Stanislaus County Employees' Retirement Association
832 12th Street, Ste. 600, Modesto, CA 95354 • PO Box 3150, Modesto, CA 95353 • www.stancera.org • 209-525-6393 • 209-558-4976 Fax

AGENDA

BOARD OF RETIREMENT
832 12th Street Ste. 600, **Wesley W. Hall Board Room**
Modesto, CA 95354

November 28, 2017
1:30 p.m.

The Board of Retirement welcomes you to its meetings, which are regularly held on the fourth Tuesday of each month. Your interest is encouraged and appreciated.

CONSENT/ACTION ITEMS: Consent matters include routine administrative actions and are identified under the Consent Items heading. All other items are considered to be action items "Action" means that the Board may dispose of any item by any action, including but not limited to the following acts: approve, disapprove, authorize, modify, defer, table, take no action, or receive and file.

PUBLIC COMMENT: Matters under jurisdiction of the Board, may be addressed by the general public before or during the regular agenda. However, California law prohibits the Board from taking action on any matter which is not on the posted agenda unless it is determined an emergency by the Board of Retirement. Any member of the public wishing to address the Board during the "Public Comment," period shall be permitted to be heard once up to three minutes. Please complete a Public Comment Form and give it to the Chair of the Board. Any person wishing to make a presentation to the Board must submit the presentation in written form, with copies furnished to all Board members. Presentations are limited to three minutes.

BOARD AGENDAS & MINUTES: Board agendas, minutes and copies of items to be considered by the Board of Retirement are customarily posted on the Internet by Friday afternoon preceding a meeting at the following website: www.stancera.org.

Materials related to an item on this Agenda submitted to the Board after distribution of the agenda packet are available for public inspection at StanCERA, 832 12th Street, Suite 600, Modesto, CA 95354, during normal business hours.

AUDIO: All Board of Retirement regular meetings are audio recorded. Audio recordings of the meetings are available after the meetings at http://www.stancera.org/agenda.

NOTICE REGARDING NON-ENGLISH SPEAKERS: Board of Retirement meetings are conducted in English and translation to other languages is not provided. Please make arrangements for an interpreter if necessary.

REASONABLE ACCOMMODATIONS: In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Board Secretary at (209) 525-6393. Notification 72 hours prior to the meeting will enable StanCERA to make reasonable arrangements to ensure accessibility to this meeting.

1. Call Meeting to Order
2. Roll Call
3. Announcements
4. Public Comment
5. Consent Items

   a. Approval of the October 24, 2017 Meeting Minutes View

   b. Monthly Staff Report View

   c. Legal/Legislation Update

   d. Approval of the 2018 StanCERA Master Calendar View

   e. Receipt of the 2018 Board of Retirement Standing Committee Assignments View

   f. Approval of the Due Diligence Investment Manager Schedule View

   g. Approval of Service Retirement(s) – **Government Code Sections 31499.14, 31670, 31662.2 & 31810**

      1. Gonzalez, Darlene – BHRS – Effective – 11-07-17
      2. Murray, Eugene – HSA – Effective 11-11-17
      3. Sanchez, Melissa – BHRS – Effective 10-20-17
      4. Simpson, Barbara – HSA – Effective 11-22-17

** Indicates Safety Personnel*

5. Consent Items (Cont.)

h. Approval of Deferred Retirement(s) **– Government Code Section 31700**

1. Manzo, Sonya – Probation – Effective 10-07-17*

** Indicates Safety Personnel*

6. Committee Reports and Recommendations for Action

STANDING COMMITTEES

a. Internal Governance Committee

I. Discussion and Action to accept the Internal Governance Committees' Recommendation Regarding:

- The June 30, 2017 and 2016 Comprehensive Annual Financial Report (CAFR) and Independent Auditor Report View

7. Executive Director – Administrative

a. Information Technology Solutions (ITS) Project Update View

b. Deferred Member Applications View

8. Verus – Investment Consultant

a. Workplan View

b. October 31, 2017 Flash Report View

c. Investment Performance Quarter 3 Review View

9.. Executive Director – Investment

None

10. Closed Session

a. Discussion and Action: Discussion and Action : Real Estate Debt Search Government Code Section 54956.81

1. Prudential

2. Brookfield

b. Discussion and Action: Risk Parity Contract Negotiation – Government Code Section 54956.81

c. Discussion and Action: Approval of Service Connected Disability Retirement for Jeffrey Given –Government Code Section 31532

d. Conference with Legal Counsel – Pending Litigation – One Case:
O'Neal et al v. Stanislaus County Employees' Retirement Association
Stanislaus County Superior Court Case No. 648469
Government Code Section 54956.9(d)(1)

10. Closed Session (Cont)

e. Conference with Legal Counsel – Pending Litigation – One Case:
Stanislaus County Employees' Retirement Association v. Buck Consultants, LLC, Mediation Pursuant to Evidence Code Sections 1115, 1119, 1152
Government Code Section 54956.9d)(4)

10. Members' Forum (Information and Future Agenda Requests Only)

11. Adjournment

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BOARD OF RETIREMENT MINUTES
October 24, 2017

1. Call Meeting to Order

Meeting called to order 1:30 p.m. by Trustee Gharat, Chair

2. Roll Call

Trustees Present: Darin Gharat, Mike Lynch, Sam Sharpe, Jim DeMartini, Donna Riley Michael O'Neal, Lauren Klein and Mandip Dhillon

Trustees Absent: Jeff Grover

Absent Alternate Trustee Rhonda Biesemeier, Alternate Retiree Representative

Staff Present: Rick Santos, Executive Director
Kellie Gomes, Executive Board Assistant
Dawn Lea, Member and Employer Services Manager

Others Present: Fred Silva, General Legal Counsel

1. Call Meeting to Order

2. Roll Call

3. Announcements

Kellie Gomes announced Item 5.h.1 is being pulled from the agenda today at the request of the member.

4. Public Comment

5. Consent Items
a. Approval of the September 26, 2017 Meeting Minutes

b. Monthly Staff Report

c. Legal/Legislation Update

d. Executive Director Goals Update Quarter 3, 2017

e StanCERA Complaint Log: July 1 and September 30, 2017

d. Approval of Service Retirement(s) – **Government Code Sections 31499.14, 31670, 31662.2 & 31810**

1. Berg, Thomas – Sheriff – Effective 10-18-17 *
2. Blair, Ofelia – Public Works – Effective 10-28-17
3. Boone, Lawrence – HSA – Effective 10-04-17
4. Dionne, Candy – CSA – Effective 10-01-17
5. Dysert, Jess – CSA – Effective 10-22-17
6. Fielder, Holly – HSA – Effective 10-10-17
7. Jackson, Robert – Sheriff – Effective 10-18-17 *
8. Matich, Coral – HSA – Effective 10-09-17
9. Ramczyk, Frank – CSA – Effective 10-28-17

10. Roberts, Gwendolyn – HSA – Effective 08-19-17
11. Shugart, Joyce – CSA – Effective 10-28-17
12. Vanhille, Stephanie – CSA – Effective 10-07-17
13. Zepeda, Carla – CSA – Effective 10-03-17

** Indicates Safety Personnel*

e. Approval of Deferred Retirement(s) – **Government Code Section 31700**

1. Baker, Christopher – Sheriff – Effective 09-28-17 *
2. Buck, Gregory - Sheriff – Effective 09-14-17 *
3. Cain, Toni – Courts – Effective 09-14-17
4. Carter, Jennifer – DCSS – Effective 11-4-16
5. Cox, Caleb – GSA – Effective 09-09-17
6. Hoogendoorn, Colin – Probation – Effective 08-24-17 *
7. O'Brien, William – Board of Supervisors – Effective 01-10-17
8. Petitt, Joshua – Sheriff– Effective 09-13-17 *

** Indicates Safety Personnel*

f. Approval of Death Benefit - **Section 31781**

1. Avila, Darlene, Deceased September 21, 2017, DCSS - Active Member

g. Approval of Reciprocal Disability Retirement - **Section 31838.5**

1. Manica, Mandy - Sheriff, Service-Connected, Effective 07.22.17 *

h. Approval of Disability Retirement - **Section 31724**

1. Given, Jeffrey - Police Department, Service-Connected, Effective 11.29.11

Motion was made by Trustee Riley and seconded by Trustee Dhillon to accept the consent items as presented

Motion carried unanimously

6. <u>Executive Director – Investment</u>

None

7. <u>Verus – Investment Consultant</u>

a. Workplan

b. September 30, 2017 Flash Report

1:45 Trustee Lynch arrived

c. Discussion and Action : Value Added Real Estate Education and Search

1. American Reality Presentation – Jay Butterfield

Jay Butterfield and Scott Darling presented an education on real estate

7. Verus – Investment Consultant (Cont.)

Motion was made by Trustee O'Neal and seconded by Trustee Riley to approve Verus proposal as outlined on page four of the presentation as follows:

Proposals:

1. The Board authorize Verus to conduct a search for appropriate real estate debt strategies.

2. Pending completion of the first proposal, the Board authorize 2.5% of plan assets to be allocated to real estate debt as half of its allocation to core real estate.

Motion carried unanimously

8. Executive Director – Administrative

a. Information Technology Solutions (ITS) Project Update

b. Discussion and Action for Voting directive for delegates the State Association of County Retirement Systems (SACRS) 2017 Fall Business Meeting

Motion was made by Trustee Lynch and seconded by Trustee Riley to oppose SACRS committee recommendation to sponsor legislation as outlined in business packet agenda Ventura #1

Motion carried unanimously

Motion was made by Trustee Dhillon and seconded by Trustee O'Neal to approve SACRS committee recommendation to not sponsor legislation as outlined in business packet agenda Ventura #2

Motion carried unanimously

Motion was made by Trustee O'Neal and seconded by Trustee Riley to approve SACRS committee recommendation to not sponsor legislation as outlined in business packet agenda Tulare #1

Motion carried unanimously

Motion was made by Trustee Dhillon and seconded by Trustee O'Neal to abstain from voting on SACRS committee recommendation to approve the proposed Bylaw amendments as outlined in business packet.

Motion carried unanimously

2:59 Trustee DeMartini left

9. Closed Session

Motion was made by Trustee Riley and seconded by Trustee Lynch to go into closed session at 3:00pm

Motion carried unanimously

a. Conference with Legal Counsel – Pending Litigation – One Case:
O'Neal et al v. Stanislaus County Employees' Retirement Association
Stanislaus County Superior Court Case No. 648469
Government Code Section 54956.9(d)(1)

9. Closed Session (Cont.)

b. Conference with Legal Counsel – Pending Litigation – One Case: Stanislaus County Employees' Retirement Association v. Buck Consultants, LLC, Mediation Pursuant to Evidence Code Sections 1115, 1119, 1152 Government Code Section 54956.9d)(4)

c. Discussion and Action: Risk Parity Contract Negotiation – Government Code Section 54956.81

3:20 Fred Silva recused himself from closed session item 9.d

d. Discussion and Action: Appointment of General Counsel Government Code Section 54957(b)(4)

Motion was made by Trustee O'Neal and seconded by Trustee Riley to go into Open session

Motion carried unanimously

Read out from closed session was made by Kellie Gomes:

Item 9.d Motion was made by Trustee O'Neal and seconded by Trustee Riley to initiate an RFP in the Fall of 2018 for General Counsel.

Motion carried unanimously

Nothing further to report from closed session

10. Members' Forum (Information and Future Agenda Requests Only)

11. Adjournment

Meeting adjourned at 3:25 p.m.

Respectfully submitted,

Rick Santos, Executive Director

APPROVED AS TO FORM:
Fred Silva, GENERAL LEGAL COUNSEL

By: ______________________
Fred Silva, General Legal Counsel

STANCERA
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November 28, 2017
Retirement Board Agenda Item

TO: Retirement Board

FROM: Rick Santos, Executive Director

I. SUBJECT: Monthly Staff Report

II. ITEM NUMBER: 5.b

III. ITEM TYPE: Information Only

IV. STAFF RECOMMENDATION: None

V. ANALYSIS:

a) *Member & Employer Services* – No report

b) *Investment Governance and Compliance* – During the months of October/November, staff completed the initial and final interview processes for the Investment Officer recruitment and have made an offer to a potential candidate. Staff also completed contract negotiations with one of the risk parity managers and executed the contract the week of November 13th. Staff is now engaged in contract negotiations with the other prospective manager.

c) *Fiscal Services* – Employer and employee contributions totaling $8,007,920 were received through 15 different payroll batches in October. 24 contribution refunds and death benefit payouts totaling $304,476 were processed. The retiree payroll for October totaled $9,946,920 and was processed as scheduled.

The fiscal year end June 30, 2017 financial audit is complete and the CAFR is ready for printing.

Staff continues to partner with Member Services in defining the business rules for the new pension software. Staff continues to meet with Tegrit to define employer payroll upload business rules for the Arrivos system. Partnering with our employers, County payroll individuals are being invited to attend some of these meetings.

VI. RISK: None

VII. STRATEGIC PLAN: Strategic Objective IV: Refine StanCERA's business and policy practices in ways that enhance stakeholder awareness, the delivery of member services and the ability of the Organization to administer the System effectively and efficiently*

VIII. ADMINISTRATIVE BUDGET IMPACT: NONE

Rick Santos, Executive Director

Dawn Lea

Dawn Lea, Member and Employer Services Manager

Natalie Elliott

Natalie Elliott, Interim Fiscal Services Manager

2018 Calendar

Board Meetings are held every 4th Tuesday at 1:30p.m.
***Exception December's Board Meeting will be moved to 3rd Tuesday, December 18th Due to the Holidays**

January, 2018

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	**23**	24	25	26	27
28	29	30	31			

February, 2018

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11	12	13	14	15	16	17
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25	26	**27**	28			

March, 2018

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25	26	**27**	28	29	30	31

April, 2018

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22	23	**24**	25	26	27	28
29	30					

May, 2018

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27	28	29	30	31		

June, 2018

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17	18	19	20	21	22	23
24	25	**26**	27	28	29	30

July, 2018

S	M	T	W	T	F	S
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22	23	**24**	25	26	27	28
29	30	31				

August, 2018

S	M	T	W	T	F	S
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12	13	14	15	16	17	18
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26	27	**28**	29	30	31	

September, 2018

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23	24	**25**	26	27	28	29
30						

October, 2018

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
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21	22	**23**	24	25	26	27
28	29	30	31			

November, 2018

S	M	T	W	T	F	S
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11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	**27**	28	29	30	

December, 2018

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16	17	$\boxed{18}$	19	20	21	22
23	24	25	26	27	28	29
30	31					

StanCERA Committee Assignments | 2018

Standing Committees

Internal Governance Committee

Areas of Responsibility: *Audits, Bylaws Revisions, Policy Revisions, Board Member Education*

Sam Sharpe, Chair
Donna Riley
Rhondа Biesemeier
Staff as needed

Due Diligence Committee

Jeff Grover, Chair
Michael O'Neal
Jim DeMartini
Staff as needed

Ad-Hoc Committees

Executive Director's Review Committee

Areas of Responsibility: *Assessment of the performance and compensation recommendation for the positions of Executive Director and Investment Officer*

Chair	Michael Lynch
Vice Chair	Jim DeMartini
Past Chair	Darin Gharat

Staff as needed

2018 -2021 Due Diligence Schedule

2018
Dodge Cox Equity
Blackrock Growth
White Oak Pinnacle

2019
Capital Prospects
Fidelity
Raven Opportunity I & III
Medley Opportunity Fund
EFI

2020
LSV
Northeren Trust

2021
Greenfield GAP
Prime Property Fund
American Realty
North Haven
Insight Investment
Dimensional Fund Advisors

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November 28, 2017
Retirement Board Agenda Item

TO: Retirement Board

FROM: Natalie Elliott, Interim Fiscal Services Manager

I. SUBJECT: Internal Governance Committee - Receipt of the Comprehensive Annual Financial Report for the Fiscal Years ended June 30, 2017 and 2016

II. ITEM NUMBER: 6.a.I

III. ITEM TYPE: Discussion and Action

IV. STAFF RECOMMENDATION: Accept the Comprehensive Annual Financial Report and Independent Auditor's Report (Attachment 1) for Fiscal Years Ended June 30, 2017 and 2016 as recommended by the Internal Governance Committee.

V. ANALYSIS: The Internal Governance Committee met November 7, 2017 with staff and the Auditors from Brown Armstrong for the StanCERA financial statements audit.

Brown Armstrong performed its audit in accordance with Generally Accepted Auditing Standards. Brown Armstrong did not provide any opinion regarding internal controls however it was noted that no internal control weaknesses were found. StanCERA received an unqualified opinion that the basic financial statements (beginning on page 21) present fairly the financial position of StanCERA in accordance with Generally Accepted Accounting Principles.

In the management comments, there were no material weaknesses or deficiencies found for FY 2017-2016.

VI. RISK: None

VII. STRATEGIC PLAN: Strategic Objective IV: Refine StanCERA's business and policy practices in ways that enhance stakeholder awareness, the delivery of member services and the ability of the Organization to administer the System effectively and efficiently.

VIII. ADMINISTRATIVE BUDGET IMPACT: None

____
Natalie Elliott, Interim Fiscal Services Manager

____
Rick Santos, Executive Director

BROWN
ARMSTRONG

CERTIFIED
PUBLIC
ACCOUNTANTS

BROWN ARMSTRONG

Certified Public Accountants

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Stanislaus County Employees' Retirement Association
Board of Retirement presentation of the June 30, 2017 audit results
By: Andrew J. Paulden, CPA
Brown Armstrong Accountancy Corporation
November 7, 2017

1. Purpose of the Audit

2. The Audit Process
   a. Timeline coordination with StanCERA staff
   b. Understanding and evaluation of StanCERA internal controls through inquiry and observation
   c. Confirmations with independent third parties
   d. Interim testing
   e. Final fieldwork testing
   f. Report presentation

3. Significant Audit Areas/Scope of Audit Work
   a. Risk based approach
   b. Investments and related earnings
   c. Participant data and actuarial information
   d. Employee and employer contributions
   e. Benefit payments
   f. GASB 67

4. Audit Reports
   a. CAFR
      i. Independent Auditor's Report (opinion) on Financial Statements – unmodified ("clean") opinion
   b. Report to the Board of Retirement and Internal Governance Committee
      i. Required Communication to the Members of the Board of Retirement and Internal Governance Committee in Accordance with Professional Standards (SAS 114)
      ii. Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

5. Questions and/or Comments?

BROWN ARMSTRONG
Certified Public Accountants

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INDEPENDENT AUDITOR'S REPORT

To the Board of Retirement and Internal Governance Committee of
Stanislaus County Employees' Retirement Association
Modesto, California

Report on the Financial Statements

We have audited the accompanying Statements of Fiduciary Net Position of the Stanislaus County Employees' Retirement Association (StanCERA) as of June 30, 2017 and 2016, the related Statements of Changes in Fiduciary Net Position for the fiscal years then ended, and the related notes to the financial statements, which collectively comprise StanCERA's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to StanCERA's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of StanCERA's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of StanCERA as of June 30, 2017 and 2016, and the changes in fiduciary net position for the fiscal years then ended in conformity with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and required supplementary information as listed in the table of contents be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Supplemental Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise StanCERA's basic financial statements. The other supplemental information and the introductory, investment, actuarial, and statistical sections, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The other supplemental information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplemental information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Additional Information

The introductory, investment, actuarial, and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated October 27, 2017, on our consideration of StanCERA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, agreements, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering StanCERA's internal control over financial reporting and compliance.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
October 27, 2017

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

REPORT TO THE BOARD OF RETIREMENT AND INTERNAL GOVERNANCE COMMITTEE

FOR THE FISCAL YEAR ENDED JUNE 30, 2017

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

TABLE OF CONTENTS

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BROWN ARMSTRONG

Certified Public Accountants

REQUIRED COMMUNICATION TO THE MEMBERS OF THE BOARD OF RETIREMENT AND INTERNAL GOVERNANCE COMMITTEE IN ACCORDANCE WITH PROFESSIONAL STANDARDS (SAS 114)

To the Board of Retirement and Internal Governance Committee of
Stanislaus County Employees' Retirement Association
Modesto, California

We have audited the financial statements of the Stanislaus County Employees' Retirement Association (StanCERA) for the fiscal year ended June 30, 2017, and have issued our report dated October 27, 2017. Professional standards require that we provide you with information about our responsibilities under auditing standards generally accepted in the United States of America and *Government Auditing Standards*, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated June 21, 2017. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by StanCERA are described in Note 2, Summary of Significant Accounting Policies, to the financial statements. No new accounting policies were adopted and the application of existing policies was not changed during the fiscal year ended June 30, 2017. We noted no transactions entered into by StanCERA during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting StanCERA's financial statements were:

- Management's estimate of the fair value of investments, which was derived by various methods as detailed in Note 2, Summary of Significant Accounting Policies. We evaluated the key factors and assumptions used to develop the estimate of the fair value of investments in determining that it is reasonable in relation to the financial statements taken as a whole.

- The contribution amounts and net pension liability which are based on the actuarially-presumed interest rate and assumptions. We evaluated the key factors and assumptions used to develop the contribution amounts and net pension liability in determining that they are reasonable in relation to the financial statements taken as a whole.

Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. The most sensitive disclosures affecting the financial statements were:

- The disclosures for deposits and investments in Notes 2 and 4 to the financial statements, Summary of Significant Accounting Policies and Cash and Investments Disclosures, respectively, were derived from StanCERA's investment policy. Management's estimate of the fair value of investments was derived by various methods as detailed in the notes.

- Additionally, the disclosures related to the funding policies, net pension liability, and actuarial methods and assumptions in Note 1, Description of Plan and Note 8, Net Pension Liability of Participating Employers Disclosures were derived from actuarial valuations, which involved estimates of the value of reported amounts and probabilities about the occurrence of future events far into the future.

Difficulties Encountered in Performing the Audit
We encountered no significant difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements
Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. Management has corrected all such misstatements. In addition, none of the misstatements detected as a result of audit procedures and corrected by management were material, either individually or in the aggregate, to the financial statements taken as a whole.

Disagreements with Management
For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations
We have requested certain representations from management that are included in the management representation letter dated October 27, 2017.

Management Consultations with Other Independent Accountants
In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to StanCERA's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues
We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as StanCERA's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters
We applied certain limited procedures to the Management's Discussion and Analysis, Schedule of Changes in Net Pension Liability and Related Ratios, Schedule of Employer Contributions, Schedule of Investment Returns, and Notes to the Required Supplementary Information, which are Required Supplementary Information (RSI) that supplement the basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during the audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

We were engaged to report on the Schedule of Administrative Expenses and Schedule of Investment Management Fees and Other Investment Expenses, which accompany the financial statements but are not RSI. With respect to this other supplemental information, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the other supplemental information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

We were not engaged to report on the introductory, investment, actuarial, and statistical sections, which accompany the financial statements but are not RSI. We did not audit or perform other procedures on this other information and we do not express an opinion or provide any assurance on it.

Restricted on Use

This information is intended solely for the use of the Board of Retirement, Internal Governance Committee, and management of StanCERA and is not intended to be, and should not be, used by anyone other than these specified parties.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION
Brown Armstrong
Accountancy Corporation

Bakersfield, California
October 27, 2017

BROWN
ARMSTRONG

CERTIFIED
PUBLIC
ACCOUNTANTS

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STOCKTON OFFICE

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STOCKTON, CA 95207
TEL 209.451.4833

BROWN ARMSTRONG

Certified Public Accountants

INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

To the Board of Retirement and Internal Governance Committee of
Stanislaus County Employees' Retirement Association
Modesto, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Stanislaus County Employees' Retirement Association (StanCERA) as of and for the fiscal year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise StanCERA's basic financial statements, and have issued our report thereon dated October 27, 2017.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered StanCERA's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of StanCERA's internal control. Accordingly, we do not express an opinion on the effectiveness of StanCERA's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of StanCERA's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether StanCERA's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of StanCERA's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering StanCERA's internal control and compliance. Accordingly, this report is not suitable for any other purpose.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
October 27, 2017

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
PENSION TRUST FUND OF THE COUNTY OF STANISLAUS, CALIFORNIA

COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Fiscal Years Ended June 30, 2017 and 2016

STANCERA

ENSURING TOMORROW'S BENEFITS
THROUGH PRUDENT MANAGEMENT

Stanislaus County Employees' Retirement Association

(A Pension Trust Fund of the County of Stanislaus, California)

Comprehensive Annual Financial Report

For the Fiscal Years Ended June 30, 2017 and 2016

Issued By

Rick Santos, CFA, ASA, MAAA
Executive Director

StanCERA
Staff

Table of Contents

Introductory Section

Financial Section

Table of Contents *(continued)*

Investment Section

Actuarial Section

Statistical Section

StanCERA secures and manages investment funds to provide benefits to its members.

Vision

Ensuring tomorrow's benefits through prudent management.

INTRODUCTORY SECTION

Stanislaus County Employees' Retirement Association
832 12th Street, Ste. 600, Modesto, CA 95354 • PO Box 3150, Modesto, CA 95353 • www.stancera.org • 209-525-6393 • 209-558-4976 Fax

LETTER OF TRANSMITTAL

October 27, 2017

Stanislaus County Employees' Retirement Association
Modesto, CA 95354

Dear Board Members:

Please find enclosed the Comprehensive Annual Financial Report (CAFR) of the Stanislaus County Employees' Retirement Association (StanCERA or the Plan) for the fiscal years ended June 30, 2017 and 2016. As of June 30, 2017, it is StanCERA's 69th year of operations.

The CAFR is a detailed financial report established by the Government Finance Officers Association (GFOA) for publicly disclosing the viability of a defined benefit public retirement system. The CAFR is intended to provide users with extensive reliable information for making management decisions, determining compliance with legal provisions, and demonstrates the responsible management and stewardship of StanCERA. StanCERA management is responsible for both the accuracy of the data and the completeness and fairness of the presentation of financial information within this CAFR, including all disclosures.

StanCERA is a multiple employer public employees' retirement system, established by the County of Stanislaus on July 1, 1948. StanCERA is operated and administered by the Board of Retirement (the Board) to provide retirement, disability, death and survivor benefits for its members under the California State Government Code, Section 31450 et seq. known as the County Employees Retirement Law of 1937 (CERL) and the Public Employees' Pension Reform Act (PEPRA).

StanCERA and Its Services

StanCERA was established by Stanislaus County to provide retirement allowances and other benefits to general and safety members employed by Stanislaus County. Currently, Stanislaus County and seven participating agencies are members of StanCERA. The participating agencies are:

City of Ceres
Stanislaus Council of Governments
Stanislaus County Superior Court
East Side Mosquito Abatement District
Hills Ferry Cemetery District
Keyes Community Services District
Salida Sanitary District

StanCERA and Its Services (continued)

StanCERA is governed by the California Constitution; the County Employees Retirement Law of 1937 (CERL); Public Employees' Pension Reform Act; and the bylaws, regulations, policies, and procedures adopted by the Board of Retirement. The Stanislaus County Board of Supervisors may also adopt resolutions, as permitted by the CERL, which may affect benefits to Stanislaus County members.

The Board of Retirement is responsible for the management of StanCERA and is comprised of nine members and two alternate members, one of whom is a safety alternate and the other a retiree alternate. The safety alternate seat is not currently filled. Four members are appointed by the Stanislaus County Board of Supervisors, one member and the alternate safety member are elected by the safety members, two members are elected by the general members, while the retiree and alternate retiree member are elected by the retired members. The Stanislaus County Treasurer serves as an ex-officio member. Members, with the exception of the Stanislaus County Treasurer, serve three-year terms with no term limits.

Financial Information

The accompanying financial statements are prepared using the accrual basis of accounting. Contributions from employers and members are recognized when received or when due pursuant to legal requirements. Benefits are recognized when due and payable in accordance with the terms of the plan. Expenses are recorded when corresponding liabilities are incurred regardless of when payment is due or made. Investments are recorded at the fair value of the asset.

An overview of StanCERA's fiscal operations for the years ended June 30, 2017 and 2016, is presented in the Management's Discussion and Analysis (MD&A) located in the financial section of the CAFR. This transmittal letter, together with the MD&A, provides an expanded view of the activities of StanCERA.

Brown Armstrong Accountancy Corporation, StanCERA's independent auditor, has audited the accompanying financial statements. Management believes an adequate system of internal controls is in place and the accompanying statements, schedules, and tables are fairly presented and free from material misstatement. The concept of reasonable assurance recognizes that first, the cost of a control should not exceed the benefits likely to be derived, and that second, the valuation of the cost and benefits requires estimates and judgments by management.

Internal controls over financial reporting cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. Internal controls over financial reporting are processes that involve human diligence and compliance and are subject to lapses in judgment and breakdowns resulting from human failures. Internal controls over financial reporting also can be circumvented by collusion or improper management override. Because of such limitations, there is a risk that material misstatements may not be prevented or detected within a timely basis by internal controls over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design safeguards into the process to reduce, but not eliminate, this risk.

Net Pension Liability and Actuarial Funding

StanCERA's funding objective is to meet long-term benefit obligations by maintaining a well-funded plan status and obtaining optimum investment returns. Pursuant to the CERL, StanCERA engages an independent actuary to perform an actuarial valuation of the Plan on an annual basis. Economic assumptions are normally reviewed every three years. Additionally, every three years, a triennial experience study is conducted, at which time non-economic assumptions are also updated. The most recent triennial experience study was conducted as of June 30, 2015 by Cheiron, Inc. Cheiron, Inc. conducted the last actuarial valuation as of June 30, 2016, the results of which were rolled forward to StanCERA's fiscal year ended June 30, 2017, and determined the Plan's Fiduciary Net Position as a percentage of the total pension liability to be 75.0% using the recommended assumptions.

Investments

The Board of Retirement has exclusive control of all StanCERA investments and is responsible for establishing investment objectives, strategies, and policies. The California Constitution and Government Code Sections 31594 and 31595 authorize the Board of Retirement to invest in any investment deemed prudent in the Board's informed opinion.

The Board has adopted an Investment Policy, which provides a framework for the management of StanCERA's investments. This policy establishes StanCERA's investment objectives and defines the duties of the Board of Retirement, investment managers, and custodial bank. The asset allocation is an integral part of the Investment Policy and is designed to provide an optimum mix of asset classes with return expectations to ensure growth of assets to meet future liabilities, minimize employer contributions, and defray reasonable administrative costs. StanCERA engages an Investment Consultant to analyze the investment policy and strategy and to conduct periodic asset allocation and asset/liability studies on behalf of StanCERA. For the fiscal years ended June 30, 2017 and 2016, the Plan's investments provided a 14.4% and -1.7% rate of return (net of fees), respectively. A summary of the asset allocation can be found in the Investment Section of this report.

Awards

StanCERA is the recipient of several awards. The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to StanCERA for its Comprehensive Annual Financial Report (CAFR) for the year ended June 30, 2016. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports. This was the eleventh consecutive year StanCERA has achieved this prestigious award.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized Comprehensive Annual Financial Report (CAFR), the contents of which meet or exceed program standards. The CAFR must satisfy both generally accepted accounting principles and applicable legal requirements.

Awards (continued)

A Certificate of Achievement is valid for a period of one year only. We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to the GFOA for evaluation.

StanCERA received the Award for Outstanding Achievement in Popular Annual Financial Reporting for the fiscal year ended June 30, 2016. This report provides all StanCERA members more concise and condensed information than can be found in the CAFR.

StanCERA also received the Public Pension Coordinating Council's Public Pension Standards 2016 Award, in recognition of meeting professional standards for plan design and administration as set forth in the Public Pension Standards.

The Public Pension Coordinating Council (PPCC) is a coalition of the following associations that represent public pension funds that cover the vast majority of public employees in the U.S.:

- National Association of State Retirement Administrators (NASRA)
- National Council on Teacher Retirement (NCTR)
- National Conference on Public Employee Retirement Systems (NCPERS)

The Public Pension Standards are intended to reflect minimum expectations for public retirement systems management and administration, and serve as a benchmark by which all defined benefit public plans should be measured.

Service Efforts and Accomplishments

Written communication for members continues to be a focus for StanCERA. Non retired members receive statements twice a year. Retirees receive printed advice notices with critical information monthly and to communicate the financial health of the fund, an easy-to-read Popular Annual Financial Report (PAFR) is distributed to all members annually.

StanCERA sponsors a one half day pre-retirement seminars to potential retirees annually, participates in the Stanislaus County new employee orientation workshop and continues to provide group educational programs at the work site for interested employees.

In addition, StanCERA continues to increase its website presence. Audio recordings of education seminars and Board meetings are available. Meeting agendas and minutes are posted timely. Policies, by-laws, member services and forms can be easily identified and downloaded. Members continue to visit the contribution and benefit calculators regularly.

Acknowledgement

The compilation of this report reflects the combined efforts of many people on StanCERA's staff. It is intended to provide reliable information as the basis for making management decisions, as a means for determining compliance with legal provisions, and as a means of determining responsible stewardship of the funds of StanCERA. Both the accuracy of the data presented and the completeness and fairness of the presentation of the CAFR are the responsibility of the management of StanCERA.

I congratulate the Board, staff and service providers of StanCERA for their commitment and for their diligent work to ensure the continued successful operation of StanCERA.

Sincerely,

Rick Santos, CFA, ASA, MAAA
Executive Director

BOARD OF RETIREMENT
JUNE 30, 2017

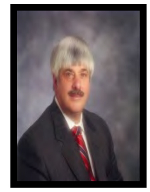
Seat # 1. ***Gordon Ford**,* Ex-Officio, Treasurer/Tax Collector

Seat #2. ***Mandip Dhillon***, Trustee, Elected by Active General Membership

Seat #3. ***Donna Riley**,* Trustee, Elected by Active General Membership

Seat #4. ***Darin Gharat**,* Chair, Appointed by the Board of Supervisors

Seat # 5. ***Mike Lynch**,* Vice Chair, Appointed by the Board of Supervisors



Seat # 6. ***Jim DeMartini**,* Trustee, Appointed by the Board of Supervisors

Seat #7. ***Sam Sharpe**,* Trustee, Elected by Active Safety Membership

Seat #7a. **Vacant**, Alternate Trustee, Elected by Active Safety Membership

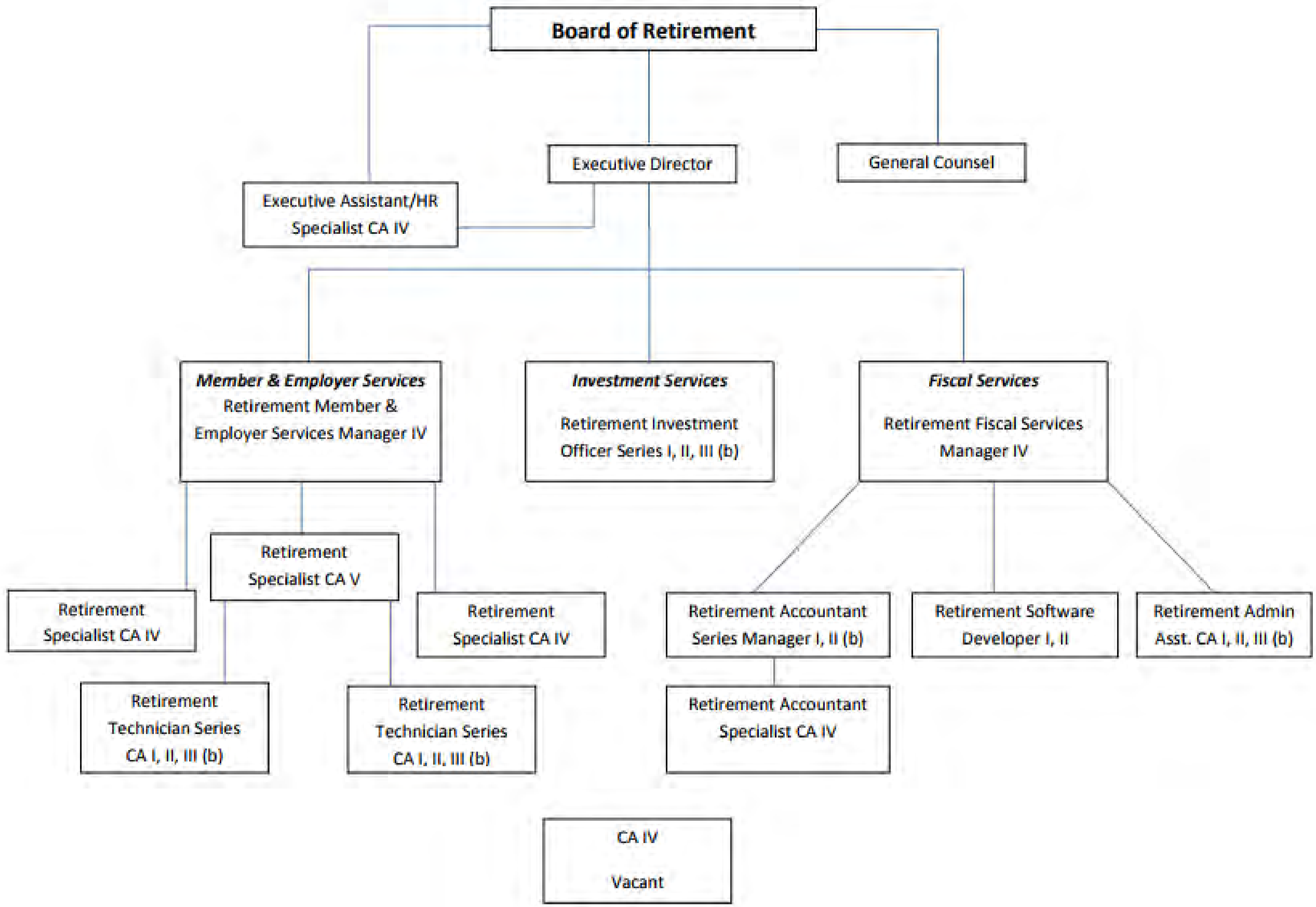
Seat # 8. ***Michael O'Neal***, Trustee, Elected by Retired Membership

Seat # 8a***.*** ***Joan Clendenin**,* Alternate Trustee, Elected by Retired Membership

Seat # 9. ***Jeff Grover**,* Trustee, Appointed by the Board of Supervisors

StanCERA ORGANIZATIONAL CHART

Effective 2016



* Retirement Board utilizes private general legal counsel for administrative legal services.
Private attorneys provide legal assistance for disability retirement applications.

PROFESSIONAL CONSULTANTS
JUNE 30, 2017

Consulting Services

Actuary
Cheiron, Inc.

Auditors
Brown Armstrong Accountancy Corporation

Investment Custodian
Northern Trust

Investment Consultant
Verus, Inc.

Legal Counsel
Damrell Nelson Schrimp Pallios
Pacher & Silva (General Legal Counsel)
Law Office of Ted M Cabral
Hansen Bridgett LLP
Reed Smith LLP

Technical & Data Services
Tyler, Inc.
SBT, County of Stanislaus

Investment Management Services*

Fixed Income
Dodge & Cox
Insight (Pareto)
PIMCO

Large Cap Value Equity
Dodge & Cox
BlackRock R1000 Value

Large Cap Growth Equity
Jackson Square Partners
BlackRock R1000 Growth

Small Cap Value Equity
Capital Prospects

Small Cap Growth Equity
Legato Capital Management

International Equity
LSV Asset Management (Value)
Pyramis Global Advisors (Growth)

Domestic Equity Index Funds
Mellon Capital Management

Real Estate
Black Rock US Real Estate Index

Private Credit
Medley Opportunity Fund II LP
Raven Capital Management, LLC
White Oak Global Advisors, LLC

Private Real Estate
American Realty Advisors
Greenfield Acquisition Partners VII LP
Morgan Stanley Prime Property Fund

Infrastructure
North Haven Partners II LP

*Refer to the Investment Section, page 60, for the Schedule of Investment Management Fees and page 61, Schedules of Commission Recapture Program fees.

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Stanislaus County

Employees' Retirement Association

California

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2016

Jeffrey R. Emer

Executive Director/CEO

Government Finance Officers Association

Award for Outstanding Achievement in Popular Annual Financial Reporting

Presented to

Stanislaus County

Employees' Retirement Association

California

For its Annual
Financial Report
for the Fiscal Year Ended

June 30, 2016

Executive Director/CEO

PPCC

Public Pension Coordinating Council

Public Pension Standards Award

For Funding and Administration

2016

Presented to

Stanislaus County Employees' Retirement Association

In recognition of meeting professional standards for
plan funding and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle

Alan H. Winkle
Program Administrator

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FINANCIAL SECTION

BROWN ARMSTRONG

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BROWN ARMSTRONG

Certified Public Accountants

INDEPENDENT AUDITOR'S REPORT

To the Board of Retirement and Internal Governance Committee of
Stanislaus County Employees' Retirement Association
Modesto, California

Report on the Financial Statements

We have audited the accompanying Statements of Fiduciary Net Position of the Stanislaus County Employees' Retirement Association (StanCERA) as of June 30, 2017 and 2016, the related Statements of Changes in Fiduciary Net Position for the fiscal years then ended, and the related notes to the financial statements, which collectively comprise StanCERA's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to StanCERA's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of StanCERA's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of StanCERA as of June 30, 2017 and 2016, and the changes in fiduciary net position for the fiscal years then ended in conformity with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and required supplementary information as listed in the table of contents be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Supplemental Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise StanCERA's basic financial statements. The other supplemental information and the introductory, investment, actuarial, and statistical sections, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The other supplemental information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplemental information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Additional Information

The introductory, investment, actuarial, and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated October 27, 2017, on our consideration of StanCERA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, agreements, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering StanCERA's internal control over financial reporting and compliance.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
October 27, 2017

MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of the Stanislaus County Employees' Retirement Association's (StanCERA or the Plan) financial performance provides an overview of the financial activities and funding conditions for the fiscal years ended June 30, 2017 and 2016. Please review information presented here in conjunction with the Letter of Transmittal and additional information provided.

Financial Highlights

- Fiduciary Net Position increased by $221.3 million (or 12.5%) as a result of the fiscal year's activities.
- Contributions (employer and member), in total, increased by $6.4 million (or 7.8%).
- Net investment income (including Net Appreciation in Fair Value of Investments) increased by $283.6 million (or 905.5%).
- Benefit payments increased by $7.3 million (or 6.9%) from the prior year.

Plan Highlights

- Benefit plans for Tiers 2 and 3 were closed to new hires and Tiers 4 and 5 were adopted effective March 9, 2002 to provide retirement formulas commonly known as 2% at age 55 for active general members, and 3% at age 50 for active safety members. One district did not implement the new benefit plans. Members in the non-contributory Tier 3 were allowed to transfer into a contributory plan. Effective January 1, 2011, Tier 5 was closed and Tier 2 was re-opened for all new hires for Stanislaus County with the reduced benefit formulas of 2% at age 61 for most general members and 2% at 50 for safety members. Tier 2 was closed and Tier 6 was adopted effective January 1, 2013 for all new hires and provides 2% at 62 for general members and 2.7% at age 57 for safety members.
- In April of 2017 and 2016, a 3.0% cost of living increase was given to all retired, disabled, and beneficiary members receiving a recurring allowance except those retirees who received pensions for service as a Tier 3 non-contributory member.

Using the Annual Report

The financial statements reflect the activities of the Stanislaus County Employees' Retirement Association and are composed of the Statements of Fiduciary Net Position and the Statements of Changes in Fiduciary Net Position. These statements are presented on an accrual basis of accounting and reflect all trust activities as incurred.

Overview of the Basic Financial Statements

This Management's Discussion and Analysis is intended to serve as an introduction to StanCERA's basic financial statements, which are comprised of the following three components:

1. Statements of Fiduciary Net Position
2. Statements of Changes in Fiduciary Net Position
3. Notes to the Basic Financial Statements

StanCERA's basic financial statements and the note disclosures to the basic financial statements are in compliance with accounting principles generally accepted for governments (GAAP) within the United States as established by the Governmental Accounting Standards Board.

Financial Analysis

Statements of Fiduciary Net Position

The Statements of Fiduciary Net Position show the assets available for future payments to retirees and liabilities as of the fiscal year end. The following condensed comparative summary of Fiduciary Net Position demonstrates that the pension trust is primarily focused on the cash and investments and the restricted net position. This statement is also a good indicator of the financial strength of StanCERA.

Fiduciary Net Position, as of June 30, 2017, 2016, and 2015

	2017	2016	2015	$ Change 2017 - 2016	$ Change 2016 - 2015
Current Assets	$166,714,182	$114,518,914	$116,109,491	$52,195,268	($1,590,577)
Investments	2,062,347,484	1,932,507,165	1,971,301,171	129,840,319	(38,794,006)
Capital Assets	3,910,685	3,358,623	3,507,734	552,062	(149,111)
Total Assets	2,232,972,351	2,050,384,702	2,090,918,396	182,587,649	(40,533,694)
Total Liabilities	238,749,040	277,470,989	258,314,192	(38,721,949)	19,156,797
Total Fiduciary Net Position	$1,994,223,311	$1,772,913,713	$1,832,604,204	$221,309,598	($59,690,491)

Financial Analysis (continued)

Statements of Changes in Fiduciary Net Position

The Statements of Changes in Fiduciary Net Position provide an account of the fiscal years' additions to and deductions from Fiduciary Net Position.

Additions To Fiduciary Net Position For The Fiscal Years Ended June 30, 2017, 2016, and 2015

	2017	2016	2015	$ Change 2017 - 2016	$ Change 2016 - 2015
Employer Contributions	$63,024,560	$58,196,310	$53,849,031	$4,828,250	$4,347,279
Plan Member Contributions	25,463,745	23,916,508	22,960,235	1,547,237	956,273
Net Investment Income	252,309,705	(31,322,276)	68,722,781	283,631,981	(100,045,057)
Total Additions	$340,798,010	$50,790,542	$145,532,047	$290,007,468	($94,741,505)
Deductions From Fiduciary Net Position For The Fiscal Years Ended June 30, 2017, 2016, and 2015					
Benefit Payments	$114,290,758	$106,946,768	$100,099,055	$7,343,990	$6,847,713
Member Refunds - Termination	2,297,328	1,219,042	1,542,566	1,078,286	(323,524)
Member Refunds - Death	255,772	-	216,535	255,772	(216,535)
Administrative Expenses	2,644,554	2,315,223	2,378,966	329,331	(63,743)
Total Deductions	$119,488,412	$110,481,033	$104,237,122	$9,007,379	$6,243,911
Increase (Decrease) in Fiduciary Net Position Restricted for					
Pension Benefits	$221,309,598	($59,690,491)	$41,294,925	$281,000,089	($100,985,416)
Fiduciary Net Position Restricted for Pension Benefits					
Beginning of Year	1,772,913,713	1,832,604,204	1,791,309,279	(59,690,491)	41,294,925
End of Year	$1,994,223,311	$1,772,913,713	$1,832,604,204	$221,309,598	($59,690,491)

Additions to Fiduciary Net Position

A review of the Statement of Fiduciary Net Position shows that June 30, 2017 closed with assets exceeding liabilities by $1.994 billion with all of the Fiduciary Net Position restricted for StanCERA's ongoing obligations to plan participants and their beneficiaries. The fiscal year ended June 30, 2016, closed with assets exceeding liabilities by $1.773 billion. The $221.3 million increase and $59.7 million decrease, respectively, in Fiduciary Net Position is a direct result of the changes in the financial market over the past two years. StanCERA remains in good financial condition.

Financial Analysis (continued)

Additions to Fiduciary Net Position (continued)

The primary sources to finance the benefits StanCERA provides are accumulated through return on investments and through the collection of member and employer contributions. The total for these income sources for fiscal year 2016-2017 resulted in an increase of $290.0 million, where fiscal year 2015-2016 resulted in a decrease of $94.7 million. This increase and decrease is primarily a result of the activity in the broad market, as discussed in the Investment Analysis below. Employer and member contributions increased by $6.4 million (or 7.8%) from the contributions made in 2015-2016. Employer contribution increases in 2017 and 2016 are due mainly to changes in economic and demographic assumptions and a change in funding methodology.

Deductions from Fiduciary Net Position

The primary uses of StanCERA's assets are the payment of benefits to retirees and their beneficiaries, refunds of contributions to terminated employees, and the costs of administering the Plan. These expenses for fiscal year 2016-2017 were $119.5 million, an increase of $9.0 million from prior year. This increase is mainly due to the increase in the number of retirees and the average amount that they are paid as well as acquiring a new pension system. For fiscal year 2015-2016, these expenses were $110.5 million, an increase of $6.2 million from the prior year due to the increase in the number of retirees and the average amount they are paid. For fiscal year 2016-2017, administrative expense increased by 14.2% over fiscal year 2015-2016. Total administrative expense represented 0.0960% of the accrued actuarial liability (funding basis) for fiscal year 2016-2017 and 0.0888% for fiscal year 2015-2016.

Overall Financial Condition

Investment Analysis

StanCERA's investment activity is a function of the underlying marketplace for the period measured and the investment policy's asset allocation.

Domestic equity returns for the fiscal year ended June 30, 2017 outperformed their benchmark by 210 basis points and international equity outperformed the benchmark by 220 basis points. Domestic equity returns for the fiscal year ended June 30, 2016 underperformed their benchmark by 470 basis points and international equity underperformed by 40 basis points.

StanCERA's fixed income returns outperformed their benchmark by 310 basis points for the fiscal year ended June 30, 2017. For the fiscal year ended June 30, 2016, the Plan's fixed income returns underperformed their benchmark by 80 basis points.

For the fiscal year ended June 30, 2017, StanCERA's total portfolio outperformed its policy benchmark by 310 basis points with an overall return of 14.4%. For the fiscal year ended June 30, 2016, the portfolio underperformed its policy benchmark by 350 basis points with an overall return of -1.7%. Management believes that the Plan remains in a very strong financial position to meet its obligations to the Plan participants and beneficiaries.

Overall Financial Condition (continued)

Net Pension Liability

The primary concern to most pension plan participants is the amount of resources available to pay benefits. Historically, pension plans have been under-funded when the employer fails to make actuarially determined contributions. All StanCERA employers have traditionally contributed the actuarially determined contribution as determined by the Plan's actuary.

An indicator of funding status is the ratio of the Fiduciary Net Position to the Total Pension Liability (TPL). An increase in the percentage over time usually indicates a plan is becoming financially stronger; however, a decrease will not necessarily indicate a plan is in financial decline. Changes in actuarial assumptions can significantly impact the Net Pension Liability (NPL). Performance in the stock and bond markets can have a material impact on the fair value of assets and Fiduciary Net Position.

The Net Pension Liability (NPL) as of June 30, 2016, rolled forward to StanCERA's fiscal year ended June 30, 2017, was $665.3 million using the entry age normal cost method. The Board of Retirement approves the assumptions used by the actuary to perform their calculation. As of the most recent actuarial valuation dated June 30, 2016, rolled forward to June 30, 2017, StanCERA's Fiduciary Net Position was 75.0% of the Total Pension Liability. The next actuarial valuation is scheduled for June 30, 2017 to be rolled forward to fiscal year ended June 30, 2018.

StanCERA's Fiduciary Responsibilities

StanCERA's Board of Retirement and management staff are fiduciaries of the pension trust fund. Under the California Constitution, the Fiduciary Net Position can only be used for the exclusive benefit of plan participants and their beneficiaries.

Requests for Information

This financial report is designed to provide the Board of Retirement, plan participants, taxpayers, investment professionals and creditors with a general overview of StanCERA's financial condition and to demonstrate StanCERA's accountability for the funds under its stewardship.

Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to:

Rick Santos, CFA, ASA, MAAA
Executive Director
Stanislaus County Employees' Retirement Association
832 12th Street, Suite 600
Modesto, CA 95354

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
STATEMENTS OF FIDUCIARY NET POSITION
As of June 30, 2017 and 2016

	June 30, 2017	June 30, 2016
ASSETS		
Cash and Cash Equivalents (Note 4):	$ 92,153,518	$ 55,503,333
Receivables:		
Interest and Dividends	6,443,406	7,165,933
Securities Transactions	62,995,717	47,249,376
Contributions (Note 3)	5,039,247	4,516,013
Total Receivables	74,478,370	58,931,322
Prepaid Insurance:	82,294	84,259
Capital Assets, net (Note 2):	3,910,685	3,358,623
Investments at Fair Value (Note 4):		
U.S. Government and Agency Obligations	285,753,443	291,246,590
Corporate Bonds	96,612,255	135,217,919
Municipal Bonds	11,528,044	13,038,517
Emerging Market / Non-US Bonds	66,887,109	83,719,754
Domestic Stocks	534,781,978	436,817,430
Domestic Equity Index Fund	316,534,021	273,249,874
International Equity	408,187,210	333,266,976
Real Estate Securities	35,190,426	24,824,937
Private Credit	92,820,985	98,831,582
Private Real Estate	53,535,171	38,881,050
Infrastructure	19,932,549	6,859,991
Securities Lending Collateral	140,584,293	196,552,545
Total Investments	2,062,347,484	1,932,507,165
Total Assets	2,232,972,351	2,050,384,702
LIABILITIES		
Current Liabilities:		
Accounts Payable	11,953,339	10,429,303
Securities Transactions	85,803,403	69,993,618
Advance of Rents	13,005	100,523
Securities Lending Obligation (Note 4)	140,584,293	196,552,545
Total Current Liabilities	238,354,040	277,075,989
Long-Term Liabilities:		
Grant Deed Extension Fee	395,000	395,000
Total Liabilities	238,749,040	277,470,989
Fiduciary Net Position Restricted For Pension Benefits (Note 6)	$ 1,994,223,311	$1,772,913,713

The accompanying notes are an integral part of these financial statements.

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION
For the Years Ended June 30, 2017 and 2016

	June 30, 2017	June 30, 2016
ADDITIONS		
Contributions (Note 5):		
Employer	$ 63,024,560	$ 58,196,310
Plan Members	25,463,745	23,916,508
Total Contributions	88,488,305	82,112,818
Investment Income/(Loss):		
Net Appreciation (Depreciation) in		
Fair Value of Investments	216,142,516	(70,114,702)
Interest and Dividends	45,117,367	47,206,807
Total Investment Gain/(Loss)	261,259,883	(22,907,895)
Net Income from Commission Recapture	20,827	46,825
Less: Investment Expense (Note 4)	(9,985,798)	(9,440,764)
Net Investment Income/(Loss)	251,294,912	(32,301,834)
Other Investment Income:		
Net Litigation Recovery Income	5,200	74,250
Rental Income	130,371	123,252
Other Investment Income	24,125	-
Net Other Investment Income	159,696	197,502
Securities Lending Activities (Note 4):		
Securities Lending Income	1,221,133	1,116,644
Less: Securities Lending Expense	(366,036)	(334,588)
Net Securities Lending Income	855,097	782,056
Total Investment Income/(Loss)	252,309,705	(31,322,276)
Total Additions	340,798,010	50,790,542
DEDUCTIONS		
Benefit Payments and Subsidies	114,290,758	106,946,768
Member Refunds - Termination	2,297,328	1,219,042
Member Refunds - Death	255,772	-
Administrative Expenses (Note 2)	2,644,554	2,315,223
Total Deductions	119,488,412	110,481,033
Net Increase (Decrease) in Fiduciary Net Position	221,309,598	(59,690,491)
Fiduciary Net Position Restricted for Pension Benefits (Note 6)		
Beginning of Year	1,772,913,713	1,832,604,204
End of Year	$ 1,994,223,311	$1,772,913,713

The accompanying notes are an integral part of these financial statements.

NOTE 1 - DESCRIPTION OF PLAN

Description of System and Applicable Provisions of the Law

The Stanislaus County Employees' Retirement Association (StanCERA or the Plan) is an integrated public employee retirement system established under and subject to the legislative authority of the State of California as enacted and amended in the County Employees Retirement Law of 1937 (Chapter 677 Statutes of 1937) and the Public Employees' Pension Reform Act. It is a cost-sharing multiple-employer pension plan. StanCERA was established by the County of Stanislaus Board of Supervisors on July 1, 1948, and was integrated with Social Security on January 1, 1956.

Membership

StanCERA consists of employees from the County of Stanislaus, East Side Mosquito Abatement District, Hills Ferry Cemetery District, Keyes Community Service District, City of Ceres, Salida Sanitary District, Stanislaus County Superior Court, and Stanislaus Council of Governments. Each person entering employment full-time or permanent part-time (50% or more of the regular hours) becomes a member on the first day of employment. The structure of the Membership with StanCERA is as follows:

	June 30, 2017			June 30, 2016		
	General	**Safety**	**Total**	**General**	**Safety**	**Total**
Active Members:						
Vested & Non-vested	3,551	758	4,309	3,522	727	4,249
Total Active	3,551	758	4,309	3,522	727	4,249
Inactive Members:						
Deferred Members	773	204	977	751	210	961
Unclaimed Contributions	343	47	390	287	41	328
Total Inactive	1,116	251	1,367	1,038	251	1,289
Retired Members:						
Service Retirements	2,819	426	3,245	2,751	406	3,157
Disability Retirements	224	161	385	219	157	376
Survivor Payments	43	10	53	40	9	49
Total Retired	3,086	597	3,683	3,010	572	3,582
Total Membership	7,753	1,606	9,359	7,570	1,550	9,120

Active

StanCERA has Tiers 1, 2, 3, 4, 5 and 6 for General Members and Tiers 2, 4, 5 and 6 for Safety Members. All tiers are closed with the exception of Tier 6 for both General and Safety Members. Members of the Plan receive a 100% vested interest in the Plan after 5 years of service, except Tier 3 which requires 10 years of service.

NOTE 1 – DESCRIPTION OF PLAN (continued)

Benefits

StanCERA provides for retirement, disability, death, beneficiary, cost of living, and ad-hoc retirement benefits.

Service Retirement Benefit

Members of Tiers 1, 2, 4, and 5 with 10 years of service, who have attained the age of 50, are eligible to retire. Tier 3 members are eligible to retire with 10 years of service at age 55. Tier 6 members are eligible to retire with 5 years of service at age 50 for Safety members, and age 52 for General members. Members of Tier 1, 2, 4, and 5 with 30 years of service (20 years for safety), regardless of age, are eligible to retire. The benefit is a percentage of monthly final average salary (FAS) per year of service, depending on age at retirement, and is illustrated below for representative ages. Government Code Section 31462 of the County Employees Retirement Law of 1937 defines the FAS as a member's average monthly compensation earned during any consecutive 12 months (applicable to members of Tier 1, 4, and 5). Government Code Sections 31462.1 and 7522.32 use the member's average monthly compensation earned during any 36 consecutive months (applicable to members of Tier 2, 3, and 6). For members integrated with Social Security, the benefit is reduced by 1/3 of the percentage shown below times the first $350 of the monthly final average salary per year of service credited after January 1, 1956. Tier 6 is not integrated with Social Security.

Percentage of FAS:

	General						Safety		
Age	**Tier 1**	**Tier 2**	**Tier 3**	**Tier 4**	**Tier 5**	**Tier 6**	**Tiers 1&2**	**Tiers 4&5**	**Tier 6**
50	1.34	1.18	N/A	1.48	1.48	N/A	2.00	3.00	2.00
55	1.77	1.49	0.68*	1.95	1.95	1.30	2.62	3.00	2.50
60	2.34	1.92	1.14*	2.44	2.44	1.80	2.62	3.00	2.70
65	2.62	2.43	2.00*	2.62	2.62	2.30	N/A	N/A	2.70

* 1% of FAS for each year of service over 35 reduced by 1/35 of Social Security Benefits at age 65 not to exceed 35 years

Retiring members may choose from 4 different beneficiary retirement allowances. Most retirees elect to receive an unmodified allowance, which includes a continuation of 60% of the allowance to the retirees' surviving spouse or registered domestic partner.

Death Benefit-Before Retirement

Employed Less Than 5 Years

In addition to the return of contributions, a death benefit is payable to the member's beneficiary or estate equal to 1 month of salary for each completed year of service under the retirement system, based on the final year's average salary, not to exceed 6 months of salary (except Tier 3 members).

NOTE 1 – DESCRIPTION OF PLAN (continued)

Death Benefit-Before Retirement (continued)

Employed More than 5 Years

If a member dies while eligible for service retirement or nonservice-connected disability, the spouse or registered domestic partner receives 60% of the allowance that the member would have received for retirement benefits on the day of his or her death (except Tier 3 members).

If a member dies in the performance of duty, the spouse or registered domestic partner receives a monthly benefit of 50% of the member's final average salary (except Tier 3 members).

Death Benefit-After Retirement

If a member dies after retirement, a burial allowance of $5,000 is paid to the beneficiary or estate (except Tier 3 members).

If the retirement benefit is for service-connected disability, 100% of the member's allowance as it was at death is continued to the surviving spouse or registered domestic partner for Tiers 1, 2, 4, 5, and 6. Tier 3 Members have no allowance continued to the surviving spouse or registered domestic partner.

If the retirement benefit is for other than service-connected disability, 60% of the member's allowance is continued to the surviving spouse or registered domestic partner for Tiers 1, 2, 4, 5, and 6, and 50% of the member's allowance is continued to the surviving spouse or registered domestic partner if the unmodified option is chosen at time of retirement.

Disability Benefit

Members with 5 years of service, regardless of age, are eligible for nonservice-connected disability (except Tier 3 members). The benefit may be up to 1/3 of final average salary. If the disability is service-connected, the member may retire regardless of length of service, and the benefit is 50% of final average salary (except Tier 3 members).

Cost of Living Benefit

The current maximum increase in retirement allowance is 3% per year (except Tier 3). The increases are based on the change in the Bureau of Labor Statistics Consumer Price Index (CPI) in the San Francisco Bay area from January 1 to December 31, effective the following April 1.

Ad-Hoc Benefits

Ad-hoc benefits are non-vested benefits which are determined by the Board of Retirement subject to funding availability.

NOTE 1 – DESCRIPTION OF PLAN (continued)

Ad-Hoc Benefits (continued)

No ad-hoc benefits are currently being paid (effective since January 1, 2010). Changes in the excess earnings policy, approved by the Board of Retirement (Board) on May 25, 2012, placed additional restrictions on the Board of Retirement's ability to grant these benefits. The greatest restriction currently is that the Plan must be 100% funded on a market basis prior to funding any ad-hoc benefit.

Contribution Rates

The County Employees Retirement Law of 1937 establishes the basic obligations for employer and member contributions to the retirement system. The actual employer and member contribution rates in effect each year are based on recommendations made by an independent actuary and adopted by the Board of Retirement.

StanCERA's policy for contributions states that actuarially determined rates expressed as a percentage of annual covered payroll are required to finance the costs of benefits earned by plan members during the year, with an additional amount to finance any unfunded liability. Level percentage of payroll employer contribution rates are determined using the entry age actuarial cost method. For funding purposes, StanCERA also uses the level entry age normal cost method with the Unfunded Actuarial Accrued Liability (UAAL) to amortize the unfunded liability. StanCERA's actuarially determined composite employer contribution rates for the years ended June 30, 2017 and June 30, 2016 were 24.99% and 23.35%, respectively, of annual payroll. Employee contribution rates are based on age of entry for Tiers 1, 2, 4 and 5 and range between 3.26% and 18.31% for the fiscal years ended June 30, 2017 and June 30, 2016. Tier 6 employer rates are based on 50% of the total normal cost. Tier 6 employee contribution rates are not based on age of entry and were a flat rate ranging between 7.28% and 14.29%, respectively, for the fiscal years ended June 30, 2017 and June 30, 2016.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting Entity

StanCERA is governed by the Board of Retirement and is considered an independent legal entity. StanCERA is a component unit of the County of Stanislaus (the County) and is being reported as a Pension Trust Fund in the County's Financial Report in accordance with Governmental Accounting Standards Board (GASB) Statement No. 39, *Determining Whether Certain Organizations Are Component Units – an Amendment of GASB Statement No. 14*.

Basis of Accounting

StanCERA follows GASB accounting principles and reporting guidelines. The financial statements are prepared on a full accrual basis of accounting, which recognizes income when earned and expenses when incurred. Contributions from employers and members are recognized when received or when due pursuant to legal requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of each plan.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Cash and Cash Equivalents

Cash includes deposits with a financial institution and pooled cash with the Stanislaus County Treasurer. Pooled cash is reported at amortized cost, which approximates fair value. Income on pooled cash is allocated on StanCERA's average daily balance in relation to total pooled assets.

Investments

The Board of Retirement has exclusive control of the investments of StanCERA. Statutes authorize the Board to invest, or to delegate the authority to invest, in any investment allowed by statute and considered prudent in the informed opinion of the Board.

Investments are stated at fair value in accordance with GASB Statement No. 67, *Financial Reporting for Pension Plans – an Amendment of GASB Statement No. 25*. Values for stocks, publicly traded bonds, issues of the U.S. Government and its agencies, and real estate securities are valued according to sale prices of recognized exchanges as of the fiscal year end, with international securities reflecting currency exchange rates in effect at June 30, 2017 and 2016. Both domestic and international investments are denominated in U.S. currency. Private Credit Partnerships, Private Real Estate and Infrastructure investments are valued using their respective Net Asset Value (NAV) and are audited annually. The most significant input into the NAV of such an entity is the fair value of its investment holdings. These holdings are valued by the partnerships on a quarterly basis and the assumptions are based upon the nature of the investment and the underlying business. The valuation techniques vary based upon investment type and involve a certain degree of expert judgment.

Securities Transactions and Related Investment Income

Securities transactions are accounted for on a trade date basis. Interest income is recognized when earned and dividend income is recognized on the ex-dividend date. Stock dividends or stock splits are recorded as memo items and do not affect the total value of the securities.

