



ND STATE INVESTMENT BOARD MEETING

Friday, August 22, 2014, 8:30 a.m.
Peace Garden Room, State Capitol
600 E Blvd., Bismarck, ND

I. APPROVAL OF AGENDA

II. APPROVAL OF MINUTES (JULY 25, 2014)

III. INVESTMENTS

- A. Mortgage Backed Securities Interviews
 - 1. BlackRock - Mr. Linh Pham, Mr. Matt Kraeger, and Mr. Sam Brindley (enclosed) (40 min)
 - 2. JPMorgan - Mr. Jim Sakelaris and Mr. Jim Cavanaugh (enclosed) (40 min)
 - 3. Staff Recommendation - Mr. Schulz (to follow) (10 min) **(Board Action)**
- B. Asset and Performance Overview - Mr. Hunter (enclosed) (10 min)
- C. Asset Class Definitions - Mr. Hunter (enclosed) (5 min)

IV. GOVERNANCE

- A. Audit Committee Membership - Mr. Hunter (enclosed) (5 min) **(Board Action)**
- B. Executive Review Committee - Mr. Lech (enclosed) (10 min) **(Board Action)**

===== BREAK =====

V. MONITORING REPORTS (Board Acceptance Needed)

- A. Pension and Insurance Trust Performance Measurement - Mr. Erlendson (enclosed) (30 min)
- B. Watch List - Mr. Hunter (enclosed) (5 min)
- C. Annual Compliance Reports - Ms. Flanagan (to follow) (5 min)

VI. EDUCATION

Callan College - Mr. Summers, Mr. Erlendson (to follow) (45 min)

VII. OTHER

Next Meeting: SIB meeting - September 26, 2014, 8:30 a.m. - Peace Garden Room
SIB Audit Committee meeting - September 26, 2014, 1:00 p.m. - Peace Garden Room

VIII. ADJOURNMENT.

**NORTH DAKOTA STATE INVESTMENT BOARD
MINUTES OF THE
JULY 25, 2014, BOARD MEETING**

MEMBERS PRESENT: Mike Sandal, Vice Chair
Clarence Corneil, Parliamentarian, TFFR Board
Lance Gaebe, Land Commissioner
Mike Gessner, TFFR Board
Rob Lech, TFFR Board
Kelly Schmidt, State Treasurer
Yvonne Smith, PERS Board
Cindy Ternes, WSI designee

BOARD MEMBERS ABSENT: Drew Wrigley, Lt. Governor, Chair
Adam Hamm, Insurance Commissioner
Tom Trenbeath, PERS Board

STAFF PRESENT: Bonnie Heit, Assist to the SIB
David Hunter, ED/CIO
Fay Kopp, Dep. ED/CRO
Cody Schmidt, Compliance Officer
Darren Schulz, Deputy CIO

OTHERS PRESENT: Weldee Baetsch, former PERS/SIB trustee
Jeff Engleson, Land Dept.
Paul Erlendson, Callan Associates
Jan Murtha, Attorney General's Office
Bryan Reinhardt, PERS
James Van Heuit, Callan Associates

CALL TO ORDER:

Mr. Sandal called the State Investment Board (SIB) meeting to order at 8:30 a.m. on Friday, July 25, 2014, at the Peace Garden Room, State Capitol, Bismarck, ND.

The SIB welcomed Ms. Yvonne Smith. Ms. Smith will be representing the Public Employees Retirement System (PERS) on the SIB.

AGENDA:

IT WAS MOVED BY MR. LECH AND SECONDED BY MR. CORNEIL AND CARRIED ON A VOICE VOTE TO ACCEPT THE REVISED AGENDA FOR THE JULY 25, 2014, MEETING AS DISTRIBUTED.

AYES: MS. TERNES, MR. CORNEIL, TREASURER SCHMIDT, COMMISSIONER GAEBE, MR. LECH, MS. SMITH, MR. GESSNER, AND MR. SANDAL

NAYS: NONE

MOTION CARRIED

ABSENT: LT. GOVERNOR WRIGLEY, COMMISSIONER HAMM, MR. TRENBEATH

MINUTES:

IT WAS MOVED BY MR. GESSNER AND SECONDED BY MS. TERNES AND CARRIED ON A VOICE VOTE TO APPROVE THE JUNE 27, 2014, MINUTES AS DISTRIBUTED.

AYES: MS. TERNES, MR. CORNEIL, TREASURER SCHMIDT, MR. GESSNER, MS. SMITH, COMMISSIONER GAEBE, MR. LECH, AND MR. SANDAL

NAYS: NONE

MOTION CARRIED**ABSENT: LT. GOVERNOR WRIGLEY, COMMISSIONER HAMM, MR. TRENBEATH****ELECTION OF OFFICERS:**

IT WAS MOVED BY COMMISSIONER GAEBE AND SECONDED BY MR. GESSNER TO CONTINUE WITH THE PRESENT SLATE OF OFFICERS FOR THE PERIOD OF JULY 1, 2014 - JUNE 30, 2015 WITH LT. GOVERNOR WRIGLEY SERVING AS CHAIR AND MR. SANDAL SERVING AS VICE CHAIR.

A ROLL CALL VOTE WAS HELD FOR THE POSITION OF CHAIR:

AYES: MR. LECH, MR. CORNEIL, COMMISSIONER GAEBE, MR. GESSNER, MS. SMITH, MS. TERNES, AND MR. SANDAL

NAYS: TREASURER SCHMIDT

MOTION CARRIED

ABSENT: LT. GOVERNOR WRIGLEY, COMMISSIONER HAMM, MR. TRENBEATH

A ROLL CALL VOTE WAS HELD FOR THE POSITION OF VICE CHAIR:

AYES: MS. TERNES, COMMISSIONER GAEBE, MR. GESSNER, MS. SMITH, MR. SANDAL, MR. LECH, MR. CORNEIL, AND TREASURER SCHMIDT

NAYS: NONE

MOTION CARRIED

ABSENT: LT. GOVERNOR WRIGLEY, COMMISSIONER HAMM, MR. TRENBEATH

Mr. Sandal reappointed Mr. Corneil as parliamentarian for Fiscal Year 2014-15.

SIB AUDIT COMMITTEE MEMBERSHIP:

The members of the Audit Committee, Ms. Becky Dorwart, Mr. Gessner, Mr. Sandal, and Ms. Ternes, are willing to serve for the period of July 1, 2014 - June 30, 2015 with the exception of Mr. Lonny Mertz. Staff intends to make a recommendation in the next two months.

IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MR. LECH AND CARRIED ON A ROLL CALL VOTE TO CONTINUE WITH THE CURRENT MEMBERSHIP OF THE SIB AUDIT COMMITTEE FOR THE PERIOD OF JULY 1, 2014 - JUNE 30, 2015.

AYES: MR. GESSNER, COMMISSIONER GAEBE, MS. SMITH, TREASURER SCHMIDT, MR. LECH, MR. CORNEIL, MS. TERNES, AND MR. SANDAL

NAYS: NONE

MOTION CARRIED

ABSENT: LT. GOVERNOR WRIGLEY, COMMISSIONER HAMM, MR. TRENBEATH

INVESTMENTS:

Private Capital/Timber Review - Mr. Hunter provided an update on Private Capital. As of March 31, 2014, every investment in the asset class with a net asset value of \$30 million or more generated excess returns ranging from 0.7% to 15.1% during the past 1 and 3 year periods excluding Timber. During the last 1 and 3 year periods, Timber investments have lagged the NCREIF Timber benchmark (whether measured on a Time Weighted Return or Internal Rate of Return basis), however Timber has generated positive excess returns on a Net Internal Rate of Return basis since inception.

Mr. Hunter reviewed the timber holdings currently managed by Timberland Investment Resources. As of March 31, 2014, the assets were valued at \$254 million.

Mr. Hunter also reviewed secondary markets where pricing is nearing all time highs.

Staff recommended the following action:

- Place Timber Investment Resources on Watch and conduct further due diligence of the SIB timber investments including the requested renewal of the Springbank commitment on June 30, 2015.
- Complete due diligence of smaller Private Capital investments within Global Real Assets.
- Engage Callan to conduct a bi-annual fee study of all asset classes.

IT WAS MOVED BY MS. TERNES AND SECONDED BY MR. CORNEIL AND CARRIED ON A ROLL CALL VOTE TO ACCEPT STAFF RECOMMENDATION AND PLACE TIR ON "WATCH" AND CONDUCT FURTHER DUE DILIGENCE OF THE TIMBER INVESTMENTS.

