

**TUCSON SUPPLEMENTAL RETIREMENT SYSTEM
BOARD OF TRUSTEES
Notice of Regular Meeting / Agenda**

DATE: Thursday, February 25th, 2016
TIME: 8:30 a.m.
PLACE: Finance Department Conference Room, 5th floor
City Hall, 255 West Alameda
Tucson, Arizona 85701

A. Consent Agenda

1. Approval of January 28, 2016 TSRS Board Meeting Minutes
2. Retirement ratifications for February 2016
3. January 2016 TSRS Budget Vs Actual Expenses

B. Investment Activity Report

1. TSRS Quarterly Performance Review for 12/31/2015 – Callan Associates
2. Asset Allocation Update – Callan Associates
3. TSRS Portfolio Composition, Transactions and Performance Review for 01/31/16

C. Administrative Discussions

1. Update on Pension Administrator Recruitment
2. Annual TSRS Budget Approval for FY 2017 ^{Note 1}
3. TSRS Comprehensive Annual Financial Report for the Plan Year Ended June 30, 2015
4. Report from Board Member on OPAL Conference Attended

D. Articles for Board Member Education / Discussion

1. Blurring the Lines – Cash Balance Plans are DB plans with DC-like Characteristics

E. Call to Audience

F. Future Agenda Items

1. March 26, 2016 - Annual Manager Reviews – T Rowe Price and Pyramis,
2. March 26, 2016 – 50/50 Split Employee/Employer Contributions for New Hires

G. Adjournment

Note 1: at the time this packet was assembled this item was unavailable but will be provided before the meeting

Please Note: Legal Action may be taken on any agenda item

*Pursuant to ARS 38-431.03(A)(3) and (4): the board may hold an executive session for the purposes of obtaining legal advice from an attorney or attorneys for the Board or to consider its position and instruct its attorney(s) in pending or contemplated litigation. The board may also hold an executive session pursuant to A.R.S. 38-431.03(A)(2) for purposes of discussion or consideration of records, information or testimony exempt by law from public inspection.

TUCSON SUPPLEMENTAL RETIREMENT SYSTEM BOARD OF TRUSTEES MEETING MINUTES

DATE: Thursday, January 28th, 2016
TIME: 8:30 a.m.
PLACE: Finance Department Conference Room, 5th floor
City Hall, 255 West Alameda
Tucson, Arizona 85701

Members Present: Robert Fleming, Chairman
Kevin Larson, City Manager Appointee (arrived 8:38 AM)
Silvia Amparano, Director of Finance
Michael Coffey, Elected Representative
Jorge Hernández, Elected Representative
John O'Hare, Elected Retiree Representative

Staff Present: Joyce Garland, Assistant City Manager
Dave Deibel, Deputy City Attorney
Silvia Navarro, Treasury Administrator
Art Cuaron, Treasury Finance Manager
Dawn Davis, Administrative Assistant

Guests Present: Claire Beaubien, CTRA Representative

Absent/Excused: Rebecca Hill, Interim HR Director

Chairman Fleming called the meeting to order at 8:33 AM.

A. Consent Agenda

1. Approval of December 17th Board Meeting Minutes
2. Retirement Ratifications for January 2016
3. December 2015 TSRS Budget Vs Actual Expenses

Chairman Fleming asked for a vote on the Consent Agenda. **The Consent Agenda was approved by a vote of 4 – 0 (Chairman Fleming did not vote, Kevin Larson absent/excused).**

B. Administrative Discussions

1. Additional Retirement Incentive and Impact to TSRS

Silvia Amparano said the City Manager's Office received feedback stating employees were not taking advantage of the 520 hour payout retirement incentive due to the cost of health insurance. The City Manager decided to offer another retirement incentive, with a deadline of 06/10/16, providing employees the option to receive a monthly subsidy, based on their current health insurance selection, for 3 years if they opt out of the City's health insurance plan. Employees retiring by 02/06/16 would be eligible to receive both incentives. As of 01/27/16, 87 employees had retired and 19 or 20 more appointments were scheduled through 02/05/16. It was unknown how many people would take advantage of the incentive to opt out of City health insurance plan once the 02/06/16 deadline had passed for the 520 hour payout incentive.

Dave Deibel asked if 87 people were retiring in addition to the people who retired before the second incentive was approved.

Ms. Amparano answered 87 people had signed paperwork to retire by the 02/06/16 deadline. The actuary assumes that 133 people would normally retire each fiscal year. The number of retirees above the assumed 133 is what would make the difference in the actuary report on the impact of the retirement incentive to TSRS. As a result they cannot consider 100 people to have taken advantage of the retirement incentive because an unknown percentage of those people would have retired without the incentive. There were employees who had already signed their retirement paperwork in December who became eligible for the 520 hour payout retirement incentive when it was passed by Mayor and Council, so they received the incentive but would have retired without it. It is difficult to determine which retirees were seriously considering retirement before the incentive was made available to them vs. the retirees who were not considering it at all before the incentive.

Chairman Fleming asked if 100 extra people took advantage of the incentive would it save the City around \$4M.

Ms. Amparano answered the assumption was the vacated positions would not be filled, but not all of the 100 vacant positions are funded from the general fund, so the assumption is also the positions funded from enterprise funds and special revenue funds would be filled with employees moving out of general fund positions when possible. In the previous year approximately \$4M was saved in payroll and benefit costs due to the positions left unstaffed, around 80, after employee retirements.

Chairman Fleming understood it was hard to determine exact numbers at this point in time, but they could anticipate about \$4M in payroll savings and a \$4M increase in the unfunded liability of the TSRS fund.

Ms. Amparano answered better numbers would be requested from the actuary once they were more firm and those numbers would be provided to the Board and the City Manager's Office.

2. Retirement of TSRS Employee

Silvia Navarro announced Dennis Woodrich, Lead Pension Analyst, had decided to take the retirement incentive and would be retiring on 02/06/2016. Bob Szelewski, Management Analyst, was promoted into the Lead Pension Analyst position; and Dawn Davis, Administrative Assistant, was promoted to the Management Analyst position. Now the vacant position is that of the Administrative Assistant.

3. Update on Pension Administrator Recruitment

Silvia Amparano advised the hiring interviews had just been completed and there would be an informal session (meet and greet) for the Board to meet the 3 final candidates after the Board meeting; they would be provided a form on which they could rank the candidates and provide feedback to be taken into consideration when the final decision was made.

Michael Coffey asked if there had been 2 rounds of interviews.

Ms. Amparano answered there were oral boards and then hiring interviews.

Mr. Coffey asked how many candidates went through the oral board interviews.

Ms. Amparano explained 7 candidates participated in oral board interviews and 3 candidates participated in hiring interviews.

Mr. Coffey asked what role the meet and greet would have in the selection process.

Chairman Fleming stated because the meet and greet did not have a posted agenda the Board would not be able to have any discussion or take any legal action according to the Arizona Open Meeting Law, and asked Ms. Amparano to distribute the forms so the Board could review them.

Mr. Coffey clarified the purpose of the meet and greet was to provide the Finance Director with feedback on the final candidates.

Ms. Amparano confirmed this was correct.

Mr. Coffey asked what role the feedback would play in the final decision.

Ms. Amparano answered she would take the feedback into consideration when making the final decision, but the feedback would not have any effect on the candidates' rankings because they had already been ranked based on their performances in the oral board interview, practical exam, and the hiring interview.

Mr. Coffey expressed concern that the Board's feedback on the candidates would have no impact on the final decision.

Dave Deibel explained under civil service rules the hiring department is supposed to hire the candidate with the highest ranking. If the department wants to hire a candidate with a lower ranking they have to justify it in writing and the Board's feedback could be utilized as a part of the written justification if they liked a lower ranked candidate more.

Mr. Coffey asked if the final decision had already been made.

Ms. Amparano answered no.

Chairman Fleming explained, hypothetically, if the Board unanimously agreed that candidate with the 2nd highest ranking was the best candidate, Ms. Amparano could use that as part of the justification to hire the 2nd candidate if she agreed. But if the Board unanimously agreed they thought the 1st candidate was the best candidate the meet and greet would still have been a good and productive use of their time.

Mr. Coffey stated it was up to Ms. Amparano as to whether she would use the feedback provided by the Board in order to justify hiring a candidate other than the one with the highest ranking.

Ms. Amparano answered HR has a process used to rank applicants, they take different pieces to get that ranking including the application, practical exams, oral boards, hiring interviews, etc. HR then provides the hiring department with a certified hiring list on which the candidates are ranked based on those factors. According to the civil service rules the hiring department can hire the 1st candidate without any further process, or hiring interviews can be held before a decision is made. The Board expressed a desire to provide input in the hiring process and this was that opportunity.

Mr. Coffey expressed concern that the feedback could be disregarded completely because the decision was up to the Finance Director instead of the Board.

Ms. Amparano answered this was true.

Mr. O'Hare asked how the Board's feedback would be weighted in the making of the final decision.

Ms. Amparano answered everything would be taken into consideration. The oral boards provided information on their technical experience and the hiring interviews provided information on who would be the best fit for the position and the Finance Department as a whole. There was no set weight assigned to the Board's feedback because in the end it would be a judgment call about which candidate was the best fit for the Pension Administrator position and as a member of the Finance Department.

Mr. O'Hare thought the decision should be based on which candidate would be best for the Plan and its goals,

which would not always be the same as those of the City.

Ms. Amparano answered the Pension Administrator would still be a City employee. In the position of the Pension Administrator the employee would serve a purpose, which was not changing.

Mr. O'Hare asked how salary would play into the negotiations when the money comes from the pension fund, and expressed concern that the best candidate could be passed over in favor of a less qualified candidate willing to work for a lower salary.

Ms. Amparano explained salary negotiations begin when an offer is made to a candidate. It is the decision of the hiring authority as to how much the candidate should be paid. They are only authorized by the City to offer a midpoint salary without further approval from the City Manager's Office.

Mr. O'Hare expressed concern over their ability to keep a good Pension Administrator to manage the \$1B fund with an uncompetitive salary.

Joyce Garland said it would be taken into consideration but at that time an offer had yet to be made, so was unknown what the individual candidates were seeking in terms of compensation.

Mr. O'Hare stated they needed the best candidate and to pay them market, whether it be midpoint or top of the range.

Mr. Coffey expressed concern over the timing of the Board's participation because he had understood the meet and greet would take place before the hiring interviews so that their feedback could be taken into consideration during those interviews. The fact that the meet and greet was taking place after the final interviews seemed to be an exercise in futility. He also expressed disappointment the meet and greet was not on the agenda.

Ms. Amaranano explained the meet and greet was an informal meeting that was noticed but did not have an agenda. It was an opportunity for the Board to meet the candidates, and ask any questions they had.

Mr. Coffey was disappointed in the selection process, it was inappropriately handled, and he felt the Board should have had more involvement.

Mr. Deibel explained the process was handled according the civil service rules. Nothing inappropriate was done. A meet and greet could not be held before the final interviews as dictated by the civil service rules because people outside of the City could not participate in the ranking, which is done by HR.

Ms. Amparano stated the process as described to the Board at the 10/30/26 meeting was the process followed.

Mr. Coffey stated that was not his recollection.

Mr. Larson suggested it might be helpful to review the process. He participated in the oral boards, when they scored those interviews there was a natural break after the top 3 or 4 candidates. The Chairman participated in the hiring interviews so the Board has been involved, just not as a whole group. There was discussion, even during the oral board interviews, as to how the other Board members could be included in the process, which was difficult. It is important to go above midpoint if necessary to compensate the new Plan Administrator and appropriately attract them to City employment.

Mr. Coffey asked if there was no alternative but to use this process to include the Board under civil service rules.

Ms. Amparano answered there was no alternative.

Mr. Coffey apologized because he misunderstood what was allowed under civil service rules.

Mr. O'Hare asked if the Pension Administrator could be hired on a separate contract.

Ms. Amparano explained the Pension Administrator was a Finance Department position, the Finance Director is the hiring authority. She acknowledged the Board's concern over having input in the hiring process and the meet and greet was the opportunity for them to give that input to the Finance Director. They have the same goal which is to hire the best person for the job.

Mr. Coffey thought the meet and greet would occur before the final interviews which was why he was concerned. Holding the meet and greet after the final interviews felt fruitless.

Ms. Amparano clarified though the final interviews had been completed the final decision had not been made.

Mr. O'Hare repeated his concern over the ability to get the best candidate for the salary they could offer.

Ms. Amparano answered the Board would be advised if that became an issue, but at this point there was no reason to believe it would be an issue.

Mr. Coffey asked if they were using the salary range advertised.

Ms. Amparano answered yes.

Chairman Fleming understood the Board's anxiety was that the Pension Administrator would be working for the City as well as the TSRS Board of Supervisors. This was addressed by one of the questions in the final interview and he was looking for a realistic realization that there would be competing interests between the City and the Board and a good candidate would have to be able to navigate those differences. He did not have the impression that any of the people participating in the final interview were looking for the candidate that would only serve the City's interests and fail to be cognizant of the needs of the fund.

Mr. O'Hare stated he was not concerned that the meet and greet would be public record but he could understand if some of the other Board members were.

Ms. Amparano answered it was not public record.

Silvia Navarro explained it was a separate event, which was only posted because the Arizona Open Meeting Law requires posting when there will be a quorum present. There was no agenda and no opportunity for the Board to take legal action so it was not public record.

Mr. Larson asked if all 3 candidates would be there at the same time.

Ms. Navarro answered no, the first was scheduled for 9:45 AM, and they are scheduled 20 minutes apart.

Ms. Amparano explained the candidates would be asked to give an introduction, their experience, and why they believe they were the best person for the job, then the Board would be able to ask questions; it would be informal.

4. Discussion of Investment Manager Fee Structure

Art Cuaron stated a chart titled "TSRS Investment Manager Fee Schedules" had been included in the board packets. All of the TSRS managers and their fee schedules were included, and all had asset based fees. He recommended maintaining the asset based fee schedule and rejecting the offered performance based fee schedule with regards to PIMCO. Callan was also supportive of that position.

Michael Coffey asked if PIMCO was seeking to change their fee structure.

Mr. Cuaron explained at the 10/30/15 meeting PIMCO offered to change to a performance based fee schedule. Staff reached out to PIMCO and learned PIMCO was willing to discuss it with the Board if they were receptive. The fee schedule for all the investment managers was presented to the Board because they requested it at the 12/17/15 meeting.

John O'Hare stated PIMCO was seeking this change because it would benefit PIMCO.

Mr. Cuaron said yes but he was not sure they were seeking the change so much as suggesting they were open to negotiation.

Mr. O'Hare stated he remembered it as them seeking the change, and the Board needed to discuss the fee schedules because those listed in the chart seemed high for managers just trying to match the performance of the benchmark.

Mr. Coffey asked how the fees compared to those charged to similar pension funds.

Mr. Cuaron answered he would have to research it and he did not know how the other plans would react to the request for that information.

Mr. O'Hare answered public pension funds, which were their peers, would be able to provide that information.

Chairman Fleming asked if they could distinguish between the things that would be interesting to know and those things that the Board really needs to know in order to improve the quality of the fund. If they learned the average fee paid by public pension plans of comparable size was 0.01% lower than those charged to TSRS, would it mean that TSRS would try to renegotiate all of their management fees?

Mr. O'Hare answered if it was a significant difference they should.

Chairman Fleming asked why the managers would agree to reduce their fees by 0.1% because on average other plans paid that much less and how much of the TSRS resources would be used to obtain that information.

Mr. O'Hare answered they would only know if they asked, and he thought there could be an opportunity to save money for the plan and the City.

Chairman Fleming asked if Callan could review the management fees and determine if any of them are high.

Mr. Coffey stated these were negotiated contracts that would be up for renegotiation at some point. In the meantime the question was whether the Board should agree with PIMCO's suggestion, and staff was recommending not to.

Chairman Fleming stated his recollection was that a Board member said if PIMCO was so sure of their methods why not offer fees based on performance.

Mr. Cuaron answered that was his recollection as well, these materials were provided for informational purposes as a part of the Board's due diligence and no legal action was necessary.

C. Investment Activity Report

1. TSRS Portfolio Composition, Transactions and Performance Review for 12/31/15

Art Cuaron explained the market was down and had been since the beginning of the year and there was increased volatility in December, so what the Board will see is decreases in the Total Fund stocks and bonds

and moderate increases in real estate and infrastructure. As of 12/31/15 the Total Fund was \$710M, which is down \$13.3M from 11/30/15. To provide some context, as of 01/27/16 the Total Fund was \$676M. The Fed decided yesterday to hold rates steady which implies they are concerned with global and US events.

John O'Hare said the Board was looking at a 20 to 40 year horizon in which returns will fluctuate.

Mr. Cuaron said he wanted to impress on the Board that they needed to look at these numbers over a long period of time and not make any decisions which might affect that long term horizon, despite the fact that the fund is substantially down with the market volatility.

Calendar YTD – The Total Fund is down 1.87% from the November return of 1.49%, and continues to trail the index by about 1.5%. Total Fixed is -0.10%, which was a decrease of about 92 basis points from the November return of 0.82%, and trailed the index by 67 basis points. Total Equities returned -3.18%, which was a decrease of 2.93% from the November return of -0.25%, and trailed the index by 2.25%. The Board asked staff to report when returns have been affected by withdrawals to fund pension obligations. In December \$5M was withdrawn from BlackRock, so the December return of -8.43% was inclusive of that withdrawal. The return would have been -0.21% if the \$5M had remained.

Mr. O'Hare said it would be helpful to see what the actual earnings were.

Mr. Cuaron explained that number was not included in the materials but could be in the future if the Board advised on how they would like to see the information. The materials presented to the Board were prepared in the same way the materials had previously been prepared. Three spreadsheets were created to calculate returns unaffected by TSRS withdrawals and can be provided to the Board.

Mr. O'Hare asked if the Board would like to see those spreadsheets in order to judge the managers on their performance and not what staff was doing.

Mr. Cuaron stated he could present the information both ways.

Mr. O'Hare answered he would prefer to see both sets of numbers.

Chairman Fleming asked about when contributions are made to a fund.

Mr. Cuaron answered it has not happened since he started 6 months ago, but it could be done the same way.

Chairman Fleming stated it was not helpful to include contributions and withdrawals as part of the returns.

Silvia Amparano said they had the option of changing the materials provided to the Board to reflect the monthly withdrawals in order to give a more accurate picture of the managers' performance, or it can be left as it is with an asterisk which does not provide the information. She would prefer to see the numbers unaffected by the monthly withdrawals and asked what the notes reflect for the year end in total.

Silvia Navarro answered it was all inclusive because staff reported ending balances for each manager.

Mr. Cuaron explained the Board may not want to use the actual numbers because withdrawals are made, as needed by the fund, from the managers who are performing well.

Ms. Amparano said the investment reports have been presented this way because the actual numbers tied to the statements.

Mr. Cuaron stated Callan reported on the actual numbers in the funds.

Michael Coffey stated there were 2 elements to this, one was the actual performance and the other was to look at the relative performance of the various fund managers over time.

Keven Larson explained the standard for calculating investment return was to ignore the changes in the balances from contributions or withdrawals. He thought Callan reported on the performance of the manager regardless of the balance changes initiated by TSRS staff.

Mr. Cuaron and Ms. Navarro explained it would be a large amount of work to present the Board with performance unaffected by TSRS contributions and withdrawals because the withdrawals are taken from different managers every month.

Ms. Amparano asked whether staff could receive a monthly report from Callan.

Mr. Cuaron answered the reports come from the custodian. Staff takes the custodial information and generates reports as a cross check. These reports are presented to the Board every month. The custodial reports could be provided as backup documentation if the Board desired.

Ms. Amparano stated she wanted to make sure they were not duplicating efforts and asked whether reports could be obtained from the custodian with the actual returns instead.

Ms. Navarro answered yes but there would have to be some customization in the BNY Mellon Workbench because the reports currently provided numbers for 1 month, 3 months, and one year. These are the numbers used to create the reports provided to the Board. However, staff would still need to cross check the numbers because discrepancies are found from time to time.

Mr. Larson suggested asking Callan for reports to be provided to the Board.

Chairman Fleming asked staff to continue as usual but present the Board with the BNY Mellon reports at the next meeting.

Mr. Cuaron stated he brought them as back up. The BNY Mellon reports were passed around for the Board's review.

Chairman Fleming asked if Callan could produce a monthly report as suggested.

Mr. Cuaron said he would ask them.

Ms. Navarro asked what the Board wanted Callan to present in these reports.

Chairman Fleming answered the Board really wanted to see performance vs. the benchmark.

Ms. Navarro explained there were 2 different sources, but Callan probably got their numbers from BNY Mellon, and asked Board would the Board still want to see the BNY Mellon reports as well.

Ms. Amparano answered if the BNY Mellon reports could be customized for the Board that would be best because they are the source of the information in all the other reports.

Chairman Fleming said the exact level of detail currently provided was not needed, a report with similar information and easier to produce would be fine; he only needed a 18 month rolling report instead of all the different reports the Board currently receives.

Mr. Cuaron questioned the practicality of staff covering the information given in the reports at the meetings and suggested adding the reports with an executive summary to the consent agenda. He would still be available at

the meetings if the Board pulled the reports from the consent agenda in order to ask questions.

Mr. Coffey stated he did not feel the need for staff to read the numbers off of the reports provided, and understood the reason so many reports were prepared was at the request of the Board and the work built up over time.

Chairman Fleming considered having a couple of Board members work with staff to determine a balance between useful information and ease of production for the investment reports to be presented to the Board.

Mr. Coffey understood the point of the reports presented to the Board was to allow them to judge the performance of the managers, and the easiest and most logical way to present that information would be fine.

Chairman Fleming said an executive summary would highlight the significant information for the month.

Mr. O'Hare expressed interest in attempting to move the investment reports to the consent agenda with an executive summary included and having staff available to answer questions instead of reading the report to the Board.

Mr. Cuaron explained the reports would be provided as they always have until the Board makes a definitive decision to change them, but significant information would be better conveyed in an executive summary. If the Board had any questions the item could be pulled from the consent agenda and ask those questions of staff at the meeting, this would allow for more efficient use of the Board's time and the executive summary would outline any unusual or interesting observations.

Jorge Hernández expressed support for a report that would isolate the performance of the different allocations of the fund, and asked whether there would be supplemental material added to the report outlining the withdrawals and contributions affecting the allocations.

Mr. Cuaron answered this was provided on the report titled "Schedule of Cash Transfers between Investment Accounts and/or Fund 072". There was a \$59K outflow, on top of the \$5M withdrawn from Black Rock, from LaSalle because the fund was being closed.

Chairman Fleming asked staff to continue providing the Board with the current reports as well as an executive summary and try adding the investment reports to the consent agenda. He also expressed interest in designing a report that would be more useful to the Board and easier for staff to prepare.

Mr. Larson stated he was willing to assist in designing the new report, and suggested he review a draft the executive summary with staff.

Mr. O'Hare asked to see a draft of the executive summary as well.

D. Articles for Board Member Education / Discussion

1. Letter from Callan to Clients: Identifying Asset Mix to Achieve Expected Rate of Return

E. Call to Audience – None heard.

F. Future Agenda Items

1. March 31, 2016 meeting – Investment Manger Visit –Fidelity

Chairman Fleming asked if Fidelity representatives would be attending the meeting scheduled for 3/31/2016.

Silvia Navarro explained 2 managers, Causeway and Fidelity, came in to the meeting on 3/26/2015 and asked whether the Board would like to see 2 managers or just Fidelity.

Service & Disability Retirements, End of Service Entrants for TSRS Board of Trustees Ratification

01/10/16 - 02/09/16 - February 2016

Name of Applicant	Department	Type	Effective Date	Date of Birth	Age	Credited Service	Member's Accumulated Contributions	AFC	Option	Pension**
Acuña, Vielito	Parks & Recreation	Normal	2/6/2016	8/9/1956	59.49	23.75	94,702.52	4,281.82	J&S 50%	2,184.09
Alegria, Jesus D	Transportation Department	Normal	2/6/2016	3/18/1949	66.88	27.47	339,171.32	9,198.80	Single Life	5,685.07
Anderson, Sandra F	City Courts	Normal	2/6/2016	8/22/1958	57.46	28.00	98,421.22	3,359.76	Single Life	2,116.29
Avelarde, Benny D	Parks & Recreation	Normal	2/6/2016	4/17/1949	66.80	19.74	72,694.75	2,461.59	J&S 50%	1,001.04
Barajas, Francisco	Parks & Recreation	Normal	2/6/2016	10/7/1958	57.33	28.26	133,044.42	4,835.97	J&S 100%	2,795.98
Barr, Lee P	Budget and Research	Normal	1/20/2016	7/4/1956	59.54	20.58	117,578.47	6,310.71	J&S 50%	2,767.54
Bejarano, George C	Environmental Services	Early Retirement	2/5/2016	6/16/1958	57.64	22.40	99,616.18	4,162.61	15 Year Term	2,011.20
Brinson, Ed L	Water Utility	Normal	2/5/2016	10/2/1958	57.34	24.43	110,449.69	4,599.44	J&S 75%	2,344.16
Brooks, Barbara J	Environmental Services	Normal	2/5/2016	7/14/1949	66.56	29.50	114,115.46	3,617.02	Single Life	2,400.51
Buford, Claudia J	Planning & Dev Services	Normal	2/6/2016	5/5/1948	67.75	18.46	56,358.31	3,606.22	J&S 100%	1,158.68
Byrd, Carol A	Housing & Comm Dev	Early Retirement	2/6/2016	1/24/1961	55.03	21.05	65,925.68	3,510.75	Single Life	1,271.54
Christopherson, Julie	Police Department	Normal	2/5/2016	6/20/1960	55.63	26.51	141,575.84	5,299.20	J&S 50%	3,036.28
Coak, Mathew A	General Services	Terminated	1/16/2016	8/12/1959	56.43	23.68	136,108.40	3,610.64	Single Life	1,924.10
Contreras, Crispin A	Parks & Recreation	Normal	1/30/2016	9/22/1961	54.36	30.04	119,779.59	3,434.29	J&S 100%	2,138.73
Coombs, Barry G	General Services	Normal	2/2/2016	6/18/1952	63.62	8.84	36,738.62	3,120.97	J&S 100%	553.56
Cotter, Diane T	City Courts	Normal	2/6/2016	6/16/1952	63.64	16.09	67,754.07	4,594.36	J&S 100%	1,615.47
Cuen, Sylvia A	Water Utility	Normal	1/23/2016	10/15/1953	62.27	15.41	40,430.08	3,431.16	Single Life	1,189.81
Deslauriers, Dennis A	Police Department	Normal	2/6/2016	10/28/1948	67.27	24.19	108,147.36	4,720.10	J&S 100%	2,358.42
Duarte, Jane E	Parks & Recreation	Normal	2/6/2016	7/4/1959	56.59	32.23	320,933.08	8,290.28	Single Life	6,011.76
Encinas, Maria V	Housing & Comm Dev	Normal	1/30/2016	2/1/1960	56.00	24.66	70,365.30	2,502.37	J&S 100%	1,283.01
Figueroa, Angel V	Transportation Department	Normal	2/6/2016	2/1/1954	62.01	17.66	47,243.83	3,312.00	J&S 100%	1,171.84
Fimbres, Mary L	Mayor and Council	Normal	2/6/2016	9/22/1954	61.37	22.52	122,144.53	5,613.27	J&S 50%	2,694.11
Gaston, James G	Procurement	Normal	2/6/2016	8/15/1949	66.48	8.31	49,184.50	4,445.06	Single Life	831.31
Gracia, Vickie L	Environmental Services	Normal	2/6/2016	10/5/1956	59.34	30.39	122,310.10	3,689.95	J&S 50%	2,342.61
Gradillas, Joseph Jr	Transportation Department	Normal	2/6/2016	11/16/1955	60.22	19.80	70,407.91	3,565.71	J&S 75%	1,426.75
Green, Sandra L	City Courts	Normal	2/6/2016	5/13/1962	53.73	28.64	124,742.38	3,879.18	J&S 50%	2,406.70
Hakala, David D	Parks & Recreation	Normal	2/6/2016	7/16/1954	61.56	23.37	85,710.06	4,080.84	J&S 75%	1,896.14
Hammond, Stephen C	Housing & Comm Dev	Normal	2/6/2016	8/10/1956	59.49	23.21	100,379.31	4,587.13	J&S 100%	2,145.60
Heredia, Joe R	Transportation Department	Normal	2/6/2016	6/12/1957	58.65	22.1	80,309.04	4,078.71	J&S 100%	1,816.93
Hernancez, Martin C	Transportation Department	Normal	2/6/2016	6/7/1953	62.66	11.27	28,335.13	3,281.06	Single Life	831.85
Hogrefe, Gordon R	General Services	Normal	2/6/2016	6/14/1964	51.64	28.38	187,592.98	5,619.98	J&S 100%	3,373.97
Howe, John M	Parks & Recreation	Normal	2/6/2016	1/31/1958	58.02	26.19	73,604.79	2,873.41	Single Life	1,693.37
Huerta, Michael L	Housing & Comm Dev	Normal	2/6/2016	9/15/1955	60.39	24.41	96,782.16	3,905.51	J&S 100%	1,861.89
Hughes, Russell E	City Public Defender	Normal	2/6/2016	9/24/1958	57.37	26.81	216,681.54	8,245.14	Single Life	4,974.24
Hughes, Thomas P	Finance	Normal	2/6/2016	10/11/1952	63.32	18.71	77,666.19	4,979.87	Single Life	2,096.69
Imhoff, Judith R	Housing & Comm Dev	Normal	2/2/2016	2/6/1953	62.99	11.84	37,824.94	4,100.14	Single Life	1,091.87
Jacobs, Claude K	Police Department	Normal	2/5/2016	1/19/1955	61.04	28.34	101,674.69	3,369.60	Single Life	2,148.51
Jung, Lynn A	Police Department	Normal	2/6/2016	8/12/1962	53.48	31.3	173,330.54	5,220.14	Single Life	3,676.60
Kalthoff, Kenneth L	Parks & Recreation	Normal	2/6/2016	6/3/1954	61.68	21.46	80,245.69	4,262.85	Single Life	2,058.65
Knoblauch, Steven R	Police Department	Normal	2/5/2016	1/2/1954	62.09	14.72	40,274.07	3,440.37	J&S 100%	1,054.71
Koltunovich, Linda D	Parks & Recreation	Normal	2/6/2016	3/18/1954	61.88	23.56	74,791.57	3,337.81	J&S 75%	1,661.64
Leahy, John F	Fire Department	Normal	2/6/2016	10/20/1951	64.29	9.22	65,650.98	5,428.58	J&S 100%	984.48
Lenon, Robert III	Water Utility	Normal	2/5/2016	10/31/1952	63.26	31.05	166,350.74	4,506.37	J&S 100%	2,593.57
Lewis, Ronald C	General Services	Normal	2/6/2016	4/10/1947	68.82	11.69	99,945.75	11,237.91	J&S 100%	2,524.93
Lopez, Frederick C	Parks & Recreation	Normal	2/6/2016	9/3/1957	58.43	31.81	135,077.54	3,808.13	J&S 75%	2,539.50
Lopez, Hector A	Housing & Comm Dev	Normal	2/6/2016	7/14/1953	62.56	23.89	97,953.00	4,709.53	Single Life	2,531.93
Lopez, Valerie K	Parks & Recreation	Normal	1/26/2016	6/30/1954	61.57	20.62	60,615.71	3,193.44	J&S 50%	1,362.18
Lucero, Peter	Environmental Services	Normal	2/6/2016	1/29/1955	61.02	36.43	211,745.93	4,710.72	J&S 100%	3,418.48

Service & Disability Retirements, End of Service Entrants for TSRS Board of Trustees Ratification

01/10/16 - 02/09/16 - February 2016

Name of Applicant	Department	Type	Effective Date	Date of Birth	Age	Credited Service	Member's Accumulated Contributions	AFC	Option	Pension**
Mariscal, Frank C	General Services	Normal	2/5/2016	4/14/1951	64.81	7.73	25,674.24	2,985.83	J&S 100%	448.45
Martinez, Jose L	Environmental Services	Normal	2/6/2016	9/3/1957	58.43	24.32	93,752.37	4,231.98	J&S 50%	2,087.18
Martinez, Mary A	Parks & Recreation	Normal	2/6/2016	9/16/1953	62.39	22.14	63,728.03	3,127.26	Single Life	1,558.04
Mcardle-Landers, Robin	Parks & Recreation	Normal	2/6/2016	8/13/1961	54.48	30.69	172,454.96	5,610.64	Single Life	3,873.14
Mckinley, Diana M	Environmental Services	Normal	2/6/2016	10/18/1957	58.30	22.47	60,271.04	3,102.36	Single Life	1,568.54
Meskan, James D	Water Utility	Normal	2/6/2016	8/17/1958	57.47	23.59	104,746.21	5,182.07	Single Life	2,750.17
Miley, Terence L	Water Utility	Normal	2/6/2016	5/15/1952	63.73	29.19	176,299.86	5,902.00	J&S 75%	3,517.82
Miller, Marcia L	Water Utility	Normal	2/6/2016	8/4/1959	56.51	28.03	105,676.83	3,528.41	10 Year Term	2,195.39
Mills, William F	City Attorney	Normal	2/6/2016	2/22/1953	62.96	33.2	401,652.34	9,319.10	J&S 100%	6,125.85
Monka, Pamela C	Transportation Department	Normal	2/6/2016	11/12/1961	54.23	26	118,153.15	5,541.39	J&S 50%	3,121.14
Monreal, Socorro V	Transportation Department	Normal	2/6/2016	10/31/1955	60.27	19.79	49,815.72	2,801.15	Single Life	1,247.14
Morgan, Stephen D	General Services	Normal	2/6/2016	7/30/1955	60.52	19.54	79,781.79	4,848.24	J&S 100%	1,856.62
Ochoa, Jose G	Transportation Department	Normal	2/6/2016	12/1/1957	58.18	34.19	153,356.05	3,747.47	J&S 50%	2,723.87
O'haver, Cynthia A	City Courts	Normal	2/6/2016	4/4/1953	62.84	21.58	86,444.11	5,975.62	J&S 50%	2,768.78
Olvera, Gloria J	Water Utility	Normal	2/6/2016	11/16/1947	68.22	26.09	101,631.40	4,181.37	J&S 75%	2,201.73
Pallanes, Abelardo O	Parks & Recreation	Normal	2/6/2016	12/19/1954	61.13	27.98	104,934.77	3,829.34	J&S 75%	2,216.03
Pallanes, Arnold	Water Utility	Normal	2/6/2016	8/20/1953	62.46	29.44	135,919.87	4,399.72	J&S 100%	2,594.19
Price, Paul P	Water Utility	Normal	1/30/2016	2/12/1952	63.97	12.1	32,576.85	3,564.46	Single Life	970.75
Quinn, Daniel W	Planning & Dev Services	Normal	2/6/2016	2/14/1952	63.98	15.51	51,664.37	4,923.15	J&S 50%	1,597.80
Quiroz, Jose M Jr	Transportation Department	Normal	1/30/2016	9/8/1955	60.39	20.86	69,826.25	2,981.33	Single Life	1,399.15
Rappeport, William R	City Public Defender	Normal	2/6/2016	9/3/1955	60.43	29.99	165,171.50	5,004.13	Single Life	3,377.03
Rico, David	Parks & Recreation	Normal	2/6/2016	10/17/1960	55.30	27.93	106,821.76	4,026.53	J&S 50%	2,417.22
Rico, Miriam	Environmental Services	Normal	2/6/2016	9/23/1958	57.37	25.22	87,696.07	3,253.77	J&S 50%	1,769.55
Rivera, David G	Planning & Dev Services	Normal	2/6/2016	2/13/1954	61.98	28.63	146,756.59	5,739.57	J&S 100%	3,235.25
Roads, Mary A	Parks & Recreation	Normal	1/30/2016	9/5/1958	57.40	30.93	107,711.40	3,747.47	J&S 50%	2,540.04
Rodriguez, Frank S	Water Utility	Normal	2/6/2016	6/3/1950	65.68	21.57	72,103.30	3,631.30	J&S 75%	1,621.66
Rodriguez, Guillermo	Environmental Services	Normal	2/5/2016	2/10/1950	65.99	8.25	20,848.15	2,136.68	J&S 75%	351.21
Ruiz, Margaret L	Housing & Comm Dev	Normal	2/6/2016	4/21/1955	60.79	19.24	60,157.40	3,438.59	Single Life	1,488.84
Salazar, Gerardo T	Transportation Department	Early Retirement	2/6/2016	11/13/1960	55.23	22.82	75,661.09	3,635.18	J&S 100%	1,512.93
Sanders, Jessie C	Transportation Department	Normal	2/6/2016	12/25/1948	67.11	27.61	379,460.07	8,842.62	J&S 75%	4,709.19
Sanders, Julie A	Parks & Recreation	Normal	2/6/2016	1/10/1956	60.07	22.07	77,986.75	4,116.72	Single Life	2,044.69
Santamarina, Laura A	Police Department	Normal	2/6/2016	1/16/1956	60.06	28.32	67,752.83	3,299.48	Single Life	2,102.26
St Paul, Michael P	Planning & Dev Services	Normal	2/6/2016	4/30/1950	65.77	15.25	48,242.20	3,786.87	Single Life	1,299.70
Stubbs, Ralph B III	General Services	Normal	2/6/2016	4/12/1959	56.82	31.68	127,250.63	3,981.94	Single Life	2,838.26
Tellez, Christina R	Housing & Comm Dev	Normal	2/6/2016	7/3/1963	52.59	28.47	152,056.74	7,179.97	J&S 100%	4,283.04
Thomas, Robin B	General Services	Normal	2/6/2016	8/23/1956	59.45	21.14	59,064.33	2,929.56	J&S 50%	1,310.19
Trillo-Saavedra, Diane	Water Utility	Normal	2/6/2016	12/28/1959	56.11	29.85	148,368.19	4,000.73	J&S 50%	2,606.19
Valenzuela, Francisco	Water Utility	Normal	2/6/2016	12/4/1962	53.17	29.37	136,483.22	4,098.08	J&S 100%	2,498.33
Viestenz, BJ	Planning & Dev Services	Normal	2/6/2016	3/22/1955	60.87	23.79	90,840.25	4,509.79	Single Life	2,413.60
Vogelsberg, James P	Planning & Dev Services	Normal	2/2/2016	12/12/1951	64.14	30.65	254,982.83	8,652.18	J&S 75%	5,414.93
Weber, Mary M	Parks & Recreation	Normal	2/6/2016	11/22/1949	66.21	40.65	420,484.75	9,819.57	J&S 100%	7,874.24
Williams, Robin E	Water Utility	Normal	2/6/2016	7/18/1956	59.55	27.71	112,190.04	3,968.11	10 Year Term	2,426.63
Woodrich, Dennis W	Human Resources	Normal	2/6/2016	10/18/1956	59.30	25.98	197,262.05	6,157.87	J&S 100%	3,123.07
Averages								411,888.25		212,954.03
								4,576.54		2,366.16

** Preliminary Estimate

Service & Disability Retirements, End of Service Entrants for TSRS Board of Trustees Ratification

01/10/16 - 02/09/16 - February 2016

Name of Applicant	Department	Type	Effective Date	Date of Birth	Age	Credited Service	Member's Accumulated Contributions	AFC	Option	Pension**
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Comparison of Monthly Pension Payments - Beginning of FY 2015 to Current Monthly Pension Payments

	Plan Year beginning 07/01/2015 (*from GRS annual valuation)	Monthly	Annual	January 2016 Pension Payroll		Annualized	Annual change since July 1, 2015	% change
	Service Pensions	2,305	5,007,097	60,085,166	2,341	5,099,204	61,190,449	1,105,283
Disability Pensions	160	174,259	2,091,109	152	168,287	2,019,443	(71,666)	-3.43%
Survivor Pensions	344	298,979	3,587,750	333	322,990	3,875,879	288,129	8.03%
	2,809	5,480,335	65,764,025	2,826	5,590,481	67,085,772	1,321,747	2.01%
				12 \$	21,829			
				(net) change from previous month				

S:\treasdiv\tsrs\retirement\facts&figures\F&F 15-16.xls

prior month

2,814 \$

5,568,652.30

Report ID : FIN-COT-BA-0001

Run Date : 02/19/2016

Run Time : 09:41 AM

City of Tucson
Budget vs Actual Expenses
Through: January, 2016
For Fiscal Year 2016

Parameter Page

Parameters and Prompts

Fiscal Year	2016
Accounting Period	7
Fund	072
Department	900
Unit	*
Object Code	*

Report Description

The Expenses vs. Actual Report shows expenditures and encumbrances for the selected accounting period and for the selected fiscal year compared against the current expense budget and the unobligated budget balance. The report is sectioned by Department, Fund and Unit and summarized by Object.

City of Tucson
Budget vs Actual Expenses
Through: January, 2016
For Fiscal Year 2016

Department 900 - TUCSON SUPPL RETIREMENT SYSTEM
Fund 072 - TUCSON SUPP RETIREMENT SYSTEM
Unit 9001 - Normal Retiree Benefit

Object	Current Period Encumbrance	Current Period Expenditure	Current Total Obligations	YTD Encumbrance	YTD Expenditure	YTD Total Obligations	Current Budgeted Amount	Unobligated Budget Balance	Percent
105 - PAYROLL PENSION	0.00	5,097,740.50	5,097,740.50	0.00	35,430,731.96	35,430,731.96	63,300,000	27,869,268.04	44.03 %
Total for 100 - PAYROLL CHGS	0.00	5,097,740.50	5,097,740.50	0.00	35,430,731.96	35,430,731.96	63,300,000	27,869,268.04	44.03 %
Total for Unit 9001 - Normal Retiree Benefit	0.00	5,097,740.50	5,097,740.50	0.00	35,430,731.96	35,430,731.96	63,300,000	27,869,268.04	44.03 %

**City of Tucson
Budget vs Actual Expenses
Through: January, 2016
For Fiscal Year 2016**

Department 900 - TUCSON SUPPL RETIREMENT SYSTEM
Fund 072 - TUCSON SUPP RETIREMENT SYSTEM
Unit 9003 - Normal Retiree Beneficiary Benefit

Object	Current Period Encumbrance	Current Period Expenditure	Current Total Obligations	YTD Encumbrance	YTD Expenditure	YTD Total Obligations	Current Budgeted Amount	Unobligated Budget Balance	Percent
105 - PAYROLL PENSION	0.00	291,729.58	291,729.58	0.00	2,030,441.81	2,030,441.81	3,100,000	1,069,558.19	34.50 %
Total for 100 - PAYROLL CHGS	0.00	291,729.58	291,729.58	0.00	2,030,441.81	2,030,441.81	3,100,000	1,069,558.19	34.50 %
Total for Unit 9003 - Normal Retiree Beneficiary Benefi	0.00	291,729.58	291,729.58	0.00	2,030,441.81	2,030,441.81	3,100,000	1,069,558.19	34.50 %

City of Tucson
Budget vs Actual Expenses
Through: January, 2016
For Fiscal Year 2016

Department 900 - TUCSON SUPPL RETIREMENT SYSTEM
Fund 072 - TUCSON SUPP RETIREMENT SYSTEM
Unit 9020 - Disability Retiree Benefit

Object	Current Period Encumbrance	Current Period Expenditure	Current Total Obligations	YTD Encumbrance	YTD Expenditure	YTD Total Obligations	Current Budgeted Amount	Unobligated Budget Balance	Percent
105 - PAYROLL PENSION	0.00	167,207.64	167,207.64	0.00	1,194,639.71	1,194,639.71	1,975,000	780,360.29	39.51 %
Total for 100 - PAYROLL CHGS	0.00	167,207.64	167,207.64	0.00	1,194,639.71	1,194,639.71	1,975,000	780,360.29	39.51 %
Total for Unit 9020 - Disability Retiree Benefit	0.00	167,207.64	167,207.64	0.00	1,194,639.71	1,194,639.71	1,975,000	780,360.29	39.51 %

**City of Tucson
Budget vs Actual Expenses
Through: January, 2016
For Fiscal Year 2016**

Department 900 - TUCSON SUPPL RETIREMENT SYSTEM
Fund 072 - TUCSON SUPP RETIREMENT SYSTEM
Unit 9021 - Pension Fund Administration

Object	Current Period Encumbrance	Current Period Expenditure	Current Total Obligations	YTD Encumbrance	YTD Expenditure	YTD Total Obligations	Current Budgeted Amount	Unobligated Budget Balance	Percent
101 - SALARIES & WAGES FOR PERMANENT EMPLOYEES	0.00	13,660.80	13,660.80	0.00	117,315.92	117,315.92	211,940	94,624.08	44.65 %
108 - DOWNTOWN ALLOWANCE & DISCOUNTED TRANSIT PASSES	0.00	69.24	69.24	0.00	590.20	590.20	1,160	569.80	49.12 %
113 - TSRS PENSION CONTRIBUTION	0.00	3,354.56	3,354.56	0.00	31,859.71	31,859.71	58,280	26,420.29	45.33 %
114 - FICA (SOCIAL SECURITY)	0.00	914.60	914.60	0.00	9,787.17	9,787.17	15,410	5,622.83	36.49 %
115 - WORKERS COMPENSATION INSURANCE	0.00	240.98	240.98	0.00	1,642.56	1,642.56	5,930	4,287.44	72.30 %
116 - GROUP PLAN INSURANCE	0.00	1,811.50	1,811.50	0.00	16,207.16	16,207.16	30,920	14,712.84	47.58 %
117 - STATE UNEMPLOYMENT	0.00	17.34	17.34	0.00	128.19	128.19	300	171.81	57.27 %
171 - SICK LEAVE PAID AT RETIREMENT	0.00	0.00	0.00	0.00	14,217.42	14,217.42	0	(14,217.42)	0.00%
196 - INTERDEPARTMENTAL LABOR	0.00	9,016.66	9,016.66	0.00	63,116.62	63,116.62	220,800	157,683.38	71.41 %
Total for 100 - PAYROLL CHGS	0.00	29,085.68	29,085.68	0.00	254,864.95	254,864.95	544,740	289,875.05	53.21 %
202 - TRAVEL	0.00	755.19	755.19	0.00	2,614.68	2,614.68	4,000	1,385.32	34.63 %
204 - TRAINING	0.00	0.00	0.00	0.00	165.00	165.00	14,000	13,835.00	98.82 %
205 - PARKING & SHUTTLE SERVICE	0.00	0.00	0.00	0.00	110.00	110.00	200	90.00	45.00 %
212 - CONSULTANTS AND SURVEYS	0.00	20.00	20.00	0.00	41,930.00	41,930.00	65,000	23,070.00	35.49 %
213 - LEGAL	0.00	2,500.00	2,500.00	0.00	19,942.00	19,942.00	50,000	30,058.00	60.12 %
215 - AUDITING AND BANK SERVICES	0.00	12,845.00	12,845.00	0.00	23,845.00	23,845.00	0	(23,845.00)	0.00%
219 - MISCELLANEOUS PROFESSIONAL SERVICES	0.00	864,308.35	864,308.35	0.00	1,521,792.65	1,521,792.65	4,059,500	2,537,707.35	62.51 %
221 - INSUR-PUBLIC LIABILITY	0.00	170.78	170.78	0.00	1,127.26	1,127.26	29,160	28,032.74	96.13 %

Run Date : 02/19/2016

Run Time : 09:41 AM

City of Tucson
Budget vs Actual Expenses
Through: January, 2016
For Fiscal Year 2016

Department 900 - TUCSON SUPPL RETIREMENT SYSTEM

Fund 072 - TUCSON SUPP RETIREMENT SYSTEM

Unit 9021 - Pension Fund Administration

Object	Current Period Encumbrance	Current Period Expenditure	Current Total Obligations	YTD Encumbrance	YTD Expenditure	YTD Total Obligations	Current Budgeted Amount	Unobligated Budget Balance	Percent
228 - HAZARDOUS WASTE INSURANCE	0.00	30.50	30.50	0.00	233.74	233.74	560	326.26	58.26 %
232 - R&M MACHINERY & EQUIPMENT	0.00	0.00	0.00	0.00	0.00	0.00	1,200	1,200.00	100.00 %
245 - TELEPHONE	0.00	420.00	420.00	0.00	1,260.00	1,260.00	1,200	(60.00)	-5.00 %
252 - RENTS EQUIPMENT	0.00	102.14	102.14	0.00	553.47	553.47	0	(553.47)	0.00%
260 - COMPUTER SOFTWARE MAINTENANCE AGREEMENTS	0.00	0.00	0.00	0.00	0.00	0.00	41,000	41,000.00	100.00 %
263 - PUBLIC RELATIONS	0.00	0.00	0.00	0.00	2,043.09	2,043.09	2,560	516.91	20.19 %
266 - ADVERTISING	0.00	0.00	0.00	0.00	411.50	411.50	0	(411.50)	0.00%
284 - MEMBERSHIPS AND SUBSCRIPTIONS	0.00	505.00	505.00	0.00	810.00	810.00	1,500	690.00	46.00 %
286 - MISC OUTSIDE SERVICES	0.00	61.92	61.92	0.00	61.92	61.92	0	(61.92)	0.00%
Total for 200 - PROF CHARGES	0.00	881,718.88	881,718.88	0.00	1,616,900.31	1,616,900.31	4,269,880	2,652,979.69	62.13 %
311 - OFFICE SUPPLIES	0.00	34.97	34.97	0.00	1,075.29	1,075.29	7,500	6,424.71	85.66 %
312 - PRINTING,PHOTOGRAPHY,REPRODUCTION	0.00	142.29	142.29	0.00	2,645.40	2,645.40	7,500	4,854.60	64.73 %
314 - POSTAGE	0.00	4.87	4.87	0.00	1,616.97	1,616.97	10,000	8,383.03	83.83 %
341 - BOOK, PERIODICALS AND RECORDS	0.00	0.00	0.00	0.00	0.00	0.00	250	250.00	100.00 %
345 - FURNISHINGS, EQUIPMENT AND TOOLS < \$5,000	0.00	0.00	0.00	0.00	0.00	0.00	1,000	1,000.00	100.00 %
346 - COMPUTER EQUIPMENT < \$5,000	0.00	0.00	0.00	0.00	0.00	0.00	1,000	1,000.00	100.00 %
Total for 300 - SUPPLIES	0.00	182.13	182.13	0.00	5,337.66	5,337.66	27,250	21,912.34	80.41 %
Total for Unit 9021 - Pension Fund Administration	0.00	910,986.69	910,986.69	0.00	1,877,102.92	1,877,102.92	4,841,870	2,964,767.08	61.23 %

City of Tucson
Budget vs Actual Expenses
Through: January, 2016
For Fiscal Year 2016

Department 900 - TUCSON SUPPL RETIREMENT SYSTEM
Fund 072 - TUCSON SUPP RETIREMENT SYSTEM
Unit 9021 - Pension Fund Administration

City of Tucson
Budget vs Actual Expenses
Through: January, 2016
For Fiscal Year 2016

Department 900 - TUCSON SUPPL RETIREMENT SYSTEM
Fund 072 - TUCSON SUPP RETIREMENT SYSTEM
Unit 9022 - Disability Retiree Beneficiary Benefit

Object	Current Period Encumbrance	Current Period Expenditure	Current Total Obligations	YTD Encumbrance	YTD Expenditure	YTD Total Obligations	Current Budgeted Amount	Unobligated Budget Balance	Percent
105 - PAYROLL PENSION	0.00	30,418.52	30,418.52	0.00	214,235.00	214,235.00	350,000	135,765.00	38.79 %
Total for 100 - PAYROLL CHGS	0.00	30,418.52	30,418.52	0.00	214,235.00	214,235.00	350,000	135,765.00	38.79 %
Total for Unit 9022 - Disability Retiree Beneficiary Ben	0.00	30,418.52	30,418.52	0.00	214,235.00	214,235.00	350,000	135,765.00	38.79 %

**City of Tucson
Budget vs Actual Expenses
Through: January, 2016
For Fiscal Year 2016**

Department 900 - TUCSON SUPPL RETIREMENT SYSTEM
Fund 072 - TUCSON SUPP RETIREMENT SYSTEM
Unit 9023 - ACTIVE MEMBER REFUNDS-CONTRBS

Object	Current Period Encumbrance	Current Period Expenditure	Current Total Obligations	YTD Encumbrance	YTD Expenditure	YTD Total Obligations	Current Budgeted Amount	Unobligated Budget Balance	Percent
105 - PAYROLL PENSION	0.00	744.57	744.57	0.00	2,978.28	2,978.28	0	(2,978.28)	0.00%
186 - TSRS REFUNDS	0.00	27,481.28	27,481.28	0.00	1,751,604.58	1,751,604.58	2,400,000	648,395.42	27.02 %
Total for 100 - PAYROLL CHGS	0.00	28,225.85	28,225.85	0.00	1,754,582.86	1,754,582.86	2,400,000	645,417.14	26.89 %
Total for Unit 9023 - ACTIVE MEMBER REFUNDS-CON	0.00	28,225.85	28,225.85	0.00	1,754,582.86	1,754,582.86	2,400,000	645,417.14	26.89 %

City of Tucson
Budget vs Actual Expenses
Through: January, 2016
For Fiscal Year 2016

Department 900 - TUCSON SUPPL RETIREMENT SYSTEM
Fund 072 - TUCSON SUPP RETIREMENT SYSTEM
Unit 9025 - INTEREST ON REFUNDS

Object	Current Period Encumbrance	Current Period Expenditure	Current Total Obligations	YTD Encumbrance	YTD Expenditure	YTD Total Obligations	Current Budgeted Amount	Unobligated Budget Balance	Percent
186 - TSRS REFUNDS	0.00	99.38	99.38	0.00	23,163.02	23,163.02	50,000	26,836.98	53.67 %
Total for 100 - PAYROLL CHGS	0.00	99.38	99.38	0.00	23,163.02	23,163.02	50,000	26,836.98	53.67 %
Total for Unit 9025 - INTEREST ON REFUNDS	0.00	99.38	99.38	0.00	23,163.02	23,163.02	50,000	26,836.98	53.67 %

City of Tucson
Budget vs Actual Expenses
Through: January, 2016
For Fiscal Year 2016

Department 900 - TUCSON SUPPL RETIREMENT SYSTEM
Fund 072 - TUCSON SUPP RETIREMENT SYSTEM
Unit 9026 - DWE SYSTEM BENEFIT PAYMENT

Object	Current Period Encumbrance	Current Period Expenditure	Current Total Obligations	YTD Encumbrance	YTD Expenditure	YTD Total Obligations	Current Budgeted Amount	Unobligated Budget Balance	Percent
186 - TSRS REFUNDS	0.00	0.00	0.00	0.00	61,918.40	61,918.40	200,000	138,081.60	69.04 %
Total for 100 - PAYROLL CHGS	0.00	0.00	0.00	0.00	61,918.40	61,918.40	200,000	138,081.60	69.04 %
Total for Unit 9026 - DWE SYSTEM BENEFIT PAYMENT	0.00	0.00	0.00	0.00	61,918.40	61,918.40	200,000	138,081.60	69.04 %

City of Tucson
Budget vs Actual Expenses
Through: January, 2016
For Fiscal Year 2016

Department 900 - TUCSON SUPPL RETIREMENT SYSTEM
Fund 072 - TUCSON SUPP RETIREMENT SYSTEM
Unit 9027 - CREDITABLE SERVICE TRANS(ASRS)

Object	Current Period Encumbrance	Current Period Expenditure	Current Total Obligations	YTD Encumbrance	YTD Expenditure	YTD Total Obligations	Current Budgeted Amount	Unobligated Budget Balance	Percent
186 - TSRS REFUNDS	0.00	0.00	0.00	0.00	(8,811.37)	(8,811.37)	0	8,811.37	0.00%
Total for 100 - PAYROLL CHGS	0.00	0.00	0.00	0.00	(8,811.37)	(8,811.37)	0	8,811.37	0.00%
Total for Unit 9027 - CREDITABLE SERVICE TRANS(A'	0.00	0.00	0.00	0.00	(8,811.37)	(8,811.37)	0	8,811.37	0.00%
Total for Fund 072 - TUCSON SUPP RETIREMENT SYS	0.00	6,526,408.16	6,526,408.16	0.00	42,578,004.31	42,578,004.31	76,216,870	33,638,865.69	44.14 %
Total for Department 900 - TUCSON SUPPL RETIREME	0.00	6,526,408.16	6,526,408.16	0.00	42,578,004.31	42,578,004.31	76,216,870	33,638,865.69	44.14 %
Grand Totals	0.00	6,526,408.16	6,526,408.16	0.00	42,578,004.31	42,578,004.31	76,216,870	33,638,865.69	44.14 %

December 31, 2015



Tucson Supplemental Retirement System

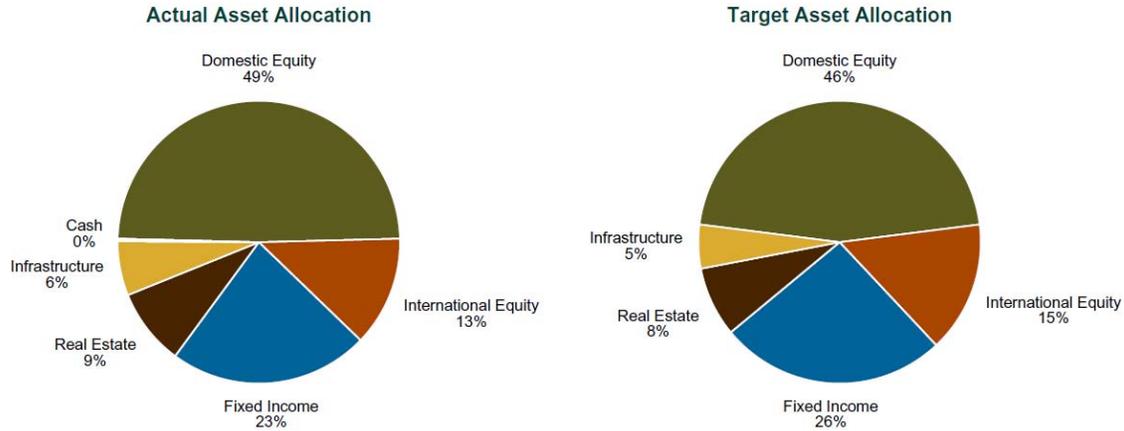
Investment Measurement Service
Quarterly Review

The following report was prepared by Callan Associates Inc. ("CAI") using information from sources that include the following: fund trustee(s); fund custodian(s); investment manager(s); CAI computer software; CAI investment manager and fund sponsor database; third party data vendors; and other outside sources as directed by the client. CAI assumes no responsibility for the accuracy or completeness of the information provided, or methodologies employed, by any information providers external to CAI. Reasonable care has been taken to assure the accuracy of the CAI database and computer software. Callan does not provide advice regarding, nor shall Callan be responsible for, the purchase, sale, hedge or holding of individual securities, including, without limitation securities of the client (i.e., company stock) or derivatives in the client's accounts. In preparing the following report, CAI has not reviewed the risks of individual security holdings or the conformity of individual security holdings with the client's investment policies and guidelines, nor has it assumed any responsibility to do so. Advice pertaining to the merits of individual securities and derivatives should be discussed with a third party securities expert. Copyright 2016 by Callan Associates Inc.