Capital Assets

Capital assets, consisting of software development, the purchase of a condominium interest in 1 floor of an office building, and office equipment are presented at historical cost. StanCERA occupies 60% of the 6th floor of the office building, and 40% has been developed as office space which is currently leased out. Total cost of the capital assets as of June 30, 2017 was $5,605,313 of which $932,383 is not depreciable for fiscal year ending June 30, 2017 due to the Pension Administration System not in service. Accumulated depreciation as of June 30, 2017 totaled $1,694,628. Depreciation expense for the years ending June 30, 2017 and June 30, 2016 totaled $72,837 and $175,830, respectively. Depreciation is calculated using the straight-line method with an estimated life of 10 years for the software development, an estimated life of 99 years for the office space, an estimated life of 10 years for the leasehold improvements, and an estimated life of 5 years for office equipment.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Capital Assets (continued)

CAPITAL ASSETS	Net Balance at June 30, 2016	Reclassifications & Additions	Reclassifications & Deletions	Less Depreciation	Net Balance at June 30, 2017
Capital Assets, not being depreciated					
Tenant Improvements	$ 390,438	$ -	$ -	$ -	$ 390,438
Pension Administration System	-	541,945	-	-	541,945
Total Capital Assets, not being depreciated	390,438	541,945	-	-	932,383
Capital Assets, being depreciated					
Tyler Software	97,028	-	-	32,342	64,686
Real Estate Occupied	1,688,922	-	-	18,977	1,669,945
Real Estate Leased	1,126,171	-	-	12,654	1,113,517
Leasehold Improvements	49,261	78,635	-	5,703	122,193
Office Equipment	5,264	-	-	1,431	3,833
Audio Recording System	-	-	-	-	-
Security & Monitoring Equipment	1,539	-	-	1,154	385
Video Conferencing Equipment	-	4,319	-	576	3,743
Total Capital Assets, being depreciated	2,968,185	82,954	-	72,837	2,978,302
TOTAL CAPITAL ASSETS	$ 3,358,623	$ 624,899	$ -	$ 72,837	$ 3,910,685

CAPITAL ASSETS	Net Balance at June 30, 2015	Reclassifications & Additions	Reclassifications & Deletions	Less Depreciation	Net Balance at June 30, 2016
Capital Assets, not being depreciated					
Tenant Improvements	$ 390,438	$ -	$ -	$ -	$ 390,438
Pension Administration System	-	-	-	-	-
Total Capital Assets, not being depreciated	390,438	-	-	-	390,438
Capital Assets, being depreciated					
Tyler Software	222,653	-	-	125,625	97,028
Real Estate Occupied	1,707,899	-	-	18,977	1,688,922
Real Estate Leased	1,138,825	-	-	12,654	1,126,171
Leasehold Improvements	42,583	21,607	-	14,929	49,261
Office Equipment	1,225	5,112	-	1,073	5,264
Audio Recording System	649	-	-	649	-
Security & Monitoring Equipment	3,462	-	-	1,923	1,539
Video Conferencing Equipment	-	-	-	-	-
Total Capital Assets, being depreciated	3,117,296	26,719	-	175,830	2,968,185
TOTAL CAPITAL ASSETS	$ 3,507,734	$ 26,719	$ -	$ 175,830	$ 3,358,623

Administrative Expenses

StanCERA's administrative expense is funded by the investment income and is limited to 0.21% of StanCERA's Actuarial Accrued Liability (AAL) pursuant to Government Code Section 31580.2. The law provides exemption from the limitation for the cost of computer consultation, hardware, and software. Total administrative expenses for the years ending June 30, 2017 and 2016 were $2,644,554 and $2,315,223, respectively, of which $349,750 and $514,811, respectively, were not subject to the administrative expense limitation. Administrative expenses subject to the limitation amounted to 0.0960% of AAL for the fiscal year ended June 30, 2017 and 0.0888% for the fiscal year ended June 30, 2016.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Income Taxes

StanCERA qualifies as a pension trust under Section 401(a) of the Internal Revenue Code. No provision for income taxes has been made in the accompanying financial statement as the plan is exempt from Federal and State income taxes under the provisions of the Internal Revenue Code Section 501 and the California Revenue and Taxation Code Section 23701, respectively.

Management's Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, contingent assets and liabilities, revenue, and expenses as of the date of the financial statements. Actual results could differ from those estimates.

Reclassifications

Certain fiscal year 2016 amounts have been reclassified to conform with the fiscal year 2017 presentation.

NOTE 3 – CONTRIBUTIONS RECEIVABLE

Contributions Receivable represents withdrawals from employees' salaries and liabilities due by employers' for retirement contributions for the month of June that were received in July. Contributions Receivable as of June 30, 2017 and 2016 were $5,039,247 and $4,516,013, respectively.

NOTE 4 – CASH AND INVESTMENTS

The California State Constitution and the County Employees Retirement Law of 1937 give the Board the exclusive authority to invest the assets of StanCERA and the Board may, at its discretion, invest or delegate the authority to invest, such assets through the purchase, holding, or sale of any form or type of investment, financial instrument, or financial transaction when deemed prudent in the informed decision of the Board. StanCERA invests the assets according to a written Investment Policy established by the Board and currently employs external investment managers to manage the assets subject to the guidelines in the Investment Policy.

Deposits in Stanislaus County Treasury

Cash needed for StanCERA's daily operational purposes is pooled with other County funds by the County Treasurer for short-term investment purposes. The County is responsible for the control and safekeeping of all instruments of title and for all investment of the pooled funds. Investments in the County Investment Pool are managed according to the Investment Policy established by the County and are subject to regulatory oversight by the County's Treasury Oversight Committee. Participation in the County Investment Pool is not mandatory. The fair value of StanCERA's cash invested with the County Treasurer totaled $12,066,637 and $9,940,519 at June 30, 2017 and 2016, respectively. Cash and investments included within the County Treasurer's Pool are described in the County's Financial Report.

NOTE 4 – CASH AND INVESTMENTS (continued)

Investments

Investment Policy – StanCERA's policy in regard to the allocation of invested assets is established and may be amended by the Board. The investments of the Plan are trust funds and are held for the exclusive purpose of providing benefits to the participants in the Plan and their beneficiaries and defraying reasonable expenses of administering the Plan. The investments shall be diversified so as to minimize the risk of loss and to maximize the rate of return. StanCERA's Investment Program employs three functional Sub-portfolios to construct the comprehensive asset allocation: the Liquidity Sub-portfolio, the Growth Sub-portfolio and the Diversifying Sub-portfolio. The Liquidity Sub-portfolio will ensure adequate assets are available to pay benefits over an extended timeframe. The Growth Sub-portfolio will grow the invested assets over the long term in order to pay future benefits. The Diversifying Sub-portfolio is to offset the investment risk of the Growth Sub-portfolio. The allocations to the Liquidity, Growth and Diversifying Sub-portfolios will vary over time and will be reviewed on an annual basis. The adopted asset allocation for the three Sub-portfolios is:

Asset Class	June 30, 2017 Target Allocation	June 30, 2016 Target Allocation
Domestic Equities	24.00%	15.00%
International Equities	24.00%	20.00%
Fixed Income	22.00%	21.00%
Real Assets	7.70%	10.00%
Alternatives:		
Private Credit	5.00%	14.00%
Private Equity	0.00%	5.00%
Private Real Estate	1.70%	0.00%
Infrastructure	0.60%	0.00%
Risk Parity	14.00%	14.00%
Cash	1.00%	1.00%
	100.00%	100.00%

Rate of Return – For the years ended June 30, 2017 and June 30, 2016, the annual money-weighted rate of return on StanCERA's investments was 14.40% and -1.70%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

NOTE 4 – CASH AND INVESTMENTS (continued)

Fair Value Measurement

Fair value is the price that would be received to sell an investment in an orderly transaction between market participants at the measurement date. GASB Statement No. 72 (GASB 72), *Fair Value Measurement and Application*, was issued to address accounting and financial reporting issues related to fair value measurement. StanCERA implemented GASB 72 in 2016.

StanCERA classifies the fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The fair value measurements are classified according to the following hierarchy:

- Level 1 – Unadjusted quoted prices for identical investments in active markets.
- Level 2 – Quoted prices for similar investments in active markets; quoted prices for identical or similar investments in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable.
- Level 3 – Investments with valuations derived from valuation techniques in which significant inputs or significant value drivers are unobservable.

Inputs used to measure fair value might fall in different levels of the fair value hierarchy, in which case StanCERA defaults to the lowest level input that is significant to the fair value measurement in its entirety. In determining the appropriate levels, a detailed analysis was performed of the assets and liabilities that are subject to GASB 72.

The following tables present fair value measurements as of June 30, 2017 and June 30, 2016:

Investments and Derivative Instruments Measured as Fair Value

Investments by Fair Value Level	6/30/2017	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Fixed Income Securities				
Asset-Backed Securities	$ 2,797,008	$ -	2,797,008	$ -
Collateralized Mortgage Obligations	1,087,450	-	1,087,450	-
Commercial Mortgage-Backed Securities	2,239,743	-	2,239,743	-
Corporate and Other Credit	96,612,255	-	96,612,255	-
Government Mortgage Backed Securities	120,887,939	-	120,887,939	-
Municipal/Revenue Bonds	11,528,044	-	11,528,044	-
Emerging Market Non-U.S. Bonds	66,887,109	-	66,887,109	-
U.S. Government Agency	7,311,898	-	7,311,898	-
U.S. Treasury	151,429,405	-	151,429,405	-
Total Fixed Income Securities	460,780,851	-	460,780,851	-
Equity Securities				
Non-U.S. Equity	363,925,061	362,831,162	-	1,093,899
U.S. Equity	534,781,978	534,781,978	-	-
Commingled Equity Funds	316,534,020	-	316,534,020	-
Emerging Market Equity	44,262,149	-	44,262,149	-
Commingled Real Estate Funds	35,190,427	-	35,190,427	-
Total Equity Securities	1,294,693,635	897,613,140	395,986,596	1,093,899
Collateral from Securities Lending	140,584,293	-	140,584,293	-
Total Investments by Fair Value Level	$ 1,896,058,779	$ 897,613,140	$ 997,351,740	$ 1,093,899
Investments Measured at the Net Asset Value (NAV)				
Private Credit	$ 92,820,985			
Private Real Estate	53,535,171			
Infrastructure	19,932,549			
Total Investments Measured at the NAV	166,288,705			
Total Investments	$ 2,062,347,484			

NOTE 4 – CASH AND INVESTMENTS (continued)

Investments and Derivative Instruments Measured as Fair Value

Investments by Fair Value Level	6/30/2016	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Fixed Income Securities				
Asset-Backed Securities	$ 4,603,191	$ -	$ 4,603,191	$ -
Collateralized Mortgage Obligations	1,393,950	-	1,393,950	-
Commercial Mortgage-Backed Securities	5,474,753	-	5,474,753	-
Corporate and Other Credit	138,152,126	-	138,152,126	-
Government Mortgage Backed Securities	169,336,520	-	169,336,520	-
Municipal/Revenue Bonds	13,038,517	-	13,038,517	-
Emerging Market Non-U.S. Bonds	83,719,754	-	83,719,754	-
U.S. Government Agency	7,272,939	-	7,272,939	-
U.S. Treasury	100,231,030	-	100,231,030	-
Total Fixed Income Securities	523,222,780	-	523,222,780	-
Equity Securities				
Non-U.S. Equity	297,145,587	294,533,696	2,073,463	538,428
U.S. Equity	436,817,430	436,817,430	-	-
Commingled Equity Funds	273,249,874	-	273,249,874	-
Emerging Market Equity	36,121,389	-	36,121,389	-
Commingled Real Estate Funds	24,824,937	-	24,824,937	-
Total Equity Securities	1,068,159,217	731,351,126	336,269,663	538,428
Collateral from Securities Lending	196,552,545	-	196,552,545	-
Total Investments by Fair Value Level	$ 1,787,934,542	$ 731,351,126	$ 1,056,044,988	$ 538,428
Investments Measured at the Net Asset Value (NAV)				
Private Credit	$ 98,831,582			
Private Real Estate	38,881,050			
Infrastructure	6,859,991			
Total Investments Measured at the NAV	144,572,623			
Total Investments	$ 1,932,507,165			

Fixed Income Securities

Asset-Backed Securities, Mortgage Backed Securities, and Non-US Bonds are valued using a combination of the discounted cash flow income model and the matrix market model. Two proprietary discounted cash flow models are used: non-volatile tranche and volatile tranche. Prepayment speeds are derived from market participant quotes along with terms and conditions of the tranche and both are entered into the model to determine the evaluated price. Matrices are developed based on trade and quote activity of bonds with similar features including issuer, vintage and purpose of the underlying loan, prepayment speeds and credit ratings in order to identify trades and quotes for similar securities.

Corporate Bonds and Municipal Bonds are valued using the matrix market model. Model inputs are derived from the market, brokers, dealer, mutual funds, and vendor client base. Model inputs include, but are not limited to; spread benchmark curves, prepayment speeds, inputs to build curves/spreads, comparable trades, bid price or spread, discount rates, quotes, trade reports, and financial reports.

US Government Agency and US Treasury Bills are valued using the consensus evaluation model and the matrix evaluation model. These model inputs come from market sources and integrate relative credit information, observed market movements, and sector news. Prices are updated regularly by obtaining dealer quotes and other market information including live trading levels, when available.

NOTE 4 – CASH AND INVESTMENTS (continued)

Equity Securities

Equities securities are valued using the NASDAQ Official Closing Price which determines the market specific closing price for NASDAQ listed issues. For equity securities listed on exchanges, the last trade price is used. The last trade price is the price at which a specific security was last traded on the primary exchange. If NASDAQ Official Closing Price or the last trade price is not available a bid, ask/offer quote is obtained from a third party vendor.

Commingled funds are valued using the net asset value (NAV) which is the market value of all securities owned by the fund, minus its total liabilities, divided by the number of shares issued. Funds that are valued using the NAV are usually not reported within the fair value hierarchy. However, StanCERA’s commingled funds are supported by audited financial statements which provide observable market data. Commingled funds are legally or contractually required to redeem at the NAV and therefore are classified as Level 2.

Investments Measured at the Net Asset Value (NAV)

Investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy.

Private Credit Funds consist of investments in four limited partnerships. The types of partnership strategies included in these funds are venture capital, growth equity, buyouts, special situations, mezzanine, and distressed debt. These funds are not eligible for redemption. Distributions are received as the underlying funds are liquidated, which can occur over the span of three to seven years. Total commitments for these funds are $160.0 million of which $41.5 million is unfunded as of June 30, 2017.

Private Real Estate Funds consist of investments in three limited partnerships. These funds are mainly invested in US commercial real estate. Shares of two of these funds can be redeemed at the request of the shareholders after a lockout period of up to two years. Distributions from each of these funds will be received as the underlying investments are liquidated. Two of these funds are open-ended and the distributions are reinvested. Liquidation of the underlying investments for one fund can occur over time up to eight years. Total commitments for these funds are $60.0 million of which $16.6 million is unfunded as of June 30, 2017.

Infrastructure Funds consist of one investment in a limited partnership. This fund is focused on opportunities in the energy, utilities and transportation sectors, and target investments in infrastructure assets globally within the Organization for Economic Cooperation and Development countries. The funds are not eligible for redemption. Distributions from this fund will be received as the underlying investments are liquidated, which can occur over the span of twelve years. Total commitments for this fund are $50.0 million of which $30.0 million is unfunded as of June 30, 2017.

NOTE 4 – CASH AND INVESTMENTS (continued)

Securities Lending Program

The Board Investment Policy permits StanCERA to participate in a securities lending program. StanCERA lends bonds and equities to various brokers for collateral that will be returned for the same securities plus a fee in the future. Transactions are collateralized at 102% of fair value for domestic securities and 105% of fair value for international securities. Collateral received may include cash, letters of credit, or securities. Because the loans were terminable-at-will, their duration did not match the duration of the investments made with cash collateral. Either StanCERA or the borrower can terminate all securities loaned on demand. There are no restrictions on the amount of securities that may be lent.

StanCERA's custodial bank administers its securities lending program. The cash collateral is reported on the financial statements as an asset and as a liability of StanCERA while the non-cash collateral is reported neither as an asset nor a liability in accordance with GASB Statement No. 28. StanCERA does not have the ability to pledge or sell collateral securities delivered absent a borrower default. The contract with the securities lending agent requires them to indemnify StanCERA if the borrower fails to return the securities (or if the collateral is not sufficient to replace the securities lent) or if the borrower fails to pay StanCERA for income distributions while the securities are on loan.

Investments made with cash collateral are classified by risk category. The average maturity of the loans is 1 week and are rated at least "A1" or "P1" by 2 nationally recognized statistical rating organizations or if unrated, are determined by the bank to be of comparable quality. As of June 30, 2017 the fair value of securities on loan was $137.2 million with collateral received of $140.6 million and non-cash collateral of $30.9 million. As of June 30, 2016, the fair value of the securities on loan was $193.7 million with collateral received of $196.6 million and non-cash collateral of $9.0 million.

As of June 30, 2017 and 2016, StanCERA had no credit risk exposure to borrowers because the amount StanCERA owes the borrower exceeds the amount the borrower owes StanCERA. StanCERA's pro-rata share of net income derived from the securities lending transactions during fiscal years 2017 and 2016 was $855,097 and $782,056, respectively. These are separate investments made on StanCERA's behalf and not StanCERA's share of pooled investments. At June 30, 2017 and 2016 StanCERA had the following securities out on loan:

	June 30, 2017		June 30, 2016	
	Fair Value of Securities on Loan	Collateral Received	Fair Value of Securities on Loan	Collateral Received
U.S. Equities	$ 86,015,018	$ 88,088,566	$ 147,205,946	$ 149,137,107
U.S. Corporate Fixed	16,828,939	17,213,320	13,236,182	13,452,178
U.S. Agencies	5,500,725	5,616,113	4,846,241	4,943,692
U.S. Government Fixed	22,887,861	23,372,341	22,143,838	22,591,555
Non-U.S. Equities	5,979,492	6,293,953	5,928,657	6,095,313
Non-U.S. Corporate Fixed	-	-	322,875	332,700
Total Securities	137,212,035	140,584,293	193,683,739	196,552,545
Total Non-Cash Collateral	29,757,018	30,859,465	8,601,706	9,035,178
Total	$ 166,969,053	$ 171,443,758	$ 202,285,445	$ 205,587,723

Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Duration is a measure of the price sensitivity of a fixed income portfolio to changes in market interest rates. Generally, the longer the maturity of an investment the greater the sensitivity of its fair value to changes in market interest rates.

Highly Sensitive Investments are certain debt investments whose terms may cause their fair value to be highly sensitive to market interest rate changes. Terms include such variables as embedded options, coupon multipliers, benchmark indices and reset dates. StanCERA's fixed income investments have embedded prepayment options that will typically cause prepayments by the obligees of the underlying investments when interest rates fall. Prepayments eliminate the stream of future interest payments and, therefore, diminish the fair value of the fixed income investment.

The following table shows the effective duration of StanCERA's fixed income investments by investment type.

	June 30, 2017		June 30, 2016	
Fixed Income Securities	**Fair Value**	**Effective Duration (in years)**	**Fair Value**	**Effective Duration (in years)**
U.S. Treasuries	$ 151,429,405	4.2	$ 100,231,031	0.7
Commercial Mortgage Backed Securities	2,239,743	3.9	5,474,753	2.5
Government Mortgage Backed Securities	120,887,939	2.6	169,336,520	1.6
Collateralized Mortgage Obligations	1,087,450	0.2	1,393,950	3.3
Federal Agency	7,311,898	3.8	7,272,939	1.1
Asset-Backed Securities	2,797,008	0.7	4,603,191	0.9
Corporate Bonds	93,836,929	6.6	135,217,918	3.7
Municipal Bonds	11,528,044	6.9	13,038,517	3.3
Emerging Market / Non-U.S. Bonds	66,887,109	5.9	83,719,754	5.1
Total Fixed Income Securities	458,005,525		520,288,573	
No Effective Duration				
Bank Loans	98,824		253,414	
Other Bonds	2,676,502		2,680,793	
Total Fixed Income Securities	$ 460,780,851		$ 523,222,780	

NOTE 4 – CASH AND INVESTMENTS (continued)

Credit Risk

Credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. In cases where credit ratings differ among rating agencies, the manager shall use the lowest of the ratings provided. StanCERA's custodial bank provided ratings for Moody's Investors Service (Moody's) and Standard & Poor's (S&P). Should the rating of a fixed income security fall below investment grade, the manager may continue to hold the security if they believe the security will be upgraded in the future, there is a low risk of default, and buyers will continue to be available throughout the anticipated holding period. The manager has the responsibility of notifying the Board whenever an issue falls below investment grade. Investment grade quality is defined as a Standard & Poor's rating of BBB or higher. The notification should include the manager's assessment of the issue's credit rating and its ongoing role in the portfolio. The Stanislaus County pool and the short term investment funds held with fiscal agent are unrated.

The following table shows the quality of StanCERA's investments in fixed income securities.

	June 30, 2017		June 30, 2016	
S&P/Moody's Credit Rating	Percentage of Total Fixed Income	StanCERA's Fixed Income Securities	Percentage of Total Fixed Income	StanCERA's Fixed Income Securities
Aaa / AAA	0.24%	$ 1,099,420	0.77%	$ 4,016,115
Aa1 / AA+	1.55%	7,162,393	0.64%	3,371,496
Aa2 / AA	0.37%	1,717,017	0.39%	2,054,738
Aa3 / AA-	1.07%	4,910,983	0.30%	1,576,913
A1 / A+	1.23%	5,690,205	1.99%	10,388,898
A2 / A	0.89%	4,092,236	0.79%	4,110,329
A3 / A-	1.66%	7,630,802	2.14%	11,207,320
Baa1 / BBB+	7.04%	32,458,568	8.74%	45,707,979
Baa2 / BBB	7.08%	32,611,260	9.79%	51,216,944
Baa3 / BBB-	9.51%	43,797,693	9.64%	50,459,527
Ba1 / BB+	4.32%	19,894,398	4.72%	24,681,704
Ba2 / BB	1.06%	4,906,899	1.21%	6,320,132
Ba3 / BB-	0.90%	4,124,392	1.11%	5,801,498
B1 / B+	1.00%	4,599,110	2.68%	14,033,307
B2 / B	0.29%	1,354,560	0.11%	557,581
B3 / B-	0.12%	537,581	0.57%	2,993,271
Caa1/CCC+	1.10%	5,081,346	0.35%	1,848,625
Caa2/CCC	27.11%	124,934,789	0.06%	294,124
N/R	0.00%	-	34.12%	178,554,648
N/A	33.46%	154,177,199	19.88%	104,027,631
Total	100.00%	$ 460,780,851	100.00%	$ 523,222,780

N/R represents securities that are not rated.
N/A represents securities that are not applicable to the rating disclosure requirements.

Concentration of Credit Risk

Concentration of Credit Risk is the risk of loss due to a large concentration of investments in any one issuer. Investments issued or explicitly guaranteed by the US Government and investments in mutual funds, external investment pools, and other pooled investments are exempt from the disclosure requirements. As of June 30, 2017, for separately managed investment accounts, StanCERA did not have investments in any one issuer representing 5% or more of the total portfolio. For the fiscal year ended June 30, 2016, StanCERA had $92,251,888 invested in a single issuer (Fannie Mae) which represented 5% or more of the total portfolio.

Custodial Credit Risk

Custodial Credit Risk for deposits is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. StanCERA does not have a formal policy for custodial credit risk for deposits. Under California Government Code, a financial institution is required to secure deposits in excess of $250,000 made by state or local government units by pledging securities held in the form of an undivided collateral pool. The fair value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by the public agencies. California law also allows financial institutions to secure governmental deposits by pledging first deed mortgage notes having a value of 150% of the secure public deposits. Such collateral is held by the pledging financial institution's trust department or agent in StanCERA's name. At year end, StanCERA had no custodial credit risk exposure to any depository financial institution. All deposits are placed with a custodial bank.

Custodial Credit Risk for investments is the risk that, in the event of the failure of the counter party (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. StanCERA does not have a formal policy for custodial credit risk for investments. Investment securities are exposed to custodial credit risk if the securities are uninsured, not registered in the governmental entity's name, and held by the counter party. StanCERA's investment securities are not exposed to custodial credit risk because all securities held by StanCERA's custodial bank are in StanCERA's name.

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates may adversely affect the fair value of an investment. StanCERA's external investment managers may invest in international securities and must follow StanCERA's Investment Guidelines pertaining to these types of investments.

American Depositary Receipts (ADR) are included in the U.S. Dollars. ADR represents underlying securities of non-U.S. companies traded on the US stock exchanges. Although the transactions are denominated in U.S. Dollars and not subject to foreign currency risk, these securities are reflected as part of the non-U.S. equities within International Equity Investments reported in the Statements of Fiduciary Net Position.

NOTE 4 – CASH AND INVESTMENTS (continued)

Foreign Currency Risk (continued)

StanCERA's exposure to foreign currency risk in U.S. dollars is as follows:

Currency	June 30, 2017 Fair Value (in U.S. $)	June 30, 2016 Fair Value (in U.S. $)
Australian Dollar	$ 22,305,405	$ 15,181,139
Brazilian Real	1,095,326	2,102,367
British Pound	46,612,396	-
Canadian Dollar	26,000,999	20,504,227
Chilean Peso	845,878	232,002
Chinese Yuan	-	12,132,249
Danish Krone	4,851,802	4,298,673
Euro Dollars	103,052,094	112,317,199
Hong Kong Dollar	23,103,895	5,371,644
Hungarian Forint	1,244,746	594,530
Indian Rupee	-	901,420
Indonesian Rupiah	1,105,930	980,322
Japanese Yen	68,986,121	58,104,762
Korean Won	-	7,513,962
Malaysian Renggit	947,026	148,152
Mexican Nuevo Peso	-	726,867
Netherlands Antillean Guilder	-	6,515,145
New Isreali Shekel	750,661	2,022,785
New Taiwan Dollar	8,387,345	6,548,487
New Zealand Dollar	1,765,526	2,245,984
Norwegian Krone	3,380,274	3,354,207
Russian Ruble	-	2,537,192
Singapore Dollar	3,171,522	4,074,867
South African Rand	1,782,798	1,773,456
South Korean Won	10,198,702	-
Swedish Krona	4,353,319	5,372,683
Swiss Franc	23,278,290	19,067,277
Thailand Baht	1,588,645	2,073,463
Turkish Lira	1,160,637	428,960
U.S. Dollar	48,217,873	36,142,955
TOTAL	$ 408,187,210	$ 333,266,976

NOTE 4 – CASH AND INVESTMENTS (continued)

Commitments to Private Credit

At June 30, 2017, StanCERA's total capital commitments to private credit partnerships was $160,000,000. Of this amount, $41,520,071 remained unfunded and is not recorded on StanCERA's Statements of Fiduciary Net Position.

Commitments to Private Real Estate

At June 30, 2017, StanCERA's total capital commitments to private real estate partnerships was $60,000,000. Of this amount, $16,574,300 was unfunded and is not recorded in StanCERA's Statement of Fiduciary Net Position.

Commitments to Infrastructure

At June 30, 2017, StanCERA's total capital commitments to infrastructure was $50,000,000. Of this amount, $29,983,500 was unfunded and is not recorded in StanCERA's Statement of Fiduciary Net Position.

Investment Expense

Investment expense includes fees paid for investment consulting services, fund evaluation services, and securities custodian services. Fees paid are charged against the StanCERA's investment earnings pursuant to Government Code Sections 31596.1 and 31592.5.

Investment Expense

	June 30, 2017	June 30, 2016
Investment Managers	$ 7,939,132	$ 8,388,630
Investment Consultants	282,572	280,418
Custodial Fees	428,916	375,988
Investment Attorney	13,723	12,648
Other Investment Costs	1,171,152	260,146
Actuarial Fees	150,303	122,934
Total Investment Expenses	$ 9,985,798	$ 9,440,764

NOTE 5 - CONTRIBUTIONS

Contribution Rates

The County Employees' Retirement Law of 1937 establishes the basic obligations for employer and member contributions to the retirement plan. The actual employer and member contribution rates in effect each year are based on recommendations made by an independent actuary and adopted by the Board.

StanCERA's policy for employer contributions states that actuarially determined rates expressed as a percentage of annual covered payroll are required to accumulate sufficient assets to pay benefits when due. Level percentage of payroll employer contribution rates are determined using the entry age actuarial cost method. StanCERA also uses the level entry age normal cost method with an UAAL to amortize any unfunded liability.

Member basic rates are based on a formula reflecting the age at entry into the Plan. For Tier 5 Safety, the rates are such as to provide an average monthly annuity at age 50 equal to 1/100 of the FAS. Tier 1 General Members pay rates that will provide an average annuity at age 60 of 1/100 of the FAS. Tier 4 General Members pay rates that will provide an average annuity at age 55 of 1/120 of the FAS. County (and former County agency) Safety and General Members in Tiers 1 and 4 pay one half of the aforementioned rates. General Members in Tier 2 pay rates to provide an average annuity of 1/120 of FAS at age 60. General Members in Tier 3 pay no member contributions. General Members in Tier 5 pay rates to provide an average annuity at age 55 of 1/120 of FAS. Both General and Safety Tier 6 Members pay approximately half of the actuarial determined normal cost rate for the benefit.

Member cost of living contributions, expressed as a percentage of their basic rates, are designed to pay for one-half of the cost of living liabilities for future service. For members integrated with Social Security, the above contributions are reduced by 1/3 of that portion of such contribution payable with respect to the first $350 of monthly salary. Member contributions are refundable upon termination from the retirement system.

Contributions as a percentage of covered payroll for fiscal year ended June 30, 2017, are shown in the following table:

Employer	Employer Contributions	Member Contributions	% of Covered Payroll
Stanislaus County	$ 55,715,221	$ 22,584,452	89.0146%
City of Ceres	3,831,916	1,397,426	4.8278%
Stanislaus Superior Court	2,857,220	1,211,449	5.1033%
Stanislaus Council of Governments	195,591	93,954	0.3595%
East Side Mosquito Abatement District	174,683	105,068	0.2824%
Salida Sanitary District	146,199	30,827	0.2310%
Keyes Community Services District	61,826	24,085	0.1161%
Hills Ferry Cemetery District	41,904	16,484	0.0653%
	$ 63,024,560	$ 25,463,745	100.0000%
Covered Payroll	$ 255,646,516		

NOTE 5 – CONTRIBUTIONS (continued)

Contributions as a percentage of covered payroll for fiscal year ended June 30, 2016, are shown in the following table:

Employer	Employer Contributions	Member Contributions	% of Covered Payroll
Stanislaus County	$ 51,455,859	$ 21,143,220	88.2823%
City of Ceres	3,554,626	1,420,682	5.3828%
Stanislaus Superior Court	2,618,462	1,140,686	5.2662%
Stanislaus Council of Governments	193,450	80,984	0.3915%
East Side Mosquito Abatement District	152,889	66,793	0.2747%
Salida Sanitary District	127,980	27,945	0.2239%
Keyes Community Services District	56,273	21,512	0.1135%
Hills Ferry Cemetery District	36,771	14,686	0.0651%
	$ 58,196,310	$ 23,916,508	100.0000%
Covered Payroll	$ 245,751,576		

NOTE 6 – RESERVES

As required by the County Employees Retirement Law of 1937 or the Board’s policies, the following reserves from Fiduciary Net Position Restricted for Pension Benefits must be established and used to account for the members’ (employees and retirees) contributions.

Active Members’ Reserve

This reserve represents the cumulative contributions made by active members (employees), after deducting refunds to the members, plus the investment earnings credited to the reserve at the assumed rate of return determined by the actuary. For fiscal years ending June 30, 2017 and 2016, the actuarial assumed rate of return was 7.25%. Based on Retirement Board policy where the Plan is below 100% funded on a market basis, the percentage allocated to Active Member Reserves is capped at the actuarial assumed rate of return and will determine the semi-annual percent of interest to be posted to individual member account balances in the subsequent fiscal year.

Employer Advance Reserves

These reserves represent the cumulative contributions made by the County and other employers. Interest earnings are credited to these reserves based on StanCERA’s excess earnings policy.

Upon the retirement of an active member, an actuarially determined amount of the member’s vested interest is transferred from the Employer Advance Reserves to the Retired Members’ Reserve.

NOTE 6 – RESERVES (continued)

Retired Members' Reserves

These reserves are established to account for the unpaid retirees' pension benefits. Upon the retirement of an employee, member contributions plus the interest earnings credited to the member's account are transferred from the Active Members' Reserve account to the Retired Members' Annuity and Cost of Living Reserve accounts.

From these reserves, StanCERA pays the retiree benefits in an amount computed in accordance with the County Employees Retirement Law of 1937. Interest earnings are credited to this reserve based on StanCERA's excess earnings policy.

Retiree Burial Allowance Reserve

The burial allowance reserve is a benefit the Board of Retirement offers which pays the family member of a deceased retiree a lump sum death benefit. This benefit is available for all retirees whose last work in a 1937 Act Retirement System or California Public Employees Retirement System (CalPERS) was with StanCERA. Interest earnings are credited to this reserve based on StanCERA's excess earnings policy.

Contingency Reserve

This optional reserve represents earnings in excess of the total interest credited to contributions of the employer and employee and is funded at a minimum 1% of total valuation reserves prior to excess earnings distribution (Government Code Section 31592). It is used as a reserve against deficiencies in interest earnings in other years, losses on investments, and other contingencies. The Board set this reserve to 1% in May 2012 and it is reviewed and adjusted annually.

Undistributed Earnings/(Losses)

This "designation" account was established on June 30, 2003. It was used to minimize the impact of actuarial smoothing of assets and contains an accumulation of earnings or losses, which have not been distributed to any other reserve. This reserve has undistributed losses of $0 and $41,804,347 as of June 30, 2017 and 2016.

NOTE 6 – RESERVES (continued)

Other Reserves

These reserves are for Tier 3 disability and legal contingencies and are non-valuation reserves.

Reserve Account Balances are as follows:

	June 30, 2017	June 30, 2016
Active Members' Reserve	$ 475,779,191	$ 441,709,617
Employer Advance Reserve	262,053,928	236,924,744
Employer Transfer from Non-Valuation Reserve	152,899,953	136,030,872
Retired Members' Reserve	1,076,561,103	973,716,411
Retiree Burial Allowance Reserve	6,553,797	6,150,733
Contingency Reserve	18,171,020	17,945,324
Undistributed Losses	-	(41,804,347)
Other Reserves		
Legal Contingency Reserve	2,202,759	2,238,799
Tier 3 Disability Reserve	1,560	1,560
Total Reserves	$ 1,994,223,311	$ 1,772,913,713

NOTE 7 – LITIGATION

StanCERA is a defendant in various lawsuits and claims arising in the ordinary course of its operations. StanCERA's management and legal counsel estimate the ultimate outcome of such litigation will not have a material effect on StanCERA's financial statements.

NOTE 8 – NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

Actuarial Assumptions

The actuarial assumptions used in the June 30, 2016 valuation were based on the results of an actuarial experience study for the period July 1, 2012 through June 30, 2015. Measurements as of the reporting date are based on the fair value of assets as of June 30, 2017, and the Total Pension Liability as of the valuation date, June 30, 2016, using update procedures to roll forward to StanCERA's fiscal year end of June 30, 2017. There were no significant events between the valuation date and the measurement date, so the roll forward procedures only included the addition of service cost and interest cost offset by actual benefit payments.

NOTE 8 – NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS (continued)

The components of the Net Pension Liability of StanCERA at June 30, 2017 and June 30, 2016 were as follows:

	June 30, 2017	June 30, 2016
Total Pension Liability	$ 2,659,510,907	$ 2,510,211,948
Fiduciary Net Position	(1,994,223,311)	(1,772,913,713)
Net Pension Liability	$ 665,287,596	$ 737,298,235
Fiduciary Net Position as a percentage of the Total Pension Liability	75.0%	70.6%

The Total Pension Liability was determined based on the June 30, 2016 and 2015 actuarial valuation rolled forward to June 30, 2017 and 2016, respectively, using the following actuarial assumptions, applied to all periods included in the measurement:

ACTUARIAL VALUATION ASSUMPTIONS

	June 30, 2016	June 30, 2015
Investment Rate of Return	7.25%, net of investment expense	7.25%, net of investment expense
Projected Salary Increases	3.25%, plus service-based rates	3.25%, plus service-based rates
Attributed to Inflation	3.00%	3.00%
Cost of Living Adjustments	100% of CPI to 3.0% annually with banking, 2.7% annual increases assumed	100% of CPI to 3.0% annually with banking, 2.7% annual increases assumed

Post-retirement mortality rates for active Members are specified by the CalPERS Pre-Retirement Non-Industrial Mortality table adjusted by 100.3% for males and 98.8% for females with generational mortality improvements projected from 2009 using Scale MP-2015. Duty related mortality rates are only applicable for Safety Active Members and are based on the CalPERS Pre-Retirement Industrial Death table without adjustment or projection.

Rates of mortality for healthy retired Members and their beneficiaries are specified by the CalPERS Healthy Annuitant table adjusted by 93.4% for males and 107.9% for females with generational mortality improvements projected from 2009 using Scale MP-2015. Separate mortality assumptions are used for disabled retirees.

NOTE 8 – NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS (continued)

The long-term defined benefit pension plan return expectations were determined using a building-block approach. An inflation forecast is the baseline and various real return premiums (e.g., bonds, equities, etc.) are added to create nominal return expectations for each asset class. These expectations are combined to produce the long-term expected rate of return by weighting the expected nominal rates of return by the target asset allocation percentages and including an expected return from rebalancing uncorrelated asset classes. Best estimates of geometric real rates of return for each major asset class included in the target asset allocation as of June 30, 2017 and June 30, 2016 are summarized in the following table:

Asset Class	2017 Long Term Expected Rate of Return	2016 Long Term Expected Rate of Return
Domestic Equities		
U.S. Large Cap	4.70%	5.90%
U.S. Small Cap	4.80%	5.20%
International Equities		
International Developed	9.70%	9.20%
Emerging Markets	8.60%	11.30%
U.S. Fixed Income		
Core	3.30%	3.20%
U.S. Treasury	2.40%	2.30%
Short-term Gov/Credit	2.60%	2.50%
Real Estate		
Core	4.60%	4.70%
Value-add	6.60%	6.70%
Risk Parity	7.20%	7.00%
Private Equity	7.80%	8.20%
Private Credit	6.50%	9.10%
Infrastructure	4.60%	4.70%
Cash	2.20%	2.00%

Discount Rate

The discount rate used to measure the total pension liability was 7.25% as of June 30, 2017 and June 30, 2016. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate and that contributions from the employers will be made at contractually required rates, actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

NOTE 8 – NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS (continued)

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of StanCERA calculated using the discount rate of 7.25%, as well as what the plan's net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.25%) or one percentage point higher (8.25%) than the current rate for fiscal year ending June 30, 2017:

Sensitivity of Net Pension Liability to Changes in Discount Rate

		1% Decrease 6.25%	Current Discount Rate 7.25%	1% Increase 8.25%
June 30, 2017	Net Pension Liability	$1,044,102,015	$665,287,596	$356,774,544
	Fiduciary Net Postion as a Percentage of Total Pension Liability	65.6%	75.0%	84.8%
		1% Decrease 6.25%	**Prior Discount Rate 7.25%**	**1% Increase 8.25%**
June 30, 2016	Net Pension Liability	$1,096,739,912	$737,298,235	$444,670,802
	Fiduciary Net Postion as a Percentage of Total Pension Liability	61.8%	70.6%	79.9%

NOTE 9 – SUBSEQUENT EVENTS

StanCERA has evaluated events through October 27, 2017, which is the date the financial statements were issued. No subsequent events took place after June 30, 2017.

REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Changes in Net Pension Liability and Related Ratios

	June 30, 2017	June 30, 2016	June 30, 2015	6/30/2014 (1)
Total Pension Liability				
Service cost	$57,465,280	$55,351,509	$48,242,363	$46,209,346
Interest (includes interest on service cost)	179,875,553	171,938,615	154,850,353	147,384,248
Changes of benefit terms	-	-	-	-
Differences between expected and actual experience	28,801,984	(6,424,597)	2,148,638	-
Changes of assumptions (4)	-	269,752,272	-	-
Benefit payments, including refunds of member contributions	(116,843,858)	(108,165,810)	(101,858,156)	(94,782,471)
Net change in total pension liability	149,298,959	382,451,989	103,383,198	98,811,123
Total pension liability - beginning	2,510,211,948	2,127,759,959	2,024,376,761	1,925,565,638
Total pension liability - ending	$2,659,510,907	$2,510,211,948	$2,127,759,959	$2,024,376,761
Fiduciary net position				
Contributions - employer	$63,024,560	$58,196,310	$53,849,031	$46,763,996
Contributions - member (2)	25,463,745	23,916,508	22,960,235	21,867,911
Total investment income	252,309,705	(31,322,276)	68,722,781	274,896,108
Benefit payments, including refunds of member contributions	(116,843,858)	(108,165,810)	(101,858,156)	(94,782,471)
Administrative expense	(2,644,554)	(2,315,223)	(2,378,966)	(2,249,260)
Net change in fiduciary net position	221,309,598	(59,690,491)	41,294,925	246,496,284
Fiduciary net position - beginning	1,772,913,713	1,832,604,204	1,791,309,279	1,544,812,995
Fiduciary net position - ending	$1,994,223,311	$1,772,913,713	$1,832,604,204	$1,791,309,279
Net pension liability - ending	$665,287,596	$737,298,235	$295,155,755	$233,067,482
Fiduciary net position as a percentage of the total	75.0%	70.6%	86.1%	88.5%
Covered payroll (3)	$255,646,515	$245,751,576	$237,263,160	$221,863,110
Net pension liability as a percentage of	260.2%	300.0%	124.4%	105.1%

(1) Trend Information: Schedule will ultimately show information for ten years. Additional years will be displayed as they become available.

(2) In accordance with GASB Statement No. 82, employer-paid member contributions are classified as Member Contributions.

(3) In accordance with GASB Statement No. 82, Covered Payroll is the payroll on which contributions are based.

(4) In 2016, amounts reported as changes of assumptions resulted primarily from changes to the assumed earnings rate from 7.75% to 7.25% and from adjustments to assumed life expectancies as a result of adopting mortality tables with generational improvements.

REQUIRED SUPPLEMENTARY INFORMATION (continued)

Schedule of Employer Contributions

Last 10 Fiscal Years for Fiscal Years Ending June 30
(Dollar amounts in thousands)

	2017	2016	2015	2014	2013
Actuarially Determined Contributions	$63,025	$58,196	$53,849	$46,764	$39,077
Contributions in Relation to the Actuarially Determined Contributions	63,025	58,196	53,849	46,764	39,077
Contribution Deficiency/(Excess)	$ -	$ -	$ -	$ -	$ -
Covered Payroll (1)	$255,647	$245,752	$237,263	$221,863	$217,491
Contributions as a Percentage of Covered Payroll	24.65%	23.68%	22.70%	21.08%	17.97%

	2012	2011	2010	2009	2008
Actuarially Determined Contributions	$41,614	$47,657	$31,814	$23,411	$22,555
Contributions in Relation to the Actuarially Determined Contributions	41,614	47,657	31,814	23,411	22,555
Contribution Deficiency/(Excess)	$ -	$ -	$ -	$ -	$ -
Covered Payroll (1)	$215,057	$221,541	$231,538	$248,316	$242,009
Contributions as a Percentage of Covered Payroll	19.35%	21.51%	13.74%	9.43%	9.32%

(1) In accordance with GASB Statement No. 82, Covered Payroll is the payroll on which contributions are based.

Schedule of Investment Returns

Last 10 Fiscal Years for Fiscal Years Ending June 30

	2017	2016	2015	2014	2013
Annual money- weighted rate of return, net of investment expense	14.40%	-1.70%	4.20%	18.20%	14.50%

	2012	2011	2010	2009	2008
Annual money- weighted rate of return, net of investment expense	0.70%	22.90%	15.90%	-16.40%	-8.20%

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

Changes of benefit terms

There were no changes of benefit terms for fiscal year ended June 30, 2017.

Changes of assumptions

There were no changes in assumptions approved by the Board of Retirement for fiscal year ended June 30, 2017.

Methods and Assumptions Used in Calculations of Actuarially Determined Contributions

The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, 2015, two years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule:

ACTUARIAL VALUATION METHODS AND ASSUMPTIONS

Valuation Date	June 30, 2015
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percent of Pay
Remaining Amortization Period	Closed period - 21 Years
Asset Valuation Method	Actuarial value: Excess earnings smoothed over five years, 80% / 120% corridor around market
Actuarial Assumptions	
Investment Rate of Return	7.25%, net of investment expenses
Projected Salary Increases	3.25%, plus service-based rates
Attributed to Inflation	3.00%
Cost of Living Adjustments	100% of CPI to 3.0% annually with banking, 2.7% annual increases assumed
Mortality	Rates of ordinary death for active Members are specified by the CalPERS Pre-Retirement Non-Industrial Mortality table, adjusted by 100.3% for males and 98.8% for females, with generational mortality improvements projected from 2009 using Scale MP-2015. Duty related mortality rates are only applicable for Safety Active Members, and are based on the CalPERS Pre-Retirmeent Individual Death table without adjustment or projection. Rates of motality for healthy retired Members and their beneficiaries are specified by the CalPERS Healthy Annuitant table, adjusted by 93.4% for males and 107.9% for feales, with generational mortality improvements projected from 2009 using Scale MP-2015. Separate mortality assumptions are used for disabled retirees.

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2017 can be found in the June 30, 2015 actuarial valuation report located on StanCERA's website, www.stancera.org.

OTHER SUPPLEMENTAL INFORMATION

SCHEDULE OF ADMINISTRATIVE EXPENSES
For the Years Ended June 30, 2017 and 2016

	2017	2016
Personnel Services:		
Salaries and Employee Benefits	$1,515,162	$1,321,728
Total Personnel Services	1,515,162	1,321,728
Professional Services:		
Computer and Software Services and Support	229,871	89,773
Outside Legal Counsel	312,792	52,570
Disability Hearing Officer/Medical Exams and Reviews	23,209	15,175
External Audit Fees	45,505	58,964
Other Professional Services	1,775	916
Total Professional Services	613,152	217,398
Office Expenses:		
Office Supplies	15,424	27,590
Minor Equipment and Computer Supplies	24,732	5,506
Stanislaus County Support Services	144,908	172,646
Contract Services	35,674	223,994
Communications	54,882	18,432
Publications	2,259	886
Total Office Expenses	277,879	449,054
Miscellaneous:		
Fiduciary and Staff - Education/Travel	73,474	52,971
Fiduciary and Staff - Meetings/Other Travel	7,100	8,900
Insurance	77,830	80,165
Memberships	7,120	9,177
Depreciation	72,837	175,830
Total Miscellaneous	238,361	327,043
TOTAL ADMINISTRATIVE EXPENSES	$2,644,554	$2,315,223

OTHER SUPPLEMENTAL INFORMATION

SCHEDULE OF INVESTMENT MANAGEMENT FEES
AND OTHER INVESTMENT EXPENSES
For the Years Ended June 30, 2017 and 2016

	2017	2016
Investment Management Fees:		
Domestic Stocks	$2,209,023	$2,286,813
International Stocks	1,664,072	1,390,657
Fixed Income	819,446	783,608
Private Credit	1,945,999	2,280,896
Private Real Estate	494,702	416,709
Infrastructure	703,254	1,143,572
Real Estate Securities & Special Situations	102,636	86,375
Total Investment Management Fees	7,939,132	8,388,630
Investment Consulting Fees	282,572	280,418
Investment Custodian Fees	428,916	375,988
Investment Legal Fees	13,723	12,648
Other Investment Related Expenses	1,171,152	260,146
Actuarial Fees	150,303	122,934
TOTAL INVESTMENT EXPENSES	$9,985,798	$9,440,764

INVESTMENT SECTION

STANCERA

Verus

Stanislaus County Employee Retirement System

Summary

Verus independently calculates the Plan's performance using portfolio market valuation and transaction data provided by the Plan's custodian bank, Northern Trust. Performance calculations are presented, to the greatest degree possible, in accordance with the Global Investment Performance Standards published by the CFA Institute.

At the Total Fund level, StanCERA returned 14.4% net of fees for the fiscal year, outperforming its policy index return of 11.5%. The Plan earned 5.3%, 9.5%, and 5.5% net of fees for the trailing three-, five-, and ten-year periods ending June 30, 2017.

The one-year period ending June 30, 2017 saw U.S. equities post a strong year. The S&P 500 returned 17.9% while the Russell 1000 Value earned 15.5% and the Russell 1000 Growth earned 20.4%. StanCERA's U.S. equity allocation generated a return of 21.5% net of fees for the fiscal year as compared to 19.4% for its custom policy index (80% Russell 1000 / 20% Russell 2000). The Plan's domestic equity allocations earned 8.3%, 14.6%, and 6.6% net of fees over the trailing three-, five-, and ten-year periods ending June 30, 2017.

International equities also posted a strong fiscal year, generally outperforming domestic equity markets. Both developed and emerging market economies generated higher growth rates than in recent history. StanCERA's International Equity managers combined to return 23.2% for the fiscal year net of fees, outperforming the 21.0% return for the MSCI All Country World ex-U.S. Index. The Plan's international equity allocations earned 2.1%, 8.5%, and 1.7% net of fees over the trailing three-, five-, and ten-year periods ending June 30, 2017.

The U.S. Fixed Income market ended the fiscal year with a -0.3% return for the Barclays US Aggregate Index. Interest rates and bond prices had been volatile with the Federal Reserve hiking its key interest rate 3 consecutive quarters to a range of 1.00% - 1.25% as of June 14, 2017. StanCERA's Fixed Income portfolio outperformed its policy index with a return of 2.8% for the one-year period net of fees. The Plan's domestic fixed income allocations earned 3.2%, 3.5%, and 5.6% net of fees over the trailing three-, five-, and ten-year periods ending June 30, 2017.

The US Real Estate sector generated a negative return for the fiscal year, with the Dow Jones US Select RESI index returning -2.4% for the fiscal year. StanCERA's Real Estate portfolio posted a 4.3% return net of fees, outperforming the index return by 6.7% for the year. The Plan's real estate allocations earned 9.7% and 11.4% net of fees over the trailing three-, and five-year periods ending June 30, 2017.

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StanCERA's Direct Lending portfolio generated a 0.9% return net of fees for the fiscal year, trailing the custom index (9% annual) by 8.1%, while the Plan's infrastructure investments underperformed the index (CPI + 5%) by 8.2% with a -1.5% return net of fees.

Investment Policy, Asset Deployment Policy and Performance Measurement Standards

StanCERA periodically reviews and updates its investment policy statement, asset allocation, and related procedures and processes. The primary investment objective is to earn a long-term return sufficient to avoid deterioration in funded status while assuming an acceptable level of investment risk. A secondary goal is to outperform the asset allocation-weighted benchmark (i.e. the "policy index"). At quarterly intervals, the System reviews performance at the total fund, asset-class composite and individual investment strategy levels. At each level, returns are evaluated against pre-determined benchmarks and peers.

At the April 2017 Board Meeting, the Board approved a new asset allocation, which is reflected in the following table. While this allocation was selected at the May meeting, it will take time to fully implement it through the selection of investment strategies and deployment of capital.

ASSET CLASS	TARGET ALLOCATION
Domestic Equity	19%
International Equity	24%
Domestic Fixed Income	21%
Real Assets	10%
Alternatives*	25%
Cash	1%
Total	100%

* Private Equity, Private Credit, Risk Parity

Investment Objectives

Investment returns achieved through June 30, 2017 have been calculated using a time-weighted rate of return methodology based upon market values. In fiscal year 2017, StanCERA met its management goals of ensuring sufficient funds available to pay vested benefits and maintain supplemental benefits, complying with applicable fiduciary standards. The following table provides gross-of-fees returns and comparative rankings at the asset class composite and total fund levels:

Periods Ending June 30, 2017	One Year	Three Years	Five Years
US Equity	**21.9%**	**8.6%**	**14.9%**
80% Russell 1000 / 20% Russell 2000	*19.4%*	*9.0%*	*14.5%*
Rank*	10	57	20
International Equity	**23.7%**	**2.5%**	**9.0%**
MSCI ACWI ex-US Index	*21.0%*	*1.3%*	*7.7%*
Rank	20	47	38
US Fixed Income	**3.0%**	**3.4%**	**3.7%**
Barclays US Aggregate	*-0.3%*	*2.5%*	*2.2%*
Rank	28	41	43
Real Estate	**4.6%**	**10.8%**	**12.4%**
DJ US Select Real Estate	*-2.4%*	*8.0%*	*10.2%*
Direct Lending	**1.5%**	**4.8%**	--
Custom Index (9% annual)	*9.0%*	*9.0%*	--
Infrastructure	**3.0%**	--	--
CPI + 5%	*6.7%*	--	--
Total Fund	**14.7%**	**5.7%**	**9.9%**
*Policy Benchmark***	*11.5%*	*5.6%*	*8.8%*
Public Fund Median	*12.3%*	*5.3%*	*8.7%*
Rank	*10*	32	13

* Rankings based on InvestorForce's universe of all Public Defined Benefit Plans. Ranking 1 is highest, 100 is lowest.
** Policy Index: 14.4% Russell 1000 Value, 11.3% Russell 1000 Growth, 4.8% S&P 500, 4.0% Russell 2000 Value, 3.7% Russell 2000 Growth, 18.0% MSCI ACWI ex USA, 29.8% Barclays Aggregate, 3.5% DJ US Select RESI, 7.5% 9% Annual,3% CPI + 4%.

Returns are gross of fees. Returns for periods greater than one-year are annualized. Results of all publicly traded investments are consistent with Global Investment Performance Standards (GIPS) as adopted by the CFA Board of Governors.

All of us here at Verus appreciate the opportunity to assist StanCERA in meeting the Plan's investment objectives. We look forward to continuing in our role of investment advisor and providing guidance to help navigate ever-changing markets.

Respectfully,

Edward J. Hoffman, CFA, FRM
Managing Director, Senior Consultant

Verus

ASSET ALLOCATION

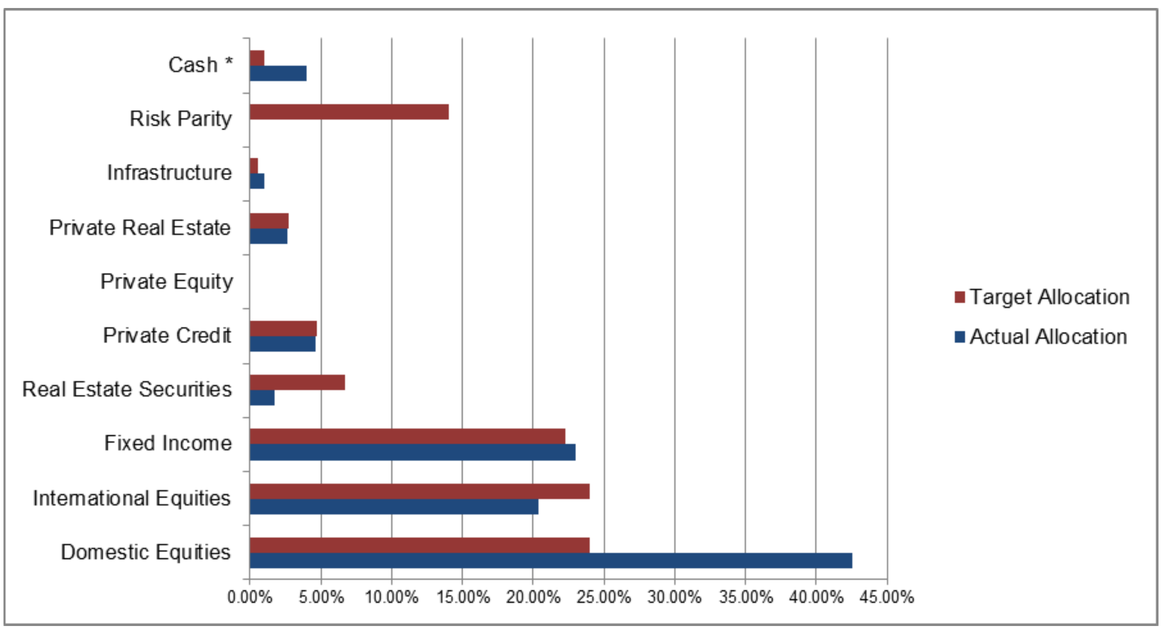
JUNE 30, 2017

Asset Class	Fair Value	Actual Allocation	Target Allocation
Domestic Equities	$851,315,999	42.52%	24.00%
International Equities	408,187,210	20.39%	24.00%
Fixed Income	460,780,851	23.02%	22.00%
Real Estate Securities	35,190,426	1.76%	6.70%
Private Credit	92,820,985	4.64%	5.00%
Private Equity	-	0.00%	0.00%
Private Real Estate	53,535,171	2.67%	2.70%
Infrastructure	19,932,549	1.00%	0.60%
Risk Parity	-	0.00%	14.00%
Cash *	80,086,881	4.00%	1.00%
TOTAL PORTFOLIO**	$2,001,850,072	100.00%	100.00%

* Excludes Pooled Cash in County Treasury of $12,066,637.

** Excludes Securities Lending Cash Collateral.

StanCERA's Asset Allocation



SCHEDULE OF INVESTMENT RETURNS (Net of Fees)

Performance as of June 30, 2017

Investment Managers	One Year	Three Year	Five Year	Ten Year
DOMESTIC EQUITY				
Dodge & Cox	28.0%	8.7%	16.1%	6.3%
BlackRock R1000 Value	15.6%	7.4%	14.0%	N/A
Russell 1000 Value Index	*15.5%*	*7.4%*	*13.9%*	*5.6%*
Jackson Square Partners	17.6%	7.3%	13.2%	8.4%
BlackRock R1000 Growth	20.5%	11.2%	15.3%	N/A
Russell 1000 Growth Index	*20.4%*	*11.1%*	*15.3%*	*8.9%*
Capital Prospects	26.0%	7.1%	14.9%	N/A
Russell 2000 Value Index	*24.9%*	*7.0%*	*13.4%*	N/A
Legato Capital Management	21.8%	5.8%	12.5%	N/A
Russell 2000 Growth Index	*24.4%*	*7.6%*	*14.0%*	N/A
Mellon Capital Management	17.9%	9.6%	14.6%	7.2%
S&P 500 Index	*17.9%*	*9.6%*	*14.6%*	*7.2%*
FIXED INCOME				
Dodge & Cox	3.5%	3.4%	3.9%	5.7%
Insight	N/A	N/A	N/A	N/A
PIMCO	0.7%	2.5%	2.2%	N/A
Barclays Aggregate Index	*-0.3%*	*2.5%*	*2.2%*	*4.5%*
INTERNATIONAL EQUITY				
LSV Asset Management	27.4%	2.0%	9.0%	1.4%
Fidelity Asset Management	19.2%	2.1%	8.1%	1.9%
MSCI ACWI ex US Index	*21.0%*	*1.3%*	*7.7%*	*1.6%*
REAL ESTATE				
BlackRock US Real Estate Index	-2.5%	7.9%	N/A	N/A
DJ US Select RESI TR USD	*-2.4%*	*8.0%*	N/A	N/A
PRIVATE CREDIT				
Medley Opportunity Fund II	6.5%	5.4%	N/A	N/A
Raven Opportunity Fund I	-7.8%	-2.8%	N/A	N/A
Raven Opportunity Fund III	-8.5%	N/A	N/A	N/A
White Oak Global Advisors	4.9%	7.7%	N/A	N/A
9% Annual	*9.0%*	*9.0%*	*N/A*	*N/A*
PRIVATE REAL ESTATE				
American Realty Advisors	10.9%	N/A	N/A	N/A
NCREIF Property Index	*7.0%*	*N/A*	*N/A*	*N/A*
Greenfield Acquisition Partners VII	6.5%	N/A	N/A	N/A
NCREIF ODCE + 1%	*8.9%*	*N/A*	*N/A*	*N/A*
Prime Property Fund	9.1%	N/A	N/A	N/A
NCREIF ODCE	*7.9%*	*N/A*	*N/A*	*N/A*
INFRASTRUCTURE				
North Haven Partners II	-1.5%	N/A	N/A	N/A
CPI + 5%	*6.7%*	*N/A*	*N/A*	*N/A*
TOTAL FUND	14.4%	5.3%	9.5%	5.5%
Policy Index	*11.5%*	*5.6%*	*8.8%*	*5.8%*

Note: % taken from Verus Quarterly Report presented to Board of Retirement on 8/22/2017.
Using time-weighted rate of return based on the market rate of return.
Does not include Securities Lending Collateral.

SCHEDULE OF INVESTMENTS BY ASSET CLASS AND MANAGER

As of June 30, 2017

Investment Managers	Asset Class	Assets Under Management	% of Fund
DOMESTIC EQUITY			
Dodge & Cox	Large Cap Value	$199,019,589	9.94%
BlackRock R1000 Value	Large Cap Value	117,446,306	5.87%
Jackson Square Parytners	Large Cap Growth	140,925,545	7.04%
BlackRock R1000 Growth	Large Cap Growth	102,682,320	5.13%
Capital Prospects	Small Cap Value	100,685,681	5.03%
Legato Capital Management	Small Cap Growth	94,151,163	4.70%
Mellon Capital Management	Large Core	96,405,395	4.82%
FIXED INCOME			
Dodge & Cox	Core Bond	273,306,617	13.65%
Insight	Core Bond	70,800,542	3.54%
PIMCO	Median Core Bond	116,673,692	5.83%
INTERNATIONAL EQUITY			
LSV Asset Management	Equity Value	205,642,854	10.27%
Fidelity Asset Management	Equity Growth	202,544,355	10.12%
REAL ESTATE			
BlackRock US Real Estate	Real Estate Index	35,190,426	1.76%
PRIVATE CREDIT			
Medley Opportunity Fund II	Private Credit	23,423,646	1.17%
Raven Opportunity Fund I	Private Credit	15,643,960	0.78%
Raven Opportunity Fund III	Private Credit	18,059,273	0.90%
White Oak Global Advisors	Private Credit	35,694,106	1.78%
PRIVATE REAL ESTATE			
American Realty Advisors	Private Real Estate	22,166,437	1.10%
Greenfield Acquisition Partners VII LP	Private Real Estate	13,769,010	0.69%
Prime Property Fund	Private Real Estate	17,599,725	0.88%
INFRASTRUCTURE			
North Haven Partners II LP	Infrastructure	19,932,549	1.00%
Total Assets Under Management		1,921,763,191	
Cash and Short-Term Investments	90 Day T-Bill	80,086,881	4.00%
Total Fund		$2,001,850,072	100.00%

Note: Does not include Securities Lending Collateral.
Does not include cash in Treasury Pool.

LARGEST BOND HOLDINGS (BY FAIR VALUE)
JUNE 30, 2017

Shares	Bond	Fair Value
22,000,000	US TREASURY NOTE 0.75% DUE 03-31-2018	$ 21,918,358
20,000,000	US TREASURY NOTE 2.375% DUE 08-15-2024	20,304,680
17,000,000	US TREASURY BILL 06-21-2018	16,799,349
16,000,000	FHLB DISCOUNT NOTE DUE 08-16-2017	15,980,048
14,800,000	US TREASURY NOTE 0.75% DUE 08-31-2018	14,702,882
12,600,000	FNMA SINGLE FAMILY MORTGAGE 3.5% 30 YEARS SETTLES AUGUST	12,919,322
12,000,000	US TREASURY NOTE 1.25% DUE 06-30-2019	11,967,192
11,800,000	US TREASURY BILL 11-09-2017	11,755,585
11,000,000	US TREASURY NOTE 1.5% DUE 06-15-2020	10,984,534
10,000,000	US TREASURY NOTE 2.125% DUE 06-30-2022	10,108,590
10,000,000	US TREASURY NOTE 1.375% DUE 06-30-2023	9,627,730
9,000,000	US TREASURY NOTE 1.125% DUE 02-28-2019	8,965,899
8,141,100	FNMA POOL #AL8182 ADJ RT DUE 02-01-2046	8,340,232
8,000,000	US TREASURY NOTE 1.125% DUE 06-30-2021	7,807,816
6,250,000	US TREASURY NOTE 0.75% DUE 02-28-2018	6,230,956
4,800,000	FNMA SINGLE FAMILY MORTGAGE 4% 30 YEARS SETTLES SEPTEMBER	5,029,877
5,000,000	FNMA SINGLE FAMILY MORTGAGE 3% 30 YEARS SETTLES SEPTEMBER	4,977,240
4,400,000	FHLB DISCOUNT NOTE DUE 08-02-2017	4,396,260
3,600,000	BAC CAP TR XI 6.625% DUE 05-23-2036	4,351,097
4,405,000	VERIZON 4.272% DUE 01-15-2036	4,251,512

LARGEST STOCK HOLDINGS (BY FAIR VALUE)
JUNE 30, 2017

Shares	Stock	Fair Value
173,510	PAYPAL INC	9,312,282
122,283	MICROSOFT CORP	8,428,967
86,427	VISA INC	8,105,124
61,485	CELGENE CORP	7,985,057
184,300	SCHWAB CHARLES CORP	7,917,528
320,100	BANK OF AMERICA CORP	7,765,626
135,072	WELLS FARGO & CO	7,484,340
85,100	CAPITAL ONE FINANCIAL CORP	7,030,962
20,028	CHARTER COMMUNICATIONS INC	6,746,432
54,428	MASTERCARD INC	6,610,281
63,333	CROWN CASTLE INTL CORP	6,344,700
75,000	ADR NOVARTIS AG	6,260,250
61,932	TIME WARNER INC	6,218,592
158,126	COMCAST CORP	6,154,264
128,255	SANOFI SPONSORED ADR	6,144,697
175,354	EBAY INC	6,123,362
245,109	LIBERTY INTERACTIVE CORP	6,014,975
82,400	MICROSOFT CORP	5,679,832
6,100	ALPHABET INC	5,671,048
25,500	GOLDMAN SACHS GROUP INC	5,658,450

A complete list of portfolio holdings is available on StanCERA's website at www.stancera.org or upon request.

SCHEDULE OF INVESTMENT MANAGEMENT FEES
For the Years Ended June 30, 2017 and 2016

		2017	2016
Domestic Equities			
BlackRock		$41,034	$55,579
Capital Prospects		732,274	606,751
Dodge & Cox		362,775	327,282
Jackson Square Partners		612,064	736,685
Legato Capital Management		501,910	616,095
Mellon Capital Management		33,462	18,862
	Total Domestic Equities	2,283,519	2,361,254
International Equities			
LSV Asset Management		1,078,138	394,409
Fidelity Asset Management		585,934	996,248
	Total International Equities	1,664,072	1,390,657
Fixed Income			
Dodge & Cox		435,293	406,990
PIMCO		384,153	376,618
	Total Fixed Income	819,446	783,608
Real Estate			
BlackRock US Real Estate Index		28,140	11,934
	Total Real Estate	28,140	11,934
Private Credit			
Medley Opportunity Fund II		265,567	369,977
Raven Opportunity Fund I		330,988	478,558
Raven Opportunity Fund III		968,340	786,223
White Oak Global Advisors		381,104	646,138
	Total Private Credit	1,945,999	2,280,896
Private Real Estate			
American Realty Advisors		129,571	125,814
Greenfield Acquisition Partners VII		225,000	156,873
Prime Property Fund		140,131	134,022
	Total Private Real Estate	494,702	416,709
Infrastructure			
North Haven Partners, LP		703,254	1,143,572
	Total Infrastructure	703,254	1,143,572
	Total Investment Management Fees	7,939,132	8,388,630
Other Investment Fees and Expenses			
Consultant Fees		282,572	280,418
Custodial Fees		428,916	375,988
Investment Attorney		13,723	12,648
Other Investment Costs		1,171,152	260,146
Actuarial Fees		150,303	122,934
	Total Other Investment Fees and Expenses	2,046,666	1,052,134
Total Investment Fees and Expenses		$9,985,798	$9,440,764

Commission Recapture Program

StanCERA participates in a commission recapture program administered by Cowen. The strategic objective of the Commission Recapture Program is to recapture a portion of trade commissions paid to brokers. The primary goal is to ensure that investment managers provide the best effort to optimize use of StanCERA's assets for the benefit of the members and beneficiaries by recapturing commissions paid on a specific percentage of trades sent to correspondent brokers on a timely basis. For fiscal years ending June 30, 2017 and 2016, Commission Recapture Income was $20,827 and $46,825, respectively.