AYES: MR. CORNEIL, MR. GESSNER, MR. SANDAL, MS. SMITH, MS. TERNES, COMMISSIONER GAEBE, MR. LECH, AND TREASURER SCHMIDT

NAYS: NONE

MOTION CARRIED

ABSENT: LT. GOVERNOR WRIGLEY, COMMISSIONER HAMM, MR. TRENBEATH

For clarification purposes, the additional due diligence of smaller Private Capital investments and the fee study of all asset classes by Callan did not require action by the SIB.

Fee Update - Staff provided an update on investment management fees. Investment management fees were restructured to generate annual savings of approximately \$2 million during the past six months when compared to the prior fiscal year end.

Callan is analyzing a securities lending proposal from Northern Trust as part of the custody review. One of the options is estimated to generate approximately \$950,000 of annual incremental income based on historical Pension and Insurance Trust asset levels.

Performance fees are expected to decline in Fiscal Year 2014 due to unusually strong returns in the structured debt strategies not being duplicated in the current year. One specific manager currently estimates a \$6 million decline in performance fees between years.

Staff will be making a recommendation to the SIB to complete a "targeted" fee study by an independent third party to compliment Callan's bi-annual fee review.

GOVERNANCE:

Executive Review Report - At the SIB's June 27, 2014, meeting, the Chair appointed an Executive Review Committee consisting of Mr. Lech, as Chair, Mr. Sandal, and Ms. Ternes. The Committee met on July 17 and 22, 2014, to review and recommend an evaluation system for the Executive Director/CIO. The Committee was also to bring forward recommendations on compensation terms. Mr. Lech reviewed a draft evaluation plan and timelines for completion of the evaluation and recommendations and timelines for compensation.

IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MS. SMITH AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE PROPOSED EVALUATION PLAN AND TIMELINE FOR THE EXECUTIVE REVIEW. THE COMPENSATION REVIEW WILL BE ADDRESSED ONCE THE EVALUATION REVIEW IS IN PLACE.

AYES: TREASURER SCHMIDT, MR. GESSNER, MS. TERNES, COMMISSIONER GAEBE, MS. SMITH, MR. LECH, MR. SANDAL, AND MR. CORNEIL

NAYS: NONE

MOTION CARRIED

ABSENT: LT. GOVERNOR WRIGLEY, COMMISSIONER HAMM, MR. TRENBEATH

Code of Conduct Recertification - The SIB was provided a copy of their Governance policy, Board Members' Code of Conduct. As outlined in the policy, board members are annually required to affirm their understanding of the policy by signing and dating the acknowledgement.

MONITORING REPORTS:

The following monitoring reports were presented to the SIB for the quarter ending June 30, 2014; Budget/Financial Conditions, Executive Limitations/Staff Relations, Investment Program Ends, Retirement Program Ends, and the "Watch List".

IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MR. GESSNER AND CARRIED BY A VOICE VOTE TO ACCEPT THE MONITORING REPORTS.

AYES: MS. SMITH, MR. SANDAL, MR. CORNEIL, MR. GESSNER, MR. LECH, MS. TERNES, COMMISSIONER GAEBE, AND TREASURER SCHMIDT

NAYS: NONE

MOTION CARRIED

ABSENT: LT. GOVERNOR WRIGLEY, COMMISSIONER HAMM, MR. TRENBEATH

The Board recessed at 9:52 a.m. and reconvened at 10:04 a.m.

EDUCATION:

Representatives of Callan Associates presented educational sessions on Capital Market Theory, Asset Allocation, and Fiduciary Roles.

OTHER:

Next SIB Meeting - August 22, 2014, 8:30 a.m. - State Capitol, Peace Garden Room
Next SIB Audit Committee meeting - September 26, 2014, 1:00 p.m. - State Capitol, Peace Garden Room

ADJOURNMENT:

With no further business to come before the SIB, Mr. Sandal adjourned the meeting at 11:59 a.m.

Mr. Sandal, Vice Chair
State Investment Board

Bonnie Heit
Assistant to the Board

Agency Mortgage Backed Securities (MBS) Manager Search

Background

Agency Mortgage Backed Securities (MBS) are fixed income instruments that entitle investors to a pro-rata share of principal and interest from a pool of residential mortgages and are issued by a government agency such as the Government National Mortgage Association (Ginnie Mae) or a government-sponsored enterprise such as the Federal National Mortgage Association (Fannie Mae) or the Federal Home Loan Mortgage Association (Freddie Mac). These agencies typically guarantee the interest and principal payments on their securities and, as a result, Agency MBS are considered to offer strong credit quality due to their explicit government backing (in the case of Ginnie Mae) or access to support from the U.S. Treasury (in the case of Fannie Mae and Freddie Mac).

The Pension Trust investment grade fixed income asset class consists of a 50% target weight within the sub-asset class to Agency MBS. The rationale for this structure is to anchor the overall fixed income allocation with securities that provide high credit quality, extremely high liquidity and greater equity risk diversification as compared to other fixed income sectors, attributes among which Agency mortgages have historically well-demonstrated.

At the February 2012 State Investment Board meeting, two managers were selected to manage dedicated Agency MBS mandates: PIMCO and Western Asset Management. As of June 30, 2014, the accounts managed by PIMCO and Western totaled approximately \$175 million and \$118 million, respectively. Importantly, due to concerns regarding meaningful personnel turnover of key investment professionals within Western Asset's mortgage-backed securities team, Staff and Callan recently conducted a manager search to identify Agency MBS candidates to replace Western Asset Management.

Search Process

Staff and Callan Associates screened the pool of candidates to create a "shortlist" of potential candidates based on a variety of qualitative and quantitative factors, including the following:

- Firm attributes, assets under management, and organizational culture;
- Team attributes, including size of staff, personnel stability and depth of experience managing active agency MBS mandates;
- Years of experience managing mortgage strategies and mortgage track record;
- Research capabilities and resources;
- Risk management, compliance and internal controls;
- Historical performance and risk factors, including benchmark-relative risk, portfolio holdings, style characteristics, and correlation of returns relative to other Pension Trust fixed income managers; and
- Fee structure.

Among a universe of 80 firms that manage dedicated mortgage strategies, 10 firms were initially identified as potential Agency MBS manager candidates. Following internal research and discussions with Callan’s Manager Research group and Callan Search Committee, four candidates were selected for further review. Two finalists were ultimately selected based on their experience managing constrained mortgage mandates, experienced investment professionals, organizational stability, well defined investment process, strong performance record, and best fit to the existing pension trust fixed income program: BlackRock and JPMorgan. Onsite visits to both firms were conducted as part of Staff’s due diligence process.

Profiles of both firms are included in the Callan Investment Manager Evaluation Mortgage Backed Securities report included with the August 2014 State Investment Board materials.

Performance and Risk Measures

Reflecting the inception date of the Western Asset mortgage composite (3Q 2000), the shortest mortgage track record, common period return and risk statistics for each manager, MBS manager mixes with PIMCO, benchmark and peer universe comparisons are as follows:

	WAMCO	PIMCO	BlackRock	JPMorgan	WAMCO / PIMCO	Blackrock / PIMCO	JPMorgan / PIMCO	Barclays Mortgage Idx	CAI Mtg- Backed Style
Returns	5.58	5.98	6.11	6.89	5.79	6.05	6.44	5.53	5.89
Excess Return	0.06	0.46	0.58	1.36	0.26	0.53	0.92	0.00	0.36
Standard Deviation	2.88	2.81	2.69	2.93	2.80	2.70	2.80	2.75	2.86
Downside Risk	0.32	0.80	0.92	1.01	0.50	0.80	0.86	0.00	0.94
Tracking Error	0.49	1.05	1.34	1.80	0.65	1.09	1.32	0.00	1.63
Information Ratio	-0.19	0.58	0.71	0.96	0.41	0.72	0.88	0.00	0.49
Sharpe Ratio	1.26	1.44	1.55	1.69	1.37	1.52	1.61	1.30	1.37
Batting Average	46.43	69.64	73.21	66.07	66.07	75.00	76.79	100.00	67.86
Alpha	-0.09	0.61	0.94	1.71	0.27	0.78	1.17	0.00	0.75
Beta	1.04	0.95	0.89	0.89	1.00	0.92	0.92	1.00	0.89
Risk Adjusted Excess Return (ND)	-0.11	0.38	0.68	1.06	0.20	0.61	0.85	0.00	0.21

* Inception date: 3Q 2000

Additionally, manager mixes reflecting all existing manager mandates within the pension trust investment grade manager structure were modeled utilizing actual pension trust manager performance and manager composite returns to extend the performance history. Reflecting the inception date of the PIMCO DISCO I/II strategy (3Q 2008), the shortest track record within the pension trust investment grade fixed income sub-asset class, common period return and risk statistics for each manager, benchmark and peer universe comparisons are as follows:

