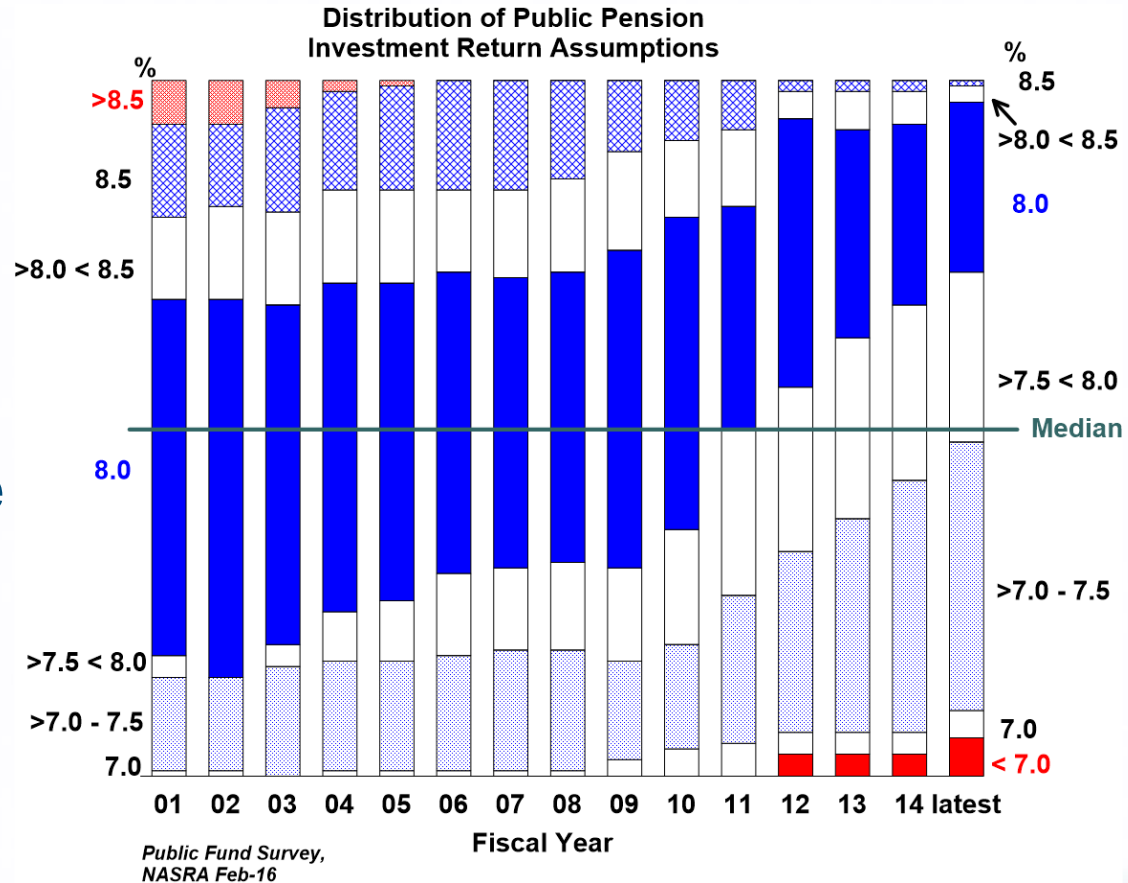
Nick Collier, ASA, EA, MAAA

June 7, 2016



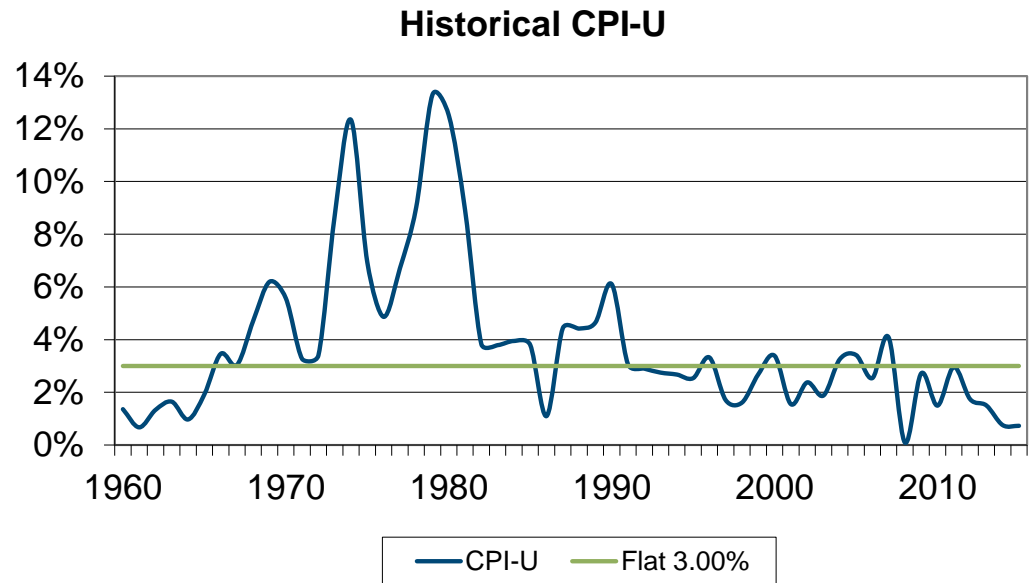
Why Movement to Lower Assumption

- Volatility
- CalPERS
- Lower Capital Market Assumptions
- Changes in Actuarial Standards of Practice



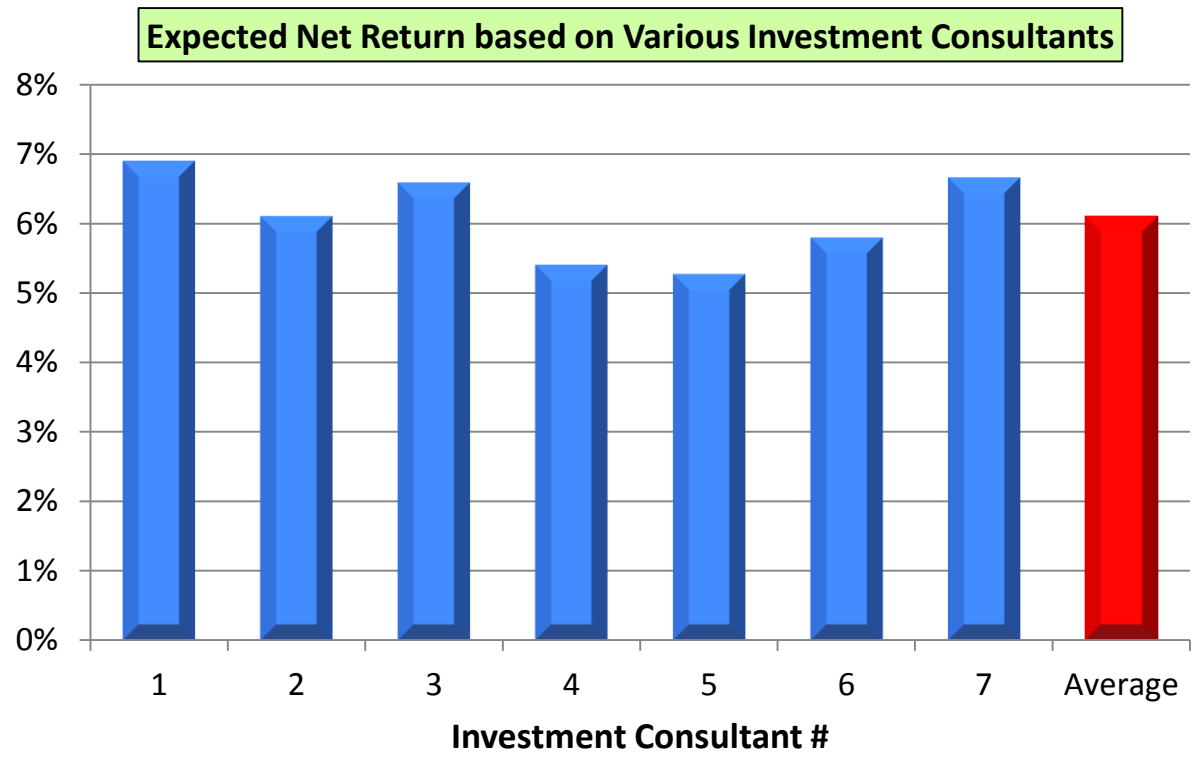
Price Inflation

- SamCERA's current assumption is 3.00%
- Historical CPI
 - 30-Year Average = 2.6%
 - 10-Year Average = 1.9%
- Forecasts
 - Implied inflation from TIPS = 1.7%
 - Investment consultants = < 2.5% (next 10 years)
 - Social Security assumptions = 2.7% (ultimate rate)
 - (range of 2.0% - 3.4%)



Investment Return Expectations

- Capital market assumptions of seven investment consultants we work with combined with SamCERA's target asset allocation
 - Net of expected investment and administrative expenses



Investment Return Expectations

- Other capital market assumptions
- Horizon Survey of Capital Market Assumptions (2015 Edition)
 - 29 respondents provided 10-year horizons
 - 10 respondents provided 20+ year horizons
- Based on SamCERA allocation:
 - Average annual expected return over 10 years is 6.6%
 - Average annual expected return over 20 years is 7.4%
- Assumes:
 - No adjustment for differences in inflation assumption
 - Net of all expenses

Actuarial Standards of Practice

- ASOP 27 governs selection of economic assumptions
 - Recent changes to ASOP 27 have tightened what is an acceptable assumption
 - “...it is not significantly optimistic or pessimistic”
- In public sector, actuaries recommend, but don't select assumptions
 - Deviation from ASOP would need to be disclosed

What if the Fund Doesn't Return 7.25%

- No change in assumption and return is less than assumed
 - Gradual increase in contribution rate
 - Slower progress toward 100% funded ratio
- Assumption is lowered and return matches assumption
 - Short-term: higher contribution rates and reverses progress toward 100% funded ratio
 - Long-term: lower contribution rates and faster progress toward 100% funded ratio

Impact of Lowering the Assumption by .25%

- Employer
 - Estimated Increase of 2.27% in contribution rate
 - Increase in NPL in GASB 68 report
- Member
 - Increase generally in 2.5% to 3.0% of base+COLA contribution rate
 - If base+COLA rate = 10.00%, increase of 0.25%- 0.30%, and new rate = 10.25% to 10.30% plus cost sharing)
 - Cost sharing piece is not affected
 - Small reduction in modified retirement optional benefit for those members that select options 2 or 4 while the rate is in effect

Impact of Lowering the Assumption by .50%

- Employer
 - Estimated Increase of 3.92% in contribution rate
 - Increase in NPL in GASB 68 report
- Member
 - Increase generally in 2.5% to 3.0% of base+COLA contribution rate
 - If base+COLA rate = 10.00%, increase of 0.25%- 0.30%, and new rate = 10.25% to 10.30% plus cost sharing)
 - Increase for Plan 2 members will be less
 - Cost sharing piece is not affected
 - Small reduction in modified retirement optional benefit for members that select options 2 or 4 while the rate is in effect

Rate Impact – Employers (0.25% Reduction)

	Statutory Contribution Rate			
	7.00%	7.25%	Increase %	Increase \$
County	34.67%	32.40%	2.27%	\$ 12,310,000
Courts	31.76%	29.82%	1.94%	\$ 396,000
SMCM&VCD	33.23%	31.29%	1.94%	\$ 31,000
Total	34.62%	32.35%	2.27%	\$ 12,737,000

Rate Impact – Employers (0.50% Reduction)

	Statutory Contribution Rate			
	6.75%	7.25%	Increase %	Increase \$
County	36.33%	32.40%	3.93%	\$ 21,312,000
Courts	33.14%	29.82%	3.32%	\$ 678,000
SMCM&VCD	34.68%	31.29%	3.39%	\$ 54,000
Total	36.27%	32.35%	3.92%	\$ 22,044,000

Rate Impact – General Members (7.00%)

Average Member Contribution Rate -- General					
Employer	Plan	COLA Share	7.00%	7.25%	Increase
County	2	0%	10.35%	10.19%	0.16%
County	2	50%	12.95%	12.73%	0.22%
Courts	2	0%	10.32%	10.16%	0.16%
County	4	0%	10.30%	10.11%	0.19%
County	4	50%	12.48%	12.25%	0.23%
Courts	4	0%	10.88%	10.69%	0.19%
SMCM&VCD	4	0%	7.58%	7.39%	0.19%
County	5	0%	8.49%	8.30%	0.19%
Courts	5	0%	9.97%	9.74%	0.23%
County	7	0%	8.13%	7.91%	0.22%
Courts	7	0%	8.13%	7.91%	0.22%
SMCM&VCD	7	0%	7.56%	7.35%	0.21%

Insignificant number of Plan 1 members in active status

Rate Impact – General Members (6.75%)

Average Member Contribution Rate - General					
Employer	Plan	COLA Share	6.75%	7.25%	Increase
County	2	0%	10.54%	10.19%	0.35%
County	2	50%	12.94%	12.73%	0.21%
Courts	2	0%	10.50%	10.16%	0.34%
County	4	0%	10.49%	10.11%	0.38%
County	4	50%	12.74%	12.25%	0.49%
Courts	4	0%	11.10%	10.69%	0.41%
SMCM\$VCD	4	0%	7.78%	7.39%	0.39%
County	5	0%	8.70%	8.30%	0.40%
Courts	5	0%	10.22%	9.74%	0.48%
County	7	0%	8.36%	7.91%	0.45%
Courts	7	0%	8.36%	7.91%	0.45%
SMCM\$VCD	7	0%	7.78%	7.35%	0.43%

Insignificant number of Plan 1 members in active status

Cost Impact – Safety Members (7.00%)

Average Member Contribution Rate -- Safety					
Employer	Plan	COLA Share	7.00%	7.25%	Increase
County	2	0%	13.55%	13.33%	0.22%
County	2	50%	18.41%	18.09%	0.32%
County	4	0%	13.76%	13.51%	0.25%
County	4	50%	19.27%	18.90%	0.37%
County	5	0%	16.74%	16.38%	0.36%
County	6	0%	14.90%	14.50%	0.40%
County	7	0%	14.01%	13.59%	0.42%

Insignificant number of Plan 1 members in active status

Cost Impact – Safety Members (6.75%)

Average Member Contribution Rate -- Safety					
Employer	Plan	COLA Share	6.75%	7.25%	Increase
County	2	0%	13.78%	13.33%	0.45%
County	2	50%	18.25%	18.09%	0.16%
County	4	0%	14.04%	13.51%	0.53%
County	4	50%	19.68%	18.90%	0.78%
County	5	0%	17.13%	16.38%	0.75%
County	6	0%	15.33%	14.50%	0.83%
County	7	0%	14.46%	13.59%	0.87%

Insignificant number of Plan 1 members in active status

Pay Period Contribution Increase Examples

@ 7% and 6.75% Assumed Rate

County General Plan 4*, entry age 36, \$3,400 bi-weekly salary

Current rate = 12.15%, @ 7.00% New rate = 12.39% \$8.16 per pp

@ 6.75% New rate = 12.64% \$16.66 per pp

County General Plan 7, \$2,915 bi-weekly salary

Current rate = 7.91%, @ 7.00% New rate = 8.13% \$6.41 per pp

@ 6.75% New rate = 8.35% \$13.12 per pp

Safety Plan 5**, entry age 31, \$4,220 bi-weekly salary

Current rate = 15.08%, @ 7.00% New rate = 15.42% \$14.35 per pp

@ 6.75% New rate = 15.77% \$29.12 per pp

Safety Plan 7, \$3,100 bi-weekly salary

Current rate = 13.59%, @ 7.00 % New rate = 14.01% \$13.02 per pp

@ 6.75% New rate = 14.46% \$26.97 per pp

*Includes 3% Cost Share and 50% COLA share

**Includes 3% Cost Share and 50% COLA share

Other Assumptions

- We recommend the following if a 6.75%/7.00% return assumption is adopted:
 - Price Inflation = 2.5%/2.75% (reduced from 3.0%)
 - General Wage Growth = 3.0%/3.25% (reduced from 3.5%)
 - Payroll Growth = 3.0%/3.25% (reduced from 3.5%)
 - COLA Plan 1 = 2.5%/2.75% (reduced from 3.0%)
 - COLA Plan 2 = 2.5%/2.65% (reduced from 2.65%)
 - COLA Plan 3 = N/A
 - COLA Plans 4, 5, 6 & 7 = 1.9%/1.9% (no change)

Questions



SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

June 7, 2016

Agenda Item 6.1

TO: Board of Retirement 
FROM: Michael Coultrip, Chief Investment Officer
SUBJECT: Preliminary Monthly Portfolio Performance Report for the Period Ended April 30, 2016

Staff Recommendation

Accept the preliminary performance report dated April 30, 2016.

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 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 April was 1.3%, while the preliminary trailing twelve-month return ending April 2016 was -0.78% net. The twelve-month net return is higher than SamCERA's Total Plan Policy Benchmark return of -0.84%, but below the Actuarial Assumed Earnings Rate of 7.25%.

After large gyrations of 'risk-on' and risk-off' sentiment shifts over the past few months, the markets in April were more subdued overall. Economic data softened, leading the Fed to leave the federal funds rate unchanged during its April meeting. The resulting dovish language in the Fed statement also lowered market expectations for a June rate cut. The broad U.S. equity market was slightly higher during the month, with the S&P 500 Index up just under 0.4%.

International equity indices were also higher on the month, with developed markets (as measured by MSCI EAFE) up 2.9% and emerging markets up 0.5%. In addition, commodities rallied 8.5% as the price of oil rallied sharply in April. WTI crude oil finished the month at just under \$46 per barrel, up 20%.

The U.S. Treasury yields were slightly higher in April, with the 10-year Treasury rate higher by 5 basis points. The general U.S. fixed income market return was higher by 0.4%. Credit spreads tightened again during the month, leading the high yield market higher by 3.9%, while emerging debt returned 1.8%.

Attachments

- A. Verus April 2016 Capital Markets Update
- B. Northern Trust Performance Report



PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS

APRIL 2016

Capital Markets Update

Market commentary

ECONOMIC CLIMATE

- First quarter real GDP growth was 0.5%. Economic growth was boosted by personal consumption expenditures for services, while non-residential fixed investment was the biggest detractor. Second quarter growth is expected to be better, which is forecasted at 1.7% by the Atlanta Fed's GDP Now.
- In line with market expectations, the Fed left interest rates unchanged at its April meeting, acknowledging that U.S. economic growth has slowed. The probability of a rate hike in June is now below 10% based on Fed Fund futures prices.
- The labor market showed a more moderate pace of hiring in April as the economy added 160,000 jobs, the fewest in seven months. The unemployment rate remained unchanged at 5.0% and the labor participation rate fell 0.2% to 62.8%.

DOMESTIC EQUITIES

- The S&P 500 traded within a relatively narrow range in April and ended the month with a 0.4% total return.
- A bounce in oil prices provided a tailwind for the energy sector of the S&P 500, which returned 8.7% in April, making it the best performing sector. Materials (4.9%) and financials (3.4%) were the next best performing sectors. Information technology (-5.4%) and utilities (-2.4%) were the biggest detractors from index performance.
- As of month-end, 62% of companies in the S&P 500 had reported Q1 earnings, and 74% of those companies beat the mean earnings estimate. However, upside earnings surprises may be the result of low expectations. The blended earnings decline is now -7.6%, compared to the -8.5% estimate at the end of March.

DOMESTIC FIXED INCOME

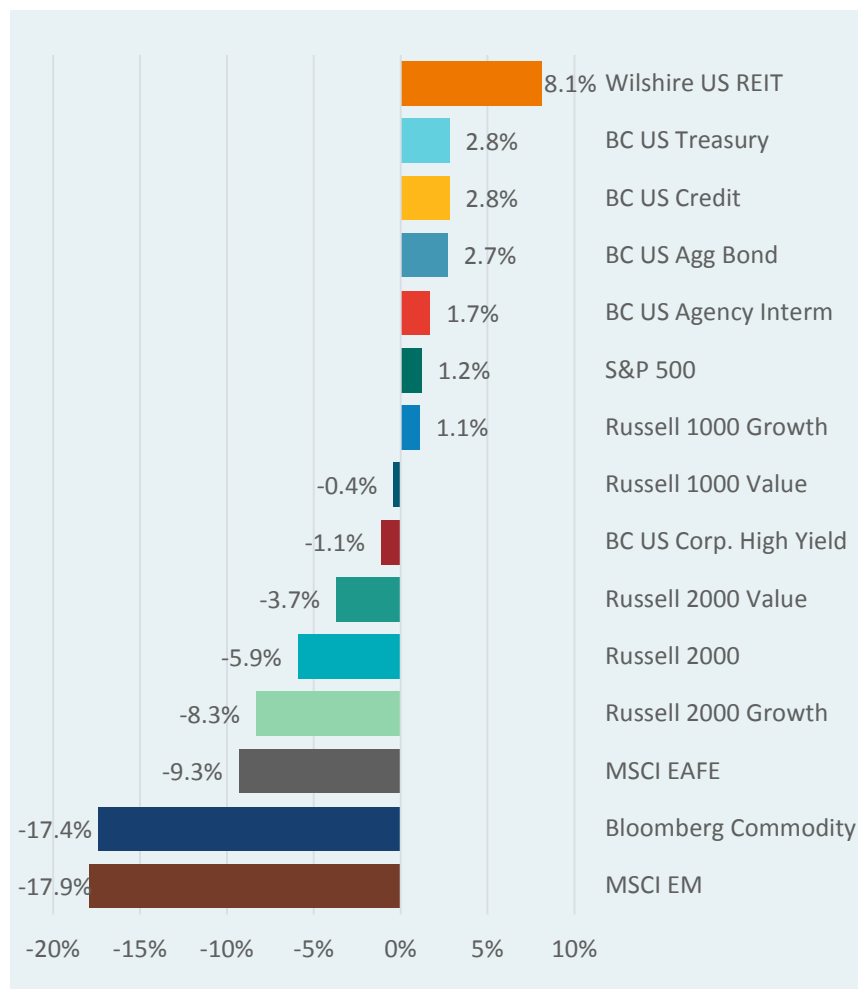
- Treasury rates were mostly stable in April, although the yield curve steepened slightly. The 10-year yield increased 5 bps to finish the month at 1.83%.
- The credit rally continued in April as spreads compressed for the second consecutive month. Option-adjusted spreads for investment-grade and high yield decreased 21 and 36 bps, respectively.
- For a second straight month, the Barclays High Yield Index was one of the best performing fixed income sectors, returning 3.9%.

INTERNATIONAL MARKETS

- Eurozone real GDP growth for the first quarter was 0.6%, which was above expectations of 0.4%. However, the region fell back into deflation as consumer prices declined 0.2% in April.
- Markets were expecting additional stimulus from the Bank of Japan at its April meeting in light of a strengthening yen and low inflation. However, the BOJ chose to keep policy unchanged and will continue to monitor the impact of monetary easing.
- Performance of emerging market equities slowed in April following a sharp rally last month. The MSCI Emerging Markets index returned 0.5%. However, emerging markets in Latin America continued to rally and returned 6.0% (MSCI EM Latin America), making it one of the best performing equity markets in April.

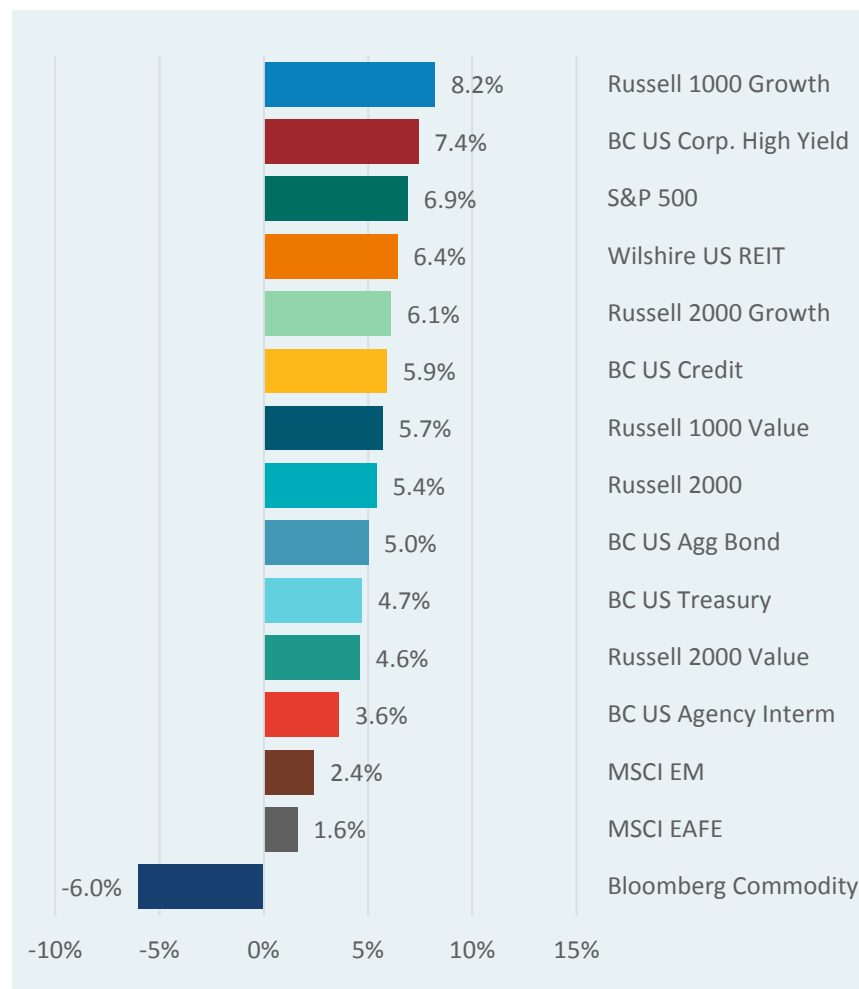
Major asset class returns

ONE YEAR ENDING APRIL



Source: Morningstar, as of 4/30/16

TEN YEARS ENDING APRIL



Source: Morningstar, as of 4/30/16

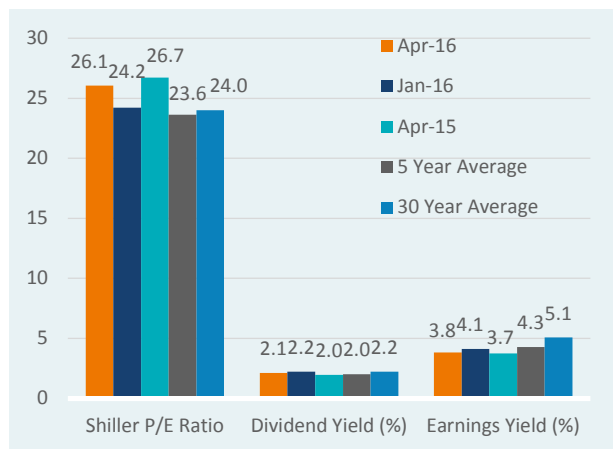
U.S. large cap equities

- Large cap equities were mostly steady during the month as realized volatility has subsided since the beginning of the year. The S&P 500 returned 0.4% in April.
- Corporate earnings have been mixed so far. As of April 29th, 74% of companies that had reported beat mean earnings estimates and 55% beat sales estimates. However, the blended earnings decline is -7.6%. According to FactSet, earnings are not

expected to turn positive until Q3 2016.

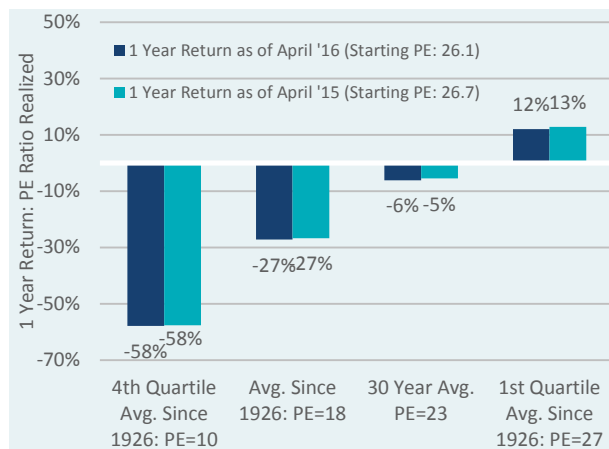
- The S&P 500 Shiller P/E ratio increased for the second straight month to 26.1. The Shiller has fallen over the past year from 26.7 to 26.1, and is currently above its 30-year average of 24.0.
- The forward 1-year P/E ratio for the S&P 500 fell slightly from 18.5 to 18.3.

US LARGE CAP (S&P 500) VALUATION SNAPSHOT



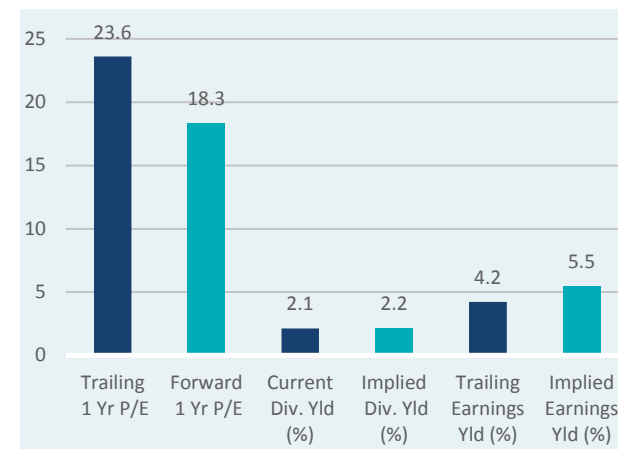
Source: Yale/Shiller, as of 4/30/16

EFFECTS OF CHANGES IN SHILLER PE RATIO



Source: Yale/Shiller, Verus

S&P 500 VALUATION SNAPSHOT



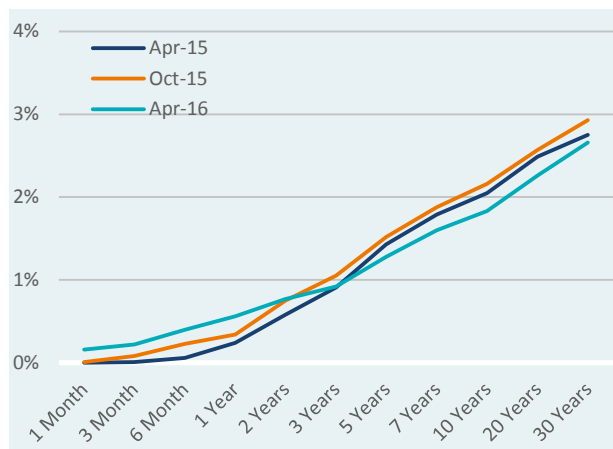
Source: Standard & Poor's, as of 4/30/16

Fixed income

- The U.S. Treasury yield curve was mostly unchanged during the month. Short-term rates fell slightly while longer-term rates increased by a small amount, resulting in a modest steepening of the curve.
- The high yield market showed one of the best domestic returns for the second consecutive month as spreads continued to tighten. The BC High Yield Index returned 3.9%.

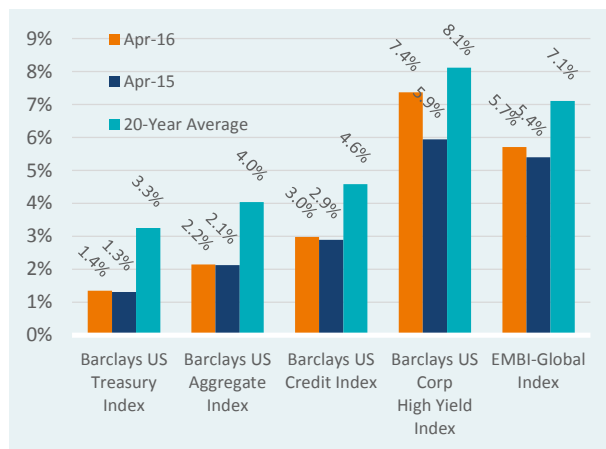
- Market inflation expectations picked up in the U.S. again in April. The 5-year and 10-year TIPS breakeven inflation rates rose 11 bps and 9 bps, respectively. Consumer inflation expectations have picked up as well since the beginning of the year. According to the University of Michigan survey, consumers expect prices to rise by 2.8% over the next 12 months.

U.S. TREASURY YIELD CURVE



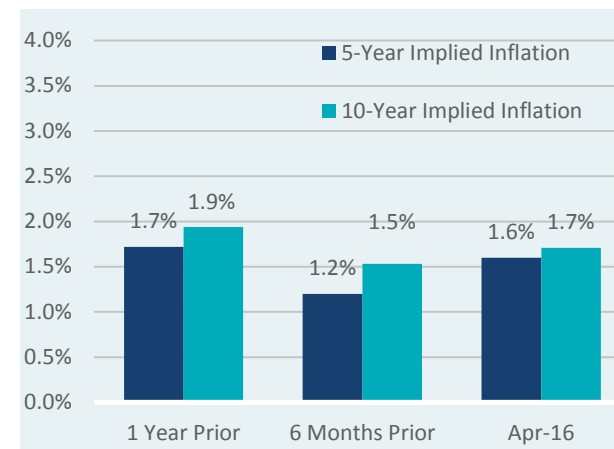
Source: Federal Reserve

NOMINAL FIXED INCOME YIELDS



Source: Ibbotson, JP Morgan

IMPLIED INFLATION (TIPS BREAKEVEN)

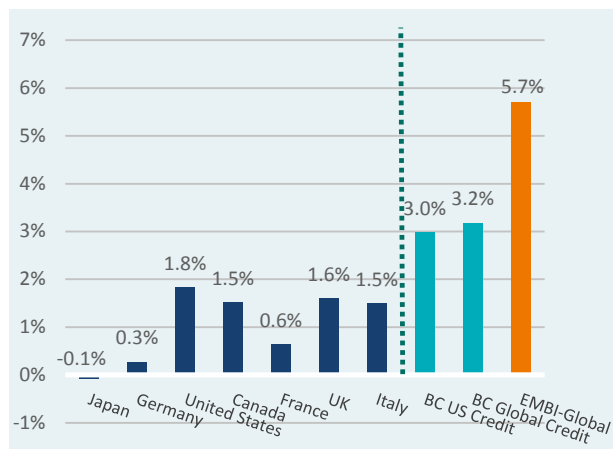


Source: Federal Reserve, as of 4/30/16

Global markets

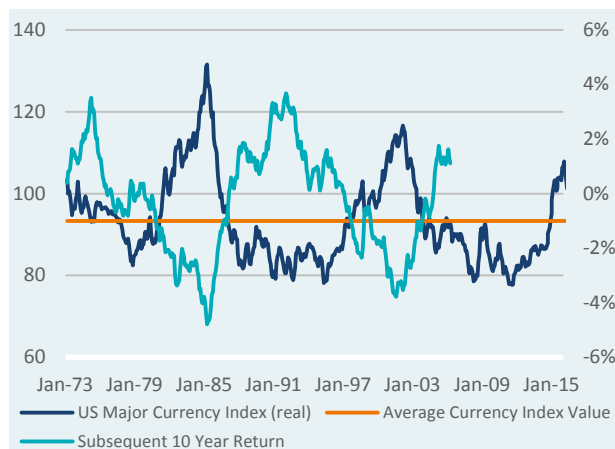
- International developed markets (MSCI EAFE +2.9%) outperformed both domestic markets (S&P 500 +0.4%) and emerging markets (MSCI EM +0.5%) in April.
- With the exception of Japan, global sovereign yields rose in April for the first time in four months. Yields on Japanese government bonds were pushed further into negative territory.
- The possibility of a U.K. exit from the European Union continues to weigh on European markets. According to a recent poll the leave voters have a slight edge at 45%, compared to 44% for stay voters, while 11% remain undecided.
- The dollar weakened for the third straight month with the U.S. Dollar Major Currency Index falling 2.3% in April.

GLOBAL SOVEREIGN 10 YEAR INDEX YIELDS



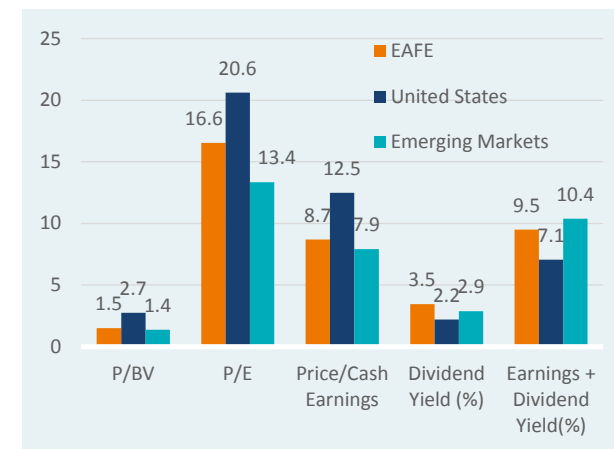
Source: Bloomberg, JP Morgan, as of 4/30/16

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 4/30/16

MSCI VALUATION METRICS (3 MONTH AVERAGE)



Source: MSCI, as of 4/30/16

Style tilts: U.S. large value vs. growth

- Value stocks outperformed growth stocks in April for the second consecutive month as the Russell 1000 Value Index and Russell 1000 Growth Index returned 2.1% and -0.9%, respectively.
- The relative P/E ratio of value to growth stocks was 0.87 at the end of April, which increased from 0.81 in the previous month. The recent outperformance of value stocks have pushed this metric above its long-

term average of 0.76.

- While value stocks have outperformed year-to-date by 4.0%, growth stocks provided a better risk-adjusted return over nearly all time periods examined relative to value stocks, except over the very long-term (20 years).

RELATIVE PE RATIO OF U.S. VALUE VS. GROWTH



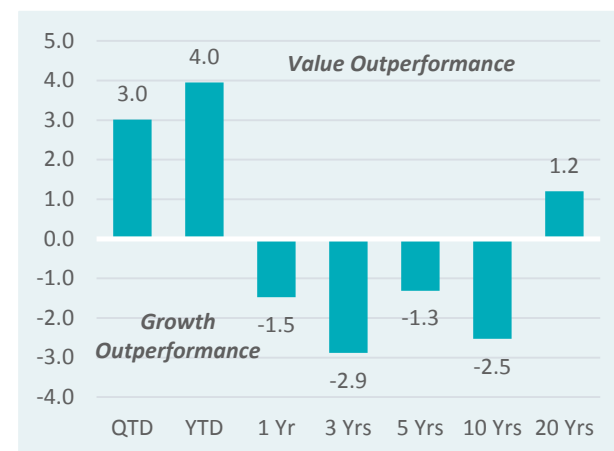
Source: Russell, Bloomberg, as of 4/30/16

U.S. VALUE VS. GROWTH ABSOLUTE PERFORMANCE

	RUSSELL 1000 GROWTH ANNUALIZED RETURN TO DATE %	RUSSELL 1000 VALUE ANNUALIZED RETURN TO DATE %
QTD	(0.9)	2.1
YTD	(0.2)	3.8
1 YEAR	1.1	(0.4)
3 YEARS	12.5	9.6
5 YEARS	11.4	10.1
7 YEARS	16.3	15.0
10 YEARS	8.2	5.7
20 YEARS	7.2	8.4
	SHARPE RATIO	SHARPE RATIO
3 YEARS	1.05	0.83
5 YEARS	0.90	0.79
7 YEARS	1.20	1.09
10 YEARS	0.46	0.29
20 YEARS	0.27	0.40

Source: Morningstar, as of 4/30/16

U.S. VALUE VS GROWTH RELATIVE PERFORMANCE

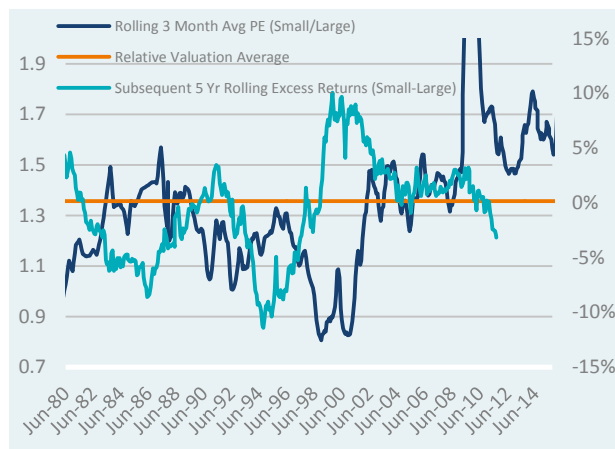


Source: Morningstar, as of 4/30/16

Style tilts: U.S. large vs. small

- Small cap equities outperformed large cap equities for the second consecutive month, but have still underperformed year-to-date. The Russell 2000 Index and Russell 1000 Index returned 1.6% and 0.5%, respectively.
- The relative P/E ratio of small to large cap equities at the end of April was 1.81, well above its long-term average of 1.37, suggesting small cap stocks are relatively overvalued.
- Besides the current quarter, the Russell 1000 Index has outperformed the Russell 2000 Index on an absolute and risk-adjusted basis in every time period examined over the last 20 years.

RELATIVE PE RATIO OF U.S. SMALL VS. LARGE



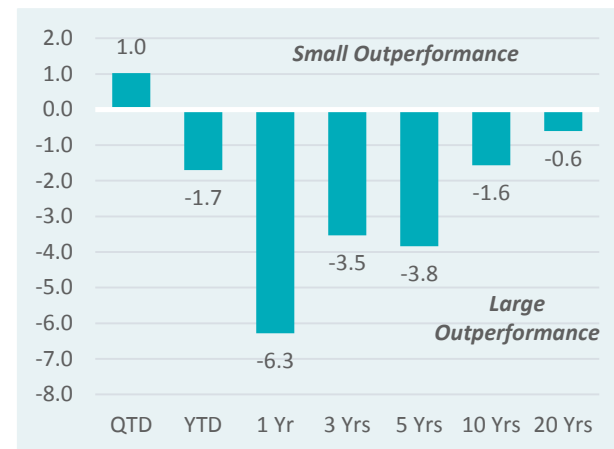
Source: Russell, Bloomberg, as of 4/30/16

U.S. LARGE VS. SMALL ABSOLUTE PERFORMANCE

	RUSSELL 1000 INDEX ANNUALIZED RETURN TO DATE %	RUSSELL 2000 INDEX ANNUALIZED RETURN TO DATE %
QTD	0.5	1.6
YTD	1.7	0.0
1 YEAR	0.3	(5.9)
3 YEARS	11.1	7.5
5 YEARS	10.8	7.0
7 YEARS	15.6	14.3
10 YEARS	7.0	5.4
20 YEARS	8.1	7.5
	SHARPE RATIO	SHARPE RATIO
3 YEARS	0.96	0.49
5 YEARS	0.87	0.42
7 YEARS	1.17	0.80
10 YEARS	0.38	0.22
20 YEARS	0.37	0.26

Source: Morningstar, as of 4/30/16

U.S. SMALL VS. LARGE RELATIVE PERFORMANCE



Source: Morningstar, as of 4/30/16

Commodities

- Commodities continued to rally in April as the Bloomberg Commodity Index returned 8.5%. Once again, a weaker U.S. dollar provided a tailwind for commodity prices.
- The price of oil increased sharply in April. WTI crude oil finished the month at \$45.92 per barrel, up 19.8%. However, U.S. commercial crude oil inventories sustained an upward trend, adding 13.5 million barrels.

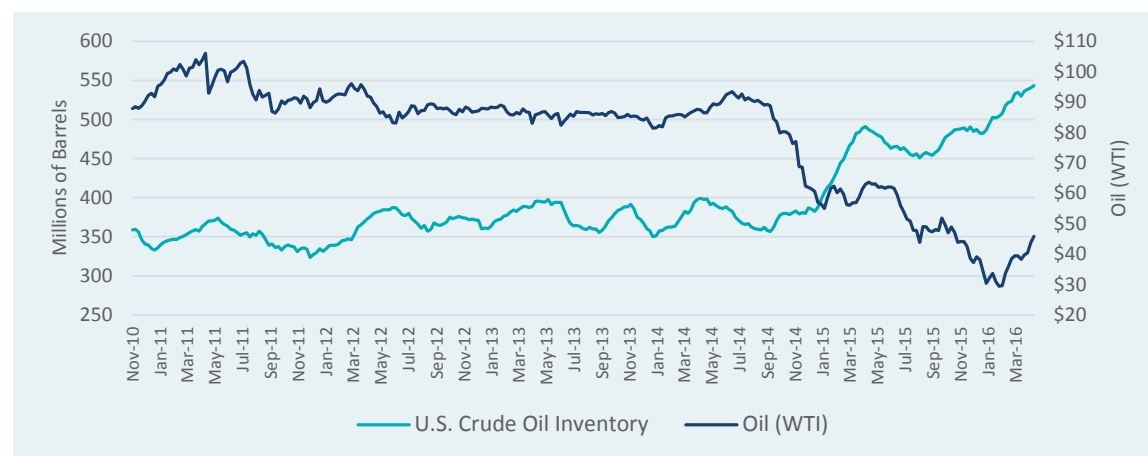
- Petroleum (14.8%) and energy (13.4%) were the best performing Bloomberg Commodity Index sub-sectors in April. Livestock (-3.5%) was the only sub-sector that finished the month with a negative return.

INDEX AND SECTOR PERFORMANCE

	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	8.5	9.0	(17.4)	(13.8)	(13.3)	(6.0)
Bloomberg Agriculture	7.0	7.8	0.3	(9.8)	(9.3)	0.4
Bloomberg Energy	13.4	2.9	(39.8)	(27.6)	(23.0)	(19.7)
Bloomberg Grains	8.6	8.7	(0.6)	(11.9)	(8.5)	1.0
Bloomberg Industrial Metals	7.2	9.6	(21.5)	(9.7)	(13.2)	(5.4)
Bloomberg Livestock	(3.5)	(2.4)	(13.7)	(2.9)	(4.2)	(6.0)
Bloomberg Petroleum	14.8	8.3	(39.2)	(26.1)	(19.6)	(12.5)
Bloomberg Precious Metals	7.3	23.7	9.0	(6.1)	(8.2)	5.3
Bloomberg Softs	2.2	1.2	(1.9)	(10.5)	(15.0)	(4.6)

Source: Morningstar, as of 4/30/16

WTI CRUDE OIL VS. U.S. TOTAL CRUDE OIL INVENTORY



Source: Bloomberg, as of 4/30/16

Appendix

Periodic table of returns

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	YTD	5-Year	10-Year
Commodities	74.8	16.6	38.4	23.2	35.2	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	10.1	9.0	11.9	8.2
Emerging Markets Equity	32.9	8.1	37.8	23.1	32.9	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	6.3	11.4	7.6
60/40 Global Portfolio	26.3	6.4	37.2	22.4	31.8	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	4.0	10.8	7.0
Small Cap Value	23.8	4.4	31.0	21.6	30.5	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	3.9	10.1	6.1
Large Cap Value	19.3	3.2	28.5	21.4	22.4	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	3.8	7.1	5.7
US Bonds	18.9	2.6	25.7	16.5	16.2	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	3.4	7.0	5.4
Real Estate	18.1	0.4	19.6	14.4	13.9	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	2.2	6.8	5.0
Large Cap Equity	13.4	-1.5	18.5	11.3	12.9	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	1.7	3.6	4.6
Cash	10.2	-1.8	15.2	10.3	10.6	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	0.1	3.6	4.4
Small Cap Equity	9.7	-2.0	11.6	9.9	9.7	-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	0.0	1.7	2.4
Large Cap Growth	3.1	-2.4	11.1	6.4	5.2	-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	-0.2	1.1	1.6
International Equity	2.9	-2.9	7.5	6.0	2.1	-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	-0.2	0.1	1.3
Hedge Funds of Funds	1.4	-3.5	5.7	5.1	-3.4	-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	-3.0	-4.6	1.0
Small Cap Growth	-1.1	-7.3	-5.2	3.6	-11.6	-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	-3.7	-13.3	-6.0

WORST

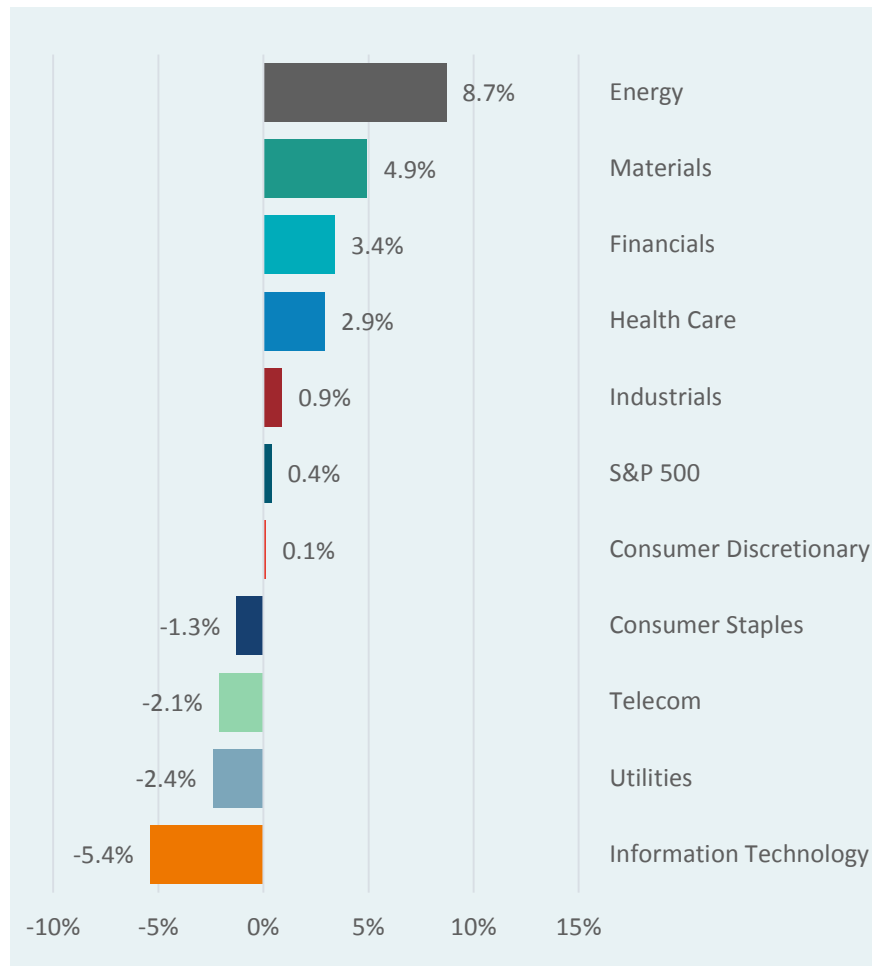
BEST

- 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% BC 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, BC Agg, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, BC Global Bond. NCREIF Property performance data as of 3/31/16.

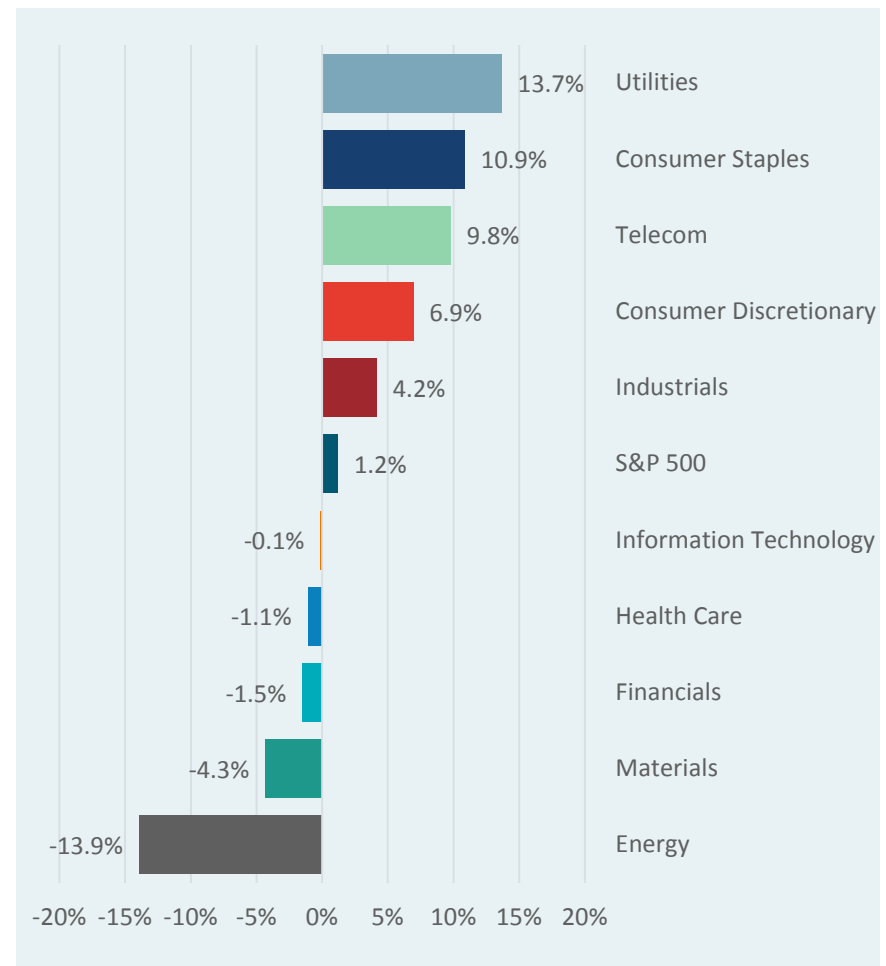
S&P 500 and S&P 500 sector returns

QTD



Source: Morningstar, as of 4/30/16

ONE YEAR ENDING APRIL



Source: Morningstar, as of 4/30/16

Detailed index returns

DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	0.4	0.4	1.7	1.2	11.3	11.0	6.9
S&P 500 Equal Weighted	1.2	1.2	4.3	(0.2)	11.6	11.0	8.2
DJ Industrial Average	0.6	0.6	2.8	2.3	8.8	9.5	7.3
Russell Top 200	0.3	0.3	1.1	1.4	11.4	11.2	6.8
Russell 1000	0.5	0.5	1.7	0.3	11.1	10.8	7.0
Russell 2000	1.6	1.6	0.0	(5.9)	7.5	7.0	5.4
Russell 3000	0.6	0.6	1.6	(0.2)	10.8	10.5	6.9
Russell Mid Cap	1.1	1.1	3.3	(2.1)	10.4	9.9	7.5
Style Index							
Russell 1000 Growth	(0.9)	(0.9)	(0.2)	1.1	12.5	11.4	8.2
Russell 1000 Value	2.1	2.1	3.8	(0.4)	9.6	10.1	5.7
Russell 2000 Growth	1.0	1.0	(3.7)	(8.3)	8.5	7.1	6.1
Russell 2000 Value	2.1	2.1	3.9	(3.7)	6.5	6.8	4.6

INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
MSCI EAFE	2.9	2.9	(0.2)	(9.3)	1.5	1.7	1.6
MSCI AC World ex US	2.6	2.6	2.2	(11.3)	(0.0)	(0.1)	1.7
MSCI EM	0.5	0.5	6.3	(17.9)	(4.6)	(4.6)	2.4
MSCI EAFE Small Cap	2.3	2.3	1.7	0.9	6.8	5.0	3.2
Style Index							
MSCI EAFE Growth	1.9	1.9	(0.2)	(5.4)	3.0	2.9	2.7
MSCI EAFE Value	3.9	3.9	(0.2)	(13.2)	(0.1)	0.5	0.5
Regional Index							
MSCI UK	3.5	3.5	1.0	(11.8)	0.3	1.5	1.8
MSCI Japan	4.6	4.6	(2.2)	(6.1)	2.5	4.9	(0.3)
MSCI Euro	1.7	1.7	(0.9)	(10.8)	2.6	(0.7)	0.6
MSCI EM Asia	(1.3)	(1.3)	0.6	(19.3)	(1.0)	(1.7)	4.2
MSCI EM Latin American	6.0	6.0	26.2	(12.7)	(13.0)	(10.6)	1.3

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
BC US Treasury US TIPS	0.3	0.3	4.8	1.1	(0.9)	2.6	4.7
BC US Treasury Bills	0.0	0.0	0.1	0.2	0.1	0.1	1.2
BC US Agg Bond	0.4	0.4	3.4	2.7	2.3	3.6	5.0
Duration							
BC US Treasury 1-3 Yr	0.0	0.0	0.9	0.9	0.8	0.8	2.5
BC US Treasury Long	(0.5)	(0.5)	7.6	5.5	4.6	9.2	8.1
BC US Treasury	(0.1)	(0.1)	3.1	2.8	1.8	3.3	4.7
Issuer							
BC US MBS	0.2	0.2	2.1	2.6	2.6	3.1	4.9
BC US Corp. High Yield	3.9	3.9	7.4	(1.1)	2.5	5.4	7.4
BC US Agency Interm	0.0	0.0	1.5	1.7	1.2	1.7	3.6
BC US Credit	1.2	1.2	5.2	2.8	2.7	4.9	5.9

OTHER

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Index							
Bloomberg Commodity	8.5	8.5	9.0	(17.4)	(13.8)	(13.3)	(6.0)
Wilshire US REIT	(2.8)	(2.8)	2.3	8.1	7.7	10.2	6.4
Regional Index							
JPM EMBI Global Div	1.8	1.8	6.9	4.3	3.1	6.3	7.4
JPM GBI-EM Global Div	2.6	2.6	13.9	(2.0)	(7.0)	(2.4)	4.9

Source: Morningstar, as of 4/30/16

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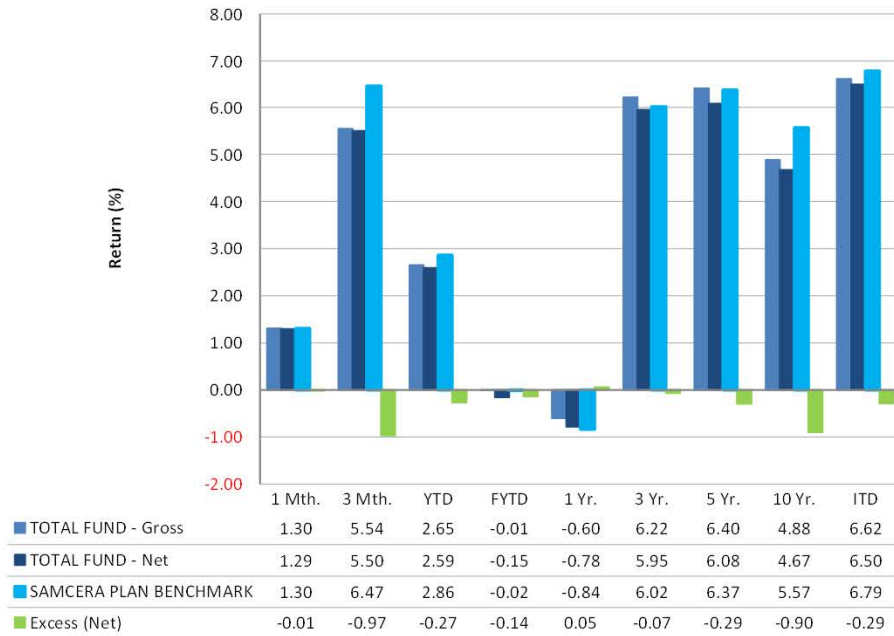
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San Mateo County Total Fund Characteristics

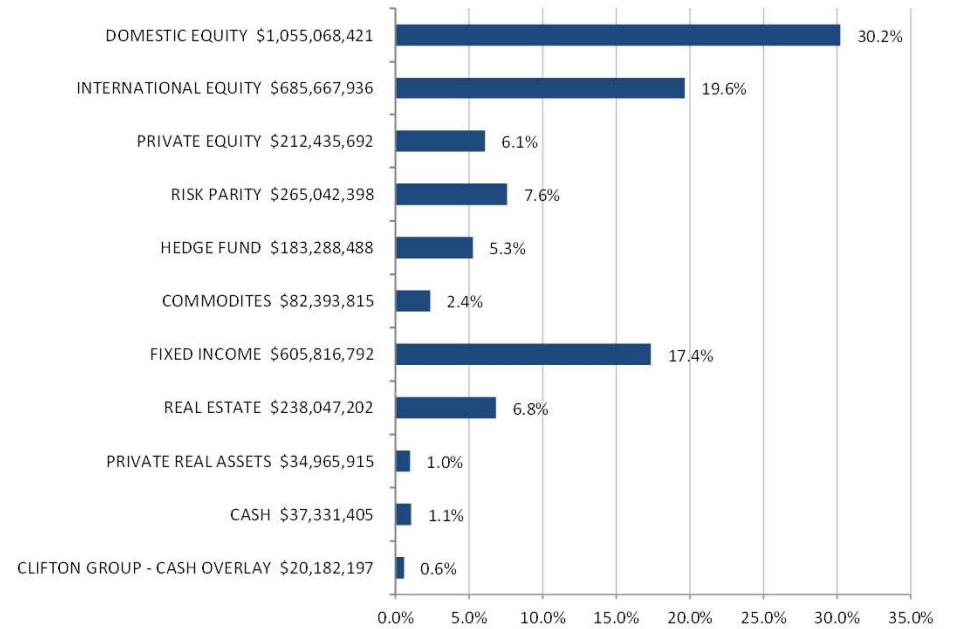


April 30, 2016

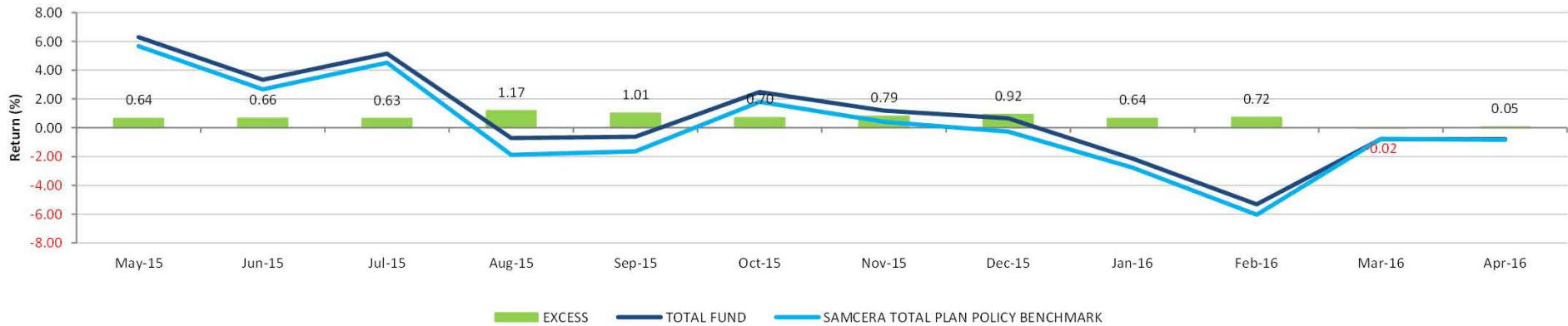
Total Fund Performance



Asset Allocation



Rolling Month End Annual Returns

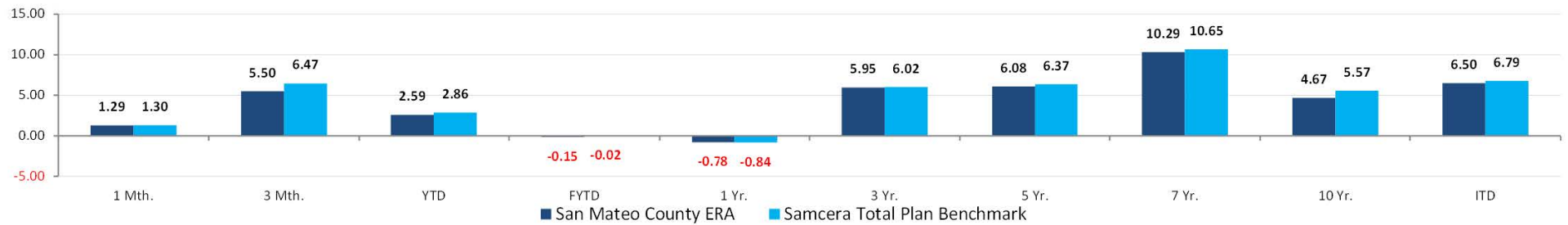


San Mateo County Composite Return Summary



April 30, 2016

Return Comparison



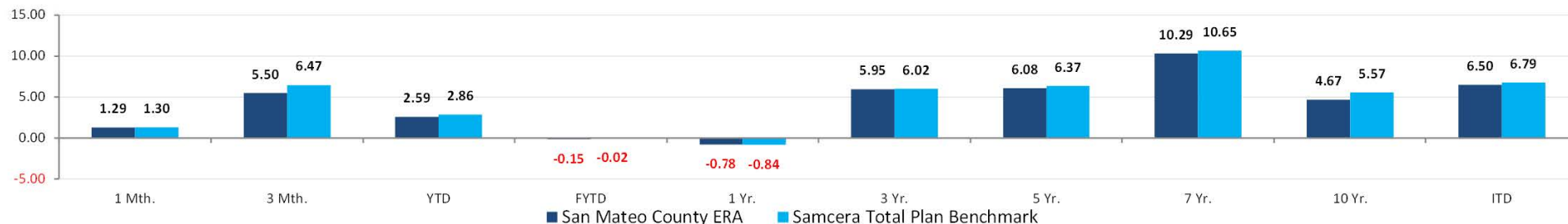
Composite Returns (Net of Manager Fees)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
San Mateo County ERA	3,489,912,452	1.29	5.50	2.59	-0.15	-0.78	5.95	6.08	10.29	4.67	6.50
Samcera Total Plan Benchmark		1.30	6.47	2.86	-0.02	-0.84	6.02	6.37	10.65	5.57	6.79
Excess		-0.01	-0.97	-0.27	-0.14	0.05	-0.07	-0.29	-0.36	-0.90	-0.29
San Mateo Ex-Clifton Overlay	3,469,730,255	1.29	5.48	2.42	-0.30	-0.93	5.83	6.03	10.22	4.53	6.43
Samcera Total Plan Benchmark		1.30	6.47	2.86	-0.02	-0.84	6.02	6.37	10.65	5.57	6.79
Excess		-0.01	-0.99	-0.44	-0.29	-0.10	-0.18	-0.34	-0.44	-1.03	-0.37
Total Equity	1,740,736,357	1.16	8.19	1.78	-2.18	-3.34	7.22	6.53	12.36	4.05	7.28
Samcera Total Equity Benchmark		1.08	8.24	1.59	-1.97	-2.74	7.93	7.28	13.36	5.45	7.79
Excess		0.07	-0.06	0.19	-0.21	-0.60	-0.71	-0.76	-1.00	-1.40	-0.51
Total Fixed Income	605,816,792	1.58	3.83	3.38	1.49	0.55	1.73	4.18	7.15	5.28	5.62
Samcera Fixed Income Benchmark		1.09	4.07	4.84	4.17	2.67	1.72	3.42	4.57	5.00	5.25
Excess		0.49	-0.24	-1.46	-2.68	-2.12	0.01	0.76	2.58	0.28	0.36
Total Risk Parity	265,042,398	1.61	6.56	7.32	-0.02	-4.68	1.26	4.62	--	--	5.50
Samcera Risk Parity Benchmark		0.53	5.42	2.43	1.95	1.22	7.48	7.91	--	--	8.18
Excess		1.09	1.14	4.89	-1.97	-5.90	-6.22	-3.29	--	--	-2.69

San Mateo County Composite Return Summary



April 30, 2016

Return Comparison



Composite Returns (Net of Manager Fees)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Total Hedge Fund Composite	183,288,488	-1.69	-3.09	-3.28	6.69	6.51	6.40	--	--	--	5.08
Samcera LIBOR + 4%		0.36	1.09	1.46	3.56	4.27	4.21	--	--	--	4.22
Excess		-2.05	-4.19	-4.75	3.13	2.23	2.19	--	--	--	0.86
Total Private Equity	212,435,692	0.20	0.69	0.12	3.66	9.64	14.56	6.63	--	--	-30.10
Samcera PE Benchmark		0.87	8.45	2.60	2.64	2.82	13.98	13.74	--	--	16.09
Excess		-0.67	-7.75	-2.48	1.02	6.82	0.58	-7.11	--	--	-46.19
Total Commodities	82,393,815	7.86	--	--	--	--	--	--	--	--	7.86
Bloomberg Commodity Index		8.51	--	--	--	--	--	--	--	--	8.51
Excess		-0.65	--	--	--	--	--	--	--	--	-0.65
Total Private Real Assets	34,965,915	14.58	--	--	--	--	--	--	--	--	14.58
Samcera CPI + 5%		0.00	--	--	--	--	--	--	--	--	0.00
Excess		14.58	--	--	--	--	--	--	--	--	14.58
Total Real Estate	238,047,202	1.33	--	--	--	--	--	--	--	--	1.33
Samcera NCREIF ODCE EW (gross)		0.00	--	--	--	--	--	--	--	--	0.00
Excess		1.33	--	--	--	--	--	--	--	--	1.33
Total Cash	37,331,405	0.03	0.09	0.11	0.27	0.32	0.46	0.53	0.68	1.07	2.10
Samcera Cash Benchmark		0.03	0.10	0.10	0.14	0.15	0.08	0.08	0.10	1.11	1.95
Excess		-0.00	-0.01	0.01	0.13	0.17	0.38	0.45	0.58	-0.04	0.14

San Mateo County Manager Return Summary



April 30, 2016

Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Total Equity	1,740,736,357	1.16	8.19	1.78	-2.18	-3.34	7.22	6.53	12.36	4.05	7.28
Samcera Total Equity Benchmark		1.08	8.24	1.59	-1.97	-2.74	7.93	7.28	13.36	5.45	7.79
Excess		0.07	-0.06	0.19	-0.21	-0.60	-0.71	-0.76	-1.00	-1.40	-0.51
Total Domestic Equity	1,055,068,421	0.69	7.50	1.14	-0.56	-0.39	10.29	9.33	14.83	5.39	8.00
Samcera Dom. Equity Benchmark		0.69	7.82	1.49	-0.94	-0.81	10.44	10.10	15.44	6.74	8.36
Excess		-0.00	-0.32	-0.35	0.38	0.42	-0.15	-0.77	-0.61	-1.35	-0.36
Total Large Cap Equity	897,516,763	0.77	7.30	1.34	1.21	1.06	11.17	10.08	14.82	5.90	8.79
Russell 1000		0.54	7.51	1.72	0.93	0.34	11.06	10.81	15.64	6.99	9.16
Excess		0.22	-0.21	-0.39	0.27	0.72	0.12	-0.73	-0.82	-1.09	-0.38
Barrow Hanley	107,372,996	2.51	7.64	0.96	-2.83	-1.36	10.13	9.78	--	--	13.29
Russell 1000 Value		2.10	9.43	3.77	0.42	-0.40	9.59	10.13	--	--	13.34
Excess		0.41	-1.79	-2.81	-3.25	-0.95	0.54	-0.35	--	--	-0.06
Blackrock S&P 500 Index Fund	564,105,640	0.39	7.06	1.75	1.97	1.34	11.32	--	--	--	12.78
S&P 500		0.39	7.05	1.74	1.89	1.21	11.26	--	--	--	12.73
Excess		0.00	0.01	0.01	0.08	0.13	0.06	--	--	--	0.06
Brown Advisory	110,188,448	0.33	6.40	-1.06	1.09	2.46	10.40	--	--	--	10.40
Russell 1000 Growth		-0.91	5.72	-0.18	1.46	1.07	12.47	--	--	--	12.47
Excess		1.24	0.68	-0.89	-0.37	1.39	-2.08	--	--	--	-2.08
DE Shaw Commingled Fund	115,849,680	1.45	9.01	2.02	1.50	0.78	--	--	--	--	3.57
Russell 1000		0.54	7.51	1.72	0.93	0.34	--	--	--	--	1.99
Excess		0.91	1.50	0.29	0.56	0.44	--	--	--	--	1.59
Total Small Cap Equity	157,551,658	0.26	8.67	0.03	-8.61	-7.17	6.46	6.57	14.93	3.27	5.79
Russell 2000		1.57	9.67	0.03	-8.73	-5.94	7.53	6.98	14.31	5.42	6.92
Excess		-1.31	-1.01	-0.00	0.12	-1.23	-1.07	-0.41	0.62	-2.15	-1.14

San Mateo County Manager Return Summary



April 30, 2016

Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Boston Company	80,270,143	-0.28	8.84	3.84	-4.47	-2.36	7.16	7.90	--	--	12.15
Russell 2000 Value		2.12	11.34	3.86	-4.63	-3.71	6.50	6.77	--	--	11.87
Excess		-2.40	-2.50	-0.02	0.16	1.34	0.66	1.14	--	--	0.28
Chartwell Investment Mgmt	77,281,515	0.82	8.49	-3.65	-12.55	-11.70	5.75	6.30	15.27	5.06	6.89
Russell 2000 Growth		1.00	7.97	-3.73	-12.69	-8.27	8.50	7.15	15.07	6.14	7.29
Excess		-0.18	0.52	0.08	0.14	-3.43	-2.75	-0.85	0.19	-1.08	-0.40
Total International Equity	685,667,936	1.88	9.26	2.79	-4.89	-8.09	1.40	0.87	7.16	1.33	5.09
MSCI ACW ex US-IMI		2.65	10.03	2.42	-6.58	-10.28	0.47	0.15	8.12	1.96	4.55
Excess		-0.77	-0.77	0.37	1.69	2.19	0.94	0.71	-0.96	-0.63	0.54
Total Developed Markets Equity	612,206,431	1.82	8.51	1.90	-4.71	-7.72	2.00	1.42	7.63	1.83	3.82
MSCI ACW ex US-IMI		2.65	10.03	2.42	-6.58	-10.28	0.47	0.15	8.12	1.96	4.26
Excess		-0.83	-1.52	-0.52	1.87	2.56	1.54	1.27	-0.49	-0.13	-0.44
Baillie Gifford	206,650,109	1.34	9.43	1.65	-3.50	-6.25	3.41	--	--	--	6.81
MSCI ACWI ex US Growth		1.59	8.01	1.35	-4.97	-8.35	1.77	--	--	--	4.58
Excess		-0.25	1.43	0.30	1.47	2.10	1.65	--	--	--	2.23
Blackrock EAFE Index Fund	129,705,182	2.99	7.78	-0.01	-6.00	-9.06	--	--	--	--	-2.29
MSCI EAFE ND		2.90	7.58	-0.20	-6.19	-9.32	--	--	--	--	-2.56
Excess		0.09	0.20	0.19	0.19	0.26	--	--	--	--	0.27
Mondrian Investment Partners	205,754,181	1.77	7.82	3.41	-5.70	-9.23	0.87	1.43	7.76	2.32	4.92
MSCI ACWI ex US Value		3.89	11.90	3.59	-9.05	-13.44	-0.99	-0.63	7.10	1.39	4.37
Excess		-2.12	-4.09	-0.18	3.35	4.22	1.86	2.06	0.66	0.93	0.55
FIAM Intl Small Cap	70,096,958	1.27	9.34	2.17	-2.61	-4.74	3.04	--	--	--	5.53
MSCI ACWI Small Cap ex US Net		2.80	12.09	3.50	-1.96	-3.59	3.70	--	--	--	5.93
Excess		-1.53	-2.75	-1.33	-0.65	-1.15	-0.65	--	--	--	-0.40

San Mateo County Manager Return Summary



April 30, 2016

Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Total Emerging Markets Equity	73,461,505	2.40	16.09	11.05	-6.85	-11.71	-3.62	--	--	--	-1.52
MSCI EM ND (USD)		0.54	13.66	6.29	-12.16	-17.87	-4.57	--	--	--	-2.74
Excess		1.86	2.43	4.76	5.31	6.16	0.95	--	--	--	1.22
EV Parametric EM	73,461,505	2.40	16.09	11.05	--	--	--	--	--	--	-0.89
MSCI Emerging Markets GD		0.56	13.72	6.35	--	--	--	--	--	--	-5.42
Excess		1.84	2.37	4.70	--	--	--	--	--	--	4.53
Total Fixed Income	605,816,792	1.58	3.83	3.38	1.49	0.55	1.73	4.18	7.15	5.28	5.62
Samcera Fixed Income Benchmark		1.09	4.07	4.84	4.17	2.67	1.72	3.42	4.57	5.00	5.25
Excess		0.49	-0.24	-1.46	-2.68	-2.12	0.01	0.76	2.58	0.28	0.36
Total Domestic Fixed Income	506,328,884	1.78	4.19	3.88	2.47	1.53	2.28	4.40	7.23	5.40	5.77
Samcera US Fixed Inc Benchmark		0.98	3.63	4.35	3.55	2.20	1.75	3.78	4.77	5.14	5.45
Excess		0.80	0.56	-0.48	-1.08	-0.67	0.53	0.63	2.46	0.26	0.32
Total Core Fixed Income	346,321,960	1.36	3.66	3.45	3.53	2.02	2.62	4.32	6.87	5.15	5.62
BC U.S. Aggregate		0.38	2.02	3.43	4.10	2.72	2.29	3.60	4.51	4.95	5.34
Excess		0.97	1.64	0.03	-0.57	-0.70	0.33	0.73	2.36	0.20	0.27
FIAM Core Bond	242,883,220	0.96	3.34	4.24	4.28	2.85	2.60	4.11	6.32	5.34	5.14
BC U.S. Aggregate		0.38	2.02	3.43	4.10	2.72	2.29	3.60	4.51	4.95	4.75
Excess		0.58	1.31	0.81	0.18	0.13	0.31	0.51	1.81	0.38	0.39
Western Total Return	103,438,740	2.30	4.43	1.65	--	--	--	--	--	--	0.90
BC U.S. Aggregate		0.38	2.02	3.43	--	--	--	--	--	--	3.38
Excess		1.92	2.40	-1.78	--	--	--	--	--	--	-2.48
Total Opportunistic Credit	160,006,925	2.70	5.26	4.24	0.18	0.39	4.60	6.62	--	--	9.37
BC BA Intermediate HY Index		2.30	6.70	5.81	2.66	1.58	3.62	6.00	--	--	7.83
Excess		0.40	-1.44	-1.56	-2.48	-1.19	0.97	0.62	--	--	1.54

San Mateo County Manager Return Summary



April 30, 2016

Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
AG Opportunistic Whole Loan	24,133,012	0.00	-0.62	0.39	1.89	3.15	--	--	--	--	-0.16
BC BA Intermediate HY Index		2.30	6.70	5.81	2.66	1.58	--	--	--	--	2.97
Excess		-2.30	-7.32	-5.41	-0.77	1.57	--	--	--	--	-3.13
Angelo Gordon	33,587,954	0.00	-1.02	-1.02	2.37	5.13	10.27	--	--	--	9.15
BC BA Intermediate HY Index		2.30	6.70	5.81	2.66	1.58	3.62	--	--	--	4.60
Excess		-2.30	-7.72	-6.83	-0.29	3.55	6.65	--	--	--	4.55
Beach Point Select Fund	40,067,352	2.02	5.83	3.81	1.85	2.24	--	--	--	--	6.02
BC BA Intermediate HY Index		2.30	6.70	5.81	2.66	1.58	--	--	--	--	3.06
Excess		-0.28	-0.87	-2.00	-0.81	0.66	--	--	--	--	2.95
Brigade Cap Mngmt	62,218,607	5.84	11.41	9.34	-3.56	-5.36	0.62	4.33	--	--	5.60
BC BA Intermediate HY Index		2.30	6.70	5.81	2.66	1.58	3.62	6.00	--	--	6.91
Excess		3.54	4.71	3.53	-6.22	-6.94	-3.01	-1.67	--	--	-1.30
Total Global Fixed Income	99,487,908	0.59	1.95	0.71	-3.89	-4.82	-0.83	2.76	--	--	3.86
Samcera Global Fixed Benchmark		1.45	6.62	7.41	6.98	4.64	0.88	1.58	--	--	2.31
Excess		-0.86	-4.67	-6.70	-10.87	-9.46	-1.71	1.19	--	--	1.55
Franklin Templeton	99,487,908	0.59	1.95	0.71	-3.89	-4.82	-1.28	2.49	--	--	3.60
BC Multiverse Index		1.45	6.62	7.41	6.98	4.64	0.88	1.58	--	--	2.31
Excess		-0.86	-4.67	-6.70	-10.87	-9.46	-2.16	0.91	--	--	1.28
Total Risk Parity	265,042,398	1.61	6.56	7.32	-0.02	-4.68	1.26	4.62	--	--	5.50
Samcera Risk Parity Benchmark		0.53	5.42	2.43	1.95	1.22	7.48	7.91	--	--	8.18
Excess		1.09	1.14	4.89	-1.97	-5.90	-6.22	-3.29	--	--	-2.69
AQR Global Risk III	123,806,131	2.86	6.20	5.68	-4.43	-8.21	-1.39	2.98	--	--	3.89
Samcera Risk Parity Benchmark		0.53	5.42	2.43	1.95	1.22	7.48	7.91	--	--	8.18
Excess		2.33	0.78	3.25	-6.37	-9.43	-8.87	-4.94	--	--	-4.30