Below are the Schedules of Commission Recapture Program Fees paid by StanCERA for fiscal years ending June 30:

	2017		
	# Shares	**Commissions**	**Per Share**
Domestic Equities			
Capital Prospects	3,057,631	$87,064	$0.028
Dodge & Cox	991,674	10,282	0.010
Jackson Square Partners	1,153,356	41,081	0.036
Legato Capital Management	9,756,711	181,278	0.019
Total Domestic Equities	14,959,372	319,705	0.021
International Equities			
LSV Asset Management	18,038,454	23,190	0.001
Fidelity Asset Management	10,641,883	121,401	0.011
Total International Equities	28,680,337	144,591	0.005
Northern Trust Transition Account	-	-	-
Totals	43,639,709	$464,296	$0.011

	2016		
	# Shares	**Commissions**	**Per Share**
Domestic Equities			
Capital Prospects	3,967,612	$108,228	$0.027
Dodge & Cox	1,528,554	17,624	0.012
Jackson Square Partners	1,153,356	45,607	0.040
Legato Capital Management	6,684,702	146,053	0.022
Total Domestic Equities	13,334,224	317,512	0.024
International Equities			
LSV Asset Management	21,207,071	24,642	0.001
Fidelity Asset Management	10,414,368	108,824	0.011
Total International Equities	31,621,439	133,466	0.002
Northern Trust Transition Account	60,351,450	16,977	0.000
Totals	105,307,113	$467,955	$0.005

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ACTUARIAL SECTION

Via Electronic Mail

September 26, 2017

Actuarial Certification

This is the Actuary's Certification Letter for the Actuarial Section of the Comprehensive Annual Financial Report (CAFR) for the StanCERA Retirement Plan (the Plan) as of June 30, 2017. This letter includes references to two documents produced by Cheiron for the Plan: the Actuarial Valuation Report as of June 30, 2016 (transmitted March 20, 2017) and the GASB 67/68 Report as of June 30, 2017 (transmitted September 26, 2017).

Actuarial Valuation Report as of June 30, 2016

The purpose of the annual Actuarial Valuation Report as of June 30, 2016 is to determine the actuarial funding status of StanCERA on that date and to calculate recommended contribution rates for the participating employers and Plan members for the Fiscal Year 2017-2018. The prior review was conducted as of June 30, 2015, and included recommended contribution rates for the Fiscal Year 2016-2017.

Actuarial funding is based on the Entry Age Normal Cost Method. Under this method, the employer contribution rate provides for current cost (normal cost) plus a level percentage of payroll to amortize the unfunded actuarial accrued liability (UAAL) plus expected administrative expenses. As of the valuation date (June 30, 2016), the amortization period is 20 years.

The funding objective of the Plan is to accumulate sufficient assets over each Member's working life to provide for Plan benefits after termination of employment or retirement. For actuarial valuation purposes, Plan assets are valued at Actuarial Value. Under this method, the assets used to determine employer contribution rates take into account market value by spreading all investment gains and losses (returns above or below expected returns) over a period of five years. The Actuarial Value is limited to no less than 80% and no more than 120% of market value.

The Board of Retirement is responsible for establishing and maintaining the funding policy of the Plan, subject to the laws of the State of California enacted under the County Employees Retirement Law of 1937 and subsequent legislation.

We prepared the following schedules, which we understand will be included in the Actuarial Section of the CAFR, based on the June 30, 2016 actuarial valuation. All historical information prior to the June 30, 2008 actuarial valuation shown in these schedules is based on information reported by the prior actuary, Buck Consultants.

- Statement of Current Actuarial Assumptions and Methods
- Membership Information (Active, Deferred, and Retired)

- Schedule of Retirees and Beneficiaries Added to and Removed from Rolls
- Development of 2016 Experience Gain/(Loss)
- GASB Solvency Test
- Summary of Plan Provisions

We reviewed the actuarial assumptions shown in the schedules and found them to be reasonably appropriate for use under the Plan. The assumptions used in this report reflect the results of an Experience Study performed by Cheiron covering the period from July 1, 2012 through June 30, 2015, and approved by the Board. The assumptions used in the most recent valuation are intended to produce results that, in the aggregate, reasonably approximate the anticipated future experience of the Plan. The next experience analysis is expected to cover the years through 2018.

We certify that the valuation was performed in accordance with generally accepted actuarial principles and practices. In particular, the assumptions and methods used for funding purposes meet the requirements of the Actuarial Standards of Practice, in particular Standards No. 4, 27, 35, and 44.

GASB 67/68 Report as of June 30, 2017

The purpose of GASB 67/68 Report as of June 30, 2017 is to provide accounting and financial reporting information under GASB 67 for StanCERA and under GASB 68 for Stanislaus County and the other participating employers. This report is not appropriate for other purposes, including the measurement of funding requirements for StanCERA.

For financial reporting purposes, the Total Pension Liability is based on the June 30, 2016 actuarial valuation updated to the measurement date of June 30, 2017. There were no significant events of which we were aware between the valuation date and the measurement date so the update procedures only included the addition of service cost and interest cost offset by actual benefit payments.

Please refer to our GASB 67/68 report as of June 30, 2017 for additional information related to the financial reporting of the System. We prepared the following schedules for inclusion in the Financial Section of the CAFR based on the June 30, 2017 GASB 67/68 report:

- Change in Net Pension Liability
- Sensitivity of Net Pension Liability to Changes in Discount Rate
- Schedule of Changes in Net Pension Liability and Related Ratios
- Notes to the Schedule of Employer Contributions

We certify that the report was performed in accordance with generally accepted actuarial principles and practices. In particular, the assumptions and methods used for disclosure purposes have been prepared in accordance with our understanding of generally accepted accounting principles as promulgated by the GASB.

CHEIRON

Disclaimers

In preparing our reports, we relied on information (some oral and some written) supplied by StanCERA. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and, changes in plan provisions or applicable law.

These reports are for the use of StanCERA and its auditor in preparing financial reports in accordance with applicable law and accounting requirements. Any other user of these reports is not an intended user and is considered a third party.

Cheiron's reports were prepared solely for StanCERA for the purposes described herein, except that the Plan's auditor may rely on these reports solely for the purpose of completing an audit related to the matters herein. They are not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

We hereby certify that, to the best of our knowledge, these reports and their contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. These reports do not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

Respectfully Submitted,

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CHEIRON

SUMMARY OF ASSUMPTIONS AND FUNDING METHODS

The following assumptions along with the post-retirement and pre-retirement demographic experiences are based on StanCERA's actuarial experience study from July 1, 2012 through June 30, 2015, approved by the StanCERA Board of Retirement on April 20, 2016. The actuarial valuation for fiscal year ending June 30, 2016 was approved by the StanCERA Board of Retirement on March 28, 2017, which incorporated the following assumptions. The purpose of the annual actuarial valuation report as of June 30, 2016 is to determine the actuarial funding status of StanCERA on that date and to calculate recommended contribution rates for the participating employers and StanCERA members for the fiscal year 2017-2018. The prior actuarial valuation conducted as of June 30, 2015 included recommended contribution rates for the fiscal year 2016-2017 which were approved by the StanCERA Board of Retirement on April 20, 2016.

Plan Description

A summary of plan provisions can be found in Note 1 of the Notes to Basic Financial Statements.

Actuarial Methods

Actuarial Cost Method

Annual contributions are computed under the Entry Age Normal Actuarial Cost Method, computed to the final decrement. A schedule of actuarially determined contributions compared to actual contributions can be found in the Required Supplementary Information section following the Notes to the Basic Financial Statements.

The excess of the Actuarial Accrued Liability over Plan assets is the Unfunded Actuarial Accrued Liability. The liability for each valuation group is amortized as a level percentage of payroll over a closed period (20 years as of the current valuation).

Actuarial Value of Plan Assets

The Actuarial Value of Plan Assets is a modified market-related value. The fair value of assets is adjusted to recognize, over a five-year period, differences between actual investment earnings and the assumed investment return. The Actuarial Value of Plan Assets is limited to no less the 80% and no more than 120% of the fair value. As of June 30, 2011, the Actuarial Value was reset to equal fair value.

ACTUARIAL VALUATION METHODS AND ASSUMPTIONS

Valuation Date	June 30, 2016	June 30, 2015
Actuarial Cost Method	Entry Age Normal	Entry Age Normal
Amortization Method	Level Percent of Pay	Level Percent of Pay
Remaining Amortization Period	19 Years	20 Years
Asset Valuation Method	Modified Market-Related Value smoothed over a five year period	Modified Market-Related Value smoothed over a five year period

Actuarial Assumptions

1. Rate of Return – The annual rate of return is assumed to be 7.25% net of investment expenses.
2. Cost of Living – The cost of living is assumed to be 3.00% per year as measured by the Consumer Price Index.
3. Administrative Expenses – An allowance of $2,472,000 has been included in the annual cost calculation.
4. Interest Credited to Employee Accounts – 0.25% annually.
5. Increases in Pay – Base salary increase is assumed at 3.25%. Assumed pay increases for active Members consist of increases due to salary adjustments (as noted above), plus service-based increases due to longevity and promotion, as shown below.

Longevity & Promotion Increases		
Service	**Safety**	**General**
0	7.00%	6.00%
1	6.00%	5.00%
2	5.00%	4.00%
3	4.00%	3.00%
4	3.00%	2.00%
5	2.00%	1.50%
6	1.75%	1.00%
7	1.50%	0.75%
8	1.25%	0.50%
9	1.00%	0.50%
10	0.75%	0.50%
11+	0.50%	0.50%

6. PEPRA Compensation Limit – Assumption used for increasing the compensation limit that applies to PEPRA members is 3.00%.
7. Post Retirement Cost of Living Adjustment (COLA) – 100% of Consumer Price Index up to 3% annually with banking, 2.7% annual increases assumed.
8. Social Security Wage Base – For projecting the Social Security Benefit, the annual Social Security Wage Base increase is assumed to be 3.25% per year. General Tier 3 members have their benefits offset by an assumed Social Security Benefit.
9. Internal Revenue Code Section 415 Limit – not reflected in the valuation for funding purposes.
10. Internal Revenue Code Section 401(a)(17) – not reflected in the valuation for funding purposes.
11. Family Composition – Spouses of male members are assumed to be three years younger than the member. Spouses of female members are assumed to be two years older than the member.

Percent Married	
Gender	**Percentage**
Males	80%
Females	50%

12. Accumulated Vacation Time Load – Active members' service retirement and related benefits are loaded by 3.0% for Safety Members and 3.5% for General Members.

13. Rates of Separation – Separate rates of termination are assumed among Safety and General Members. Termination rates do not apply once a member is eligible for retirement.

Termination (all types)		
	Safety	General
Service	All	All
0	18.0%	18.0%
1	12.0%	14.0%
2	9.0%	11.7%
3	7.0%	9.4%
4	6.0%	7.1%
5	5.0%	5.0%
10	5.0%	3.5%
15	3.4%	2.9%
20	0.0%	1.5%
25	0.0%	1.3%
30+	0.0%	0.0%

14. Withdrawal – Rates of withdrawal apply to active Members who terminate their employment and withdraw their member contributions. 50% of all General Member terminations with less than ten years of service and 20% of those with ten or more years of service are assumed to take a refund of contributions. 35% of all Safety Member terminations with less than ten years of service and 10% of those with ten or more years of service are assumed to take a refund of contributions.

15. Vested Termination – Rates of vested termination apply to active Members who terminate their employment after five years of service and leave their member contributions on deposit with the Plan. Tier 3 General Members are assumed to begin receiving benefits at age 65; all other General Members at age 58. Safety Members are assumed to begin receiving benefits at age 53. 25% of vested terminated General members are assumed to be reciprocal, and 50% of vested Safety members are assumed to be reciprocal. Reciprocal members are assumed to receive 4% annual pay increases from the date of transfer to the assumed retirement date.

16. Service-Connected Disability – Separate rates are assumed among Safety and General Members. Rates for both sexes for Safety Members are combined.

Service-Connected Disability			
	Safety	General	
Age	All	Female	Male
20	0.0759%	0.0002%	0.0043%
25	0.1932%	0.0004%	0.0102%
30	0.3457%	0.0008%	0.0211%
35	0.5309%	0.0024%	0.0284%
40	0.7426%	0.0056%	0.0401%
45	1.1297%	0.0101%	0.0613%
50	1.5092%	0.0162%	0.0897%
55	1.7230%	0.0249%	0.1227%
60	0.0000%	0.0349%	0.1637%
65	0.0000%	0.0000%	0.0000%

17. Nonservice-Connected Disability - Separate rates are assumed among Safety and General Members. Rates for both sexes for Safety Members are combined. Rates shown are applied after five years of service.

Nonservice-Connected Disability			
	Safety	General	
Age	All	Female	Male
20	0.0100%	0.0100%	0.0170%
25	0.0100%	0.0100%	0.0170%
30	0.0200%	0.0240%	0.0190%
35	0.0300%	0.0810%	0.0490%
40	0.0400%	0.1550%	0.1220%
45	0.0500%	0.2180%	0.1910%
50	0.0800%	0.2290%	0.2130%
55	0.1300%	0.1790%	0.2210%
60	0.2000%	0.1350%	0.2220%
65	0.2000%	0.1180%	0.2100%
70	0.2000%	0.1140%	0.1800%
75	0.2000%	0.1180%	0.1420%
80	0.2000%	0.1180%	0.1420%
81+	0.0000%	0.0000%	0.0000%

18. Rates for Mortality for Healthy Lives – Rates of mortality for active Members are specified by the California Public Employees Retirement System (CalPERS) Pre-Retirement Non-Industrial Mortality table, adjusted by 100.3% for males and 98.8% for females, with generational mortality improvements projected from 2009 using Scale MP-2015.

Mortality Rates			
	Duty Death	Ordinary Death - General & Safety	
Age	Safety All	Female	Male
20	0.0030%	0.0209%	0.0330%
25	0.0070%	0.0241%	0.0426%
30	0.0100%	0.0262%	0.0522%
35	0.0120%	0.0368%	0.0607%
40	0.0130%	0.0525%	0.0798%
45	0.0140%	0.0745%	0.1129%
50	0.0150%	0.1049%	0.1651%
55	0.0160%	0.1508%	0.2428%
60	0.0170%	0.2198%	0.3556%
65	0.0180%	0.3233%	0.5107%
70	0.0190%	0.4616%	0.7110%

19. Disabled Member Mortality –

Nonservice-Connected Disability Members are specified by the CalPERS Non-Industrial Disabled Annuitant Mortality table, adjusted by 96.4% for males and 110.4% for females, with generational mortality improvements projected from 2009 using Scale MP-2015.

Service-Connected Disability Members are adjusted by 100.2% for males and 100.1% for females using the same table and scale.

Disabled Mortality Rates				
	NonService-Connected		Service-Connected	
Age	Female	Male	Female	Male
45	0.9430%	1.2500%	0.2980%	0.3390%
50	1.3580%	1.7200%	0.4960%	0.5330%
55	1.4020%	2.0200%	0.4600%	0.6370%
60	1.6670%	2.5390%	0.6340%	0.8690%
65	2.2590%	3.0080%	1.0680%	1.4310%
70	3.1070%	3.7500%	1.7770%	2.2160%
75	4.2690%	5.2040%	2.9550%	3.8420%
80	6.6420%	7.9340%	4.9830%	6.6420%
85	10.9100%	12.6920%	7.9670%	10.4100%
90	17.7550%	17.8040%	12.3470%	16.2180%

20. Retired Member and Beneficiary Mortality - specified by the CalPERS Non-Industrial Disabled Annuitant Mortality table, adjusted by 93.4% for males and 107.9% for females, with generational mortality improvements projected from 2009 using Scale MP-2015.

Retired Mortality Rates		
Age	Female	Male
45	0.2290%	0.2250%
50	0.5340%	0.4970%
55	0.4960%	0.5940%
60	0.5760%	0.7630%
65	0.8070%	0.9860%
70	1.3650%	1.6490%
75	2.3660%	2.7860%
80	3.9870%	4.9280%
85	7.2020%	8.8070%
90	13.3100%	15.1180%

21. Mortality Improvement – The mortality assumptions employ a fully generational mortality improvement projection from base year 2009 using Scale MP-2015.

22. Service Retirement – Assumed to occur among eligible members in accordance with the following table.

Service Retirement - General			
	Years of Service		
Age	0-9	10-29	30+
40-44	0.00%	0.00%	0.00%
45-49	0.00%	0.00%	10.00%
50-54	0.00%	5.00%	10.00%
55	0.00%	10.00%	25.00%
56	0.00%	10.00%	25.00%
57	0.00%	10.00%	25.00%
58	0.00%	15.00%	25.00%
59	0.00%	15.00%	25.00%
60	0.00%	15.00%	25.00%
61	0.00%	20.00%	25.00%
62	0.00%	25.00%	40.00%
63	0.00%	20.00%	25.00%
64	0.00%	25.00%	25.00%
65	0.00%	35.00%	35.00%
66	0.00%	45.00%	45.00%
67	0.00%	20.00%	25.00%
68	0.00%	20.00%	25.00%
69	0.00%	20.00%	25.00%
70	50.00%	50.00%	100.00%
71	50.00%	50.00%	100.00%
72	50.00%	50.00%	100.00%
73	50.00%	50.00%	100.00%
74	50.00%	50.00%	100.00%
75+	100.00%	100.00%	100.00%

Service Retirement - Safety			
	Years of Service		
Age	0-9	10-29	30+
40-44	0.00%	0.00%	5.00%
45-48	0.00%	0.00%	10.00%
49	0.00%	0.00%	20.00%
50	0.00%	10.00%	30.00%
51	0.00%	10.00%	20.00%
52	0.00%	10.00%	20.00%
53	0.00%	10.00%	20.00%
54	0.00%	10.00%	20.00%
55	0.00%	10.00%	30.00%
56	0.00%	10.00%	30.00%
57	0.00%	10.00%	30.00%
58	0.00%	10.00%	30.00%
59	0.00%	10.00%	30.00%
60	0.00%	25.00%	100.00%
61	0.00%	25.00%	100.00%
62	0.00%	25.00%	100.00%
63	0.00%	25.00%	100.00%
64	0.00%	25.00%	100.00%
65	0.00%	100.00%	100.00%
66	0.00%	100.00%	100.00%
67	0.00%	100.00%	100.00%
68	0.00%	100.00%	100.00%
69	0.00%	100.00%	100.00%
70+	100.00%	100.00%	100.00%

23. Changes in actuarial assumptions – StanCERA's Board of Retirement adopted a three year phase in of the increase in Plan cost due to the change in assumptions as a result of the Actuarial Experience Study Report for the period covering July 1, 2012 through June 30, 2015.

Participant data on active and inactive Members and their beneficiaries as of the valuation date was supplied by the Plan staff on direction of the Executive Director on electronic media. Member data was neither verified nor audited.

SCHEDULE OF ACTIVE MEMBER VALUATION DATA
FOR FISCAL YEARS ENDED JUNE 30

Valuation Date	Plan Type	Number	Annual Salary	Average Annual Salary	(Decrease) in Average Salary	Number of Employers
6/30/2008	General	3,719	$ 230,942,000	$ 62,098	27.88%	
	Safety	731	44,638,000	61,064	5.18%	
	Total	4,450	$ 275,580,000	$ 61,928	23.73%	8
6/30/2009	General	3,627	$ 201,144,000	$ 55,457	-10.69%	
	Safety	739	47,172,000	63,832	4.53%	
	Total	4,366	$ 248,316,000	$ 56,875	-8.16%	8
6/30/2010	General	3,464	$ 202,200,198	$ 58,372	5.26%	
	Safety	685	46,630,275	68,073	6.64%	
	Total	4,149	$ 248,830,473	$ 59,974	5.45%	8
6/30/2011	General	3,232	$ 184,906,498	$ 57,211	-1.99%	
	Safety	637	41,800,298	65,621	-3.60%	
	Total	3,869	$ 226,706,796	$ 58,596	-2.30%	8
6/30/2012	General	3,233	$ 179,260,736	$ 55,447	-3.08%	
	Safety	661	41,657,273	63,022	-3.96%	
	Total	3,894	$ 220,918,009	$ 56,733	-3.18%	8
6/30/2013	General	3,230	$ 176,437,755	$ 54,625	-1.48%	
	Safety	694	42,590,563	61,370	-2.62%	
	Total	3,924	$ 219,028,318	$ 55,818	-1.61%	8
6/30/2014	General	3,303	$ 179,606,090	$ 54,377	-0.45%	
	Safety	689	43,422,198	63,022	2.69%	
	Total	3,992	$ 223,028,288	$ 55,869	0.09%	8
6/30/2015	General	3,421	$ 188,550,804	$ 55,116	1.36%	
	Safety	723	49,166,923	68,004	7.91%	
	Total	4,144	$ 237,717,727	$ 57,364	2.68%	8
6/30/2016	General	3,521	$ 198,457,059	$ 56,364	2.26%	
	Safety	727	52,020,521	71,555	5.22%	
	Total	4,248	$ 250,477,580	$ 58,964	2.79%	8

Note: Actuarial valuation was not performed for fiscal year June 30, 2007. The total number of members differs from the membership data in the notes to the financial statements due to actuary cleansing of the data.

Note: The annual salary presented here is annualized historical salary. The covered payroll shown in the Notes to the Basic Financial Statements is actual pensionable salaries. Salary shown in the Schedule of Funding Progress is based on projected salary from the actuarial valuation.

Note: The employers participating in the Plan include Stanislaus County, Stanislaus County Superior Court, City of Ceres and five small districts.

SCHEDULE OF FUNDING PROGESS
FOR YEARS ENDED JUNE 30

Actuarial Valuation Date	Valuation Assets [1]	Actuarial Accrued Liability (AAL)	Unfunded AAL	Funded Ratio	Covered Payroll	Unfunded AAL as a % of Covered Payroll
2006	$ 1,154,048,000	$ 1,329,375,000 [2]	$ 175,327,000	86.8%	$ 219,768,000	79.8%
2008	$ 1,317,167,000 [3]	$ 1,548,824,000	$ 231,657,000	85.0%	$ 275,580,000	84.1%
2009	$ 1,171,767,000	$ 1,653,716,000	$ 481,949,000	70.9%	$ 248,316,000	194.1%
2010	$ 1,325,801,000	$ 1,737,824,000	$ 412,023,000	76.3%	$ 248,830,473	165.6%
2011	$ 1,372,046,000	$ 1,757,717,000	$ 385,671,000	78.1%	$ 226,706,796	170.1%
2012	$ 1,451,764,000	$ 1,888,713,000	$ 436,951,000	76.9%	$ 220,918,009	197.8%
2013	$ 1,524,076,000	$ 1,919,227,000	$ 395,151,000	79.4%	$ 219,028,318	180.4%
2014	$ 1,644,077,000	$ 2,026,371,000	$ 382,294,000	81.1%	$ 223,028,288	171.4%
2015	$ 1,763,629,000	$ 2,391,522,000	$ 627,893,000	73.7%	$ 237,717,727	264.1%
2016	$ 1,845,764,000	$ 2,537,067,000	$ 691,303,000	72.8%	$ 250,477,580	276.0%

[1] Excludes value of Non-Valuation Reserves.

[2] The Accrued Liability as of June 30, 2006 was recomputed to reflect the change in Actuary and in the retirement, termination and refund assumptions.

[3] Includes $50 million tranferred from Non-Valuation Reserves as of June 30, 2008.

Note: Actuarial valuation was not performed for year ended June 30, 2007.

RETIREES AND BENEFICIARIES ADDED TO
AND REMOVED FROM RETIREE PAYROLL
FOR YEARS ENDED JUNE 30

Actuarial Valuation Date	At Beginning of Year	Added During Year	Allowances Added	Removed During Year	Allowances Removed	At End of Year	Retiree Payroll	% Increase in Retiree Payroll	Average Annual Allowance
2006	2,273	247	$ 3,495,143	75	$ 700,133	2,445	$ 53,111,000	12.00%	$ 21,744
2008	2,445	369	$ 9,084,777	148	$ 1,731,738	2,666	$ 63,296,000	19.18%	$ 23,742
2009	2,666	156	$ 2,168,425	71	$ 647,870	2,751	$ 66,720,003	5.41%	$ 24,253
2010	2,751	159	$ 3,349,900	80	$ 751,427	2,830	$ 71,464,735	7.11%	$ 25,334
2011	2,830	263	$ 4,724,416	78	$ 1,194,042	3,015	$ 74,826,404	4.70%	$ 25,732
2012	3,015	226	$ 3,565,634	99	$ 978,729	3,142	$ 80,157,222	7.12%	$ 26,737
2013	3,142	198	$ 6,036,138	91	$ 1,144,584	3,249	$ 89,975,736	12.25%	$ 27,694
2014	3,249	222	$ 6,703,273	86	$ 1,725,066	3,385	$ 96,405,454	7.15%	$ 28,480
2015	3,385	237	$ 7,778,716	83	$ 2,043,313	3,539	$ 104,052,097	7.93%	$ 29,402
2016	3,539	211	$ 7,066,750	99	$ 2,160,689	3,651	$ 111,260,240	6.93%	$ 30,474

Note: Actuarial valuation was not performed for year ended June 30, 2007.

SOLVENCY TEST
FOR YEARS ENDED JUNE 30

Valuation Date		Actuarial Accrued Liabilities (AAL) for: 1 Active Member Contributions	2 Retirees & Beneficiaries	3 Active Members Employer Portion	Actuarial Accrued Liabilities	Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets 1	2	3
2006	1	$ 219,907,000	$ 619,109,000	$ 355,888,000	$ 1,194,904,000	$ 1,154,048,000	100%	100%	89%
2008	2	$ 272,657,000	$ 739,838,000	$ 536,329,000	$ 1,548,824,000	$ 1,317,167,000	100%	100%	57%
2009		$ 298,342,000	$ 781,082,000	$ 574,292,000	$ 1,653,716,000	$ 1,171,767,000	100%	100%	16%
2010		$ 323,940,000	$ 829,323,000	$ 584,561,000	$ 1,737,824,000	$ 1,325,801,000	100%	100%	30%
2011		$ 337,201,000	$ 897,384,000	$ 523,133,000	$ 1,757,718,000	$ 1,372,046,000	100%	100%	26%
2012		$ 351,569,000	$ 987,546,000	$ 549,598,000	$ 1,888,713,000	$ 1,451,764,000	100%	100%	20%
2013	3	$ 191,968,000	$ 1,065,792,000	$ 661,466,000	$ 1,919,226,000	$ 1,524,076,000	100%	100%	40%
2014		$ 193,301,000	$ 1,144,734,000	$ 688,335,000	$ 2,026,370,000	$ 1,644,077,000	100%	100%	44%
2015		$ 196,074,000	$ 1,328,846,000	$ 850,510,000	$ 2,375,430,000	$ 1,763,629,000	100%	100%	28%
2016		$ 200,960,000	$ 1,427,166,000	$ 908,941,000	$ 2,537,067,000	$ 1,845,764,000	100%	100%	24%

1 Results recalculated, reflecting Level 1 assumption changes (new retirement, termination and withdrawal decrements) and new EFI EAN methodology.
2 Reflects transfer as of June 30, 2008 of $50 million from Non-Valuation to Valuation Reserves.
3 Reflects change to include only refundable contribution balance.
Note: Actuarial valuation was not performed for year ended June 30, 2007.

ACTUARIAL ANALYSIS OF FINANCIAL EXPERIENCE
FOR YEARS ENDED JUNE 30

Plan Year Ending	Actuarial (Gains)/Losses: Asset Sources	Liability Sources	Total	Changes in Plan Provisions	Changes in Assumption / Methods
2007	$ 86,178,774	$ -	$ 86,178,774	$ -	$ 134,470,779
2008	$ (50,709,169)	$ 67,324,195	$ 16,615,026	$ -	$ -
2009	$ 228,905,354	$ 12,996,828	$ 241,902,182	$ -	$ -
2010	$ (76,507,113)	$ 37,492,978	$ (39,014,165)	$ -	$ (51,743,766)
2011	$ 49,205,018	$ (2,387,353)	$ 46,817,665	$ -	$ (72,085,966)
2012	$ (5,283,786)	$ 6,191,029	$ 907,243	$ -	$ 52,606,350
2013	$ 10,200,000	$ 8,500,000	$ 18,700,000	$ -	$ (63,400,000)
2014	$ (22,600,000)	$ 6,100,000	$ (16,500,000)	$ -	$ 400,000
2015	$ (20,600,000)	$ (5,600,000)	$ (26,200,000)	$ -	$ 269,800,000
2016	$ 16,300,000	$ 28,900,000	$ 45,200,000	$ -	$ -

Actuarial valuation was not performed for year ended June 30, 2007.
Changes due to Actuarial Audit included a Liability Loss of $700,000.

A 10 year schedule of actuarially determined contributions compared to actual contributions can be found in the Required Supplementary Information to the Financial Statements on page 48.

STATISTICAL SECTION

STANCERA

STATISTICAL INFORMATION

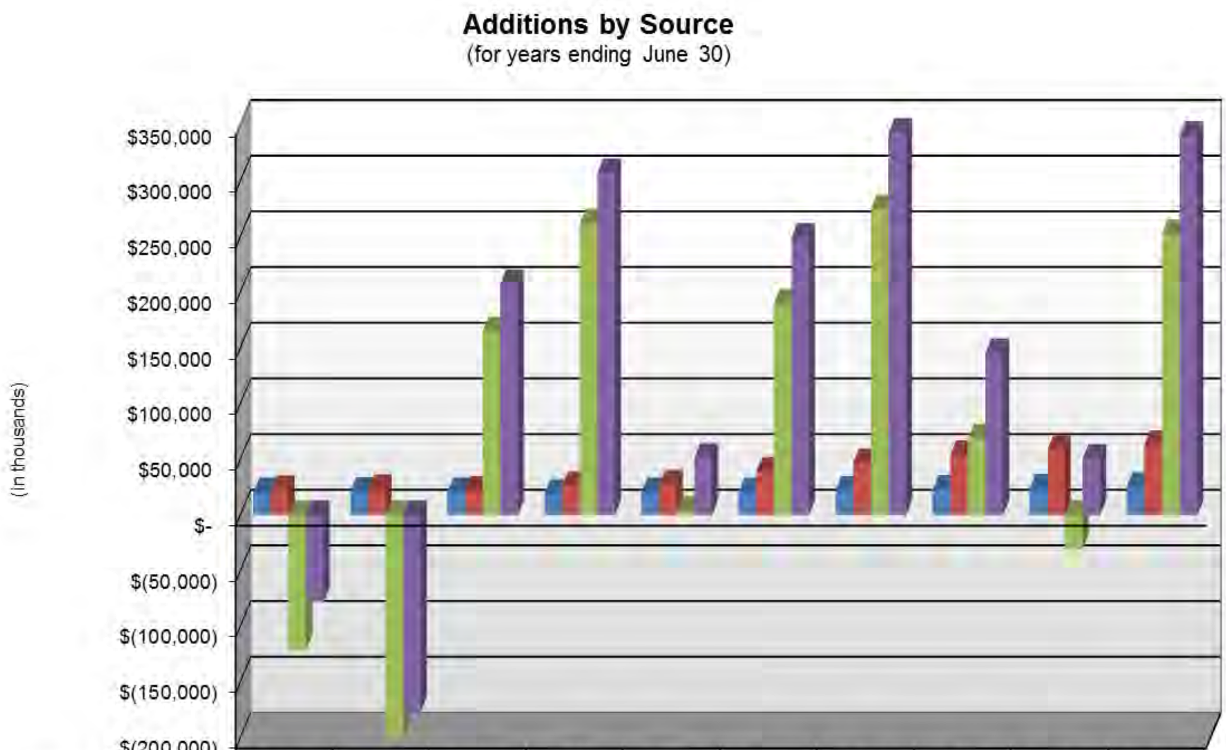
This section provides a multi-year trend of financial and demographic information to facilitate a more comprehensive understanding of this year's financial statements, note disclosures, and supplementary information covering StanCERA's Plan. The financial and operating information provides additional perspective, context, and detail for StanCERA's Fiduciary Net Position, revenues and expenses by source, number of retirees by benefit type, payments made to retirees by benefit type, membership history, and the participating employers. The financial and operating trend information is located below and on the following pages.

CHANGES IN FIDUCIARY NET POSITION

Last Ten Fiscal Years ending June 30

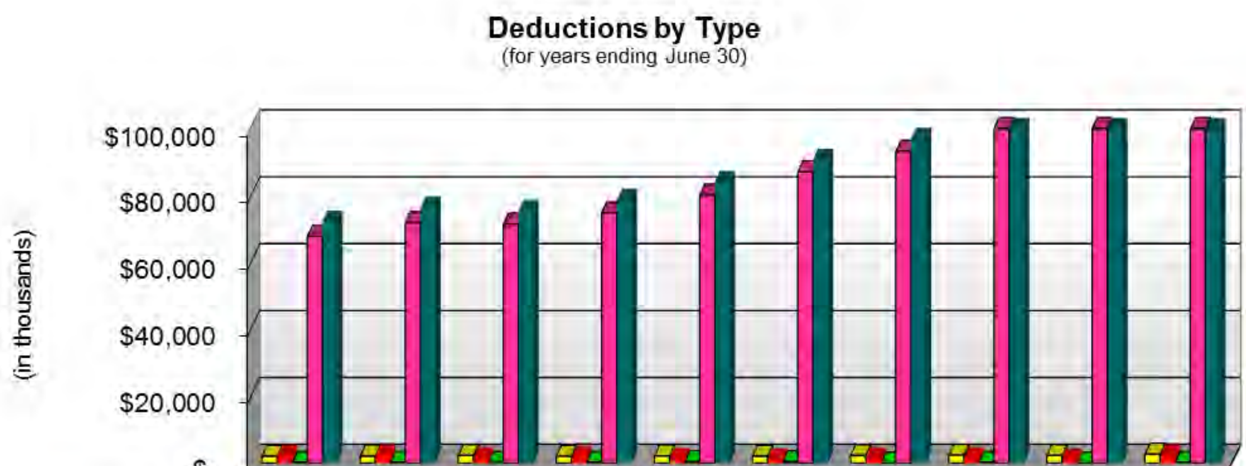
Additions To Fiduciary Net Position	**2017**	**2016**	**2015**	**2014**	**2013**
Employer Contributions	$63,024,560	$58,196,310	$53,849,031	$46,763,996	$39,077,480
Plan Member Contributions	25,463,745	23,916,508	22,960,235	21,867,911	20,285,888
Net Investment Income (Loss)	252,309,705	(31,322,276)	68,722,781	274,896,108	189,988,287
Total Additions	$340,798,010	$50,790,542	$145,532,047	$343,528,015	$249,351,655
Deductions From Fiduciary Net Position					
Pension Benefits	$114,290,758	$106,946,768	$100,099,055	$93,266,904	$87,102,798
Refunds	2,553,100	1,219,042	1,759,101	1,515,567	1,545,763
Administrative Expense	2,644,554	2,315,223	2,378,966	2,249,260	2,065,345
Total Deductions	$119,488,412	$110,481,033	$104,237,122	$97,031,731	$90,713,906
Increase (Decrease) in Fiduciary Net Position Restricted for Pension Benefits	$221,309,598	($59,690,491)	$41,294,925	$246,496,284	$158,637,749
Fiduciary Net Position Restricted for Pension Benefits					
Beginning of Year	1,772,913,713	1,832,604,204	1,791,309,279	1,544,812,995	1,386,175,246
End of Year	$1,994,223,311	$1,772,913,713	$1,832,604,204	$1,791,309,279	$1,544,812,995

Additions To Fiduciary Net Position	**2012**	**2011**	**2010**	**2009**	**2008**
Employer Contributions	$27,314,032	$26,256,729	$21,814,194	$23,410,965	$22,555,416
Plan Member Contributions	20,525,295	19,197,052	20,746,411	20,922,893	20,689,439
Net Investment Income (Loss)	3,724,754	261,842,492	165,053,844	(221,031,397)	(121,409,123)
Total Additions	$51,564,081	$307,296,273	$207,614,449	($176,697,539)	($78,164,268)
Deductions From Fiduciary Net Position					
Pension Benefits	$80,157,222	$74,826,404	$71,464,735	$71,861,210	$67,785,111
Refunds	1,832,811	1,906,153	1,731,971	2,537,978	2,442,426
Administrative Expense	2,144,748	2,037,167	2,307,436	2,080,130	2,044,286
Total Deductions	$84,134,781	$78,769,724	$75,504,142	$76,479,318	$72,271,823
Increase (Decrease) in Fiduciary Net Position Restricted for Pension Benefits	($32,570,700)	$228,526,549	$132,110,307	($253,176,857)	($150,436,091)
Fiduciary Net Position Restricted for Pension Benefits					
Beginning of Year	1,418,745,946	1,190,219,397	1,058,109,090	1,311,285,947	1,461,722,038
End of Year	$1,386,175,246	$1,418,745,946	$1,190,219,397	$1,058,109,090	$1,311,285,947



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Plan Member Contrib.	$20,689	$20,923	$20,746	$19,197	$20,525	$20,286	$21,868	$22,960	$23,917	$25,464
Employer Contrib.	$22,555	$23,411	$21,814	$26,257	$27,314	$39,077	$46,764	$53,849	$58,196	$63,024
Investments	$(121,409)	$(221,031)	$165,054	$261,842	$3,725	$189,988	$274,896	$68,723	$(31,322)	$252,310
Total	$(78,165)	$(176,697)	$207,614	$307,296	$51,564	$249,351	$343,528	$145,532	$50,791	$340,798

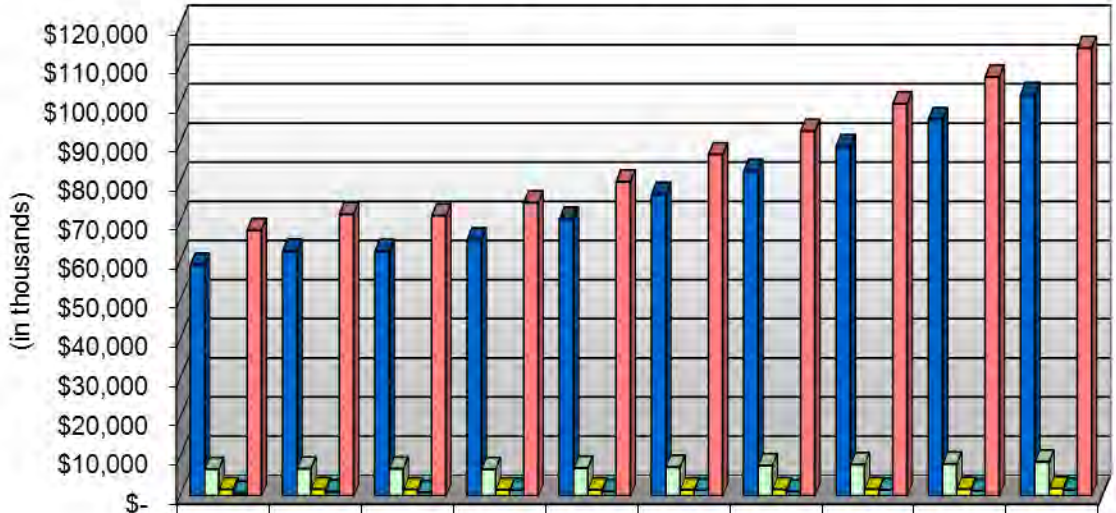
Data Source: CAFR Financial Section, Statement of Changes in Fiduciary Net Position in Management Discussion and Analysis



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Administrative	$2,044	$2,080	$2,307	$2,037	$2,145	$2,065	$2,249	$2,379	$2,315	$2,644
Refunds - Separation	$2,204	$2,310	$1,581	$1,703	$1,389	$1,115	$1,516	$1,543	$1,219	$2,297
Refunds - Death	$238	$228	$151	$204	$444	$431	$-	$216	$-	$256
Benefits	$67,785	$71,861	$71,465	$74,826	$80,157	$87,103	$93,267	$100,099	$106,947	$114,291
Total	$72,271	$76,479	$75,504	$78,770	$84,135	$90,714	$97,032	$104,237	$110,481	$119,488

Data Source: CAFR Financial Section, Statement of Changes in Fiduciary Net Position

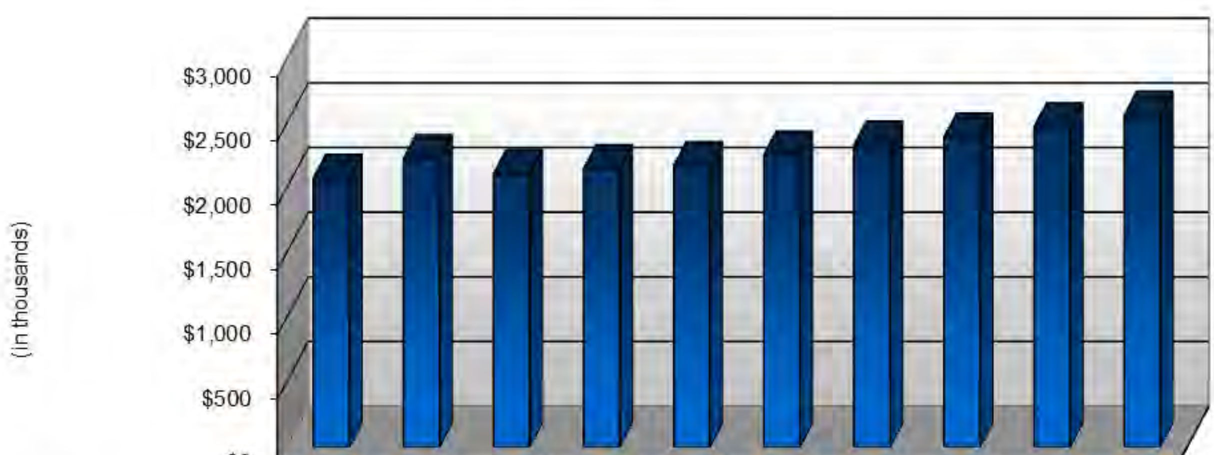
Benefit Expense by Type
(for years ending June 30)



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Service	$58,875	$62,463	$62,400	$65,311	$70,619	$77,009	$82,939	$89,192	$96,077	$102,484
Serv. Conn. Dis.	$6,719	$6,828	$6,792	$6,672	$7,020	$7,271	$7,636	$7,911	$8,072	$8,591
Non-Serv. Dis.	$1,535	$1,572	$1,496	$1,446	$1,471	$1,475	$1,526	$1,577	$1,631	$1,819
Surv. Death Ben.	$655	$998	$777	$1,397	$1,047	$1,348	$1,015	$1,419	$1,167	$1,397
Total	$67,784	$71,861	$71,465	$74,826	$80,157	$87,103	$93,116	$100,099	$106,947	$114,291

Data Source: StanCERA Pension Administration System

Average Monthly Retirement Benefits
(for years ending June 30)



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Monthly Allowance	$2,080	$2,232	$2,115	$2,153	$2,177	$2,260	$2,337	$2,398	$2,478	$2,568

Data Source: StanCERA Pension Administration System

RETIRED MEMBERS BY BENEFIT TYPE
as of June 30, 2017

Amount Monthly Benefit	Total # Retirees	Service Retirement	Service Connected Disability	Non-Service Disability	Survivors
General Members					
$0-500	349	334	1	9	5
501-1,000	492	434	3	33	22
1,001-1,500	517	446	21	43	7
1,501-2,000	388	331	39	15	3
2,001-2,500	326	291	29	4	2
2,501-3,000	212	198	9	3	2
3,001-3,500	181	172	6	2	1
3,501-4,000	135	133	1	0	1
4,001-4,500	109	105	3	1	0
4,501-5,000	77	75	2	0	0
over 5,000	300	300	0	0	0
Totals	3,086	2,819	114	110	43
Safety Members					
$0-500	25	13	9	2	1
501-1,000	17	15	1	0	1
1,001-1,500	30	25	2	2	1
1,501-2,000	48	41	1	5	1
2,001-2,500	36	24	11	1	0
2,501-3,000	84	31	51	1	1
3,001-3,500	77	33	42	0	2
3,501-4,000	56	38	17	0	1
4,001-4,500	43	39	4	0	0
4,501-5,000	29	27	1	0	1
over 5,000	152	140	11	0	1
Totals	597	426	150	11	10
TOTALS	3,683	3,245	264	121	53

Data Source: StanCERA Pension Administration System

AVERAGE BENEFIT PAYMENTS

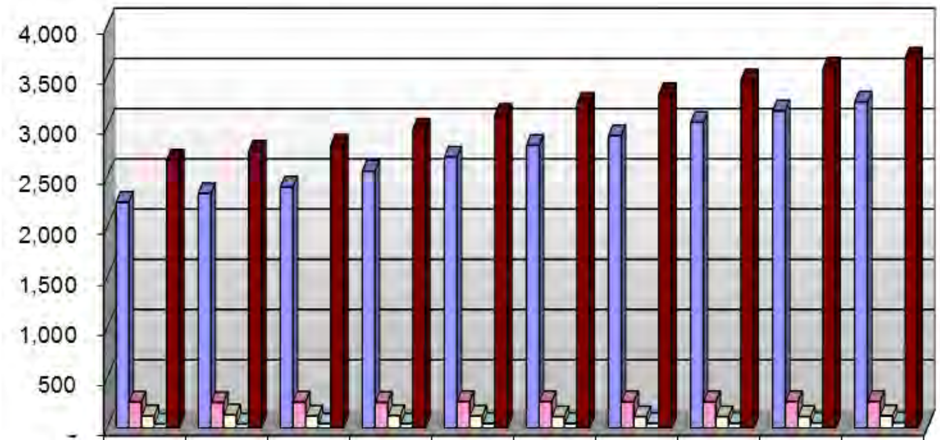
As of Fiscal Year End June 30

	Beneficiaries & Dro's	Service Years Credited 0-5	5-10	10-15	15-20	20-25	25-30	30+
Fiscal Year Ending June 30, 2008								
Average Monthly Benefit	-	$382	$1,016	$1,284	$1,836	$2,594	$3,778	$4,599
Number of Active Retirees	-	246	427	522	523	398	365	251
Fiscal Year Ending June 30, 2009								
Average Monthly Benefit	$1,426	$627	$1,095	$1,257	$1,934	$2,641	$3,912	$5,332
Avg Final Average Salary	$1,037	$3,053	$2,621	$2,332	$2,445	$2,586	$3,249	$4,547
Number of Active Retirees	365	159	312	528	425	390	325	253
Fiscal Year Ending June 30, 2010								
Average Monthly Benefit	$1,345	$602	$1,038	$1,171	$1,834	$2,550	$3,753	$5,172
Avg Final Average Salary	$1,106	$3,177	$2,516	$2,322	$2,400	$2,486	$3,233	$4,192
Number of Active Retirees	366	157	330	536	434	405	318	270
Fiscal Year Ending June 30, 2011								
Average Monthly Benefit	$1,362	$621	$1,044	$1,192	$1,843	$2,581	$3,785	$5,260
Avg Final Average Salary	$1,176	$3,840	$3,286	$2,862	$3,009	$3,364	$3,790	$5,232
Number of Active Retirees	389	169	350	574	454	424	331	298
Fiscal Year Ending June 30, 2012								
Average Monthly Benefit	$1,405	$596	$1,040	$1,212	$1,918	$2,654	$3,860	$5,152
Avg Final Average Salary	$2,612	$4,848	$3,857	$3,620	$3,963	$4,393	$4,812	$5,815
Number of Active Retirees	383	176	366	606	484	446	335	320
Fiscal Year Ending June 30, 2013								
Average Monthly Benefit	$1,430	$657	$1,100	$1,295	$2,003	$2,792	$4,007	$5,309
Avg Final Average Salary	$2,662	$5,058	$4,110	$3,748	$4,047	$4,516	$4,962	$5,872
Number of Active Retirees	387	195	376	634	498	469	344	331
Fiscal Year Ending June 30, 2014								
Average Monthly Benefit	$1,467	$651	$1,124	$1,354	$2,082	$2,836	$4,088	$5,427
Avg Final Average Salary	$2,745	$5,272	$4,205	$3,927	$4,235	$4,596	$5,089	$5,948
Number of Active Retirees	389	206	394	680	524	488	353	349
Fiscal Year Ending June 30, 2015								
Average Monthly Benefit	$1,508	$638	$1,143	$1,403	$2,164	$2,938	$4,217	$5,566
Avg Final Average Salary	$2,846	$5,627	$4,328	$4,055	$4,379	$4,675	$5,175	$6,047
Number of Active Retirees	399	222	407	699	551	511	375	360
Fiscal Year Ending June 30, 2016								
Average Monthly Benefit	$1,548	$652	$1,186	$1,462	$2,231	$3,034	$4,342	$5,309
Avg Final Average Salary	$2,901	$5,766	$4,535	$4,187	$4,513	$4,779	$5,297	$5,872
Number of Active Retirees	412	230	420	699	573	525	398	331
Fiscal Year Ending June 30, 2017								
Average Monthly Benefit	$1,620	$791	$1,203	$1,520	$2,338	$3,172	$4,482	$5,427
Avg Final Average Salary	$3,006	$5,453	$4,588	$4,293	$4,666	$4,946	$5,413	$5,948
Number of Active Retirees	378	274	438	716	593	547	413	349

Data for Beneficiaries & Dro's (Domestic Relations Orders) was not available until June 30, 2009 due to system constraints.

Data for Average Final Average Salary was not available until June 30, 2009 due to system constraints.

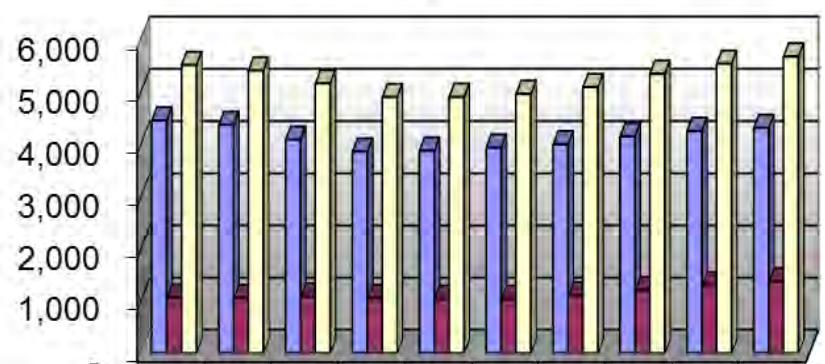
Membership History (Retired)
(for years ending June 30)



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Service	2,247	2,334	2,399	2,558	2,697	2,814	2,910	3,043	3,157	3,245
Serv. Conn. Dis.	259	252	258	254	262	262	260	260	262	264
Non-Serv. Dis.	120	131	119	122	119	113	112	113	114	121
Surv. Death Ben.	40	40	42	42	45	45	46	48	49	53
Total	2,666	2,757	2,818	2,976	3,123	3,234	3,328	3,464	3,582	3,683

Data Source: StanCERA Pension Administration System

Membership History (Active & Deferred)
(for years ending June 30)



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Active Members	4,450	4,366	4,085	3,854	3,868	3,931	3,993	4,145	4,249	4,309
Inactive Members	1,062	1,044	1,075	1,042	1,032	1,028	1,095	1,198	1,289	1,367
Total	5,512	5,410	5,160	4,896	4,900	4,959	5,088	5,343	5,538	5,676

Data Source: StanCERA Pension Administration System

PARTICIPATING EMPLOYERS AND ACTIVE MEMBERS WITH PERCENTAGE OF TOTAL SYSTEM

for years ended June 30

	2017		2016		2015		2014		2013	
Stanislaus County:										
General Members	3,202	74.3%	3,156	74.3%	3,062	73.9%	2,963	74.2%	2,903	73.8%
Safety Members	676	15.7%	645	15.2%	643	15.5%	602	15.1%	606	15.4%
Total	3,878		3,801		3,705		3,565		3,509	
Participating Agencies:										
Stanislaus County Superior Court	217	5.0%	228	5.4%	224	5.4%	212	5.3%	205	5.2%
City of Ceres	180	4.2%	184	4.3%	181	4.4%	181	4.5%	178	4.5%
East Side Mosquito Abatement District	9	0.2%	10	0.2%	8	0.2%	9	0.2%	10	0.3%
Hills Ferry Cemetery District	3	0.1%	3	0.1%	3	0.1%	3	0.1%	4	0.1%
Keyes Community Services District	6	0.1%	6	0.1%	6	0.1%	6	0.1%	5	0.2%
Salida Sanitary District	7	0.2%	7	0.2%	7	0.2%	7	0.2%	7	0.2%
Stanislaus Council of Governments	9	0.2%	10	0.2%	11	0.2%	10	0.3%	13	0.3%
Total	431		448		440		428		422	
Total Active Membership	4,309		4,249		4,145		3,993		3,931	

	2012		2011		2010		2009		2008	
Stanislaus County:										
General Members	2,852	73.7%	2,841	73.7%	3,013	73.8%	3,227	73.9%	3,313	74.4%
Safety Members	574	14.8%	553	14.3%	601	14.7%	658	15.1%	663	14.9%
Total	3,426		3,394		3,614		3,885		3,976	
Participating Agencies:										
Stanislaus County Superior Court	229	5.9%	245	6.4%	252	6.2%	263	6.0%	254	5.7%
City of Ceres	173	4.5%	173	4.5%	178	4.4%	178	4.1%	186	4.2%
East Side Mosquito Abatement District	10	0.3%	11	0.3%	11	0.3%	11	0.3%	10	0.3%
Hills Ferry Cemetery District	4	0.1%	4	0.1%	4	0.1%	4	0.1%	4	0.1%
Keyes Community Services District	6	0.2%	6	0.2%	6	0.1%	6	0.1%	6	0.1%
Salida Sanitary District	7	0.2%	7	0.2%	7	0.1%	6	0.1%	4	0.1%
Stanislaus Council of Governments	13	0.3%	14	0.3%	13	0.3%	13	0.3%	10	0.2%
Total	442		460		471		481		474	
Total Active Membership	3,868		3,854		4,085		4,366		4,450	

Data Source: StanCERA Pension Administration System

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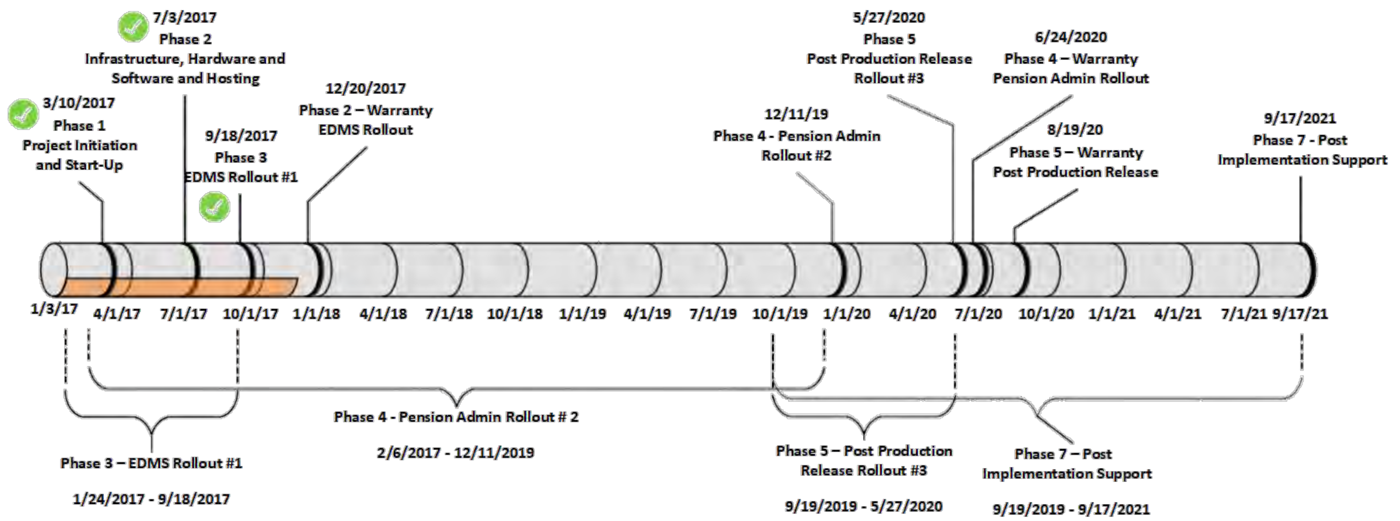
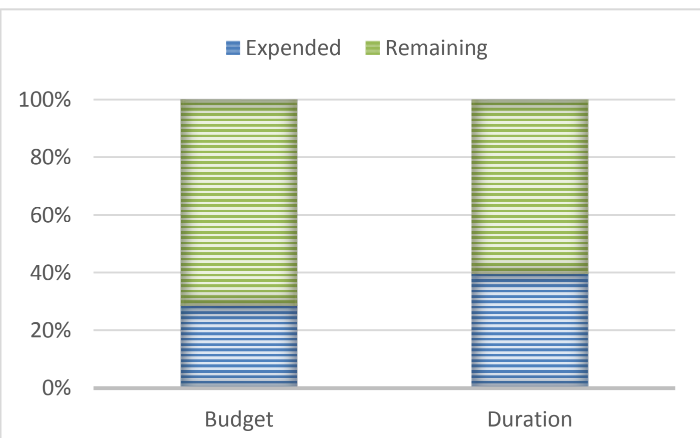
STANCERA

PAS Implementation
Linea Bi-weekly Status Update

Sponsor:	Rick Santos	**Report Date:**	11-17-2017



Baseline 12/01/2016 STATUS



Budget as of 09/30/17

Risks & Issues:

No high-level risks have been identified at this time.

Accomplishments:

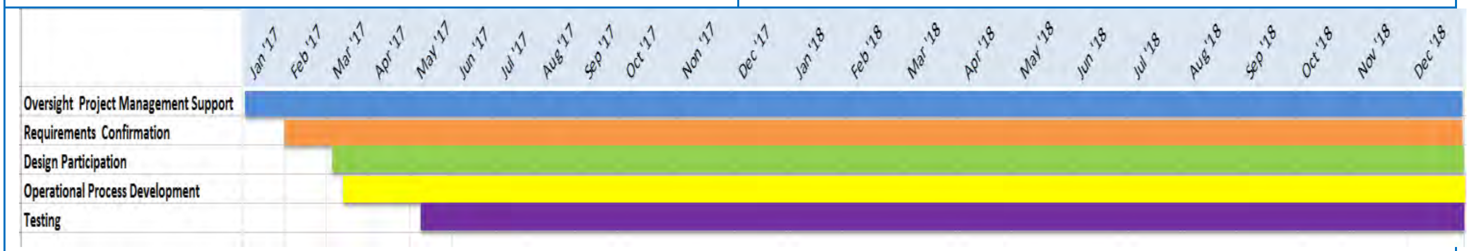
- Completed Phase 4A UAT retesting process.
- Continued to provide support to StanCERA in using Arrivos Imaging and processing office documents, including attending a StanCERA brainstorming meeting to discuss evolving process ideas.
- Coordinated testing efforts of SMEs and developed testing strategy document for Phase 4C UAT.
- Continued to identify and report issues with Arrivos Imaging production environment, as needed.

Upcoming:

- Continue development of detailed business process documentation for document handling and imaging.
- Continue to provide training, support, and assistance to StanCERA with regard to Arrivos Imaging and document handling procedures.
- Assist StanCERA in the development of plans to communicate with employers about employer reporting changes.
- Continue to coordinate Phase 4C UAT.

Ongoing Project Contributions

- Facilitate weekly Project Manager's meetings and create meeting minutes.
- Facilitate monthly Steering Committee Meetings and create meeting minutes.
- Participate in Tegrit work sessions, review meeting minutes, and compile resulting decision logs and action items.
- Regularly review action items for follow up and completion.
- Review and hold group review sessions for BSRD deliverables made by Tegrit.
- Track requirements, as discussed in work sessions and BSRDs, using the RTM and meet with StanCERA PM to update requirements confirmation.
- Manage and participate in system testing efforts, including review of test scripts, compiling of results, input of PIRs, and tracking of issue resolution.



Stanislaus County Employees' Retirement Association
832 12th Street, Ste. 600, Modesto, CA 95354 • PO Box 3150, Modesto, CA 95353 • www.stancera.org • 209-525-6393 • 209-558-4976 Fax

November 28, 2017
Retirement Board Agenda Item

TO: Retirement Board

FROM: Rick Santos, Executive Director

I. SUBJECT: Deferred Member Applications

II. ITEM NUMBER: 7.b

III. ITEM TYPE: Consent

IV. STAFF RECOMMENDATION: None

V. ANALYSIS: Recently a question was posed concerning the number of deferred member applications on a StanCERA Board Meeting agenda. Specifically, the number of deferred applications for the month of August and September were 28 and 12, respectively. Staff was asked to find out if this was a random event or if some other issue was at play.

Staff compiled data for the past 7 years and concluded that based on past history, experiencing deferrments at these levels was an extraordinary event. Statistically speaking, to an extremely high degree of confidence, the number of deferrments for these months was not a random event.

After researching the matter further, it was determined that during the months leading up to these high counts, work loads and priorities were shuffled to accommodate the scanning process and as a result, most of the deferrments were delayed 2 to 3 months. In the future, staff will attempt to minimize these kinds of delays, however, in light of those periods of time where it is expected that the project may demand large amounts of staff time, some shifts in priorities may be necessary.

VI. RISK: None

VII. STRATEGIC PLAN: Strategic Objective IV: Refine StanCERA's business and policy practices in ways that enhance stakeholder awareness, the delivery of member services and the ability of the Organization to administer the System effectively and efficiently.

VIII. ADMINISTRATIVE BUDGET IMPACT: None

Rick Santos, Executive Director

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StanCERA Investment Program 12-Month Workplan

changes from prior month highlighted in yellow

	Time
November, 2017	**1:35**
Flash report and 12-month workplan	0:05
Quarterly investment performance report	0:15
Present search for Real Estate mandate(s)	0:15
Present real estate debt finalists (moved from Jan. 2018)	1:00
December, 2017	**0:45**
Flash report and 12-month workplan	0:05
Real estate rebalacing recommendation	0:10
Private markets 2nd session	0:30
January, 2018	**0:05**
Flash report and 12-month workplan	0:05
February, 2018	**1:05**
Flash report and 12-month workplan	0:05
Quarterly investment performance report	0:30
Private markets search	0:30
March, 2018	**0:25**
Flash report and 12-month workplan	0:05
Annual review of FFP with updated capital market assumptions	0:20
April, 2018	**1:35**
Flash report and 12-month workplan	0:05
Annual review of IPS and updated asset allocation table	0:30
Private markets finalists	1:00
May, 2018	**1:05**
Flash report and 12-month workplan	0:05
Quarterly investment performance report	0:30
Cash overlay education and search authorization	0:30
June, 2018	**0:35**
Flash report and 12-month workplan	0:05
Transition management education and search authorization	0:30

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StanCERA Investment Program 12-Month Workplan

changes from prior month highlighted in yellow

	Time
July, 2018	**0:35**
Flash report and 12-month workplan	0:05
Cash overlay search presentation & selection	0:30
August, 2018	**1:05**
Flash report and 12-month workplan	0:05
Quarterly investment performance report	0:30
Transition management search presentation & selection	0:30
September, 2018	**0:05**
Flash report and 12-month workplan	0:05
October, 2018	**0:05**
Flash report and 12-month workplan	0:05

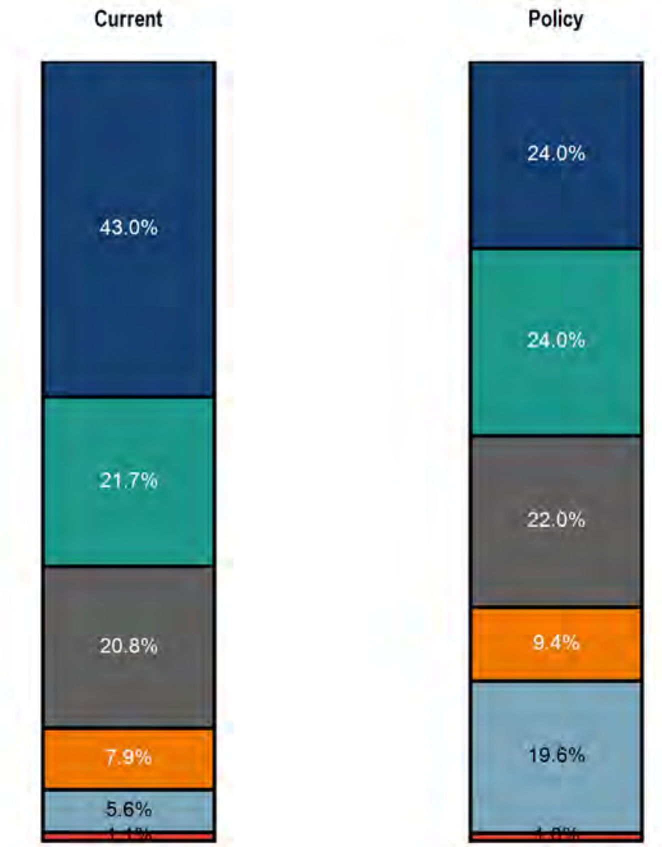
Total Fund

Flash Report (Net of Fees) - Preliminary

Period Ending: October 31, 2017

	Market Value	% of Portfolio	1 Mo	YTD	Fiscal YTD
Total Fund	**2,062,858,658**	**100.0**	**1.0**	**12.4**	**4.6**
Policy Index			*1.1*	*11.8*	*4.7*
US Equity	**887,836,671**	**43.0**	**1.7**	**15.6**	**6.4**
US Equity Blended			*2.0*	*15.8*	*6.8*
Russell 3000			*2.2*	*16.4*	*6.9*
Northern Trust Russell 1000	163,379,806	7.9	2.3	--	--
Russell 1000			*2.3*	*--*	*--*
BlackRock Russell 1000 Growth	112,938,440	5.5	3.9	25.4	10.0
Russell 1000 Growth			*3.9*	*25.4*	*10.0*
Jackson Square	157,389,130	7.6	1.3	26.2	10.3
Russell 1000 Growth			*3.9*	*25.4*	*10.0*
BlackRock Russell 1000 Value	122,037,556	5.9	0.8	8.8	3.9
Russell 1000 Value			*0.7*	*8.7*	*3.9*
Dodge & Cox-Equity	218,160,695	10.6	0.8	12.5	5.5
Russell 1000 Value			*0.7*	*8.7*	*3.9*
Capital Prospects	113,931,043	5.5	2.0	12.6	8.7
Russell 2000 Value			*0.1*	*5.8*	*5.2*
International Equity	**447,154,769**	**21.7**	**1.6**	**22.9**	**7.1**
MSCI ACWI ex USA Gross			*1.9*	*23.9*	*8.3*
LSV Asset Mgt	226,337,472	11.0	1.5	22.8	7.2
MSCI ACWI ex USA Gross			*1.9*	*23.9*	*8.3*
Fidelity	220,817,297	10.7	1.7	23.1	6.9
MSCI ACWI ex USA Gross			*1.9*	*23.9*	*8.3*
US Fixed Income	**428,670,282**	**20.8**	**0.1**	**3.9**	**1.0**
BBgBarc US Aggregate TR			*0.1*	*3.2*	*0.9*
Insight	92,632,669	4.5	0.2	--	0.7
BBgBarc US Govt/Credit 1-5 Yr. TR			*0.0*	*--*	*0.4*
DFA	277,458,769	13.5	0.0	--	--
BofA Merrill Lynch US Corp & Gov 1-5 Yrs			*0.0*	*--*	*--*
Northern Trust Intermediate Gov't Bond	43,716,345	2.1	-0.1	--	--
BBgBarc US Govt Int TR			*-0.1*	*--*	*--*
Northern Trust Long Term Gov't Bond	14,817,978	0.7	0.0	--	--
BBgBarc US Govt Long TR			*-0.1*	*--*	*--*

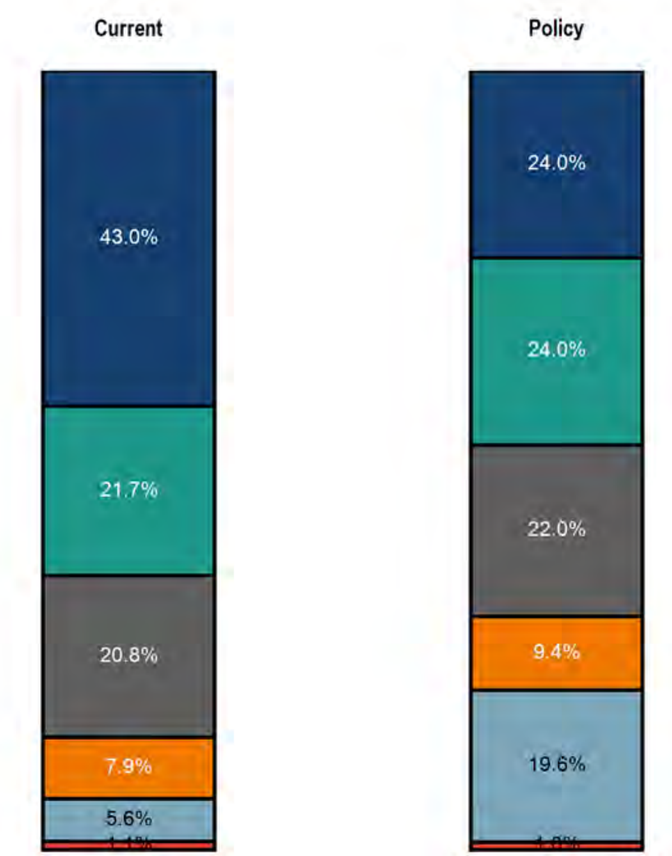
	Current	%	Policy	%
Domestic Equity	$887,836,671	43.0%	$495,086,078	24.0%
International Equity	$447,154,769	21.7%	$495,086,078	24.0%
Domestic Fixed Income	$428,670,282	20.8%	$453,828,905	22.0%
Real Estate	$162,283,666	7.9%	$193,908,714	9.4%
Alternatives	$114,489,991	5.6%	$404,320,297	19.6%
Cash and Equivalents	$22,423,281	1.1%	$20,628,587	1.0%
Total	**$2,062,858,658**	**100.0%**	**$2,062,858,658**	**100.0%**



Policy Index (7/1/2017): 18.5% Russell 1000, 5.5% Russell 2000, 24% MSCI ACWI ex-USA, 19% BBgBarc US Gov't/Credit 1-3 Yr, 3% BBgBarc US Treasury 7-10 Yr, 7.7% NCREIF Property, 1.7% NCREIF Property +2%, 0.6% CPI +5%, 5% BBgBarc US High Yield +2%, 14% 60% MSCI ACWI / 40% BBgBarc Global Aggregate, 1% Citi 1 Month T-Bills. Mellon S&P 500, Legato Capital, PIMCO, and Dodge and Cox-Fixed are in liquidation and residual cash balances are included in total fund market value. All data is preliminary.