	Pension Fixed IG - Current	Pension Fixed IG - BlackRock	Pension Fixed IG - JPMorgan	Barclays Aggregate Index	CAI Core Bond Style
Returns	7.49	7.68	7.85	5.05	5.88
Excess Return	2.44	2.63	2.80	0.00	0.83
Standard Deviation	3.21	3.30	3.26	3.37	3.59
Downside Risk	0.92	1.01	1.01	0.00	1.02
Tracking Error	2.11	2.29	2.32	0.00	1.66
Information Ratio	1.76	1.70	1.80	0.00	0.68
Sharpe Ratio	2.26	2.25	2.33	1.42	1.56
Batting Average	75.00	75.00	75.00	100.00	70.83
Alpha	3.51	3.71	3.95	0.00	1.03
Beta	0.76	0.76	0.74	1.00	0.93
Risk Adjusted Excess Return (ND)	2.82	2.80	3.06	0.00	0.46

* Inception date: 3Q 2008

A Staff recommendation to the State Investment Board concerning the award of the MBS mandate will be presented at the August 22, 2014 SIB meeting.

Agency MBS Manager Search

August 22, 2014

Dave Hunter, Executive Director/CIO

Darren Schulz, Deputy CIO

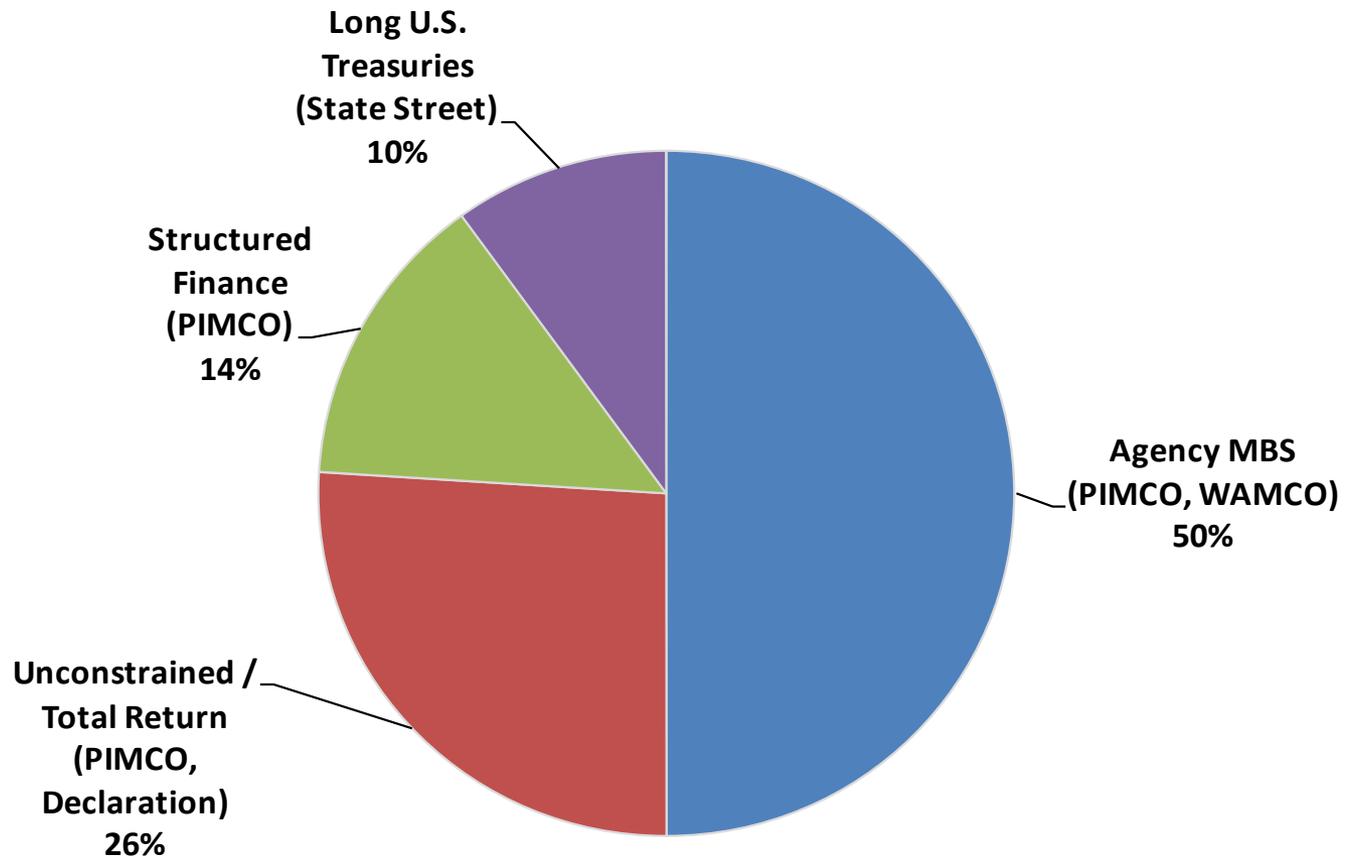
ND Retirement & Investment Office (RIO)

State Investment Board (SIB)

Introduction

- ▶ As approved by the SIB at the November 2011 meeting, the pension trust investment grade fixed income asset class was restructured to provide the following benefits:
 1. Equity risk diversification through the addition of dedicated Agency MBS and the exclusion of IG corporate bonds
 2. Equity “tail risk” hedge through the addition of Long Treasuries
 3. Interest rate risk mitigation through lower duration, higher yielding securitized and unconstrained mandates

Pension Trust Investment Grade Manager Structure



Why Agency MBS?

- ▶ **High credit quality** given explicit or implicit backing of Government-Sponsored Enterprises (GSEs)
- ▶ **Large opportunity set:** Agency MBS securities outstanding total nearly \$6 trillion
- ▶ **Extremely liquid** fixed income segment
- ▶ Historically **greater equity risk diversification** as compared to other fixed income sectors
- ▶ **Consistent, repeatable, high-quality alpha** can be harvested through active management:
 - ▶ Relative value within Agency MBS (coupon stack, GSE, structure)
 - ▶ Sector allocation across securitized markets
 - ▶ Duration and yield curve positioning

MBS Manager Search Process

- ▶ Significant turnover within Western's MBS team ushered in the need to seek a replacement candidate for a \$118 million MBS mandate
- ▶ From a universe of 80 managers, 10 firms were initially identified from which 4 firms were selected for further review. Following internal research and discussions with Callan, two finalists were selected based on a number of criteria including the following:
 - ▶ Firm experience and track record managing mortgage strategies
 - ▶ Experience, tenure and stability of team managing mortgage mandates
 - ▶ Research capabilities and resources
 - ▶ Risk management, compliance and internal controls
 - ▶ Historical performance and risk factors
 - ▶ Best fit with existing PIMCO MBS mandate and the overall fixed income structure
 - ▶ Fees