Tucson Supplemental Retirement System

Executive Summary for Period Ending December 31, 2015

Asset Allocation



Total Fund Performance

Returns for Periods Ended December 31, 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 years
Total Fund Gross	4.05%	1.71%	9.77%	8.90%	6.26%
Total Fund Net	3.95%	1.26%	9.28%	8.36%	5.72%
Total Fund Benchmark*	3.52%	1.08%	8.66%	8.10%	6.06%

Fiscal Year Returns

	2016	2015	2014	2013	2012
Total Fund Gross	-1.26%	4.63%	19.64%	14.84%	2.40%
Total Fund Net	-1.25%	4.17%	19.11%	14.21%	1.82%
Total Fund Benchmark*	-1.25%	4.34%	16.97%	12.87%	3.04%

* Current Quarter Target = 36.0% S&P 500 Index, 26.0% Barclays Aggregate Index, 15.0% MSCI ACWI x US (Net), 10.0% Russell 2500 Index, 8.0% NFI-ODCE Value Weight Gr and 5.0% CPI-W+4.0%.

Recent Developments

- On February 1, 2016, T. Rowe Price announced that U.S. Large Cap Growth Equity Portfolio Manager Rob Sharps will step down, effective December 31, 2016. Sharps has managed the strategy since inception in 2001. He is transitioning roles to become co-head of Global Equity with Chris Alderson, who is the current head of International Equity. Sharps is also joining the T. Rowe Price Management Committee. Taymour Tamaddon, portfolio manager of the Health Sciences Equity Strategy, will succeed Sharp's role as Portfolio Manager. Effective June 30, 2016, Tamaddon will transition to the U.S. Large Cap Growth Equity strategy team and will assume leadership of the strategy on January 1, 2017. Sharps will be responsible for all portfolio decisions on the strategy throughout 2016.

Organizational Issues

- Aberdeen Asset Management announced the departure of Chief Investment Officer Anne Richards in late 2015. She is joining M&G Investments, the UK and European asset management division of Prudential plc, as Chief Executive Officer. Richards' management responsibilities as Head of Solutions and Head of EMEA will be assumed by Global Head of Alternatives Andrew McCaffery and Deputy Chief Executive Andrew Laing, respectively. Richards joined Aberdeen in 2003 with the acquisition of Edinburgh Fund Managers and was appointed as CIO in 2011.

Active Manager Performance

Fund	Peer Group Ranking		
	Last Year	Last 3 Years	Last 5 Years
PIMCO Stocks Plus	56	43	17
T. Rowe Price Large Cap Growth	12	4	[8]
Champlain Mid Cap	13	21	25
Pyramis Small Cap	8	14	11
Causeway International Value Equity	75	48	24
Aberdeen EAFE Plus	99	99	[96]
PIMCO Fixed Income	73	75	16
J.P. Morgan Strategic Property Fund	35	15	22
JP Morgan Income and Growth Fund	69	52	10

** Brackets indicate actual performance linked with manager composite*

- Aberdeen EAFE Plus – Callan's Global Manager Research group maintains a positive view on Aberdeen's Non-U.S. strategy despite recent underperformance. Much of the recent slide has come from over exposures to Energy and Materials. We've questioned them on the "quality" of these exposures where they feel they're holding companies with the highest quality managements and reserves. Given the across-the-board selloffs in these sectors their quality bias has not protected them. We acknowledge that these exposures have become more "value" oriented. Aberdeen's performance is shown on pages 61 & 62.

Gordon Weightman, CFA
Vice President

Paul Erlendson
Senior Vice President

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Unwarranted Pessimism?

ECONOMY

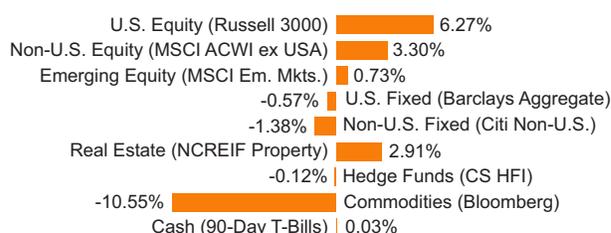
2 The global economy seemed to improve as 2015 unfolded, but market sentiment turned sharply negative as the year drew to a close. Moderate growth continued through the third and fourth quarters, particularly in the U.S., and GDP grew 2.4% for the year.

A Rocky Road to Revival

FUND SPONSOR

4 Despite preceding quarters marked with volatility, equities displayed a brief revival. Endowment/foundations and public funds performed well, ahead of other fund types. Corporate plans saw a small improvement in funded ratio over both the quarter and the year.

Broad Market Quarterly Returns



Sources: Barclays, Bloomberg, Citigroup, Credit Suisse Hedge Index, Merrill Lynch, MSCI, NCREIF, Russell Investment Group

Back in Black

U.S. EQUITY

6 With the strongest quarter of the year (+7.04%), the **S&P 500 Index** was able to finish 2015 in the black (+1.38%). All capitalization ranges advanced, though larger performed better for the second consecutive quarter (**Russell 1000 Index**: +6.50% and **Russell 2000 Index**: +3.59%).

Tech Takes Over

NON-U.S. EQUITY

9 Non-U.S. markets were propped by surging merger activity, robust tech sector gains, and stronger-than-expected corporate profits during the fourth quarter. Although the **MSCI Emerging Markets Index** (+0.73%) barely broke even, the developed **MSCI World ex USA Index** rose 3.91%.

Take It Easy

U.S. FIXED INCOME

12 Bond markets stuttered in the U.S. after the Federal Reserve announced a rate increase. The yield curve flattened and spreads were mixed. The **Barclays Aggregate Index** dropped 0.57%; the **Barclays Corporate High Yield Index** slumped 2.07%.

Slip 'n Slide

NON-U.S. FIXED INCOME

15 The U.S. dollar continued its appreciation as the benchmark's hedged equivalent returned 0.58% for the quarter and 1.55% for the year. The **Citi Non-U.S. World Government Bond Index** declined 1.38% for the quarter and 5.54% for the year.

A Straight but Bumpy Road

REAL ESTATE

17 The **NCREIF Property Index** advanced 2.91%. The quarter saw 210 asset trades, representing \$11.3 billion of transactional volume, comfortably ahead of the \$5.1 billion 10-year average and the prior 10-year peak of \$8.7 billion in the second quarter of 2007.

Level at 35,000 Feet

PRIVATE EQUITY

19 Decelerating from 2014's high-velocity market, most private equity measures were flat-to-down in 2015—albeit at relatively high absolute measures. While the first half of the year was strong, the second half showed a notable pullback.

Under Pressure

HEDGE FUNDS

20 Growing unease with economic change is evident in the capital markets. Commodity prices slid further, led by oil, as China struggled with its centrally planned shift to a consumer-driven economy.

Chasing the Market

DEFINED CONTRIBUTION

21 Almost three-fourths of the asset classes in the DC Index experienced net outflows in the third quarter. But for the first time in two years, stable value experienced net inflows.

Unwarranted Pessimism?

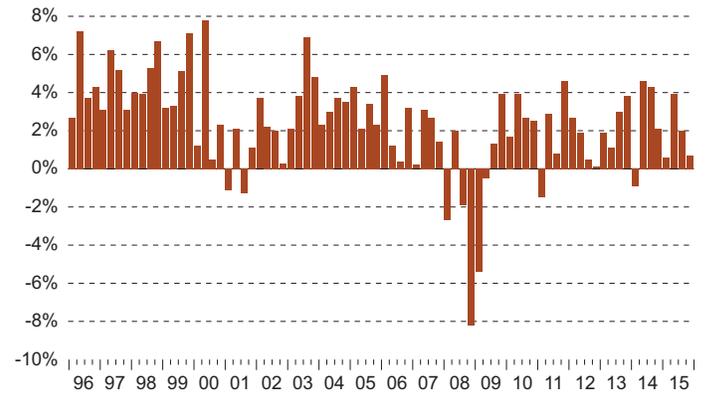
ECONOMY | Jay Kloepfer

The global economy seemed to improve as 2015 unfolded, but market sentiment turned sharply negative as the year drew to a close. Is this pessimism warranted? The data instead suggests that moderate growth continued through the third and fourth quarters, particularly in the U.S. After a slow start to the year, real GDP in the U.S. grew 3.9% in the second quarter and 2.0% in the third. GDP growth slowed to just 0.7% in the fourth quarter, pulled down by an inventory cycle, the plunge in energy-sector capital spending, and pain in the manufacturing sector and exports in general due to a strong dollar. Solid growth in consumer spending and housing provided enough of a sound foundation to fight these headwinds and keep the U.S. economy on a modest growth path. GDP grew 2.4% for the year, matching 2014. Growth in non-U.S. developed markets is relatively weak but continued to firm up; both Japan and Europe reported GDP growth of 1.6% in the third quarter.

Consumer spending in the U.S. has been supported by solid gains in the job market, real disposable income, and a recovery in housing asset values. December saw a gain of 292,000 jobs, the highest monthly gain in 2015. Payrolls climbed by 2.65 million over the year for an average of 221,000. Unemployment fell to 5.0% in October and held steady through December, as the labor force surged. With the Fed focused on unemployment and the labor force, the December jobs report certainly supported the Fed's decision to raise interest rates. As the year drew to a close, the outlook for consumers was positive, and will likely remain so. The University of Michigan's Index of Consumer Confidence slipped from a reading of 98 at the start of 2015 to 87 in the third quarter when global equity markets were roiled by China, but confidence surged back to a reading of 93 through the last three months of the year. For reference, a reading above 80 suggests a positive outlook by consumers. Real disposable (after-tax) income grew an estimated 3.6% in 2015, fueling a 2.2% rise in consumption spending. Auto sales surged to 17.4 million units in 2015, up from 16.4 million in 2014 and 14.4 million in 2012. Pent-up demand may finally be close to satisfied.

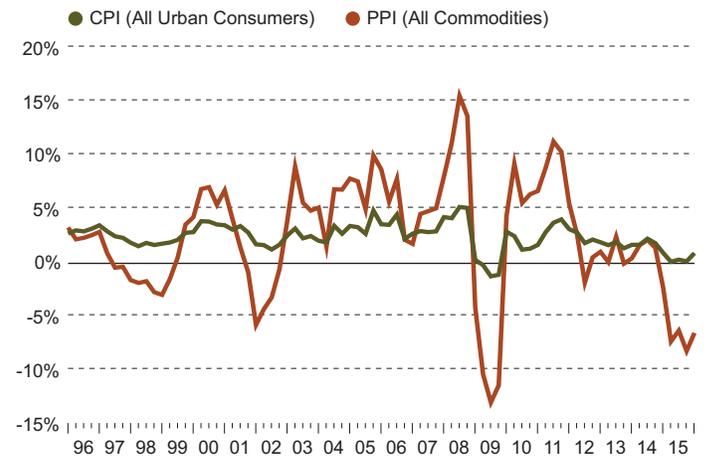
Quarterly Real GDP Growth

(20 Years)



Source: Bureau of Economic Analysis

Inflation Year-Over-Year



Source: Bureau of Labor Statistics

Consumers clearly benefitted from falling energy prices. Lower gasoline prices provide an effective boost to disposable income. Oil peaked at \$135 per barrel in July 2008, started 2015 at \$52, and closed the year at \$38 (the Brent crude spot price). The impact of energy on the measure of inflation is significant. U.S. Core CPI, which excludes energy and food, stood at 2.25% for December (measured year-over-year). Headline CPI, which includes energy, held near zero for most of the

year. Once energy prices stabilize, we expect they will cease to have the same disinflationary impact and will begin to add volatility to headline CPI. Similar forces are affecting Europe, where headline inflation is also close to zero; much of peripheral Europe is mired in deflation.

The rise in the value of the dollar has complicated the measure of price inflation for consumers. Versus a trade-weighted basket of major currencies, the dollar was up approximately 10% over the course of 2015. Prices of imports fell for consumers, adding to disinflationary pressures. On the other hand, exports become more expensive, and U.S. manufacturing has clearly suffered from the dollar's upward move. The ISM Index for manufacturing fell to 48.2 in December, its lowest level since June 2009. A reading below 50 suggests contraction in activity. Adding to the pressure on manufacturing from a strong dollar, inventories were built earlier in 2015 and in 2014 in anticipation of stronger global growth, and these inventories are now being worked down, further reducing the need for manufacturing output. The ISM Index for non-manufacturing remained above 50, with a reading of 55.3 in December, but this is the lowest level in almost two years.

On balance, the economic data show modest growth continuing in the U.S., although the rate is substantially below that of previous recoveries. GDP growth has averaged close to 2.2% since 2010, compared to the 3% or higher achieved in the past.

The Long-Term View

Index	2015 4th Qtr	Periods ended December 31, 2015			
		Year	5 Yrs	10 Yrs	25 Yrs
U.S. Equity					
Russell 3000	6.27	0.48	12.18	7.35	10.03
S&P 500	7.04	1.38	12.57	7.31	9.82
Russell 2000	3.59	-4.41	9.19	6.80	10.50
Non-U.S. Equity					
MSCI EAFE	4.71	-0.81	3.60	3.03	5.40
MSCI Emerging Markets	0.73	-14.60	-4.47	3.95	8.63
S&P ex-U.S. Small Cap	5.21	5.92	5.51	5.33	6.80
Fixed Income					
Barclays Aggregate	-0.57	0.55	3.25	4.51	6.15
90-Day T-Bill	0.03	0.05	0.07	1.24	2.93
Barclays Long G/C	-0.94	-3.30	6.98	6.45	8.08
Citi Non-U.S. Govt	-1.38	-5.54	-1.30	3.05	5.37
Real Estate					
NCREIF Property	2.91	13.33	12.18	7.76	8.05
FTSE NAREIT Equity	7.26	3.20	11.96	7.41	12.13
Alternatives					
CS Hedge Fund	-0.12	-0.71	3.55	4.97	-
Cambridge PE*	-	11.38	16.03	12.65	15.73
Bloomberg Commodity	-10.52	-24.66	-13.47	-6.43	-
Gold Spot Price	-4.93	-10.46	-5.70	7.41	4.02
Inflation – CPI-U	-0.60	0.73	1.53	1.86	2.30

*Private equity data is time-weighted return for periods ended June 30, 2015.

Sources: Barclays, Bloomberg, Citigroup, Credit Suisse, FTSE, MSCI, NCREIF, Russell Investment Group, Standard & Poor's, Thomson/Cambridge, Bureau of Economic Analysis.

Recent Quarterly Indicators

Economic Indicators	4Q15	3Q15	2Q15	1Q15	4Q14	3Q14	2Q14	1Q14
Employment Cost–Total Compensation Growth	2.0%	2.0%	2.0%	2.6%	2.2%	2.2%	2.0%	1.8%
Nonfarm Business–Productivity Growth	-0.5%*	2.2%	3.5%	-1.1%	-2.2%	3.1%	2.8%	-3.5%
GDP Growth	0.7%	2.0%	3.9%	0.6%	2.1%	4.3%	4.6%	-0.9%
Manufacturing Capacity Utilization	76.1%	76.3%	75.9%	75.9%	76.2%	75.7%	75.1%	74.2%
Consumer Sentiment Index (1966=100)	91.3	90.8	94.2	95.5	89.8	83.0	82.8	80.9

*Estimate.

Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, IHS Economics, Reuters/University of Michigan.

A Rocky Road to Revival

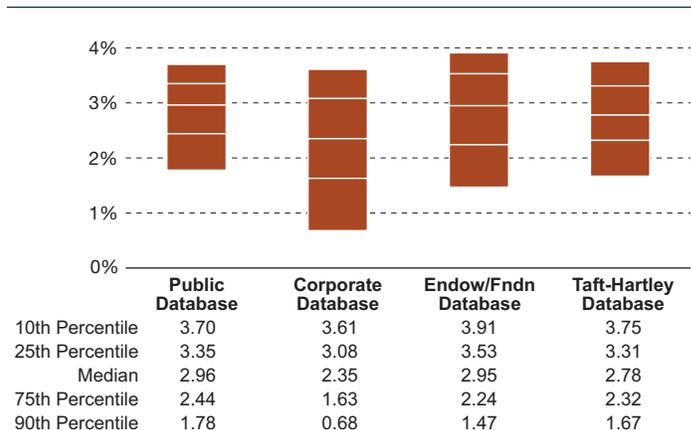
FUND SPONSOR | Rufash Lama

Despite preceding quarters marked with volatility, global equities displayed a brief revival, particularly in October. Central banks in Japan and Europe affirmed their decision to increase accommodative policies to support their respective economies. For the quarter, U.S. equity markets edged ahead of non-U.S. (**Russell 3000 Index: +6.27%, MSCI EAFE Index: +4.71%**) while both U.S. and non-U.S. fixed income markets retreated (**Barclays Aggregate Index: -0.57%, Citi Non-U.S. World Government Bond Index: -1.38%**).

Performance varied, albeit marginally, for the different fund types. Endowment/foundations and public funds performed well, leading across all percentiles. Corporate plans, although positive, trailed the other plan types. We have observed a continued divergence between different asset owners as corporate plans seek to de-risk. While performance dispersion was modest, in the 90th percentile public plans surpassed corporate plans by 1.10%.

Following December's interest rate hike, bond strategies saw substantial outflows on concerns about high-yield issuers, to the dismay of corporate plans. Corporate plans saw a small improvement in funded ratio over both the last quarter and the year. The median and average funded status of U.S. corporate defined

Callan Fund Sponsor Returns for the Quarter



Source: Callan

benefit plans were 82.7% and 83.0%, respectively, based on a peer group* of seven different funded ratio measures. Over the year, liabilities fell as interest rates rose, while asset returns in both equity and fixed income were flat.

Endowment/foundations performed well due to an overweight to U.S. stocks and relatively low exposure to U.S. fixed income. Despite trailing in the 10- and 15-year periods, Taft Hartley plans have performed best in the three- and five-year periods primarily due to their relatively high exposure to real estate and low exposure to non-U.S. equities.

Callan Database Median and Index Returns** for Periods ended December 31, 2015

Fund Sponsor	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Public Database	2.96	0.33	7.50	6.99	5.78	5.64
Corporate Database	2.35	-0.97	6.33	6.95	5.89	5.64
Endowments/Foundations Database	2.95	-0.75	6.58	6.21	5.55	5.46
Taft-Hartley Database	2.78	1.15	8.02	7.31	5.51	5.38
Diversified Manager	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Asset Allocator Style	3.04	-1.07	7.85	7.45	6.15	5.92
U.S. Balanced Database	2.98	-0.89	7.34	6.71	5.76	5.70
Global Balanced Database	1.67	-1.88	4.65	5.07	5.25	6.73
60% Russell 3000 + 40% Barclays Agg	3.53	0.66	9.40	8.82	6.65	5.70
60% MSCI World + 40% Barclays Gbl Agg	2.93	-1.61	5.05	5.02	4.76	4.62

* The peer group includes funded ratio measures provided by large, institutional investment and actuarial consultants, as well as investment management firms.

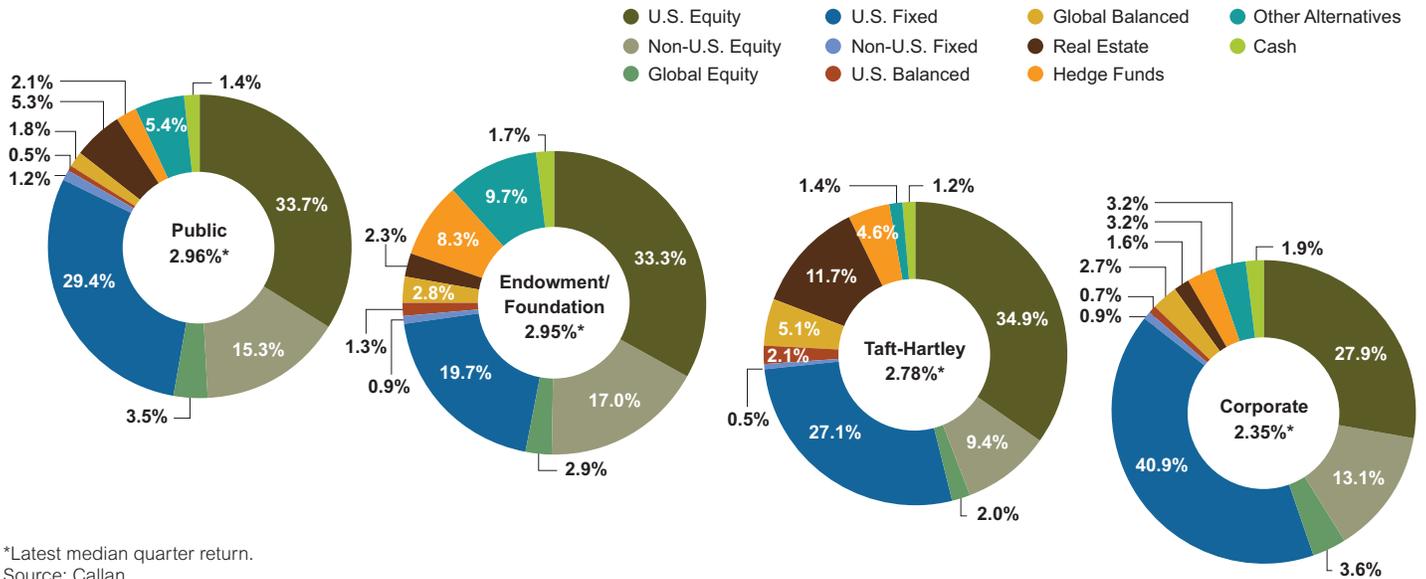
**Returns less than one year are not annualized.

Sources: Callan, Barclays, MSCI, Russell Investment Group.

As of the most recent quarter, all fund types have displayed performance within a 5–6% range over longer time frames. A U.S.-focused benchmark of 60% Russell 3000 + 40% Barclays Aggregate (+3.53%) now outperforms the broader, 60% MSCI

World + 40% Barclays Global Aggregate (+2.93%) benchmark over multiple time periods. Callan’s U.S. Balanced Database group has outperformed the Global Balanced Database group in all periods except 15 years.

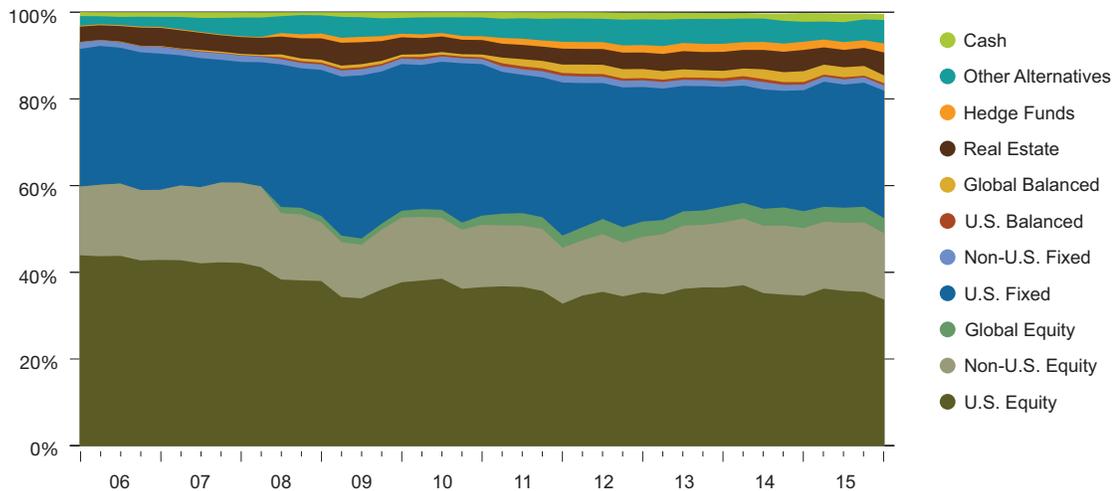
Callan Fund Sponsor Average Asset Allocation



*Latest median quarter return. Source: Callan

Callan Public Fund Database Average Asset Allocation

(10 Years)



Source: Callan

Back in Black

U.S. EQUITY | Lauren Mathias, CFA

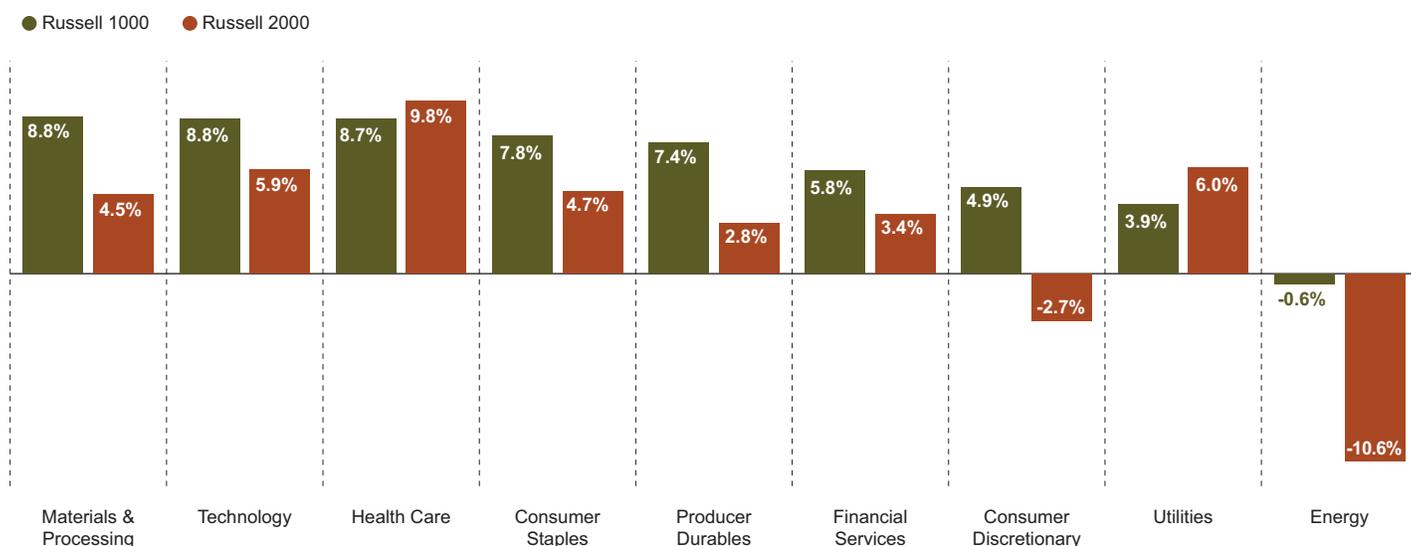
Although the fourth quarter was the strongest of the year, the journey was volatile. October proved to be a welcome turnaround after a stumbling third quarter as U.S. indices landed one of their strongest single months since the financial crisis (**S&P 500 Index: +8.44%** in October). Yet a slowing Chinese economy, other weak emerging markets, commodity price declines, and the strength of the U.S. dollar led to a middling November and disappointing December. Despite this, the U.S. Federal Reserve deemed the U.S. economy to be in a strong enough position for a rate increase, citing improved labor market conditions and subdued inflation. The price of oil continued to decline, and consumer confidence remained above average and provided a small tailwind to the market.

Growth continued to build its lead on value in the fourth quarter (**Russell 1000 Growth Index: +7.32%** and **Russell 1000 Value Index: +5.64%**); over the year the difference was profound

(+5.67% vs. -3.83%, respectively). All U.S. equity indices posted positive results, but larger proved better (**Russell Midcap Index: +3.62%**, **Russell 2000 Index: +3.59%**, and **Russell Microcap Index: +3.74%**). The **Russell Top 50 Index** led the way gaining 9.34%.

Large cap sectors continued their strong performance, led by Materials & Processing, Technology, and Health Care. In small cap, Energy trailed significantly, Health Care produced the strongest positive result, and only Consumer Discretionary showed a strong directional difference. Commodity price declines and slow global growth were major factors behind Energy's stumble. Biotech companies led small cap Health Care. Active managers struggled again in such a narrow market, especially in large cap where the S&P 500 Index total annual return (with dividends) would have been negative without three stocks: Amazon, Microsoft, and GE. Investors

Economic Sector Quarterly Performance



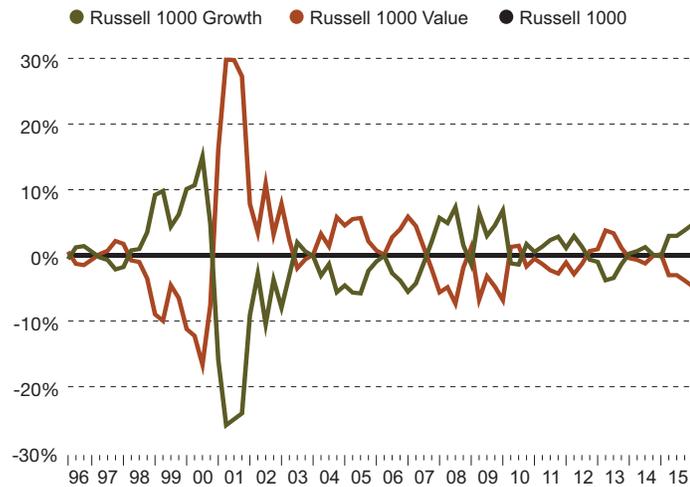
Source: Russell Investment Group

Note: As of the fourth quarter of 2015, the Capital Markets Review reports sector-specific return using the Russell Global Sectors (RGS) classification system rather than the Global Industry Classification Standard (GICS) system. RGS uses a three-tier classification system containing nine sectors; GICS uses a four-tier system containing ten sectors.

preferred the safety of these and other large-cap companies. Equity volatility as measured by the VIX increased during the quarter but ended the year below average. Assets continued to flow into passive funds and ETFs, further challenging active managers.

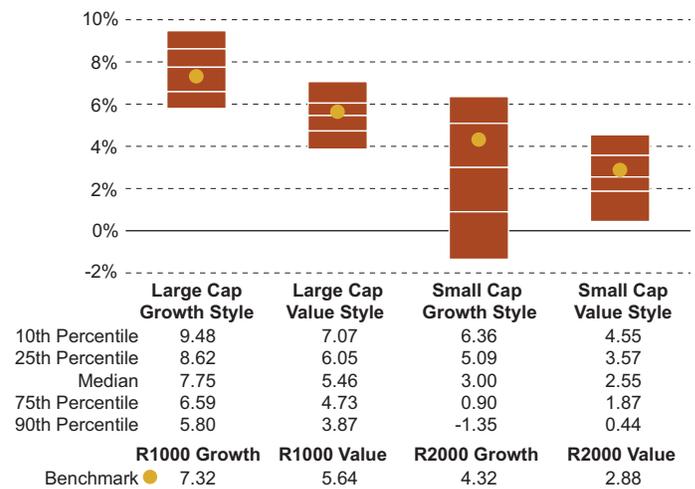
The U.S. equity market was generous in the fourth quarter, but for the full year four stocks were down for every three that rose (in the S&P 500). Despite this, broad market valuations remain above average, leading to questionable prospects as we enter 2016.

Rolling One-Year Relative Returns (vs. Russell 1000)



Source: Russell Investment Group

Callan Style Group Quarterly Returns



Sources: Callan, Russell Investment Group

U.S. Equity Index Characteristics as of December 31, 2015

	S&P 500	Rus 3000	Rus 1000	Rus Midcap	Rus 2500	Rus 2000
Cap Range Min (\$mm)	1,360	2	149	149	2	2
Cap Range Max (\$bn)	586.86	606.41	606.41	28.85	12.06	6.42
Number of Issues	504	2,968	1,018	818	2,460	1,988
% of Russell 3000	81%	100%	92%	27%	17%	8%
Wtd Avg Mkt Cap (\$bn)	128.44	106.38	115.12	12.09	4.06	1.88
Price/Book Ratio	2.7	2.6	2.6	2.3	2.0	1.9
Forward P/E Ratio	16.3	16.7	16.5	17.9	18.1	18.8
Dividend Yield	2.2%	2.1%	2.1%	1.9%	1.7%	1.6%
5-Yr Earnings (forecasted)	10.3%	10.9%	10.7%	10.9%	12.1%	13.2%

Sources: Russell Investment Group, Standard & Poor's.

U.S. EQUITY (Continued)

Callan Style Median and Index Returns* for Periods ended December 31, 2015

Large Cap Equity	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Large Cap Core Style	6.59	1.38	15.48	12.59	7.76	5.77
Large Cap Growth Style	7.75	6.43	17.03	13.23	8.65	4.82
Large Cap Value Style	5.46	-2.56	13.76	11.70	7.01	6.84
Aggressive Growth Style	5.12	5.53	16.47	11.59	8.71	5.30
Contrarian Style	4.90	-4.29	13.05	11.00	6.91	7.33
Yield-Oriented Style	5.78	-2.99	11.91	10.91	7.32	7.12
Russell 3000	6.27	0.48	14.74	12.18	7.35	5.39
Russell 1000	6.50	0.92	15.01	12.44	7.40	5.25
Russell 1000 Growth	7.32	5.67	16.83	13.53	8.53	4.33
Russell 1000 Value	5.64	-3.83	13.08	11.27	6.16	5.86
S&P Composite 1500	6.59	1.01	14.84	12.35	7.39	5.39
S&P 500	7.04	1.38	15.13	12.57	7.31	5.00
NYSE	4.11	-4.09	9.14	9.39	6.25	5.55
Dow Jones Industrials	7.70	0.21	12.66	11.30	7.75	5.80
Mid Cap Equity	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Mid Cap Core Style	3.61	0.15	15.13	12.33	8.31	9.28
Mid Cap Growth Style	3.04	0.28	14.04	11.02	8.69	6.88
Mid Cap Value Style	3.23	-2.95	13.46	11.02	8.46	10.13
Russell Midcap	3.62	-2.44	14.18	11.44	8.00	8.15
S&P MidCap 400	2.60	-2.18	12.76	10.68	8.18	8.32
Small Cap Equity	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Small Cap Core Style	3.23	-1.80	13.86	11.38	8.04	9.88
Small Cap Growth Style	3.00	-1.29	14.29	11.06	8.36	7.10
Small Cap Value Style	2.55	-3.82	12.43	10.30	7.87	10.68
Russell 2000	3.59	-4.41	11.65	9.19	6.80	7.28
S&P SmallCap 600	3.72	-1.97	13.57	11.48	8.00	8.92
NASDAQ	8.71	6.96	19.80	14.97	9.72	5.75
Smid Cap Equity	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Smid Cap Broad Style	2.86	-0.99	13.35	11.31	8.66	9.41
Smid Cap Growth Style	2.86	-0.37	13.99	11.70	8.61	8.03
Smid Cap Value Style	2.00	-3.85	11.96	9.99	8.13	10.42
Russell 2500	3.28	-2.90	12.46	10.32	7.56	8.08
S&P 1000	2.93	-2.11	13.02	10.92	8.11	8.48
Russell 3000 Sectors	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Consumer Discretionary	4.28	4.95	17.50	16.16	10.00	—
Consumer Staples	7.72	7.96	17.46	15.28	11.93	—
Energy	-0.93	-23.11	-4.56	-1.47	2.98	—
Financial Services	5.58	0.68	15.58	11.48	1.53	—
Health Care	8.81	7.14	24.32	20.51	11.22	—
Materials & Processing	8.32	-8.52	6.34	5.74	6.15	—
Producer Durables	6.99	-3.45	14.27	11.11	6.76	—
Technology	8.57	4.04	16.86	12.29	9.46	—
Utilities	4.06	-1.74	9.66	9.81	7.27	—

*Returns less than one year are not annualized.

Sources: Callan, Dow Jones & Company, Russell Investment Group, Standard & Poor's, The NASDAQ Stock Market.

Tech Takes Over

NON-U.S. EQUITY | Irina Sushch

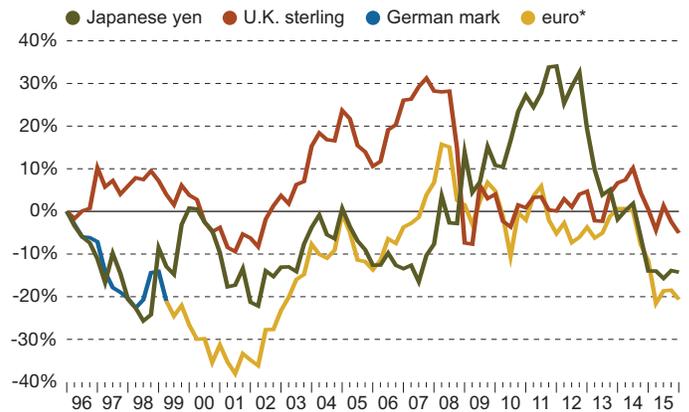
Surging merger activity, robust tech sector gains, and stronger-than-expected corporate profits drove a positive fourth quarter for non-U.S. markets (**MSCI ACWI ex USA Index**: +3.30%). Total global M&A volume in 2015 surpassed \$4.3 trillion, breaking the previous record set in 2007. Companies were persuaded to sign deals by the availability of cheap debt and the desire to stay competitive and efficient in a slow-growth environment. The strengthening dollar boosted returns of international export-oriented companies.

As in the U.S., growth (**MSCI ACWI ex USA Growth**: +5.04%) fared better than value (**MSCI ACWI ex USA Value**: +1.50%). **The MSCI Emerging Markets Index** (+0.73%) delivered paltry returns in comparison to its developed-market counterpart the **MSCI World ex USA Index** (+3.91%). Small cap outpaced large cap once again due to fewer Energy holdings (**MSCI ACWI ex USA Small Cap Index**: +5.28%). Among sectors, Information Technology (+8.40%) was the darling, while Industrials (+4.67%) and Consumer Discretionary (+4.59%) helped with high M&A activity. Energy (-0.43%) and Materials (+0.36%) have now lagged for two straight quarters. Crude oil ended the year below \$40 per barrel, down 17.85% for the quarter, due to unrelenting excess supply over global demand.

European stocks were up for the first two months of the quarter due to investor expectations of amplified European Central Bank (ECB) stimulus measures. Investors were disappointed in December when the central bank cut its deposit rate by only 0.10%, and extended the existing bond-buying program by six months. Returns faltered, yet the **MSCI Europe Index** ended the quarter up 2.49%.

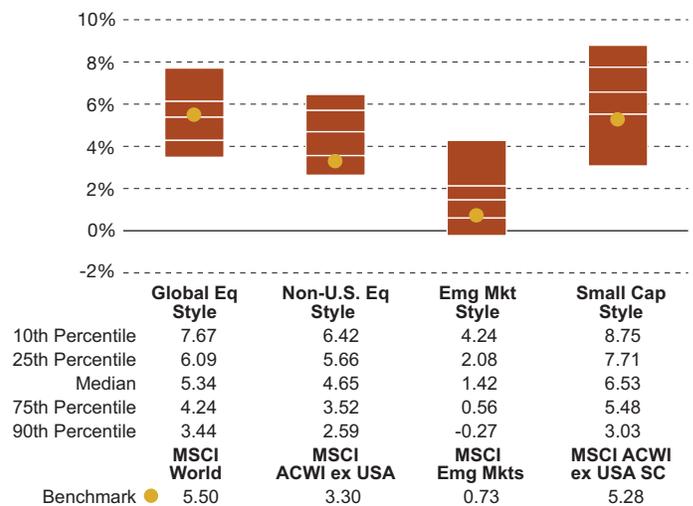
Japanese stocks closed the year on a high note (**MSCI Japan**: +9.34%; YTD: +9.57%). The weak yen boosted automobile companies, and health care companies fared well due to robust drug pipelines. The country also completed the largest state asset sale since 1987 with the privatization of Japan Post Holdings, accompanied by ramped up stimulus measures. The

Major Currencies' Cumulative Returns (vs. U.S. Dollar)



*euro returns from 1Q99
Source: MSCI

Callan Style Group Quarterly Returns



Sources: Callan, MSCI

remainder of Southeast Asia and the Pacific also enjoyed gains (**MSCI Pacific ex Japan Index**: +8.29%). New Zealand led the pack, up 18.15%, due to increased tourism and the positive impact of Industrials and Materials. Australia thrived (+9.96%) on a strong financial sector; the largest Aussie banks raised home-loan rates.

NON-U.S. EQUITY (Continued)

Emerging market countries produced a spectrum of returns, but collectively closed slightly ahead (+0.73%). Information Technology (+6.46%) buoyed returns. Insecurities about U.S. monetary policy were assuaged by the U.S. Federal Reserve raising rates. China (+4.03%) was more even-tempered than last quarter. Its central bank cut interest rates once again, part of an ongoing stream of stimulus measures to fuel consumption. China's currency, the renminbi, will join the dollar, euro, pound, and yen in the International Monetary Fund's basket of reserve currencies later in 2016. The rest of emerging Asia also had a positive quarter (**MSCI Emerging Markets Asia Index**: +3.53%). Indonesia gained 20.87%, with significant advances in all sectors, thanks to progressive policies and reforms pursued by the government.

On the negative end, Greece's financial woes continued (-18.99%). Russian stocks declined 3.99% as the economy deteriorated further. Emerging Europe sank 5.13%. The Middle East did not fare well amid ongoing political turbulence and declining

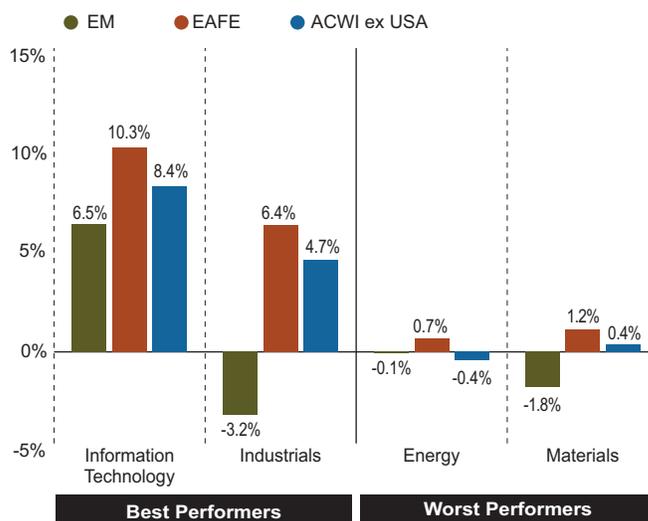
oil prices. South Africa plummeted 10.51% with losses in the financials sector and ongoing political instability. Latin America (-2.61%) had another miserable quarter. Brazil dropped 3.16%, and its debt rating was cut to below investment grade.

Quarterly Return Attribution for EAFE (U.S. Dollar)

Country	Total	Local	Currency	Wtg
Australia	9.96%	6.13%	3.60%	6.84%
Austria	6.85%	9.80%	-2.68%	0.18%
Belgium	13.64%	16.77%	-2.68%	1.43%
Denmark	6.69%	9.67%	-2.72%	1.90%
Finland	9.64%	12.67%	-2.68%	0.90%
France	1.67%	4.47%	-2.68%	9.74%
Germany	7.70%	10.67%	-2.68%	9.10%
Hong Kong	6.01%	6.01%	0.00%	3.09%
Ireland	6.99%	9.94%	-2.68%	0.40%
Israel	8.91%	7.90%	0.87%	0.76%
Italy	-2.32%	0.38%	-2.68%	2.36%
Japan	9.34%	9.83%	-0.44%	23.44%
Netherlands	3.14%	6.11%	-2.68%	2.88%
New Zealand	18.15%	10.40%	7.02%	0.16%
Norway	-0.52%	3.22%	-3.63%	0.55%
Portugal	4.23%	7.11%	-2.68%	0.15%
Singapore	4.24%	4.01%	0.23%	1.25%
Spain	-2.55%	0.14%	-2.68%	3.18%
Sweden	2.43%	2.96%	-0.52%	2.87%
Switzerland	2.04%	4.54%	-2.39%	9.41%
U.K.	0.73%	3.52%	-2.70%	19.39%

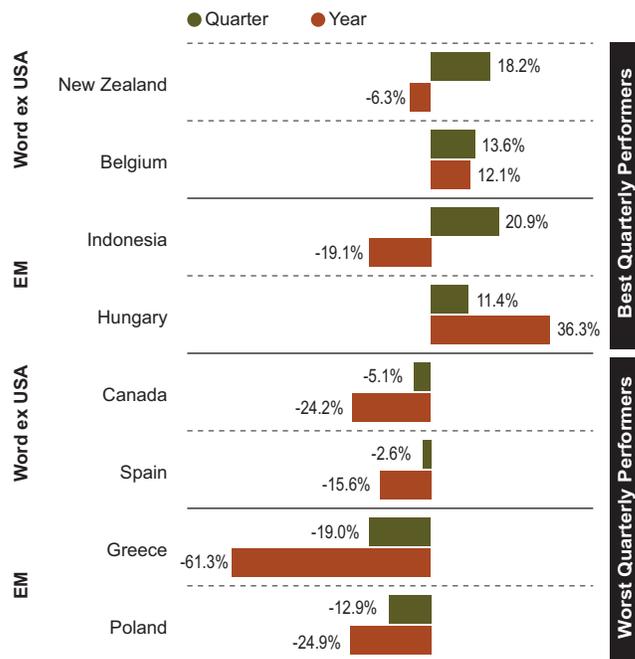
Sources: MSCI, Russell Investment Group, Standard & Poor's.

Quarterly Returns: Strong and Struggling Sectors



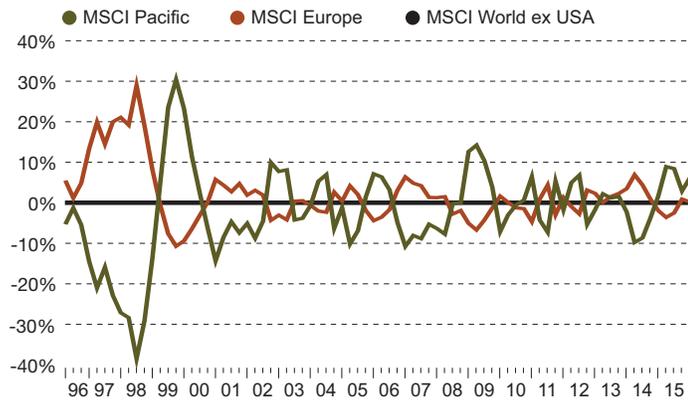
Source: MSCI

Quarterly and Annual Country Performance Snapshot



Source: MSCI

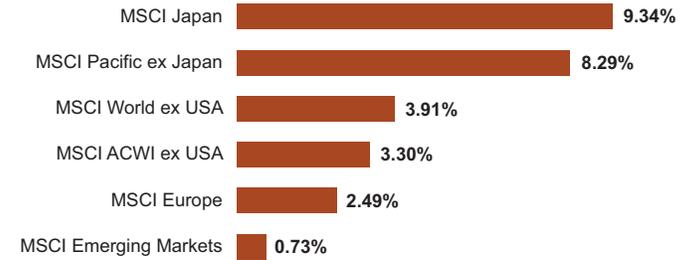
Rolling One-year Relative Returns (vs. MSCI World ex USA)



Source: MSCI

Regional Quarterly Performance

(U.S. Dollar)



Source: MSCI

Style Median and Index Returns* for Periods ended December 31, 2015

Non-U.S. Equity	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Non-U.S. Equity Style	4.65	0.62	5.82	4.70	4.24	5.42
MSCI EAFE	4.71	-0.81	5.01	3.60	3.03	3.54
MSCI EAFE (local)	6.34	5.33	12.30	7.85	3.22	2.67
MSCI ACWI ex USA	3.30	-5.25	1.94	1.51	3.38	4.46
MSCI ACWI ex USA Growth	5.04	-0.91	3.90	2.48	4.02	3.96
MSCI ACWI ex USA Value	1.50	-9.59	-0.08	0.49	2.68	4.87
Global Equity	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Global Equity Style	5.34	0.11	10.20	8.13	6.09	5.49
MSCI World	5.50	-0.87	9.63	7.59	4.98	4.04
MSCI World (local)	6.22	2.08	13.04	9.58	4.95	3.60
MSCI ACWI	5.15	-1.84	8.26	6.66	5.31	4.67
Regional Equity	Quarter	Year	3 Years	5 Years	10 Years	15 Years
MSCI Europe	2.49	-2.84	4.51	3.88	3.36	3.47
MSCI Europe (local)	5.17	4.91	10.10	6.94	3.94	2.56
MSCI Japan	9.34	9.57	10.17	4.38	0.91	2.12
MSCI Japan (local)	9.83	9.93	22.99	12.95	1.10	2.48
MSCI Pacific ex Japan	8.29	-8.47	-1.32	0.87	6.07	8.15
MSCI Pacific ex Japan (local)	5.90	-0.98	6.80	5.38	5.74	6.46
Emerging/Frontier Markets	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Emerging Market Style	1.42	-13.68	-4.91	-3.46	4.79	10.13
MSCI Emerging Markets	0.73	-14.60	-6.42	-4.47	3.95	8.87
MSCI Emerging Markets (local)	1.56	-5.40	1.20	1.27	6.36	10.22
MSCI Frontier Markets	-1.23	-14.46	4.79	0.36	-1.70	-
Non-U.S. Small Cap Equity	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Non-U.S. Small Cap Style	6.53	9.90	11.48	8.05	6.80	9.73
MSCI World ex USA Small Cap	5.82	5.46	7.82	4.39	4.09	7.35
MSCI ACWI ex USA Small Cap	5.28	2.60	5.64	2.63	4.95	8.24
MSCI Emerging Market Small Cap	3.27	-6.85	-1.67	-3.29	6.14	10.86

*Returns less than one year are not annualized.
Sources: Callan, MSCI.

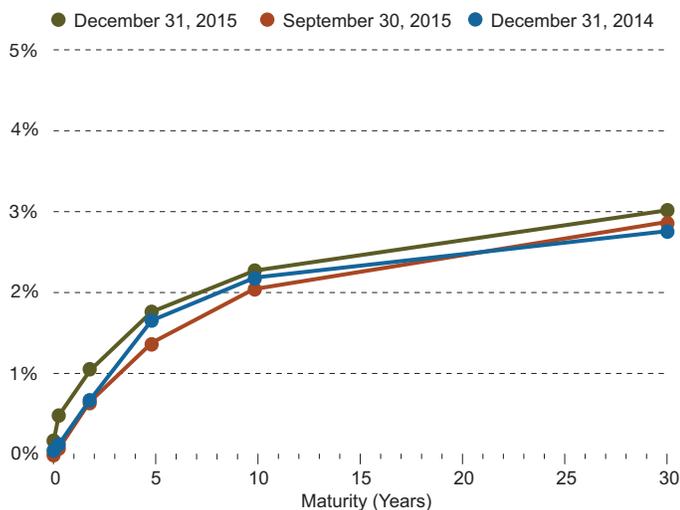
Take It Easy

U.S. FIXED INCOME | Kevin Nagy

Yields rose in the fourth quarter as the Federal Reserve raised interest rates for the first time in nearly a decade. The yield curve flattened, though the effect on spreads was mixed: investment grade credit and mortgage backed security (MBS) spreads tightened while asset-backed (ABS), commercial MBS, and high yield spreads widened. The **Barclays Aggregate Index** dropped 0.57%.