	Market Value	% of Portfolio	1 Mo	YTD	Fiscal YTD
Real Estate	**162,283,666**	**7.9**	**-0.7**	**4.5**	**0.9**
DJ US Select RESI			*-1.1*	*0.6*	*-0.7*
Prime Property Fund	17,993,624	0.9	0.0	6.5	2.2
NCREIF-ODCE			*0.0*	*5.4*	*1.9*
American Strategic Value Realty	22,647,938	1.1	0.0	7.6	2.2
NCREIF Property Index			*0.0*	*5.1*	*1.7*
BlackRock US Real Estate	107,884,860	5.2	-1.1	0.6	-0.7
DJ US Select RESI TR USD			*-1.1*	*0.6*	*-0.7*
Greenfield Gap	13,757,244	0.7			
Direct Lending	**95,740,438**	**4.6**			
Medley Capital	21,874,551	1.1			
Raven Capital	15,643,963	0.8			
Raven Opportunity III	24,701,216	1.2			
White Oak Pinnacle	33,520,708	1.6			
Infrastructure	**18,749,553**	**0.9**			
MS Infrastructure Partners II	18,749,553	0.9			
Cash Account	22,423,281	1.1	0.1	0.8	0.2

	Current	%	Policy	%
Domestic Equity	$887,836,671	43.0%	$495,086,078	24.0%
International Equity	$447,154,769	21.7%	$495,086,078	24.0%
Domestic Fixed Income	$428,670,282	20.8%	$453,828,905	22.0%
Real Estate	$162,283,666	7.9%	$193,908,714	9.4%
Alternatives	$114,489,991	5.6%	$404,320,297	19.6%
Cash and Equivalents	$22,423,281	1.1%	$20,628,587	1.0%
Total	**$2,062,858,658**	**100.0%**	**$2,062,858,658**	**100.0%**



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Verus
PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS
4TH QUARTER 2017
Investment Landscape

Table of contents

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3rd quarter summary

THE ECONOMIC CLIMATE

— Growth strengthened across developed and emerging economies. Business surveys suggest conditions are improving in both manufacturing and service industries. *p. 17*

— The U.S. job market tightened as unemployment dropped from 4.4 to 4.2%, despite disappointing job growth data. Unemployment has not been this low since March of 2001. *p. 9*

— An independence movement in Catalonia has received little attention from the financial community, and risk premiums may not reflect the negative possible knock-on effects on the EU. *p. 16*

PORTFOLIO IMPACTS

— Improving economic growth, low inflation, low unemployment, and supportive monetary policy across most markets has created a positive environment for global risk assets, justifying a moderate overweight risk position. *p. 16*

— Within risk assets, we believe opportunities exist in emerging markets. *p. 33*

THE INVESTMENT CLIMATE

— Global interest rates are still at historic lows, and very little monetary tightening is priced in across developed markets over the next few years. Even in the U.S., the market is only expecting two rate hikes through the end of next year. *p. 20*

— Valuations across global equities and credit are elevated, and have been so for the past few years. Further price appreciation through equity multiple expansion or credit spread contraction is unlikely. *p. 23 & 34*

ASSET ALLOCATION ISSUES

— Equity performance remains strong. Year-to-date returns have been fundamentally driven, supported by earnings growth rather than valuation expansion. *p. 29*

— Equity volatility is near historic lows. Stable economic growth and inflation have likely contributed to the muted volatility environment. Investors should monitor leverage in strategies with a specific volatility target. *p. 35*

We believe a moderate overweight to risk is warranted

What drove the market in Q3?

"Traders keep bets on Fed rate hike in December after jobs report"

DECEMBER RATE HIKE PROBABILITY BASED ON MARKET PRICING

Apr 30th	May 31st	Jun 30th	Jul 31st	Aug 31st	Oct 6th
47%	43%	52%	42%	34%	80%

Article Source: Bloomberg, September 27th 2017

"U.S.-North Korea tensions fuel flight to safety"

DAILY PRICE REACTION DURING NORTH KOREA EVENTS

Fire & fury comments		8/28 missile launch		9/15 missile launch	
S&P 500	Gold	S&P 500	Gold	S&P 500	Gold
-1.5%	1.3%	-0.1%	1.5%	-0.1%	0.6%

Article Source: Financial Times, August 9th 2017

"Strong earnings lift U.S. stocks"

MSCI U.S. INDEX EARNINGS GROWTH (YOY)

Q3 16	Q4 16	Q1 17	Q2 17
-7.3%	-3.2%	2.2%	9.2%

Article Source: Wall Street Journal, July 25th 2017

"S&P 500 volatility hits 50-year low"

S&P 500 30-DAY ANNUALIZED TRAILING VOLATILITY

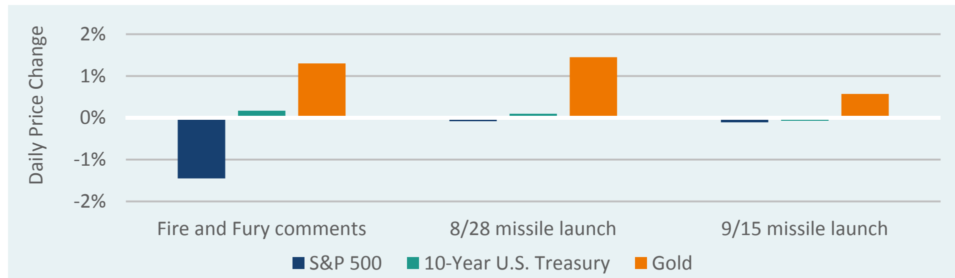
Apr 30th	May 31st	Jun 30th	Jul 31st	Aug 31st	Sep 30th
7.3%	7.8%	6.8%	7.1%	8.1%	5.8%

Article Source: Forbes, August 1st 2017

DECEMBER RATE HIKE PROBABILITY

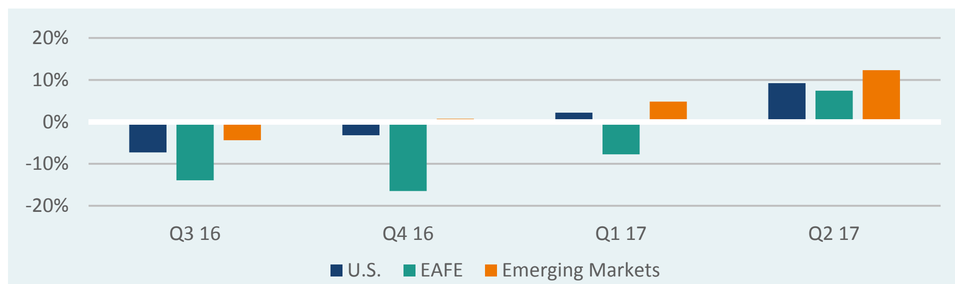
Source: Bloomberg, as of 10/6/17, based on Fed fund futures prices

MARKET REACTION DURING NORTH KOREA EVENTS



Source: Bloomberg

EQUITY EARNINGS GROWTH (YOY)



Source: Bloomberg, MSCI, as of 9/30/17

Economic environment

U.S. economics summary

— U.S. real GDP grew 2.2% YoY in Q2, consistent with the trend of slow, but steady growth in the current expansion. Consumer spending and business investment were the primary drivers of growth.

— Purchasing manager indexes (PMIs) moved higher to above average levels, indicating a likely acceleration in economic growth over the coming quarters. The ISM Manufacturing and Services PMIs for September were 60.8 and 59.8, respectively.

— The economy added an average of 91,000 jobs per month to payrolls in the third quarter. The September employment data was heavily influenced by hurricanes Harvey and Irma, which resulted in a decline of 33,000 jobs from payrolls, the first drop since 2010. Due to the calculation methodology, a bounce back should be expected in October.

— The U3 unemployment rate (unaffected by the hurricanes) fell 0.2% to a 17-year low of 4.2% over the quarter. The broader U6 unemployment rate also tightened, dropping 0.3% to 8.3%.

— Year-over-year headline CPI accelerated from 1.6% in June to 2.2% in September, while the core inflation rate was unchanged over the quarter at 1.7%. Outside of volatile energy prices inflationary pressures still appear absent, and core inflation remains below the Fed's 2% target.

— The Fed paused from raising interest rates following three consecutive quarters with hikes. Core inflation that has persistently been below the Fed's 2% target was the primary reason given to delay further tightening. The market is expecting the Fed to raise interest rates again in December based on fed fund futures prices.

	Most Recent	**12 Months Prior**
GDP *(YoY)*	2.2% *6/30/17*	1.2% *6/30/16*
Inflation *(CPI YoY, Headline)*	2.2% *9/30/17*	1.5% *9/30/16*
Expected Inflation *(5yr-5yr forward)*	2.0% *9/30/17*	1.8% *9/30/16*
Fed Funds Rate	1.25% *9/30/17*	0.50% *9/30/16*
10 Year Rate	2.3% *9/30/17*	1.6% *9/30/16*
U-3 Unemployment	4.2% *9/30/17*	4.9% *9/30/16*
U-6 Unemployment	8.3% *9/30/17*	9.7% *9/30/16*

U.S. economics – GDP growth

Real GDP grew by 2.2% YoY in Q2 (3.1% quarterly annualized rate), the fastest pace of expansion since Q3 2015. The economic recovery is nearly in its eighth year, but the level of growth remains low relative to history. Despite the length of the expansion, we do not see many of the typical signs that the economy is overheating.

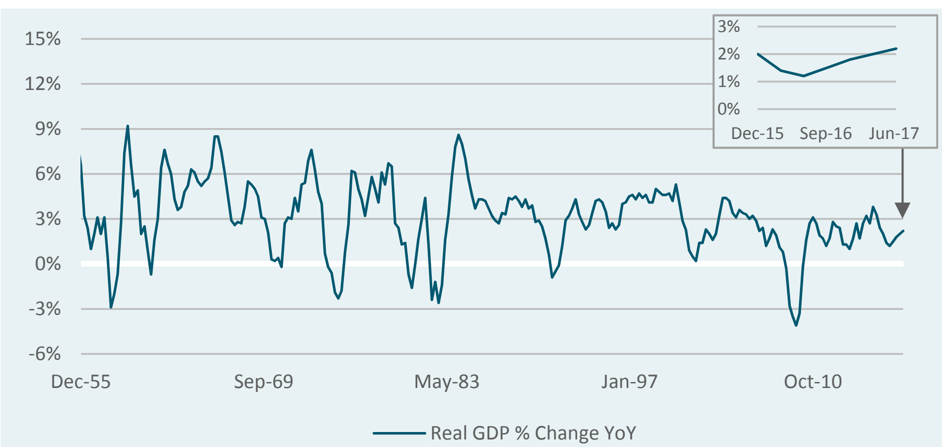
After slowing in the first quarter, consumer spending accelerated to 3.3%, and contributed 2.2% to the overall quarterly growth rate. A tight labor market and moderate wage gains should create a positive environment for consumer spending moving forward.

Business investment has picked up in recent quarters, and was the second largest contributor to GDP in Q2, while residential investment was a slight drag on growth. Trade also had a positive impact on growth, as exports increased at a quicker rate than imports.

Moderate growth is expected throughout the rest of the year – the Atlanta Fed GDP Now forecast for Q3 was 2.5% as of October 6th. Hurricanes Harvey and Irma disrupted growth in September, but the economy is likely to see a boost in Q4 once rebuilding begins.

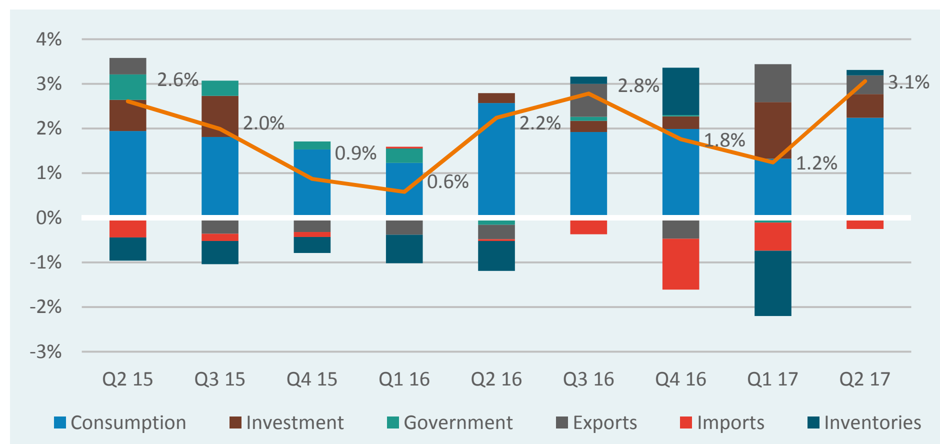
The economy experienced another quarter of moderate growth in Q2 with few signs of overheating

U.S. REAL GDP GROWTH (YOY)



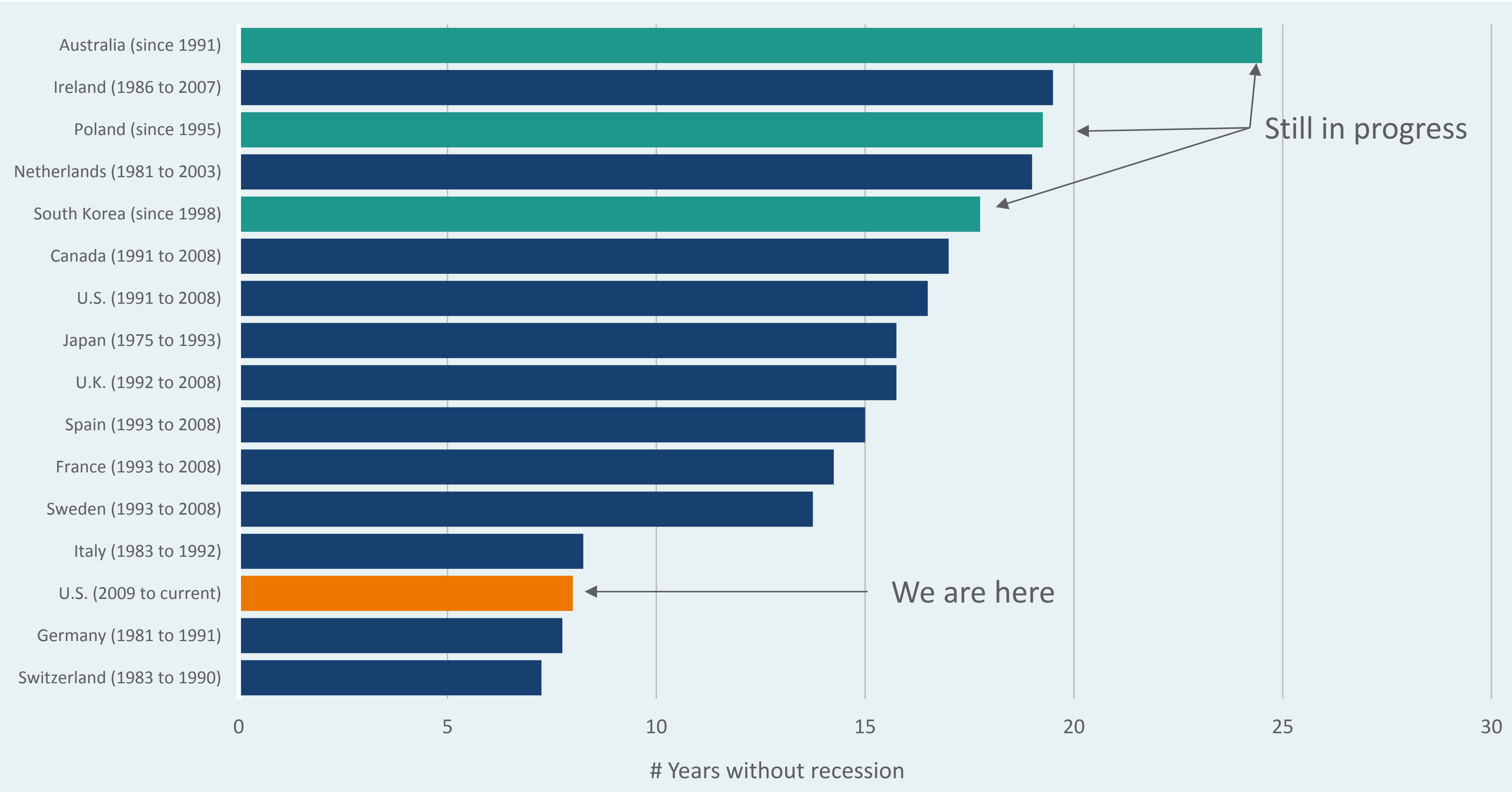
Source: FRED, as of 6/30/17

U.S. GDP COMPONENTS



Source: BEA, annualized quarterly rate, as of 6/30/17

How long can expansions continue?



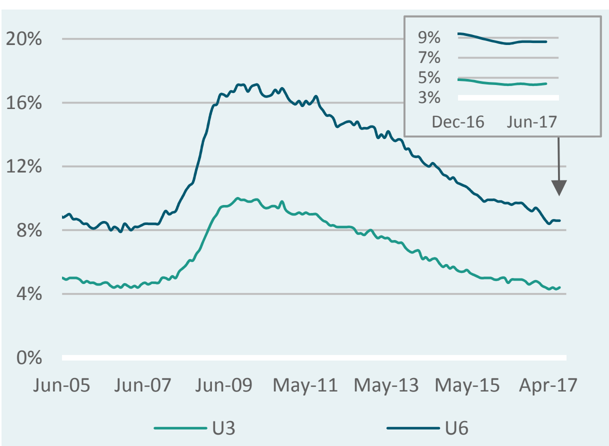
Source: Australia Trade and Investment Commission

U.S. economics – Labor market

The U.S. job market tightened as unemployment dropped from 4.4 to 4.2% - the lowest level since March of 2001. Job creation data disappointed in September, though this may largely be attributed to the effects of hurricanes Harvey and Irma.

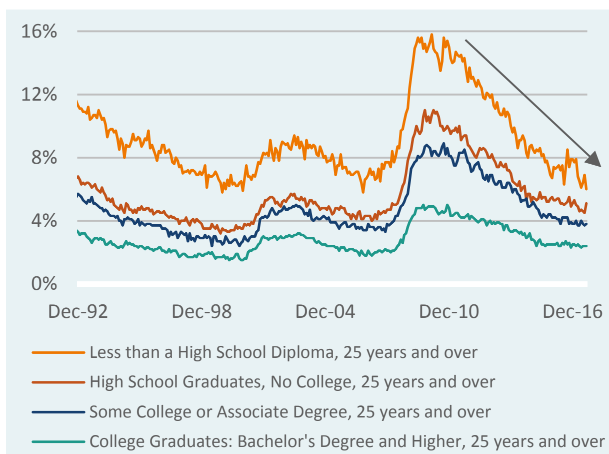
Labor growth throughout the current U.S. expansion has tended to be tilted towards lower-skill and lower-pay jobs. It is reasonable to ask whether this indicates that the recovery is weak or unbalanced. To arrive at an answer it is important to note that the types of jobs created during an economic recovery is partly a product of the types of jobs lost during the initial downturn. Examining unemployment by education level and age group suggests that the downturn disproportionately impacted the jobs of younger workers and those with less education. This implies that the job creation seen lately is natural and not necessarily an indication of weakness.

U.S. UNEMPLOYMENT



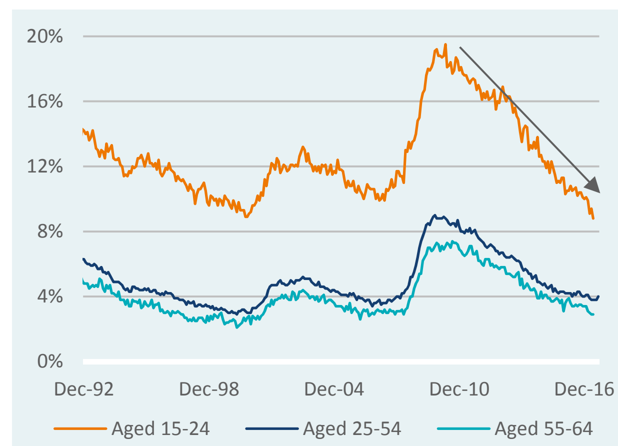
Source: FRED, as of 8/31/17

UNEMPLOYMENT BY EDUCATION LEVEL



Source: FRED, as of 8/31/17

UNEMPLOYMENT BY AGE GROUP



Source: FRED, as of 8/31/17

U.S. economics – The consumer

Consumer spending remained within a normal range. Savings rates, in aggregate, have declined over the past year and are now at levels consistent with past economic expansions. The fundamental picture for consumers is still positive. Low inflation, low unemployment, and moderate wage gains should provide a backdrop for further spending growth.

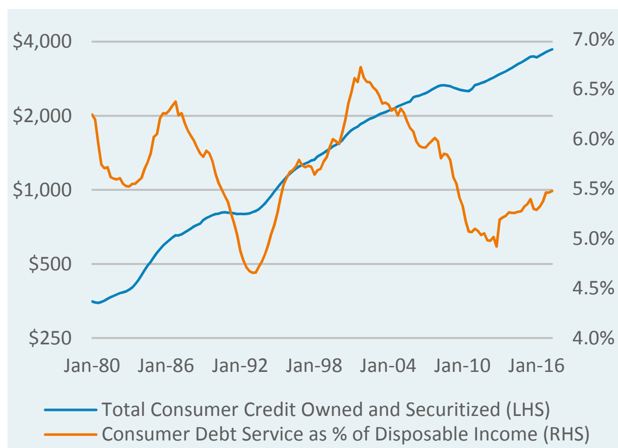
Total consumer debt has surpassed pre-crisis levels, fueled by student loans and auto loans. However, the burden of debt is lower due to the lower interest rate environment.

U.S. auto sales spiked in September, reversing a recent trend of weaker purchase activity. Hurricanes Irma and Harvey were estimated to have affected hundreds of thousands of vehicles, which contributed to buying activity throughout the month. However, the spike in sales will likely result in a drag on activity in future years.

CONSUMER SPENDING (YOY GROWTH)

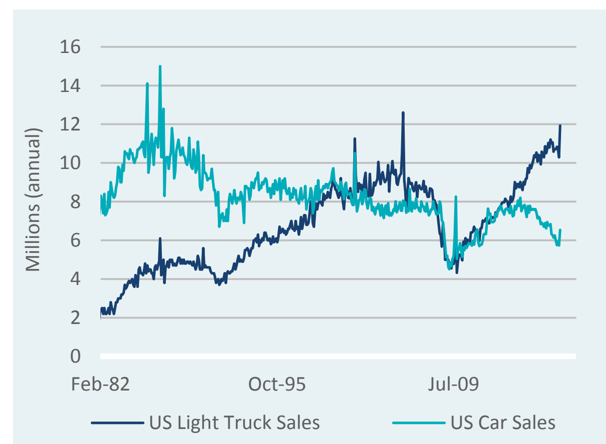
Source: Bloomberg, as of 8/31/17

CONSUMER DEBT & DEBT BURDEN



Source: FRED, as of 4/30/17

U.S. AUTO SALES



Source: Bloomberg, as of 9/30/17

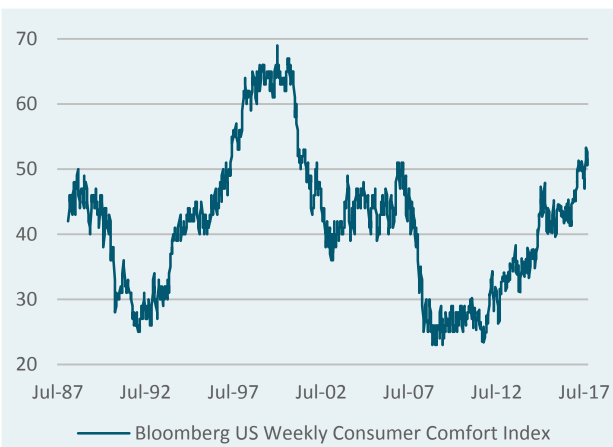
U.S. economics – Sentiment

Consumer sentiment measures are above average, reflecting Americans' overall positive view of the economy. In the preliminary reading for October, The University of Michigan Consumer Sentiment Survey unexpectedly increased from 95.1 to 101.1, the highest level since 2004, which placed it in the 91st percentile since 1978. According to the survey, the elevated level of confidence is primarily due to consumers anticipating low unemployment, low inflation, small increases in interest rates, and moderate gains in income. Consumer sentiment has been high since the election last November, but there has yet to be a material increase in consumer spending.

Other measures of sentiment, such as the NFIB Small Business Optimism Index, remain high by historical standards, but have dropped so far this year. Small businesses are still expecting to benefit from tax reform and deregulation, although significant uncertainty remains surrounding the timing and nature of these changes.

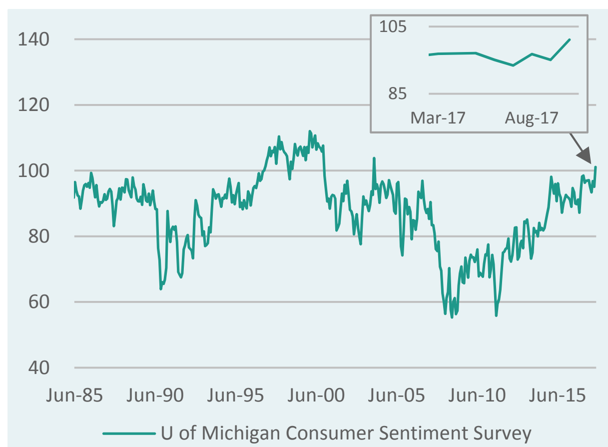
Consumers and small businesses have a positive outlook on the economy

CONSUMER COMFORT INDEX



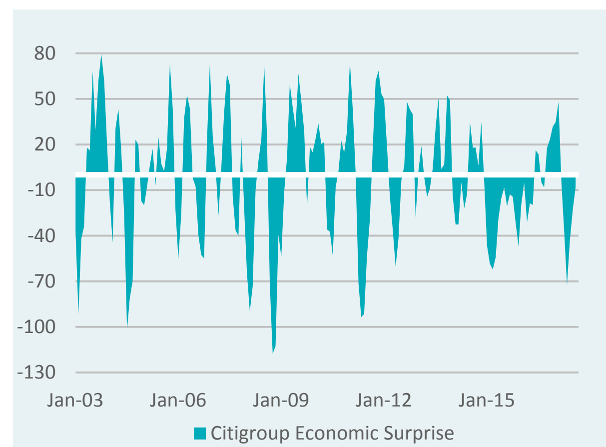
Source: Bloomberg, as of 9/24/17 (see Appendix)

CONSUMER SENTIMENT



Source: University of Michigan, as of 9/30/17 (see Appendix)

U.S. ECONOMIC SURPRISE



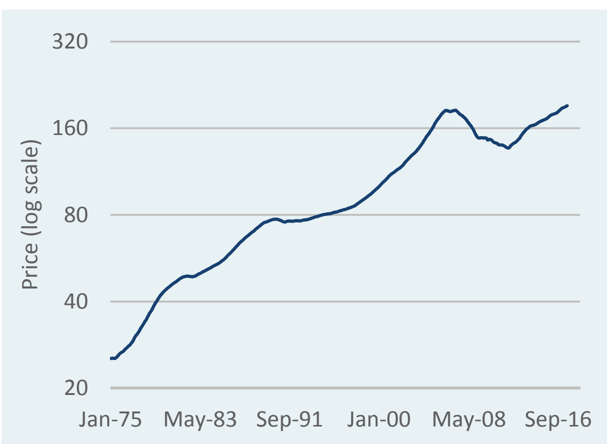
Source: Bloomberg, as of 9/29/17 (see Appendix for details)

U.S. economics – Housing

U.S. home prices continued to climb higher with 5.9% growth YoY in July according to the S&P/Case-Shiller U.S. National Home Price Index. New and existing home sales have decelerated and are flat year-over-year, though not necessarily worrying given the volatility of sales activity. A surge in housing starts and permit applications is possible as areas of the south and southeast rebuild following hurricane damage.

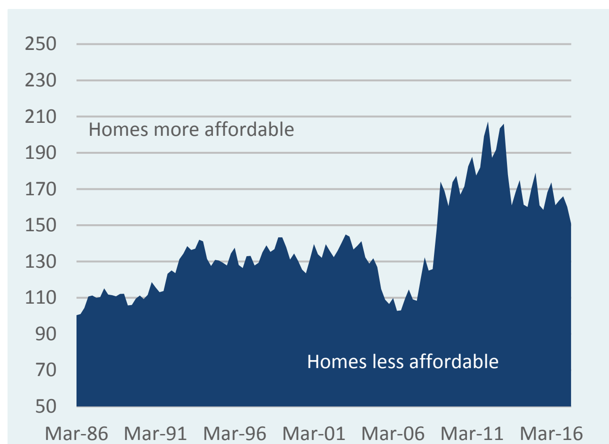
Owning a home remains affordable relative to history. A scenario of higher interest rates and further home price appreciation would result in affordability falling towards the historical average. Materially higher interest rates would make home ownership much more expensive, given the low current level of interest rates. A 1% rise in mortgage interest rates for a $400,000 loan results in a roughly $4,000 rise in annual cost for homeowners.

CASE-SHILLER HOME PRICE INDEX



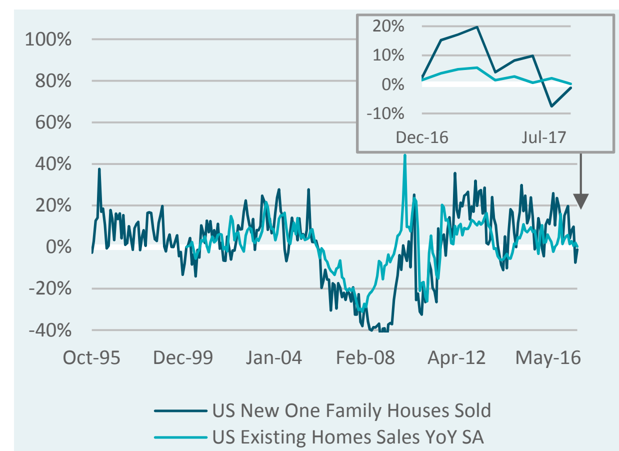
Source: FRED, as of 6/30/17

HOME AFFORDABILITY



Source: National Association of Realtors, as of 6/30/17 (see appendix)

HOUSING SALES



Source: Bloomberg, as of 8/31/17

U.S. economics – Inflation

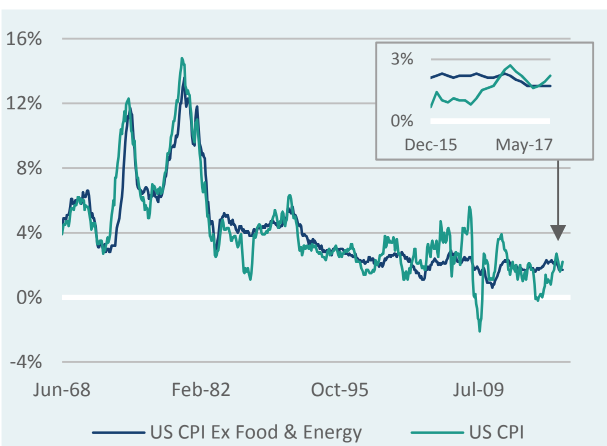
Headline CPI inflation was 2.2% from the previous year in September, up from 1.6% in June, driven mainly by increases in gasoline prices following hurricanes Harvey and Irma. Core inflation was unchanged at 1.7%.

Although the Fed has belabored the "low inflation environment", inflation measures are not extreme from a historical perspective. The perception of low inflation is likely being impacted by the long duration of the current economic expansion since rising inflation typically occurs in the late cycle. Although several Fed officials have stated they believe below target inflation is transitory, continued softness in price levels may result in a slower pace of monetary tightening.

Market based inflation expectations increased modestly throughout the quarter with the 10-year TIPS breakeven inflation rate up 10 bps to 1.83%. Expectations are still low, and investors are receiving a low inflation premium on nominal Treasuries.

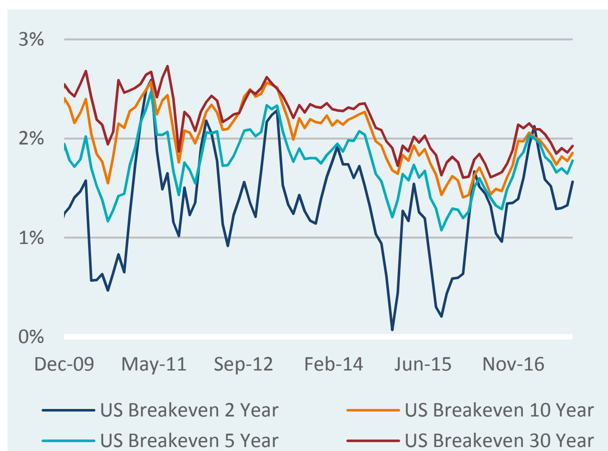
Pressures on core inflation are still low

U.S. CPI (YOY)



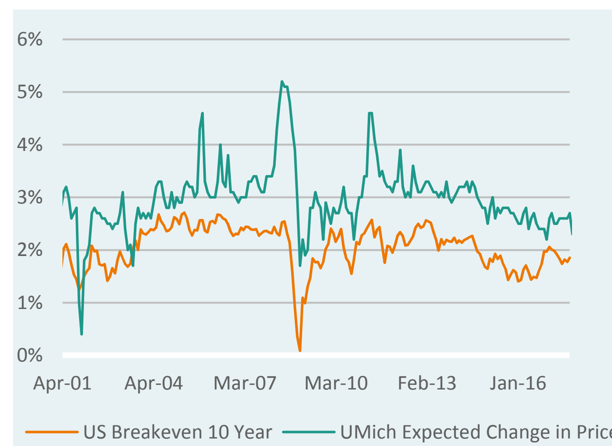
Source: FRED, as of 9/30/17

U.S. TIPS BREAKEVEN RATES



Source: FRED, as of 9/30/17

INFLATION EXPECTATIONS



Source: Bloomberg, as of 9/30/17

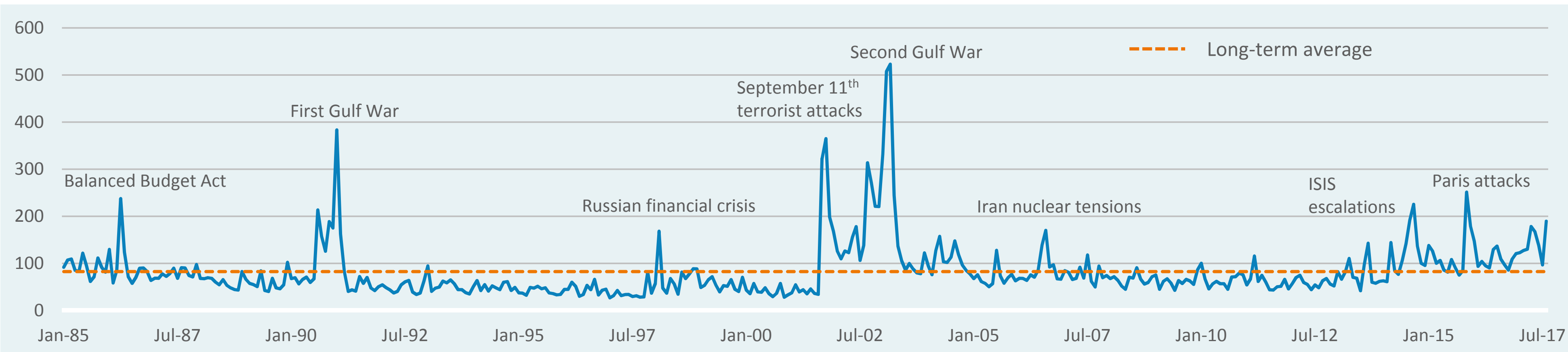
Is geopolitical risk abnormally high?

Several events over the quarter, especially increased tensions on the Korean peninsula, have led to heightened concerns over the impact of geopolitical risk on financial markets. The unique nature of each geopolitical event makes it difficult to determine whether the apparent risks are greater than past events.

The Geopolitical Risk Index (GPR) uses automated text-search results of 11 U.S. and international newspapers to give some indication of how the current environment relates to history. While the GPR is above average, it is not abnormally high. Further, given the unpredictability of geopolitical risk and how it will affect financial markets, we do not recommend making any significant changes to portfolios.

While the concerns over a nuclear attack from North Korea have recently escalated, the threat is not a new one. Many political experts believe the probability of an attack by North Korea against the U.S. or its allies is low because it would jeopardize the existence of the current regime. Additionally, China's support of North Korea has waned in recent months after it agreed to two new rounds of sanctions through the United Nations Security Council.

GEOPOLITICAL RISK INDEX

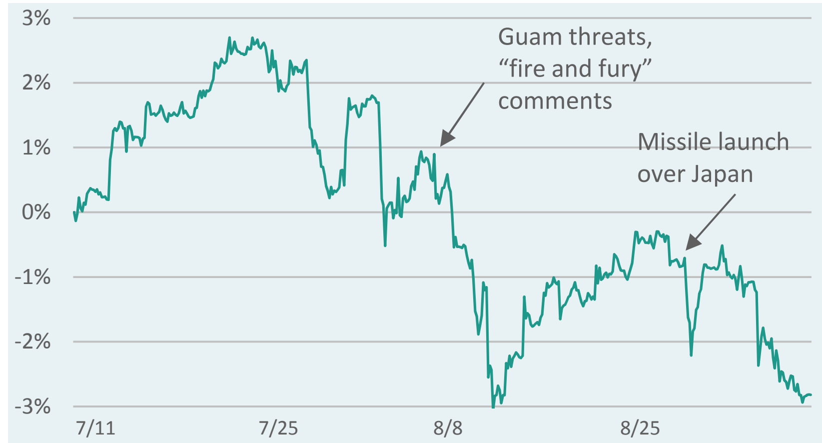


Source: The Geopolitical Risk Index - Caldarra, Iacoviello, Federal Reserve Board, as of 8/31/17

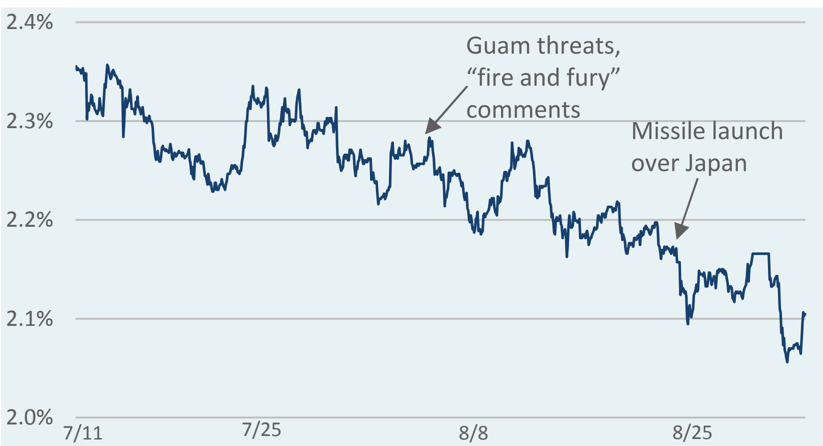
North Korea – Market reactions

U.S. EQUITY (CUMULATIVE PRICE MOVEMENT)

SOUTH KOREAN EQUITY (CUMULATIVE PRICE MOVEMENT)



U.S. 10-YEAR TREASURY YIELD



GOLD PRICES

Source: Bloomberg, S&P 500, KOSPI, 7/11/17-9/6/17

International economics summary

— International economic growth advanced in the second quarter in both developed and emerging markets. PMIs are above 50 (indicating expansion) in nearly every country across the world, pointing towards a continuation in the recent global growth pickup.

— The IMF raised its projections for global GDP growth 0.1% for both 2017 and 2018 to 3.6% and 3.7%, respectively. For comparison, global GDP growth was 3.2% in 2016.

— Economic conditions in emerging markets have improved. Several countries, such as Brazil and Russia, are still at the beginning stages of a recovery. Lower inflation has allowed emerging central banks to pursue looser monetary policy, which should provide a tailwind to further economic growth.

— Inflation in developed countries has yet to see much pressure outside of the U.K., and remains well below central bank targets.

— Inflation in the U.K. (headline CPI) rose 3.0% YoY in September, driven partly by a weaker pound, while wages only increased by 2.2%. The Bank of England stated that a rate hike may be necessary before the end of the year to slow price increases.

— On October 1st, Catalonia passed a referendum to declare independence from Spain, which the Spanish government declared illegal. Although the Catalan prime minister accepted the vote as a mandate to declare independence, he immediately suspended this declaration with the goal of bringing the Spanish government to the negotiating table.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	2.2% *6/30/17*	2.2% *9/30/17*	4.2% *9/30/17*
Western Europe	2.0% *6/30/17*	1.5% *9/30/17*	7.9% *6/30/17*
Japan	1.4% *6/30/17*	0.7% *8/31/17*	2.8% *8/31/17*
BRICS Nations	5.6% *6/30/17*	2.0% *6/30/17*	5.8% *6/30/17*
Brazil	0.3% *6/30/17*	2.5% *9/30/17*	12.7% *9/30/17*
Russia	2.5% *6/30/17*	3.0% *9/30/17*	4.9% *8/31/17*
India	5.7% *6/30/17*	3.3% *9/30/17*	8.4% *12/31/16*
China	6.9% *6/30/17*	1.6% *9/30/17*	4.0% *6/30/17*

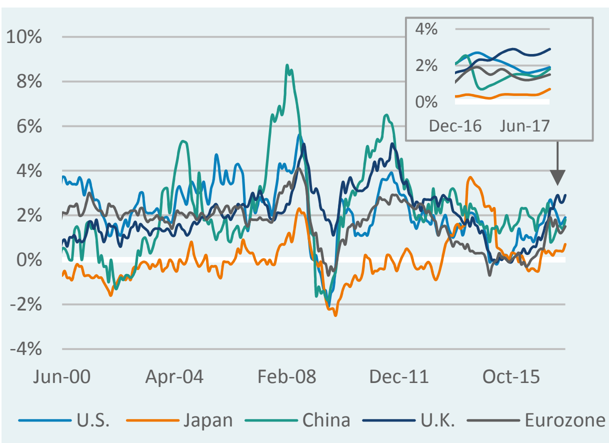
International economics

Global surveys indicate a synchronized rise in global growth which may have begun to materialize in Q2. Second quarter GDP growth improved across most countries, especially in Europe and emerging markets.

Real GDP in the Eurozone was 2.3% YoY in Q2, the fastest pace of growth in more than six years. While the ECB has discussed tapering monetary stimulus beginning next year, this will likely be a slow and delicate process. Eurozone financial conditions should continue to be supportive over the next few years. Monetary policy is not expected to change in Japan for the foreseeable future, and will continue to be a tailwind for the Japanese economy.

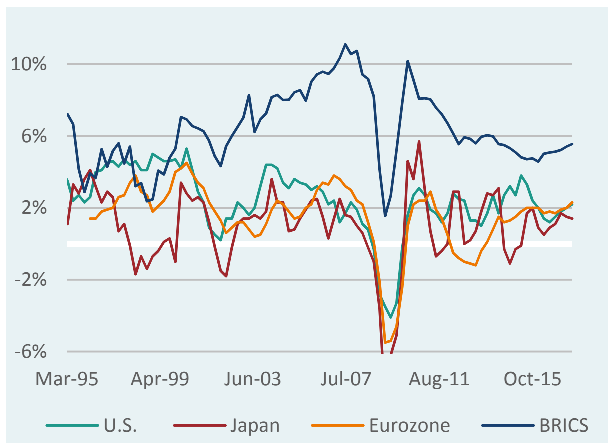
Developed market inflation remains low, with the exception of the U.K. The latest headline CPI reading for the Eurozone and Japan was 1.5% and 0.7%, respectively. Inflation in emerging economies has trended downwards, allowing central banks to cut interest rates to provide monetary stimulus. Many emerging markets are well behind developed markets in the current economic cycle.

INFLATION (CPI)



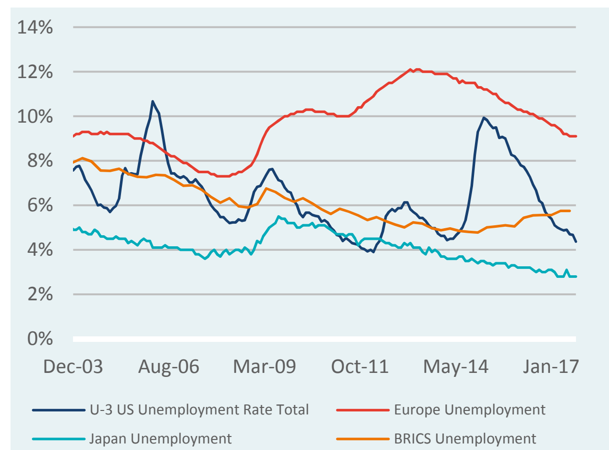
Source: Bloomberg, as of 8/31/17

REAL GDP GROWTH (YOY)



Source: Bloomberg, as of 6/30/17

UNEMPLOYMENT



Source: Bloomberg, as of 8/31/17 or most recent release

Global PMIs

PMI 1 YEAR (CROSS SECTION) – BLUE HIGH / ORANGE LOW

	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17
Manufacturing												
Global	52	52	53	53	53	53	53	53	53	53	53	53
Developed	53	53	54	54	54	54	54	54	54	54	54	55
US	52	54	55	56	58	57	55	55	58	56	59	61
UK	54	53	56	55	55	54	57	56	54	55	57	56
Eurozone	54	54	55	55	55	56	57	57	57	57	57	58
Germany	55	54	56	56	57	58	58	60	60	58	59	61
Japan	51	51	52	53	53	52	53	53	52	52	52	53
EM	51	51	51	51	51	52	51	51	51	51	52	51
Services												
Global	53	53	53	54	53	54	54	54	54	54	54	54
Developed	54	54	54	55	54	54	54	54	55	55	55	55
US	55	56	57	57	58	55	58	57	57	54	55	60
UK	55	55	56	55	53	55	56	54	53	54	53	54
Eurozone	53	54	54	54	56	56	56	56	55	55	55	56
Germany	54	55	54	53	54	56	55	55	54	53	54	56
Japan	51	52	52	52	51	53	52	53	53	52	52	51
EM	53	54	54	54	56	56	56	56	55	55	55	56

Source: Bloomberg, as of 9/30/17 – PMIs are based on survey data compiled from purchasing and supply managers. Survey questions are asked about several different components of each sector, such as new orders, employment, prices, etc. The final PMI reading is based on the percentage of respondents with a positive view on the sector. A reading above 50 indicates expansion in the sector while a reading below 50 indicates contraction. Historically, PMIs have had a relatively strong positive relationship with actual economic activity.

Fixed income rates & credit

Interest rate environment

- After bottoming out to a post-election low of 2.04% on September 7th following increased tensions with North Korea, the U.S. 10-year rose to finish the quarter slightly higher at 2.33%.
- The Fed kept interest rates unchanged over the quarter, citing concerns over the lack of inflation. However, Fed officials have communicated that they believe recent low inflation is transitory. An additional rate hike in December appears likely based on market implied probabilities.
- The Fed will begin to reduce its balance sheet in October. The central bank's plan is to runoff $6 billion of Treasuries and $4 billion of mortgage-backed securities per month. This will be scaled up commensurately every 3 months to $50 billion per month. At this pace it will take more than seven years to return the balance sheet to pre-crisis levels.
- U.K. sovereign yields experienced the biggest increase among developed countries after the Bank of England acknowledged that a rate hike may be necessary by the end of the year to slow inflation.
- Very little monetary tightening is priced into short-term developed market interest rates over the next few years. Although we expect central banks to be cautious, faster than expected increases in interest rates represents a potential risk.
- Our underweight position to both U.S. and developed sovereign rates (currency hedged) was unchanged over the quarter, primarily due to the low carry. However, Treasuries still play an important role in portfolios by offering equity risk diversification.

Area	Short Term (3M)	10 Year
United States	1.02%	2.33%
Germany	(0.70%)	0.46%
France	(0.59%)	0.74%
Spain	(0.45%)	1.60%
Italy	(0.39%)	2.11%
Greece	2.02%	5.66%
U.K.	0.28%	1.37%
Japan	(0.17%)	0.07%
Australia	1.71%	2.84%
China	3.04%	3.62%
Brazil	7.46%	9.77%
Russia	7.76%	7.66%

Source: Bloomberg, as of 9/30/17

Fed monetary tightening

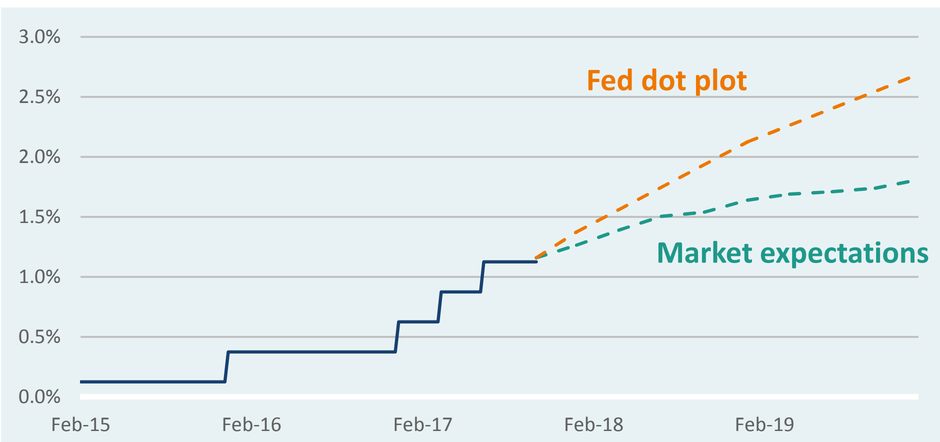
The market's expectation of a rate hike in December increased considerably throughout the quarter to 90%. Although core inflation remained below the official 2% target, several Fed officials have stated they believe the factors dampening inflation are transitory and prices should gradually increase along with wages. According to its own forecast, the Fed is expecting one additional hike this year, three hikes in 2018, and two more in 2019. However, market expectations are much more conservative, pricing in one more hike this year, and only two additional hikes through 2019.

During this tightening cycle the Fed has continually undelivered on projected rate increases. We believe it is reasonable to think this trend will continue since the risk of tightening too quickly outweighs the risk of moving too slowly.

Balance sheet reduction, which began in October also represents a form of gradual tightening. Based on the current plan, the balance sheet will fall by $1.7 trillion to $2.8 trillion at the end of 2020. According to the Fed, the runoff will continue as scheduled unless interest rates are brought back down to 0%.

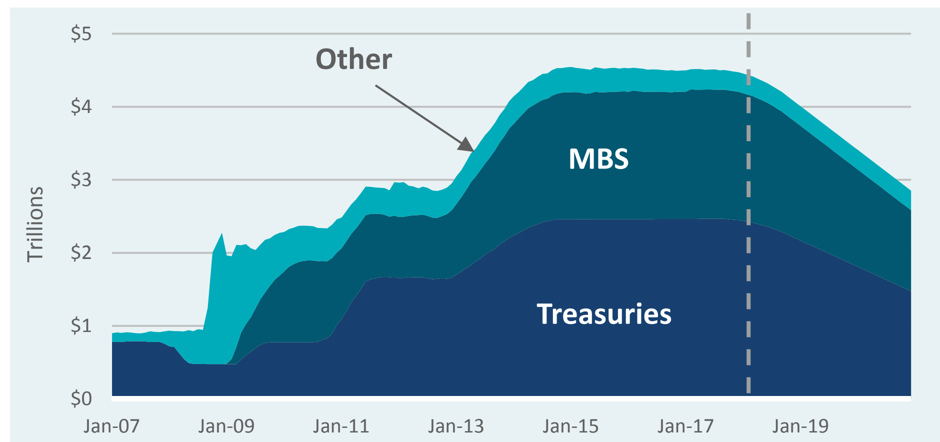
The market is expecting the Fed to move cautiously with further monetary tightening

FED RATE HIKE EXPECTATIONS



Source: Bloomberg, as of 10/6/17

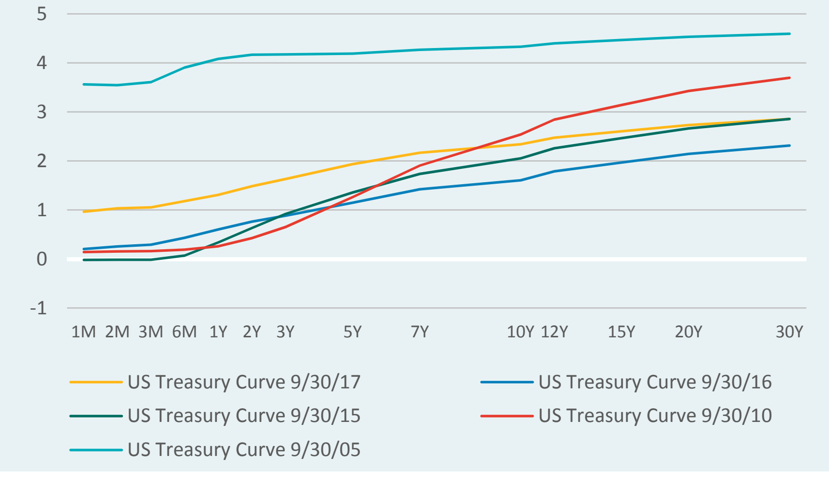
FED BALANCE SHEET REDUCTION EXPECTATIONS



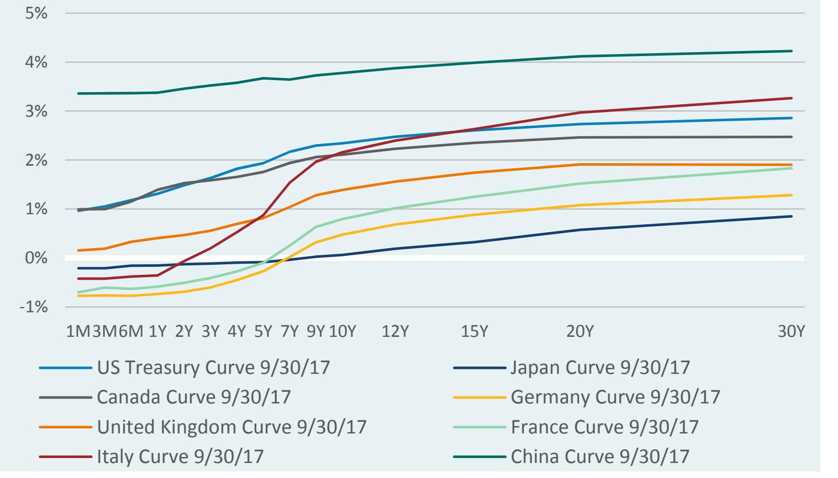
Source: Federal Reserve, as of 9/29/17, projections are based on the Fed's announced reduction plan

Yield environment

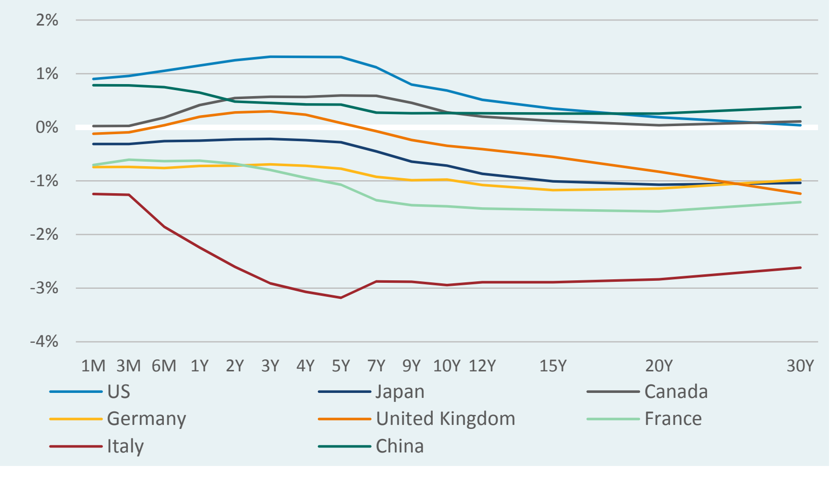
U.S. YIELD CURVE



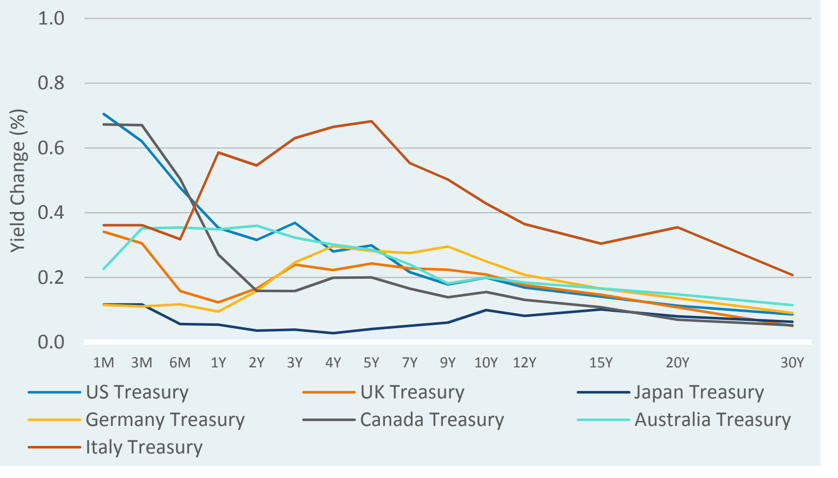
GLOBAL GOVERNMENT YIELD CURVES



YIELD CURVE CHANGES OVER LAST FIVE YEARS



IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 9/30/17

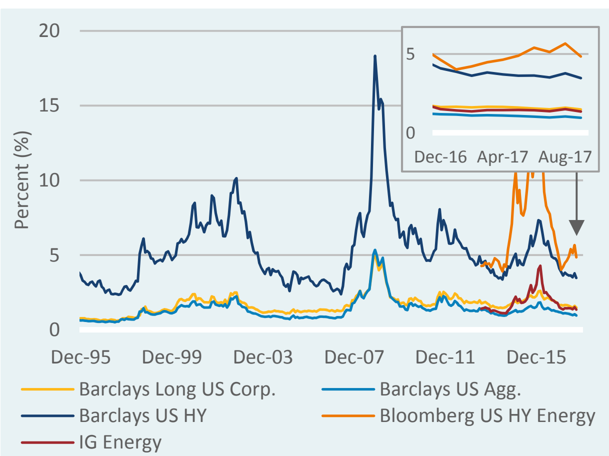
Credit environment

Credit spreads fell slightly over the quarter, remaining at low levels. U.S. high yield option-adjusted spreads compressed in the third quarter to 3.5%, and the asset class generated a 2.0% total return (BBgBarc U.S. Corp. High Yield Index). High yield spreads are tighter than those of bank loans on a duration neutral basis.

Credit spreads have continued to tighten close to multi-year lows, driven by strong corporate fundamentals and general macroeconomic improvement. The combination of tighter credit spreads and additional carry (greater yield) over Treasuries led credit to broadly outperform U.S. Treasuries in Q3. High yield spreads began the year at 4.0% and have tightened by 51 bps year-to-date. Credit spreads have historically been a good indicator of future performance relative to Treasuries.

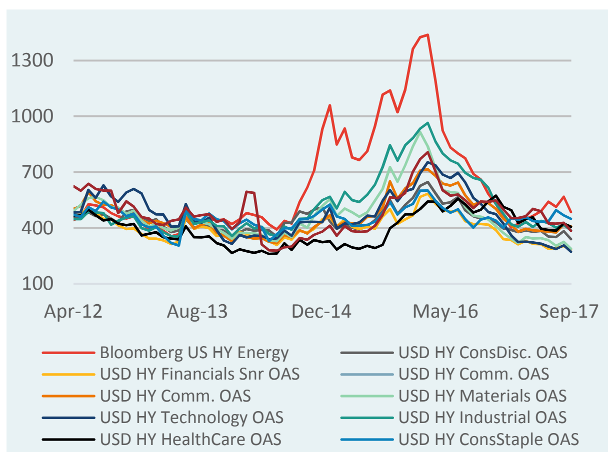
High yield energy spreads compressed over the quarter by 55 bps to 4.8% - a very moderate compression following the 2014 commodity drawdown. Year-to-date, the best performing sectors were financials and utilities. Industrials had weaker performance, most specifically consumer cyclical and the energy sector, which has been recovering from the recent commodity crisis.

HIGH YIELD SECTOR SPREADS



Source: Barclays, Bloomberg, as of 9/30/17

SPREADS



Source: Bloomberg, as of 9/30/17

Market	Credit Spread (9/30/17)	Credit Spread (1 Year Ago)
Long US Corporate	1.5%	2.0%
US Aggregate	1.0%	1.4%
US High Yield	3.5%	4.8%
US High Yield Energy	4.4%	6.1%
US Bank Loans	3.6%	3.9%

Source: Barclays, Credit Suisse, Bloomberg, as of 9/30/17

Issuance and default

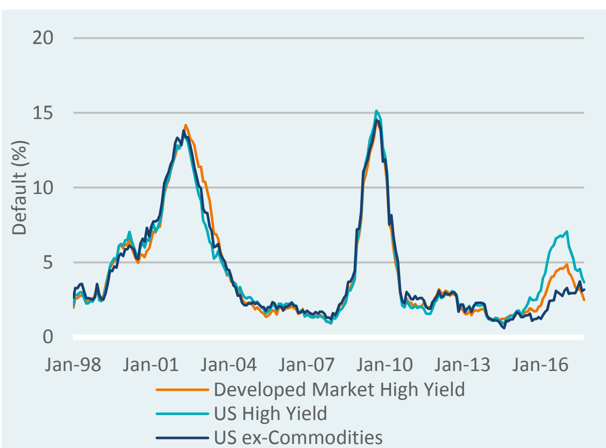
Default activity continued to stabilize in U.S. and international credit markets. Only one U.S. company defaulted in September, the third consecutive month with only one or no defaults, which was the first time this occurred since May 2011. Default volume in the third quarter was the lowest since Q4 2013.

Senior loan and high yield markets stabilized further with the majority of par defaults last year coming from the energy and metals/mining sectors. The retail sector has accounted for the second most defaults.

Rolling default rates are currently running below long-term averages. Active management may offer value to investors in the high yield space.

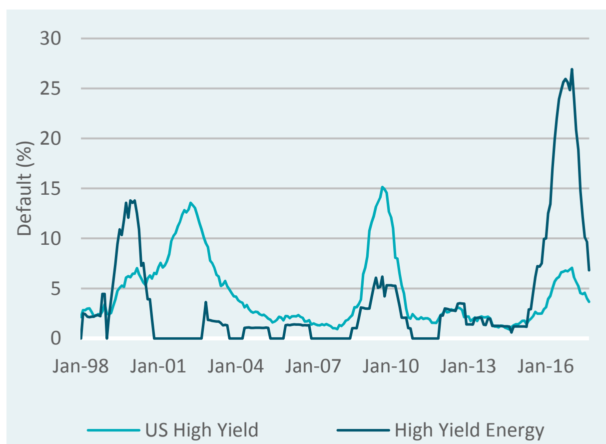
The effects of commodity related defaults are subsiding

HY DEFAULT TRENDS (ROLLING 1 YEAR)



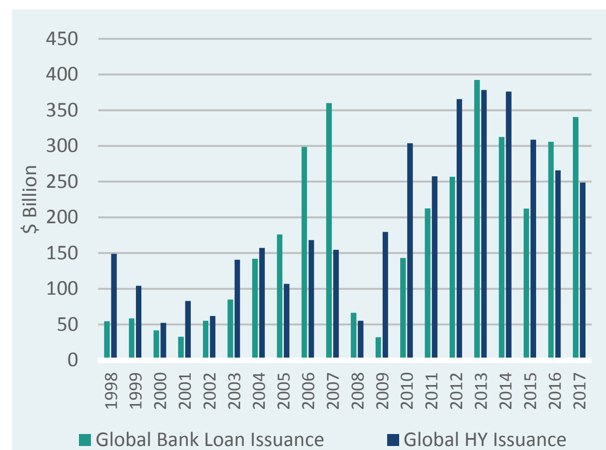
Source: BofA Merrill Lynch, as of 9/30/17

ENERGY DEFAULT TRENDS



Source: BofA Merrill Lynch, as of 9/30/17

GLOBAL ISSUANCE



Source: Bloomberg, BofA Merrill Lynch, as of 9/30/17

Equity

Equity environment

— We maintain a moderate overweight to equities with a preference for emerging markets. Emerging markets have historically delivered outsized economic growth and performance during strong global growth environments. These markets remain attractively valued relative to developed markets, though valuations rose over the quarter.

— U.S. equities moved upward in Q3, setting record highs. Performance has been fueled by earnings growth.

— The possibility of U.S. corporate tax reform has led the market to price in greater expectations for future equity earnings growth. Significant uncertainty remains around the timing and nature of the reform, and the outcome will have a material impact on equity prices in the short-term.

— Equity volatility remains unusually low. Lower volatility has historically indicated less downside risk in equity markets.