San Mateo County Manager Return Summary



April 30, 2016

Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Panagora	141,236,267	0.55	6.87	8.80	4.18	-1.36	--	--	--	--	4.58
Samcera Risk Parity Benchmark		0.53	5.42	2.43	1.95	1.22	--	--	--	--	3.89
Excess		0.02	1.45	6.37	2.24	-2.58	--	--	--	--	0.68
Total Alternatives	395,724,180	-0.68	-1.01	-1.72	-1.26	0.75	2.35	3.32	-11.33	-7.33	-4.20
Samcera Alternatives Benchmark		0.66	3.72	1.99	-1.99	-1.71	5.22	5.74	10.57	5.88	6.86
Excess		-1.34	-4.73	-3.72	0.72	2.46	-2.87	-2.42	-21.91	-13.21	-11.05
Total Private Equity	212,435,692	0.20	0.69	0.12	3.66	9.64	14.56	6.63	--	--	-30.10
Samcera PE Benchmark		0.87	8.45	2.60	2.64	2.82	13.98	13.74	--	--	16.09
Excess		-0.67	-7.75	-2.48	1.02	6.82	0.58	-7.11	--	--	-46.19
Total Hedge Fund Composite	183,288,488	-1.69	-3.09	-3.28	6.69	6.51	6.40	--	--	--	5.08
Samcera LIBOR + 4%		0.36	1.09	1.46	3.56	4.27	4.21	--	--	--	4.22
Excess		-2.05	-4.19	-4.75	3.13	2.23	2.19	--	--	--	0.86
AQR Delta XN	149,510,849	-2.09	-3.50	-3.33	7.04	6.85	6.51	--	--	--	5.15
Samcera LIBOR + 4%		0.36	1.09	1.46	3.56	4.27	4.21	--	--	--	4.22
Excess		-2.46	-4.59	-4.79	3.48	2.58	2.31	--	--	--	0.93
Standard Life GARS	33,777,639	0.16	-1.25	-3.08	--	--	--	--	--	--	-3.49
Samcera LIBOR + 4%		0.36	1.09	1.46	--	--	--	--	--	--	2.51
Excess		-0.20	-2.34	-4.54	--	--	--	--	--	--	-6.00
Total Inflation Pool	425,079,122	3.31	--	--	--	--	--	--	--	--	3.31
SamCERA Inflation Pool Index		1.87	--	--	--	--	--	--	--	--	1.87
Excess		1.44	--	--	--	--	--	--	--	--	1.44
Total TIPS	69,672,189	0.35	--	--	--	--	--	--	--	--	0.35
BC US Tips		0.35	--	--	--	--	--	--	--	--	0.35
Excess		0.00	--	--	--	--	--	--	--	--	0.00

San Mateo County Manager Return Summary



April 30, 2016

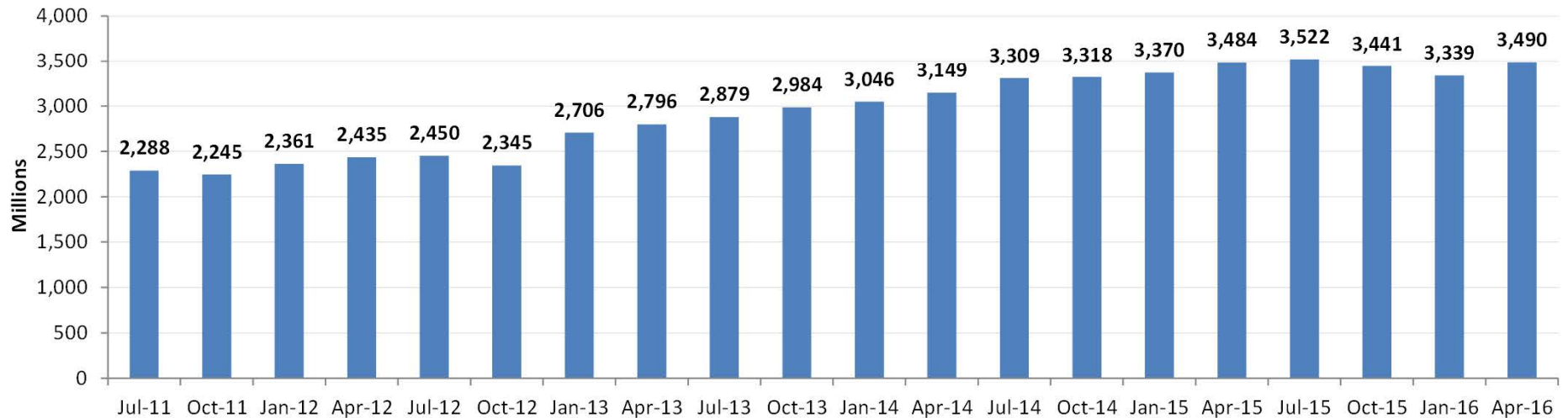
Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Brown Brothers Harriman	69,672,189	0.35	2.90	3.73	1.52	0.57	-2.27	2.02	--	--	2.76
BC US Tips		0.35	3.29	4.82	2.96	1.12	-0.86	2.58	--	--	3.35
Excess		0.00	-0.38	-1.09	-1.43	-0.55	-1.41	-0.56	--	--	-0.59
Total Real Estate	238,047,202	1.33	--	--	--	--	--	--	--	--	1.33
Samcera NCREIF ODCE EW (gross)		0.00	--	--	--	--	--	--	--	--	0.00
Excess		1.33	--	--	--	--	--	--	--	--	1.33
Invesco Core Real Estate	229,923,146	1.39	1.39	3.84	6.83	12.35	13.02	12.58	7.22	5.91	7.73
Samcera NCREIF ODCE EW (gross)		0.00	2.44	2.44	9.80	14.10	13.58	13.22	8.59	6.12	7.66
Excess		1.39	-1.05	1.40	-2.97	-1.75	-0.56	-0.63	-1.37	-0.21	0.07
Invesco US Val IV	8,124,056	-0.30	15.92	15.92	--	--	--	--	--	--	10.73
Samcera NCREIF ODCE EW (gross)		0.00	2.44	2.44	--	--	--	--	--	--	5.95
Excess		-0.30	13.48	13.48	--	--	--	--	--	--	4.78
Total Private Real Assets	34,965,915	14.58	--	--	--	--	--	--	--	--	14.58
Samcera CPI + 5%		0.00	--	--	--	--	--	--	--	--	0.00
Excess		14.58	--	--	--	--	--	--	--	--	14.58
Total Commodities	82,393,815	7.86	--	--	--	--	--	--	--	--	7.86
Bloomberg Commodity Index		8.51	--	--	--	--	--	--	--	--	8.51
Excess		-0.65	--	--	--	--	--	--	--	--	-0.65
Total Cash	37,331,405	0.03	0.09	0.11	0.27	0.32	0.46	0.53	0.68	1.07	2.10
Samcera Cash Benchmark		0.03	0.10	0.10	0.14	0.15	0.08	0.08	0.10	1.11	1.95
Excess		-0.00	-0.01	0.01	0.13	0.17	0.38	0.45	0.58	-0.04	0.14
SamCera General Account	33,704,100	0.04	0.12	0.15	0.33	0.39	0.21	0.24	0.24	1.33	2.09
County Treasury Pool	3,627,305	0.00	0.00	0.00	0.00	0.00	0.31	0.53	0.71	0.93	2.81
San Mateo County ERA	3,489,912,452	1.29	5.50	2.59	-0.15	-0.78	5.95	6.08	10.29	4.67	6.50
Samcera Total Plan Benchmark		1.30	6.47	2.86	-0.02	-0.84	6.02	6.37	10.65	5.57	6.79
Excess		-0.01	-0.97	-0.27	-0.14	0.05	-0.07	-0.29	-0.36	-0.90	-0.29

April 30, 2016

Record of Asset Growth

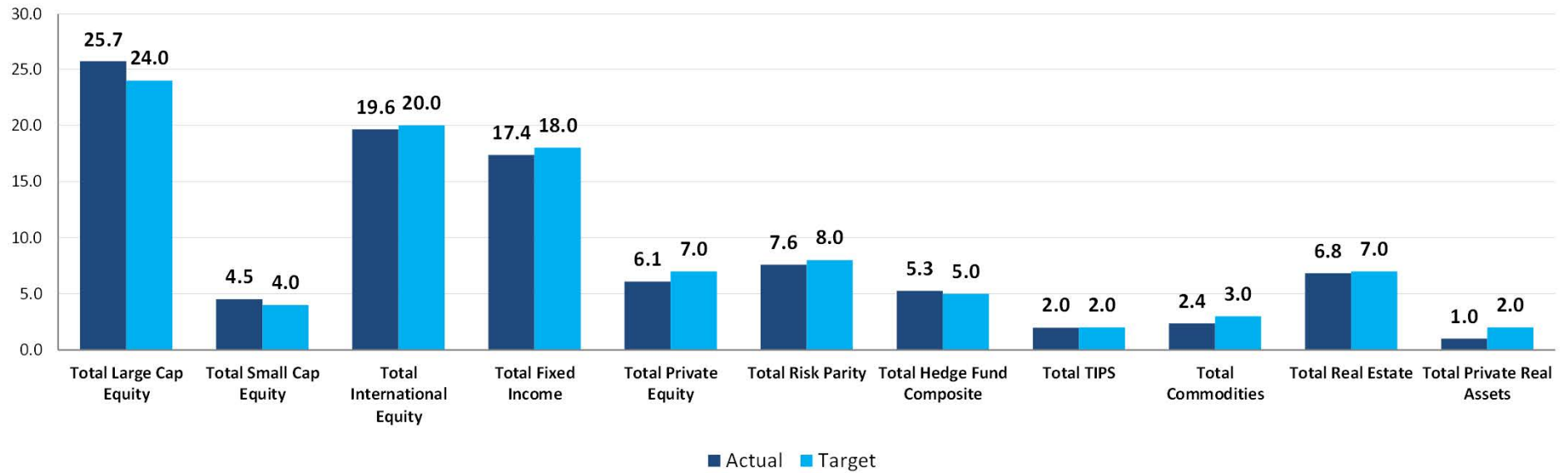
	Three Months	One Year
TOTAL FUND		
Beginning Market Value	3,338,666,091	3,484,384,010
Contributions	13,512,526	312,559,019
Withdrawals	-46,344,982	-287,216,322
Income Received	11,263,639	39,087,131
Gain/Loss	173,132,579	-59,870,930
Ending Market Value	3,489,912,452	3,489,912,452

Net Asset Values Over Time (\$000)



April 30, 2016

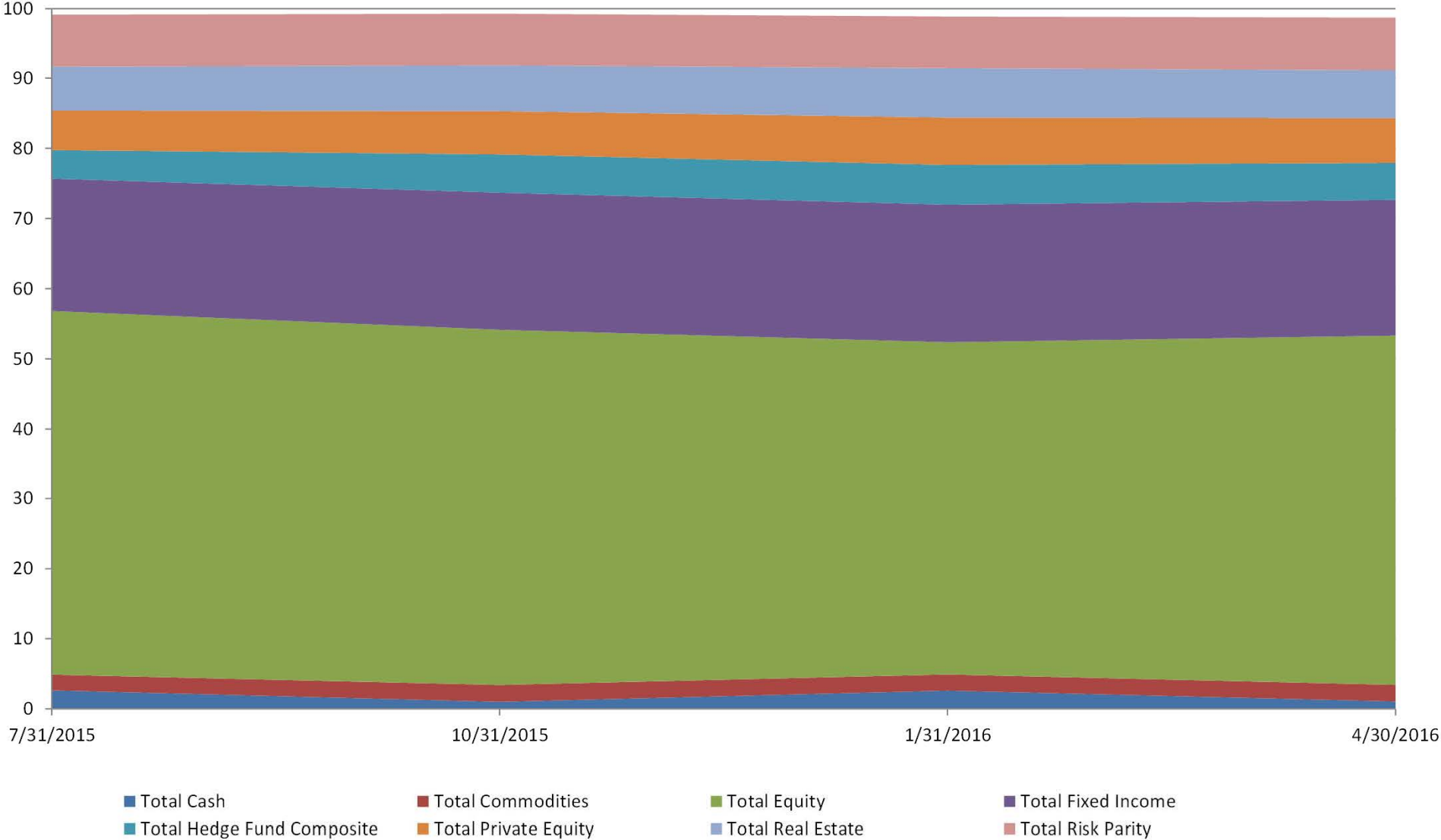
Actual vs Target Weights



	Min	Actual	Target	Deviation	Max
Total Large Cap Equity	22.0	25.7	24.0	1.7	26.0
Total Small Cap Equity	2.0	4.5	4.0	0.5	6.0
Total International Equity	18.0	19.6	20.0	-0.4	22.0
Total Fixed Income	16.0	17.4	18.0	-0.6	20.0
Total Private Equity	5.0	6.1	7.0	-0.9	9.0
Total Risk Parity	6.0	7.6	8.0	-0.4	10.0
Total Hedge Fund Composite	3.0	5.3	5.0	0.3	7.0
Total TIPS	0.0	2.0	2.0	0.0	4.0
Total Commodities	1.0	2.4	3.0	-0.6	5.0
Total Real Estate	5.0	6.8	7.0	-0.2	9.0
Total Private Real Assets	0.0	1.0	2.0	-1.0	4.0

April 30, 2016

Asset Allocation over Time

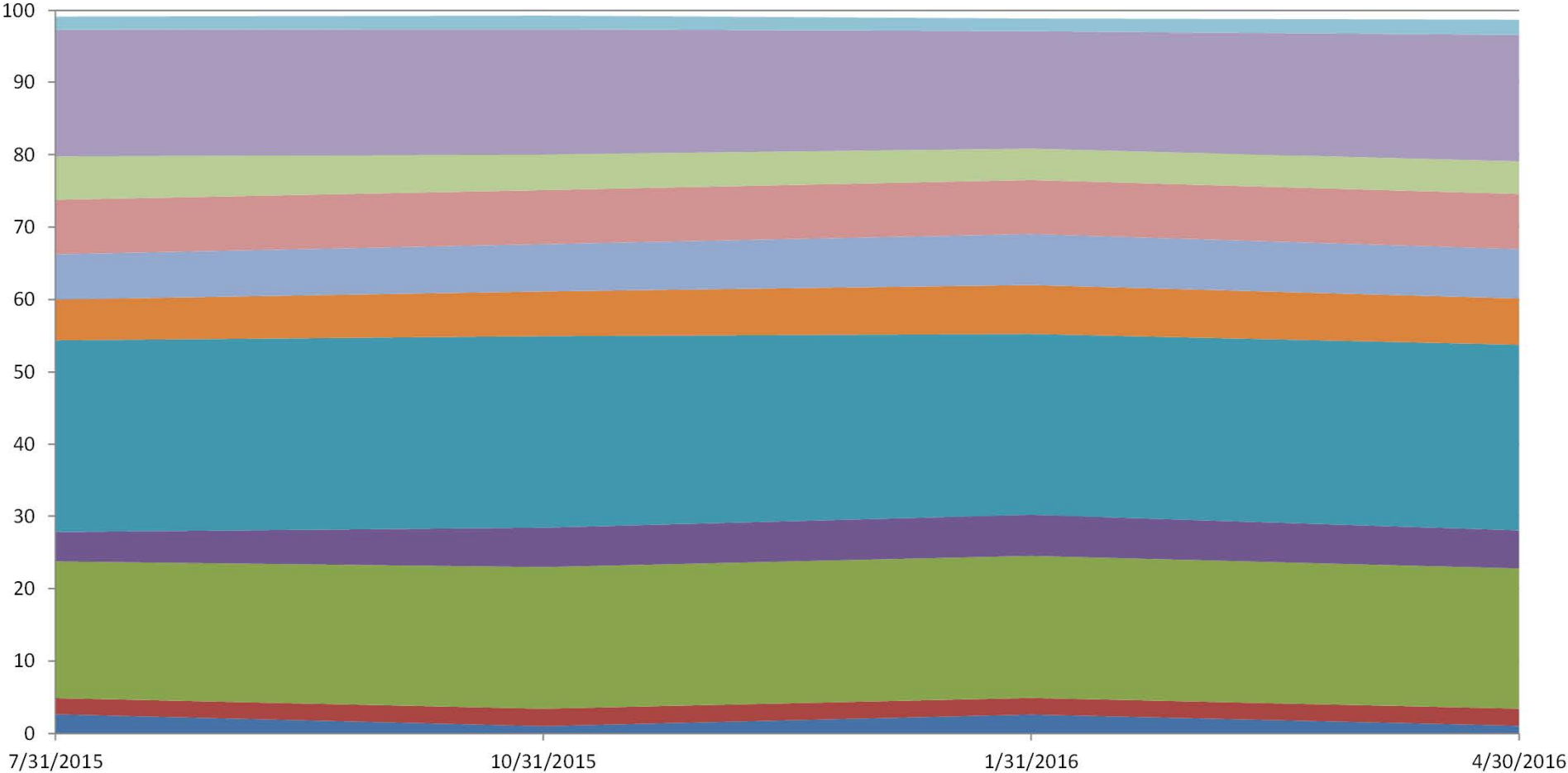


**San Mateo County
Sub-Asset Class Allocation Over Time**



April 30, 2016

Sub-Asset Class Allocation Over Time



- Total Cash
- Total Commodities
- Total Fixed Income
- Total Hedge Fund Composite
- Total Large Cap Equity
- Total Private Equity
- Total Real Estate
- Total Risk Parity
- Total Small Cap Equity
- Total Developed Markets Equity
- Total Emerging Markets Equity

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

June 7, 2016

Agenda Item 6.2

TO: Board of Retirement 
FROM: Michael Coultrip, Chief Investment Officer
SUBJECT: Quarterly Investment Performance Report for the Period Ended March 31, 2016

Staff Recommendation

Accept Verus Advisory's quarterly performance report for the period ended March 31, 2016.

Discussion

The 1st quarter net total return for the SamCERA portfolio was 1.3%, which was 20 bps lower than the 1.5% policy benchmark return. As can be seen on Pages 19 and 20, outperformance in our Risk Parity composite was more than offset by underperformance in our Fixed Income and Alternatives composite.

Margaret Jadallah will present the report to the Board and will be available for questions.

Attachment

Verus Quarterly Performance Report Ending 3/31/2016



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**



PERIOD ENDING: MARCH 31, 2016

Investment Performance Review for

San Mateo County Employees' Retirement Association

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VERUSINVESTMENTS.COM

SEATTLE 206-622-3700

LOS ANGELES 310-297-1777

SAN FRANCISCO 415-362-3484

Market Environment

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Alternatives

TAB VI

Total Fund

TAB II

Real Estate

TAB VII

US Equity

TAB III

Risk Parity

TAB VIII

International Equity

TAB IV

Appendix

TAB IX

Fixed Income

TAB V

- Historically, emerging market performance has been closely linked with the U.S. dollar and commodities. With a collapsing dollar and rebounding commodity prices, therefore, it comes as no surprise that emerging markets enjoyed a significant rally in Q1. The MSCI EM index rose 5.7% in Q1, led by Latin America as a leveraged play on commodities. EM Europe and Middle East followed suit, rising 12.6% in the quarter, while Asia lagged the benchmark, rising only 1.9%.
- EM FX also stabilized on the back of a dovish Fed, prompting an inflection in the monetary policy stance of a number of EM central banks. Indonesia, Hungary and Taiwan all cut rates in Q1. Importantly, inflation rates across the region either moved lower or fell within central bank targets, with only a handful of countries continuing to struggle with high inflation. This trend, in turn, drove a compression in bond yields and a multiple expansion in equities, boding well for a sustained bullish view on the asset class.
- With the U.K. referendum on EU membership drawing close, investor nervousness is reflected in the decline of the Pound. Opinion polls ended the quarter quite tight, as the lead of “Remain” significantly diminished. The currency lost 2.5% in Q1, and will likely remain weak into the June EU referendum.
- All U.S. corporate bonds finished Q1 on a positive note, led by BAA-rated bonds. Treasury and Agency debt also rose and closed the quarter 3.2% and 2% higher, respectively.
- The State Street Investor Confidence Index® (ICI) measures risk appetite by analyzing the buying and selling patterns of the institutional investors. The Global ICI rose to 114.8 in March, up from February’s revised reading of 106.6. The increase in sentiment was driven by an improvement in the North American ICI from 109.4 to 123.7. The European ICI rose by 5.6 points to 95.8 while the Asian ICI rose only marginally, from 111.5 to 112.
- For the period ending 3/31/16, the one quarter returns for, respectively, the NAREIT Equity index and the NCREIF Property index (one quarter lag), were 6.0% and 2.9%; one year, 4.4% and 13.3%; three years, 10.5% and 12.0%; and five years, 11.9% and 12.2%.
- Elevated volatility in world markets have resulted from concerns about global economic growth and the on-going weakness of commodity prices, emerging market currencies and the widening of credit spreads. REITs were down over 4% in the first two months of the year as the equity markets sold off. A large recovery in March had REITs up over 10% for the month of March.
- REIT dividend yields decreased by eight bps in the first quarter to 3.8% while the ten-year US Treasury decreased by 49 bps to 1.8%, both as of March 31, 2015. As a result, the REIT dividend yield spread to Treasuries increased by 41 bps to 206 bps, well above the historical average of 111 bps.

Equity Markets

	<u>QTR</u>	<u>1 Year</u>	<u>3 Year</u>
S&P 500	1.3	1.8	11.8
Dow Jones Industrial Average	2.2	2.1	9.3
NASDAQ	-2.7	-0.6	14.2
Russell 1000	1.2	0.5	11.5
Russell 2000	-1.5	-9.8	6.8
Russell 3000	1.0	-0.3	11.1
MSCI EAFE (Net)	-3.0	-8.3	2.2
MSCI Emerging Markets (Net)	5.7	-12.0	-4.5
MSCI All Country World ex US (Net)	-0.4	-9.2	0.3

Bond Markets

	<u>QTR</u>	<u>1 Year</u>	<u>3 Year</u>
Barclays Capital Aggregate	3.0	2.0	2.5
Barclays Capital Gov/Credit	3.5	1.7	2.4
Barclays Capital Universal	3.1	1.8	2.5
Barclays Capital Corp. High Yield	3.4	-3.7	1.8
CG Non-US World Govt.	9.1	7.7	-0.2

Non-Public Markets

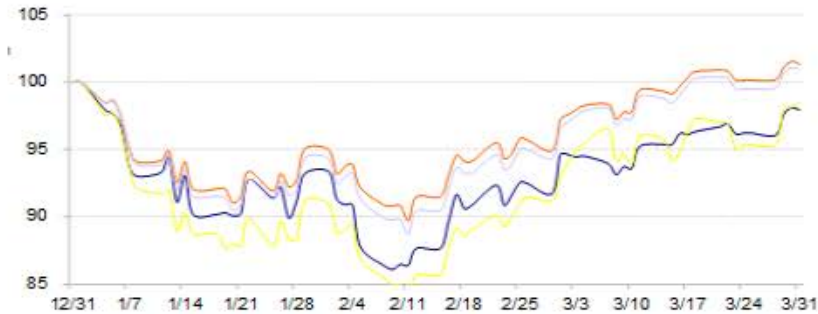
lagged quarterly

	<u>QTR</u>	<u>1 Year</u>	<u>3 Year</u>
NCREIF Property	2.9	13.3	12.0

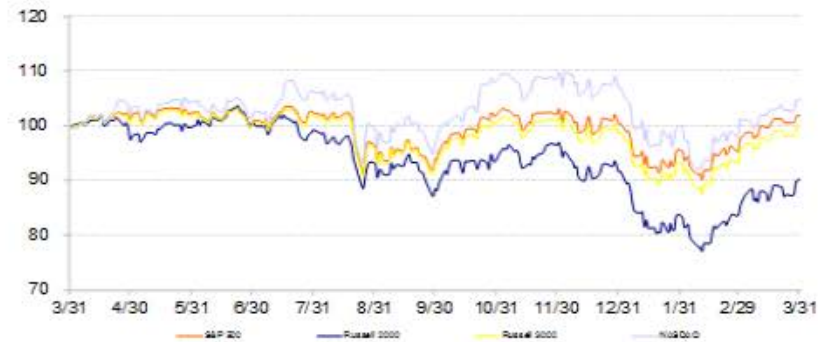
U.S. Equity Market

- The first half of the quarter saw falling risk assets in response to softer economic data and worsening tail risk fears of a US recession and Chinese currency devaluation. Immediate tail risks faded into the second half of the quarter, however, prompting significant reversals.
- While the S&P 500 recovered all losses from earlier this year, small capitalization stocks continued to lag, finishing the quarter down 1.5%.
- Bond markets rallied, supported by Fed Chair Yellen reiterating her dovish message in March.

Equity Index – Quarterly Growth Rate



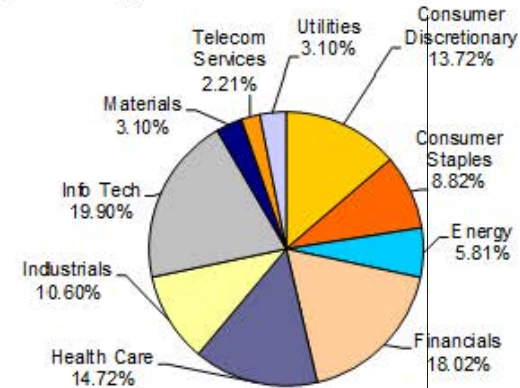
Equity Index – 1-Year Growth Rate



U.S. Equity – Russell 3000

- Sector performance was mixed in Q1, with a combination of cyclicals and defensives beating the benchmark. Among defensive sectors, consumer staples, utilities and telecoms outperformed, but healthcare lagged. In contrast, investors bid cyclicals higher across the board, and materials, energy, IT and industrials all delivered stronger returns than the benchmark.
- The weakest sector in Q1 was healthcare, where valuations remain extended and the earnings outlook is rapidly deteriorating. The sector declined 7% in Q1.
- In an environment of heightened regulation and lower yields, financials also lagged the benchmark, losing 3.7% in Q1.

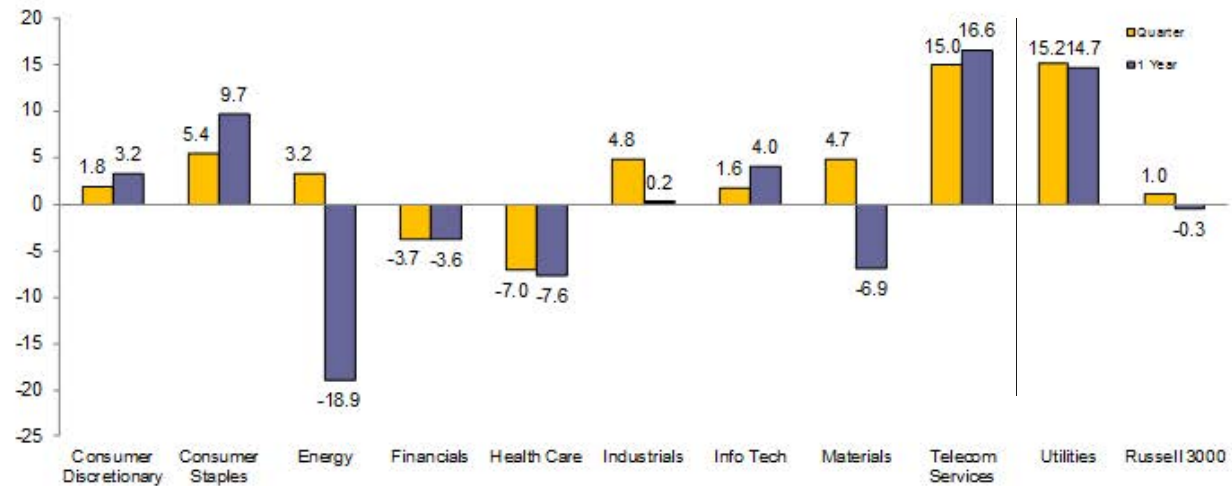
Ending Sector Weights



Characteristics

Div Yield (%)	2.08
P/B Ratio	4.76
P/E Ratio	22.12
Forward P/E Ratio	17.30
Fundamental Beta	1.03
Market Cap - Cap Wtd (MM\$)	109,006

Sector Returns (%)



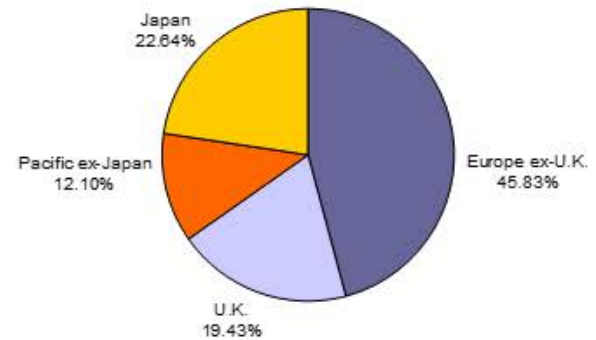
Contribution to Return:

Qtr	0.2	0.5	0.2	-0.7	-1.0	0.5	0.3	0.1	0.3	0.5	1.0
1 Year	0.4	0.8	-1.4	-0.6	-1.1	0.0	0.8	-0.2	0.3	0.5	-0.3

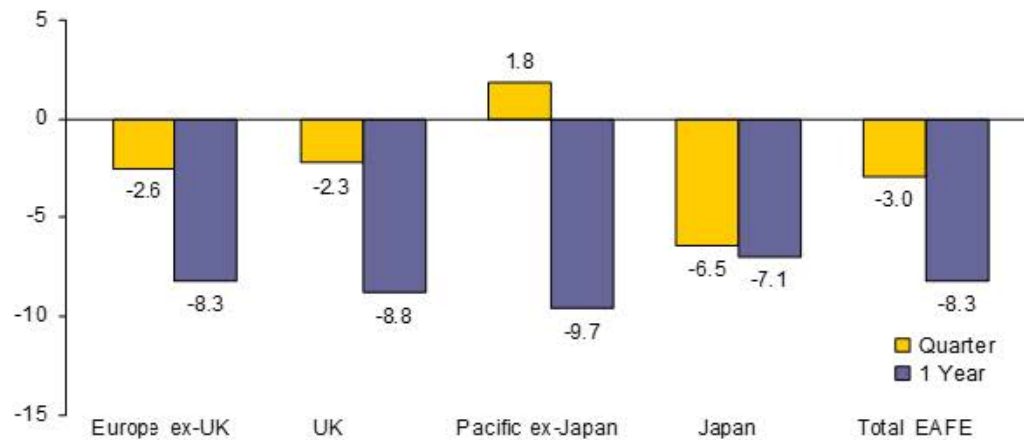
Developed Equity – MSCI EAFE (Net)

- So far, there is little evidence that global accommodative policy has helped developed equities. All key markets lost ground in Q1, with the exception of Asia Pacific ex-Japan which rose 1.8%.
- Earnings momentum in Japan slowed down and domestic activity showed no signs of acceleration in Q1. The market lost 6.5% YTD.
- Overall, the MSCI EAFE Net Return index was down 3% in Q1.

Ending Regional Weights



Regional Returns (%)

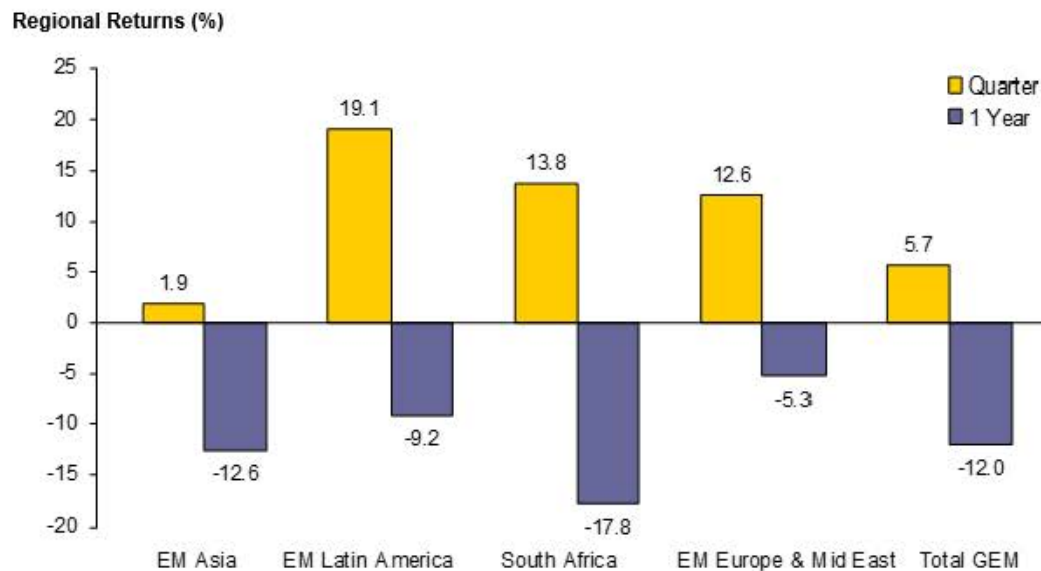
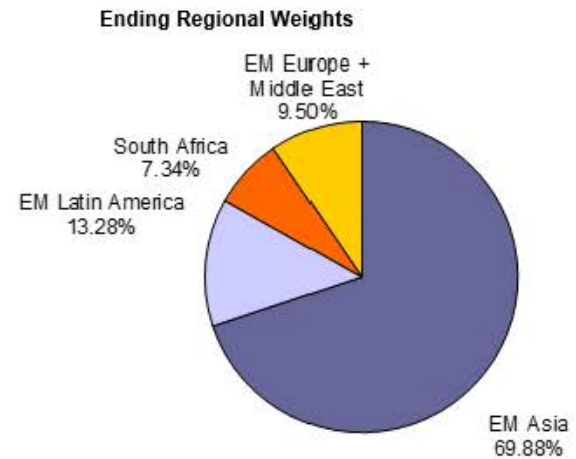


Contribution to Return:

	Europe ex-UK	UK	Pacific ex-Japan	Japan	Total EAFE
Qtr	-1.2	-0.5	0.2	-1.5	-3.0
1 Yr	-3.8	-1.7	-1.2	-1.6	-8.3

Emerging Markets Equity – MSCI EM (Net)

- Historically, emerging market performance has been strongly influenced by the U.S. dollar and commodities. A dovish Fed resulting in U.S. dollar weakness and a rebound in commodities helped the asset class in Q1.
- The MSCI EM index rose 5.7% in Q1, led by Latin America as a leveraged play on commodities. EM Europe and Middle East followed suit, rising 12.6% in the quarter, while Asia lagged.
- On a 1-year basis, South Africa lost the most, down 17.8% despite the significant rally in Q1. Following the sharp decline of the rand over the past year, inflation remains rampant in the country, tying the hands of policy makers. The SARB hiked rates twice already this year, in an effort to stabilize prices.



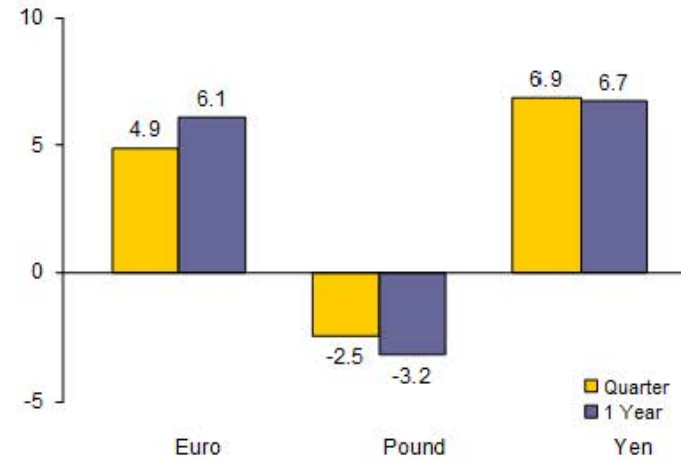
Contribution to Return:

	EM Asia	EM Latin America	South Africa	EM Europe & Mid East	Total GEM
Qtr	1.4	2.5	1.0	1.2	5.7
1 Yr	-8.8	-1.2	-1.3	-0.5	-12.0

Currency Markets

- In Q1, the U.S. dollar lost 4.9% and 6.9% against the euro and the yen, respectively.
- With the U.K. referendum on EU membership drawing close, investor nervousness is reflected in the decline of the Pound. Opinion polls ended the quarter quite tight, as the lead of "Remain" significantly diminished. The currency lost 2.5% in Q1, and will likely remain weak into the June EU referendum.

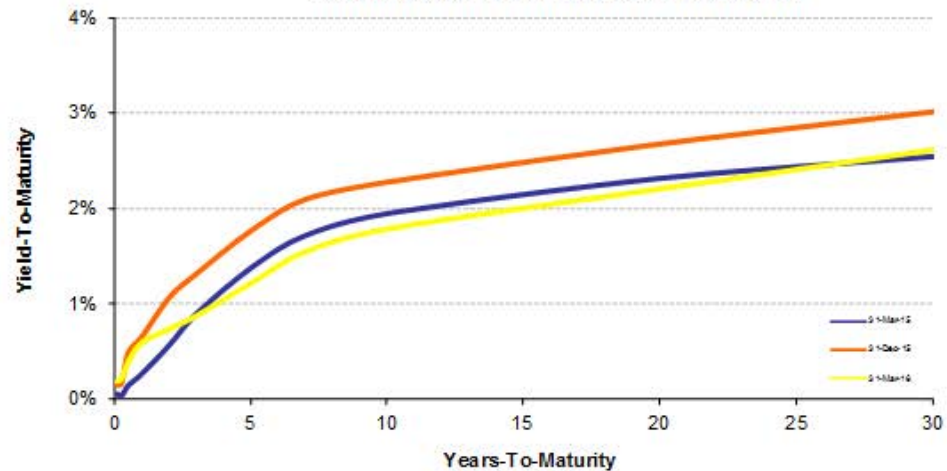
Currency Returns (%)



Yield Curve

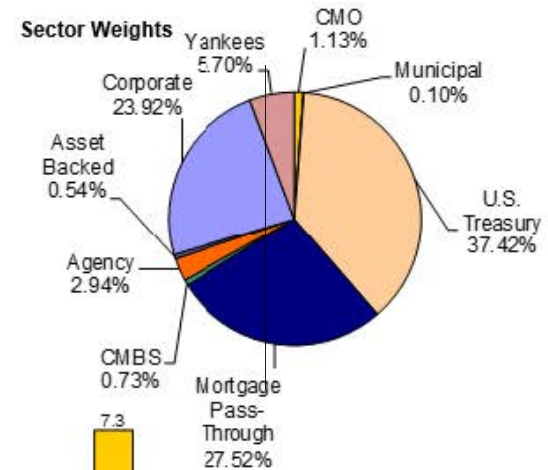
- The Treasury yield curve shifted lower last quarter, driven by decreases across the longer maturities.
- 10-year yields fell 49 bps during Q1, while 30-year yields fell by 40 bps.
- The yields on the 1-month and 3-month Treasuries rose by 4 bps and 5 bps, respectively.

INTEREST RATE TERM STRUCTURE
 Government Issues - 3 Months to 30 Years Maturity

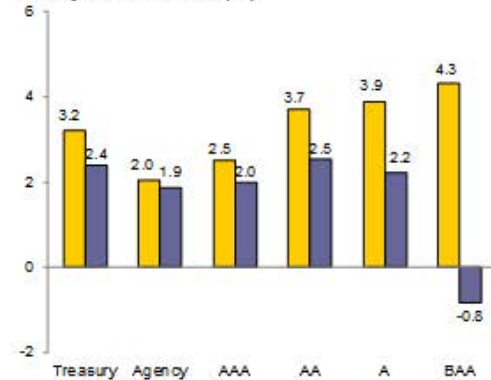


U.S. Bond Market Returns – Barclays Capital Aggregate

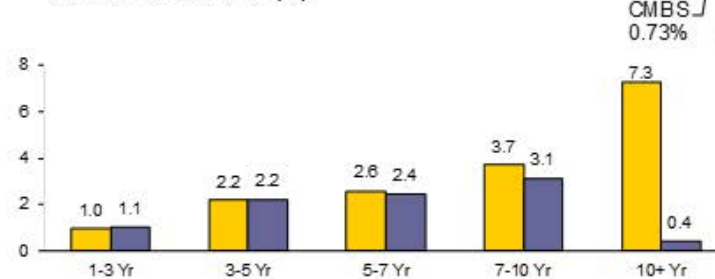
- U.S. Treasuries rose 3.2% in Q1, supported by the dovish Fed message delivered in March.
- Longer-duration US Government bonds led the gains and bonds with durations over 10 years rose 7.3% in Q1.
- Among sectors, municipal debt rose the most again, up 6.1%, while CMBS, agency and asset-backed debt underperformed the benchmark.



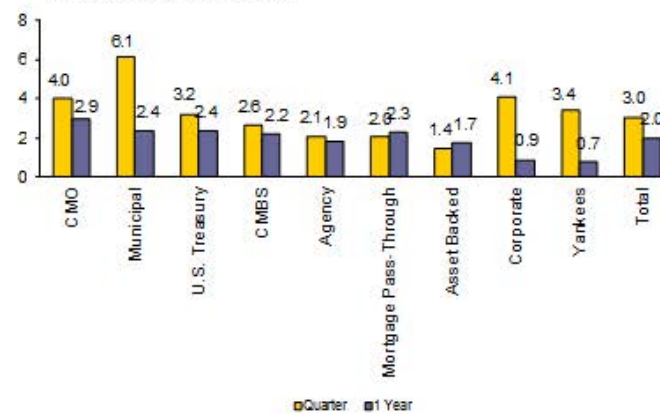
Quality Performance (%)



Duration Performance (%)



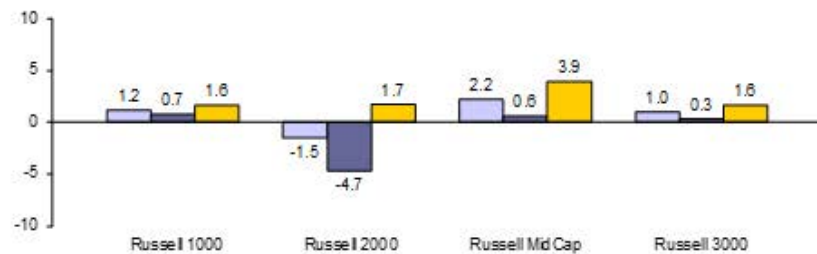
Sector Performance (%)



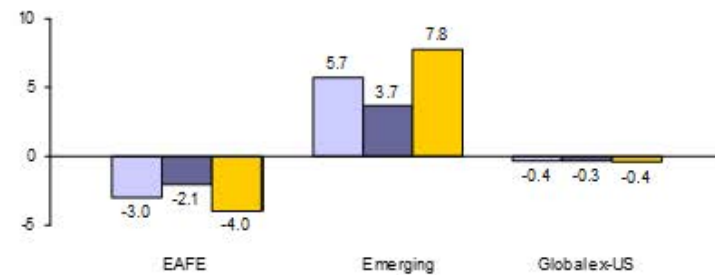
Style & Capitalization Returns

- Value led the Q1 gains across US indices. The rally in emerging markets was also supported by a preference for value over growth.
- In terms of size, mid caps strongly outperformed in Q1, recouping some of their losses over the past year.
- Reversing trend from Q4 last year, emerging markets were the best performer across styles in Q1, while EAFE lost the most.

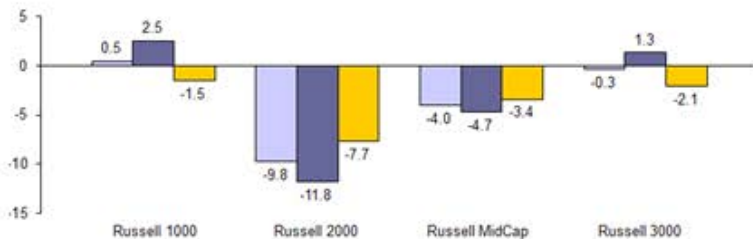
Russell US Style Returns (%) – Quarter



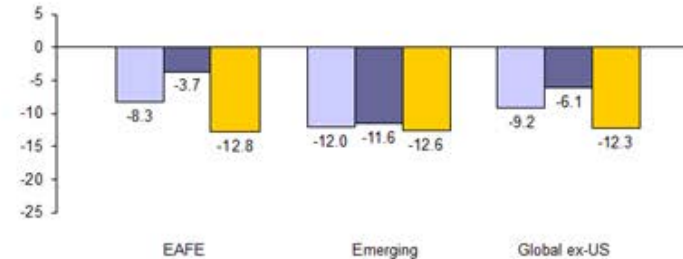
MSCI Non-US Style Returns (%) – Quarter



Russell US Style Returns (%) – 1 Year



MSCI Non-US Style Returns (%) – 1 Year



Neutral Growth Value

- The Total Fund, net of manager fees, returned 1.3% in the first quarter of 2016 and ranked 25th among other public plans great than \$1 billion (median of 0.9%). It lagged the policy index return of 1.5%. The Total Fund w/o Overlay was 1.1% for the quarter. The Parametric Minneapolis Overlay strategy was funded August 2013. The Total Fund one year return of -0.8% was behind its policy index return of -0.7% and ranked in 33rd percentile of its peer universe. The three-year return of 6.1% (24th percentile) was above median among large public plans (5.4%).

- First quarter results were enhanced by the following factors:
 1. The Private Real Asset composite out-performed its benchmark, the CPI +5% (14.7% vs. 1.2%).
 2. Risk parity manager PanAgora beat its benchmark, the blended 60% Russell 3000/ 40% Barclays Aggregate Index (8.2% vs. 1.9%). Exposure to nominal fixed income (non-US and US government debt) and inflation protected assets (commodities) added to the quarter.
 3. During the first quarter, Parametric Core beat the MSCI Emerging Markets Index (8.8% vs. 5.8%) by 300 basis points. An underweight to China and overweight to Turkey, while carrying sector diversification in Korea contributed to relative performance.
 4. AQR Global Risk Premium, 10% Volatility Fund was up 4.6% while the blended 60% Russell 3000/ 40% Barclays Aggregate Index returned 1.9%. First quarter gross return attribution is as follows: equity (-0.4%), nominal interest rates (3.3%), inflation (1.1%) and credit/currency (0.8%) risk.
 5. The Boston Company returned 4.1%, versus 1.7% for the Russell 2000 Value Index, and ranked in the 24th percentile among its small cap value peers (median 2.2%). Performance alpha was mainly derived from its Consumer Discretionary and Financials stock selection and intra-quarter trading.
 6. Mondrian returned 1.6%, beat the MSCI ACWI ex US Value (-0.3%) and ranked in the 26th percentile among its ACWI ex US Value equity peers (0.3% median). Performance results were enhanced by stock selection in the UK, Japan and Switzerland equity markets.

7. Baillie Gifford led its benchmark, the MSCI ACWI ex US (0.3% vs. -0.3%). It ranked in the top quartile among ACWI ex US growth equity managers (median of -2.2%). Australian Cochlear, Japanese Shiseido and Chinese (Hong Kong) Jardine Matheson were contributors during the quarter.
8. The Treasury and LAIF account was up, 0.7%, during the quarter. The 91-Day T-Bill returned 0.1% during the same time period.
9. Chartwell lost less value, -4.4%, than the Russell 2000 Growth Index, -4.7%. Chartwell ranked in 56th percentile among small cap growth managers (median of -4.1%). Positive attributes include stock selection the Healthcare (Bruker) and Consumer Discretionary (Burlington Stores, Express, Steve Madden) sectors.
10. The FIAM Broad Market Duration Fund added 3.2% to its value and ranked in the 15th percentile among core bond managers (median of 2.9%). The Barclays Aggregate Index was up 3.0% for the quarter. Corporate security selection, overweight to CMBS and US TIPS and an underweight to agency MBS were contributors to relative performance.
11. The BlackRock S&P 500 Index Fund, 1.4%, was in line with its benchmark (1.3%) and ranked above the large cap core median of 0.2%.
12. The BlackRock EAFE Index Fund, -2.9%, slightly led its benchmark (-3.0%) but ranked below the EAFE core equity median of -2.5%.
13. The FIAM Select International Small Cap Plus quarterly portfolio result of 0.9% was slightly ahead of the MSCI ACWI ex US Small Cap (0.8%), and ranked in the 16th percentile among ACWI ex US small cap managers. Holdings in the Switzerland and China aided performance. Consumer Staples (Sundrug) and Financials (Bolsa Mexicana de Valores) were two of the primary sector contributors.

— First quarter results were hindered by the following factors:

1. Franklin Templeton appreciated, 0.1% and ranked in the bottom quartile among global bond managers (median of 3.4%). The Barclays Multiverse Index return was 5.9%. Franklin's currency positions (underweight to the euro, Japanese yen and Australian dollar), interest rate strategies (underweight duration exposure in the US and Japan) and overall credit exposures (overweight high yield) flattened results.

2. The Angelo Gordon STAR Fund depreciated, -2.2%, (preliminary quarterly return) while the Barclays Aggregate Index return was 3.0%.
3. In its first full quarter, Standard Life GARS fell behind its benchmark, the Libor +4% Index (-3.2% vs. 1.0%). It ranked in the bottom quartile among other multi-strategy hedge funds (0.4% median). The following strategies were factors to negative attribution: short US duration, long USD vs. Singapore dollar and US banks vs. US Consumer Staples.
4. Barrow Hanley's return of -1.6% was behind the Russell 1000 Value Index, 1.6%, and ranked in the bottom quartile among large cap value equity managers (median of 0.7%). Performance was hurt by its lack of Utilities exposure and select Consumer Discretionary (Royal Caribbean Cruises) and Financials (Bank of America, Citigroup, E*Trade Financial) investments.
5. The SSARIS Multisource Active Commodity Fund was behind the Bloomberg Commodity Index (-2.8% vs. 0.4%). Underperformance was driven by the Core and Tactical pools.
6. In its first full quarter, Invesco US Val IV was not on par with the NCREIF ODCE (-0.2% vs. 2.2%). Current property levels in the fund total \$210.6 million, with \$1.8 million distributed to date.
7. The Angelo Gordon Opportunistic strategy returned 0.7% (preliminary quarterly return). The Barclays Aggregate Index return was 3.0%. Effective Q2 2015, the fund is no longer valued at one-quarter lag.
8. Private Equity investments depreciated, -0.3%, for the quarter. The Russell 3000 +3% Index was up 1.8%.
9. Hedge fund strategy AQR DELTA XN lagged the Libor +4% Index (-1.1% vs. 1.0%). It ranked in the third quartile among other hedge fund multi-strategy accounts (median of 0.4%). The long/short equity (-2.2%), fixed income relative value (-0.3%) and global macro (-0.3%) strategies were AQR's largest detractors.
10. Brown Advisory was outpaced by the Russell 1000 Growth Index (-1.4% vs. 0.7%) and ranked in the second quartile among large cap growth managers (median of -1.9%). Select Consumer Discretionary (Amazon.com, TripAdvisor) and Financials (Charles Schwab) stocks dampened performance.

11. Brown Brothers Harriman was below par, 3.4%, was outpaced by the Barclays US TIPS Index (4.5%) and ranked in the bottom quartile among inflation linked bond accounts (median of 4.2%). During the quarter, the portfolio held shorter maturity TIPS and long break-even positions.
12. Beach Point Select trailed the Barclays BAA Intermediate High Yield Index (2.4% vs. 3.4%). It ranked in the second quartile among other high yield managers. Its greatest negative factor was its public equities strategy. Its leading detractors were Freedom Group and Valeant Pharmaceutical.
13. The Invesco Core Real Estate-USA Fund returned 1.4% for the quarter and below par with the NCREIF ODCE Index (2.2%). During the quarter, the fund produced a return comprised of 1.0% income and 0.5% appreciation, gross of fees. ICRE incurred \$40m (50 bps) in write-downs.
14. Western TRU was behind its benchmark, the 3-Month Libor Total Return Index (-0.7% vs. 0.1%) and ranked in the bottom quartile among core fixed managers (median of 2.9%). Its structure product and high yield energy exposure impacted performance.
15. DE Shaw's 130/30 strategy return of 0.6% ranked in the second quartile among large cap core equity managers (0.2% median), and was behind its benchmark, the Russell 1000 Index (1.2%). Its event driven and fundamental forecasts were the largest contributors to underperformance.
16. The opportunistic credit high yield manager, Brigade Capital, lagged its benchmark, the Barclays BAA Intermediate High Yield Index (3.1% vs. 3.4%). The median high yield quarterly return was 2.3%. Its bank loans and CLO positions were the primary detractors of performance.

Total Fund
Performance Summary (Net of Fees)

Period Ending: March 31, 2016

	3 Mo (%)	Rank*	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Fund**	1.3	25	-1.4	31	-0.8	33	2.9	29	6.1	24	6.5	30	4.6	75
<i>Policy Index</i> ¹	1.5	11	-1.2	27	-0.7	31	2.6	42	6.2	23	6.7	24	5.6	24
<i>Allocation Index</i>	1.5	13	-1.2	27	-0.8	31	2.5	43	6.2	23	--	--	--	--
<i>InvestorForce Public DB > \$1B Net Median</i>	0.9		-2.1		-1.6		2.1		5.4		5.9		5.0	
Total Fund ex Overlay	1.1	38	-1.5	40	-1.0	34	2.8	37	6.0	31	6.4	31	4.6	75
<i>Policy Index</i> ¹	1.5	11	-1.2	27	-0.7	31	2.6	42	6.2	23	6.7	24	5.6	24
<i>Allocation Index</i>	1.5	13	-1.2	27	-0.8	31	2.5	43	6.2	23	--	--	--	--
<i>InvestorForce Public DB > \$1B Net Median</i>	0.9		-2.1		-1.6		2.1		5.4		5.9		5.0	
Total Equity	0.6	39	-3.3	30	-2.8	29	1.7	41	7.5	42	7.1	42	4.2	70
<i>Blended Equity Index</i> ²	0.4	45	-4.5	47	-3.9	44	1.2	51	7.0	50	7.0	45	5.1	37
<i>InvestorForce All DB Total Eq Net Median</i>	0.2		-4.7		-4.2		1.3		7.0		6.8		4.8	
US Equity	0.4	57	-1.3	39	-0.9	36	4.8	47	10.6	42	10.0	52	5.6	85
<i>Blended US Equity Index</i> ²	0.8	45	-1.6	43	-1.4	45	5.0	40	10.7	37	10.6	28	6.8	29
<i>Russell 3000</i>	1.0	36	-0.5	24	-0.3	25	5.8	20	11.1	19	11.0	13	6.9	20
<i>InvestorForce All DB US Eq Net Median</i>	0.6		-2.1		-1.8		4.6		10.4		10.0		6.4	
Large Cap Equity	0.6	--	0.4	--	1.0	--	6.6	--	11.6	--	10.7	--	6.0	--
<i>Russell 1000</i>	1.2	--	0.4	--	0.5	--	6.4	--	11.5	--	11.4	--	7.1	--
<i>Barrow Hanley</i>	-1.6	87	-5.6	72	-3.3	52	2.5	58	10.0	39	9.9	41	--	--
<i>Russell 1000 Value</i>	1.6	37	-1.6	35	-1.5	31	3.8	35	9.4	52	10.2	34	5.7	69
<i>eA US Large Cap Value Equity Net Median</i>	0.7		-3.8		-3.1		2.9		9.4		9.6		6.2	
<i>BlackRock S&P 500 Index</i>	1.4	30	1.5	22	1.8	21	7.2	23	11.9	26	--	--	--	--
<i>S&P 500</i>	1.3	30	1.5	23	1.8	21	7.1	24	11.8	26	11.6	28	7.0	48
<i>eA US Large Cap Core Equity Net Median</i>	0.2		-1.7		-1.3		5.1		10.9		10.7		6.9	

* Total Fund and asset class aggregates are ranked in InvestorForce universes. Managers are ranked in eVest (eA) manager universes.

** Includes Parametric Minneapolis manager funded in August 2013.

1. Effective 1/1/16, Policy Index is 24% Russell 1000/ 4% Russell 2000/ 20% MSCI ACWI ex US IMI/ 10% Barclays Aggregate/ 2% Barclays TIPS
5% Barclays BA Intermediate HY / 3% Barclays Multi-verse/ 7% NCREIF NFI ODCE/ 7% Russell 3000 + 3%
8% (60% Russell 3000/40% Barclays Aggregate)/ 5% Libor +4%/ 3% Bloomberg Commodity/ 2% CPI +5%

2. See Appendix for Benchmark History.

Total Fund
Performance Summary (Net of Fees)

Period Ending: March 31, 2016

	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Brown Advisory	-1.4	42	0.8	23	1.5	19	6.0	52	--	--	--	--	--	--
<i>Russell 1000 Growth</i>	0.7	19	2.4	11	2.5	13	9.1	12	13.6	20	12.4	17	8.3	21
<i>eA US Large Cap Growth Equity Net Median</i>	-1.9		-2.0		-1.8		6.1		12.0		10.7		7.3	
DE Shaw	0.6	39	0.0	33	0.3	32	7.5	17	11.9	25	12.3	15	--	--
<i>Russell 1000</i>	1.2	33	0.4	30	0.5	32	6.4	32	11.5	34	11.4	32	7.1	46
<i>eA US Large Cap Core Equity Net Median</i>	0.2		-1.7		-1.3		5.1		10.9		10.7		6.9	
Small Cap Equity	-0.2	51	-8.6	57	-9.2	66	-2.7	73	6.1	69	7.2	63	3.6	96
<i>Russell 2000</i>	-1.5	65	-10.1	66	-9.8	70	-1.2	61	6.8	61	7.2	63	5.3	69
<i>eA US Small Cap Equity Net Median</i>	-0.2		-7.7		-7.2		-0.2		7.6		8.0		6.0	
The Boston Co	4.1	24	-4.1	37	-3.6	28	-0.7	64	7.1	57	8.3	43	--	--
<i>Russell 2000 Value</i>	1.7	58	-6.6	61	-7.7	71	-1.8	75	5.7	74	6.7	72	4.4	89
<i>eA US Small Cap Value Equity Net Median</i>	2.2		-5.5		-5.8		0.2		7.6		8.1		6.1	
Chartwell	-4.4	56	-13.1	52	-14.6	74	-4.7	74	5.1	79	6.8	67	5.1	65
<i>Russell 2000 Growth</i>	-4.7	58	-13.6	57	-11.8	58	-0.6	41	7.9	42	7.7	53	6.0	45
<i>eA US Small Cap Growth Equity Net Median</i>	-4.1		-12.4		-10.5		-1.8		7.1		7.8		5.6	
International Equity	0.9	18	-6.7	16	-6.0	20	-3.4	26	2.0	33	1.6	42	1.7	61
<i>MSCI ACWI ex US IMI²</i>	-0.1	38	-8.8	43	-7.7	42	-4.4	46	1.2	55	1.0	59	2.5	36
<i>MSCI EAFE Gross</i>	-2.9	88	-8.6	41	-7.9	44	-4.2	43	2.7	22	2.8	19	2.3	44
<i>InvestorForce All DB ex-US Eq Net Median</i>	-0.5		-9.2		-8.2		-4.5		1.3		1.3		2.1	
Developed Markets	0.1	18	-6.5	18	-5.7	19	-3.0	30	2.8	39	2.1	54	2.0	57
<i>MSCI ACWI ex USA Gross</i>	-0.3	18	-9.4	51	-8.8	55	-4.8	59	0.8	78	0.8	80	2.4	39
<i>InvestorForce All DB Dev Mkt ex-US Eq Net Median</i>	-1.9		-9.4		-8.5		-4.1		2.2		2.3		2.2	
Baillie Gifford	0.3	18	-4.8	42	-4.4	59	-1.5	56	4.1	51	--	--	--	--
<i>MSCI ACWI ex US²</i>	-0.3	22	-9.4	85	-8.8	87	-4.8	86	2.3	80	--	--	--	--

2. See Appendix for Benchmark History.

Total Fund
Performance Summary (Net of Fees)

Period Ending: March 31, 2016

	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<i>MSCI ACWI ex US Growth²</i>	-0.2	22	-6.4	58	-5.8	65	-1.9	65	3.6	60	--	--	--	--
<i>eA ACWI ex-US Growth Equity Net Median</i>	-2.2		-5.8		-3.0		-1.0		4.2		3.6		4.7	
BlackRock EAFE Index	-2.9	60	-8.7	67	-8.0	71	-4.4	74	--	--	--	--	--	--
<i>MSCI EAFE</i>	-3.0	61	-8.8	68	-8.3	72	-4.7	80	2.2	72	2.3	75	1.8	81
<i>MSCI EAFE Gross</i>	-2.9	59	-8.6	66	-7.9	70	-4.2	74	2.7	69	2.8	72	2.3	64
<i>eA EAFE Core Equity Net Median</i>	-2.5		-7.6		-6.4		-2.8		4.0		3.7		2.9	
FIAM Equity ⁺	0.9	16	-4.3	61	-0.4	73	-0.8	54	3.6	91	--	--	--	--
<i>MSCI ACWI ex US Small Cap Gross</i>	0.8	16	-4.4	62	-0.3	71	-1.8	69	4.0	85	2.8	99	4.2	92
<i>eA ACWI ex-US Small Cap Equity Net Median</i>	-1.1		-3.4		0.5		-0.7		5.5		5.9		6.4	
Mondrian	1.6	26	-7.4	51	-7.3	62	-4.2	60	1.9	61	2.3	62	2.7	40
<i>MSCI ACWI ex USA Value Gross</i>	-0.3	56	-12.5	91	-11.8	93	-7.6	81	-0.8	84	-0.5	84	1.7	83
<i>MSCI ACWI ex USA Gross</i>	-0.3	56	-9.4	69	-8.8	71	-4.8	65	0.8	78	0.8	72	2.4	51
<i>eA ACWI ex-US Value Equity Net Median</i>	0.3		-7.3		-4.4		-3.7		3.4		2.9		2.4	
Emerging Markets	8.8	11	-8.7	13	-8.0	9	-6.7	76	-3.8	27	--	--	--	--
<i>MSCI Emerging Markets Gross</i>	5.8	46	-12.4	71	-11.7	78	-5.7	50	-4.2	30	-3.8	46	3.3	27
<i>InvestorForce All DB Emg Mkt Eq Net Median</i>	5.5		-11.2		-10.5		-5.8		-4.8		-4.1		2.6	
Parametric Core [*]	8.8	9	--	--	--	--	--	--	--	--	--	--	--	--
<i>MSCI Emerging Markets Gross</i>	5.8	27	-12.4	62	-11.7	60	-5.7	58	-4.2	56	-3.8	70	3.3	67
<i>eA Emg Mkts Equity Net Median</i>	4.0		-11.6		-10.8		-5.3		-3.7		-2.4		3.9	
Total Fixed Income	1.7	90	-0.5	89	-1.1	86	1.6	76	1.4	70	4.1	37	5.0	61
<i>Blended Fixed Index²</i>	3.7	27	3.0	33	1.9	20	2.7	46	1.7	57	3.5	64	4.8	66
<i>InvestorForce All DB Total Fix Inc Net Median</i>	2.8		2.4		0.7		2.6		1.8		3.7		5.3	
US Fixed Income	2.0	79	0.2	87	-0.5	82	2.2	78	1.8	66	4.2	43	5.1	53
<i>Blended US Fixed Index²</i>	3.3	30	2.6	52	1.4	34	3.2	42	1.8	67	3.9	56	5.0	57
<i>InvestorForce All DB US Fix Inc Net Median</i>	2.6		2.7		0.9		3.0		2.2		4.0		5.2	

+ Name change from Pyramis Equity in September 2015.

* Funded July 2015. (Parametric closed September 2015.)

2. See Appendix for Benchmark History.

Total Fund
Performance Summary (Net of Fees)

Period Ending: March 31, 2016

	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Core Fixed	2.0	--	2.0	--	0.3	--	3.1	--	2.3	--	4.1	--	--	--
Barclays Aggregate	3.0	--	3.7	--	2.0	--	3.8	--	2.5	--	3.8	--	4.9	--
FIAM Bond ⁺	3.2	15	3.3	55	1.6	62	3.7	42	2.7	31	4.2	32	5.2	42
Western TRU [*]	-0.7	99	--	--	--	--	--	--	--	--	--	--	--	--
3-Month Libor Total Return USD	0.1	99	0.3	99	0.4	97	0.3	99	0.3	99	0.3	99	1.6	99
Barclays Aggregate	3.0	40	3.7	32	2.0	35	3.8	39	2.5	47	3.8	69	4.9	73
eA US Core Fixed Inc Net Median	2.9		3.3		1.8		3.7		2.5		4.0		5.1	
TIPS	3.4	--	1.2	--	1.2	--	1.0	--	-1.8	--	2.6	--	--	--
Barclays US TIPS	4.5	--	2.6	--	1.5	--	2.3	--	-0.7	--	3.0	--	4.6	--
Brown Brothers Harriman	3.4	78	1.2	69	1.2	40	1.0	65	-1.8	83	2.6	59	--	--
Barclays US TIPS	4.5	22	2.6	16	1.5	17	2.3	20	-0.7	39	3.0	34	4.6	48
eA TIPS / Infl Indexed Fixed Inc Net Median	4.2		2.1		1.0		1.5		-0.8		2.7		4.6	
Opportunistic Credit	1.4	--	-3.8	--	-2.8	--	0.8	--	3.7	--	6.5	--	--	--
Barclays BA Intermediate HY	3.4	--	0.4	--	0.2	--	2.1	--	1.7	--	4.8	--	--	--
Angelo Gordon Opportunistic ^{**}	0.7	--	0.4	--	2.9	--	--	--	--	--	--	--	--	--
Angelo Gordon STAR ^{***}	-2.2	--	-1.9	--	0.2	--	6.1	--	9.5	--	--	--	--	--
Barclays Aggregate	3.0	--	3.7	--	2.0	--	3.8	--	2.5	--	3.8	--	4.9	--
Beach Point Select	2.4	47	0.1	12	2.2	1	--	--	--	--	--	--	--	--
Barclays BA Intermediate HY ²	3.4	9	0.4	10	0.2	8	2.1	3	1.7	53	4.8	41	--	--
eA US High Yield Fixed Inc Net Median	2.3		-3.5		-3.2		-0.7		1.9		4.6		6.3	
Brigade Capital	3.1	19	-9.4	97	-10.1	99	-5.1	98	-1.5	98	3.0	93	--	--
Barclays BA Intermediate HY ²	3.4	9	0.4	10	0.2	8	2.1	3	1.7	53	4.8	41	--	--
50% Barclays HY/ 50% Bank Loan	2.3	49	-2.8	38	-2.4	38	0.0	37	2.1	45	4.2	63	--	--
eA US High Yield Fixed Inc Net Median	2.3		-3.5		-3.2		-0.7		1.9		4.6		6.3	

+ Name change from Pyramis Bond in September 2015.

* Funded August 2015.

** Preliminary return as of 3/31/2016. Changed from one-quarter lag to quarterly in June 2015.

*** Preliminary return as of 3/31/2016.

2. See Appendix for Benchmark History.

Total Fund
Performance Summary (Net of Fees)

Period Ending: March 31, 2016

	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Global Fixed Income	0.1	91	-4.4	87	-4.3	87	-2.0	90	-1.1	86	2.9	63	--	--
Barclays Multi-verse	5.9	16	5.5	3	4.4	2	0.2	48	0.9	43	1.9	94	4.4	79
InvestorForce All DB Gbl Fix Inc Net Median	3.0		0.1		-0.6		0.0		0.7		3.5		5.5	
Franklin Templeton	0.1	91	-4.5	91	-4.4	93	-2.1	84	-1.1	89	2.9	53	--	--
Barclays Multi-verse	5.9	18	5.5	11	4.4	5	0.2	48	0.9	54	1.9	70	4.4	73
eA All Global Fixed Inc Net Median	3.4		1.4		0.2		0.1		1.1		3.0		4.9	
Alternatives	-0.7	--	-0.5	--	2.8	--	4.8	--	3.6	--	4.8	--	--	--
Alternatives Allocation Index ²	1.4	--	-2.4	--	-1.0	--	--	--	--	--	--	--	--	--
Blended Alternatives Index	1.3	--	-2.3	--	-0.9	--	0.7	--	5.0	--	5.9	--	--	--
Private Equity	-0.3	73	4.4	40	13.4	16	16.6	13	16.4	9	8.0	72	--	--
Russell 3000 +3%	1.8	18	2.4	62	2.7	80	8.8	55	14.2	26	14.0	16	10.0	39
InvestorForce All DB Private Eq Net Median	0.3		3.6		6.8		9.0		11.1		10.4		8.7	
Hedge Fund/Absolute Return	-1.5	20	8.3	1	5.7	1	9.7	1	8.1	1	--	--	--	--
Libor 1 month +4%	1.0	6	3.2	2	4.3	1	4.2	5	4.2	12	4.2	11	--	--
InvestorForce All DB Hedge Funds Net Median	-2.8		-6.4		-6.0		-1.0		2.3		2.8		2.9	
AQR DELTA XN	-1.1	66	9.2	9	6.6	14	10.1	17	8.4	24	--	--	--	--
Libor 1 month +4%	1.0	42	3.2	23	4.3	24	4.2	40	4.2	48	4.2	45	--	--
eV Alt All Multi-Strategy Median	0.4		-0.8		-1.6		2.2		3.9		3.8		6.2	
Standard Life GARS*	-3.2	79	--	--	--	--	--	--	--	--	--	--	--	--
Libor 1 month +4%	1.0	42	3.2	23	4.3	24	4.2	40	4.2	48	4.2	45	--	--
eV Alt All Multi-Strategy Median	0.4		-0.8		-1.6		2.2		3.9		3.8		6.2	
Commodity	-2.8	--	-24.3	--	-22.4	--	-20.9	--	-15.2	--	--	--	--	--
Bloomberg Commodity Index TR USD	0.4	--	-23.1	--	-19.6	--	-23.4	--	-16.9	--	-14.1	--	-6.2	--
SSARIS Multisource Active Commodity	-2.8	--	-24.3	--	-22.4	--	-20.9	--	-15.2	--	--	--	--	--
Bloomberg Commodity Index TR USD	0.4	--	-23.1	--	-19.6	--	-23.4	--	-16.9	--	-14.1	--	-6.2	--

* Funded October 2015.

2. See Appendix for Benchmark History.

Total Fund
Performance Summary (Net of Fees)

Period Ending: March 31, 2016

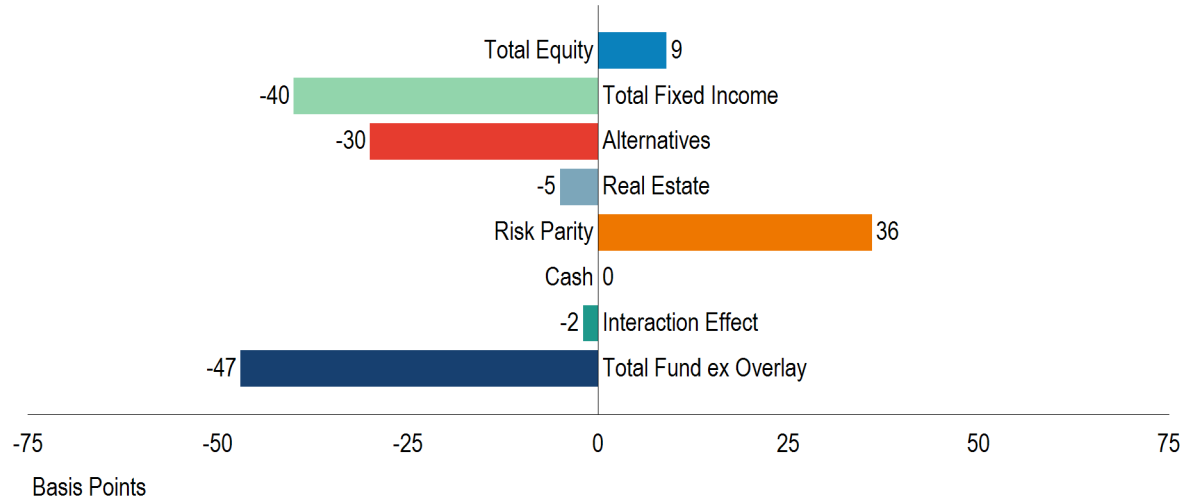
	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<i>S&P Goldman Sachs Commodity</i>	-2.5	--	-34.4	--	-28.7	--	-34.8	--	-24.5	--	-17.4	--	--	--
Private Real Asset**	14.7	--	9.5	--	10.1	--	--	--	--	--	--	--	--	--
<i>CPI +5%</i>	1.2	--	3.6	--	5.0	--	4.9	--	--	--	--	--	--	--
Real Estate	1.3	76	7.2	80	12.8	26	13.3	19	12.9	18	12.5	28	5.9	32
<i>NCREIF ODCE</i>	2.2	38	9.5	23	13.7	15	13.6	13	13.6	8	13.3	5	6.8	7
<i>InvestorForce All DB Real Estate Pub Net Median</i>	2.0		8.6		11.8		12.2		12.2		11.5		5.1	
<i>Invesco</i>	1.4	--	6.9	--	12.4	--	13.1	--	12.8	--	12.4	--	5.8	--
<i>NCREIF ODCE</i>	2.2	--	9.5	--	13.7	--	13.6	--	13.6	--	13.3	--	6.8	--
<i>Invesco US Val IV*</i>	-0.2	--	--	--	--	--	--	--	--	--	--	--	--	--
<i>NCREIF ODCE</i>	2.2	--	9.5	--	13.7	--	13.6	--	13.6	--	13.3	--	6.8	--
<i>NCREIF CEVA 1Q Lag - NET</i>	5.8	--	14.3	--	18.7	--	17.8	--	--	--	--	--	--	--
Risk Parity	6.5	--	-1.2	--	-5.2	--	2.6	--	1.2	--	5.2	--	--	--
<i>60/40 Russell 3000/Barclays Aggregate</i>	1.9	--	1.4	--	0.8	--	5.2	--	7.8	--	8.3	--	6.4	--
AQR GRP, 10% Volatility	4.6	--	-6.2	--	-8.6	--	-1.6	--	-1.5	--	3.5	--	--	--
<i>PanAgora</i>	8.2	--	3.6	--	-1.9	--	--	--	--	--	--	--	--	--
<i>60/40 Russell 3000/Barclays Aggregate</i>	1.9	--	1.4	--	0.8	--	5.2	--	7.8	--	8.3	--	6.4	--
<i>60/40 MSCI World/Barclays Global Aggregate</i>	1.2	--	-0.2	--	-0.9	--	2.8	--	5.7	--	6.0	--	--	--
Cash	0.2	--	1.2	--	1.3	--	0.9	--	0.7	--	0.7	--	1.2	--
<i>91 Day T-Bills</i>	0.1	--	0.1	--	0.1	--	0.1	--	0.1	--	0.1	--	1.0	--
<i>General Account</i>	0.2	--	1.7	--	1.9	--	1.3	--	0.9	--	0.7	--	1.6	--
<i>Treasury & LAIF</i>	0.7	--	0.8	--	0.9	--	1.0	--	0.9	--	0.9	--	1.1	--
<i>91 Day T-Bills</i>	0.1	--	0.1	--	0.1	--	0.1	--	0.1	--	0.1	--	1.0	--

* Funded December 2015.

** Preliminary return as of 3/31/2016.

Total Fund ex Overlay
Performance Attribution

Period Ending: March 31, 2016



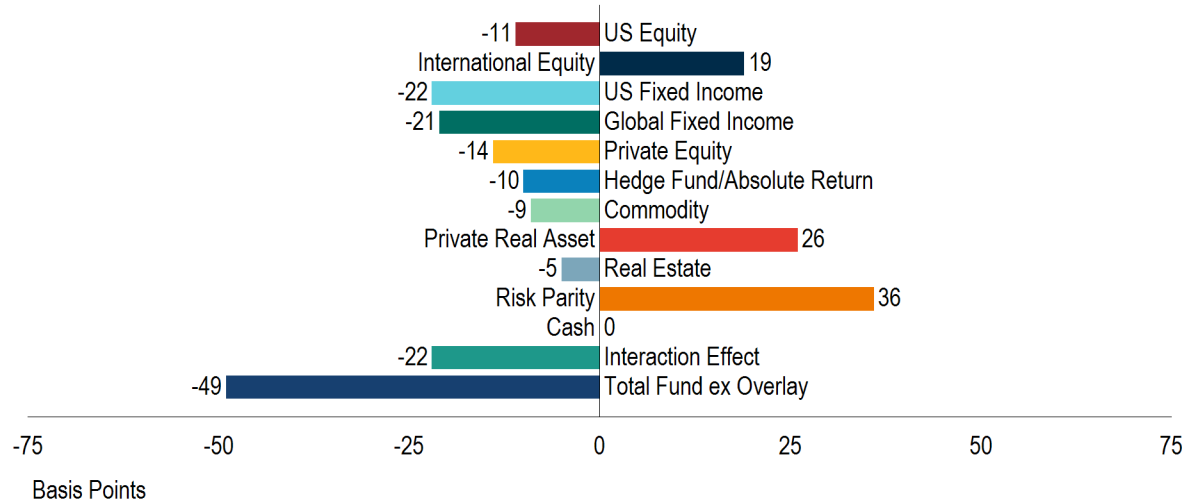
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction* Effects	Total Effects
Total Equity	0.61%	0.41%	0.19%	0.09%	-0.05%	0.01%	0.05%
Total Fixed Income	1.73%	3.71%	-1.98%	-0.40%	-0.01%	0.01%	-0.40%
Alternatives	-0.69%	1.33%	-2.02%	-0.30%	0.00%	0.01%	-0.29%
Real Estate	1.30%	2.18%	-0.88%	-0.05%	0.00%	-0.01%	-0.06%
Risk Parity	6.53%	1.89%	4.64%	0.36%	0.00%	-0.03%	0.33%
Cash	0.17%	0.07%	0.10%	0.00%	-0.10%	0.00%	-0.10%
Total	1.04%	1.51%	-0.47%	-0.30%	-0.15%	-0.02%	-0.47%

Attribution does not include the impact of the Parametric Minneapolis strategy.

* Interaction Effects include Residual Effects

Total Fund ex Overlay
Performance Attribution

Period Ending: March 31, 2016



	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction* Effects	Total Effects
US Equity	0.43%	0.79%	-0.36%	-0.11%	-0.03%	0.00%	-0.14%
International Equity	0.87%	-0.12%	1.00%	0.19%	-0.01%	-0.01%	0.18%
US Fixed Income	2.01%	3.33%	-1.31%	-0.22%	0.01%	-0.01%	-0.22%
Global Fixed Income	0.12%	5.88%	-5.75%	-0.21%	-0.03%	0.04%	-0.20%
Private Equity	-0.31%	1.81%	-2.12%	-0.14%	0.00%	0.00%	-0.14%
Hedge Fund/Absolute Return	-1.46%	0.99%	-2.45%	-0.10%	-0.01%	-0.04%	-0.15%
Commodity	-2.76%	0.42%	-3.18%	-0.09%	0.01%	0.02%	-0.07%
Private Real Asset	14.71%	1.22%	13.49%	0.26%	0.00%	-0.19%	0.07%
Real Estate	1.30%	2.18%	-0.88%	-0.05%	0.00%	-0.01%	-0.06%
Risk Parity	6.53%	1.89%	4.64%	0.36%	0.00%	-0.03%	0.33%
Cash	0.17%	0.07%	0.10%	0.00%	-0.10%	0.00%	-0.10%
Total	1.05%	1.54%	-0.49%	-0.11%	-0.16%	-0.22%	-0.49%

Attribution does not include the impact of the Parametric Minneapolis strategy.