According to the Fed, the economy showed signs of moderate growth, driven by fixed investment from businesses, household spending, and a strengthening housing sector. So after months of restraint, the Fed raised the federal funds rate band by 0.25% to 0.25%–0.50%. The Fed specifically cited a strong labor market as a key reason behind the decision. The 10-year U.S. Treasury yield increased to 2.27%. The breakeven inflation rate (the difference between nominal and real yields) on 10-year Treasuries increased from 1.43% to 1.58% as TIPS outperformed nominal Treasuries. This measure rebounded from last quarter, when it reached its lowest level since 2008 (1.43%).

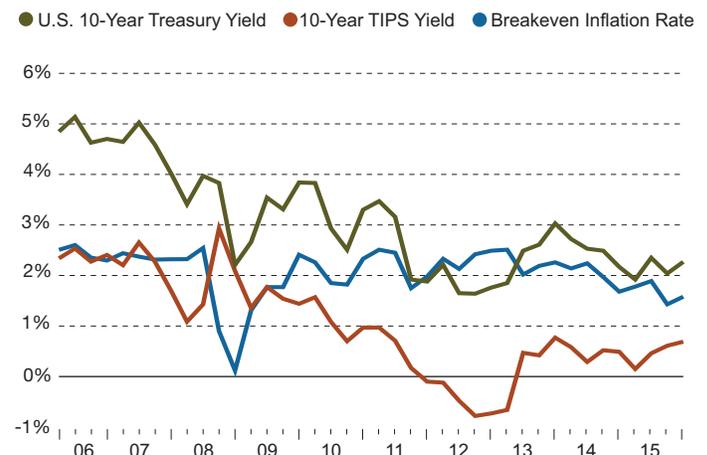
U.S. Treasury Yield Curves



Source: Bloomberg

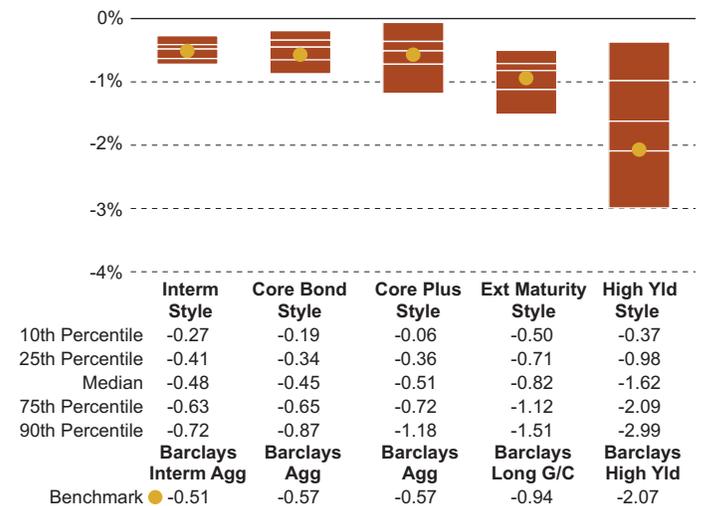
Every sector in the Barclays Aggregate posted negative quarterly returns. Relative to like-duration Treasuries, the strongest performer was U.S. MBS which, although down 0.10%, beat Treasuries by 0.61%. Credit (-0.52%) was the only other sector to outperform Treasuries (+0.50% relative to Treasuries), buoyed by strong performance in the Financials sector (+1.09% relative to Treasuries). Both ABS and U.S. agencies outperformed like-duration Treasuries for the year, despite trailing in the quarter.

Historical 10-Year Yields



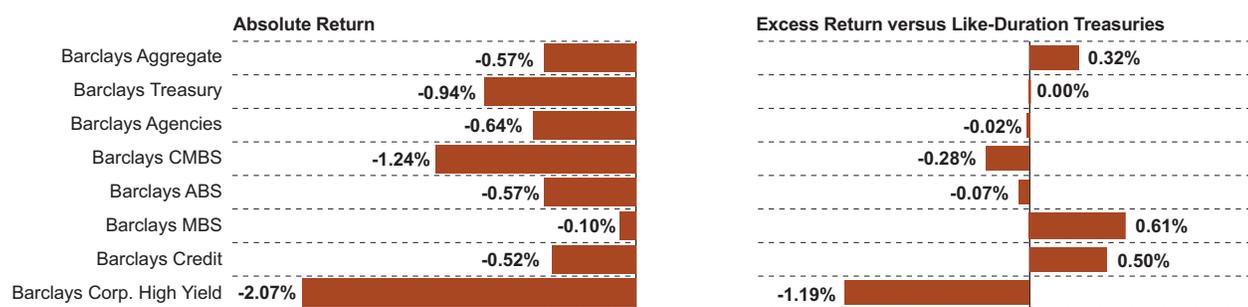
Source: Bloomberg

Callan Style Group Quarterly Returns



Sources: Barclays, Callan

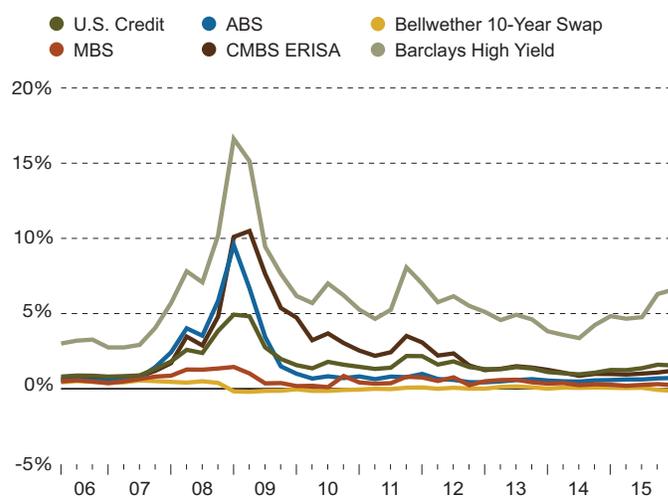
Fixed Income Index Quarterly Returns



Source: Barclays

High yield corporate bonds slumped as the **Barclays Corporate High Yield Index** ended the quarter down 2.07%. The Index receded 4.47% for the year and underperformed Treasuries by 5.77%. New issuance was \$35.6 billion for the quarter, down from \$42.8 billion. New issue activity for 2015 was \$260.5 billion, 16.3% lower than 2014.

Effective Yield Over Treasuries



Source: Barclays

U.S. Fixed Income Index Characteristics as of December 31, 2015

Barclays Indices	Yield to Worst	Mod Adj Duration	Avg Maturity	% of Barclays G/C	% of Barclays Agg
Barclays Aggregate	2.59	5.68	7.94		100.00
Barclays Govt/Credit	2.51	6.22	8.49	100.00	68.90
Intermediate	2.06	3.97	4.31	78.98	54.42
Long-Term	4.19	14.67	24.20	21.02	14.48
Barclays Govt	1.72	5.71	7.02	56.97	39.25
Barclays Credit	3.54	6.90	10.43	43.03	29.65
Barclays MBS	2.77	4.49	6.89		28.64
Barclays ABS	1.88	2.32	2.47		0.56
Barclays CMBS	2.97	4.99	5.62		1.83
Barclays Corp High Yield	8.74	4.34	6.19		

Source: Barclays

U.S. FIXED INCOME (Continued)

Callan Style Median and Index Returns* for Periods ended December 31, 2015

Broad Fixed Income	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Core Bond Style	-0.45	0.82	1.71	3.77	4.96	5.40
Core Bond Plus Style	-0.51	0.20	1.77	4.17	5.36	5.96
Barclays Aggregate	-0.57	0.55	1.44	3.25	4.51	4.97
Barclays Govt/Credit	-0.74	0.15	1.21	3.39	4.47	5.01
Barclays Govt	-0.91	0.86	1.01	2.77	4.10	4.53
Barclays Credit	-0.52	-0.77	1.49	4.38	5.18	5.82
Citi Broad Investment Grade	-0.53	0.53	1.41	3.23	4.60	5.04
Long-Term	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Extended Maturity Style	-0.82	-3.34	2.10	7.42	6.93	7.43
Barclays Long Govt/Credit	-0.94	-3.30	1.70	6.98	6.45	7.07
Barclays Long Govt	-1.38	-1.16	2.55	7.65	6.67	6.97
Barclays Long Credit	-0.66	-4.56	1.23	6.49	6.19	7.28
Citi Pension Discount Curve	0.77	-3.04	2.85	9.28	7.80	9.19
Intermediate-Term	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Intermediate Style	-0.48	1.26	1.32	2.93	4.54	4.94
Barclays Intermediate Aggregate	-0.51	1.21	1.41	2.74	4.26	4.67
Barclays Intermediate Govt/Credit	-0.69	1.07	1.10	2.58	4.04	4.53
Barclays Intermediate Govt	-0.84	1.18	0.81	2.02	3.71	4.07
Barclays Intermediate Credit	-0.45	0.90	1.61	3.63	4.82	5.35
Short-Term	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Defensive Style	-0.24	0.91	0.90	1.45	3.05	3.42
Active Duration Style	-0.42	1.17	1.53	3.28	4.60	5.27
Money Market Funds (net of fees)	0.00	0.01	0.01	0.01	1.17	1.41
ML Treasury 1–3-Year	-0.44	0.54	0.51	0.70	2.42	2.84
90-Day Treasury Bills	0.03	0.05	0.05	0.07	1.24	1.61
High Yield	Quarter	Year	3 Years	5 Years	10 Years	15 Years
High Yield Style	-1.62	-3.10	2.41	5.47	6.95	7.79
Barclays Corporate High Yield	-2.07	-4.47	1.69	5.04	6.96	7.59
ML High Yield Master	-2.09	-4.55	1.64	4.84	6.74	7.41
Mortgage/Asset-Backed	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Mortgage Style	-0.16	1.72	2.34	3.63	4.96	5.34
Barclays MBS	-0.10	1.51	2.01	2.96	4.64	4.90
Barclays ABS	-0.57	1.25	0.95	2.31	3.29	4.00
Barclays CMBS	-1.24	0.97	1.68	4.09	5.20	5.79
Municipal	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Barclays Muni	1.50	3.30	3.16	5.35	4.72	5.01
Barclays Muni 1–10-Year	0.79	2.45	2.24	3.56	4.08	4.25
Barclays Muni 3-Year	-0.01	1.18	1.24	1.81	3.01	3.24
TIPS	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Barclays TIPS Full Duration	-0.64	-1.44	-2.27	2.55	3.93	5.51
Barclays TIPS 1-10 Year	-0.70	-0.52	-1.77	1.64	3.51	4.84

*Returns for less than one year are not annualized.

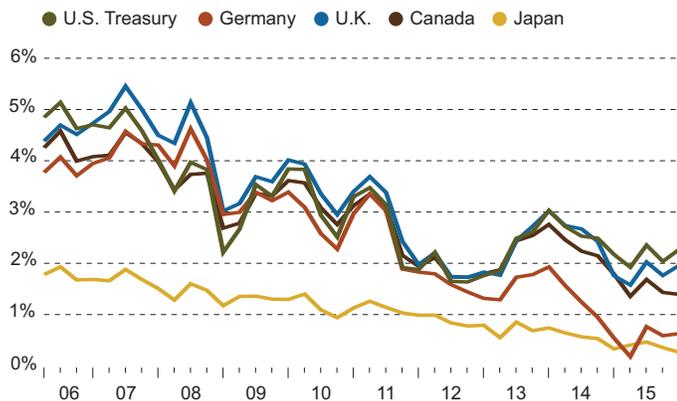
Sources: Barclays, Callan, Citigroup, Merrill Lynch.

Slip 'n Slide

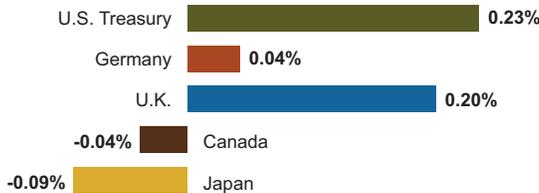
NON-U.S. FIXED INCOME | Kyle Fekete

The **Citi Non-U.S. World Government Bond Index** declined 1.38% for the quarter and 5.54% for the year. As the U.S. dollar continued to appreciate, the Index's hedged equivalent inched ahead 0.48% for the quarter and 1.52% for the year. The yield on 10-year German bunds was volatile throughout 2015: it started off the year at 0.54%, sank to 0.18% on March 31, climbed to 0.76% on June 30, and eventually ended year at 0.63%. Adding to the noise of 2015, German debt with maturities as far out as seven years provided negative yields, indicating bond investors would have to pay to own before adjusting for inflation. Approximately a third of the debt issued by European governments had negative yields at the end of the year. U.K. sovereigns lagged their European counterparts as the 10-year gilt fell 1.36%, pushing yields higher than the 10-year German bund. The Bank of England continued to battle weak inflation and held interest rates at an all-time low throughout the year.

10-Year Global Government Bond Yields



Change in 10-Year Yields from 3Q15 to 4Q15



Source: Bloomberg

The Japanese 10-year bond yield declined to 0.27%, the lowest since January. The country dodged a recession as GDP growth was revised upwards to 1% through September; the original calculation had it contracting by 0.8%.

In December, the ECB lowered its deposit rate to -0.3% and extended its quantitative easing program out to March 2017. Propelled by the ECB's monetary policy and investors' hunt for yield, European periphery countries outperformed their core-eurozone counterparts. Italian and Spanish 10-year bonds earned 1.82% and 1.43%, respectively. Both countries continued their recovery from record-long recessions as unemployment dropped to a three-year low.

Quarterly Return Attribution for Non-U.S. Gov't Indices (U.S. Dollar)

Country	Total	Local	Currency	Wtg
Australia	3.05%	-0.53%	3.60%	2.14%
Austria	-2.86%	-0.18%	-2.68%	1.83%
Belgium	-3.13%	-0.45%	-2.68%	2.98%
Canada	-2.79%	0.72%	-3.48%	2.35%
Denmark	-3.26%	-0.56%	-2.72%	0.72%
Finland	-2.70%	-0.02%	-2.68%	0.72%
France	-2.69%	-0.01%	-2.68%	11.25%
Germany	-3.03%	-0.35%	-2.68%	8.80%
Ireland	-2.09%	0.61%	-2.68%	0.93%
Italy	-1.07%	1.66%	-2.68%	11.43%
Japan	0.74%	1.18%	-0.44%	33.36%
Malaysia	4.27%	1.84%	2.38%	0.54%
Mexico	-0.89%	1.00%	-1.88%	1.14%
Netherlands	-2.77%	-0.09%	-2.68%	2.96%
Norway	-3.58%	0.05%	-3.63%	0.33%
Poland	-3.09%	0.64%	-3.71%	0.66%
Singapore	0.66%	0.43%	0.23%	0.42%
South Africa	-16.79%	-6.75%	-10.77%	0.48%
Spain	-1.48%	1.24%	-2.68%	6.41%
Sweden	-2.08%	-1.57%	-0.52%	0.57%
Switzerland	-2.75%	-0.37%	-2.39%	0.35%
U.K.	-3.99%	-1.33%	-2.70%	9.63%

Source: Citigroup

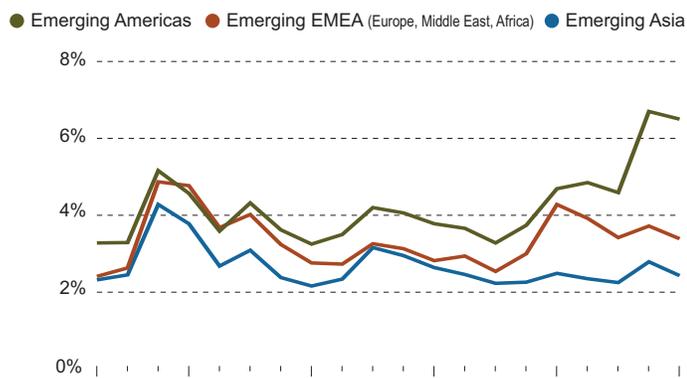
NON-U.S. FIXED INCOME (Continued)

Emerging markets were mired by political and economic strife. The dollar-denominated **JPM EMBI Global Diversified Index** gained 1.25%, outperforming emerging local currency-denominated sovereign debt. The negative currency effect pulled the **JPM GBI-EM Global Diversified Index** down (-0.01%).

The South African 10-year bond declined 7.26% (on a dollar-denominated basis) over worries that the country's political and economic turmoil could result in a downgrade to junk status. Investors responded harshly after President Jacob Zuma fired Finance Minister Nhlanelhla Nene and hired an unknown

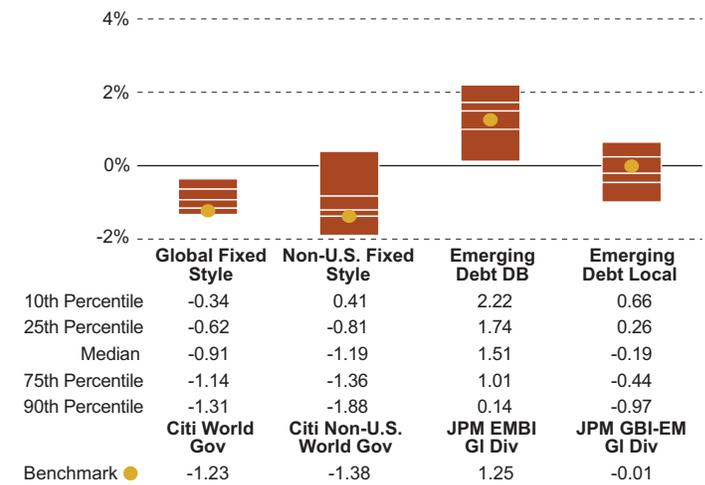
candidate for the job. Additionally, the rand's exchange rate dropped to record lows against major currencies. The local currency-denominated South African 10-year bond plummeted 28.22% in 2015. Brazilian debt declined 30.69% in 2015 on a local currency basis, in the midst of a corruption scandal and President Rousseff's possible impeachment. Brazil remains in a steep recession after being cut to below investment grade by Standard & Poor's earlier in the year.

Emerging Spreads Over Developed (By Region)



Source: Barclays

Callan Style Group Quarterly Returns



Sources: Callan, Citigroup, JPMorgan Chase

Callan Style Median and Index Returns* for Periods ended December 31, 2015

Global Fixed Income	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Global Style	-0.91	-3.31	-1.75	1.29	4.29	5.34
Citi World Govt	-1.23	-3.57	-2.70	-0.08	3.44	4.59
Citi World Govt (Local)	0.01	1.28	3.25	3.98	3.74	4.09
Barclays Global Aggregate	-0.92	-3.15	-1.74	0.90	3.74	4.75
Non-U.S. Fixed	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Non-U.S. Style	-1.19	-5.89	-3.85	-0.12	3.67	5.27
Citi Non-U.S. World Govt	-1.38	-5.54	-4.27	-1.30	3.05	4.43
Citi Non-U.S. World Govt (Local)	0.48	1.52	4.20	4.49	3.72	4.01
European Fixed	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Citi Euro Govt Bond	-2.23	-8.74	-1.05	1.73	3.77	6.28
Citi Euro Govt Bond (Local)	0.47	1.65	4.92	5.73	4.44	5.13
Emerging Markets Fixed	Quarter	Year	3 Years	5 Years	10 Years	15 Years
JPM EMBI Global Diversified	1.25	1.18	0.99	5.36	6.86	8.99
JPM GBI-EM Global Diversified	-0.01	-14.92	-9.95	-3.48	4.31	-

*Returns less than one year are not annualized.

Sources: Callan, Citigroup, JPMorgan Chase.

A Straight but Bumpy Road

REAL ESTATE | Mike Pritts

The **NCREIF Property Index** advanced 2.91%, recording a 1.20% income return and a 1.72% appreciation return during the quarter. The NCREIF Property Index cash-flow return appreciated 0.64% for the quarter and 3.10% for the trailing four quarters. There were 210 asset trades, representing \$11.3 billion of overall transactional volume, comfortably ahead of the \$5.1 billion 10-year quarterly transaction average and the prior peak of \$8.7 billion in the second quarter of 2007.

Pricing remained stable as equal-weighted transactional capitalization rates decreased to 5.90%, a slight retreat from the 2015 high (+5.91%) during the third quarter. Over the course of the prior cycle, quarterly equal-weighted transactional capitalization rates dipped to a low of 5.46% in the fourth quarter of 2007 and expanded to a peak of 8.46% in the third quarter of 2009. During the fourth quarter of 2015, appraisal capitalization rates decreased from 4.67% to 4.58%. As markets peaked over the prior cycle, appraisal capitalization rates declined to a low of 4.89% in the third quarter of 2008.

The **NCREIF Open End Diversified Core Equity Index** notched a 3.11% total return, comprising a 1.14% income return and a 2.20% appreciation return. In the listed real estate market, the **FTSE EPRA/NAREIT Developed REIT Index (USD)** gained 4.40% and U.S. REITs tracked by the **FTSE NAREIT Equity REITs Index** advanced an impressive 7.26%.

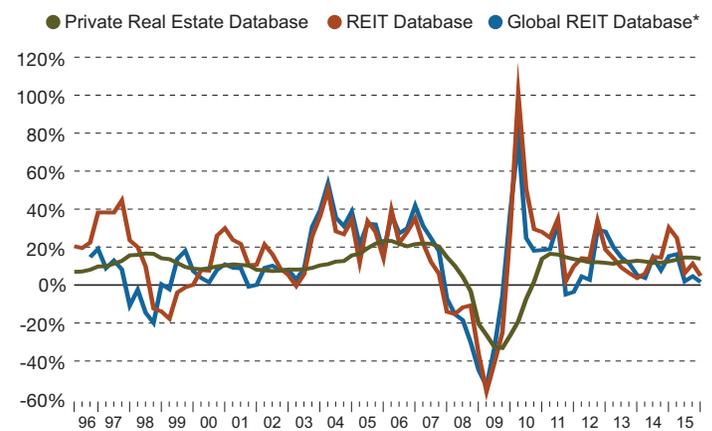
In the U.S., volatility continued as REIT sectors rebounded sharply. Positive sector performance was led by Self-Storage (+16.76%), followed by Industrial (+8.69%), Residential (+8.38%), Retail (+8.10%), Malls (+6.77%), and Health Care (+2.61%). The only negative was Lodging (-2.27%). For the year, Residential was the best performer of the primary real estate sectors (+10.22%), while Lodging lagged (-18.09%). U.S. REITs raised \$10.2 billion following the completion of 14 unsecured-debt offerings raising \$6.9 billion, 14 secondary offerings

raising \$3.1 billion, and two preferred-equity offerings raising \$117 million. There was one U.S. REIT IPO during the quarter. Public equity financing slightly increased from the third quarter's five-year low, but remained a challenge.

During 2015, MSCI and S&P Dow Jones announced that in August 2016, they will begin to break out real estate into a distinct sector rather than continuing to include it in the broader group of Financials. There are currently twenty-five companies included in the S&P 500 Index that will now be included in the new real estate sector. While most commercial real estate in the U.S. is traded in the private markets, this change indicates the increasing importance of publicly listed real estate.

In European core markets, pricing appears undeterred by volatility. Capital-raising remains robust and has consolidated. Several large, commingled vehicles are currently in the market with new funds. According to a survey produced by INREV, many (65%) European investors expect to increase their allocation to real estate over the next two years.

Rolling One-Year Returns



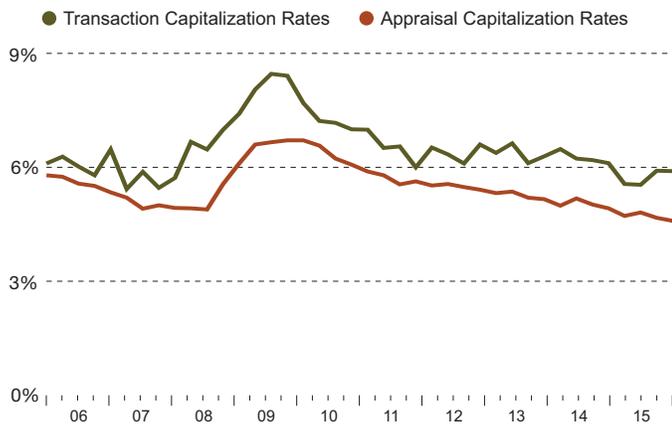
*Global REIT returns from 3Q96
Source: Callan

REAL ESTATE (Continued)

Asian Real Estate funds continue to raise capital despite a slowing Chinese GDP and record capital outflows in the stock market and pressure on the renminbi. The big question in early 2016 is whether continued market uncertainty in the Chinese economy will affect commercial property valuations in other parts of Asia and the world.

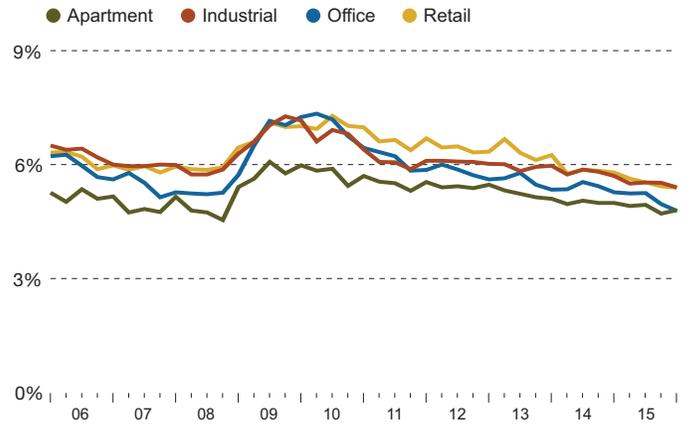
CMBS issuance reached \$23.4 billion, remaining steady since the third quarter and slightly down year-over-year (\$25.2 billion). Total issuance for the trailing-12 months was \$101.0 billion, a reduction from its second-quarter peak.

NCREIF Transaction and Appraisal Capitalization Rates



Source: NCREIF
Note: Transaction capitalization rate is equal-weighted.

NCREIF Capitalization Rates by Property Type



Source: NCREIF
Note: Capitalization rates are appraisal-based.

Callan Database Median and Index Returns* for Periods ended December 31, 2015

	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Private Real Estate						
Real Estate Database (net of fees)	2.90	12.90	12.97	12.60	5.47	7.90
NCREIF Property	2.91	13.33	12.04	12.18	7.76	8.96
NFI-ODCE (value wtd. net)	3.11	13.95	12.77	12.60	5.55	6.94
Public Real Estate						
REIT Database	7.50	4.48	12.03	12.89	8.32	12.13
FTSE NAREIT Equity	7.26	3.20	11.23	11.96	7.41	11.16
Global Real Estate						
Global REIT Database	4.38	1.03	7.61	8.95	6.15	—
FTSE EPRA/NAREIT Developed REIT	4.40	0.05	6.59	7.97	5.39	9.20

*Returns for less than one year are not annualized.
All REIT returns are reported gross in USD.

Sources: Callan, NAREIT, NCREIF, The FTSE Group. NCREIF statistics are the product of direct queries and may fluctuate over time.

Level at 35,000 Feet

PRIVATE EQUITY | Gary Robertson

In fundraising, *Private Equity Analyst* reports that 2015's fund-raising total of \$257 billion is a modest decline from 2014 (-3.6% or \$10.5 billion). The number of funds formed declined by 83 (-10.8%) to 682 in 2015. The fourth quarter's new commitments totaled \$59.7 billion with 125 new partnerships formed. While the dollar volume increased by 11% compared to the prior quarter's \$53.7 billion, the number of funds formed fell by 20% from the third quarter's 179. The year's final quarter was surprisingly weak, likely due to the onset of public equity market volatility in mid-August.

According to *Buyouts* newsletter, announced and closed new-company acquisitions totaled 1,911 in 2015, up 4% from 1,836 in 2014. Announced and closed dollar volume was \$303.7 billion, up 47% from \$206.8 billion in 2014. The quarter generated 365 announced and closed transactions, down from 548. Disclosed dollar volume totaled \$77.2 billion, up from \$66.7 billion. According to S&P Capital IQ, in the second half of the year average purchase price multiples remained just over 10x EBITDA.

According to the National Venture Capital Association, the \$58.8 billion of new investment in venture capital companies is a 16% jump for the year, up from \$50.8 billion. The dollar volume in 2015 is the second highest year on record, although significantly shy of first place: \$105.0 billion in 2000. The year produced 4,380 rounds of investment, slightly down from last year's 4,441. Quarterly investment volume totaled \$11.3 billion in 962 rounds of financing, down from \$16.6 billion in 1,149 rounds.

Private Equity Performance Database (%)

(Pooled Horizon IRRs through June 30, 2015*)

Strategy	3 Months	Year	3 Years	5 Years	10 Years	15 Years	20 Years
All Venture	6.8	26.8	21.0	18.7	11.4	4.0	27.1
Growth Equity	5.0	11.0	15.3	14.6	12.7	9.9	14.9
All Buyouts	5.3	7.7	15.7	15.4	12.5	11.3	13.2
Mezzanine	3.6	8.5	11.3	11.8	10.7	7.8	10.0
Distressed	1.6	4.2	13.3	12.2	10.4	11.1	11.2
All Private Equity	5.1	10.7	16.1	15.4	12.1	9.2	14.4
S&P 500 Index	0.3	7.4	17.3	17.3	7.9	4.4	8.9

Private equity returns are net of fees.

Sources: Standard & Poor's, Thomson/Cambridge.

*Most recent data available at time of publication.

Funds Closed January 1 to December 31, 2015

Strategy	No. of Funds	Amt (\$mm)	Percent
Venture Capital	281	34,274	13%
Buyouts	263	169,694	66%
Subordinated Debt	28	12,535	5%
Distressed Debt	37	22,573	9%
Secondary and Other	15	6,637	3%
Fund-of-funds	58	10,961	4%
Totals	682	256,673	100%

Source: Private Equity Analyst

Regarding exits, *Buyouts* reports that 2015's aggregate disclosed M&A exit values of \$127.4 billion is up 13% from 2014's \$111.5 billion. The 513 private M&A exits of buyout-backed companies is down 35% from the 690 in 2014. Seven of the completed 99 M&A exits had values over \$1 billion, with the largest being Silver Lake's \$5.3 billion sale of Interactive Data Corp. to Intercontinental Exchange. There were only four buyout-backed IPOs, with a total value of \$774.4 million. The full year produced 31 IPOs, raising a total of \$9.1 billion.

Venture-backed M&A exits for the year total 372 with 84 announced values totaling \$16.2 billion, down from 385 exits and \$48.1 billion in announced value last year. The quarter had 91 exits with 26 announced values totaling \$3.6 billion. The total number of M&A deals and announced value both declined from the third quarter's 109 exits totaling \$6.9 billion. The year produced 77 venture-backed IPOs raising \$9.4 billion; for the quarter, there were 16 raising \$2.2 billion. The number and total float was up versus the third quarter's 15 IPOs raising \$1.9 billion.

Under Pressure

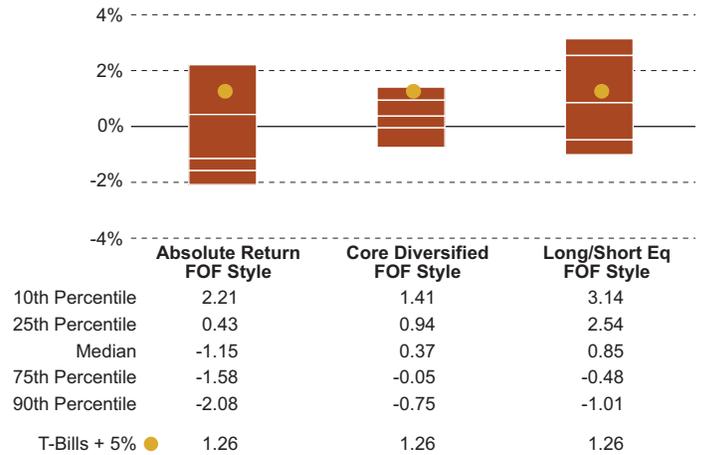
HEDGE FUNDS | Jim McKee

Growing unease with economic change is evident in the capital markets. Commodity prices slid further, led by oil, as China struggled with its centrally planned shift to a consumer-driven economy. Strong employment gains and record auto sales in the U.S. bolstered the Federal Reserve's confidence to raise short-term rates for the first time in almost a decade. Despite rebounding equities in developed markets, credit spreads widened, particularly among lower-rated bonds in the commodity sector.

As a proxy for hedge funds without implementation costs, the **Credit Suisse Hedge Fund Index (CS HFI)** slipped 0.12% in the fourth quarter. By contrast, the median manager in the **Callan Hedge Fund-of-Funds Database** edged ahead 0.40%, net of all fees.

Within the CS HFI, the major sector winner was *Long/Short Equity* (+1.58%). *Event-Driven Multi-Strategy* (-2.55%), which is typically more focused on soft catalysts, fell particularly hard as investors fled crowded trades in this space. *Distressed* (-1.76%) also lost ground with credit spreads widening, but outpaced the **Barclays High Yield Credit Index** (-2.07%).

Callan Style Group Quarterly Returns



Sources: Callan, Merrill Lynch

Within Callan's Hedge Fund-of-Funds Database, market exposures marginally affected performance. Aided by the U.S. equity market rally, the median *Callan Long/Short Equity FOF* (+0.85%) outpaced the *Callan Absolute Return FOF* (-1.15%). With diversifying exposures to both non-directional and directional styles, the *Core Diversified FOF* modestly gained 0.37%.

Callan Database Median and Index Returns* for Periods ended December 31, 2015

	Quarter	3 Quarters	Year	3 Years	5 Years	10 Years
Hedge Fund-of-Funds Database	0.40	-0.09	4.72	3.54	3.96	5.28
CS Hedge Fund Index	-0.12	-0.71	4.30	3.55	4.97	5.95
CS Equity Market Neutral	-0.04	1.69	3.16	2.96	-1.44	1.39
CS Convertible Arbitrage	-0.58	0.81	1.67	2.76	4.42	4.94
CS Fixed Income Arbitrage	0.03	0.59	2.90	4.84	3.84	4.50
CS Multi-Strategy	0.51	3.84	7.01	6.77	6.17	6.89
CS Distressed	-1.76	-5.30	4.05	3.81	4.82	7.80
CS Risk Arbitrage	0.81	0.41	1.30	1.50	3.55	3.65
CS Event-Driven Multi-Strategy	-2.55	-6.67	2.86	1.08	5.12	6.45
CS Long/Short Equity	1.58	3.56	8.77	5.23	5.80	5.98
CS Dedicated Short Bias	-4.29	2.38	-10.15	-9.72	-8.90	-7.19
CS Global Macro	0.62	0.17	2.52	3.70	6.79	9.04
CS Managed Futures	-1.05	-0.93	4.54	1.22	4.21	5.40
CS Emerging Markets	2.79	-0.22	3.30	2.55	5.17	8.06

*Returns less than one year are not annualized. Sources: Callan, Credit Suisse.

Chasing the Market

DEFINED CONTRIBUTION | Tom Szkwarla

The Callan DC Index™ declined 5.82% in the third quarter of 2015, reflecting widespread losses in global equity markets.

According to the Callan DC Index, the typical defined contribution (DC) plan trailed defined benefit (DB) plans by 1.83% in the third quarter of 2015. This is primarily because DC plans have little exposure to longer-term fixed income. Meanwhile, the average 2035 target date fund fared even worse—declining 7.34%—reflecting its higher allocation to equities (78% average allocation).

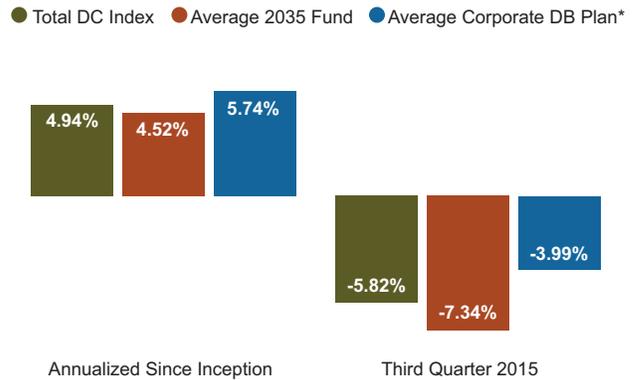
Driven almost entirely by investment losses, DC plan balances shrank by 5.97% in the third quarter. However, annualized total growth since inception remains steady at a respectable 7.33%. In the long term, participant contributions (net flows) added 2.39% annually, while market appreciation (return growth) contributed the remaining 4.94%.

Almost three-fourths of the asset classes in the DC Index experienced net outflows in the third quarter. Predictably, target date funds were among the only asset class to attract inflows. Despite weak performance, about 60 cents of every dollar that moved within DC plans ended up in target date funds.

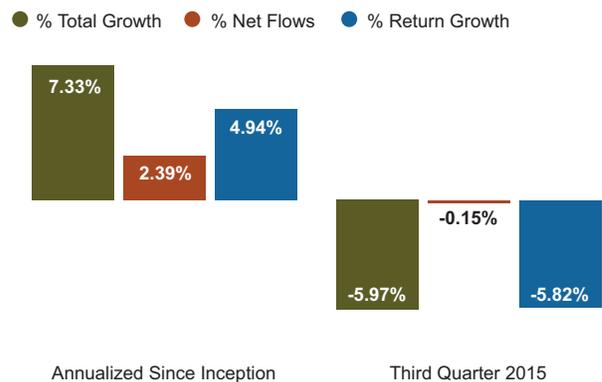
For the first time in two years, stable value experienced net inflows. Conversely, U.S. large cap and company stock saw significant outflows for the second consecutive quarter. Third-quarter turnover activity (i.e., net transfer activity levels) within DC plans came in at 0.38%, which is slightly higher than the second quarter (0.32%) but still well below the historical average of 0.65%.

The Callan DC Index is an equally weighted index tracking the cash flows and performance of nearly 90 plans, representing more than one million DC participants and over \$135 billion in assets. The Index is updated quarterly and is available on Callan's website, as is the quarterly DC Observer newsletter.

Investment Performance*



Growth Sources*



Net Cash Flow Analysis (Third Quarter 2015)*

(Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	60.70%
Stable Value	22.06%
U.S. Small/Mid Cap	-18.45%
U.S. Large Cap	-42.20%
Total Turnover**	0.38%

Source: Callan DC Index

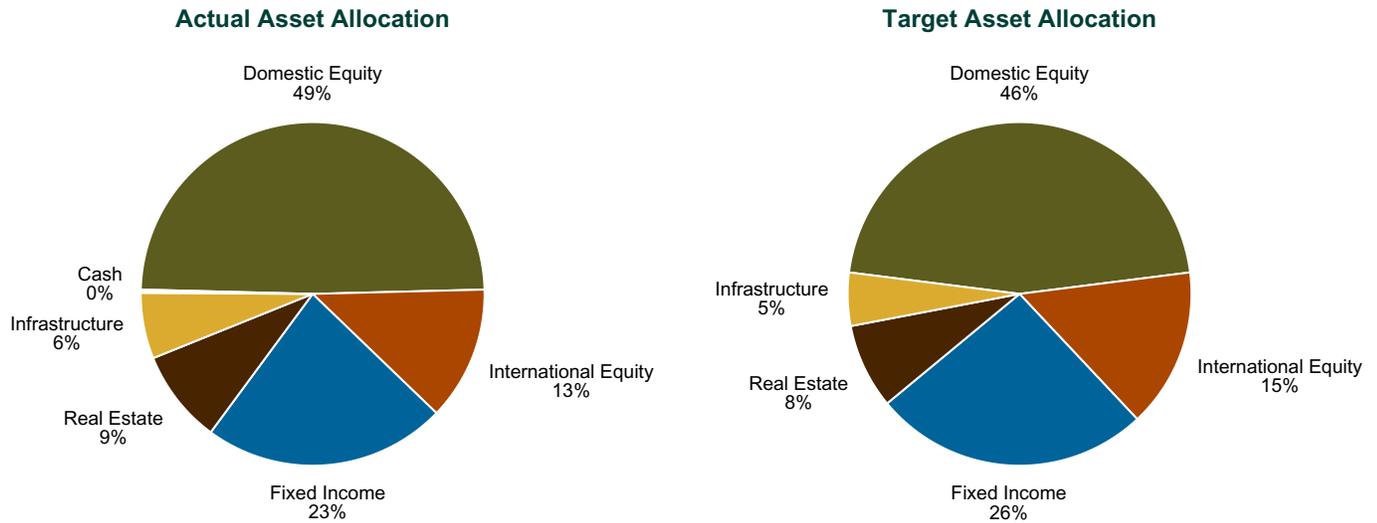
Data provided here is the most recent available at time of publication.

* DC Index inception date is January 2006. DB plan performance is gross of fees.

**Total Index "turnover" measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.

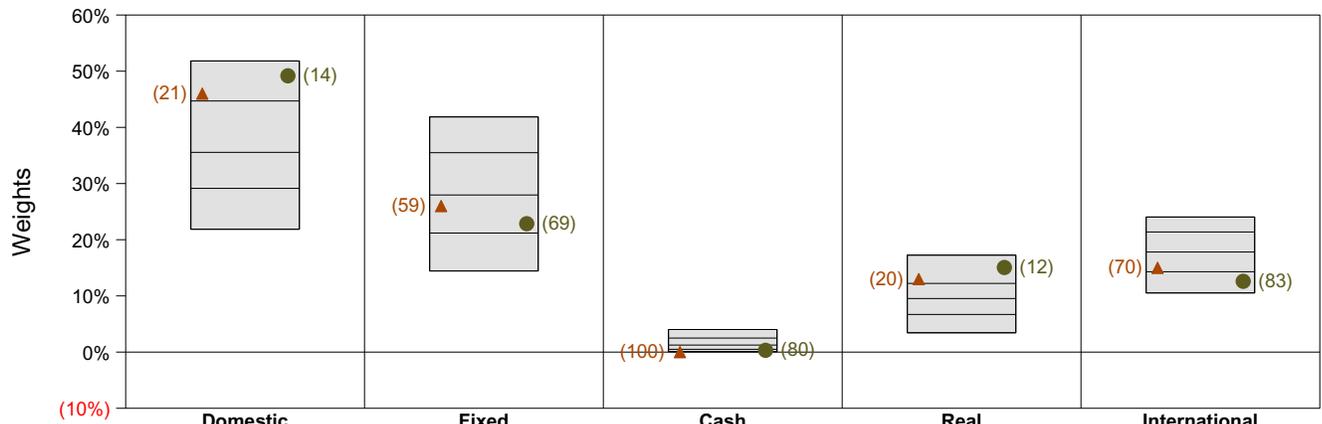
Actual vs Target Asset Allocation As of December 31, 2015

The top left chart shows the Fund's asset allocation as of December 31, 2015. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the Public Fund Sponsor Database.



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equity	347,631	49.2%	46.0%	3.2%	22,448
International Equity	89,066	12.6%	15.0%	(2.4%)	(16,972)
Fixed Income	161,556	22.9%	26.0%	(3.1%)	(22,243)
Real Estate	62,287	8.8%	8.0%	0.8%	5,734
Infrastructure	44,155	6.2%	5.0%	1.2%	8,809
Cash	2,225	0.3%	0.0%	0.3%	2,225
Total	706,919	100.0%	100.0%		

Asset Class Weights vs Public Fund Sponsor Database



	Domestic Equity	Fixed Income	Cash	Real Estate	International Equity
10th Percentile	51.82	41.87	4.02	17.26	24.04
25th Percentile	44.70	35.49	2.50	12.22	21.38
Median	35.55	27.96	1.25	9.53	17.81
75th Percentile	29.15	21.19	0.50	6.70	14.30
90th Percentile	21.87	14.44	0.08	3.44	10.53
Fund ●	49.18	22.85	0.31	15.06	12.60
Target ▲	46.00	26.00	0.00	13.00	15.00
% Group Invested	98.98%	97.45%	70.92%	61.22%	97.45%

* Current Quarter Target = 36.0% S&P 500 Index, 26.0% Barclays Aggregate Index, 15.0% MSCI ACWI x US (Net), 10.0% Russell 2500 Index, 8.0% NFI-ODCE Value Weight Gr and 5.0% CPI-W+4.0%.

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2015, with the distribution as of September 30, 2015. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

Asset Distribution Across Investment Managers

	December 31, 2015			Inv. Return	September 30, 2015	
	Market Value	Weight	Net New Inv.		Market Value	Weight
Domestic Equity	\$347,630,515	49.18%	\$(15,276,324)	\$22,654,590	\$340,252,250	49.02%
Large Cap Equity	\$266,872,812	37.75%	\$(15,117,007)	\$19,226,651	\$262,763,167	37.86%
Alliance S&P Index	82,075,358	11.61%	(5,011,072)	5,804,406	81,282,023	11.71%
PIMCO StocksPLUS	37,498,435	5.30%	(5,000,000)	2,927,350	39,571,085	5.70%
BlackRock Russell 1000 Value	71,274,537	10.08%	(5,007,513)	4,214,512	72,067,538	10.38%
T. Rowe Price Large Cap Growth	76,024,481	10.75%	(98,422)	6,280,383	69,842,521	10.06%
Small/Mid Cap Equity	\$80,757,704	11.42%	\$(159,318)	\$3,427,939	\$77,489,083	11.16%
Champlain Mid Cap	41,178,840	5.83%	(81,122)	2,255,231	39,004,731	5.62%
Pyramis Small Cap	39,578,864	5.60%	(78,196)	1,172,707	38,484,353	5.54%
International Equity	\$89,066,150	12.60%	\$(169,672)	\$2,540,118	\$86,695,704	12.49%
Causeway International Value Equity	53,473,591	7.56%	(96,225)	2,013,283	51,556,532	7.43%
Aberdeen EAFE Plus	35,592,560	5.03%	(73,447)	526,836	35,139,171	5.06%
Fixed Income	\$161,555,875	22.85%	\$(142,671)	\$197,995	\$161,500,551	23.27%
BlackRock U.S. Debt Fund	61,859,594	8.75%	(8,519)	(360,411)	62,228,524	8.97%
PIMCO Fixed Income	99,696,282	14.10%	(134,152)	558,406	99,272,027	14.30%
Real Estate	\$62,287,125	8.81%	\$(222,449)	\$1,843,512	\$60,666,062	8.74%
JP Morgan Strategic Property Fund	44,965,728	6.36%	(105,685)	1,467,966	43,603,447	6.28%
LaSalle Income and Growth Fund*	0	0.00%	(62,468)	468	62,000	0.01%
JP Morgan Income and Growth Fund	17,321,397	2.45%	(54,296)	375,078	17,000,615	2.45%
Infrastructure	\$44,154,909	6.25%	\$(981,897)	\$1,017,414	\$44,119,392	6.36%
Macquarie European Infrastructure	20,720,251	2.93%	2,134	(526,551)	21,244,668	3.06%
SteelRiver Infrastructure	23,434,658	3.32%	(984,031)	1,543,965	22,874,724	3.30%
Cash Composite	\$2,224,646	0.31%	\$1,395,960	\$120	\$828,565	0.12%
Cash	2,224,646	0.31%	1,395,960	120	828,565	0.12%
Total Plan	\$706,919,221	100.0%	\$(15,397,052)	\$28,253,749	\$694,062,524	100.0%

*Note(s): The LaSalle Income & Growth IV Fund's final distribution took place on December 30, 2015, leaving a residual balance of \$2,658.46, which is now reflected in the Cash account.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Gross of Fees					
Domestic Equity	6.60%	2.59%	16.27%	13.01%	7.19%
Total Domestic Equity Target (1)	6.21%	0.47%	14.57%	12.11%	7.40%
Large Cap Equity	7.25%	2.36%	16.28%	12.90%	6.67%
S&P 500 Index	7.04%	1.38%	15.13%	12.57%	7.31%
Alliance S&P Index	7.03%	1.48%	15.13%	12.54%	7.37%
PIMCO StocksPLUS S&P 500 Index	7.17%	0.34%	15.79%	13.99%	-
	7.04%	1.38%	15.13%	12.57%	7.31%
BlackRock Russell 1000 Value Index	5.68%	(3.62%)	13.21%	11.39%	6.31%
Russell 1000 Value Index	5.64%	(3.83%)	13.08%	11.27%	6.16%
T. Rowe Price Large Cap Growth	8.99%	10.69%	20.74%	15.59%	9.99%
Russell 1000 Growth Index	7.32%	5.67%	16.83%	13.53%	8.53%
Small/Mid Cap Equity U.S. Equity	4.42%	3.44%	16.25%	13.25%	9.10%
Russell 2500 Index	3.28%	(2.90%)	12.46%	10.32%	7.56%
Champlain Mid Cap Russell MidCap Index	5.78%	2.55%	16.00%	12.81%	10.55%
	3.62%	(2.44%)	14.18%	11.44%	8.00%
Pyramis Small Cap Russell 2000 Index	3.05%	4.27%	16.39%	13.59%	10.15%
	3.59%	(4.41%)	11.65%	9.19%	6.80%
International Equity	2.93%	(7.06%)	2.18%	1.73%	3.13%
MSCI ACWI x US (Net)	3.24%	(5.66%)	1.50%	1.06%	2.92%
Causeway International Value Equity	3.90%	(2.09%)	5.95%	5.79%	5.28%
MSCI EAFE Index	4.71%	(0.81%)	5.01%	3.60%	3.03%
Aberdeen EAFE Plus	1.50%	(13.63%)	(2.59%)	0.63%	4.36%
MSCI ACWI x US (Net)	3.24%	(5.66%)	1.50%	1.06%	2.92%
Fixed Income	0.12%	(0.00%)	1.61%	4.15%	5.39%
Barclays Aggregate Index	(0.57%)	0.55%	1.44%	3.25%	4.51%
BlackRock U.S. Debt Fund	(0.58%)	0.63%	1.59%	3.37%	4.64%
Barclays Aggregate Index	(0.57%)	0.55%	1.44%	3.25%	4.51%
PIMCO Fixed Income Custom Index (2)	0.56%	(0.39%)	1.62%	4.80%	5.96%
	0.21%	0.37%	1.75%	4.40%	5.60%

(1) The Total Domestic Equity target is currently composed of 78% S&P 500 and 22% Russell 2500 Index.

(2) The custom index is currently composed of 25% Barclays Mortgage, 25% Barclays Credit, 25% Barclays High Yield, and 25% JP Morgan EMBI Global. Prior to 2/1/2012, the custom index was composed of 70% Barclays Mortgage, 15% Barclays Credit, and 15% Barclays High Yield.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Gross of Fees					
Real Estate	3.04%	15.38%	14.30%	14.12%	6.11%
NFI-ODCE Value Weight Gr	3.34%	15.02%	13.81%	13.66%	6.53%
JP Morgan Strategic Property Fund	3.37%	15.24%	14.07%	14.00%	7.28%
NFI-ODCE Value Weight Gr	3.34%	15.02%	13.81%	13.66%	6.53%
JP Morgan Income and Growth Fund	2.20%	15.83%	15.89%	18.69%	4.85%
NFI-ODCE Value Weight Gr	3.34%	15.02%	13.81%	13.66%	6.53%
Infrastructure	2.38%	3.49%	4.16%	5.95%	-
CPI + 4%	0.21%	4.39%	4.72%	5.41%	5.84%
Macquarie European Infrastructure	(2.47%)	(3.09%)	1.45%	5.24%	-
SteelRiver Infrastructure	6.90%	10.17%	6.93%	6.57%	-
CPI + 4%	0.21%	4.39%	4.72%	5.41%	5.84%
Cash Composite	0.01%	0.01%	0.01%	0.03%	1.39%
Total Fund	4.05%	1.71%	9.77%	8.90%	6.26%
Total Fund Benchmark*	3.52%	1.08%	8.66%	8.10%	6.06%

* Current Quarter Target = 36.0% S&P 500 Index, 26.0% Barclays Aggregate Index, 15.0% MSCI ACWI x US (Net), 10.0% Russell 2500 Index, 8.0% NFI-ODCE Value Weight Gr and 5.0% CPI-W+4.0%.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	6/2015- 12/2015	FY 2015	FY 2014	FY 2013	FY 2012
Gross of Fees					
Domestic Equity	(1.03%)	9.01%	26.67%	23.35%	2.92%
Total Domestic Equity Target (1)	(1.53%)	7.15%	24.84%	21.70%	3.77%
Large Cap Equity	0.07%	7.96%	27.15%	22.41%	3.48%
S&P 500 Index	0.15%	7.42%	24.61%	20.60%	5.45%
Alliance S&P Index	0.24%	7.43%	24.50%	20.51%	5.48%
PIMCO StocksPLUS S&P 500 Index	(1.15%)	7.57%	27.61%	24.51%	5.80%
	0.15%	7.42%	24.61%	20.60%	5.45%
BlackRock Russell 1000 Value Index	(3.13%)	4.34%	23.88%	25.36%	3.07%
Russell 1000 Value Index	(3.23%)	4.13%	23.81%	25.32%	3.01%
T. Rowe Price Large Cap Growth Russell 1000 Growth Index	3.82%	12.35%	32.80%	20.37%	5.19%
	1.64%	10.56%	26.92%	17.07%	5.76%
Small/Mid Cap Equity U.S. Equity	(4.68%)	12.68%	24.97%	26.35%	0.64%
Russell 2500 Index	(7.36%)	5.92%	25.58%	25.61%	(2.29%)
Champlain Mid Cap Russell MidCap Index	(4.16%)	10.27%	26.20%	22.88%	0.78%
	(4.68%)	6.63%	26.85%	25.41%	(1.65%)
Pyramis Small Cap Russell 2000 Index	(5.25%)	15.07%	23.59%	29.74%	0.44%
	(8.75%)	6.49%	23.64%	24.21%	(2.08%)
International Equity	(9.56%)	(5.79%)	21.26%	17.18%	(14.49%)
MSCI ACWI x US (Net)	(9.32%)	(5.26%)	21.75%	13.63%	(14.57%)
Causeway International Value Equity MSCI EAFE Index	(6.82%)	(2.38%)	23.76%	22.07%	(10.83%)
	(6.01%)	(4.22%)	23.57%	18.62%	(13.83%)
Aberdeen EAFE Plus MSCI ACWI x US (Net)	(13.38%)	(10.16%)	18.20%	11.69%	(4.27%)
	(9.32%)	(5.26%)	21.75%	13.63%	(14.57%)
Fixed Income	(0.68%)	0.78%	7.64%	1.84%	8.32%
Barclays Aggregate Index	0.65%	1.86%	4.37%	(0.69%)	7.47%
BlackRock U.S. Debt Fund Barclays Aggregate Index	0.70%	1.99%	4.49%	(0.48%)	7.55%
	0.65%	1.86%	4.37%	(0.69%)	7.47%
PIMCO Fixed Income Custom Index (2)	(1.52%)	0.05%	9.60%	3.27%	9.56%
	(0.34%)	0.75%	8.48%	2.41%	7.63%

(1) The Total Domestic Equity target is currently composed of 78% S&P 500 and 22% Russell 2500 Index.