— According to FactSet as of October 6th, the estimated Q3 earnings growth rate of the S&P 500 was 2.8% YoY, a materially weaker figure than the 7.5% which was expected as of June 30. Much of the weakness was caused by expected insurance industry losses due to hurricane damage. Excluding the insurance sector, earnings are expected to grow by 4.9% YoY.

— U.S. dollar weakness year-to-date has caused significant earnings differences between companies with greater international sales focus and companies that are more domestically-focused. Overall, U.S. dollar movement has acted as a tailwind to earnings growth.

	QTD TOTAL RETURN		YTD TOTAL RETURN		1 YEAR TOTAL RETURN	
	(unhedged)	(hedged)	(unhedged)	(hedged)	(unhedged)	(hedged)
US Large Cap (Russell 1000)	4.5%		14.2%		18.5%	
US Small Cap (Russell 2000)	5.7%		10.9%		20.7%	
US Large Value (Russell 1000 Value)	3.1%		7.9%		15.1%	
US Large Growth (Russell 1000 Growth)	5.9%		20.7%		21.9%	
International Large (MSCI EAFE)	5.4%	3.7%	20.0%	12.3%	19.1%	20.5%
Eurozone (Euro Stoxx 50)	8.5%	5.2%	25.2%	13.2%	29.2%	24.9%
U.K. (FTSE 100)	4.8%	2.1%	15.7%	7.2%	14.9%	11.9%
Japan (NIKKEI 225)	2.0%	2.7%	12.1%	9.4%	13.4%	27.0%
Emerging Markets (MSCI Emerging Markets)	7.9%	7.2%	27.8%	22.1%	22.5%	19.6%

Source: Russell Investments, MSCI, STOXX, FTSE, Nikkei, as of 9/30/17

Domestic equity

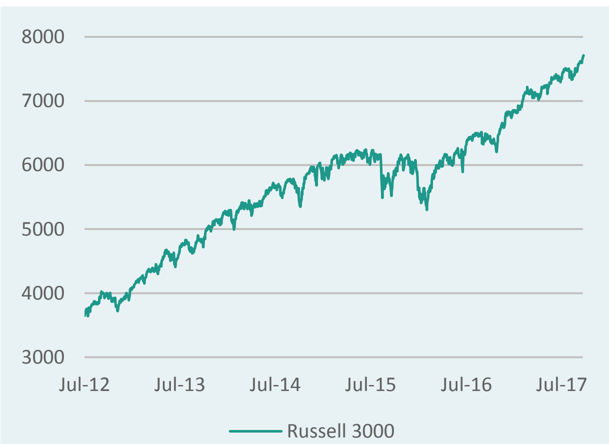
U.S. equities moved upward over the quarter (S&P 500 +4.5%), reaching record highs, but underperformed international markets (MSCI EAFE +5.4%). Earnings growth remained the primary driver of robust equity performance, though Q3 earnings growth expectations have fallen due to hurricane-related insurance industry losses. The possibility of U.S. tax reform has likely contributed to a positive domestic equity outlook.

According to FactSet, as of October 6th the estimated Q3 earnings growth rate of the S&P 500 was 2.8% YoY, a materially weaker figure than the 7.5% which was expected as of June 30. Most of the weakness was caused by insurance industry losses due to hurricane damage. Excluding this sector would result in a current estimate of 4.9% overall growth rather than 2.8%.

U.S. domestically-facing business in aggregate are expected to face flat sales and revenue growth, while externally-facing businesses are expected to produce strong growth. U.S. dollar depreciation and international growth have created a tailwind to the performance of externally-focused U.S. businesses.

We maintain a neutral weight to U.S. equities

U.S. EQUITIES

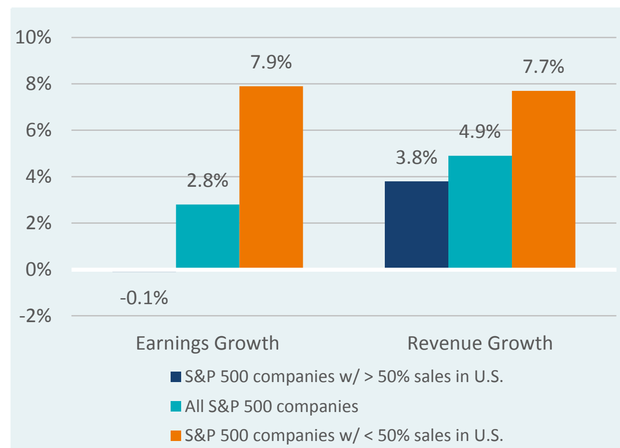


Source: Russell Investments, as of 9/29/17

S&P 500 EPS GROWTH

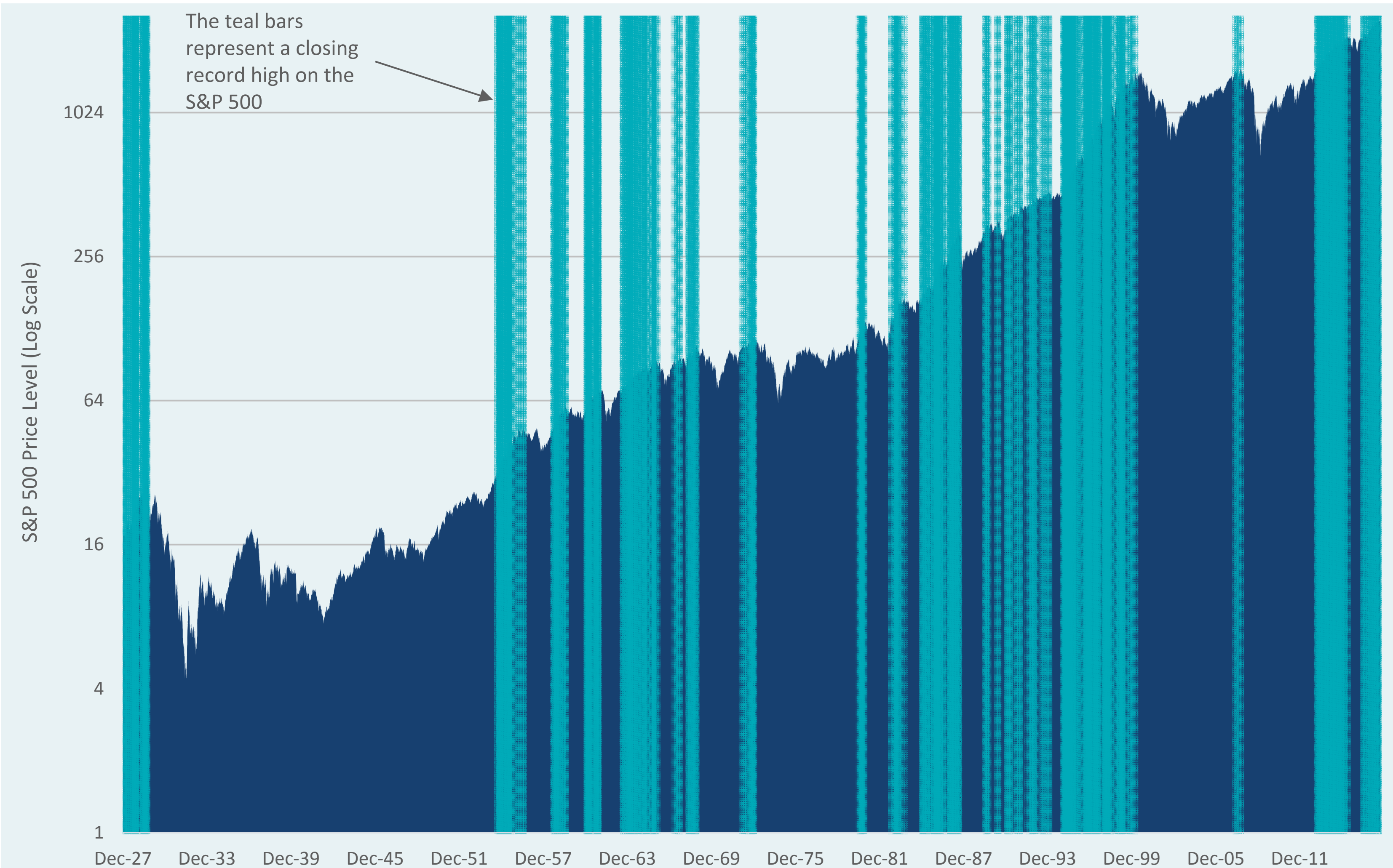
Source: Bloomberg, as of 9/30/17

Q3 EXPECTATIONS



Source: FactSet, as of 10/6/17

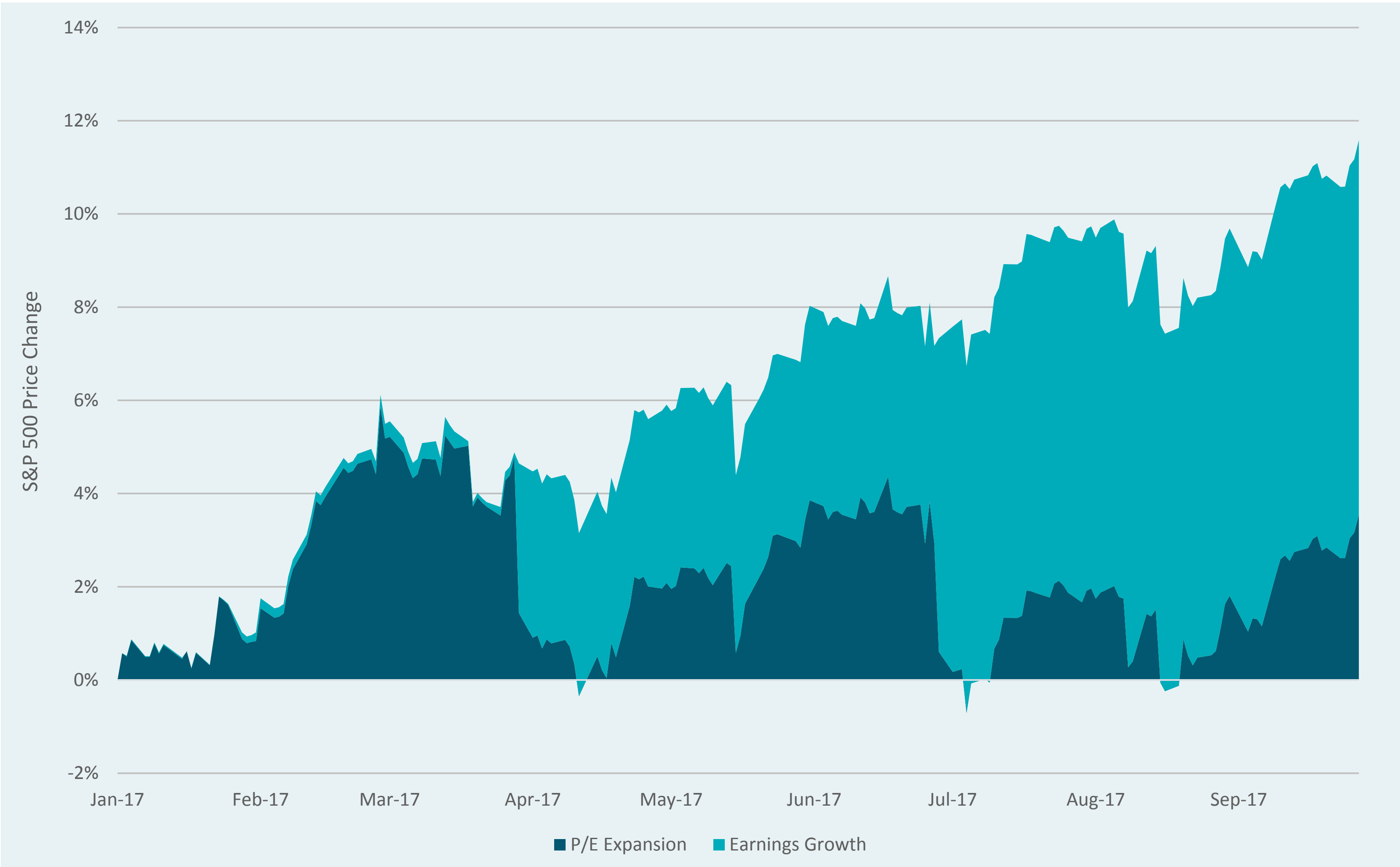
Record highs



Equity market highs are reached on 5% of market trading days

Source: Verus, Bloomberg, as of 9/29/17, based on the closing price

What is driving U.S. equities?



S&P 500 price appreciation has been driven by earnings growth so far this year

Source: Verus, Bloomberg, as of 9/29/17

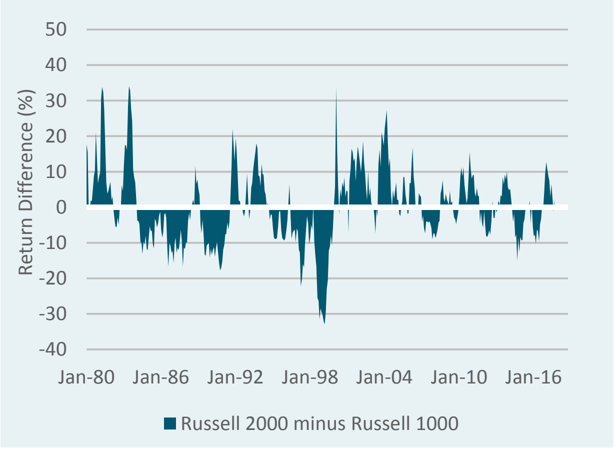
Domestic equity size and style

Large cap equities led small cap equities through July and August. However, small cap equities rallied in September (+6.2% in the month) and outperformed large cap equities over the quarter. The move in September was partially attributed to an increased focus on U.S. tax reform. If passed, tax cuts will likely provide a greater marginal benefit to smaller companies. Expectations of lower taxes and deregulation have contributed to small cap price appreciation that has outpaced earnings. The relative P/E ratio between large and small companies is at its highest level since the financial crisis.

Large cap equities were led by the technology sector, from which the strongest contributors were semiconductor and internet software companies. The top three individual contributors were Apple, Facebook and Microsoft. Small cap equities were mainly driven by producer durables companies.

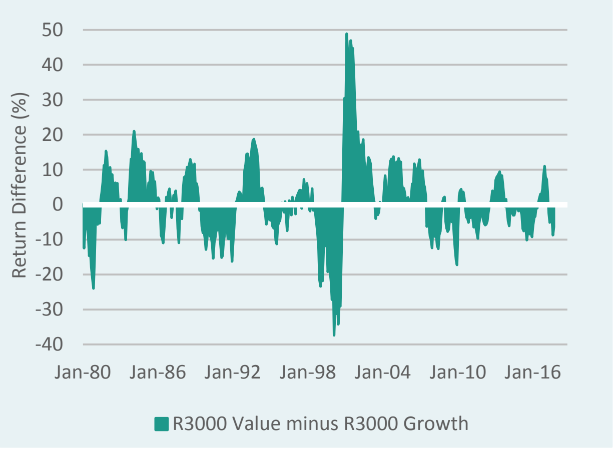
Growth outperformed value in Q3 due to a higher relative weighting to technology companies. Financial services, the most heavily weighted sector in value, returned a positive 5.0%, but still underperformed technology by 3.2%.

SMALL CAP VS LARGE CAP (YOY)



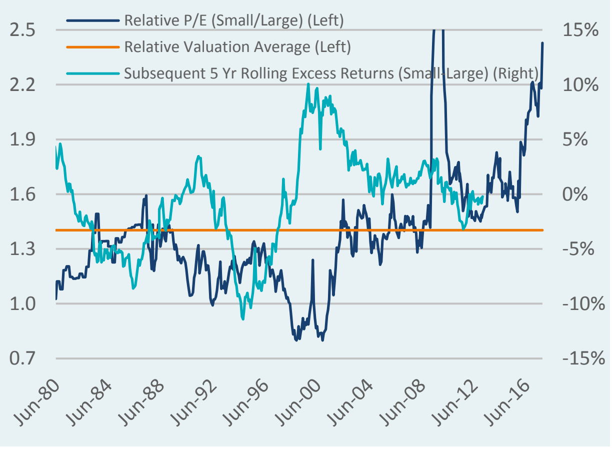
Source: Russell Investments, as of 9/30/17

VALUE VS GROWTH (YOY)



Source: Russell Investments, as of 9/30/17

U.S. LARGE VS. SMALL RELATIVE VALUATIONS



Source: Russell, Bloomberg, as of 9/30/17

International equity

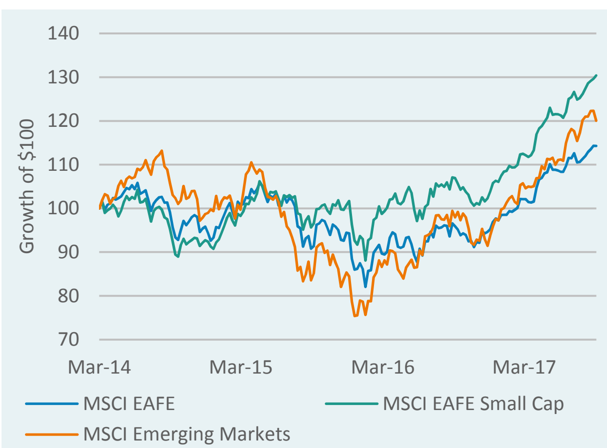
International equities outperformed domestic equities during the third quarter. The MSCI ACWI ex U.S. returned 6.2% (+4.6% hedged) while the S&P 500 returned 4.5%. Consistent with the first half of 2017, emerging markets outperformed (MSCI EM +7.9% unhedged) both the EAFE Small Cap Index (+7.5%) and the broad EAFE Index (+5.4%).

Japanese equities were the largest contributors to the EAFE index in Q3, particularly companies within the industrials and consumer discretionary sectors. Despite the positive moves, Japanese equity valuations based on earnings and sales remain attractive relative to those in Europe and the United Kingdom.

MSCI EAFE valuations have remained relatively stable in 2017 as earnings and sales growth have kept pace with price appreciation.

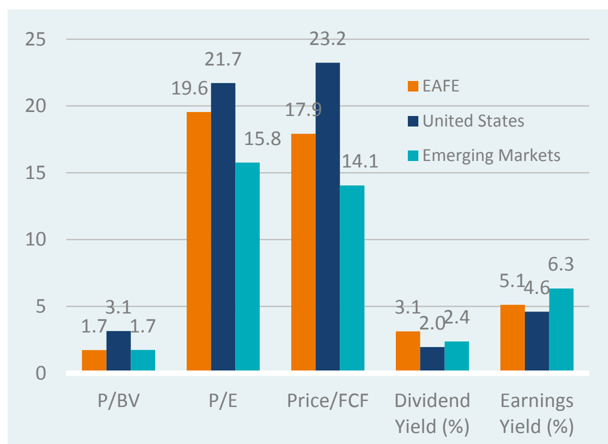
Currency effects added a positive 1.7% to the unhedged MSCI EAFE in Q3 (+7.6% year-to-date), as the U.S. dollar fell for a third consecutive quarter against a trade weighted basket of currencies.

GLOBAL EQUITY PERFORMANCE



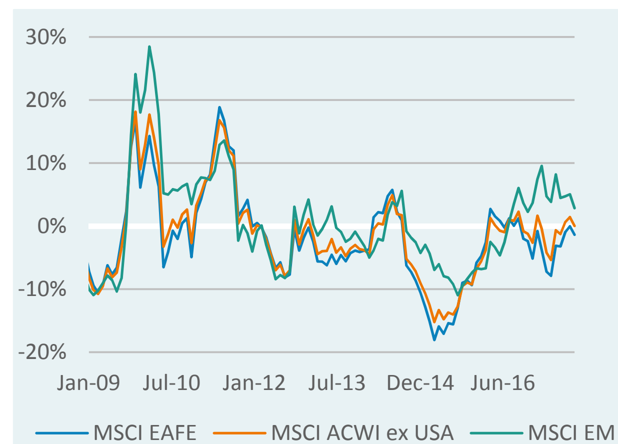
Source: Bloomberg, as of 9/30/17

VALUATIONS



Source: Bloomberg, as of 9/30/17

EFFECT OF CURRENCY (1 YEAR ROLLING)



Source: MSCI, as of 9/30/17

Emerging market equity

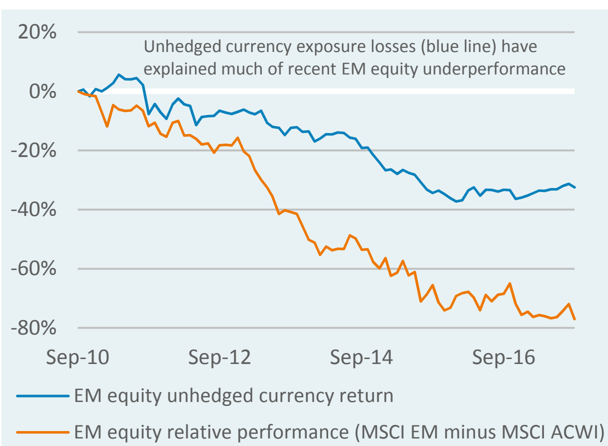
We maintain an overweight to emerging market equities, which have historically delivered outsized economic growth and performance during stronger global growth environments.

Emerging market equities have outperformed developed markets over the quarter (7.9% vs. 4.8%) and the past year (22.5% vs 18.2%), reversing an extended period of underperformance following the global financial crisis. Currency movement was a significant contributor to emerging market underperformance during this time, and the recent reversal in currency trends has been additive to the outperformance of these markets.

Valuations have risen off of low levels, bolstering returns. These markets are no longer cheap relative to history though strong earnings growth and mean reversion of currencies could likely fuel further outsized equity gains.

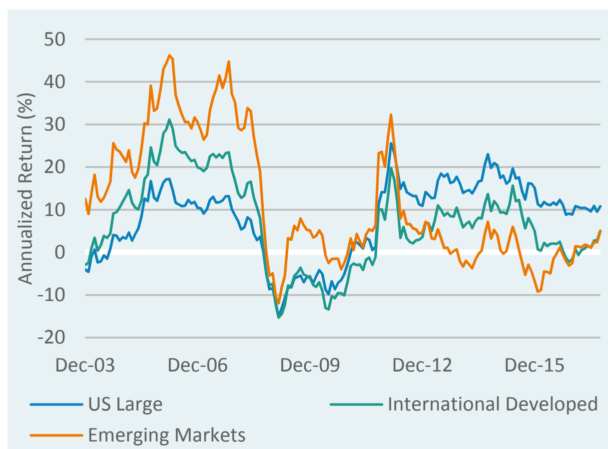
Accelerating global growth should have a positive effect on emerging economies

EMERGING MARKET FX & RELATIVE PERFORMANCE (7YR CUMULATIVE)



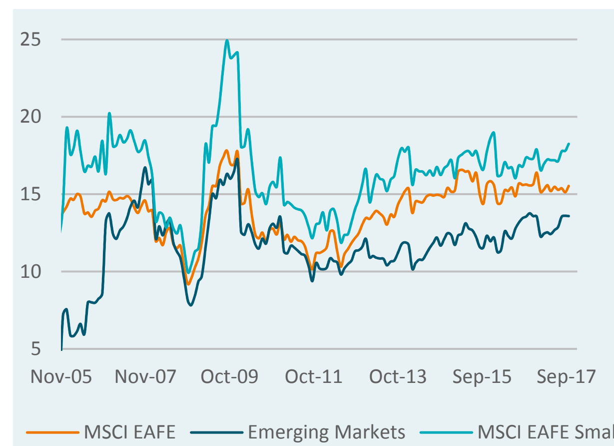
Source: MSCI, JP Morgan EM Currency Index, as of 9/30/17

EQUITY PERFORMANCE (3YR ROLLING)



Source: Standard & Poor's, MSCI, as of 9/30/17

FORWARD P/E RATIOS



Source: Bloomberg as of 9/30/17

Emerging markets – High "growth beta"

During Q3 the trend of coordinated global economic growth continued. Emerging market equities materially outperformed global equities over the quarter (7.9% MSCI EM vs. 5.2% MSCI ACWI) and year-to-date (27.8% vs. 17.3%).

Emerging markets have historically performed well during periods of global growth acceleration, in terms of both equity performance and underlying economic growth.

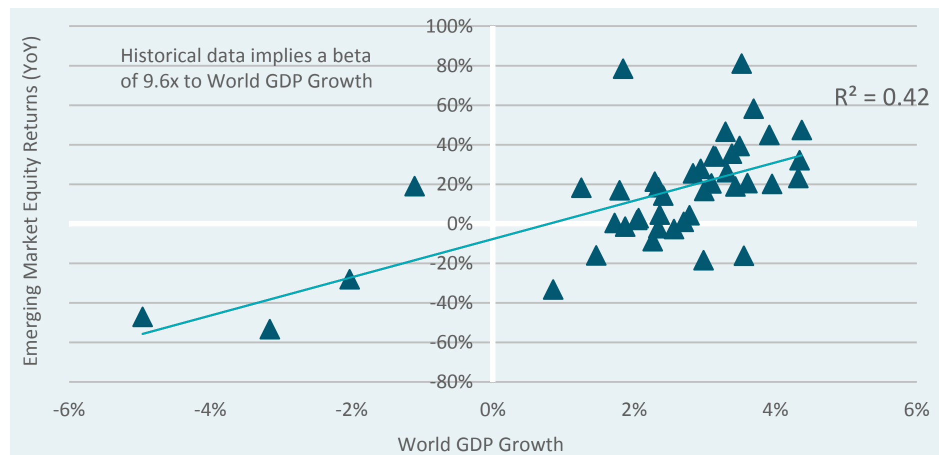
The relationship between emerging market equities and world economic growth has historically exhibited a beta of 9.6. This suggests that, on average, investors might expect a 1% improvement in global growth to result in emerging market equity outperformance of 9.6%.

It is important to note that this relationship has also held on the downside, as emerging markets tend to produce poor returns during weak growth environments.

EM GROWTH RELATIONSHIP TO GLOBAL GROWTH

Source: Bloomberg, since 1996 – BRICS used to represent emerging market economic growth

EM EQUITY PERFORMANCE RELATIONSHIP TO GLOBAL GROWTH



Source: Bloomberg, since 1996 - MSCI

Equity valuations

Equity valuations remain elevated compared to history, although recent price appreciation has been driven by earnings growth as opposed to multiple expansion. In international developed markets (EAFE), earnings growth over the past two quarters has outpaced price appreciation, leading to a slight decline in P/E ratios. The opposite has occurred in emerging markets where strong price gains have resulted in higher valuations. Relative to developed countries, emerging equities still appear attractive from a valuation perspective but are no longer considered cheap. Other valuation measures such as price-to-sales (P/S) ratios also indicate equity prices are rich, especially in the U.S. The P/S ratio at the end of September was 2.1, the highest level since 2000. During this cycle, sales growth has lagged earnings growth (per share), influenced by expanding profit margins and an increase in equity buybacks.

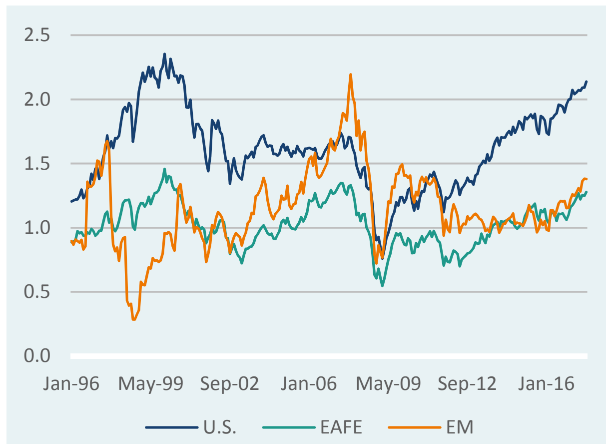
Historically, higher valuations have led to lower future returns over the medium-term, on average. However, valuations can remain elevated for long periods of time and may be partially justified given the current environment of low interest rates and inflation.

Valuations are elevated, but relative opportunities exist

TRAILING P/E RATIOS

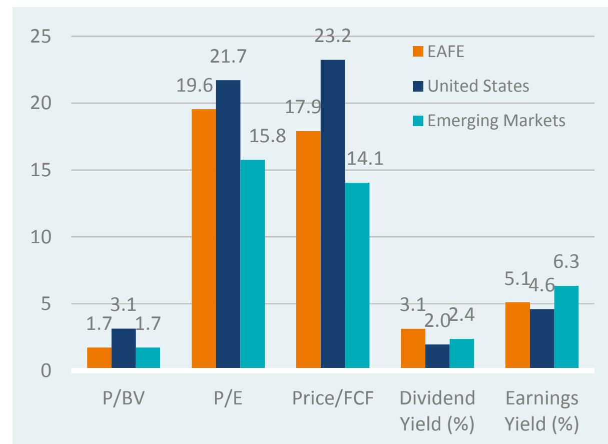
Source: Bloomberg, as of 9/30/17

TRAILING PRICE-TO-SALES RATIOS



Source: Bloomberg, as of 9/30/17

CURRENT VALUATION METRICS



Source: Bloomberg, as of 9/30/17

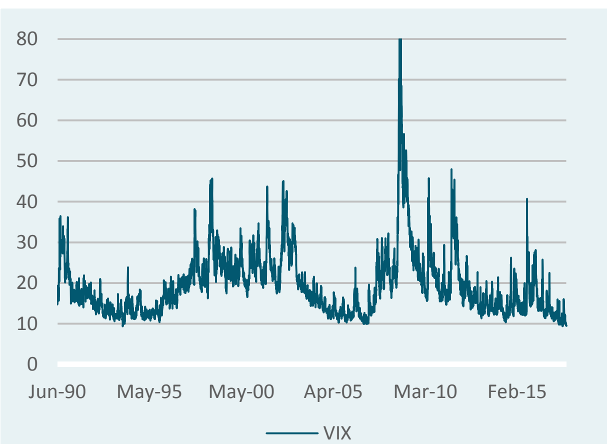
Equity volatility

Despite a rise in geopolitical risks, including tensions on the Korean peninsula, realized volatility in equities over the quarter was extremely low, consistent with recent trends. In September, S&P 500 annualized volatility was 5%, the lowest level for a calendar month on record. While many market participants have voiced concern over complacency, low volatility generally accompanies bull markets. We continue to watch volatility trends closely, but at this time do not view the current environment as a bearish signal. For investors in strategies with specific volatility targets, such as risk parity, it is important to be aware of rising equity exposure and leverage. A spike in volatility may lead to forced equity selling during a downturn in order to maintain the risk target.

The CBOE Skew Index, which looks at the steepness of the volatility curve, is above its historical average. This indicates investors are still paying a premium for downside protection.

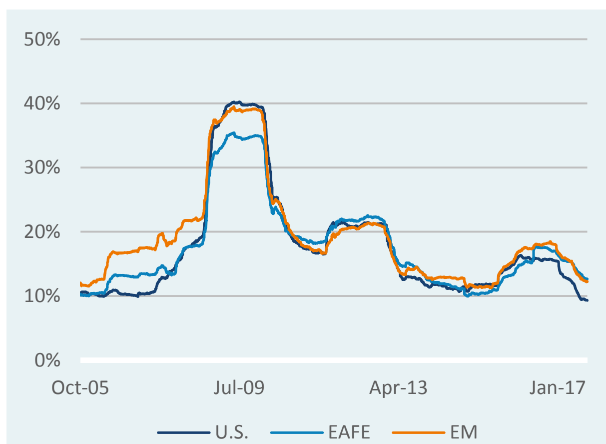
Equity volatility has trended downwards

U.S. IMPLIED VOLATILITY



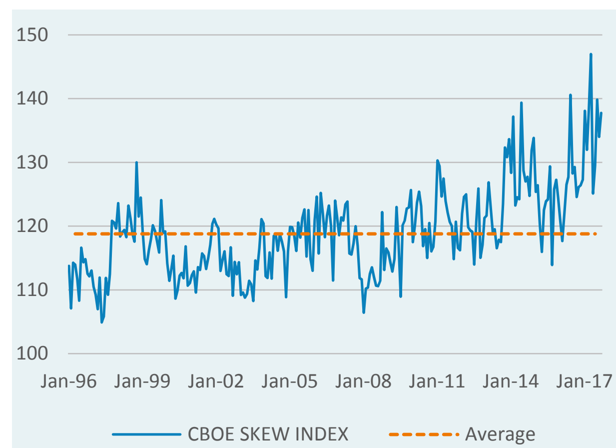
Source: CBOE, as of 9/30/17

REALIZED 1-YEAR ROLLING VOLATILITY



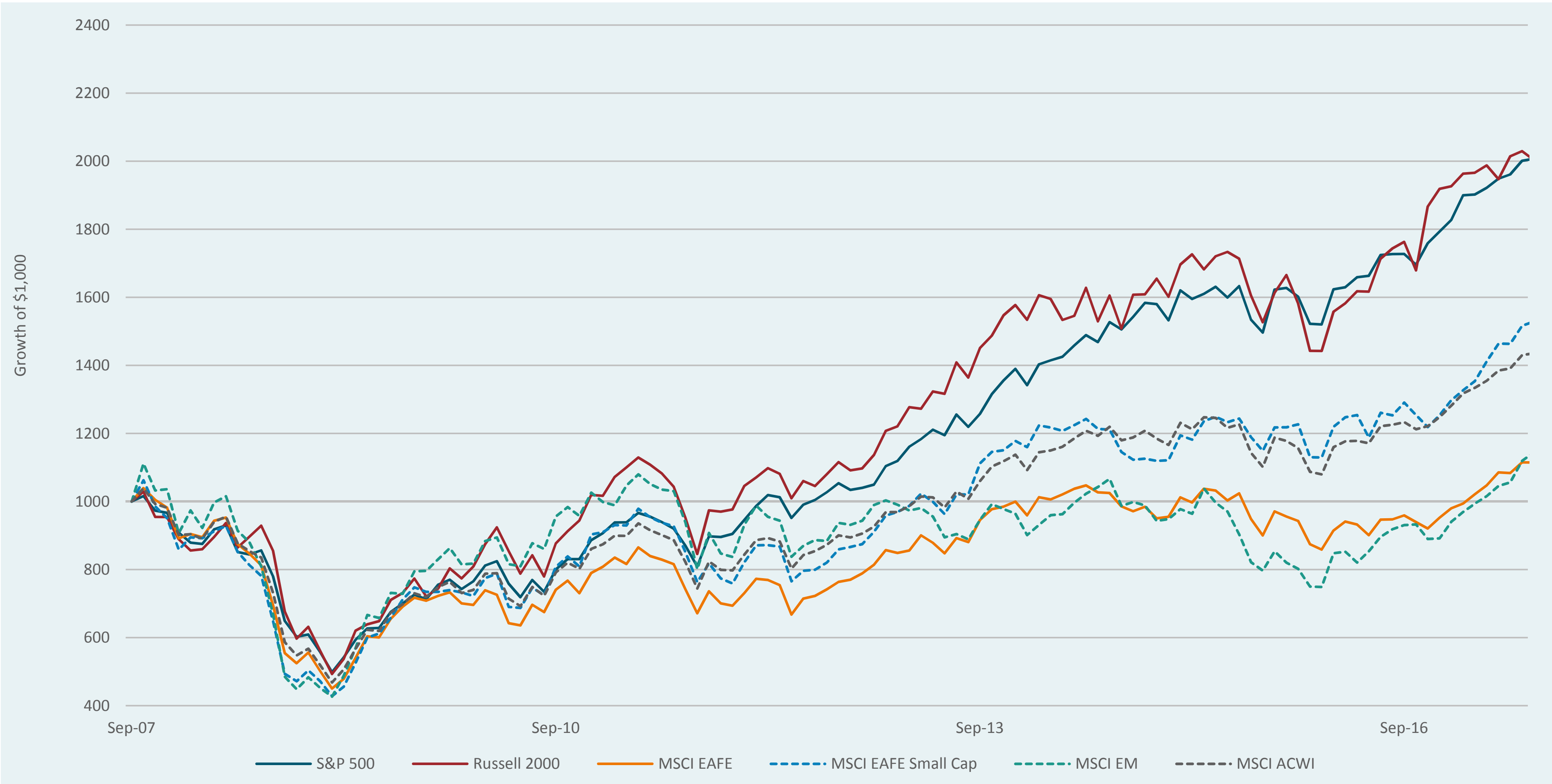
Source: Bloomberg, as of 9/30/17

U.S. VOLATILITY SKEW



Source: CBOE, as of 9/30/17

Long-term equity performance



Source: MPI, as of 9/30/17

Other assets

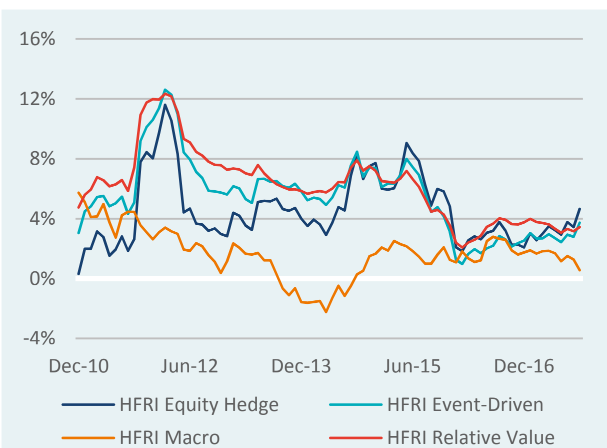
Hedge funds

In aggregate, hedge funds returned 2.2% during Q3 and 5.5% year-to-date per HFRI. Equity hedge strategies were the top performer for both periods as they gained 3.5% and 9.6%, respectively. Short biased funds stood out as the only negative sub strategy during Q3, which is typical during equity rallies. Funds with greater net-long market exposure benefited from strong year-to-date equity market returns.

Emerging market hedge funds were notable winners this year as HFRI reported performance of 4.8% for Q3 and 14.7% year-to-date. Funds focused on Latin America (+10.2% for Q3, 16.5% YTD) were particularly strong performers. Those markets rallied due in part to a combination of pro-business politicians retaining power, improving economic growth prospects and stabilizing commodity markets.

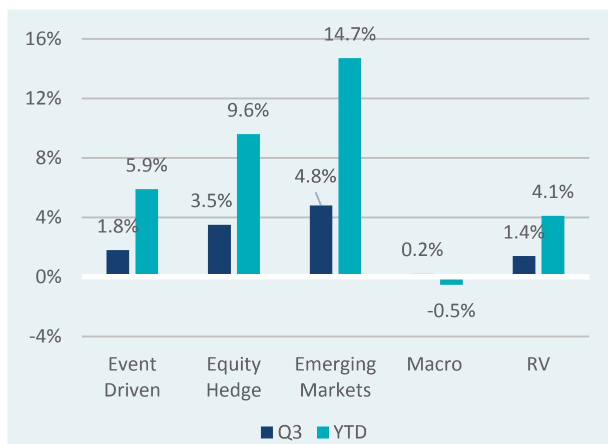
We are closely monitoring volatility levels because we understand that sudden changes in volatility regimes can negatively impact high gross leverage strategies. Our concerns are somewhat balanced due to more normal net leverage levels.

3-YEAR ROLLING STYLE PERFORMANCE



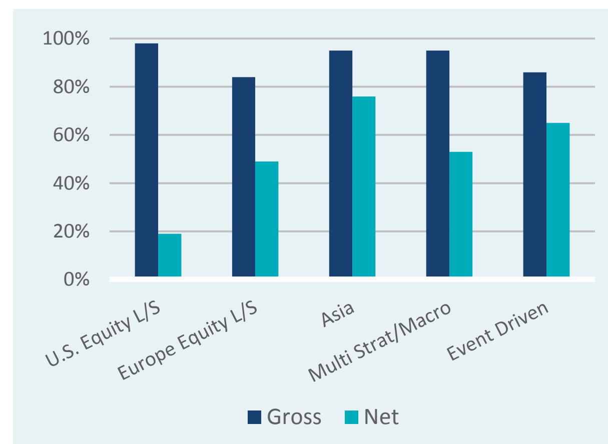
Source: HFRI, as of 9/30/17

Q3 & YTD STYLE PERFORMANCE



Source: HFRI, as of 9/30/17

LEVERAGE (PERCENTILE RANK SINCE 2010)



Source: Morgan Stanley, as of 9/30/17

Currency

The U.S. dollar depreciated an additional 2.7% in Q3 against a trade weighted basket of developed currencies, which brought the year-to-date decline to 8.0%. The downward trend partially reversed in September after prospects of another interest rate hike in December from the Fed helped lead to the first month of dollar appreciation so far this year. The euro appreciated 3.4% against the dollar over the quarter, influenced by improving economic conditions and the possibility of ECB tightening monetary policy.

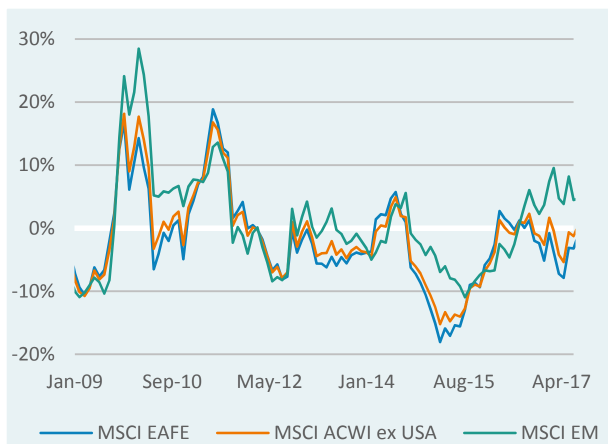
After several years of depreciation, emerging market currencies have stabilized. Improved current account balances and economic growth conditions have provided a positive backdrop for these currencies moving forward. However, a quicker than expected rise in U.S. interest rates could represent a headwind to further appreciation.

Currency losses from unhedged exposure to developed international equities has begun to reverse due to recent dollar weakness, although currency exposure has still resulted in materially higher volatility.

U.S. DOLLAR TRADE WEIGHTED INDEX

Source: Federal Reserve, as of 9/30/17

EFFECT OF CURRENCY (1-YEAR ROLLING)



Source: MPI, as of 9/30/17

JPM EM CURRENCY INDEX

Source: JPMorgan, as of 9/30/17

Appendix

Periodic table of returns

BEST ↑ / ↓ WORST

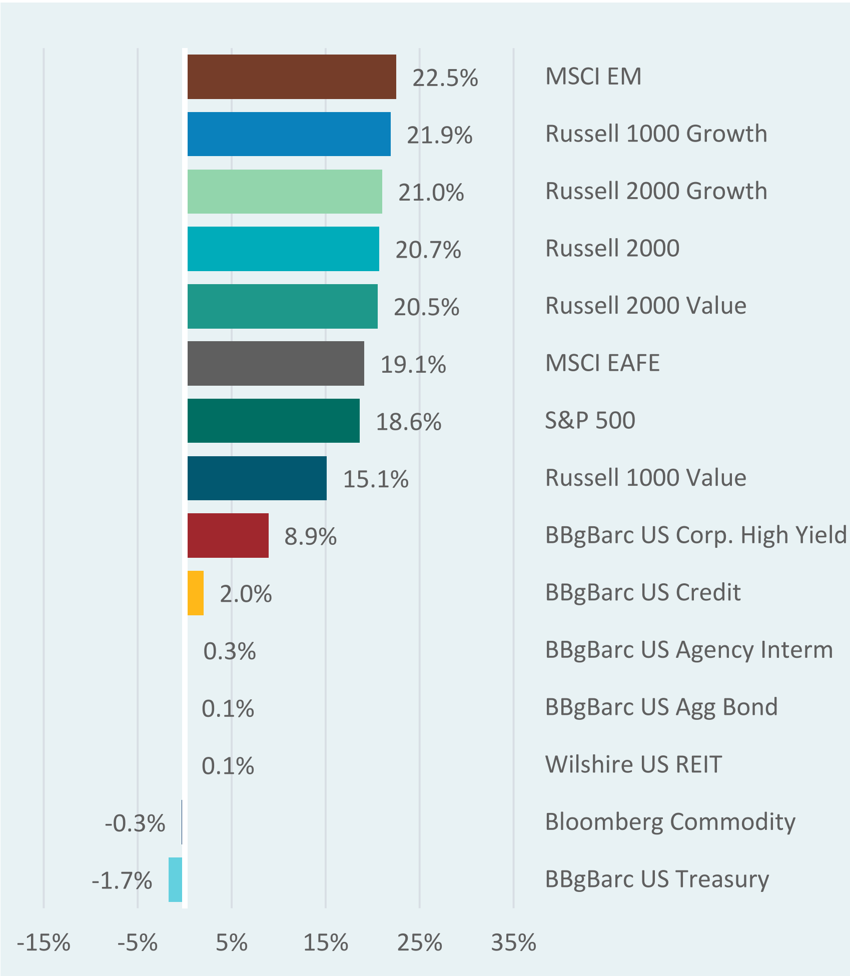
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	YTD	5-Year	10-Year
Emerging Markets Equity	16.6	38.4	23.2	35.2	38.7	66.4	31.8	14.0	25.9	56.3	26.0	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	13.3	31.7	27.8	15.3	9.1
Large Cap Growth	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	21.3	20.7	14.3	8.5
International Equity	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	17.3	20.0	14.3	7.8
Small Cap Growth	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	12.1	16.8	13.8	7.5
Large Cap Equity	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	11.8	14.2	13.3	7.1
60/40 Global Portfolio	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	11.3	12.7	13.2	6.4
Small Cap Equity	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	11.2	10.9	10.5	5.9
Large Cap Value	-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	8.0	7.9	8.4	4.3
Small Cap Value	-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	7.1	5.7	6.3	4.0
Hedge Funds of Funds	-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	5.7	5.5	4.0	1.3
Real Estate	-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	2.6	3.3	3.8	1.3
US Bonds	-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	1.0	3.1	2.1	1.1
Cash	-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	0.5	0.6	0.2	0.4
Commodities	-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	0.3	-2.9	-10.5	-6.8

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

Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, BBgBarc US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, BBgBarc Global Bond. NCREIF Property Index performance data as of 6/30/17.

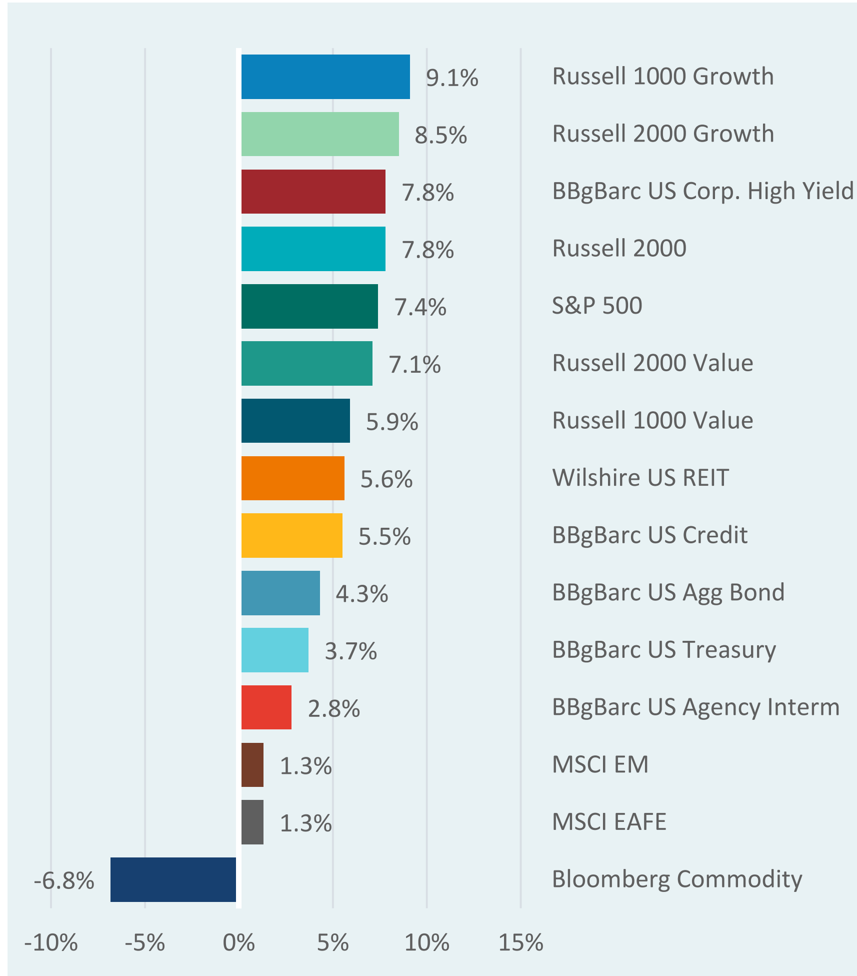
Major asset class returns

ONE YEAR ENDING SEPTEMBER



Source: Morningstar, as of 9/30/17

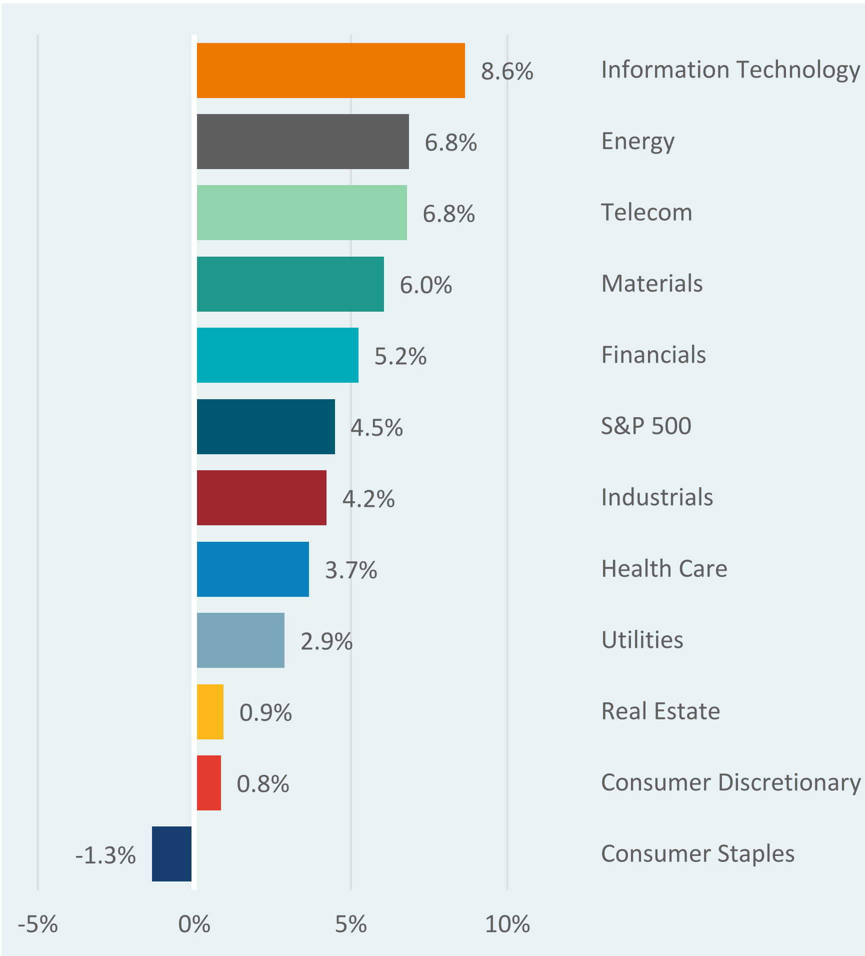
TEN YEARS ENDING SEPTEMBER



Source: Morningstar, as of 9/30/17

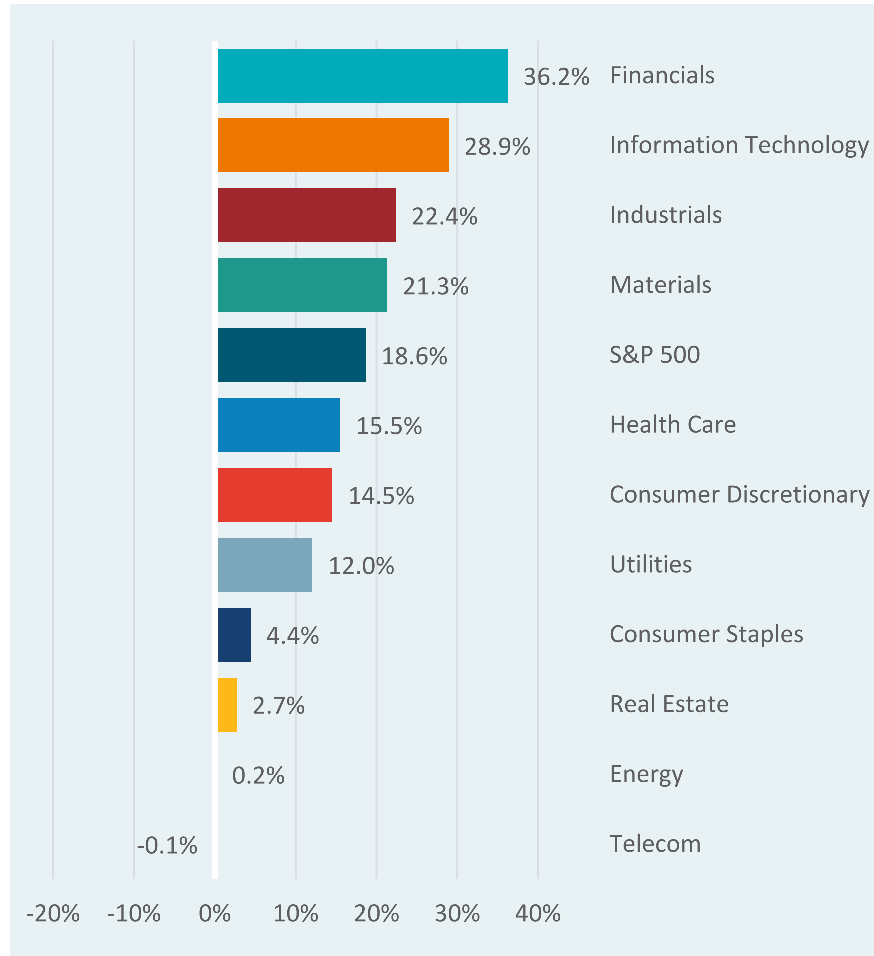
S&P 500 sector returns

3RD QUARTER



Source: Morningstar, as of 9/30/17

ONE YEAR ENDING SEPTEMBER



Source: Morningstar, as of 9/30/17

Detailed index returns

DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	2.1	4.5	14.2	18.6	10.8	14.2	7.4
S&P 500 Equal Weighted	2.9	3.6	11.9	16.2	10.1	15.0	8.9
DJ Industrial Average	2.2	5.6	15.5	25.5	12.3	13.6	7.7
Russell Top 200	1.9	4.9	15.1	19.8	11.1	14.3	7.3
Russell 1000	2.1	4.5	14.2	18.5	10.6	14.3	7.5
Russell 2000	6.2	5.7	10.9	20.7	12.2	13.8	7.8
Russell 3000	2.4	4.6	13.9	18.7	10.7	14.2	7.6
Russell Mid Cap	2.8	3.5	11.7	15.3	9.5	14.3	8.1
Style Index							
Russell 1000 Growth	1.3	5.9	20.7	21.9	12.7	15.3	9.1
Russell 1000 Value	3.0	3.1	7.9	15.1	8.5	13.2	5.9
Russell 2000 Growth	5.4	6.2	16.8	21.0	12.2	14.3	8.5
Russell 2000 Value	7.1	5.1	5.7	20.5	12.1	13.3	7.1

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
BBgBarc US Treasury US TIPS	(0.6)	0.9	1.7	(0.7)	1.6	0.0	3.9
BBgBarc US Treasury Bills	0.1	0.3	0.6	0.6	0.3	0.2	0.5
BBgBarc US Agg Bond	(0.5)	0.8	3.1	0.1	2.7	2.1	4.3
Duration							
BBgBarc US Treasury 1-3 Yr	(0.2)	0.2	0.7	0.2	0.8	0.6	1.7
BBgBarc US Treasury Long	(2.2)	0.6	6.0	(6.4)	4.9	2.8	6.9
BBgBarc US Treasury	(0.9)	0.4	2.3	(1.7)	2.0	1.2	3.7
Issuer							
BBgBarc US MBS	(0.2)	1.0	2.3	0.3	2.4	2.0	4.1
BBgBarc US Corp. High Yield	0.9	2.0	7.0	8.9	5.8	6.4	7.8
BBgBarc US Agency Interm	(0.3)	0.3	1.4	0.3	1.5	1.1	2.8
BBgBarc US Credit	(0.2)	1.3	5.1	2.0	3.9	3.2	5.5

INTERNATIONAL EQUITY

Broad Index							
MSCI ACWI	1.9	5.2	17.3	18.6	7.4	10.2	3.9
MSCI ACWI ex US	1.9	6.2	21.1	19.6	4.7	7.0	1.3
MSCI EAFE	2.5	5.4	20.0	19.1	5.0	8.4	1.3
MSCI EM	(0.4)	7.9	27.8	22.5	4.9	4.0	1.3
MSCI EAFE Small Cap	2.9	7.5	25.4	21.8	11.1	12.8	4.6
Style Index							
MSCI EAFE Growth	1.9	4.9	22.4	15.7	6.5	8.9	2.1
MSCI EAFE Value	3.1	5.9	17.6	22.5	3.5	7.8	0.5
Regional Index							
MSCI UK	3.3	5.2	15.7	14.6	0.8	4.9	0.7
MSCI Japan	2.0	4.0	14.3	14.1	7.7	10.6	1.7
MSCI Euro	3.9	8.0	25.9	28.4	5.6	9.9	(0.0)
MSCI EM Asia	(0.0)	7.0	31.8	23.8	8.0	7.4	2.7
MSCI EM Latin American	1.6	15.1	26.7	25.6	(0.3)	(1.9)	(0.8)

OTHER

Index							
Bloomberg Commodity	(0.1)	2.5	(2.9)	(0.3)	(10.4)	(10.5)	(6.8)
Wilshire US REIT	(0.1)	0.6	2.4	0.1	9.7	9.5	5.6
CS Leveraged Loans	0.4	1.1	3.0	5.4	4.0	4.4	4.4
Regional Index							
JPM EMBI Global Div	0.0	2.6	9.0	4.6	6.5	4.9	7.5
JPM GBI-EM Global Div	(0.3)	3.6	14.3	7.3	0.3	(0.9)	3.8
Hedge Funds							
HFRI Composite	0.5	2.1	5.7	6.9	3.3	4.7	3.1
HFRI FOF Composite	0.4	2.2	5.5	6.4	2.2	3.8	1.1
Currency (Spot)							
Euro	(0.6)	3.7	12.1	5.2	(2.2)	(1.7)	(1.8)
Pound	4.1	3.3	8.6	3.3	(6.1)	(3.6)	(4.1)
Yen	(2.2)	(0.2)	3.6	(10.0)	(0.9)	(7.1)	0.2

Source: Morningstar, as of 9/30/17

Definitions

Bloomberg US Weekly Consumer Comfort Index *- tracks the public's economic attitudes each week, providing a high-frequency read on consumer sentiment. The index, based on cell and landline telephone interviews with a random, representative national sample of U.S. adults, tracks Americans' ratings of the national economy, their personal finances and the buying climate on a weekly basis, with views of the economy's direction measured separately each month. (www.langerresearch.com)*

University of Michigan Consumer Sentiment Index *- A survey of consumer attitudes concerning both the present situation as well as expectations regarding economic conditions conducted by the University of Michigan. For the preliminary release approximately three hundred consumers are surveyed while five hundred are interviewed for the final figure. The level of consumer sentiment is related to the strength of consumer spending. (www.Bloomberg.com)*

Citi Economic Surprise Index *- objective and quantitative measures of economic news. Defined as weighted historical standard deviations of data surprises (actual releases vs Bloomberg survey median). A positive reading of the Economic Surprise Index suggests that economic releases have on balance been beating consensus. The indices are calculated daily in a rolling three-month window. The weights of economic indicators are derived from relative high-frequency spot FX impacts of 1 standard deviation data surprises. The indices also employ a time decay function to replicate the limited memory of markets. (www.Bloomberg.com)*

NFIB Small Business Outlook *- Small Business Economic Trends (SBET) is a monthly assessment of the U.S. small-business economy and its near-term prospects. Its data are collected through mail surveys to random samples of the National Federal of Independent Business (NFIB) membership. The survey contains three broad question types: recent performance, near-term forecasts, and demographics. The topics addressed include: outlook, sales, earnings, employment, employee compensation, investment, inventories, credit conditions, and single most important problem. (http://www.nfib-sbet.org/about/)*

Notices & disclosures

Stanislaus County Employees' Retirement Association

Investment Performance Review

Period Ending: September 30, 2017

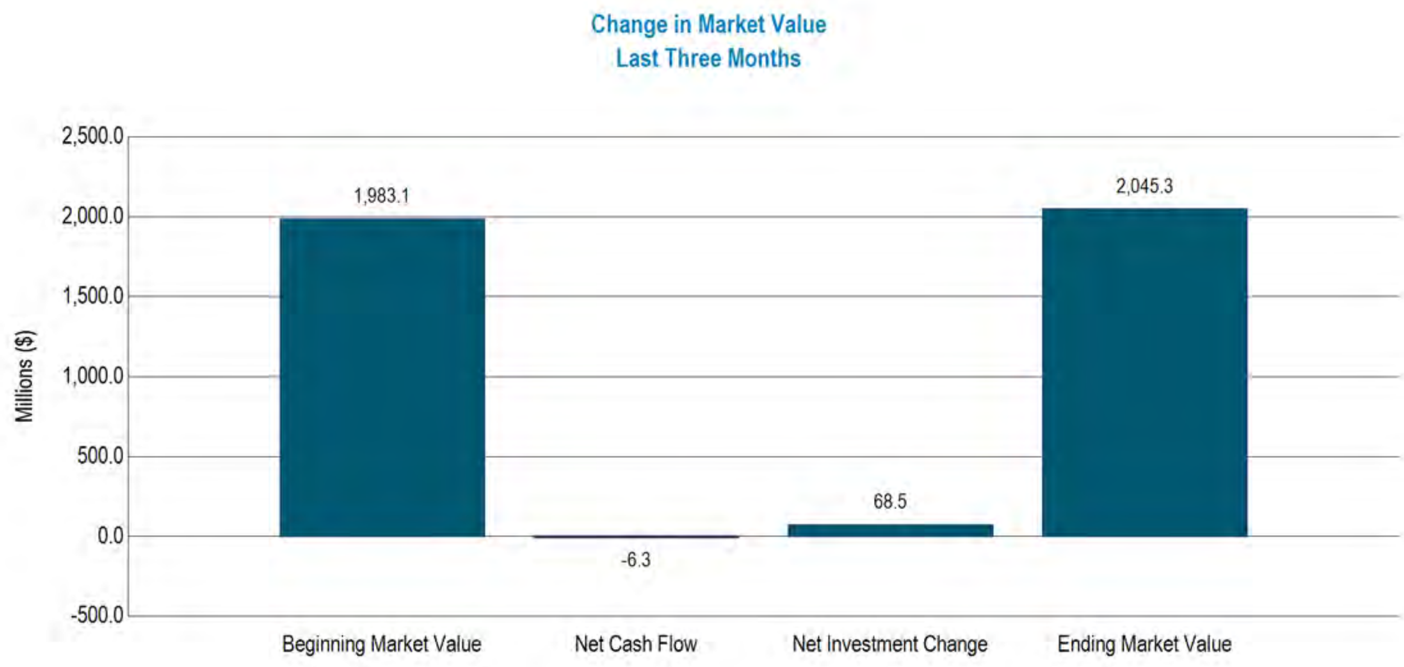
Verus

VERUSINVESTMENTS.COM

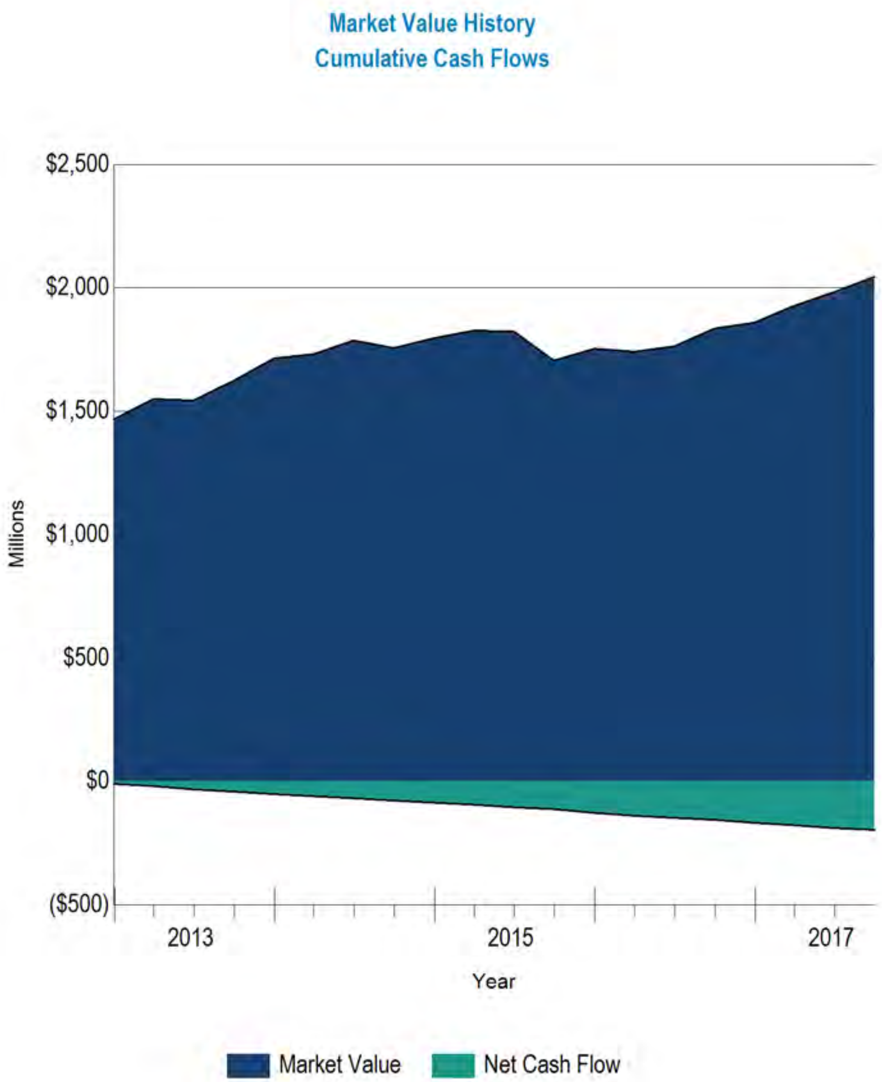
SEATTLE 206-622-3700
LOS ANGELES 310-297-1777
SAN FRANCISCO 415-362-3484

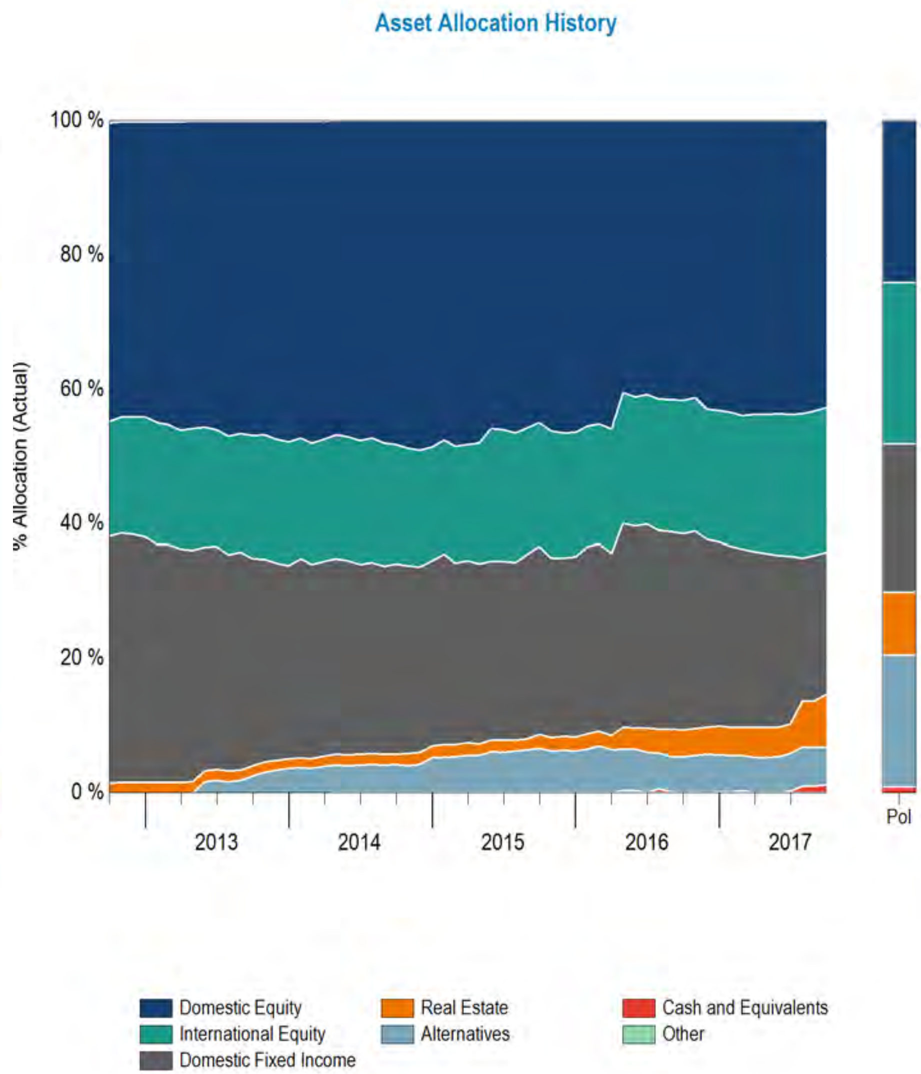
Portfolio Reconciliation

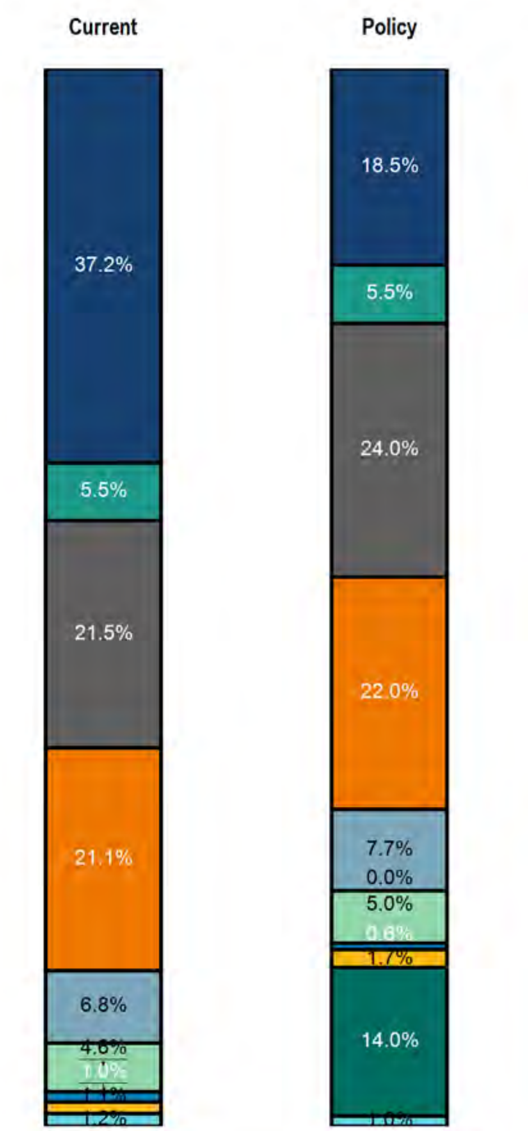
	Last Three Months	Fiscal Year-To-Date	Year-To-Date
Beginning Market Value	$1,983,082,534	$1,983,082,534	$1,859,742,905
Net Cash Flow	-$6,313,062	-$6,313,062	-$25,421,623
Net Investment Change	$68,517,873	$68,517,873	$210,966,064
Ending Market Value	$2,045,287,345	$2,045,287,345	$2,045,287,345



Contributions and withdrawals may include intra-account transfers between managers/funds.