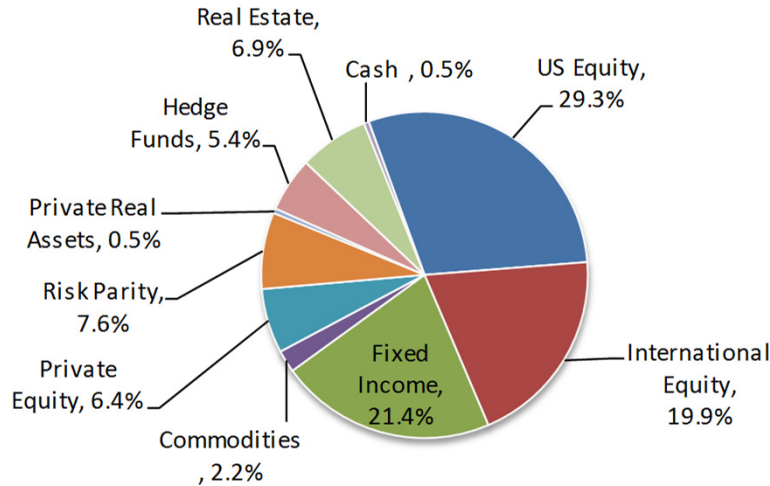
* Interaction Effects include Residual Effects

Total Fund

Asset Allocation Analysis

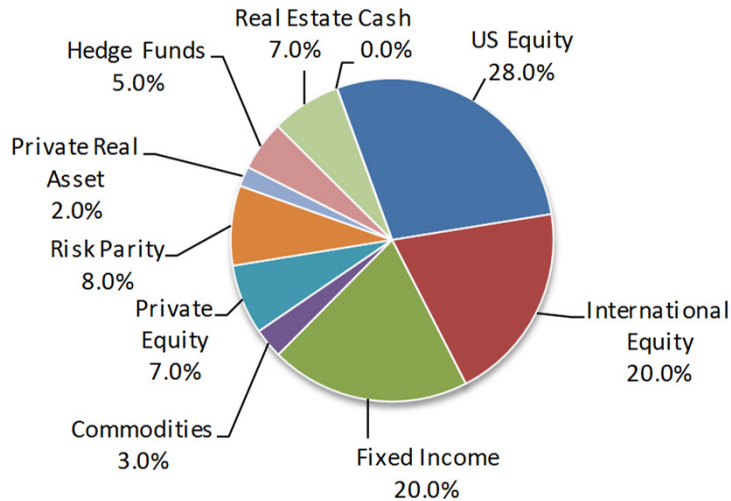
Period Ending: March 31, 2016

Current w/Overlay



ASSET ALLOCATION	MARKET VALUE	W/OVERLAY	W/O OVERLAY
US Equity	1,047,839,059	29.3%	30.3%
International Equity	672,727,724	19.9%	19.5%
Fixed Income	665,968,684	21.4%	19.3%
Commodities	76,362,485	2.2%	2.2%
Private Equity	221,248,743	6.4%	6.4%
Risk Parity	262,036,190	7.6%	7.6%
Private Real Assets	16,533,230	0.5%	0.5%
Hedge Funds	186,300,204	5.4%	5.4%
Real Estate	238,047,447	6.9%	6.9%
Cash	69,094,658	0.5%	2.0%
TOTAL	3,456,158,423	100.0%	100.0%

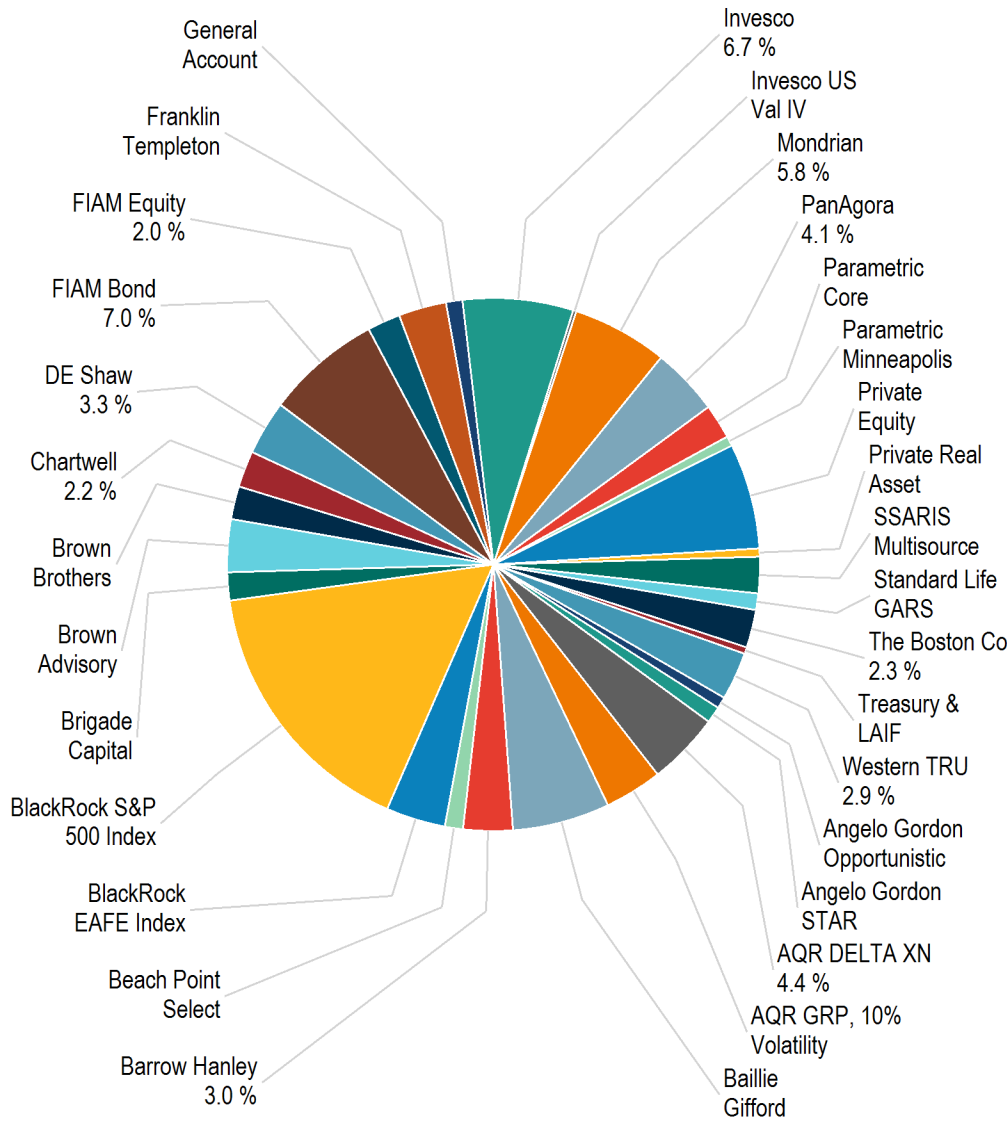
Target



ASSET ALLOCATION	W/OVERLAY	TARGET	DIFF
US Equity	29.3%	28.0%	1.3%
International Equity	19.9%	20.0%	-0.1%
Fixed Income	21.4%	20.0%	1.4%
Commodities	2.2%	3.0%	-0.8%
Private Equity	6.4%	7.0%	-0.6%
Risk Parity	7.6%	8.0%	-0.4%
Private Real Asset	0.5%	2.0%	-1.5%
Hedge Funds	5.4%	5.0%	0.4%
Real Estate	6.9%	7.0%	-0.1%
Cash	0.5%	0.0%	0.5%
TOTAL	100.0%	100.0%	0.0%

Total Fund Manager Allocation Analysis

Period Ending: March 31, 2016



	Actual \$	Actual %
Angelo Gordon Opportunistic	\$24,045,000	1%
Angelo Gordon STAR	\$33,756,000	1%
AQR DELTA XN	\$152,577,660	4%
AQR GRP, 10% Volatility	\$121,571,865	4%
Baillie Gifford	\$203,704,253	6%
Barrow Hanley	\$104,746,480	3%
Beach Point Select	\$39,374,363	1%
BlackRock EAFE Index	\$125,939,642	4%
BlackRock S&P 500 Index	\$561,918,463	16%
Brigade Capital	\$58,775,083	2%
Brown Advisory	\$109,830,625	3%
Brown Brothers Harriman	\$69,431,137	2%
Chartwell	\$76,655,870	2%
DE Shaw	\$114,193,869	3%
FIAM Bond	\$240,572,666	7%
FIAM Equity	\$69,217,310	2%
Franklin Templeton	\$98,904,372	3%
General Account	\$35,886,561	1%
Invesco	\$229,923,478	7%
Invesco US Val IV	\$8,123,969	0%
Mondrian	\$202,181,119	6%
PanAgora	\$140,464,325	4%
Parametric Core	\$71,685,400	2%
Parametric Minneapolis Overlay	\$20,080,486	1%
Private Equity	\$221,248,743	6%
Private Real Asset	\$16,533,230	0%
SSARIS Multisource Active Commodity	\$76,362,485	2%
Standard Life GARS	\$33,722,544	1%
The Boston Co	\$80,493,752	2%
Treasury & LAIF	\$13,127,611	0%
Western TRU	\$101,110,062	3%
Total	\$3,456,158,423	100%

Statistics Summary

3 Years

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Information Ratio	Information Ratio Rank	Tracking Error	Tracking Error Rank
Total Fund	6.1%	24	7.3%	67	0.8	44	0.0	24	1.0%	3
Policy Index	6.2%	23	7.7%	80	0.8	49	--	--	0.0%	1
InvestorForce Public DB > \$1B Net Median	5.4%	--	6.8%	--	0.8	--	-0.3	--	1.6%	--

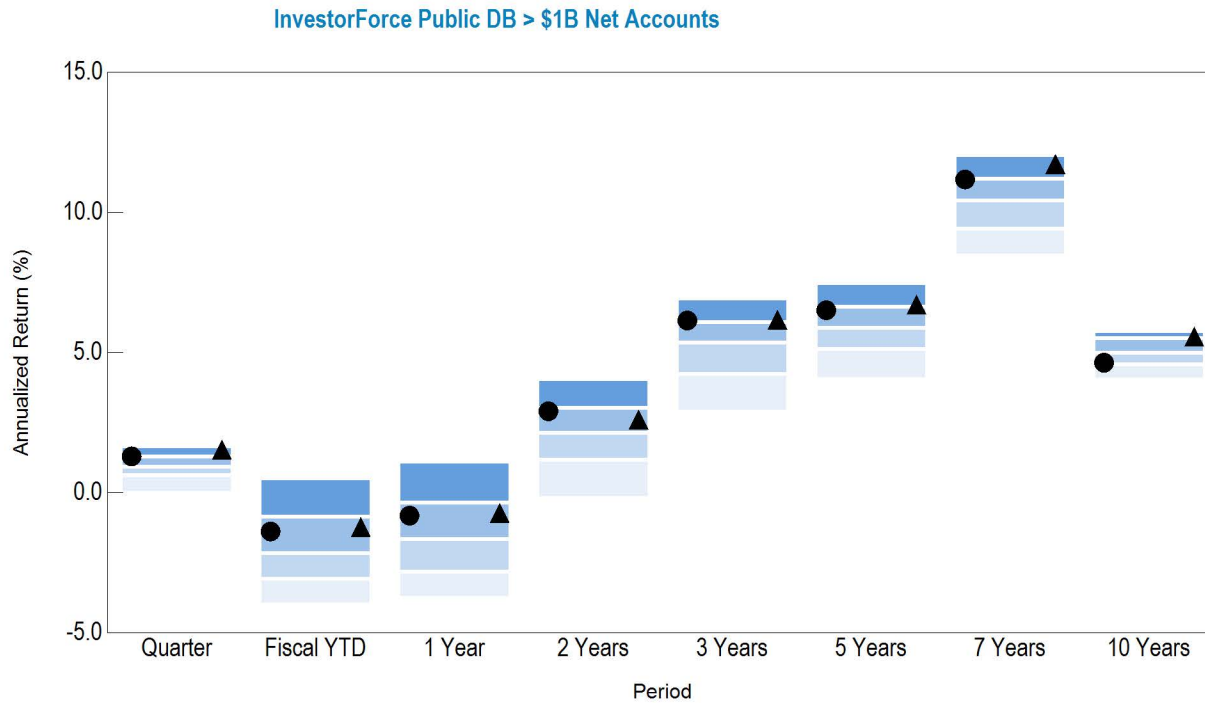
Statistics Summary

5 Years

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Information Ratio	Information Ratio Rank	Tracking Error	Tracking Error Rank
Total Fund	6.5%	30	8.4%	76	0.8	49	-0.2	42	1.0%	6
Policy Index	6.7%	24	8.8%	86	0.8	52	--	--	0.0%	1
InvestorForce Public DB > \$1B Net Median	5.9%	--	7.6%	--	0.8	--	-0.4	--	1.9%	--

Total Fund
Peer Universe Comparison

Period Ending: March 31, 2016

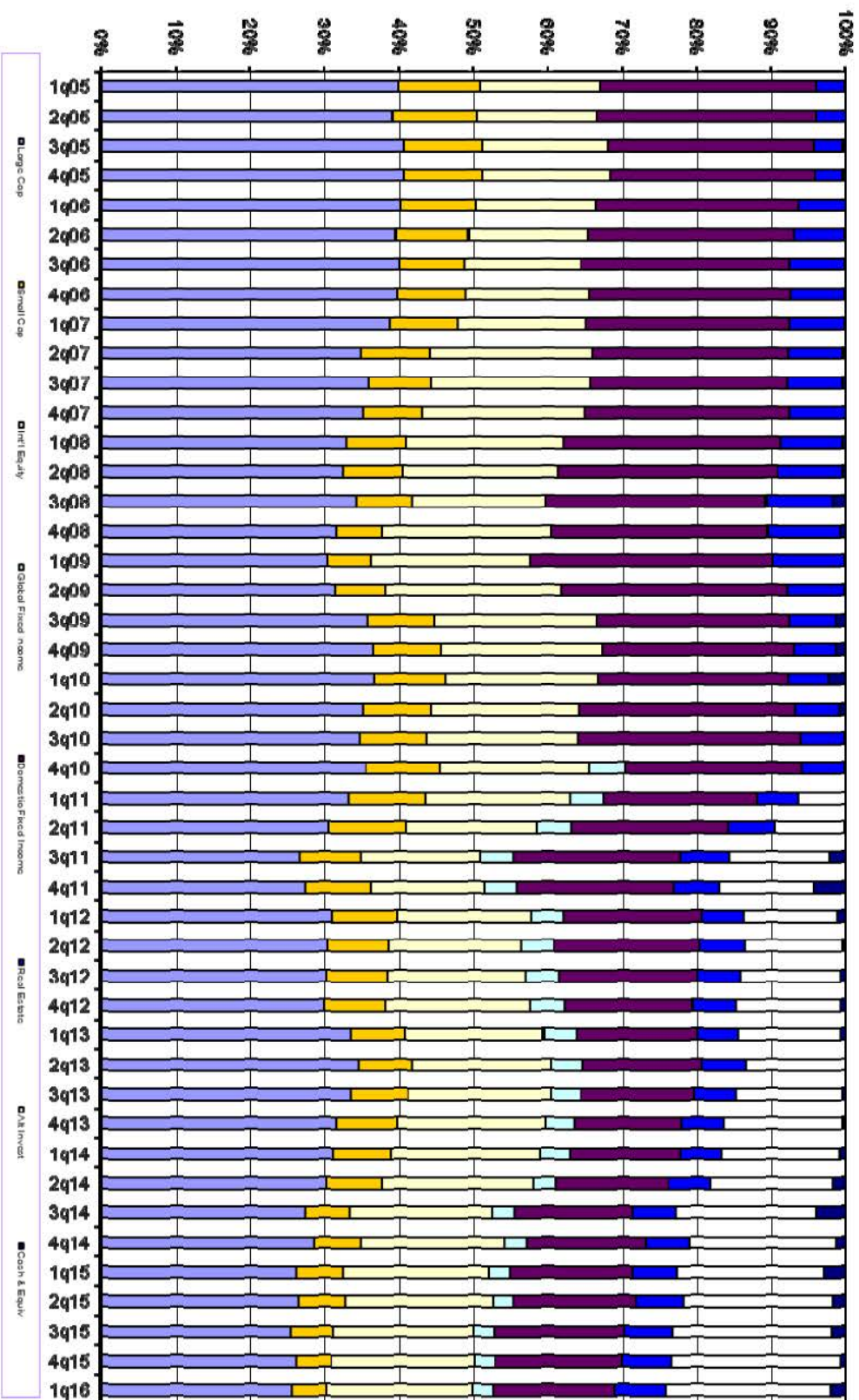


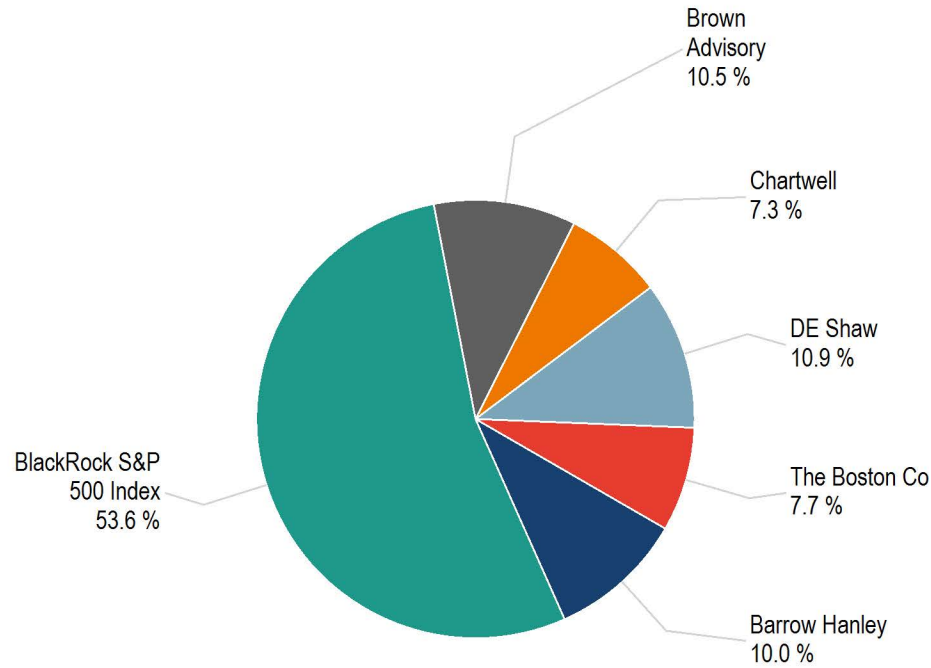
	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	1.6	0.5	1.1	4.0	6.9	7.5	12.0	5.8
25th Percentile	1.3	-0.8	-0.3	3.0	6.1	6.6	11.2	5.5
Median	0.9	-2.1	-1.6	2.1	5.4	5.9	10.4	5.0
75th Percentile	0.6	-3.1	-2.8	1.2	4.2	5.1	9.4	4.6
95th Percentile	0.0	-4.0	-3.8	-0.2	2.9	4.1	8.5	4.0
# of Portfolios	50	50	50	50	50	50	49	45
● Total Fund	1.3 (25)	-1.4 (31)	-0.8 (33)	2.9 (29)	6.1 (24)	6.5 (30)	11.2 (30)	4.6 (75)
▲ Policy Index	1.5 (11)	-1.2 (27)	-0.7 (31)	2.6 (42)	6.2 (23)	6.7 (24)	11.7 (9)	5.6 (24)

Total Fund

Asset Allocation History

Period Ending: March 31, 2016





	Actual \$	Actual %	Manager Contribution to Excess Return %
Barrow Hanley	\$104,746,480	10.0%	-0.3%
BlackRock S&P 500 Index	\$561,918,463	53.6%	0.0%
Brown Advisory	\$109,830,625	10.5%	-0.2%
Chartwell	\$76,655,870	7.3%	0.0%
DE Shaw	\$114,193,869	10.9%	-0.1%
The Boston Co	\$80,493,752	7.7%	0.2%
Actual vs. Policy Weight Difference			0.1%
Total	\$1,047,839,059	100.0%	-0.4%

Statistics Summary

3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
US Equity	10.6%	11.6%	0.9	-0.1	0.8%
Blended US Equity Index	10.7%	11.8%	0.9	--	0.0%
Russell 3000	11.1%	11.6%	1.0	0.5	1.0%

Statistics Summary

3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Large Cap Equity	11.6%	11.3%	1.0	0.1	0.8%
Russell 1000	11.5%	11.4%	1.0	--	0.0%
Barrow Hanley	10.0%	12.0%	0.8	0.2	3.0%
Russell 1000 Value	9.4%	11.4%	0.8	--	0.0%
DE Shaw	11.9%	11.8%	1.0	0.2	2.2%
Russell 1000	11.5%	11.4%	1.0	--	0.0%
Small Cap Equity	6.1%	14.8%	0.4	-0.3	2.5%
Russell 2000	6.8%	15.3%	0.4	--	0.0%
The Boston Co	7.1%	14.0%	0.5	0.5	3.0%
Russell 2000 Value	5.7%	14.5%	0.4	--	0.0%
Chartwell	5.1%	16.1%	0.3	-0.7	4.2%
Russell 2000 Growth	7.9%	16.7%	0.5	--	0.0%

Statistics Summary

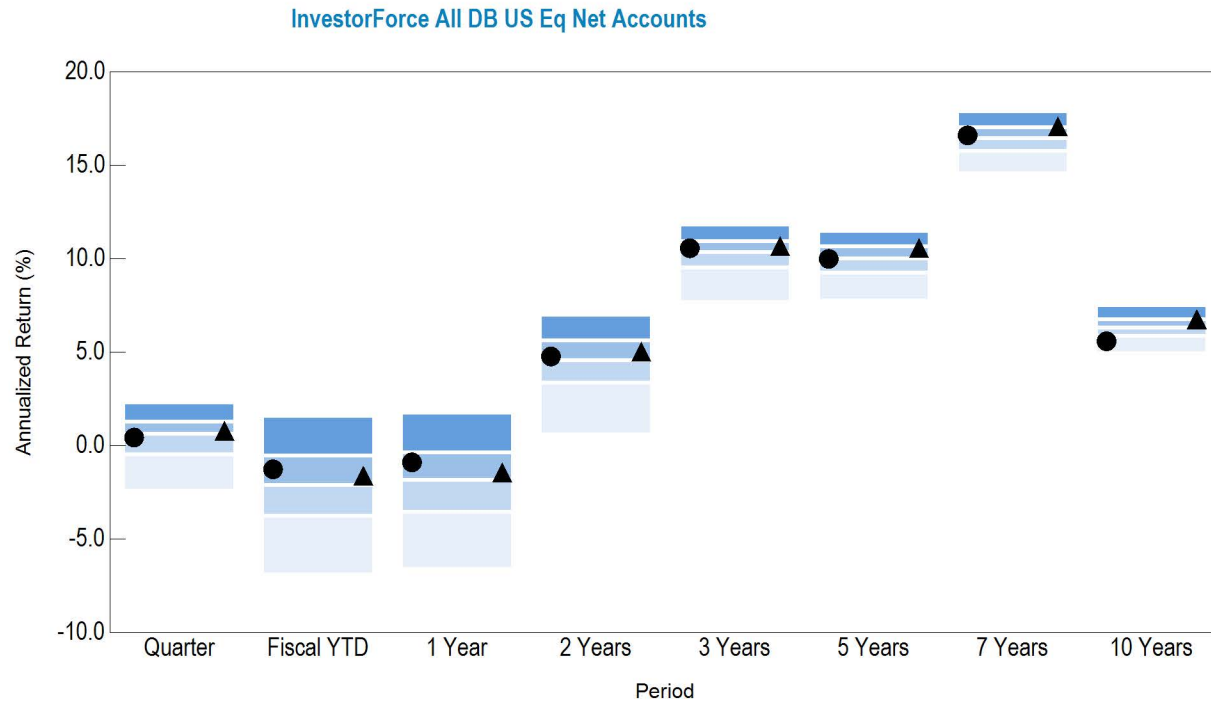
5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
US Equity	10.0%	13.2%	0.8	-0.6	1.0%
Blended US Equity Index	10.6%	13.0%	0.8	--	0.0%
Russell 3000	11.0%	12.7%	0.9	0.5	0.9%

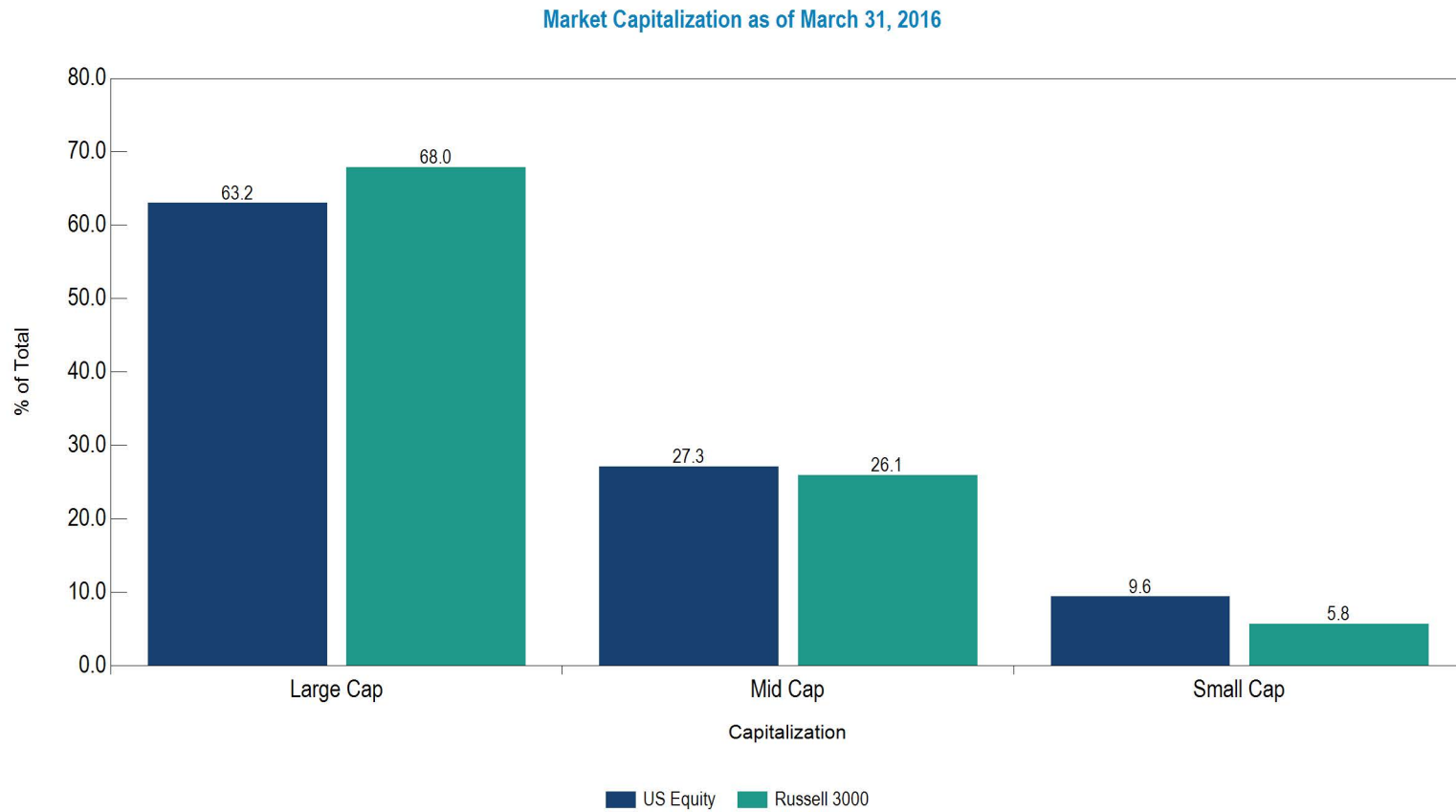
Statistics Summary

5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Large Cap Equity	10.7%	12.7%	0.8	-0.7	0.9%
Russell 1000	11.4%	12.4%	0.9	--	0.0%
Barrow Hanley	9.9%	13.2%	0.7	-0.1	2.7%
Russell 1000 Value	10.2%	12.7%	0.8	--	0.0%
DE Shaw	12.3%	13.0%	0.9	0.5	2.0%
Russell 1000	11.4%	12.4%	0.9	--	0.0%
Small Cap Equity	7.2%	16.3%	0.4	0.0	2.9%
Russell 2000	7.2%	16.7%	0.4	--	0.0%
The Boston Co	8.3%	15.8%	0.5	0.6	2.9%
Russell 2000 Value	6.7%	15.9%	0.4	--	0.0%
Chartwell	6.8%	17.7%	0.4	-0.2	4.4%
Russell 2000 Growth	7.7%	17.8%	0.4	--	0.0%



	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
Return (Rank)								
5th Percentile	2.3	1.6	1.7	7.0	11.8	11.5	17.9	7.5
25th Percentile	1.3	-0.5	-0.4	5.6	11.0	10.7	17.1	6.8
Median	0.6	-2.1	-1.8	4.6	10.4	10.0	16.5	6.4
75th Percentile	-0.4	-3.7	-3.5	3.4	9.6	9.3	15.8	5.9
95th Percentile	-2.4	-6.9	-6.6	0.6	7.7	7.8	14.6	5.0
# of Portfolios	671	666	664	646	605	510	434	345
● US Equity	0.4 (57)	-1.3 (39)	-0.9 (36)	4.8 (47)	10.6 (42)	10.0 (52)	16.6 (45)	5.6 (85)
▲ Blended US Equity Index	0.8 (45)	-1.6 (43)	-1.4 (45)	5.0 (40)	10.7 (37)	10.6 (28)	17.1 (25)	6.8 (29)



See appendix for the market capitalization breakpoints.

Characteristics

	Portfolio	Russell 3000
Number of Holdings	2,333	2,973
Weighted Avg. Market Cap. (\$B)	94.0	107.4
Median Market Cap. (\$B)	2.2	1.4
Price To Earnings	24.8	23.0
Price To Book	4.6	3.6
Price To Sales	3.5	3.1
Return on Equity (%)	17.4	16.2
Yield (%)	1.9	2.0
Beta (holdings; domestic)	1.0	1.0

Top Holdings

APPLE	2.3%
MICROSOFT	1.5%
AMAZON.COM	1.4%
JOHNSON & JOHNSON	1.3%
FACEBOOK CLASS A	1.2%
VISA 'A'	1.1%
EXXON MOBIL	1.0%
ALPHABET 'A'	1.0%
WELLS FARGO & CO	1.0%
ALPHABET 'C'	0.9%

Best Performers

	Return %
ULTRAPETROL BAHAMAS (ULTR)	157.1%
TOWN SPORTS INTL.HDG. (CLUB)	141.2%
COEUR MINING (CDE)	126.6%
ENERNOC (ENOC)	94.3%
SUNCOKE ENERGY (SXC)	87.3%
KINROSS GOLD (NYS) (KGC)	86.8%
CONTANGO OIL & GAS (MCF)	83.9%
VIRNETX HOLDING (VHC)	78.6%
MCEWEN MINING (MUX)	78.0%
LSB INDUSTRIES (LXU)	75.9%

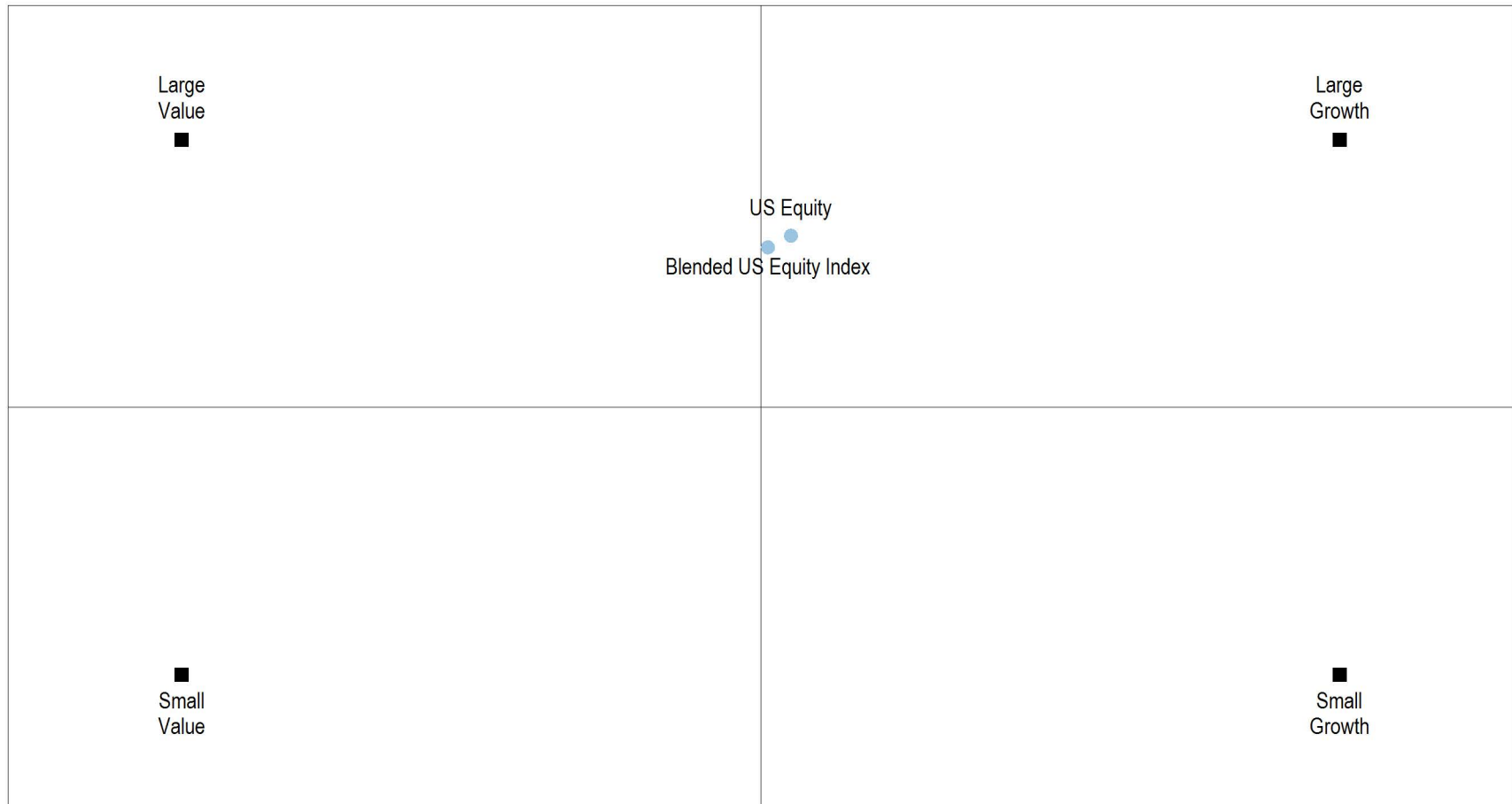
Worst Performers

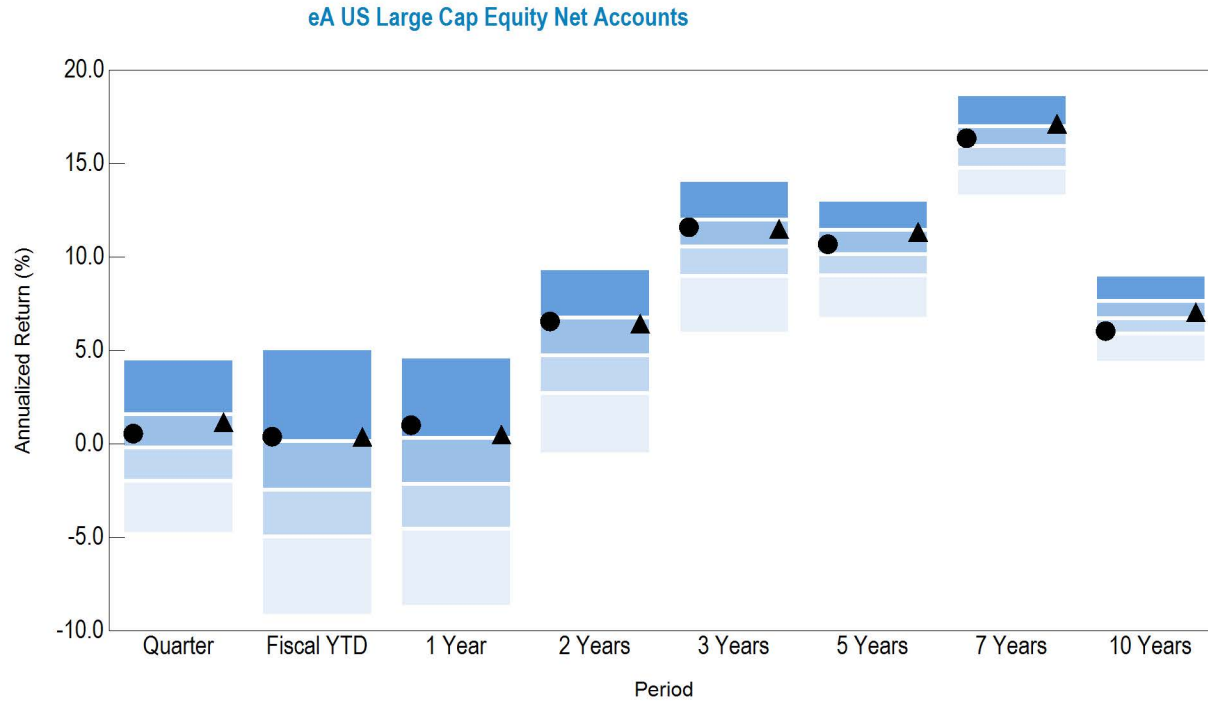
	Return %
EAGLE BULK SHIPPING (EGLE)	-89.8%
NORANDA ALUMINUM HLDG. (NORNQ)	-82.8%
MIDSTATES PETROLEUM (MPOYQ)	-82.4%
CARBILAN THERAPEUTICS (CBYL)	-82.2%
STONE ENERGY (SGY)	-81.6%
PTC THERAPEUTICS (PTCT)	-80.1%
CELLEX THERAPEUTICS (CLDX)	-75.9%
VALEANT PHARMS. (NYS) INTL. (VRX)	-74.1%
BIOCRIST PHARMS. (BCRX)	-72.6%
BONANZA CREEK ENERGY (BCEI)	-69.8%

US Equity Performance Attribution vs. Russell 3000

	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.0%	0.0%	0.0%	0.0%	2.8%	3.2%	5.9%	5.9%			
Materials	-0.2%	-0.2%	0.0%	0.0%	-1.9%	4.8%	3.1%	3.1%			
Industrials	0.0%	-0.2%	0.1%	0.0%	3.3%	4.8%	11.8%	10.7%			
Cons. Disc.	0.0%	0.0%	0.0%	0.0%	1.6%	1.8%	14.6%	13.5%			
Cons. Staples	0.2%	0.3%	0.0%	-0.1%	9.0%	5.4%	8.0%	8.8%			
Health Care	0.2%	0.1%	0.0%	0.0%	-6.0%	-7.0%	15.2%	14.8%			
Financials	0.0%	-0.1%	0.1%	0.0%	-4.5%	-3.7%	15.8%	18.1%			
Info. Tech	-0.3%	-0.2%	0.0%	0.0%	0.7%	1.9%	20.7%	19.9%			
Telecomm.	-0.1%	-0.1%	-0.1%	0.1%	10.6%	15.0%	1.8%	2.2%			
Utilities	-0.2%	-0.1%	-0.1%	0.1%	11.0%	15.3%	2.3%	3.1%			
Cash	-0.1%	0.0%	-0.1%	0.0%	0.1%	--	0.8%	0.0%			
Unclassified	0.0%	0.0%	0.0%	0.0%	-5.0%	--	0.1%	0.0%			
Portfolio	-0.6%	=	-0.6%	+	0.0%	+	0.0%	0.5%	1.0%	100.0%	100.0%

US Effective Style Map





	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
Return (Rank)								
5th Percentile	4.5	5.1	4.6	9.4	14.1	13.1	18.7	9.0
25th Percentile	1.6	0.2	0.4	6.8	12.0	11.5	17.0	7.7
Median	-0.2	-2.4	-2.1	4.8	10.6	10.2	16.0	6.8
75th Percentile	-2.0	-5.0	-4.5	2.8	9.0	9.1	14.8	5.9
95th Percentile	-4.8	-9.2	-8.7	-0.5	5.9	6.7	13.3	4.4
# of Portfolios	527	522	519	504	491	443	417	353
● Large Cap Equity	0.6 (38)	0.4 (25)	1.0 (20)	6.6 (28)	11.6 (30)	10.7 (41)	16.4 (41)	6.0 (72)
▲ Russell 1000	1.2 (32)	0.4 (25)	0.5 (25)	6.4 (29)	11.5 (32)	11.4 (27)	17.2 (23)	7.1 (43)

Characteristics

	Portfolio	Russell 1000
Number of Holdings	2,260	1,020
Weighted Avg. Market Cap. (\$B)	110.5	115.9
Median Market Cap. (\$B)	2.3	7.5
Price To Earnings	24.9	23.0
Price To Book	4.9	4.1
Price To Sales	3.7	3.1
Return on Equity (%)	18.0	17.5
Yield (%)	2.0	2.1
Beta (holdings; domestic)	1.0	1.0

Top Holdings

APPLE	2.7%
MICROSOFT	1.7%
AMAZON.COM	1.7%
JOHNSON & JOHNSON	1.5%
FACEBOOK CLASS A	1.5%
VISA 'A'	1.3%
EXXON MOBIL	1.2%
ALPHABET 'A'	1.2%
WELLS FARGO & CO	1.2%
ALPHABET 'C'	1.1%

Best Performers

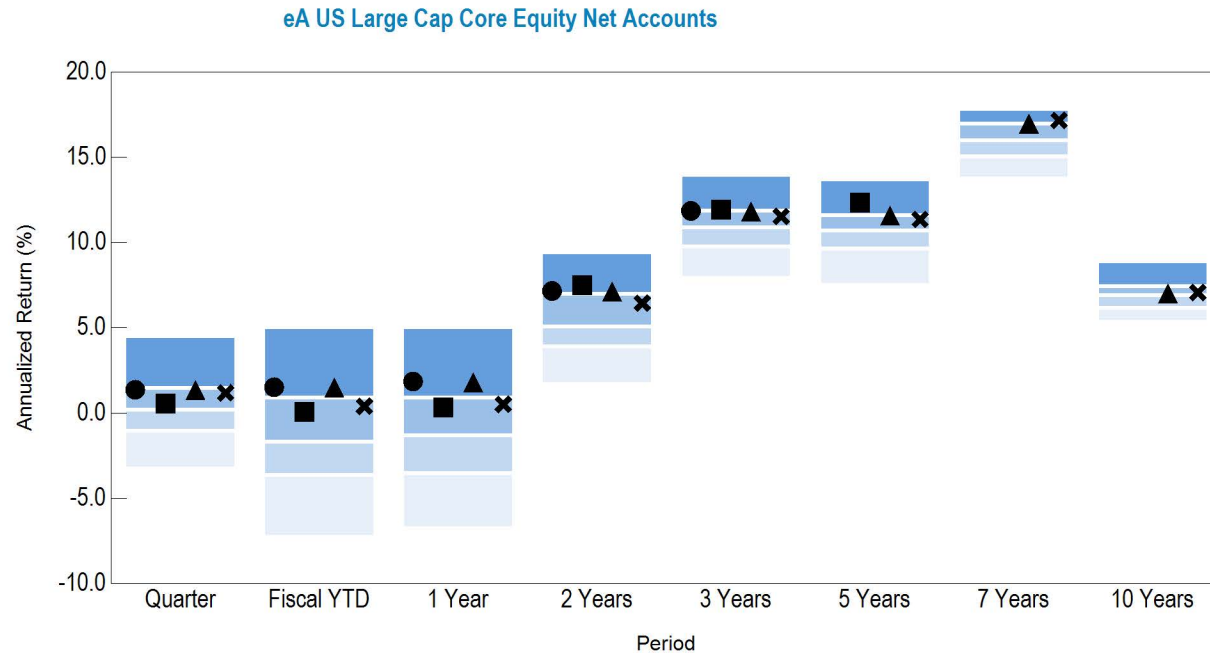
	Return %
ULTRAPETROL BAHAMAS (ULTR)	157.1%
TOWN SPORTS INTL.HDG. (CLUB)	141.2%
COEUR MINING (CDE)	126.6%
ENERNOC (ENOC)	94.3%
SUNCOKE ENERGY (SXC)	87.3%
KINROSS GOLD (NYS) (KGC)	86.8%
CONTANGO OIL & GAS (MCF)	83.9%
VIRNETX HOLDING (VHC)	78.6%
MCEWEN MINING (MUX)	78.0%
LSB INDUSTRIES (LXU)	75.9%

Worst Performers

	Return %
EAGLE BULK SHIPPING (EGLE)	-89.8%
NORANDA ALUMINUM HLDG. (NORNQ)	-82.8%
MIDSTATES PETROLEUM (MPOYQ)	-82.4%
CARBYLAN THERAPEUTICS (CBYL)	-82.2%
STONE ENERGY (SGY)	-81.6%
PTC THERAPEUTICS (PTCT)	-80.1%
CELLEX THERAPEUTICS (CLDX)	-75.9%
VALEANT PHARMS. (NYS) INTL. (VRX)	-74.1%
BIOCRYS THERAPEUTICS (BCRX)	-72.6%
BONANZA CREEK ENERGY (BCEI)	-69.8%

Large Cap Equity Performance Attribution vs. Russell 1000

	Total Effects	Attribution Effects			Returns		Sector Weights				
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.1%	-0.1%	0.0%	0.0%	2.5%	3.6%	6.3%	6.2%			
Materials	0.0%	0.0%	0.0%	0.0%	3.3%	4.7%	3.3%	3.1%			
Industrials	0.0%	0.0%	0.0%	0.0%	4.5%	4.7%	11.2%	10.4%			
Cons. Disc.	-0.3%	-0.3%	0.0%	0.0%	-0.5%	1.8%	13.6%	13.6%			
Cons. Staples	0.0%	0.0%	0.0%	0.0%	5.6%	5.5%	9.2%	9.2%			
Health Care	0.0%	0.1%	-0.1%	0.0%	-5.7%	-6.1%	15.4%	14.7%			
Financials	-0.3%	-0.5%	0.2%	0.1%	-7.1%	-4.3%	14.7%	17.5%			
Info. Tech	0.1%	0.0%	0.0%	0.0%	2.0%	1.8%	21.2%	20.0%			
Telecomm.	0.0%	0.0%	0.0%	0.0%	14.8%	15.2%	2.2%	2.3%			
Utilities	-0.1%	0.0%	-0.1%	0.0%	15.7%	15.7%	2.0%	3.0%			
Cash	0.0%	0.0%	0.0%	0.0%	0.1%	--	0.8%	0.0%			
Unclassified	0.0%	0.0%	0.0%	0.0%	1.3%	--	0.1%	0.0%			
Portfolio	-0.8%	=	-0.8%	+	0.0%	+	0.1%	0.4%	1.1%	100.0%	100.0%



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	4.5	5.0	5.0	9.4	14.0	13.7	17.8	8.9
25th Percentile	1.5	0.9	0.9	7.0	11.9	11.6	17.0	7.5
Median	0.2	-1.7	-1.3	5.1	10.9	10.7	16.0	6.9
75th Percentile	-1.0	-3.6	-3.5	3.9	9.8	9.7	15.1	6.2
95th Percentile	-3.2	-7.2	-6.7	1.7	7.9	7.5	13.8	5.4
# of Portfolios	137	135	134	131	125	114	104	94
● BlackRock S&P 500 Index	1.4 (30)	1.5 (22)	1.8 (21)	7.2 (23)	11.9 (26)	-- (--)	-- (--)	-- (--)
■ DE Shaw	0.6 (39)	0.0 (33)	0.3 (32)	7.5 (17)	11.9 (25)	12.3 (15)	-- (--)	-- (--)
▲ S&P 500	1.3 (30)	1.5 (23)	1.8 (21)	7.1 (24)	11.8 (26)	11.6 (28)	17.0 (26)	7.0 (48)
✕ Russell 1000	1.2 (33)	0.4 (30)	0.5 (32)	6.4 (32)	11.5 (34)	11.4 (32)	17.2 (19)	7.1 (46)

Characteristics

	Portfolio	S&P 500
Number of Holdings	503	504
Weighted Avg. Market Cap. (\$B)	128.7	128.9
Median Market Cap. (\$B)	18.2	18.3
Price To Earnings	24.4	22.7
Price To Book	5.0	4.2
Price To Sales	3.5	3.0
Return on Equity (%)	19.0	17.8
Yield (%)	2.2	2.2
Beta (holdings; domestic)	1.0	1.0

Top Holdings

APPLE	3.4%
MICROSOFT	2.5%
EXXON MOBIL	2.0%
JOHNSON & JOHNSON	1.7%
GENERAL ELECTRIC	1.7%
FACEBOOK CLASS A	1.5%
AT&T	1.4%
AMAZON.COM	1.3%
WELLS FARGO & CO	1.3%
ALPHABET 'A'	1.3%

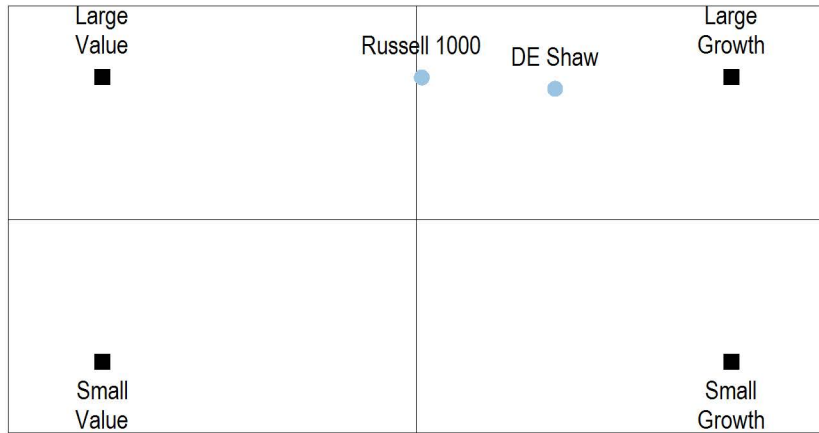
Best Performers

	Return %
FREEMONT-MCMORAN (FCX)	52.7%
NEWMONT MINING (NEM)	47.9%
URBAN OUTFITTERS (URBN)	45.5%
CONSOL EN. (CNX)	43.1%
MICHAEL KORS HOLDINGS (KORS)	42.2%
WYNN RESORTS (WYNN)	35.9%
PVH (PVH)	34.6%
RANGE RES. (RRC)	31.7%
EXELON (EXC)	30.4%
SPECTRA ENERGY (SE)	29.7%

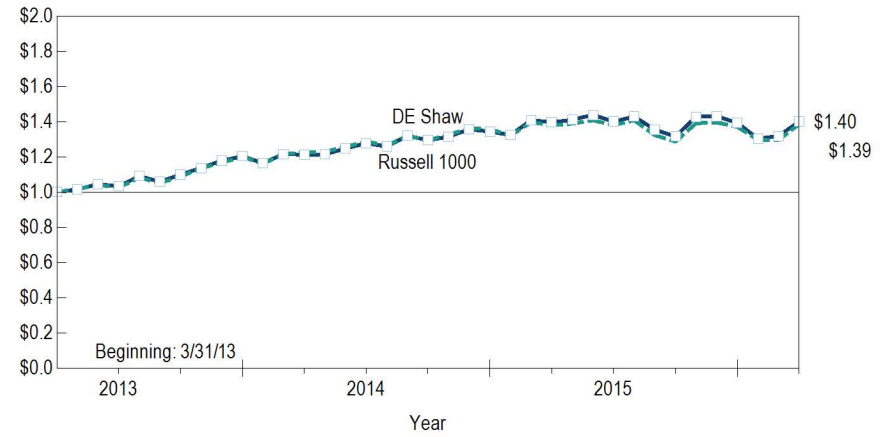
Worst Performers

	Return %
ENDO INTERNATIONAL (ENDP)	-54.0%
VERTEX PHARMS. (VRTX)	-36.8%
WILLIAMS (WMB)	-35.0%
REGENERON PHARMS. (REGN)	-33.6%
ENSCO CLASS A (ESV)	-32.6%
MARATHON PETROLEUM (MPC)	-27.6%
ALEXION PHARMS. (ALXN)	-27.0%
TRANSOCEAN (RIG)	-26.2%
MICRON TECHNOLOGY (MU)	-26.1%
CF INDUSTRIES HDG. (CF)	-22.4%

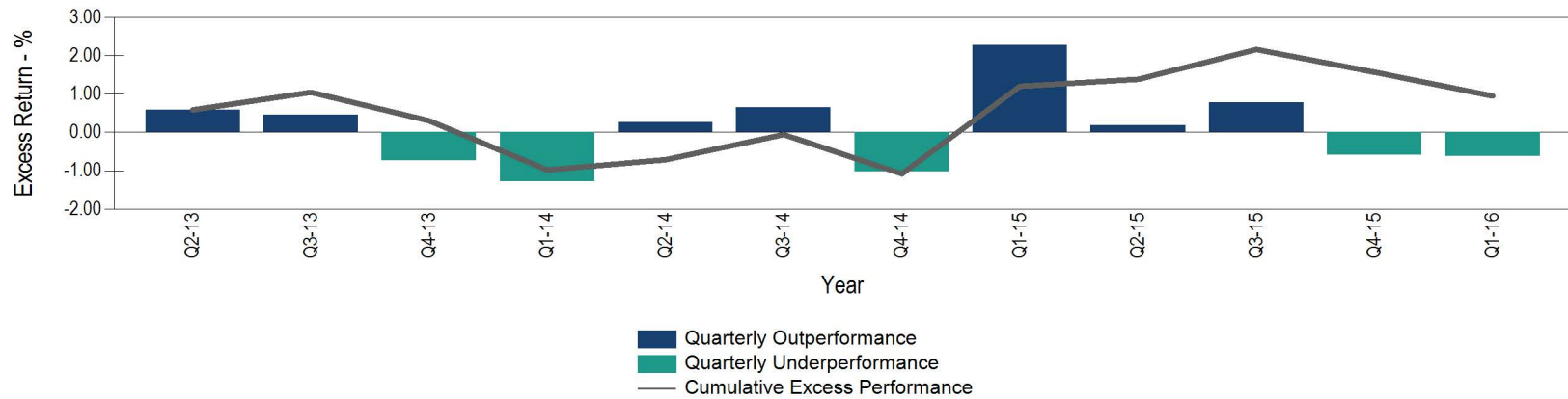
US Effective Style Map

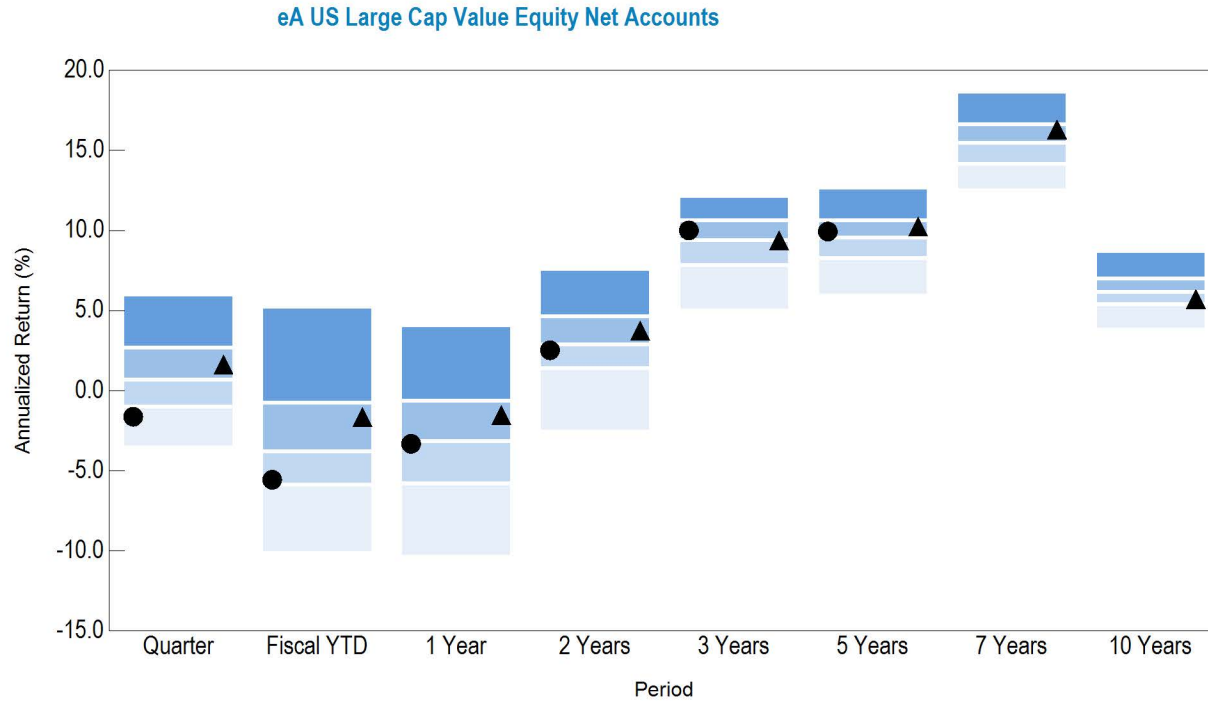


Growth of a Dollar



Quarterly and Cumulative Excess Performance





	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	6.0	5.2	4.0	7.6	12.1	12.7	18.6	8.7
25th Percentile	2.7	-0.7	-0.6	4.7	10.6	10.7	16.7	7.0
Median	0.7	-3.8	-3.1	2.9	9.4	9.6	15.5	6.2
75th Percentile	-1.0	-5.8	-5.8	1.4	7.9	8.3	14.2	5.4
95th Percentile	-3.5	-10.1	-10.4	-2.5	5.0	5.9	12.6	3.8
# of Portfolios	209	209	208	200	197	176	167	140
● Barrow Hanley	-1.6 (87)	-5.6 (72)	-3.3 (52)	2.5 (58)	10.0 (39)	9.9 (41)	-- (--)	-- (--)
▲ Russell 1000 Value	1.6 (37)	-1.6 (35)	-1.5 (31)	3.8 (35)	9.4 (52)	10.2 (34)	16.3 (33)	5.7 (69)

Characteristics

	Portfolio	Russell 1000 Value
Number of Holdings	75	684
Weighted Avg. Market Cap. (\$B)	74.3	105.3
Median Market Cap. (\$B)	36.7	6.9
Price To Earnings	19.5	20.0
Price To Book	2.6	2.3
Price To Sales	2.4	2.5
Return on Equity (%)	15.4	11.5
Yield (%)	2.7	2.6
Beta (holdings; domestic)	1.1	1.0

Top Holdings

CAPITAL ONE FINL.	2.3%
ALTRIA GROUP	2.1%
CITIGROUP	2.1%
WELLS FARGO & CO	1.9%
JP MORGAN CHASE & CO.	1.9%
TEXAS INSTRUMENTS	1.8%
NORWEGIAN CRUISE LINE HDG.	1.8%
CRH ADR 1:1	1.8%
NIELSEN	1.8%
CARNIVAL	1.8%

Best Performers

	Return %
EATON (ETN)	21.4%
VERIZON COMMUNICATIONS (VZ)	18.5%
TYCO INTERNATIONAL (TYC)	15.9%
TARGET (TGT)	14.2%
NIELSEN (NLSN)	13.6%
PHILIP MORRIS INTL. (PM)	12.8%
ORACLE (ORCL)	12.5%
AIR PRDS.& CHEMS. (APD)	11.4%
UNITEDHEALTH GROUP (UNH)	10.0%
REYNOLDS AMERICAN (RAI)	9.9%

Worst Performers

	Return %
BANK OF AMERICA (BAC)	-19.4%
CITIGROUP (C)	-19.2%
ROYAL CARIBBEAN CRUISES (RCL)	-18.4%
TEVA PHARM.INDS.ADR 1:1 (TEVA)	-18.0%
E*TRADE FINANCIAL (ETFC)	-17.4%
FIFTH THIRD BANCORP (FITB)	-16.3%
CONOCOPHILLIPS (COP)	-13.1%
AMERICAN INTL.GP. (AIG)	-12.2%
DELPHI AUTOMOTIVE (DLPH)	-12.1%
AMERICAN EXPRESS (AXP)	-11.3%

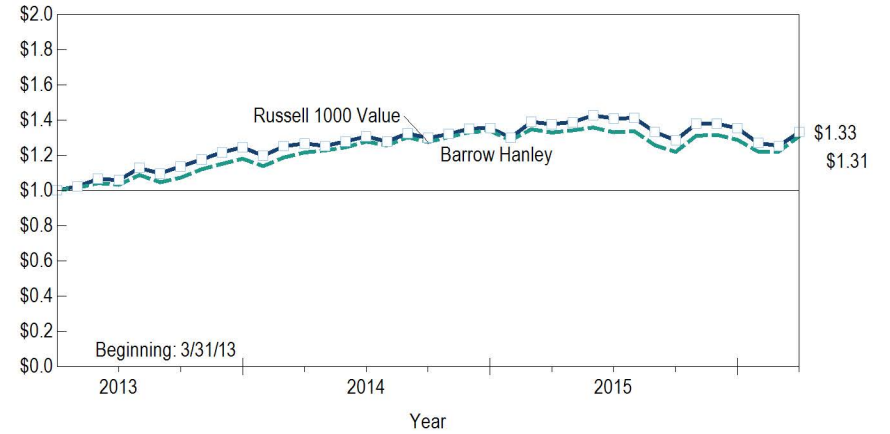
Barrow Hanley Performance Attribution vs. Russell 1000 Value

	Total Effects	Attribution Effects			Returns		Sector Weights				
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.4%	-0.5%	-0.1%	0.2%	0.2%	4.1%	6.9%	12.2%			
Materials	0.0%	-0.1%	0.2%	-0.1%	4.8%	7.7%	4.2%	2.6%			
Industrials	-0.3%	-0.3%	0.2%	-0.2%	2.1%	5.1%	15.6%	10.4%			
Cons. Disc.	-0.5%	-0.3%	0.1%	-0.4%	-2.0%	3.6%	13.4%	5.2%			
Cons. Staples	0.2%	0.3%	0.0%	0.0%	9.4%	5.1%	6.3%	7.0%			
Health Care	-0.3%	-0.2%	-0.1%	0.0%	-3.3%	-1.7%	14.2%	11.9%			
Financials	-0.9%	-1.3%	0.2%	0.2%	-9.8%	-5.3%	26.7%	30.4%			
Info. Tech	0.0%	0.1%	0.0%	0.0%	4.1%	2.8%	8.1%	11.5%			
Telecomm.	-0.1%	0.0%	0.0%	0.0%	12.1%	14.0%	2.2%	2.5%			
Utilities	-0.8%	--	-0.8%	--	--	15.7%	0.0%	6.2%			
Cash	0.0%	0.0%	0.0%	0.0%	0.1%	--	2.4%	0.0%			
Portfolio	-3.2%	=	-2.4%	+	-0.4%	+	-0.5%	-1.6%	1.6%	100.0%	100.0%

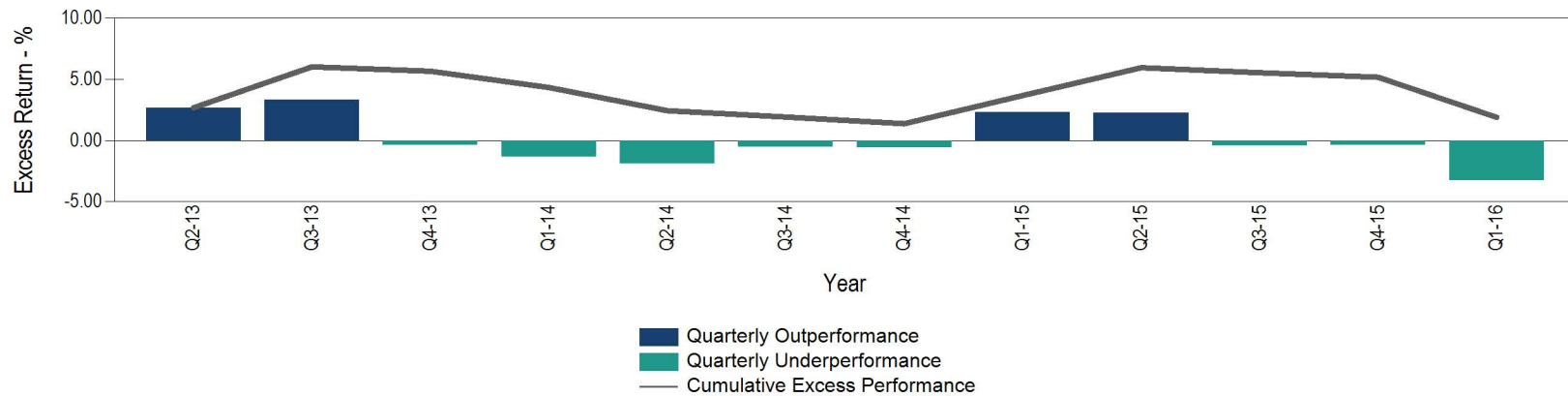
US Effective Style Map

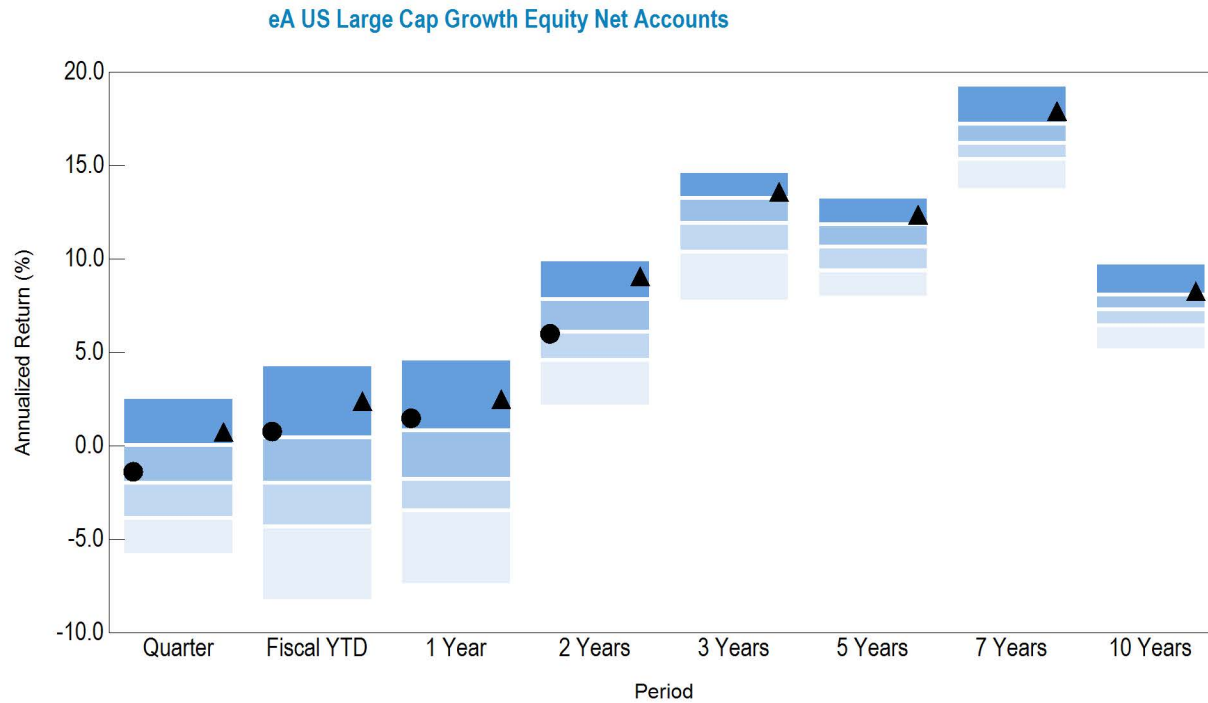


Growth of a Dollar



Quarterly and Cumulative Excess Performance





	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
Return (Rank)								
5th Percentile	2.6	4.4	4.7	10.0	14.7	13.3	19.3	9.8
25th Percentile	0.1	0.5	0.9	7.9	13.3	11.9	17.3	8.1
Median	-1.9	-2.0	-1.8	6.1	12.0	10.7	16.2	7.3
75th Percentile	-3.8	-4.3	-3.4	4.6	10.4	9.4	15.4	6.5
95th Percentile	-5.8	-8.3	-7.4	2.1	7.8	7.9	13.7	5.2
# of Portfolios	181	178	177	173	169	153	146	119
● Brown Advisory	-1.4 (42)	0.8 (23)	1.5 (19)	6.0 (52)	-- (--)	-- (--)	-- (--)	-- (--)
▲ Russell 1000 Growth	0.7 (19)	2.4 (11)	2.5 (13)	9.1 (12)	13.6 (20)	12.4 (17)	17.9 (16)	8.3 (21)

Characteristics

	Portfolio	Russell 1000 Growth
Number of Holdings	36	635
Weighted Avg. Market Cap. (\$B)	80.9	125.8
Median Market Cap. (\$B)	25.3	8.5
Price To Earnings	36.8	25.3
Price To Book	6.7	6.6
Price To Sales	5.8	3.7
Return on Equity (%)	17.0	24.2
Yield (%)	0.6	1.6
Beta (holdings; domestic)	1.0	0.9

Top Holdings

AMAZON.COM	4.9%
VISA 'A'	4.7%
FACEBOOK CLASS A	4.5%
STARBUCKS	4.2%
ESTEE LAUDER COS.'A'	3.9%
DANAHER	3.8%
INTUITIVE SURGICAL	3.6%
COSTCO WHOLESALE	3.5%
SALESFORCE.COM	3.5%
ECOLAB	3.4%

Best Performers

	Return %
COLFAX (CFX)	22.4%
FASTENAL (FAST)	21.0%
WABTEC (WAB)	11.6%
AMPHENOL 'A' (APH)	11.0%
INTUITIVE SURGICAL (ISRG)	10.1%
FACEBOOK CLASS A (FB)	9.0%
GENPACT (G)	8.8%
MEAD JOHNSON NUTRITION (MJN)	8.2%
ESTEE LAUDER COS.'A' (EL)	7.4%
NATIONAL INSTS. (NATI)	5.7%

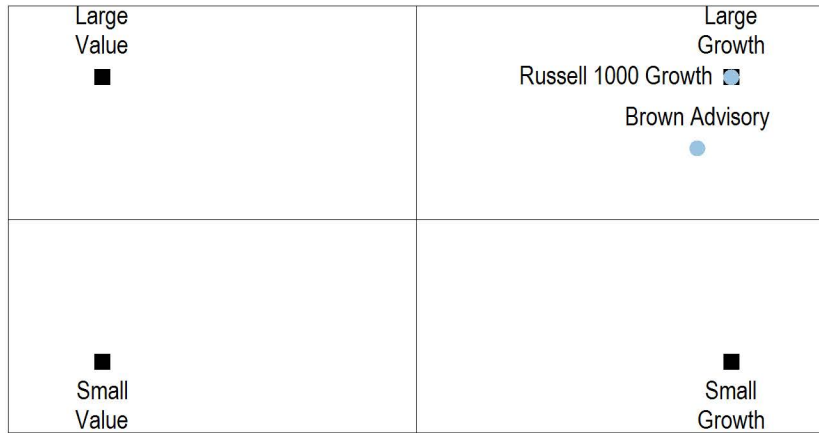
Worst Performers

	Return %
ALEXION PHARMS. (ALXN)	-27.0%
TRIPADVISOR 'A' (TRIP)	-22.0%
EXPRESS SCRIPTS HOLDING (ESRX)	-21.4%
NETSUITE (N)	-19.1%
CHARLES SCHWAB (SCHW)	-14.7%
AMAZON.COM (AMZN)	-12.2%
BRISTOL MYERS SQUIBB (BMY)	-6.6%
SALESFORCE.COM (CRM)	-5.8%
FMC TECHNOLOGIES (FTI)	-5.7%
NXP SEMICONDUCTORS (NXPI)	-3.8%

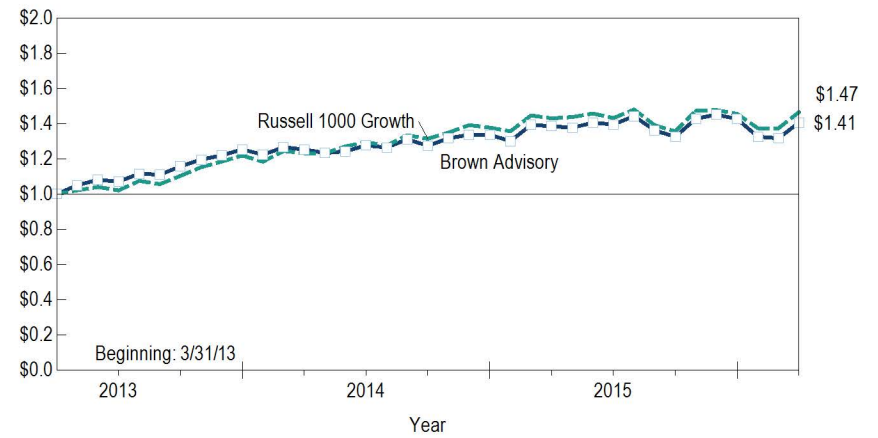
Brown Advisory Performance Attribution vs. Russell 1000 Growth

	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.1%	0.0%	0.0%	-0.1%	-15.4%	-8.1%	1.5%	0.5%			
Materials	-0.2%	-0.2%	0.0%	0.0%	-2.2%	2.5%	3.0%	3.4%			
Industrials	0.4%	0.4%	0.0%	0.0%	8.8%	4.5%	10.3%	10.8%			
Cons. Disc.	-1.6%	-2.3%	0.0%	0.8%	-8.9%	1.4%	14.3%	21.2%			
Cons. Staples	-0.2%	-0.1%	-0.1%	0.0%	4.3%	5.7%	9.8%	11.3%			
Health Care	0.3%	0.1%	0.2%	0.0%	-8.3%	-9.0%	15.0%	17.1%			
Financials	-0.5%	-0.8%	0.0%	0.3%	-14.7%	1.3%	3.4%	5.5%			
Info. Tech	-0.1%	-0.2%	0.1%	-0.1%	1.5%	2.1%	38.8%	28.1%			
Telecomm.	-0.4%	-0.2%	-0.3%	0.1%	0.9%	16.7%	0.0%	2.1%			
Utilities	0.0%	--	0.0%	--	--	10.6%	0.0%	0.0%			
Cash	-0.1%	0.0%	-0.1%	0.0%	0.1%	--	3.9%	0.0%			
Portfolio	-2.3%	=	-3.1%	+	-0.2%	+	1.0%	-1.4%	0.9%	100.0%	100.0%

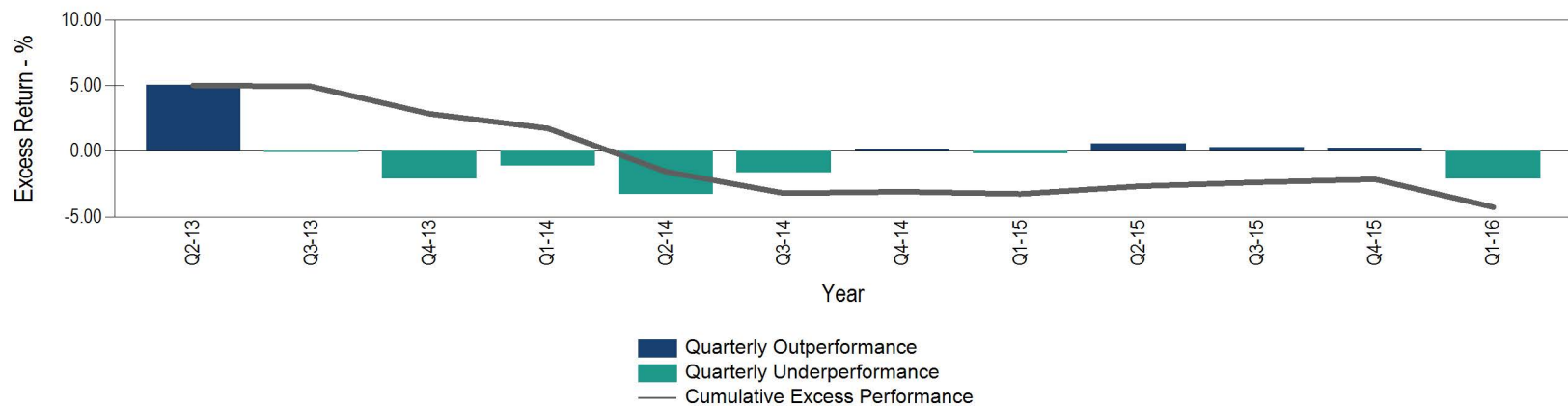
US Effective Style Map

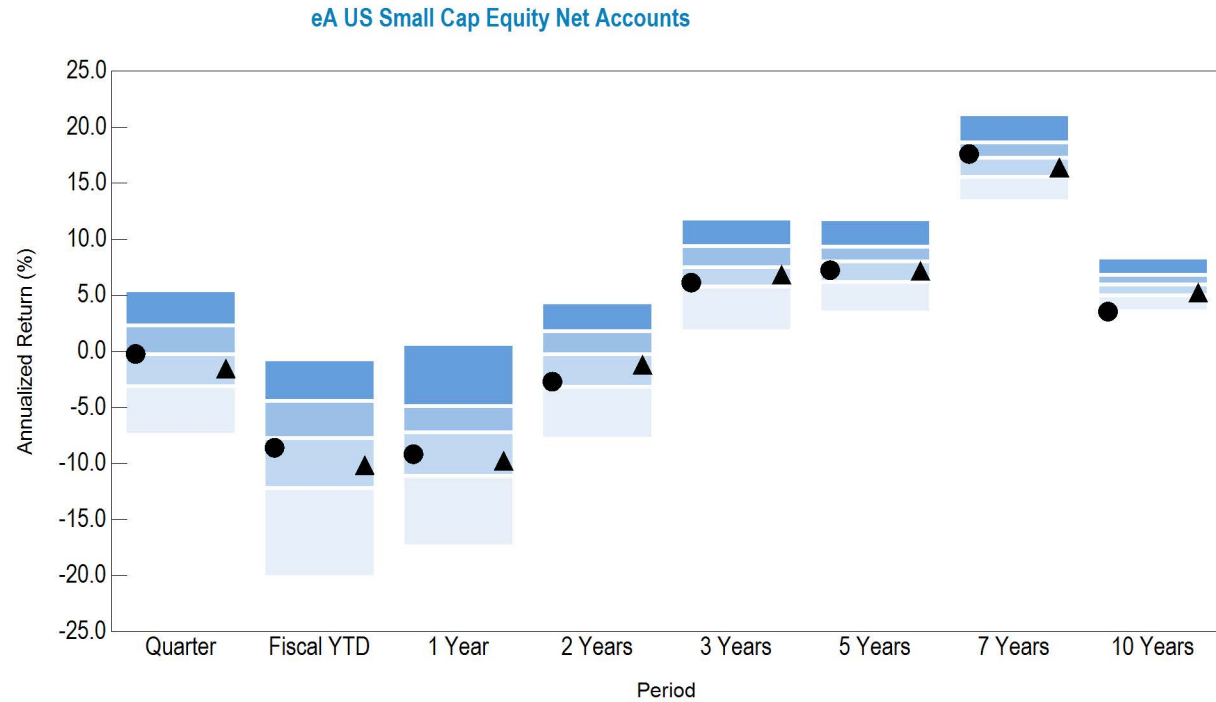


Growth of a Dollar



Quarterly and Cumulative Excess Performance





	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	5.4	-0.8	0.6	4.4	11.8	11.8	21.2	8.4
25th Percentile	2.4	-4.4	-4.8	1.8	9.4	9.4	18.7	6.8
Median	-0.2	-7.7	-7.2	-0.2	7.6	8.0	17.3	6.0
75th Percentile	-3.1	-12.1	-11.1	-3.2	5.8	6.3	15.6	5.0
95th Percentile	-7.4	-20.1	-17.4	-7.7	1.8	3.5	13.4	3.6
# of Portfolios	330	325	322	315	304	284	265	219
● Small Cap Equity	-0.2 (51)	-8.6 (57)	-9.2 (66)	-2.7 (73)	6.1 (69)	7.2 (63)	17.6 (44)	3.6 (96)
▲ Russell 2000	-1.5 (65)	-10.1 (66)	-9.8 (70)	-1.2 (61)	6.8 (61)	7.2 (63)	16.4 (65)	5.3 (69)

Characteristics

	Portfolio	Russell 2000
Number of Holdings	207	1,959
Weighted Avg. Market Cap. (\$B)	2.2	1.9
Median Market Cap. (\$B)	1.7	0.6
Price To Earnings	24.4	24.1
Price To Book	3.1	2.7
Price To Sales	2.6	2.8
Return on Equity (%)	14.3	10.6
Yield (%)	1.2	1.4
Beta (holdings; domestic)	1.3	1.2

Top Holdings

MDC PARTNERS 'A' (NAS)	2.5%
H&E EQUIPMENT SERVICES	2.4%
BRUNSWICK	2.2%
MGIC INVESTMENT	2.0%
ON ASSIGNMENT	2.0%
MARINEMAX	1.8%
TRUEBLUE	1.5%
SONIC	1.5%
FIRST BANCORP PRICO.	1.5%
ELTN.FOR IMAG.	1.5%