(2) The custom index is currently composed of 25% Barclays Mortgage, 25% Barclays Credit, 25% Barclays High Yield, and 25% JP Morgan EMBI Global. Prior to 2/1/2012, the custom index was composed of 70% Barclays Mortgage, 15% Barclays Credit, and 15% Barclays High Yield.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	6/2015- 12/2015	FY 2015	FY 2014	FY 2013	FY 2012
Gross of Fees					
Real Estate	6.66%	13.92%	13.27%	16.00%	11.63%
NFI-ODCE Value Weight Gr	7.15%	14.43%	12.75%	12.17%	12.42%
JP Morgan Strategic Property Fund	6.89%	13.37%	14.08%	14.08%	12.00%
NFI-ODCE Value Weight Gr	7.15%	14.43%	12.75%	12.17%	12.42%
JP Morgan Income and Growth Fund	6.11%	16.19%	11.66%	25.49%	18.15%
NFI-ODCE Value Weight Gr	7.15%	14.43%	12.75%	12.17%	12.42%
Infrastructure	3.44%	(2.75%)	16.31%	3.27%	5.68%
CPI + 4%	0.72%	3.62%	6.05%	5.76%	5.58%
Macquarie European Infrastructure	(0.53%)	(9.64%)	14.63%	13.28%	0.54%
SteelRiver Infrastructure	6.90%	5.97%	18.46%	(7.19%)	13.03%
CPI + 4%	0.72%	3.62%	6.05%	5.76%	5.58%
Cash Composite	0.01%	0.00%	0.00%	0.05%	0.03%
Total Fund	(1.26%)	4.63%	19.64%	14.84%	2.40%
Total Fund Benchmark*	(1.25%)	4.34%	16.97%	12.87%	3.04%

* Current Quarter Target = 36.0% S&P 500 Index, 26.0% Barclays Aggregate Index, 15.0% MSCI ACWI x US (Net), 10.0% Russell 2500 Index, 8.0% NFI-ODCE Value Weight Gr and 5.0% CPI-W+4.0%.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Net of Fees					
Domestic Equity	6.52%	2.32%	15.94%	12.63%	6.79%
Total Domestic Equity Target (1)	6.21%	0.47%	14.57%	12.11%	7.40%
Large Cap Equity	7.21%	2.24%	16.11%	12.70%	6.40%
S&P 500 Index	7.04%	1.38%	15.13%	12.57%	7.31%
Alliance S&P Index	7.02%	1.45%	15.09%	12.50%	7.32%
PIMCO StocksPLUS	7.17%	0.34%	15.79%	13.81%	-
S&P 500 Index	7.04%	1.38%	15.13%	12.57%	7.31%
BlackRock Russell 1000 Value Index	5.68%	(3.65%)	13.17%	11.37%	6.30%
Russell 1000 Value Index	5.64%	(3.83%)	13.08%	11.27%	6.16%
T. Rowe Price Large Cap Growth	8.86%	10.30%	20.21%	15.05%	9.46%
Russell 1000 Growth Index	7.32%	5.67%	16.83%	13.53%	8.53%
Small/Mid Cap Equity U.S. Equity	4.23%	2.65%	15.34%	12.36%	8.26%
Russell 2500 Index	3.28%	(2.90%)	12.46%	10.32%	7.56%
Champlain Mid Cap	5.58%	1.70%	15.04%	11.87%	9.63%
Russell MidCap Index	3.62%	(2.44%)	14.18%	11.44%	8.00%
Pyramis Small Cap	2.86%	3.54%	15.55%	12.76%	9.34%
Russell 2000 Index	3.59%	(4.41%)	11.65%	9.19%	6.80%
International Equity	2.74%	(7.72%)	1.45%	0.97%	2.33%
MSCI ACWI x US (Net)	3.24%	(5.66%)	1.50%	1.06%	2.92%
Causeway International Value Equity	3.73%	(2.72%)	5.27%	5.10%	4.59%
MSCI EAFE Index	4.71%	(0.81%)	5.01%	3.60%	3.03%
Aberdeen EAFE Plus	1.29%	(14.34%)	(3.38%)	(0.18%)	3.53%
MSCI ACWI x US (Net)	3.24%	(5.66%)	1.50%	1.06%	2.92%
Fixed Income	0.05%	(0.31%)	1.29%	3.84%	5.12%
Barclays Aggregate Index	(0.57%)	0.55%	1.44%	3.25%	4.51%
BlackRock U.S. Debt Fund	(0.58%)	0.62%	1.56%	3.35%	4.63%
Barclays Aggregate Index	(0.57%)	0.55%	1.44%	3.25%	4.51%
PIMCO Fixed Income	0.44%	(0.87%)	1.13%	4.33%	5.54%
Custom Index (2)	0.21%	0.37%	1.75%	4.40%	5.60%

(1) The Total Domestic Equity target is currently composed of 78% S&P 500 and 22% Russell 2500 Index.

(2) The custom index is currently composed of 25% Barclays Mortgage, 25% Barclays Credit, 25% Barclays High Yield, and 25% JP Morgan EMBI Global. Prior to 2/1/2012, the custom index was composed of 70% Barclays Mortgage, 15% Barclays Credit, and 15% Barclays High Yield.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Net of Fees					
Real Estate	2.77%	14.18%	13.05%	12.85%	4.88%
NFI-ODCE Equal Weight Net	3.21%	14.18%	12.65%	12.56%	5.34%
JP Morgan Strategic Property Fund	3.12%	14.12%	12.97%	12.89%	6.22%
NFI-ODCE Equal Weight Net	3.21%	14.18%	12.65%	12.56%	5.34%
JP Morgan Income and Growth Fund	1.88%	14.39%	14.21%	16.97%	3.19%
NFI-ODCE Equal Weight Net	3.21%	14.18%	12.65%	12.56%	5.34%
Infrastructure	2.25%	2.42%	3.15%	4.50%	-
CPI + 4%	0.21%	4.39%	4.72%	5.41%	5.84%
Macquarie European Infrastructure	(2.47%)	(3.99%)	0.78%	4.00%	-
SteelRiver Infrastructure	6.65%	8.90%	5.45%	4.86%	-
CPI + 4%	0.21%	4.39%	4.72%	5.41%	5.84%
Cash Composite	0.01%	0.01%	0.01%	0.03%	1.39%
Total Fund	3.95%	1.26%	9.28%	8.36%	5.72%
Total Fund Benchmark*	3.52%	1.08%	8.66%	8.10%	6.06%

* Current Quarter Target = 36.0% S&P 500 Index, 26.0% Barclays Aggregate Index, 15.0% MSCI ACWI x US (Net), 10.0% Russell 2500 Index, 8.0% NFI-ODCE Value Weight Gr and 5.0% CPI-W+4.0%.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	6/2015- 12/2015	FY 2015	FY 2014	FY 2013	FY 2012
Net of Fees					
Domestic Equity	(1.18%)	8.72%	26.30%	22.90%	2.50%
Total Domestic Equity Target (1)	(1.53%)	7.15%	24.84%	21.70%	3.77%
Large Cap Equity	(0.00%)	7.83%	26.95%	22.21%	3.21%
S&P 500 Index	0.15%	7.42%	24.61%	20.60%	5.45%
Alliance S&P Index	0.22%	7.40%	24.45%	20.46%	5.43%
PIMCO StocksPLUS S&P 500 Index	(1.15%) 0.15%	7.57% 7.42%	27.61% 24.61%	23.83% 20.60%	5.56% 5.45%
BlackRock Russell 1000 Value Index	(3.14%)	4.30%	23.83%	25.35%	3.07%
Russell 1000 Value Index	(3.23%)	4.13%	23.81%	25.32%	3.01%
T. Rowe Price Large Cap Growth	3.56%	11.93%	32.16%	19.79%	4.67%
Russell 1000 Growth Index	1.64%	10.56%	26.92%	17.07%	5.76%
Small/Mid Cap Equity U.S. Equity	(5.05%)	11.80%	24.00%	25.36%	(0.16%)
Russell 2500 Index	(7.36%)	5.92%	25.58%	25.61%	(2.29%)
Champlain Mid Cap Russell MidCap Index	(4.55%) (4.68%)	9.33% 6.63%	25.16% 26.85%	21.86% 25.41%	(0.08%) (1.65%)
Pyramis Small Cap Russell 2000 Index	(5.59%) (8.75%)	14.24% 6.49%	22.70% 23.64%	28.79% 24.21%	(0.31%) (2.08%)
International Equity	(9.89%)	(6.46%)	20.41%	16.34%	(15.16%)
MSCI ACWI x US (Net)	(9.32%)	(5.26%)	21.75%	13.63%	(14.57%)
Causeway International Value Equity MSCI EAFE Index	(7.12%) (6.01%)	(3.01%) (4.22%)	22.98% 23.57%	21.27% 18.62%	(11.43%) (13.83%)
Aberdeen EAFE Plus MSCI ACWI x US (Net)	(13.75%) (9.32%)	(10.90%) (5.26%)	17.28% 21.75%	10.80% 13.63%	(5.04%) (14.57%)
Fixed Income	(0.84%)	0.46%	7.30%	1.51%	8.03%
Barclays Aggregate Index	0.65%	1.86%	4.37%	(0.69%)	7.47%
BlackRock U.S. Debt Fund Barclays Aggregate Index	0.68% 0.65%	1.97% 1.86%	4.43% 4.37%	(0.49%) (0.69%)	7.55% 7.47%
PIMCO Fixed Income Custom Index (2)	(1.75%) (0.34%)	(0.43%) 0.75%	9.07% 8.48%	2.77% 2.41%	9.15% 7.63%

(1) The Total Domestic Equity target is currently composed of 78% S&P 500 and 22% Russell 2500 Index.

(2) The custom index is currently composed of 25% Barclays Mortgage, 25% Barclays Credit, 25% Barclays High Yield, and 25% JP Morgan EMBI Global. Prior to 2/1/2012, the custom index was composed of 70% Barclays Mortgage, 15% Barclays Credit, and 15% Barclays High Yield.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

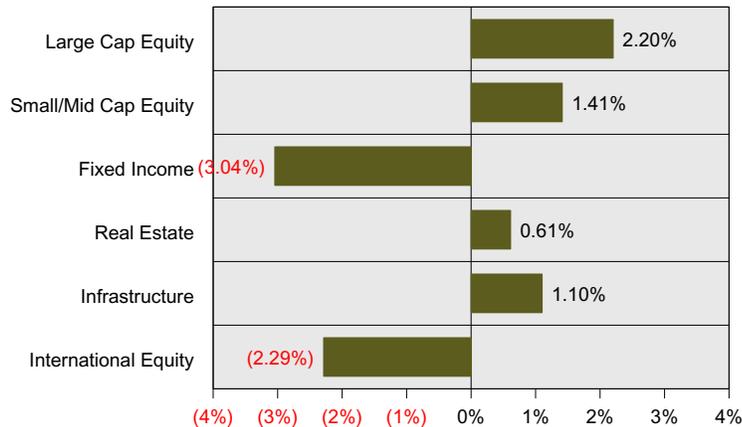
	6/2015- 12/2015	FY 2015	FY 2014	FY 2013	FY 2012
Net of Fees					
Real Estate	6.11%	12.74%	12.03%	14.67%	10.34%
NFI-ODCE Equal Weight Net	6.72%	13.64%	11.37%	10.80%	11.46%
JP Morgan Strategic Property Fund	6.37%	12.28%	12.98%	12.95%	10.90%
NFI-ODCE Equal Weight Net	6.72%	13.64%	11.37%	10.80%	11.46%
JP Morgan Income and Growth Fund	5.45%	14.74%	9.93%	23.54%	16.49%
NFI-ODCE Equal Weight Net	6.72%	13.64%	11.37%	10.80%	11.46%
Infrastructure	3.31%	(3.82%)	15.32%	1.39%	3.61%
CPI + 4%	0.72%	3.62%	6.05%	5.76%	5.58%
Macquarie European Infrastructure	(0.53%)	(10.56%)	14.11%	11.61%	(1.44%)
SteelRiver Infrastructure	6.65%	4.67%	16.80%	(9.28%)	10.85%
CPI + 4%	0.72%	3.62%	6.05%	5.76%	5.58%
Cash Composite	0.01%	(0.00%)	0.00%	0.05%	0.03%
Total Fund	(1.47%)	4.17%	19.11%	14.21%	1.82%
Total Fund Benchmark*	(1.25%)	4.34%	16.97%	12.87%	3.04%

* Current Quarter Target = 36.0% S&P 500 Index, 26.0% Barclays Aggregate Index, 15.0% MSCI ACWI x US (Net), 10.0% Russell 2500 Index, 8.0% NFI-ODCE Value Weight Gr and 5.0% CPI-W+4.0%.

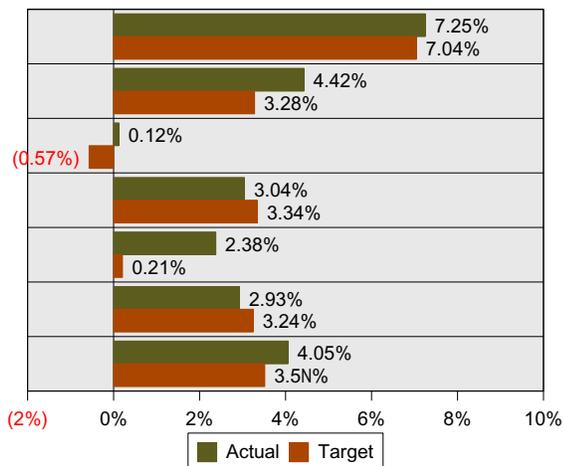
Quarterly Style Attribution - December 31, 2015

The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Style Allocation Effect and Manager Selection Effect. The Style Allocation Effect represents the excess return due to the actual total fund style allocation differing from the target style allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

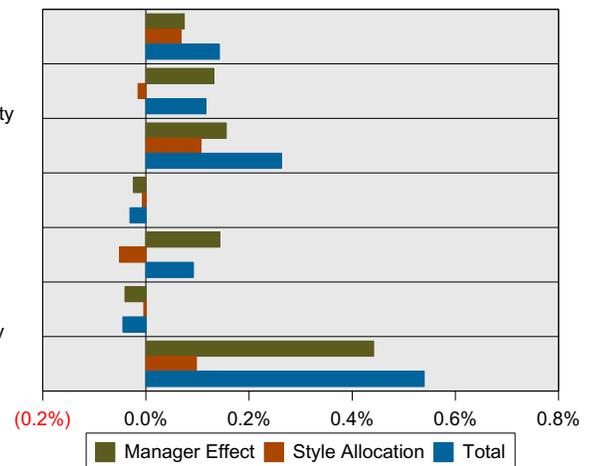
Style Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Style Class



Relative Attribution Effects for Quarter ended December 31, 2015

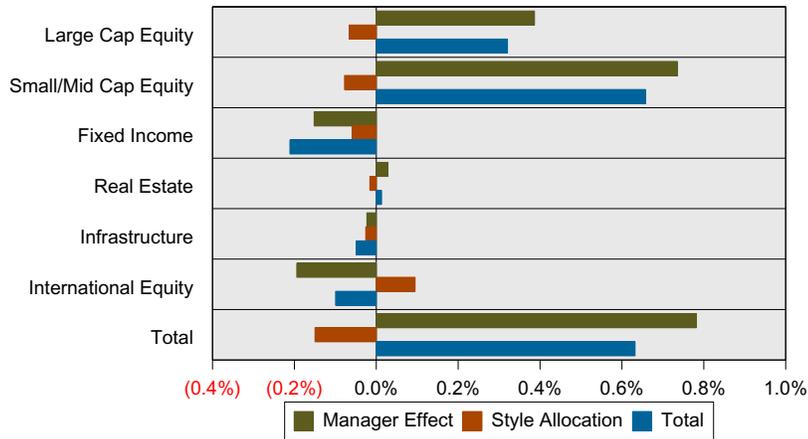
Style Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Style Allocation	Total Relative Return
Large Cap Equity	38%	36%	7.25%	7.04%	0.07%	0.07%	0.14%
Small/Mid Cap Equity	11%	10%	4.42%	3.28%	0.13%	(0.02%)	0.12%
Fixed Income	23%	26%	0.12%	(0.57%)	0.16%	0.11%	0.26%
Real Estate	9%	8%	3.04%	3.34%	(0.02%)	(0.01%)	(0.03%)
Infrastructure	6%	5%	2.38%	0.21%	0.14%	(0.05%)	0.09%
International Equity	13%	15%	2.93%	3.24%	(0.04%)	(0.00%)	(0.04%)
Total			4.05%	3.50%	0.44%	0.10%	0.54%

* Current Quarter Target = 36.0% S&P 500 Index, 26.0% Barclays Aggregate Index, 15.0% MSCI ACWI x US (Net), 10.0% Russell 2500 Index, 8.0% NFI-ODCE Value Weight Gr and 5.0% CPI-W+4.0%.

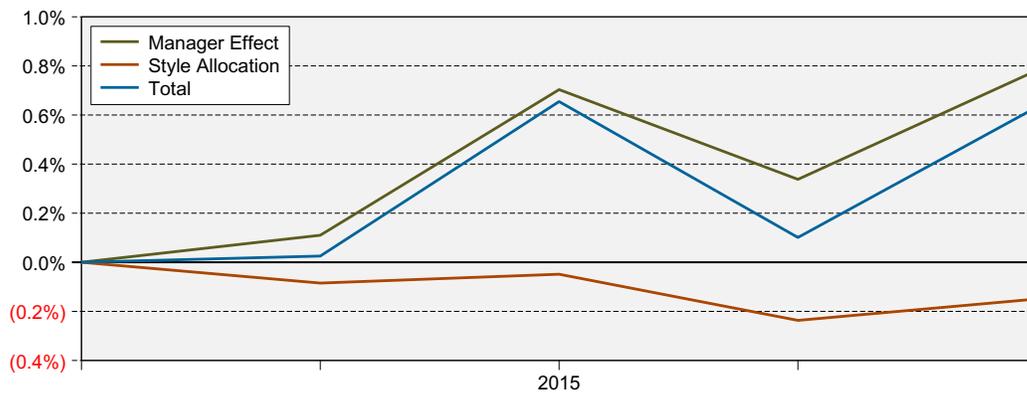
Cumulative Style Relative Attribution - December 31, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by style class. These relative attribution effects separate the cumulative sources of total fund excess return into Style Allocation Effect and Manager Selection Effect.

One Year Relative Attribution Effects



Cumulative Relative Attribution Effects



One Year Relative Attribution Effects

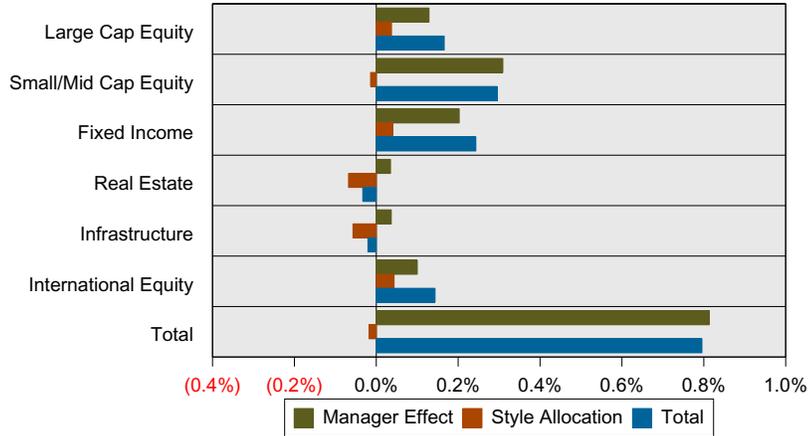
Style Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Style Allocation	Total Relative Return
Large Cap Equity	39%	36%	2.36%	1.38%	0.39%	(0.07%)	0.32%
Small/Mid Cap Equity	11%	10%	3.44%	(2.90%)	0.74%	(0.08%)	0.66%
Fixed Income	23%	26%	(0.00%)	0.55%	(0.15%)	(0.06%)	(0.21%)
Real Estate	8%	8%	15.38%	15.02%	0.03%	(0.02%)	0.01%
Infrastructure	6%	5%	3.49%	4.39%	(0.02%)	(0.03%)	(0.05%)
International Equity	13%	15%	(7.06%)	(5.66%)	(0.19%)	0.09%	(0.10%)
Total			1.71%	1.08%	+ 0.78%	+ (0.15%)	0.63%

* Current Quarter Target = 36.0% S&P 500 Index, 26.0% Barclays Aggregate Index, 15.0% MSCI ACWI x US (Net), 10.0% Russell 2500 Index, 8.0% NFI-ODCE Value Weight Gr and 5.0% CPI-W+4.0%.

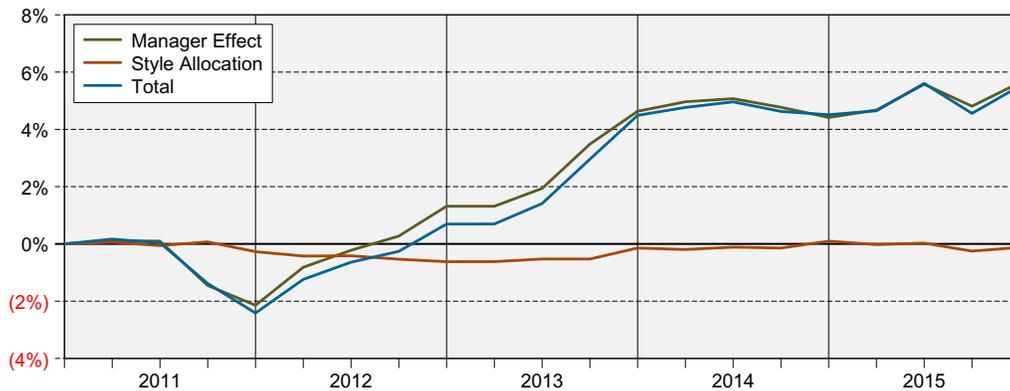
Cumulative Style Relative Attribution - December 31, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by style class. These relative attribution effects separate the cumulative sources of total fund excess return into Style Allocation Effect and Manager Selection Effect.

Five Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Five Year Annualized Relative Attribution Effects

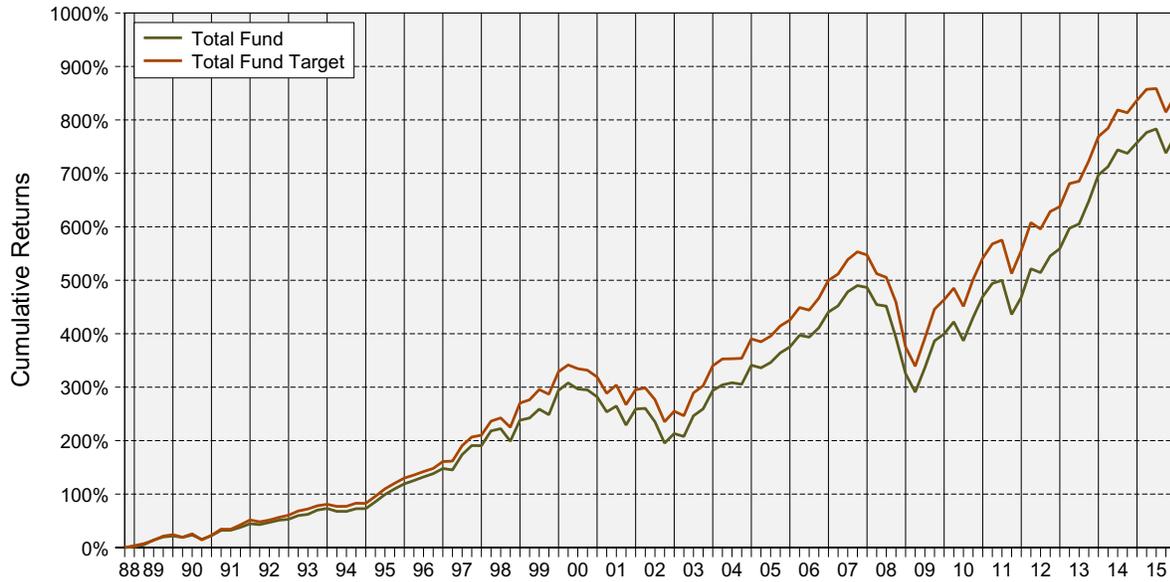
Style Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Style Allocation	Total Relative Return
Large Cap Equity	38%	36%	12.90%	12.57%	0.13%	0.04%	0.17%
Small/Mid Cap Equity	11%	10%	13.25%	10.32%	0.31%	(0.01%)	0.30%
Fixed Income	24%	26%	4.15%	3.34%	0.20%	0.04%	0.24%
Real Estate	8%	8%	14.12%	13.67%	0.03%	(0.07%)	(0.03%)
Infrastructure	6%	5%	5.95%	5.41%	0.04%	(0.06%)	(0.02%)
International Equity	14%	15%	1.73%	1.06%	0.10%	0.04%	0.14%
Total			8.90%	8.10%	+ 0.81%	+ (0.02%)	0.80%

* Current Quarter Target = 36.0% S&P 500 Index, 26.0% Barclays Aggregate Index, 15.0% MSCI ACWI x US (Net), 10.0% Russell 2500 Index, 8.0% NFI-ODCE Value Weight Gr and 5.0% CPI-W+4.0%.

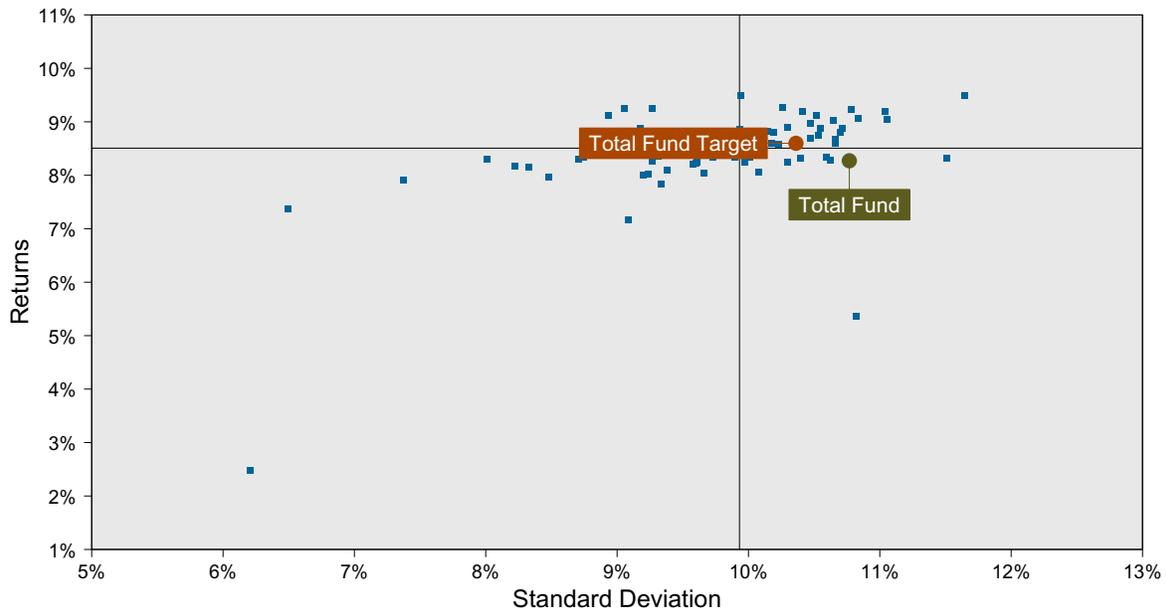
Cumulative Performance Relative to Target

The first chart below illustrates the cumulative performance of the Total Fund relative to the cumulative performance of the Fund's Target Asset Mix. The Target Mix is assumed to be rebalanced each quarter with no transaction costs. The second chart below shows the return and the risk of the Total Fund and the Target Mix, contrasted with the returns and risks of the funds in the Public Fund Sponsor Database.

Cumulative Returns Actual vs Target



Twenty-Seven and One-Quarter Year Annualized Risk vs Return



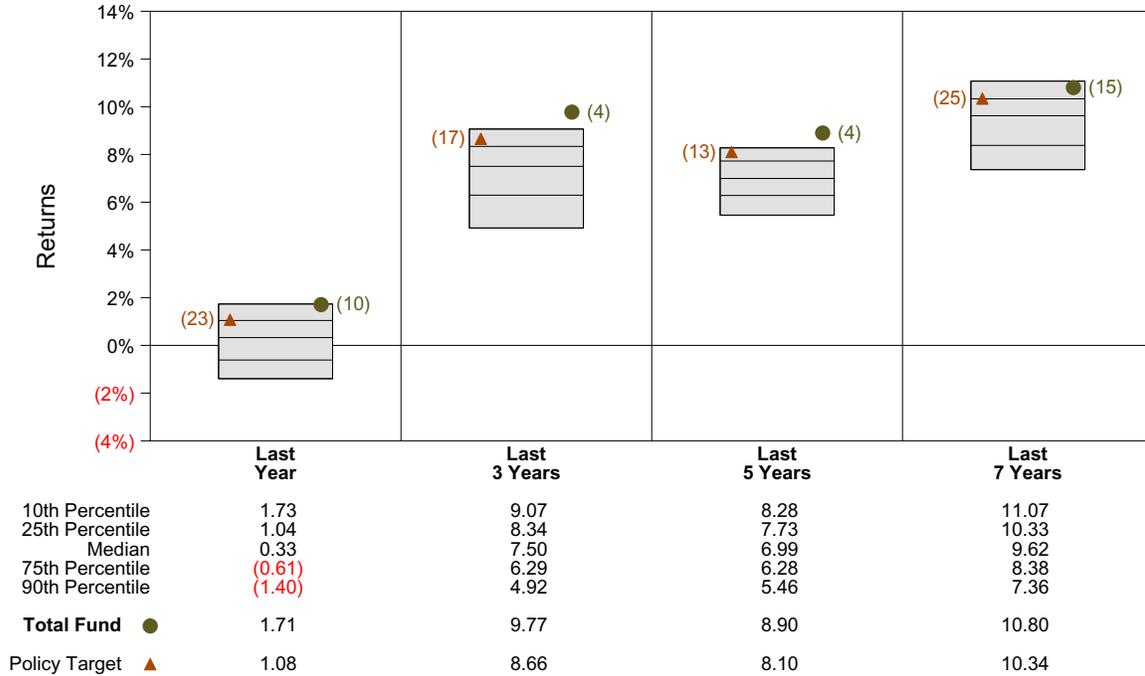
Squares represent membership of the Public Fund Sponsor Database

* Current Quarter Target = 36.0% S&P 500 Index, 26.0% Barclays Aggregate Index, 15.0% MSCI ACWI x US (Net), 10.0% Russell 2500 Index, 8.0% NFI-ODCE Value Weight Gr and 5.0% CPI-W+4.0%.

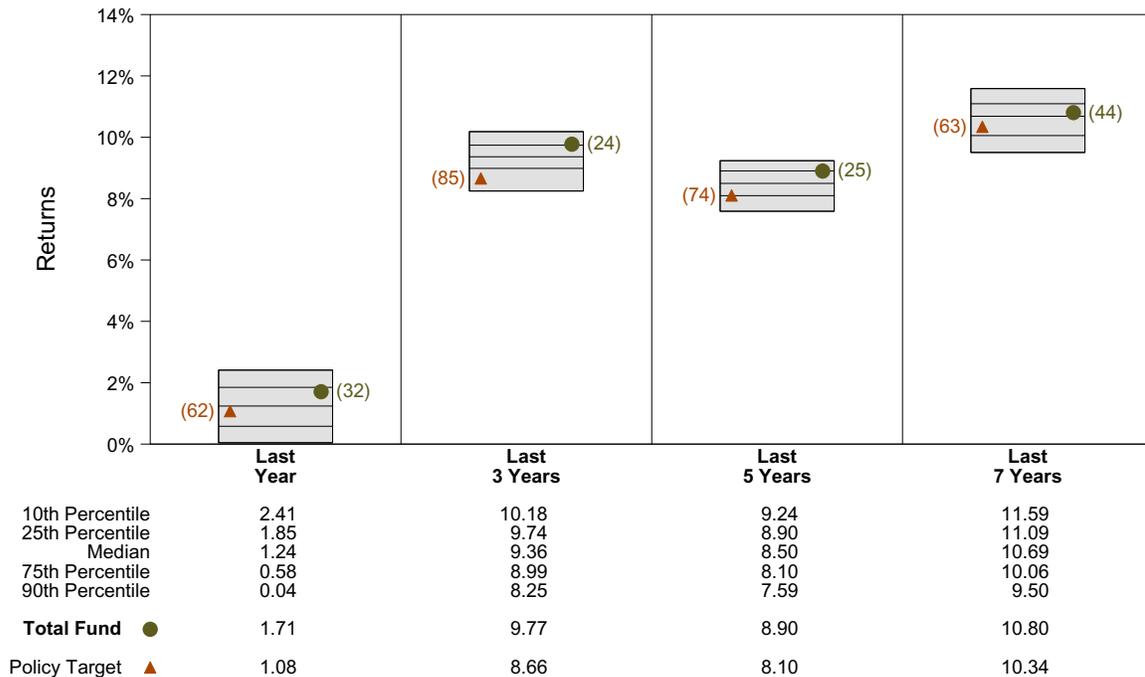
Total Fund Ranking

The first two charts show the ranking of the Total Fund's performance relative to that of the Public Fund Sponsor Database for periods ended December 31, 2015. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.

Public Fund Sponsor Database



Asset Allocation Adjusted Ranking

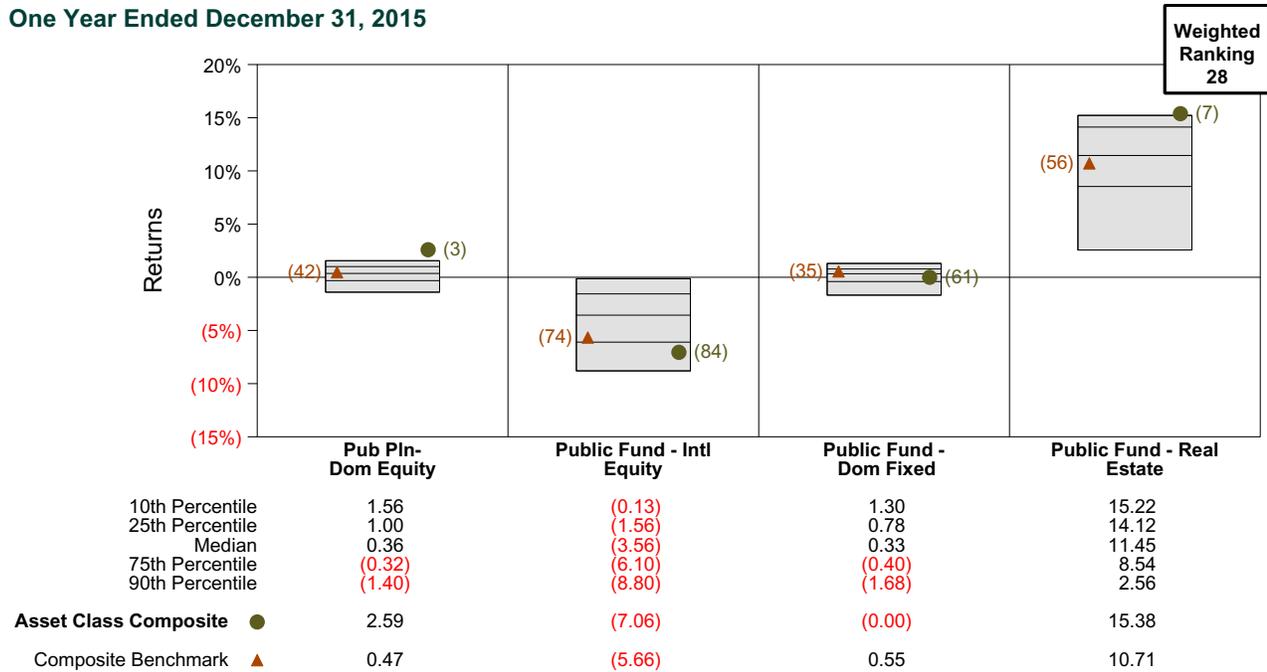


* Current Quarter Target = 36.0% S&P 500 Index, 26.0% Barclays Aggregate Index, 15.0% MSCI ACWI x US (Net), 10.0% Russell 2500 Index, 8.0% NFI-ODCE Value Weight Gr and 5.0% CPI-W+4.0%.

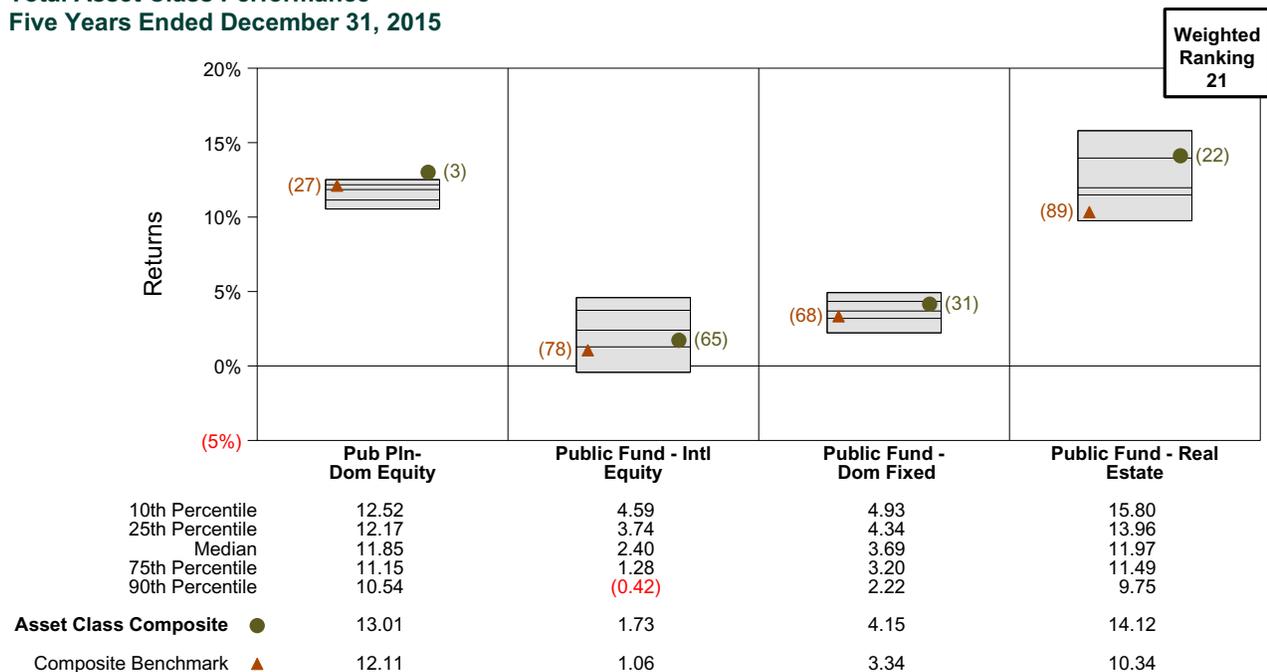
Asset Class Rankings

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.

Total Asset Class Performance One Year Ended December 31, 2015



Total Asset Class Performance Five Years Ended December 31, 2015



* Current Quarter Target = 36.0% S&P 500 Index, 26.0% Barclays Aggregate Index, 15.0% MSCI ACWI x US (Net), 10.0% Russell 2500 Index, 8.0% NFI-ODCE Value Weight Gr and 5.0% CPI-W+4.0%.

Total Fund

Period Ended December 31, 2015

Investment Philosophy

The total fund return stream starts the third quarter of 1988.

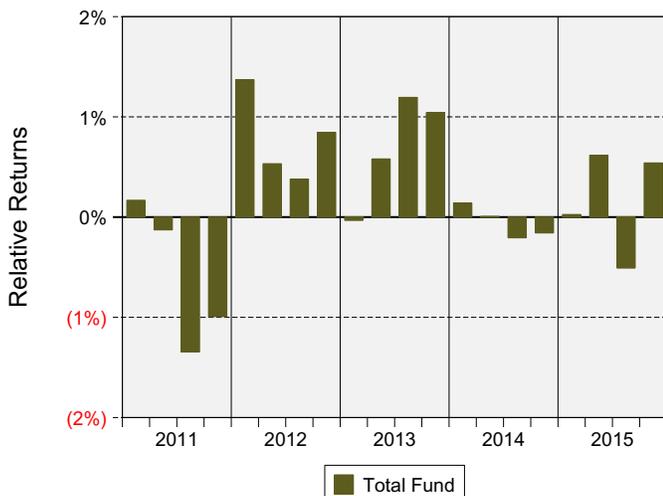
Quarterly Summary and Highlights

- Total Fund's portfolio posted a 4.05% return for the quarter placing it in the 4 percentile of the Public Fund Sponsor Database group for the quarter and in the 10 percentile for the last year.
- Total Fund's portfolio outperformed the Total Fund Benchmark by 0.54% for the quarter and outperformed the Total Fund Benchmark for the year by 0.63%.

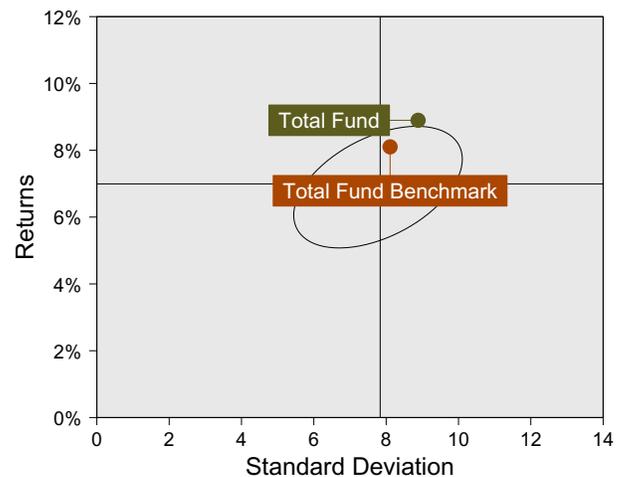
Performance vs Public Fund Sponsor Database (Gross)



Relative Return vs Total Fund Benchmark



Public Fund Sponsor Database (Gross) Annualized Five Year Risk vs Return



Domestic Equity

Period Ended December 31, 2015

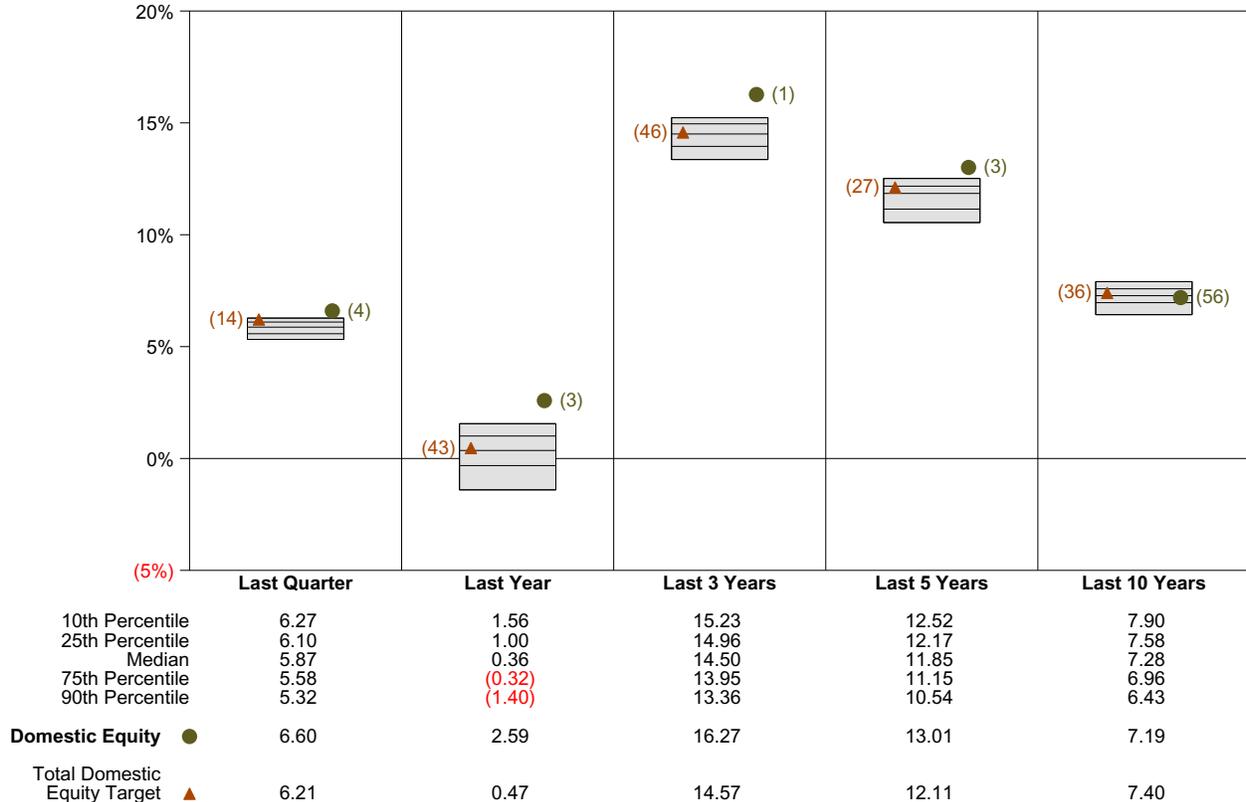
Investment Philosophy

The Total Domestic Equity target is currently composed of 78% S&P 500 Index and 22% Russell 2500 Index.

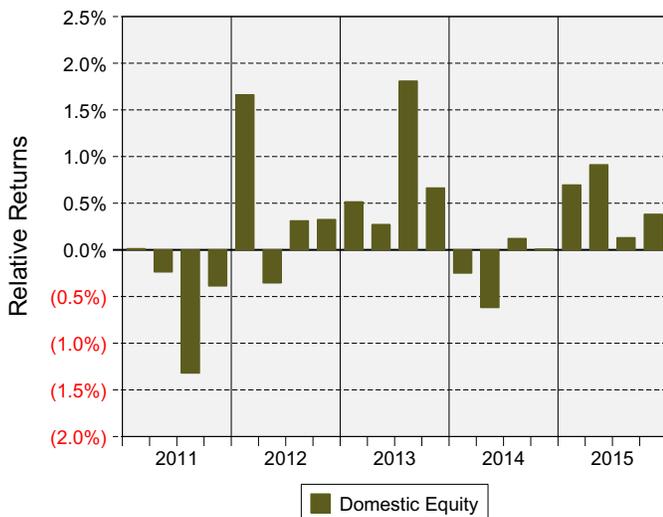
Quarterly Summary and Highlights

- Domestic Equity's portfolio posted a 6.60% return for the quarter placing it in the 4 percentile of the Pub Pln- Domestic Equity group for the quarter and in the 3 percentile for the last year.
- Domestic Equity's portfolio outperformed the Total Domestic Equity Target by 0.38% for the quarter and outperformed the Total Domestic Equity Target for the year by 2.12%.

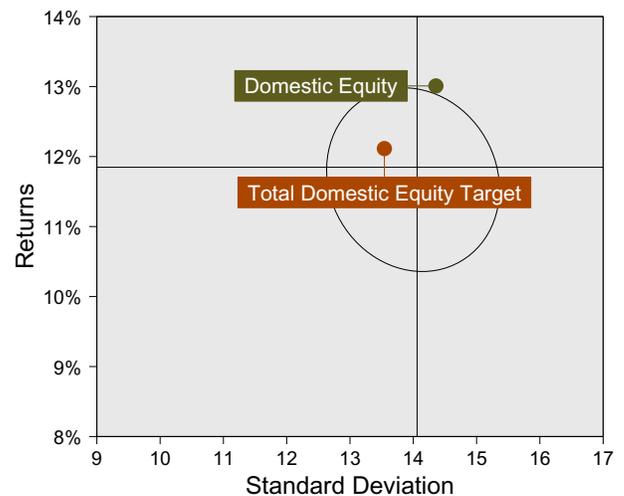
Performance vs Pub Pln- Domestic Equity (Gross)



Relative Returns vs Total Domestic Equity Target



Pub Pln- Domestic Equity (Gross) Annualized Five Year Risk vs Return

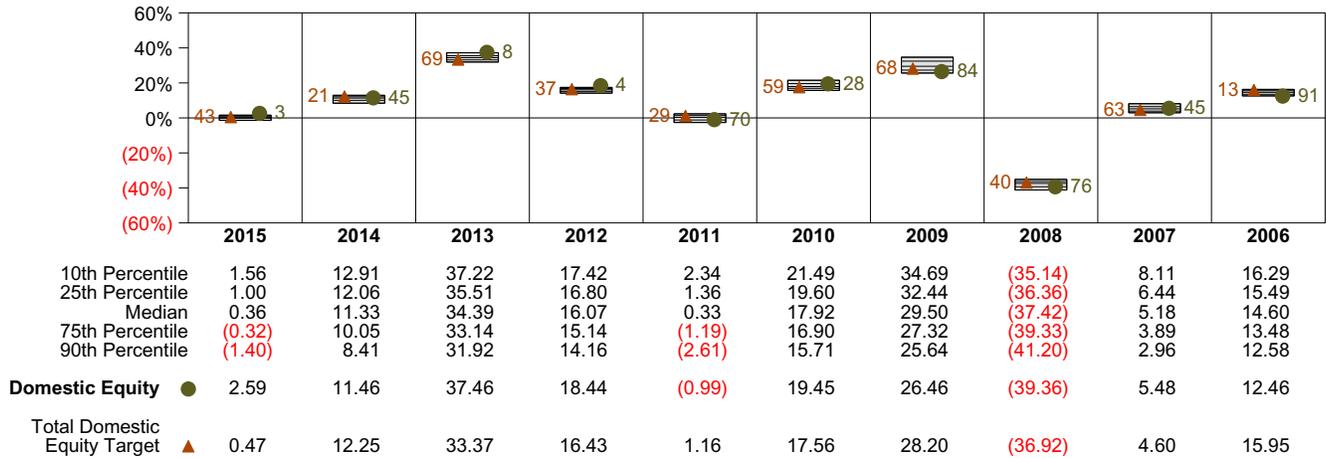


Domestic Equity Return Analysis Summary

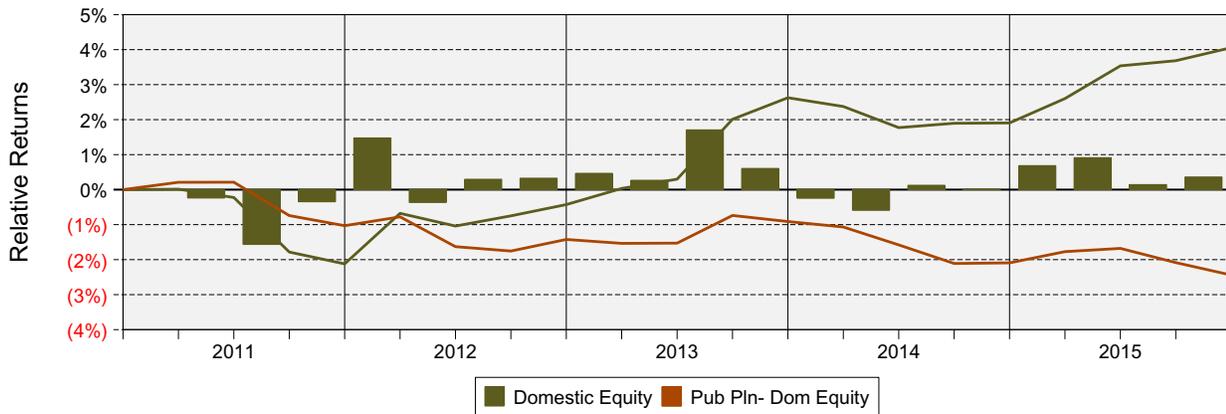
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures.

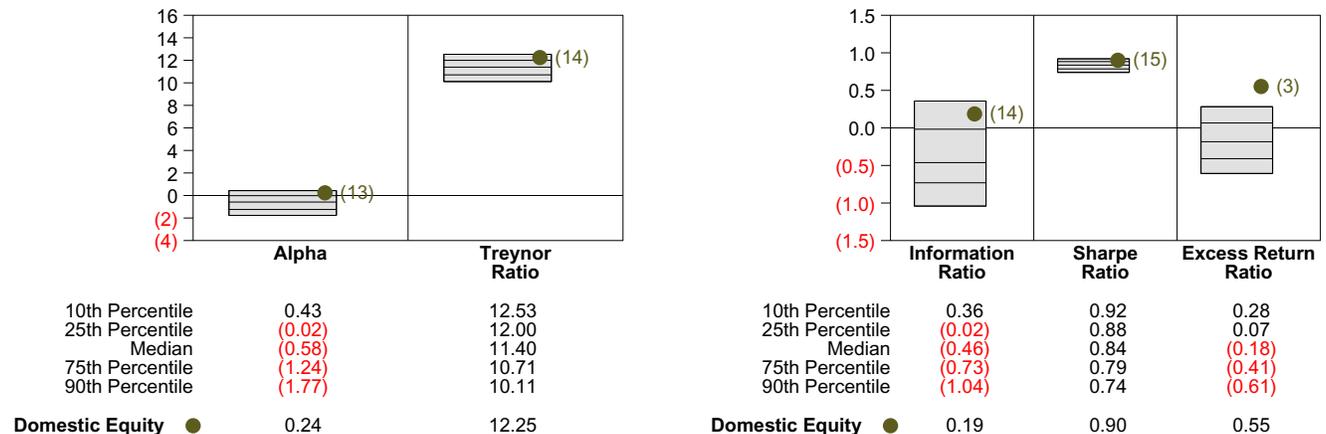
Performance vs Pub Pln- Domestic Equity (Gross)



Cumulative and Quarterly Relative Return vs Total Domestic Equity Target



Risk Adjusted Return Measures vs Total Domestic Equity Target Rankings Against Pub Pln- Domestic Equity (Gross) Five Years Ended December 31, 2015



Alliance S&P Index Period Ended December 31, 2015

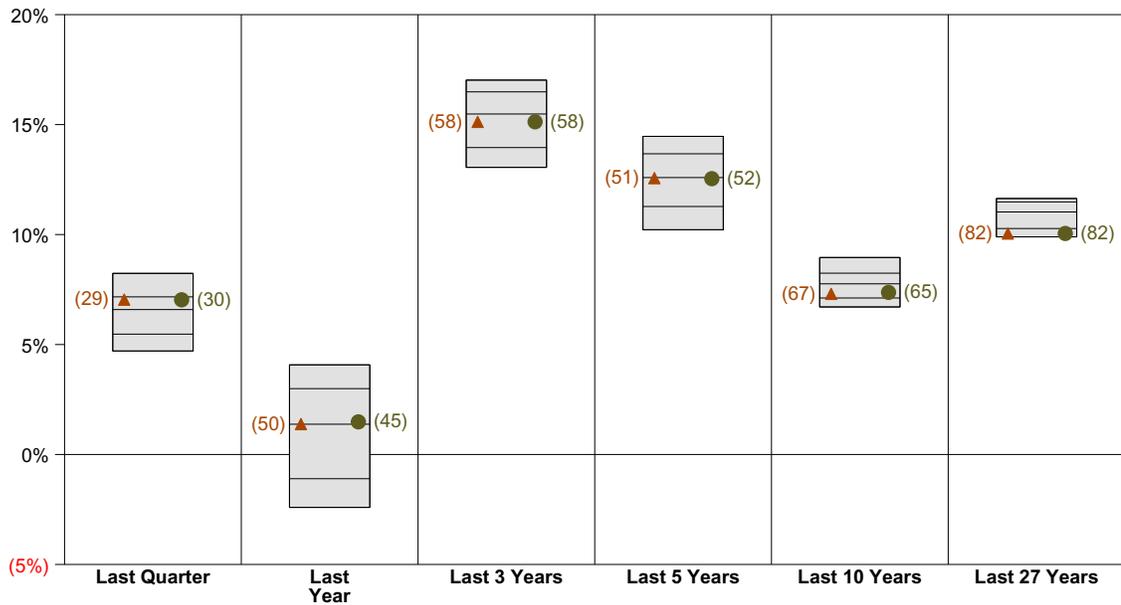
Investment Philosophy

Alliance uses a stratified sampling methodology and purchases a majority of the index stocks to replicate the Standard and Poor's 500. The product was funded during the third quarter of 1988.