Market Value History
Cumulative Cash Flows
$2,500
$2,000
$1,500
$1,000
$500
$0
($500)
Millions
2013
2015
2017
Year
Market Value
Net Cash Flow

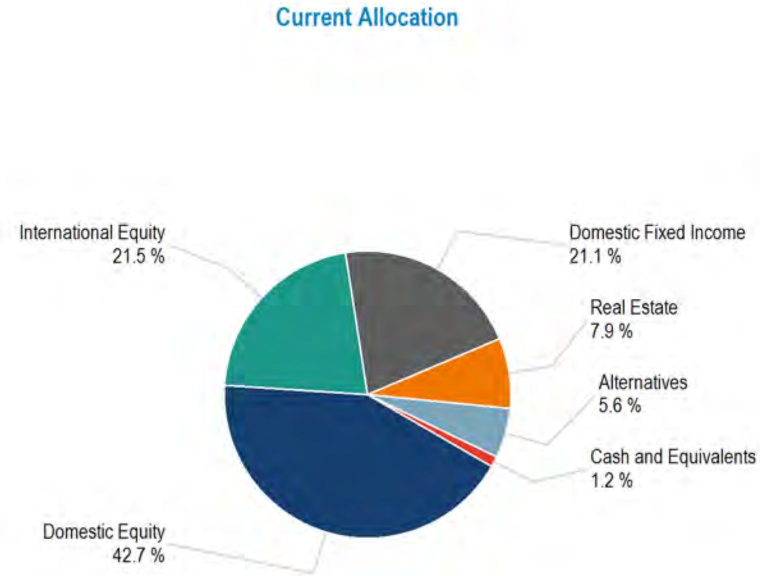

Asset Allocation History
100 %
80 %
60 %
40 %
20 %
0 %
% Allocation (Actual)
2013
2014
2015
2016
2017
Pol
Domestic Equity
International Equity
Domestic Fixed Income
Real Estate
Alternatives
Cash and Equivalents
Other



	Current Balance	Current Allocation	Policy	Difference	Policy Range	Within IPS Range?
U.S. Equity Large Cap	$761,232,436	37.2%	18.5%	$382,854,277	14.0% - 23.0%	No
U.S. Equity Small Cap	$111,726,858	5.5%	5.5%	-$763,946	1.0% - 10.0%	Yes
International Equity	$440,079,009	21.5%	24.0%	-$50,789,954	15.0% - 33.0%	Yes
U.S. Fixed Income	$430,765,687	21.1%	22.0%	-$19,197,529	15.0% - 29.0%	Yes
Real Estate	$139,845,813	6.8%	7.7%	-$17,641,312	5.0% - 11.0%	Yes
Private Equity	--	--	0.0%	$0	0.0% - 10.0%	Yes
Direct Lending	$94,724,415	4.6%	5.0%	-$7,539,953	0.0% - 10.0%	Yes
Infrastructure	$19,931,563	1.0%	0.6%	$7,659,839	0.0% - 3.0%	Yes
Value Added	$22,647,938	1.1%	1.7%	-$12,121,946	0.0% - 5.0%	Yes
Risk Parity	--	--	14.0%	-$286,340,228	9.0% - 19.0%	No
Cash and Equivalents	$24,333,626	1.2%	1.0%	$3,880,753	0.0% - 1.5%	Yes
Total	**$2,045,287,345**	**100.0%**	**100.0%**			

Cash Account includes cash held at Northern Trust for all closed end funds.

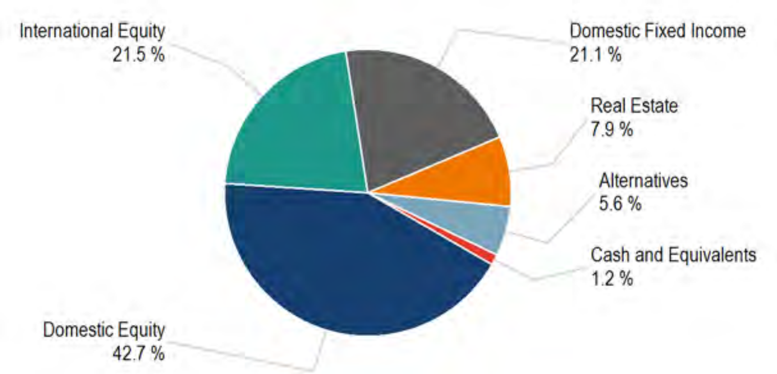
	QTD	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
Total Fund	**3.6**	**11.5**	**3.6**	**13.7**	**7.3**	**9.5**	**6.0**
Policy Index	*3.6*	*10.6*	*3.6*	*11.7*	*7.3*	*8.6*	*6.0*
InvestorForce Public DB Gross Rank	*34*	*40*	*34*	*17*	*30*	*17*	*24*
US Equity	**4.7**	**13.9**	**4.7**	**19.8**	**10.4**	**14.4**	**7.3**
US Equity Blended	*4.7*	*13.6*	*4.7*	*19.1*	*11.0*	*14.2*	*7.8*
Russell 3000	*4.6*	*13.9*	*4.6*	*18.7*	*10.7*	*14.2*	*7.6*
InvestorForce All DB US Eq Gross Rank	*39*	*47*	*39*	*22*	*64*	*28*	*65*
International Equity	**5.5**	**21.3**	**5.5**	**21.6**	**6.0**	**8.5**	**2.3**
MSCI ACWI ex USA Gross	*6.3*	*21.6*	*6.3*	*20.2*	*5.2*	*7.5*	*1.7*
InvestorForce All DB ex-US Eq Gross Rank	*78*	*78*	*78*	*28*	*52*	*48*	*42*
US Fixed Income	**1.0**	**3.9**	**1.0**	**2.5**	**3.6**	**3.4**	**5.6**
BBgBarc US Aggregate TR	*0.8*	*3.1*	*0.8*	*0.1*	*2.7*	*2.1*	*4.3*
InvestorForce All DB US Fix Inc Gross Rank	*64*	*57*	*64*	*32*	*46*	*41*	*41*
Real Estate	**1.6**	**5.3**	**1.6**	**5.7**	**12.7**	**11.3**	**--**
DJ US Select RESI	*0.4*	*1.7*	*0.4*	*-0.8*	*9.3*	*9.1*	*--*
Direct Lending	**0.6**	**-0.1**	**0.6**	**2.1**	**5.2**	**--**	**--**
9% Annual	*2.2*	*6.7*	*2.2*	*9.0*	*9.0*	*--*	*--*
Infrastructure	**4.1**	**3.1**	**4.1**	**7.3**	**--**	**--**	**--**
CPI + 5%	*2.0*	*6.0*	*2.0*	*7.3*	*--*	*--*	*--*



Policy Index (7/1/2017): 18.5% Russell 1000, 5.5% Russell 2000, 24% MSCI ACWI ex-USA, 19% BBgBarc US Gov't/Credit 1-3 Yr, 3% BBgBarc US Treasury 7-10 Yr, 7.7% NCREIF Property, 1.7% NCREIF Property +2%, 0.6% CPI +5%, 5% BBgBarc US High Yield +2%, 14% 60% MSCI ACWI / 40% BBgBarc Global Aggregate, 1% Citi 1 Month T-Bills. US Equity Blended: 80% Russell 1000, 20% Russell 2000.

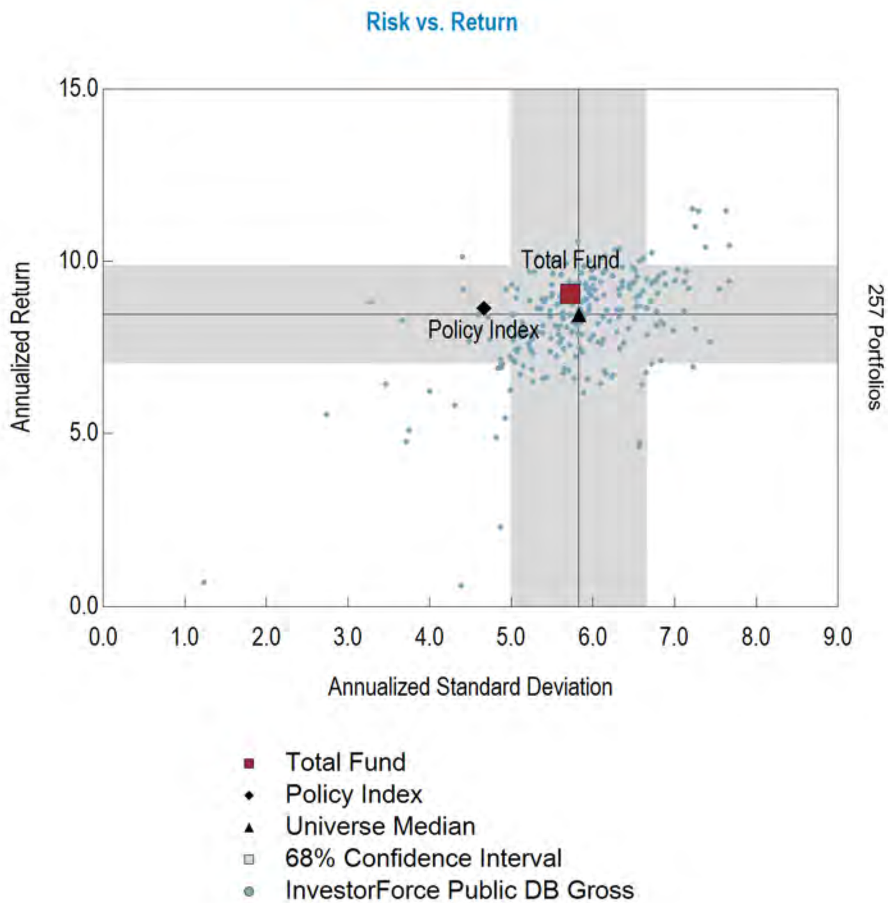
	QTD	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
Total Fund	3.5	11.3	3.5	13.3	7.0	9.1	5.6
Policy Index	3.6	10.6	3.6	11.7	7.3	8.6	6.0
US Equity	4.7	13.7	4.7	19.5	10.1	14.1	7.0
US Equity Blended	4.7	13.6	4.7	19.1	11.0	14.2	7.8
Russell 3000	4.6	13.9	4.6	18.7	10.7	14.2	7.6
International Equity	5.4	21.0	5.4	21.1	5.6	8.0	1.8
MSCI ACWI ex USA Gross	6.3	21.6	6.3	20.2	5.2	7.5	1.7
US Fixed Income	0.9	3.8	0.9	2.3	3.5	3.2	5.4
BBgBarc US Aggregate TR	0.8	3.1	0.8	0.1	2.7	2.1	4.3
Real Estate	1.6	5.3	1.6	5.5	11.5	10.7	--
DJ US Select RESI	0.4	1.7	0.4	-0.8	9.3	9.1	--
Direct Lending	0.6	-0.1	0.6	1.5	3.8	--	--
9% Annual	2.2	6.7	2.2	9.0	9.0	--	--
Infrastructure	4.1	3.1	4.1	2.6	--	--	--
CPI + 5%	2.0	6.0	2.0	7.3	--	--	--

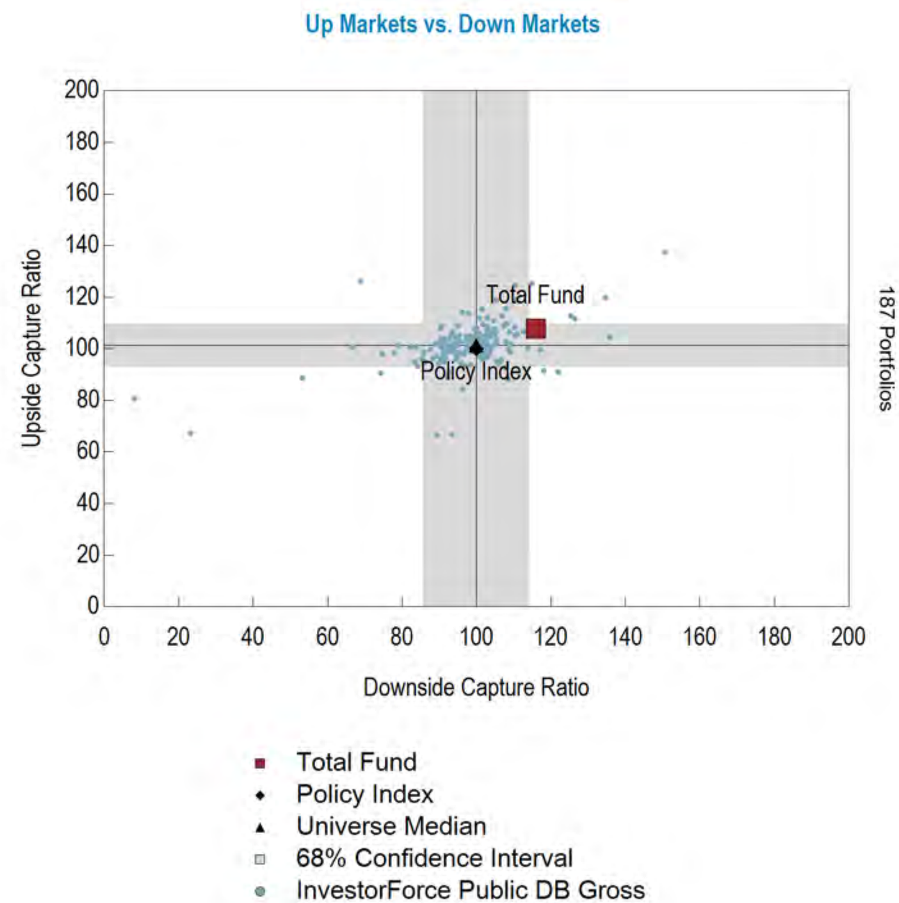
Current Allocation



Policy Index (7/1/2017): 18.5% Russell 1000, 5.5% Russell 2000, 24% MSCI ACWI ex-USA, 19% BBgBarc US Gov't/Credit 1-3 Yr, 3% BBgBarc US Treasury 7-10 Yr, 7.7% NCREIF Property, 1.7% NCREIF Property +2%, 0.6% CPI +5%, 5% BBgBarc US High Yield +2%, 14% 60% MSCI ACWI / 40% BBgBarc Global Aggregate, 1% Citi 1 Month T-Bills. US Equity Blended: 80% Russell 1000, 20% Russell 2000.

	Anlzd Ret	Ann Excess BM Return	Anlzd Std Dev	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Info Ratio	Up Mkt Cap Ratio	Down Mkt Cap Ratio
Total Fund	9.05%	0.41%	5.72%	-1.21%	1.19	1.69%	0.94	1.55	0.24	107.78%	115.89%





	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2016	2015	2014	2013	2012	Return	Since
Total Fund	**2,045,287,345**	**100.0**	**3.6**	**11.5**	**3.6**	**13.7**	**7.3**	**9.5**	**6.0**	**8.1**	**-0.3**	**6.9**	**19.8**	**14.3**	**9.5**	**Dec-94**
Policy Index			*3.6*	*10.6*	*3.6*	*11.7*	*7.3*	*8.6*	*6.0*	*8.5*	*0.2*	*7.5*	*15.4*	*12.3*	*8.2*	*Dec-94*
InvestorForce Public DB Gross Rank			*34*	*40*	*34*	*17*	*30*	*17*	*24*	*34*	*61*	*23*	*12*	*10*		
US Equity	**872,959,294**	**42.7**	**4.7**	**13.9**	**4.7**	**19.8**	**10.4**	**14.4**	**7.3**	**12.3**	**-0.2**	**10.9**	**36.9**	**18.8**	**7.3**	**Jun-01**
US Equity Blended			*4.7*	*13.6*	*4.7*	*19.1*	*11.0*	*14.2*	*7.8*	*13.9*	*-0.1*	*11.6*	*34.3*	*16.7*	*7.2*	*Jun-01*
Russell 3000			*4.6*	*13.9*	*4.6*	*18.7*	*10.7*	*14.2*	*7.6*	*12.7*	*0.5*	*12.6*	*33.6*	*16.4*	*7.0*	*Jun-01*
InvestorForce All DB US Eq Gross Rank			*39*	*47*	*39*	*22*	*64*	*28*	*65*	*61*	*63*	*54*	*13*	*6*		
Northern Trust Russell 1000	159,721,889	7.8	--	--	--	--	--	--	--	--	--	--	--	--	2.1	Aug-17
Russell 1000			--	--	--	--	--	--	--	--	--	--	--	--	*2.1*	*Aug-17*
eA US Large Cap Equity Gross Rank			--	--	--	--	--	--	--	--	--	--	--	--		
BlackRock Russell 1000 Growth	108,742,741	5.3	5.9	20.7	5.9	22.0	12.8	15.3	--	7.2	5.7	13.1	33.5	15.4	16.9	Jun-10
Russell 1000 Growth			*5.9*	*20.7*	*5.9*	*21.9*	*12.7*	*15.3*	--	*7.1*	*5.7*	*13.0*	*33.5*	*15.3*	*16.8*	*Jun-10*
eA US Large Cap Growth Equity Gross Rank			*38*	*46*	*38*	*41*	*31*	*40*	--	*26*	*42*	*37*	*56*	*53*		
Jackson Square	155,288,195	7.6	9.0	25.0	9.0	20.0	10.6	14.2	9.0	-4.4	5.9	13.8	35.6	17.0	10.0	Aug-06
Russell 1000 Growth			*5.9*	*20.7*	*5.9*	*21.9*	*12.7*	*15.3*	*9.1*	*7.1*	*5.7*	*13.0*	*33.5*	*15.3*	*10.2*	*Aug-06*
eA US Large Cap Growth Equity Gross Rank			*2*	*17*	*2*	*64*	*72*	*66*	*46*	*98*	*39*	*32*	*39*	*36*		
BlackRock Russell 1000 Value	121,126,706	5.9	3.1	8.0	3.1	15.2	8.6	13.3	--	17.3	-3.6	13.5	32.6	17.6	13.8	Jul-09
Russell 1000 Value			*3.1*	*7.9*	*3.1*	*15.1*	*8.5*	*13.2*	--	*17.3*	*-3.8*	*13.5*	*32.5*	*17.5*	*13.6*	*Jul-09*
eA US Large Cap Value Equity Gross Rank			*81*	*83*	*81*	*77*	*58*	*57*	--	*26*	*62*	*31*	*59*	*30*		
Dodge & Cox-Equity	216,352,855	10.6	4.7	11.7	4.7	23.5	10.2	15.6	7.2	21.4	-3.9	10.9	39.1	22.3	12.5	Dec-94
Russell 1000 Value			*3.1*	*7.9*	*3.1*	*15.1*	*8.5*	*13.2*	*5.9*	*17.3*	*-3.8*	*13.5*	*32.5*	*17.5*	*10.1*	*Dec-94*
eA US Large Cap Value Equity Gross Rank			*30*	*33*	*30*	*8*	*24*	*11*	*43*	*6*	*64*	*72*	*15*	*3*		
Capital Prospects	111,672,835	5.5	6.9	11.0	6.9	25.5	12.4	15.5	--	28.1	-7.0	5.8	37.9	23.8	16.5	Dec-08
Russell 2000 Value			*5.1*	*5.7*	*5.1*	*20.5*	*12.1*	*13.3*	--	*31.7*	*-7.5*	*4.2*	*34.5*	*18.1*	*13.5*	*Dec-08*
eA US Small Cap Value Equity Gross Rank			*15*	*16*	*15*	*10*	*42*	*36*	--	*40*	*72*	*51*	*53*	*9*		
International Equity	**440,079,009**	**21.5**	**5.5**	**21.3**	**5.5**	**21.6**	**6.0**	**8.5**	**2.3**	**5.5**	**-3.7**	**-4.2**	**20.0**	**18.0**	**6.3**	**Jun-01**
MSCI ACWI ex USA Gross			*6.3*	*21.6*	*6.3*	*20.2*	*5.2*	*7.5*	*1.7*	*5.0*	*-5.3*	*-3.4*	*15.8*	*17.4*	*6.6*	*Jun-01*
InvestorForce All DB ex-US Eq Gross Rank			*78*	*78*	*78*	*28*	*52*	*48*	*42*	*26*	*51*	*70*	*35*	*63*		
LSV Asset Mgt	222,950,272	10.9	5.8	21.5	5.8	24.4	6.2	8.9	2.4	8.8	-5.1	-4.0	20.4	16.7	7.7	Aug-04
MSCI ACWI ex USA Gross			*6.3*	*21.6*	*6.3*	*20.2*	*5.2*	*7.5*	*1.7*	*5.0*	*-5.3*	*-3.4*	*15.8*	*17.4*	*7.2*	*Aug-04*
eA ACWI ex-US Equity Unhedged Gross Rank			*69*	*73*	*69*	*23*	*67*	*62*	*75*	*10*	*86*	*65*	*46*	*78*		
Fidelity	217,128,737	10.6	5.2	21.2	5.2	18.8	5.9	8.0	2.3	2.4	-2.0	-4.5	19.6	19.3	4.4	Apr-06
MSCI ACWI ex USA Gross			*6.3*	*21.6*	*6.3*	*20.2*	*5.2*	*7.5*	*1.7*	*5.0*	*-5.3*	*-3.4*	*15.8*	*17.4*	*3.9*	*Apr-06*
eA ACWI ex-US Equity Unhedged Gross Rank			*80*	*76*	*80*	*69*	*69*	*76*	*76*	*46*	*66*	*70*	*55*	*55*		

Individual closed end funds are not shown in performance summary table.

Performance Summary (Gross of Fees)

Period Ending: September 30, 2017

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2016	2015	2014	2013	2012	Return	Since
US Fixed Income	**430,765,687**	**21.1**	**1.0**	**3.9**	**1.0**	**2.5**	**3.6**	**3.4**	**5.6**	**5.4**	**0.3**	**6.2**	**0.3**	**7.9**	**5.8**	**Jun-01**
BBgBarc US Aggregate TR			*0.8*	*3.1*	*0.8*	*0.1*	*2.7*	*2.1*	*4.3*	*2.6*	*0.6*	*6.0*	*-2.0*	*4.2*	*4.7*	*Jun-01*
InvestorForce All DB US Fix Inc Gross Rank			*64*	*57*	*64*	*32*	*46*	*41*	*41*	*47*	*42*	*42*	*21*	*48*		
Insight	94,830,014	4.6	0.5	--	0.5	--	--	--	--	--	--	--	--	--	0.5	Jun-17
BBgBarc US Govt/Credit 1-5 Yr. TR			*0.4*	--	*0.4*	--	--	--	--	--	--	--	--	--	*0.4*	*Jun-17*
eA US Short Duration Fixed Inc Gross Rank			*33*	--	*33*	--	--	--	--	--	--	--	--	--		
DFA	277,339,543	13.6	--	--	--	--	--	--	--	--	--	--	--	--	0.2	Jul-17
BofA Merrill Lynch US Corp & Gov 1-5 Yrs			--	--	--	--	--	--	--	--	--	--	--	--	*0.1*	*Jul-17*
eA US Short Duration Fixed Inc Gross Rank			--	--	--	--	--	--	--	--	--	--	--	--		
Northern Trust Intermediate Gov't Bond	43,772,867	2.1	--	--	--	--	--	--	--	--	--	--	--	--	0.0	Jul-17
BBgBarc US Govt Int TR			--	--	--	--	--	--	--	--	--	--	--	--	*0.0*	*Jul-17*
eA US Government Fixed Inc Gross Rank			--	--	--	--	--	--	--	--	--	--	--	--		
Northern Trust Long Term Gov't Bond	14,822,348	0.7	--	--	--	--	--	--	--	--	--	--	--	--	1.2	Jul-17
BBgBarc US Govt Long TR			--	--	--	--	--	--	--	--	--	--	--	--	*1.2*	*Jul-17*
eA US Government Fixed Inc Gross Rank			--	--	--	--	--	--	--	--	--	--	--	--		
Real Estate	**162,493,752**	**7.9**	**1.6**	**5.3**	**1.6**	**5.7**	**12.7**	**11.3**	**--**	**8.2**	**12.8**	**28.3**	**1.4**	**5.6**	**4.2**	**Feb-08**
DJ US Select RESI			*0.4*	*1.7*	*0.4*	*-0.8*	*9.3*	*9.1*	--	*6.6*	*4.5*	*31.9*	*1.3*	*16.1*	*5.3*	*Feb-08*
Prime Property Fund	17,993,624	0.9	2.2	6.5	2.2	9.3	--	--	--	10.4	--	--	--	--	10.2	Sep-15
NCREIF-ODCE			*1.9*	*5.4*	*1.9*	*7.7*	--	--	--	*8.8*	--	--	--	--	*8.9*	*Sep-15*
American Strategic Value Realty	22,647,938	1.1	2.2	7.6	2.2	11.3	--	--	--	13.1	21.4	--	--	--	15.3	Dec-14
NCREIF Property Index			*1.7*	*5.1*	*1.7*	*6.9*	--	--	--	*8.0*	*13.3*	--	--	--	*9.6*	*Dec-14*
BlackRock US Real Estate	109,075,475	5.3	0.4	1.8	0.4	-0.8	9.2	9.2	--	6.6	4.4	31.9	1.4	--	9.2	Sep-12
DJ US Select RESI TR USD			*0.4*	*1.7*	*0.4*	*-0.8*	*9.3*	*9.1*	--	*6.6*	*4.5*	*31.9*	*1.3*	--	*9.1*	*Sep-12*
eA US REIT Gross Rank			*79*	*84*	*79*	*86*	*76*	*89*	--	*68*	*58*	*39*	*91*	--		

Individual closed end funds are not shown in performance summary table.

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2016	2015	2014	2013	2012	Return	Since
Total Fund	**2,045,287,345**	**100.0**	**3.5**	**11.3**	**3.5**	**13.3**	**7.0**	**9.1**	**5.6**	**7.6**	**-0.6**	**6.5**	**19.2**	**14.0**	**9.2**	**Dec-94**
Policy Index			*3.6*	*10.6*	*3.6*	*11.7*	*7.3*	*8.6*	*6.0*	*8.5*	*0.2*	*7.5*	*15.4*	*12.3*	*8.2*	*Dec-94*
US Equity	**872,959,294**	**42.7**	**4.7**	**13.7**	**4.7**	**19.5**	**10.1**	**14.1**	**7.0**	**11.9**	**-0.4**	**10.7**	**36.5**	**18.5**	**7.0**	**Jun-01**
US Equity Blended			*4.7*	*13.6*	*4.7*	*19.1*	*11.0*	*14.2*	*7.8*	*13.9*	*-0.1*	*11.6*	*34.3*	*16.7*	*7.2*	*Jun-01*
Russell 3000			*4.6*	*13.9*	*4.6*	*18.7*	*10.7*	*14.2*	*7.6*	*12.7*	*0.5*	*12.6*	*33.6*	*16.4*	*7.0*	*Jun-01*
Northern Trust Russell 1000	159,721,889	7.8	--	--	--	--	--	--	--	--	--	--	--	--	2.1	Aug-17
Russell 1000			--	--	--	--	--	--	--	--	--	--	--	--	*2.1*	*Aug-17*
BlackRock Russell 1000 Growth	108,742,741	5.3	5.9	20.7	5.9	22.0	12.7	15.3	--	7.2	5.7	13.1	33.5	15.4	16.9	Jun-10
Russell 1000 Growth			*5.9*	*20.7*	*5.9*	*21.9*	*12.7*	*15.3*	--	*7.1*	*5.7*	*13.0*	*33.5*	*15.3*	*16.8*	*Jun-10*
Jackson Square	155,288,195	7.6	8.9	24.6	8.9	19.4	10.1	13.7	8.5	-4.9	5.5	13.4	34.9	16.6	9.5	Aug-06
Russell 1000 Growth			*5.9*	*20.7*	*5.9*	*21.9*	*12.7*	*15.3*	*9.1*	*7.1*	*5.7*	*13.0*	*33.5*	*15.3*	*10.2*	*Aug-06*
BlackRock Russell 1000 Value	121,126,706	5.9	3.1	8.0	3.1	15.2	8.6	13.3	--	17.3	-3.6	13.5	32.6	17.6	13.8	Jul-09
Russell 1000 Value			*3.1*	*7.9*	*3.1*	*15.1*	*8.5*	*13.2*	--	*17.3*	*-3.8*	*13.5*	*32.5*	*17.5*	*13.6*	*Jul-09*
Dodge & Cox-Equity	216,352,855	10.6	4.6	11.6	4.6	23.2	10.1	15.4	7.0	21.2	-4.0	10.7	38.8	22.1	12.3	Dec-94
Russell 1000 Value			*3.1*	*7.9*	*3.1*	*15.1*	*8.5*	*13.2*	*5.9*	*17.3*	*-3.8*	*13.5*	*32.5*	*17.5*	*10.1*	*Dec-94*
Capital Prospects	111,672,835	5.5	6.7	10.4	6.7	24.5	11.7	14.7	--	27.1	-7.5	5.2	36.8	23.2	15.7	Dec-08
Russell 2000 Value			*5.1*	*5.7*	*5.1*	*20.5*	*12.1*	*13.3*	--	*31.7*	*-7.5*	*4.2*	*34.5*	*18.1*	*13.5*	*Dec-08*
International Equity	**440,079,009**	**21.5**	**5.4**	**21.0**	**5.4**	**21.1**	**5.6**	**8.0**	**1.8**	**4.9**	**-4.0**	**-4.5**	**19.4**	**17.5**	**5.8**	**Jun-01**
MSCI ACWI ex USA Gross			*6.3*	*21.6*	*6.3*	*20.2*	*5.2*	*7.5*	*1.7*	*5.0*	*-5.3*	*-3.4*	*15.8*	*17.4*	*6.6*	*Jun-01*
LSV Asset Mgt	222,950,272	10.9	5.7	21.0	5.7	23.8	5.7	8.4	1.9	8.2	-5.4	-4.2	19.8	16.2	7.1	Aug-04
MSCI ACWI ex USA Gross			*6.3*	*21.6*	*6.3*	*20.2*	*5.2*	*7.5*	*1.7*	*5.0*	*-5.3*	*-3.4*	*15.8*	*17.4*	*7.2*	*Aug-04*
Fidelity	217,128,737	10.6	5.1	21.0	5.1	18.5	5.5	7.6	1.9	1.8	-2.3	-4.9	19.1	18.8	4.0	Apr-06
MSCI ACWI ex USA Gross			*6.3*	*21.6*	*6.3*	*20.2*	*5.2*	*7.5*	*1.7*	*5.0*	*-5.3*	*-3.4*	*15.8*	*17.4*	*3.9*	*Apr-06*
US Fixed Income	**430,765,687**	**21.1**	**0.9**	**3.8**	**0.9**	**2.3**	**3.5**	**3.2**	**5.4**	**5.2**	**0.2**	**6.1**	**0.1**	**7.7**	**5.7**	**Jun-01**
BBgBarc US Aggregate TR			*0.8*	*3.1*	*0.8*	*0.1*	*2.7*	*2.1*	*4.3*	*2.6*	*0.6*	*6.0*	*-2.0*	*4.2*	*4.7*	*Jun-01*
Insight	94,830,014	4.6	0.5	--	0.5	--	--	--	--	--	--	--	--	--	0.5	Jun-17
BBgBarc US Govt/Credit 1-5 Yr. TR			*0.4*	--	*0.4*	--	--	--	--	--	--	--	--	--	*0.4*	*Jun-17*
DFA	277,339,543	13.6	--	--	--	--	--	--	--	--	--	--	--	--	0.1	Jul-17
BofA Merrill Lynch US Corp & Gov 1-5 Yrs			--	--	--	--	--	--	--	--	--	--	--	--	*0.1*	*Jul-17*
Northern Trust Intermediate Gov't Bond	43,772,867	2.1	--	--	--	--	--	--	--	--	--	--	--	--	0.0	Jul-17
BBgBarc US Govt Int TR			--	--	--	--	--	--	--	--	--	--	--	--	*0.0*	*Jul-17*
Northern Trust Long Term Gov't Bond	14,822,348	0.7	--	--	--	--	--	--	--	--	--	--	--	--	1.2	Jul-17
BBgBarc US Govt Long TR			--	--	--	--	--	--	--	--	--	--	--	--	*1.2*	*Jul-17*

Individual closed end funds are not shown in performance summary table.

Performance Summary (Net of Fees)

Period Ending: September 30, 2017

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2016	2015	2014	2013	2012	Return	Since
Real Estate	**162,493,752**	**7.9**	**1.6**	**5.3**	**1.6**	**5.5**	**11.5**	**10.7**	**--**	**7.3**	**11.2**	**27.4**	**1.3**	**2.7**	**3.3**	**Feb-08**
DJ US Select RESI			*0.4*	*1.7*	*0.4*	*-0.8*	*9.3*	*9.1*	--	*6.6*	*4.5*	*31.9*	*1.3*	*16.1*	*5.3*	*Feb-08*
Prime Property Fund	17,993,624	0.9	2.2	6.5	2.2	9.1	--	--	--	9.2	--	--	--	--	9.5	Sep-15
NCREIF-ODCE			*1.9*	*5.4*	*1.9*	*7.7*	--	--	--	*8.8*	--	--	--	--	*8.9*	*Sep-15*
American Strategic Value Realty	22,647,938	1.1	2.2	7.6	2.2	10.8	--	--	--	11.7	18.3	--	--	--	13.7	Dec-14
NCREIF Property Index			*1.7*	*5.1*	*1.7*	*6.9*	--	--	--	*8.0*	*13.3*	--	--	--	*9.6*	*Dec-14*
BlackRock US Real Estate	109,075,475	5.3	0.4	1.7	0.4	-0.9	9.2	9.1	--	6.6	4.4	31.9	1.3	--	9.1	Sep-12
DJ US Select RESI TR USD			*0.4*	*1.7*	*0.4*	*-0.8*	*9.3*	*9.1*	--	*6.6*	*4.5*	*31.9*	*1.3*	--	*9.1*	*Sep-12*

Individual closed end funds are not shown in performance summary table.

			Verus Internal Analysis							
Inception Date	Manager Name/Fund Name	Estimated Market Value as of 9/30/2017[3]	Total Commitment	Capital Called	% Called	Remaining Commitment	Total Distributions	Distrib./ Paid-In (DPI)[1]	Tot. Value/ Paid-In (TVPI)[2]	Latest Valuation
Real Estate										
7/31/2014	Greenfield Gap	$12,776,715	$15,000,000	$11,021,141	73%	$3,978,859	$2,129,708	19.3%	*135.3%*	6/30/2017
	Total Real Estate	**$12,776,715**	$15,000,000	$11,021,141	73%	$3,978,859	$2,129,708	19.3%	*135.3%*	
	% of Portfolio (Market Value)	***0.6%***								
Direct Lending										
5/31/2013	Medley Capital	$23,423,544	$30,000,000	$29,000,453	97%	$999,547	$16,489,758	56.9%	*137.6%*	6/30/2017
5/31/2013	Raven Capital	$15,643,963	$40,000,000	$34,505,763	86%	$5,494,237	$20,439,805	59.2%	*104.6%*	6/30/2017
7/31/2015	Raven Opportunity III	$22,136,200	$50,000,000	$23,912,325	48%	$26,087,676	$200,411	0.8%	*93.4%*	6/30/2017
8/31/2013	White Oak Pinnacle	$33,520,708	$40,000,000	$40,000,000[4]	100%	$5,153,060	$31,995,907	80.0%	*163.8%*	6/30/2017
	Total Direct Lending	**$94,724,415**	$160,000,000	$127,418,541	80%	$37,734,520	$69,125,881	54.3%	*128.6%*	
	% of Portfolio (Market Value)	***4.6%***								
Infrastructure										
5/31/2015	MS Infrastructure Partners II	$19,931,563	$50,000,000	$20,016,500	40%	$29,983,500	$122,400	0.6%	*100.2%*	6/30/2017
	Total Infrastructure	**$19,931,563**	$50,000,000	$20,016,500	40%	$29,983,500	$122,400	0.6%	*100.2%*	
	% of Portfolio (Market Value)	***1.0%***								

1 (DPI) is equal to (capital returned / capital called)
2 (TVPI) is equal to (market value + capital returned) / capital called
3 Last known market value + capital calls - distributions
4 Includes deemed contributions, which are amounts withheld from distributions and applied to fulfill capital calls.

Real Estate	Inception	Fund Level (G)	StanCERA (G)	Fund Level (N)	StanCERA (N)	IRR Date
Greenfield Gap	7/31/2014	19.0%	20.8%	15.5%	15.1%	6/30/2017
Direct Lending						
Medley Capital	5/31/2013	8.6%	7.7%	6.8%	5.4%	6/30/2017
Raven Capital	5/31/2013	4.7%	4.7%	1.8%	1.8%	6/30/2017
Raven Opportunity III	7/31/2015	3.4%	3.4%	-8.0%	-8.0%	6/30/2017
White Oak Pinnacle	8/31/2013	12.4%	12.9%	7.9%	8.0%	6/30/2017
Infrastructure						
MS Infrastructure Partners II	5/31/2015	12.7%	12.7%	3.0%	-0.4%	6/30/2017

IRR information provided by managers.

3 Years

	Anlzd Ret	Ann Excess BM Return	Anlzd Std Dev	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Info Ratio	Up Mkt Cap Ratio	Down Mkt Cap Ratio
BlackRock Russell 1000 Growth	12.75%	0.05%	7.69%	0.05%	1.00	0.05%	1.00	1.61	1.03	100.42%	100.07%
Jackson Square	10.15%	-2.55%	11.95%	-7.17%	1.36	6.37%	0.77	0.82	-0.40	86.09%	136.05%
BlackRock Russell 1000 Value	8.62%	0.08%	7.94%	0.13%	0.99	0.07%	1.00	1.05	1.17	100.45%	98.99%
Dodge & Cox-Equity	10.07%	1.54%	10.17%	0.63%	1.11	5.12%	0.75	0.96	0.30	121.16%	117.02%
Legato Capital	5.97%	-6.20%	13.21%	-5.36%	0.93	6.06%	0.79	0.43	-1.02	69.15%	116.34%
Capital Prospects	11.73%	-0.38%	11.66%	0.65%	0.91	2.63%	0.96	0.98	-0.15	92.82%	87.35%
LSV Asset Mgt	5.73%	0.54%	12.25%	0.24%	1.06	2.81%	0.95	0.44	0.19	107.53%	102.96%
Fidelity	5.54%	0.35%	10.67%	0.74%	0.93	2.33%	0.96	0.49	0.15	100.76%	96.20%
Dodge & Cox-Fixed	12.17%	9.45%	15.74%	10.04%	0.78	15.54%	0.03	0.75	0.61	309.05%	39.36%
PIMCO	2.57%	-0.14%	2.92%	0.29%	0.84	0.84%	0.95	0.77	-0.17	86.89%	77.07%
BlackRock US Real Estate	9.17%	-0.09%	12.23%	-0.08%	1.00	0.03%	1.00	0.72	-2.57	99.44%	100.36%

5 Years

	Anlzd Ret	Ann Excess BM Return	Anlzd Std Dev	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Info Ratio	Up Mkt Cap Ratio	Down Mkt Cap Ratio
BlackRock Russell 1000 Growth	15.29%	0.03%	8.04%	0.05%	1.00	0.05%	1.00	1.88	0.72	100.24%	99.79%
Jackson Square	13.71%	-1.54%	11.24%	-5.73%	1.27	5.10%	0.83	1.20	-0.30	90.26%	119.01%
BlackRock Russell 1000 Value	13.26%	0.06%	8.39%	0.10%	1.00	0.06%	1.00	1.56	0.95	100.26%	98.83%
Dodge & Cox-Equity	15.39%	2.19%	9.70%	1.66%	1.04	4.19%	0.81	1.57	0.52	121.33%	107.58%
Legato Capital	10.27%	-4.01%	13.38%	-3.70%	0.98	5.14%	0.85	0.75	-0.78	76.01%	107.93%
Capital Prospects	14.74%	1.47%	11.70%	2.34%	0.93	3.02%	0.94	1.24	0.49	103.90%	81.92%
LSV Asset Mgt	8.43%	0.97%	11.44%	0.54%	1.06	2.30%	0.96	0.72	0.42	110.35%	100.66%
Fidelity	7.59%	0.14%	9.95%	0.78%	0.91	2.44%	0.95	0.74	0.06	94.74%	89.70%
Dodge & Cox-Fixed	8.61%	6.55%	12.30%	6.72%	0.92	11.98%	0.05	0.68	0.55	273.76%	27.38%
PIMCO	1.76%	-0.30%	2.89%	-0.12%	0.91	0.75%	0.94	0.54	-0.40	86.89%	91.33%

Performance Analysis excludes closed end funds and those funds without 3 and 5 years of performance.

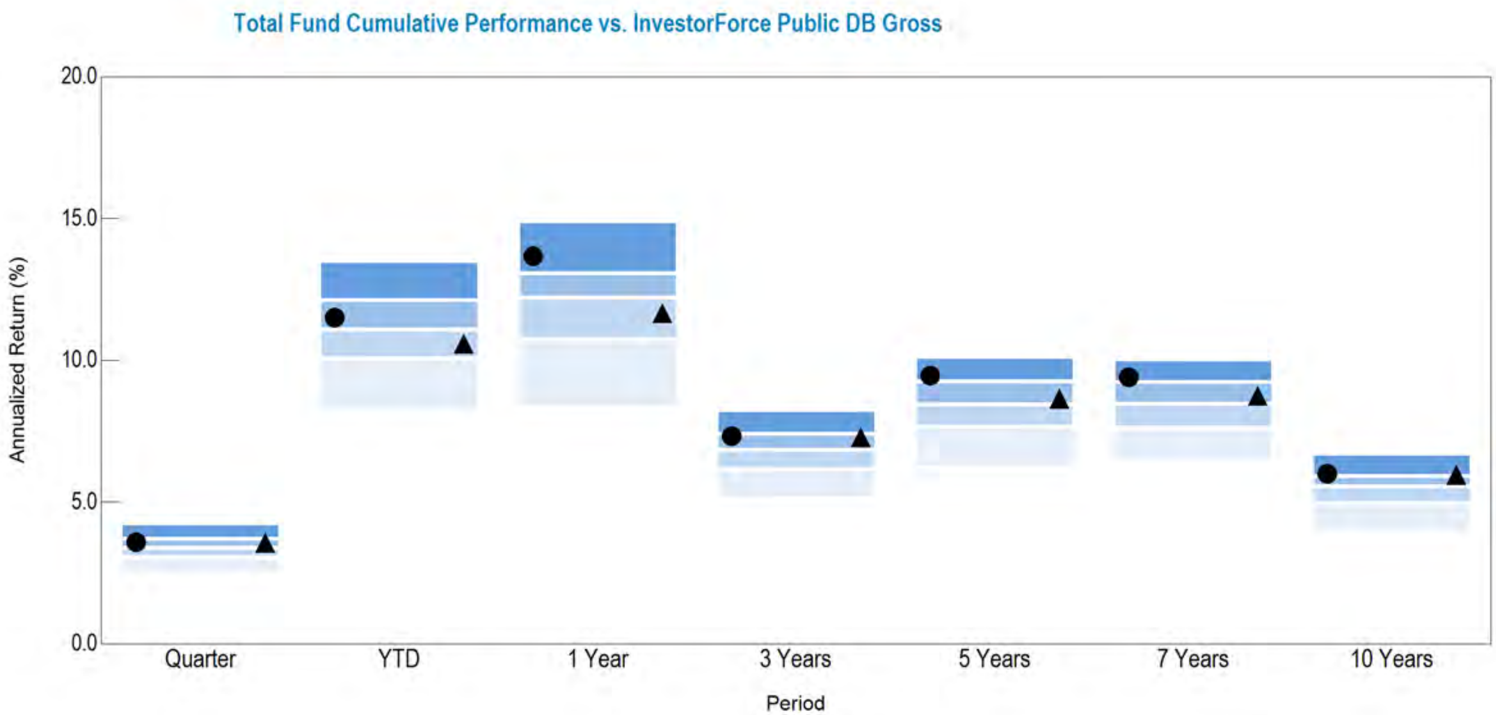
Total Fund

Investment Fund Fee Analysis

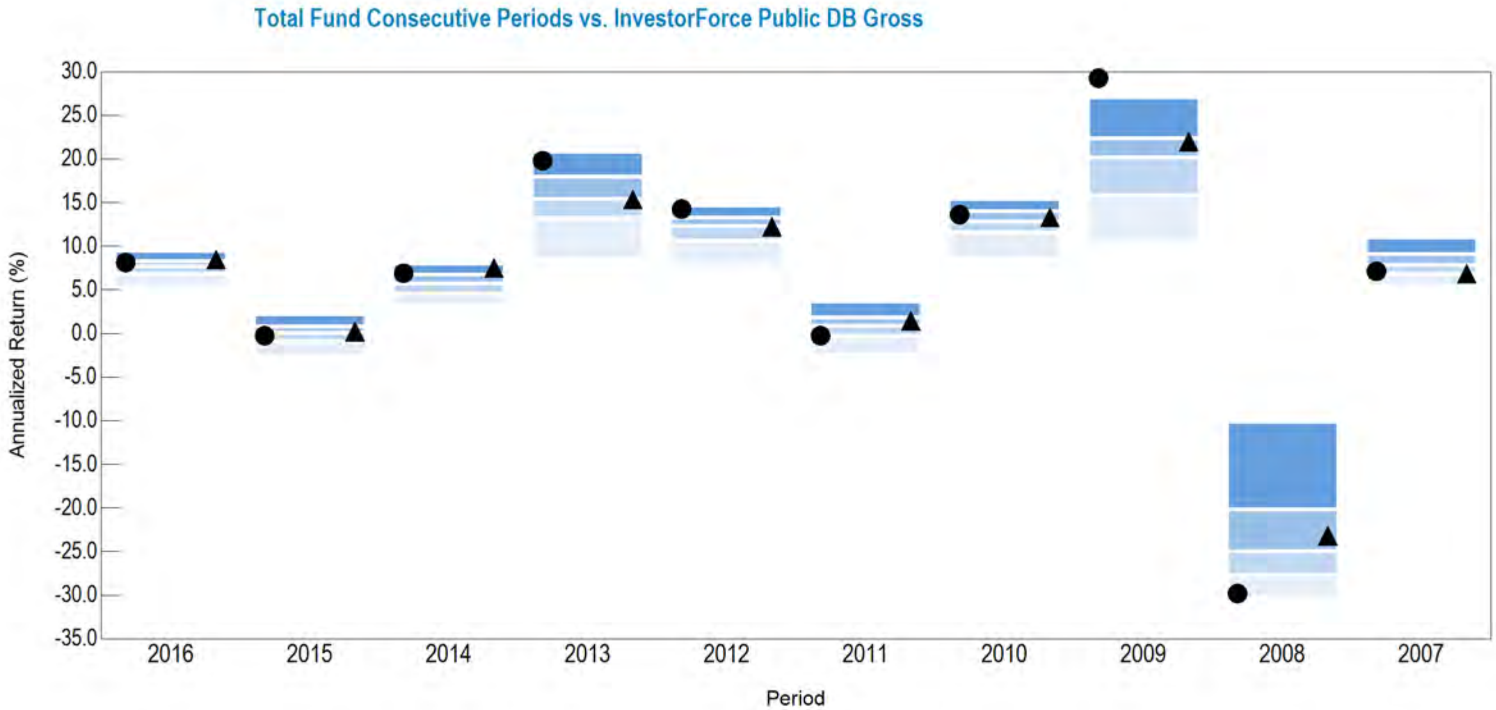
Period Ending: September 30, 2017

Name	Asset Class	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
Northern Trust Russell 1000	Domestic Equity	0.02% of Assets	$159,721,889	$23,958	0.02%
BlackRock Russell 1000 Growth	Domestic Equity	0.02% of Assets	$108,742,741	$21,749	0.02%
Jackson Square	Domestic Equity	0.50% of First $100.0 Mil, 0.45% Thereafter	$155,288,195	$748,797	0.48%
BlackRock Russell 1000 Value	Domestic Equity	0.02% of Assets	$121,126,706	$24,225	0.02%
Dodge & Cox-Equity	Domestic Equity	0.40% of First $10.0 Mil, 0.20% of Next $90.0 Mil, 0.15% Thereafter	$216,352,855	$394,529	0.18%
Capital Prospects		0.75% of Assets	$111,672,835	$837,546	0.75%
LSV Asset Mgt	International Equity	0.75% of First $25.0 Mil, 0.65% of Next $25.0 Mil, 0.55% of Next $50.0 Mil, 0.45% Thereafter	$222,950,272	$1,178,276	0.53%
Fidelity	International Equity	0.25% of Assets	$217,128,737	$542,822	0.25%
Insight	Domestic Fixed Income	0.12% of Assets	$94,830,014	$113,796	0.12%
DFA	Domestic Fixed Income	0.20% of First $25.0 Mil, 0.10% Thereafter	$277,339,543	$302,340	0.11%
Northern Trust Intermediate Gov't Bond	Domestic Fixed Income	0.05% of First $25.0 Mil, 0.04% Thereafter	$43,772,867	$20,009	0.05%
Northern Trust Long Term Gov't Bond	Domestic Fixed Income	0.05% of First $25.0 Mil, 0.04% Thereafter	$14,822,348	$7,411	0.05%
Prime Property Fund	Real Estate	0.84% of Assets	$17,993,624	$151,146	0.84%
American Strategic Value Realty	Real Estate	1.25% of First $10.0 Mil, 1.20% of Next $15.0 Mil, 1.10% of Next $25.0 Mil, 1.00% Thereafter	$22,647,938	$276,775	1.22%
BlackRock US Real Estate	Real Estate	0.09% of First $100.0 Mil, 0.07% Thereafter	$109,075,475	$96,353	0.09%
Cash Account	Cash and Equivalents	0.10% of Assets	$24,333,626	$24,334	0.10%
Total			**$1,806,126,830**	**$4,764,066**	**0.26%**

Closed end funds excluded from fee analysis. Fidelity has performance based fees which are not included in the analysis above; fee shown is the annual base fee only. Northern Trust aggregates StanCERA's Northern Trust Bond Funds.



Return (Rank)	Quarter		YTD		1 Year		3 Years		5 Years		7 Years		10 Years	
5th Percentile	4.2		13.5		14.9		8.2		10.1		10.0		6.7	
25th Percentile	3.7		12.1		13.1		7.4		9.3		9.2		5.9	
Median	3.4		11.1		12.2		6.9		8.5		8.5		5.6	
75th Percentile	3.1		10.1		10.8		6.2		7.7		7.7		5.0	
95th Percentile	2.5		8.2		8.4		5.1		6.3		6.5		4.0	
# of Portfolios	311		311		309		283		257		228		208	
● Total Fund	3.6	(34)	11.5	(40)	13.7	(17)	7.3	(30)	9.5	(17)	9.4	(19)	6.0	(24)
▲ Policy Index	3.6	(37)	10.6	(65)	11.7	(59)	7.3	(32)	8.6	(43)	8.7	(42)	6.0	(25)



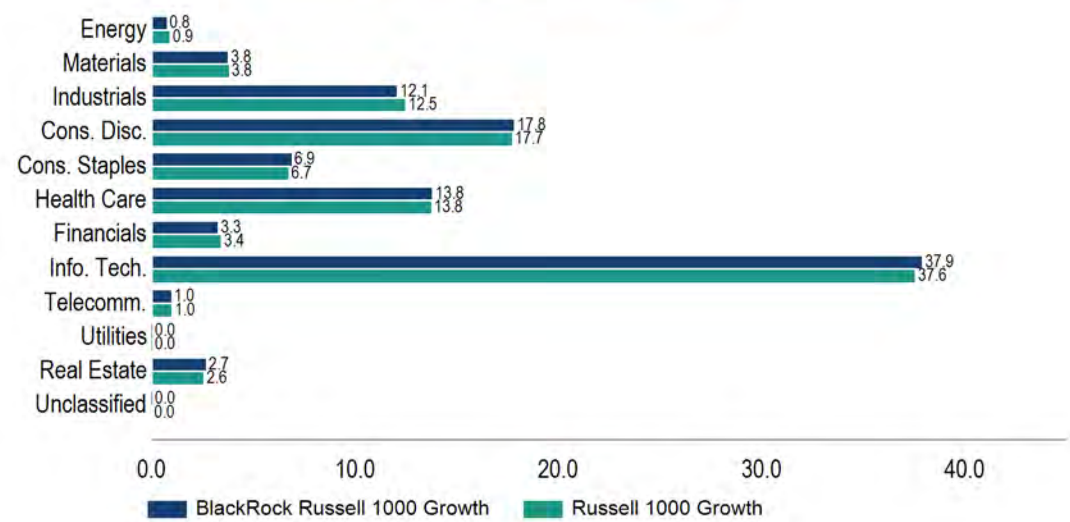
Return (Rank)	2016		2015		2014		2013		2012		2011		2010		2009		2008		2007	
5th Percentile	9.4		2.2		8.0		20.8		14.6		3.6		15.4		27.0		-10.1		11.0	
25th Percentile	8.4		0.9		6.8		18.0		13.4		1.9		14.0		22.4		-20.1		9.1	
Median	7.7		0.1		5.8		15.5		12.4		0.9		12.9		20.2		-24.9		7.9	
75th Percentile	6.9		-0.9		4.6		13.3		10.7		-0.3		11.7		15.9		-27.6		6.9	
95th Percentile	5.3		-2.6		3.2		8.5		7.8		-2.5		8.6		10.5		-30.3		5.4	
# of Portfolios	305		316		248		231		236		206		188		184		181		177	
● Total Fund	8.1	(34)	-0.3	(61)	6.9	(23)	19.8	(12)	14.3	(10)	-0.3	(75)	13.6	(35)	29.3	(1)	-29.8	(92)	7.1	(68)
▲ Policy Index	8.5	(23)	0.2	(46)	7.5	(12)	15.4	(52)	12.3	(53)	1.4	(35)	13.3	(42)	22.0	(29)	-23.2	(37)	6.9	(76)

Domestic Equity Managers

Characteristics

	Portfolio	Russell 1000 Growth
Number of Holdings	551	550
Weighted Avg. Market Cap. ($B)	186.97	181.93
Median Market Cap. ($B)	10.81	10.82
Price To Earnings	28.85	28.62
Price To Book	8.66	7.91
Price To Sales	4.49	4.39
Return on Equity (%)	27.80	27.51
Yield (%)	1.37	1.37
Beta	1.00	1.00

Sector Allocation (%) vs Russell 1000 Growth



Largest Holdings

	End Weight	Return
APPLE	7.25	7.45
MICROSOFT	4.75	8.64
FACEBOOK CLASS A	3.40	13.17
AMAZON.COM	3.30	-0.69
ALPHABET 'A'	2.41	4.74
ALPHABET 'C'	2.41	5.54
VISA 'A'	1.62	12.40
UNITEDHEALTH GROUP	1.62	6.02
HOME DEPOT	1.53	7.26
COMCAST 'A'	1.50	-1.13

Top Contributors

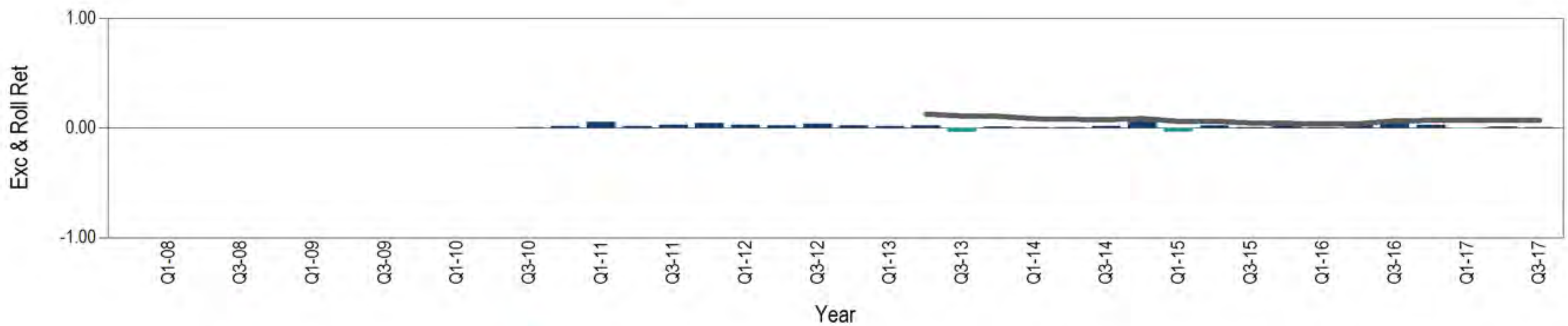
	Avg Wgt	Return	Contribution
APPLE	2.21	7.45	0.16
FACEBOOK CLASS A	1.04	13.17	0.14
MICROSOFT	1.52	8.64	0.13
BOEING	0.33	29.33	0.10
ABBVIE	0.34	23.64	0.08
VISA 'A'	0.51	12.40	0.06
NVIDIA	0.24	23.77	0.06
MASTERCARD	0.34	16.47	0.06
ALPHABET 'C'	0.81	5.54	0.04
HOME DEPOT	0.54	7.26	0.04

Bottom Contributors

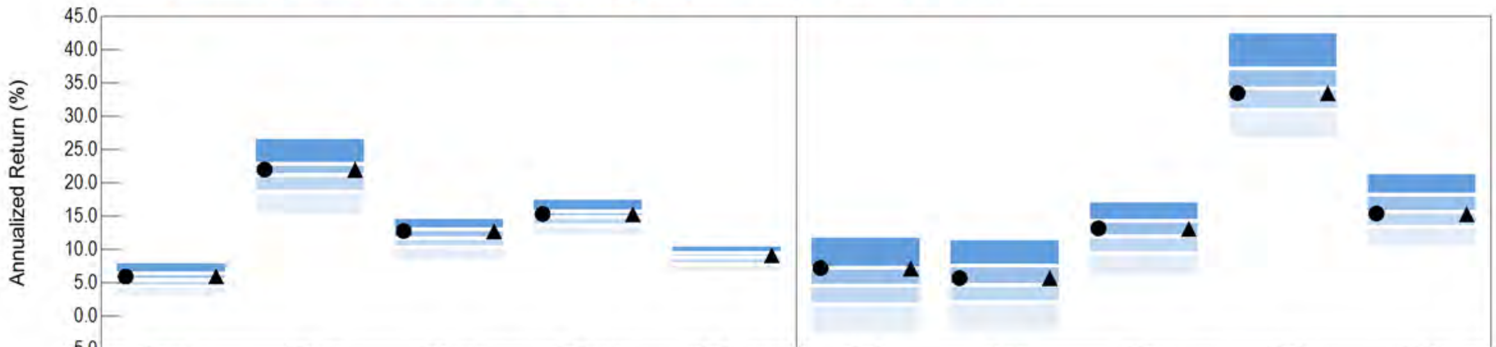
	Avg Wgt	Return	Contribution
ALTRIA GROUP	0.42	-13.94	-0.06
NIKE 'B'	0.23	-11.82	-0.03
WALT DISNEY	0.33	-6.53	-0.02
STARBUCKS	0.24	-7.47	-0.02
INTERNATIONAL BUS.MCHS.	0.27	-4.69	-0.01
PEPSICO	0.42	-2.84	-0.01
GENERAL ELECTRIC	0.12	-9.58	-0.01
EQUIFAX	0.05	-22.66	-0.01
ULTA BEAUTY	0.05	-21.33	-0.01
REGENERON PHARMS.	0.11	-8.96	-0.01

Unclassified sector allocation includes cash allocations.