Best Performers

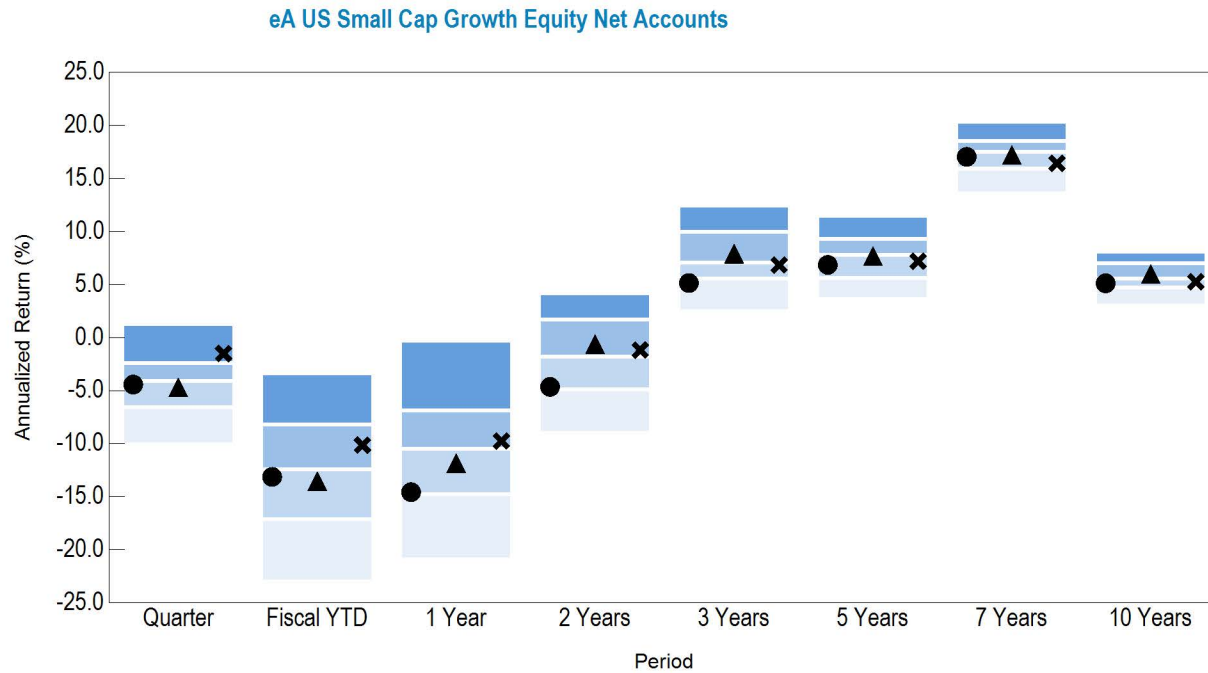
	Return %
CHILDRENS PLACE (PLCE)	51.2%
URBAN OUTFITTERS (URBN)	45.5%
MSC INDL.DIRECT 'A' (MSM)	36.6%
ZUMIEZ (ZUMZ)	31.7%
BURLINGTON STORES (BURL)	31.1%
VERA BRADLEY (VRA)	29.1%
BELDEN (BDC)	28.8%
COHEN & STEERS (CNS)	28.7%
DECKERS OUTDOOR (DECK)	26.9%
CSG SYS.INTL. (CSGS)	26.1%

Worst Performers

	Return %
EVERI HOLDINGS (EVRI)	-47.8%
CHIMERIX (CMRX)	-42.9%
SPS COMMERCE (SPSC)	-38.8%
AKORN (AKRX)	-36.9%
PHARMERICA (PMC)	-36.8%
ADVISORY BOARD (ABCO)	-35.0%
ISIS PHARMACEUTICALS (IONS)	-34.6%
NXSTAGE MEDICAL (NXTM)	-31.6%
OSI SYSTEMS (OSIS)	-26.1%
GULF ISLAND FABRICATION (GIFI)	-24.9%

Small Cap Equity Performance Attribution vs. Russell 2000

	Total Effects	Attribution Effects			Returns		Sector Weights				
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.4%	0.3%	-0.1%	0.2%	4.6%	-7.9%	4.1%	2.7%			
Materials	-0.3%	-0.4%	-0.2%	0.3%	-6.7%	5.1%	1.5%	3.6%			
Industrials	-0.4%	-0.4%	0.1%	-0.1%	0.2%	4.5%	15.1%	12.1%			
Cons. Disc.	1.5%	0.8%	0.3%	0.4%	8.0%	2.3%	21.0%	13.5%			
Cons. Staples	0.0%	0.1%	-0.1%	0.0%	4.7%	3.3%	1.6%	3.4%			
Health Care	1.6%	1.3%	0.6%	-0.3%	-8.5%	-16.8%	11.7%	16.5%			
Financials	-0.3%	-0.3%	-0.1%	0.0%	-1.2%	0.3%	21.9%	25.6%			
Info. Tech	-0.2%	-0.1%	0.0%	0.0%	-2.5%	-1.5%	18.2%	18.0%			
Telecomm.	-0.1%	--	-0.1%	--	--	5.9%	0.0%	0.8%			
Utilities	0.0%	-0.1%	0.0%	0.0%	10.8%	12.3%	4.0%	3.7%			
Cash	0.0%	0.0%	0.0%	0.0%	0.1%	--	0.8%	0.0%			
Portfolio	2.1%	=	1.1%	+	0.6%	+	0.4%	0.6%	-1.5%	100.0%	100.0%



	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
Return (Rank)								
5th Percentile	1.2	-3.4	-0.3	4.1	12.4	11.5	20.3	8.1
25th Percentile	-2.3	-8.2	-6.8	1.7	10.0	9.3	18.5	7.0
Median	-4.1	-12.4	-10.5	-1.8	7.1	7.8	17.5	5.6
75th Percentile	-6.6	-17.1	-14.7	-4.8	5.6	5.7	16.0	4.7
95th Percentile	-10.0	-22.9	-20.9	-8.9	2.5	3.6	13.6	3.1
# of Portfolios	103	99	99	97	93	88	83	72
● Chartwell	-4.4 (56)	-13.1 (52)	-14.6 (74)	-4.7 (74)	5.1 (79)	6.8 (67)	17.0 (64)	5.1 (65)
▲ Russell 2000 Growth	-4.7 (58)	-13.6 (57)	-11.8 (58)	-0.6 (41)	7.9 (42)	7.7 (53)	17.2 (60)	6.0 (45)
✕ Russell 2000	-1.5 (21)	-10.1 (39)	-9.8 (47)	-1.2 (44)	6.8 (58)	7.2 (59)	16.4 (68)	5.3 (59)

Characteristics

	Portfolio	Russell 2000 Growth
Number of Holdings	70	1,181
Weighted Avg. Market Cap. (\$B)	2.4	2.0
Median Market Cap. (\$B)	2.0	0.7
Price To Earnings	24.6	27.4
Price To Book	4.1	4.2
Price To Sales	2.6	3.2
Return on Equity (%)	20.3	16.6
Yield (%)	0.8	0.6
Beta (holdings; domestic)	1.5	1.3

Top Holdings

MDC PARTNERS 'A' (NAS)	5.1%
H&E EQUIPMENT SERVICES	5.0%
BRUNSWICK	4.5%
MGIC INVESTMENT	4.2%
ON ASSIGNMENT	4.2%
MARINEMAX	3.8%
TRUEBLUE	3.2%
SONIC	3.2%
FIRST BANCORP PRICO.	3.2%
SS&C TECHNOLOGIES HDG.	3.1%

Best Performers

	Return %
BURLINGTON STORES (BURL)	31.1%
BELDEN (BDC)	28.8%
EXPRESS (EXPR)	23.9%
STEVEN MADDEN (SHOO)	22.6%
DIAMONDBACK ENERGY (FANG)	15.4%
DORMAN PRODUCTS (DORM)	14.6%
WAGeworks (WAGE)	11.5%
MDC PARTNERS 'A' (NAS) (MDCA)	9.7%
SONIC (SONC)	9.3%
POOL (POOL)	9.0%

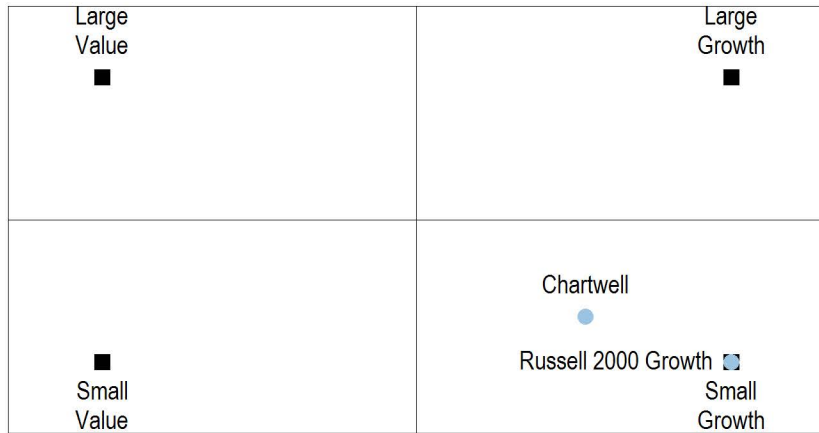
Worst Performers

	Return %
EVERI HOLDINGS (EVRI)	-47.8%
CHIMERIX (CMRX)	-42.9%
SPS COMMERCE (SPSC)	-38.8%
AKORN (AKRX)	-36.9%
PHARMERICA (PMC)	-36.8%
ADVISORY BOARD (ABCO)	-35.0%
ISIS PHARMACEUTICALS (IONS)	-34.6%
NXSTAGE MEDICAL (NXTM)	-31.6%
HORIZON PHARMA (HZNP)	-23.5%
INTEGRATED DEVICE TECH. (IDTI)	-22.4%

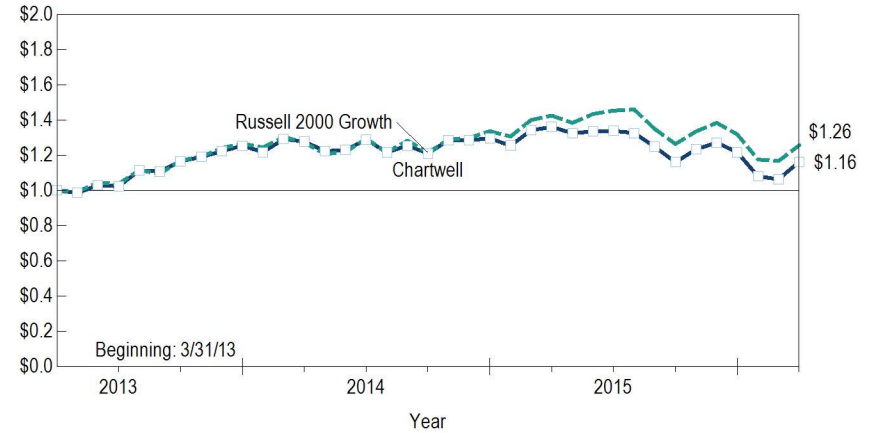
Chartwell Performance Attribution vs. Russell 2000 Growth

	Total Effects	Attribution Effects			Returns		Sector Weights				
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.4%	0.2%	-0.1%	0.3%	7.5%	-12.1%	2.8%	1.1%			
Materials	-0.2%	--	-0.2%	--	--	0.7%	0.0%	4.1%			
Industrials	-1.4%	-1.4%	0.4%	-0.5%	-5.1%	5.5%	17.0%	12.8%			
Cons. Disc.	1.5%	0.7%	0.6%	0.3%	7.0%	3.1%	24.4%	17.0%			
Cons. Staples	-0.2%	--	-0.2%	--	--	0.4%	0.0%	3.4%			
Health Care	2.7%	2.0%	1.5%	-0.7%	-11.8%	-18.9%	17.2%	27.7%			
Financials	-1.1%	-0.8%	0.4%	-0.7%	-8.8%	1.4%	14.3%	7.9%			
Info. Tech	-0.8%	-0.8%	0.0%	0.1%	-7.1%	-3.9%	23.1%	25.1%			
Telecomm.	-0.1%	--	-0.1%	--	--	11.4%	0.0%	0.8%			
Utilities	0.0%	--	0.0%	--	--	-3.0%	0.0%	0.1%			
Cash	0.1%	0.0%	0.1%	0.0%	0.1%	--	1.2%	0.0%			
Portfolio	1.0%	=	-0.1%	+	2.3%	+	-1.2%	-3.9%	-4.9%	100.0%	100.0%

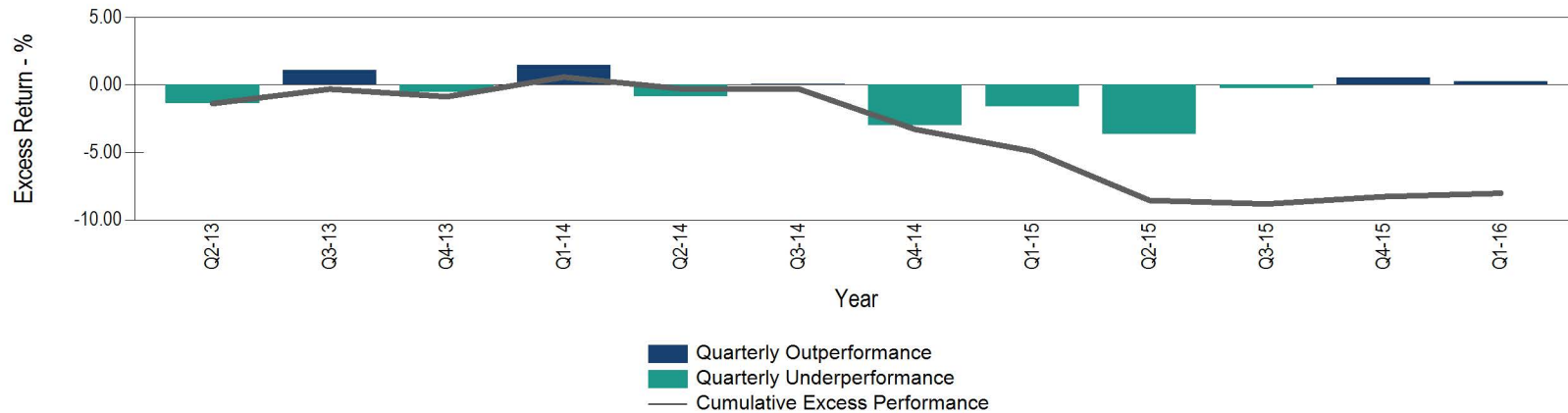
US Effective Style Map

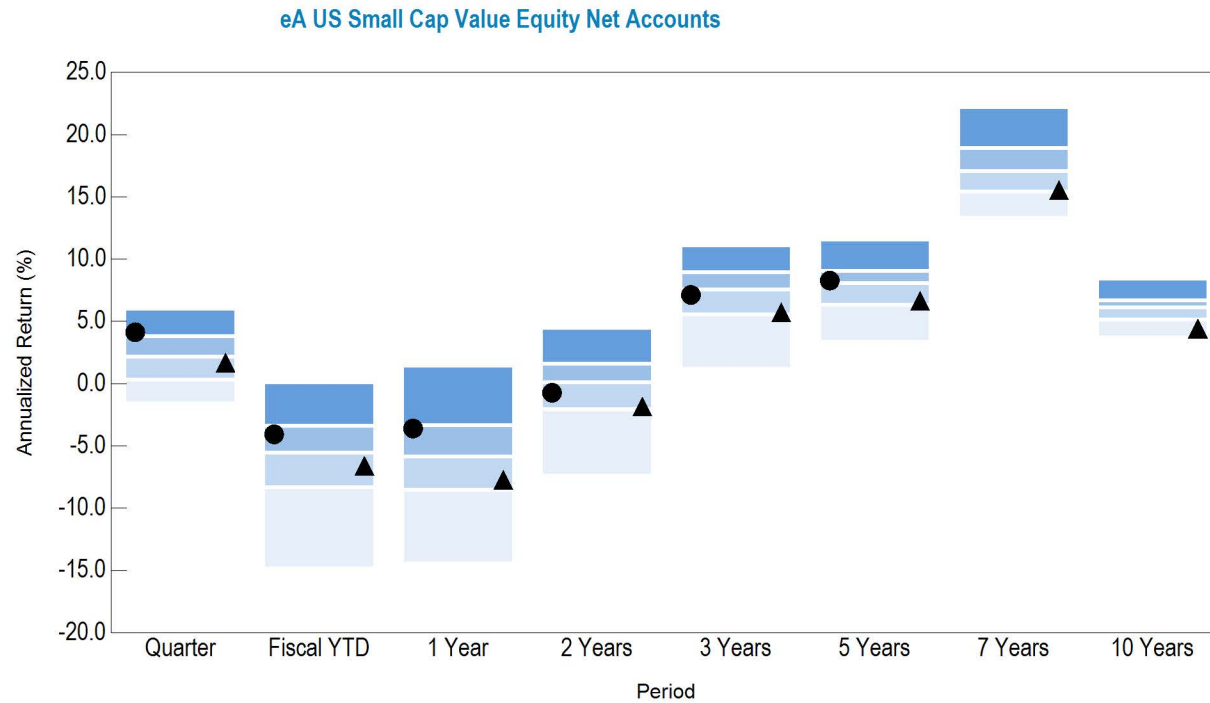


Growth of a Dollar



Quarterly and Cumulative Excess Performance





	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	6.0	0.1	1.4	4.5	11.1	11.6	22.2	8.4
25th Percentile	3.9	-3.3	-3.3	1.7	9.0	9.1	19.0	6.7
Median	2.2	-5.5	-5.8	0.2	7.6	8.1	17.1	6.1
75th Percentile	0.4	-8.3	-8.5	-2.0	5.6	6.4	15.4	5.2
95th Percentile	-1.6	-14.8	-14.4	-7.4	1.2	3.4	13.3	3.7
# of Portfolios	142	141	139	135	129	123	117	97
● The Boston Co	4.1 (24)	-4.1 (37)	-3.6 (28)	-0.7 (64)	7.1 (57)	8.3 (43)	-- (--)	-- (--)
▲ Russell 2000 Value	1.7 (58)	-6.6 (61)	-7.7 (71)	-1.8 (75)	5.7 (74)	6.7 (72)	15.5 (75)	4.4 (89)

Characteristics

	Portfolio	Russell 2000 Value
Number of Holdings	145	1,325
Weighted Avg. Market Cap. (\$B)	2.1	1.7
Median Market Cap. (\$B)	1.6	0.6
Price To Earnings	24.2	20.4
Price To Book	2.3	1.6
Price To Sales	2.6	2.5
Return on Equity (%)	9.3	7.1
Yield (%)	1.6	2.0
Beta (holdings; domestic)	1.1	1.1

Top Holdings

SYNOVUS FINANCIAL	1.9%
UMB FINANCIAL	1.5%
PEBBLEBROOK HOTEL TRUST	1.5%
URBAN OUTFITTERS	1.5%
WEBSTER FINANCIAL	1.4%
CHEESECAKE FACTORY	1.4%
HEALTHCARE TRUST OF AM. CL.A	1.3%
PORTLAND GEN.ELEC.	1.3%
HAWAIIAN ELECTRIC INDS.	1.3%
SCRIPPS E W 'A'	1.2%

Best Performers

	Return %
CHILDRENS PLACE (PLCE)	51.2%
URBAN OUTFITTERS (URBN)	45.5%
MSC INDL.DIRECT 'A' (MSM)	36.6%
ZUMIEZ (ZUMZ)	31.7%
VERA BRADLEY (VRA)	29.1%
COHEN & STEERS (CNS)	28.7%
DECKERS OUTDOOR (DECK)	26.9%
CSG SYS.INTL. (CSGS)	26.1%
SCANSOURCE (SCSC)	25.3%
STILLWATER MINING (SWC)	24.3%

Worst Performers

	Return %
ADVISORY BOARD (ABCO)	-35.0%
OSI SYSTEMS (OSIS)	-26.1%
GULF ISLAND FABRICATION (GIFI)	-24.9%
INVACARE (IVC)	-24.3%
FREIGHTCAR AMERICA (RAIL)	-19.4%
CALGON CARBON (CCC)	-18.4%
SCRIPPS E W 'A' (SSP)	-17.9%
WCI COMMUNITIES (WCIC)	-16.6%
GLOBUS MEDICAL CL.A (GMED)	-14.6%
AIR METHODS (AIRM)	-13.6%

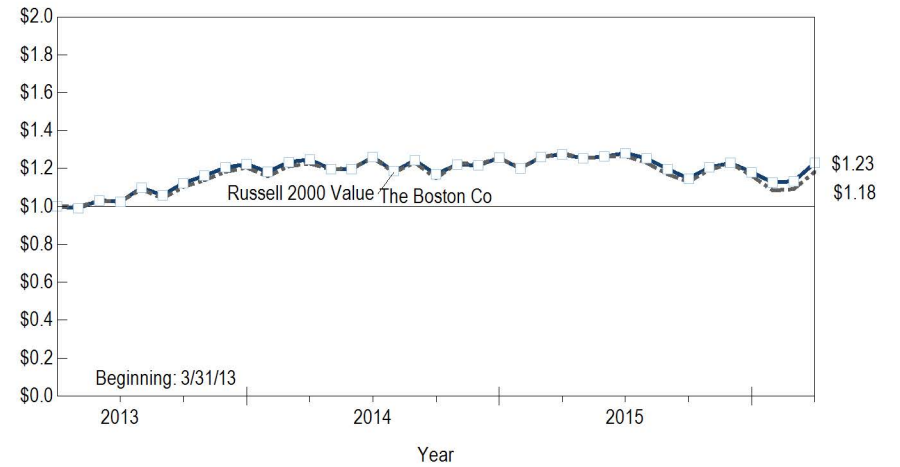
The Boston Co Performance Attribution vs. Russell 2000 Value

	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.5%	0.5%	-0.1%	0.1%	5.2%	-6.9%	5.4%	4.4%			
Materials	-0.5%	-0.6%	-0.1%	0.2%	-6.7%	10.6%	3.2%	3.1%			
Industrials	0.4%	0.3%	0.0%	0.0%	6.0%	3.3%	13.2%	11.6%			
Cons. Disc.	1.4%	0.8%	-0.1%	0.6%	9.3%	1.0%	17.5%	10.1%			
Cons. Staples	0.0%	0.0%	0.0%	0.0%	4.7%	6.2%	3.2%	3.3%			
Health Care	0.0%	0.2%	-0.2%	0.0%	-5.1%	-8.5%	6.1%	4.6%			
Financials	0.9%	0.9%	0.2%	-0.3%	2.2%	0.1%	29.8%	43.8%			
Info. Tech	0.5%	0.3%	0.0%	0.1%	6.9%	3.9%	13.0%	10.7%			
Telecomm.	0.0%	--	0.0%	--	--	0.8%	0.0%	0.9%			
Utilities	0.0%	-0.1%	0.1%	0.0%	10.8%	12.5%	8.2%	7.4%			
Cash	-0.1%	0.0%	-0.1%	0.0%	0.1%	--	0.4%	0.0%			
Portfolio	3.1%	=	2.3%	+	-0.1%	+	0.8%	4.8%	1.7%	100.0%	100.0%

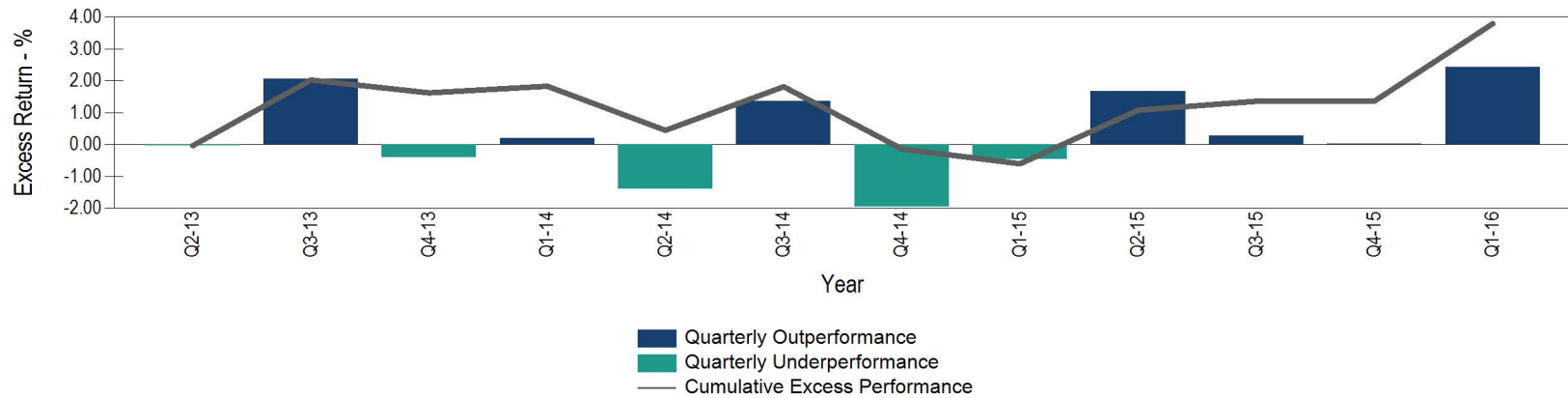
US Effective Style Map

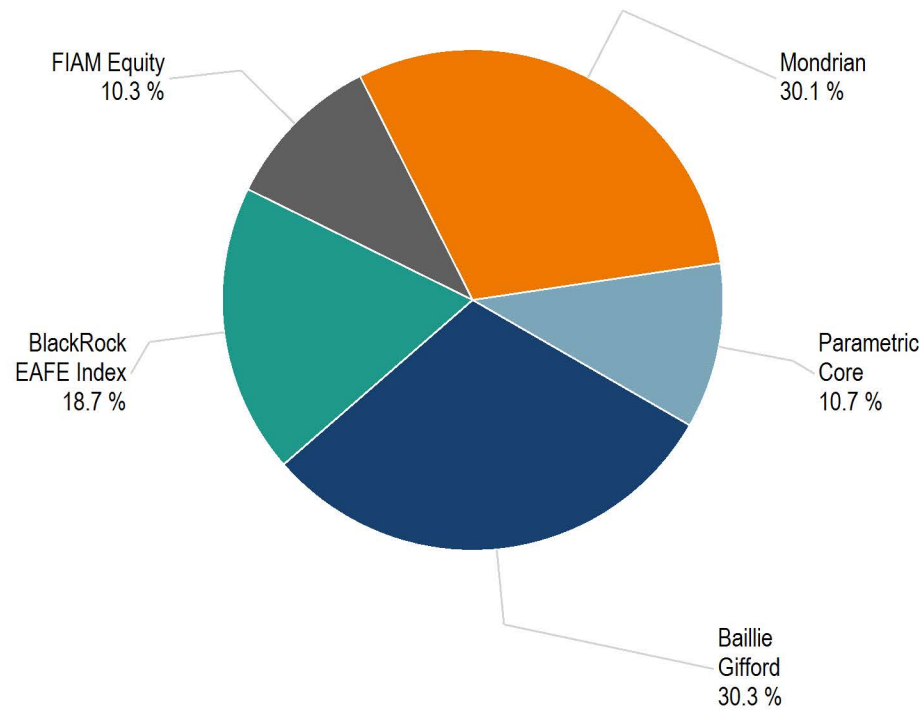


Growth of a Dollar



Quarterly and Cumulative Excess Performance





	Actual \$	Actual %	Manager Contribution to Excess Return %
Baillie Gifford	\$203,704,253	30.3%	0.2%
BlackRock EAFE Index	\$125,939,642	18.7%	0.0%
FIAM Equity	\$69,217,310	10.3%	0.0%
Mondrian	\$202,181,119	30.1%	0.6%
Parametric Core	\$71,685,400	10.7%	0.3%
Actual vs. Policy Weight Difference			-0.1%
Total	\$672,727,724	100.0%	1.0%

Statistics Summary

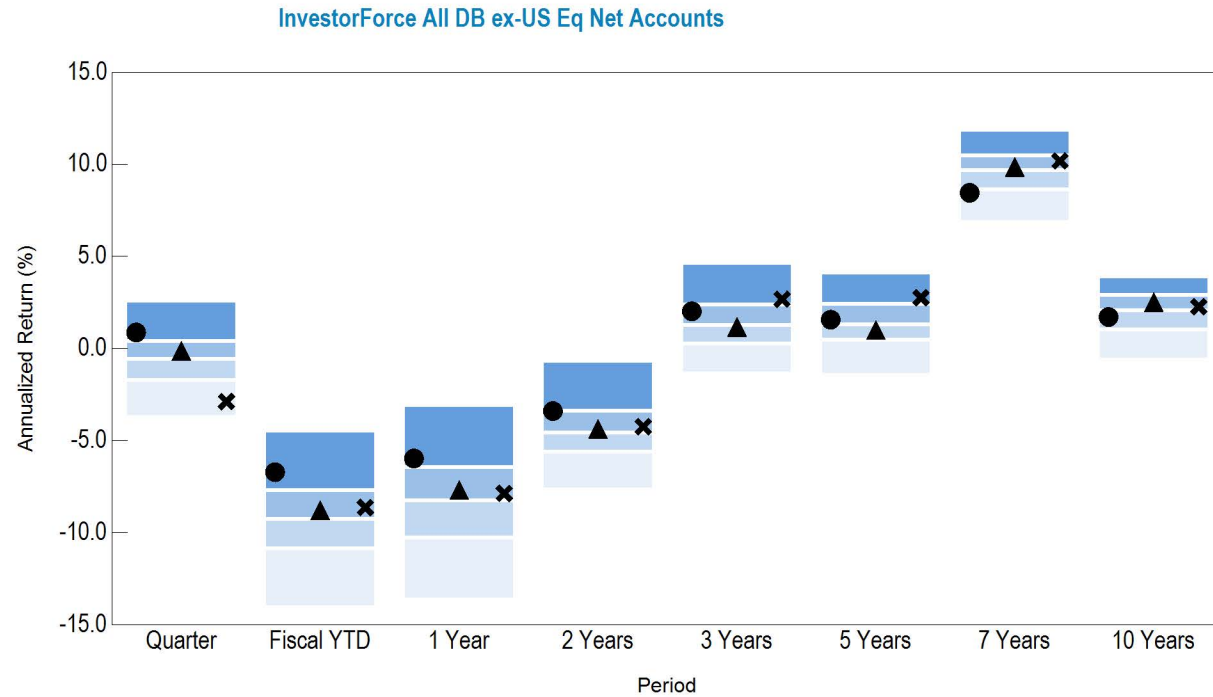
3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
International Equity	2.0%	13.1%	0.1	0.5	1.6%
MSCI ACWI ex US IMI	1.2%	13.4%	0.1	--	0.0%
Baillie Gifford	4.1%	14.1%	0.3	0.5	3.7%
MSCI ACWI ex US	2.3%	13.9%	0.2	--	0.0%
FIAM Equity	3.6%	12.6%	0.3	-0.2	2.4%
MSCI ACWI ex US Small Cap Gross	4.0%	13.1%	0.3	--	0.0%
Mondrian	1.9%	13.0%	0.1	0.6	4.2%
MSCI ACWI ex USA Value Gross	-0.8%	14.6%	-0.1	--	0.0%

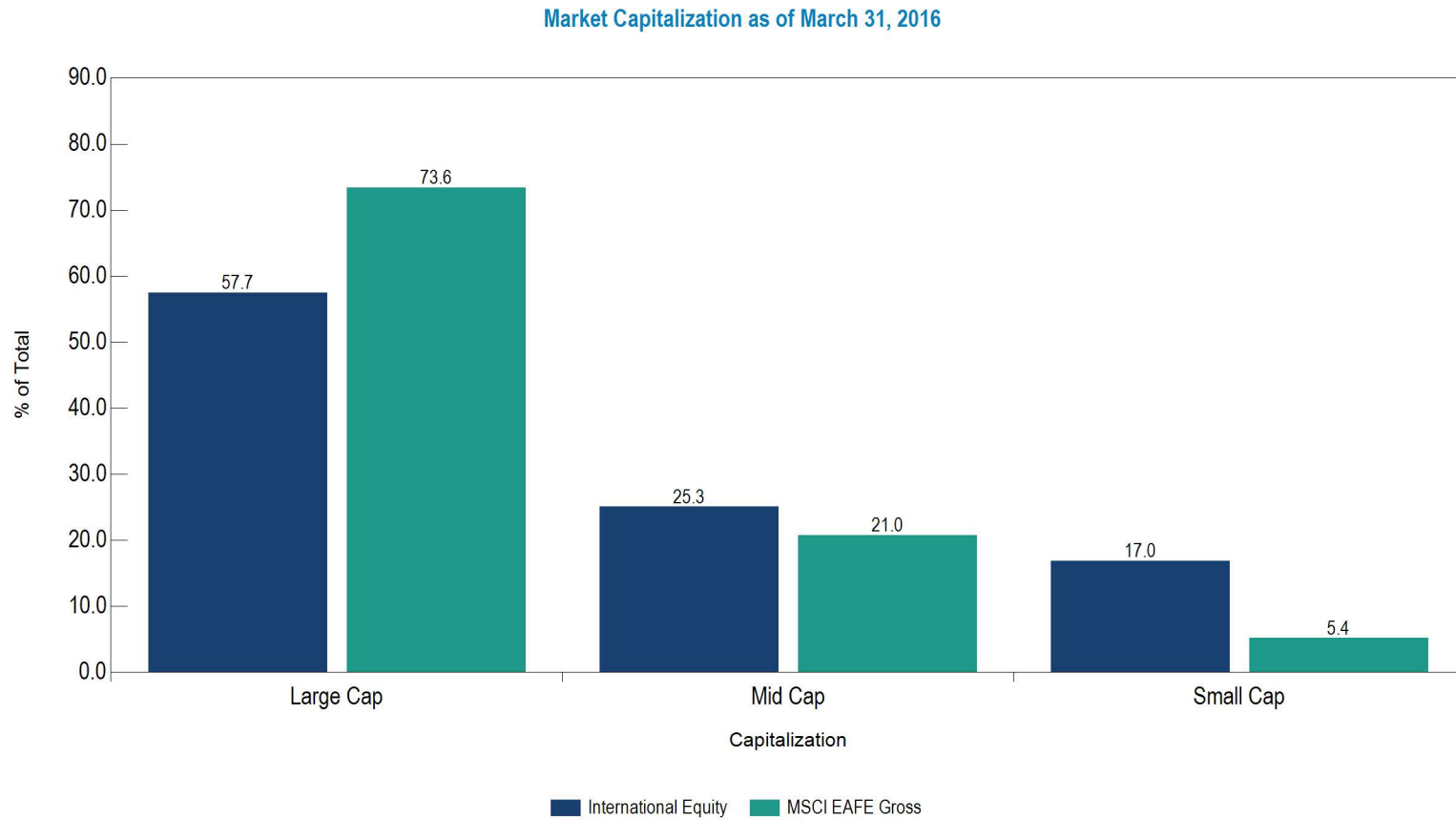
Statistics Summary

5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
International Equity	1.6%	14.8%	0.1	0.3	2.0%
MSCI ACWI ex US IMI	1.0%	15.6%	0.1	--	0.0%
Mondrian	2.3%	14.0%	0.2	0.6	4.6%
MSCI ACWI ex USA Value Gross	-0.5%	16.3%	0.0	--	0.0%



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	2.6	-4.5	-3.1	-0.7	4.6	4.1	11.9	3.9
25th Percentile	0.4	-7.7	-6.4	-3.4	2.4	2.5	10.5	2.9
Median	-0.5	-9.2	-8.2	-4.5	1.3	1.3	9.7	2.1
75th Percentile	-1.7	-10.8	-10.3	-5.6	0.3	0.5	8.7	1.1
95th Percentile	-3.7	-14.0	-13.6	-7.6	-1.3	-1.4	6.9	-0.6
# of Portfolios	464	458	456	442	405	344	292	216
● International Equity	0.9 (18)	-6.7 (16)	-6.0 (20)	-3.4 (26)	2.0 (33)	1.6 (42)	8.5 (79)	1.7 (61)
▲ MSCI ACWI ex US IMI	-0.1 (38)	-8.8 (43)	-7.7 (42)	-4.4 (46)	1.2 (55)	1.0 (59)	9.9 (46)	2.5 (36)
✕ MSCI EAFE Gross	-2.9 (88)	-8.6 (41)	-7.9 (44)	-4.2 (43)	2.7 (22)	2.8 (19)	10.2 (34)	2.3 (44)



Excludes FIAM Equity holdings.

See appendix for the market capitalization breakpoints.

Characteristics

	Portfolio	MSCI ACWI ex USA IMI Gross
Number of Holdings	1,774	6,110
Weighted Avg. Market Cap. (\$B)	37.6	40.6
Median Market Cap. (\$B)	4.5	1.2
Price To Earnings	22.0	17.8
Price To Book	3.5	2.4
Price To Sales	2.9	2.2
Return on Equity (%)	16.3	14.2
Yield (%)	3.0	3.1
Beta (holdings; global)	1.0	1.0

Top Holdings

UNILEVER (UK)	1.7%
NESTLE 'R'	1.4%
UNITED OVERSEAS BANK	1.3%
KAO	1.2%
NOVO NORDISK 'B'	1.1%
GLAXOSMITHKLINE	1.0%
SYNGENTA	1.0%
TAKEDA PHARMACEUTICAL	1.0%
COCHLEAR	1.0%
ABB LTD N	1.0%

Best Performers

	Return %
HARMONY GOLD MNG. (R:HARJ)	258.1%
VOLCAN COMPANIA MINERA B PREF. (PE:VLB)	191.2%
ASSORE (R:ASRJ)	176.4%
SIBANYE GOLD (R:SGLJ)	165.5%
AFN.RAINBOW MRLS. (R:ARIJ)	130.4%
KCE ELECTRONIC FB (Q:KCNF)	105.9%
ANGLO AMERICAN PLATINUM (R:AMSJ)	105.7%
KUMBA IRON ORE (R:KIOJ)	103.4%
MINSUR 'I' (PE:MIN)	102.9%
ANGLOGOLD ASHANTI (R:ANGJ)	102.8%

Worst Performers

	Return %
PTT EXPLORATION & PRDN. FB (Q:PTTF)	-59.5%
NANTKWEST (NK)	-52.6%
PETROSONIC ENERGY (PSON)	-47.5%
DRYSHIPS (DRYS)	-45.9%
NAVIOS MARITIME ACQ. (NNA)	-45.6%
SEVENTY SEVEN ENERGY (SSE)	-44.8%
RESTAURANT GROUP (UKIR:RTN)	-44.2%
JAPAN AIRPORT TERM.(OTC) (JAIRF)	-41.7%
RESOLUTE ENERGY (REN)	-41.4%
RUMO LOG.OPD.MULTIMODAL (BR:P3M)	-40.2%

Excludes FIAM Equity holdings.

Int'l Equity Performance Attribution vs. MSCI ACWI ex USA IMI Gross

	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.3%	-0.1%	-0.1%	-0.1%	4.6%	8.6%	4.6%	5.3%			
Materials	-0.3%	0.0%	-0.1%	-0.2%	5.2%	7.1%	4.5%	6.8%			
Industrials	0.1%	0.2%	0.0%	-0.1%	2.4%	2.1%	13.0%	12.3%			
Cons. Disc.	0.0%	0.1%	0.0%	-0.1%	-2.9%	-2.5%	14.9%	12.9%			
Cons. Staples	0.4%	0.1%	0.1%	0.1%	5.1%	4.2%	13.3%	10.2%			
Health Care	0.5%	0.4%	0.0%	0.0%	-1.8%	-6.7%	9.7%	9.3%			
Financials	0.4%	0.6%	0.3%	-0.6%	-2.5%	-4.4%	17.9%	26.1%			
Info. Tech	0.3%	0.3%	0.0%	0.0%	3.0%	0.5%	10.5%	9.2%			
Telecomm.	0.3%	0.1%	0.0%	0.1%	5.9%	2.4%	5.8%	4.6%			
Utilities	0.1%	0.1%	0.0%	0.0%	3.6%	2.4%	4.3%	3.3%			
Cash	0.0%	0.0%	0.0%	0.0%	0.1%	--	1.5%	0.0%			
Portfolio	1.4%	=	1.9%	+	0.3%	+	-0.8%	1.2%	-0.2%	100.0%	100.0%

Excludes FIAM Equity holdings.

Int'l Equity Performance Attribution vs. MSCI ACWI ex USA IMI Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
Europe									
Austria	-15.2%	-0.2%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Belgium	-19.9%	-2.2%	0.1%	1.1%	-0.2%	0.0%	0.0%	0.2%	0.0%
Czech Republic*	5.9%	5.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Denmark	1.2%	-0.4%	2.3%	1.4%	0.0%	0.0%	0.0%	0.0%	0.1%
Finland	12.1%	-1.1%	0.6%	0.7%	0.1%	0.0%	0.0%	0.0%	0.1%
France	-3.5%	0.1%	3.0%	6.6%	-0.2%	0.0%	-0.2%	0.1%	-0.2%
Germany	0.4%	-2.1%	4.8%	6.4%	0.2%	0.0%	-0.1%	0.0%	0.1%
Greece*	-2.8%	-10.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Hungary*	16.8%	17.3%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Ireland	1.1%	0.0%	0.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Italy	-3.4%	-10.6%	0.9%	1.9%	0.1%	0.1%	0.0%	-0.1%	0.1%
Luxembourg	4.9%	-0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Netherlands	7.0%	3.0%	1.9%	2.1%	0.1%	0.0%	0.0%	0.0%	0.1%
Norway	4.6%	2.6%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland*	11.7%	12.7%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Portugal	25.8%	1.3%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%
Russia*	14.1%	16.2%	0.8%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Spain	-4.4%	-3.7%	3.9%	2.3%	0.0%	-0.1%	0.0%	0.0%	0.0%
Sweden	-0.5%	0.5%	4.1%	2.3%	0.0%	0.0%	0.1%	0.0%	0.0%
Switzerland	-0.2%	-4.5%	6.9%	6.4%	0.3%	0.0%	0.0%	0.0%	0.3%
United Kingdom	-0.8%	-3.0%	15.9%	14.1%	0.3%	0.1%	0.0%	0.0%	0.4%

Excludes FIAM Equity holdings.

Int'l Equity Performance Attribution vs. MSCI ACWI ex USA IMI Gross

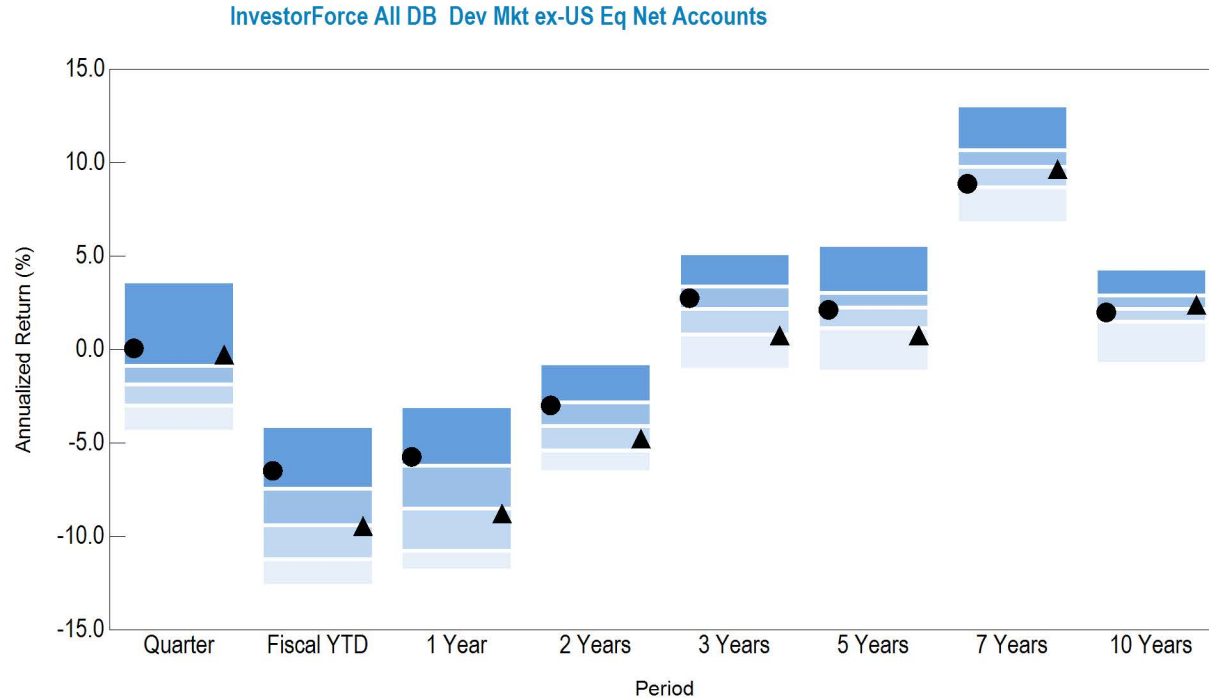
	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
AsiaPacific									
Australia	11.0%	2.8%	3.1%	4.9%	0.4%	0.0%	-0.1%	-0.1%	0.1%
China*	-5.7%	-5.3%	2.7%	5.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Hong Kong	-1.2%	-1.4%	2.8%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%
India*	-3.5%	-3.8%	1.8%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Indonesia*	9.5%	11.4%	0.7%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Japan	-4.1%	-5.7%	18.8%	17.7%	0.5%	-0.1%	-0.1%	0.0%	0.3%
Korea*	2.9%	4.2%	3.0%	3.3%	0.0%	0.0%	0.0%	0.0%	-0.1%
Malaysia*	12.0%	12.5%	0.8%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
New Zealand	--	9.6%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Philippines*	7.3%	7.6%	0.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Singapore	6.6%	5.7%	2.5%	1.0%	0.0%	0.1%	0.0%	0.0%	0.2%
Taiwan*	8.7%	7.1%	2.8%	2.6%	0.1%	0.0%	0.0%	0.0%	0.1%
Thailand*	11.9%	14.8%	0.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Americas									
Brazil*	27.2%	28.2%	1.3%	1.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Canada	20.2%	12.0%	0.5%	5.9%	0.6%	-0.4%	-0.4%	-0.6%	-0.8%
Chile*	11.8%	13.6%	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%
Colombia*	23.4%	22.8%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Mexico*	5.4%	8.2%	1.4%	0.9%	0.0%	0.1%	0.0%	0.0%	0.0%
Peru*	23.8%	26.9%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
United States	1.7%	0.8%	4.7%	0.0%	0.0%	0.2%	0.0%	0.0%	0.3%

Excludes FIAM Equity holdings.

Int'l Equity Performance Attribution vs. MSCI ACWI ex USA IMI Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
Other									
Egypt*	--	-5.7%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Israel	-5.5%	-7.1%	0.1%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Kazakhstan**	-10.6%	-11.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Kuwait**	-8.6%	-10.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	-9.8%	3.4%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	-0.1%
Romania**	-12.1%	-11.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	9.6%	15.6%	1.9%	1.3%	-0.1%	0.1%	0.0%	0.0%	0.0%
Turkey*	1.4%	19.4%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	-0.1%
United Arab Emirates*	-9.3%	7.3%	0.3%	0.2%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Totals									
Americas	4.7%	13.4%	8.8%	8.1%	-0.3%	-0.3%	-0.6%	0.0%	-1.3%
Europe	-0.5%	-1.8%	47.1%	47.6%	0.9%	-0.1%	0.2%	0.0%	1.1%
Asia/Pacific	1.1%	-1.6%	39.8%	41.5%	0.7%	0.1%	0.0%	-0.1%	0.8%
Other	8.9%	10.1%	3.3%	2.7%	-0.1%	-0.1%	0.0%	0.1%	-0.2%
Cash	0.1%	--	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	0.3%	-0.2%	100.0%	100.0%	1.2%	-0.4%	-0.4%	-0.1%	0.4%
Totals									
Developed	-0.5%	-1.5%	77.9%	79.2%	1.2%	-0.2%	0.2%	0.1%	1.3%
Emerging*	6.1%	4.7%	20.8%	20.8%	0.8%	-0.8%	-0.6%	-0.3%	-0.9%
Frontier**	-9.2%	--	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.1%	--	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Excludes FIAM Equity holdings.



	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	3.6	-4.1	-3.0	-0.8	5.1	5.6	13.1	4.3
25th Percentile	-0.9	-7.4	-6.2	-2.8	3.4	3.1	10.7	2.9
Median	-1.9	-9.4	-8.5	-4.1	2.2	2.3	9.8	2.2
75th Percentile	-3.0	-11.2	-10.7	-5.4	0.8	1.2	8.7	1.5
95th Percentile	-4.4	-12.6	-11.8	-6.6	-1.0	-1.2	6.8	-0.8
# of Portfolios	154	154	152	145	139	113	91	61
● Developed Markets	0.1 (18)	-6.5 (18)	-5.7 (19)	-3.0 (30)	2.8 (39)	2.1 (54)	8.9 (68)	2.0 (57)
▲ MSCI ACWI ex USA Gross	-0.3 (18)	-9.4 (51)	-8.8 (55)	-4.8 (59)	0.8 (78)	0.8 (80)	9.7 (52)	2.4 (39)

Characteristics

	Portfolio	MSCI ACWI ex USA Gross
Number of Holdings	817	1,856
Weighted Avg. Market Cap. (\$B)	40.8	46.7
Median Market Cap. (\$B)	7.4	6.6
Price To Earnings	22.5	17.6
Price To Book	3.6	2.4
Price To Sales	3.0	2.3
Return on Equity (%)	16.4	14.5
Yield (%)	3.0	3.2
Beta (holdings; global)	1.0	1.0

Top Holdings

UNILEVER (UK)	2.0%
NESTLE 'R'	1.7%
UNITED OVERSEAS BANK	1.5%
KAO	1.3%
NOVO NORDISK 'B'	1.2%
GLAXOSMITHKLINE	1.2%
SYNGENTA	1.1%
TAKEDA PHARMACEUTICAL	1.1%
COCHLEAR	1.1%
ABB LTD N	1.1%

Best Performers

	Return %
MINERAL DEPOSITS (A:MDLX)	70.2%
ANDREA ELECTRONICS (ANDR)	57.4%
IAMGOLD (NYS) (IAG)	55.6%
MESOBLAST (A:MSBX)	46.9%
CPFL EN.ON SPN.ADR.1:2 (CPL)	46.8%
MEDA 'A' (W:MEDA)	46.7%
CHRISTOPHER & BKS. (CBK)	44.8%
CPFL ENERGIA ON (BR:CPL)	44.1%
ARCELORMITTAL ADR 1:1 (MT)	42.7%
TELEFONICA BRASIL PN ADR 1:1 (VIV)	39.5%

Worst Performers

	Return %
NANTKWEST (NK)	-52.6%
PETROSONIC ENERGY (PSON)	-47.5%
SEVENTY SEVEN ENERGY (SSE)	-44.8%
RESTAURANT GROUP (UKIR:RTN)	-44.2%
JAPAN AIRPORT TERM.(OTC) (JAIRF)	-41.7%
RESOLUTE ENERGY (REN)	-41.4%
BANCA PPO.EMILIA ROMAGNA (I:BPE)	-37.7%
HIROSHIMA BANK (J:HRBK)	-35.7%
CREDIT SUISSE GROUP SPN. ADR 1:1 (CS)	-34.9%
ZUMTOBEL (O:ZUS)	-33.6%

Excludes FIAM Equity holdings.

Developed Markets Performance Attribution vs. MSCI ACWI ex USA Gross

	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.5%	-0.3%	-0.1%	-0.1%	1.7%	9.3%	5.0%	5.9%			
Materials	-0.5%	-0.2%	-0.2%	-0.1%	1.8%	6.5%	3.8%	6.4%			
Industrials	0.1%	0.1%	0.0%	-0.1%	2.6%	2.1%	13.1%	11.0%			
Cons. Disc.	-0.1%	0.0%	-0.1%	0.0%	-3.2%	-2.7%	15.2%	12.2%			
Cons. Staples	0.6%	0.1%	0.1%	0.4%	5.6%	4.2%	13.6%	10.7%			
Health Care	0.5%	0.4%	-0.2%	0.3%	-2.4%	-7.4%	10.1%	9.5%			
Financials	0.0%	0.0%	0.4%	-0.4%	-4.5%	-4.4%	17.7%	26.9%			
Info. Tech	0.3%	0.3%	0.0%	0.0%	2.5%	0.0%	10.6%	8.8%			
Telecomm.	0.1%	0.0%	0.0%	0.1%	5.4%	3.3%	5.3%	5.1%			
Utilities	-0.2%	-0.2%	0.0%	0.0%	-2.3%	2.3%	3.9%	3.5%			
Cash	0.0%	0.0%	0.0%	0.0%	0.1%	--	1.1%	0.0%			
Unclassified	0.0%	0.0%	0.0%	0.0%	-10.6%	--	0.5%	0.0%			
Portfolio	0.3%	=	0.3%	+	0.0%	+	0.1%	0.1%	-0.3%	100.0%	100.0%

Excludes FIAM Equity holdings.

Developed Markets Performance Attribution vs. MSCI ACWI ex USA Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
Europe									
Austria	-18.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Belgium	-15.0%	-3.0%	0.1%	1.1%	-0.1%	0.1%	0.0%	0.1%	0.0%
Czech Republic*	--	6.0%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Denmark	0.9%	-0.5%	2.6%	1.4%	0.0%	0.0%	0.1%	0.0%	0.1%
Finland	13.6%	-4.3%	0.7%	0.7%	0.1%	0.0%	0.0%	0.0%	0.1%
France	-6.3%	0.2%	3.3%	7.1%	-0.5%	0.0%	-0.2%	0.3%	-0.4%
Germany	-1.5%	-2.1%	5.3%	6.6%	0.1%	0.0%	0.0%	-0.1%	0.0%
Greece*	--	-12.3%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Hungary*	--	18.0%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Ireland	-7.3%	-3.0%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Italy	-1.8%	-11.1%	1.0%	1.7%	0.2%	0.1%	0.0%	-0.1%	0.2%
Luxembourg	-10.8%	-6.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Netherlands	4.8%	2.3%	2.0%	2.2%	0.1%	0.0%	0.0%	0.0%	0.1%
Norway	-8.6%	2.5%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland*	--	13.7%	0.0%	0.3%	--	0.0%	0.0%	--	-0.1%
Portugal	25.8%	4.6%	0.4%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%
Russia*	-2.2%	17.1%	0.1%	0.7%	0.0%	-0.1%	-0.1%	0.0%	-0.2%
Spain	-5.5%	-4.4%	4.3%	2.3%	0.0%	-0.1%	0.1%	0.0%	-0.1%
Sweden	-1.1%	0.0%	4.5%	2.1%	0.0%	0.0%	0.2%	0.0%	0.2%
Switzerland	-0.6%	-4.9%	7.6%	6.9%	0.3%	-0.2%	0.2%	0.1%	0.4%
United Kingdom	0.1%	-2.4%	18.6%	14.3%	0.4%	0.3%	-0.1%	0.1%	0.7%

Excludes FIAM Equity holdings.

Developed Markets Performance Attribution vs. MSCI ACWI ex USA Gross

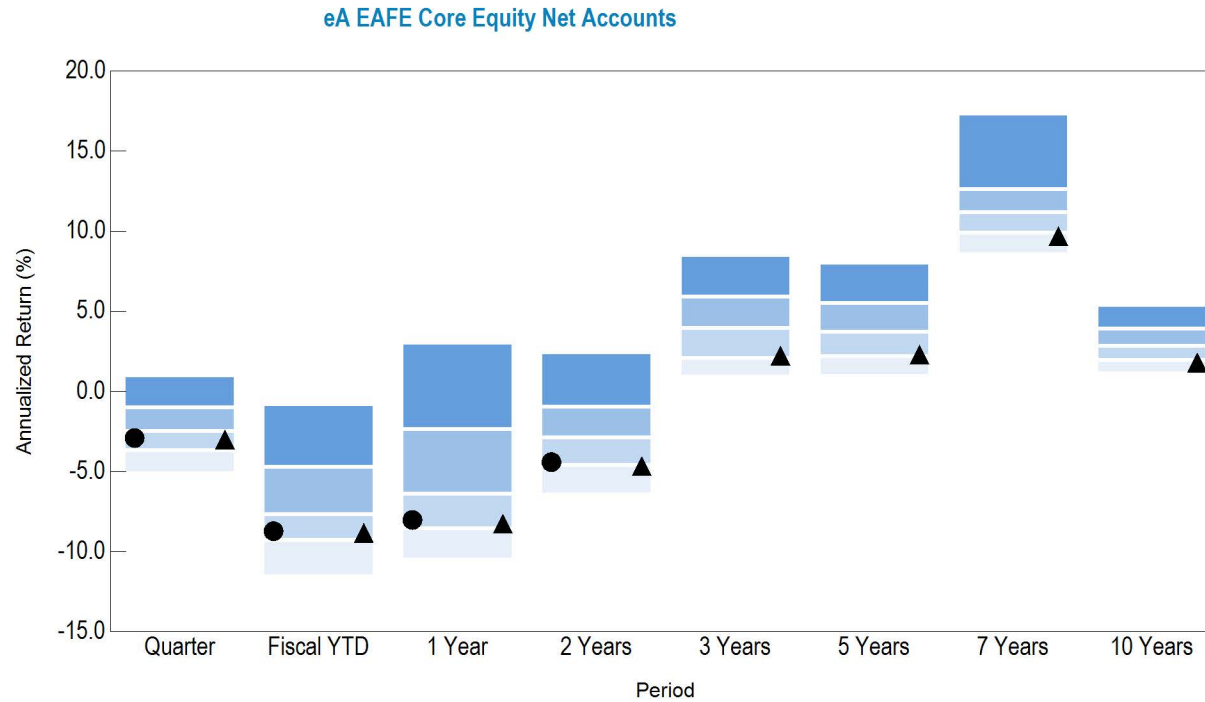
	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
AsiaPacific									
Australia	11.0%	2.1%	3.5%	5.0%	0.4%	0.0%	-0.1%	-0.1%	0.2%
China*	-6.5%	-4.8%	2.4%	5.9%	-0.1%	0.0%	0.0%	0.1%	0.0%
Hong Kong	-0.7%	-0.4%	2.5%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%
India*	-3.5%	-2.6%	1.3%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Indonesia*	8.2%	11.3%	0.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Japan	-4.1%	-6.5%	21.0%	17.0%	0.6%	-0.3%	0.0%	0.1%	0.4%
Korea*	1.0%	4.9%	2.4%	3.2%	-0.1%	0.0%	0.0%	0.0%	-0.2%
Malaysia*	15.1%	13.2%	0.4%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
New Zealand	--	12.1%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Philippines*	6.5%	7.3%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Singapore	6.6%	5.1%	2.8%	0.9%	0.0%	0.1%	0.1%	0.1%	0.2%
Taiwan*	9.5%	7.7%	2.2%	2.4%	0.1%	0.0%	0.0%	0.0%	0.0%
Thailand*	19.5%	17.2%	0.1%	0.4%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Americas									
Brazil*	30.0%	28.6%	0.6%	1.1%	0.1%	-0.1%	-0.1%	0.0%	-0.2%
Canada	20.2%	11.4%	0.6%	5.9%	0.6%	-0.4%	-0.4%	-0.6%	-0.8%
Chile*	11.1%	13.3%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Colombia*	28.9%	22.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Mexico*	2.4%	8.5%	0.7%	0.9%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Peru*	--	26.9%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
United States	1.5%	0.8%	5.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.3%

Excludes FIAM Equity holdings.

Developed Markets Pyramis Performance Attribution vs. MSCI ACWI ex USA Gross

	Returns and Weights				Attribution Effects				
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects
Other									
Egypt*	--	-6.1%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Israel	-5.5%	-9.3%	0.1%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Kazakhstan**	-10.6%	-11.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	-10.7%	3.4%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Romania**	-12.1%	-11.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	7.8%	14.6%	1.3%	1.4%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Turkey*	-0.1%	22.4%	0.1%	0.3%	0.0%	-0.1%	0.0%	0.0%	-0.1%
United Arab Emirates*	-10.3%	7.7%	0.1%	0.2%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Totals									
Americas	3.9%	13.2%	7.2%	8.3%	-0.4%	-0.4%	-0.6%	0.0%	-1.4%
Europe	-0.5%	-2.0%	50.9%	48.5%	1.0%	-0.1%	0.1%	0.1%	1.1%
Asia/Pacific	0.9%	-1.7%	38.8%	40.5%	0.7%	0.1%	0.1%	-0.1%	0.8%
Other	7.1%	10.0%	1.9%	2.7%	-0.2%	-0.1%	0.0%	0.1%	-0.2%
Cash	0.1%	--	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	0.1%	-0.3%	100.0%	100.0%	1.1%	-0.5%	-0.4%	0.1%	0.3%
Totals									
Developed	-0.4%	-1.8%	86.1%	79.3%	1.5%	-0.3%	0.1%	0.2%	1.6%
Emerging*	4.8%	5.4%	12.8%	20.7%	0.4%	-0.9%	-0.5%	-0.3%	-1.3%
Frontier**	-11.4%	--	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.1%	--	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Excludes FIAM Equity holdings.



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	1.0	-0.8	3.0	2.4	8.5	8.0	17.3	5.4
25th Percentile	-1.0	-4.7	-2.3	-0.9	5.9	5.5	12.7	3.9
Median	-2.5	-7.6	-6.4	-2.8	4.0	3.7	11.2	2.9
75th Percentile	-3.6	-9.2	-8.5	-4.6	2.1	2.2	9.9	2.0
95th Percentile	-5.1	-11.5	-10.5	-6.4	1.0	1.0	8.6	1.2
# of Portfolios	91	91	89	87	80	69	61	45
● BlackRock EAFE Index	-2.9 (60)	-8.7 (67)	-8.0 (71)	-4.4 (74)	-- (--)	-- (--)	-- (--)	-- (--)
▲ MSCI EAFE	-3.0 (61)	-8.8 (68)	-8.3 (72)	-4.7 (80)	2.2 (72)	2.3 (75)	9.7 (77)	1.8 (81)

Characteristics

	Portfolio	MSCI EAFE
Number of Holdings	619	928
Weighted Avg. Market Cap. (\$B)	30.2	50.3
Median Market Cap. (\$B)	5.9	8.7
Price To Earnings	18.5	17.6
Price To Book	2.2	2.3
Price To Sales	2.2	2.2
Return on Equity (%)	11.1	13.4
Yield (%)	3.1	3.4
Beta (holdings: global)	1.2	1.0

Top Holdings

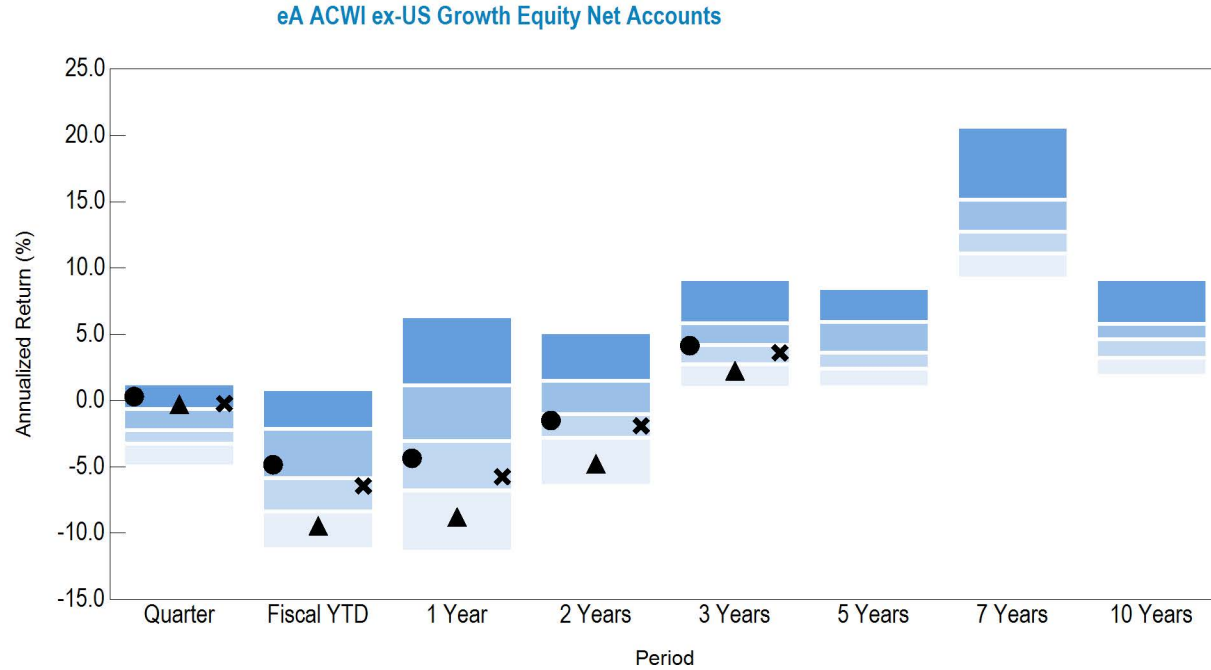
ROGERS	2.5%
NOVEN PHARMS.	2.3%
BANCO SANTANDER SA ADR 1:1	2.3%
TOYOTA MOTOR	2.1%
CLEARBRIDGE AMER.EN.MLP FD.	1.4%
GLAXOSMITHKLINE SPN.ADR 1:2	1.4%
BAY NATIONAL	1.4%
ROYAL DUTCH SHELL B ADR 1:2	1.4%
ROYAL DUTCH SHELL A ADR 1:2	1.4%
VODAFONE GP.SPN.ADR 1:10	1.2%

Best Performers

	Return %
ANDREA ELECTRONICS (ANDR)	57.4%
IAMGOLD (NYS) (IAG)	55.6%
CHRISTOPHER & BKS. (CBK)	44.8%
ARCELORMITTAL ADR 1:1 (MT)	42.7%
TELEFONICA BRASIL PN ADR 1:1 (VIV)	39.5%
HOSHIZAKI ELECTRIC (J:HSZK)	32.9%
SCHNITZER STL.INDS. (SCHN)	30.1%
WH GROUP (K:HHPL)	29.7%
SUBURBAN PROPANE PTNS. (SPH)	27.2%
SANDSTORM GOLD (ASE) (SAND)	25.1%

Worst Performers

	Return %
NANTKWEST (NK)	-52.6%
PETROSONIC ENERGY (PSON)	-47.5%
SEVENTY SEVEN ENERGY (SSE)	-44.8%
JAPAN AIRPORT TERM.(OTC) (JAIRF)	-41.7%
RESOLUTE ENERGY (REN)	-41.4%
HIROSHIMA BANK (J:HRBK)	-35.7%
CREDIT SUISSE GROUP SPN. ADR 1:1 (CS)	-34.9%
ISA INTERNATIONALE (ISAT)	-33.3%
IYO BANK (J:IYOT)	-32.9%
RARE ELEMENT RES. (ASE) (REEMF)	-29.8%



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	1.3	0.8	6.3	5.1	9.1	8.4	20.6	9.1
25th Percentile	-0.6	-2.1	1.2	1.5	5.8	5.9	15.2	5.8
Median	-2.2	-5.8	-3.0	-1.0	4.2	3.6	12.8	4.7
75th Percentile	-3.2	-8.3	-6.8	-2.8	2.7	2.4	11.1	3.2
95th Percentile	-5.0	-11.2	-11.4	-6.4	1.0	1.0	9.3	1.9
# of Portfolios	49	49	49	44	41	38	34	27
● Baillie Gifford	0.3 (18)	-4.8 (42)	-4.4 (59)	-1.5 (56)	4.1 (51)	-- (--)	-- (--)	-- (--)
▲ MSCI ACWI ex US	-0.3 (22)	-9.4 (85)	-8.8 (87)	-4.8 (86)	2.3 (80)	-- (--)	-- (--)	-- (--)
✕ MSCI ACWI ex US Growth	-0.2 (22)	-6.4 (58)	-5.8 (65)	-1.9 (65)	3.6 (60)	-- (--)	-- (--)	-- (--)

Characteristics

	Portfolio	MSCI ACWI ex USA Gross
Number of Holdings	87	1,856
Weighted Avg. Market Cap. (\$B)	33.6	46.7
Median Market Cap. (\$B)	11.5	6.6
Price To Earnings	27.0	17.6
Price To Book	5.3	2.4
Price To Sales	4.2	2.3
Return on Equity (%)	23.0	14.5
Yield (%)	1.9	3.2
Beta (holdings: global)	1.1	1.0

Top Holdings

NOVO NORDISK 'B'	2.9%
KAO	2.7%
COCHLEAR	2.6%
SHIMANO	2.5%
TAIWAN SEMICON.SPN.ADR 1:5	2.3%
KINNEVIK 'B'	2.2%
ARM HOLDINGS	2.2%
NASPERS	2.2%
HARGREAVES LANSDOWN	2.2%
MS&AD INSURANCE GP.HDG.	2.1%

Best Performers

	Return %
MESOBLAST (A:MSBX)	46.9%
IMAGINATION TECHNOLOGIES (UKIR:IMG)	38.2%
ITAU UNIBANCO BANCO HLDG.ADR 1:1 (ITUB)	35.8%
JERONIMO MARTINS (P:JMT)	25.8%
TREASURY WINE ESTATES (A:TWEX)	23.8%
ADIDAS (D:ADS)	19.9%
JARDINE MATHESON HDG. (T:JMST)	19.5%
CLICKS GROUP (R:CLSJ)	17.5%
KONE 'B' (M:KNEBV)	17.4%
TAIWAN SEMICON.SPN.ADR 1:5 (TSM)	15.2%

Worst Performers

	Return %
MITCHELLS & BUTLERS (UKIR:MAB)	-21.5%
JD.COM 'A' ADR 1:2 (JD)	-17.9%
PROTALIX BIOTH. (PLX)	-17.6%
RAKUTEN (J:RAKT)	-17.2%
ZALANDO (D:ZAL)	-16.5%
TSINGTAO BREWERY 'H' (K:TSIN)	-16.2%
CAPITA (UKIR:CPI)	-15.9%
DENSO (J:DE@N)	-15.7%
AUTO TRADER GROUP (UKIR:AUTO)	-14.2%
LI & FUNG (K:FUNG)	-13.0%

Baillie Gifford Performance Attribution vs. MSCI ACWI ex USA Gross

	Total Effects	Attribution Effects			Returns		Sector Weights				
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.7%	-0.2%	-0.4%	-0.1%	2.0%	9.3%	1.8%	5.9%			
Materials	-0.6%	-0.2%	-0.2%	-0.2%	-0.7%	6.5%	2.8%	6.4%			
Industrials	0.6%	0.4%	0.1%	0.1%	4.9%	2.1%	13.8%	11.0%			
Cons. Disc.	-0.2%	-0.1%	-0.2%	0.1%	-4.3%	-2.7%	21.3%	12.2%			
Cons. Staples	0.7%	-0.1%	0.3%	0.4%	4.8%	4.2%	17.9%	10.7%			
Health Care	0.9%	0.7%	-0.1%	0.3%	1.1%	-7.4%	10.3%	9.5%			
Financials	0.1%	0.2%	0.3%	-0.5%	-4.2%	-4.4%	17.8%	26.9%			
Info. Tech	0.5%	0.4%	0.1%	0.0%	1.8%	0.0%	11.9%	8.8%			
Telecomm.	-0.4%	--	-0.2%	--	--	3.3%	0.0%	5.1%			
Utilities	-0.2%	--	-0.1%	--	--	2.3%	0.0%	3.5%			
Cash	0.1%	0.0%	0.1%	0.0%	0.1%	--	2.5%	0.0%			
Portfolio	0.7%	=	1.2%	+	-0.4%	+	-0.2%	0.4%	-0.3%	100.0%	100.0%

Baillie Gifford Performance Attribution vs. MSCI ACWI ex USA Gross

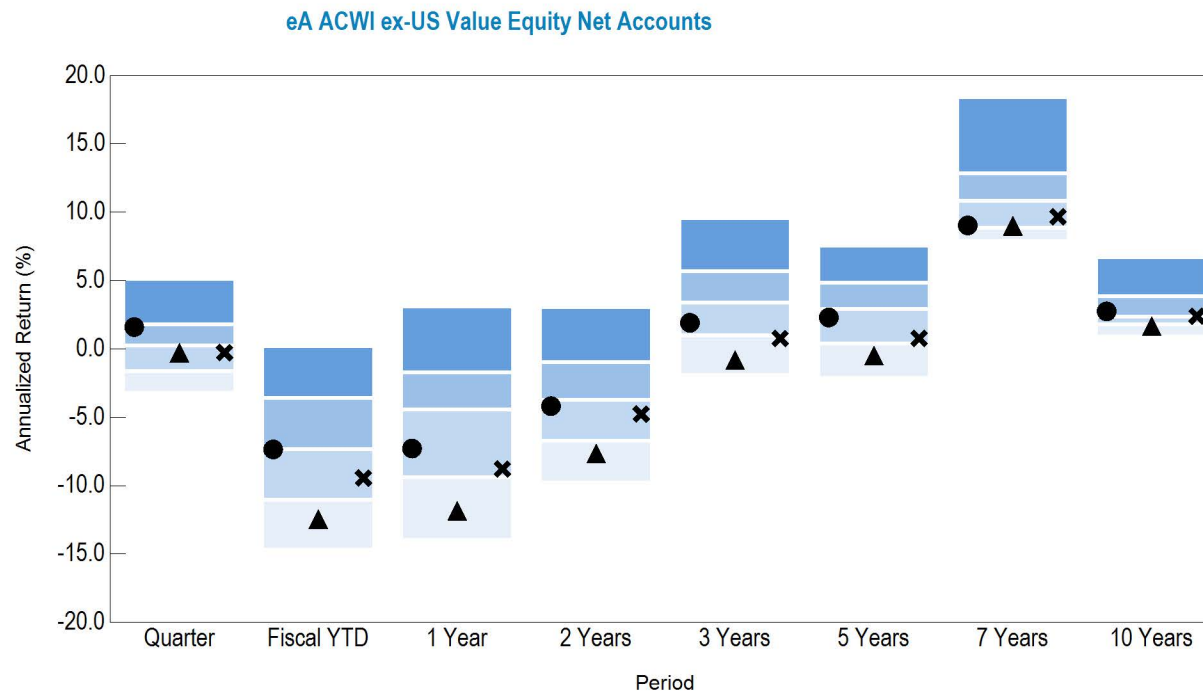
	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
Europe									
Austria	--	0.0%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Belgium	--	-3.0%	0.0%	1.1%	--	0.1%	-0.1%	--	0.0%
Czech Republic*	--	6.0%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Denmark	-0.6%	-0.5%	5.6%	1.4%	0.0%	-0.1%	0.2%	0.0%	0.1%
Finland	17.4%	-4.3%	1.2%	0.7%	0.1%	0.0%	0.0%	0.1%	0.3%
France	-1.0%	0.2%	0.8%	7.1%	0.0%	0.1%	-0.3%	0.0%	-0.3%
Germany	1.7%	-2.1%	2.6%	6.6%	0.2%	0.1%	-0.2%	-0.1%	0.0%
Greece*	--	-12.3%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Hungary*	--	18.0%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Ireland	--	-3.0%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
Italy	--	-11.1%	0.0%	1.7%	--	0.2%	-0.1%	--	0.1%
Netherlands	--	2.3%	0.0%	2.2%	--	0.0%	-0.1%	--	-0.1%
Norway	--	2.5%	0.0%	0.4%	--	0.0%	0.0%	--	0.0%
Poland*	--	13.7%	0.0%	0.3%	--	0.0%	0.0%	--	-0.1%
Portugal	25.8%	4.6%	0.9%	0.1%	0.0%	0.0%	0.1%	0.2%	0.3%
Russia*	--	17.1%	0.0%	0.7%	--	-0.1%	-0.1%	--	-0.2%
Spain	-7.4%	-4.4%	3.7%	2.3%	-0.1%	-0.1%	0.1%	0.0%	-0.1%
Sweden	-3.0%	0.0%	7.6%	2.1%	0.0%	0.0%	0.2%	-0.1%	0.0%
Switzerland	-1.2%	-4.9%	5.6%	6.9%	0.2%	0.0%	0.0%	0.0%	0.2%
United Kingdom	-2.2%	-2.4%	20.3%	14.3%	0.1%	0.4%	-0.2%	-0.1%	0.2%

Baillie Gifford Performance Attribution vs. MSCI ACWI ex USA Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
AsiaPacific									
Australia	15.8%	2.2%	5.7%	5.0%	0.5%	0.0%	0.1%	0.2%	0.8%
China*	-6.8%	-4.7%	5.6%	5.9%	0.0%	0.0%	0.0%	-0.1%	-0.1%
Hong Kong	-1.9%	0.6%	1.7%	2.4%	-0.1%	-0.1%	0.0%	0.0%	-0.1%
India*	-6.5%	-2.9%	1.4%	1.8%	0.1%	0.1%	0.0%	-0.1%	0.0%
Indonesia*	--	12.8%	0.0%	0.5%	--	-0.1%	0.0%	--	-0.1%
Japan	-2.4%	-6.3%	18.9%	17.0%	0.6%	-0.3%	0.3%	0.1%	0.7%
Korea*	2.6%	4.6%	3.3%	3.2%	0.0%	0.0%	0.0%	0.0%	-0.1%
Malaysia*	--	13.5%	0.0%	0.7%	--	-0.1%	-0.1%	--	-0.1%
New Zealand	--	11.9%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Philippines*	8.2%	7.5%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Singapore	8.3%	5.6%	3.5%	0.9%	0.0%	0.1%	0.0%	0.1%	0.3%
Taiwan*	11.1%	7.7%	3.1%	2.4%	0.2%	0.1%	-0.1%	0.0%	0.2%
Thailand*	--	17.0%	0.0%	0.4%	--	-0.1%	0.0%	--	-0.1%
Americas									
Brazil*	35.8%	27.2%	0.4%	1.1%	0.2%	-0.2%	-0.2%	-0.2%	-0.2%
Canada	--	11.3%	0.0%	5.9%	--	-0.4%	-0.4%	--	-0.8%
Chile*	--	12.5%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Colombia*	--	24.1%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Mexico*	-4.7%	8.6%	0.7%	0.9%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Peru*	--	17.2%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
United States	0.5%	0.8%	1.6%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%

Baillie Gifford Performance Attribution vs. MSCI ACWI ex USA Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
Other									
Egypt*	--	-6.1%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Israel	--	-9.3%	0.0%	0.6%	--	0.0%	0.0%	--	0.0%
Qatar*	--	3.4%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
South Africa*	6.4%	14.6%	2.9%	1.4%	-0.1%	0.2%	0.1%	-0.1%	0.1%
Turkey*	--	22.4%	0.0%	0.3%	--	-0.1%	0.0%	--	-0.1%
United Arab Emirates*	--	7.7%	0.0%	0.2%	--	-0.1%	0.0%	--	-0.1%
Totals									
Americas	4.2%	13.2%	2.7%	8.3%	-0.1%	-0.6%	-0.6%	0.1%	-1.2%
Europe	-1.2%	-2.0%	48.4%	48.5%	0.9%	0.1%	-0.5%	0.0%	0.5%
Asia/Pacific	1.4%	-1.7%	43.5%	40.5%	1.2%	0.1%	0.2%	0.0%	1.4%
Other	6.4%	10.0%	2.9%	2.7%	-0.2%	0.0%	0.1%	0.0%	-0.1%
Cash	0.1%	--	2.5%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%
Total	0.4%	-0.3%	100.0%	100.0%	1.8%	-0.3%	-0.8%	0.0%	0.7%
Totals									
Developed	0.1%	-1.8%	79.8%	79.3%	2.0%	-0.1%	-0.4%	0.2%	1.7%
Emerging*	1.6%	5.4%	17.7%	20.7%	-0.3%	-0.4%	-0.4%	-0.1%	-1.1%
Cash	0.1%	--	2.5%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	5.1	0.2	3.1	3.0	9.5	7.5	18.4	6.7
25th Percentile	1.8	-3.5	-1.7	-0.9	5.7	4.9	12.9	3.9
Median	0.3	-7.3	-4.4	-3.7	3.4	2.9	10.8	2.4
75th Percentile	-1.6	-11.0	-9.4	-6.7	1.0	0.4	8.9	1.8
95th Percentile	-3.2	-14.6	-14.0	-9.7	-1.9	-2.1	7.9	0.9
# of Portfolios	33	31	31	29	27	23	20	18
● Mondrian	1.6 (26)	-7.4 (51)	-7.3 (62)	-4.2 (60)	1.9 (61)	2.3 (62)	9.0 (68)	2.7 (40)
▲ MSCI ACWI ex USA Value Gross	-0.3 (56)	-12.5 (91)	-11.8 (93)	-7.6 (81)	-0.8 (84)	-0.5 (84)	9.0 (69)	1.7 (83)
✕ MSCI ACWI ex USA Gross	-0.3 (56)	-9.4 (69)	-8.8 (71)	-4.8 (65)	0.8 (78)	0.8 (72)	9.7 (63)	2.4 (51)