Quarterly Summary and Highlights

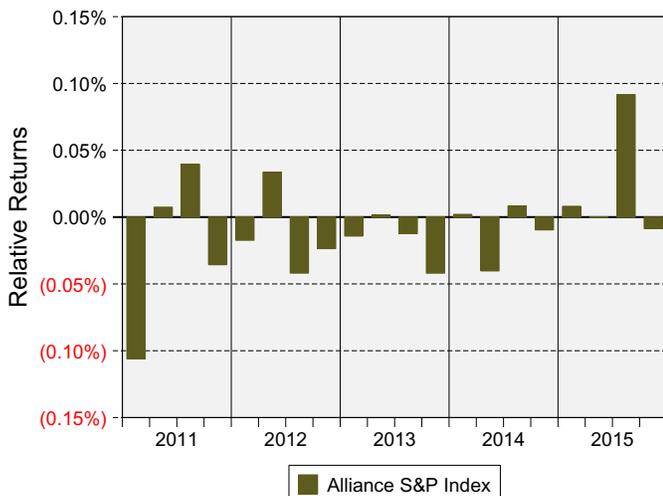
- Alliance S&P Index's portfolio posted a 7.03% return for the quarter placing it in the 30 percentile of the CAI Large Cap Core Style group for the quarter and in the 45 percentile for the last year.
- Alliance S&P Index's portfolio underperformed the S&P 500 Index by 0.01% for the quarter and outperformed the S&P 500 Index for the year by 0.10%.

Performance vs CAI Large Cap Core Style (Gross)

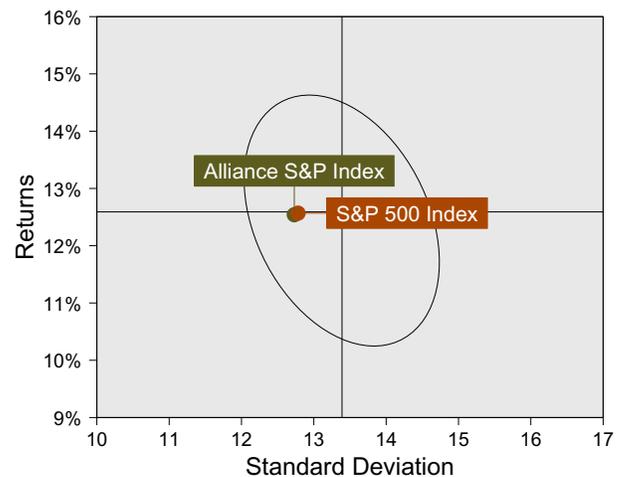


10th Percentile	8.23	4.08	17.02	14.47	8.96	11.64
25th Percentile	7.17	2.99	16.49	13.67	8.24	11.48
Median	6.59	1.38	15.48	12.59	7.76	11.03
75th Percentile	5.47	(1.10)	13.96	11.28	7.12	10.27
90th Percentile	4.70	(2.41)	13.06	10.22	6.71	9.90
Alliance S&P Index	● 7.03	1.48	15.13	12.54	7.37	10.05
S&P 500 Index	▲ 7.04	1.38	15.13	12.57	7.31	10.05

Relative Return vs S&P 500 Index



CAI Large Cap Core Style (Gross) Annualized Five Year Risk vs Return

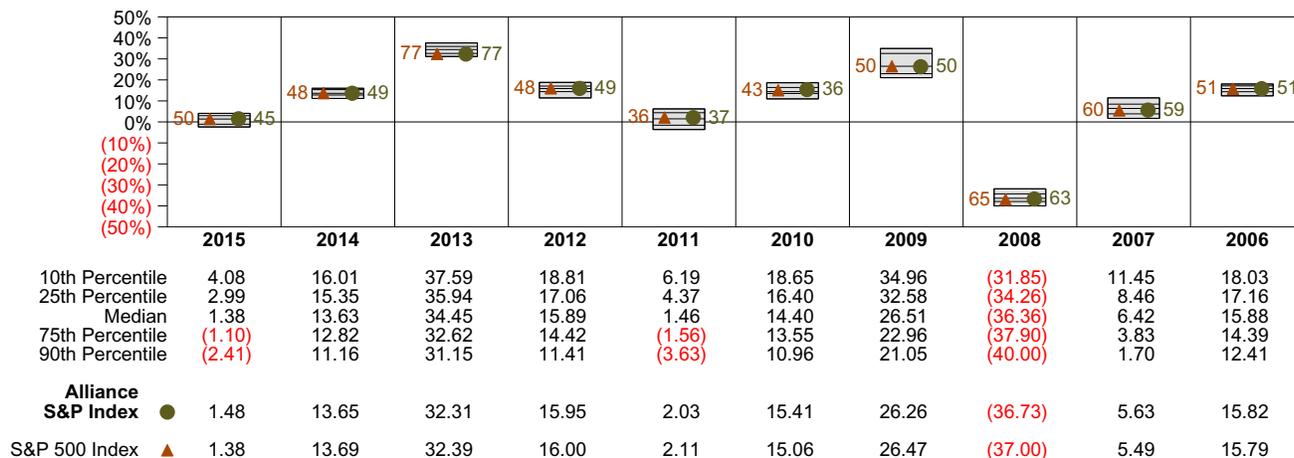


Alliance S&P Index Return Analysis Summary

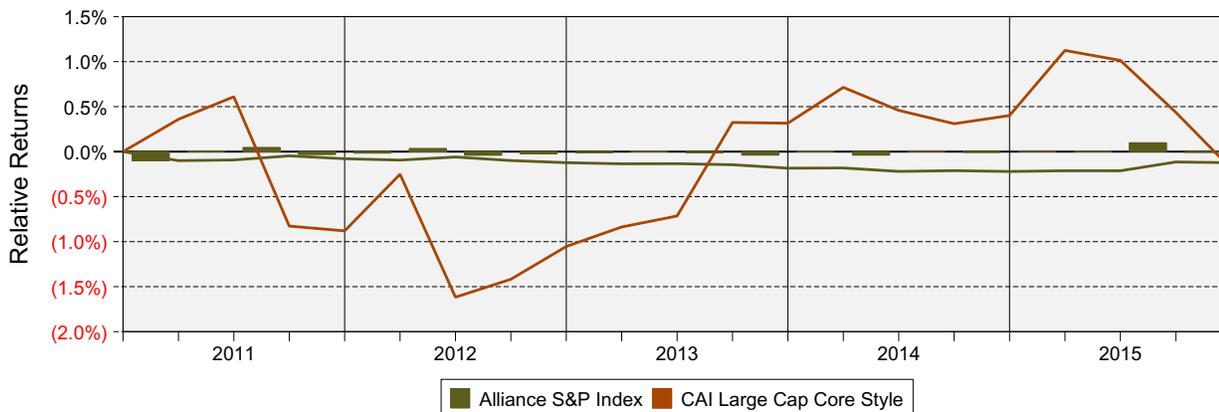
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures.

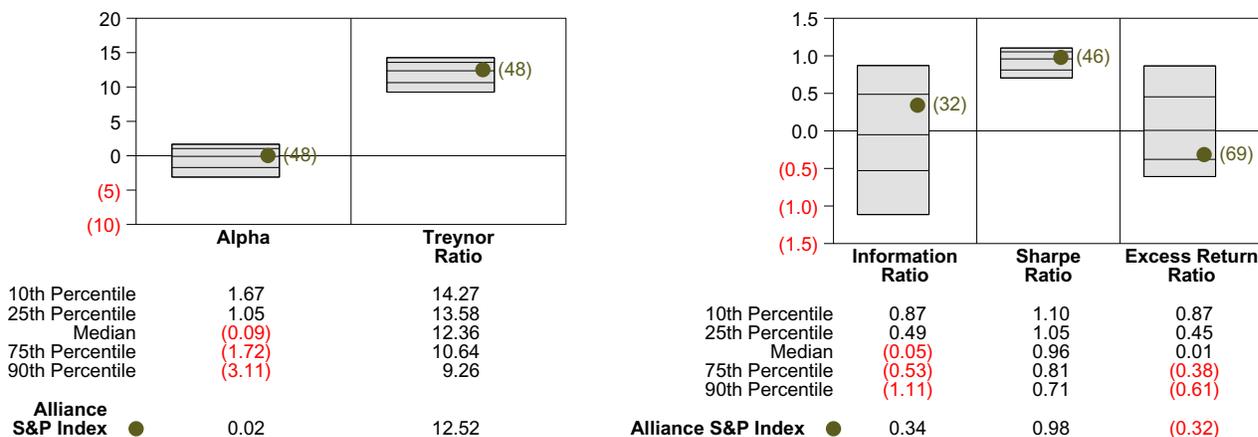
Performance vs CAI Large Cap Core Style (Gross)



Cumulative and Quarterly Relative Return vs S&P 500 Index



Risk Adjusted Return Measures vs S&P 500 Index Rankings Against CAI Large Cap Core Style (Gross) Five Years Ended December 31, 2015



PIMCO StocksPLUS

Period Ended December 31, 2015

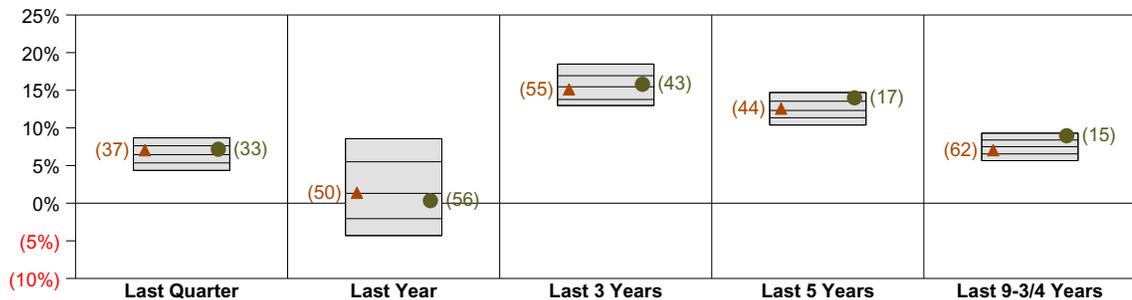
Investment Philosophy

PIMCO's StocksPLUS investment philosophy is based on the principal that stock index futures and swaps, when used as a non-leveraged vehicle for obtaining long-term equity exposure, offer an attractive means for enhancing equity market returns. The strategy seeks a longer time horizon of their investors relative to that of typical money market investors. This long time horizon allows PIMCO to use their fixed income and associated risk management skill set to seek out attractive yields relative to money market financing rates on a portion of the high quality fixed-income securities they use to back the futures contracts. Since they only require sufficient liquidity to meet a worst case margin outflow caused by a stock market decline, a portion of their fixed-income portfolio can be invested in somewhat less liquid, higher yielding securities. In addition, they generally take advantage of the typical upward slope of the short end of the yield curve by extending their duration to six months in most market environments and sometimes up to one year. PIMCO also feels that it is appropriate in most market environments to capture both the credit yield premium provided by holding a portion of the fixed-income portfolio in low duration corporate securities and the volatility yield premium provided by holding high quality mortgage securities. The product was funded during the first quarter of 2006.

Quarterly Summary and Highlights

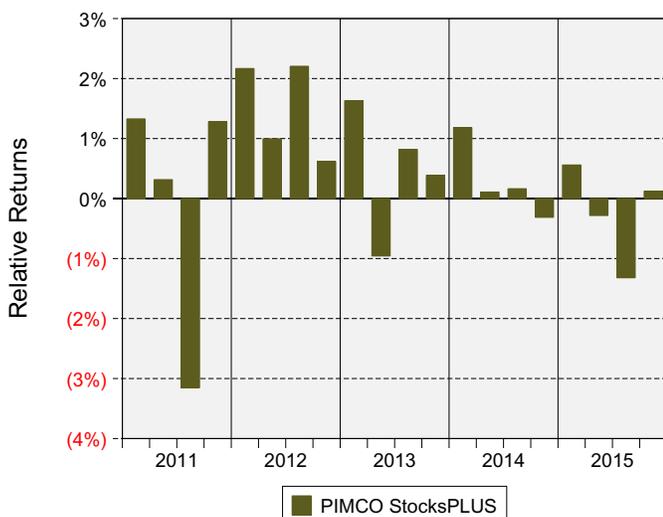
- PIMCO StocksPLUS's portfolio posted a 7.17% return for the quarter placing it in the 33 percentile of the CAI Large Capitalization Style group for the quarter and in the 56 percentile for the last year.
- PIMCO StocksPLUS's portfolio outperformed the S&P 500 Index by 0.12% for the quarter and underperformed the S&P 500 Index for the year by 1.04%.

Performance vs CAI Large Capitalization Style (Gross)

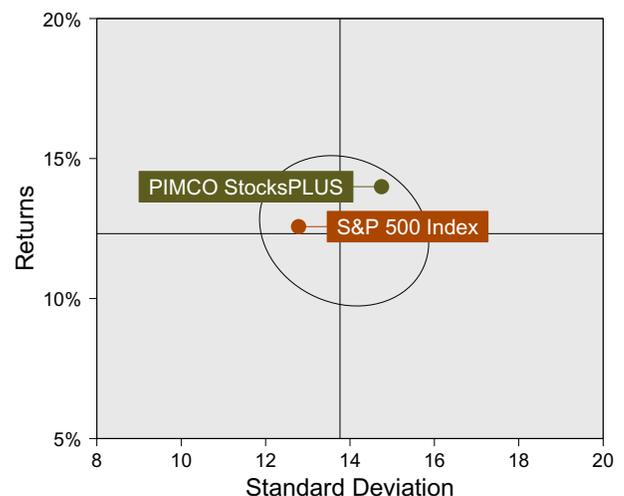


	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 9-3/4 Years
10th Percentile	8.68	8.57	18.48	14.70	9.30
25th Percentile	7.63	5.50	16.94	13.55	8.39
Median	6.45	1.31	15.46	12.32	7.51
75th Percentile	5.35	(2.05)	13.78	11.35	6.55
90th Percentile	4.35	(4.30)	12.97	10.39	5.65
PIMCO StocksPLUS	7.17	0.34	15.79	13.99	8.96
S&P 500 Index	7.04	1.38	15.13	12.57	7.05

Relative Return vs S&P 500 Index



CAI Large Capitalization Style (Gross) Annualized Five Year Risk vs Return

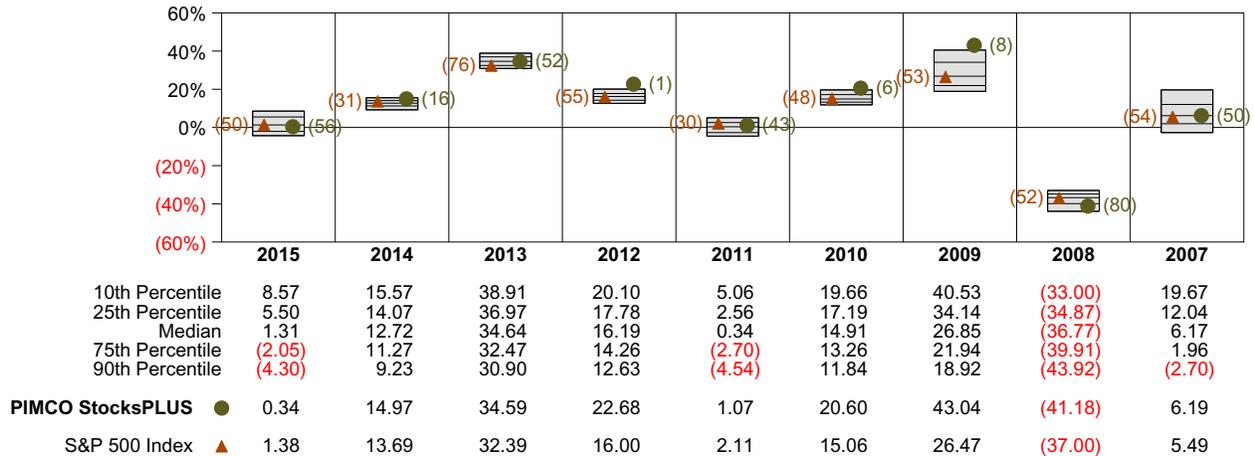


PIMCO StocksPLUS Return Analysis Summary

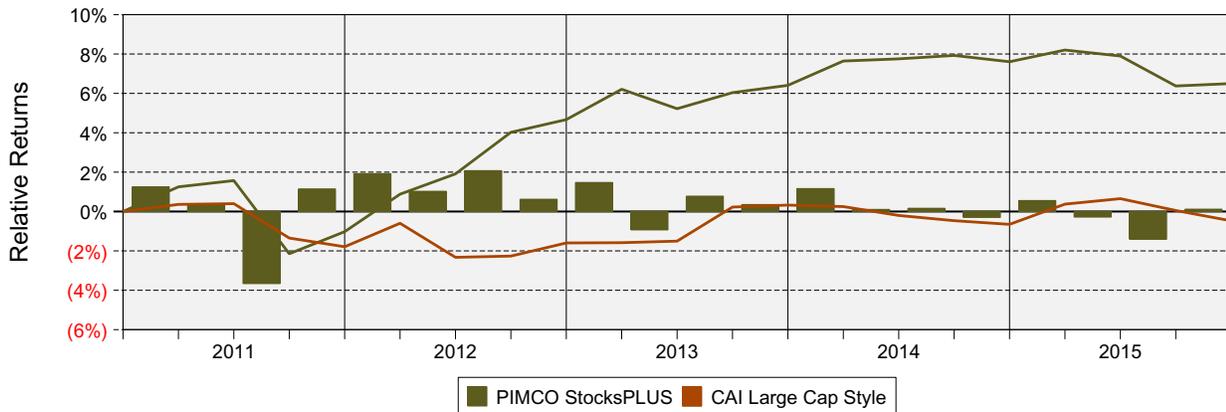
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures.

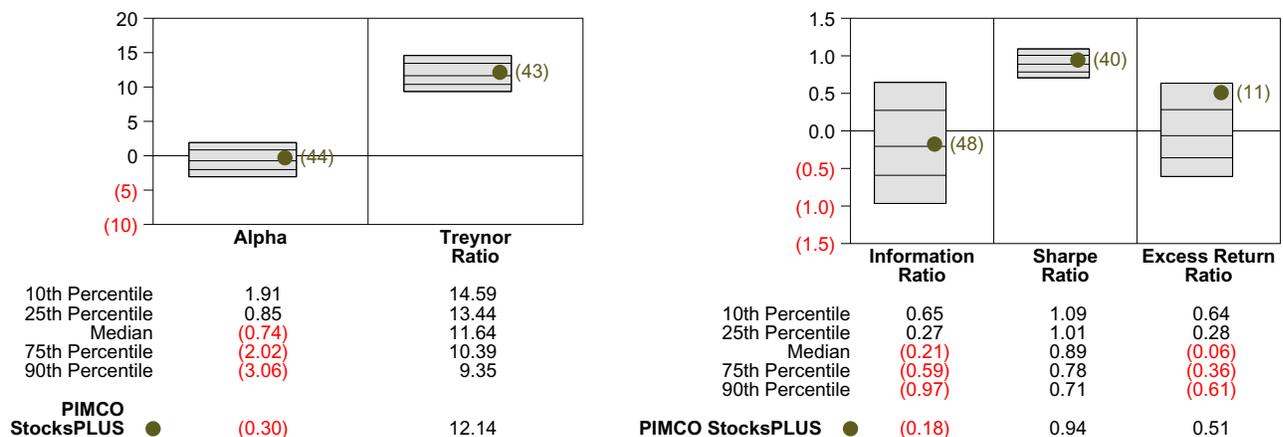
Performance vs CAI Large Capitalization Style (Gross)



Cumulative and Quarterly Relative Return vs S&P 500 Index



Risk Adjusted Return Measures vs S&P 500 Index Rankings Against CAI Large Capitalization Style (Gross) Five Years Ended December 31, 2015



BlackRock Russell 1000 Value Period Ended December 31, 2015

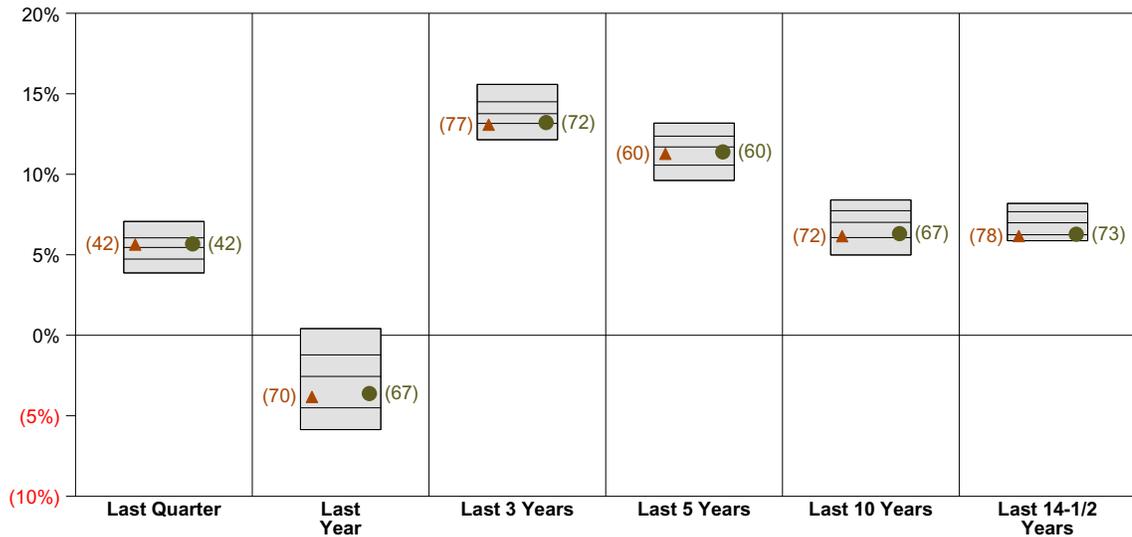
Investment Philosophy

The objective of the Russell 1000 Value Index Fund is to track the performance of its benchmark, the Russell 1000 Value Index. They seek to deliver a high quality and cost-effective index-based solution to institutional investors. The product was funded during the second quarter of 2001.

Quarterly Summary and Highlights

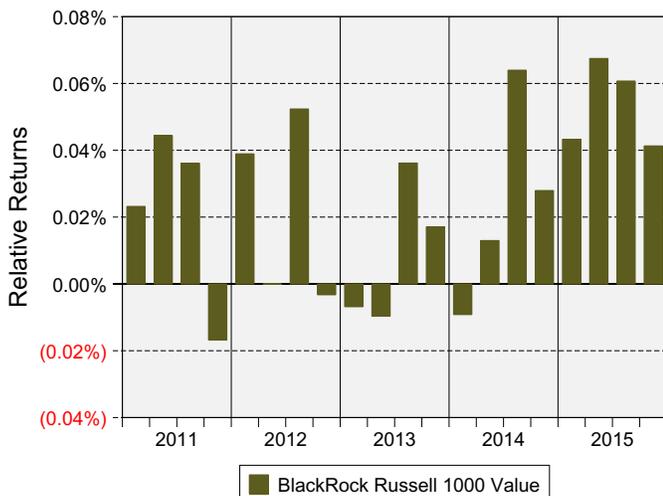
- BlackRock Russell 1000 Value's portfolio posted a 5.68% return for the quarter placing it in the 42 percentile of the CAI Large Cap Value Style group for the quarter and in the 67 percentile for the last year.
- BlackRock Russell 1000 Value's portfolio outperformed the Russell 1000 Value Index by 0.04% for the quarter and outperformed the Russell 1000 Value Index for the year by 0.21%.

Performance vs CAI Large Cap Value Style (Gross)

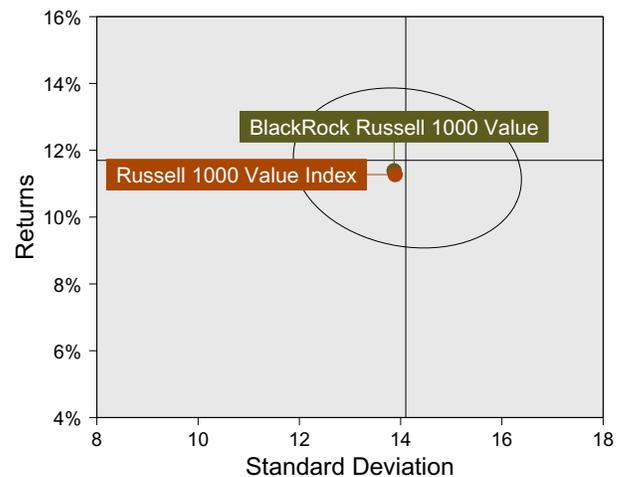


	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 14-1/2 Years
10th Percentile	7.07	0.41	15.58	13.18	8.40	8.19
25th Percentile	6.05	(1.22)	14.50	12.37	7.74	7.68
Median	5.45	(2.56)	13.76	11.70	7.01	6.99
75th Percentile	4.73	(4.51)	13.16	10.57	6.07	6.24
90th Percentile	3.87	(5.86)	12.14	9.62	4.99	5.87
BlackRock Russell 1000 Value	● 5.68	(3.62)	13.21	11.39	6.31	6.28
Russell 1000 Value Index	▲ 5.64	(3.83)	13.08	11.27	6.16	6.16

Relative Return vs Russell 1000 Value Index



CAI Large Cap Value Style (Gross) Annualized Five Year Risk vs Return

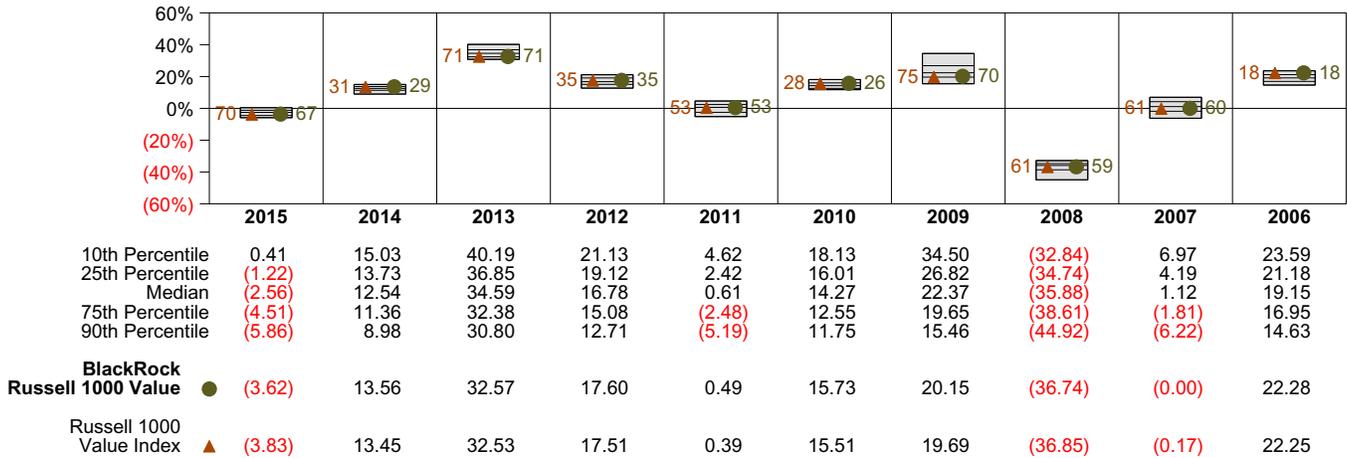


BlackRock Russell 1000 Value Return Analysis Summary

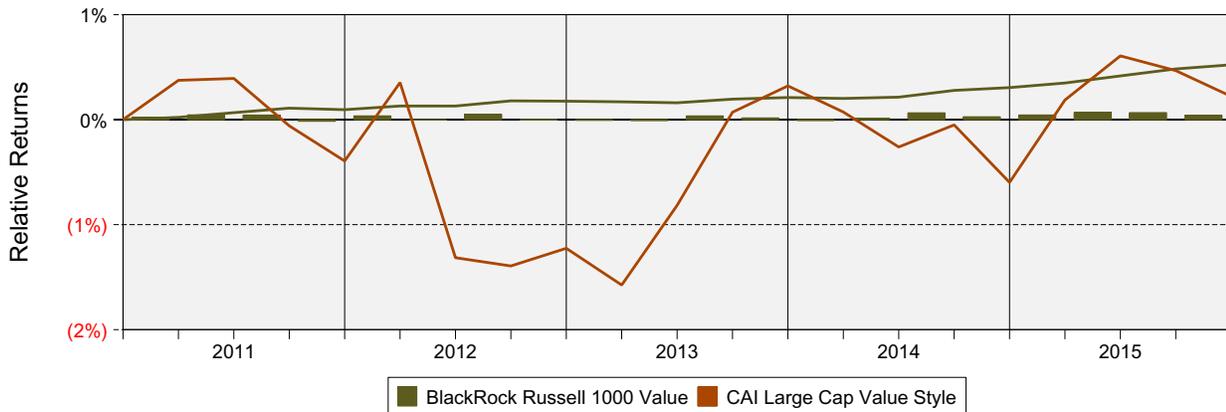
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures.

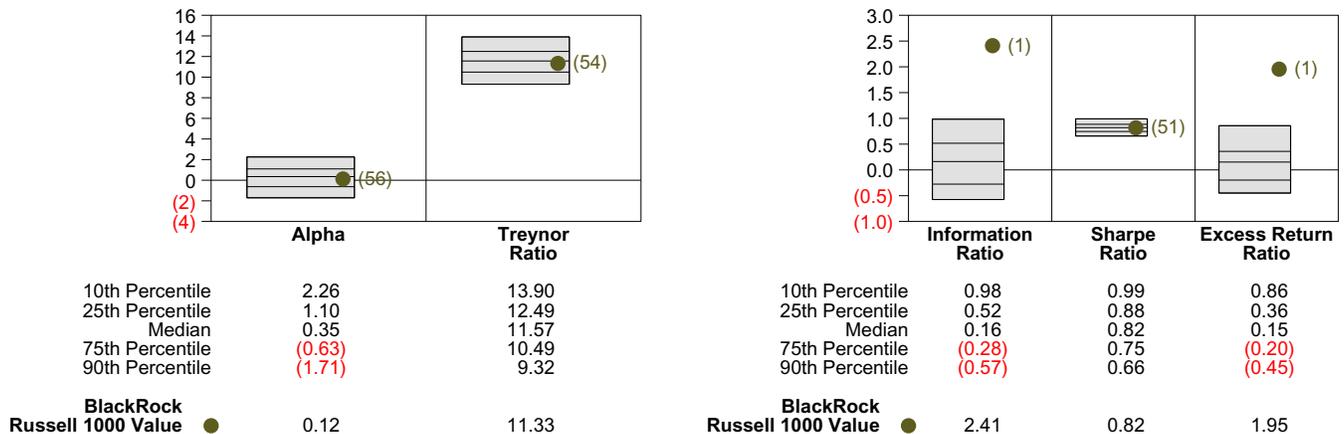
Performance vs CAI Large Cap Value Style (Gross)



Cumulative and Quarterly Relative Return vs Russell 1000 Value Index



Risk Adjusted Return Measures vs Russell 1000 Value Index Rankings Against CAI Large Cap Value Style (Gross) Five Years Ended December 31, 2015



T. Rowe Price Large Cap Growth Period Ended December 31, 2015

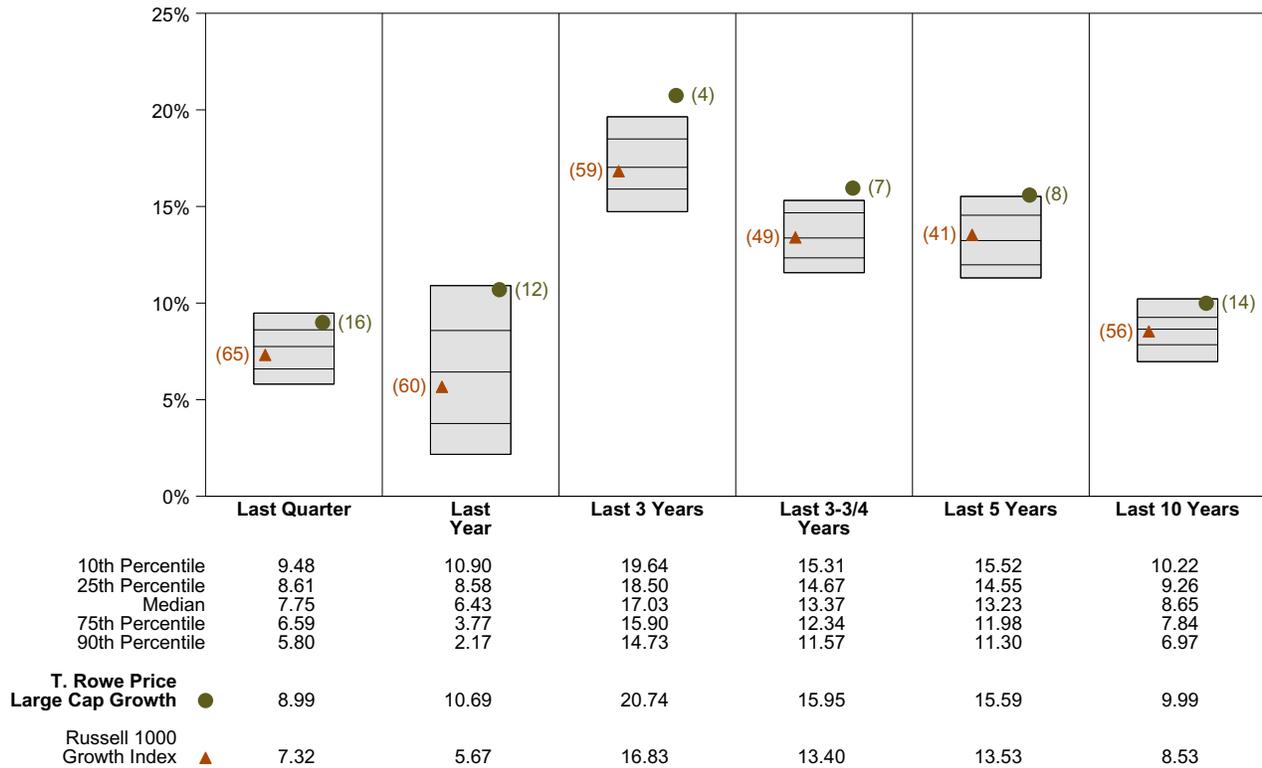
Investment Philosophy

The Large-Cap Growth Strategy is a fundamentally driven, active approach to large company growth investing. The investment philosophy is centered around the manager's belief that long-term growth in earnings and cash flow drive stockholder returns. The product was funded during the first quarter of 2012. Performance prior is that of the composite.

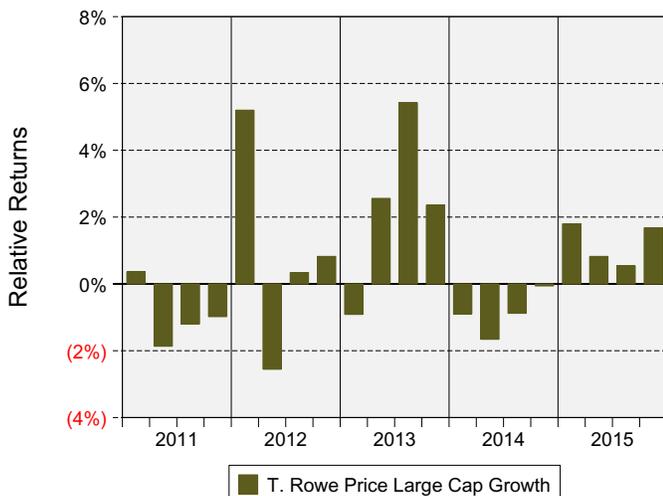
Quarterly Summary and Highlights

- T. Rowe Price Large Cap Growth's portfolio posted a 8.99% return for the quarter placing it in the 16 percentile of the CAI Large Cap Growth Style group for the quarter and in the 12 percentile for the last year.
- T. Rowe Price Large Cap Growth's portfolio outperformed the Russell 1000 Growth Index by 1.68% for the quarter and outperformed the Russell 1000 Growth Index for the year by 5.03%.

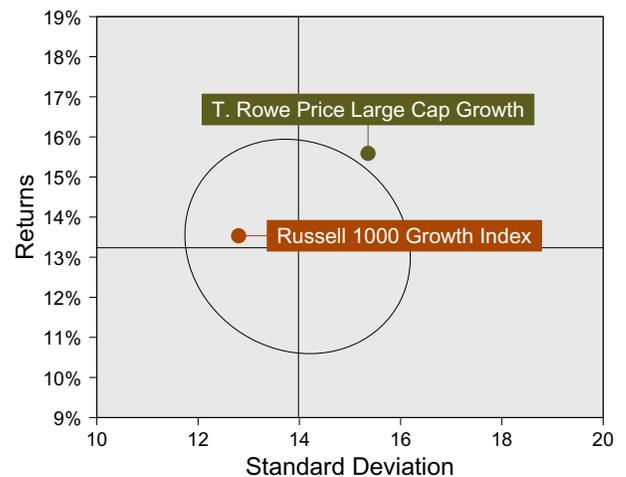
Performance vs CAI Large Cap Growth Style (Gross)



Relative Return vs Russell 1000 Growth Index



CAI Large Cap Growth Style (Gross) Annualized Five Year Risk vs Return

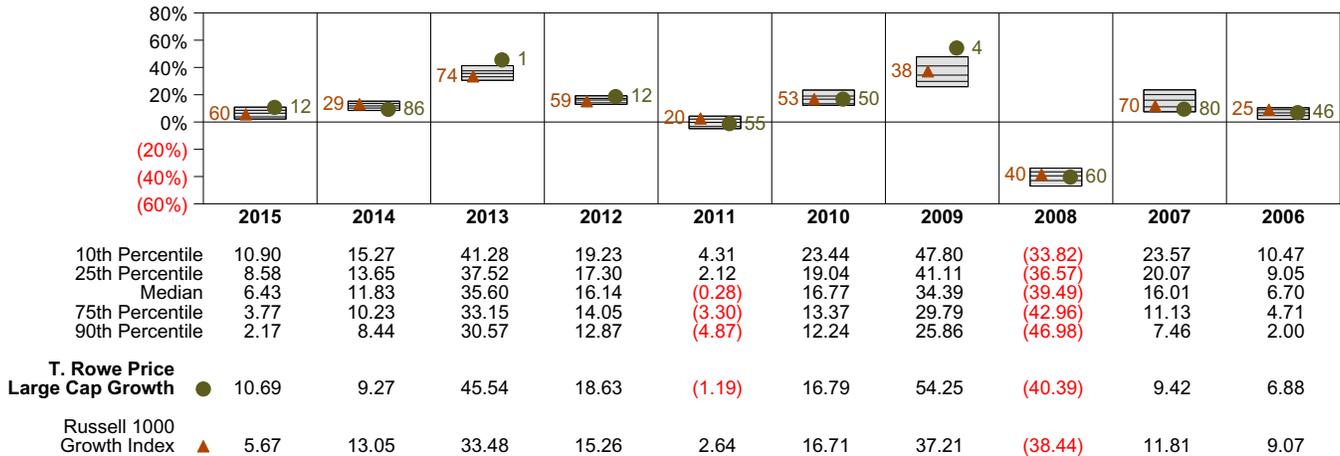


T. Rowe Price Large Cap Growth Return Analysis Summary

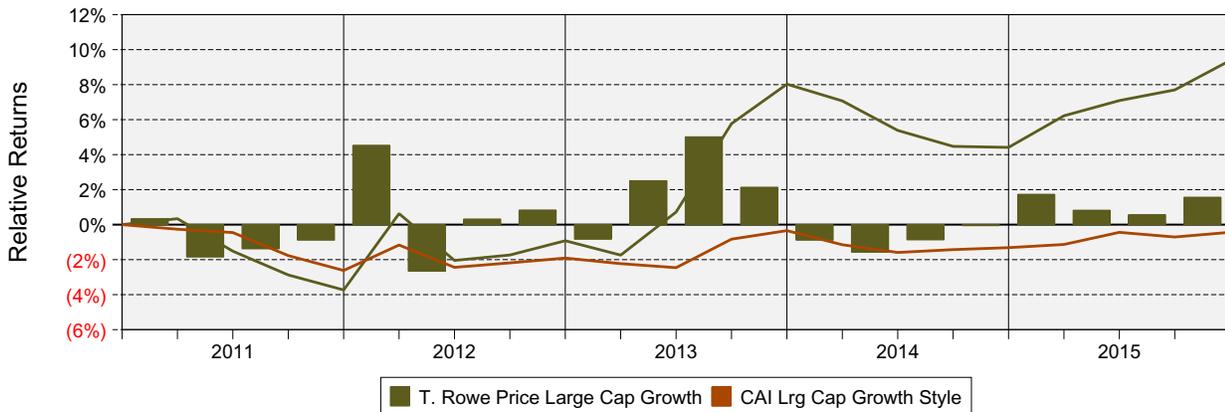
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures.

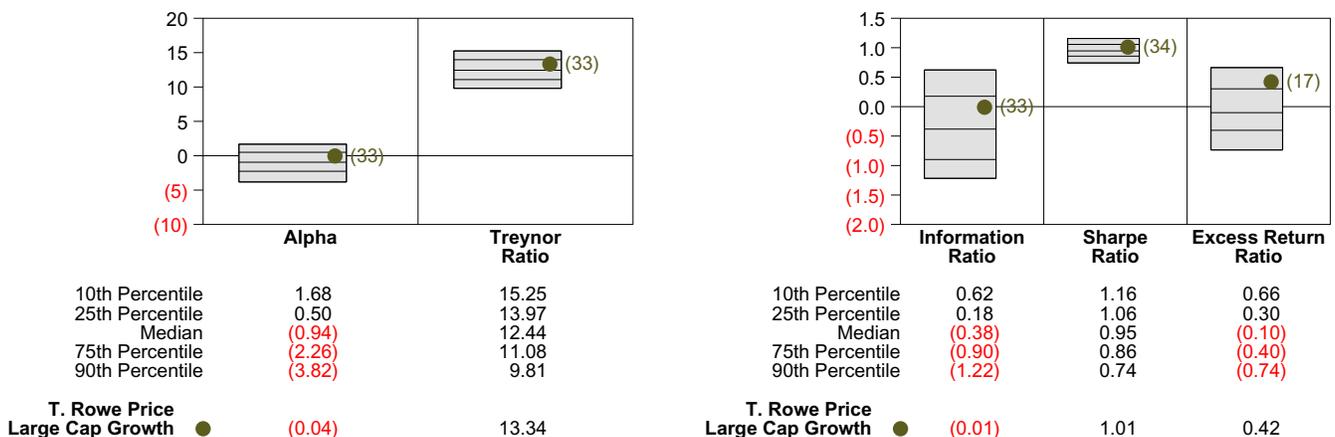
Performance vs CAI Large Cap Growth Style (Gross)



Cumulative and Quarterly Relative Return vs Russell 1000 Growth Index



Risk Adjusted Return Measures vs Russell 1000 Growth Index Rankings Against CAI Large Cap Growth Style (Gross) Five Years Ended December 31, 2015



Champlain Mid Cap Period Ended December 31, 2015

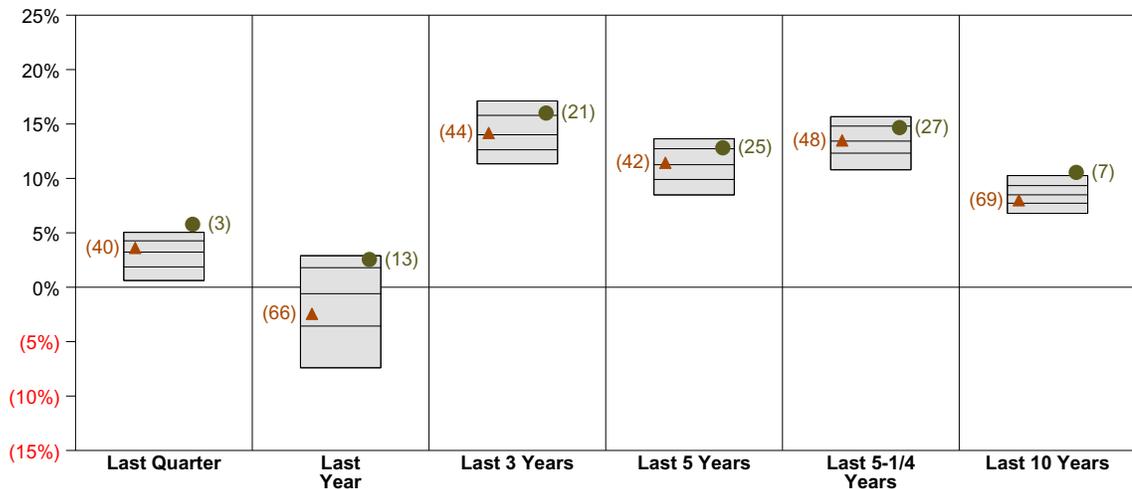
Investment Philosophy

Champlain Investment Partners believes buying the shares of superior businesses with credible and sincere managements at a discount to fair or intrinsic value gives investors several potential paths to wealth creation. First, the market may bid the shares to a premium over fair value. Second, management may grow the fair value over time at a faster rate than market appreciation. Third, the company may be bought by a larger company or private market investor. They are willing to sell over-priced stocks and harvest gains, reducing valuation risk. The product was funded during the third quarter of 2010. Performance prior is that of the composite.

Quarterly Summary and Highlights

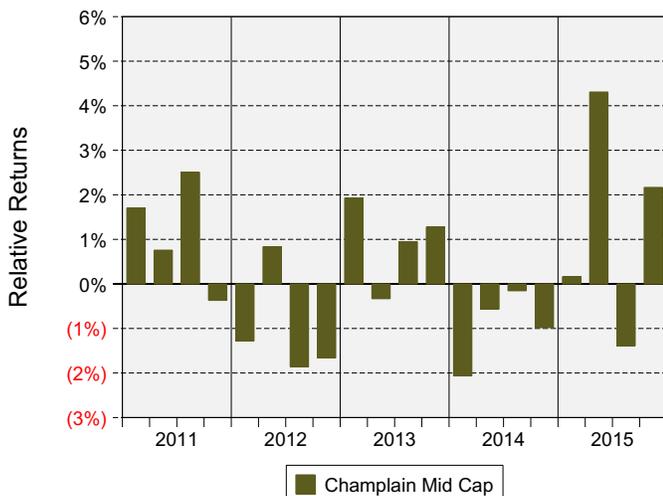
- Champlain Mid Cap's portfolio posted a 5.78% return for the quarter placing it in the 3 percentile of the CAI Mid Capitalization Style group for the quarter and in the 13 percentile for the last year.
- Champlain Mid Cap's portfolio outperformed the Russell MidCap Index by 2.17% for the quarter and outperformed the Russell MidCap Index for the year by 4.99%.

Performance vs CAI Mid Capitalization Style (Gross)

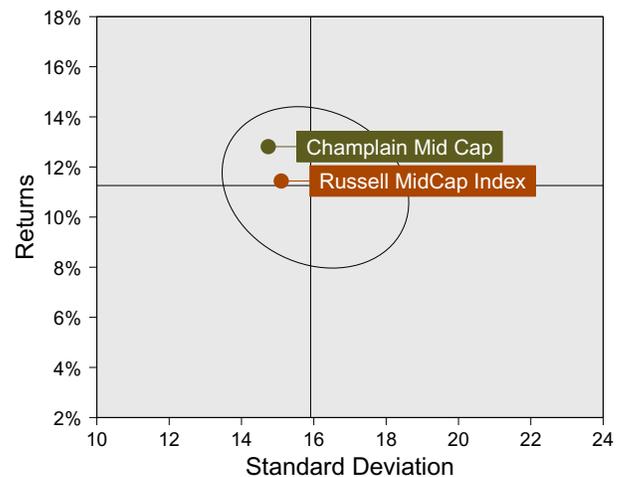


10th Percentile	5.05	2.90	17.12	13.64	15.67	10.26
25th Percentile	4.26	1.80	15.79	12.73	14.81	9.34
Median	3.23	(0.59)	14.01	11.26	13.43	8.49
75th Percentile	1.87	(3.57)	12.63	9.90	12.32	7.72
90th Percentile	0.61	(7.40)	11.34	8.48	10.79	6.79
Champlain Mid Cap ●	5.78	2.55	16.00	12.81	14.67	10.55
Russell MidCap Index ▲	3.62	(2.44)	14.18	11.44	13.49	8.00

Relative Return vs Russell MidCap Index



CAI Mid Capitalization Style (Gross) Annualized Five Year Risk vs Return

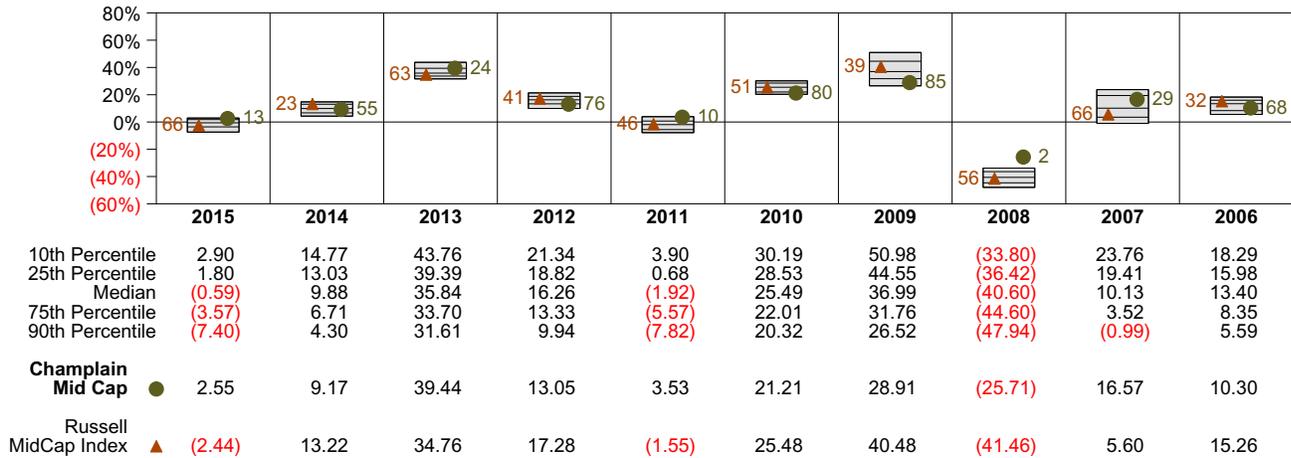


Champlain Mid Cap Return Analysis Summary

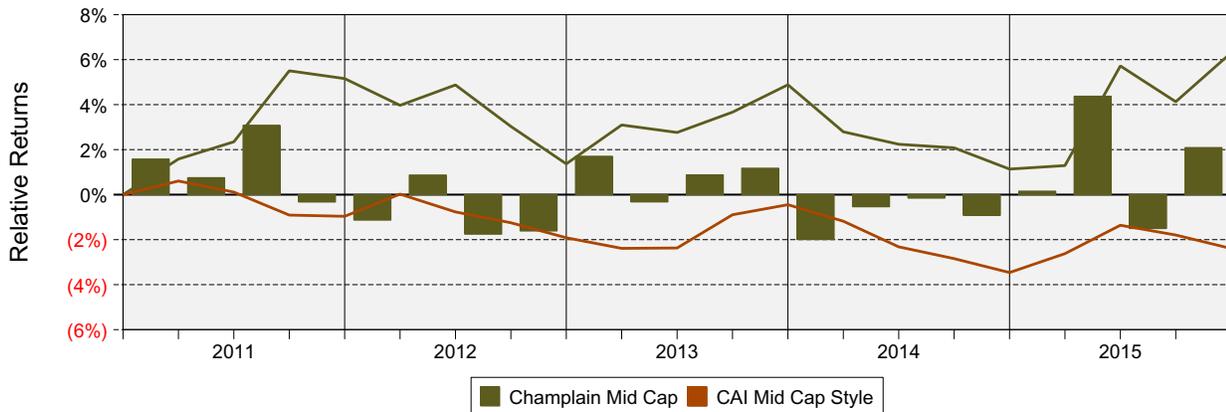
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures.