MBS Manager and Mix Performance and Risk

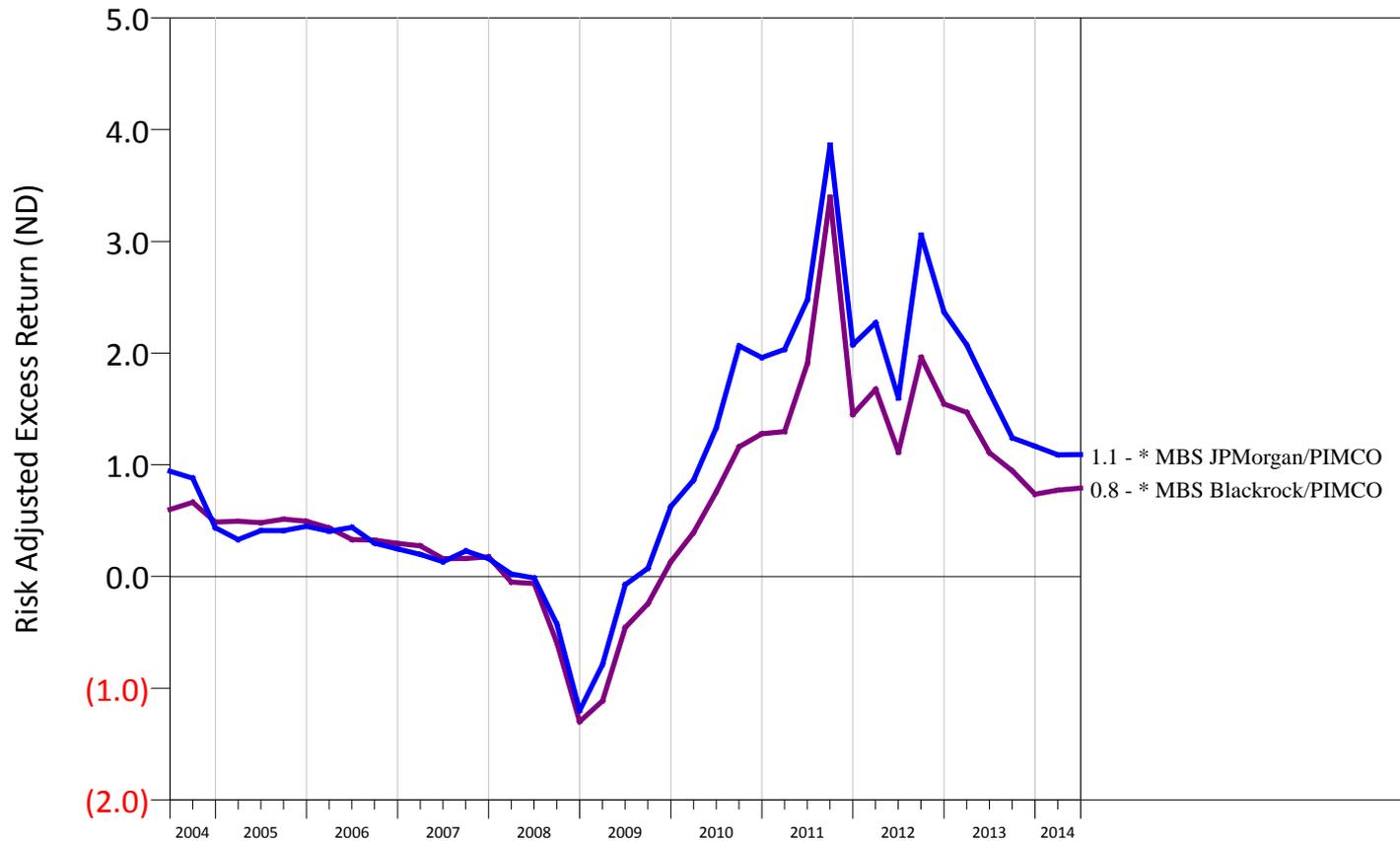
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Sharpe Ratio	1.26	1.44	1.55	1.69	1.37	1.52	1.61	1.30	1.37
Batting Average	46.43	69.64	73.21	66.07	66.07	75.00	76.79	100.00	67.86
Alpha	-0.09	0.61	0.94	1.71	0.27	0.78	1.17	0.00	0.75
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* Inception date: 3Q 2000

- ▶ Common period manager mixes illustrate attractive risk-adjusted returns for J.P. Morgan as compared to BlackRock
- ▶ Consistency of outperformance (batting average) and efficiency (information ratio) also favorable

MBS Manager Mix Risk-Adjusted Excess Return

Rolling 12 Quarter Risk Adjusted Excess Return (ND) Relative To Barclays:Mortgage Idx
for 10 Years Ended June 30, 2014



Pension IG Fixed Income Mixes Performance and Risk

	Pension Fixed IG - Current	Pension Fixed IG - BlackRock	Pension Fixed IG - JPMorgan	Barclays Aggregate Index	CAI Core Bond Style
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- ▶ Common period IG fixed income mixes illustrate attractive risk-adjusted returns for J.P. Morgan as compared to BlackRock
- ▶ Consistency of outperformance (batting average) and efficiency (information ratio) also favorable

Recommendation: J.P. Morgan

- ▶ Team experience and track record managing high quality out-of-index structured Agency MBS complements PIMCO's focus on relative value within Agency MBS
- ▶ Lower absolute and excess correlation relative to PIMCO
- ▶ Supporting the rationale for equity risk mitigation within the manager structure, favorable correlation to equities
- ▶ Well diversified across numerous MBS sectors, historically high average credit quality (AA+ currently), and low turnover
- ▶ Attractive fee structure



August 2014

**North Dakota State Investment
Board**

Investment Manager Evaluation

Mortgage Backed Securities



Investment Manager Evaluation

Mortgage Backed Securities

August 2014

The following investment manager organizations have submitted information to Callan regarding their investment management capabilities, for which information Callan has not necessarily verified the accuracy or completeness of or updated. The information provided to Callan has been summarized in this report for your consideration. Unless otherwise noted, performance figures reflect a commingled fund or a composite of discretionary accounts. All written comments in this report are based on Callan's standard evaluation procedures which are designed to provide objective comments based upon facts provided to Callan. Statements in this report are made as of the date they are expressed.

This report is for informational purposes only and should not be construed as legal or tax advice on any matter. Any decision you make on the basis of the content is your sole responsibility. You should consult with legal and tax advisers before applying any of this information to your particular situation. Reference to or inclusion in this report of any product, service or entity should not be construed as a recommendation, approval, affiliation or endorsement of such product, service or entity by Callan. Past performance is no guarantee of future results.

Callan

The following investment manager organizations have submitted information to Callan Associates Inc. regarding their investment management capabilities. The information has been summarized in this report for the consideration of the North Dakota State Investment Board.

Mortgage Backed Securities

BlackRock

J.P. Morgan Asset Management

North Dakota State Investment Board Investment Manager Evaluation

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Search Outline

BlackRock

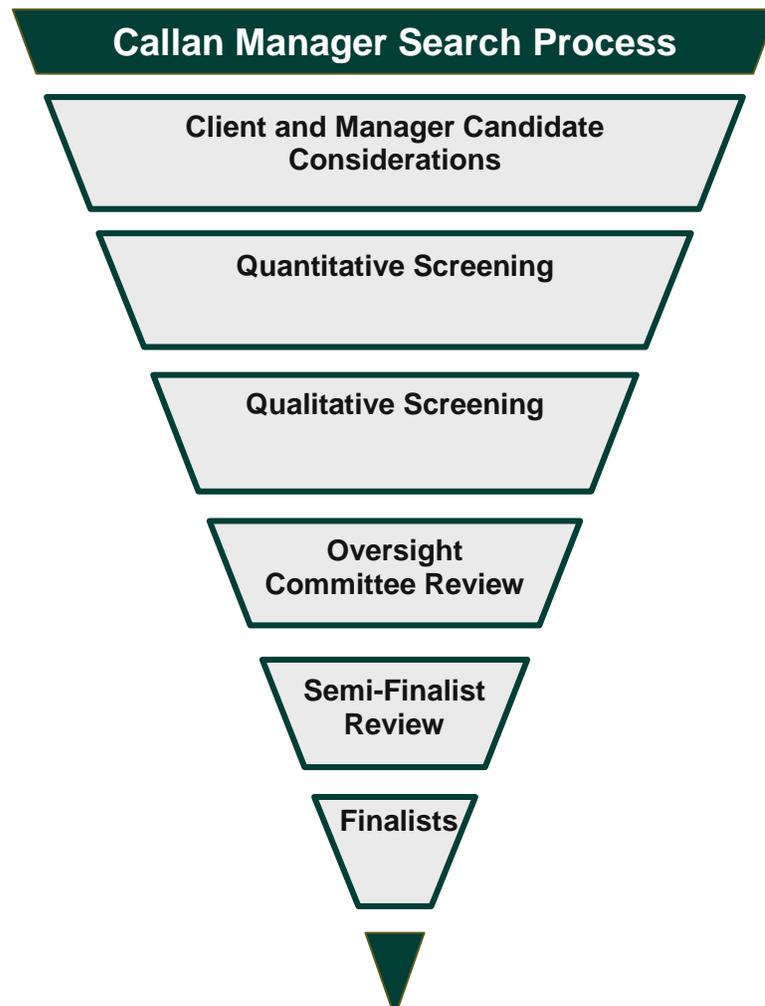
J.P. Morgan Asset Management

Summary Matrix

Comparative Manager Performance

Appendix

Manager Search Process



Manager Search Process Overview

Callan's investment manager searches are underpinned by a disciplined, six-step process:

I. Identify Client and Manager Candidate Considerations

At the onset of each search, Callan meets with the client to review and document any specific characteristics sought in an investment manager. This includes factors such as the manager's strategy and approach, organizational structure, minimum/maximum assets under management, performance criteria relative to an appropriate index and peer group, and risk tolerance. These factors serve as the basis for developing the appropriate quantitative and qualitative screening criteria.