Characteristics

	Portfolio	MSCI ACWI ex USA Value Gross
Number of Holdings	148	1,007
Weighted Avg. Market Cap. (\$B)	51.7	45.2
Median Market Cap. (\$B)	16.0	6.2
Price To Earnings	19.5	12.8
Price To Book	2.4	1.4
Price To Sales	1.8	1.6
Return on Equity (%)	11.9	10.5
Yield (%)	4.0	4.2
Beta (holdings: global)	0.9	1.0

Top Holdings

UNILEVER (UK)	2.9%
GLAXOSMITHKLINE	2.8%
SYNGENTA	2.7%
ABB LTD N	2.7%
IBERDROLA	2.5%
AHOLD KON.	2.5%
TAKEDA PHARMACEUTICAL	2.5%
HONDA MOTOR	2.4%
NESTLE 'R'	2.4%
TELIASONERA	2.3%

Best Performers

	Return %
CPFL EN.ON SPN.ADR.1:2 (CPL)	46.8%
CPFL ENERGIA ON (BR:CPL)	44.1%
CREDICORP (BAP)	34.6%
TSMS.ALIANCA ENELA. UTS. (BR:TDC)	34.5%
ECOD.INFU.E LOG.ON (BR:EON)	31.6%
REDEFINE PROPERTIES (R:RDFJ)	30.1%
WH GROUP (K:HHPL)	29.7%
BANCOLOMBIA PF.SPN.ADR 1:4 (CIB)	28.9%
VALE ON ADR 1:1 (VALE)	28.0%
CMPH.COCS. RODOVIARIAS ON (BR:CCR)	27.4%

Worst Performers

	Return %
VALLOUREC (F:VLR)	-29.9%
BELLE INTERNATIONAL HDG. (K:BIHL)	-22.9%
RURAL ELECFN.CORP. (IN:RUR)	-21.3%
SOCIETE GENERALE (F:SGE)	-20.0%
G4S (UKIR:GFS)	-17.6%
HONDA MOTOR (J:HO@N)	-14.9%
NOVARTIS 'R' (S:NOVN)	-12.9%
TOKIO MARINE HOLDINGS (J:MIHO)	-12.5%
HOUSING DEVELOPMENT FIN. (IN:HDF)	-12.4%
ZURICH INSURANCE GROUP (S:ZURN)	-9.7%

Mondrian Performance Attribution vs. MSCI ACWI ex USA Value Gross

	Total Effects	Attribution Effects			Returns		Sector Weights				
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.6%	-0.3%	-0.2%	-0.1%	3.6%	7.9%	7.2%	9.5%			
Materials	-0.7%	-0.3%	-0.4%	0.0%	6.7%	11.1%	3.2%	6.9%			
Industrials	-0.2%	-0.2%	0.0%	-0.1%	1.4%	3.6%	9.2%	9.7%			
Cons. Disc.	0.2%	0.4%	0.0%	-0.2%	-1.6%	-4.2%	8.6%	8.9%			
Cons. Staples	1.3%	0.1%	0.6%	0.6%	6.7%	4.1%	14.9%	3.5%			
Health Care	0.0%	0.0%	-0.2%	0.2%	-5.3%	-6.6%	10.7%	6.0%			
Financials	0.6%	0.6%	1.2%	-1.2%	-3.8%	-5.3%	15.0%	39.1%			
Info. Tech	0.4%	0.0%	0.1%	0.3%	3.5%	1.4%	9.2%	4.5%			
Telecomm.	0.6%	0.0%	0.3%	0.3%	5.0%	4.1%	12.9%	6.4%			
Utilities	0.1%	0.0%	0.1%	0.0%	1.2%	1.9%	9.1%	5.5%			
Cash	0.0%	--	--	--	--	--	0.0%	0.0%			
Portfolio	1.8%	=	0.4%	+	1.5%	+	0.0%	1.4%	-0.4%	100.0%	100.0%

Mondrian Performance Attribution vs. MSCI ACWI ex USA Value Gross

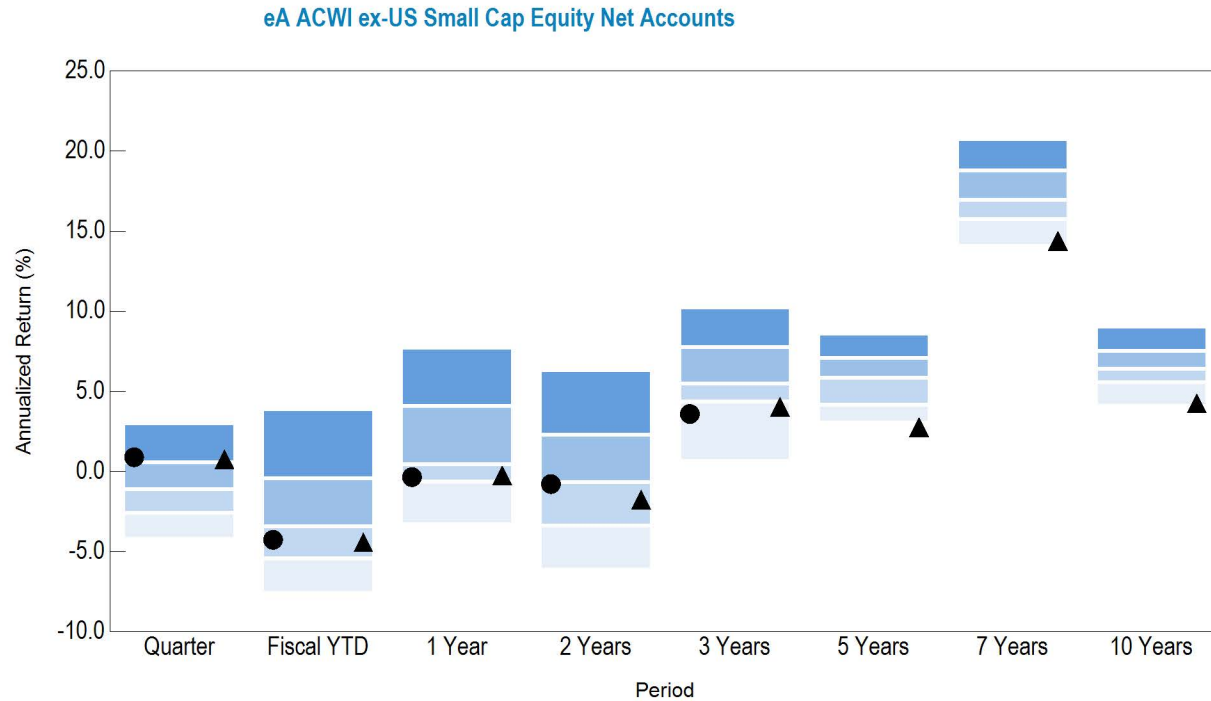
	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
Europe									
Austria	--	-3.2%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Belgium	--	-5.9%	0.0%	0.7%	--	0.0%	0.0%	--	0.0%
Czech Republic*	--	-1.1%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Denmark	11.1%	1.8%	0.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.1%
Finland	--	-1.5%	0.0%	0.8%	--	0.0%	0.0%	--	0.0%
France	-7.3%	-1.3%	5.5%	8.4%	-0.5%	0.1%	-0.1%	0.2%	-0.4%
Germany	-2.5%	-4.3%	8.4%	6.4%	0.1%	-0.1%	0.2%	-0.1%	0.2%
Greece*	--	-18.0%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Hungary*	--	18.7%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Italy	1.1%	-5.9%	1.9%	2.1%	0.1%	0.0%	0.0%	0.0%	0.2%
Netherlands	7.2%	-5.0%	4.0%	1.2%	0.2%	-0.2%	0.2%	0.3%	0.5%
Norway	--	2.1%	0.0%	0.8%	--	0.0%	-0.1%	--	0.0%
Poland*	--	14.7%	0.0%	0.3%	--	0.0%	0.0%	--	-0.1%
Portugal	--	0.1%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Russia*	-2.2%	21.3%	0.3%	0.7%	-0.1%	-0.1%	-0.1%	0.0%	-0.2%
Spain	-1.8%	-5.0%	5.3%	2.9%	0.1%	-0.2%	0.1%	0.1%	0.1%
Sweden	3.5%	0.9%	3.5%	2.0%	0.1%	0.0%	0.1%	0.1%	0.2%
Switzerland	-0.2%	-5.6%	11.4%	4.9%	0.3%	-0.5%	0.4%	0.4%	0.6%
United Kingdom	4.5%	-2.9%	20.0%	16.4%	1.3%	0.1%	-0.1%	0.3%	1.6%

Mondrian Performance Attribution vs. MSCI ACWI ex USA Value Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
AsiaPacific									
Australia	-5.8%	0.1%	0.9%	4.9%	-0.3%	0.1%	-0.2%	0.2%	-0.2%
China*	-8.3%	-3.9%	0.8%	5.6%	0.2%	-0.1%	0.0%	-0.2%	0.0%
Hong Kong	-7.7%	0.9%	2.7%	2.5%	0.0%	-0.2%	0.0%	0.0%	-0.2%
India*	-8.1%	-0.5%	2.1%	1.8%	0.0%	0.0%	0.0%	0.0%	-0.1%
Indonesia*	-1.7%	12.0%	0.7%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Japan	-4.6%	-8.5%	15.6%	17.3%	0.7%	-0.1%	0.1%	0.0%	0.7%
Korea*	-3.6%	8.9%	1.6%	3.1%	0.1%	-0.3%	-0.1%	0.0%	-0.4%
Malaysia*	4.3%	16.6%	1.2%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
New Zealand	--	12.2%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Philippines*	9.8%	8.3%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Singapore	4.9%	6.7%	3.9%	0.9%	0.0%	0.2%	0.2%	-0.1%	0.3%
Taiwan*	-3.4%	6.0%	2.7%	2.4%	0.1%	-0.2%	-0.1%	0.0%	-0.2%
Thailand*	-1.7%	20.3%	0.3%	0.4%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Americas									
Brazil*	-3.6%	41.5%	0.9%	1.1%	0.1%	-0.4%	-0.2%	0.0%	-0.5%
Canada	20.3%	14.7%	1.0%	6.1%	0.3%	-0.5%	-0.4%	-0.3%	-0.9%
Chile*	-1.5%	13.6%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Colombia*	10.3%	22.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Mexico*	-7.0%	8.6%	1.2%	0.9%	0.0%	0.0%	-0.1%	0.0%	-0.1%
Peru*	--	32.6%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
United States	1.6%	-5.3%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Mondrian Performance Attribution vs. MSCI ACWI ex USA Value Gross

	Returns and Weights				Attribution Effects				
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects
Other									
Egypt*	--	-10.3%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Israel	--	-9.7%	0.0%	0.6%	--	0.1%	0.0%	--	0.0%
Kazakhstan**	-10.6%	-7.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	-10.7%	2.2%	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Romania**	-12.1%	-7.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	0.5%	21.9%	0.6%	1.3%	0.0%	-0.2%	-0.1%	0.0%	-0.3%
Turkey*	-0.1%	22.1%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	-0.1%
United Arab Emirates*	-10.3%	10.2%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Totals									
Americas	13.5%	17.7%	4.2%	8.5%	-0.3%	-0.9%	-0.6%	0.3%	-1.5%
Europe	1.2%	-2.7%	61.1%	48.4%	2.0%	-0.3%	0.7%	0.5%	2.9%
Asia/Pacific	-1.7%	-2.2%	32.9%	40.5%	-0.6%	0.2%	-0.3%	0.5%	-0.2%
Other	-5.1%	11.8%	1.9%	2.6%	-0.1%	-0.2%	-0.1%	0.0%	-0.4%
Cash	0.0%	0.0%	0.0%	--	0.0%	-0.1%	0.0%	0.0%	-0.1%
Total	0.3%	-0.4%	100.0%	100.0%	1.0%	-1.2%	-0.3%	1.3%	0.7%
Totals									
Developed	0.3%	-2.6%	85.4%	79.6%	2.7%	-0.4%	0.5%	0.1%	2.9%
Emerging*	-3.7%	7.8%	14.4%	20.4%	0.5%	-1.7%	-0.8%	-0.2%	-2.1%
Frontier**	-11.4%	--	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	3.0	3.9	7.7	6.3	10.2	8.6	20.8	9.0
25th Percentile	0.6	-0.4	4.1	2.3	7.8	7.1	18.8	7.5
Median	-1.1	-3.4	0.5	-0.7	5.5	5.9	17.0	6.4
75th Percentile	-2.6	-5.4	-0.6	-3.4	4.4	4.2	15.8	5.6
95th Percentile	-4.2	-7.6	-3.3	-6.1	0.7	3.1	14.1	4.1
# of Portfolios	32	31	30	25	22	16	16	12
● FIAM Equity	0.9 (16)	-4.3 (61)	-0.4 (73)	-0.8 (54)	3.6 (91)	-- (--)	-- (--)	-- (--)
▲ MSCI ACWI ex US Small Cap Gross	0.8 (16)	-4.4 (62)	-0.3 (71)	-1.8 (69)	4.0 (85)	2.8 (99)	14.4 (93)	4.2 (92)

Characteristics

	Portfolio	MSCI ACWI ex-US Small Cap
No. of Securities	226	4,244
Wgt'd. Avg. Market Cap (000's)	2,766	1,928
Price to Book Ratio	1.8	1.5
Return on Equity	12.8%	10.9%

Ten Holdings

TECHTRONIC INDUSTRIES CO LTD	1.7
OBIC CO LTD	1.6
REGUS PLC	1.4
HIKMA PHARMACEUTICALS PLC	1.4
NIHON PARKERIZING CO LTD	1.3
GRAND CITY PROPERTIES SA	1.0
QUEBECOR INC CL B SUB VT G	0.9
PARTNERS GROUP HOLDING AG	0.9
JUNGHEINRICH AG NON-VT G PFD	0.9
FRUTAROM INDS LTD	0.9

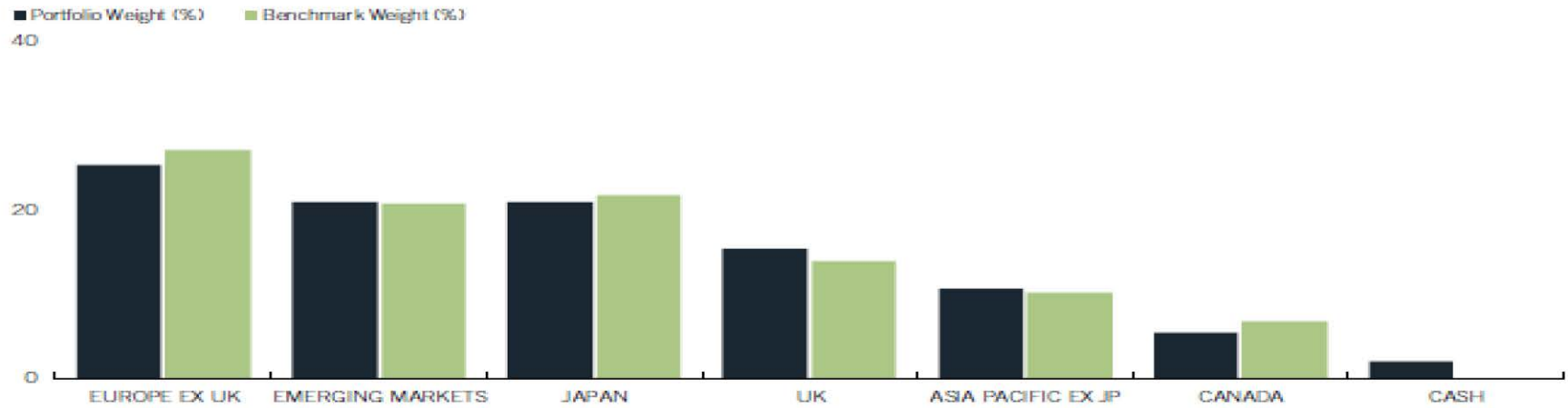
Best Performers (Absolute Return %)

TRICAN WELL SERVICE LTD	141.7
T4F ENTRETENIMENTO SA	129.0
MINERAL DEPOSITS LTD	70.2
ALAMOS GOLD INC A	62.4
DETOUR GOLD CORP	52.4
TIMAH TBK PT	52.4
MEDA AB A	46.7
AWE LTD	42.7
JEAN COUTU GRP INC A SUB VT G	33.1
MIURACO LTD	31.1

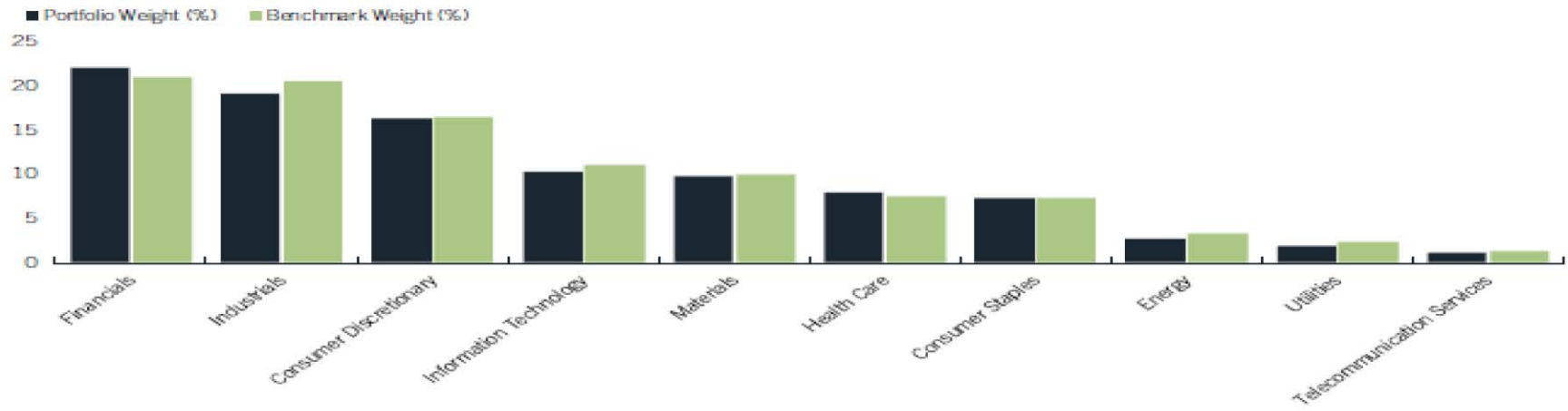
Worst Performers (Absolute Return %)

THE RESTAURANT GROUP PLC	(44.2)
BANCA POP DELL'EMILIA ROMAGNA	(37.7)
ZUMTOBEL GROUP AG	(32.9)
PREMIER OIL PLC	(31.5)
WESTERN ENERGY SERVICES CORP	(30.4)
EURONAV NV	(25.8)
NIPPON SHOKUBAI CO LTD	(25.7)
KEPCO PLANT SER & ENG CO LTD	(25.7)
KINTETSU WORLD EXPRESS INC	(24.5)
DE LONGHI SPA	(24.2)

Regional Weights



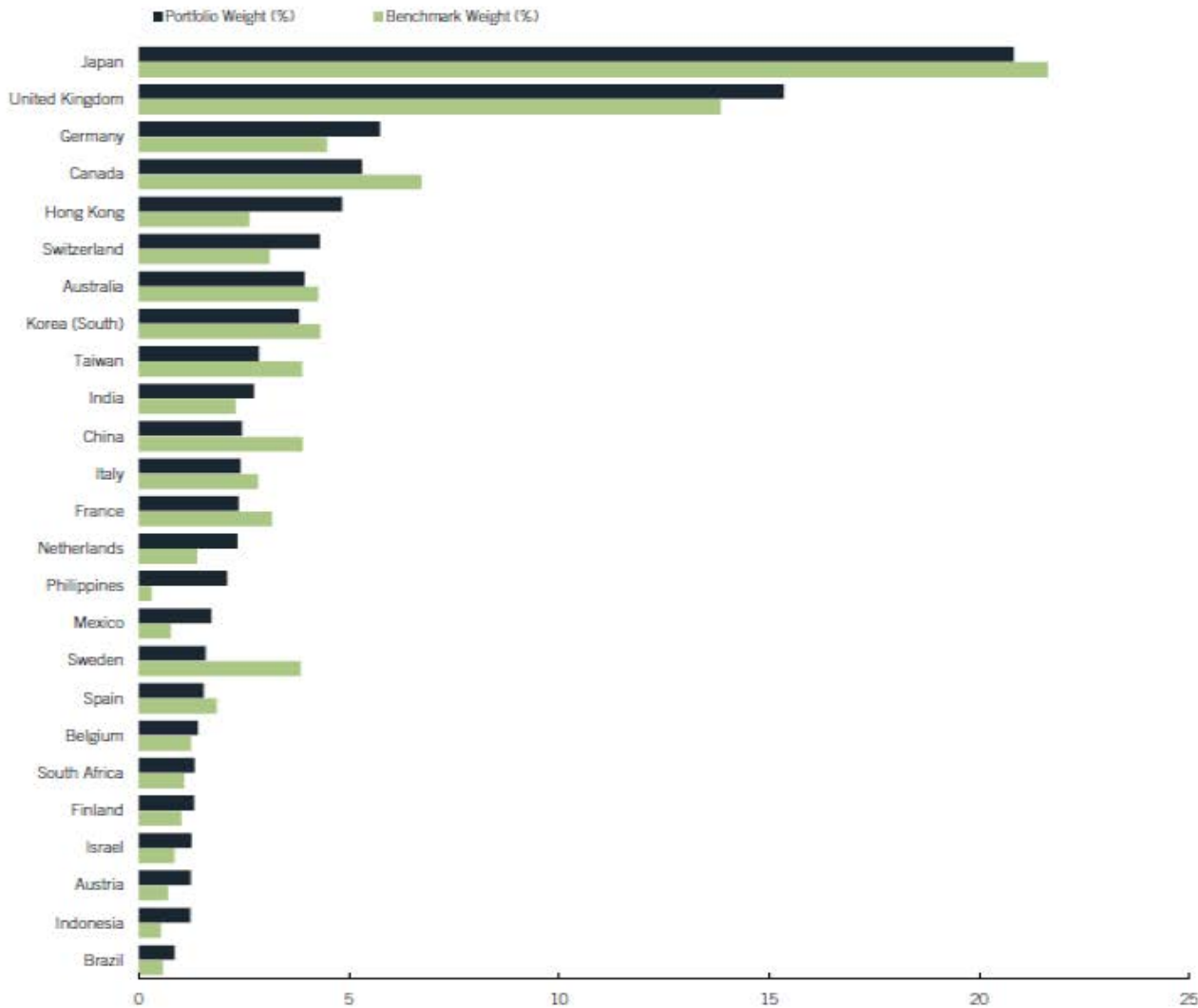
Sector Weights



Sector breakdowns are only applied to equities and convertibles and the allocation percentages may not add to 100%.

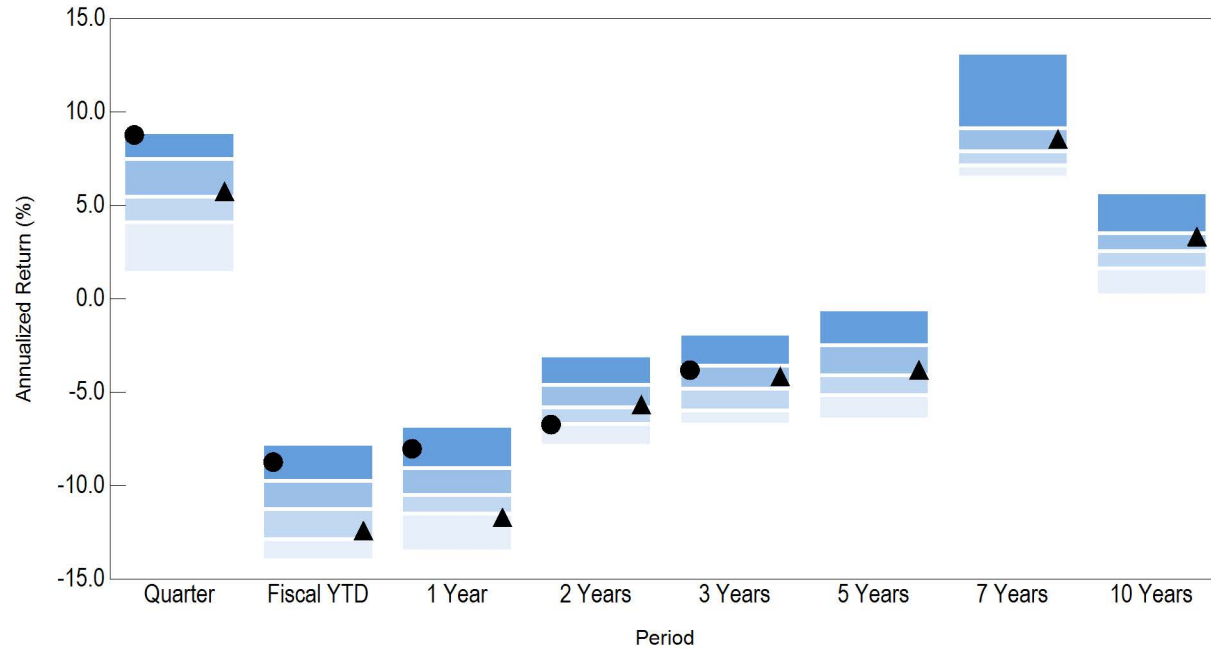
Benchmark: MSCI AC Wld Sm Cap xUS(N)

Top 25 Country Weights

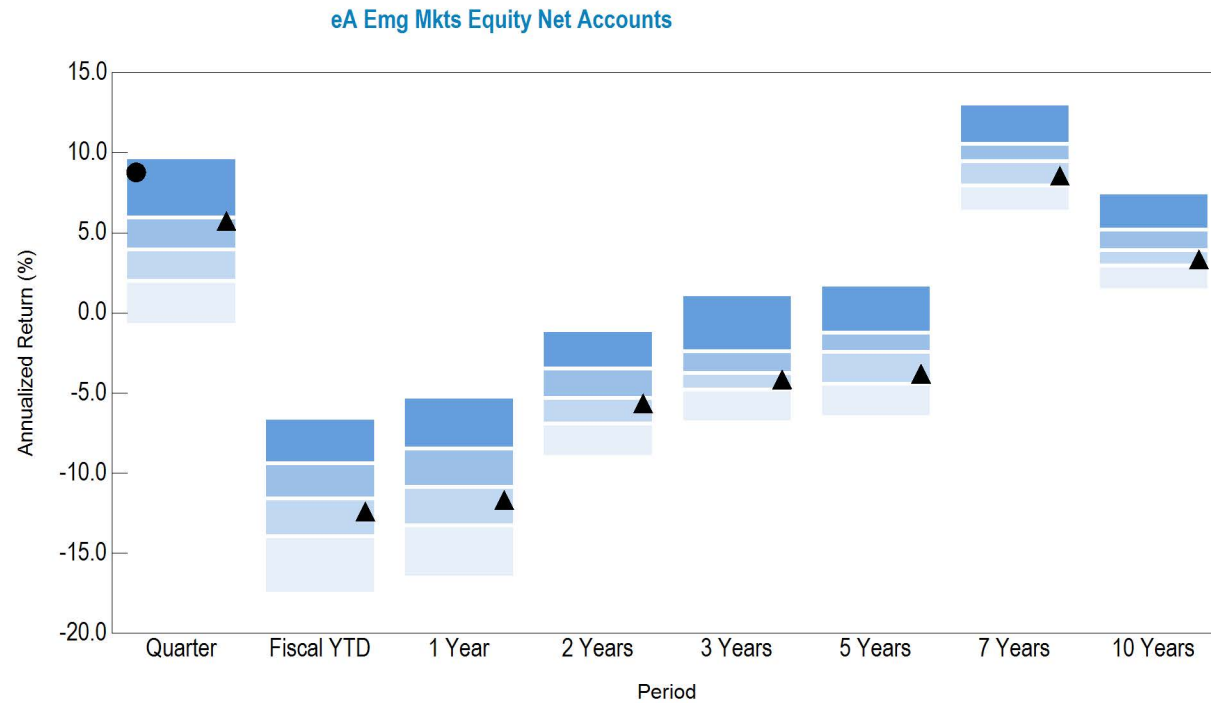


Benchmark: MSCI AC Wld Sm Cap xUS(N)

InvestorForce All DB Emg Mkt Eq Net Accounts



	Return (Rank)															
5th Percentile	8.9	-7.8	-6.8	-3.0	-1.9	-0.6	13.2	5.7								
25th Percentile	7.5	-9.7	-9.1	-4.6	-3.6	-2.5	9.1	3.5								
Median	5.5	-11.2	-10.5	-5.8	-4.8	-4.1	7.9	2.6								
75th Percentile	4.1	-12.9	-11.5	-6.7	-6.0	-5.1	7.2	1.7								
95th Percentile	1.4	-14.0	-13.5	-7.9	-6.7	-6.4	6.5	0.2								
# of Portfolios	87	85	85	75	68	45	20	14								
● Emerging Markets	8.8 (11)	-8.7 (13)	-8.0 (9)	-6.7 (76)	-3.8 (27)	-- (--)	-- (--)	-- (--)								
▲ MSCI Emerging Markets Gross	5.8 (46)	-12.4 (71)	-11.7 (78)	-5.7 (50)	-4.2 (30)	-3.8 (46)	8.6 (37)	3.3 (27)								



	Return (Rank)													
5th Percentile	9.7	-6.6	-5.2	-1.1	1.1	1.7	13.0	7.5						
25th Percentile	6.0	-9.4	-8.5	-3.5	-2.4	-1.2	10.6	5.2						
Median	4.0	-11.6	-10.8	-5.3	-3.7	-2.4	9.5	3.9						
75th Percentile	2.0	-13.9	-13.2	-6.9	-4.8	-4.4	8.0	3.0						
95th Percentile	-0.8	-17.5	-16.5	-9.0	-6.8	-6.5	6.3	1.4						
# of Portfolios	150	147	146	140	129	91	68	42						
● Parametric Core	8.8	(9)	--	(--)	--	(--)	--	(--)	--	(--)	--	(--)	--	(--)
▲ MSCI Emerging Markets Gross	5.8	(27)	-12.4	(62)	-11.7	(60)	-5.7	(58)	-4.2	(56)	-3.8	(70)	8.6	(73)
														3.3
														(67)

Characteristics

	Portfolio	MSCI Emerging Markets Gross
Number of Holdings	1,019	835
Weighted Avg. Market Cap. (\$B)	16.5	39.0
Median Market Cap. (\$B)	3.1	4.6
Price To Earnings	18.9	17.1
Price To Book	2.9	2.9
Price To Sales	2.5	2.5
Return on Equity (%)	15.5	16.9
Yield (%)	2.9	2.7
Beta (holdings; global)	1.0	1.0

Top Holdings

AMERICA MOVIL SAB DE CV SPN.ADR 'L' 1:20	1.0%
SBERBANK OF RUSSIA	0.9%
TAIWAN SEMICON.MNFG.	0.9%
OAD GAZPROM SPN.ADR 1:2	0.8%
CHINA MOBILE	0.8%
SASOL	0.8%
CIELO ON	0.7%
TELEFONICA BRASIL PN	0.7%
KOREA ELECTRIC POWER	0.6%
PTRO.BRAO.ADR 1:2	0.6%

Best Performers

	Return %
HARMONY GOLD MNG. (R:HARJ)	258.1%
VOLCAN COMPANIA MINERA B PREF. (PE:VLB)	191.2%
ASSORE (R:ASRJ)	176.4%
SIBANYE GOLD (R:SGLJ)	165.5%
AFN.RAINBOW MRLS. (R:ARIJ)	130.4%
KCE ELECTRONIC FB (Q:KCNF)	105.9%
ANGLO AMERICAN PLATINUM (R:AMSJ)	105.7%
KUMBA IRON ORE (R:KIOJ)	103.4%
MINSUR 'I' (PE:MIN)	102.9%
ANGLOGOLD ASHANTI (R:ANGJ)	102.8%

Worst Performers

	Return %
PTT EXPLORATION & PRDN. FB (Q:PTTF)	-59.5%
DRYSHIPS (DRYS)	-45.9%
NAVIOS MARITIME ACQ. (NNA)	-45.6%
RUMO LOG.OPD.MULTIMODAL (BR:P3M)	-40.2%
ADVD.INFO.SER.FB (OTC) (AVIKF)	-38.8%
DIANA SHIPPING (DSX)	-38.6%
SUZLON ENERGY GDR (UKIR:SUEL)	-35.8%
NAVIOS MARITIME HDG. (NM)	-35.4%
FIBRIA CELULOSE ON (BR:PS3)	-34.7%
OI PN (BR:LR4)	-34.2%

Parametric Core Performance Attribution vs. MSCI Emerging Markets Gross

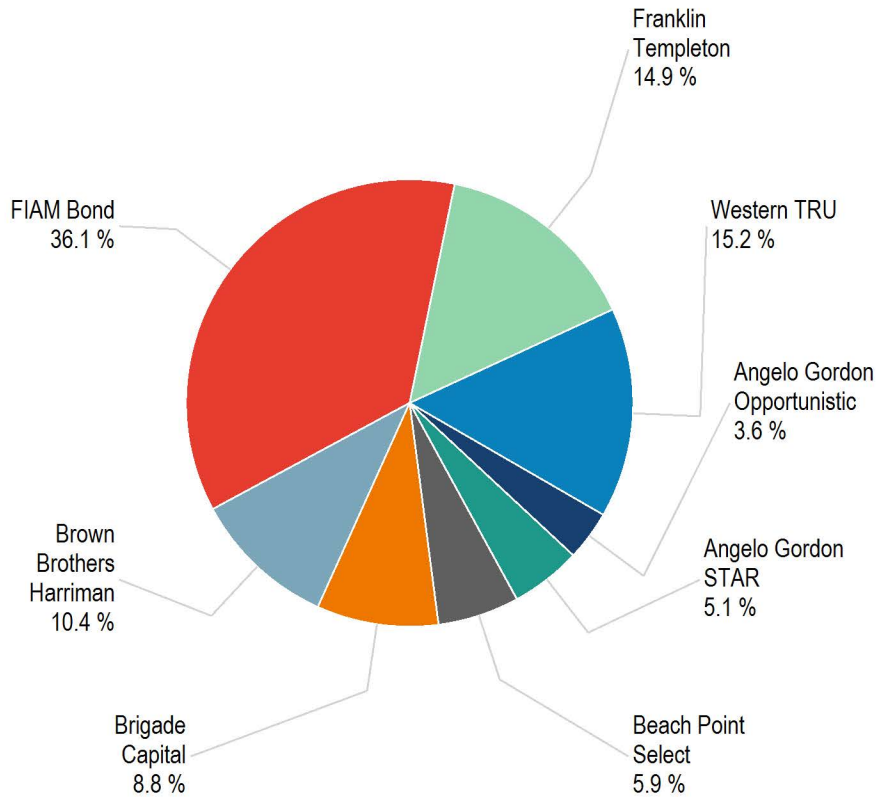
	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.3%	0.1%	0.2%	0.0%	14.6%	14.9%	10.0%	7.1%			
Materials	0.7%	0.1%	0.4%	0.2%	16.3%	14.9%	11.0%	6.1%			
Industrials	0.3%	0.2%	-0.1%	0.2%	6.4%	3.6%	10.1%	6.6%			
Cons. Disc.	0.3%	0.3%	0.0%	0.1%	6.1%	3.0%	10.4%	10.0%			
Cons. Staples	0.3%	0.2%	0.0%	0.2%	9.0%	6.3%	10.4%	8.3%			
Health Care	0.0%	0.0%	-0.2%	0.2%	1.6%	-1.0%	5.9%	2.8%			
Financials	1.0%	1.6%	0.3%	-0.8%	9.8%	3.4%	17.4%	28.0%			
Info. Tech	-0.2%	-0.1%	0.0%	0.0%	5.4%	4.8%	8.6%	21.1%			
Telecomm.	0.4%	0.1%	0.0%	0.3%	10.6%	6.9%	9.0%	6.8%			
Utilities	0.2%	0.0%	0.1%	0.2%	9.2%	8.8%	6.8%	3.2%			
Cash	0.0%	0.0%	0.0%	0.0%	0.1%	--	0.4%	0.0%			
Unclassified	0.0%	--	--	--	--	--	0.0%	0.0%			
Portfolio	3.6%	=	2.4%	+	0.6%	+	0.5%	9.3%	5.7%	100.0%	100.0%

Parametric Core Performance Attribution vs. MSCI Emerging Markets Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
Europe									
Czech Republic*	5.9%	5.1%	0.7%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Greece*	-2.8%	-12.3%	1.4%	0.5%	0.0%	-0.2%	0.0%	0.1%	0.0%
Hungary*	16.8%	17.2%	1.3%	0.3%	0.0%	0.1%	0.1%	0.0%	0.1%
Luxembourg	19.5%	5.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Netherlands	27.8%	3.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland*	11.7%	13.9%	3.3%	1.3%	0.0%	0.1%	0.1%	0.0%	0.2%
Russia*	13.7%	16.0%	6.6%	3.4%	0.0%	0.2%	0.0%	0.0%	0.3%
United Kingdom	14.1%	-2.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AsiaPacific									
China*	-3.0%	-4.8%	5.7%	26.2%	0.5%	1.6%	0.0%	-0.4%	1.7%
Hong Kong	-3.3%	-3.4%	5.4%	0.0%	0.0%	-0.3%	0.0%	0.0%	-0.3%
India*	-3.5%	-2.6%	5.7%	8.7%	-0.1%	0.2%	0.0%	0.0%	0.1%
Indonesia*	10.1%	11.3%	4.3%	2.6%	0.0%	0.1%	0.1%	0.0%	0.1%
Korea*	7.8%	4.9%	7.9%	15.7%	0.5%	0.0%	-0.2%	-0.2%	0.1%
Malaysia*	9.2%	13.2%	4.1%	3.3%	-0.1%	0.0%	0.1%	0.0%	-0.1%
Philippines*	7.8%	7.3%	3.7%	1.4%	0.0%	0.0%	0.1%	0.0%	0.1%
Singapore	2.5%	5.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Taiwan*	6.5%	7.7%	7.6%	12.1%	-0.2%	-0.1%	-0.1%	0.1%	-0.3%
Thailand*	9.6%	17.2%	3.3%	2.0%	-0.1%	0.1%	0.0%	-0.1%	-0.1%
Americas									
Brazil*	25.4%	28.6%	7.3%	5.5%	0.0%	0.2%	0.1%	0.0%	0.2%
Chile*	12.1%	13.3%	3.7%	1.2%	0.0%	0.1%	0.1%	0.0%	0.2%
Colombia*	23.0%	22.5%	1.8%	0.4%	0.0%	0.2%	0.1%	0.0%	0.3%
Mexico*	8.0%	8.5%	7.4%	4.5%	0.0%	0.1%	0.0%	0.0%	0.1%
Peru*	23.8%	26.9%	0.8%	0.3%	0.0%	0.1%	0.0%	0.0%	0.1%
United States	5.6%	0.8%	2.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%

Parametric Core Performance Attribution vs. MSCI Emerging Markets Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
Other									
Egypt*	--	-5.8%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Kuwait**	-0.1%	-2.5%	1.8%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Qatar*	2.3%	3.7%	1.7%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	18.6%	13.9%	6.3%	6.7%	0.3%	0.0%	0.0%	0.0%	0.2%
Turkey*	23.5%	21.7%	3.7%	1.4%	0.0%	0.3%	0.1%	0.0%	0.5%
United Arab Emirates*	7.2%	8.7%	1.7%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Totals									
Americas	15.7%	19.2%	22.9%	11.9%	-0.2%	1.0%	0.3%	-0.1%	1.0%
Europe	11.5%	12.8%	13.5%	5.7%	0.0%	0.2%	0.3%	0.1%	0.6%
Asia/Pacific	4.1%	1.9%	48.0%	72.1%	1.1%	0.6%	0.0%	-0.4%	1.3%
Other	14.5%	13.1%	15.2%	10.3%	0.2%	0.3%	0.1%	0.1%	0.7%
Cash	0.1%	--	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	9.3%	5.8%	100.0%	100.0%	1.1%	2.1%	0.7%	-0.3%	3.6%
Totals									
Developed	-0.2%	--	7.9%	0.0%	0.0%	0.0%	0.0%	-0.3%	-0.2%
Emerging*	10.4%	5.8%	89.9%	100.0%	3.6%	0.0%	0.7%	-0.4%	3.9%
Frontier**	-0.1%	--	1.8%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%
Cash	0.1%	--	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



	Actual \$	Actual %	Manager Contribution to Excess Return %
Angelo Gordon Opportunistic	\$24,045,000	3.6%	-0.1%
Angelo Gordon STAR	\$33,756,000	5.1%	-0.3%
Beach Point Select	\$39,374,363	5.9%	-0.1%
Brigade Capital	\$58,775,083	8.8%	-0.0%
Brown Brother Harriman	\$69,431,137	10.4%	-0.1%
FIAM Bond	\$240,572,666	36.1%	1.1%
Franklin Templeton	\$98,904,372	14.9%	-0.9%
Western Asset TRU	\$101,110,062	15.2%	-0.1%
Actual vs. Policy Weight Difference			-1.5%
Total	\$665,968,684	100.0%	-2.0%

Statistics Summary

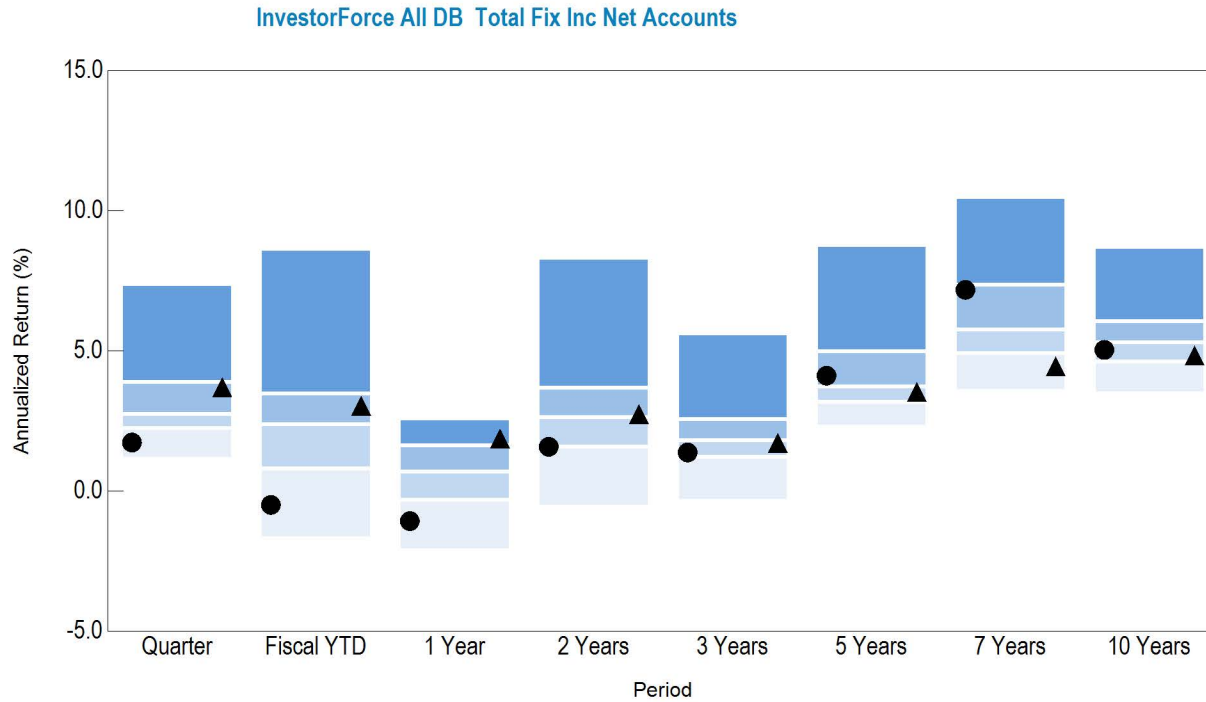
3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fixed Income	1.4%	3.6%	0.4	-0.2	1.8%
Blended Fixed Index	1.7%	3.6%	0.5	--	0.0%
US Fixed Income	1.8%	3.2%	0.5	0.0	1.3%
Blended US Fixed Index	1.8%	3.6%	0.5	--	0.0%
FIAM Bond	2.7%	3.3%	0.8	0.2	0.8%
Barclays Aggregate	2.5%	3.0%	0.8	--	0.0%
Brown Brothers Harriman	-1.8%	4.7%	-0.4	-0.8	1.3%
Barclays US TIPS	-0.7%	5.3%	-0.1	--	0.0%
Angelo Gordon STAR	9.5%	5.9%	1.6	0.9	7.5%
Barclays Aggregate	2.5%	3.0%	0.8	--	0.0%
Brigade Capital	-1.5%	6.4%	-0.2	-0.7	4.3%
Barclays BA Intermediate HY	1.7%	5.6%	0.3	--	0.0%
Franklin Templeton	-1.1%	6.8%	-0.2	-0.3	6.5%
Barclays Multi-verse	0.9%	4.5%	0.2	--	0.0%

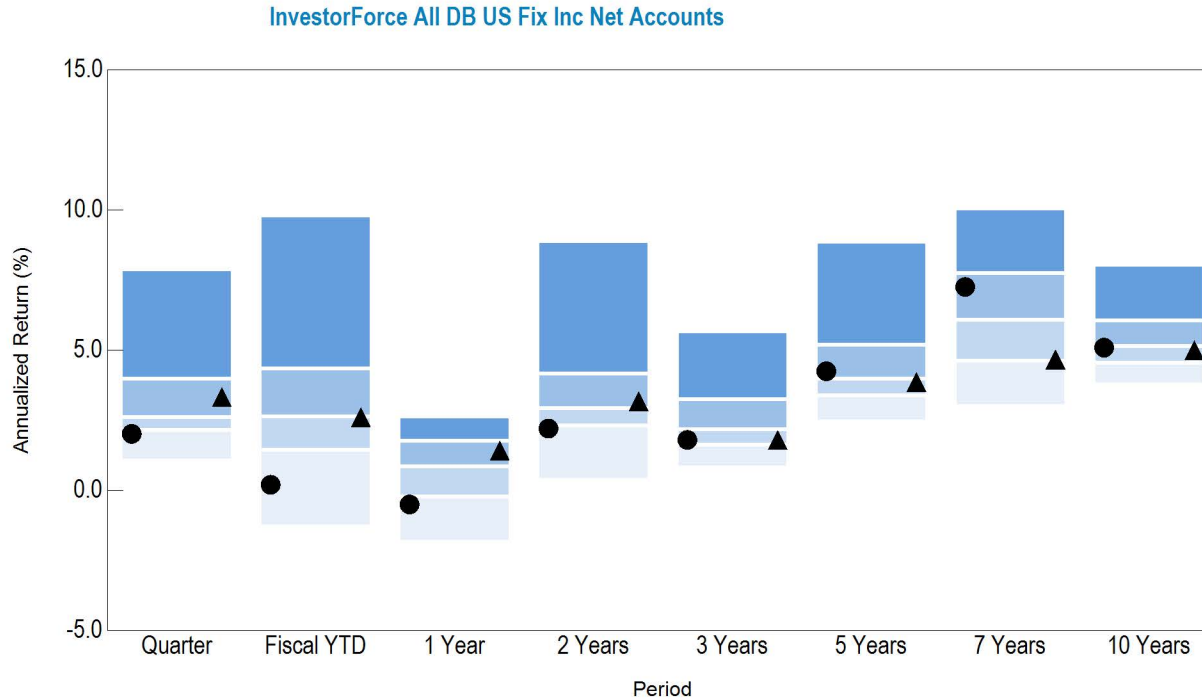
Statistics Summary

5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fixed Income	4.1%	3.7%	1.1	0.2	2.3%
Blended Fixed Index	3.5%	3.3%	1.1	--	0.0%
US Fixed Income	4.2%	3.0%	1.4	0.2	1.6%
Blended US Fixed Index	3.9%	3.3%	1.2	--	0.0%
FIAM Bond	4.2%	3.0%	1.4	0.6	0.8%
Barclays Aggregate	3.8%	2.8%	1.3	--	0.0%
Brown Brothers Harriman	2.6%	4.7%	0.5	-0.4	1.1%
Barclays US TIPS	3.0%	5.0%	0.6	--	0.0%
Brigade Capital	3.0%	5.9%	0.5	-0.4	4.3%
Barclays BA Intermediate HY	4.8%	5.2%	0.9	--	0.0%
Franklin Templeton	2.9%	9.6%	0.3	0.1	8.0%
Barclays Multi-verse	1.9%	4.4%	0.4	--	0.0%



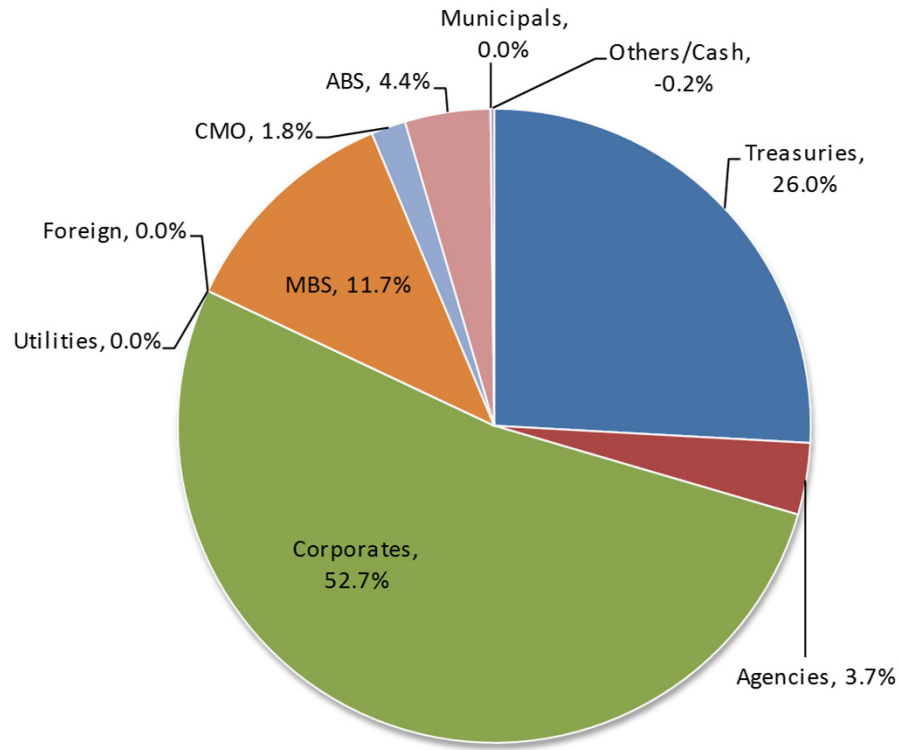
	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	7.4	8.6	2.6	8.3	5.6	8.8	10.5	8.7
25th Percentile	3.9	3.5	1.6	3.7	2.6	5.0	7.4	6.1
Median	2.8	2.4	0.7	2.6	1.8	3.7	5.8	5.3
75th Percentile	2.3	0.8	-0.3	1.6	1.2	3.2	4.9	4.6
95th Percentile	1.2	-1.7	-2.1	-0.6	-0.3	2.3	3.6	3.5
# of Portfolios	344	343	341	335	316	269	225	186
● Total Fixed Income	1.7 (90)	-0.5 (89)	-1.1 (86)	1.6 (76)	1.4 (70)	4.1 (37)	7.2 (28)	5.0 (61)
▲ Blended Fixed Index	3.7 (27)	3.0 (33)	1.9 (20)	2.7 (46)	1.7 (57)	3.5 (64)	4.4 (83)	4.8 (66)



	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
Return (Rank)								
5th Percentile	7.9	9.8	2.6	8.9	5.7	8.9	10.0	8.0
25th Percentile	4.0	4.4	1.8	4.2	3.3	5.2	7.8	6.1
Median	2.6	2.7	0.9	3.0	2.2	4.0	6.1	5.2
75th Percentile	2.2	1.5	-0.2	2.3	1.6	3.4	4.6	4.6
95th Percentile	1.1	-1.3	-1.8	0.4	0.8	2.5	3.0	3.8
# of Portfolios	435	433	432	422	392	331	272	201
● US Fixed Income	2.0 (79)	0.2 (87)	-0.5 (82)	2.2 (78)	1.8 (66)	4.2 (43)	7.3 (32)	5.1 (53)
▲ Blended US Fixed Index	3.3 (30)	2.6 (52)	1.4 (34)	3.2 (42)	1.8 (67)	3.9 (56)	4.7 (75)	5.0 (57)

US Fixed Income
Bond Sector Allocation

Period Ending: March 31, 2016



Sector*	Account Weight	BC Aggregate Weight	Difference
Treasuries	26.0%	36.7%	-10.7%
Agencies	3.7%	8.2%	-4.5%
Corporates	52.7%	24.2%	28.4%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	11.7%	28.6%	-16.9%
CMO	1.8%	0.0%	1.8%
ABS	4.4%	2.3%	2.1%
Municipals	0.0%	0.0%	0.0%
Others/Cash	-0.2%	0.0%	-0.2%
TOTAL	100.0%	100.0%	0.0%

* Sector Allocation excludes Opportunistic Credit Managers.

US Fixed Income
Bond Summary Statistics

Period Ending: March 31, 2016

Portfolio Characteristics*		Portfolio	BC Aggregate
Total Number of Securities			
Total Market Value	\$	411,113,865	
Current Coupon		3.26	3.25
Yield to Maturity		9.45	12.64
Average Life		7.43	7.49
Duration		4.67	5.41
Quality		AA-	AA+

Yield to Maturity	
Range	% Held
0.0 - 5.0	n/a
5.0 - 7.0	n/a
7.0 - 9.0	n/a
9.0 - 11.0	n/a
11.0 - 13.0	n/a
13.0+	n/a
Unclassified	n/a

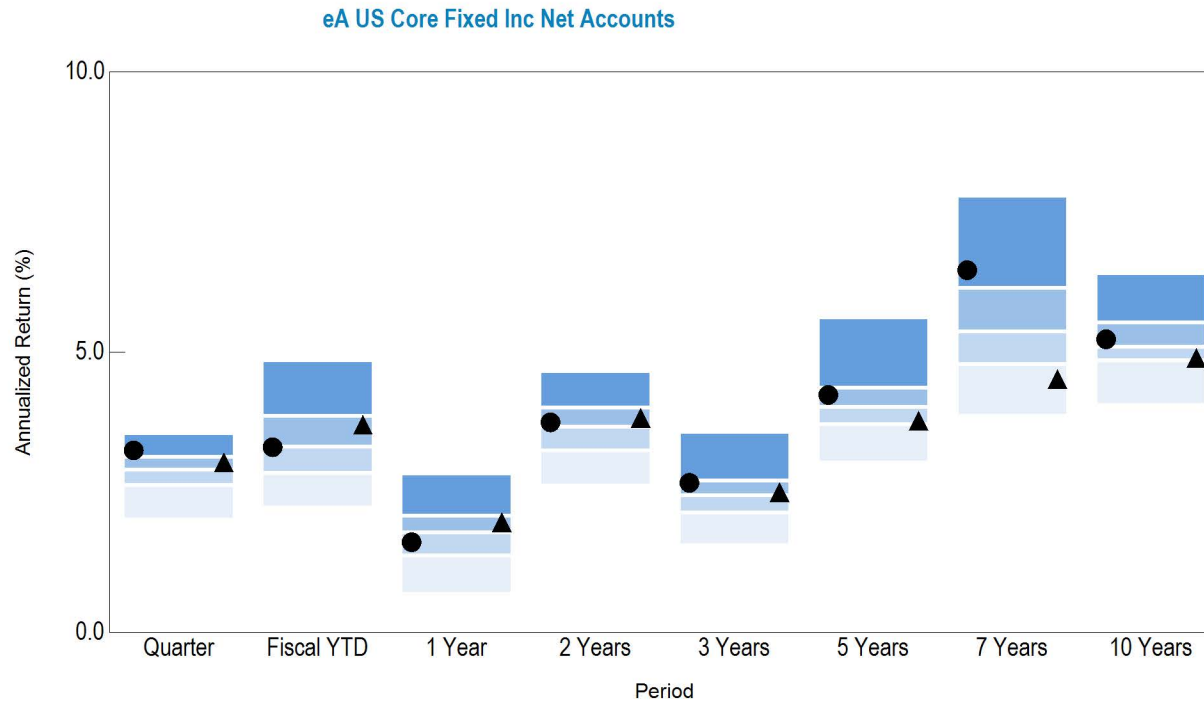
Average Life	
Range	% Held
0.0 - 1.0	2.9
1.0 - 3.0	12.7
3.0 - 5.0	23.6
5.0 - 10.0	50.8
10.0 - 20.0	3.6
20.0+	6.5
Unclassified	0.0

Duration	
Range	% Held
0.0 - 1.0	7.4
1.0 - 3.0	43.0
3.0 - 5.0	25.3
5.0 - 7.0	9.3
7.0 - 10.0	6.9
10.0+	8.1
Unclassified	0.0

Quality	
Range	% Held
Govt (10)	42.7
Aaa (10)	2.1
Aa (9)	1.8
A (8)	14.8
Baa (7)	39.1
Below Baa (6-1)	1.8
Other	-2.2

Coupon	
Range	% Held
0.0 - 5.0	84.3
5.0 - 7.0	12.2
7.0 - 9.0	1.8
9.0 - 11.0	0.1
11.0 - 13.0	0.0
13.0+	1.7
Unclassified	0.0

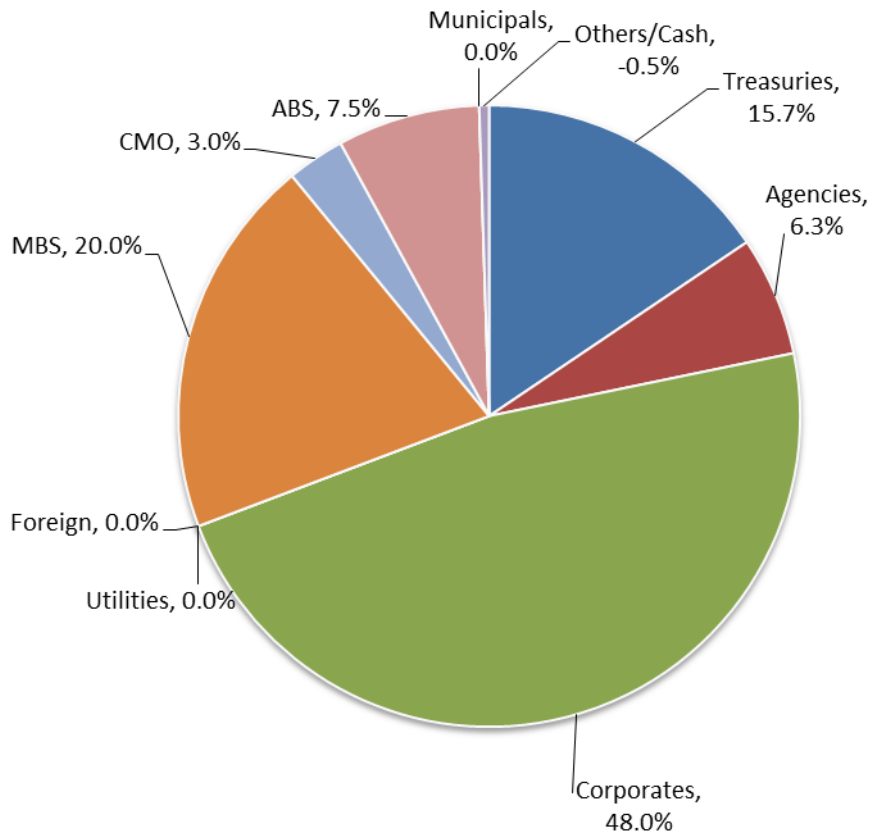
* Characteristics excludes Opportunistic Credit Managers.



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	3.5	4.9	2.8	4.7	3.6	5.6	7.8	6.4
25th Percentile	3.1	3.9	2.1	4.0	2.7	4.4	6.2	5.5
Median	2.9	3.3	1.8	3.7	2.5	4.0	5.4	5.1
75th Percentile	2.6	2.9	1.4	3.2	2.1	3.7	4.8	4.9
95th Percentile	2.0	2.2	0.7	2.6	1.6	3.0	3.9	4.1
# of Portfolios	106	105	103	102	101	93	87	77
● FIAM Bond	3.2 (15)	3.3 (55)	1.6 (62)	3.7 (42)	2.7 (31)	4.2 (32)	6.5 (20)	5.2 (42)
▲ Barclays Aggregate	3.0 (40)	3.7 (32)	2.0 (35)	3.8 (39)	2.5 (47)	3.8 (69)	4.5 (82)	4.9 (73)

FIAM Bond Market Duration Pool
Bond Sector Allocation

Period Ending: March 31, 2016



Sector	Account Weight	BC Aggregate Weight	Difference
Treasuries	15.7%	36.7%	-21.0%
Agencies	6.3%	8.2%	-1.9%
Corporates	48.0%	24.2%	23.8%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	20.0%	28.6%	-8.6%
CMO	3.0%	0.0%	3.0%
ABS	7.5%	2.3%	5.2%
Municipals	0.0%	0.0%	0.0%
Others/Cash	-0.5%	0.0%	-0.5%
TOTAL	100.0%	100.0%	0.0%

FIAM Bond Market Duration Pool
Bond Summary Statistics

Period Ending: March 31, 2016

Portfolio Characteristics		
		Portfolio
Total Number of Securities		951
Total Market Value	\$	240,572,666
Current Coupon		3.80
Yield to Maturity		13.65
Average Life		8.6
Duration		5.60
Quality		A+

BC Aggregate	
	3.25
	12.64
	7.49
	5.41
	AA+

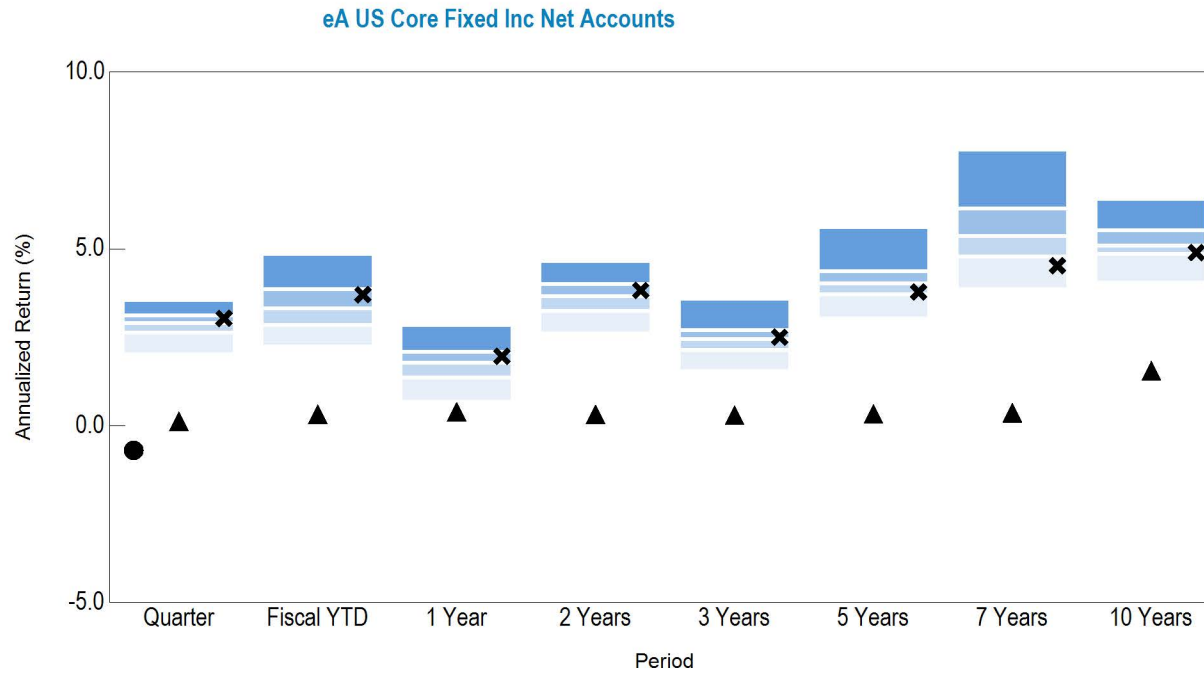
Yield to Maturity	
Range	% Held
0.0 - 5.0	89.5
5.0 - 7.0	7.7
7.0 - 9.0	1.1
9.0 - 11.0	1.3
11.0 - 13.0	0.3
13.0+	0.1
Unclassified	0.0

Average Life	
Range	% Held
0.0 - 1.0	4.5
1.0 - 3.0	14.6
3.0 - 5.0	24.3
5.0 - 10.0	42.0
10.0 - 20.0	3.7
20.0+	11.1
Unclassified	0.0

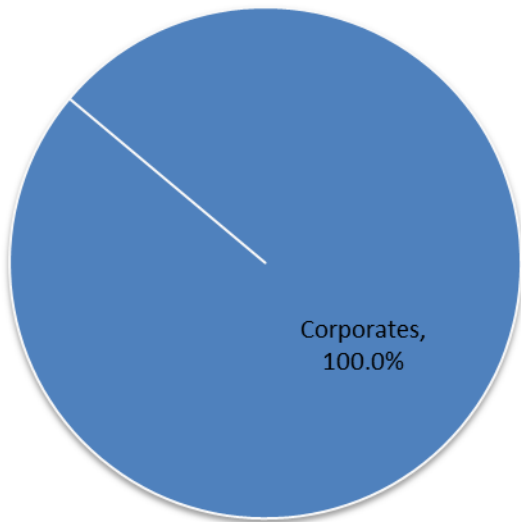
Duration	
Range	% Held
0.0 - 1.0	5.5
1.0 - 3.0	25.7
3.0 - 5.0	30.1
5.0 - 7.0	14.5
7.0 - 10.0	10.5
10.0+	13.8
Unclassified	0.0

Quality	
Range	% Held
Govt (10)	44.4
Aaa (10)	3.5
Aa (9)	3.1
A (8)	25.3
Baa (7)	24.8
Below Baa (6-1)	3.1
Other	-4.0

Coupon	
Range	% Held
0.0 - 5.0	73.2
5.0 - 7.0	20.9
7.0 - 9.0	3.0
9.0 - 11.0	0.1
11.0 - 13.0	0.0
13.0+	2.9
Unclassified	0.0



	Quarter		Fiscal YTD		1 Year		2 Years		3 Years		5 Years		7 Years		10 Years	
Return (Rank)																
5th Percentile	3.5	4.9	2.8	4.7	3.6	5.6	7.8	6.4	3.1	3.9	2.1	4.0	2.7	4.4	6.2	5.5
25th Percentile	2.9	3.3	1.8	3.7	2.5	4.0	5.4	5.1	2.6	2.9	1.4	3.2	2.1	3.7	4.8	4.9
Median	2.0	2.2	0.7	2.6	1.6	3.0	3.9	4.1	2.0	2.2	0.7	2.6	1.6	3.0	3.9	4.1
75th Percentile	106	105	103	102	101	93	87	77	106	105	103	102	101	93	87	77
95th Percentile	106	105	103	102	101	93	87	77	106	105	103	102	101	93	87	77
# of Portfolios	106	105	103	102	101	93	87	77	106	105	103	102	101	93	87	77
● Western TRU	-0.7	--	--	--	--	--	--	--	-0.7	--	--	--	--	--	--	--
▲ 3-Month Libor Total Return USD	0.1	0.3	0.4	0.3	0.3	0.3	0.4	1.6	0.1	0.3	0.4	0.3	0.3	0.4	1.6	
✕ Barclays Aggregate	3.0	3.7	2.0	3.8	2.5	3.8	4.5	4.9	3.0	3.7	2.0	3.8	2.5	3.8	4.5	



Sector	Account Weight	BC Aggregate Weight	Difference
Treasuries	0.0%	36.7%	-36.7%
Agencies	0.0%	8.2%	-8.2%
Corporates	100.0%	24.2%	75.8%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	0.0%	28.6%	-28.6%
CMO	0.0%	0.0%	0.0%
ABS	0.0%	2.3%	-2.3%
Municipals	0.0%	0.0%	0.0%
Others/Cash	0.0%	0.0%	0.0%
TOTAL	100.0%	100.0%	0.0%

Portfolio Characteristics	
	Portfolio
Total Number of Securities	2
Total Market Value	\$ 101,110,062
Current Coupon	3.67
Yield to Maturity	5.97
Average Life	9.73
Duration	1.89
Quality	BBB+

BC Aggregate
3.25
12.64
7.49
5.41
AA+

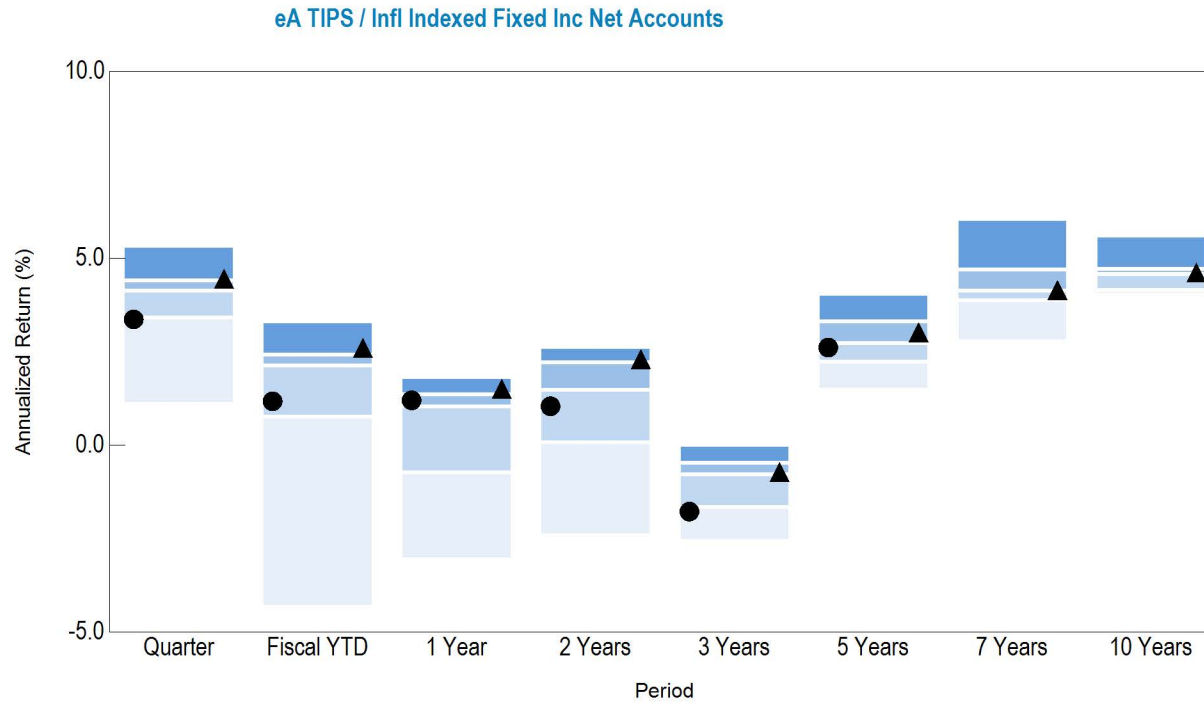
Yield to Maturity	
Range	% Held
0.0 - 5.0	n/a
5.0 - 7.0	n/a
7.0 - 9.0	n/a
9.0 - 11.0	n/a
11.0 - 13.0	n/a
13.0+	n/a
Unclassified	n/a

Average Life	
Range	% Held
0.0 - 1.0	0.0
1.0 - 3.0	0.0
3.0 - 5.0	0.0
5.0 - 10.0	100.0
10.0 - 20.0	0.0
20.0+	0.0
Unclassified	0.0

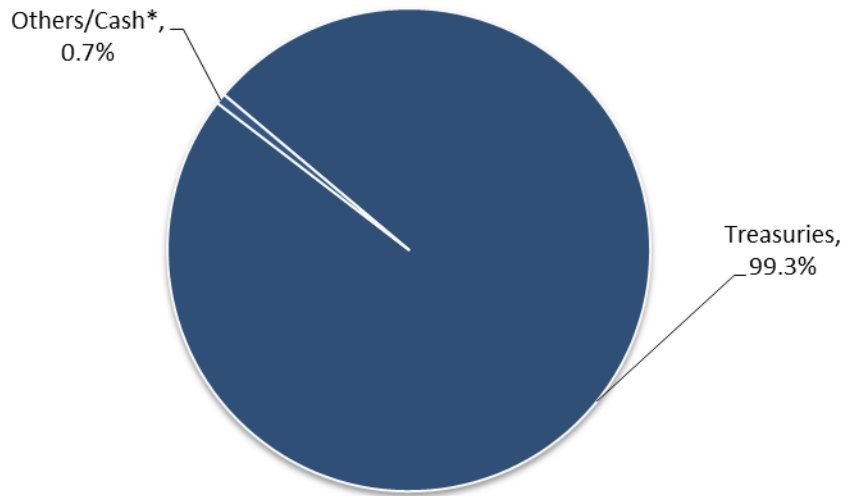
Duration	
Range	% Held
0.0 - 1.0	0.0
1.0 - 3.0	100.0
3.0 - 5.0	0.0
5.0 - 7.0	0.0
7.0 - 10.0	0.0
10.0+	0.0
Unclassified	0.0

Quality	
Range	% Held
Govt (10)	0.0
Aaa (10)	0.0
Aa (9)	0.0
A (8)	0.0
Baa (7)	100.0
Below Baa (6-1)	0.0
Other	0.0

Coupon	
Range	% Held
0.0 - 5.0	100.0
5.0 - 7.0	0.0
7.0 - 9.0	0.0
9.0 - 10.0	0.0
10.0+	0.0
Unclassified	0.0



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	5.3	3.3	1.8	2.6	0.0	4.0	6.0	5.6
25th Percentile	4.4	2.4	1.4	2.2	-0.5	3.3	4.7	4.7
Median	4.2	2.1	1.0	1.5	-0.8	2.7	4.1	4.6
75th Percentile	3.4	0.8	-0.7	0.1	-1.6	2.2	3.9	4.2
95th Percentile	1.1	-4.3	-3.1	-2.4	-2.6	1.5	2.8	4.0
# of Portfolios	20	20	19	16	15	12	9	6
● Brown Brothers Harriman	3.4 (78)	1.2 (69)	1.2 (40)	1.0 (65)	-1.8 (83)	2.6 (59)	-- (--)	-- (--)
▲ Barclays US TIPS	4.5 (22)	2.6 (16)	1.5 (17)	2.3 (20)	-0.7 (39)	3.0 (34)	4.2 (50)	4.6 (48)



Sector	Account Weight	Barclays TIPS	
		Index	Difference
Treasuries	99.3%	100.0%	-0.7%
Agencies	0.0%	0.0%	0.0%
Corporates	0.0%	0.0%	0.0%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	0.0%	0.0%	0.0%
CMO	0.0%	0.0%	0.0%
ABS	0.0%	0.0%	0.0%
Municipals	0.0%	0.0%	0.0%
Others/Cash*	0.7%	0.0%	0.7%
TOTAL	100.0%	100.0%	0.0%

* May include Derivatives, Futures, Swaps, Credit Default Swaps, Total Return Swaps or Currency Contracts.