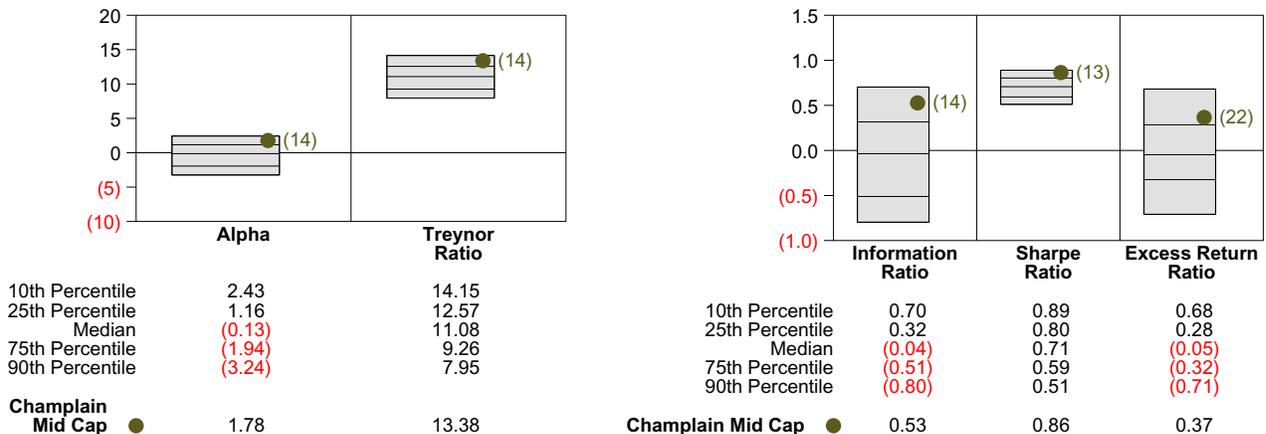
Performance vs CAI Mid Capitalization Style (Gross)



Cumulative and Quarterly Relative Return vs Russell MidCap Index



Risk Adjusted Return Measures vs Russell MidCap Index Rankings Against CAI Mid Capitalization Style (Gross) Five Years Ended December 31, 2015



Pyramis Small Cap Period Ended December 31, 2015

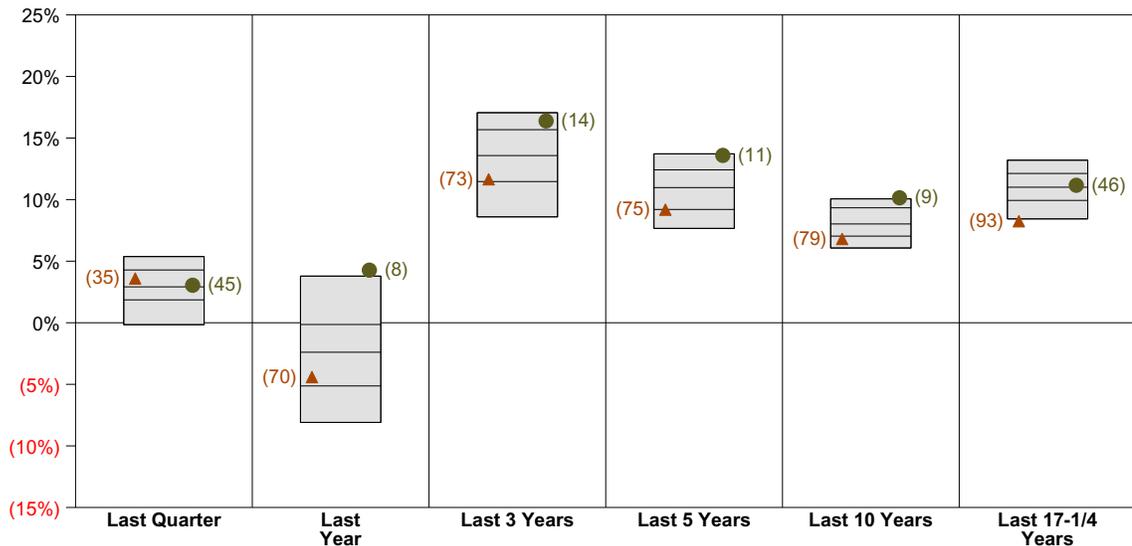
Investment Philosophy

Pyramis believes that pricing anomalies exist within the marketplace. The firm's objective is to exploit these inefficiencies and add value over the Russell 2000 Index using fundamental research to identify potential investment opportunities. The Pyramis Small Cap Core strategy seeks to build a balanced portfolio where returns will be driven by stock selection and not by systemic biases or exposures to market factors. The product was funded during the third quarter of 1998.

Quarterly Summary and Highlights

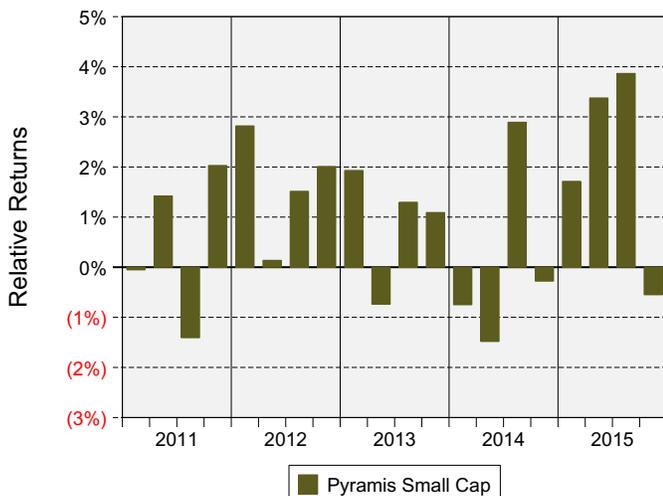
- Pyramis Small Cap's portfolio posted a 3.05% return for the quarter placing it in the 45 percentile of the CAI Small Capitalization Style group for the quarter and in the 8 percentile for the last year.
- Pyramis Small Cap's portfolio underperformed the Russell 2000 Index by 0.55% for the quarter and outperformed the Russell 2000 Index for the year by 8.69%.

Performance vs CAI Small Capitalization Style (Gross)

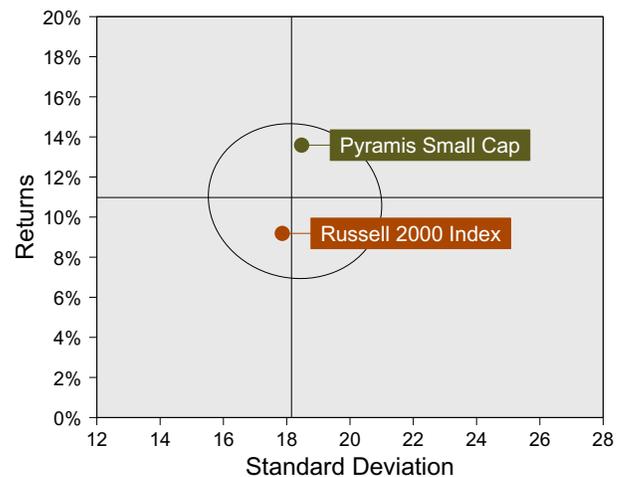


10th Percentile	5.38	3.79	17.06	13.72	10.06	13.20
25th Percentile	4.28	(0.14)	15.68	12.42	9.33	12.12
Median	2.91	(2.39)	13.58	10.98	8.02	11.00
75th Percentile	1.86	(5.13)	11.47	9.20	7.03	9.93
90th Percentile	(0.16)	(8.09)	8.60	7.66	6.07	8.43
Pyramis Small Cap ●	3.05	4.27	16.39	13.59	10.15	11.16
Russell 2000 Index ▲	3.59	(4.41)	11.65	9.19	6.80	8.24

Relative Return vs Russell 2000 Index



CAI Small Capitalization Style (Gross) Annualized Five Year Risk vs Return

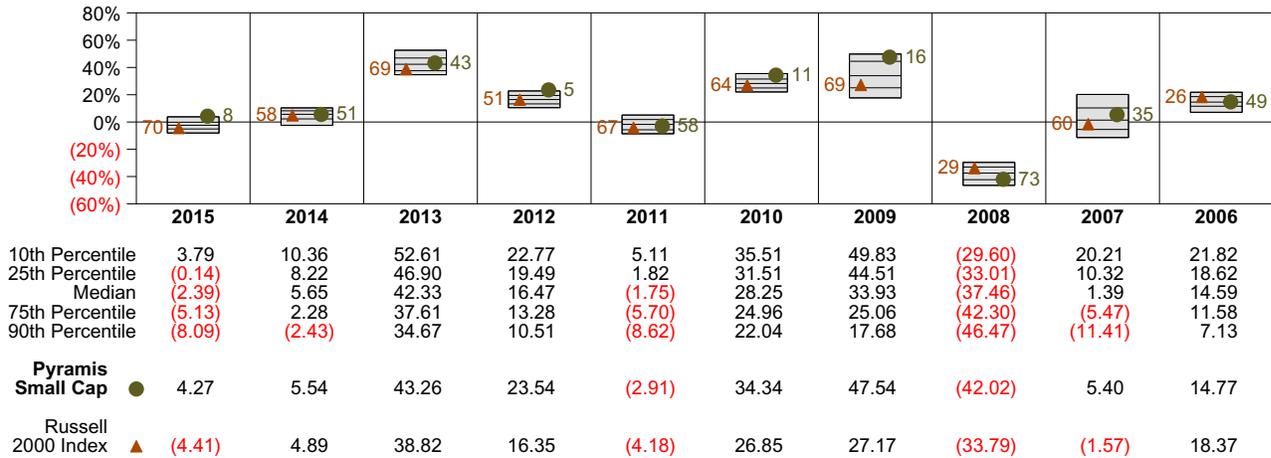


Pyramis Small Cap Return Analysis Summary

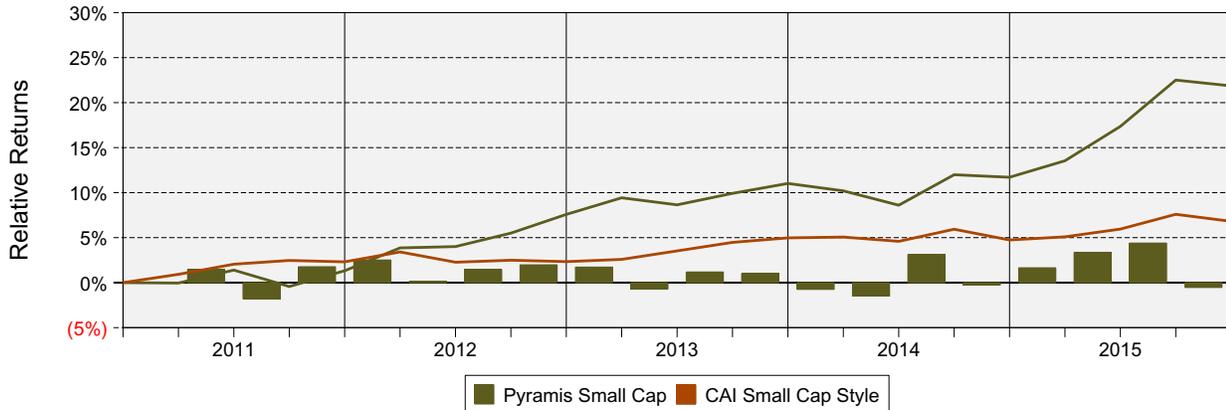
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures.

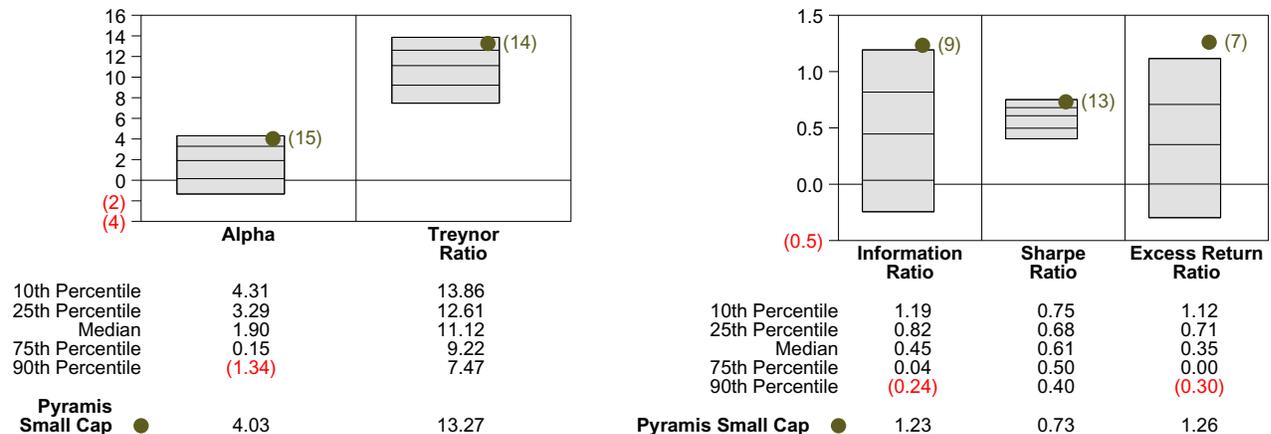
Performance vs CAI Small Capitalization Style (Gross)



Cumulative and Quarterly Relative Return vs Russell 2000 Index



Risk Adjusted Return Measures vs Russell 2000 Index Rankings Against CAI Small Capitalization Style (Gross) Five Years Ended December 31, 2015



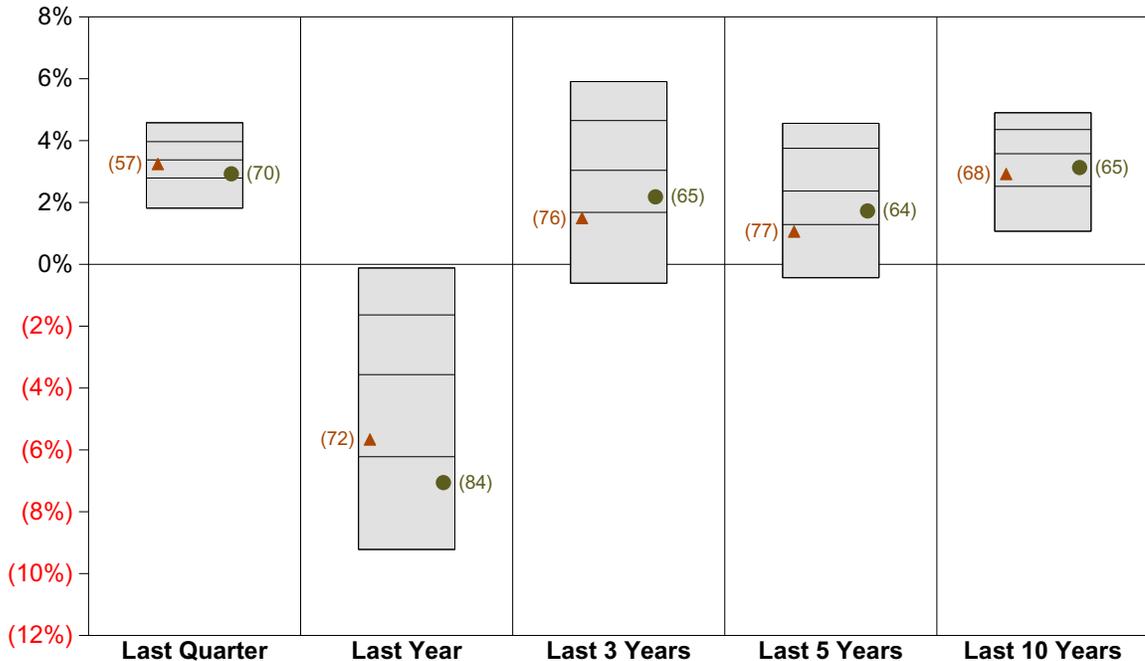
International Equity

Period Ended December 31, 2015

Quarterly Summary and Highlights

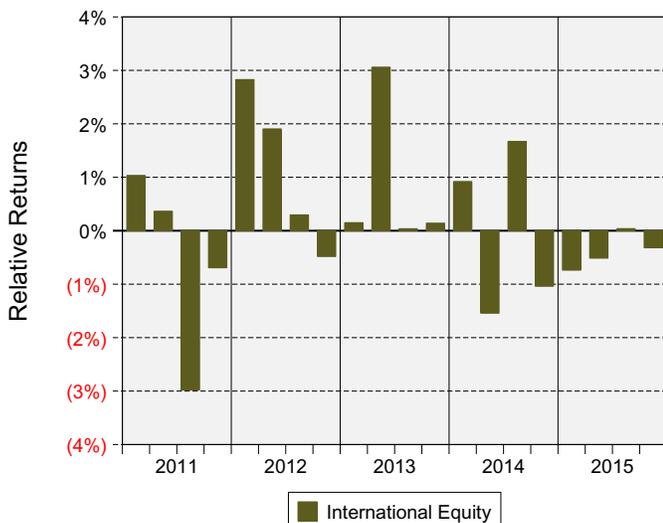
- International Equity's portfolio posted a 2.93% return for the quarter placing it in the 70 percentile of the Pub Pln- International Equity group for the quarter and in the 84 percentile for the last year.
- International Equity's portfolio underperformed the MSCI ACWI x US (Net) by 0.32% for the quarter and underperformed the MSCI ACWI x US (Net) for the year by 1.40%.

Performance vs Pub Pln- International Equity (Gross)

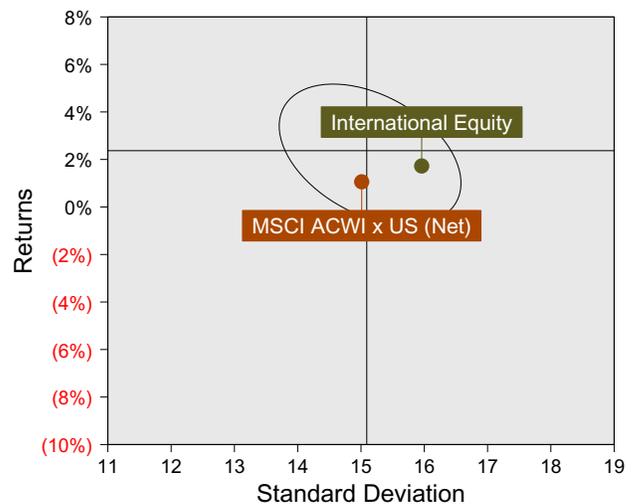


	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	4.58	(0.12)	5.91	4.56	4.90
25th Percentile	3.97	(1.64)	4.65	3.75	4.36
Median	3.38	(3.57)	3.04	2.37	3.58
75th Percentile	2.79	(6.22)	1.68	1.29	2.52
90th Percentile	1.82	(9.22)	(0.61)	(0.43)	1.07
International Equity	● 2.93	(7.06)	2.18	1.73	3.13
MSCI ACWI x US (Net)	▲ 3.24	(5.66)	1.50	1.06	2.92

Relative Return vs MSCI ACWI x US (Net)



Pub Pln- International Equity (Gross)
Annualized Five Year Risk vs Return

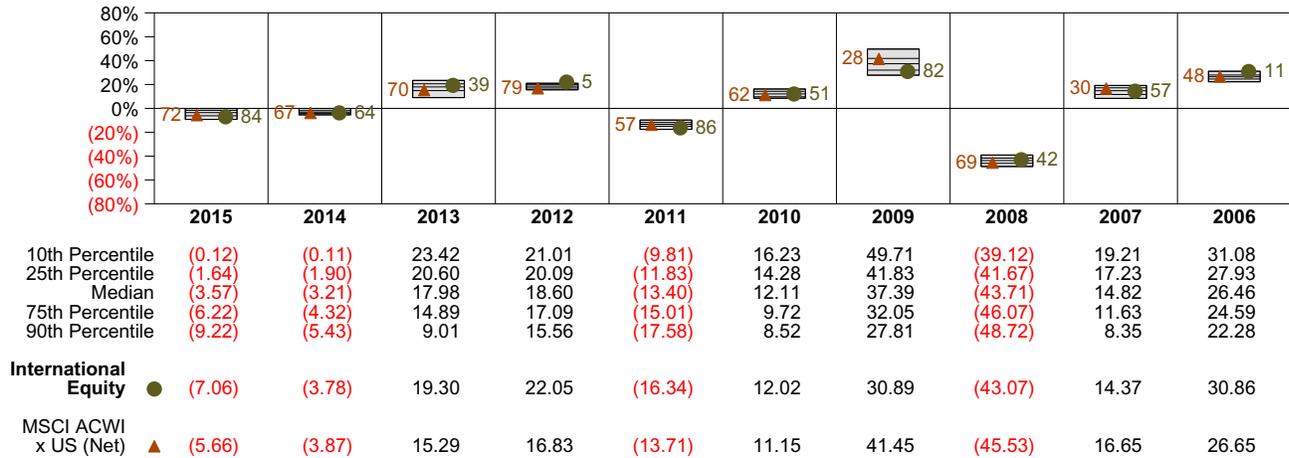


International Equity Return Analysis Summary

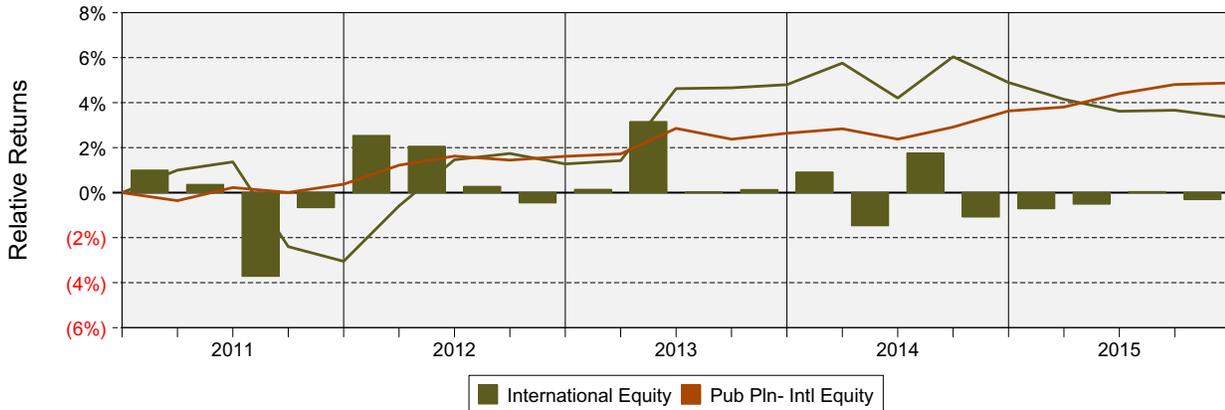
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures.

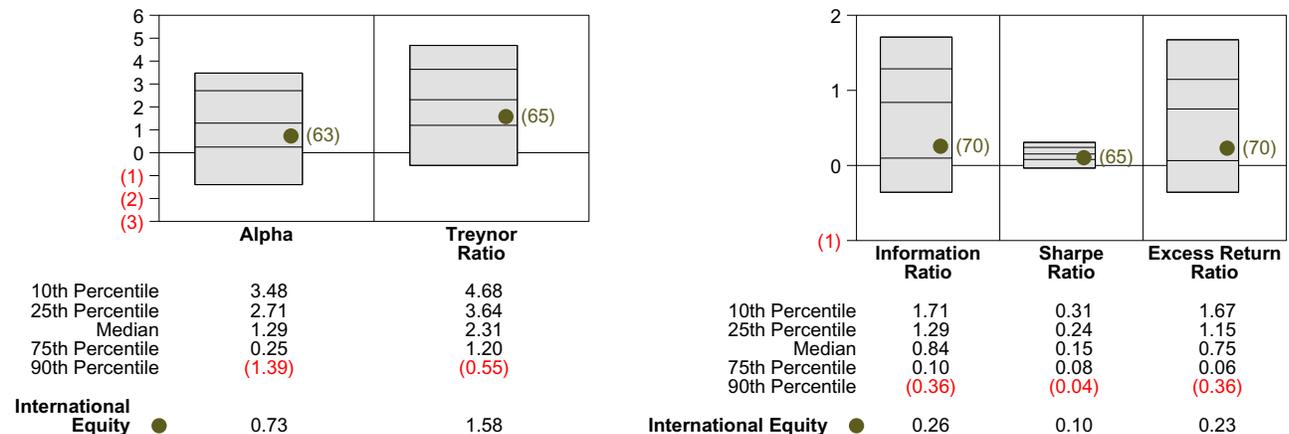
Performance vs Pub Pln- International Equity (Gross)



Cumulative and Quarterly Relative Return vs MSCI ACWI x US (Net)



Risk Adjusted Return Measures vs MSCI ACWI x US (Net) Rankings Against Pub Pln- International Equity (Gross) Five Years Ended December 31, 2015



Causeway International Value Equity Period Ended December 31, 2015

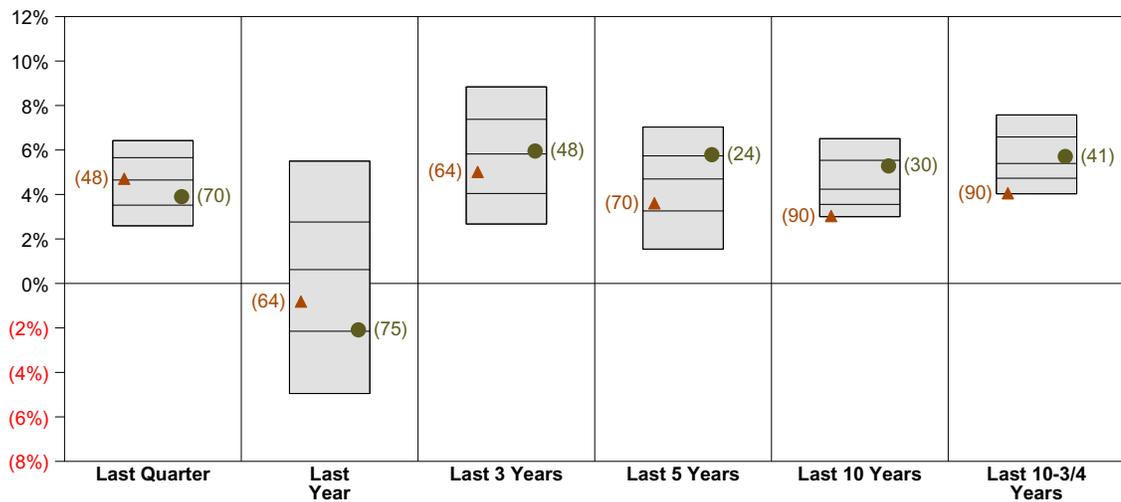
Investment Philosophy

Causeway Capital Management's International Value Equity team focuses on active investment management with a value-driven, bottom-up approach to stock selection. The team believes in managing equity portfolios using a disciplined approach with the goal of producing favorable long-term returns coupled with reduced downside volatility. Although the firm possesses dedicated emerging market capabilities which are quantitative in nature, research for this strategy is fundamentally focused. The product was funded during the first quarter of 2005.

Quarterly Summary and Highlights

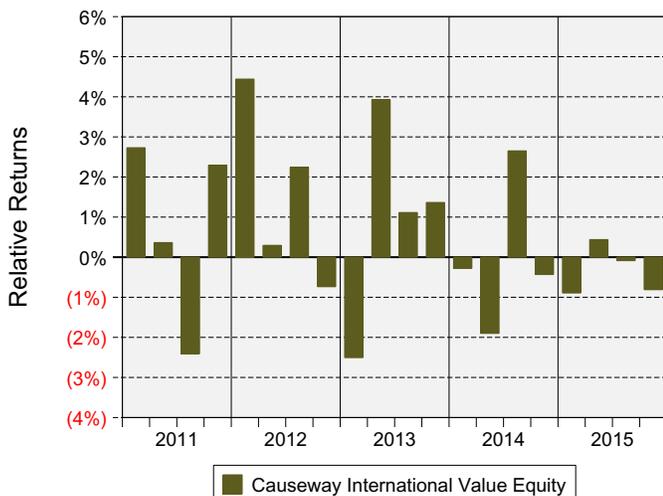
- Causeway International Value Equity's portfolio posted a 3.90% return for the quarter placing it in the 70 percentile of the CAI Non-U.S. Equity Style group for the quarter and in the 75 percentile for the last year.
- Causeway International Value Equity's portfolio underperformed the MSCI EAFE Index by 0.81% for the quarter and underperformed the MSCI EAFE Index for the year by 1.27%.

Performance vs CAI Non-U.S. Equity Style (Gross)

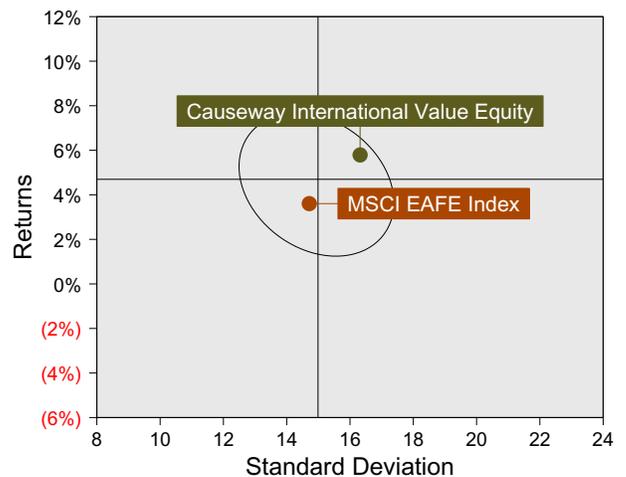


Causeway International Value Equity ●
MSCI EAFE Index ▲

Relative Return vs MSCI EAFE Index



CAI Non-U.S. Equity Style (Gross) Annualized Five Year Risk vs Return

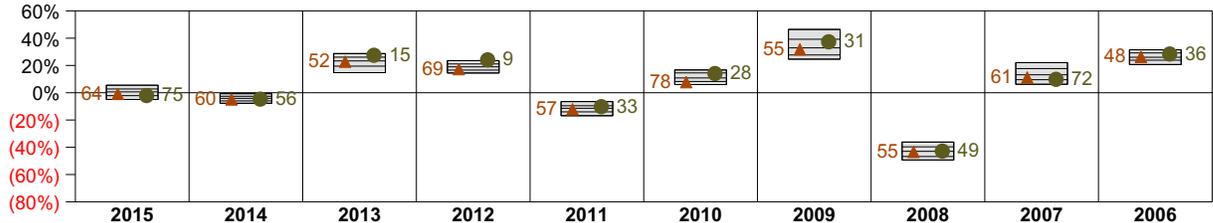


Causeway International Value Equity Return Analysis Summary

Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures.

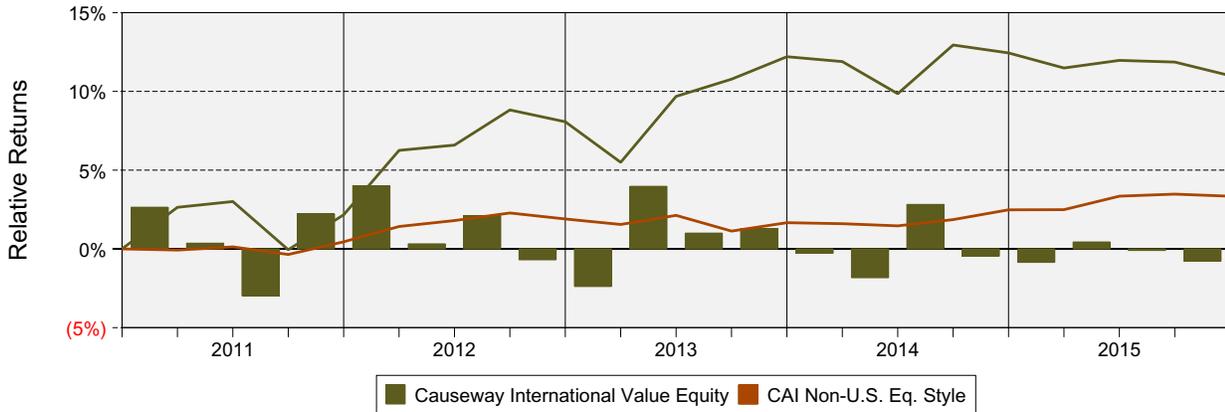
Performance vs CAI Non-U.S. Equity Style (Gross)



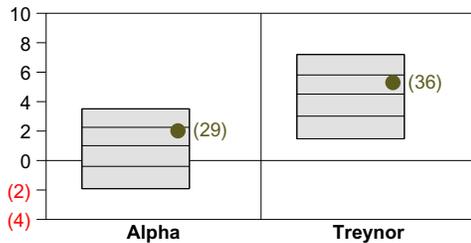
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
10th Percentile	5.50	(0.67)	28.72	23.54	(6.48)	16.72	46.43	(36.18)	22.09	31.47
25th Percentile	2.76	(2.59)	26.08	21.12	(9.56)	14.53	39.21	(39.67)	17.70	29.21
Median	0.62	(4.12)	23.32	18.99	(11.40)	10.84	32.89	(42.97)	13.15	26.02
75th Percentile	(2.15)	(5.97)	19.49	16.61	(14.02)	8.27	27.71	(46.76)	9.54	23.87
90th Percentile	(4.95)	(7.74)	14.73	14.45	(16.87)	5.97	24.60	(49.34)	6.21	20.66

Causeway International Value Equity	●	(2.09)	(4.70)	27.47	24.10	(10.24)	14.06	37.35	(42.83)	9.82	28.40
MSCI EAFE Index	▲	(0.81)	(4.90)	22.78	17.32	(12.14)	7.75	31.78	(43.38)	11.17	26.34

Cumulative and Quarterly Relative Return vs MSCI EAFE Index

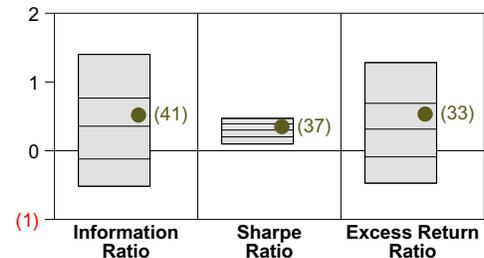


Risk Adjusted Return Measures vs MSCI EAFE Index Rankings Against CAI Non-U.S. Equity Style (Gross) Five Years Ended December 31, 2015



	Alpha	Treynor Ratio
10th Percentile	3.51	7.20
25th Percentile	2.26	5.81
Median	1.01	4.51
75th Percentile	(0.40)	3.01
90th Percentile	(1.91)	1.48

Causeway International Value Equity	●	2.02	5.30
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	Information Ratio	Sharpe Ratio	Excess Return Ratio
10th Percentile	1.40	0.47	1.28
25th Percentile	0.77	0.39	0.69
Median	0.36	0.30	0.31
75th Percentile	(0.12)	0.20	(0.09)
90th Percentile	(0.52)	0.10	(0.47)

Causeway International Value Equity	●	0.52	0.35	0.53
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Aberdeen EAFE Plus Period Ended December 31, 2015

Investment Philosophy

Aberdeen believes that given the inefficiency of markets, superior long-term returns are achieved by identifying high quality stocks, buying them at reasonable/cheap prices, and ultimately investing in those securities for the long term. Absolute return is held to be of the utmost importance. The strategy is benchmark aware, but not benchmark driven. This benchmark stance is born from their belief that indices do not provide meaningful guidance to the prospects of a company or its inherent worth.

Quarterly Summary and Highlights

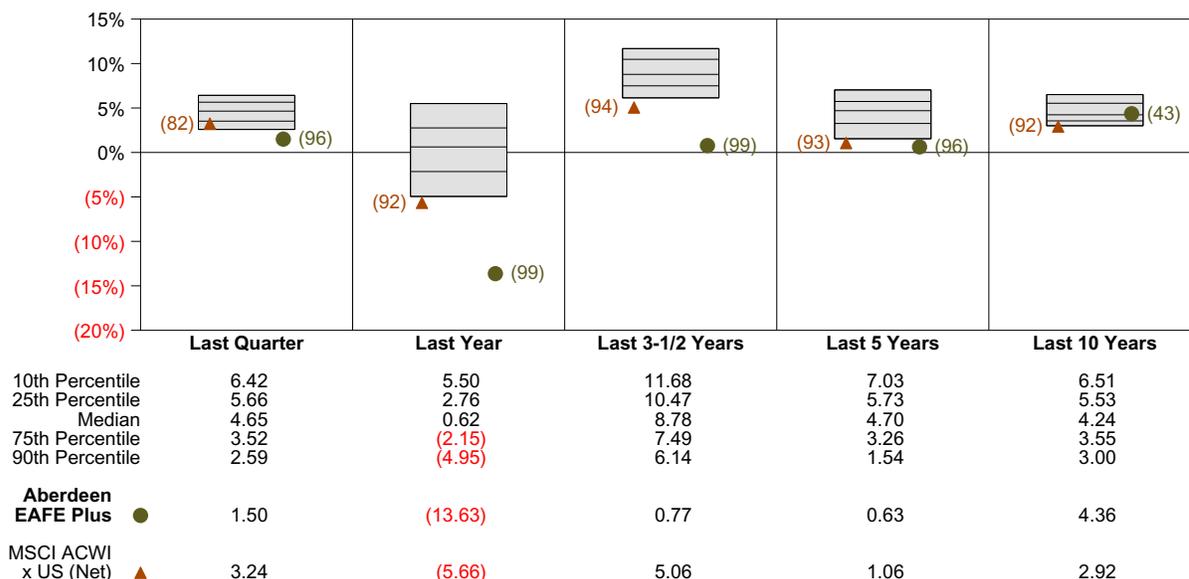
- Aberdeen EAFE Plus's portfolio posted a 1.50% return for the quarter placing it in the 96 percentile of the CAI Non-U.S. Equity Style group for the quarter and in the 99 percentile for the last year.
- Aberdeen EAFE Plus's portfolio underperformed the MSCI ACWI x US (Net) by 1.75% for the quarter and underperformed the MSCI ACWI x US (Net) for the year by 7.97%.

Quarterly Asset Growth

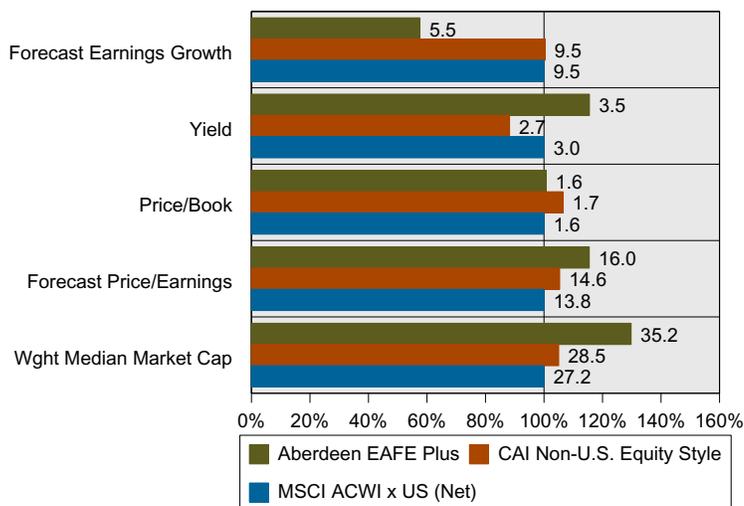
Beginning Market Value	\$35,139,171
Net New Investment	\$-73,447
Investment Gains/(Losses)	\$526,836
Ending Market Value	\$35,592,560

Percent Cash: 0.0%

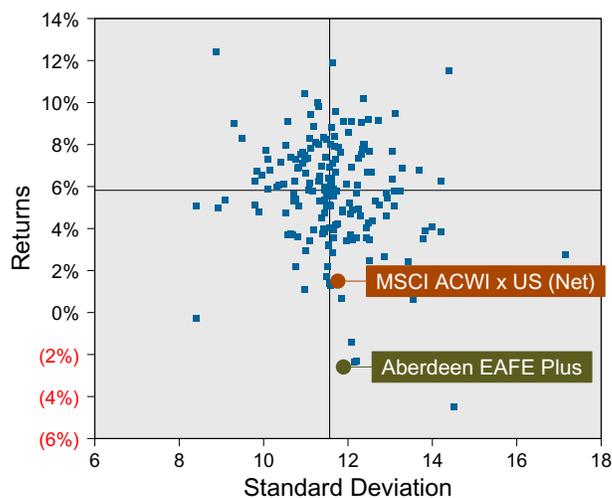
Performance vs CAI Non-U.S. Equity Style (Gross)



Portfolio Characteristics as a Percentage of the MSCI ACWI x US (Net)



CAI Non-U.S. Equity Style (Gross) Annualized Three Year Risk vs Return

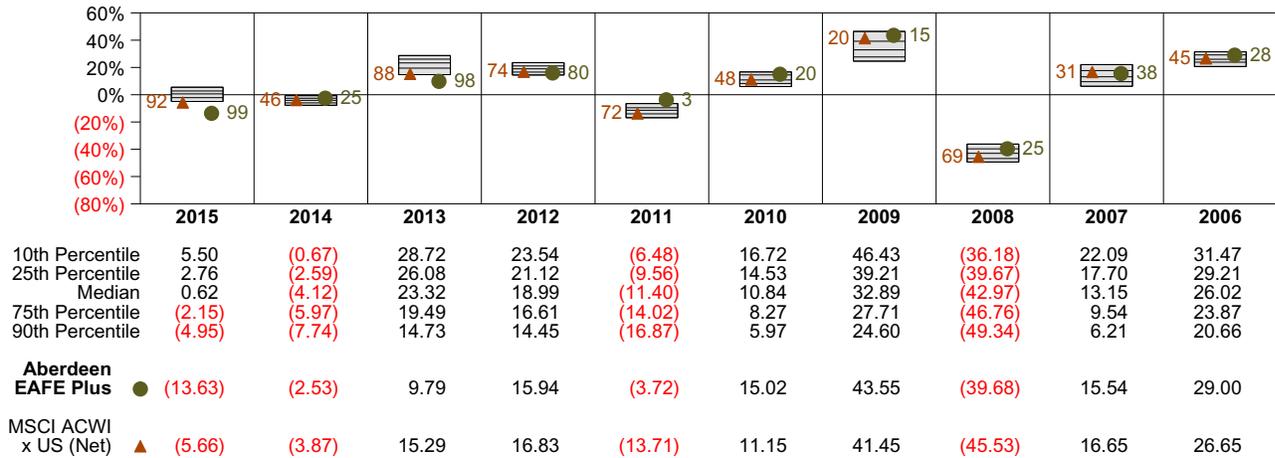


Aberdeen EAFE Plus Return Analysis Summary

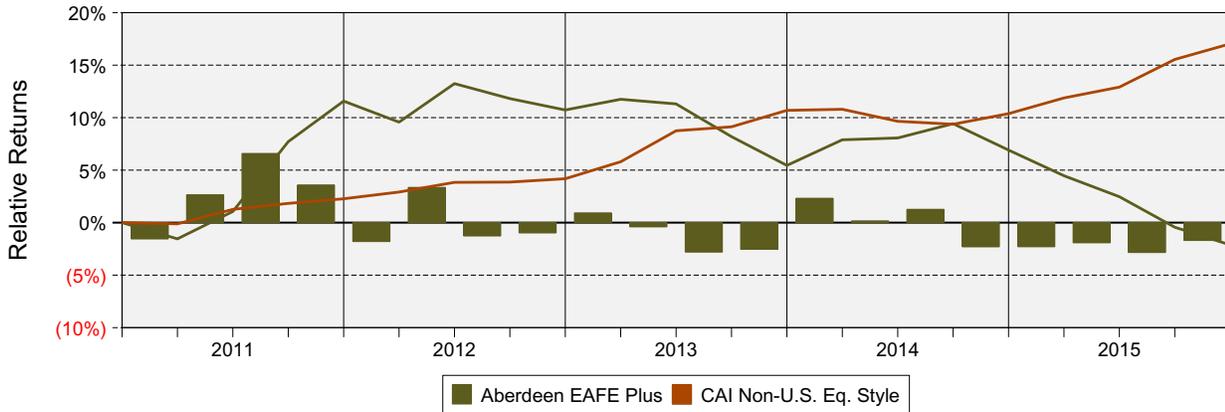
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures.

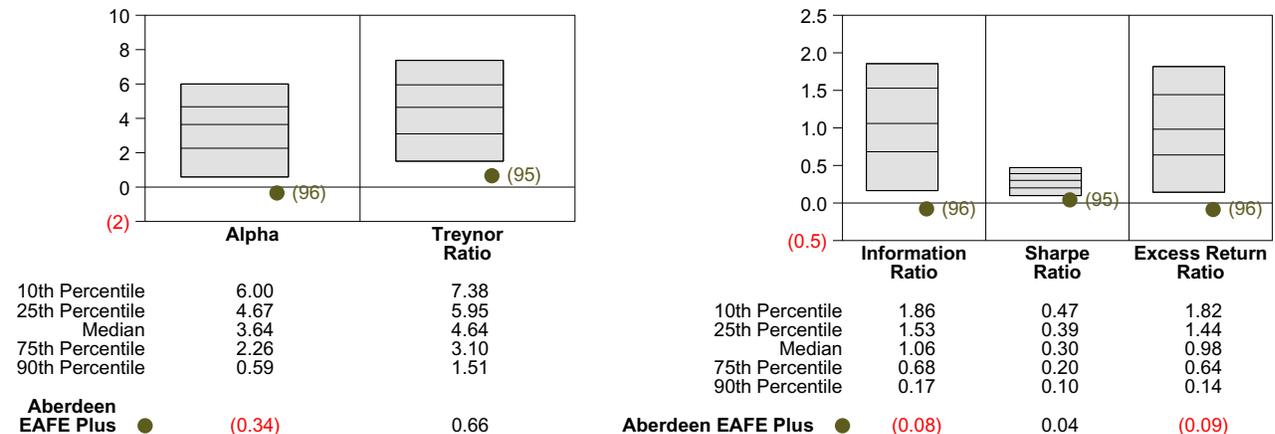
Performance vs CAI Non-U.S. Equity Style (Gross)



Cumulative and Quarterly Relative Return vs MSCI ACWI x US (Net)



Risk Adjusted Return Measures vs MSCI ACWI x US (Net) Rankings Against CAI Non-U.S. Equity Style (Gross) Five Years Ended December 31, 2015



Fixed Income Period Ended December 31, 2015

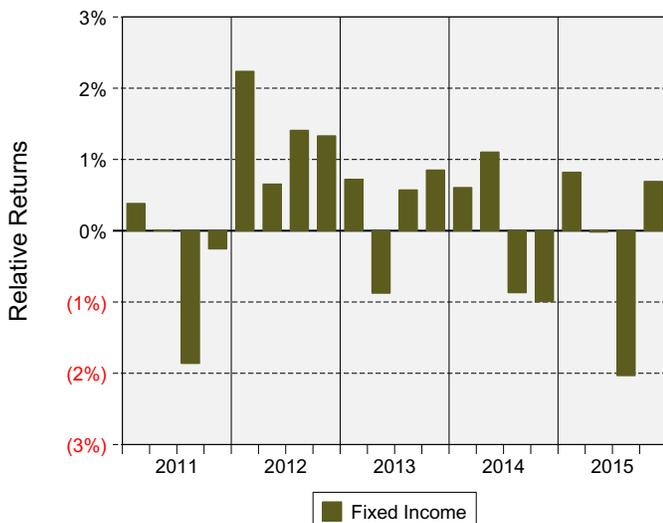
Quarterly Summary and Highlights

- Fixed Income's portfolio posted a 0.12% return for the quarter placing it in the 2 percentile of the Corp Pln- Domestic Fixed group for the quarter and in the 32 percentile for the last year.
- Fixed Income's portfolio outperformed the Barclays Aggregate Index by 0.69% for the quarter and underperformed the Barclays Aggregate Index for the year by 0.55%.

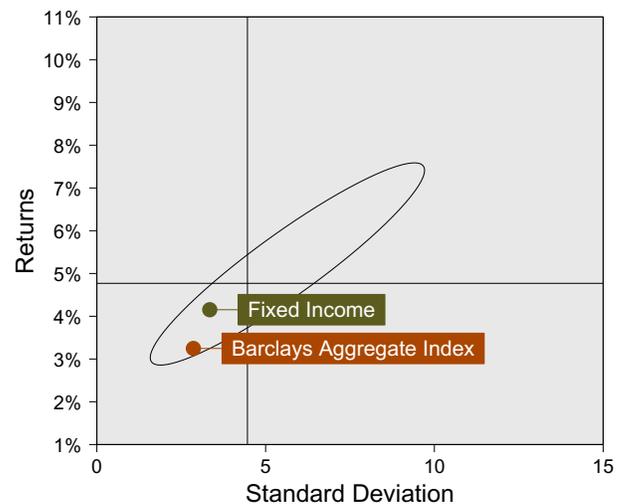
Performance vs Corp Pln- Domestic Fixed (Gross)



Relative Return vs Barclays Aggregate Index



Corp Pln- Domestic Fixed (Gross) Annualized Five Year Risk vs Return

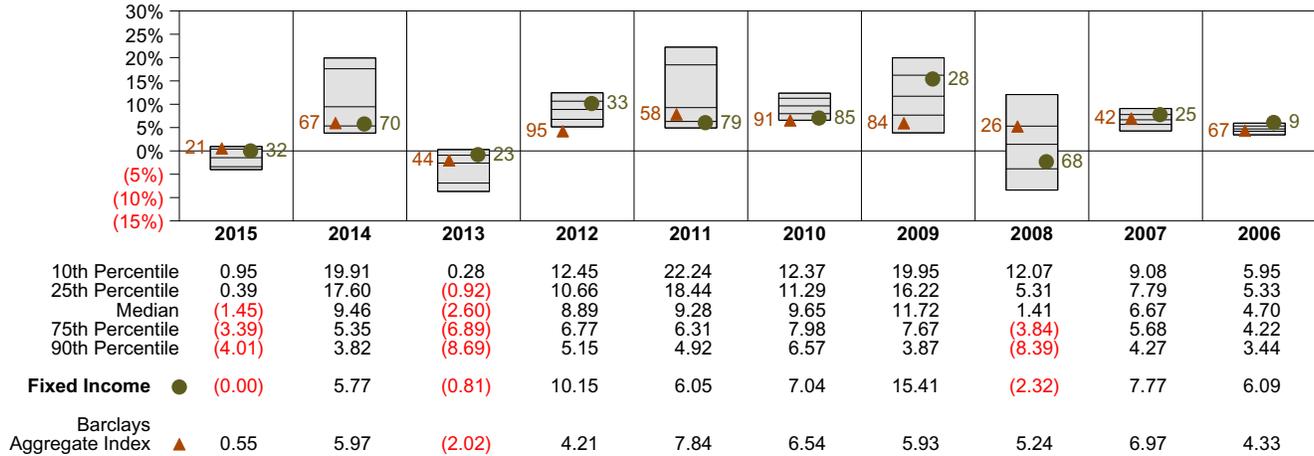


Fixed Income Return Analysis Summary

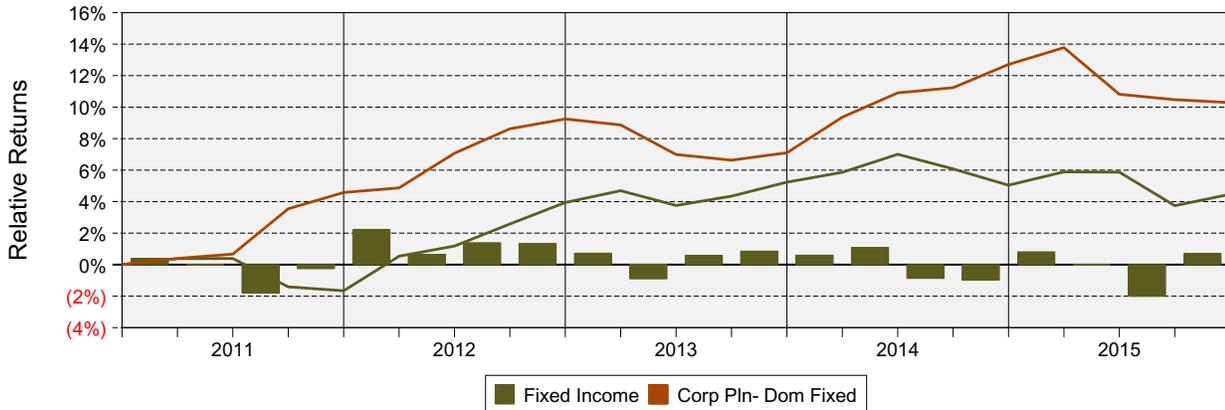
Return Analysis

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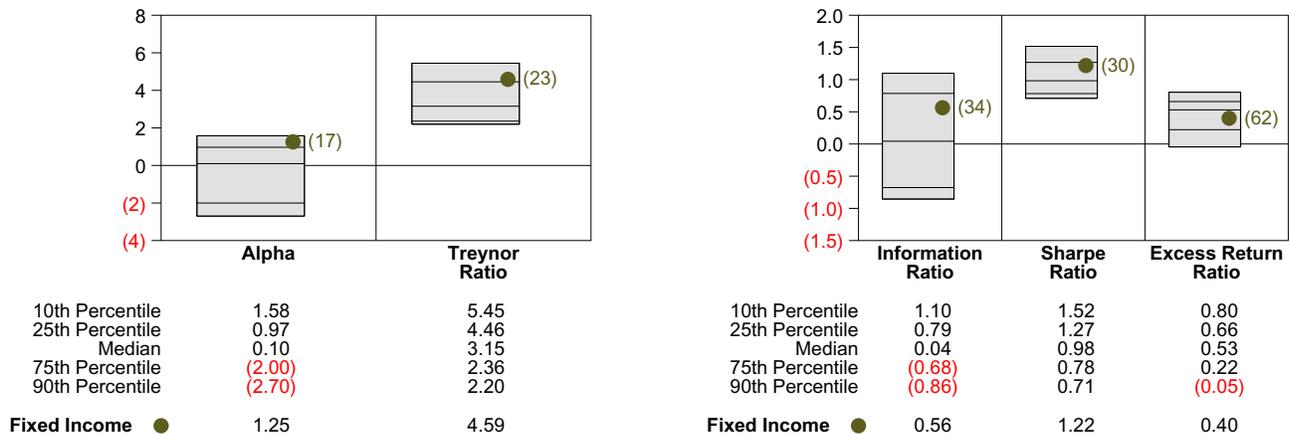
Performance vs Corp Pln- Domestic Fixed (Gross)



Cumulative and Quarterly Relative Return vs Barclays Aggregate Index



Risk Adjusted Return Measures vs Barclays Aggregate Index Rankings Against Corp Pln- Domestic Fixed (Gross) Five Years Ended December 31, 2015



BlackRock U.S. Debt Fund

Period Ended December 31, 2015

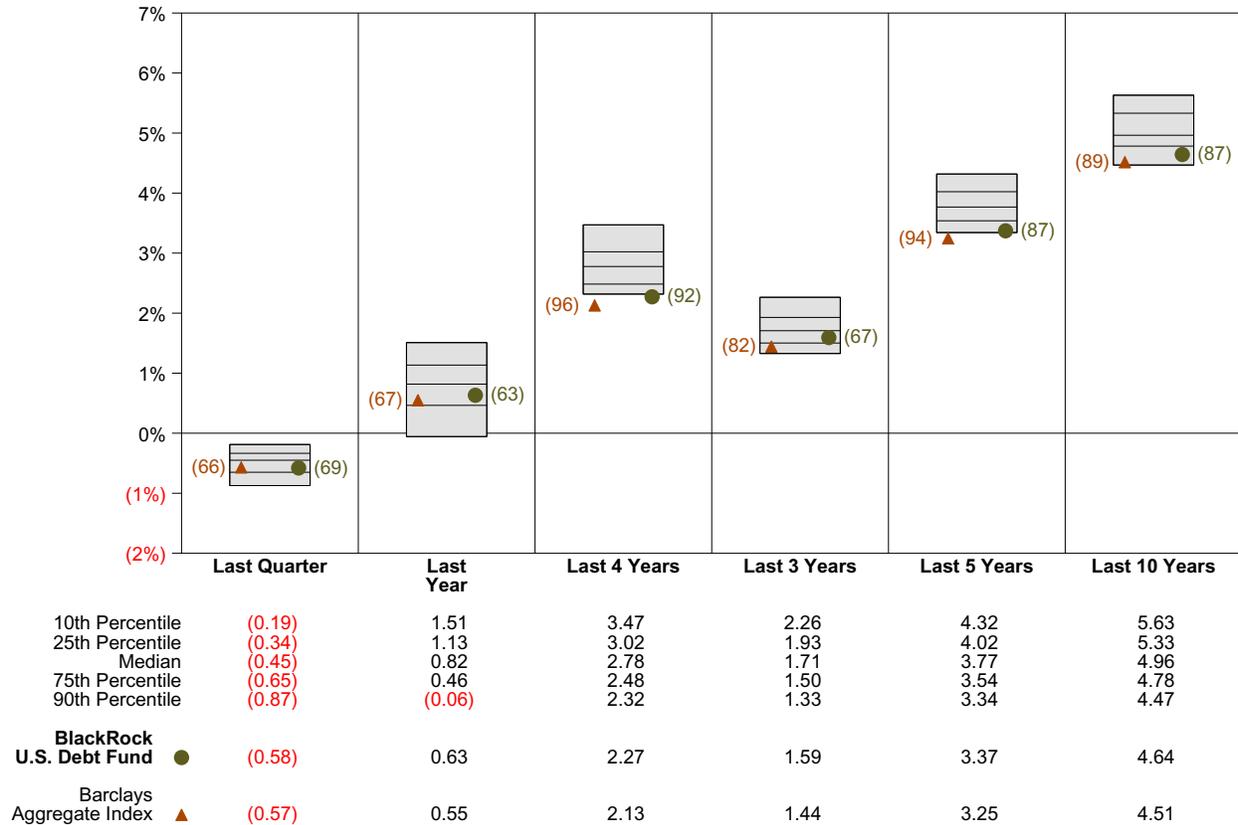
Investment Philosophy

The product was funded during the fourth quarter of 2011. Performance prior is that of the composite.