II. Conduct Quantitative Screening

After beginning with the broadest possible universe of candidates, Callan narrows the field using client-specified screening criteria to screen our proprietary database. Screens examine numerous quantitative factors including performance, volatility, correlation with the existing structure, and assets under management. Callan screens performance across multiple time periods, market cycles, and statistical analyses so as to identify consistency of returns and avoid performance bias.

III. Perform Qualitative Screening

Qualitative screening concentrates the field even further. Qualitative screens examine manager type, organizational history, depth and experience of investment personnel, investment process and style, client servicing capability and resource allocation. Callan generates qualitative assessments based on manager research conducted by our dedicated asset class specialists and generalist consultants through regular in-house meetings, conference calls, and on-site manager due diligence.

IV. Oversight Committee Review of Preliminary Recommendations

Callan's Manager Search Committee—an oversight body that is comprised of approximately [18] senior consultants—reviews each search to thoroughly examine candidates and ensure Callan has met the client's specified criteria. Collectively, the Manager Search Committee vets the candidates and identifies semi-finalist candidates to present to the client.

V. Review Semi-finalist Candidates

A manager evaluation document comparing the semi-finalist candidates is prepared for the client. Callan reviews the report with the client to highlight important considerations in conducting the search, compare and contrast the manager candidates, and assist in the identification of finalist candidates.

VI. Interview Finalists

To gain additional insight, finalists are invited to present to the client. The presentations generally include an overview of the manager organization and a specific review of the product being considered. They also provide the opportunity for the client and/or consultant to address any outstanding issues. A winner is typically selected following these presentations.

North Dakota State Investment Board
Mortgage Backed Securities Manager Search
Candidate Profile
April 18, 2014

The North Dakota State Investment Board (“SIB”) is looking for agency-only mortgage-backed securities (“MBS”) candidates who can successfully manage tax exempt money for both qualified and non-qualified investment pools. Candidates should satisfy a majority of the following criteria:

1. Manager Orientation

Agency-only MBS mandates.

2. Manager Type

Only qualified investment counselor organizations registered under the Investment Advisors Act of 1940 will be considered. This includes investment counselors and investment counseling subsidiaries of banks, brokerage houses and insurance companies.

3. Investment Style

The SIB seeks to fund an active agency MBS manager. The selected manager may make tactical use of US Government and Agency debentures, Agency CMOs, passthroughs, pools, TBAs, and CMBS. The manager may make use of other instruments such as ABS, non-Agency MBS with up to 10% of the asset value of the overall account. Both quantitative and fundamental strategies are open to consideration. While the immediate assignment is for Pension assets, SIB will want to know which finalists have the ability to manage both tax-exempt and non-qualified pools of capital in the same strategy.

4. Investment Vehicle

SIB prefers a separate account but is willing to consider institutional collective funds.

5. Total Assets and Accounts Under Management

The SIB prefers to be less than 20% of the total strategy assets under management (“AUM”) but will consider exceptions on a case by case basis for financially secure firms. SIB prefers that candidates’ AUM in the relevant strategy be at least \$500mm. SIB prefers that total assets under management at the firm be at least \$2 billion. SIB may be willing to consider candidates on a case-by-case basis that do not meet the AUM standards.

6. Size of Professional Staff

Investment staff should be of sufficient depth and breadth to perform ongoing duties of the firm. Additionally, there should be a sufficient number of client service and investment personnel relative to the firm’s account load to ensure that the SIB has reasonable access to the firm and that the investment portfolios are well attended.

**North Dakota State Investment Board
Mortgage-Backed Securities Manager Search
Candidate Profile
April 18, 2014**

7. Years of Experience in Managing Funds and Strategy Track Record

At least five years of experience by the investment team is preferred, with at least two key professionals having ten years or more of direct experience. Experience gained at another firm is permissible as long as the historical record is directly attributable to the investment team at the firm under consideration. Highly qualified teams not meeting this criterion may be considered on a case-by-case basis.

8. Geographic Location

None specifically required.

9. Flexibility of Individual Portfolio Manager

The dispersion of portfolio returns across accounts within the firm's product composite should be small. There should be a firm-wide investment process.

10. Portfolio Risk Level

Returns generated by the portfolio will be evaluated in light of the portfolio risk. Risk will be evaluated relative to the benchmark and peer group through quantitative measures such as Sharpe Ratio, Standard Deviation, Downside Risk, Tracking Error, Correlation, and R-Squared. Candidates should demonstrate risk-adjusted performance that compares favorably to the product's benchmark and peer group.

11. Historical Performance Criteria

Performance screening will focus on consistency of returns relative to the Barclays Capital US Mortgage Backed Securities ("BC MBS") Index and peer groups over time. Historical performance will be scored based on the following:

- Cumulative 4, 5 and 7 year data relative to the BC MBS Index and Callan's MBS Fixed-Income Style Group.
- Rolling 3-year periods based on quarterly data compared to the BC MBS Index and Callan's MBS Fixed-Income Style Group.

Performance will be evaluated relative to each criterion. There will be a maximum of 40 points possible, (17 rolling 3-year periods and three other cumulative periods). Candidates will receive one point for each standard passed. The relative score will be considered for candidates with limited performance history. Performance at a prior employer may be utilized on a case by case basis.

**North Dakota State Investment Board
Mortgage-Backed Securities Manager Search
Candidate Profile
April 18, 2014**

12. Client Servicing

Qualified representatives will be expected to meet with the SIB's Board of Trustees at least annually and, as requested, with the SIB's investment staff within the Retirement and Investment Office staff. The selected manager's investment staff is expected to participate in quarterly telephonic reviews of investment results with SIB staff.

13. Qualities to be Avoided

- Strategies that use short sales;
- Extensive use of options/futures/swaps;
- Long-term records that have been propelled by just a few block-buster years;
- Excessive recent growth in assets within the strategy; and
- Candidates currently involved in significant litigation, a merger or acquisition.

14. Qualities Specifically Sought

- Demonstrated skill in publicly-traded MBS investment strategy;
- 90% AAA (or equivalent) investment grade exposures;
- Long-only, publicly traded securities strategies;
- Experienced investment professionals whose interests are aligned with those of their clients;
- Consistent and competitive risk-adjusted returns through time;
- Fully invested portfolios;
- Well established organization with institutional focus;
- Disciplined investment process with risk controls;
- Depth of portfolio management and research;
- Effective communication skills and commitment to client service;
- Low turnover of investment personnel; and
- Managers who also manage a competitive, viable Core Plus bond strategy.

15. Business Plan and Financial Well-Being

The SIB seeks MBS candidates who have been successful in the business of money management and are committed to continued delivery of above average product performance and client service. Candidates should be able to demonstrate their ongoing commitment to the investment management of comparable funds and possess the financial wherewithal to survive a poor business environment without significant changes to their investment process or organization.

**North Dakota State Investment Board
Mortgage-Backed Securities Manager Search
Candidate Profile
April 18, 2014**

16. Fees

Investment management fees should be competitive.

17. Assets to be Allocated

The total target amount for this allocation is approximately \$110 million. It is expected that that amount will include assets from the Pension Trust. Future funding from the non-qualified Insurance Trust may be made in the future.

18. Client Requests

The SIB's incumbent managers should be evaluated if they have appropriate investment products. These firms are to be evaluated pari passu with all other potential candidates.

19. Other Consideration

The SIB will be re-evaluating its overall fixed-income structure. Consequently, SIB wants to know which qualified MBS candidates also have a successful Core Plus bond strategy. While the SIB presently seeks a narrow MB-only mandate, it is likely that SIB may convert the MBS-only account into a more diversified Core Plus bond strategy in future. Consequently, the SIB prefers MBS candidates who will be able to accommodate such a migration.

#

BlackRock
40 East 52nd Street, Suite 121
New York, NY 10022

History

BlackRock was founded in March 1988 and in June 1988 registered with the SEC under the Investment Advisors Act of 1940. In February 1995, BlackRock became a wholly-owned subsidiary of The PNC Financial Services Group, Inc. (formerly PNC Bank) and a member of the PNC Asset Mgmt. Group. In 1998, PNC consolidated its asset management subsidiary names under BlackRock. BlackRock completed an IPO in 1999 for 16% of its equity. In November 2002, BlackRock acquired Cyllenius Capital Mgmt. for an undisclosed amount. On January 31, 2005, BlackRock acquired SSRM Holdings Inc., the holding company of State Street Research and Management and State Street Realty. On September 29, 2006, BlackRock, Inc. and Merrill Lynch Investment Managers merged to create an independent company operating under the BlackRock name. In October 2007, BlackRock acquired Quellos Group. In December 2009, BlackRock completed the acquisition of Barclays Global Investors (BGI) including its iShares exchange-traded funds.