Portfolio Characteristics		
	Portfolio	
Total Number of Securities		11
Total Market Value	\$	69,431,137
Current Coupon		0.80
Yield to Maturity		-0.06
Average Life		
Duration		5.49
Quality		GOV

Barclays TIPS	
Total Number of Securities	37
Total Market Value	N/A
Current Coupon	0.87
Yield to Maturity	-0.11
Average Life	
Duration	7.76
Quality	AAA

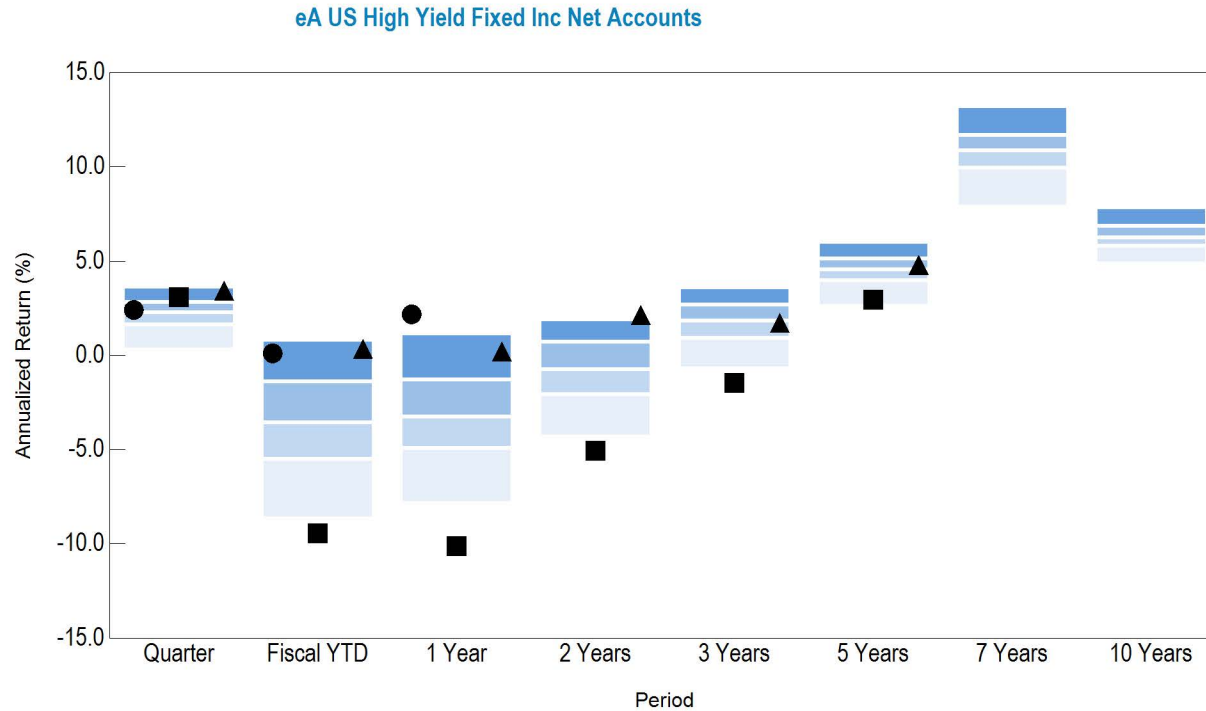
Yield to Maturity	
Range	% Held
0.0 - 5.0	100.0
5.0 - 7.0	n/a
7.0 - 9.0	n/a
9.0 - 11.0	n/a
11.0 - 13.0	n/a
13.0+	n/a
Unclassified	n/a

Average Life	
Range	% Held
0.0 - 3.0	1.7
3.0 - 5.0	24.5
5.0 - 10.0	55.6
10.0- 15.0	9.9
15.0+	8.3
Unclassified	0.0

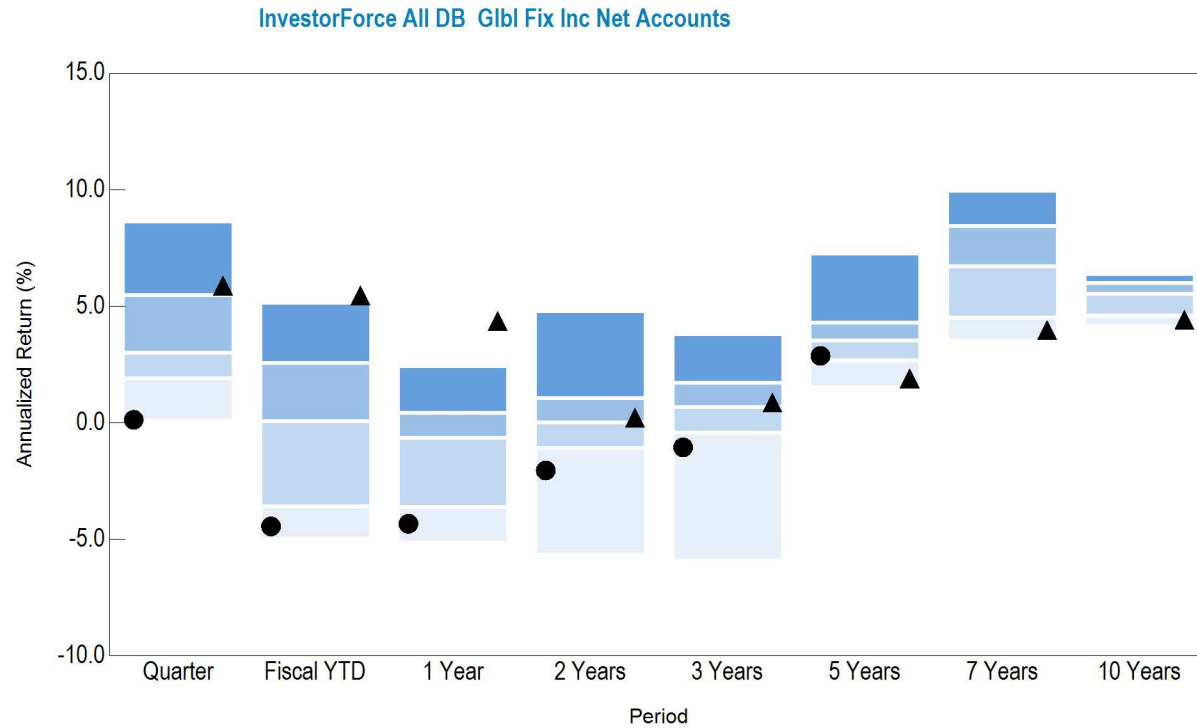
Duration	
Range	% Held
0.0 - 3.0	25.0
3.0 - 5.0	20.3
5.0 - 10.0	45.4
10.0- 15.0	4.7
15.0+	4.6
Unclassified	0.0

Quality	
Range	% Held
Govt (10)	99.3
Aaa (10)	0.0
Aa (9)	0.0
A (8)	0.0
Baa (7)	0.0
Below Baa (6-1)	0.0
Other	0.7

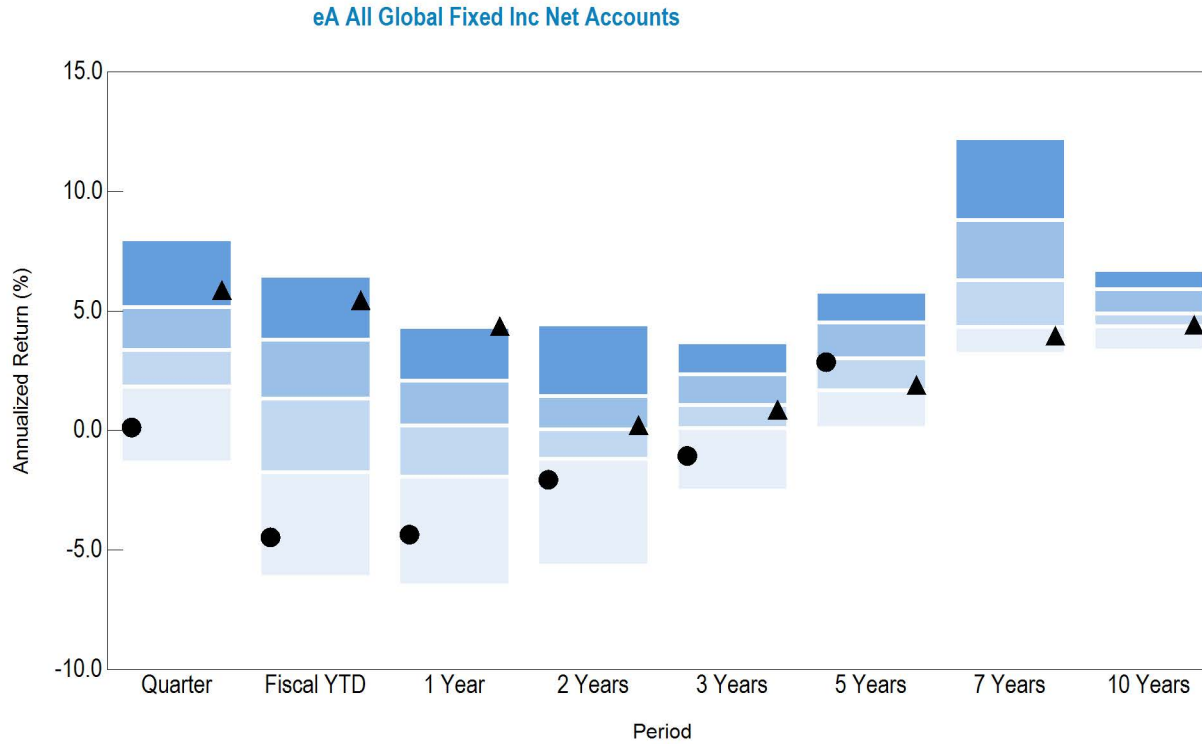
Coupon	
Range	% Held
0.0 - 5.0	100.0
5.0 - 7.0	0.0
7.0 - 9.0	0.0
9.0 - 11.0	0.0
11.0 - 13.0	0.0
13.0+	0.0
Unclassified	0.0



	Quarter		Fiscal YTD		1 Year		2 Years		3 Years		5 Years		7 Years		10 Years	
Return (Rank)	3.6	0.8	1.2	1.9	3.6	6.0	13.2	7.8	2.9	-1.3	-1.2	0.7	2.7	5.2	11.7	6.9
5th Percentile	2.3	-3.5	-3.2	-0.7	1.9	4.6	10.9	6.3	1.7	-5.5	-4.9	-2.0	0.9	4.0	10.0	5.9
25th Percentile	0.3	-8.6	-7.8	-4.3	-0.7	2.7	7.9	4.9	0.3	-8.6	-7.8	-4.3	-0.7	2.7	7.9	4.9
Median	91	91	87	84	82	74	60	54	91	91	87	84	82	74	60	54
75th Percentile	91	91	87	84	82	74	60	54	91	91	87	84	82	74	60	54
95th Percentile	91	91	87	84	82	74	60	54	91	91	87	84	82	74	60	54
# of Portfolios	● Beach Point Select	2.4 (47)	0.1 (12)	2.2 (1)	-- (--)	-- (--)	-- (--)	-- (--)	2.4 (47)	0.1 (12)	2.2 (1)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)
	■ Brigade Capital	3.1 (19)	-9.4 (97)	-10.1 (99)	-5.1 (98)	-1.5 (98)	3.0 (93)	-- (--)	3.1 (19)	-9.4 (97)	-10.1 (99)	-5.1 (98)	-1.5 (98)	3.0 (93)	-- (--)	-- (--)
	▲ Barclays BA Intermediate HY	3.4 (9)	0.4 (10)	0.2 (8)	2.1 (3)	1.7 (53)	4.8 (41)	-- (--)	3.4 (9)	0.4 (10)	0.2 (8)	2.1 (3)	1.7 (53)	4.8 (41)	-- (--)	-- (--)



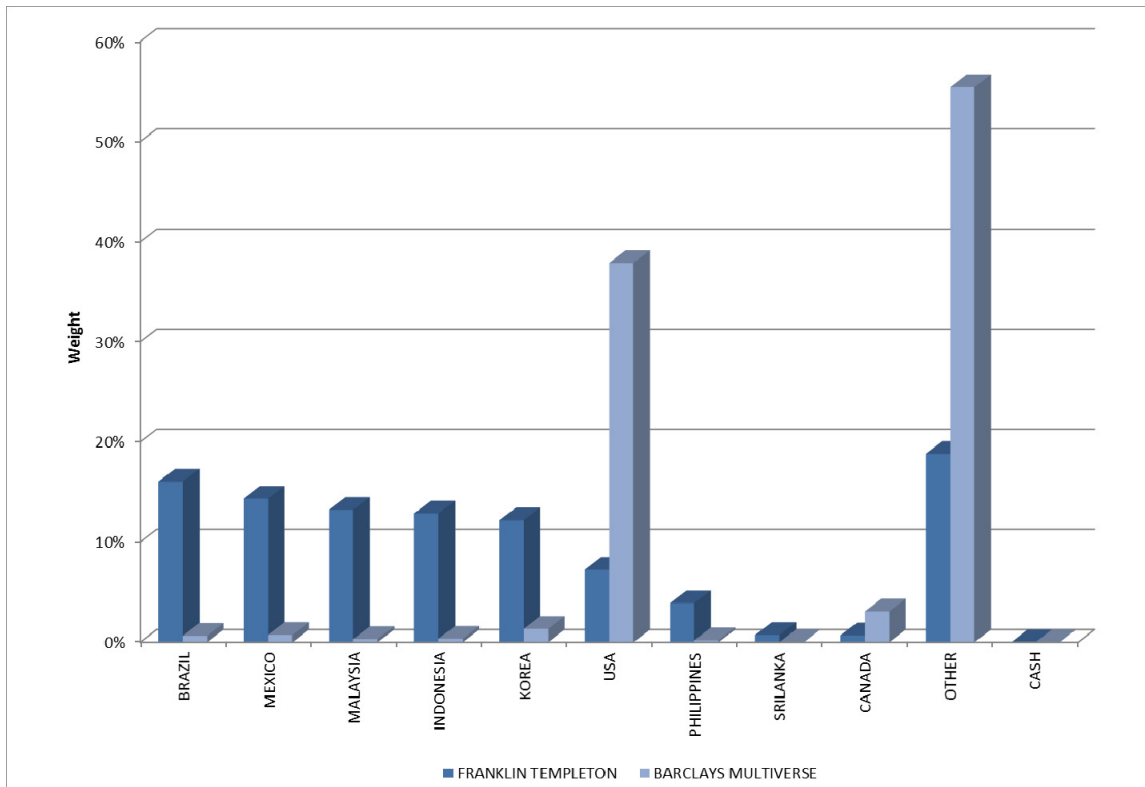
	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	8.6	5.1	2.4	4.8	3.8	7.3	9.9	6.4
25th Percentile	5.5	2.6	0.4	1.1	1.7	4.3	8.5	6.0
Median	3.0	0.1	-0.6	0.0	0.7	3.5	6.7	5.5
75th Percentile	1.9	-3.6	-3.6	-1.1	-0.4	2.7	4.5	4.6
95th Percentile	0.1	-5.0	-5.1	-5.7	-5.9	1.5	3.5	4.2
# of Portfolios	44	44	44	39	36	28	21	14
● Global Fixed Income	0.1 (91)	-4.4 (87)	-4.3 (87)	-2.0 (90)	-1.1 (86)	2.9 (63)	-- (--)	-- (--)
▲ Barclays Multi-verse	5.9 (16)	5.5 (3)	4.4 (2)	0.2 (48)	0.9 (43)	1.9 (94)	4.0 (88)	4.4 (79)



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	8.0	6.5	4.3	4.4	3.7	5.8	12.2	6.7
25th Percentile	5.2	3.8	2.1	1.5	2.4	4.5	8.8	5.9
Median	3.4	1.4	0.2	0.1	1.1	3.0	6.3	4.9
75th Percentile	1.9	-1.7	-1.9	-1.2	0.1	1.7	4.3	4.4
95th Percentile	-1.3	-6.1	-6.5	-5.6	-2.5	0.1	3.2	3.3
# of Portfolios	200	189	185	181	169	138	111	77
● Franklin Templeton	0.1 (91)	-4.5 (91)	-4.4 (93)	-2.1 (84)	-1.1 (89)	2.9 (53)	-- (--)	-- (--)
▲ Barclays Multi-verse	5.9 (18)	5.5 (11)	4.4 (5)	0.2 (48)	0.9 (54)	1.9 (70)	4.0 (81)	4.4 (73)

Franklin Templeton
Portfolio Country Weights

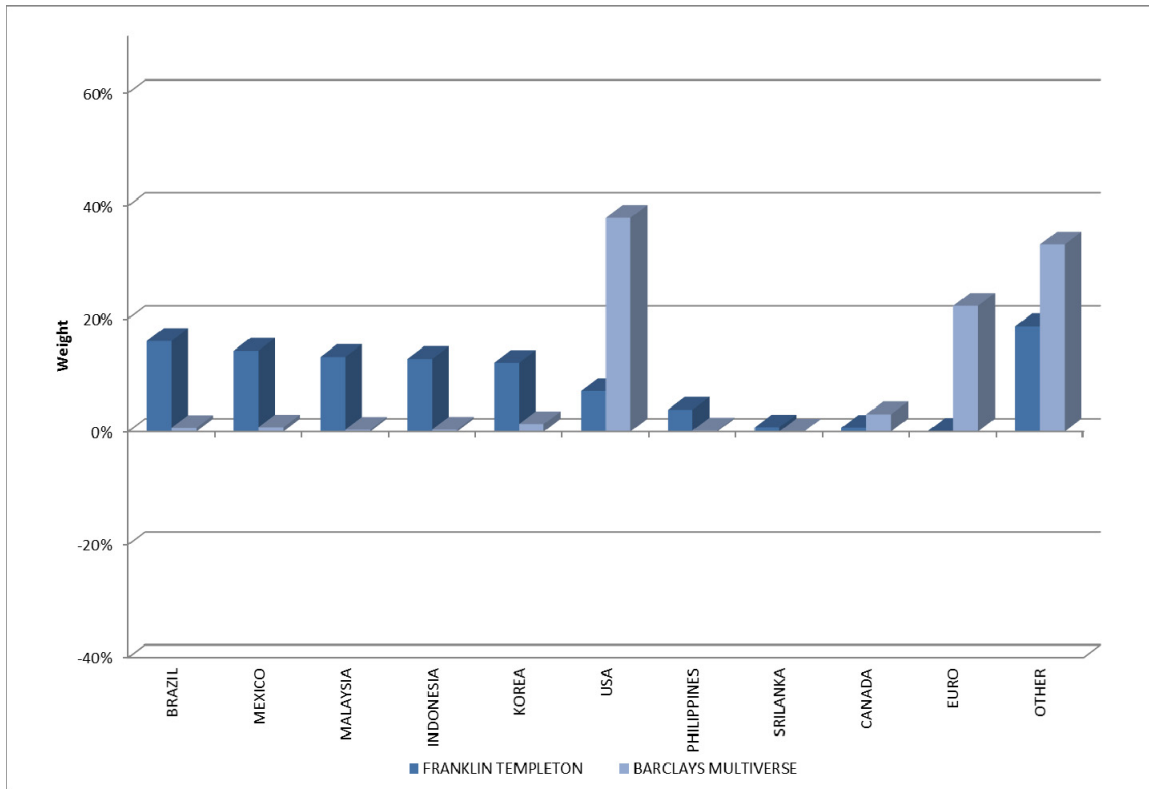
Period Ending: March 31, 2016



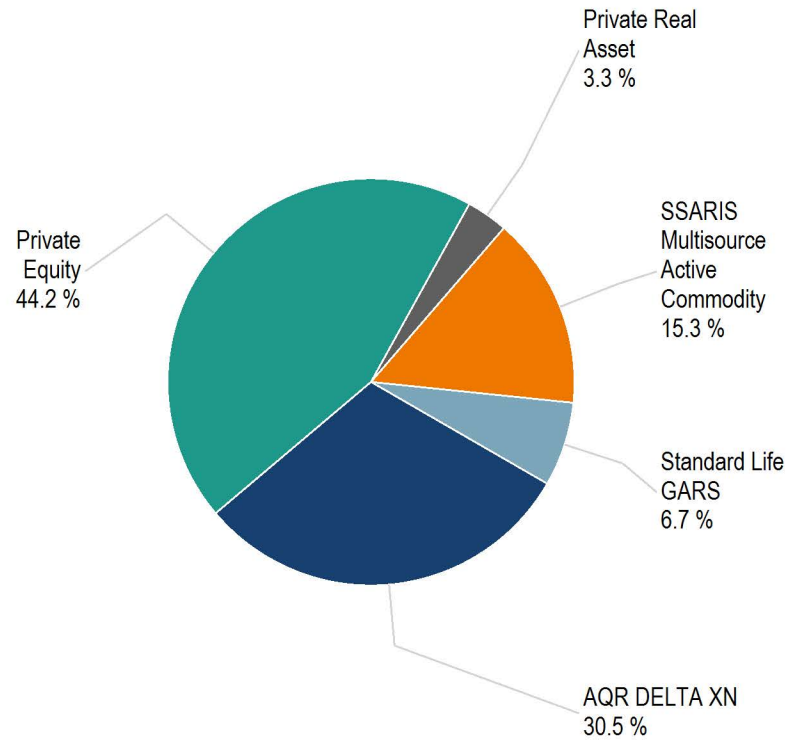
COUNTRY	MARKET VALUE	FRANKLIN TEMPLETON	BARCLAYS MULTIVERSE	DIFF
BRAZIL	\$ 15,864	16.0%	0.6%	+15.4%
MEXICO	\$ 14,179	14.3%	0.7%	+13.6%
MALAYSIA	\$ 13,080	13.2%	0.3%	+12.9%
INDONESIA	\$ 12,724	12.9%	0.4%	+12.5%
KOREA	\$ 12,056	12.2%	1.3%	+10.9%
USA	\$ 7,148	7.2%	37.9%	-30.7%
PHILIPPINES	\$ 3,855	3.9%	0.2%	+3.7%
SRILANKA	\$ 715	0.7%	0.0%	+0.7%
CANADA	\$ 673	0.7%	3.1%	-2.4%
OTHER	\$ 18,608	18.8%	55.5%	-36.6%
CASH	\$ -	0.0%	0.0%	0.0%
	\$ 98,904	100.0%	100.0%	0.0%

Franklin Templeton
Portfolio Currency Exposures

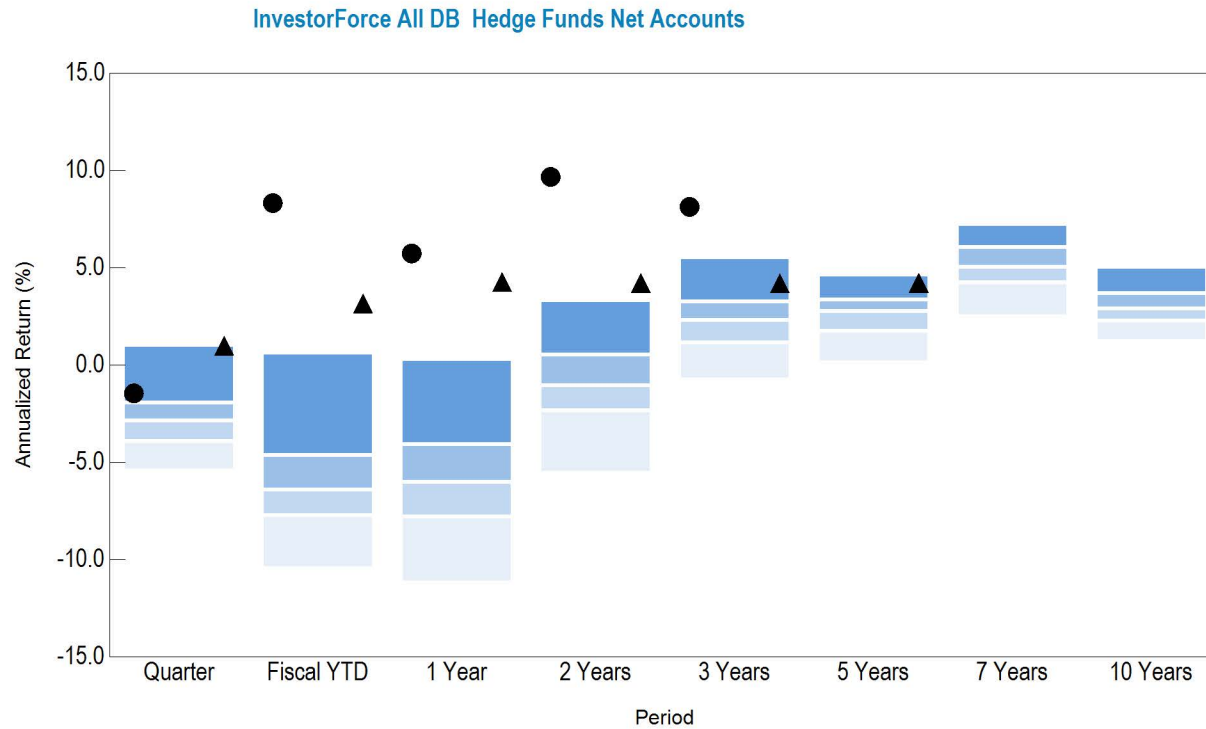
Period Ending: March 31, 2016



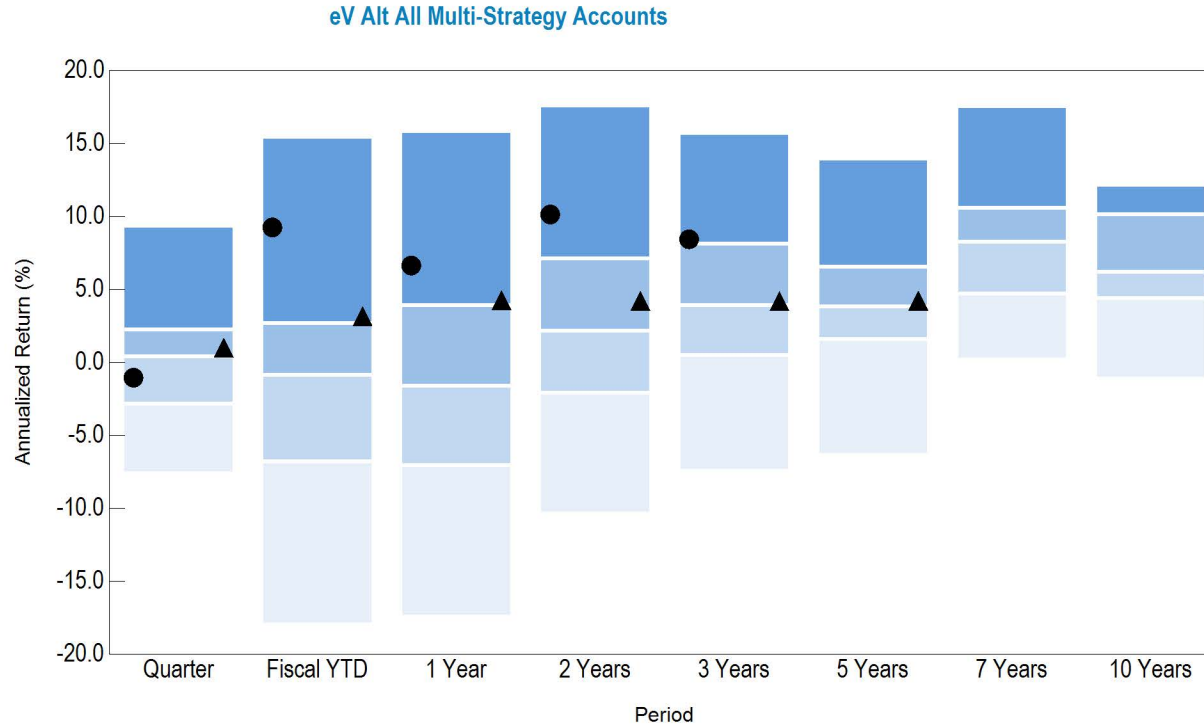
CURRENCY	MARKET VALUE	FRANKLIN TEMPLETON	BARCLAYS MULTIVERSE	DIFF
BRAZIL	\$ 15,864	16.0%	0.6%	+15.4%
MEXICO	\$ 14,179	14.3%	0.7%	+13.6%
MALAYSIA	\$ 13,080	13.2%	0.3%	+12.9%
INDONESIA	\$ 12,724	12.9%	0.4%	+12.5%
KOREA	\$ 12,056	12.2%	1.3%	+10.9%
USA	\$ 7,148	7.2%	37.9%	-30.7%
PHILIPPINES	\$ 3,855	3.9%	0.2%	+3.7%
SRILANKA	\$ 715	0.7%	0.0%	+0.7%
CANADA	\$ 673	0.7%	3.1%	-2.4%
EURO	\$ 147	0.1%	22.3%	-22.1%
OTHER	\$ 18,461	18.7%	33.2%	-14.5%
	\$ 98,904	100.0%	100.0%	0.0%



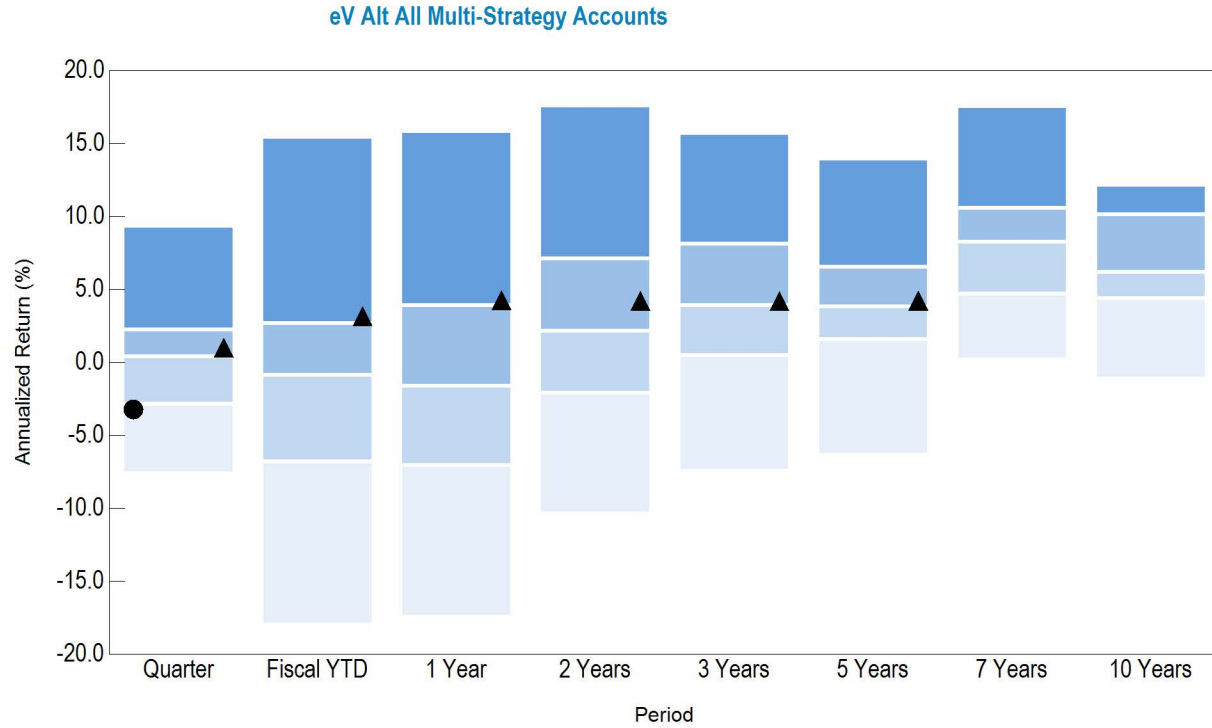
	Actual \$	Actual %	Manager Contribution to Excess Return %
AQR DELTA XN	\$152,577,660	30.5%	-0.6%
Private Equity	\$221,248,743	44.2%	-0.9%
Private Real Asset	\$16,533,230	3.3%	0.5%
SSARIS Multisource Active Commodity	\$76,362,485	15.3%	-0.5%
Standard Life GARS	\$33,722,544	6.7%	-0.3%
Actual vs. Policy Weight Difference			-0.1%
Total	\$500,444,662	100.0%	-2.0%



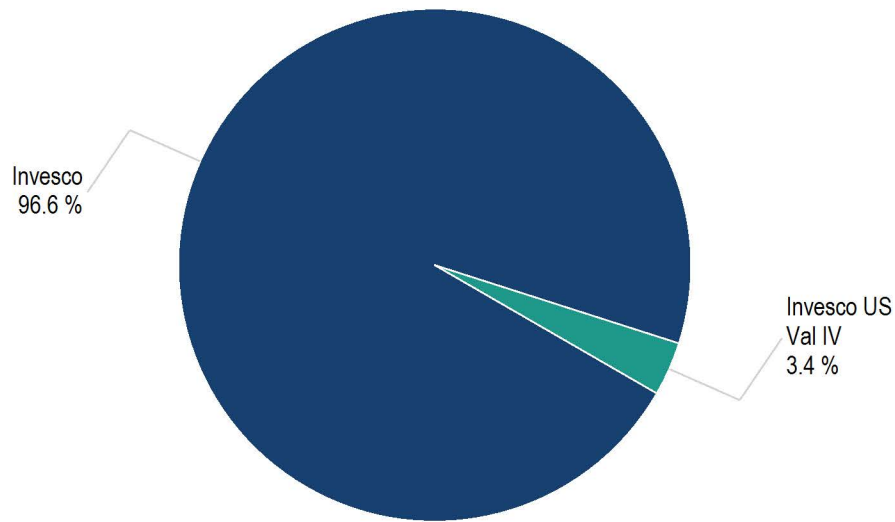
	Quarter		Fiscal YTD		1 Year		2 Years		3 Years		5 Years		7 Years		10 Years									
Return (Rank)	1.0	0.6	0.3	3.3	5.5	4.6	7.2	5.0	-1.5	(20)	8.3	(1)	5.7	(1)	9.7	(1)	8.1	(1)	--	(--)	--	(--)	--	(--)
5th Percentile	-1.9	-4.6	-4.1	0.5	3.3	3.4	6.1	3.7	1.0	(6)	3.2	(2)	4.3	(1)	4.2	(5)	4.2	(12)	4.2	(11)	--	(--)	--	(--)
25th Percentile	-2.8	-6.4	-6.0	-1.0	2.3	2.8	5.1	2.9																
Median	-3.9	-7.7	-7.8	-2.3	1.2	1.8	4.3	2.3																
75th Percentile	-5.4	-10.4	-11.2	-5.5	-0.7	0.2	2.5	1.3																
95th Percentile																								
# of Portfolios	248	246	245	241	221	185	134	73																
● Hedge Fund/Absolute Return																								
▲ Libor 1 month +4%																								



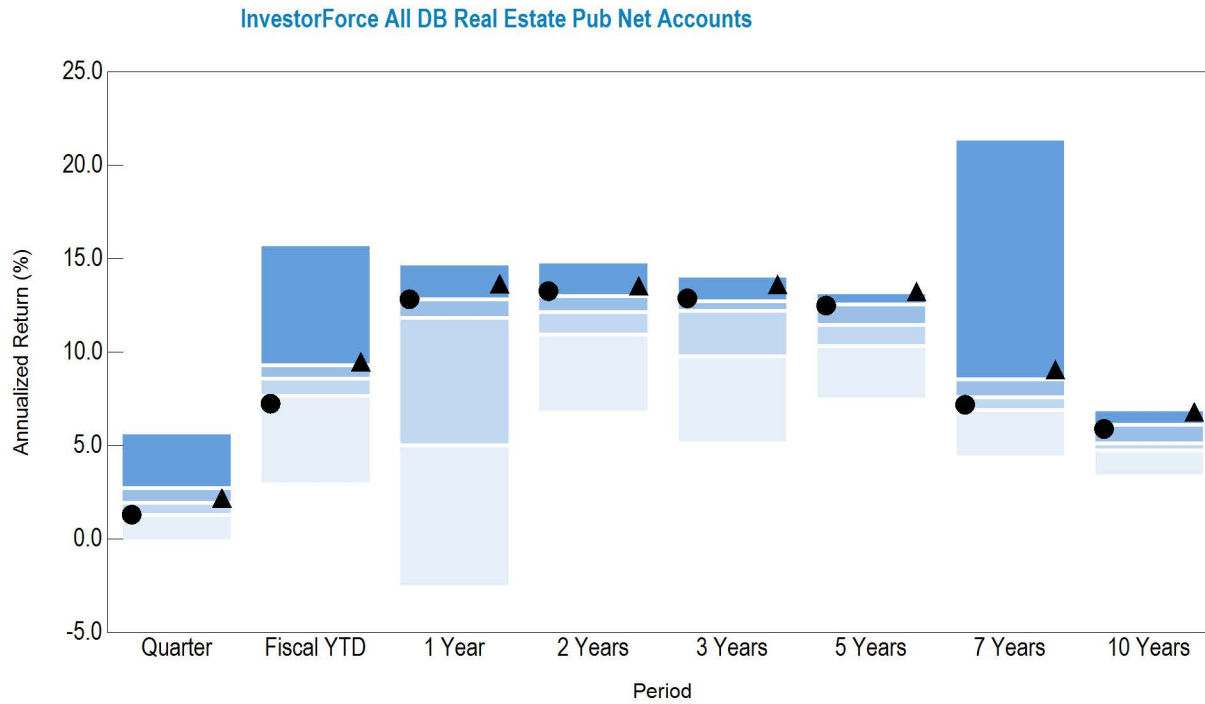
	Return (Rank)							
5th Percentile	9.3	15.4	15.8	17.6	15.7	14.0	17.5	12.1
25th Percentile	2.3	2.7	3.9	7.2	8.2	6.6	10.6	10.2
Median	0.4	-0.8	-1.6	2.2	3.9	3.8	8.3	6.2
75th Percentile	-2.8	-6.8	-7.0	-2.1	0.5	1.6	4.7	4.4
95th Percentile	-7.6	-17.9	-17.4	-10.4	-7.4	-6.3	0.2	-1.1
# of Portfolios	231	227	225	208	182	137	109	67
● AQR DELTA XN	-1.1 (66)	9.2 (9)	6.6 (14)	10.1 (17)	8.4 (24)	-- (--)	-- (--)	-- (--)
▲ Libor 1 month +4%	1.0 (42)	3.2 (23)	4.3 (24)	4.2 (40)	4.2 (48)	4.2 (45)	-- (--)	-- (--)



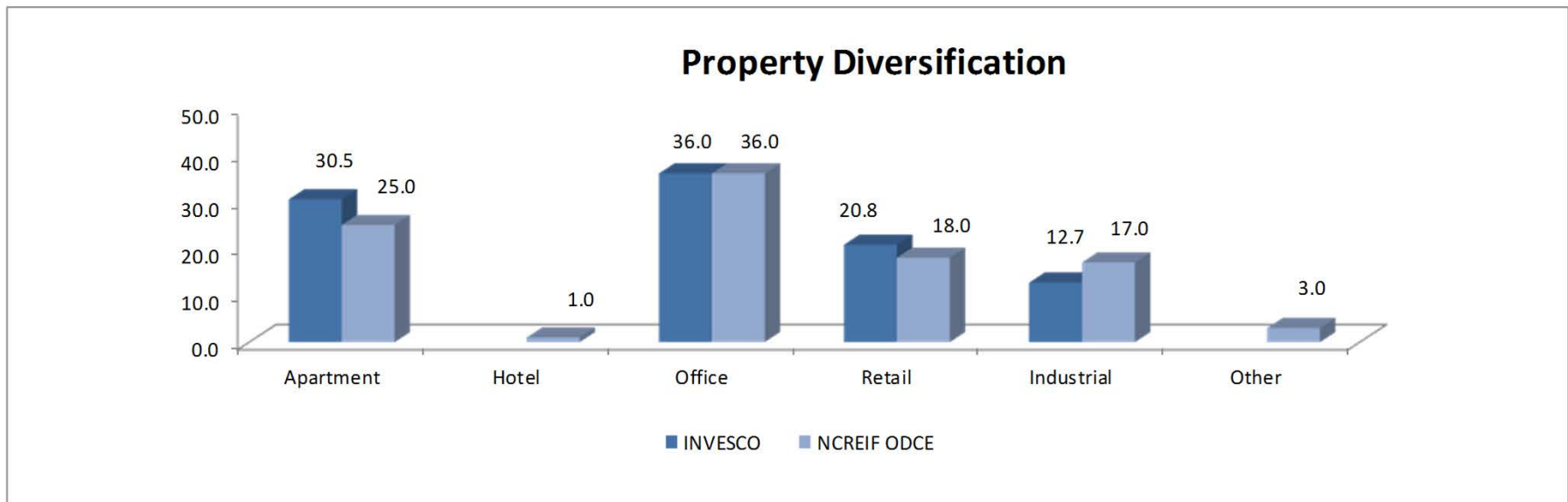
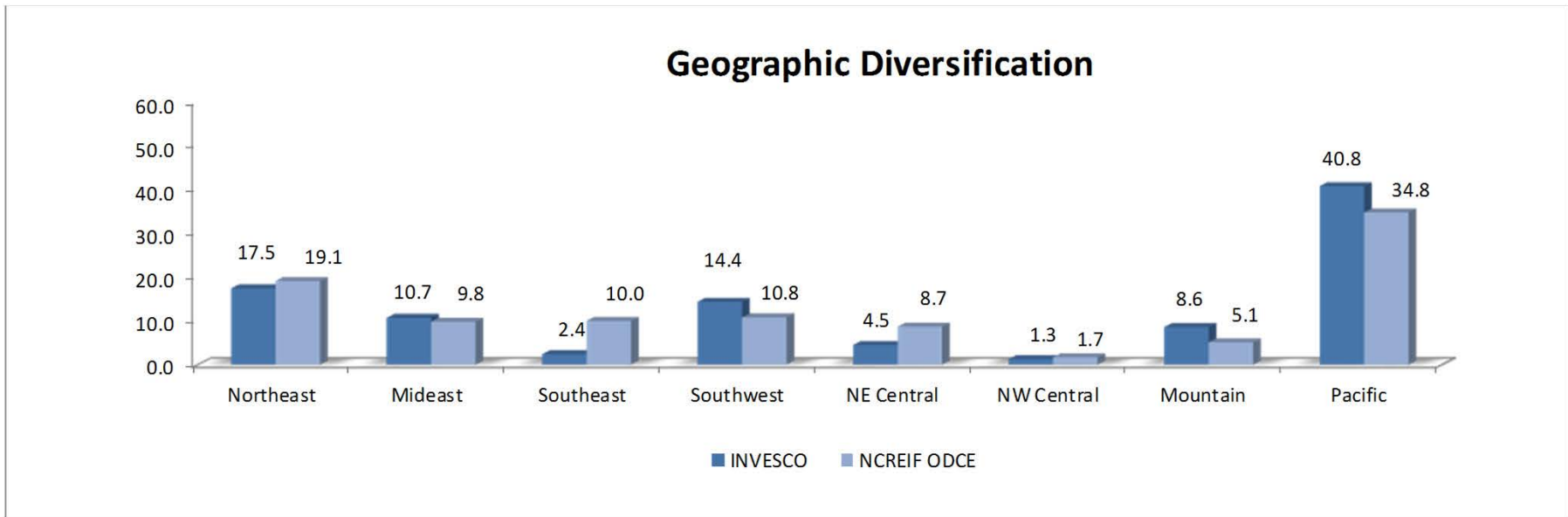
	Return (Rank)							
5th Percentile	9.3	15.4	15.8	17.6	15.7	14.0	17.5	12.1
25th Percentile	2.3	2.7	3.9	7.2	8.2	6.6	10.6	10.2
Median	0.4	-0.8	-1.6	2.2	3.9	3.8	8.3	6.2
75th Percentile	-2.8	-6.8	-7.0	-2.1	0.5	1.6	4.7	4.4
95th Percentile	-7.6	-17.9	-17.4	-10.4	-7.4	-6.3	0.2	-1.1
# of Portfolios	231	227	225	208	182	137	109	67
● Standard Life GARS	-3.2 (79)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)
▲ Libor 1 month +4%	1.0 (42)	3.2 (23)	4.3 (24)	4.2 (40)	4.2 (48)	4.2 (45)	-- (--)	-- (--)



	Actual \$	Actual %	Manager Contribution to Excess Return %
Invesco	\$229,923,478	96.6%	-0.8%
Invesco US Val IV	\$8,123,969	3.4%	-0.1%
Actual vs. Policy Weight Difference			-0.1%
Total	\$238,047,447	100.0%	-0.9%



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	5.7	15.7	14.7	14.8	14.1	13.2	21.4	6.9
25th Percentile	2.7	9.3	12.8	13.0	12.8	12.6	8.6	6.1
Median	2.0	8.6	11.8	12.2	12.2	11.5	7.6	5.1
75th Percentile	1.3	7.7	5.0	11.0	9.8	10.3	6.9	4.7
95th Percentile	-0.1	2.9	-2.6	6.8	5.1	7.5	4.4	3.4
# of Portfolios	87	86	86	83	81	70	57	35
● Real Estate	1.3 (76)	7.2 (80)	12.8 (26)	13.3 (19)	12.9 (18)	12.5 (28)	7.2 (68)	5.9 (32)
▲ NCREIF ODCE	2.2 (38)	9.5 (23)	13.7 (15)	13.6 (13)	13.6 (8)	13.3 (5)	9.1 (18)	6.8 (7)



INVESCO Core Real Estate
Real Estate Valuation Analysis

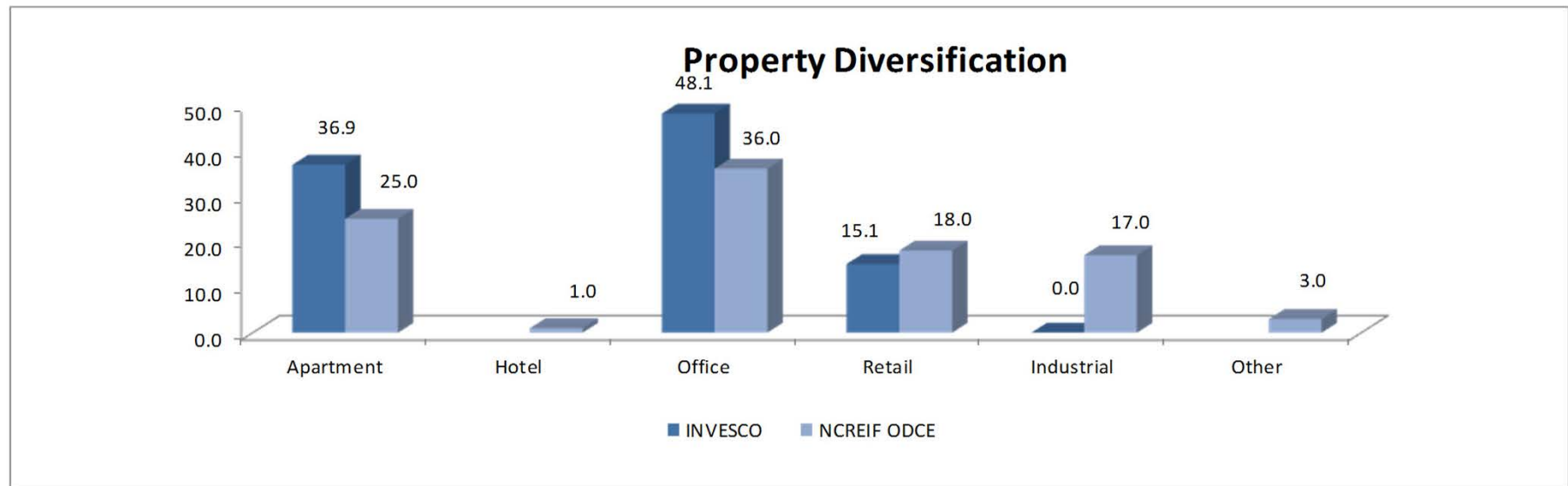
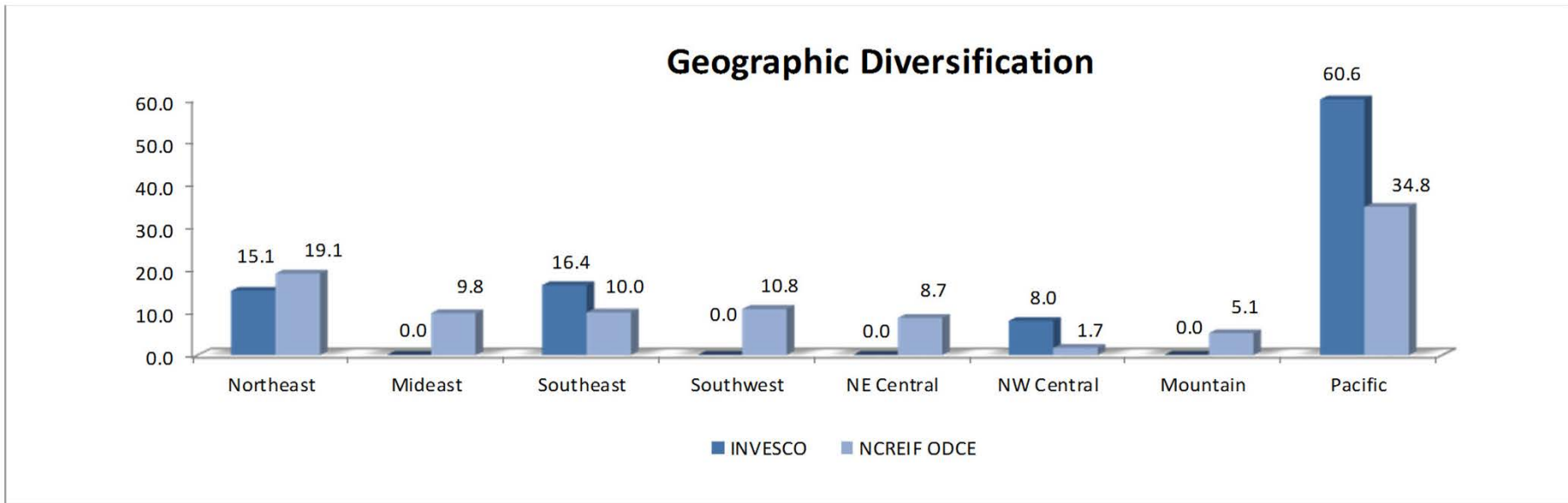
Period Ending: March 31, 2016

Property Name	MSA	Prior Quarter Carry Value	Current Quarter Carry Value	Net Market Value	Date Added to Fund	Last Valuation Date	SamCERA ownership as of 03/31/2016 2.94%
APARTMENTS							
Milestone Apt Portfolio	Various States - South	\$32,926,875	\$1,990,912	\$1,990,912	2Q06	March-16	\$58,528
Stoneridge Apartments	Pleasanton, CA	\$209,000,000	\$213,000,000	\$213,000,000	4Q06	March-16	\$6,261,699
Sterling Parc Apartments	Cedar Knolls, NJ	\$89,000,000	\$89,300,000	\$89,300,000	2Q07	March-16	\$2,625,210
Instrata Pentagon City	Arlington, VA	\$150,000,000	\$149,000,000	\$88,857,133	3Q10	March-16	\$2,612,191
Ladd Tower	Portland, OR	\$132,000,000	\$135,000,000	\$78,123,195	4Q10	March-16	\$2,296,638
Legacy Fountain Plaza	San Jose, CA	\$139,956,139	\$141,957,508	\$141,957,508	1Q11	March-16	\$4,173,217
Instrata Gramercy (fka The Elektra)	New York, NY	\$157,000,000	\$153,000,000	\$80,377,103	1Q11	March-16	\$2,362,898
Instrata Brooklyn Heights (fka 75 Clinton Street)	Brooklyn, NY	\$64,400,000	\$64,400,000	\$64,400,000	1Q12	March-16	\$1,893,208
Club Laguna	Orange County, CA	\$159,000,000	\$158,000,000	\$96,447,539	3Q12	March-16	\$2,835,331
The GoodWynn	Atlanta, GA	\$99,100,000	\$99,200,000	\$62,223,640	4Q12	March-16	\$1,829,229
Instrata at Mercedes House	New York, NY	\$207,000,000	\$207,000,000	\$132,000,000	1Q13	March-16	\$3,880,489
Sunset Vine Tower	Los Angeles, CA	\$95,500,000	\$97,800,000	\$97,800,000	2Q13	March-16	\$2,875,090
The Ashton	Dallas, TX	\$114,700,000	\$115,000,000	\$57,822,023	4Q13	March-16	\$1,699,831
The Pointe at Westchester	West Chester, PA	\$66,700,000	\$67,500,000	\$67,500,000	4Q13	March-16	\$1,984,341
206 Bell	Seattle, WA	\$44,100,000	\$44,600,000	\$44,600,000	4Q13	March-16	\$1,311,135
Cadence Union Station	Denver, CO	\$84,600,000	\$85,100,000	\$47,977,415	1Q14	March-16	\$1,410,423
Joseph Arnold Lofts	Seattle, WA	\$69,300,000	\$69,300,000	\$35,058,052	2Q14	March-16	\$1,030,624
Verve	Denver, CO	\$108,000,000	\$108,000,000	\$108,000,000	3Q14	March-16	\$3,174,946
Broadstone Little Italy	San Diego CA	\$117,000,000	\$117,000,000	\$63,801,284	3Q14	March-16	\$1,875,608
33 Tehama	San Francisco, CA	\$78,900,018	\$94,388,745	\$94,387,828	3Q14	March-16	\$2,774,780
The Parker	Portland, OR	\$64,300,000	\$65,200,000	\$32,179,667	1Q15	March-16	\$946,007
Legacy West Apartments	Plano, TX	\$22,197,010	\$30,689,399	\$30,689,399	1Q15	March-16	\$902,196
Village at Park Place	Irvine, CA	\$57,566,321	\$61,695,139	\$61,695,139	2Q15	March-16	\$1,813,692
Wheaton 121	Wheaton, IL	\$96,700,000	\$91,500,000	\$91,500,000	2Q15	March-16	\$2,689,885
Jefferson Marketplace	Washington, DC	\$140,660,389	\$142,000,000	\$71,422,191	4Q15	March-16	\$2,099,644
Retreat at Park Meadows	Littleton, CO	\$125,014,884	\$126,000,000	\$126,000,000	4Q15	March-16	\$3,704,104
North Water	Chicago, IL	\$0	\$246,000,000	\$246,000,000	1Q16	Acq 1Q16	\$7,231,821
2270 Broadway	Oakland, CA	\$0	\$18,935,211	\$18,935,211	1Q16	Acq 1Q16	\$556,651
Runway at Playa Vista -Apartments	Playa Vista, CA	\$0	\$130,525,926	\$67,058,426	1Q16	Acq 1Q16	\$1,971,360
		\$2,724,621,636	\$3,123,082,840	\$2,411,103,665			\$70,880,775
INDUSTRIAL							
Arjons	San Diego CA	\$37,500,000	\$38,400,000	\$38,400,000	2Q04	March-16	\$1,128,870
Gateway Business Park	Dallas TX	\$12,900,000	\$13,000,000	\$13,000,000	2Q04	March-16	\$382,169
Hayward Industrial	Oakland CA	\$141,700,000	\$142,100,000	\$142,100,000	3Q04-3Q07	March-16	\$4,177,406
Lackman Park	Kansas City MO-KS	\$24,500,000	\$24,500,000	\$24,500,000	2Q04	March-16	\$720,242
Crossroads Industrial	Kansas City MO-KS	\$7,900,000	\$8,100,000	\$8,100,000	1Q06	March-16	\$238,121
Oakesdale Commerce Center	Seattle - Belle - Eve WA	\$45,900,000	\$46,800,000	\$46,800,000	1Q06	March-16	\$1,375,810
South Bay Industrial	Los Angeles, CA	\$74,525,000	\$43,700,000	\$43,700,000	4Q06	March-16	\$1,284,677
VIP Holdings I	Chicago, IL	\$75,496,504	\$73,894,809	\$31,394,931	2Q06	March-16	\$922,937
Tempe Commerce Park	Phoenix - Mesa AZ	\$60,300,000	\$60,300,000	\$60,300,000	4Q07	March-16	\$1,772,678
Steeplechase 95 International Business Park	Capitol Heights, MD	\$91,300,000	\$91,600,000	\$91,600,000	1Q11	March-16	\$2,692,825
Airport Trade Center Portfolio	Dallas, TX	\$118,200,000	\$119,800,000	\$119,800,000	1Q11	March-16	\$3,521,838
IE Logistics	San Bernardino, CA	\$126,900,000	\$128,400,000	\$128,400,000	3Q11	March-16	\$3,774,658
Railhead Drive Industrial	Dallas, TX	\$61,800,000	\$62,000,000	\$62,000,000	4Q11	March-16	\$1,822,654
Empire Gateway aka Chino South Logistics Cent	Chino, CA	\$227,000,000	\$232,000,000	\$232,000,000	4Q12	March-16	\$6,820,254
SFF Logistics Center	San Francisco, CA	\$129,900,000	\$130,000,000	\$130,000,000	4Q13	March-16	\$3,821,694
Easton Industrial Portfolio	Various ,FL	\$0	\$87,638,765	\$50,839,901	1Q16	Acq 1Q16	\$1,494,573
		\$1,235,821,504	\$1,302,233,574	\$1,222,934,832			\$35,951,407

INVESCO Core Real Estate
Real Estate Valuation Analysis

Period Ending: March 31, 2016

OFFICE							
55 Cambridge Parkway	Boston MA - NH	\$249,000,000	\$260,000,000	\$260,000,000	4Q06	March-16	\$7,643,388
Gainey Center II	Scottsdale - AZ	\$35,200,000	\$0	\$0	3Q07	Sold 1Q16	\$0
Valencia Town Center	Valencia, CA	\$129,000,000	\$130,000,000	\$130,000,000	3Q07	March-16	\$3,821,694
The Executive Building	Washington, D.C.	\$230,000,000	\$231,000,000	\$231,000,000	2Q08	March-16	\$6,790,857
1111 Pennsylvania Avenue	Washington, D.C.	\$293,000,000	\$307,000,000	\$307,000,000	4Q10	March-16	\$9,025,078
1800 Larimer	Denver, CO	\$308,000,000	\$309,000,000	\$309,000,000	1Q11	March-16	\$9,083,873
3450 & 3460 Hillview Ave.	San Jose, CA	\$76,700,000	\$77,000,000	\$77,000,000	3Q12	March-16	\$2,263,619
Williams Tower	Houston, TX	\$591,000,000	\$590,000,000	\$405,257,812	1Q13	March-16	\$11,913,626
Westlake Park Place	Westlake Village, CA	\$110,000,000	\$111,000,000	\$111,000,000	4Q13	March-16	\$3,263,139
101 Second	San Francisco, CA	\$360,000,000	\$366,000,000	\$366,000,000	1Q14	March-16	\$10,759,539
Energy Crossing II	Houston, TX	\$113,000,000	\$113,000,000	\$113,000,000	2Q14	March-16	\$3,321,934
1776 Wilson Blvd.	Arlington, VA	\$94,200,000	\$94,700,000	\$94,700,000	3Q14	March-16	\$2,783,957
631 Howard	San Francisco, CA	\$89,900,000	\$90,200,000	\$90,200,000	3Q14	March-16	\$2,651,668
Barton Oaks	Austin, TX	\$82,400,000	\$83,100,000	\$83,100,000	3Q14	March-16	\$2,442,944
Hercules East and South Campus	Los Angeles, CA	\$144,030,524	\$147,758,313	\$147,758,313	3Q14	March-16	\$4,343,747
The Reserve	Playa Vista, CA	\$326,100,555	\$331,628,621	\$331,628,621	1Q15	March-16	\$9,749,101
Fort Point Portfolio	Boston, MA	\$197,325,884	\$206,752,386	\$116,839,633	2Q15	March-16	\$3,434,810
Legacy West Office	Plano, TX	\$34,220,391	\$47,312,824	\$47,312,824	1Q15	March-16	\$1,390,886
Summit IV	Aliso Viejo, CA	\$110,000,000	\$109,000,000	\$70,514,248	2Q15	March-16	\$2,072,953
1101 Westlake	Seattle, WA	\$83,800,000	\$85,300,000	\$85,300,000	3Q15	December-15	\$2,507,619
		\$3,656,877,354	\$3,689,752,144	\$3,376,611,451			\$99,264,433
RETAIL							
Broadway at Surf	Chicago IL	\$36,200,000	\$32,600,000	\$32,600,000	2Q04	March-16	\$958,363
Carriagetown Marketplace	Boston MA - NH	\$22,085,460	\$0	\$0	2Q04	March-16	\$0
Chandler Pavilion	Phoenix - Mesa AZ	\$21,800,000	\$22,100,000	\$22,100,000	2Q04	March-16	\$649,688
Matthews Township	Charlotte - G - RH NC-SC	\$24,200,000	\$25,500,000	\$25,500,000	2Q04	March-16	\$749,640
Windward Commons	Atlanta GA	\$24,400,000	\$24,400,000	\$24,400,000	2Q04	March-16	\$717,303
Cityline at Tenley	Washington, D.C.	\$54,900,000	\$55,200,000	\$55,200,000	4Q05	March-16	\$1,622,750
Ridgehaven Shopping Center	Minnetonka, MN	\$42,400,000	\$42,400,000	\$42,400,000	4Q05	March-16	\$1,246,460
The Beacon Retail	San Francisco, CA	\$66,000,000	\$66,000,000	\$66,000,000	1Q06	March-16	\$1,940,245
The Beacon Garage (units)	San Francisco, CA	\$30,700,000	\$30,700,000	\$30,700,000	1Q06	March-16	\$902,508
The Beacon Office (210 King)	San Francisco, CA	\$13,300,000	\$14,400,000	\$14,400,000	1Q15	March-16	\$423,326
Oak Brook Court	Chicago, IL	\$20,300,000	\$0	\$0	4Q07	Sold 1Q16	\$0
Hawthorne Plaza	Overland Park, KS	\$53,800,000	\$54,300,000	\$54,300,000	4Q07	March-16	\$1,596,292
The Loop	Boston MA - NH	\$96,400,000	\$96,400,000	\$96,400,000	1Q08	March-16	\$2,833,933
Westbank Market	Austin, TX	\$59,200,000	\$59,600,000	\$59,600,000	3Q10	March-16	\$1,752,100
910 Lincoln Road	Miami, FL	\$35,600,000	\$36,100,000	\$36,100,000	4Q10	March-16	\$1,061,255
Lake Pointe Village	Houston, TX	\$75,650,000	\$76,050,000	\$76,050,000	4Q11	March-16	\$2,235,691
Safeway Kapahulu	Hawaii	\$85,100,000	\$85,200,000	\$48,896,141	4Q11	March-16	\$1,437,432
Safeway Burlingame	San Francisco, CA	\$54,600,000	\$54,800,000	\$31,969,010	4Q11	March-16	\$939,814
Shamrock Plaza	Oakland, CA	\$37,800,000	\$37,900,000	\$21,617,320	4Q11	March-16	\$635,498
Pavilions Marketplace	West Hollywood, CA	\$58,200,000	\$58,300,000	\$33,551,331	1Q12	March-16	\$986,330
130 Prince	New York, NY	\$221,000,000	\$218,000,000	\$218,000,000	2Q12	March-16	\$6,408,687
Safeway Pleasanton	Pleasanton, CA	\$80,100,000	\$80,200,000	\$80,200,000	4Q12	March-16	\$2,357,691
Liberty Wharf	Boston, MA	\$86,400,000	\$89,400,000	\$55,366,249	4Q12	March-16	\$1,627,637
Shops at Legacy	Plano, TX	\$109,710,916	\$109,710,916	\$109,710,916	3Q13	March-16	\$3,225,243
Pasadena Commons	Pasadena, CA	\$47,000,000	\$50,900,000	\$49,000,000	4Q14	March-16	\$1,496,340
1003 N. Rush Street	Chicago, IL	\$14,600,000	\$15,300,000	\$15,300,000	4Q14	March-16	\$449,784
Legacy West Retail	Plano, TX	\$36,070,142	\$49,870,274	\$49,869,372	1Q15	March-16	\$1,466,042
131-137 Spring Street	New York, NY	\$224,000,000	\$224,800,000	\$112,000,000	3Q15	March-16	\$3,292,537
Runway at Playa Vista - Retail	Playa Vista, CA	\$0	\$128,345,953	\$65,938,453	1Q16	Acq 1Q16	\$1,938,435
139 Spring	New York, NY	\$0	\$111,059,200	\$111,059,200	1Q16	Acq 1Q16	\$3,264,879
Clayton Lane	Denver, CO	\$0	\$168,062,319	\$120,595,240	1Q16	Acq 1Q16	\$3,545,216
4th & Colorado	Santa Monica, CA	\$0	\$12,597,554	\$12,597,554	1Q16	Acq 1Q16	\$370,338
		\$1,731,516,518	\$2,130,196,216	\$1,773,320,786			\$52,131,459
	Portfolio Total	\$9,348,837,012	\$10,245,264,774	\$8,783,970,734			\$258,228,074

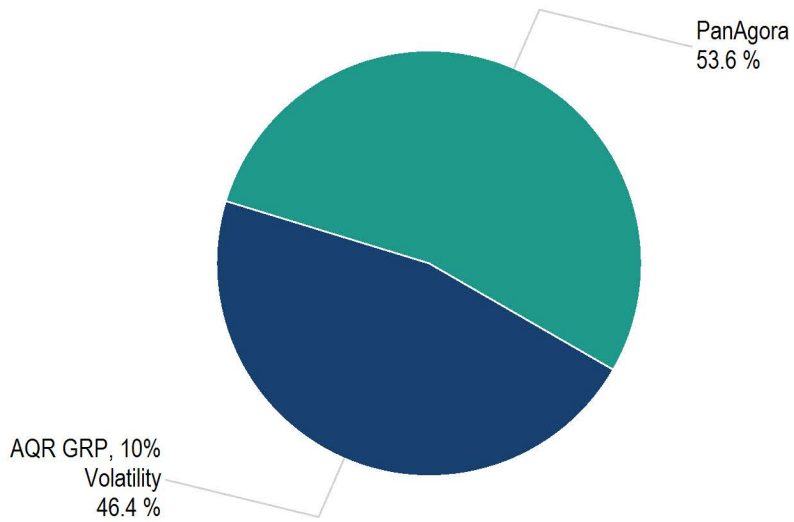


INVESCO US Val IV

Real Estate Valuation Analysis

Period Ending: March 31, 2016

Property Name	Region Classification	Geographic Classification	MSA	Prior Quarter Carry Value	Current Quarter Carry Value	Net Market Value	Date Added to Fund	Last Valuation Date
APARTMENTS								
Brookwood	West	Southeast	Atlanta, GA	\$31,788,755	\$42,840,948	\$20,378,078	3Q14	March-16
Broadstone Harbor Beach	East	Southeast	Ft. Lauderdale, FL	\$46,494,654	\$53,681,509	\$37,090,542	1Q15	March-16
Downtown East	MidWest	West North Central	Minneapolis, MN	\$34,218,793	\$47,169,752	\$22,019,925	2Q15	March-16
Wyndham Park	West	Pacific	Portland, OR	\$68,700,000	\$73,500,000	\$30,783,347	2Q15	March-16
				\$181,202,202	\$217,192,209	\$110,271,892		
INDUSTRIAL								
OFFICE								
55 Hawthorne	East	Pacific	San Francisco, CA	\$124,000,000	\$126,100,000	\$64,963,654	3Q14	March-16
Silicon Valley Towers	East	Pacific	San Jose, CA	\$65,900,000	\$80,000,000	\$35,124,117	2Q15	March-16
Post 3rd	West	Pacific	Los Angeles, CA	\$0	\$77,200,000	\$30,668,790	1Q16	March-16
				\$189,900,000	\$283,300,000	\$130,756,561		
RETAIL								
Ledgewood Mall	East	Northeast	Roxbury, NJ	\$30,000,000	\$30,000,000	\$15,546,942	3Q15	March-16
Paramus Retail Portfolio	East	Northeast	Paramus, NJ	\$57,324,791	\$58,800,000	\$20,137,841	4Q15	March-16
				\$87,324,791	\$88,800,000	\$35,684,783		
Portfolio Total				\$458,426,993	\$589,292,209	\$276,713,236		



	Actual \$	Actual %	Manager Contribution to Excess Return %
AQR GRP, 10% Volatility	\$121,571,865	46.4%	1.3%
PanAgora	\$140,464,325	53.6%	3.3%
Actual vs. Policy Weight Difference			0.0%
Total	\$262,036,190	100.0%	4.6%

Total Fund
Performance Summary (Gross of Fees)

Period Ending: March 31, 2016

	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Fund	1.4	-1.2	-0.5	3.2	6.4	6.8	5.0
<i>Policy Index</i>	1.5	-1.2	-0.7	2.6	6.2	6.7	5.6
<i>Allocation Index</i>	1.5	-1.2	-0.8	2.5	6.2	--	--
Total Fund ex Overlay	1.2	-1.3	-0.7	3.0	6.3	6.8	4.9
<i>Policy Index</i>	1.5	-1.2	-0.7	2.6	6.2	6.7	5.6
<i>Allocation Index</i>	1.5	-1.2	-0.8	2.5	6.2	--	--
Total Equity	0.7	-3.1	-2.5	2.1	7.9	7.5	4.6
<i>Blended Equity Index</i>	0.4	-4.5	-3.9	1.2	7.0	7.0	5.1
US Equity	0.5	-1.0	-0.5	5.1	10.9	10.4	5.9
<i>Blended US Equity Index</i>	0.8	-1.6	-1.4	5.0	10.7	10.6	6.8
<i>Russell 3000</i>	1.0	-0.5	-0.3	5.8	11.1	11.0	6.9
Large Cap Equity	0.6	0.6	1.3	6.8	11.8	11.0	6.3
<i>Russell 1000</i>	1.2	0.4	0.5	6.4	11.5	11.4	7.1
Barrow Hanley	-1.5	-5.2	-2.8	3.0	10.5	10.4	--
<i>Russell 1000 Value</i>	1.6	-1.6	-1.5	3.8	9.4	10.2	5.7
BlackRock S&P 500 Index	1.4	1.5	1.9	7.2	11.9	--	--
<i>S&P 500</i>	1.3	1.5	1.8	7.1	11.8	11.6	7.0
Brown Advisory	-1.3	1.1	2.1	6.5	--	--	--
<i>Russell 1000 Growth</i>	0.7	2.4	2.5	9.1	13.6	12.4	8.3
DE Shaw	0.7	0.6	1.1	8.1	12.5	12.9	--
<i>Russell 1000</i>	1.2	0.4	0.5	6.4	11.5	11.4	7.1
Small Cap Equity	0.0	-8.0	-8.4	-2.0	6.9	8.1	4.3
<i>Russell 2000</i>	-1.5	-10.1	-9.8	-1.2	6.8	7.2	5.3
The Boston Co	4.4	-3.4	-2.7	0.0	7.9	9.1	--
<i>Russell 2000 Value</i>	1.7	-6.6	-7.7	-1.8	5.7	6.7	4.4
Chartwell	-4.2	-12.6	-13.9	-4.0	5.9	7.6	5.9
<i>Russell 2000 Growth</i>	-4.7	-13.6	-11.8	-0.6	7.9	7.7	6.0

Total Fund
Performance Summary (Gross of Fees)

Period Ending: March 31, 2016

	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
International Equity	1.0	-6.4	-5.6	-3.0	2.4	1.9	2.1
<i>MSCI ACWI ex US IMI</i>	-0.1	-8.8	-7.7	-4.4	1.2	1.0	2.5
<i>MSCI EAFE Gross</i>	-2.9	-8.6	-7.9	-4.2	2.7	2.8	2.3
Developed Markets	0.2	-6.2	-5.4	-2.7	3.1	2.5	2.4
<i>MSCI ACWI ex USA Gross</i>	-0.3	-9.4	-8.8	-4.8	0.8	0.8	2.4
Baillie Gifford	0.4	-4.5	-3.9	-1.1	4.6	--	--
<i>MSCI ACWI ex US</i>	-0.3	-9.4	-8.8	-4.8	2.3	--	--
<i>MSCI ACWI ex US Growth</i>	-0.2	-6.4	-5.8	-1.9	3.6	--	--
BlackRock EAFE Index	-2.9	-8.7	-8.0	-4.4	--	--	--
<i>MSCI EAFE</i>	-3.0	-8.8	-8.3	-4.7	2.2	2.3	1.8
<i>MSCI EAFE Gross</i>	-2.9	-8.6	-7.9	-4.2	2.7	2.8	2.3
FIAM Equity	1.1	-3.6	0.6	0.0	4.4	--	--
<i>MSCI ACWI ex US Small Cap Gross</i>	0.8	-4.4	-0.3	-1.8	4.0	2.8	4.2
Mondrian	1.7	-7.1	-6.9	-3.9	2.2	2.5	3.0
<i>MSCI ACWI ex USA Value Gross</i>	-0.3	-12.5	-11.8	-7.6	-0.8	-0.5	1.7
<i>MSCI ACWI ex USA Gross</i>	-0.3	-9.4	-8.8	-4.8	0.8	0.8	2.4
Emerging Markets	8.9	-8.3	-7.4	-6.1	-3.1	--	--
<i>MSCI Emerging Markets Gross</i>	5.8	-12.4	-11.7	-5.7	-4.2	-3.8	3.3
Parametric Core	8.9	--	--	--	--	--	--
<i>MSCI Emerging Markets Gross</i>	5.8	-12.4	-11.7	-5.7	-4.2	-3.8	3.3
Total Fixed Income	1.8	-0.3	-0.7	1.9	1.7	4.4	5.3
<i>Blended Fixed Index</i>	3.7	3.0	1.9	2.7	1.7	3.5	4.8
US Fixed Income	2.1	0.5	-0.1	2.6	2.1	4.6	5.4
<i>Blended US Fixed Index</i>	3.3	2.6	1.4	3.2	1.8	3.9	5.0
Core Fixed	2.1	2.2	0.5	3.3	2.4	4.4	--
<i>Barclays Aggregate</i>	3.0	3.7	2.0	3.8	2.5	3.8	4.9
FIAM Bond	3.3	3.4	1.7	3.9	2.8	4.4	5.4

Total Fund
Performance Summary (Gross of Fees)

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	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Western TRU	-0.6	--	--	--	--	--	--
3-Month Libor Total Return USD	0.1	0.3	0.4	0.3	0.3	0.3	1.6
Barclays Aggregate	3.0	3.7	2.0	3.8	2.5	3.8	4.9
TIPS	3.4	1.3	1.4	1.2	-1.6	2.8	--
Barclays US TIPS	4.5	2.6	1.5	2.3	-0.7	3.0	4.6
Brown Brothers Harriman	3.4	1.3	1.4	1.2	-1.6	2.8	--
Barclays US TIPS	4.5	2.6	1.5	2.3	-0.7	3.0	4.6
Opportunistic Credit	1.5	-3.2	-1.9	1.7	4.5	7.2	--
Barclays BA Intermediate HY	3.4	0.4	0.2	2.1	1.7	4.8	--
Angelo Gordon Opportunistic	0.7	1.0	3.8	--	--	--	--
Angelo Gordon STAR	-2.2	-1.3	1.1	7.3	10.9	--	--
Barclays Aggregate	3.0	3.7	2.0	3.8	2.5	3.8	4.9
Beach Point Select	2.7	0.9	3.2	--	--	--	--
Barclays BA Intermediate HY	3.4	0.4	0.2	2.1	1.7	4.8	--
Brigade Capital	3.3	-8.9	-9.4	-4.3	-0.8	3.5	--
Barclays BA Intermediate HY	3.4	0.4	0.2	2.1	1.7	4.8	--
50% Barclays HY/ 50% Bank Loan	2.3	-2.8	-2.4	0.0	2.1	4.2	--
Global Fixed Income	0.1	-4.4	-4.3	-2.0	-0.9	3.1	--
Barclays Multi-verse	5.9	5.5	4.4	0.2	0.9	1.9	4.4
Franklin Templeton	0.1	-4.5	-4.4	-2.0	-0.9	3.1	--
Barclays Multi-verse	5.9	5.5	4.4	0.2	0.9	1.9	4.4
Alternatives	-0.7	-0.5	2.8	4.9	3.7	5.1	--
Alternatives Allocation Index	1.4	-2.4	-1.0	--	--	--	--
Blended Alternatives Index	1.3	-2.3	-0.9	0.7	5.0	5.9	--
Private Equity	-0.3	4.4	13.4	16.6	16.4	8.0	--
Russell 3000 +3%	1.8	2.4	2.7	8.8	14.2	14.0	10.0
Hedge Fund/Absolute Return	-1.5	8.3	5.7	9.7	8.2	--	--
Libor 1 month +4%	1.0	3.2	4.3	4.2	4.2	4.2	--

Total Fund
Performance Summary (Gross of Fees)

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	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
AQR DELTA XN	-1.1	9.2	6.6	10.1	8.4	--	--
<i>Libor 1 month +4%</i>	1.0	3.2	4.3	4.2	4.2	4.2	--
Standard Life GARS	-3.2	--	--	--	--	--	--
<i>Libor 1 month +4%</i>	1.0	3.2	4.3	4.2	4.2	4.2	--
Commodity	-2.8	-24.3	-22.4	-20.7	-15.0	--	--
<i>Bloomberg Commodity Index TR USD</i>	0.4	-23.1	-19.6	-23.4	-16.9	-14.1	-6.2
SSARIS Multisource Active Commodity	-2.8	-24.3	-22.4	-20.7	-15.0	--	--
<i>Bloomberg Commodity Index TR USD</i>	0.4	-23.1	-19.6	-23.4	-16.9	-14.1	-6.2
<i>S&P Goldman Sachs Commodity</i>	-2.5	-34.4	-28.7	-34.8	-24.5	-17.4	--
Private Real Asset	14.7	12.2	14.7	--	--	--	--
<i>CPI +5%</i>	1.2	3.6	5.0	4.9	--	--	--
Real Estate	1.4	7.4	13.1	13.6	13.3	12.9	6.3
<i>NCREIF ODCE</i>	2.2	9.5	13.7	13.6	13.6	13.3	6.8
Invesco	1.5	7.0	12.7	13.4	13.1	12.8	6.3
<i>NCREIF ODCE</i>	2.2	9.5	13.7	13.6	13.6	13.3	6.8
Invesco US Val IV	-0.2	--	--	--	--	--	--
<i>NCREIF ODCE</i>	2.2	9.5	13.7	13.6	13.6	13.3	6.8
<i>NCREIF CEVA 1Q Lag - NET</i>	5.8	14.3	18.7	17.8	--	--	--
Risk Parity	6.5	-1.2	-5.2	2.6	1.3	5.4	--
<i>60/40 Russell 3000/Barclays Aggregate</i>	1.9	1.4	0.8	5.2	7.8	8.3	6.4
AQR GRP, 10% Volatility	4.6	-6.2	-8.6	-1.6	-1.4	3.7	--
PanAgora	8.2	3.6	-1.9	--	--	--	--
<i>60/40 Russell 3000/Barclays Aggregate</i>	1.9	1.4	0.8	5.2	7.8	8.3	6.4
<i>60/40 MSCI World/Barclays Global Aggregate</i>	1.2	-0.2	-0.9	2.8	5.7	6.0	--
Cash	0.2	1.2	1.3	0.9	0.7	0.7	1.2
91 Day T-Bills	0.1	0.1	0.1	0.1	0.1	0.1	1.0
General Account	0.2	1.7	1.9	1.3	0.9	0.7	1.6
Treasury & LAIF	0.0	0.0	0.0	0.0	0.0	0.2	0.8
91 Day T-Bills	0.1	0.1	0.1	0.1	0.1	0.1	1.0

Angelo, Gordon & Co. – AG STAR Fund

The STAR Fund will focus on CMBS and non-Agency RMBS priced between 25-75% of par, which AG believes are even today mispriced due to their complex nature and a dearth of natural buyers capable of accurately valuing these assets. In addition, AG will target securities that are well-positioned to benefit from home and commercial property price stabilization and recovery, and/or borrower credit quality improvement. In this regard the STAR Fund will be more aggressive than the PPIP Fund since it will target securities that are more geared to a recovery of the commercial and residential real estate markets. The Fund will utilize a moderate amount of leverage (1x to 1.5x) and is targeting a base-case 15% net IRR with a downside return in the mid/high single digits and an upside projection of 25%+ returns.

Angelo, Gordon & Co. – AG Opportunistic Whole Loan Fund

As bank balance sheets have strengthened since the crisis, Angelo Gordon expects approximately \$40 billion of re-performing loans and non-performing loans will trade hands each year in the near term. By acquiring these loans at a discounted price and replacing original servicers with better-focused special servicers, Angelo Gordon believes it can improve operational efficiency and generate attractive returns. To take advantage of this opportunity, Angelo Gordon established this Opportunistic Whole Loan Fund to make investments primarily in a portfolio of non-performing loans and re-performing, but will also include investments in new residential mortgage loans and excess mortgage servicing rights. Opportunistic investments in commercial mortgage loans and other mortgage related investments may also be included in the Fund's portfolio. Angelo Gordon has been an active participant in the residential and consumer debt market since 2008. The Partnership's investment approach to residential mortgage loans and securities is guided by an analytically based investment process anchored by distressed asset valuation and cash flow modeling. Angelo Gordon's analysis of re-performing and non-performing loans begins with its loan due diligence process. This process will include a review of substantially all of the properties in the pool, as well as a review of the loan files backing the loan pool. In addition, a macro overlay is embedded in the investment process which incorporates general economic trends, along with specific views on interest rates, unemployment, collateral appreciation or depreciation, governmental intervention in creditors' rights and liquidation timelines.

AQR Delta

The AQR DELTA Fund aims to deliver efficient exposure to a well-diversified portfolio of hedge fund strategies, including Convertible Arbitrage, Event Driven, Fixed Income Relative Value, Equity Market Neutral, Long/Short Equity, Dedicated Short Bias, Global Macro, Managed Futures, and Emerging Markets. The Delta Fund's approach is to capture and deliver the "hedge fund risk premiums" that explain much of the returns of each of these strategies by building bottom-up positions in each strategy. AQR's research has demonstrated that many hedge funds use similar strategies to generate returns. These strategies are often well-known, widely understood and share common exposures. AQR's experience and research suggests much of the insight underlying these strategies - as well as a meaningful portion of their returns - can be captured using a dynamic, disciplined investment approach. Just as the equity risk premium can explain a large portion of the returns from equity investing, hedge fund risk premiums can explain the returns from hedge fund investing. Importantly, while compensation for equity risk is dependent on economic growth, hedge fund risk premiums are largely unrelated to economic activity, and thus provide attractive diversification properties.

AQR – Risk Parity

The objective of Global Risk Parity (GRP) is to generate excess returns from a risk diversified portfolio of asset exposures. AQR believes that its approach maximizes the diversification benefit across a broad range of economic environments. For many institutional portfolios, equity risk has historically been the predominant risk and the source of most return expectations since equities offer higher expected returns to compensate for their high risk. Investor preference for and concentration in equities has been driven by their expected return needs, which cannot be satisfied in a well-diversified un-levered portfolio. GRP is a diversified portfolio that can be scaled to similar levels of risk as a portfolio concentrated in equities, but with a higher expected return resulting from diversification across asset class risk. The approach helps do away with the compromise of concentrating in high risk assets to meet high return needs. Consistent with portfolio theory, the GRP strategy is designed to maximize diversification across a broad spectrum of liquid global risk premia to create a portfolio with higher expected risk-adjusted returns. Research shows that risk-adjusted returns across asset classes are similar over the long-term. Since realized risk-adjusted returns across asset classes are similar, AQR expects a portfolio that is diversified equally by risk to perform better. The Global Risk Premium strategy aims to deliver efficient market exposure across four broad asset classes in a risk balanced fashion.

Baillie Gifford – ACWI ex US Focus Equities

ACWI ex US Focus is a fundamental growth strategy. Research is organized primarily by regional teams, with each member of the ACWI ex US Focus Portfolio Construction Group representing a regional team. Four global sector groups also contribute research. Baillie Gifford conducts approximately 2000 company meetings annually both in Edinburgh and onsite. Companies are evaluated on their growth opportunity relative to the average company, their ability to execute on that opportunity, and the degree to which probability of future success is already valued by the market. Baillie Gifford's basic philosophy is that share prices ultimately follow earnings. They believe that the stock market has a recurring tendency to under-appreciate the value of long-term compound growth. The process seeks to add value through use of proprietary fundamental research to identify companies exhibiting some combination of sustained above average growth, and attractive financial characteristics. The portfolio generally holds 80-120 stocks, with country and sector weights +/-6% relative to the index and industry weights +/- 5% relative to the index.

Barrow Hanley – Diversified Large Cap Value

Barrow Hanley takes a bottom up value approach to equity investing. They seek to buy stocks that exhibit all three of the following characteristics: price/earnings and price/book ratios below the market, and dividend yield above the market (with the S&P 500 representing the market). Their view is that a portfolio that emphasizes low price/book and high dividend yield stocks will provide some protection in down markets and participation in improving economic cycles. In addition to their basic valuation criteria, Barrow Hanley is also looking for profitable companies with earnings growth greater than the market. After the quantitative screening process, Barrow Hanley's equity research team conducts qualitative analysis of candidate investments. This involves forecasting ROE 5-years out and treating this forecast as the basis for earnings, book value and dividend yield projections for the same five year period. These projections are used as inputs into a dividend discount model and relative return model. Stocks that appear to be attractively valued according to both of these models comprise the firm's buy list. The portfolio managers construct the portfolio with 70-90 of the buy list names. Securities are weighted approximately equally, with core positions in the range of 1.5%. Sector weightings are limited to 35% (at cost) and industry weightings are limited to 15%. Stocks are generally held for three to four years, resulting in average turnover of 25% - 35%.

Beach Point Select Fund

Beach Point Select Fund is a commingled fund vehicle within the firm's Opportunistic Credit strategy. This fund focuses on off-the-run, complex, and less-liquid securities. It is a best ideas portfolio of distressed debt, special situations, private/direct loans, catalyst-driven high yield bonds and bank loans, and credit-informed equities with a North American and European focus. The Select Fund differs from other funds and accounts in the Opportunistic Credit strategy by pursuing a more concentrated portfolio and emphasizing a higher percentage of less-liquid/private investments. Beach Point invests up and down the entire capital structure and it constructs portfolios with a bottom-up, research-driven approach that also takes into account top-down macro considerations. Its investment process includes idea generation, detailed credit analysis, relative value decision making and investment selection, portfolio construction and on-going monitoring. The ultimate goal of its investment process is to produce a well-diversified investment portfolio with limited downside risk and substantial upside potential.

BlackRock – EAFE Index

The EAFE Index Fund seeks to replicate the return of the MSCI EAFE Index. This index represents the developed equity markets outside of North America: Europe, Austral, Asia and the Far East.

BlackRock – S&P 500 Index

The Equity Index Fund seeks to capture the growth potential of large companies and achieve broad diversification with low costs by fully replicating the Standard & Poor's (S&P) 500 Index. Representing approximately 80% of the total US equity market capitalization, the S&P 500 Index is one of the most widely followed benchmarks of US stock market performance. Introduced in 1977, this fund was the investment management industry's first institutional S&P 500 Index fund.