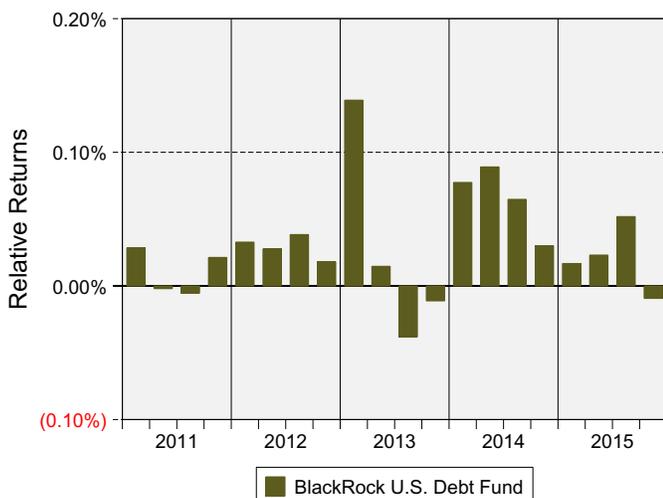
Quarterly Summary and Highlights

- BlackRock U.S. Debt Fund's portfolio posted a (0.58)% return for the quarter placing it in the 69 percentile of the CAI Core Bond Fixed-Inc Style group for the quarter and in the 63 percentile for the last year.
- BlackRock U.S. Debt Fund's portfolio underperformed the Barclays Aggregate Index by 0.01% for the quarter and outperformed the Barclays Aggregate Index for the year by 0.08%.

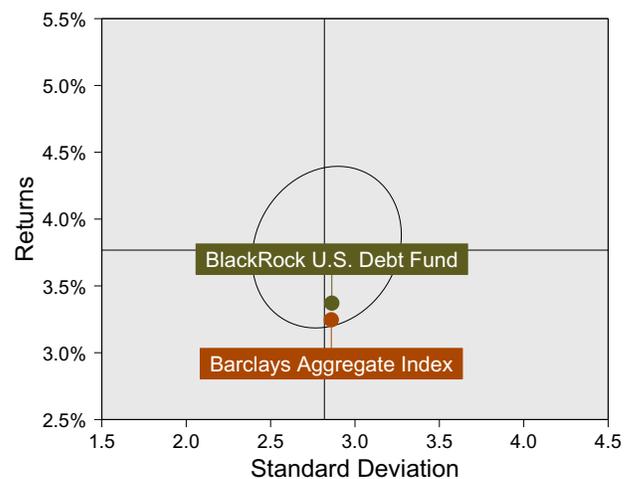
Performance vs CAI Core Bond Fixed-Inc Style (Gross)



Relative Return vs Barclays Aggregate Index



CAI Core Bond Fixed-Inc Style (Gross) Annualized Five Year Risk vs Return

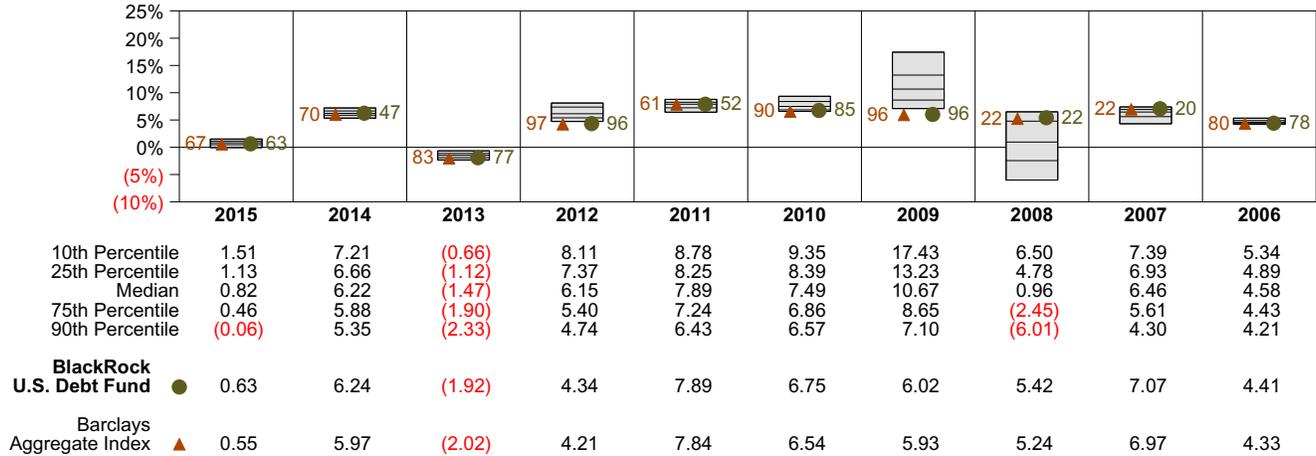


BlackRock U.S. Debt Fund Return Analysis Summary

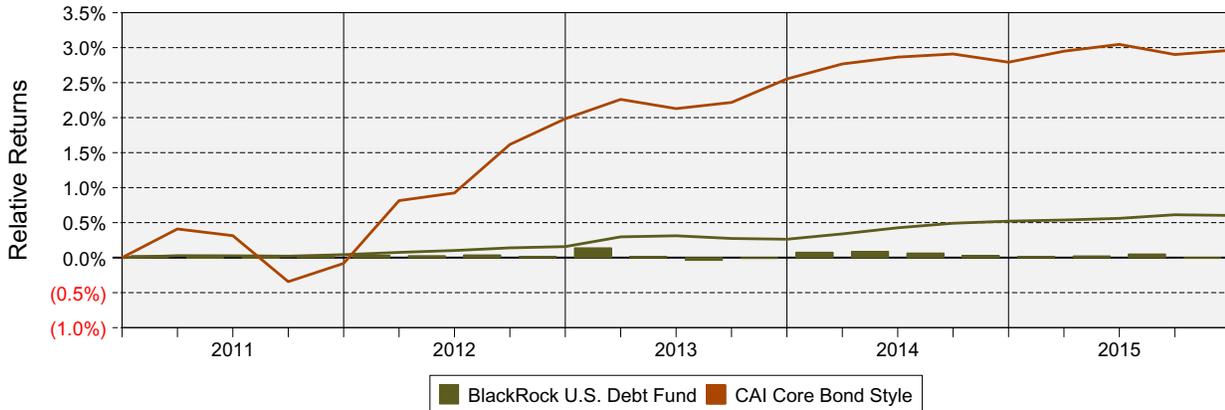
Return Analysis

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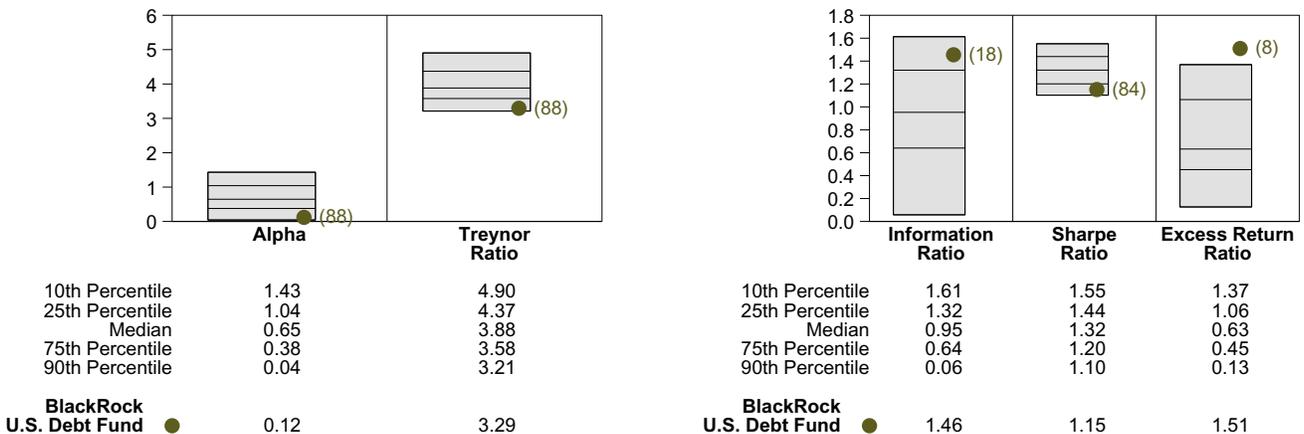
Performance vs CAI Core Bond Fixed-Inc Style (Gross)



Cumulative and Quarterly Relative Return vs Barclays Aggregate Index



Risk Adjusted Return Measures vs Barclays Aggregate Index Rankings Against CAI Core Bond Fixed-Inc Style (Gross) Five Years Ended December 31, 2015



PIMCO Fixed Income Period Ended December 31, 2015

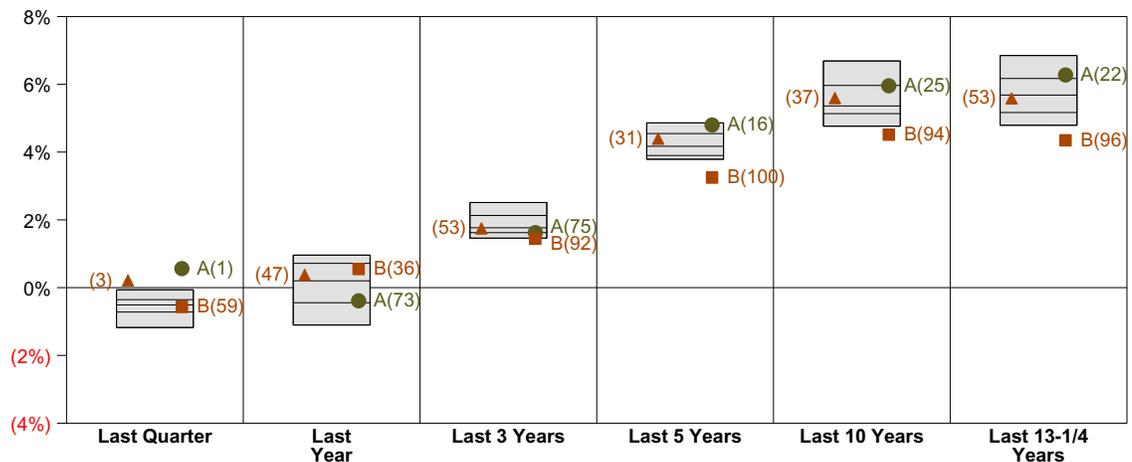
Investment Philosophy

PIMCO emphasizes adding value by rotating through the major sectors of the domestic and international bond markets. They also seek to enhance returns through duration management. The product was funded during the third quarter of 2002. The custom index is currently composed of 25% Barclays Mortgage, 25% Barclays Credit, 25% Barclays High Yield, and 25% JP Morgan EMBI Global. Prior to 2/1/2012, the custom index was composed of 70% Barclays Mortgage, 15% Barclays Credit, and 15% Barclays High Yield.

Quarterly Summary and Highlights

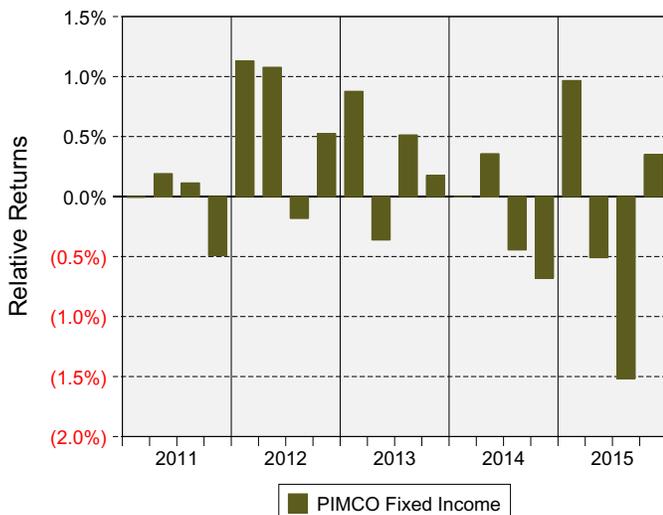
- PIMCO Fixed Income's portfolio posted a 0.56% return for the quarter placing it in the 1 percentile of the CAI Core Bond Plus Style group for the quarter and in the 73 percentile for the last year.
- PIMCO Fixed Income's portfolio outperformed the Custom Index by 0.35% for the quarter and underperformed the Custom Index for the year by 0.76%.

Performance vs CAI Core Bond Plus Style (Gross)

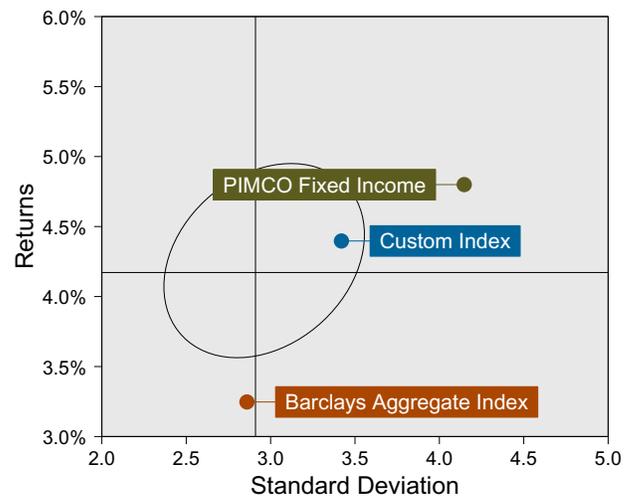


10th Percentile	(0.06)	0.96	2.51	4.86	6.69	6.85
25th Percentile	(0.35)	0.72	2.13	4.55	5.97	6.17
Median	(0.51)	0.20	1.77	4.17	5.36	5.68
75th Percentile	(0.72)	(0.45)	1.62	3.90	5.13	5.17
90th Percentile	(1.18)	(1.10)	1.46	3.79	4.76	4.79
PIMCO Fixed Income	● A 0.56	● A (0.39)	● A 1.62	● A 4.80	● A 5.96	● A 6.28
Barclays Aggregate Index	■ B (0.57)	■ B 0.55	■ B 1.44	■ B 3.25	■ B 4.51	■ B 4.35
Custom Index	▲ 0.21	▲ 0.37	▲ 1.75	▲ 4.40	▲ 5.60	▲ 5.59

Relative Return vs Custom Index



CAI Core Bond Plus Style (Gross) Annualized Five Year Risk vs Return

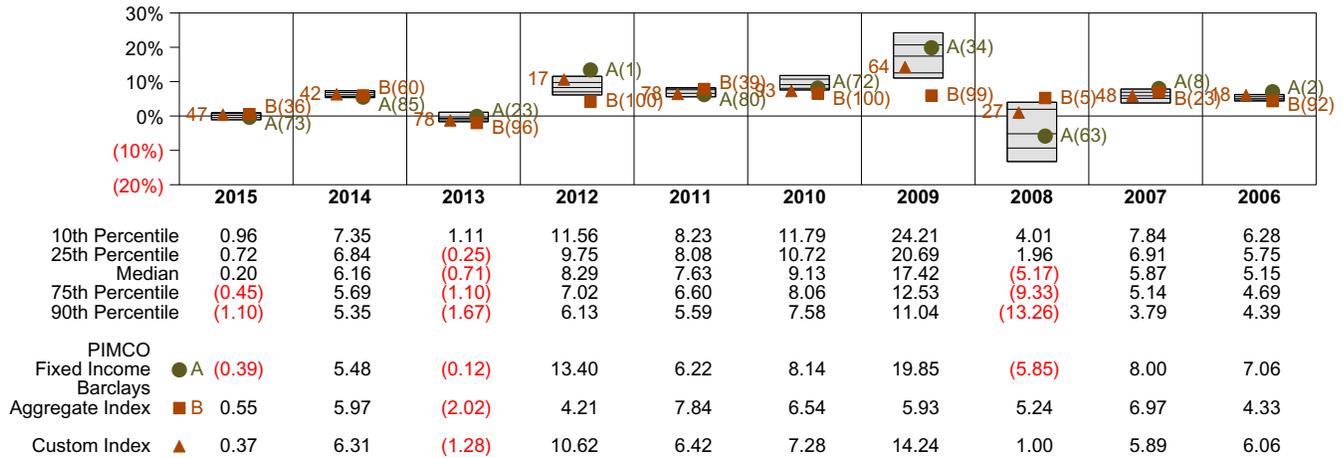


PIMCO Fixed Income Return Analysis Summary

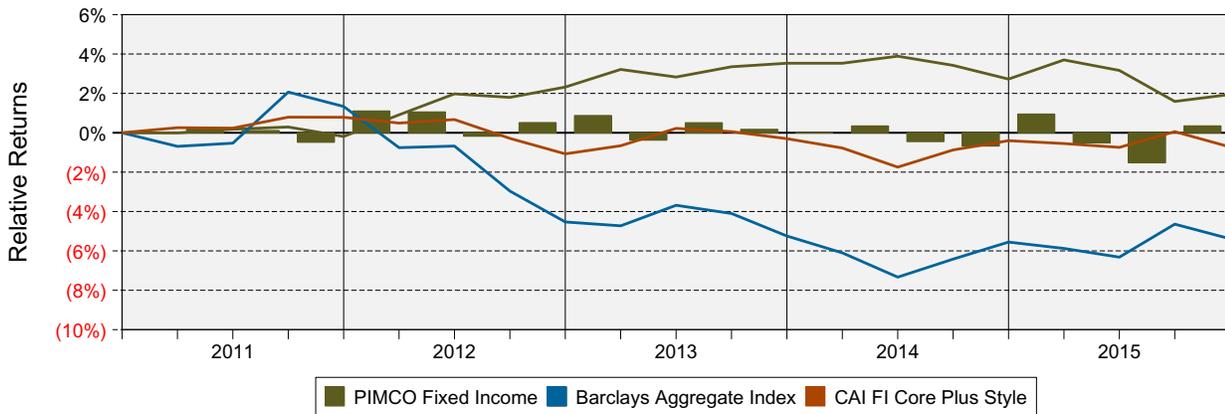
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures.

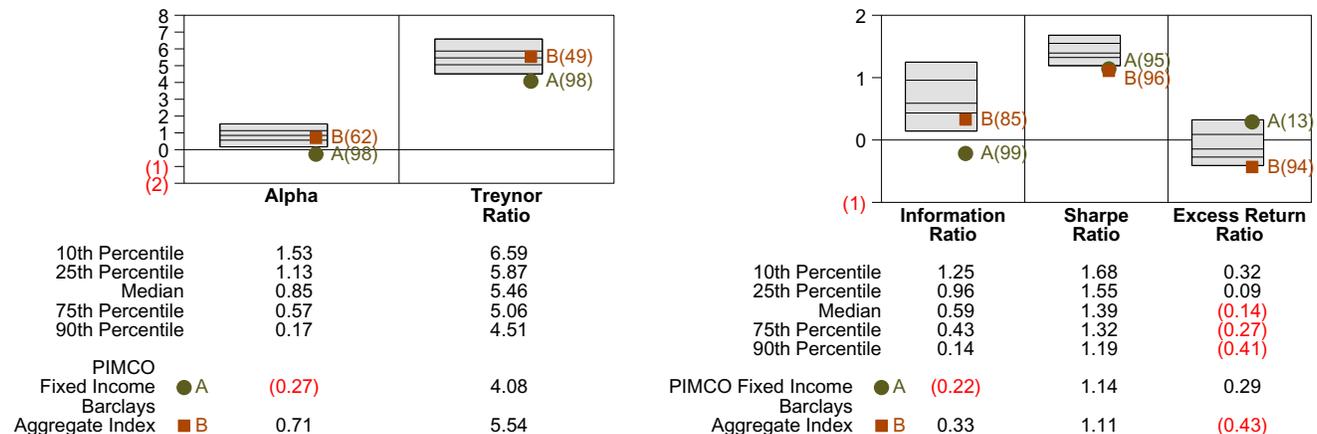
Performance vs CAI Core Bond Plus Style (Gross)



Cumulative and Quarterly Relative Return vs Custom Index



Risk Adjusted Return Measures vs Custom Index Rankings Against CAI Core Bond Plus Style (Gross) Five Years Ended December 31, 2015



Real Estate Period Ended December 31, 2015

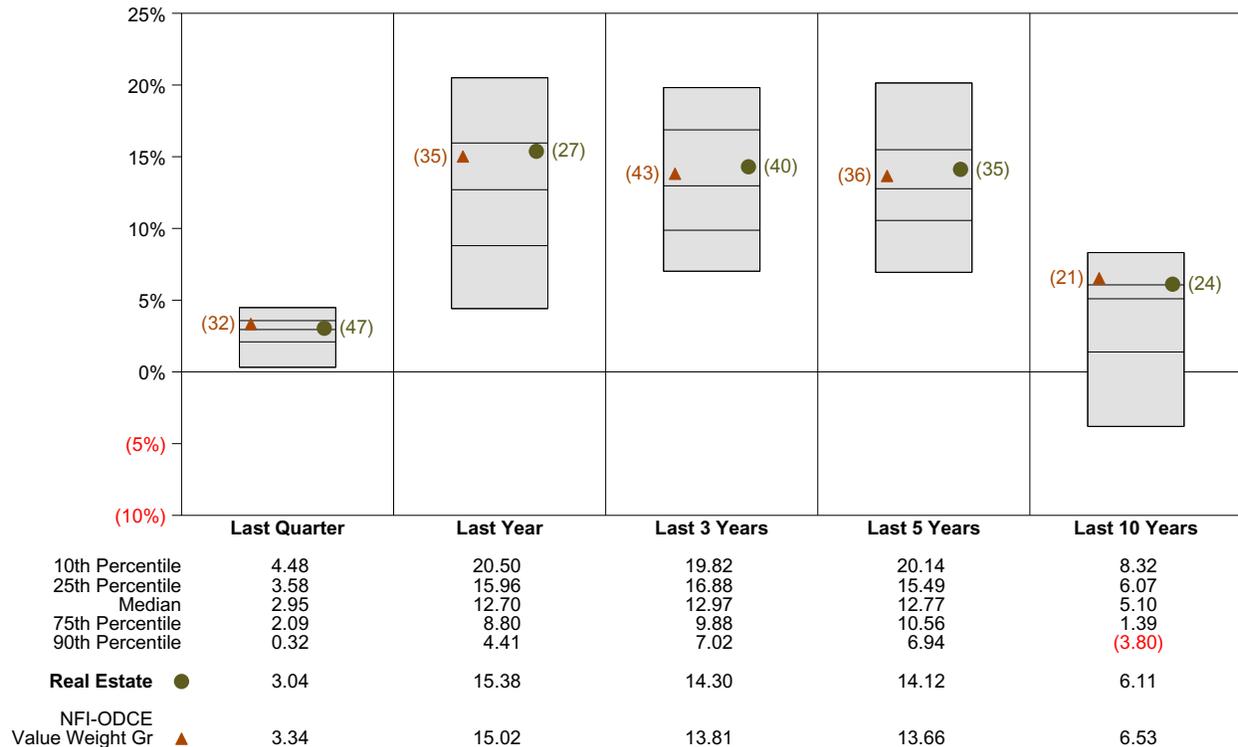
Investment Philosophy

The Total Real Estate Funds Database consists of both open and closed-end commingled funds as well as separate accounts managed by real estate firms. The returns represent the overall performance of institutional capital invested in real estate properties.

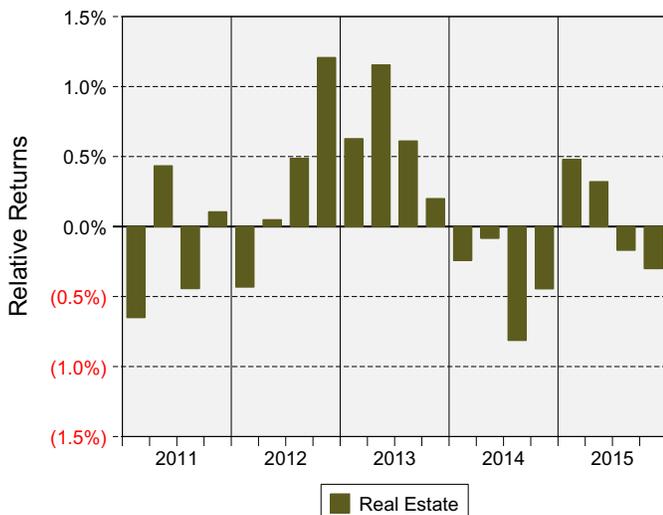
Quarterly Summary and Highlights

- Real Estate's portfolio posted a 3.04% return for the quarter placing it in the 47th percentile of the Total Real Estate DB group for the quarter and in the 27th percentile for the last year.
- Real Estate's portfolio underperformed the NFI-ODCE Value Weight Gr by 0.30% for the quarter and outperformed the NFI-ODCE Value Weight Gr for the year by 0.36%.

Performance vs Total Real Estate DB (Net)



Relative Return vs NFI-ODCE Value Weight Gr



Total Real Estate DB (Net) Annualized Five Year Risk vs Return

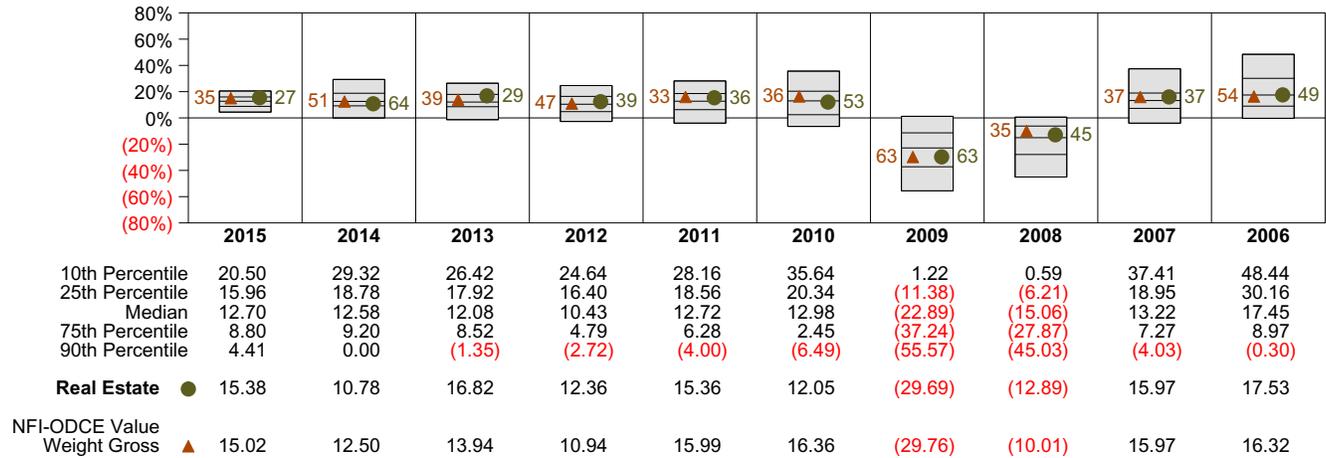


Real Estate Return Analysis Summary

Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures.

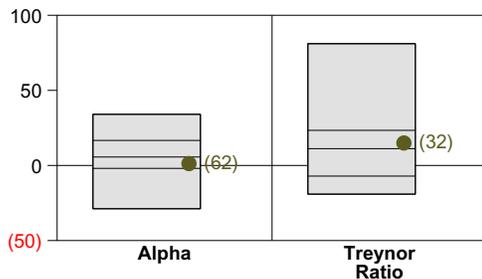
Performance vs Total Real Estate DB (Net)



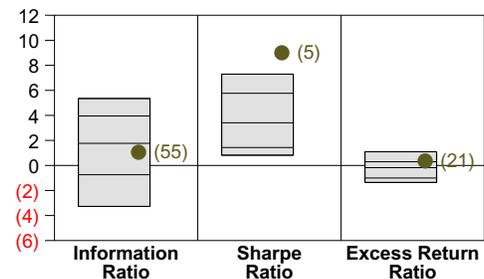
Cumulative and Quarterly Relative Return vs NFI-ODCE Value Weight Gross



Risk Adjusted Return Measures vs NFI-ODCE Value Weight Gross Rankings Against Total Real Estate DB (Net) Five Years Ended December 31, 2015



	Alpha	Treynor Ratio
10th Percentile	34.07	81.07
25th Percentile	16.66	23.38
Median	5.62	11.17
75th Percentile	(1.93)	(7.08)
90th Percentile	(28.84)	(19.11)
Real Estate	1.22	14.96



	Information Ratio	Sharpe Ratio	Excess Return Ratio
10th Percentile	5.35	7.29	1.09
25th Percentile	3.95	5.77	0.30
Median	1.77	3.41	(0.18)
75th Percentile	(0.74)	1.43	(1.00)
90th Percentile	(3.27)	0.82	(1.36)
Real Estate	1.06	9.00	0.36

JP Morgan Strategic Property Fund

Period Ended December 31, 2015

Investment Philosophy

Strategic Property Fund is an actively managed diversified, core, open-end commingled pension trust fund. It seeks an income-driven rate of return of 100 basis points over the NFI-ODCE Equal Weight Net Index over a full market cycle (three to five year horizon) through asset, geographic and sector selection and active asset management. The Fund invests in high quality stabilized assets with dominant competitive characteristics in markets with attractive demographics throughout the United States. The product was funded in the fourth quarter of 2008.

Quarterly Summary and Highlights

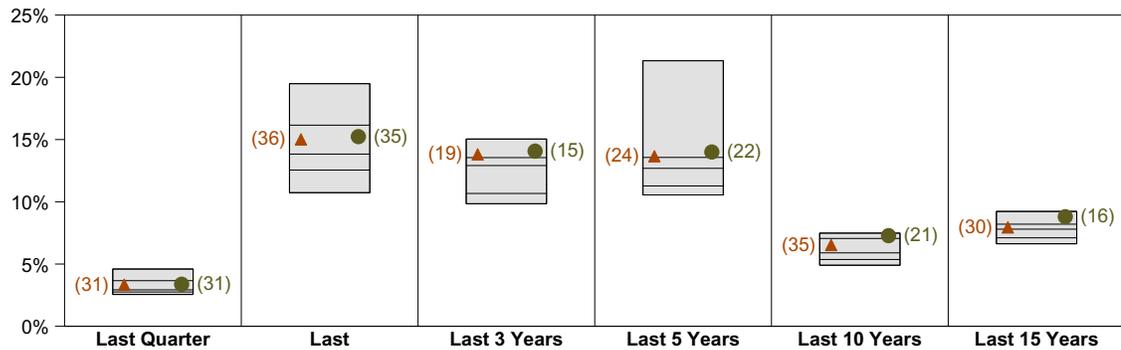
- JP Morgan Strategic Property Fund's portfolio posted a 3.37% return for the quarter placing it in the 31 percentile of the CAI Open-End Real Estate Funds group for the quarter and in the 35 percentile for the last year.
- JP Morgan Strategic Property Fund's portfolio outperformed the NFI-ODCE Value Weight Gross by 0.03% for the quarter and outperformed the NFI-ODCE Value Weight Gross for the year by 0.22%.

Quarterly Asset Growth

Beginning Market Value	\$43,603,447
Net New Investment	\$-105,685
Investment Gains/(Losses)	\$1,467,966
Ending Market Value	\$44,965,728

Percent Cash: 0.0%

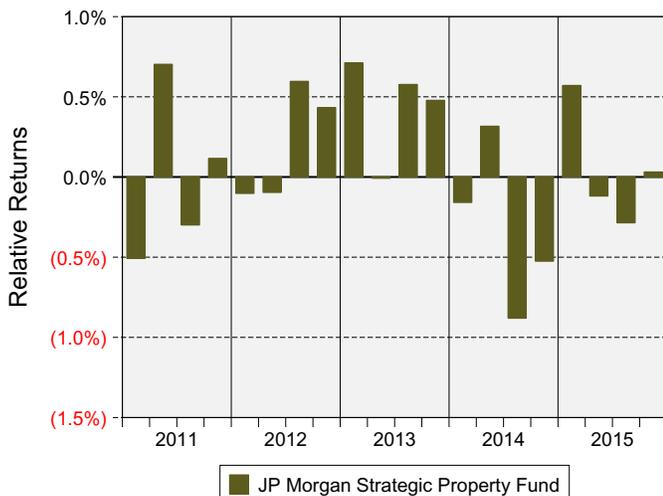
Performance vs CAI Open-End Real Estate Funds (Net)



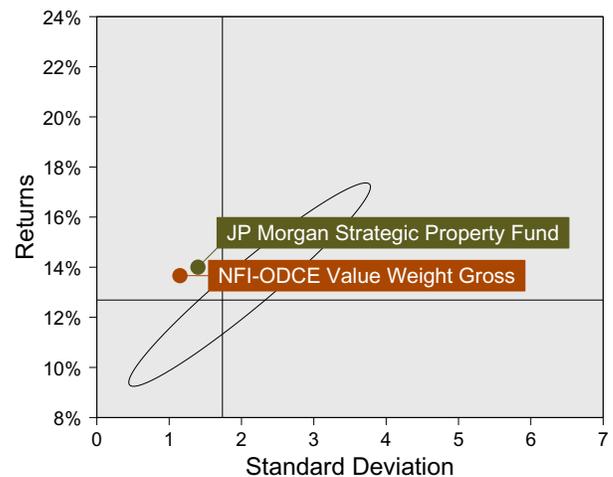
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years
10th Percentile	4.60	19.49	15.04	21.33	7.48	9.23
25th Percentile	3.66	16.16	13.55	13.56	7.06	8.20
Median	2.93	13.83	12.91	12.69	5.90	7.80
75th Percentile	2.76	12.55	10.67	11.28	5.37	7.11
90th Percentile	2.56	10.73	9.84	10.55	4.90	6.63

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years
JP Morgan Strategic Property Fund ●	3.37	15.24	14.07	14.00	7.28	8.80
NFI-ODCE Value Weight Gross ▲	3.34	15.02	13.81	13.66	6.53	7.94

Relative Returns vs NFI-ODCE Value Weight Gross



CAI Open-End Real Estate Funds (Net) Annualized Five Year Risk vs Return

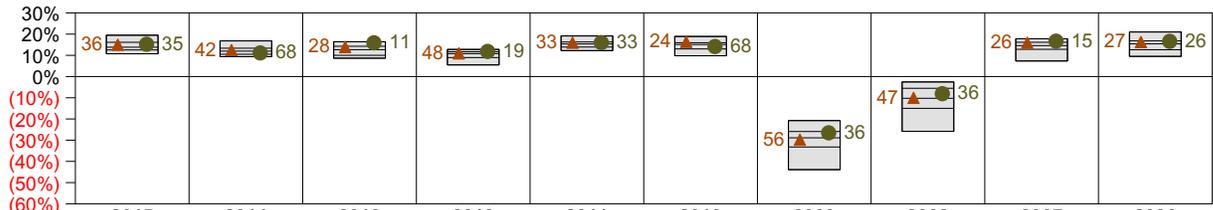


JP Morgan Strategic Property Fund Return Analysis Summary

Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures.

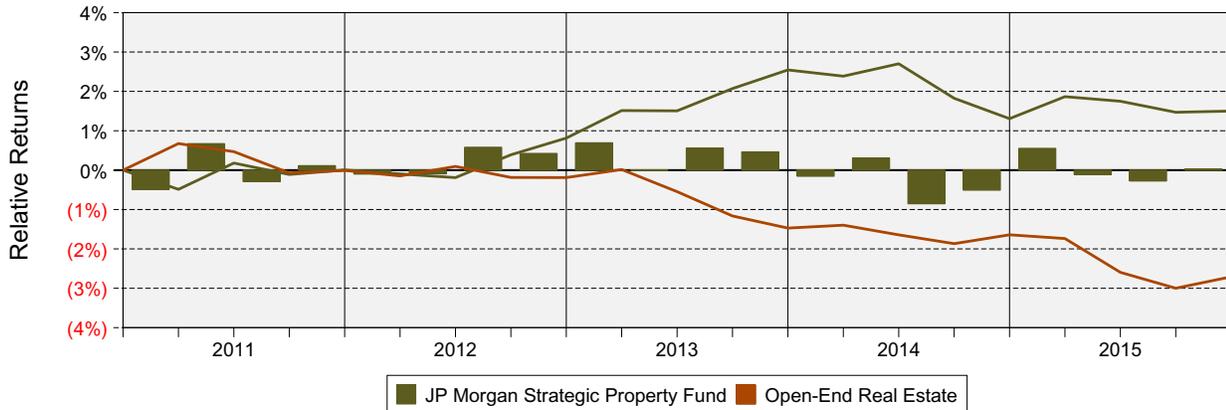
Performance vs CAI Open-End Real Estate Funds (Net)



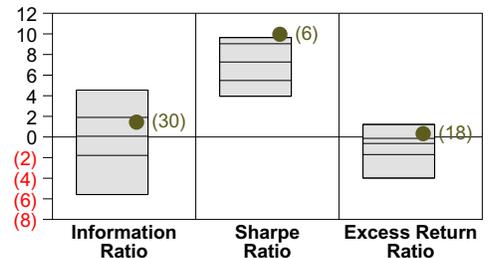
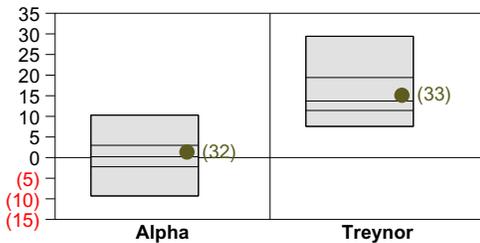
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
10th Percentile	19.49	16.81	16.41	12.79	19.15	18.90	(20.77)	(2.54)	17.80	21.01
25th Percentile	16.16	13.36	14.28	11.67	16.29	15.94	(25.92)	(5.53)	16.15	16.80
Median	13.83	11.99	12.67	10.80	15.33	15.09	(28.89)	(10.25)	14.59	15.41
75th Percentile	12.55	10.52	10.02	8.95	13.91	13.02	(33.22)	(14.99)	12.84	12.65
90th Percentile	10.73	9.38	8.65	5.49	12.22	9.80	(43.90)	(25.83)	7.34	9.50

JP Morgan Strategic Property Fund	●	15.24	11.14	15.90	11.84	15.99	14.16	(26.53)	(8.09)	16.67	16.59
NFI-ODCE Value Weight Gross	▲	15.02	12.50	13.94	10.94	15.99	16.36	(29.76)	(10.01)	15.97	16.32

Cumulative and Quarterly Relative Return vs NFI-ODCE Value Weight Gross



Risk Adjusted Return Measures vs NFI-ODCE Value Weight Gross Rankings Against CAI Open-End Real Estate Funds (Net) Five Years Ended December 31, 2015



10th Percentile	10.30	29.42	10th Percentile	4.55	9.64	1.22
25th Percentile	2.98	19.41	25th Percentile	1.90	9.04	(0.14)
Median	0.20	13.72	Median	0.07	7.27	(0.63)
75th Percentile	(2.23)	11.43	75th Percentile	(1.79)	5.48	(1.71)
90th Percentile	(9.31)	7.56	90th Percentile	(5.59)	3.95	(3.99)

JP Morgan Strategic Property Fund	●	1.34	15.13
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JP Morgan Strategic Property Fund	●	1.44	9.96	0.33
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JP Morgan Income and Growth Fund Period Ended December 31, 2015

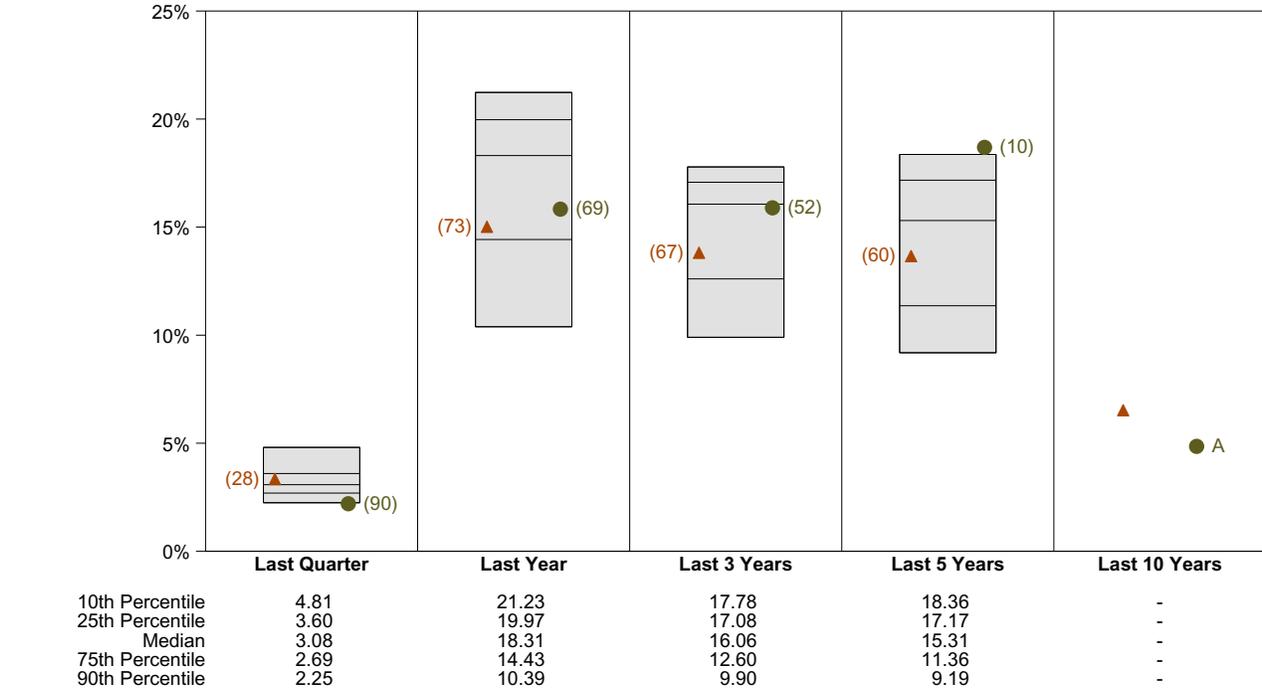
Investment Philosophy

The product was funded in the fourth quarter of 2005.

Quarterly Summary and Highlights

- JP Morgan Income and Growth Fund's portfolio posted a 2.20% return for the quarter placing it in the 90 percentile of the Real Estate Value Added Open End Funds group for the quarter and in the 69 percentile for the last year.
- JP Morgan Income and Growth Fund's portfolio underperformed the NFI-ODCE Value Weight Gross by 1.14% for the quarter and outperformed the NFI-ODCE Value Weight Gross for the year by 0.81%.

Performance vs Real Estate Value Added Open End Funds (Net)

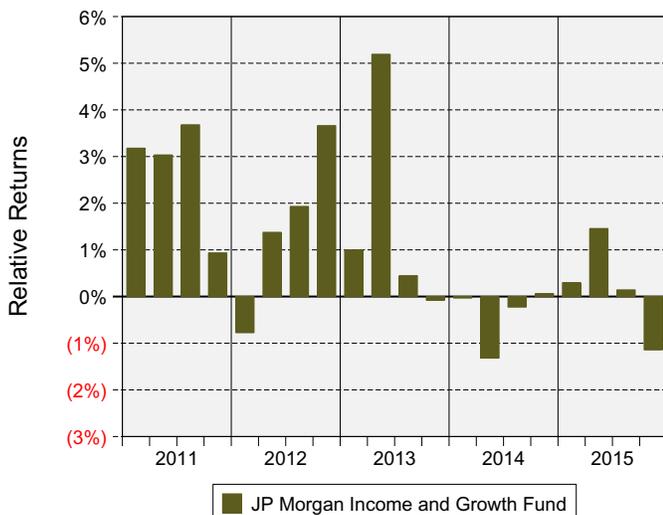


JP Morgan Income and Growth Fund ●

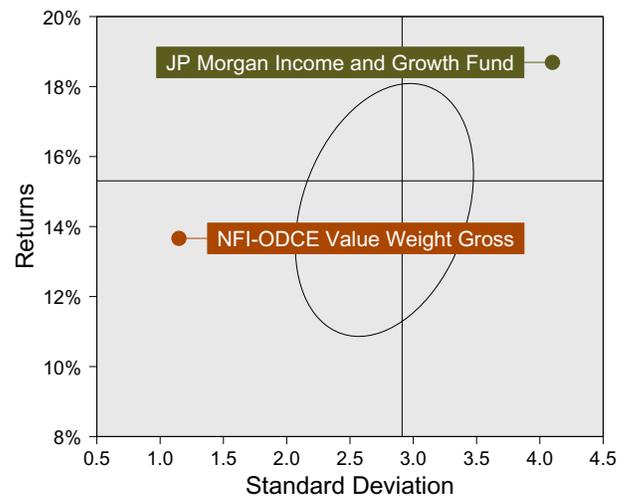
NFI-ODCE Value Weight Gross ▲

JP Morgan Income and Growth Fund	2.20	15.83	15.89	18.69	4.85
NFI-ODCE Value Weight Gross	3.34	15.02	13.81	13.66	6.53

Relative Returns vs NFI-ODCE Value Weight Gross



Real Estate Value Added Open End Funds (Net) Annualized Five Year Risk vs Return

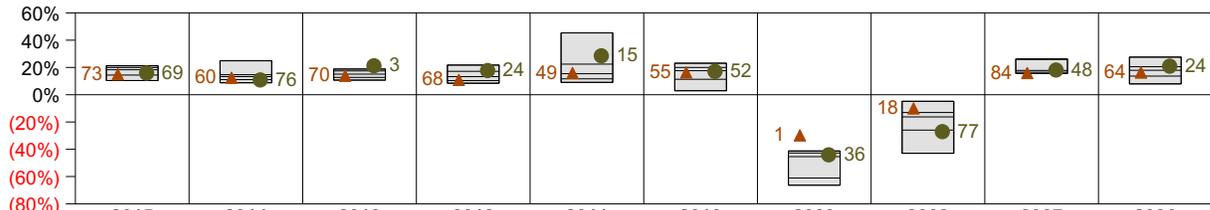


JPM Income and Growth Fund Return Analysis Summary

Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures.

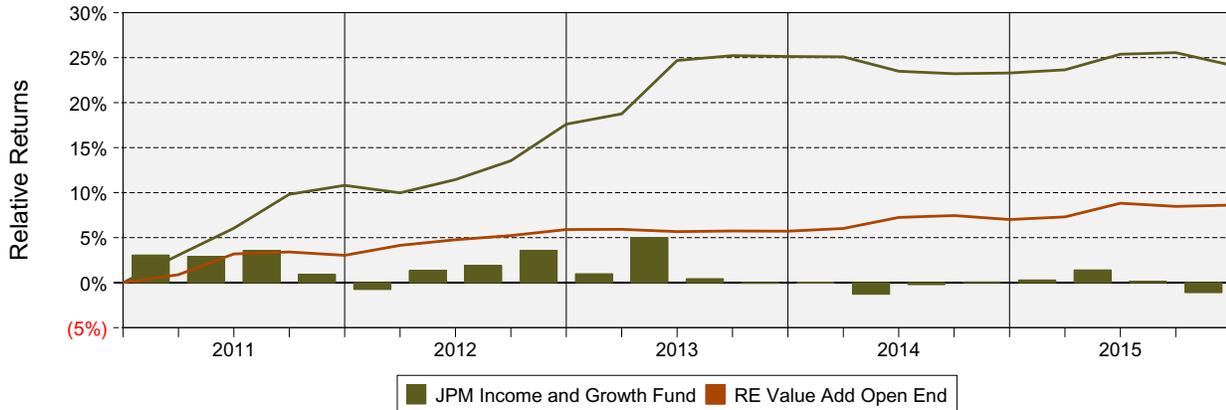
Performance vs Real Estate Value Added Open End Funds (Net)



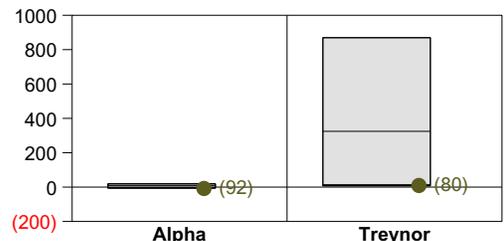
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
10th Percentile	21.23	24.91	18.81	21.75	45.34	23.11	(41.24)	(4.81)	26.17	27.58
25th Percentile	19.97	14.68	17.45	17.17	22.42	20.00	(42.72)	(13.03)	25.97	20.55
Median	18.31	13.32	15.13	13.28	15.42	17.62	(45.40)	(16.25)	17.80	17.92
75th Percentile	14.43	11.07	12.70	10.39	11.66	11.32	(61.06)	(25.95)	16.47	13.67
90th Percentile	10.39	8.77	10.70	8.43	9.06	2.94	(66.35)	(42.95)	15.61	7.95

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
JPM Income and Growth Fund	15.83	10.85	21.23	17.74	28.52	17.11	(44.09)	(27.07)	18.11	20.93
NFI-ODCE Value Weight Gross	15.02	12.50	13.94	10.94	15.99	16.36	(29.76)	(10.01)	15.97	16.32

Cumulative and Quarterly Relative Return vs NFI-ODCE Value Weight Gross

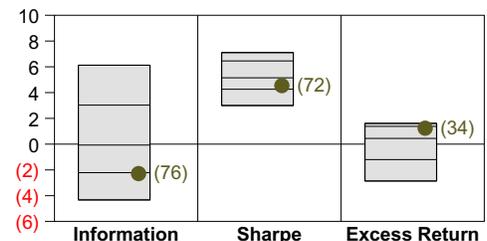


Risk Adjusted Return Measures vs NFI-ODCE Value Weight Gross Rankings Against Real Estate Value Added Open End Funds (Net) Five Years Ended December 31, 2015



	Alpha	Treynor Ratio
10th Percentile	19.04	869.46
25th Percentile	9.77	324.46
Median	(0.15)	13.57
75th Percentile	(3.78)	10.36
90th Percentile	(6.03)	7.52

JPM Income and Growth Fund	(7.97)	9.37
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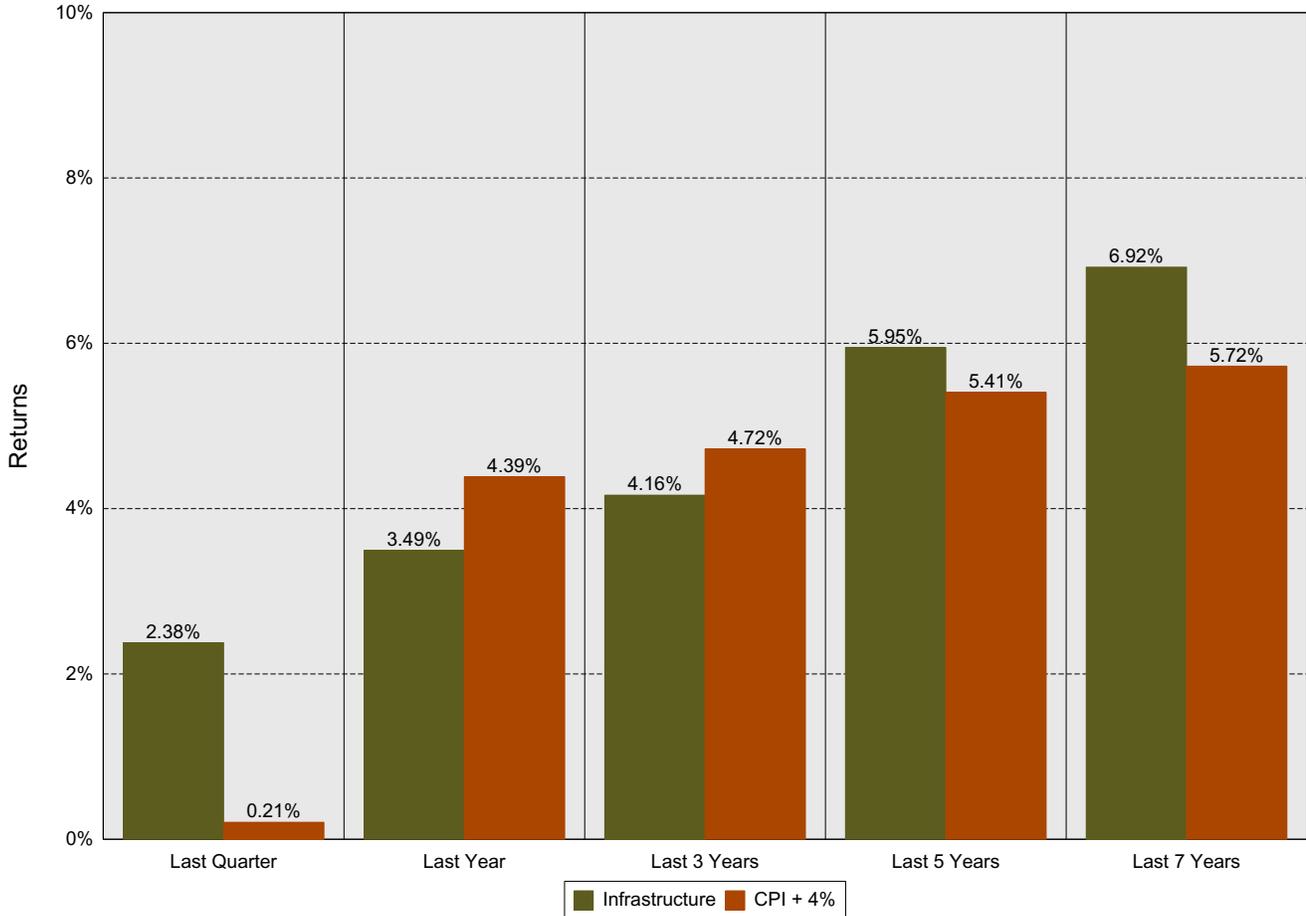
	Information Ratio	Sharpe Ratio	Excess Return Ratio
10th Percentile	6.13	7.10	1.61
25th Percentile	3.03	6.46	1.38
Median	(0.07)	5.15	0.44
75th Percentile	(2.21)	4.26	(1.20)
90th Percentile	(4.33)	3.00	(2.86)

JPM Income and Growth Fund	(2.29)	4.54	1.24
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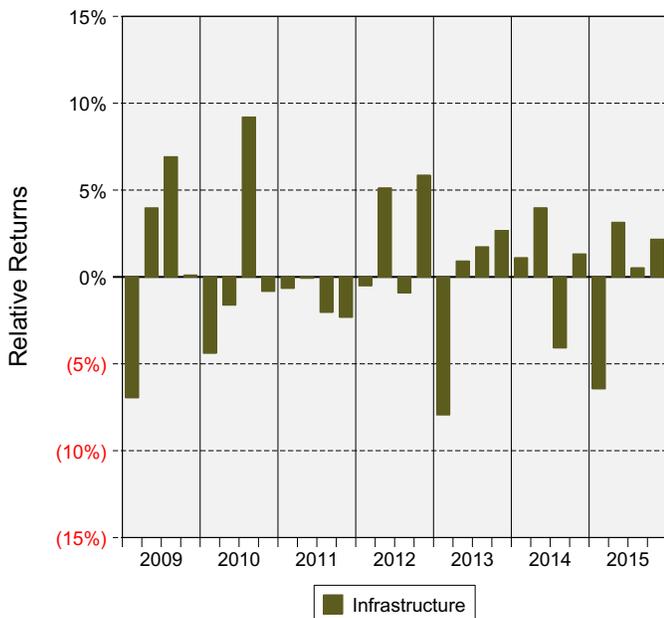
Infrastructure Period Ended December 31, 2015

Quarterly Summary and Highlights

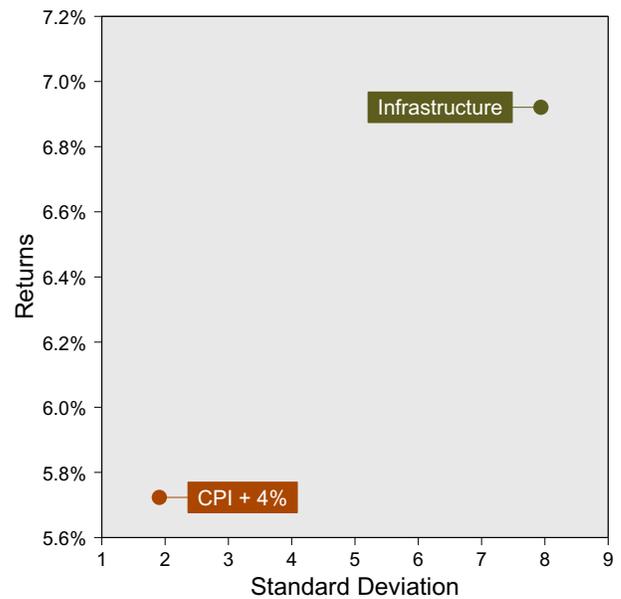
- Infrastructure's portfolio outperformed the CPI + 4% by 2.17% for the quarter and underperformed the CPI + 4% for the year by 0.89%.