Structure

Founded: 1988
 Parent: None
 Ownership: Publicly Owned
 Errors and omissions insurance: Yes
 In compliance with SEC and DOL: Yes
 GIPS Compliant: Yes

Contact:

Azim Hilmy
 400 Howard Street
 San Francisco, CA 94105
 Phone: (415) 670-2115
 Fax: (415) 618-1637
 Email: azim.hilmy@blackrock.com

Key Professionals

Laurence Fink - Chairman, CEO
 Robert Kapito - President

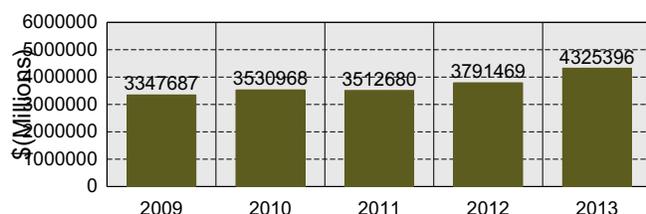
Joined Investment Firm Experience

1988 1976
 1988 1981

Employee Structure

Administrative	611
Central Research Analyst	455
Client Services/Marketing	2196
Executive Management	17
Operations	2129
Portfolio Manager	1032
Real Estate	246
System/Information Technology	1741
Trader	147
Total	8574

Total Asset Growth



Total Asset Structure

Asset Type	\$(mm)	
U.S. Tax-Exempt	1,019,285	24%
U.S. Taxable	444,753	10%
Non-U.S.	1,453,076	34%
Mutual Fund	1,408,282	33%
Total	4,325,396	100%

U.S. Tax-Exempt Separate/Commingled Assets as of December 31, 2013

Asset Class	\$(mm)		Client Type	\$(mm)	
Domestic Balanced	1,362	0%	Corporate	100,548	10%
Domestic Broad Equity	439,849	43%	Endowment/Foundation	7,796	1%
Domestic Broad Fixed-Income	227,464	22%	Multi-Employer	9,677	1%
Domestic Real Estate	7,003	1%	Public	349,373	34%
Hedge Fund of Funds	1,471	0%	Healthcare	4,757	0%
Intl Equity	211,964	21%	Insurance	8,365	1%
Intl/Global Balanced	98,332	10%	High Net Worth	255	0%
Intl/Global Fixed-Income	9,356	1%	Sub-Advised	45,568	4%
Other Alternatives	17,571	2%	Other	492,946	48%
Real Estate Securities	4,913	0%	Total	1,019,285	100%
Total	1,019,285	100%			

Note(s): In February 2013, Peter Fisher left his role as Head of Fixed Income, Americas, and joined the BlackRock Institute. In January 2011, Blake Grossman, Vice Chairman and Head of Scientific Investments, left the firm. Prior to the merger with Blackrock, Grossman was CEO of BGI. "Other" assets refer to commingled funds, government agencies, insurance company retirement plans, non-profit retirement plans, and official institutions.

BlackRock

BlackRock Mortgages

As of December 31, 2013

Key Professionals

	Joined Firm	Investment Experience
Matthew Kraeger - PM	2000	2000
Siddharth Mehta - PM	2005	2005
Jason Bennett - PM	2007	2007
Akiva Dickstein - PM	2009	1990

Investment Professionals

Function	#	5 Years	
		Gained	Lost
Portfolio Manager	4	3	1
Portfolio Decision: Team Management			

Product Highlights:

Investment Style: Mortgages

Benchmark: Barclays Mortgage

Invest. Strategy: Constrained Duration/Active Sector and Issue

Investment Process:

- 5% Duration Management
- 45% Industry/Sector Allocation
- 40% Security Selection
- 10% Yield Curve Management

Portfolio Characteristics

	Year End
Quality Rating	AA
Effective Duration (years)	5.2

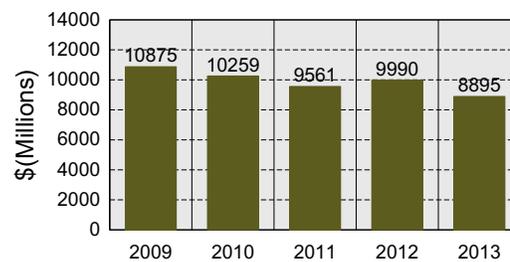
Portfolio Sector Exposures

	Year End
US Asset Backed	4.4
US Agency RMBS	102.7
US CMBS	8.5
US CMOs	16.4
Cash	(32.4)
Other/Misc	1.0

Total Asset Structure

Asset Type	\$(mm)	
U.S. Tax-Exempt Commingled	8	0%
U.S. Tax-Exempt Sep Acct	5,931	67%
U.S. Taxable	367	4%
Non-U.S.	1,136	13%
Mutual Fund	1,453	16%
Total	8,895	100%

Total Asset Growth



U.S. Tax-Exempt Assets

Vehicle	Largest Acct	# of Accts	\$(mm) Assets	5 Years Net Flows
Commingled	0	1	8	0
Separate	0	9	5,931	-203

Fee Schedule:

Min Acct Size (\$mm): 50

Account Size (\$mm)	Fee (%)
First \$50	0.30
Next \$50	0.25
Next \$100	0.20
Next \$100	0.17
Next \$200	0.15
Next \$500	0.10
Balance	0.08
Client Allocation	
\$110	0.27

Performance Composite:

Assets in composite (\$mm): 3,298
Number of Accts in Composite: 6

2013 Annual Dispersion Range:
Composite Return: (0.38%)
Highest Return: 0.44%
Lowest Return: 0.14%

Note(s): Performance represents the composite, gross-of-fees. Asset increase in 2010 was attributed to the gain of six accounts for \$1.5 billion. Portfolio Managers Siddharth Mehta and Akiva Dickstein joined the strategy in 2009. Portfolio Manager Max Nissman left the team in 2013, and Portfolio Manager Jason Bennett joined the team.

BlackRock

BlackRock Mortgages

Investment Philosophy:

BlackRock employs a highly quantitative method to managing mortgage-backed securities, making extensive use of proprietary analytics. Risk management is an important overlay to their process.

Portfolio Construction:

BlackRock's process is active within a risk management framework. Emphasis is placed on sector/sub-sector rotation and security selection over duration and yield curve decisions. The ISG and sector specialists use the extensive research resources of the firm to assist in the decision-making process to identify both positive and negative relative value that will lead to trade decisions. On a daily basis, BlackRock measures each portfolio versus its benchmark for duration, yield curve exposure, convexity, credit quality, sector/sub-sector exposures, and liquidity. BlackRock's proprietary technology allows them to evaluate each security and each portfolio on a daily basis, and on a prospective basis in "what if" scenarios.

Duration Description:

Portfolio duration is viewed as a risk control parameter, and is set by the Investment Strategy Group (ISG). The group meets weekly to set macro portfolio strategy, and includes all portfolio managers and several senior members of the Risk Management and Analytics group. Duration is held to within 20% of the benchmark. Yield curve exposure is measured and managed using a variety of duration and convexity measurements. One of the main methods used is key rate duration analysis, which measures sensitivity to non-parallel curve shifts at both the security and portfolio levels. Yield curve posture is also set by the ISG.

Sector Selection:

BlackRock's ISG sets sector and sub-sector policy, using inputs from the sector specialists in each relevant area. Each portfolio manager serves as a sector specialist, and is responsible for idea generation and information flow within their area of expertise. The ISG incorporates these sector-specific insights, in addition to their view on trends in the fixed income markets and the economy, changing regulatory environments and sector spreads to determine strategy.

Security Selection:

Once the ISG has set broad parameters, individual portfolio managers will implement the strategy through selecting issues in their sectors that offer the best relative value. The firm places heavy emphasis on their proprietary OAS and OAD analyses, which are run for every security in their universe. Securities are then evaluated relative to other opportunities on this basis.

Sell Discipline:

Securities are sold when their characteristics no longer meet portfolio objectives.