Blue Road Capital

Blue Road Capital was formed in 2013 by John Duryea, Luis Paz-Galindo, David Blue and Daniel Fabian. The Blue Road team has been working together for seven years while they ran the Ospraie Special Opportunities pool ("OSO"), which was established in 2006. OSO had a fairly broad mandate to invest in natural resource industries ranging from liquid publicly traded securities to illiquid private equity style investments. The Blue Road team, led by John Duryea, seeks to make similar investments in agricultural industries that they executed within the OSO pool. Specifically, the team looks to identify supply and/or demand imbalances in the agricultural value chain and capitalize on that opportunity by bringing institutional capital and management to the industry identified. Blue Road aims to achieve private equity style returns by building enterprise value beyond just the intrinsic value of a real asset (e.g. farmland). While owning farmland will be a significant component of the Fund's invested capital, Blue Road's aim is to drive value creation by executing on a business plan whether that is building a vertically integrated production company or by exploiting supply chain inefficiencies within agriculture.

The Boston Company – Small Cap Value

The Boston Company's approach to small cap value investing is to conduct bottom-up fundamental research in an effort to add value through security selection. The investment process seeks to identify the stocks of companies which have compelling valuations and business fundamentals, as well as a catalyst for positive change. The appropriate valuation metrics for an individual company can vary depending on industry. Ideas are generated from company meetings, industry contacts and team's internal research. The universe of domestic small-cap equity securities is quantitatively screened for valuation, business health and earnings revisions. In addition, they also screen/track operating income and EBITDA estimate revisions. Once candidates for investment are identified, individual stock weights are determined by portfolio risk, liquidity, and analyst conviction. Normally, portfolios will contain between 120-150 holdings (from a short list of 500 securities), with a maximum individual security weighting of 5%, though most are less than 3%. Securities will typically be in the \$100 million - \$2 billion market cap range at time of purchase. Generally, sector exposure is limited to no more than 2X the index weight with a maximum overweight of 10 percentage points and a maximum underweight of half that of the index. The goal is for portfolios to be close to fully invested at all times, with cash typically below 5%. Any stock down 20% from the purchase price is reviewed. In addition, portfolios are reviewed on a regular basis for unintended risk. Positions are sold when any one of the three investment criteria (valuation, fundamentals, catalyst) breaks down.

Brigade – Opportunistic Credit

Opportunistic Credit is a fundamental, bottom-up strategy focused on high yield corporate bonds and bank loans with tactical allocations to structured securities, convertibles and other sectors of the bond markets as they become attractive on a relative value basis. While performing credits represent the majority, Brigade will invest up to 35% of the portfolio in distressed securities and restructuring situations if these types of opportunities are attractive on a risk-adjusted basis and the timing is right with respect to the credit cycle. The portfolio is comprised of mostly North American issuers, but they are not restricted geographically and expect to have a moderate allocation to Europe over time. Although the portfolio is generally long-only, Brigade has the ability to implement a limited amount of tactical macro hedges.

Brown Advisory – Large Cap Growth Equity

Brown Advisory's Large-Cap Growth Equity philosophy is based on the belief that concentrated portfolios of fundamentally strong businesses should generate returns in excess of the portfolio's index and the broad market, with an acceptable level of risk. The success of the philosophy is based on a talented, highly collaborative investment team with a long-term outlook, performing deep investment research on a broad universe of stocks. This culminates in bottom-up company selection that strives to identify drivers of growth in the large capitalization universe. With conviction in strict investment criteria and rigorous due diligence, Brown concentrate its portfolios in its best ideas, creating the potential for above-average returns. The objective is to exceed the returns of the strategy's benchmark, the Russell 1000 Growth Index, over a full market cycle (typically 3-5 years) on a risk-adjusted basis.

Brown Brothers Harriman – Inflation Indexed Securities

BBH manages TIPS using three main types of strategies: Fundamental, Technical and Opportunistic. The Fundamental bucket has two sub-strategies, real yield duration and real yield curve slope vs. nominal yield curve slope. The Technical strategies consist of yield curve roll-down, auction cycle trading, seasonal vs. non-seasonal CPI and security selection/option value analysis. Finally, nominal Treasuries vs. TIPS, sector relative value (i.e., corporate or Agency inflation-linked bonds) and non-Dollar inflation-linked bonds make up the Opportunistic group. Real yield duration is held to +/- 1 year vs. the benchmark and the portfolio has a limited allocation to non-index securities, typically 5-10% with a maximum of 20% (including nominal Treasuries).

Chartwell Investment Partners – Small Cap Growth

Chartwell's Small Cap Growth product strives to hold stocks with strong fundamentals that are best positioned for rapid growth. These businesses typically demonstrate strong increases in earnings per share. Chartwell invests in these securities with an intermediate time horizon in mind. They initiate investments opportunistically and when stocks are attractively valued. Chartwell focuses on high growth companies that lie in the middle of the momentum and growth at a reasonable price continuum, and construct Small Cap Growth portfolios with fairly low tracking errors. Portfolios contain 50-70 stocks with market capitalizations between \$200 million and \$2.5 billion at purchase. Meetings with management are an important part of the investment process. This product is closed to new investors.

DE Shaw – DE Shaw US Broad Market Core Alpha Extension Fund

The D. E. Shaw group believes that there exist some market inefficiencies that may be identified through quantitative analysis, advanced technology, and the insight of practitioners. Identifying these inefficiencies involves a process of hypothesis formulation, testing, and validation. Importantly, to avoid data-mining, the hypothesis formulation precedes the analysis of the historical data. D.E. Shaw's Structured Equity strategies rely largely on quantitative and computational investment techniques developed by the D. E. Shaw over the last 19 years in the course of research conducted for purposes of managing the firm's hedge funds. In addition to its beta one strategies, D.E. Shaw manages substantial assets in its hedge fund strategies. D.E. Shaw's investment process involves a suite of quantitative models, each designed to capitalize on a distinct and uncorrelated set of market inefficiencies. Some of these models are technical in nature and involve price and volume inputs. Other models rely on fundamental data, such as figures gleaned from corporate balance sheets or income statements. Still others, again quantitative, anticipate or react to a particular corporate event or set of events. These models typically operate with forecast horizons of a few weeks to many months. The ability to trade on shorter-term signals distinguishes D.E. Shaw from many of its long only and 130/30 peers. Portfolio construction involves the use of a proprietary optimizer which runs dynamically throughout the trading day. The portfolio is broadly diversified with several hundred long and short positions. Over- and under-weighting of sectors and industries relative to the benchmark will be quite modest, with the intention that most of the alpha be generated by security selection. The US Broad Market Core Alpha Extension Fund is a 130/30 strategy which maintains a beta that is approximately neutral to the Russell 1000 Index.

Eaton Vance/Parametric – Structured Emerging Markets Core Equity

Parametric utilizes a structured, rules-based approach, which they believe is capable of generating enhanced returns with lower volatility compared to both traditional active management and passive capitalization weighted indices. The basic idea is to structure the portfolio with more balanced country weights than the market cap weighted indices, and also to capture a rebalancing premium. This provides more diversification and greater exposure to smaller countries than is provided by the market cap weighted indices. The approach is to divide emerging markets countries into three tiers, and to equally weight the countries within each tier. Tier 1 countries are the largest eight countries that dominate the cap weighted index. Each successive tier is comprised of smaller countries, each of which is given a smaller target weighting in the model portfolio. In aggregate, the eight Tier 1 countries are given a much lower weighting than in the capitalization weighted index, but they nevertheless comprise more than 50% of the portfolio. The Core SEM strategy targets excess return of 3% over a market cycle with 2.5%-4.5% tracking error. It is designed to generate a level of volatility 90%-100% of the MSCI EM index. The strategy invests in 44 countries and will typically hold 700-1,000 securities. Turnover is expected to be in the range of 5%-15%.

EverStream Solar Infrastructure I – Private Real Assets

EverStream Solar Infrastructure I's principal objective is to acquire a high-quality diversified portfolio of Solar PV and Wind assets and projects. EverStream will seek to invest in high-quality solar and wind project opportunities developed by experienced solar/wind project developers, including SunEdison and First Wind. The objective of the Fund is to generate long-term capital appreciation and cash yield with a focus on Solar PV projects and the opportunistic investment in attractive wind projects already in the development phase. It is expected that each investment will be privately negotiated and may be structured in the form of equity, equity-linked securities, debt or some combination thereof. The Fund expects to make investments ranging from \$5 million to \$20 million over the life of the Investment in a portfolio asset. The Investment Team believes that this is an area of the market underserved by most energy and infrastructure funds. EverStream will focus on solar infrastructure projects with energy off-take contracts, reliable technology and predictable cash-flows, in sectors where the Investment Team has an edge by virtue of its experience and its relationship with SunEdison, among other developers. The targeted holding period for an investment is generally expected to range from two to five years. The Fund intends to invest (i) a minimum of 50% of the aggregate Capital Commitments in assets, or in securities of issuers whose principal assets or operations are, located in the United States and Canada, (ii) a maximum of 50% of the aggregate Capital Commitments in assets, or in securities of issuers whose principal assets or operations are, located in other OECD countries, and (iii) a maximum of 33% of the aggregate Capital Commitments in assets, or in securities of issuers whose principal assets or operations, are located in the rest of the world.

Franklin Templeton Investments – Global Fixed Income

Franklin Templeton manages the global bond mandate in an unconstrained fashion using a top-down, fundamental framework. In the short term and on a country-by-country basis there are often inefficiencies in global bond and currency markets, however, over the longer term the market will generally price to fundamentals. Thus, FT focuses on fundamental research to identify long-term opportunities and uses short-term market inefficiencies to build positions in such investments. The investment and portfolio construction process begins with the determination of the Fund's or institutional client's investment objectives, resulting in a set of risk-return parameters and exposure limits within which the portfolio is managed. Next the firm's global economic outlook for the industrialized countries is developed, with a focus on interest rate and exchange rate forecasts. The portfolio's interest rate outlook is a function of global general equilibrium macroeconomic analysis as well as country-specific research. Macroeconomic conditions in the G-3 economies are analyzed first, primarily with respect to how current and projected growth and inflation dynamics are expected to influence monetary policy. This analysis is then extended out to the rest of the industrialized countries (G-13) as well as emerging markets, which results in broad targets for cash, duration, currencies and the developed/emerging market mix. Using the firm's interest rate and exchange rate outlook, probability-weighted horizon returns for bonds of various countries are then calculated. This analysis is used to establish specific country weights and duration targets based on risk-adjusted expected total return measured in the portfolio's base currency. Analysis of emerging markets includes sovereign credit analysis along with greater emphasis on capital flows, inter-market dynamics and trends in the level of risk aversion in the market.

INVESCO Realty Advisors – INVESCO Core Equity, LLC

SamCERA is a founding member of INVESCO's open end Core Equity real estate fund and rolled its separate account properties into the fund. INVESCO Core Equity, LLC (the "Fund") is a perpetual life, open-end vehicle which invests in a diversified portfolio of institutional quality office, retail, industrial and multifamily residential real estate assets. The Fund buys core properties that are located within the United States, typically requiring an investment of \$10 million or more. The portfolio cannot be more than 30% leveraged.

INVESCO Realty Advisors – INVESCO US Val IV

Invesco has provided SamCERA with Core Real Estate exposure since 2004 through the Invesco Core Equity Fund. The Invesco real estate team manages around \$62B in assets with investments and offices around the globe. Invesco Value Fund IV will look to acquire fundamentally sound but broken "core" assets that can be repositioned into institutional-quality, income producing properties. Investments will be limited to direct equity interests in office, multi-family, retail and industrial properties across the US. The Fund is expected to be geographically concentrated in U.S. gateway cities and top 25 Metropolitan Statistical Areas (MSA's). Invesco Value Fund IV will provide a nice compliment to the more conservative Invesco Core Fund and offer the potential of enhanced returns to the SamCERA Real Estate portfolio.

Mondrian Investment Partners – International Equity

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

Panagora – Diversified Risk Multi Asset Fund

The Multi Asset team is headed up by Edward Qian, CIO of the group, and the founder of Panagora's risk parity strategy. A staff of approximately thirteen works in this group on research and portfolio construction, with some people spending more time on the former and some more on the latter. Panagora implements risk parity by distinguishing between three categories of assets: equities, nominal fixed income, and inflation protection. Each of these categories corresponds to a respective economic environment: economic growth, economic contraction and inflation. Panagora's risk allocation targets 40% each from equities and nominal fixed income, and 20% from inflation protection. In addition to applying concept of risk parity between asset classes, Panagora also applies it within each asset class. The 40/40/20 allocation to equities/nominal fixed income/inflation protection is a long term strategic allocation. In 2009 Panagora introduced what they refer to as "Dynamic Risk Allocation" or "DRA," which involves tactically tilting the risk allocations away from the neutral targets in order to enhance returns and reduce risk.

Pyramis Global Advisors – Broad Market Duration Commingled Pool

Pyramis' Broad Market Duration (BMD) investment strategy seeks to achieve absolute and risk-adjusted returns in excess of the BC U.S. Aggregate Index, focusing its investments in US Treasuries, agencies, investment grade corporate bonds, mortgage-backed and asset-backed securities. The BMD commingled pool can also hold small, opportunistic positions in out-of-benchmark securities, such as inflation-linked bonds. The investable universe includes all US dollar denominated, investment grade debt securities. The BMD investment approach emphasizes issuer and sector valuation and individual security selection. Through the integration of fundamental and quantitative research and trading, the BMD strategy is implemented in a team environment. Risk management technology is utilized to explicitly quantify benchmark exposures on a daily basis, and Pyramis uses the same analytical framework to assess both index and portfolio risk. Tracking error should range between 40 and 60 basis points per annum over the benchmark, and stringent portfolio construction risk control rules are strictly adhered to.

Pyramis Global Advisors – Select International Small Cap

Pyramis Select International Small Cap is a core strategy. The approach is designed to leverage Pyramis/Fidelity's proprietary resources to add value exclusively via stock selection. To that end the portfolio is constructed to be regionally neutral, with only modest deviations from the benchmark's country and sector weights. The investment process involves three basic stages. The first stage is the security level research conducted by the analysts. The second stage is stock selection from within the pool of names that are highly ranked by the analysts. The third step is portfolio construction and risk management. The essential differentiating feature of this strategy is the breadth of coverage that is made possible by the large staff of analysts. Analysts actively conduct regular fundamental research on, and give a formal rating of 1-5, 1200-1300 international small cap companies. While there is no single firm-wide approach to security research, analysts are expected to establish an upside target for any given stock and assign a formal rating. The decision making structure is quite efficient, with portfolio manager Rob Feldman making all the buy and sell decisions. His role, as he puts it, is to be an intelligent user of the analysts' research. He selects the 1- and 2- rated stocks that he thinks are compelling and additive to his portfolio, and he sells names when they are downgraded by the analysts. There are approximately 200 holdings in the portfolio. Country and sector weights are within 3 percentage points of the benchmark and position sizes are within 2 percentage points of the benchmark. Turnover tends to be in the 60%-80% range.

SSARIS Global Multisector Plus – Commodities

SSARIS believes that the commodities markets are not fully efficient, and that a disciplined, quantitative investment process can identify and exploit futures contract mispricings. They believe in taking a small number of large active positions in order to capitalize on these mispricings in a timely manner, utilizing a systematic process to evaluate commodity market prices, to process this information objectively, to build investment models, and to construct efficient portfolios. The strategy's three quantitative models each seek to capture distinct inefficiencies prevalent in the commodity markets: mean reversion, structural imbalances and price dislocations. Backwardation: This model establishes a medium-term view on individual commodity price movement by observing the futures prices associated with a particular commodity. Regime Switching: Price cycles for a given commodity market tends to be persistent in duration yet also change from time to time (and often quite abruptly). This model ascertains the most probable regime in which an individual commodity resides, how likely this regime is to change, and the expected short-term price impact for a given level of price change. Trend Following: This model uses an annual commodity market selection and risk budgeting process to set the universe of commodity markets to be traded. The selection process takes into account liquidity, volatility and prior period drawdowns. The top ranked markets will receive a larger share of risk capital relative to those that are selected, yet not as highly ranked. It then utilizes trend following and momentum algorithms that are based upon price series analysis ranging over time periods from several weeks to months to enter and exit specific markets.

Standard Life Global Absolute Return Strategy (GARS)

The Standard Life Global Absolute Return Strategy (GARS) was initially launched in 2005 to help address Standard Life's own pension plan's deficit problem. GARS' primary investment objective is to deliver a positive absolute return over the medium to long term with lower volatility than equities, irrespective of market conditions. It seeks returns through dynamic allocation to investment opportunities in traditional and advanced asset classes, and also separately exploits the team's security selection expertise. In the search for attractive investment positions, the team follows a rigorous research process. This includes a variety of research techniques, including broad global macro-economic, fundamental analysis, quantitative research and valuation modeling. The GARS investment process is designed to capitalize on an array of research and investment techniques and draws together the team's three-year investment insights. The team then rigorously examines and review position proposals to approve a high conviction, short list of positions that work well together. Having a cash benchmark means that GARS has a potentially unrestricted investment universe and all portfolio holdings are at the Portfolio Manager's discretion. The GARS portfolio also routinely uses a variety of conventional derivatives for investment, liquidity, efficiency and hedging purposes. The GARS strategy has experienced significant growth in its asset under management since it becomes available to external investors in 2006.

Taurus Mining – Private Real Assets

Taurus is forming their first Mining Debt Fund to implement its investment strategy of making loans to late stage mining projects around the globe. The Fund seeks to selectively finance those projects that have completed the multitude of hurdles required to commence construction and subsequently move into production thereby being able to generate sufficient cash flow to repay their loans. In addition, the loans will carry an additional return through an attached structured equity instrument such as a gross revenue royalty, off-take agreement, warrants/options, or some other structure. The investment thesis can be distilled into a fundamental bottom up thesis that "Project Development Creates Value." The Fund will provide late stage mine development finance, investing in the debt of emerging public, and private mining companies used to finance or refinance project development for those companies which have material value-adding projects under development or expansion. Essentially as a project clears each hurdle towards successful development the expected cash flows become more likely and less distant. The curve works because firstly, the risk of a mining project decreases, and the discount (risk) rate applied to the project decreases, as the project progresses through its evaluation phases, and secondly, because the cash flows that will be produced by the project become closer in time. The value creation which occurs through successful project development is therefore a natural NPV effect.

Western Asset Management – Total Return Unconstrained (TRU)

Western Asset's Total Return Unconstrained strategy (TRU) seeks to provide bond-like risk and return over the long term, but does not have a benchmark. This allows for asset allocation based on value rather than using the construction of a benchmark as baseline positioning. The investment approach is active with very broad latitude on duration (-3 to +8 years) and on asset allocation across all of the eligible sectors in a core plus mandate. The portfolio must have at least 50% of its holdings in investment-grade securities. The flexibility offered by this strategy allows for defensive positioning in rising rate environments and opportunistic deployment of capital when value opportunities arise. It also allows the portfolio managers to emphasize (or deemphasize) either credit or rates when one or the other appears to offer greater (or lesser) value. um non-US exposure.

Policy Index and Benchmark History

Period Ending: March 31, 2016

Total Plan Policy Index	As of:											
	1/1/16	7/1/14	1/1/14	2/1/13	1/1/11	10/1/10	1/1/09	5/1/07	6/1/00	3/1/99	9/1/98	7/1/96
10 Year Treasury +2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.0%	10.0%	10.0%
60% Russell 3000/40% BC Aggregate (RP)	8.0%	8.0%	8.0%	6.0%	6.0%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Barclays Aggregate	10.0%	10.0%	9.3%	11.0%	11.0%	12.9%	27.0%	27.0%	29.0%	25.0%	21.0%	21.0%
Barclays BA Intermediate HY	5.0%	5.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Barclays BBB	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Barclays Credit BAA	0.0%	0.0%	0.0%	3.5%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Barclays Multiverse	3.0%	3.0%	3.8%	4.4%	4.4%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Barclays TIPS	2.0%	2.0%	2.0%	3.1%	3.3%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bloomberg Commodity	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Citigroup non-US WGBI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	9.0%	9.0%
CPI + 5% (RA)	2.0%	2.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Libor +4% (HF)	5.0%	4.0%	4.0%	3.0%	3.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MSCI ACWI ex-US	0.0%	0.0%	0.0%	18.0%	18.0%	18.0%	21.0%	21.0%	15.0%	0.0%	0.0%	0.0%
MSCI ACWI ex-US IMI	20.0%	20.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MSCI EAFE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	20.0%	20.0%
NCREIF ODCE	7.0%	6.0%	6.0%	5.0%	5.0%	5.0%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NCREIF Property	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.0%	6.0%	0.0%	0.0%	0.0%
Russell 1000	24.0%	24.0%	24.0%	28.0%	28.0%	28.0%	37.0%	37.0%	40.0%	22.0%	20.0%	20.0%
Russell 1000 Value	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	5.0%	0.0%
Russell 2000	4.0%	6.0%	6.0%	7.0%	7.0%	7.0%	9.0%	9.0%	10.0%	15.0%	15.0%	15.0%
Russell 3000 +3% (PE)	7.0%	7.0%	7.0%	8.0%	8.0%	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
S&P 500	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Policy Index and Benchmark History

Period Ending: March 31, 2016

Total Equity Benchmark	As of:							
	1/1/16	1/1/14	10/1/10	5/1/07	6/1/00	3/1/99	9/1/98	1/1/96
MSCI ACW ex-US	0.0%	0.0%	34.0%	31.3%	23.1%	0.0%	0.0%	0.0%
MSCI ACW ex-US IMI	41.7%	40.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MSCI EAFE	0.0%	0.0%	0.0%	0.0%	0.0%	32.3%	33.3%	33.3%
Russell 1000	50.0%	48.0%	52.8%	55.2%	61.5%	35.5%	33.3%	33.3%
Russell 1000 Value	0.0%	0.0%	0.0%	0.0%	0.0%	8.0%	8.4%	0.0%
Russell 2000	8.3%	12.0%	13.2%	13.5%	15.4%	24.2%	25.0%	25.0%
S&P 500	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.4%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

US Equity Benchmark	As of:					
	1/1/16	6/1/00	3/1/99	9/1/98	7/1/96	1/1/95
Russell 1000	85.7%	80.0%	52.0%	50.0%	50.0%	69.0%
Russell 1000 Value	0.0%	0.0%	12.0%	12.5%	0.0%	0.0%
Russell 2000	14.3%	20.0%	36.0%	37.5%	37.5%	14.0%
S & P 500	0.0%	0.0%	0.0%	0.0%	12.5%	17.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

International Equity Benchmark	As of:		
	1/1/14	6/1/00	1/1/96
MSCI ACW ex US	0.0%	100.0%	0.0%
MSCI ACW ex US IMI	100.0%	0.0%	0.0%
MSCI EAFE	0.0%	0.0%	100.0%
	100.0%	100.0%	100.0%

Total Fixed Income Benchmark	As of:							
	7/1/14	1/1/14	2/1/13	1/1/11	10/1/10	6/1/00	3/1/99	7/1/96
Barclays Aggregate	50.0%	46.3%	50.0%	50.0%	58.6%	100.0%	83.3%	70.0%
Barclays BA Intermediate HY	25.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Barclays BBB	0.0%	0.0%	0.0%	0.0%	7.3%	0.0%	0.0%	0.0%
Barclays Credit BAA	0.0%	0.0%	16.0%	15.0%	0.0%	0.0%	0.0%	0.0%
Barclays Multiverse	15.0%	18.8%	20.0%	20.0%	20.5%	0.0%	0.0%	0.0%
Barclays TIPS	10.0%	10.0%	14.0%	15.0%	13.6%	0.0%	0.0%	0.0%
Citigroup non-US WGBI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	30.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

US Fixed Income Benchmark

As of:

	7/1/14	1/1/14	2/1/13	1/1/11	10/1/10	7/1/96
Barclays Aggregate	58.8%	56.9%	62.5%	62.5%	73.7%	100.0%
Barclays BA Intermediate HY	29.4%	30.8%	0.0%	0.0%	0.0%	0.0%
Barclays BBB	0.0%	0.0%	0.0%	0.0%	9.1%	0.0%
Barclays Credit BAA	0.0%	0.0%	20.0%	18.8%	0.0%	0.0%
Barclays TIPS	11.8%	12.3%	17.5%	18.8%	17.2%	0.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Opportunistic Credit Benchmark

As of:

	1/1/14	12/1/09
Barclays BA Intermediate HY	100.0%	0.0%
Barclays Credit BAA	0.0%	100.0%
	100.0%	100.0%

Real Asset Benchmark

As of:

	1/1/14
CPI + 5%	100.0%
	100.0%

Alternatives Benchmark

As of:

	1/1/16	1/1/14	1/1/11
60% Russell 3000/40% BC Aggregate (RP)	0.0%	0.0%	30.0%
Bloomberg Commodity	17.7%	18.8%	15.0%
CPI + 5% (RA)	11.8%	12.5%	0.0%
Libor +4% (HF)	29.4%	25.0%	15.0%
Russell 3000 +3% (PE)	41.2%	43.8%	40.0%
	100.0%	100.0%	100.0%

Real Estate Benchmark

As of:

	1/1/09	6/1/00	7/1/96
10 Year Treasury +2%	0.0%	0.0%	100.0%
NCREIF ODCE	100.0%	0.0%	0.0%
NCREIF Property	0.0%	100.0%	0.0%
	100.0%	100.0%	100.0%

Private Equity Benchmark

As of:

	10/1/10
Russell 3000 +3%	100.0%
	100.0%

Risk Parity Benchmark

As of:

	10/1/10
Barclays Aggregate	40.0%
Russell 3000	60.0%
	100.0%

Hedge Fund Benchmark

As of:

	10/1/10
Libor +4%	100.0%
	100.0%

Baillie Gifford Benchmark	As of:	
	1/1/14	5/1/12
MSCI ACWI ex-US	100.0%	0.0%
MSCI EAFE	0.0%	100.0%
	100.0%	100.0%

Baillie Gifford Secondary Benchmark	As of:	
	1/1/14	5/1/12
MSCI ACWI ex-US Growth	100.0%	0.0%
MSCI EAFE Growth	0.0%	100.0%
	100.0%	100.0%

Brigade Secondary Benchmark	As of:	
	8/1/10	
Barclays High Yield	50.0%	
Credit Suisse Leveraged Loans	50.0%	
	100.0%	

Fee Schedule

Period Ending: March 31, 2016

Baillie Gifford

First \$25 million:	0.60% per annum
Next \$75 million:	0.50% per annum
Next \$300 million:	0.40% per annum
Thereafter:	0.30% per annum

Barrow, Hanley, Mewhinney & Strauss

First \$15 million:	0.75% per annum
Next \$10 million:	0.55% per annum
Next \$75 million:	0.45% per annum
Next \$100 million:	0.35% per annum
Next \$800 million:	0.25% per annum
Thereafter:	0.15% per annum

BlackRock-Russell S&P 500 Fund

First \$250 million:	0.03% per annum
Thereafter:	0.02% per annum

BlackRock-EAFE Equity Index Fund

First \$100 million:	0.06% per annum
Thereafter:	0.04% per annum

The Boston Company Asset Management

First \$25 million:	0.90% per annum
Thereafter:	0.80% per annum

Brown Advisory

First \$50 million:	0.47% per annum
Next \$100 million:	0.45% per annum
Next \$300 million:	0.40% per annum
Thereafter:	0.35% per annum

Brown Brothers Harriman

On All Assets:	0.15% per annum
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Chartwell Investment Partners

On All Assets:	0.75% per annum
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Clifton Group

First \$50 million:	0.12% per annum
Next \$150 million:	0.10% per annum
Thereafter:	0.05% per annum

Franklin Templeton Investment

First \$50 million:	0.45% per annum
Next \$50 million:	0.35% per annum
Thereafter:	0.30% per annum

Mondrian Investment Partners

First \$50 million:	1.00% per annum
Next \$150 million:	0.19% per annum
Thereafter:	0.33% per annum

Parametric

On All Assets:	0.35% per annum
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FIAM Bond

First \$50 million:	0.20% per annum
Next \$50 million:	0.175% per annum
Next \$100 million:	0.10% per annum
Thereafter:	0.085% per annum

FIAM Equity

On All Assets:	0.90% per annum
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Western Asset Management

On All Assets:	0.25% per annum
Performance Fee:	20%

Manager*	Primary Benchmark	Rule 1	Rule 2	Rule 3	Rule 4	Rule 5	Rule 6	Rule 13	Rule 9	Rule 10
Barrow Hanley	Russell 1000 Value	✓	✗	✓	✗	✓	✗	✗	✓	✓
Brown Advisory	Russell 1000 Growth	--	--	--	--	--	--	✗	--	--
DE Shaw	Russell 1000	✓	✓	✓	✓	✗	✓	✓	✓	✓
The Boston Co	Russell 2000 Value	✓	✓	✓	✓	✓	✓	✗	✗	✓
Chartwell	Russell 2000 Growth	✗	✗	✗	✗	✗	✗	✗	✗	✗
Baillie Gifford	MSCI ACWI ex US	✓	--	✓	--	✓	--	✗	✗	--
FIAM Equity	MSCI ACWI ex US Small Cap Gross	✗	--	✗	--	✗	--	✗	✗	--
Mondrian	MSCI ACWI ex USA Value Gross	✓	✓	✓	✓	✓	✓	✗	✗	✗
Parametric Core	MSCI Emerging Markets Gross	--	--	--	--	--	--	--	--	--
FIAM Bond	Barclays Aggregate	✓	✓	✓	✓	✗	✓	✓	✓	✓
Western TRU	3-Month Libor Total Return USD	--	--	--	--	--	--	--	--	--
Brown Brothers Harriman	Barclays US TIPS	✗	✗	✗	✗	✗	✗	✗	✗	✗
Beach Point Select	Barclays BA Intermediate HY	--	--	--	--	--	--	--	--	--
Brigade Capital	Barclays BA Intermediate HY	✗	✗	✗	✗	✗	✗	✗	✗	✗
Franklin Templeton	Barclays Multi-verse	✗	✓	✗	✓	✗	✗	✗	✗	✗

Rule 1 - 3 Year Performance (net) vs. Benchmark
 Rule 2 - 5 Year Performance (net) vs. Benchmark
 Rule 3 - 3 Year Performance (gross) vs. Benchmark
 Rule 4 - 5 Year Performance (gross) vs. Benchmark
 Rule 5 - 3 Year Sharpe Ratio (net) vs. Benchmark
 Rule 6 - 5 Year Sharpe Ratio (net) vs. Benchmark
 Rule 13 - 2 Year Performance (net) vs. Median
 Rule 9 - 3 Year Performance (net) vs. Median
 Rule 10 - 5 Year Performance (net) vs. Median

* All managers are meeting investment performance expectations except for Chartwell.

Manager Performance Comparison (Gross of Fees)

Period Ending: March 31, 2016

	Jan	Feb	Mar	1st Qtr. 2016	Difference	4th Qtr. 2015	Difference	3rd Qtr. 2015	Difference	2nd Qtr. 2015	Difference	1st Qtr. 2015	Difference
Verus	-6.20%	-1.11%	6.18%	-1.50%		5.41%		-8.68%		2.53%		1.74%	
Barrow Hanley	-6.20%	-1.08%	6.15%	-1.51%	0.01%	5.40%	0.01%	-8.69%	0.01%	2.51%	-0.01%	1.73%	0.01%
Russell 1000 Value Index	-5.17%	-0.03%	7.20%	1.64%		5.64%		-8.40%		0.11%		-0.72%	
Verus	-4.96%	-0.12%	6.79%	1.36%		7.05%		-6.43%		0.34%		0.96%	
BlackRock S&P 500 Fund	-4.96%	-0.12%	6.79%	1.37%	-0.01%	7.05%	0.00%	-6.43%	0.00%	0.34%	0.00%	0.96%	0.00%
S&P 500 Index	-4.96%	-0.13%	6.78%	1.34%		7.03%		-6.43%		0.28%		0.96%	
Verus	-6.90%	-0.69%	6.79%	-1.26%		7.68%		-4.87%		1.00%		3.78%	
BrownAdvisory	-6.88%	-0.68%	6.76%	-1.26%	0.00%	7.68%	0.01%	-4.89%	0.02%	1.00%	-0.01%	3.80%	-0.02%
Russell 1000 Growth Index	-5.58%	-0.04%	6.74%	0.75%		7.33%		-5.28%		0.12%		3.84%	
Verus	-6.36%	1.14%	6.37%	0.75%		6.11%		-5.87%		0.49%		4.10%	
D.E. Shaw	-6.35%	1.14%	6.38%	0.76%	-0.01%	6.10%	0.00%	-5.86%	-0.01%	0.50%	0.00%	4.11%	-0.01%
Russell 1000 Index	-5.38%	-0.03%	6.97%	1.18%		6.51%		-6.83%		0.11%		1.59%	
Verus	-4.59%	0.81%	8.52%	4.38%		3.13%		-10.26%		0.69%		1.71%	
The Boston Company	-4.59%	0.81%	8.52%	4.38%	0.00%	3.13%	0.00%	-10.26%	0.00%	0.68%	0.00%	1.68%	0.03%
Russell 2000 Value Index	-6.72%	0.68%	8.29%	1.70%		2.88%		-10.73%		-1.20%		1.98%	
Verus	-11.18%	-1.35%	9.33%	-4.21%		5.09%		-13.15%		-1.48%		5.39%	
Chartwell	-11.18%	-1.35%	9.34%	-4.20%	-0.01%	5.09%	0.00%	-13.15%	0.00%	-1.48%	0.01%	5.39%	0.00%
Russell 2000 Growth Index	-10.83%	-0.71%	7.66%	-4.67%		4.33%		-13.07%		1.97%		6.64%	
Verus	-7.12%	0.05%	8.07%	0.42%		7.59%		-11.60%		0.62%		6.47%	
Baillie Gifford	-7.13%	0.03%	8.10%	0.42%	0.00%	7.57%	0.02%	-11.54%	-0.06%	0.60%	-0.02%	6.47%	0.00%
MSCI ACWI ex US	-6.79%	-1.11%	8.21%	-0.26%		3.29%		-12.11%		0.73%		3.60%	
MSCI ACWI ex US Growth	-6.17%	-1.23%	7.64%	-0.24%		5.05%		-10.73%		0.75%		4.89%	
Verus	-7.23%	-1.80%	6.59%	-2.90%		4.72%		-10.21%		0.78%		5.00%	
BlackRock EAFE Equity	-7.23%	-1.80%	6.59%	-2.90%	0.00%	4.72%	0.00%	-10.21%	0.00%	0.79%	0.00%	5.00%	0.00%
MSCI EAFE (Net)	-7.23%	-1.83%	6.51%	-3.01%		4.71%		-10.24%		0.62%		4.88%	
MSCI EAFE (Gross)	-7.22%	-1.80%	6.59%	-2.89%		4.75%		-10.19%		0.84%		5.00%	

Manager Performance Comparison (Gross of Fees)

Period Ending: March 31, 2016

	Jan	Feb	Mar	1st Qtr. 2016	Difference	4th Qtr. 2015	Difference	3rd Qtr. 2015	Difference	2nd Qtr. 2015	Difference	1st Qtr. 2015	Difference
Verus FIAM Equity	-6.35%	-0.69%	8.72%	1.12%		5.51%		-9.65%		4.31%		4.78%	
MSCI ACWI -ex US Small Cap Index	-6.35%	-0.69%	8.72%	1.11%	0.01%	5.51%	0.00%	-9.65%	0.00%	4.32%	0.00%	4.78%	0.00%
Verus Mondrian	-4.09%	-1.02%	7.12%	1.70%		2.33%		-10.72%		0.16%		3.82%	
MSCI ACWI -ex US Value Index	-4.09%	-1.02%	7.13%	1.70%	0.00%	2.33%	0.00%	-10.73%	0.01%	0.22%	0.00%	-4.33%	8.14%
MSCI ACWI -ex US	-7.43%	-0.99%	8.79%	-0.29%		1.50%		-13.49%		0.72%		2.25%	
	-6.79%	-1.11%	8.21%	-0.26%		3.29%		-12.11%		0.73%		3.60%	
Verus Parametric Core	-4.25%	0.80%	12.81%	8.88%		-0.97%		-11.81%					
MSCI EM Market Index	-4.24%	0.82%	12.81%	8.91%	-0.03%	-0.97%	0.00%	-11.81%	0.00%				
	-6.48%	-0.15%	13.26%	5.74%		0.72%		-17.78%					
Verus FIAM Bond	0.87%	0.61%	1.77%	3.28%		-0.39%		0.50%		-1.61%		1.72%	
BC Aggregate Index	0.87%	0.61%	1.77%	3.28%	0.00%	-0.39%	0.00%	0.50%	0.00%	-1.60%	-0.01%	1.72%	0.00%
	1.38%	0.71%	0.92%	3.02%		-0.58%		1.24%		-1.68%		1.61%	
Verus Western TRU	-2.66%	-1.35%	3.48%	-0.64%		0.63%		-1.01%					
3-Month Libor Total Return USD Index	-2.66%	-1.35%	3.48%	-0.63%	-0.01%	0.63%	0.00%	-1.00%	-0.01%				
BC Aggregate Index	0.02%	0.05%	0.05%	0.13%		0.13%		0.08%					
	1.38%	0.71%	0.92%	3.04%		-0.58%		1.24%					
Verus Brown Brothers Hariman	0.80%	0.89%	1.68%	3.41%		-0.18%		-1.87%		0.06%		0.94%	
BC U.S Tips	0.79%	0.89%	1.80%	3.52%	-0.11%	-0.18%	0.00%	-1.88%	0.01%	0.08%	-0.04%	0.98%	-0.04%
	1.48%	1.11%	1.80%	4.46%		-0.64%		-1.14%		-1.07%		1.43%	
Verus (Net) Angelo Gordon Opportunistic				0.70%		-0.57%		0.34%		5.90%		-1.22%	
BC Aggregate Index				0.70%	0.00%		-0.57%		0.34%	1.28%	0.00%	-1.22%	0.00%
				0.92%		-0.57%		1.24%		-1.68%		1.61%	
Verus (Net) Angelo Gordon STAR Fund (Net)				-2.17%		-0.91%		1.22%		2.14%		2.62%	
BC Aggregate Index				-2.17%	0.00%		-0.91%		1.22%	2.14%	0.00%	2.62%	0.00%
				0.92%		-0.57%		1.24%		-1.68%		1.61%	

Manager Performance Comparison (Gross of Fees)

Period Ending: March 31, 2016

	Jan	Feb	Mar	1st Qtr. 2016	Difference	4th Qtr. 2015	Difference	3rd Qtr. 2015	Difference	2nd Qtr. 2015	Difference	1st Qtr. 2015	Difference
Verus	-1.41%	0.16%	3.97%	2.67%		-1.35%		-0.41%		2.32%		0.00%	
Beach Point Select (Net)	-1.49%	0.07%	3.89%	2.41%	0.26%	-1.35%	0.00%	-0.66%	0.25%	2.06%	0.08%	0.00%	0.00%
Barclays BA Intermediate HY	-0.84%	1.32%	2.94%	3.43%		0.01%		-3.00%		2.61%		0.00%	
Verus	-1.86%	-0.49%	5.77%	3.29%		-6.30%		-5.87%		-0.55%		2.95%	
Brigade Capital	-1.86%	-0.49%	5.77%	3.29%	0.00%	-6.30%	-0.01%	-5.87%	0.00%	-0.56%	0.00%	2.82%	0.13%
Barclays BA Intermediate HY	-0.84%	1.32%	2.94%	3.43%		0.01%		-3.00%		2.61%		2.44%	
Verus	-1.21%	-2.58%	4.03%	0.12%		2.22%		-6.66%		0.12%		0.47%	
Franklin Templeton Investments	-1.21%	-2.58%	4.03%	0.12%	0.00%	2.22%	0.00%	-6.66%	0.00%	0.11%	0.01%	0.47%	0.00%
BC Multiverse	0.74%	2.15%	2.89%	5.88%		-0.87%		0.49%		-1.04%		-1.89%	
Verus	0.23%	-0.48%	-0.82%	-1.06%		2.54%		7.68%		-2.39%		2.55%	
AQR DELTA XN	0.23%	-0.48%	-0.82%	-1.07%	0.01%	2.54%	0.00%	7.68%	0.00%	-2.39%	0.00%	2.55%	0.00%
Libor + 4%	0.27%	0.35%	0.37%	0.99%		1.09%		1.05%		1.06%		0.95%	
Verus	-1.86%	-0.90%	-0.52%	-3.24%		0.00%		0.00%		0.00%		0.00%	
Standard Life GARS	-1.86%	-0.90%	-0.52%	-3.25%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Libor + 4%	0.27%	0.35%	0.37%	0.99%		0.00%		0.00%		0.00%		0.00%	
Verus	-2.54%	0.46%	-0.67%	-2.76%		-7.41%		-15.95%		2.55%		0.00%	
SSARIS Multisource Commodity	-2.54%	0.46%	-0.67%	-2.75%	-0.01%	-7.41%	0.00%	-15.95%	0.00%	2.55%	0.00%	0.00%	0.00%
Bloomberg Commodity	-1.68%	-1.63%	3.82%	0.42%		-10.52%		-14.47%		4.66%		0.00%	
S&P Goldman Sachs Commodity	-5.17%	-2.01%	4.93%	-2.49%		-16.63%		-19.30%		8.73%		0.00%	
Verus				1.47%		2.44%		2.98%		5.31%		3.22%	
INVESCO Real Estate				1.47%	0.00%	2.50%	-0.06%	2.96%	0.02%	5.26%	0.00%	3.28%	-0.06%
NCREIF NFI ODCE Index				2.18%		3.34%		3.68%		3.82%		3.40%	
Verus				-0.19%		0.00%		0.00%		0.00%		0.00%	
Invesco US Val IV				-0.19%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NCREIF CEVA 1Q Lag - NET				2.18%		0.00%		0.00%		0.00%		0.00%	
Verus	-0.03%	0.67%	3.98%	4.65%		-2.87%		-7.67%		-2.66%		3.94%	
AQR GRP, 10% Volatility (Net)	-0.03%	0.67%	3.98%	4.65%	0.00%	-2.87%	0.00%	-7.67%	0.00%	-2.67%	0.00%	3.84%	0.10%
60% R3000/ 40% BC Agg	-2.84%	0.26%	4.59%	1.89%		3.54%		-3.89%		-0.59%		1.81%	
60% MSCI World/ 40% BC GlobalAgg	-3.00%	-0.06%	4.40%	1.21%		3.37%		-4.60%					
Verus	1.79%	2.11%	4.13%	8.22%		-0.50%		-3.78%		-5.34%		6.23%	
PanAgora (Net)	1.79%	2.11%	4.13%	8.23%	-0.01%	-0.50%	0.00%	-3.78%	0.00%	-5.33%	-0.01%	6.14%	0.09%
60% R3000/ 40% BC Agg	-2.84%	0.26%	4.59%	1.89%		3.54%		-3.89%		-0.59%		1.81%	
60% MSCI World/ 40% BC GlobalAgg	-3.00%	-0.06%	4.40%	1.21%		3.37%		-4.60%					

1 MSCI

1.1 MSCI US MARKET BREAKPOINTS

Break Point*	Companies included
Large Cap	1-200
Medium-Large Cap	201-550
Medium Cap	551-750
Medium-Small Cap	751-2500
Small Cap	2501+

*MSCI only categorizes equities per size into large, mid and small cap. For InvestorForce Report analytics coherence regarding domestic benchmarks the buffer zones of the mid-cap category are used to determine Medium-Large and Medium-Small Cap categories.

As Of	Large Cap	Medium Large Cap	Medium Cap	Medium Small Cap	Small Cap
3/31/2016	15.358	9.43	4.548	2.591	0
12/31/2015	16.507	9.968	5.069	2.917	0
9/30/2015	16.507	9.968	5.069	2.917	0
6/30/2015	15.288	9.09	4.506	2.596	0
3/31/2015	15.356	9.083	4.491	2.577	0
12/31/2014	15.356	9.083	4.491	2.577	0

Number in billion USD

InvestorForce Report reflects changes in the MSCI breakpoints once MSCI publishes new breakpoints. For months when no new breakpoints are published always the last breakpoints are applied. Changes usually but always happen around re-balancing of the indexes. Some index reviews do not contain changes to the market-cap breakpoints.

1.2 MSCI DEVELOPED AND EMERGING MARKET BREAKPOINTS

In case of MSCI Indexes to define the Size - Segment Indexes for a market, the following free float - adjustedmarket capitalization Market Coverage Target Ranges are applied to the Market Investable Equity Universe:

Break Point	Companies included
Large Cap Index	70% ±5%
Standard Index*	85% ±5%
Investable Market Index**	99%+1% or -0.5%

* Standard Index (Large+Mid)

**Investable Market Index (Large+Mid+Small)

MSCI Country Classification can be found here: <https://www.msci.com/market-classification>

For Emerging Markets, the Global Minimum Size Reference is set at *one-half* the corresponding level of full market capitalization used for the Developed Markets for each size-segment.

As Of	Large Cap DM	Large Cap EM	Medium Cap DM	Medium Cap EM	Small Cap
3/31/2016	14.077	7.0385	5.046	2.523	0
12/31/2015	14.077	7.0385	5.046	2.5230	0
9/30/2015	14.883	7.4415	5.359	2.6795	0
6/30/2015	14.883	7.4415	5.359	2.6795	0
3/31/2015	13.368	6.684	4.781	2.3905	0
12/31/2014	13.368	6.684	4.781	2.3905	0

Number in billion USD

InvestorForce Report shows changes in the MSCI breakpoints once MSCI publishes a new one. For months when no new breakpoints are published always the last breakpoint is applied. Changes usually happen around re-balancing of the indexes.

2 RUSSELL US BREAKPOINTS

The market capitalization breakpoints that appear in the Market Capitalization Chart are defined by the Russell 3000 Index and change for each period end. Russell calculated the total market capitalization of each security for the end of the period, based on the total shares and price, to determine whether it is large enough for inclusion in one or more of the Russell Breakpoints.

Once the market capitalization for each security is determined, each security is then placed in the appropriate market capitalization breakpoint. A market capitalization breakpoint is determined by the break between the companies below.

Break Point	Companies included
Large Cap	50 Largest US Companies
Medium Large Cap	Next largest 150 US Companies
Medium Cap	Next largest 300 US Companies
Medium Small Cap	Next largest 500 US Companies
Small Cap	All US Companies below 1,000 largest

After the breakpoints are determined by the ranges above, new members are assigned on the basis of the breakpoints and existing members are reviewed to determine if they fall within a cumulative 5% market cap range around the new market capitalization breakpoints. If an existing securities market cap falls within this 5%, it will remain in its current index rather than move into a new market capitalization based index.

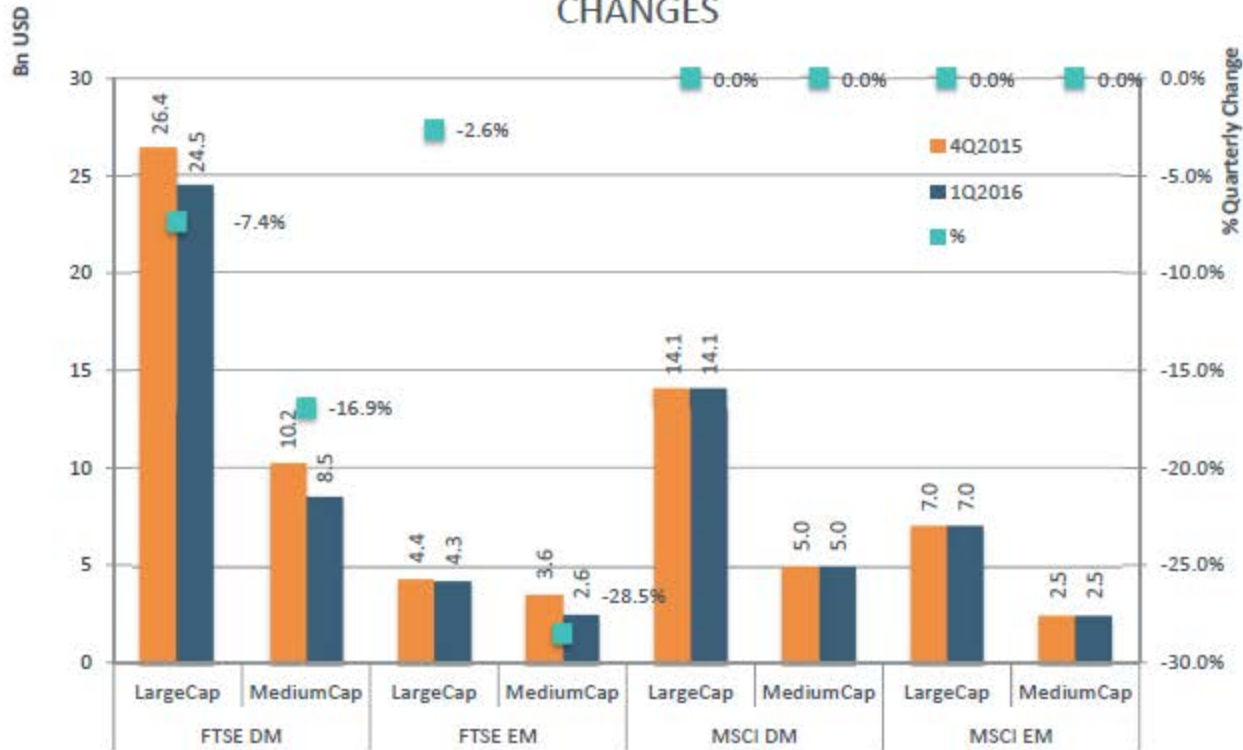
As Of	Large Cap	Medium Large Cap	Medium Cap	Medium Small Cap	Small Cap
3/31/2016	83.360	22.414	7.435	2.395	0
12/31/2015	90.075	24.308	8.141	2.936	0
9/30/2015	88.944	23.139	7.993	2.946	0
6/30/2015	92.87	25.07	8.797	3.352	0
3/31/2015	93.082	25.494	8.794	3.384	0
12/31/2014	89.92	25.19	8.51	3.29	0
9/30/2014	84.51	24.44	7.97	3.04	0
6/30/2014	80.39	23.62	8.07	3.24	0
3/31/2014	76.77	23.15	7.83	3.06	0
12/31/2013	77.11	22.27	7.65	3.03	0
9/30/2013	72.4	19.93	7.15	2.71	0

As Of	Large Cap	Medium Large Cap	Medium Cap	Medium Small Cap	Small Cap
6/30/2013	68.47	19.36	6.48	2.46	0
3/31/2013	64.31	18.64	6.39	2.39	0
12/31/2012	58.45	16.8	5.75	2.13	0
9/30/2012	57.06	16.48	5.49	2.08	0
6/30/2012	55.65	16.13	5.14	1.99	0
3/31/2012	57.58	16.43	5.55	2.13	0
12/31/2011	51.97	14.66	4.93	1.93	0
9/30/2011	45.35	13.88	4.38	1.66	0
6/30/2011	54.25	15.95	5.66	2.16	0
3/31/2011	52.22	15.69	5.7	2.16	0
12/31/2010	49.54	14.8	5.16	2.04	0
9/30/2010	42.83	13.13	4.64	1.8	0
6/30/2010	39.95	11.58	4.1	1.59	0
3/31/2010	42.43	12.61	4.3	1.68	0

Numbers are billions USD

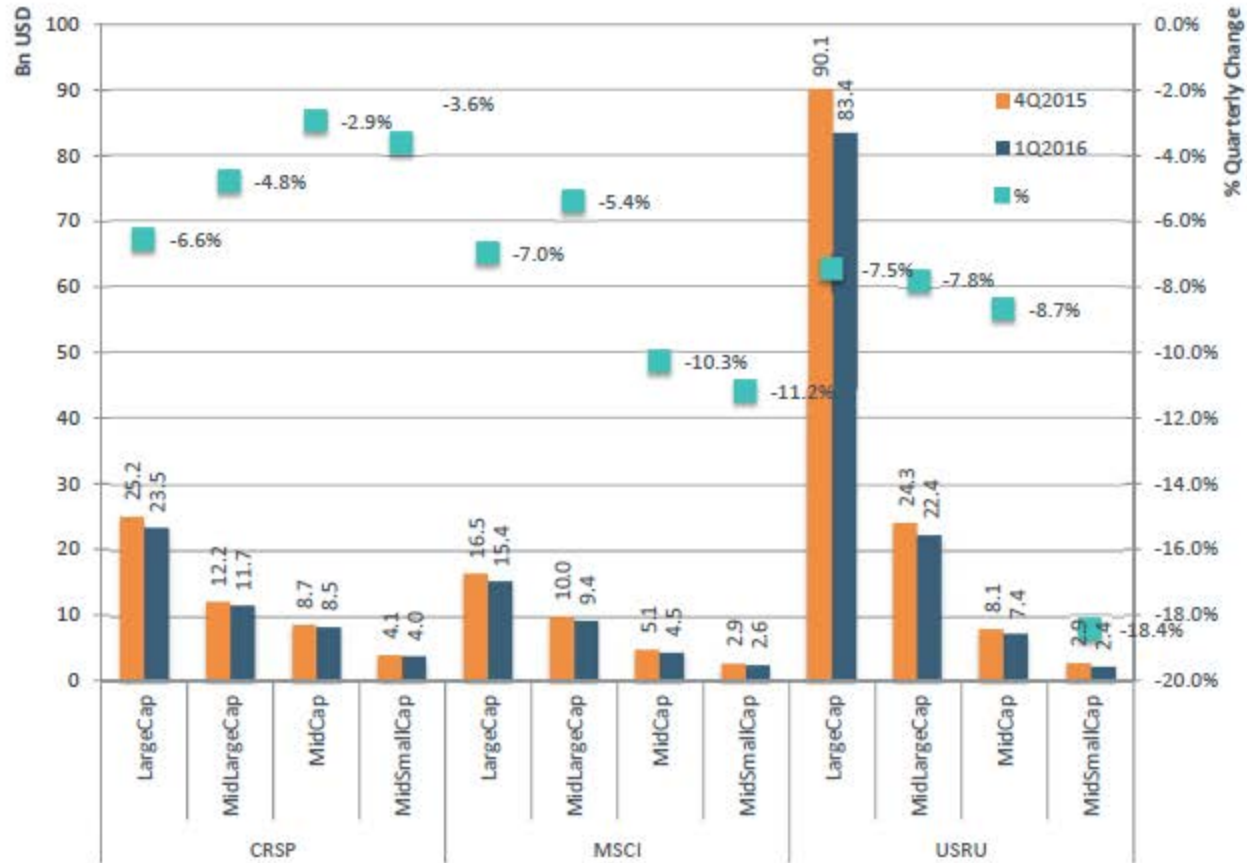
BREAKPOINT TRENDS

1Q2016 DEVELOPED AND EMERGING MARKET BREAKPOINT CHANGES



MSCI is releasing market capitalization breakpoints less frequently than FTSE, hence the market capitalization breakpoints are longer in effect, showing as no change.

1Q2016 US MARKET BREAKPOINT CHANGES*



*Represents US Market data from MSCI.

Glossary

Allocation Effect: An attribution effect that describes the amount attributable to the managers' asset allocation decisions, relative to the benchmark.

Alpha: The excess return of a portfolio after adjusting for market risk. This excess return is attributable to the selection skill of the portfolio manager. Alpha is calculated as: $\text{Portfolio Return} - [\text{Risk-free Rate} + \text{Portfolio Beta} \times (\text{Market Return} - \text{Risk-free Rate})]$.

Benchmark R-squared: Measures how well the Benchmark return series fits the manager's return series. The higher the Benchmark R-squared, the more appropriate the benchmark is for the manager.

Beta: A measure of systematic, or market risk; the part of risk in a portfolio or security that is attributable to general market movements. Beta is calculated by dividing the covariance of a security by the variance of the market.

Book-to-Market: The ratio of book value per share to market price per share. Growth managers typically have low book-to-market ratios while value managers typically have high book-to-market ratios.

Capture Ratio: A statistical measure of an investment manager's overall performance in up or down markets. The capture ratio is used to evaluate how well an investment manager performed relative to an index during periods when that index has risen (up market) or fallen (down market). The capture ratio is calculated by dividing the manager's returns by the returns of the index during the up/down market, and multiplying that factor by 100.

Correlation: A measure of the relative movement of returns of one security or asset class relative to another over time. A correlation of 1 means the returns of two securities move in lock step, a correlation of -1 means the returns of two securities move in the exact opposite direction over time. Correlation is used as a measure to help maximize the benefits of diversification when constructing an investment portfolio.

Excess Return: A measure of the difference in appreciation or depreciation in the price of an investment compared to its benchmark, over a given time period. This is usually expressed as a percentage and may be annualized over a number of years or represent a single period.

Information Ratio: A measure of a manager's ability to earn excess return without incurring additional risk. Information ratio is calculated as: $\text{excess return} / \text{tracking error}$.

Interaction Effect: An attribution effect that describes the portion of active management that is contributable to the cross interaction between the allocation and selection effect. This can also be explained as an effect that cannot be easily traced to a source.

Portfolio Turnover: The percentage of a portfolio that is sold and replaced (turned over) during a given time period. Low portfolio turnover is indicative of a buy and hold strategy while high portfolio turnover implies a more active form of management.

Price-to-Earnings Ratio (P/E): Also called the earnings multiplier, it is calculated by dividing the price of a company's stock into earnings per share. Growth managers typically hold stocks with high price-to-earnings ratios whereas value managers hold stocks with low price-to-earnings ratios.

R-Squared: Also called the coefficient of determination, it measures the amount of variation in one variable explained by variations in another, i.e., the goodness of fit to a benchmark. In the case of investments, the term is used to explain the amount of variation in a security or portfolio explained by movements in the market or the portfolio's benchmark.

Selection Effect: An attribution effect that describes the amount attributable to the managers' stock selection decisions, relative to the benchmark.

Sharpe Ratio: A measure of portfolio efficiency. The Sharpe Ratio indicates excess portfolio return for each unit of risk associated with achieving the excess return. The higher the Sharpe Ratio, the more efficient the portfolio. Sharpe ratio is calculated as: $\text{Portfolio Excess Return} / \text{Portfolio Standard Deviation}$.

Sortino Ratio: Measures the risk-adjusted return of an investment, portfolio, or strategy. It is a modification of the Sharpe Ratio, but penalizes only those returns falling below a specified benchmark. The Sortino Ratio uses downside deviation in the denominator rather than standard deviation, like the Sharpe Ratio.

Standard Deviation: A measure of volatility, or risk, inherent in a security or portfolio. The standard deviation of a series is a measure of the extent to which observations in the series differ from the arithmetic mean of the series. For example, if a security has an average annual rate of return of 10% and a standard deviation of 5%, then two-thirds of the time, one would expect to receive an annual rate of return between 5% and 15%.

Style Analysis: A return based analysis designed to identify combinations of passive investments to closely replicate the performance of funds

Style Map: A specialized form or scatter plot chart typically used to show where a Manager lies in relation to a set of style indices on a two-dimensional plane. This is simply a way of viewing the asset loadings in a different context. The coordinates are calculated by rescaling the asset loadings to range from -1 to 1 on each axis and are dependent on the Style Indices comprising the Map.

Disclaimer

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Verus will make every reasonable effort to obtain and include accurate market values. However, if managers or custodians are unable to provide the reporting period's market values prior to the report issuance, Verus may use the last reported market value or make estimates based on the manager's stated or estimated returns and other information available at the time. These estimates may differ materially from the actual value. Hedge fund market values presented in this report are provided by the fund manager or custodian. Market values presented for private equity investments reflect the last reported NAV by the custodian or manager net of capital calls and distributions as of the end of the reporting period. These values are estimates and may differ materially from the investments actual value. Private equity managers report performance using an internal rate of return (IRR), which differs from the time-weighted rate of return (TWRR) calculation done by Verus. It is inappropriate to compare IRR and TWRR to each other. IRR figures reported in the illiquid alternative pages are provided by the respective managers, and Verus has not made any attempts to verify these returns. Until a partnership is liquidated (typically over 10-12 years), the IRR is only an interim estimated return. The actual IRR performance of any LP is not known until the final liquidation.


Verus receives universe data from InvestorForce, eVestment Alliance, and Morningstar. We believe this data to be robust and appropriate for peer comparison. Nevertheless, these universes may not be comprehensive of all peer investors/managers but rather of the investors/managers that comprise that database. The resulting universe composition is not static and will change over time. Returns are annualized when they cover more than one year. Investment managers may revise their data after report distribution. Verus will make the appropriate correction to the client account but may or may not disclose the change to the client based on the materiality of the change.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

June 7, 2016

Agenda Item 6.3

TO: Board of Retirement

FROM: Doris Ng, Investment Analyst 

SUBJECT: Report on Real Estate Annual Manager Review

Staff Recommendation

Accept and review the report on the annual review of SamCERA's Real Estate manager.

Background

In April, SamCERA staff and consultant held annual review meeting in SamCERA's office for our real estate manager.

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

Discussion

INVESCO's Core Real Estate fund, an open-ended commingled pool which invests in institutional quality office, retail, industrial and multi-family residential real estate assets, was reviewed. SamCERA is also invested in the INVESCO U.S. Value-Add Fund. The majority of the meeting focused on the Core Real Estate fund as the Value-Add Fund was recently added in December 2015.

David Farmer, INVESCO's COO, announced his retirement in March 2016 for the following year. His responsibilities will be split into two positions, Chief Administrative Officer and Chief Financial Officer. There is no impact to the investment strategy.

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

Attachment

INVESCO Real Estate Annual Review Meeting Notes

Date of meeting: 4/14/2016

Location: SamCERA Office

Manager Representative(s)

Bill Grubbs (Portfolio Manager), Michelle Foss (Co-Portfolio Manager)

Verus Representative(s)

Margaret Jadallah

Client Representative(s)

Mike Coultrip (CIO), Scott Hood (CEO), Natalie Kwan Lloyd (Trustee), Doris Ng (Investment Analyst)

Product Description

Invesco Core Real Estate-USA Fund (the "Core Fund") is a perpetual life, open-end vehicle which invests in a diversified portfolio of institutional quality office, retail, industrial and multi-family residential real estate assets. The Core Fund buys core properties that are located within the United States, averaging investment sizes of \$100 million or more. Income is meant to be the largest component of return to the Core Fund over longer periods of time. Portfolio leverage is limited to 35%. SamCERA was a founding investor in the Core Fund in 2004.

Invesco-Value Add Fund (the "Value Add Fund") is a US closed-end, commingled value-add fund that had its final close in February 2016. Recently, SamCERA invested in the Value Add Fund in December 2015 to diversify its real estate exposure and add incremental return to this portion of the portfolio. The Value Add Fund invests to add value through both income and appreciation. Operational improvements to fundamentally sound but broken Core assets are additional drivers of return to this fund and asset class within real estate.

This review will focus primarily on the Invesco Core Fund.

Meeting Notes

Organization

Invesco has become a large investment management firm with assets under management of \$775 billion and more than 6,000 employees worldwide. Of this number, more than 750 are investment professionals. The client base is a mix of retail and institutional. Bill Grubbs continues to credit the leadership of CEO Marty Flanagan with the firm's expansion.

As of the December 31, 2015, the real estate platform had assets of \$64.4 billion. It has also become increasingly global both in terms of offices and product offerings. Invesco manages core open end funds in all three regions, North America, Europe and Asia. In addition to direct real estate investments, Invesco also offers U.S. and Global real estate securities (REIT) offerings, and has approximately \$25 billion in these vehicles. Within the real estate platform, most growth over the past year has occurred in European direct real estate followed by U.S. direct real estate.

In March 2016, David Farmer announced that after 30 years he will be retiring in March 2017. Farmer is COO and has not been involved in investments for about 10 years. His roles have been split into two positions – Chief Administrative Officer and Chief Financial Officer – with long time lieutenants identified for each position.

Investment Team

The structure of Invesco's real estate team emphasizes specialization and a focus on accountability. The Invesco Core Real Estate fund is overseen by three committees composed of senior professionals. The Investment Committee is responsible for approving acquisitions and sales. The Steering Committee governs the Fund's investment and governance policy. And the North American Direct Investment Strategy Group oversees execution, including market selection and sector allocation. In addition to the Portfolio Management Team, INVESCO employs professionals dedicated to a range of real estate specializations including research, acquisitions, financing, underwriting, closing and due diligence, asset management, and accounting and reporting.

Michelle Foss has been co-portfolio manager on the Core Fund with Bill Grubbs for about two years. She joined from Bailard where she was a core, open end real estate fund manager. She had worked with Bill previously at Prudential 20 years ago. Bill stated that Invesco continues to expand its real estate staff across the U.S. to the point where Dallas is no longer the dominant real estate presence for Invesco. Notably, the real estate team has grown in San Francisco and New York, where there are 20 and 30 professionals, respectively. (Bill Grubb has always been based in the Bay Area.) Grubb stated that a local presence in regions helps with off market purchases.

Investment Strategy

As stated above, SamCERA was one of the founding investors in the Invesco Core Real Estate fund in 2004. At that time there were 14 funds in the ODCE (open end, diversified, core peer group) and now there are approximately 25 funds in this peer universe. Among this group, Invesco is a more conservative fund offering with less leverage than the index and many of its peers. As a founding investor, SamCERA has benefited from lower fees than those paid by more recent investors. This fund is Invesco's largest and flagship real estate fund, and has assets of about \$10 billion. U.S. direct real estate assets in total were about \$26 billion at 12/31/15. The Core Fund has a queue of \$200 million now which they believe is manageable.

Four broad principles underlie Invesco's approach to core real estate investing. They seek to manage a diversified portfolio, both geographically and by property type. The portfolio holds office, industrial, retail and apartment properties. The portfolio maintains an income-oriented investment approach. Attractive markets and properties must offer investments that are "durable" with barriers to entry, in growing areas and liquid, meaning that it's possible to redeem if desired. They strive to have a conservative risk profile, with strong balance sheets, limited leverage and selective exposure to value add type investments. Invesco also strives to be transparent and efficient in client communication and reporting.

The investment process has both top down and bottom up elements. Invesco has long term strategic ranges for each property type with an overweight to apartments. They develop a view about different regions and cities and focus on specific target markets. Invesco is looking primarily at gateway cities and also up-and-coming markets. They are most selective in office and industrial properties, where they believe a market needs to have high value jobs and high barriers to entry to be attractive. Invesco also seeks to generate returns on a bottom up basis with property specific selection within their target property type ranges and preferred regions.

As mentioned, they will also selectively make value add investments (up to 15% allowed). But they do so only in cases where replacement cost is lower than purchasing an existing property. Value add investments are not made with the expectation of a quick sale, but of holding the property in the portfolio for purposes of generating income. While there are some value add investments in the Core Fund, there isn't overlap in exposure with the Value Add Fund. The Value Add Fund has higher return/risk expectations of 12-15% and, as a result, value add investments in the Core Fund don't meet the higher hurdle for inclusion in the Value Add Fund.

Performance & Positioning

Bill Grubbs discussed Invesco's outlook and positioning with a focus on the Core Fund where he is lead portfolio manager. There are big differences between winners and losers post-Great Financial Crisis, so geography and location is critical for success. Apartment pricing is high in some regions now to the extent that it is above replacement cost. However, they are starting to reduce office exposure and adding to apartments on the margin in certain geographies. Office exposure has been reduced because it is more volatile. Retail that tends to fare well in downturns was increased on the margin; Invesco prefers retail space that has grocery anchored tenants such as Whole Foods. Invesco's analysis includes a detailed review of tenant profiles. Almost all tenant profiles are strong from the cash flow and longevity standpoint.

On our meeting date, the Core Fund was closing on its first mall purchase which is a special situation. It's a purchase from a non-strategic seller who is exiting the space. The property is a Las Vegas mixed use mall near City Center which was jointly owned by a casino and middle eastern entity. Invesco purchased it at an attractive price. Simon is Invesco's 50% partner. Bill Grubbs stressed that Simon has a lot of experience in the luxury market.

As discussed in last year's review, Invesco has consciously upgraded the quality of its portfolio post-Great Financial Crisis. Grubbs views valuations of their investments as stable. Invesco believes we are in the late cycle, and is generally avoiding large assets in favor of more diversification. Invesco is locking in longer leases with new tenants in case rents moderate or decline. The team is selling properties where there are good gains (230 Park Ave.) and proactively writing down property values where warranted ahead of comp/appraisal changes. They believe the current market can yield 8-10% returns.

This strategy employs a moderate amount of leverage. As of the end of 2015, debt to total assets was 21%. They have maintained a longer duration than most peers. The weighted average remaining term on their debt was 7.8 years with an average contract interest rate of 3.7% at year-end. They have taken the opportunity in the current low interest rate environment to lock in low borrowing costs. The Core Fund has lower leverage and longer duration borrowing vs. the ODCE peer universe.

Over the past year ended 3/31/16, the Invesco Core Fund has underperformed ODCE but provided a strong absolute return (12.8% v. 13.7% for ODCE). This return is in line with Invesco's more conservative positioning.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

June 7, 2016

Agenda Item 6.4

TO: Board of Retirement

FROM: Doris Ng, Investment Analyst 

SUBJECT: Report on Annual Review of SamCERA's Core Equity Managers

Staff Recommendation

Accept and review the report on the annual reviews of SamCERA's Core Equity Managers.

Background

On May 5th, SamCERA staff held annual review meetings in SamCERA's office for our core equity managers (Blackrock and D.E. Shaw). Each meeting lasted approximately 1.5 hours, and consisted of a firm/organizational update, investment process review, performance review and attribution, and current positioning/market outlook.

Discussion

The Blackrock S&P 500 and EAFE Index Funds were reviewed first. There were some announced structural changes to the Beta Strategies business to reduce team size, reallocate resources and increase efficiency. Additionally, there were two announced senior-level retirements in the group, one occurred in April 2016 and another is planned for 2017. Next, the D.E. Shaw U.S. Broad Market Core Alpha Extension Fund, which is a 130/30 large-cap core strategy that seeks to identify market inefficiencies through quantitative analysis, was reviewed.

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

Attachments

- A. *Blackrock S&P 500 and EAFE Index Fund Annual Review Meeting Notes*
- B. *D.E. Shaw U.S. Broad Market Core Alpha Extension Fund Annual Review Meeting Notes*

Date of meeting: 5/5/2016

Location: SamCERA Office

Manager Representative(s)

Scott Dohemann (Head of US Product Strategy), Christian DeLeon (Americas Product Strategy), Laryssa Temnycky (Client Service)

Verus Representative(s)

Margaret Jadallah

Client Representative(s)

Mike Coultrip (CIO), Scott Hood (CEO), Lilibeth Dames (Analyst), Doris Ng (Analyst)

Product Description

BlackRock uses a full replication approach. They hold each stock in the same proportion in which they are represented in the S&P 500 Index and the MSCI EAFE Index, respectively. BlackRock monitors their funds daily to ensure that additions and deletions to the indexes, mergers and acquisitions, restructurings and other capitalization changes are made to the fund in such a way as to minimize tracking error and transactions costs.

Organization

BlackRock, founded in 1988, has risen to become the largest asset manager in the world through the growth of its legacy products as well as a series of strategic acquisitions. The two most significant deals were the mergers with Merrill Lynch Investment Managers (MLIM) in 2006 and Barclays Global Investors (BGI) in 2009. MLIM began managing assets in the UK in 1946 as part of S.G. Warburg & Co. (later known as Mercury Asset Management), and in the US in 1976 under the Merrill Lynch name. BGI traces its roots back to 1922, when its predecessor organizations, Wells Fargo Investment Advisors and Wells Fargo Bank, began managing US institutional assets. BGI was formed in 1995 from the merger of Barclays de Zoete Wedd Investment Management and Wells Fargo Nikko Investment Advisors. Other notable acquisitions include State Street Research & Management (2005), Quellos Group (2007) and R3 Capital Partners (2009). In addition to its asset management business, BlackRock provides risk management and advisory services through its BlackRock Solutions arm.

Total firm assets at 3/31/16 were \$4.65 trillion with \$3.0 trillion in beta strategies, of which index management is \$2.2 trillion. The S&P 500 Index Fund had \$301 billion and the EAFE Index fund had \$85 billion at year-end.

Year to date 2016, BlackRock has announced some meaningful structural changes to its businesses. The firm consolidated its fixed income business into a global unit, combined Fundamental Active Equity and Scientific Active Equity into a unified active equity business and streamlined its Beta Strategies business through simplifying and reducing team sizes. The firm is reallocating some resources to what they believe are future growth areas, including Multi-Asset Strategies.

Scott Dohemann discussed the recent changes to the Beta business. Head count was reduced by 3% across the firm because of reduced revenue and a desire to reinvest/reallocate firm resources for the future. Chris Bliss, the head of institutional portfolio management left the firm and his managerial responsibilities were split under Rachel Aguirre and Creighton Jue who will also continue to be involved in portfolio management. Colin Frost, head of global portfolio strategy, retired and was replaced by Kristen Dickey, a BlackRock veteran based in New York. Three portfolio managers were let go as part of the reduction in work force, but 56 portfolio managers remain in San Francisco.

Investment Team

Of note, Amy Schioldager, global head of beta strategies, also announced her retirement one year from now in 2017. She will be very much involved in choosing an appropriate successor. Amy has played an integral role in the firm's passive business and portfolio management effort for her entire career, so we will be monitoring this transition plan carefully. It is worth stating that Scott Dohemann has been and continues to be an experienced and knowledgeable client service contact to SamCERA.

BlackRock employs a large team of portfolio managers, research professionals, strategists and traders on its index team, which manages both institutional (index fund) and iShares applications. Most of these employees are located in San Francisco.

Investment Strategy

BlackRock focuses on three objectives in the management of its index funds: minimizing tracking error, minimizing transaction costs, and minimizing investment and operational risks. BlackRock believe that superior investment outcomes can most reliably be achieved through Total Performance Management – the management of return, risk, and cost. Blackrock employs quantitative management techniques through the use of sophisticated computer-driven models to ensure all ideas are theoretically sound and empirically valid.

There are multiple, small sources of tracking to the benchmark in index management. Commissions, taxes, market impact and cash drag are small detractors from performance. Securities lending and a tax advantage specific to international portfolios are persistent tailwinds.

Securities lending for both funds utilize conservative funds subject to SEC Rule 2a-7 which maintain an average dollar-weighted maturity of 90 days or less and prohibit money market funds from purchasing securities that have an effective maturity longer than 13 months.

Performance & Positioning

For the past year ended 3/31/16 both funds met their objectives (S&P 500 Fund 1.8% v. 1.8% for the S&P Index; EAFE Fund -8.0% v. -8.3% for the MSCI EAFE Index). There were no large sources of deduction from either fund. 6 bps through delayed successful litigation from the B of A/Merrill deal was the largest source of alpha for the S&P 500 Fund. The tax advantage of the EAFE Fund added 29 bps to returns. BlackRock's size and longevity in passive investing in the international markets allows the firm to pursue foreign withholding tax credits systematically.

During the annual review, Scott Dohemann talked generally about the importance of BlackRock's scale and the ability to cross trade as a means of cost reduction. Approximately half of fund flows can be crossed, and about half of index changes can be matched.

There are some nuances to their full replication approach. Both funds are fully replicated most days and most of the time. However, cost is a consideration in the return vs. tracking error decision and the team may wait for short period to replicate the index if the differences are small and the trade is not cost effective.

BlackRock is actively researching the addition of foreign listed companies into MSCI indices, in particular China A-shares and Chinese ADRs (ex., Alibaba Group). They are tiptoeing into building exposure because their research shows that there is still a lot that needs to be figured out. The firm is also conducting research into high frequency trading specific to liquidity and trading patterns. They've found that there has been more liquidity at the end of the day recently, not at the open, and have adjusted broker algorithms to account for this.

BlackRock has finished implementing new and enhanced systems for the team's portfolio managers which took about a year to complete. This comprehensive system was designed by portfolio managers, built internally, and incorporates the Aladdin risk and trading system. A noteworthy enhancement is that funds/portfolios with cash that needs to be invested are flagged automatically now which is a time saver for the portfolio managers.

Conclusion

The S&P 500 strategy successfully replicates the returns of the S&P 500 Index. The EAFE Index fund successfully replicates the MSCI EAFE Index. We consider BlackRock to be a top tier passive manager and will be paying close attention to BlackRock's restructuring as it relates to the indexing business.

Date of meeting: 5/5/2016

Location: SamCERA Office

Manager Representative(s)

Letitia Yang (client relations), on phone: Philip Kearns (Head of Structured Equity) and Jordan Drachman (Product Strategist)

Verus Representative(s)

Margaret Jadallah

Client Representative(s)

Mike Coultrip (CIO), Scott Hood (CEO), Lilibeth Dames (Analyst), Doris Ng (Analyst)

Product Description

The D. E. Shaw group believes that there exist some market inefficiencies that can be identified through quantitative analysis, advanced technology, and the insight of practitioners. Identifying these inefficiencies involves a process of hypothesis formulation, testing, and validation. Importantly, to avoid data-mining, the hypothesis formulation precedes the analysis of the historical data. D.E. Shaw's Structured Equity strategies rely largely on quantitative and computational investment techniques developed by the D. E. Shaw over the last two decades in the course of research conducted for purposes of managing the firm's hedge funds.

D.E. Shaw commits substantial resources to quantitative research and portfolio management. D.E. Shaw's investment process involves a suite of quantitative models, each designed to capitalize on a distinct and uncorrelated set of market inefficiencies. Some of these models are technical in nature and involve price and volume inputs. Other models rely on fundamental data, such as figures gleaned from corporate balance sheets or income statements. Still others, again quantitative, anticipate or react to a particular corporate event or set of events. These models typically operate with forecast horizons of a few weeks to many months. The ability to trade on shorter-term signals distinguishes D.E. Shaw from many of its quantitatively-oriented peers. Portfolio construction involves the use of a proprietary optimizer which runs dynamically throughout the trading day. D.E. Shaw builds broadly diversified portfolios with a modest over- and under-weighting of sectors and industries relative to the benchmark. The portfolio is constructed with the intention that most of the alpha be generated by security selection.

In December 2014, SamCERA changed D.E. Shaw's mandate from large cap long only (Broad Market Core Enhanced Plus) to a large cap core 130/30 mandate (Broad Market Core Alpha Extension) which uses the same basic methodology and alpha sources. In addition to allowing shorting, the targeted tracking error for the SamCERA portfolio increased from 200 to 300 bps.

Organization

D.E. Shaw & Co., L.P. ("DESCO") is the parent entity of D.E. Shaw Investment Management, L.L.C. ("DESIM"). D. E. Shaw's firm-wide assets under management were at \$38 billion as of April 1, 2016. DESIM manages the firm's benchmark relative Structured Equity strategies which currently stand at \$11.7 billion and represent a growing percentage of the firm's assets. Of this, slightly over half is invested in long only strategies (\$5.7B) with 130/30 strategies at \$4.6B.

In April 2015, Hillspire, LLC (the family office for Eric Schmidt of Google and his family) acquired Lehman Brothers Inc.'s 20% non-voting stake in D.E. Shaw & Co., L.P. ("DESCO"). Hillspire had been an investor in D.E. Shaw's funds for

several years. Letitia stressed that Schmidt is a passive owner who does not receive fee breaks or extra transparency because of his ownership. Firm ownership with this change last year was: 70% David Shaw, 20% Hillspire, Bank of America 4% and senior D.E. Shaw employees owning the rest (with low individual amounts). At the end of 2015, D.E. Shaw employees purchased the 4% ownership stake from B of A.

Last year about this time, D.E. Shaw spun out its back- and middle-office technology platform and related personnel into a new, independently operated company called Arcesium, LLC. The D.E. Shaw group is the majority owner of this offshoot firm, and Blackstone Alternative Asset Management owns a minority stake. Arcesium remains D.E. Shaw's trade operations (reconciliation, booking and verification) and accounting system. Arcesium is not a risk management or trade execution system and is not associated with D.E. Shaw's investment process. While ultimately Arcesium would like to have outside clients, they are focusing on the successful servicing of D.E. Shaw and Blackstone as clients for the time being.

Investment Team

The Structured Equity team harnesses the resources of DESIM and the broader D.E. Shaw organization. Quantitative resources include 1) 65 investment professionals with Ph.Ds., principally with backgrounds in math, physics and computer science, 2) a team of 50 quantitatively oriented research analysts, financial analysts and software developers, and 3) robust, proprietary technological tools for modeling and trading utilizing "cluster" servers and serviced by 250 IT professionals.

Philip Kearns, Ph.D. remains the Head of Structured Equity strategies and Orienteering. There were no senior changes to the investment team since SamCERA's last review. A senior trader was added to the Structured Equity platform from the firm's hedge fund side.

Investment Strategy

As described above, DESIM's Structured Equity strategies are underpinned by the firm's proprietary modeling, optimization and trading systems and a powerful computing network distributed across hundreds of "cluster" servers. These systems are continually reviewed and upgraded.

The Broad Market Core Alpha Extension (130/30) strategy is managed with the stated goal of constructing portfolios that are style and capitalization neutral. However, it is worth noting that the weighted average market cap can skew lower than that of the benchmark. Their investment approach allows for small out of benchmark weights which are typically lower cap. The optimizer will account for trading costs and, as a result, smaller cap stocks in small positions may continue to be held or only trimmed due to their higher trading costs. As of 3/31/2016, weighted average cap for SamCERA's portfolio was \$84B vs \$116B for the Russell 1000.