Rolling Annualized Excess Performance

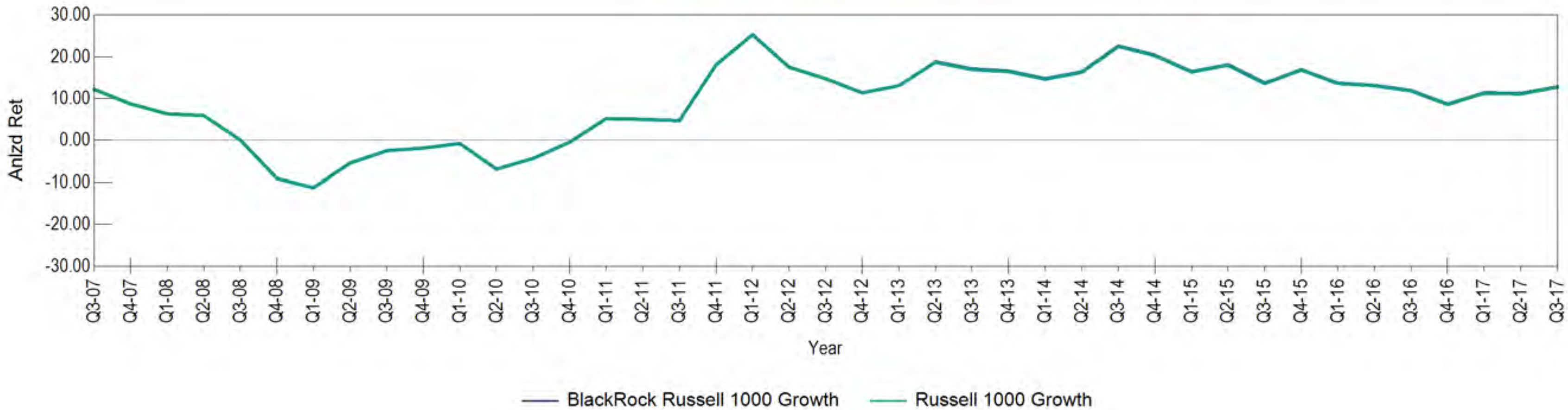


BlackRock Russell 1000 Growth vs. eA US Large Cap Growth Equity Gross Universe

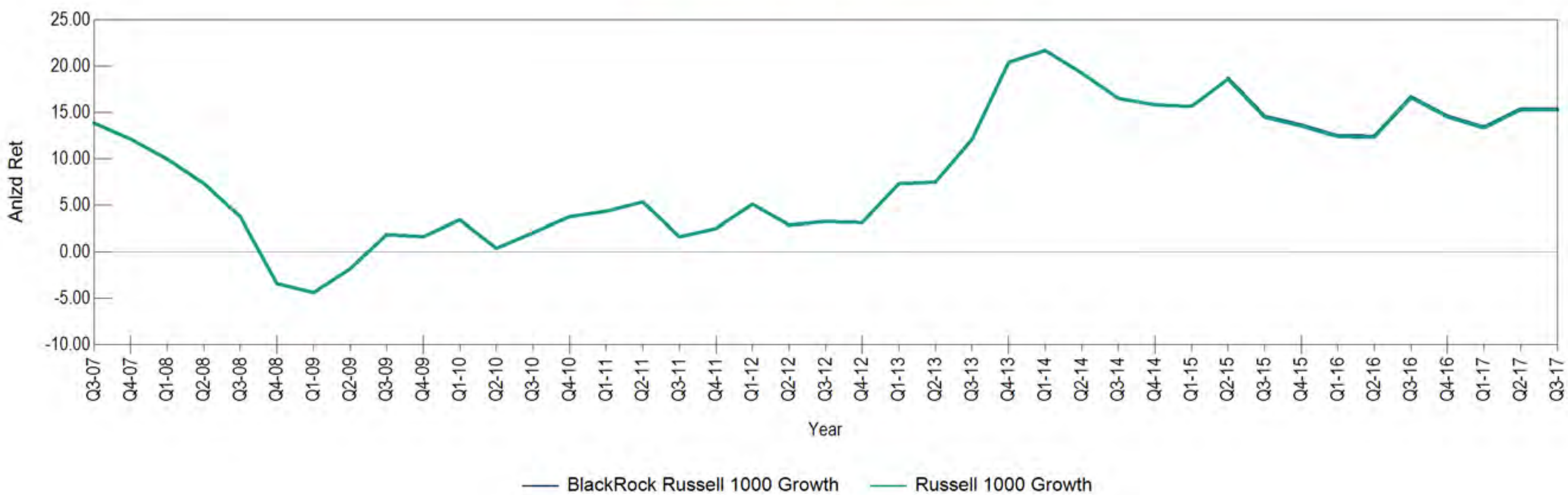


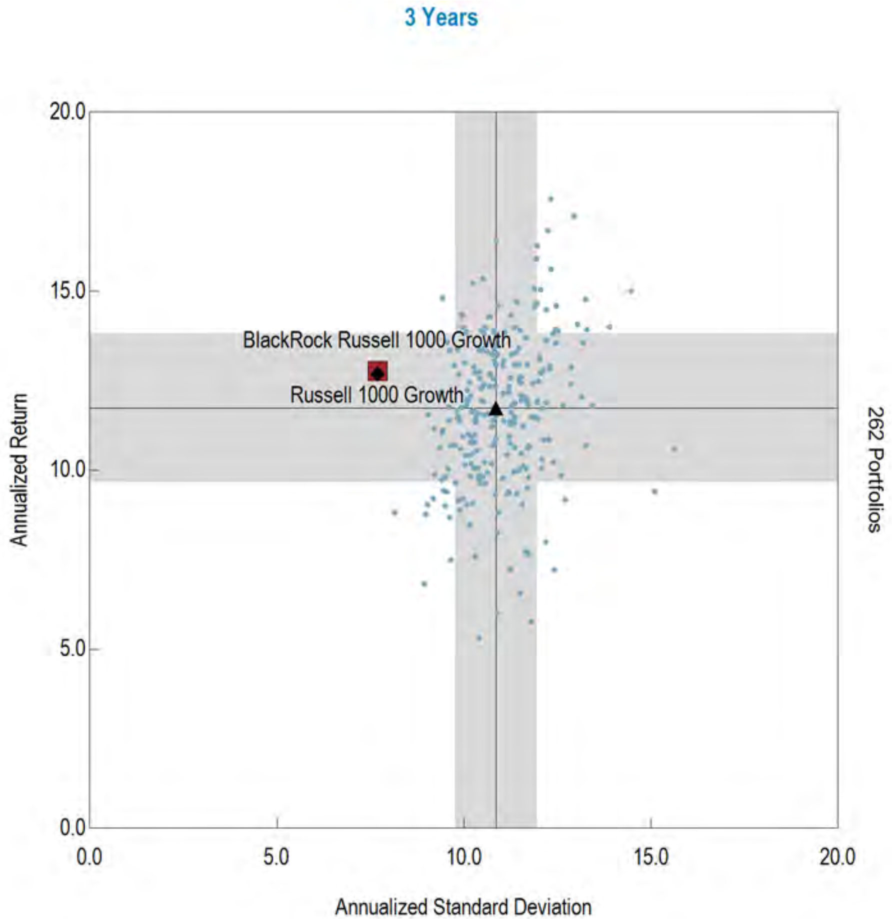
	Quarter		1 Year		3 Years		5 Years		10 Years		2016		2015		2014		2013		2012	
	Return (Rank)																			
5th Percentile	8.2		26.8		14.8		17.7		10.7		12.0		11.6		17.3		42.8		21.6	
25th Percentile	6.4		22.9		13.1		15.8		9.5		7.3		7.6		14.3		37.3		18.2	
Median	5.4		21.2		11.7		14.9		8.8		4.6		4.7		12.0		34.3		15.7	
75th Percentile	4.5		18.7		10.3		13.6		7.8		1.8		2.1		9.5		31.0		13.4	
95th Percentile	3.1		15.1		8.3		12.0		6.5		-2.7		-2.4		5.8		26.6		10.2	
# of Portfolios	266		266		262		245		219		282		270		291		274		274	
● BlackRock Russell 1000 Growth	5.9	(38)	22.0	(41)	12.8	(31)	15.3	(40)	--	(--)	7.2	(26)	5.7	(42)	13.1	(37)	33.5	(56)	15.4	(53)
▲ Russell 1000 Growth	5.9	(38)	21.9	(41)	12.7	(32)	15.3	(41)	9.1	(42)	7.1	(26)	5.7	(42)	13.0	(38)	33.5	(56)	15.3	(55)

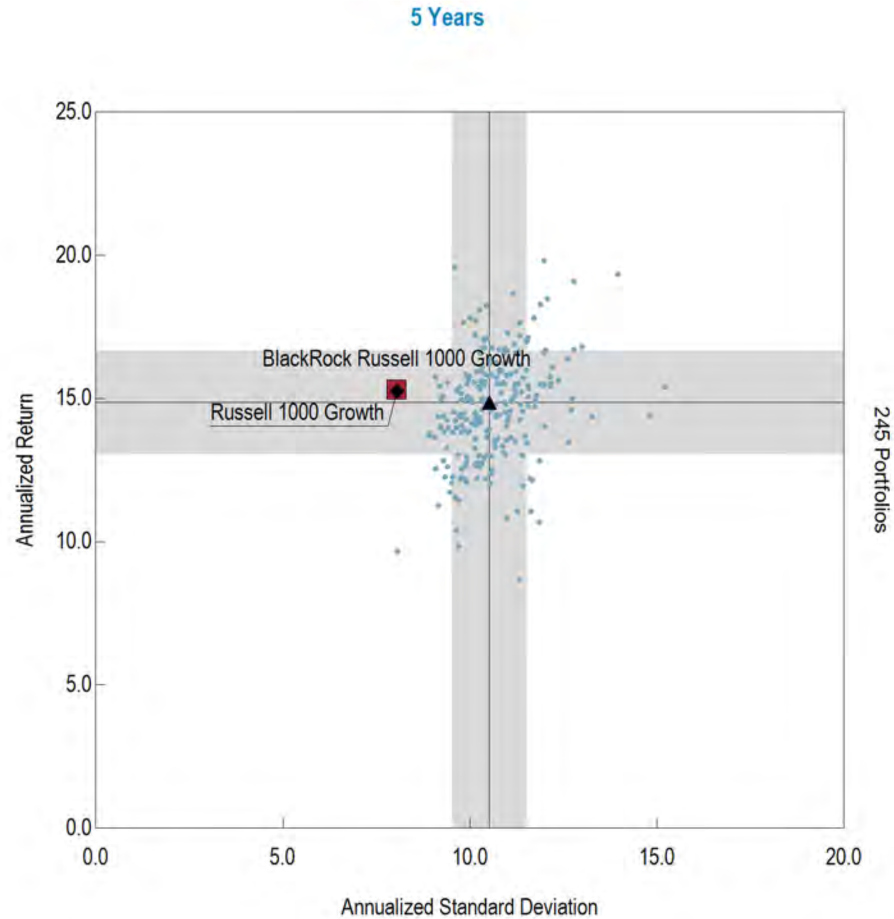
Rolling 3 Year Annualized Return (%)



Rolling 5 Year Annualized Return (%)







3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
BlackRock Russell 1000 Growth	12.8%	7.7%	1.6
Russell 1000 Growth	12.7%	7.7%	1.6
eA US Large Cap Growth Equity Gross Median	11.7%	10.9%	1.0

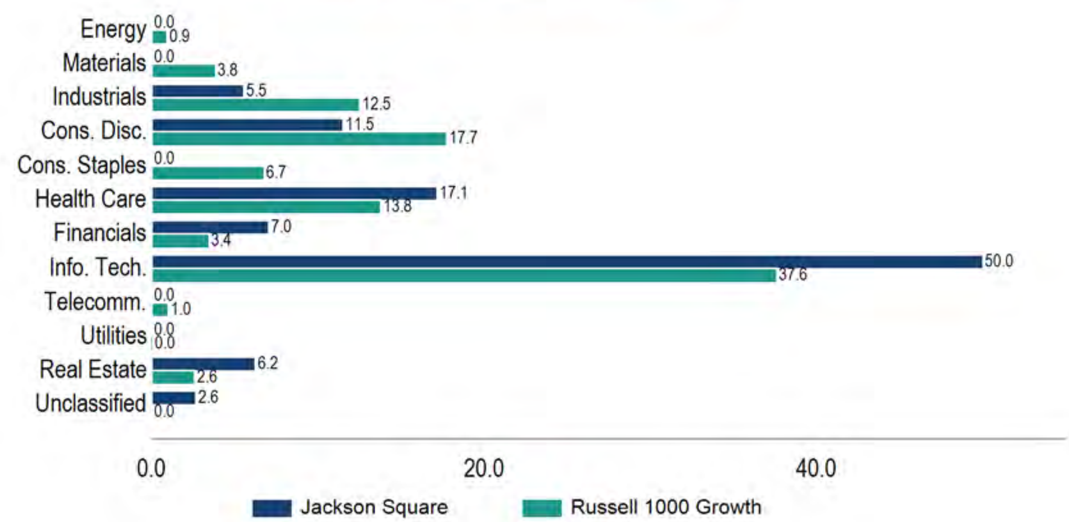
5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
BlackRock Russell 1000 Growth	15.3%	8.0%	1.9
Russell 1000 Growth	15.3%	8.0%	1.9
eA US Large Cap Growth Equity Gross Median	14.9%	10.5%	1.4

Characteristics

	Portfolio	Russell 1000 Growth
Number of Holdings	32	550
Weighted Avg. Market Cap. ($B)	124.91	181.93
Median Market Cap. ($B)	41.16	10.82
Price To Earnings	36.60	28.62
Price To Book	7.33	7.91
Price To Sales	5.94	4.39
Return on Equity (%)	22.95	27.51
Yield (%)	0.73	1.37
Beta	1.37	1.00

Sector Allocation (%) vs Russell 1000 Growth



Largest Holdings

	End Weight	Return
PAYPAL HOLDINGS	6.95	19.30
VISA 'A'	5.86	12.40
MICROSOFT	5.77	8.64
CELGENE	5.30	12.28
MASTERCARD	4.95	16.47
CROWN CASTLE INTL.	4.08	0.70
EBAY	3.89	10.14
ALPHABET 'A'	3.73	4.74
LIBERTY INTACT.QVC GROUP 'A'	3.72	-3.95
INTERCONTINENTAL EX.	3.70	4.53

Top Contributors

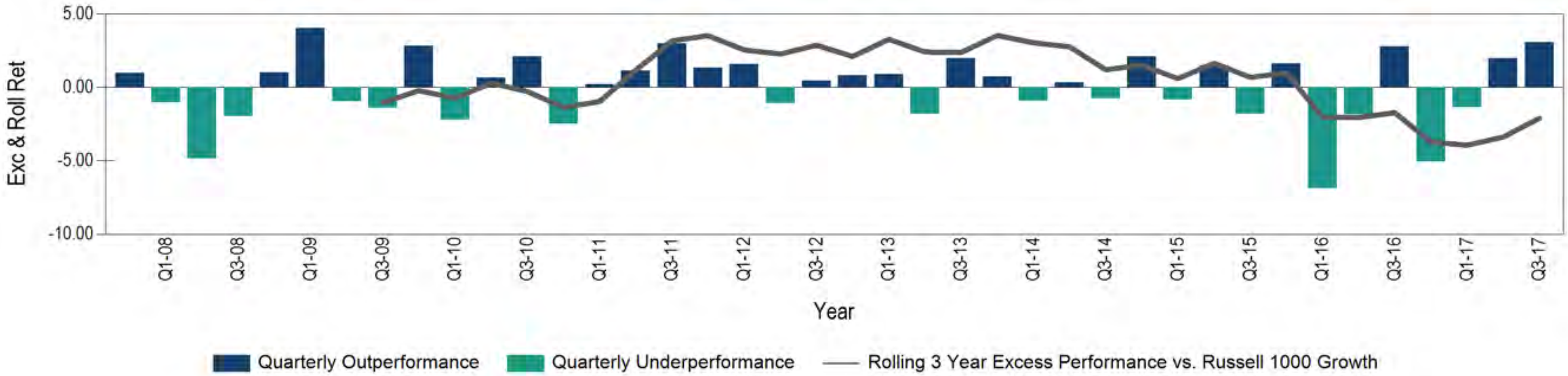
	Avg Wgt	Return	Contribution
PAYPAL HOLDINGS	6.73	19.30	1.30
MASTERCARD	4.70	16.47	0.77
VISA 'A'	5.79	12.40	0.72
TAKE TWO INTACT.SFTW.	1.73	39.32	0.68
CELGENE	5.47	12.28	0.67
ASML HLDG.ADR 1:1	1.88	31.38	0.59
SYMANTEC	3.19	16.45	0.52
MICROSOFT	5.95	8.64	0.51
FACEBOOK CLASS A	3.68	13.17	0.48
NVIDIA	1.77	23.77	0.42

Bottom Contributors

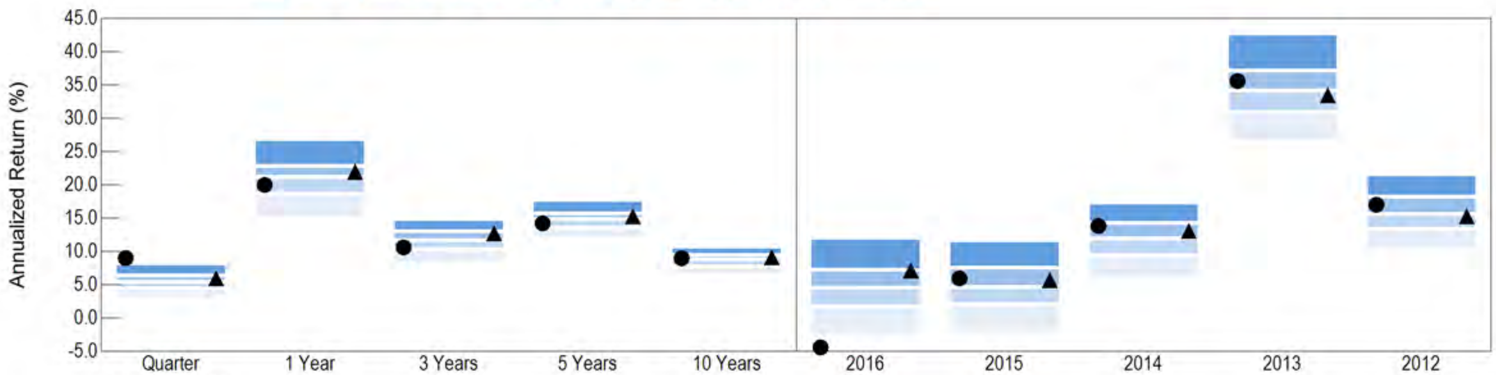
	Avg Wgt	Return	Contribution
ALLERGAN	2.63	-15.43	-0.41
DENTSPLY SIRONA	2.49	-7.62	-0.19
LIBERTY INTACT.QVC GROUP 'A'	3.91	-3.95	-0.15
CROWN CASTLE INTL.	4.42	0.70	0.03
LIBERTY GLOBAL CL.A	0.78	5.57	0.04
CHARLES SCHWAB	2.78	2.01	0.06
EQUINIX	2.35	4.46	0.10
TRIPADVISOR 'A'	2.15	6.10	0.13
LIBERTY GLOBAL SR.C	2.82	4.87	0.14
FEDEX	3.52	4.04	0.14

Unclassified sector allocation includes cash allocations.

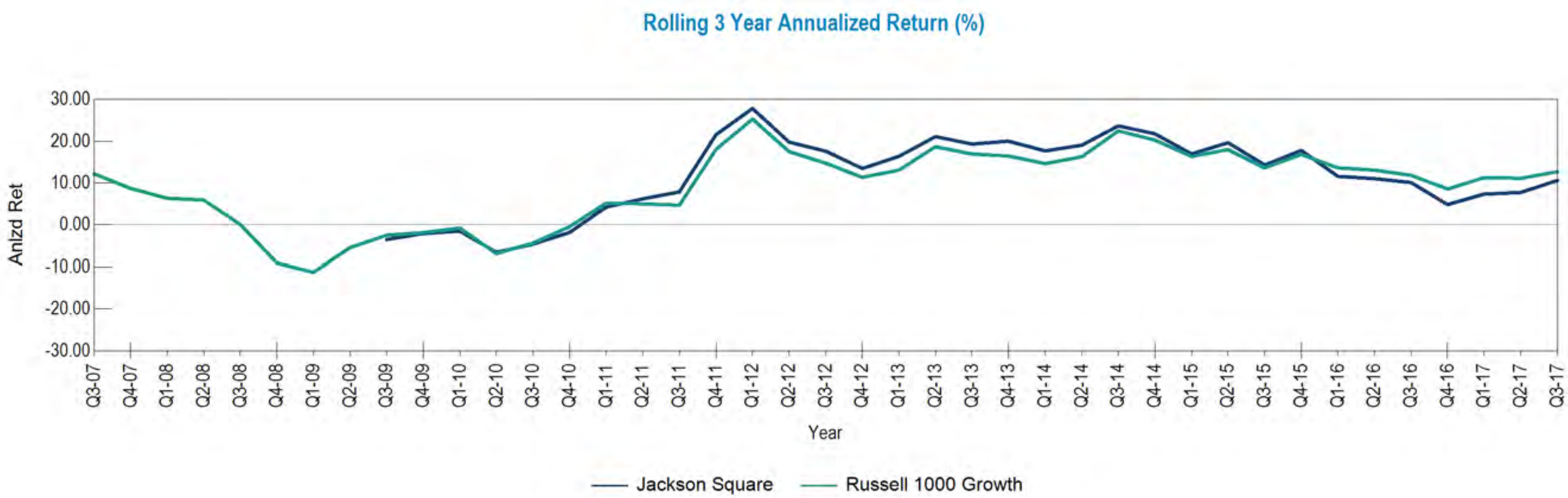
Rolling Annualized Excess Performance



Jackson Square vs. eA US Large Cap Growth Equity Gross Universe

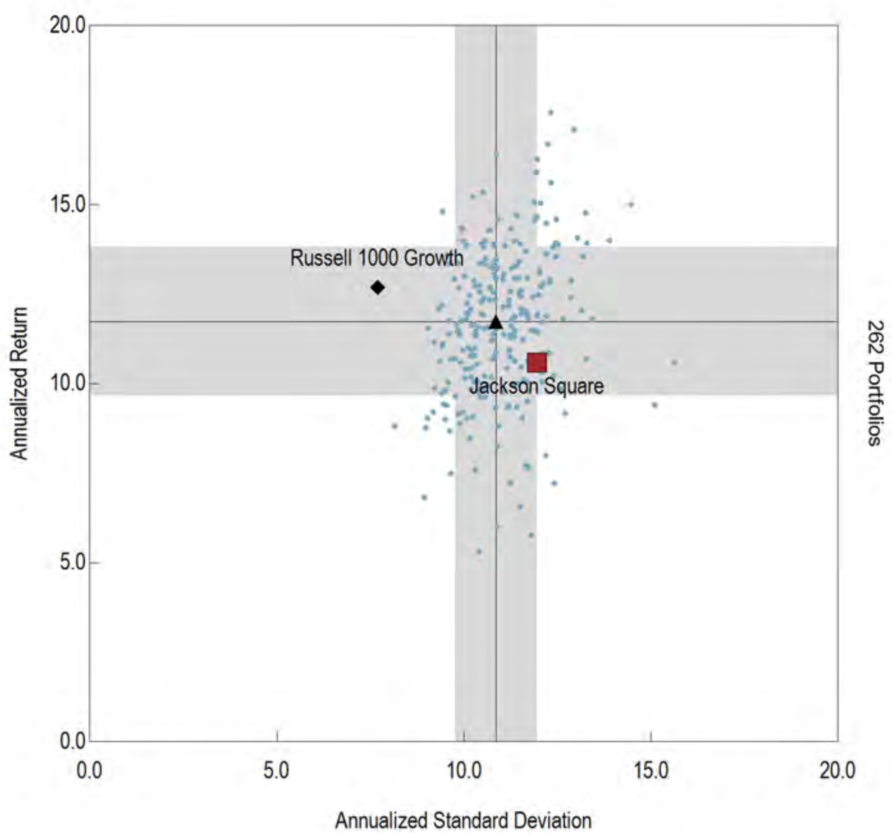


Return (Rank)	Quarter	1 Year	3 Years	5 Years	10 Years	2016	2015	2014	2013	2012
5th Percentile	8.2	26.8	14.8	17.7	10.7	12.0	11.6	17.3	42.8	21.6
25th Percentile	6.4	22.9	13.1	15.8	9.5	7.3	7.6	14.3	37.3	18.2
Median	5.4	21.2	11.7	14.9	8.8	4.6	4.7	12.0	34.3	15.7
75th Percentile	4.5	18.7	10.3	13.6	7.8	1.8	2.1	9.5	31.0	13.4
95th Percentile	3.1	15.1	8.3	12.0	6.5	-2.7	-2.4	5.8	26.6	10.2
# of Portfolios	266	266	262	245	219	282	270	291	274	274
● Jackson Square	9.0 (2)	20.0 (64)	10.6 (72)	14.2 (66)	9.0 (46)	-4.4 (98)	5.9 (39)	13.8 (32)	35.6 (39)	17.0 (36)
▲ Russell 1000 Growth	5.9 (38)	21.9 (41)	12.7 (32)	15.3 (41)	9.1 (42)	7.1 (26)	5.7 (42)	13.0 (38)	33.5 (56)	15.3 (55)

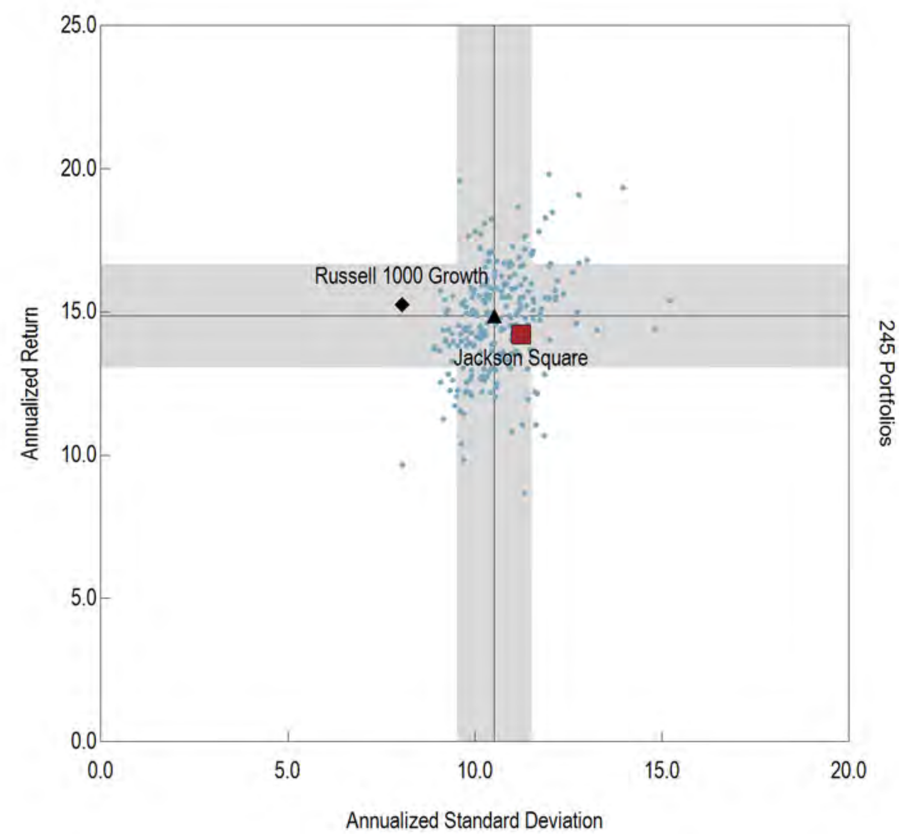

Rolling 3 Year Annualized Return (%)
Anlzd Ret
Year
Jackson Square
Russell 1000 Growth


Rolling 5 Year Annualized Return (%)
Anlzd Ret
Year
Jackson Square
Russell 1000 Growth

3 Years



5 Years



3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Jackson Square	10.6%	12.0%	0.9
Russell 1000 Growth	12.7%	7.7%	1.6
eA US Large Cap Growth Equity Gross Median	11.7%	10.9%	1.0

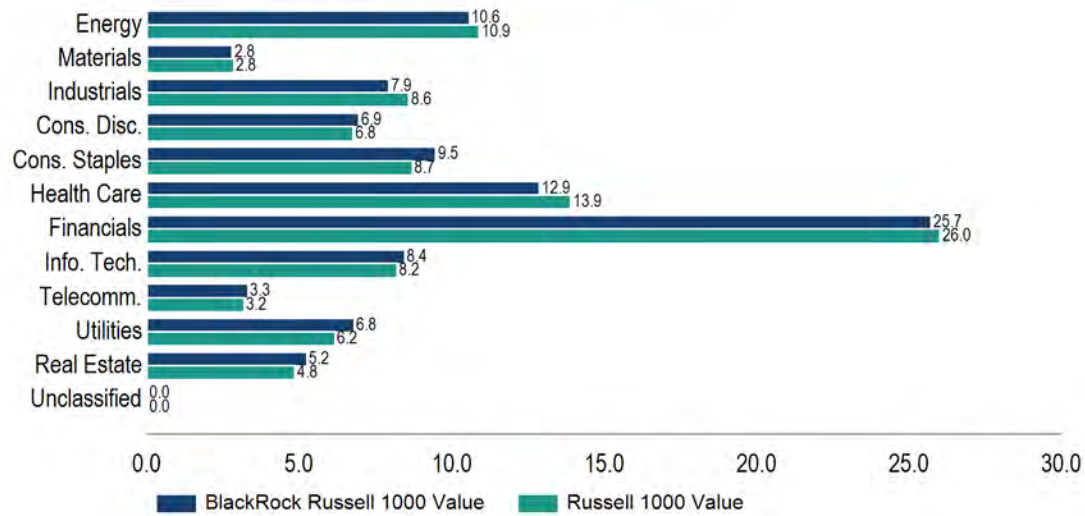
5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Jackson Square	14.2%	11.2%	1.2
Russell 1000 Growth	15.3%	8.0%	1.9
eA US Large Cap Growth Equity Gross Median	14.9%	10.5%	1.4

Characteristics

	Portfolio	Russell 1000 Value
Number of Holdings	684	716
Weighted Avg. Market Cap. ($B)	115.38	112.84
Median Market Cap. ($B)	8.51	8.54
Price To Earnings	22.56	21.28
Price To Book	2.37	2.61
Price To Sales	2.90	2.85
Return on Equity (%)	13.90	12.04
Yield (%)	2.46	2.42
Beta	0.99	1.00

Sector Allocation (%) vs Russell 1000 Value



Largest Holdings

	End Weight	Return
BERKSHIRE HATHAWAY 'B'	3.10	8.24
EXXON MOBIL	2.88	2.54
JP MORGAN CHASE & CO.	2.86	5.06
JOHNSON & JOHNSON	2.69	-1.10
BANK OF AMERICA	2.12	4.98
AT&T	2.05	5.18
WELLS FARGO & CO	2.04	0.25
PROCTER & GAMBLE	1.99	5.21
CHEVRON	1.81	13.76
PFIZER	1.78	7.31

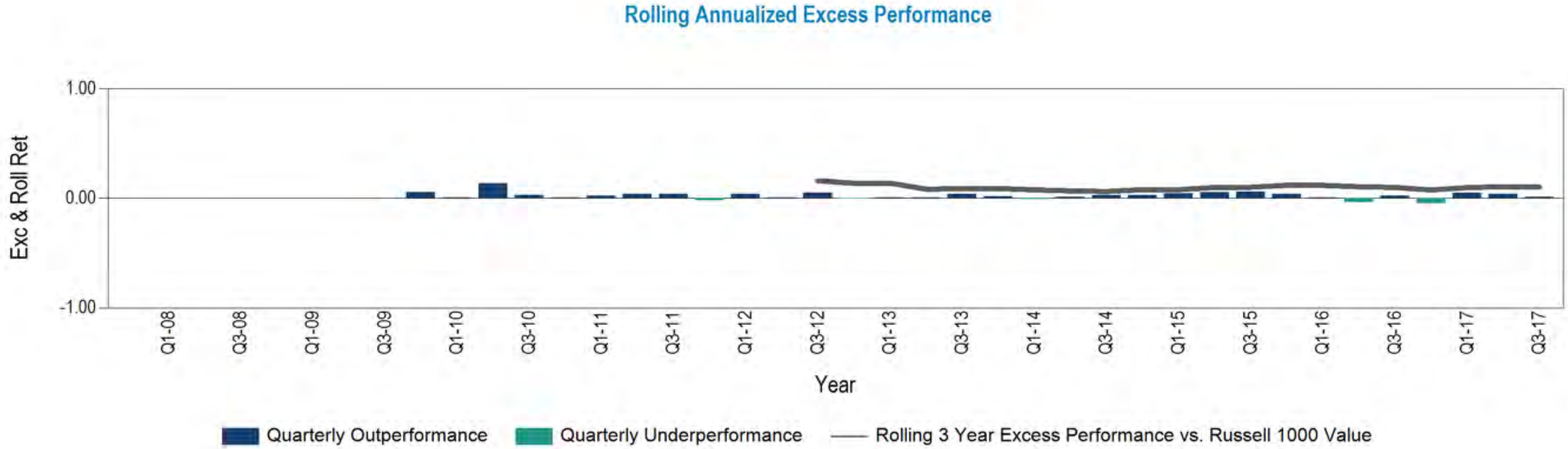
Top Contributors

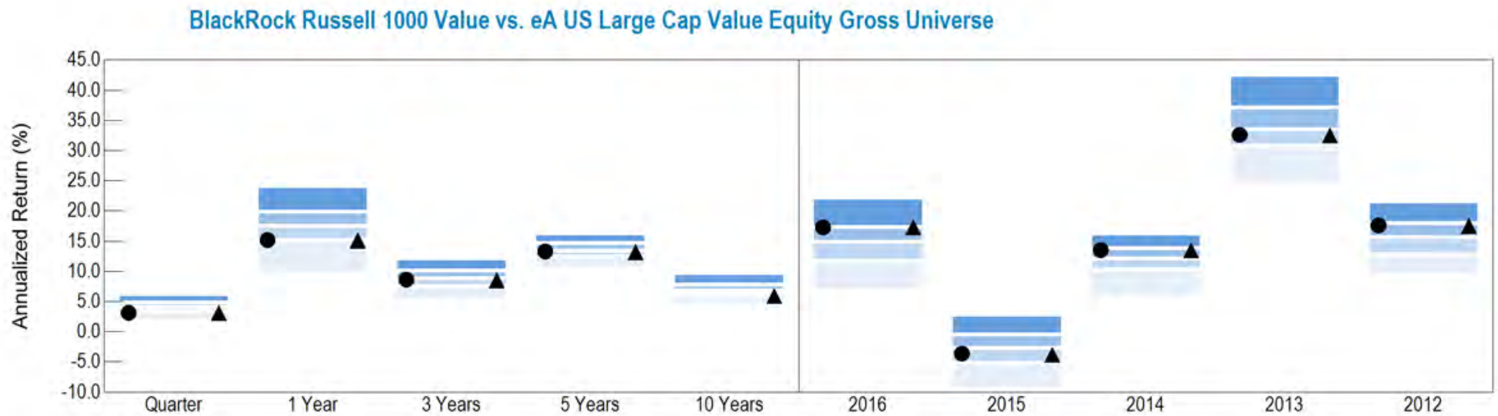
	Avg Wgt	Return	Contribution
CHEVRON	0.55	13.76	0.08
BERKSHIRE HATHAWAY 'B'	0.92	8.24	0.08
INTEL	0.45	13.71	0.06
CITIGROUP	0.52	9.27	0.05
JP MORGAN CHASE & CO.	0.91	5.06	0.05
PFIZER	0.56	7.31	0.04
CISCO SYSTEMS	0.44	8.45	0.04
AT&T	0.65	5.18	0.03
BANK OF AMERICA	0.68	4.98	0.03
VERIZON COMMUNICATIONS	0.26	12.29	0.03

Bottom Contributors

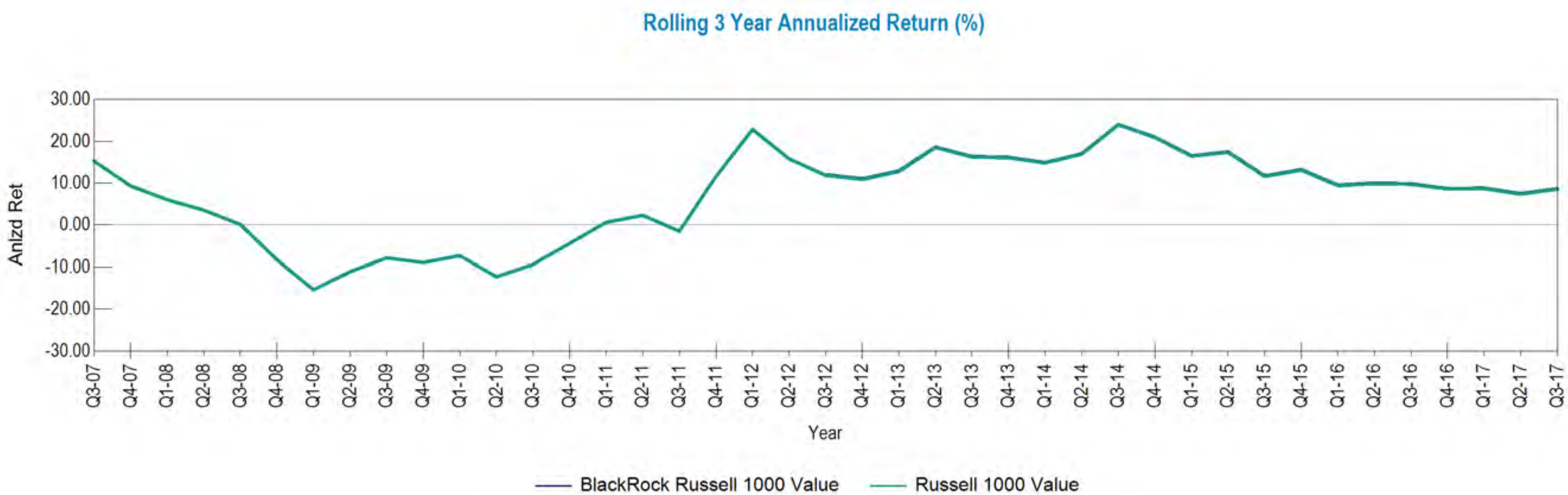
	Avg Wgt	Return	Contribution
GENERAL ELECTRIC	0.55	-9.58	-0.05
MEDTRONIC	0.32	-11.40	-0.04
ALLERGAN	0.23	-15.43	-0.04
PHILIP MORRIS INTL.	0.47	-4.58	-0.02
NEWELL BRANDS	0.07	-20.04	-0.01
KRAFT HEINZ	0.14	-8.79	-0.01
ORACLE	0.37	-3.21	-0.01
QUALCOMM	0.23	-5.09	-0.01
UNITED CONTINENTAL HDG.	0.06	-19.10	-0.01
UNITED TECHNOLOGIES	0.26	-4.37	-0.01

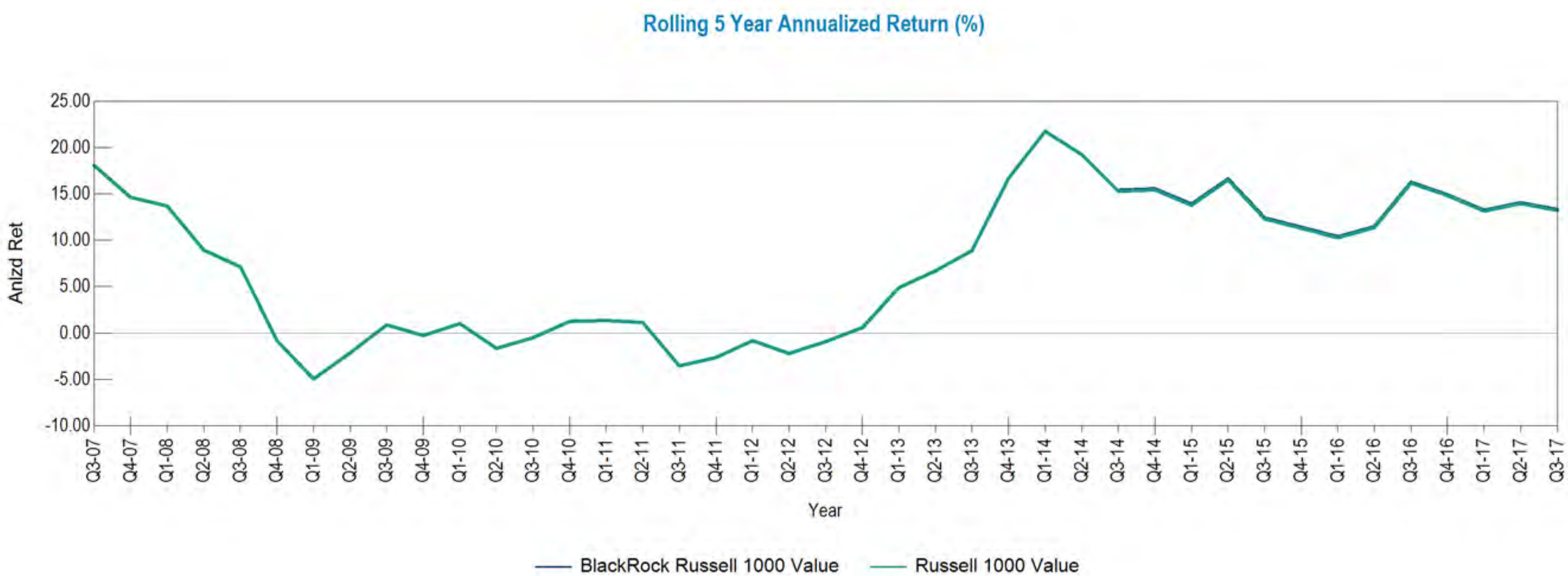
Unclassified sector allocation includes cash allocations.

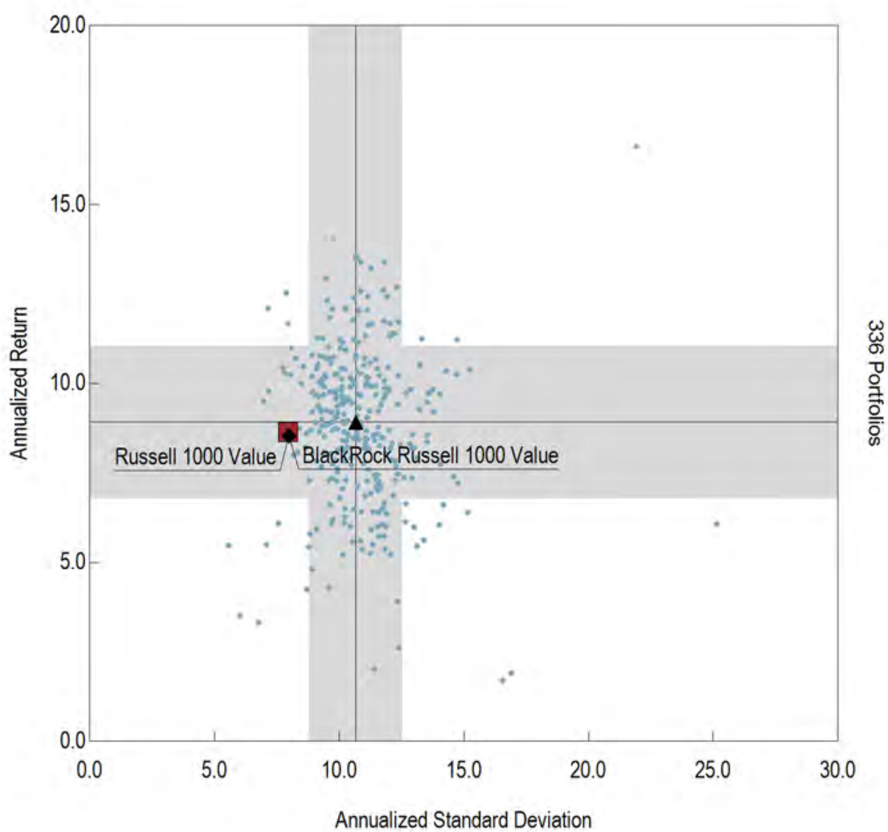


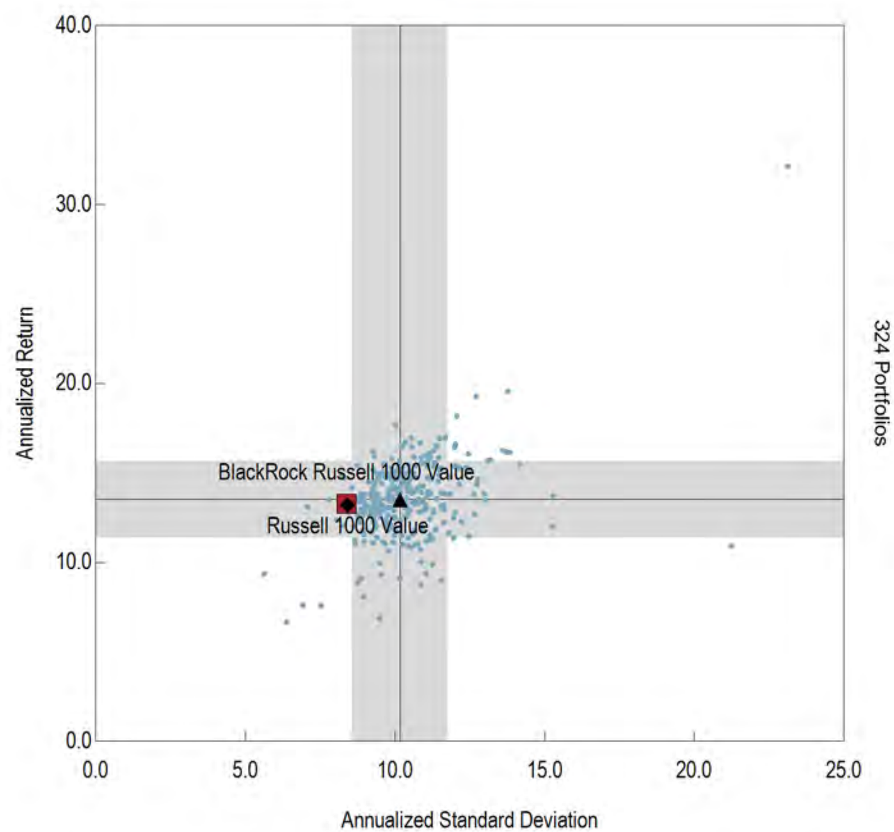


	Quarter		1 Year		3 Years		5 Years		10 Years		2016		2015		2014		2013		2012	
Return (Rank)																				
5th Percentile	6.1		24.1		12.1		16.3		9.7		22.1		2.8		16.3		42.5		21.5	
25th Percentile	4.9		19.9		10.2		14.7		7.9		17.4		-0.4		13.9		37.2		18.0	
Median	4.2		17.6		8.9		13.5		6.9		15.0		-2.6		12.2		33.6		15.7	
75th Percentile	3.4		15.3		7.7		12.5		6.3		11.8		-5.1		10.4		30.8		13.0	
95th Percentile	1.9		9.8		5.4		10.6		4.8		7.0		-9.4		5.9		24.6		9.6	
# of Portfolios	342		342		336		324		263		346		312		307		310		303	
● BlackRock Russell 1000 Value	3.1	(81)	15.2	(77)	8.6	(58)	13.3	(57)	--	(--)	17.3	(26)	-3.6	(62)	13.5	(31)	32.6	(59)	17.6	(30)
▲ Russell 1000 Value	3.1	(81)	15.1	(77)	8.5	(61)	13.2	(58)	5.9	(83)	17.3	(26)	-3.8	(64)	13.5	(33)	32.5	(60)	17.5	(30)


Rolling 3 Year Annualized Return (%)
30.00
20.00
10.00
0.00
-10.00
-20.00
-30.00
Anlzd Ret
Q3-07 Q4-07 Q1-08 Q2-08 Q3-08 Q4-08 Q1-09 Q2-09 Q3-09 Q4-09 Q1-10 Q2-10 Q3-10 Q4-10 Q1-11 Q2-11 Q3-11 Q4-11 Q1-12 Q2-12 Q3-12 Q4-12 Q1-13 Q2-13 Q3-13 Q4-13 Q1-14 Q2-14 Q3-14 Q4-14 Q1-15 Q2-15 Q3-15 Q4-15 Q1-16 Q2-16 Q3-16 Q4-16 Q1-17 Q2-17 Q3-17
Year
BlackRock Russell 1000 Value
Russell 1000 Value


Rolling 5 Year Annualized Return (%)
25.00
20.00
15.00
10.00
5.00
0.00
-5.00
-10.00
Anlzd Ret
Q3-07 Q4-07 Q1-08 Q2-08 Q3-08 Q4-08 Q1-09 Q2-09 Q3-09 Q4-09 Q1-10 Q2-10 Q3-10 Q4-10 Q1-11 Q2-11 Q3-11 Q4-11 Q1-12 Q2-12 Q3-12 Q4-12 Q1-13 Q2-13 Q3-13 Q4-13 Q1-14 Q2-14 Q3-14 Q4-14 Q1-15 Q2-15 Q3-15 Q4-15 Q1-16 Q2-16 Q3-16 Q4-16 Q1-17 Q2-17 Q3-17
Year
BlackRock Russell 1000 Value
Russell 1000 Value





3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
BlackRock Russell 1000 Value	8.6%	7.9%	1.0
Russell 1000 Value	8.5%	8.0%	1.0
eA US Large Cap Value Equity Gross Median	8.9%	10.7%	0.8

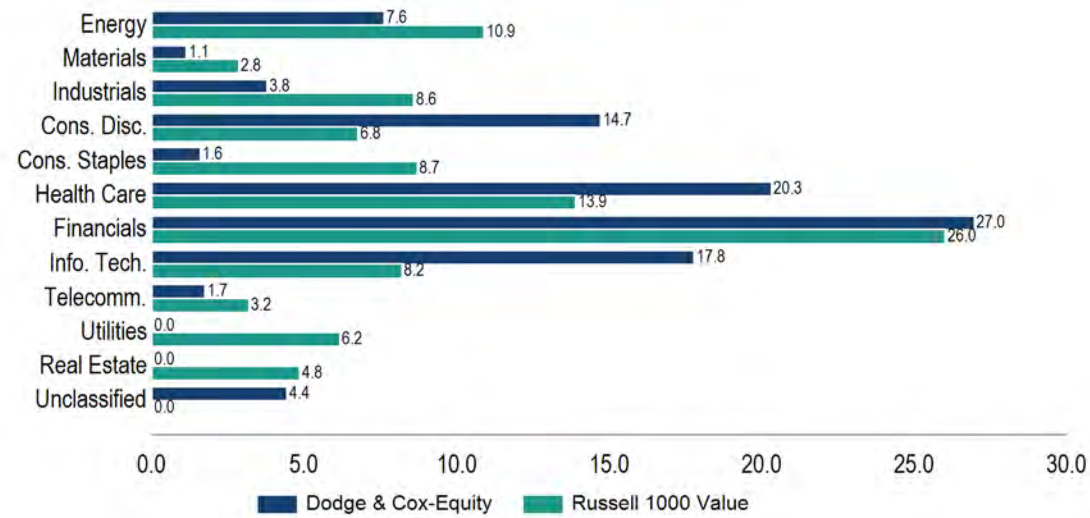
5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
BlackRock Russell 1000 Value	13.3%	8.4%	1.6
Russell 1000 Value	13.2%	8.4%	1.5
eA US Large Cap Value Equity Gross Median	13.5%	10.2%	1.3

Characteristics

	Portfolio	Russell 1000 Value
Number of Holdings	71	716
Weighted Avg. Market Cap. ($B)	120.64	112.84
Median Market Cap. ($B)	40.95	8.54
Price To Earnings	22.20	21.28
Price To Book	3.19	2.61
Price To Sales	2.90	2.85
Return on Equity (%)	15.64	12.04
Yield (%)	1.78	2.42
Beta	1.11	1.00

Sector Allocation (%) vs Russell 1000 Value



Largest Holdings

	End Weight	Return
BANK OF AMERICA	3.75	4.98
CHARLES SCHWAB	3.49	2.01
WELLS FARGO & CO	3.44	0.25
CHARTER COMMS.CL.A	3.36	7.89
CAPITAL ONE FINL.	3.33	2.95
SANOFI ADR 2:1	2.95	3.92
COMCAST 'A'	2.81	-1.13
GOLDMAN SACHS GP.	2.80	7.25
MICROSOFT	2.79	8.64
NOVARTIS 'B' SPN.ADR 1:1	2.73	2.85

Top Contributors

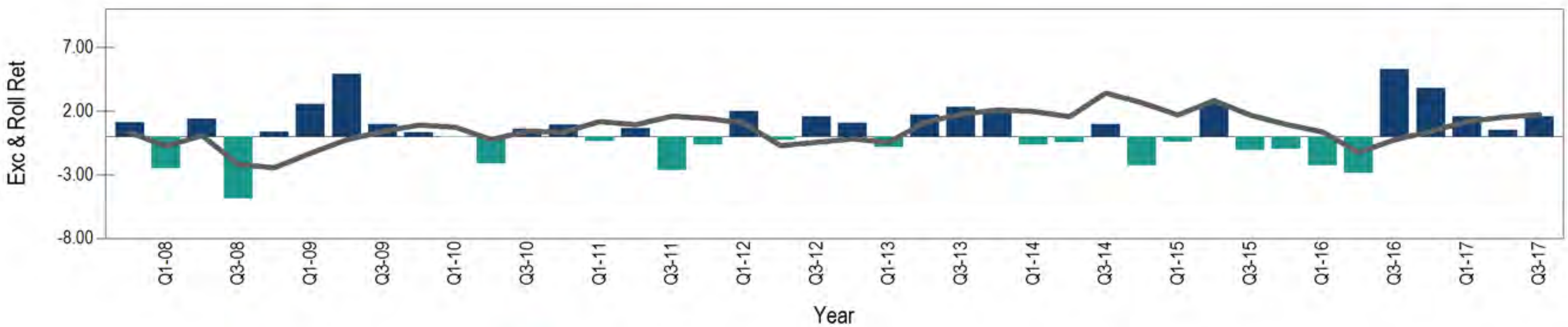
	Avg Wgt	Return	Contribution
HEWLETT PACKARD ENTER.	2.57	14.87	0.38
HP	2.00	14.97	0.30
CHARTER COMMS.CL.A	3.61	7.89	0.28
ALNYLAM PHARMACEUTICALS	0.59	47.30	0.28
MICROSOFT	2.84	8.64	0.25
CIGNA	2.08	11.68	0.24
BRISTOL MYERS SQUIBB	1.49	15.19	0.23
VMWARE	0.80	24.89	0.20
GOLDMAN SACHS GP.	2.74	7.25	0.20
BANK OF AMERICA	3.70	4.98	0.18

Bottom Contributors

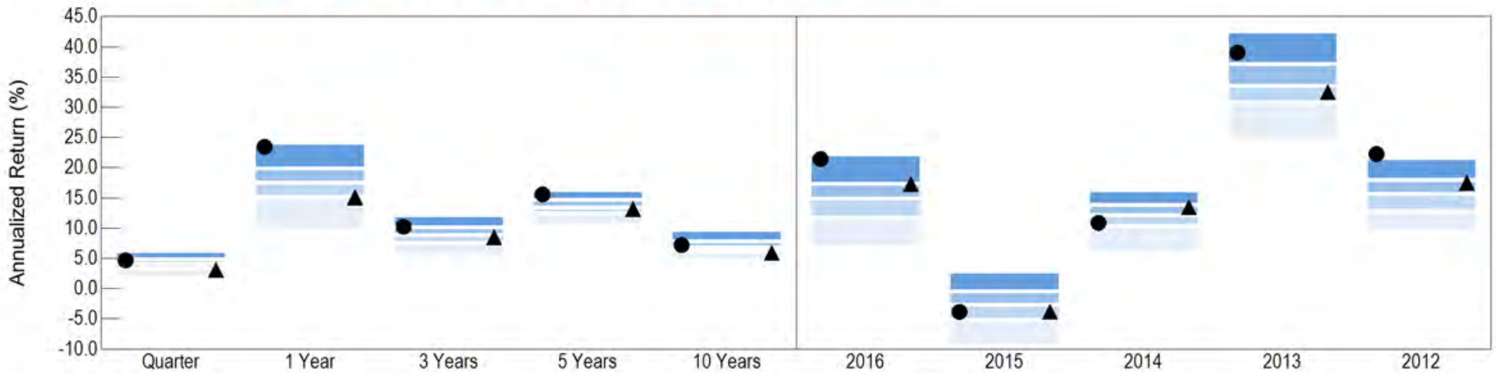
	Avg Wgt	Return	Contribution
DISH NETWORK 'A'	0.90	-13.59	-0.12
MEDTRONIC	0.85	-11.40	-0.10
TAPESTRY	0.61	-14.21	-0.09
SPRINT	1.17	-5.24	-0.06
APACHE	1.20	-3.96	-0.05
HARLEY-DAVIDSON	0.39	-10.07	-0.04
COMCAST 'A'	3.04	-1.13	-0.03
BAKER HUGHES A GE CO.	0.99	-3.09	-0.03
LIBERTY INTACT.QVC GROUP 'A'	0.70	-3.95	-0.03
PRICELINE GROUP	1.29	-2.12	-0.03

Unclassified sector allocation includes cash allocations.

Rolling Annualized Excess Performance

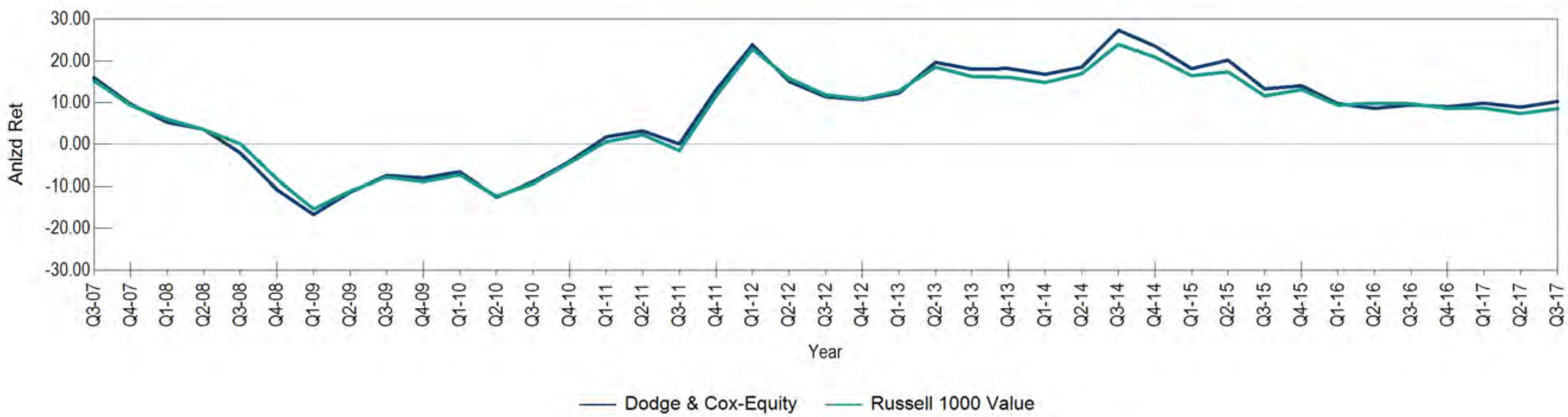


Dodge & Cox-Equity vs. eA US Large Cap Value Equity Gross Universe

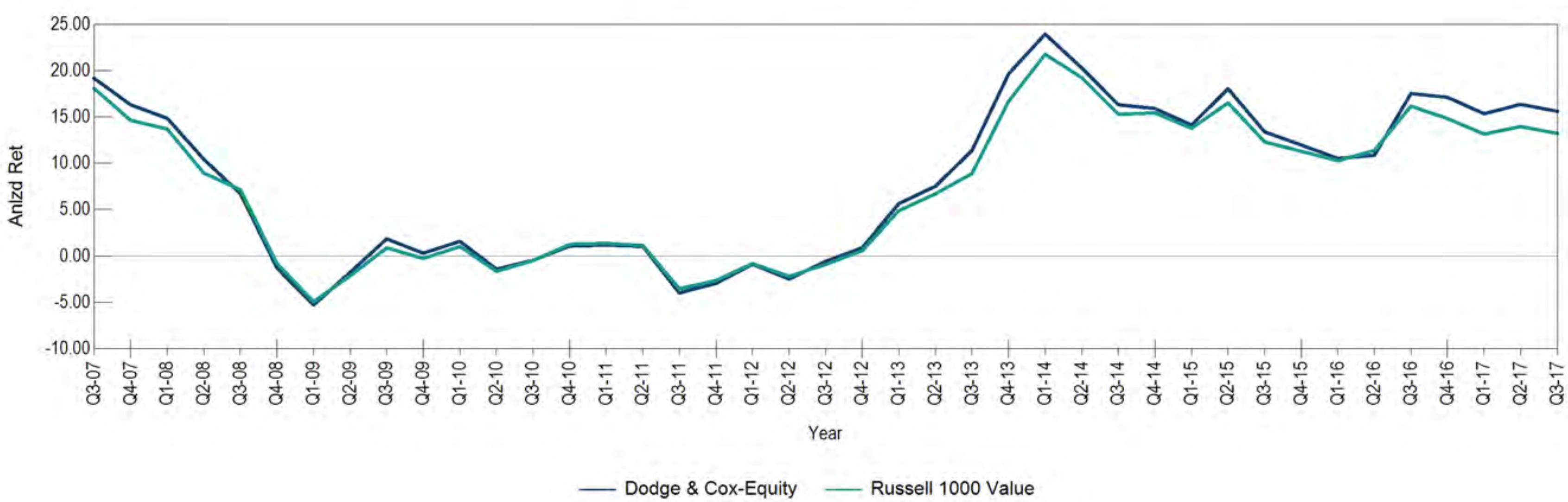


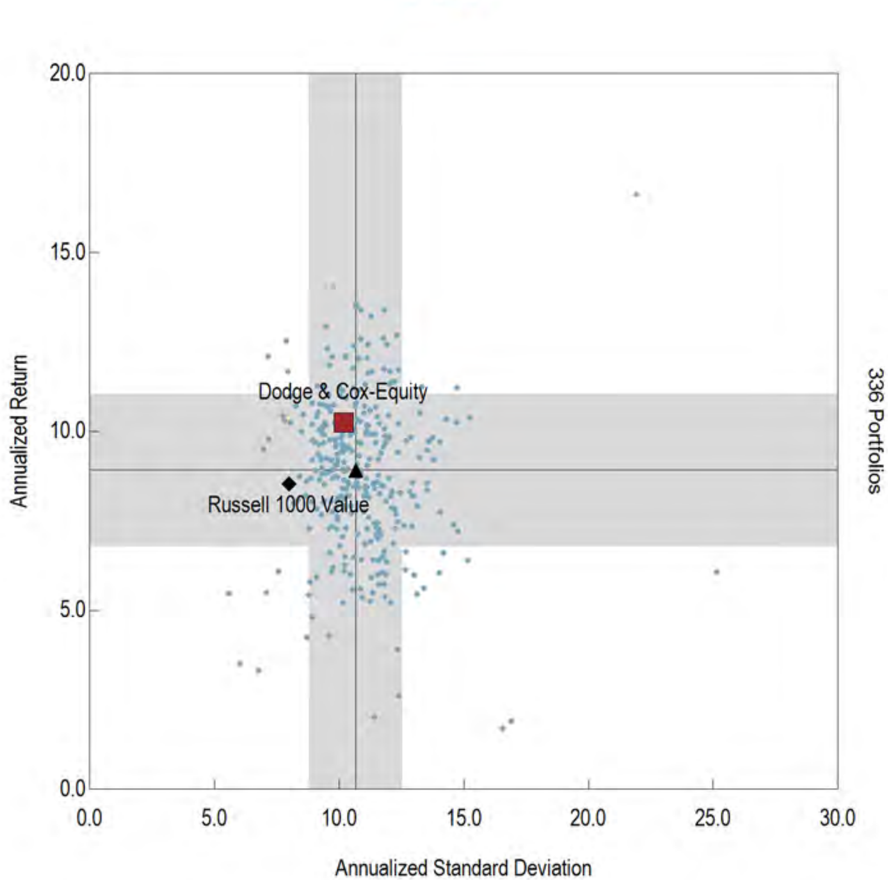
Return (Rank)	Quarter		1 Year		3 Years		5 Years		10 Years		2016		2015		2014		2013		2012	
5th Percentile	6.1		24.1		12.1		16.3		9.7		22.1		2.8		16.3		42.5		21.5	
25th Percentile	4.9		19.9		10.2		14.7		7.9		17.4		-0.4		13.9		37.2		18.0	
Median	4.2		17.6		8.9		13.5		6.9		15.0		-2.6		12.2		33.6		15.7	
75th Percentile	3.4		15.3		7.7		12.5		6.3		11.8		-5.1		10.4		30.8		13.0	
95th Percentile	1.9		9.8		5.4		10.6		4.8		7.0		-9.4		5.9		24.6		9.6	
# of Portfolios	342		342		336		324		263		346		312		307		310		303	
● Dodge & Cox-Equity	4.7	(30)	23.5	(8)	10.2	(24)	15.6	(11)	7.2	(43)	21.4	(6)	-3.9	(64)	10.9	(72)	39.1	(15)	22.3	(3)
▲ Russell 1000 Value	3.1	(81)	15.1	(77)	8.5	(61)	13.2	(58)	5.9	(83)	17.3	(26)	-3.8	(64)	13.5	(33)	32.5	(60)	17.5	(30)

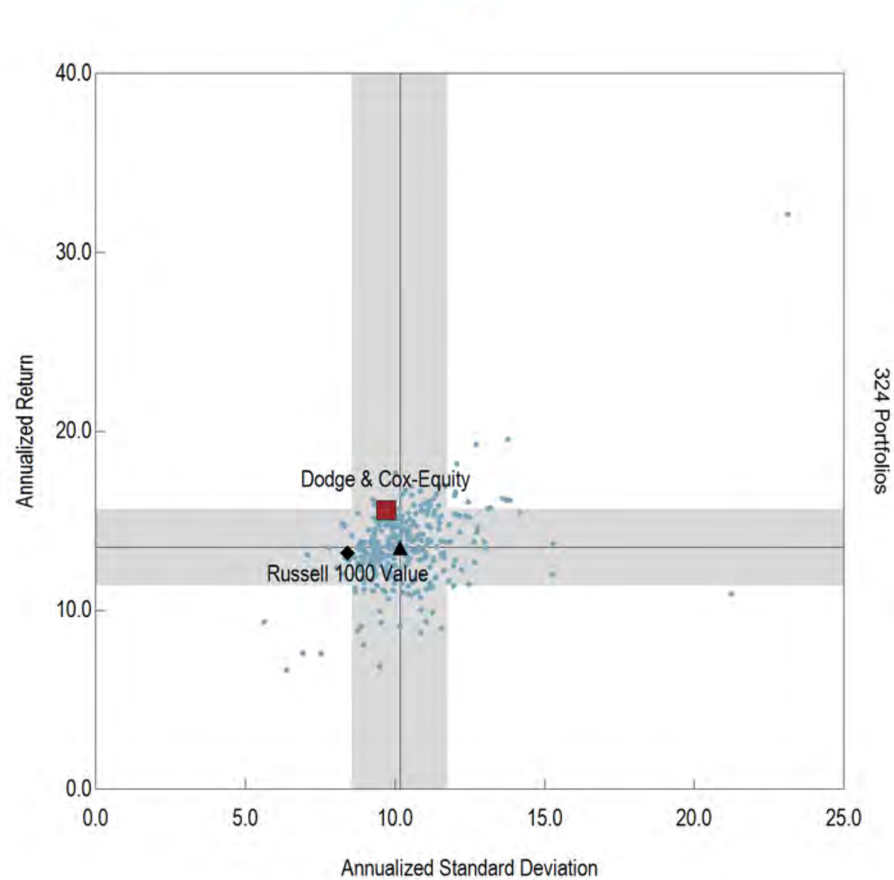
Rolling 3 Year Annualized Return (%)



Rolling 5 Year Annualized Return (%)







3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Dodge & Cox-Equity	10.2%	10.2%	1.0
Russell 1000 Value	8.5%	8.0%	1.0
eA US Large Cap Value Equity Gross Median	8.9%	10.7%	0.8

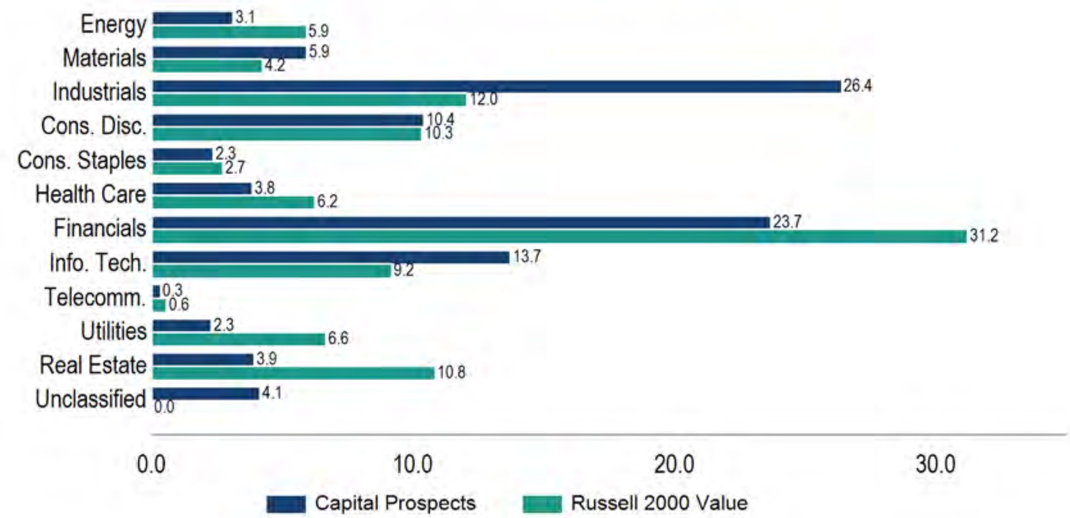
5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Dodge & Cox-Equity	15.6%	9.7%	1.6
Russell 1000 Value	13.2%	8.4%	1.5
eA US Large Cap Value Equity Gross Median	13.5%	10.2%	1.3

Characteristics

	Portfolio	Russell 2000 Value
Number of Holdings	294	1,396
Weighted Avg. Market Cap. ($B)	2.31	1.96
Median Market Cap. ($B)	1.31	0.70
Price To Earnings	24.87	20.69
Price To Book	2.89	1.79
Price To Sales	2.24	2.72
Return on Equity (%)	12.66	7.49
Yield (%)	1.47	1.60
Beta	0.92	1.00

Sector Allocation (%) vs Russell 2000 Value



Largest Holdings

	End Weight	Return
LITTELFUSE	1.46	18.96
ALLETE	1.32	8.61
HOSTESS BRANDS CL.A	1.29	-15.16
HILLENBRAND	1.19	8.22
MERITOR	1.14	56.59
MB FINANCIAL	1.11	2.74
ARTISAN PTNS.ASTMGMT.	1.02	8.29
AIR LEASE	1.00	14.29
ABM INDS.	0.91	0.87
JOHN BEAN TECHNOLOGIES	0.91	3.28

Top Contributors

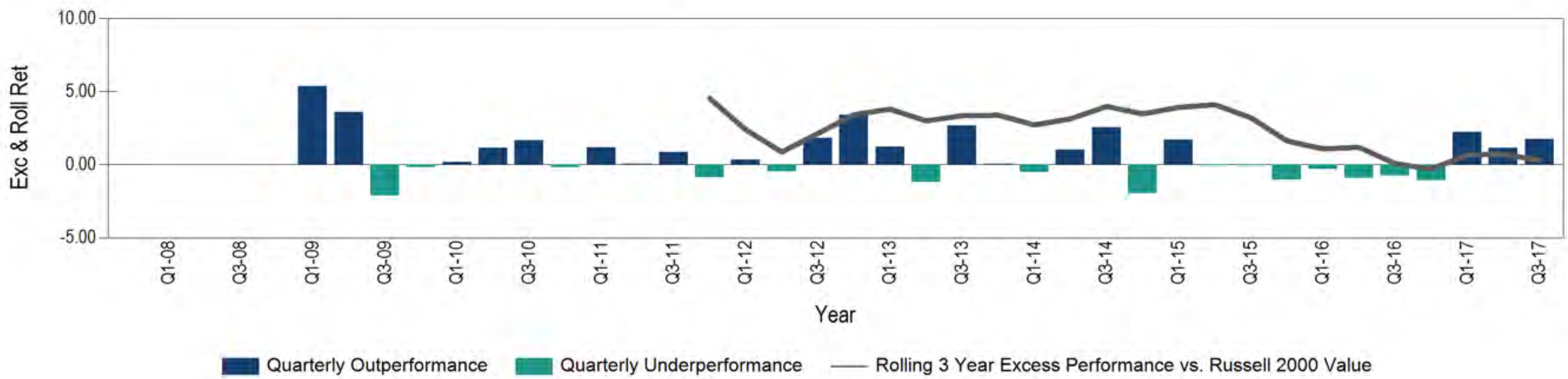
	Avg Wgt	Return	Contribution
MERITOR	0.84	56.59	0.47
ZAGG	0.44	82.08	0.36
LITTELFUSE	1.40	18.96	0.27
ULTRA CLEAN HOLDINGS	0.36	63.31	0.23
SP PLUS	0.69	29.30	0.20
COLUMBUS MCKINNON NY	0.40	49.16	0.20
SPIRIT AEROSYSTEMS CL.A	0.56	34.31	0.19
AXT	0.41	44.09	0.18
ELECTRO SCIEN.INDS.	0.26	68.93	0.18
OCH-ZIFF CAP.MAN.GP.CL.A	0.66	26.65	0.18

Bottom Contributors

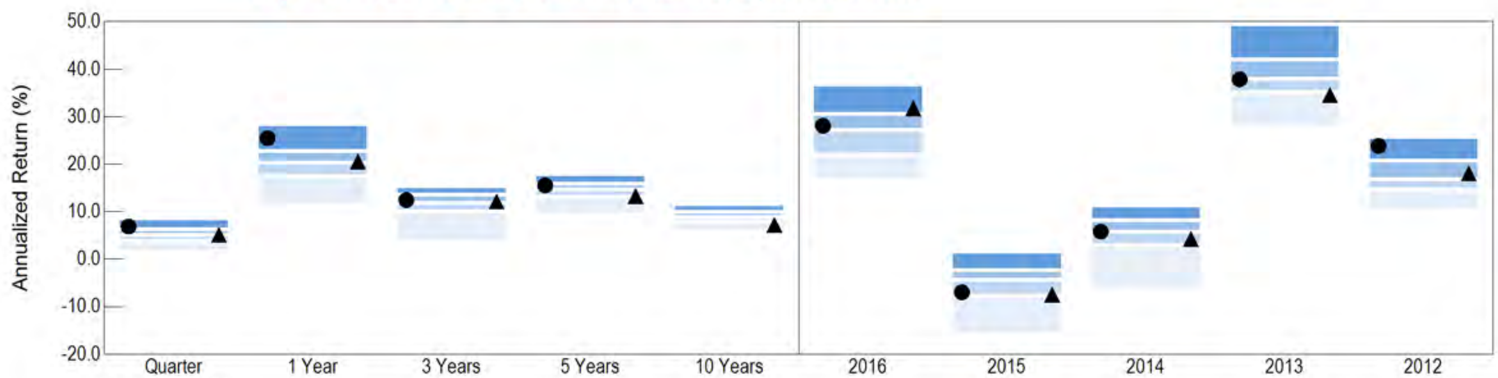
	Avg Wgt	Return	Contribution
HOSTESS BRANDS CL.A	1.34	-15.16	-0.20
RADISYS	0.28	-63.56	-0.18
CRH MEDICAL	0.25	-54.27	-0.14
BABCOCK & WILCOX ENTS.	0.16	-71.68	-0.11
MEET GROUP	0.34	-27.92	-0.10
KINDRED HEALTHCARE	0.23	-41.63	-0.10
BARNES & NOBLE ED.	0.22	-38.76	-0.09
BIG 5 SPTG.GOODS	0.21	-40.22	-0.09
PCM	0.30	-25.33	-0.08
QUANTUM	0.34	-21.64	-0.07

Unclassified sector allocation includes cash allocations.