Research Process:

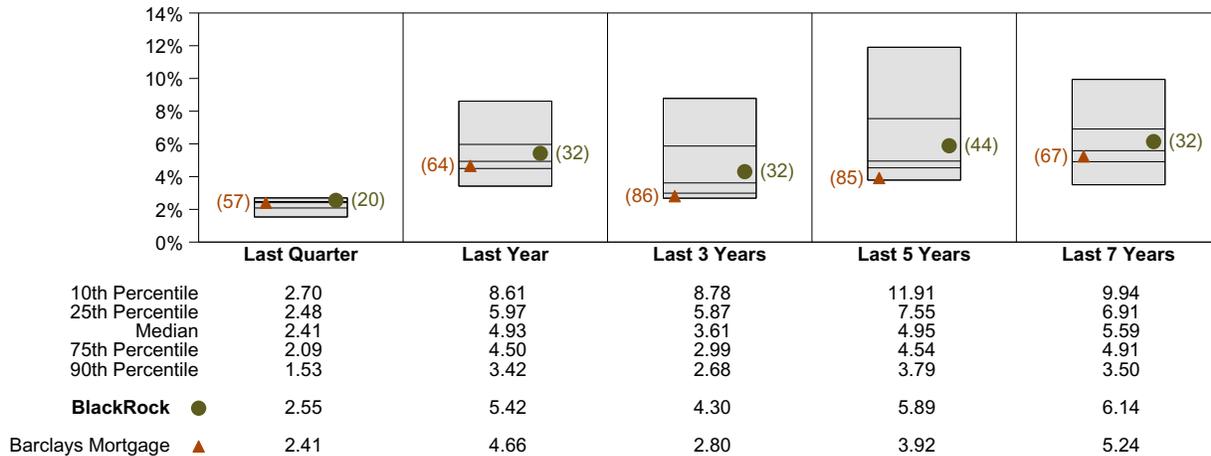
BlackRock believes that the markets are too complex for portfolio managers to be generalists. As a result, all portfolio managers are specialists in one or more sector or sub-sector, and are responsible for contributing security and sector-level research. In addition, the firm has a large quantitative research staff called the Risk Management and Analytics Group. This group is charged with developing and monitoring quantitative tools to measure and monitor portfolio risk exposures so that the portfolio managers can be fully aware of their positions relative to their benchmarks.

BlackRock BlackRock Mortgages Return Analysis Summary

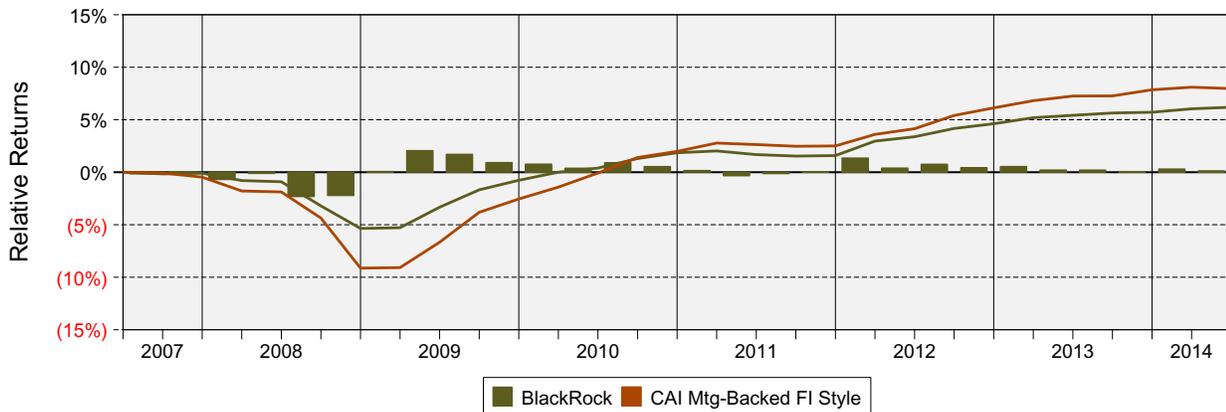
Return Analysis

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.

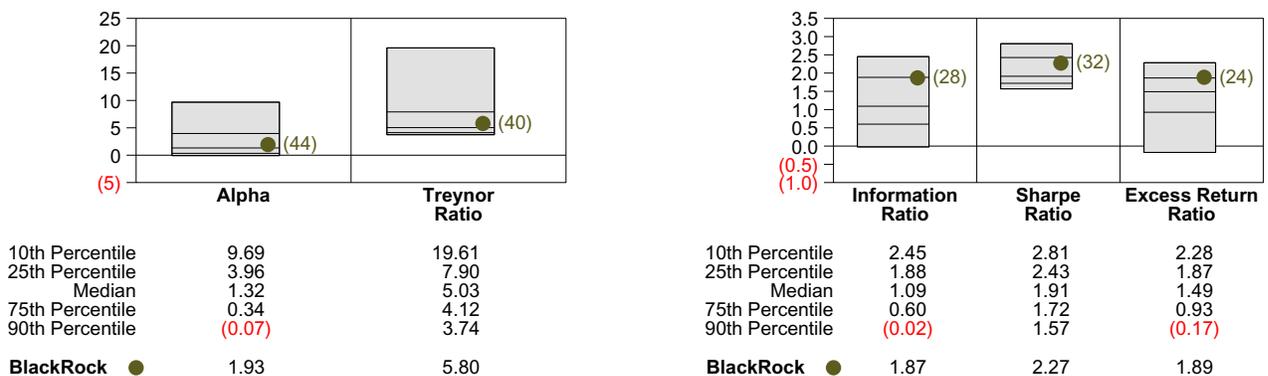
Performance vs CAI Mtg-Backed FI Style (Gross) Periods ended June 30, 2014



Cumulative and Quarterly Relative Return vs Barclays Mortgage



Risk Adjusted Return Measures vs Barclays Mortgage Rankings Against CAI Mtg-Backed FI Style (Gross) Five Years Ended June 30, 2014

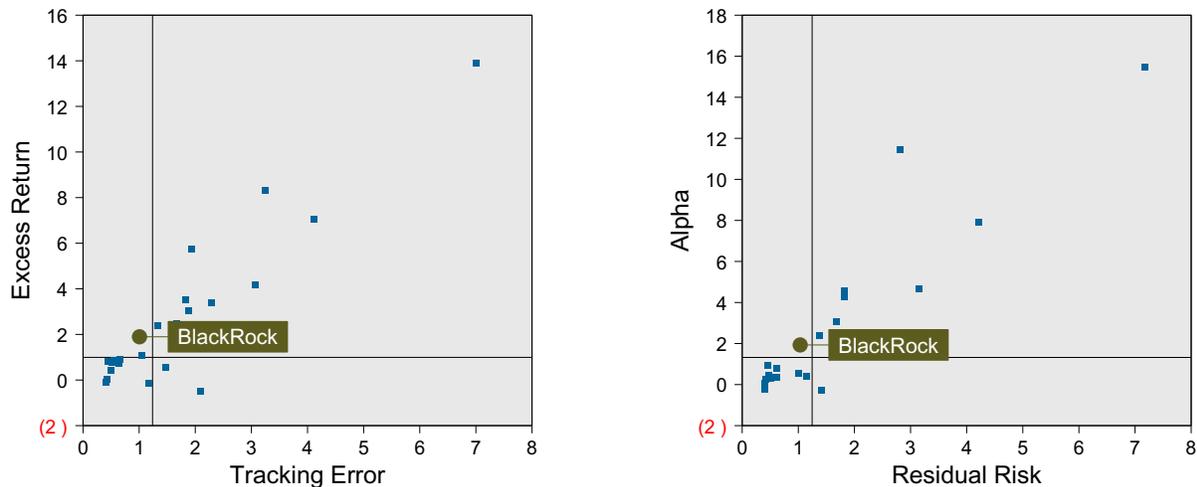


BlackRock BlackRock Mortgages Risk Analysis Summary

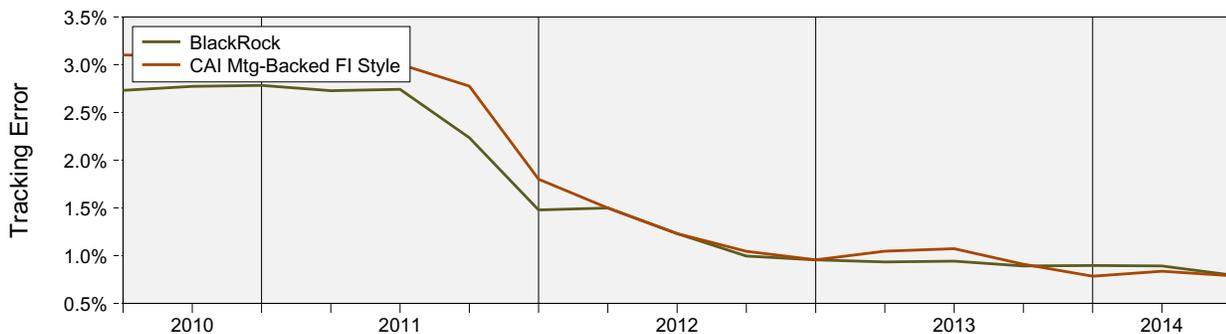
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second scatter chart displays the relationship, sometimes called Information Ratio, between alpha (market-risk or "beta" adjusted return) and residual risk (non-market or "unsystematic" risk). The third chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