Portfolios are broadly diversified by position weight (currently about 2000 positions) yet maintain a high active share (currently 91.5%) compared to the Russell 1000 because of active position weight differentials. The portfolio is structured such that forecast specific and residual factors are the greatest contributors to return, and other factors, such as beta, sector and macro, are actively minimized.

The Structured Equity strategies, including the 130/30 strategy, should outperform in periods of high liquidity when transactions costs are low, and when there is moderate to high price dispersion among stocks. Conversely, the strategy will underperform when there is lower liquidity, lower intra-market volatility and lower cross-sectional dispersion.

Performance & Positioning

The Broad Market Core Alpha Extension Fund underperformed the Russell 1000 Index by 20 bps net of fees over the past year ended 3/31/16 (0.3% vs. 0.5% for the Russell 1000). Over the past five years, D.E. Shaw, using SamCERA's linked long only and 130/30 track record, outperformed by 90 bps net (12.3% vs. 11.4% for the Russell 1000)

The portfolio's 6% overweight to Consumer Cyclical is a larger sector deviation than normal and driven by stock forecasts for different alpha sources that aggregated at the sector exposure. While many other quantitatively oriented managers tend to have large momentum exposures, D.E. Shaw does not overweight that factor consistently. During Q1 2016, the portfolio had a lower exposure to momentum than the index which was additive to performance.

Philip Kearns described the past year as one that was fruitful for D.E. Shaw from a research standpoint. Four new stock forecast models were added to U.S. portfolios across quantitative, event driven and fundamental components of alpha. The firm reviewed its realized tracking error in depth and determined that it was systemically under predicted targets. They are working on increasing volatility through tweaking implied volatility inputs into the process. Lastly, the team is working on enhancing its "common investor risk" in order to improve its knowledge of the positioning of competitors (ex., hedge funds) and better avoid downside risk associated with owning positions that hedge funds are trading out of.

Letitia Yang provided detail on a performance fee structure that D.E. Shaw could implement for SamCERA should the Plan determine that it is preferable.

Conclusion

Verus believes that D.E. Shaw is a skilled investor that uses unique and differentiated sources of alpha, many derived from the firm's years as a successful hedge fund investor. The Broad Market Core Alpha Extension strategy has been additive to SamCERA's portfolio.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

June 7, 2016

Agenda Item 6.5

TO: Board of Retirement *Michael R Coultrip*
FROM: Michael Coultrip, Chief Investment Officer
SUBJECT: Presentation of Private Asset Semi-Annual Performance Reports as of December 31, 2015

Staff Recommendation

Accept and review Verus's semi-annual private equity and private real assets performance reports as of December 31, 2015.

Background

In August 2010, the Board of Retirement approved the implementation of SamCERA's private equity program. In October 2013, the Board of Retirement subsequently approved the implementation of SamCERA's private real asset program. Verus intends to provide a semi-annual private equity and private real asset performance report as of June 30th and December 31st of every year.

Discussion

As of December 31, 2015, SamCERA's private equity portfolio had a total market value of \$225.6 million (6.7% of SamCERA's total fund). From January 1, 2015 through December 31, 2015, SamCERA committed to three new funds for a total of \$38.0 million. This brought the sum of private equity funds in the portfolio to 19 with \$333.5 million in committed capital.

As of December 31, 2015, SamCERA's private real assets portfolio had a total market value of \$17.6 million (0.5% of SamCERA's total fund). SamCERA made its first commitment to real assets in July 2014. From January 1, 2015 through December 31, 2015, SamCERA committed to two new funds for a total of \$25 million. This brought the sum of private real asset funds in the portfolio to three with \$45 million in committed capital.

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

Attachments

- A. Verus Semi-Annual Private Equity Performance Report for Period Ending 12/31/2015
- B. Verus Semi-Annual Private Real Assets Performance Report for Period Ending 12/31/2015



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PERIOD ENDING: DECEMBER 31, 2015

Private Equity Review

San Mateo County Employees' Retirement Association

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— PE Portfolio Diversification by Geography			
— PE Portfolio Diversification by Industry			
— PE Portfolio Diversification by Vintage Year			

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

Private Equity Market Recap

Buyouts

- Despite moderate volatility in both the U.S. public and debt markets in 2015, entry pricing multiples continued to expand and set new records in U.S. Buyouts at 10.3x EBITDA, a function of persistent capital overhang. Moderately decreasing trend in leverage (58% of the capital structure) has led to improvement in credit ratios (5.6x Debt / EBITDA) and lower risk. These two trends, increasing prices financed by more equity versus debt, points to a downward pressure on future U.S. Buyout returns.
- Relative to the U.S., European Buyout pricing is both more stable and attractive (9.15x EBITDA in Europe versus 10.26x in the U.S. in 2015). However, driven in part by record setting capital raised post-GFC, European pricing levels have remained consistently high, approximately 2x EBITDA above 2006-07 levels.

Venture Capital & Growth

- In Venture Capital and Growth, unicorns (privately held companies valued above \$1 billion) continue to dominate the news cycles – more recently for some notable markdowns and down-round valuations, but also for continued increase in value for others.
- On the tails of relatively open exit markets in 2014 (over \$100B) and generally increasing portfolio valuations, VCs raised more capital in 2015 (over \$80 billion). Innovative companies exhibiting technical and market success notwithstanding, we note that investment risks generally continue through exit and distribution of capital back to LPs.

Asia & Rest of the World

- Buyout funds have attracted increasing amounts of capital in Asia over the last three years, but Growth and Venture Capital funds continue to generally dominate private equity investments outside the U.S. and Europe.
- Market activity and investment dynamics vary widely from region to region and across countries. One notable regional highlight included increased exit activity in Asia for a second year in a row (close to \$45 billion in 2015); and a notable lowlight, reduced fundraising activity in Latin America private equity (\$76 billion), driven by macro and political dynamics.

Market Commentary

- Nonetheless, capital overhang continues to persist outside the U.S and Europe as well (\$160 billion in Asia and over \$70B in Latin America and ROW), a function of LP demand for both high returns and diversification of such returns within private equity portfolios.

Secondary & Co-Investments

- In secondary markets, transaction volume persists at near record levels (\$40 billion), with pricing generally in the high-80s, close to record levels post-GFC.
- Continued maturing of the asset class has led to increased scrutiny of GPs by regulatory bodies, as well to LPs seeking ways to optimize future returns by reducing fees, both pre-investment when negotiating terms and post-investments via co-investment activities.

Outlook

- Historically over the long-term, private equity has generated higher returns relative to investments in public markets, with discrete fund commitments exhibiting high dispersion of returns.
- As the asset class matures and becomes more efficient, investors with more durable skills stand to benefit from the potential premium associated with private investments. We believe that these skills include prudence on the part of LPs in constructing portfolios, driven primarily by the selection of disciplined investment managers skilled in improving the operating metrics of privately held companies.

Sources: Preqin (2016 Global PE Report, Co-Investment Outlook, Secondary Market Update), Pitchbook, Federal Reserve Economic Data, Bloomberg, Multiple Sources, available upon request.

Investment Type	Policy Target	Policy Range	Market Value %	Market Value \$(000)	Unfunded Commitment \$(000)	Market Value + Unfunded \$(000)
SamCERA - Total Plan			100.0%	3,361,656		
Buyout (60% +/- 20%)	4.2%	3.2%-6.4%	3.9%	132,163	71,571	203,734
Venture Capital (20%, 0%-30%)	1.4%	0.0%-2.4%	1.8%	58,849	19,550	78,399
Debt-Related/Special Situations (20% +/- 10%)	1.4%	0.8%-2.4%	1.0%	34,574	42,782	77,356
Total Private Equity	7.0%	6%-10%	6.7%	225,586	133,903	359,489

Portfolio Summary

- As of December 31, 2015, the Private Equity Portfolio had a total market value of \$225.6 million, with \$132.2 million in Buyout, \$58.8 million in Venture Capital, and \$34.6 million in Debt-Related/Special Situations. Total market value is the current reported value of investments, excluding the remaining amount of unfunded commitments.
- All sub-asset classes, except Venture Capital, are below policy target as commitments continue to be made to new managers.

Portfolio Activity

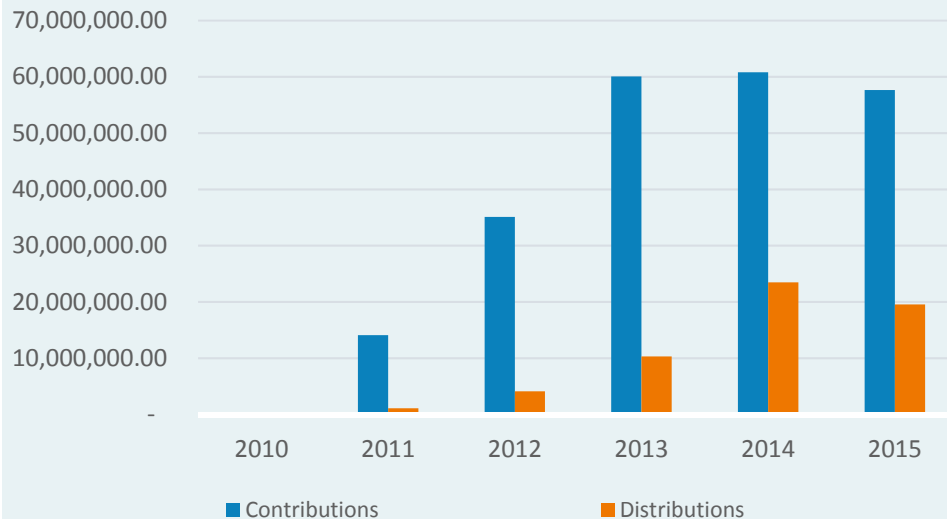
- From January 1, 2015 through December 31, 2015, SamCERA committed \$15.0 million to Catalyst Fund Limited Partners V, \$8.0 million to Emergence Capital Partners IV and \$15.0 million to JLL Partners Fund VII.

Performance

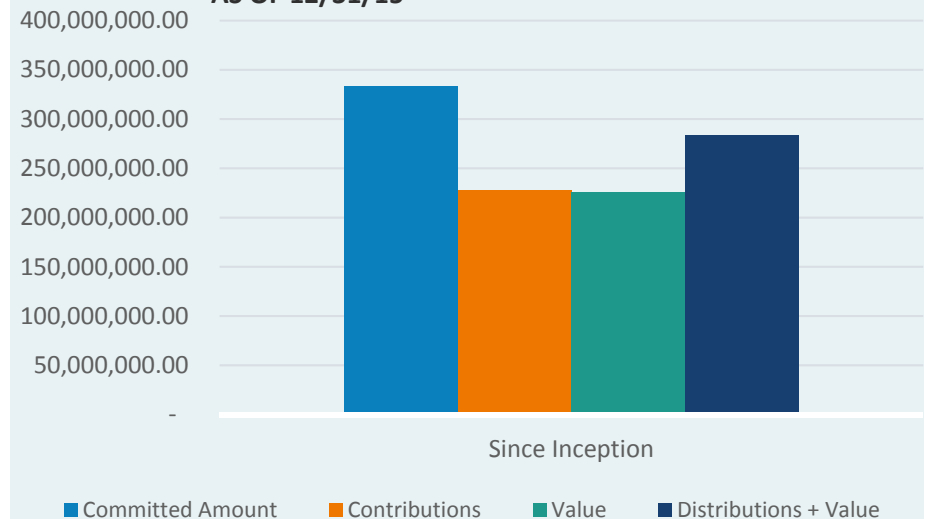
- The Private Equity portfolio’s performance, as measured by net IRR, is 13.84%. Capital weighted average investment age of the portfolio is 1.91 years.
- The portfolio is currently valued at \$225.6 million. Together with \$58.5 million in realized distributions, the Total Value at \$284.1 million is approximately \$56.2 million above \$228.0 million total capital contributions, resulting in a total value multiple of 1.25x and a distribution multiple of 0.26x.
- Attribution of returns:
 - Buyouts up \$38.6 million / +29.7% versus cost (Sycamore, ABRY VII, and Warburg Pincus XI leading), with 28.1% of Total Value of portfolio distributed;

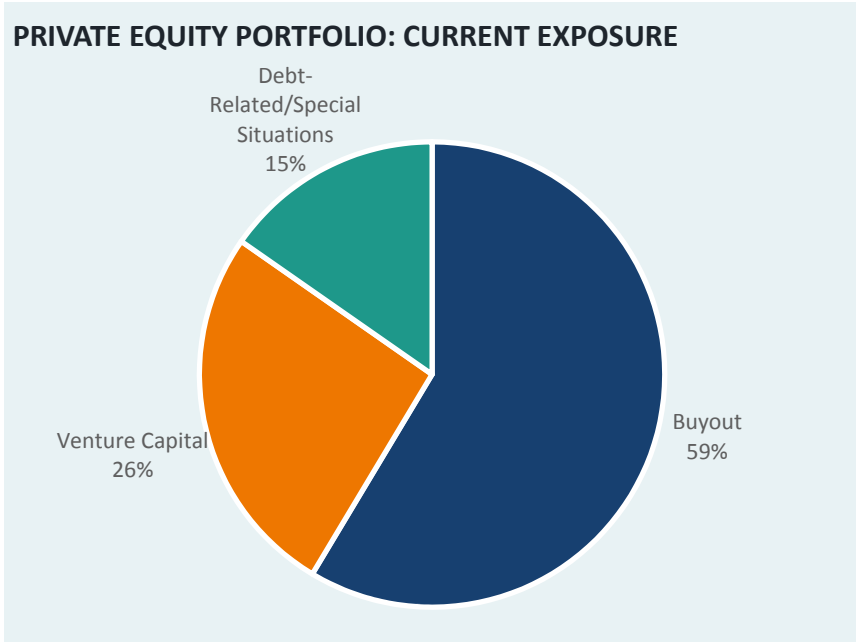
- Venture Capital up \$25.7 million / +74.3% versus cost (Third Rock III, General Catalyst VI, and Emergence Capital III leading), with 3.9% of Total Value of portfolio distributed; and
- Debt-related/Special Situations down \$8.1 million / -12.8% versus cost (negatively impacted by Sheridan II-B; however ABRY Advanced Securities II, Regiment Capital Special Situation V, and Catalyst Fund Limited Partners V are up \$6.4 million in aggregate / +18.7% versus cost), with 32.6% of Total Value of portfolio distributed.
- Within Private Equity, the current allocation of invested capital is 58.6% to Buyout, 26.1% to Venture Capital, and 15.3% to Debt-Related/Special Situations.

CASH FLOWS ON ANNUAL BASIS



CUMULATIVE CASH FLOWS AND VALUATION AS OF 12/31/15

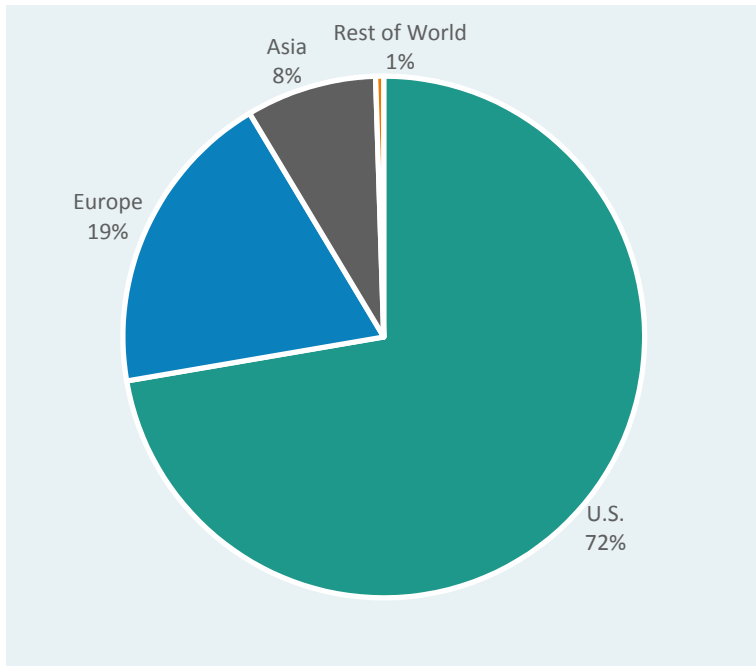




Geography

Portfolio Diversification

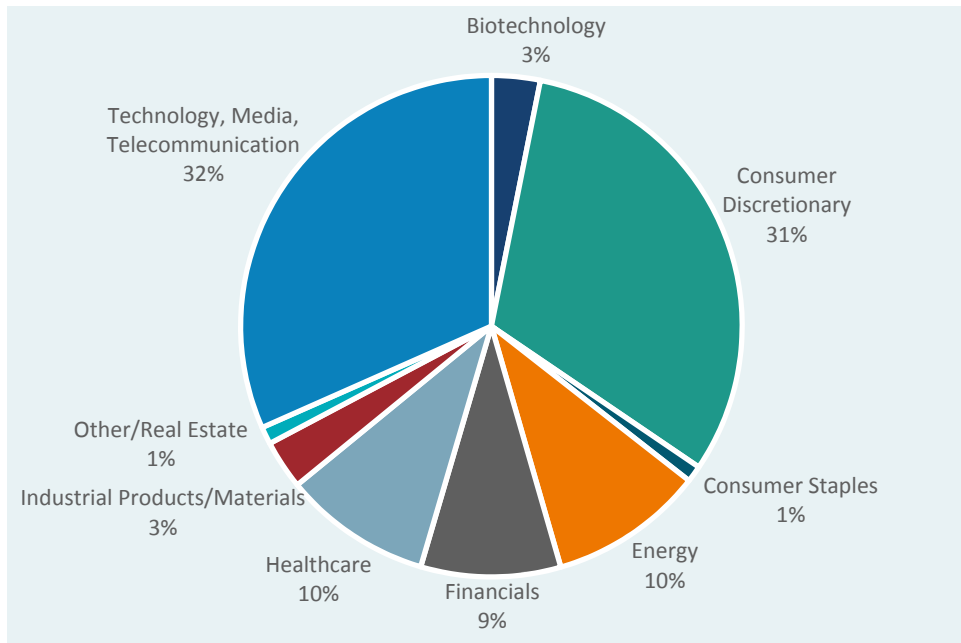
Period Ending: December 31, 2015



Based on the value of portfolio companies as of December 31, 2015, if provided by the partnerships.
Differences between reported value and the total portfolio valuation is due to temporary cash funds, fees, other expenses, and holdings with undisclosed geography breakdown.

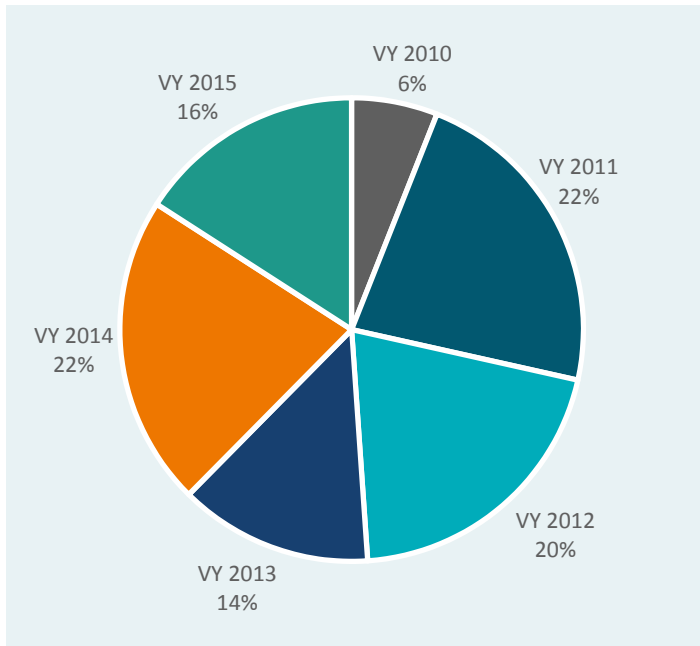
Industry Portfolio Diversification

Period Ending: December 31, 2015



Based on the value of portfolio companies as of December 31, 2015, if provided by the partnerships.
Differences between reported value and the total portfolio valuation is due to temporary cash funds, fees, other expenses, and holdings with undisclosed geography breakdown.

Vintage Year Portfolio Diversification



Material Exceptions to Policy Significant Events

- **As of December 31, 2015, the Private Equity Portfolio is slightly below the lower range of its target allocation, with exposures within target diversification bands.**

- **Significant drop in energy prices have impaired the current value of Sheridan Production Partners II-B. While significant hedges remain in place through 2017 per GP, ultimate value will depend on recovery of oil prices and its timing.**



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PERIOD ENDING: DECEMBER 31, 2015

Real Assets Review

San Mateo County Employees' Retirement Association

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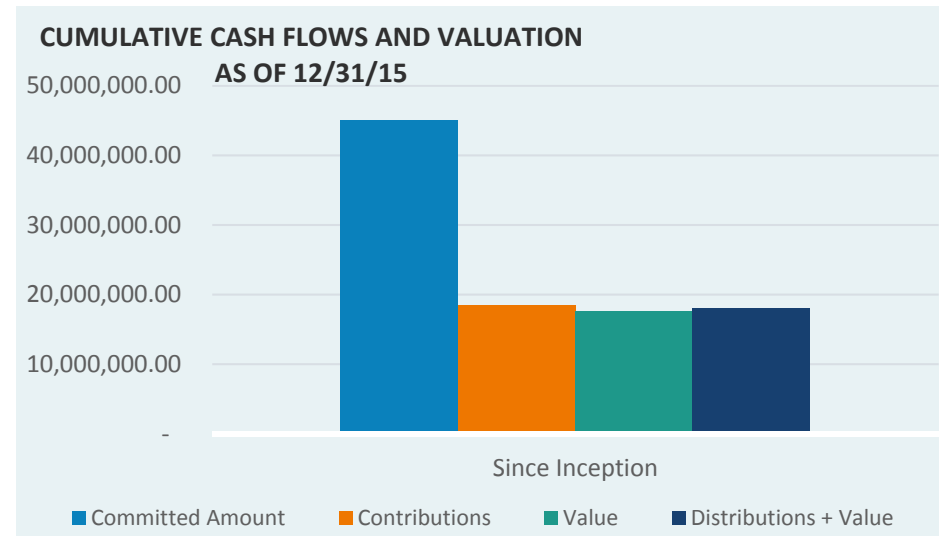
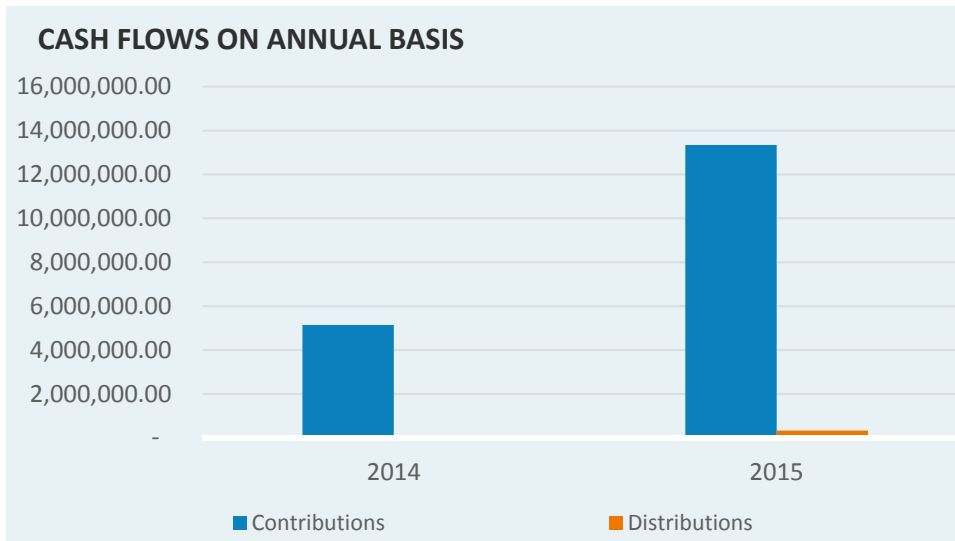
- PE Portfolio Diversification by Strategy
 - PE Portfolio Diversification by Geography
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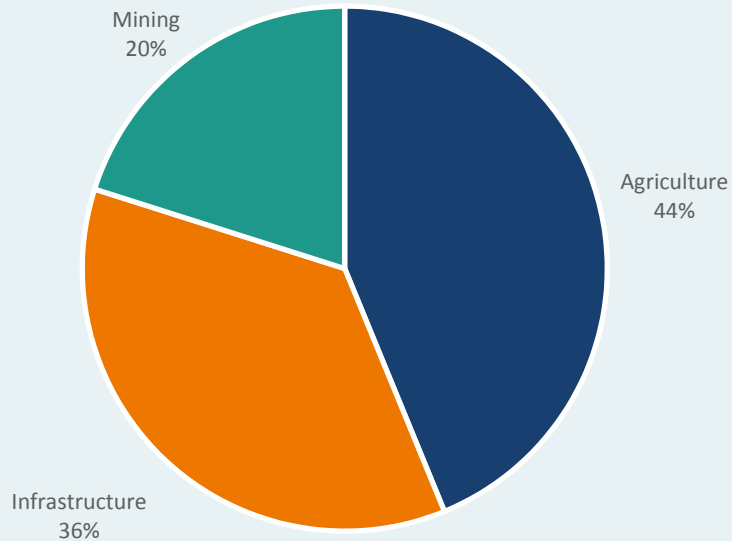
***Past performance is no guarantee of future results.** This document is provided for informational purposes only and is directed to institutional clients and eligible institutional counterparties only and is not intended for retail investors. Nothing herein constitutes investment, legal, accounting or tax advice, or a recommendation to buy, sell or hold a security or pursue a particular investment vehicle or any trading strategy. This document may include or imply estimates, outlooks, projections and other "forward-looking statements." No assurance can be given that future results described or implied by any forward looking information will be achieved. Investing entails risks, including possible loss of principal. Verus Advisory Inc. and Verus Investors, LLC ("Verus") file a single form ADV under the United States Investment Advisors Act of 1940, as amended.*

Performance

- With a capital weighted average investment age of less than one year (0.5 year,) the Real Assets portfolio is in the early stages of its investment period. Generally at this stage, payment of fees and the lack of sufficient portfolio maturity results in negative performance, a phenomenon known as “the J-Curve” effect.
- The portfolio is currently valued at \$17.6 million. Together with \$0.4 million in realized distributions, the Total Value at \$18.0 million is approximately \$0.5 million below \$18.5 million total capital contributions, resulting in a total value multiple of 1.0x and a net IRR of -5.46%.
- Within Real Assets, the current allocation of invested capital is 43.8% to Agriculture, 36.1% to Infrastructure, and 20.1% to Mining.



PRIVATE EQUITY PORTFOLIO: CURRENT EXPOSURE

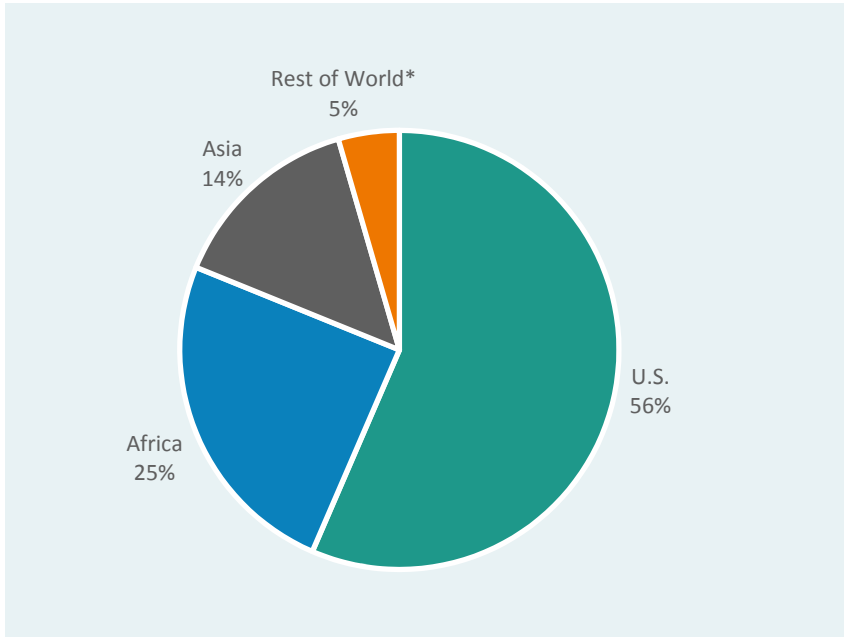


As of December 31, 2015, the Real Assets portfolio invested 43.8% to Agriculture, 36.1% to Infrastructure, and 20.1% to Mining. The Portfolio is expected to be diversified over a period of 3 to 5 years.

Geography

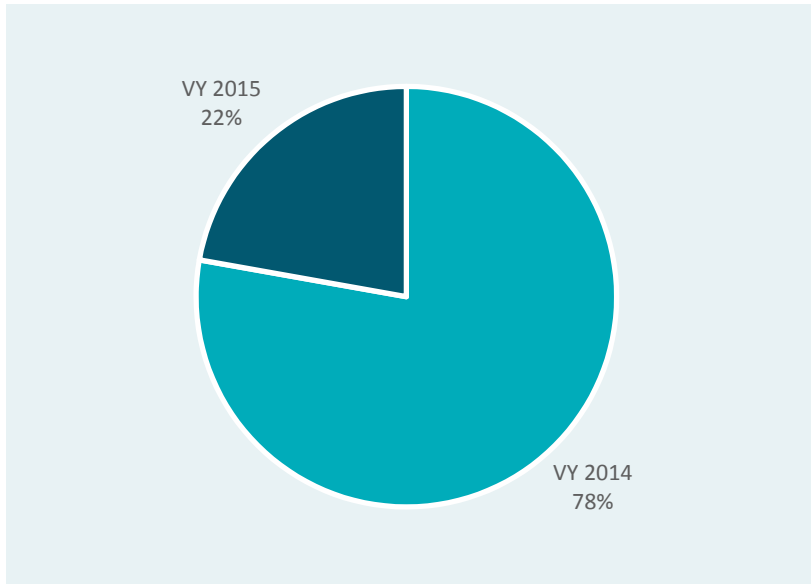
Portfolio Diversification

Period Ending: December 31, 2015



Based on invested capital as of December 31, 2015 if provided by the partnerships.

* Rest of World includes Chile.



As of December 31, 2015 due to the recent inception and lack of maturity of the program, the Real Assets portfolio was below its target diversification range. The Portfolio is expected to be diversified over a period of 3 to 5 years.

- As of December 31, 2015 due to the recent inception and lack of maturity of the program, the Real Assets Portfolio was below its target allocation and target diversification ranges.
- The Portfolio is expected to be diversified over a period of 3 to 5 years.
- No other significant events.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

June 7, 2016

Agenda Item 6.7

TO: Board of Retirement

Michael R Coultrip

FROM: Michael Coultrip, Chief Investment Officer

SUBJECT: Report on U.S. Core Small-Capitalization Equity Manager Search

Staff Recommendation

Provide direction to staff regarding next steps in the due diligence process to identify finalist small-capitalization core equity products for further consideration.

Background

During the strategic discussion of investments issues that took place during the December 2015 Board meeting, staff discussed various ways to simplify the domestic equity structure. One of the first steps that was discussed was to combine the assets from our two existing style-specific small-capitalization equity managers into a new, to-be-identified core small-capitalization equity strategy. This would reduce the number of managers in our domestic equity program by one, reducing the total number from 6 to 5 products.

During its February meeting, the Board instructed staff and consultant to develop a short-list of U.S. core small-capitalization managers for further review, with a primary focus on products that have exhibited consistent excess return objectives, low tracking error levels, and low management fees. Five managers were short-listed in this process, and due diligence questionnaires were sent to each of these firms.

Discussion

Staff and consultant reviewed the responses and followed-up with additional questions/clarifications to each of the managers. From this exercise, three of the strategies better match SamCERA's needs. These three strategies are compared in the attached report from Verus. Margaret Jadallah from Verus will review the report and answer any questions that the Board may have on this topic.

Attachment

Verus Small-Cap Core Manager Search – Due Diligence Questionnaire Comparison

Memorandum

To: SamCERA
From: Verus
Date: May 26, 2016
RE: Small Cap Core manager search – RFI comparison

Executive Summary

SamCERA's Board approved its Small Cap Core search after reviewing its current US equity small cap structure and deciding to reduce the small cap manager roster from two managers, one growth and one value focused, to one manager with a small cap core style.

The Small Cap Core search sought out specific parameters and attributes which were:

- 1) Lower tracking error compared to active, fundamental managers;*
- 2) History of consistently outperforming the Russell 2000 Index;*
- 3) Style consistency compared to the Russell 2000 Index, including similar market capitalization;*
and
- 4) Competitive fees in line with the strategy's risk profile.*

Using these criteria, Verus screened the entire universe of Small Cap Core managers in the eVestment Alliance universe. Of the ten small cap core manager that met all criteria, Verus and SamCERA Staff discussed the strengths and weaknesses of these managers and excluded a handful of them for qualitative reasons and relative risk/return rankings.

Five small cap core managers were then sent detailed RFIs:

- Chicago Equity Partners – Small Cap Core
- Delaware Investments – Small Cap Core
- DFA – US Small Cap Equity
- Northern Trust – NT Quality Small Cap Core
- QMA – US Small Cap Core Equity

Verus and SamCERA Staff reviewed RFI responses and ranked the five managers after comparing the strengths and weaknesses of each manager. Based on our assessment, three managers rose to the top. A summary comparison of these three small cap core managers is provided below. Verus and SamCERA Staff are continuing due diligence on DFA, Northern Trust and QMA.

Summary Comparison

Firm Name	Dimensional Fund Advisors	Northern Trust	QMA
Firm Inception Date	1981	1889	1975
Firm Total AUM	\$388 Billion	\$875 Billion	\$113 Billion
Proposed Strategy/Fund Name	U.S. Small Cap Equity Strategy	Quality Small Cap Core U.S. Fund	U.S. Small Cap Core Equity Strategy
Proposed Strategy Inception	June 1986	September 1999	October 2009

Strategy Description	DFA uses a market capitalization weighted approach to purchase a diversified group of value stocks excluding unfavorable stocks using various factors, such as low liquidity and low profitability	Northern Trust runs value and growth models to restrict poor quality investments into the portfolio, the remaining securities are purchased at target cap weights	QMA uses a bottom-up, quantitative approach based on fundamentals to determine the relative attractiveness of a stock relative to a broad universe with different factor weightings for value and growth companies
Number of Stocks	2027	2142	339
Median/Weighted Average Market Cap	Median \$519MM Wted Avg \$1974	Median \$531MM Wted Avg \$1900	Median \$1036MM Wted Avg \$1744
Proposed Strategy AUM	\$16.8 Billion	\$0.9 Billion	\$1.1 Billion
Small-Cap fund Capacity	DFA maintains they have enough capacity for the mandate	\$4-5 Billion	\$3 Billion
Team Size & # of Investment Professionals	750, including 152 investment professionals	86 investment professionals	201, including 45 investment professionals
Team Location	Austin, TX, with 11 offices in the US and worldwide	Chicago, IL with offices in 19 states and 22 international offices	Newark, NJ; secondary research office in San Francisco, CA
Separate Account Minimum Size	\$100 Million	\$25 Million	\$20 Million

Fees for Proposed Vehicle	Commingled Schedule: 36 bps Separate account: 35 bps	Commingled Schedule: 25 bps on first \$100M 20 bps on balance Separate account: 35 bps on first \$75M 25 bps on balance	Commingled Schedule: 55 bps on first \$50M 50 bps on balance Separate account: 60 bps on first \$100M 55 bps on balance
Liquidity	At 15 or 20% ADV liquidation would take less than 3 days	99% can be liquidated within 1 day; the remaining holdings would take 5-7 days at 15% and 20% ADV	1 day, at 15% and 20% ADV levels positions could be liquidated in 2-3 days
Historical Performance vs R2000 As of 3/31/16	1-Year: -5.3% vs -9.8% 3-Year: 9.2% vs 6.8% 5-Year: 9.1 vs 7.2%	1-Year: -5.4% vs -9.8% 3-Year: 9.1% vs 6.8% 5-Year: 9.0 vs 7.2%	1-Year: -6.7% vs -9.8% 3-Year: 10.7% vs 6.8% 5-Year: 11.8% vs 7.2%
Tracking Error	2-4%	1.5-2.5%	2-3%
Target Turnover	10-20%	15-30%	75-100%
Soft Dollar Policy	Does not use soft dollars	Uses soft dollars, Separate Account can be used with restriction against soft dollars	Does not use soft dollars

Correlation Matrix to existing managers

	DE Shaw	Brown Advisory	Barrow Hanley	Chartwell	The Boston Co	Northern Trust	QMA	DFA
DE Shaw	1.00	0.30	0.10	-0.04	-0.03	0.15	0.60	0.35
Brown Advisory	0.30	1.00	-0.02	0.07	0.38	-0.20	0.25	0.18
Barrow Hanley	0.10	-0.02	1.00	-0.05	0.39	-0.04	-0.30	-0.16
Chartwell	-0.04	0.07	-0.05	1.00	0.36	-0.12	0.01	-0.10
The Boston Co.	-0.03	0.38	0.39	0.36	1.00	0.10	-0.13	0.01
Northern Trust	0.15	-0.20	-0.04	-0.12	0.10	1.00	0.34	0.50
QMA	0.60	0.25	-0.30	0.01	-0.13	0.34	1.00	0.31
DFA	0.35	0.18	-0.16	-0.10	0.01	0.50	0.31	1.00

- Proposed investments shaded in blue

Next Steps

Verus and SamCERA Staff will continue in-depth due diligence, starting with an onsite visit to QMA's San Francisco office. We will report back to the Board with our findings at the July meeting.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

June 7, 2016

Agenda Item 6.8

TO: Board of Retirement



FROM: Michael Coultrip, Chief Investment Officer

SUBJECT: Discussion on SamCERA's Risk Tolerance and Direction to Staff

Staff Recommendation

Provide direction to staff and consultant regarding SamCERA's enterprise risk tolerance assessment.

Background

During the April Board retreat, Verus provided a session on our upcoming asset-liability study. They introduced the topic and reviewed the steps in the process, and showed a proposed timeline for the various stages of the study. According to this timeline, the first step is having an enterprise risk tolerance discussion. To help facilitate this discussion, on May 25th Verus emailed a risk tolerance survey to Trustees and select staff members.

Discussion


Margaret Jadallah from Verus will share the survey results and lead the discussion around SamCERA's risk tolerance assessment, and answer any questions that the Board may have on this topic. Survey results will be included in the Day-Of folder.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

June 7, 2016

Agenda Item 6.9

TO: Board of Retirement

FROM: Doris Ng, Investment Analyst 

SUBJECT: Report on Proxy Voting Summary for Quarter Ended March 31, 2016

Staff Recommendation

Accept the Proxy Voting Summary Report for the quarter ended March 31, 2016.

Background

Consistent with SamCERA's Investment Policy, investment managers are delegated authority for the voting of proxies. Managers have been providing staff with quarterly reports on all proxies cast.

The summary report is a more streamlined and robust aggregation of the various reports and shows an overview of the proxy voting conducted by SamCERA's domestic and international equity managers on SamCERA's behalf for the period.

On the summary page, the first table shows statistics of the proposals voted and how they were voted relative to management's or proxy advisor's recommendations. As the majority of proposals are typically cast in favor of management's recommendations, in the second table, we drill into the proposals cast against management's or proxy advisor's recommendations by proposal type.

Details of the subset of proposals voted against management's or proxy advisor's recommendations will be provided in the day-of-folder.

Discussion

Staff will present report at the Board meeting.

Attachment

Proxy Voting Summary Qtr Ended 3-31-2016

Qtr Ended 3/31/2016

Proxy Voting Summary Statistics

Investment Manager ¹	Strategy	Proposals		FOR	AGAINST	AGAINST
		Total	Not	Mgmt	Mgmt	Proxy
		Proposals	Voted	Rec	Rec	Advisor Rec ²
Baillie Gifford	International Growth	213	0	209	4	
Barrow Hanley	Large Cap Value	56	0	52	4	
Passive Core	S&P 500, EAFE	1775	82	1627	66	
Brown Advisory	Large Cap Growth	54	0	49	5	
Chartwell	Small Cap Growth	20	0	19	1	
Fidelity Institutional Asset Management	International Small Cap	376	158	203	15	
Mondrian ³	International Value	103	0	98	5	2
Mondrian ³	Emerging Markets					
	Equity Fund, L.P.	116	0	91	25	2
The Boston Company	Small Cap Value	50	0	45	5	6
Grand Total		2763	240	2393	130	10

¹ Note: Information not available for investment managers, D.E. Shaw and Eaton Vance Parametric, as related to the Large Cap Core 130/30 and Emerging Markets Core Equity portfolios, respectively.

² Information not available or applicable for all managers.

³ Voting rationale provided for only select proposals voted against management and/or proxy advisor due to manual process.

Votes Against Management or Proxy Advisor

Summary	Investment Manager								
	Baillie Gifford		Fidelity Institutional Asset Management		The Boston Company		Passive Core		Brown Advisory
Proposal Type		Barrow Hanley		Mondrian		Core	Chartwell		
Boards and Directors		3	13	3	4	36		5	64
Capital Structure, Mergers, Asset Sales and Other Special Transactions		1		5		6	1		13
General Corporate Governance Matters			1	3	1	6			11
Remuneration and Benefits		3	1	1	2	18			26
Grand Total		4	4	15	13	6	66	1	114

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

June 7, 2016

Agenda Item 7.1

To: Board of Retirement

From: Tat-Ling Chow, Finance Officer *Chow*

Subject: Discussion and Approval of SamCERA's Fiscal Year 2016-17 Budget

Staff Recommendation

Approve SamCERA's Fiscal Year (FY) 2016-17 Budget totaling \$36 million, an increase of \$3.4 million (or 11%) compared to the prior fiscal year.

<u>SamCERA Budget</u>	<u>FY 2016-17 Proposed</u>	<u>FY 2015-16 Adopted</u>	<u>Increase</u>	<u>% of Change</u>
Professional Services	\$ 23,145,914	\$ 20,559,150	\$ 2,586,764	12.6%
Administrative	6,821,723	6,614,586	207,137	3.1%
Technology	5,907,340	5,258,815	648,525	12.3%
Total budget - SamCERA	<u>\$ 35,874,977</u>	<u>\$ 32,432,551</u>	<u>\$ 3,442,426</u>	10.6%

Background

SamCERA's budget consists of three components: a professional services budget, an administrative budget, and a technology budget.

- **Professional Services Budget** (see Attachment 1) – provides an itemized summary of projected professional fees as authorized by Government Code §31596.1. This Code authorizes the Board of Retirement to expend funds from investment earnings of SamCERA's pension trust for specific professional services. These professional services include the following: Actuarial valuation, Custodial, Investment management, Investment consultation, and Legal services.

<u>Professional Services Budget</u>	<u>FY 2016-17 Proposed</u>	<u>FY 2015-16 Adopted</u>	<u>Increase</u>	<u>% of Change</u>
Investment Managers	\$ 22,193,414	\$ 19,671,150	\$ 2,522,264	12.8%
Non Investment Managers	952,500	888,000	64,500	7.3%
Total - Professional Services	<u>\$ 23,145,914</u>	<u>\$ 20,559,150</u>	<u>\$ 2,586,764</u>	12.6%

The professional services budget for the fiscal year ending June 30, 2017, is projected to be around \$23 million, which is \$2.6 million (or 13%) higher than the adopted budget for FY 2015-16. The increase primarily comes from the management decision to include the performance fee estimate of \$2 million as a new budget line item starting in FY 2016-17. In previous years, performance fees were not included in the budget but included in actual expenditures. The performance fee is a payment made to a fund manager generating positive returns, which is generally calculated as a percentage of investment profits.

- **Administrative Budget** – provides an itemized summary of projected administrative expenses. Government Code §31580.2(a) of the County Employees Retirement Law of 1937 limits SamCERA’s administrative budget to twenty-one hundredths of 1 percent (0.21%) of the accrued actuarial liability of the retirement system.

<u>Administrative Budget</u>	FY 2016-17 Proposed Budget	FY 2015-16 Adopted Budget	Increase/ (Decrease)	% of Change
Salaries and Benefits				
Salaries	\$ 3,352,710	\$ 3,182,525	\$ 170,185	5.3%
Benefits	1,686,813	1,676,717	10,096	0.6%
Total salaries and benefits	<u>5,039,523</u>	<u>4,859,242</u>	<u>180,281</u>	3.7%
Services and Supplies				
Board expense	10,500	10,500	-	0.0%
Insurance	80,000	80,000	-	0.0%
Medical record and hearing service	50,000	70,000	(20,000)	-28.6%
Member education	60,000	55,000	5,000	9.1%
Education and conference	137,800	140,800	(3,000)	-2.1%
Transportation and lodging	205,500	192,500	13,000	6.8%
Property and equipment	43,000	32,500	10,500	32.3%
General office supplies	45,000	45,000	-	0.0%
Postage and printing	70,000	90,000	(20,000)	-22.2%
Leased facilities	575,000	571,305	3,695	0.6%
County services	397,900	355,739	42,161	11.9%
Audit services	52,500	57,000	(4,500)	-7.9%
Other administration	55,000	55,000	-	0.0%
Total Services and Supplies	<u>1,782,200</u>	<u>1,755,344</u>	<u>26,856</u>	1.5%
Total administrative expenses	<u>\$ 6,821,723</u>	<u>\$ 6,614,586</u>	<u>\$ 207,137</u>	3.1%

The proposed administrative budget for FY 2016-17 is \$6.8 million, or 3%, higher than the adopted budget for FY 2015-16. This amount approximates to 17% of the total accrued actuarial liability of \$4 billion at June 30, 2015 (determined by the SamCERA’s actuarial firm, Milliman).

The growth in *salaries and benefits* of \$180,281, or 3.7%, is caused primarily by merit increases and the 3% negotiated salary increase in October 2016.

The overall increase in *services and supplies* of \$26,856, or 1.5%, is caused mainly by the following:

- Medical record and hearing service expenses are expected to decrease by \$20,000 based on current experience.
- Transportation and lodging expenses are projected to increase by \$13,000 to accommodate anticipated travel fee increases.
- Property and equipment expenses are estimated to rise by \$10,500 to cover replacement costs and new equipment purchases for new hires.

- Postage and printing expenses are expected to decrease by \$20,000 to align the budget with the actual business needs.
- County services are anticipated to increase by \$42,161 due to fee increases in workers' compensation insurance, legal services, and general liability insurance.
- **Technology Budget** (see Attachment 2) – provides an itemized summary of projected technology expenses authorized by Government Code §31580.2(b). The Code states that “Expenditures for computer software, computer hardware, and computer technology consulting services in support of these computer products shall not be considered a cost of administration of the retirement system.”

<u>Technology Budget</u>	<u>FY 2016-17 Proposed</u>	<u>FY 2015-16 Adopted</u>	<u>Increase</u>	<u>% of Change</u>
Computer equipment and software	\$ 200,000	\$ 200,000	\$ -	0.0%
Software license maintenance - IT infrastructure	230,340	223,700	6,640	3.0%
Electronic content management	500,000	500,000	-	0.0%
Technology infrastructure	200,000	150,000	50,000	33.3%
Contract IT Services - IT Infrastructure	503,000	498,000	5,000	1.0%
Leasehold improvements	20,000	20,000	-	0.0%
ISD budget	150,000	67,115	82,885	123.5%
Pension administration software system	4,000,000	3,500,000	500,000	14.3%
Technology research and development	<u>104,000</u>	<u>100,000</u>	<u>4,000</u>	4.0%
Total - Technology	<u>\$ 5,907,340</u>	<u>\$ 5,258,815</u>	<u>\$ 648,525</u>	12.3%

The technology budget for the fiscal year ending June 30, 2017, is projected to be \$6 million, which is \$0.6 million (or 12%) higher than the adopted budget for FY 2015-16. Areas with significant increases include the following:

- SamCERA allocates an additional \$50,000 for technology infrastructure. This amount is designated to increase the capacities of the existing infrastructure for emerging workloads and to create a robust business continuance and disaster recovery plan.
- Staff increases the Information System Department (ISD) budget by \$82,885 to finance special projects (such as an upgrade of the wireless connectivity to the County's computer systems) that require technical support from the County's ISD.
- Staff expects that the overall expense for the new Pension Administration Software System (PASS) is likely to increase by \$500,000. This represents the amount included in the contract with Vitech and is anticipated to be invoiced during the fiscal year.

Attachments

1. SamCERA's Professional Services Budget
2. SamCERA's Technology Budget

Attachment 1 - SamCERA's PROFESSIONAL SERVICES BUDGET

SamCERA employs professional investment managers to maximize its investment return and minimize related risks. Investment management fees are performance driven, primarily dependent upon the market value of the assets under management and the negotiated fee schedule of the individual investment management agreements. As the market value of the assets increase, so do management fees.

Investment management expenses for the fiscal year ending June 30, 2017, are budgeted to increase in proportion to the projected increases in market value of the assets under management. Such expenses/fees are netted against investment income for financial reporting purposes; however, they are reported at gross for budgetary purposes.

Other professional services expenses related to investments are driven by contractual agreements. Fees for the actuarial services, investment consulting services, and global custodian services are based on per-service and/or per-retainer as detailed in the individual contractual agreements.

The tables below summarize the fee estimates for services provided by investment managers and other professionals for the fiscal year ending 2016-17.

Investment Managers					
Investment Manager	Asset Class	Fee	Projected Investment Manager Fee	Projected Performance Fee	Total Projected Fee for FY 2016-17
Total Domestic Equity	Domestic Equity	31 bps	\$ 3,472,050	\$ -	\$ 3,472,050
Total International Equity	International Equity	38.8 bps	2,678,274	-	2,678,274
Total Domestic Fixed Income	Domestic Fixed Income	N/A	2,652,630	967,249	3,619,880
Total Global Fixed Income	Global Fixed Income	35 bps	349,310	-	349,310
Total Strategic Overlay	Strategic Overlay	N/A	148,000	-	148,000
Total Risk Parity	Risk Parity	37.4 bps	967,483	-	967,483
Total Real Estate	Real Estate	N/A	1,023,780	4,476	1,028,256
Total Commodities	Commodities	N/A	449,186	-	449,186
Total Hedge Funds	Hedge Funds	N/A	1,962,999	48,438	2,011,436
Total Private Equity	Private Equity	N/A	5,360,000	662,072	6,022,072
Total Private Real Assets	Private Real Assets	N/A	1,181,250	266,217	1,447,467
TOTAL		61.8 bps	\$ 20,244,963	\$ 1,948,451	\$ 22,193,414

Other Professional Fees			
Contractor	Service	Fee	Projected Fee for FY 2016-17
Milliman	Actuarial Consulting	0.3 bps	\$ 117,500
Segal	Actuarial Audit	0.1 bps	35,000
Verus Investments	Investment Consulting	1.3 bps	450,000
Northern Trust	Custodian	1.0 bps	350,000
TOTAL		2.7 bps	\$ 952,500

Investment Managers + Other Professional Fees		
Service	Projected Fee for FY 2016-17	Fee
Investment Managers	\$ 22,193,414	61.8 bps
Other Professional Fees	952,500	2.7 bps
TOTAL	\$ 23,145,914	64.5 bps

Performance of the investment managers is reviewed monthly and quarterly by the combined efforts of the investment consultants, the Chief Investment Officer, and the Board. Likewise, professional service expenses are reviewed quarterly to verify compliance with the respective contractual agreements.

Attachment 2 - SamCERA's TECHNOLOGY BUDGET

The table below provides details for the Technology Budget items:

Budget Item	Description	Amount
Computer Equipment <\$3,000 - Property & Equipment		
Computer Equipment and Software	SamCERA purchases equipment and software to meet the needs of SamCERA staff. This need is usually the result of feedback from staff and new technologies that would benefit SamCERA. Examples: purchasing extra licenses for hardware and software.	\$100,000
Electronic Board Materials	This budget item is for board members who have not gone electronic and for upgrades to existing devices. Staff will also be researching Agenda Management software to aid in the process of board packet assembly.	\$100,000
SUB TOTAL - Computer Equipment <\$3,000 - Property & Equipment		\$200,000
Software License Maintenance – IT Infrastructure		
PensionGold Yearly Maintenance	Required support and maintenance which includes about \$20,000 for web member services and \$80,000 for PensionGold.	\$100,000
PensionGold Enhancements	Enhancements include changes to PensionGold requested by staff and management. These changes improve customer service to SamCERA members. These changes may encompass support to staff during the implementation of the PASS in areas such as data conversion.	\$100,000
Dynamics Yearly Maintenance	Required yearly maintenance fee which provides SamCERA with 6 support calls to Microsoft per year and version upgrades as they are released.	\$3,000
Datawatch Yearly Maintenance	Required yearly maintenance fee which provides SamCERA with support and upgrades for 4 licenses of Datawatch Monarch software.	\$1,700
Sun Storage Support and Maintenance	Yearly Gold Support 7x24.	\$5,000
Website Support	Monthly support from Digital Deployment will be \$975/month for a yearly total of \$11,700.	\$12,000

Budget Item	Description	Amount
Kodak Scanners	Yearly maintenance agreement for two Kodak scanners, \$870 each.	\$1,740
Kofax Software	Yearly support and maintenance for Kofax Scanning Software.	\$2,500
Desktop Central	Yearly maintenance for patch management software.	\$400
Sharepoint (Vitech)	Yearly license cost for SharePoint Online used for collaboration with Vitech.	\$2,500
Atlassian	Yearly support and maintenance for Confluence and JIRA	\$500
Other Yearly Licenses	Other miscellaneous yearly license expenses	\$1,000
SUB TOTAL - Software License Maintenance – IT Infrastructure		\$230,340
Imaging Expense – IT Infrastructure		
Electronic Content Management (ECM) Phase 2	Phase 1 of the ECM project involved converting member documents from paper to electronic and importing them into the county HP Autonomy system. Phase 2 will analyze the other areas SamCERA could convert paper to digital, including Finance, Investments, and Administration. SamCERA will implement phase 2 using the County SharePoint software solution. This is not covered under any existing contracts so expenditure of these funds will require Board approval in the form of a contract with a vendor.	\$500,000
SUB TOTAL - Imaging Expense – IT Infrastructure		\$500,000
Server - IT Infrastructure		
Technology Infrastructure	Increase the capacities of the existing infrastructure to help SamCERA handle current and future workloads, in addition to creating a robust business continuance and disaster recovery plan.	\$200,000
SUB TOTAL - Server – IT Infrastructure		\$200,000
Leasehold Improvements		


Budget Item	Description	Amount
Suite Configuration	SamCERA is scheduled to relinquish suite 225 back to the landlord in March. Costs for uninstalling equipment may include: Data and Voice Cabling \$15,000 and ISD Project Management and labor charges \$5,000.	\$20,000
SUB TOTAL – Leasehold Improvements		\$20,000
Contract IT Services – IT Infrastructure		
PASS Oversight Project Management	The oversight project management is handled by LRWL. This amount is covered under an existing contract with LRWL, Inc.	\$400,000
Miscellaneous Consulting Fees	This budget item is for special projects that may need services from the county Information Services Department; consultation on expanding our technology infrastructure, such as backup systems, more power, more rack space in our file room, and possibly researching alternative offsite services in case of a disaster.	\$50,000
Penetration Testing of Web Services	SamCERA is working with ISD and a third party security consultant to conduct penetration testing of the PensionGold Web Member Services application to help SamCERA secure member information. SamCERA will also perform an independent penetration test of the new Vitech V3 products.	\$50,000
Printer Maintenance	Printer maintenance is performed by Computer Extras Xpress. They are on call for any problems with the printers including jamming, distortion, or just a failure of a printer, and perform routine yearly maintenance.	\$3,000
SUB TOTAL - Contract IT Services – IT Infrastructure		\$503,000
County		
ISD Budget	ISD Charges include network connectivity, remote access, mobile data, cell phones, network backup, and other related IT services offered by the county. The budget also includes some special projects such as the office space expansion and upgrade of the wireless connectivity to the county.	\$150,000
SUB TOTAL - County		\$150,000

Budget Item	Description	Amount
Other Special Department Expense		
Research and Development	This budget item allows SamCERA to continue to evaluate and experiment with ideas and technologies that may benefit the SamCERA board, staff, and membership.	\$100,000
Norex Subscription	Technology research resources.	\$4,000
SUB TOTAL – Other Special Department Expense		\$104,000
Capital Asset – Software		
Pension Administration Software System (PASS)	The overall estimate of the PASS project over from FY 2013-14 through FY 2016-17 is not to exceed \$9.5 million for the contract with Vitech, which includes licensing, hosting, development, testing and implementation among other tasks. The total project cost incurred since inception through FY 2015-16 is about \$5.2 million. This amount represents the remainder of the contract expected to be invoiced during the fiscal year.	\$4,000,000
SUB TOTAL - Capital Asset – Software		\$4,000,000
TOTAL		\$5,907,340

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

June 7, 2016

Agenda Item 7.2

TO: Board of Retirement
FROM: Scott Hood, Chief Executive Officer 
SUBJECT: Approval SamCERA's 2016-17 Strategic Plan

Staff Recommendation

Approve SamCERA's Strategic Plan for Fiscal Year 2016-2017.

Background

The Strategic Plan is the product of staff's annual retreat and subsequent discussions. It represents the best thinking of staff regarding those tasks that should be undertaken during the 2016-17 Fiscal Year in order to fulfill the mission and goals of SamCERA.

Discussion

The Strategic Plan contains both new action items and items from 2015-16 that have been carried over to the current fiscal year as they merit further action. (Attachment A) Items beginning with "17" are the new items added for fiscal year 2016-17. The Strategic Plan Dashboard depicts the tasks to be undertaken during 2016-17 in a more compressed fashion. (Attachment B)

Staff continues to improve upon the strategic planning process, and many of the items added this year are more strategic in nature. Each of the tasks in the Strategic Plan Action Matrix is tied to the achievement of one or more of SamCERA's Mission & Goals. This connection to our goals is further reflected in the Dashboard.

Attachments

- A- Strategic Plan FY 2016-2017
- B- Strategic Plan Dashboard FY 2016-2017



San Mateo County Employees' Retirement Association

Strategic Plan

2016-17 UPDATE

Executive Summary

This is an update of SamCERA's Strategic Plan, which covers the fiscal year 2016-17.

Some projects identified in this plan will extend beyond that time period. The update includes this summary and the Action Plan Matrix, which lists and describes the projects staff will pursue during the year. All the steps in the Strategic Planning process leading up to the writing of the report were conducted as usual this year. All staff held a retreat in February 2016 and discussed the strengths, weaknesses, opportunities and threats facing SamCERA. The result of these discussions is the Action Plan Matrix below.

This year's Action Plan Matrix also includes an estimated completion timeframe for each action item as well as the two categories added in FY 15: (1) "Lead," which identifies the individual responsible for coordinating that particular action item, and (2) "End State," which describes the conditions which must be met before that action item can be considered "done."

Staff will provide periodic status updates to the plan during the year.

During the 2016-17 fiscal year SamCERA will continue to pursue its three major goals, all of which are derived from and consistent with SamCERA's mission statement.

SamCERA Mission

SamCERA exists to serve as loyal fiduciary for its members and as prudent administrator of the retirement system.

Asset Management Goal

Prudently manage the assets in order to appropriately fund the actuarial liabilities of the retirement system, to ensure the ability to pay all earned benefits while minimizing the costs to employers.

New projects under this goal include performing a cost/benefit analysis to determine if SamCERA should add a risk system to the portfolio, developing an "inflation protection pool" asset class, working with IT to develop a streamlined tech solution to tracking investment manager reporting, developing a quarterly investment performance snapshot to provide employers and to determine whether standardized reporting can be implemented with our private equity managers.

Customer Services Goal

Provide caring, fair, accurate, timely and knowledgeable professional services and information to members and other stakeholders.

Over the coming year, meeting this goal will involve continuing to support the design, development and implementation of our Pension Administration Software System (PASS) during the final phase of the implementation project. Since this is our top priority no new projects were added to this specific goal.

Operations Goal

Constantly improve the effectiveness and efficiency of SamCERA's operations.

Operationally, SamCERA will continue to focus on the PASS implementation. Some related and supporting projects will also be undertaken. These include developing and executing a PASS communications plan to inform our stakeholders of the impending changes. Likewise, staff will undertake a transition of the retiree health accounting functions back to Human Resources and streamline a deduction method that will work with the new PASS system. Additionally, the IT and investment staff divisions will collaborate on finding a technological solution to track investment manager reporting.

Each goal has a number of specific projects designed to help achieve it. The projects incorporate ideas generated during all staff retreats beginning in 2005. The 2016-17 plan is SamCERA's eleventh under the Government Finance Officers' Association (GFOA) Strategic Planning approach. There are now 18 projects for the staff to initiate and/or complete during the 2016-17 fiscal year. There are two projects that will extend into the 2017-2018 fiscal year. As SamCERA staff improves upon the strategic planning processes more action items that are strategic in nature will appear on the list and those items will include items that are more tactical in nature. The net result will be that fewer items will appear in on the strategic plan. That said, the count of 20 tasks broadly understates the tasks ahead for the staff during the next few years as SamCERA continues with its Technology Modernization Project and specifically the Pension Automation Software System Implementation.

During the previous plan year, the staff completed 8 projects. Projects that were not completed but still relevant are continued on this current plan. In the previous 10 years, staff has completed a total of 210 projects, all over and above their regular duties.

2016-17 Action Plan Matrix

Ranking: A=Must be started and/or completed in FY. B=Should be completed in FY. C=Should be started in FY.

ID#	GOAL	RANK	TOPIC	PLANNED ACTIONS	DIVISIONS INVOLVED	LEAD	TIMING / STATUS	END STATE
14-3	Ops.	A	SamCERA must be prepared to react to all types of emergencies that might affect the ability of the association to fulfill its responsibilities.	<p>Staff will: Create a committee to meet every two months to review and recommend steps to improve safety and emergency preparedness. Annually review and update the Safety and Emergency Plans. Continue to hold table-top exercises at Staff Meetings. Document the technology emergency plan (for PensionGold, backups, etc.) Document the retiree payroll plan (PensionGold, moving funds, creating and sending files). Keep the emergency contacts information up to date.</p> <p>Committee to develop task list/milestones for coming year.</p>	Admin./All Divisions	Tariq	3 rd Quarter	SamCERA is prepared to respond to emergencies.
14-14	Cust. Serv.	B	Member education is a key to successful retirement planning and the most effective use of SamCERA benefits. Many members are without financial management knowledge. We should provide different types of education to members.	Continue strengthening member education programs. Include: Regular attendance at training/meetings of payroll clerks, use of website and advices to notify members of new information, update of the Survivor Handbook, use of more focus groups for publications, web site, etc.	Ben./Comm.	Gladys	4 th Quarter	Develop Member Education Master Plan.

ID#	GOAL	RANK	TOPIC	PLANNED ACTIONS	DIVISIONS INVOLVED	LEAD	TIMING / STATUS	END STATE
15-1	Ops.	A	No offsite disaster recovery location for critical technology.	Develop Plan.	IT	Tariq	1 st Quarter	Thorough disaster recovery plan for critical infrastructure technology is operational at another site.
16-1	Ops	C	New Technology Systems integration and training.	Develop a systems matrix identifying the system, system support personnel, options for training.	IT	Tariq	1 st Quarter	Systems training plan is developed.
16-2	Ops	A	Board Agenda Management.	Implement Board agenda management software.	Admin/IT	Tariq/Gladys	1 st Quarter	Agenda management software implemented.
16-3	Ops	B	Develop Resource Management Plan.	Coordinate and synchronize planning for staffing, space and budget. Discuss during staff retreat in January.	Fin/Admin	Gladys	3 rd Quarter	Resource Management plan implemented.
16-4	Ops	C	Enterprise wide records management.	Explore options to organize the various types of records maintained by SamCERA.	Admin/IT	Gladys	4 th Quarter	Develop approach to organize administrative records.
16-7	Cust Serv.	C	Maintain SamCERA's Culture.	Define SamCERA's culture. Identify ways to maintain the culture.	All	Elizabeth	4 th Quarter	Implement a program to maintain SamCERA's culture.
16-8	Asset Mgmt.	A	Review public equity manager structure.	Investigate options around modifying the public equity manager structure.	Inv.	Mike	1 st Quarter	The public equity manager structure is reviewed and recommended changes, if any, are implemented.

ID#	GOAL	RANK	TOPIC	PLANNED ACTIONS	DIVISIONS INVOLVED	LEAD	TIMING / STATUS	END STATE
16-11	Asset Mgmt.	A	Evaluate performance fee arrangement and the use of soft dollars.	Review current performance fee arrangements and the use of soft dollars and explore options available to improve the arrangement.	Inv.	Mike	1 st Quarter	Implement a process which considers fees and the use of soft dollars.
16-12	Ops	B	Our Internal Control procedures should be reviewed to insure they are appropriate for the changes in personnel and organizational structure.	Review internal control policies.	Fin	Tat-ling	3 rd Quarter	Internal control policies are reviewed and recommendations are implemented.
17-1	Ops	A	PASS Communications Plan.	Develop and execute SamCERA's member and employer communications plan regarding what to expect with the rollout of our new PASS system.	Admin/IT	Tariq	4 th Quarter	PASS Rollout with stakeholders informed.
17-2	Ops	B	Retiree Health Transition.	Develop and execute an implementation plan for the transition of retiree health accounting to the County and streamline county member deduction process. Coordinate with Human Resources staff and its retiree health vendor in regards to the accounting and deduction changes. Transition to be completed prior to the launch of the PASS system.	IT	Tariq	4 th Quarter	Effective transition of retiree health accounting and integration of a streamlined deduction process in V3.
17-3	Ops	C	Social Media Policy.	Develop a policy and procedure for SamCERA's use of social media.	Admin/Comm	Tariq	2 nd Quarter, FY 17-18	Effective social media policy implemented.

ID#	GOAL	RANK	TOPIC	PLANNED ACTIONS	DIVISIONS INVOLVED	LEAD	TIMING / STATUS	END STATE
17-4	Asset Mgmt.	C	Tech Solution for Investments.	Develop a technology solution to assist investment staff in the receipt and tracking of investment manager reporting. Explore the use of Sharepoint as a repository and granting of access to investment managers to deposit reports on an ongoing basis.	IT/Inv.	Tariq/Mike	4 th Quarter, FY 17-18	Implement a program to track investment manager reporting.
17-5	Asset Mgmt.	B	Enhanced Risk Analysis.	Perform a cost/benefit analysis to determine if it makes sense to add a risk system in our investment strategy.	Inv.	Mike	4 th Quarter	Risk System options are studied and evaluated.
17-6	Asset Mgmt.	A	Inflation Protection Pool.	Develop an "inflation protection pool" asset category to list all such assets for better tracking.	Inv.	Mike	3 rd Quarter	Inflation Protection Pool asset category is developed and Implemented.
17-7	Asset Mgmt.	B	Enhance Investments Onboarding/Staff Procedure Manuals.	Update and maintain investment staff procedure manuals.	Inv.	Mike	4 th Quarter	Proxy voting policy and procedures are reviewed and recommended changes, if any, are implemented.
17-8	Asset Mgmt.	A	Provide Employers More Frequent and High-Level Performance Updates.	Develop a quarterly one-page portfolio snapshot that can provide employers high-level performance data of SamCERA's investment portfolio.	Inv.	Mike	2 nd Quarter	Employers are provided a useful portfolio performance snapshot.
17-9	Asset Mgmt.	A	Standardize Private Equity Reporting.	Determine if standardized private equity reporting can be required from our private equity investment managers.	Inv.	Mike	2 nd Quarter	Research is completed on whether private equity managers can be required to report in a standardized manner.

Strategic Plan Dashboard

Project Lead	ITEM	TIMING							
		FY 2016-17				FY 2017-18			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
TA	17-1 Retiree health transition			X					
TA	17-2 Social media policy						X		
TA	17-3 PASS communications plan			X					
TA	17-4 Tech solution for investment info							X	
MC	17-5 Enhanced risk analysis				X				
MC	17-6 Inflation protection pool		X						
MC	17-7 Update manuals for investments				X				
MC	17-8 Quarterly investments snapshots		X						
MC	17-9 Standardize private eq. reporting		X						



17-series projects were developed for FY 2016-17.

as of 5/24/2016



X = completion date

X = projected completion date (ongoing project)

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

June 7, 2016

Agenda Item 7.3

TO: Board of Retirement 
FROM: Scott Hood, Chief Executive Officer
SUBJECT: Policy for Procurement and Contracting for Certain Goods and Services

Staff Recommendation

Adopt a resolution amending the "Policy for Procurement and Contracting for Certain Goods and Services."

Background

In April of 2015, the Board adopted a "Policy for Procurement and Contracting for Certain Goods and Services." ("Policy") The Policy delegates authority to the Chief Executive Officer to contract for supplies and services that relate to SamCERA's day to day operations. It mirrors the County's Departmental limits by granting the CEO the authority to sign agreements for services in amounts of \$100,000 or less. All purchases for County's supplies are done through the County's Purchasing Agent. SamCERA can, and does, use the services of the Purchasing Agent, but it is not required to do so.

In regards to investments, by separate delegation, the Board has delineated the Chief Executive Officer's ("CEO") authority to execute documents with our external investment managers in order to effectuate the Board's investment decisions and to respond to the demands of the day-to-day operations of the investments.

Discussion

There are certain investment related services that are not tied to a particular investment manager but are "investment related." These services include transition management and due diligence activities for proposed or existing investments, including but not limited to: background checks, trading costs, specified due diligence legal services and forensic accounting. Staff recommends that the Policy be further clarified that the CEO is delegated authority to enter in contracts for these types of investment related services.

The expenditures for all purchases and service agreements addressed in the Policy are included in the applicable budget, which is subject to Board approval.

Attachment

Resolution amending the "Policy for Procurement and Contracting for Certain Goods and Services."

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
RESOLUTION 2016-__

**RESOLUTION AMENDING THE "POLICY FOR PROCUREMENT AND
CONTRACTING FOR CERTAIN GOODS AND SERVICES."**

WHEREAS, pursuant to Government Code section 31520, the management of the retirement system is vested in the Board of Retirement ("Board"); and

WHEREAS, the Board has a fiduciary obligation to the retirement fund to conserve assets and protect the integrity of the fund, for the benefit of the members and beneficiaries of SamCERA; and

WHEREAS, this Board adopted a "Policy for Procurement and Contracting for Certain Goods and Services" so that the procurement of goods and services be undertaken in an efficient, diligent, transparent, economical, and fair manner; and further that authority be delegated to the Chief Executive Officer, or designee, to select vendors and enter into certain contracts without approval by the Board, as long as the expenditures for said purchases and service agreements are included in the applicable budget or budgets; and

WHEREAS, this Board finds that it is in the best interest of SamCERA that the Policy be amended to clarify that authority be delegated to the Chief Executive Officer for investment related matters such as transition management and due diligence activities for proposed or existing investments, including but not limited to: background checks, trading costs, specified due diligence legal services and forensic accounting; and

WHEREAS; this Board has read and desires to adopt the attached amended "Policy for Procurement and Contracting for Certain Goods and Services"; therefore, be it

RESOLVED that the Board of Retirement hereby approves the attached amended "Policy for Procurement and Contracting for Certain Goods and Services.

* * * * *

*Regularly passed and adopted, by the San Mateo County Employees' Retirement Association,
Board of Retirement, on June 7, 2016.*

Ayes, Trustees:

Noes, Trustees:

Absent, Trustees:

Abstain, Trustees:

BOARD OF RETIREMENT

POLICY FOR PROCUREMENT AND CONTRACTING FOR CERTAIN GOODS AND SERVICES

I. POLICY OF THE BOARD OF RETIREMENT

The management of the retirement system is vested with the Board of Retirement (“Board”) pursuant to Government Code Section 31520. Consistent with the Board’s fiduciary duty to conserve retirement fund assets, to protect the integrity of the fund for the benefit of the members and beneficiaries, and to minimize the costs of administering the system, it is the policy of the Board that the procurement of goods and services be made in the best interest of SamCERA and be undertaken in an efficient, diligent, transparent, economical, fair manner.

II. DELEGATION OF AUTHORITY TO THE CHIEF EXECUTIVE OFFICER

- A. **Delegated Authority.** The Chief Executive Officer or designee (hereinafter CEO) may bind SamCERA for the purchase of good or services based upon the provisions of this policy, except in emergencies and as may be otherwise authorized by the Board. In cases of emergencies, the CEO is authorized to act on behalf of SamCERA subject to later ratification by the Board.-The CEO is authorized to retain services related transition management and due diligence activities for proposed or existing investments, including but not limited to: background checks, trading costs, specified due diligence legal services, forensic accounting.
- B. **Retained Authority.** The Board retains the authority to select and direct the CEO to execute agreements for the following services: actuarial, investment ~~related-manager~~ services, legal, custodial, auditing and any other service provider providing and advisory or consulting services for the Board--The CEO’s authority regarding investment services is set forth by a separate resolution entitled “Authorization For The Chief Executive Officer To Execute Documentation For Investments As Required.” The Board further retains the authority to execute all leases.

III. CONTRACTS FOR SERVICES

- A. **Contracts \$100,000 and Below.** For contracts for the provision of services that the Board has not retained authority as set forth in Section II B, the CEO may enter into agreements for \$100,000 and below. If the agreement is amended and the amended total is more than \$100,000, the CEO must have Board approval to execute the amendment.

- B. **Contracts Above \$100,000.** All contracts for services, regardless of the type of service, which are for \$100,000 or above, the CEO must have Board approval to execute the contract.

IV. PURCHASE CONTRACTS

The CEO has authority to purchase goods, supplies, equipment and other items needed by SamCERA. If it is in the best interest of SamCERA, and if authorized by the County, the CEO may utilize the County's Procurement Division and process.

V. BUDGET APPROVAL

All expenditures for contracts entered into by the CEO pursuant to the authority delegated by this policy must be included in the applicable budget or budgets. All budgets must be approved by the Board.

VI. PROCEDURES FOR PROCURING GOODS AND SERVICES

CEO will use selection procedures that will enable the consideration of a broad range of potential suppliers of good and services in the selection process, which will meet budgetary, staffing, time and other relevant constraints.

The selection of goods and services shall be efficient, diligent, transparent, economical, fair manner and made in the best interest of SamCERA. Selection procedures need not be used if there is only a "sole source provider" and no other qualified provider.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

June, 2016

Agenda Item 7.4

TO: Board of Retirement

FROM: Tariq Ali, Chief Technology Officer



SUBJECT: Report on Status of Pension Administration Software System Project

Discussion

The Project Manager for the PASS implementation Will Morrow will deliver an update on the Pension Administration Software System implementation project.

PASS Implementation

- Status
 - Phase 1 (Project Initiation) is 100% complete
 - Phase 2 (PASS Development) is 97% complete
 - Phase 3 (PASS Implementation) is 9% complete
 - Overall 73% complete
- Schedule
 - On schedule
 - Only minor modifications to sprint plan to date
 - No schedule variances from sprint plan
 - Phase 1 complete
 - Phase 2 complete except for Validation 4 solution design documents
 - Phase 3 (PASS Implementation) has started with planned go-live January 2017
- Data Conversion
 - No significant conversion issues
 - Data conversions to support each of the four Validation testing periods are complete
 - Data reconciliation has started
- Budget
 - No budget variance
 - Vitech has invoiced \$4,867,538 (60%) of the \$8,097,560 project budget
 - Four contract amendments approved totaling \$644,688 (8.7% of original contract)
- Risks
 - We have identified and planned mitigation for project risks, including these top risks:

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

- Loss of key Vitech project staff results in schedule delays and/or quality issues
 - Mosquito District is not prepared to submit work reports
 - Inadequate production system performance results in user dissatisfaction and delays rollout schedules
 - Member self-service retirement estimates and applications are not user friendly resulting in phone calls and low usage
- Other
 - Change management focus groups with staff were conducted and action items created accordingly
 - Work has started on a detailed implementation plan
 - Hosted production environment has been installed. Remaining test activities will occur in this environment.
 - Vitech will perform Vendor Acceptance Testing through July 22.



Moving Retirement Systems Forward

SamCERA PASS Project Update

June 7, 2016

PASS Status Overview

Status as of May 2, 2016

ID	Task Name	Start	Finish	Duration	% Complete	2014				2015				2016			
						Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	PASS Project	4/14/2014	1/2/2017	142.2w	72.66%												
2	Phase 1: Initiate Project	4/14/2014	8/15/2014	18w	100%												
3	Phase 2: Develop PASS	7/7/2014	4/15/2016	93w	96.93%												
4	Validation 1: Demographics	7/7/2014	12/19/2014	24w	100%												
5	Validation 2: ECM, CRM, Employer, Pension	9/29/2014	6/19/2015	38w	100%												
6	Validation 3: Service Purchase, Benefit Calculation	3/2/2015	11/13/2015	37w	100%												
7	Validation 4: Payments, Finance, Self Service, Options	8/24/2015	4/15/2016	34w	88%												
8	Phase 3: Implement PASS	3/7/2016	1/2/2017	43.2w	9%												

Budget Summary

Item	Contract	Invoiced	Remaining
Phase 1	\$590,372	\$590,372	\$0
Phase 2	\$3,575,208	\$3,500,208	\$75,000
Phase 3	\$1,547,585	\$0	\$1,547,585
Holdback	\$477,023	\$0	\$477,023
Options	\$1,040,500	\$61,513	\$978,988
Hardware	\$183,158	\$178,244	\$4,914
Software	\$636,589	\$502,413	\$134,176
Other	\$47,126	\$34,789	\$12,336
TOTAL	\$8,097,560	\$4,867,538	\$3,230,022

60% of contract value has been invoiced

Risks

Risk (Value)	Actions
Loss of key Vitech project staff results in schedule delays and/or quality issues (42)	Steering Team monitoring new pension lead
Mosquito District is not prepared to submit work reports (40)	SamCERA working with leadership at Mosquito to prepare them for spreadsheet submissions
Inadequate production system performance results in user dissatisfaction and delays rollout schedules (32)	Performance testing will be performed during vendor acceptance tests
Member self-service retirement estimates and applications are not user friendly resulting in phone calls and low usage (32)	Work with Vitech to improve wizard. Pilot test with members. Delay or abandon implementation of member self service retirement application until acceptable.

Implementation Plan

- Plans
 - User Acceptance Tests
 - Training
 - System Security
 - Disaster Recovery
 - Vitech Transition Staffing
 - Communications
 - Pre- and Post-Implementation Checklist
- Schedules
 - Sprint
 - Vendor Acceptance Test
 - User Acceptance Test
 - Training
 - Documentation
 - Implementation

Implementation Plan

□ Other activities

- Production performance testing
- Network vulnerability assessment
- Disaster recovery test
- Implementation risk review
- Data reconciliation

Data Reconciliation

- ❑ Purpose: Independent verification that member accounts, benefits, and documents have been converted with integrity and accuracy
- ❑ Scope
 - Participant counts by type
 - Member account balances for contributions and interest, hours, and salary, by member
 - Active benefits from gross to net by member
 - Payment history by member
 - Document counts by member

Other Status and Information

- Change management focus groups conducted and action items captured
- Hosted production environment has been installed. Remaining test activities will occur in this environment.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

June 7, 2016

Agenda Item 7.5

TO: Board of Retirement

FROM: Scott Hood, Chief Executive Officer 

SUBJECT: Approval to Reschedule the Regular July Meeting of the Board of Retirement

Staff Recommendation

Discuss and approve a change to the date and time of the regularly scheduled July 2016 meeting of the Board of Retirement to facilitate trustee attendance at Wharton-SF's International and Emerging Market Investing program.

Background

The Board of Retirement's regular meetings are scheduled on the fourth Tuesday of each month. This year there is a conflict with the Board meeting and program offered by Wharton-SF. Every two out of three years Wharton-SF offers 2 ½ day investing program at their San Francisco campus. The programs are usually offered during the first three days of the fourth week in July. This year three trustees have expressed interest in attending, but it would limit the number of attendees at the regularly scheduled meeting to only five. Staff conducted two surveys to find alternate dates that would permit better attendance at the July meeting. Staff found that either 2:00 PM on Wednesday, July 27th or 10:00 AM on the Thursday, July 28th would have greater attendance than the regularly scheduled meeting that week. The 2:00 PM start time was selected as it allows attendees at the Wharton-SF program to finish at noon and travel to Redwood City in time for the meeting.

The Board of Retirement is authorized by Article 2, Section 2.4 of the Regulations of the Board of Retirement to change meeting times and dates.

"Regular Meetings: Regular meetings of the Board shall be held on the Fourth Tuesday of each month. Meetings shall begin at 1:00 p.m. Meetings shall be held in SamCERA's offices. The Board may cancel and or approve a change in the date, time and/or location of meetings within the County, if the proposed change is included on the agenda of a regular meeting."

Discussion

Staff polled the board members regarding their availability for meeting dates and times in July. The dates that were free for most board members were July 27 at 2:00 PM (8 available) and July 28 at 10:00 AM (8 available). Counting alternate trustees, either date would also permit 8 voting members to attend.