Relative Return vs CPI + 4%



Annualized Seven Year Risk vs Return



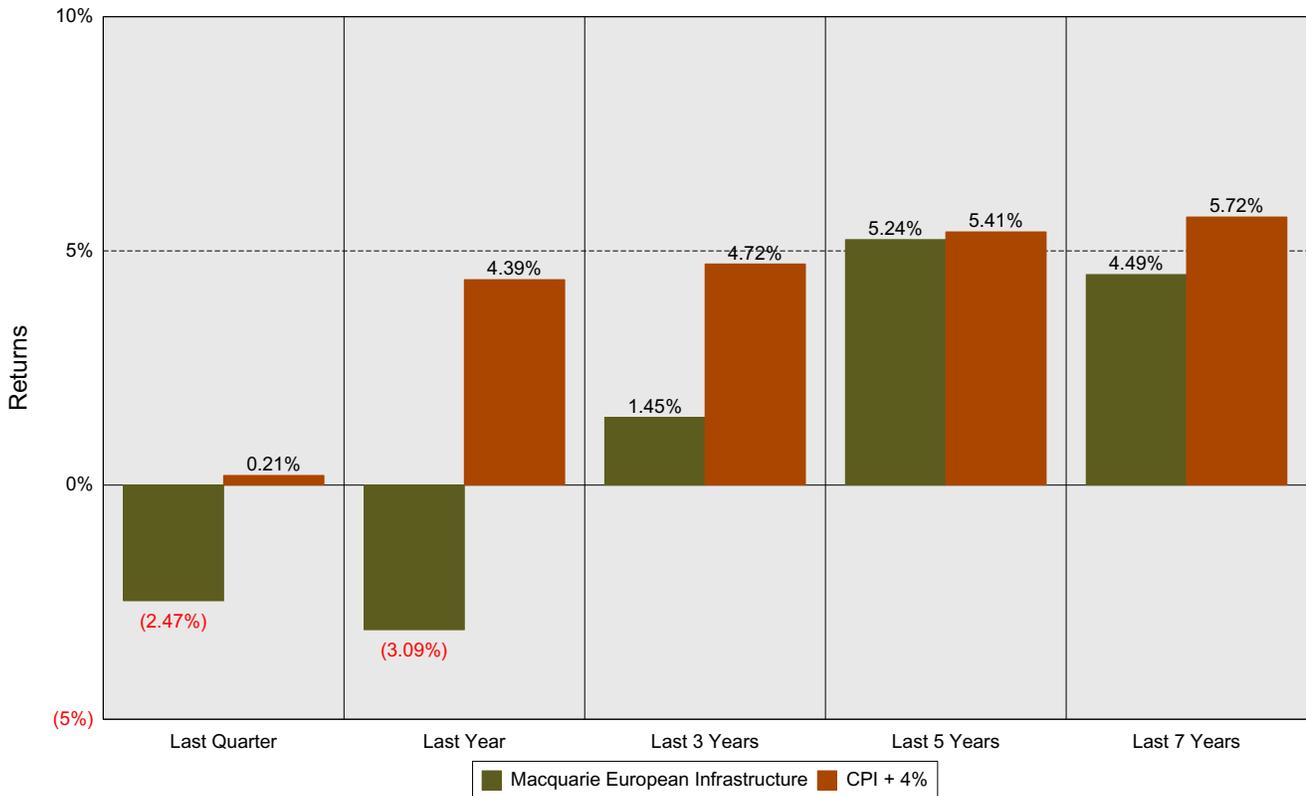
Macquarie European Infrastructure Period Ended December 31, 2015

Investment Philosophy

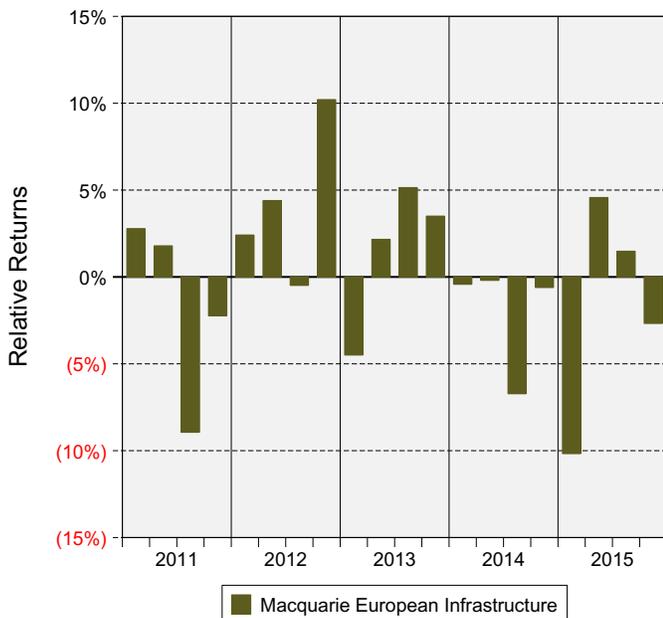
The product was funded in the fourth quarter of 2008.

Quarterly Summary and Highlights

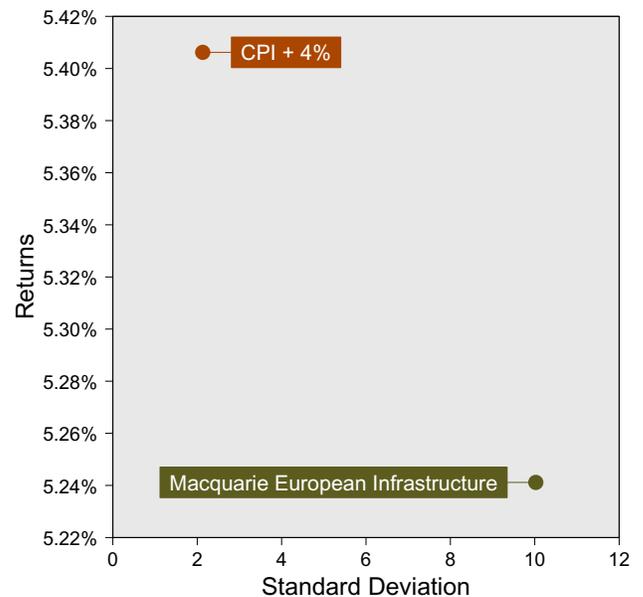
- Macquarie European Infrastructure's portfolio underperformed the CPI + 4% by 2.67% for the quarter and underperformed the CPI + 4% for the year by 7.47%.



Relative Return vs CPI + 4%



Annualized Five Year Risk vs Return



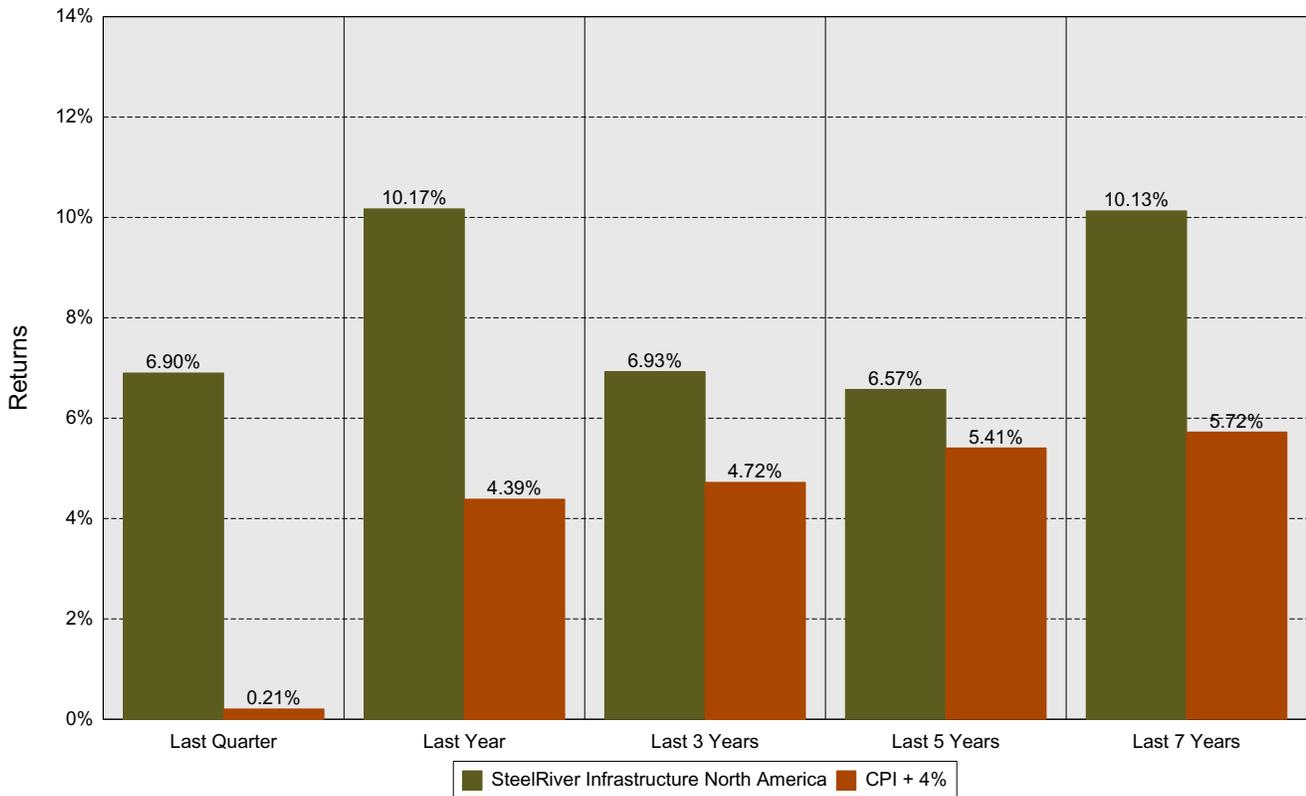
SteelRiver Infrastructure North America Period Ended December 31, 2015

Investment Philosophy

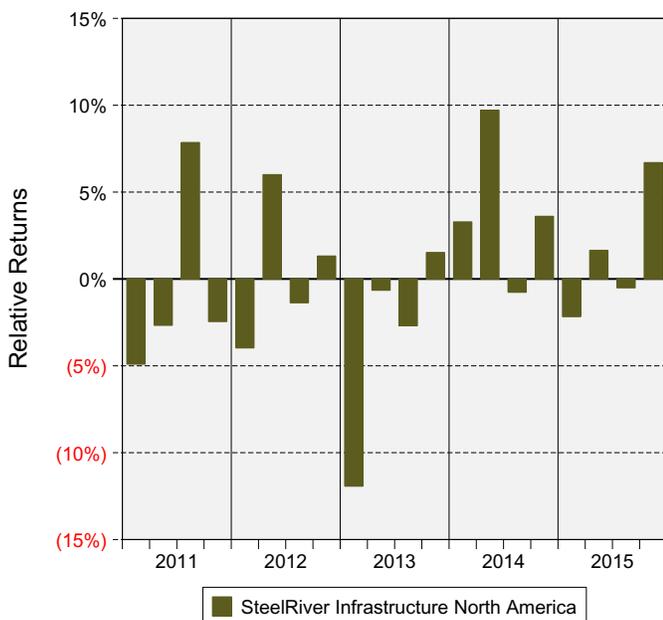
The product was funded in the fourth quarter of 2008.

Quarterly Summary and Highlights

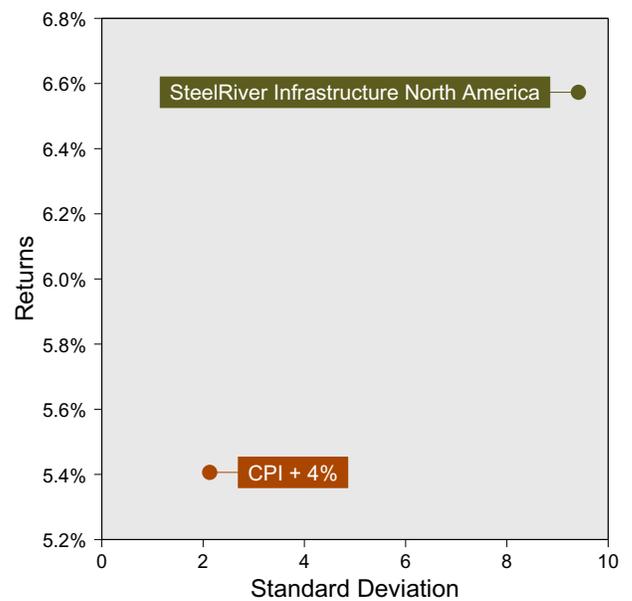
- SteelRiver Infrastructure North America's portfolio outperformed the CPI + 4% by 6.69% for the quarter and outperformed the CPI + 4% for the year by 5.79%.



Relative Return vs CPI + 4%



Annualized Five Year Risk vs Return



Research and Educational Programs

The Callan Investments Institute provides research that keeps clients updated on the latest industry trends while helping them learn through carefully structured educational programs.

Recent Research

Please visit www.callan.com/research to see all of our publications.

Video: The Education of Beta In this brief video, Eugene Podkaminer describes the reasons he decided to explore the “smart beta” concept in detail.

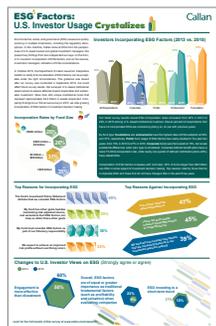


2015 Alternative Investments Survey Our 2015 Alternative Investments Survey provides institutional investors a current report on asset allocation trends and investor practices.

Inside Callan’s Database, 3rd Quarter 2015 This report graphs performance and risk data from Callan’s proprietary database alongside relevant market indices.

Capital Market Review, 3rd Quarter 2015 Insights on the economy and recent performance in equities, fixed income, alternatives, real estate, and more.

Market Pulse Flipbook, 3rd Quarter 2015 A quarterly market reference guide covering investment and fund sponsor trends in the U.S. economy, U.S. and non-U.S. equities and fixed income, alternatives, and defined contribution.



ESG Factors: U.S. Investor Usage Crystalizes This charticle looks at ESG from the perspectives of U.S. asset owners and global investment managers, revealing growing incorporation of ESG factors in investment decision making.

The Department of Labor Weighs in on ESG: Key Takeaways from Interpretive Bulletin 2015-01 A summary of the DOL’s Interpretive Bulletin 2015-011, relating to the fiduciary standard under ERISA considering economically targeted investments (ETIs), and the implications for investors.

Hedge Fund Monitor, 3rd Quarter 2015 Author Jim McKee provides quarterly performance and a snapshot of the asset class. This quarter’s cover story: “Beyond the Glitter and Regret: Reassessing Hedge Funds’ Role in Asset Allocation.”

Video: In the Spotlight-Target Date Funds Lori Lucas discusses some of the trends that are causing target date funds to have lower fees.

ESG Interest and Implementation Survey Results of Callan’s third annual survey to assess the status of ESG factor integration in the U.S. institutional market.

DC Observer, 3rd Quarter 2015 Cover story: Meeting the Challenge of Managed Account Selection and Evaluation.

Grading the Pension Protection Act, Ten Years Later: Success Stories and Near Misses Callan grades the performance of nine key PPA provisions over the past decade, listing them from least to most effective.

Private Markets Trends, Fall 2015 Gary Robertson summarizes the market environment, recent events, performance, and other issues involving private equity.

Events

Miss out on a Callan conference or workshop? Event summaries and speakers' presentations are available on our website: <https://www.callan.com/education/CII/>

The **National Conference**, to be held January 25–27 in San Francisco, consists of general sessions with presentations by world, political, arts, science, and investment industry speakers. The general sessions are followed by smaller breakout sessions on timely industry topics led by Callan specialists. Attendees include plan/fund sponsors, investment managers, and Callan associates.

Save the date for our **Regional Workshops**: June 28 in Atlanta, June 29 in San Francisco, October 25 in New York, and October 26 in Chicago. Also mark your calendars for our fall **Investment Manager Conference**, September 11-13.

For more information about research or educational events, please contact Anna West: 415.974.5060 / institute@callan.com

The Center for Investment Training Educational Sessions

The Center for Investment Training, better known as the “Callan College,” provides a foundation of knowledge for industry professionals who are involved in the investment decision-making process. It was founded in 1994 to provide clients and non-clients alike with basic- to intermediate-level instruction. Our next session is:

Introduction to Investments

Atlanta, GA, April 19–20, 2016

San Francisco, CA, July 19–20, 2016

Chicago, IL, October 18–19, 2016

This session familiarizes fund sponsor trustees, staff, and asset management advisors with basic investment theory, terminology, and practices. It lasts one-and-a-half days and is designed for individuals who have less than two years of experience with asset-management oversight and/or support responsibilities. Tuition for the Introductory “Callan College” session is \$2,350 per person. Tuition includes instruction, all materials, breakfast and lunch on each day, and dinner on the first evening with the instructors.

Customized Sessions

The “Callan College” is equipped to customize a curriculum to meet the training and educational needs of a specific organization. These tailored sessions range from basic to advanced and can take place anywhere—even at your office.

Learn more at <https://www.callan.com/education/college/> or contact Kathleen Cunnie: 415.274.3029 / cunnie@callan.com

Education: By the Numbers

500

Attendees (on average) of the Institute's annual National Conference

50+

Unique pieces of research the Institute generates each year

3,300

Total attendees of the “Callan College” since 1994

1980

Year the Callan Investments Institute was founded



“We think the best way to learn something is to teach it. Entrusting client education to our consultants and specialists ensures that they have a total command of their subject matter. This is one reason why education and research have been cornerstones of our firm for more than 40 years.”

Ron Peyton, Chairman and CEO

List of Callan's Investment Manager Clients

Confidential – For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor and disclose potential conflicts on an on-going basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

Fund sponsor clients may request a copy of the most currently available list at any time. Fund sponsor clients may also request specific information regarding the fees paid to Callan by particular fund manager clients. Per company policy, information requests regarding fees are handled exclusively by Callan's Compliance Department.

Manager Name
1607 Capital Partners, LLC
Aberdeen Asset Management
Acadian Asset Management, Inc.
Advisory Research
Affiliated Managers Group
AllianceBernstein
Allianz Global Investors U.S. LLC
Allianz Life Insurance Company of North America
AlphaOne Investment Services
American Century Investment Management
Analytic Investors
Apollo Global Management
AQR Capital Management
Ares Management
Ariel Investments
Aristotle Capital Management
Artisan Partners Limited
Atlanta Capital Management Co., L.L.C.
AXA Rosenberg Investment Management
Babson Capital Management LLC
Bailard
Baillie Gifford Overseas Limited
Baird Advisors
Bank of America
Baring Asset Management
Baron Capital Management
BlackRock
Blue Vista Capital Management
BMO Asset Management
BNP Paribas Investment Partners
BNY Mellon Asset Management
Boston Company Asset Management, LLC (The)
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
Brown Brothers Harriman & Company
Cadence Capital Management

Manager Name
Calamos Advisors
Capital Group
CastleArk Management, LLC
Causeway Capital Management
Champlain Investment Partners
Channing Capital Management, LLC
Charles Schwab Investment Management
Chartwell Investment Partners
ClearBridge Investments, LLC (fka ClearBridge Advisors)
Cohen & Steers
Columbia Management Investment Advisors, LLC
Columbus Circle Investors
Corbin Capital Partners
Cornerstone Investment Partners, LLC
Cramer Rosenthal McGlynn, LLC
Crawford Investment Council
Credit Suisse Asset Management
Crestline Investors
Cutwater Asset Management
DDJ Capital Management
DE Shaw Investment Management LLC
Delaware Investments
DePrince, Race & Zollo, Inc.
Deutsche Asset & Wealth Management
Diamond Hill Investments
Duff & Phelps Investment Mgmt.
Eagle Asset Management, Inc.
EARNEST Partners, LLC
Eaton Vance Management
EnTrust Capital Inc.
Epoch Investment Partners
Fayez Sarofim & Company
Federated Investors
Fidelity Institutional Asset Management
First Eagle Investment Management
First Hawaiian Bank Wealth Management Division
First State Investments

Manager Name
Fisher Investments
FLAG Capital Management
Fort Washington Investment Advisors, Inc.
Franklin Templeton
Fred Alger Management Co., Inc.
Fuller & Thaler Asset Management
GAM (USA) Inc.
GE Asset Management
Goldman Sachs Asset Management
Grand-Jean Capital Management
GMO (fka Grantham, Mayo, Van Otterloo & Co., LLC)
Gresham Investment Management, LLC
Guggenheim Investments Asset Management (fka Security Global)
Harbor Capital
Harding Loevner LP
Harrison Street Real Estate Capital
Hartford Funds
Hartford Investment Management Co.
Henderson Global Investors
Hotchkis & Wiley
HSBC Global Asset Management
Income Research & Management
Insight Investment Management
Institutional Capital LLC
INTECH Investment Management
Invesco
Investec Asset Management
Janus Capital Group (fka Janus Capital Management, LLC)
Jensen Investment Management
J.P. Morgan Asset Management
KeyCorp
Kopernik Global Investors
Lazard Asset Management
LMCG Investments (fka Lee Munder Capital Group)
Legal & General Investment Management America
Lincoln National Corporation
Logan Circle Partners, L.P.
The London Company
Longview Partners
Loomis, Sayles & Company, L.P.
Lord Abbett & Company
Los Angeles Capital Management
LSV Asset Management
Lyrical Partners
MackKay Shields LLC
Man Investments
Manulife Asset Management
Martin Currie
Marvin & Palmer Associates, Inc.
MFS Investment Management
MidFirst Bank
Millstreet Capital Management
Mondrian Investment Partners Limited
Montag & Caldwell, Inc.
Morgan Stanley Investment Management
Mountain Lake Investment Management LLC
MUFG Union Bank, N.A.
Neuberger Berman, LLC (fka, Lehman Brothers)
Newton Capital Management
Northern Lights Capital Group

Manager Name
Northern Trust Asset Management
Nuveen Investments Institutional Services Group LLC
Old Mutual Asset Management
OppenheimerFunds, Inc.
Pacific Investment Management Company
Palisade Capital Management LLC
PanAgora Asset Management
Paradigm Asset Management
Parametric Portfolio Associates
Peregrine Capital Management, Inc.
PineBridge Investments (formerly AIG)
Pinnacle Asset Management
Pioneer Investment Management, Inc.
PNC Capital Advisors, LLC (fka Allegiant Asset Mgmt)
Principal Global Investors
Private Advisors
Prudential Investment Management, Inc.
Putnam Investments, LLC
Pyramis Global Advisors
Pzena Investment Management, LLC
RBC Global Asset Management (U.S.) Inc.
Regions Financial Corporation
Riverbridge Partners LLC
Rothschild Asset Management, Inc.
Royce & Associates
RS Investments
Russell Investment Management
Santander Global Facilities
Schroder Investment Management North America Inc.
Scout Investments
SEI Investments
SEIX Investment Advisors, Inc.
Smith Graham and Company
Smith Group Asset Management
Standard Life Investments
Standish (fka, Standish Mellon Asset Management)
State Street Global Advisors
Stone Harbor Investment Partners, L.P.
Systematic Financial Management
T. Rowe Price Associates, Inc.
Taplin, Canida & Habacht
TIAA-CREF
TCW Asset Management Company
Tocqueville Asset Management
UBS Asset Management
Van Eck
Versus Capital Group
Victory Capital Management Inc.
Vontobel Asset Management
Voya Investment Management (fka ING)
Waddell & Reed Asset Management Group
WCM Investment Management
WEDGE Capital Management
Wellington Management Company, LLP
Wells Capital Management
Wells Fargo Private Bank
Western Asset Management Company
Westwood Management Corp.
William Blair & Co., Inc.

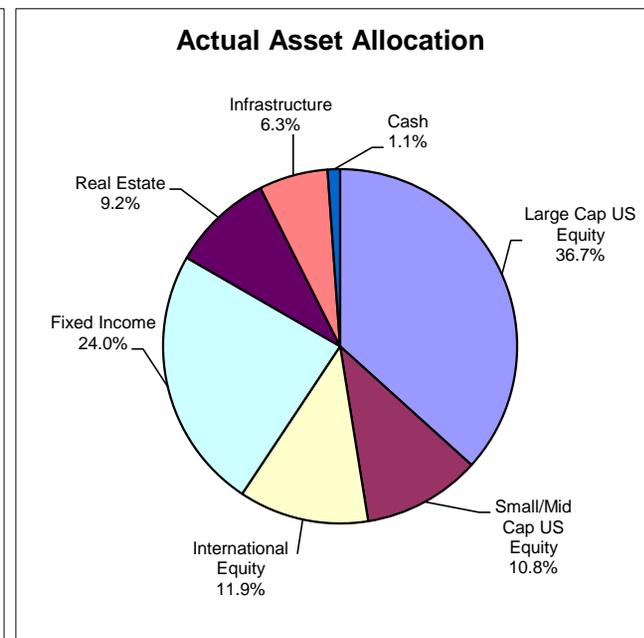
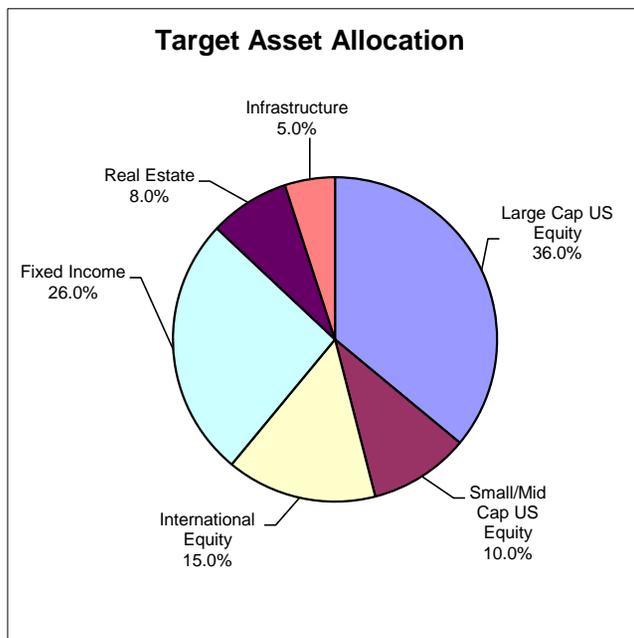
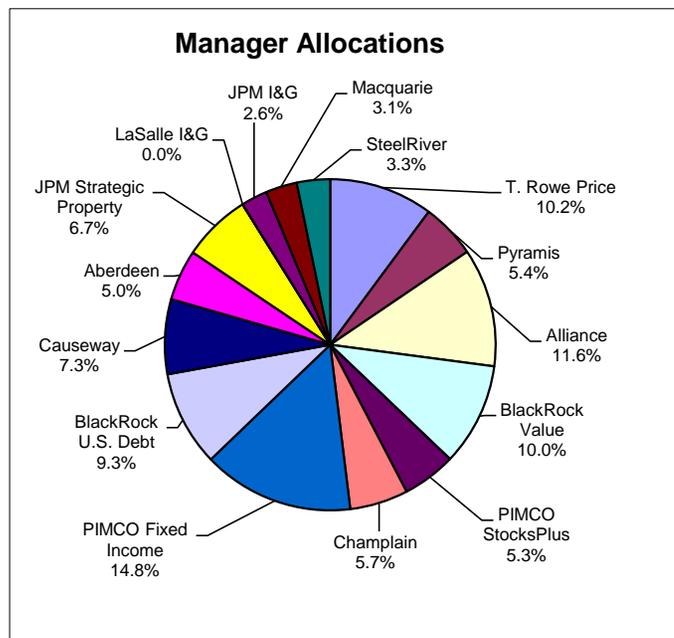
Manager Allocations Compared with Policy Levels

Monthly Report as of: 01/31/16

Managers and Asset Class	Actual		Target		Differences		Range		Outside Range
	(000s)	%	(000s)	%	From Target		Min	Max	
T. Rowe Price	\$ 68,463	10.1%	\$ 67,633	10.0%	0.1%	\$ 830	8.0%	12.0%	0.0%
Alliance (S&P 500)	77,993	11.5%	74,396	11.0%	0.5%	3,597	8.0%	14.0%	0.0%
BlackRock Value	67,599	10.0%	67,633	10.0%	0.0%	(34)	8.0%	12.0%	0.0%
PIMCO StocksPlus	35,420	5.2%	33,816	5.0%	0.2%	1,603	3.0%	7.0%	0.0%
Large Cap U.S. Equity	249,474	36.8%	243,479	36.0%	0.8%	5,995	31.0%	41.0%	0.0%
Pyramis	36,125	5.3%	33,816	5.0%	0.3%	2,308	3.0%	7.0%	0.0%
Champlain	38,408	5.7%	33,816	5.0%	0.7%	4,592	3.0%	7.0%	0.0%
Small/Mid Cap U.S. Equity	74,533	11.0%	67,633	10.0%	1.0%	6,900	6.0%	14.0%	0.0%
Causeway Capital Mgmt	49,246	7.3%	50,725	7.5%	-0.2%	(1,479)	5.5%	9.5%	0.0%
Aberdeen Asset Mgmt	33,483	5.0%	50,725	7.5%	-2.5%	(17,242)	5.5%	9.5%	-0.5%
International Equity	82,728	12.3%	101,449	15.0%	-2.7%	(18,721)	13.0%	17.0%	-0.7%
Total Stocks	406,736	60.1%	412,561	61.0%	-0.9%	(5,825)	56.0%	66.0%	0.0%
PIMCO Fixed Income	99,538	14.7%	108,213	16.0%	-1.3%	(8,675)	13.0%	19.0%	0.0%
BlackRock U.S. Debt	62,756	9.3%	67,633	10.0%	-0.7%	(4,877)	8.0%	12.0%	0.0%
Total Bonds	162,294	24.0%	175,846	26.0%	-2.0%	(13,552)	21.0%	31.0%	0.0%
JPM Strategic Property	45,186	6.7%	33,816	5.0%	1.7%	11,370	3.0%	7.0%	0.0%
LaSalle Income & Growth IV	3	0.0%	10,145	1.5%	-1.5%	(10,142)	0.0%	3.0%	0.0%
JPM Income & Growth	17,321	2.6%	10,145	1.5%	1.1%	7,176	0.0%	3.0%	0.0%
Total Real Estate	62,510	9.3%	54,106	8.0%	1.3%	8,404	6.0%	10.0%	0.0%
Macquarie	20,639	3.1%	16,908	2.5%	0.6%	3,731	1.5%	3.5%	0.0%
SteelRiver	21,920	3.2%	16,908	2.5%	0.7%	5,012	1.5%	3.5%	0.0%
Total Infrastructure	42,560	6.3%	33,816	5.0%	1.3%	8,743	3.0%	7.0%	0.0%
Liquidity Fund	2,230	0.3%	-						
Total Fund	\$ 676,329	100%	\$ 676,329	100%					

Allocation Summaries

As of: 01/31/16



Investment Manager Allocation:

<u>Investment Account</u>	<u>(000s)</u>
1 T. Rowe Price	\$ 68,463
2 Pyramis	36,125
3 Alliance	77,993
4 BlackRock Value	67,599
5 PIMCO StocksPlus	35,420
6 Champlain	38,408
7 PIMCO Fixed Income	99,538
8 BlackRock U.S. Debt	62,756
9 Causeway	49,246
10 Aberdeen	33,483
11 JPM Strategic Property	45,186
12 LaSalle I&G	3
13 JPM I&G	17,321
14 Macquarie	20,639
15 SteelRiver	21,920
Liquidity Account	2,230
Total Assets	\$ 676,329

Target Asset Allocation:

<u>Asset Class</u>	<u>(000s)</u>
Large Cap US Equity	243,479
Small/Mid Cap US Equity	67,633
International Equity	101,449
Fixed Income	175,846
Real Estate	54,106
Infrastructure	33,816
Total Assets	\$ 676,329

Actual Asset Allocation:

<u>Asset Class</u>	<u>(000s)</u>
Large Cap US Equity	248,126
Small/Mid Cap US Equity	72,869
International Equity	80,306
Fixed Income	162,294
Real Estate	62,510
Infrastructure	42,551
Cash	7,674
Total Assets	\$ 676,329

**TUCSON SUPPLEMENTAL RETIREMENT SYSTEM
CALENDAR YEAR 2016 PERFORMANCE BY MANAGER
NET OF FEES AND CUSTODIAL CHARGES**

	Total Fund	BlackRock U.S. Debt	PIMCO	Total Fixed	Alliance S&P 500	BlackRock Value	PIMCO StocksPlus	T.RowePrice	Pyramis	Champlain	Aberdeen	Causeway Capital	Total Equities	JP Morgan Strat Prop	LaSalle I & G	JP Morgan I & G	Total Real Estate	SteelRiver	Macquarie Capital	Total Infrastructure
JAN	-4.76%	1.45%	-0.16%	0.46%	-4.98%	-5.16%	-16.66%	-9.95%	-8.73%	-6.73%	-5.93%	-7.91%	-7.92%	0.49%	0.00%	1.88%	0.87%	-0.11%	-0.39%	-0.25%
FEB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MAR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
APR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MAY	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
JUN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
JUL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
AUG	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
SEP	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
OCT	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NOV	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
DEC	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CYTD	-4.76%	1.45%	-0.16%	0.46%	-4.98%	-5.16%	-16.66%	-9.95%	-8.73%	-6.73%	-5.93%	-7.91%	-7.92%	0.49%	0.00%	1.88%	0.87%	-0.11%	-0.39%	-0.25%

Benchmark Returns:																				
Latest Month	-3.22%	1.38%	0.00%	1.38%	-4.96%	-5.17%	-4.96%	-5.58%	-8.79%	-6.55%	-6.80%	-7.23%	-6.05%	-	-	-	-	0.50%	0.50%	0.50%
Cldr Yr to Date	-3.22%	1.38%	0.00%	1.38%	-4.96%	-5.17%	-4.96%	-5.58%	-8.79%	-6.55%	-6.80%	-7.23%	-6.05%	0.00%	0.00%	0.00%	0.00%	0.50%	0.50%	0.50%
Index	Custom Plan Index	Barclays Aggregate	Fixed Inc Custom	Barclays Aggregate	S & P 500	Russell 1000 Value	S & P 500	Russell 1000 Growth	Russell 2000	Russell Midcap	MSCI All Country Wld x-US N	MSCI EAFE Net Divd	Equity Composite	NCREIF-ODCE (1)	NCREIF-ODCE (1)	NCREIF-ODCE (1)	NCREIF-ODCE (1)	CPI + 4% (2)	CPI + 4% (2)	CPI + 4% (2)

(1) CYTD Index returns thru:

(2) CYTD Index Returns thru: 01/31/16

**TUCSON SUPPLEMENTAL RETIREMENT SYSTEM
FISCAL YEAR 2016 PERFORMANCE BY MANAGER
NET OF FEES AND CUSTODIAL CHARGES**

	Total Fund	BlackRock U.S. Debt	PIMCO	Total Fixed	Alliance S&P 500	BlackRock Value	PIMCO StocksPlus	T.RowePrice	Pyramis	Champlain	Aberdeen	Causeway Capital	Total Equities	JP Morgan Strat Prop	LaSalle I & G	JP Morgan I & G	Total Real Estate	SteelRiver	Macquarie Capital	Total Infrastructure
JUL	1.16%	0.68%	0.57%	0.61%	2.12%	0.48%	2.15%	5.03%	1.16%	-1.52%	-1.48%	1.73%	1.55%	0.85%	0.00%	0.00%	0.61%	0.00%	-0.84%	-0.44%
AUG	-3.97%	-0.13%	-1.06%	-0.71%	-5.99%	-5.96%	-6.64%	-5.75%	-5.24%	-4.69%	-8.19%	-6.46%	-6.07%	0.97%	0.00%	0.00%	0.70%	0.00%	1.42%	0.74%
SEP	-3.20%	0.71%	-1.70%	-0.79%	-2.46%	-3.01%	-3.27%	-10.49%	-4.20%	-3.67%	-5.86%	-5.93%	-4.99%	1.30%	0.00%	0.00%	0.94%	-0.22%	1.41%	0.64%
OCT	4.38%	0.00%	2.26%	1.39%	2.29%	7.57%	8.68%	8.67%	3.97%	7.02%	7.51%	7.12%	6.41%	0.57%	0.00%	3.50%	1.37%	0.00%	-1.05%	-0.55%
NOV	0.50%	-0.26%	-0.54%	-0.43%	0.28%	0.41%	0.18%	0.35%	3.33%	1.53%	-2.78%	-2.04%	0.15%	1.52%	0.00%	0.00%	1.10%	19.98%	-6.30%	6.19%
DEC	-1.84%	-0.34%	-1.26%	-0.91%	-1.56%	-8.43%	-1.36%	-0.18%	-4.27%	-2.84%	-3.09%	-1.16%	-2.93%	1.00%	-95.71%	0.00%	0.63%	-3.93%	5.19%	0.29%
JAN	-4.76%	1.45%	-0.16%	0.46%	-4.98%	-5.16%	-16.66%	-9.95%	-8.73%	-6.73%	-5.93%	-7.91%	-7.92%	0.49%	0.00%	1.88%	0.87%	-0.11%	-0.39%	-0.25%
FEB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MAR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
APR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MAY	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
JUN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
FYTD	-7.78%	2.12%	-1.93%	-0.40%	-10.15%	-14.03%	-17.43%	-13.15%	-13.80%	-10.97%	-18.86%	-14.50%	-13.67%	6.89%	-95.71%	5.45%	6.39%	14.88%	-0.92%	6.64%

Benchmark Returns:																				
Latest Month	-3.22%	1.38%	0.00%	1.38%	-4.96%	-5.17%	-4.96%	-5.58%	-8.79%	-6.55%	-6.80%	-7.23%	-6.05%	3.34%	3.34%	3.34%	3.34%	0.50%	0.50%	0.50%
Fiscal Yr to Date	-4.39%	2.07%	-1.55%	2.07%	-4.80%	-8.24%	-4.80%	-4.03%	-16.78%	-10.93%	-15.49%	-12.81%	-9.10%	7.14%	7.14%	7.14%	7.14%	1.60%	1.60%	1.60%
Index	Custom Plan Index	Barclays Aggregate	Fixed Inc Custom	Barclays Aggregate	S & P 500	Russell 1000 Value	S & P 500	Russell 1000 Growth	Russell 2000	Russell Midcap	MSCI All Country Wld x-US N	MSCI EAFE Net Divd	Equity Composite	NCREIF - ODCE (1)	CPI + 4% (2)	CPI + 4% (2)	CPI + 4% (2)			

(1) FYTD Index returns thru: 12/31/15

(2) FYTD Index returns thru: 1/31/16

**TUCSON SUPPLEMENTAL RETIREMENT SYSTEM
ONE YEAR TO DATE PERFORMANCE BY MANAGER
NET OF FEES AND CUSTODIAL CHARGES**

	Total Fund	BlackRock U.S. Debt	PIMCO	Total Fixed	Alliance S&P 500	BlackRock Value	PIMCO StocksPlus	T.RowePrice	Pyramis	Champlain	Aberdeen	Causeway Capital	Total Equities	JP Morgan Strat Prop	LaSalle I & G	JP Morgan I & G	Total Real Estate	SteelRiver	Macquarie Capital	Total Infrastructure
JAN '15	-1.02%	2.10%	1.67%	1.83%	-3.00%	-3.97%	-2.78%	-0.58%	-2.39%	-2.76%	-0.48%	0.53%	-2.02%	0.47%	0.00%	3.00%	1.14%	0.00%	-6.70%	-3.58%
FEB '15	3.76%	-0.92%	0.76%	0.12%	5.73%	4.86%	5.92%	6.73%	6.88%	5.94%	4.26%	4.42%	5.60%	1.85%	0.00%	0.00%	1.32%	-0.20%	2.16%	1.02%
MAR '15	-0.57%	0.44%	0.33%	0.37%	-1.58%	-1.37%	-1.46%	-0.55%	1.43%	0.83%	-2.74%	-1.12%	-0.93%	1.35%	2.61%	0.00%	1.00%	0.00%	-4.25%	-2.22%
APR '15	1.14%	-0.29%	0.20%	0.02%	0.95%	0.94%	0.77%	0.09%	-1.32%	1.02%	4.82%	4.89%	1.39%	0.90%	0.00%	3.36%	1.55%	0.00%	4.33%	2.22%
MAY '15	0.70%	-0.29%	0.12%	-0.03%	1.29%	1.21%	1.38%	2.03%	3.79%	1.47%	-2.01%	-1.14%	1.05%	1.02%	0.00%	0.00%	0.73%	1.47%	-2.16%	-0.43%
JUN '15	-1.08%	-1.10%	-1.77%	-1.52%	-1.92%	-1.93%	-2.11%	-1.20%	1.19%	0.06%	-4.19%	-2.71%	-1.66%	1.49%	24.40%	4.95%	2.45%	1.66%	3.61%	2.66%
JUL '15	1.16%	0.68%	0.57%	0.61%	2.12%	0.48%	2.15%	5.03%	1.16%	-1.52%	-1.48%	1.73%	1.55%	0.85%	0.00%	0.00%	0.61%	0.00%	-0.84%	-0.44%
AUG '15	-3.97%	-0.13%	-1.06%	-0.71%	-5.99%	-5.96%	-6.64%	-5.75%	-5.24%	-4.69%	-8.19%	-6.46%	-6.07%	-0.97%	0.00%	0.00%	0.70%	0.00%	1.42%	0.74%
SEP '15	-3.20%	7.10%	-1.70%	-0.79%	-2.46%	-3.01%	-3.27%	-10.49%	-4.20%	-3.67%	-5.86%	-5.93%	-4.99%	1.30%	0.00%	0.00%	0.94%	-0.22%	1.41%	0.64%
OCT '15	4.38%	0.00%	2.26%	1.39%	2.29%	7.57%	8.68%	8.67%	3.97%	7.02%	7.51%	7.12%	6.41%	0.57%	0.00%	3.50%	1.37%	0.00%	-1.05%	-0.55%
NOV '15	0.50%	-0.26%	-0.54%	-0.43%	0.28%	0.41%	0.18%	0.35%	3.33%	1.53%	-2.78%	-2.04%	0.15%	1.52%	0.00%	0.00%	1.10%	19.98%	-6.30%	6.19%
DEC '15	-1.84%	-0.34%	-1.26%	-0.91%	-1.56%	-8.43%	-1.36%	-0.18%	-4.27%	-2.84%	-3.09%	-1.16%	-2.93%	1.00%	-95.71%	0.00%	0.63%	-3.93%	5.19%	0.29%
JAN '16	-4.76%	1.45%	-0.16%	0.46%	-4.98%	-5.16%	-16.66%	-9.95%	-8.73%	-6.73%	-5.93%	-7.91%	-7.92%	0.49%	0.00%	1.88%	0.87%	-0.11%	-0.39%	-0.25%
1-YTD	-4.15%	6.26%	-2.30%	-1.45%	-6.24%	-10.92%	-13.82%	-6.98%	-3.15%	-2.46%	-19.03%	-10.94%	-9.01%	11.95%	-94.52%	14.38%	14.09%	18.27%	2.50%	10.06%

Benchmark Returns:																				
Latest Month	-3.22%	1.38%	0.00%	1.38%	-4.96%	-5.17%	-4.96%	-5.58%	-8.79%	-6.55%	-6.80%	-7.23%	-6.05%	3.34%	3.34%	3.34%	3.34%	0.50%	0.50%	0.50%
One Yr to Date	-1.37%	-0.14%	-1.77%	-0.14%	-0.64%	-5.01%	-0.64%	1.33%	-9.92%	-7.40%	-11.95%	-8.44%	-4.73%	15.01%	15.01%	15.01%	15.01%	5.44%	5.44%	5.44%
Index	Custom Plan Index	Barclays Aggregate	Fixed Inc Custom	Barclays Aggregate	S & P 500	Russell 1000 Value	S & P 500	Russell 1000 Growth	Russell 2000	Russell Midcap	MSCI All Country Wld x-US N	MSCI EAFE Net Divd	Equity Composite	NCREIF - ODCE (1)	CPI + 4% (2)	CPI + 4% (2)	CPI + 4% (2)			

(1) One Yr Index returns thru: 12/31/15

(2) One Yr Index returns thru: 1/31/16

**Tucson Supplemental Retirement System (TSRS)
 BNY Mellon - Securities Lending & Custodial Fee Summary
 FY16**

July 1, 2015 - June 30, 2016

	Gross Earnings	Rebate Paid	Bank Fees	Gross Client Earnings	Administration Fee	FY16 Net Client Earnings	FY15 Net Client Earnings	FY16 Custodian Fees	FY15 Custodian Fees
July	\$ 2,924	\$ (7,613)	\$ 4,214	\$ 6,323	\$ -	\$ 6,323	\$ 6,816	\$ -	\$ -
August	2,712	(7,968)	4,271	6,410	-	6,410	5,775	-	-
September	2,016	(10,251)	4,905	7,362	-	7,362	6,239	74,053	73,879
October	2,230	(10,678)	5,162	7,746	-	7,746	6,970	-	-
November	2,563	(6,447)	3,603	5,407	-	5,407	6,002	-	-
December	4,516	(8,780)	5,316	7,979	-	7,979	6,655	-	71,675
January	5,571	(5,972)	4,615	6,928	-	6,928	7,214	-	-
February	-	-	-	-	-	-	8,612	-	-
March	-	-	-	-	-	-	11,248	-	75,962
April	-	-	-	-	-	-	11,082	-	-
May	-	-	-	-	-	-	13,175	-	-
June	-	-	-	-	-	-	8,769	-	-
Totals	\$ 22,532	\$ (57,709)	\$ 32,087	\$ 48,154	\$ -	\$ 48,154	\$ 98,557	\$ 74,053	\$ 221,516

cross check: 48,154

Blurring the Lines

Cash balance plans are DB plans with DC-like characteristics



In the province of retirement plans, between the old world occupied by venerable defined benefit (DB) pensions and the new world of defined contribution (DC) arrangements, lies a middle territory, with indistinct borders, staked out by cash balance plans. They sprang up 10 or 15 years ago, when large corporate plan sponsors sought to reduce the high cost and uncertainty of defined benefit plans while retaining some of their better features.

Recently the borders among DB, cash balance and DC plans have been blurred further by an evolving regulation on investment choices, and few large sponsors are migrating to the new territory. But the flexibility in design, and significant tax advantages, of cash balance plans have expanded their numbers among smaller companies with highly paid owners.

By definition, cash balance plans are defined benefit plans. They look somewhat like defined contribution plans; however, unique accounts are set up for each participant, and the participant's retirement benefit is the contribution made by the employer over the years plus interest credits applied each year at a rate specified by the plan, rather than a lifetime income annuity that traditional DB plans provide. Interest credits are typically tied to a fixed rate or the yield on 30-year U.S. Treasury securities.

Moreover, in cash balance plans, sponsors retain control over plan investments, bringing the potential lower costs and higher returns associated with the institutional portfolio management of traditional pensions. But sponsors also keep the investment risk and must make participants whole if their account values fall below the sum of contributions made.

For sponsors concerned about the volatility of pension liabilities in their financial statements, cash balance plans

offer some relief, and this contributed to a surge in growth that started in the late 1990s. “Cash balance plans are less subject to movements in liabilities than a traditional DB plan,” explains Alan Glickstein, senior retirement consultant in the Dallas office of consulting firm Towers Watson. On the benefit side, they are insulated from increases in pay, which would ratchet up benefits for past years. “And when interest rates increase,” he says, “the effect of reducing the discounted liability is generally offset by the higher interest credit that the plan is providing, making for less volatility in liabilities than a traditional plan.” These are rules of thumb, however, and results are highly dependent on plan structure, including minimums set on crediting rates.

But sponsors are not off the hook with respect to funded status, as cash balance plans bring a different set of investment risks in matching asset returns with moves in liabilities. “Cash balance accounts typically grow based on some reference interest rate, and that growth doesn’t mirror any investable asset class, making the liabilities difficult to hedge,” observes Justin Harvey, who leads the liability-driven investment (LDI) team at T. Rowe Price Group, Baltimore. (For more about the complexities of cash balance plan investments, see “Risks and Returns,” PLANSPONSOR, November 2015).

Cash balance plans are still small on the landscape, rising five-fold between 2003 and 2013 to 11,122 plans, and gaining a cumulative 80% in assets to \$951 billion.

A small part of the growth resulted from corporate sponsors pivoting away from traditional pension plans. In 1998, full-fledged defined benefit plans were in place at about 300 Fortune 500 companies, while cash balance plans were used at 48.

“Once cash balance plans were widely introduced, they became popular really quickly,” Glickstein recalls. “But the early rules were written [as for] traditional plans, and through the mid-2000s there was a lot of regulatory uncertainty.”

Involved, in part, were legal challenges that cash balance plans discriminated against older participants.

“By 2006, when much of the legal uncertainty was being addressed, many sponsors had already moved away from the plans,” Glickstein says. “At the same time, the Pension Protection Act [PPA] brought in less smoothing in pension funding and, with the mark-to-market accounting, many wanted to get the risk of the additional volatility off their shoulders, and they moved to DC plans,” he says.

Still, many big firms have stayed the course. In 2014, assets in the cash balance plans of AT&T were \$57 billion and of IBM were \$55 billion, according to the “2015 National Cash Balance Research Report” from cash balance plan specialist Kravitz Inc.

“... cash balance plans are popular where the money is ...”

“Many sponsors that have cash balance plans take pride in having moved away from traditional DB, and they are happy with the benefit-accrual status quo, for the most part,” notes Ethan Bronsnick, co-head of the pension solutions group at Morgan Stanley in New York City.

The growth in cash balance plans has therefore been at the smaller end of the spectrum. “Most plans have been started by small businesses,” notes Daniel Kravitz, president of Kravitz, which is headquartered in Los Angeles. Typically, a sponsor will offer a cash balance plan as a supplement to a 401(k) arrangement. “The most you can put into a 401(k) plan is about \$50,000 per participant per year, and if there’s a desire to defer more than that, it makes sense to add a cash balance plan,” he says.

Accordingly, cash balance plans are popular where the money is—for instance, with law firms (where the average partner earned just over \$700,000 in 2014) and

physicians (orthopedists averaged over \$400,000, that year). Annual contributions to cash balance plans are limited by the annual payout the participant can receive at retirement, which was set at about \$200,000 for 2015. The higher limits are attractive to professionals who have had to delay retirement saving while they attain credentials, allowing a rapid buildup of assets in a shorter time frame.

Blurring the boundaries even more among plan types are possible changes in the nature of crediting rates available to cash balance participants, toward returns more tied to the markets. “Rather than being credited with a fixed rate or Treasury yield, it’s possible to have a mutual fund or S&P [Standard & Poor’s] 500 index fund as the basis for a rate,” Glickstein says. Such a move would allow sponsors to map employees into strategies with higher expected returns. “The IRS [Internal Revenue Service] said in November that it hadn’t yet decided on whether it liked the idea of a DC-like menu of such options with annual choice,” he adds, “but there may be another act to come.”

Although the action in cash balance plans today is more focused on smaller enterprises, there may yet be more life in the large plan market. “Newer organizations start out as young and entrepreneurial, and are less likely to see the merits of a DB plan,” Glickstein observes. “But the cool thing is that everyone gets old. Even at technology firms such as Apple and Microsoft, they’re not 20-year-old software geniuses working in their garages anymore—they’re getting to be 50 and 60 years old like the rest of us.

“We’re exploring which sorts of retirement plans make sense as companies’ demographics evolve,” he goes on. “We don’t expect to see a push in this direction soon but we have had conversations with large organizations that are giving thought to cash balance plans. Even with rising PBGC premiums, the regulatory burdens, mark-to-market accounting and the rest of it, the fundamental merits are there.” —John Keefe