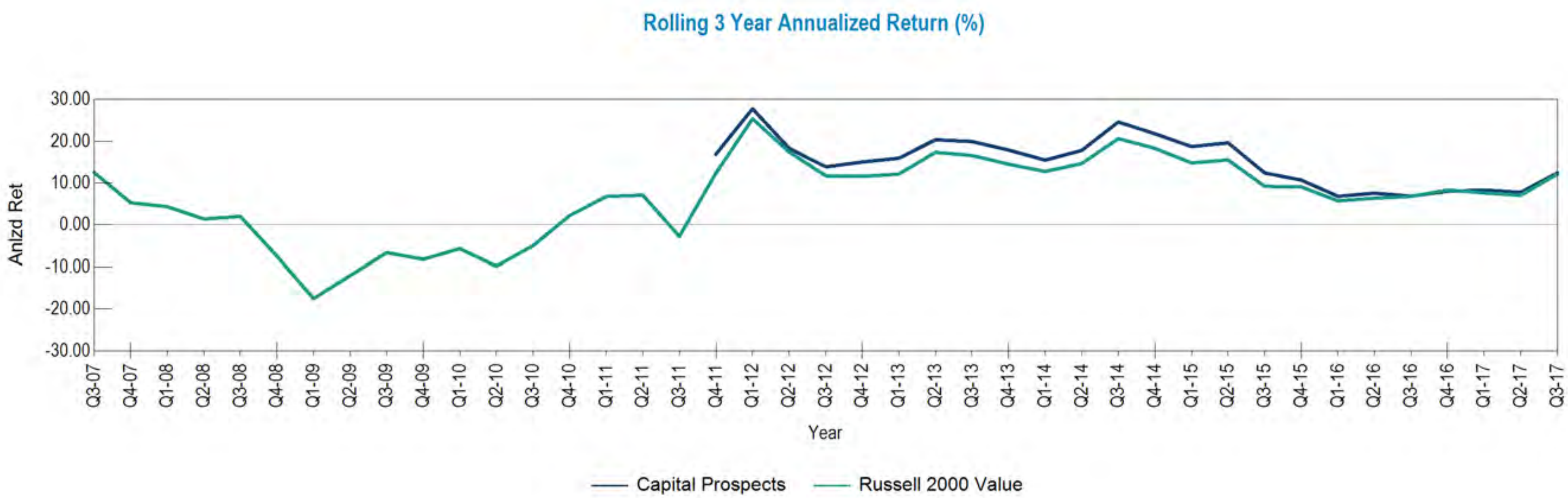
Rolling Annualized Excess Performance

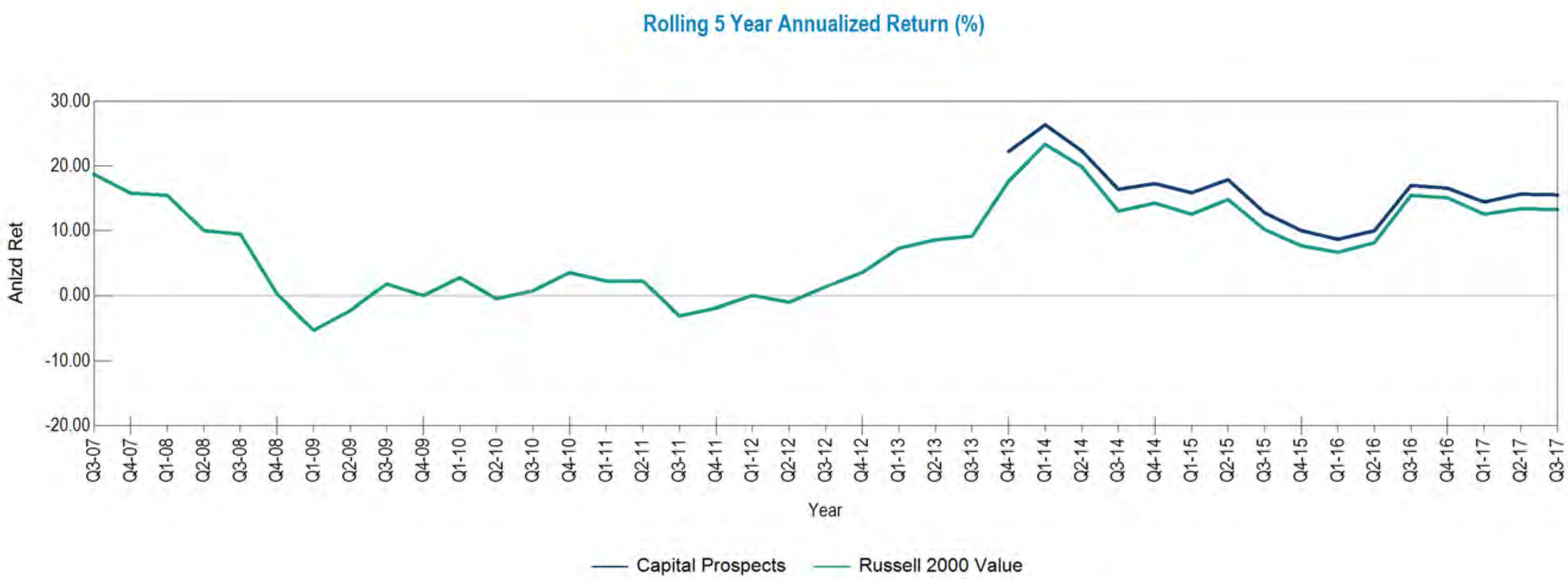


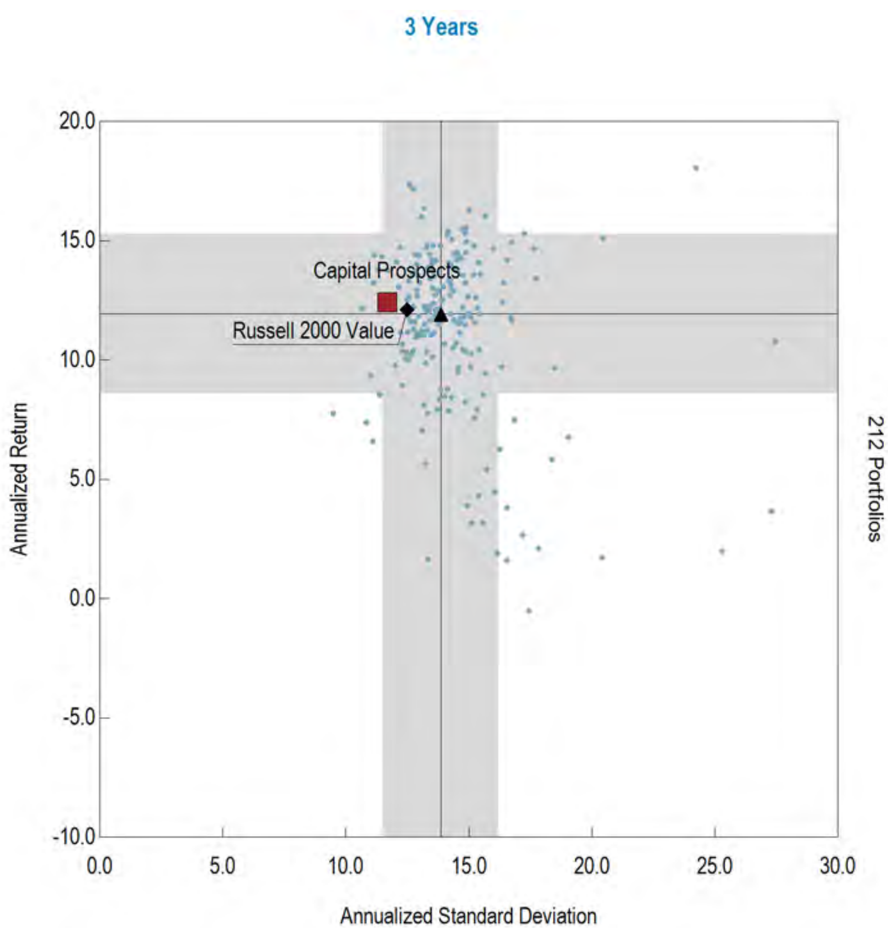
Capital Prospects vs. eA US Small Cap Value Equity Gross Universe

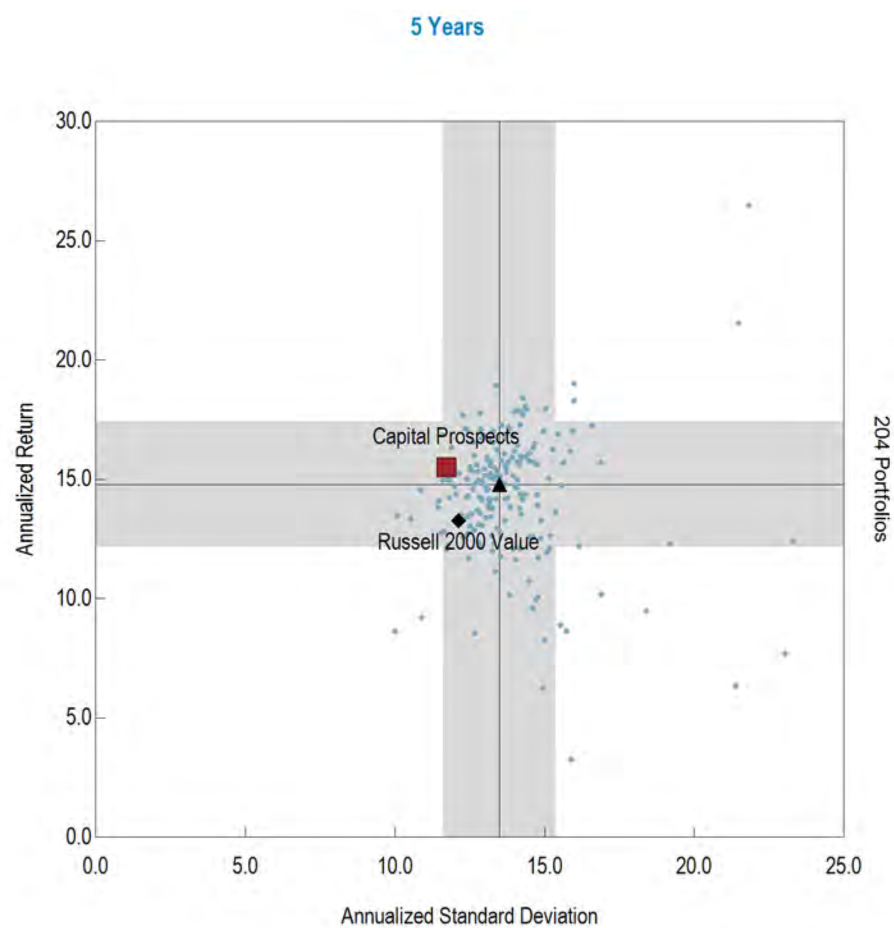


Return (Rank)	Quarter		1 Year		3 Years		5 Years		10 Years		2016		2015		2014		2013		2012	
5th Percentile	8.5		28.3		15.3		17.8		11.5		36.7		1.5		11.2		49.4		25.7	
25th Percentile	6.4		22.9		13.6		15.9		10.0		30.7		-2.2		8.2		42.1		20.8	
Median	5.2		20.4		11.9		14.8		9.0		27.2		-4.3		5.8		38.1		16.9	
75th Percentile	3.9		17.6		10.1		13.2		8.0		22.2		-7.7		3.1		35.2		14.7	
95th Percentile	1.7		11.6		3.7		9.5		6.0		16.8		-15.8		-6.3		27.8		10.3	
# of Portfolios	222		222		212		204		170		222		212		206		199		187	
● Capital Prospects	6.9	(15)	25.5	(10)	12.4	(42)	15.5	(36)	--	(--)	28.1	(40)	-7.0	(72)	5.8	(51)	37.9	(53)	23.8	(9)
▲ Russell 2000 Value	5.1	(54)	20.5	(49)	12.1	(48)	13.3	(75)	7.1	(85)	31.7	(17)	-7.5	(74)	4.2	(68)	34.5	(78)	18.1	(43)


Rolling 3 Year Annualized Return (%)
30.00
20.00
10.00
0.00
-10.00
-20.00
-30.00
Anlzd Ret
Q3-07 Q4-07 Q1-08 Q2-08 Q3-08 Q4-08 Q1-09 Q2-09 Q3-09 Q4-09 Q1-10 Q2-10 Q3-10 Q4-10 Q1-11 Q2-11 Q3-11 Q4-11 Q1-12 Q2-12 Q3-12 Q4-12 Q1-13 Q2-13 Q3-13 Q4-13 Q1-14 Q2-14 Q3-14 Q4-14 Q1-15 Q2-15 Q3-15 Q4-15 Q1-16 Q2-16 Q3-16 Q4-16 Q1-17 Q2-17 Q3-17
Year
Capital Prospects
Russell 2000 Value


Rolling 5 Year Annualized Return (%)
30.00
20.00
10.00
0.00
-10.00
-20.00
Anlzd Ret
Q3-07 Q4-07 Q1-08 Q2-08 Q3-08 Q4-08 Q1-09 Q2-09 Q3-09 Q4-09 Q1-10 Q2-10 Q3-10 Q4-10 Q1-11 Q2-11 Q3-11 Q4-11 Q1-12 Q2-12 Q3-12 Q4-12 Q1-13 Q2-13 Q3-13 Q4-13 Q1-14 Q2-14 Q3-14 Q4-14 Q1-15 Q2-15 Q3-15 Q4-15 Q1-16 Q2-16 Q3-16 Q4-16 Q1-17 Q2-17 Q3-17
Year
Capital Prospects
Russell 2000 Value





3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Capital Prospects	12.4%	11.7%	1.0
Russell 2000 Value	12.1%	12.5%	0.9
eA US Small Cap Value Equity Gross Median	11.9%	13.9%	0.8

5 Years

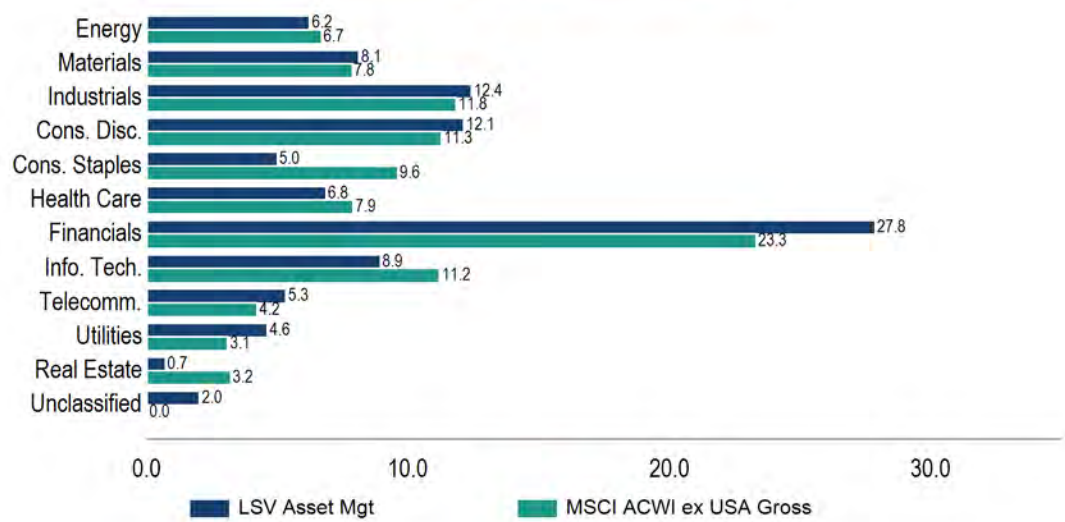
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Capital Prospects	15.5%	11.7%	1.3
Russell 2000 Value	13.3%	12.1%	1.1
eA US Small Cap Value Equity Gross Median	14.8%	13.5%	1.1

International Equity Managers

Characteristics

	Portfolio	MSCI ACWI ex USA Gross
Number of Holdings	255	1,859
Weighted Avg. Market Cap. ($B)	36.44	62.90
Median Market Cap. ($B)	8.08	7.99
Price To Earnings	13.54	21.12
Price To Book	1.69	2.62
Price To Sales	1.04	2.17
Return on Equity (%)	14.35	14.58
Yield (%)	3.51	2.80
Beta	1.06	1.00

Sector Allocation (%) vs MSCI ACWI ex USA Gross



Largest Holdings

	End Weight	Return
SAMSUNG ELECTRONICS	2.21	7.75
SANOFI	1.73	3.96
NIPPON TELG. & TEL.	1.42	-1.65
ALLIANZ	1.38	13.18
ENEL	1.36	14.59
MAGNA INTL.	1.28	15.79
BAE SYSTEMS	1.27	2.96
KDDI	1.19	1.06
SWISS LIFE HOLDING	1.09	4.33
BAYER	1.02	5.57

Top Contributors

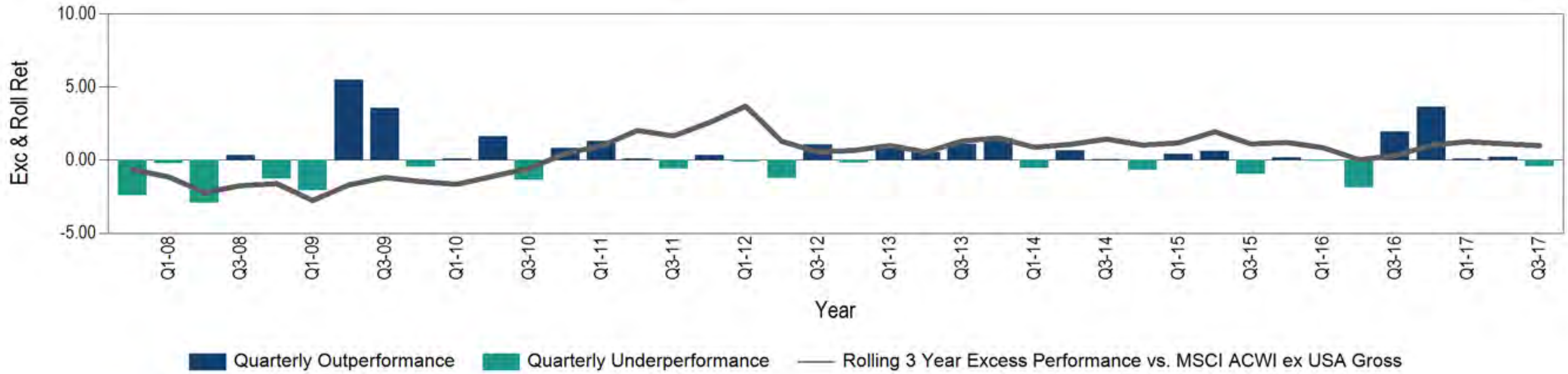
	Avg Wgt	Return	Contribution
BYD ELECTRONIC (INTL.)	0.61	49.14	0.30
MAGNA INTL.	1.17	15.79	0.19
ENEL	1.25	14.59	0.18
ALLIANZ	1.31	13.18	0.17
SAMSUNG ELECTRONICS	2.13	7.75	0.17
KINGBOARD CHEMICAL HDG.	0.48	32.89	0.16
RHEINMETALL	0.66	18.59	0.12
DEUTSCHE POST	0.61	19.16	0.12
BOLIDEN	0.48	23.92	0.12
BASF	0.84	13.50	0.11

Bottom Contributors

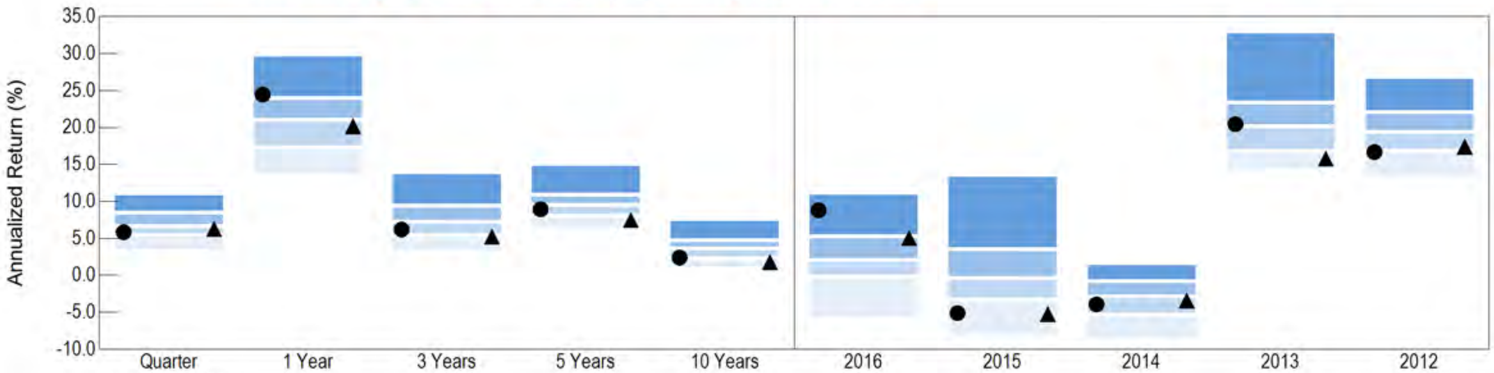
	Avg Wgt	Return	Contribution
TEVA PHARMACEUTICAL	0.29	-47.13	-0.13
AIR CHINA 'H'	0.47	-19.42	-0.09
PEGATRON	0.52	-12.85	-0.07
SHANGHAI PHARMS.HLDG. CO.'H'	0.34	-17.98	-0.06
WEIQIAO TEXTILE 'H'	0.24	-25.67	-0.06
AUSTRALIAN PHARM.INDS.	0.30	-19.99	-0.06
PERUSAHAAN GAS NEGARA	0.18	-30.74	-0.06
CASCADES	0.42	-11.94	-0.05
SELCUK ECZA DEPOSU	0.24	-20.75	-0.05
DAISHIN SECURITIES	0.33	-14.65	-0.05

Unclassified sector allocation includes cash allocations.

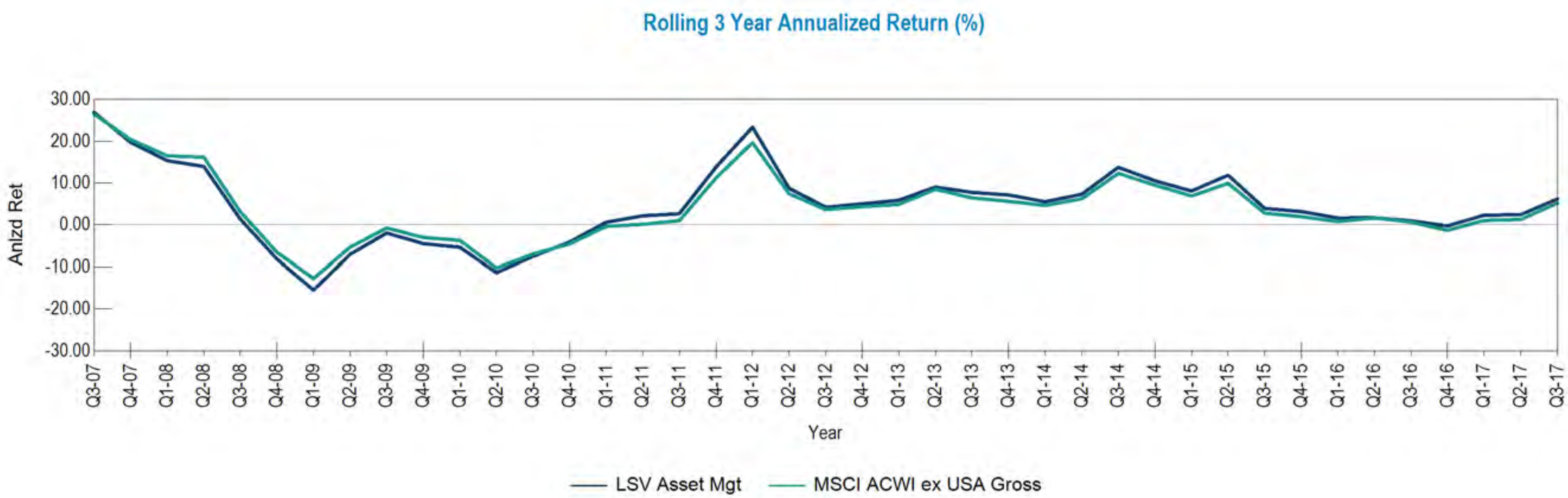
Rolling Annualized Excess Performance

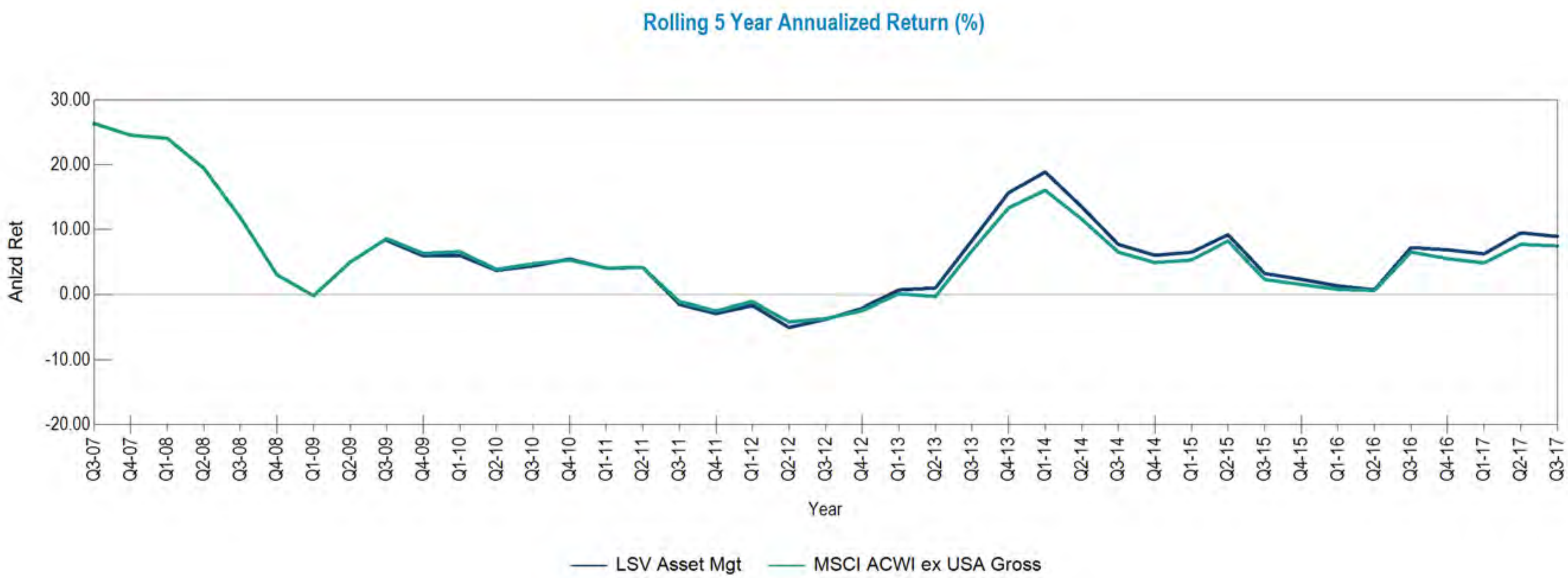


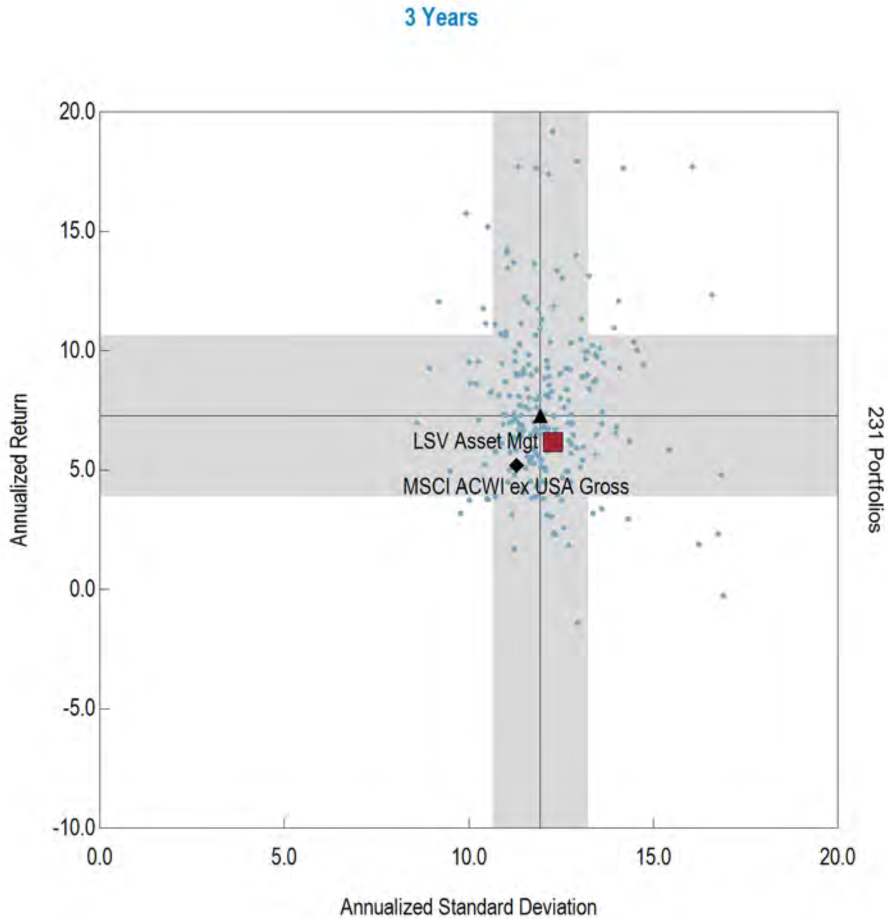
LSV Asset Mgt vs. eA ACWI ex-US Equity Unhedged Gross Universe

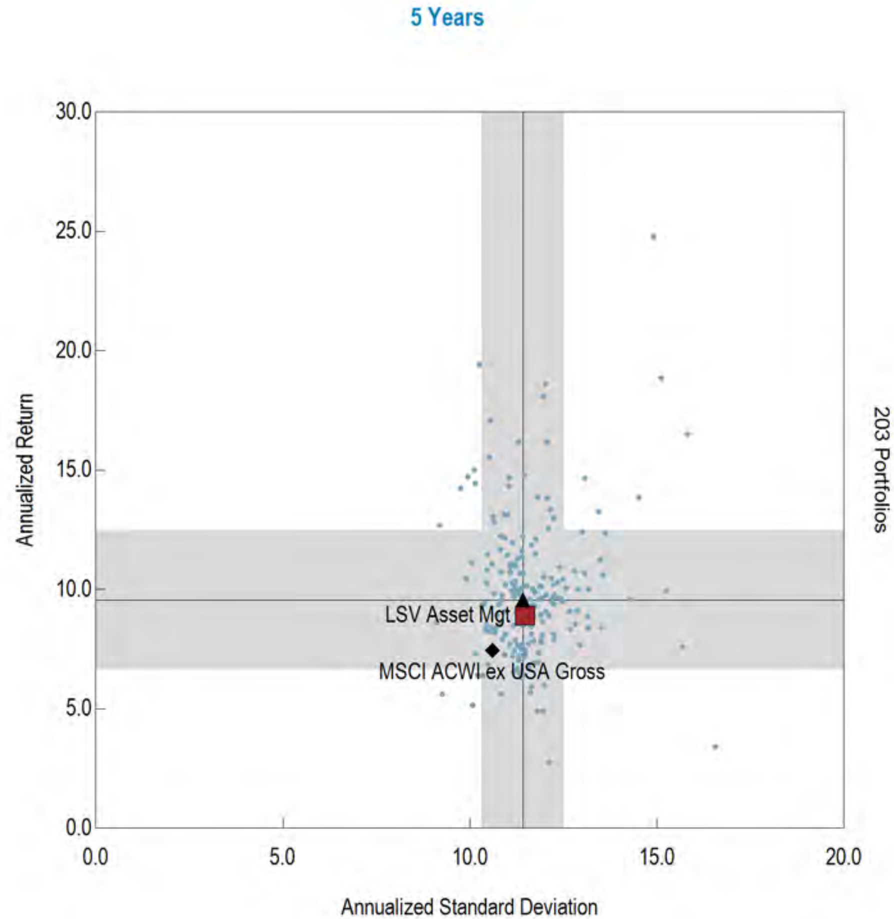


Return (Rank)	Quarter		1 Year		3 Years		5 Years		10 Years		2016		2015		2014		2013		2012	
5th Percentile	11.0		29.8		13.9		15.0		7.5		11.1		13.5		1.6		32.9		26.8	
25th Percentile	8.5		24.0		9.4		11.0		4.8		5.3		3.5		-0.8		23.4		22.1	
Median	6.7		21.1		7.3		9.6		3.6		2.1		-0.3		-2.9		20.3		19.5	
75th Percentile	5.5		17.4		5.5		8.1		2.3		-0.2		-3.3		-5.3		16.9		16.9	
95th Percentile	3.3		13.6		3.1		6.3		1.0		-5.8		-8.3		-8.7		14.3		13.2	
# of Portfolios	254		254		231		203		132		238		179		147		136		127	
● LSV Asset Mgt	5.8	(69)	24.4	(23)	6.2	(67)	8.9	(62)	2.4	(75)	8.8	(10)	-5.1	(86)	-4.0	(65)	20.4	(46)	16.7	(78)
▲ MSCI ACWI ex USA Gross	6.3	(61)	20.2	(55)	5.2	(79)	7.5	(85)	1.7	(89)	5.0	(27)	-5.3	(87)	-3.4	(58)	15.8	(87)	17.4	(74)


Rolling 3 Year Annualized Return (%)
Anlzd Ret
30.00
20.00
10.00
0.00
-10.00
-20.00
-30.00
Q3-07 Q4-07 Q1-08 Q2-08 Q3-08 Q4-08 Q1-09 Q2-09 Q3-09 Q4-09 Q1-10 Q2-10 Q3-10 Q4-10 Q1-11 Q2-11 Q3-11 Q4-11 Q1-12 Q2-12 Q3-12 Q4-12 Q1-13 Q2-13 Q3-13 Q4-13 Q1-14 Q2-14 Q3-14 Q4-14 Q1-15 Q2-15 Q3-15 Q4-15 Q1-16 Q2-16 Q3-16 Q4-16 Q1-17 Q2-17 Q3-17
Year
LSV Asset Mgt
MSCI ACWI ex USA Gross


Rolling 5 Year Annualized Return (%)
Anlzd Ret
30.00
20.00
10.00
0.00
-10.00
-20.00
Q3-07 Q4-07 Q1-08 Q2-08 Q3-08 Q4-08 Q1-09 Q2-09 Q3-09 Q4-09 Q1-10 Q2-10 Q3-10 Q4-10 Q1-11 Q2-11 Q3-11 Q4-11 Q1-12 Q2-12 Q3-12 Q4-12 Q1-13 Q2-13 Q3-13 Q4-13 Q1-14 Q2-14 Q3-14 Q4-14 Q1-15 Q2-15 Q3-15 Q4-15 Q1-16 Q2-16 Q3-16 Q4-16 Q1-17 Q2-17 Q3-17
Year
LSV Asset Mgt
MSCI ACWI ex USA Gross





3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
LSV Asset Mgt	6.2%	12.3%	0.5
MSCI ACWI ex USA Gross	5.2%	11.3%	0.4
eA ACWI ex-US Equity Unhedged Gross Median	7.3%	11.9%	0.6

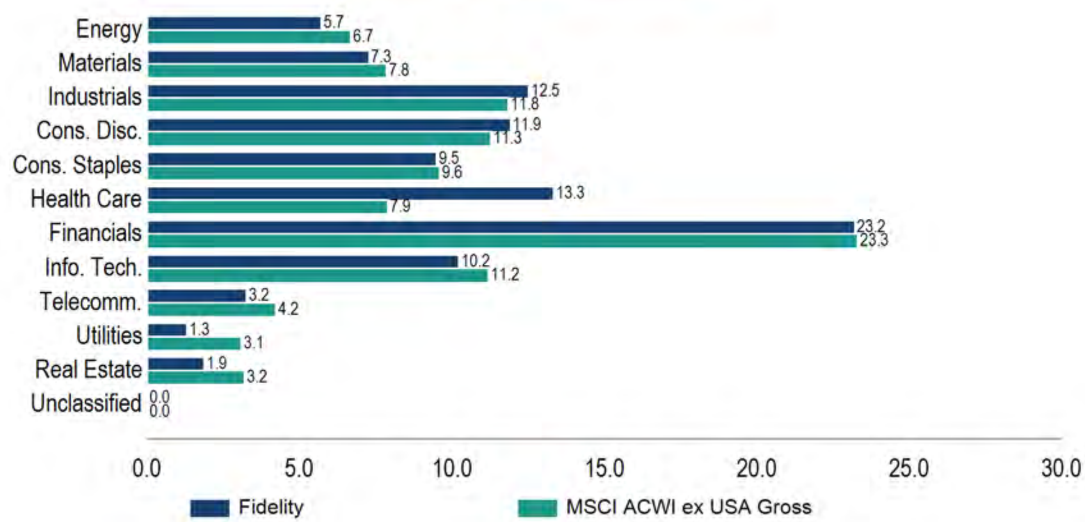
5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
LSV Asset Mgt	8.9%	11.5%	0.8
MSCI ACWI ex USA Gross	7.5%	10.6%	0.7
eA ACWI ex-US Equity Unhedged Gross Median	9.6%	11.4%	0.8

Characteristics

	Portfolio	MSCI ACWI ex USA Gross
Number of Holdings	282	1,859
Weighted Avg. Market Cap. ($B)	56.44	62.90
Median Market Cap. ($B)	12.05	7.99
Price To Earnings	23.11	21.12
Price To Book	3.69	2.62
Price To Sales	2.79	2.17
Return on Equity (%)	17.84	14.58
Yield (%)	2.58	2.80
Beta	0.92	1.00

Sector Allocation (%) vs MSCI ACWI ex USA Gross



Largest Holdings

	End Weight	Return
ROYAL DUTCH SHELL A	2.20	15.97
NESTLE 'R'	1.70	-3.81
SAP	1.46	4.51
ROCHE HOLDING	1.26	0.19
PHILIPS ELTN.KONINKLIJKE	1.23	16.44
BRITISH AMERICAN TOBACCO	1.21	-6.73
BAYER	1.14	5.57
AIA GROUP	1.08	1.35
BP	1.04	13.21
BNP PARIBAS	0.99	12.18

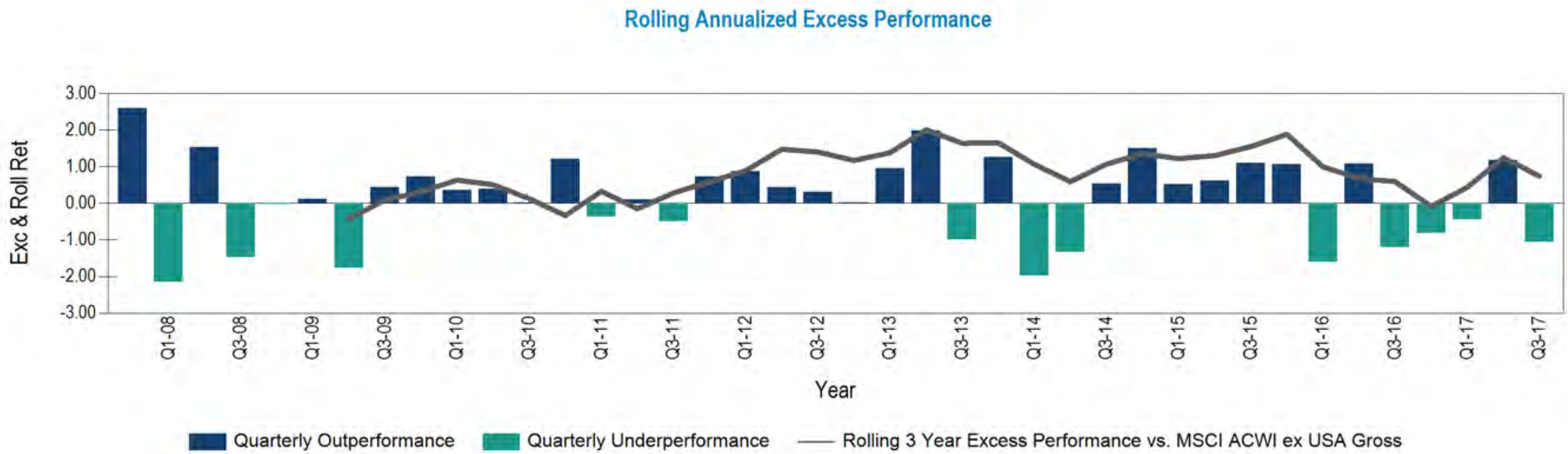
Top Contributors

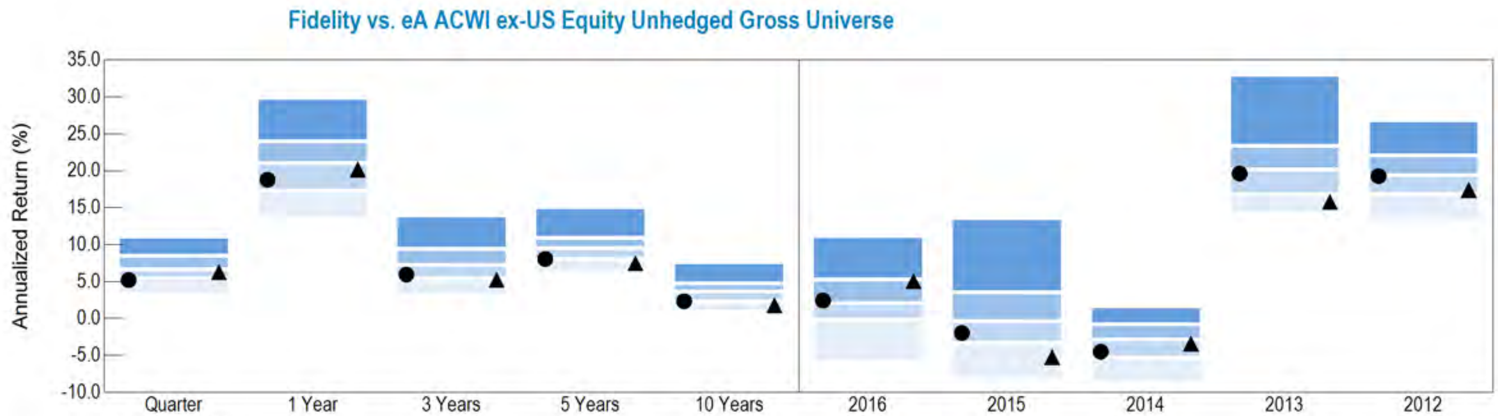
	Avg Wgt	Return	Contribution
ROYAL DUTCH SHELL A	1.18	15.97	0.19
ASML HOLDING	0.56	30.86	0.17
GLENCORE	0.62	23.89	0.15
DEUTSCHE POST	0.73	19.16	0.14
PHILIPS ELTN.KONINKLIJKE	0.85	16.44	0.14
ROYAL DUTCH SHELL A(LON)	0.82	16.03	0.13
DNB	0.66	18.94	0.13
NIDEC	0.61	20.24	0.12
BNP PARIBAS	0.94	12.18	0.11
KEYENCE	0.52	20.98	0.11

Bottom Contributors

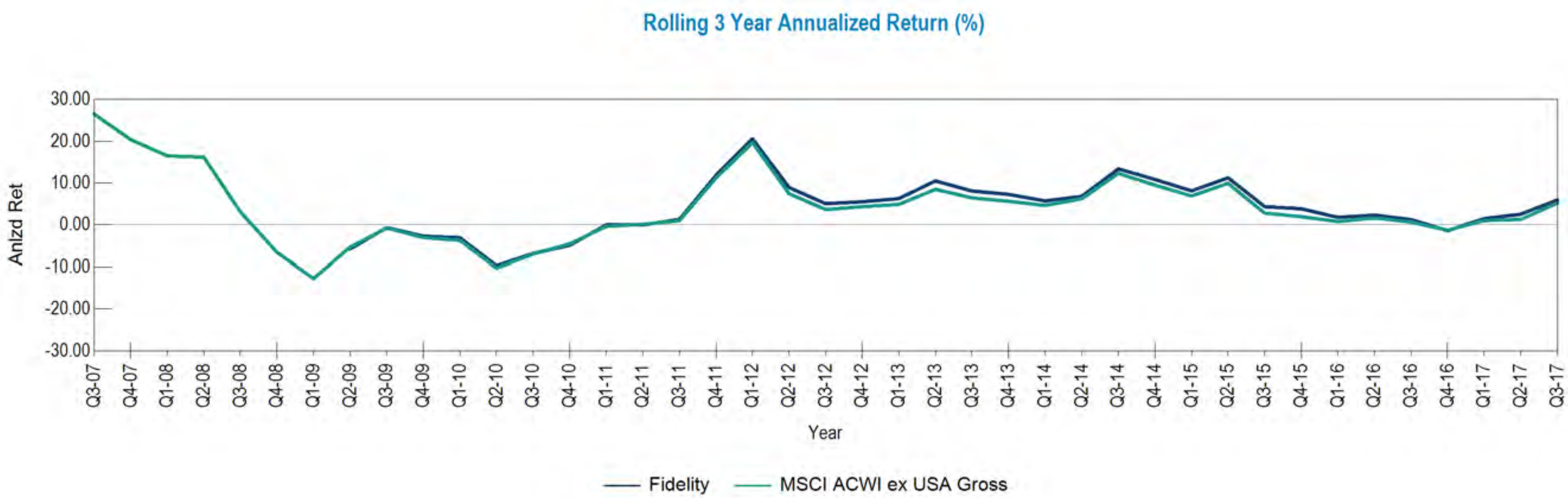
	Avg Wgt	Return	Contribution
TEVA PHARMACEUTICAL	0.23	-47.13	-0.11
BRITISH AMERICAN TOBACCO	1.13	-6.73	-0.08
NESTLE 'R'	1.76	-3.81	-0.07
SHIRE	0.83	-7.59	-0.06
BEST PACIFIC INTL.HDG.	0.13	-37.18	-0.05
WPP	0.41	-11.37	-0.05
DENTSU	0.46	-8.17	-0.04
SURUGA BANK	0.30	-10.65	-0.03
ELIOR PARTICIPATIONS	0.36	-8.73	-0.03
PUBLICIS GROUPE	0.46	-6.22	-0.03

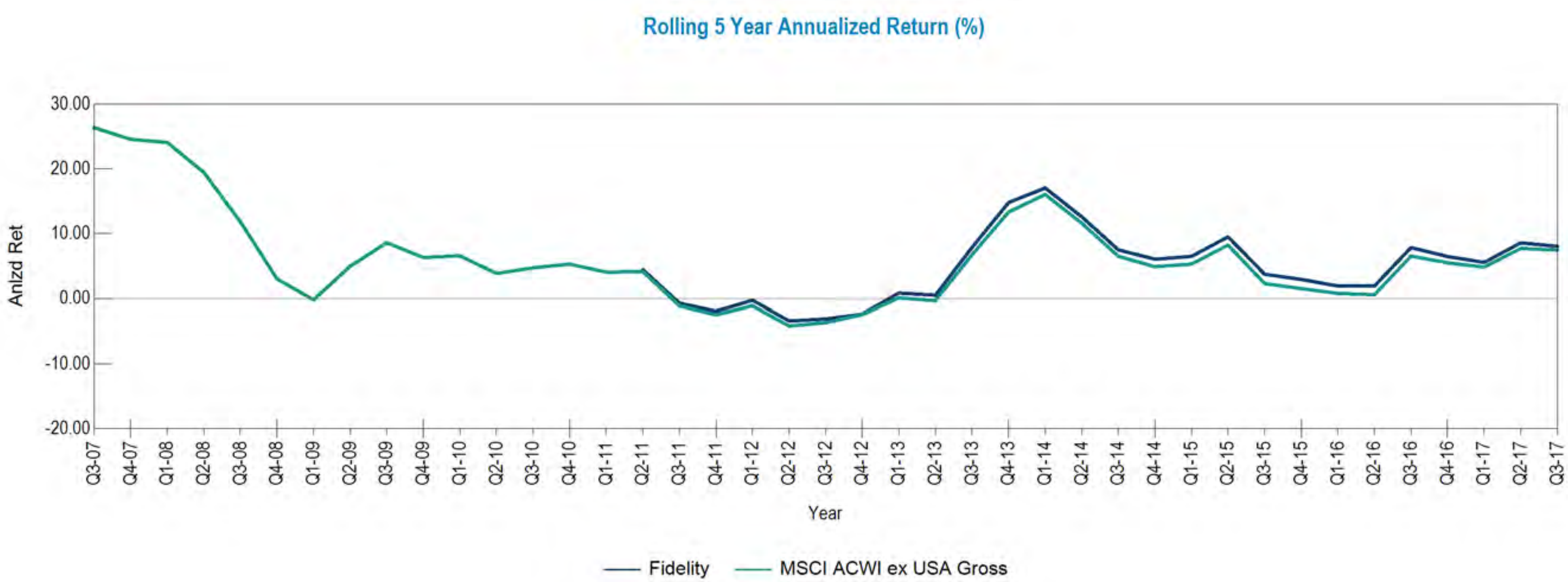
Unclassified sector allocation includes cash allocations.





Return (Rank)	Quarter		1 Year		3 Years		5 Years		10 Years		2016		2015		2014		2013		2012	
5th Percentile	11.0		29.8		13.9		15.0		7.5		11.1		13.5		1.6		32.9		26.8	
25th Percentile	8.5		24.0		9.4		11.0		4.8		5.3		3.5		-0.8		23.4		22.1	
Median	6.7		21.1		7.3		9.6		3.6		2.1		-0.3		-2.9		20.3		19.5	
75th Percentile	5.5		17.4		5.5		8.1		2.3		-0.2		-3.3		-5.3		16.9		16.9	
95th Percentile	3.3		13.6		3.1		6.3		1.0		-5.8		-8.3		-8.7		14.3		13.2	
# of Portfolios	254		254		231		203		132		238		179		147		136		127	
● Fidelity	5.2	(80)	18.8	(69)	5.9	(69)	8.0	(76)	2.3	(76)	2.4	(46)	-2.0	(66)	-4.5	(70)	19.6	(55)	19.3	(55)
▲ MSCI ACWI ex USA Gross	6.3	(61)	20.2	(55)	5.2	(79)	7.5	(85)	1.7	(89)	5.0	(27)	-5.3	(87)	-3.4	(58)	15.8	(87)	17.4	(74)


Rolling 3 Year Annualized Return (%)
Anlzd Ret
30.00
20.00
10.00
0.00
-10.00
-20.00
-30.00
Q3-07 Q4-07 Q1-08 Q2-08 Q3-08 Q4-08 Q1-09 Q2-09 Q3-09 Q4-09 Q1-10 Q2-10 Q3-10 Q4-10 Q1-11 Q2-11 Q3-11 Q4-11 Q1-12 Q2-12 Q3-12 Q4-12 Q1-13 Q2-13 Q3-13 Q4-13 Q1-14 Q2-14 Q3-14 Q4-14 Q1-15 Q2-15 Q3-15 Q4-15 Q1-16 Q2-16 Q3-16 Q4-16 Q1-17 Q2-17 Q3-17
Year
Fidelity
MSCI ACWI ex USA Gross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Anlzd Ret
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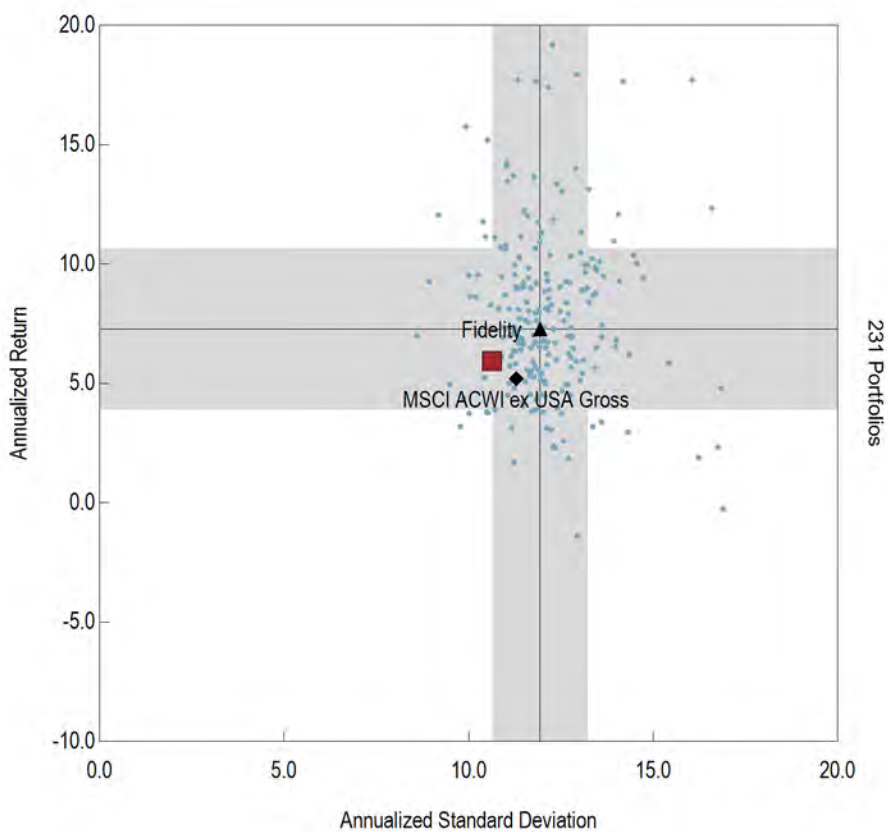
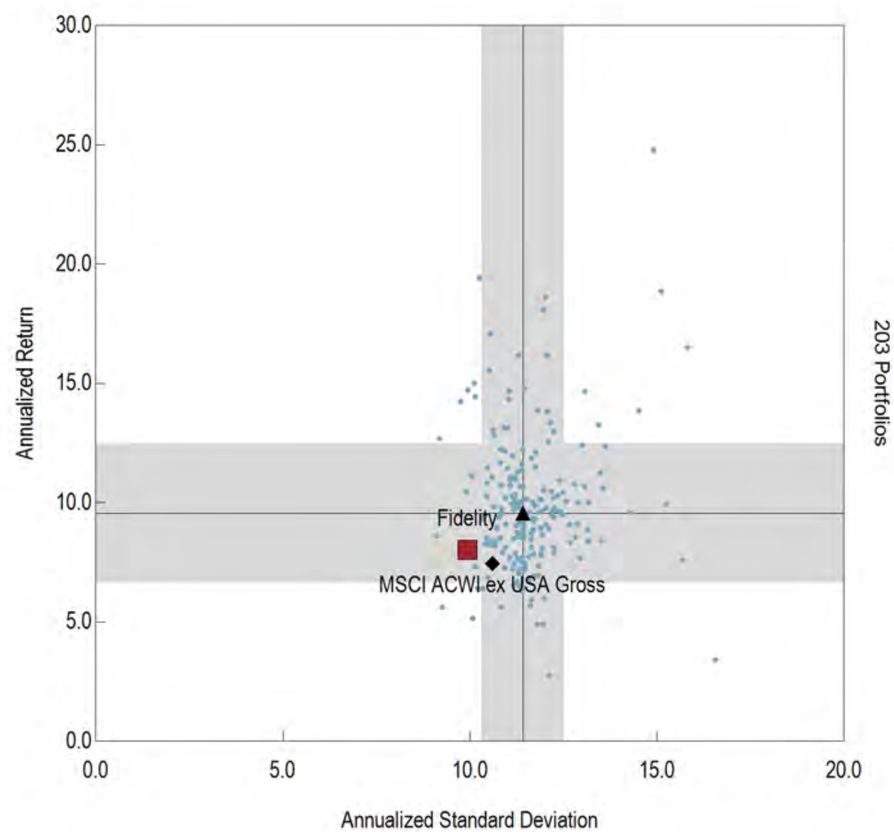
20.00
10.00
0.00
-10.00
-20.00
Q3-07 Q4-07 Q1-08 Q2-08 Q3-08 Q4-08 Q1-09 Q2-09 Q3-09 Q4-09 Q1-10 Q2-10 Q3-10 Q4-10 Q1-11 Q2-11 Q3-11 Q4-11 Q1-12 Q2-12 Q3-12 Q4-12 Q1-13 Q2-13 Q3-13 Q4-13 Q1-14 Q2-14 Q3-14 Q4-14 Q1-15 Q2-15 Q3-15 Q4-15 Q1-16 Q2-16 Q3-16 Q4-16 Q1-17 Q2-17 Q3-17
Year
Fidelity
MSCI ACWI ex USA Gross

3 Years



5 Years



3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Fidelity	5.9%	10.6%	0.5
MSCI ACWI ex USA Gross	5.2%	11.3%	0.4
eA ACWI ex-US Equity Unhedged Gross Median	7.3%	11.9%	0.6

5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Fidelity	8.0%	9.9%	0.8
MSCI ACWI ex USA Gross	7.5%	10.6%	0.7
eA ACWI ex-US Equity Unhedged Gross Median	9.6%	11.4%	0.8

Performance Return Calculations

Performance is calculated using Time Weighted Rates of Return (TWRR) methodologies. Monthly returns are geometrically linked and annualized for periods longer than one year.

Data Source

Verus is an independent third party consulting firm and calculates returns from best source book of record data. Returns calculated by Verus may deviate from those shown by the manager in part, but not limited to, differences in prices and market values reported by the custodian and manager, as well as significant cash flows into or out of an account. It is the responsibility of the manager and custodian to provide insight into the pricing methodologies and any difference in valuation.

Illiquid Alternatives

Due to the inability to receive final valuation prior to report production, closed end funds (including but are not limited to Real Estate, Hedge Funds, Private Equity, and Private Credit) performance is typically reported at a one-quarter lag. Valuation is reported at a one-quarter lag, adjusted for current quarter flow (cash flows are captured real time). Closed end fund performance is calculated using a time-weighted return methodology consistent with all portfolio and total fund performance calculations. For Private Markets, performance reports also include Verus-calculated multiples based on flows and valuations (e.g. DPI and TVPI) and manager-provided IRRs.

Manager Line Up

Manager	Fund Incepted	Data Source	Manager	Fund Incepted	Data Source
Northern Trust Russell 1000	8/31/2017	Mellon	Northern Trust Intermediate Gov't Bond	7/31/2017	Northern Trust
BlackRock Russell 1000 Growth	6/30/2010	BlackRock	Northern Trust Long Term Gov't Bond	7/31/2017	Northern Trust
Jackson Square	8/31/2006	Northern Trust	Prime Property Fund	9/30/2015	Prime Property
BlackRock Russell 1000 Value	7/31/2009	BlackRock	American Strategic Value Realty	12/31/2014	American Realty
Dodge & Cox - Equity	12/31/1994	Northern Trust	BlackRock US Real Estate	9/30/2012	BlackRock
Legato Capital	12/31/2008	Northern Trust	Greenfield Gap	7/31/2014	Greenfield
Capital Prospects	12/31/2008	Northern Trust	Medley Capital	5/31/2013	Medley Capital
LSV Asset Mgt	8/31/2004	Northern Trust	Raven Capital	5/31/2013	Raven Capital
Fidelity	4/30/2006	Northern Trust	Raven Opportunity III	7/31/2015	Raven Capital
Dodge & Cox - Fixed	12/31/1994	Northern Trust	White Oak Pinnacle	8/31/2013	White Oak
Insight	6/29/2017	Northern Trust	MS Infrastructure	5/31/2015	Morgan Stanley
DFA	7/31/2017	Northern Trust			

Policy & Custom Index Composition

Policy Index (7/01/2017):	18.5% Russell 1000, 5.5% Russell 2000, 24% MSCI ACWI ex-USA, 19% BBgBarc US Gov't/Credit 1-3 Yr, 3% BBgBarc US Treasury 7-10 Yr, 7.7% NCREIF Property, 1.7% NCREIF Property +2%, 0.6% CPI +5%, 5% BBgBarc US High Yield +2%, 14% 60% MSCI ACWI / 40% BBgBarc Global Aggregate, 1% Citi 1 Month T-Bills.
US Equity Blended:	80% Russell 1000, 20% Russell 2000.
Prior Policy Index:	14.4% Russell 1000 Value, 11.3% Russell 1000 Growth, 4.8% S&P 500, 4.0% Russell 2000 Value, 3.7% Russell 2000 Growth, 18.0% MSCI ACWI ex USA, 29.8% BBgBarc US Aggregate, 3.5% DJ US Select RESI, 7.5% 9% Annual, 3% CPI + 4%.

Other Disclosures

Fiscal Year End: 6/30
Cash Account includes cash held at Northern Trust for all closed end funds and cash held by BlackRock.
Effective 1/01/2017, only traditional asset class (public equity, public fixed income, REITs) investment management fees will be included in the gross of fee return calculation.
All data prior to 6/30/2015 provided by the previous consultant.
As of 9/30/2017, Mellon 500, Legato, Dodge & Cox Fixed, and Pimco are in liquidation and combine for $54,987.56 in residual value.

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: Portfolio Return - [Risk-free Rate + Portfolio Beta x (Market Return - 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: excess return divided by 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: Portfolio Excess Return / 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.

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