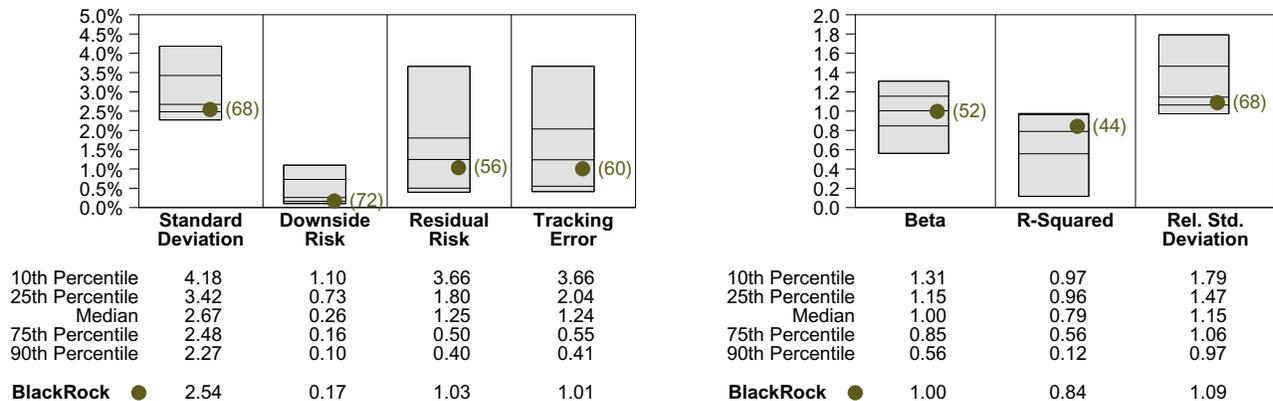
Risk Analysis vs CAI Mtg-Backed FI Style (Gross) Five Years Ended June 30, 2014



Rolling 12 Quarter Tracking Error vs Barclays Mortgage

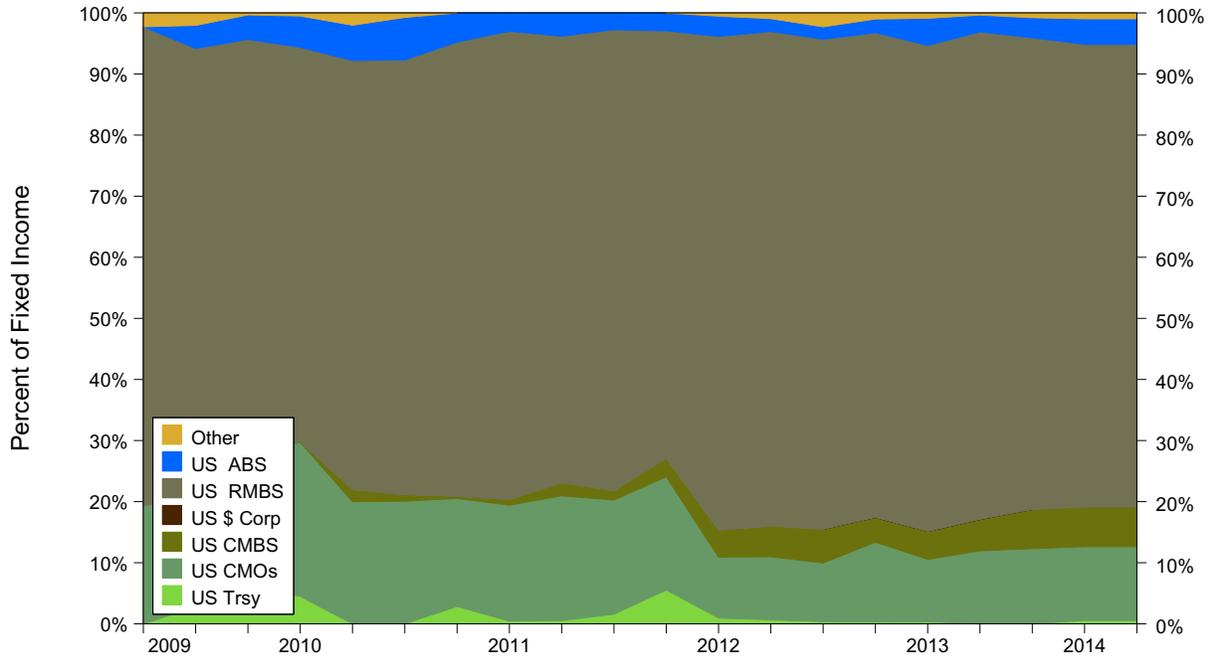


Risk Statistics Rankings vs Barclays Mortgage Rankings Against CAI Mtg-Backed FI Style (Gross) Five Years Ended June 30, 2014

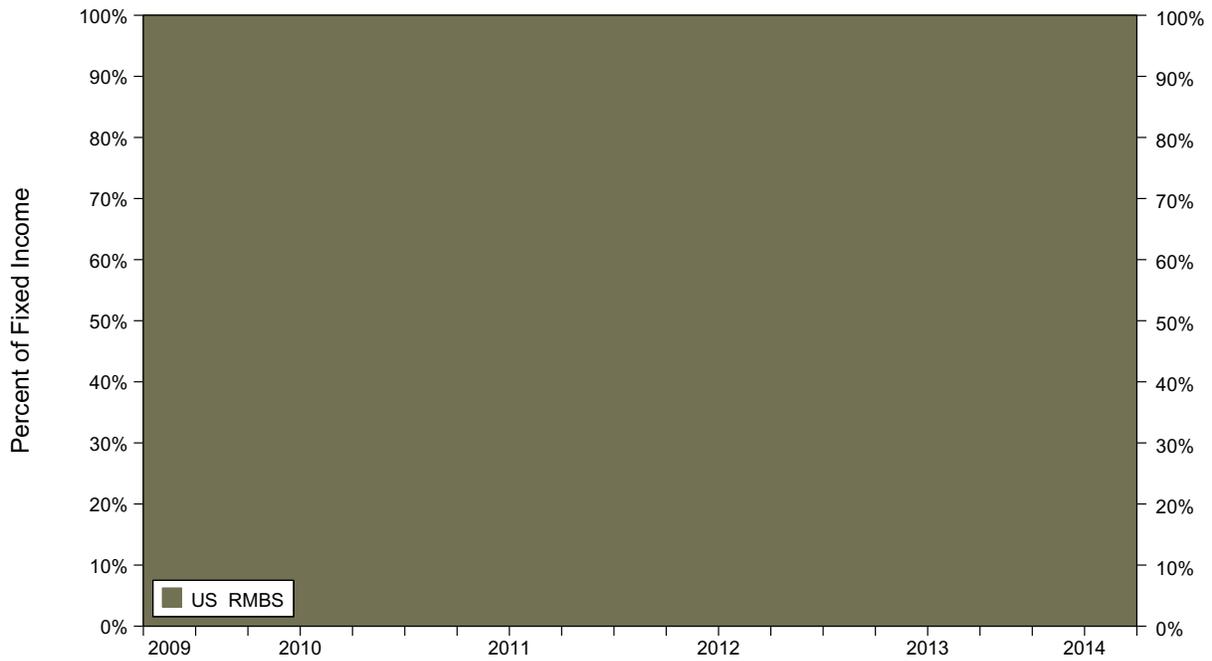


Historical Distribution of Sectors Percent of Fixed Income by Ending Weights in Each Sector

BlackRock



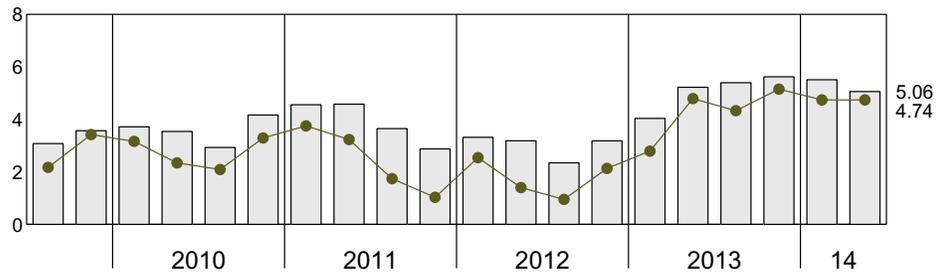
Barclays Mortgage



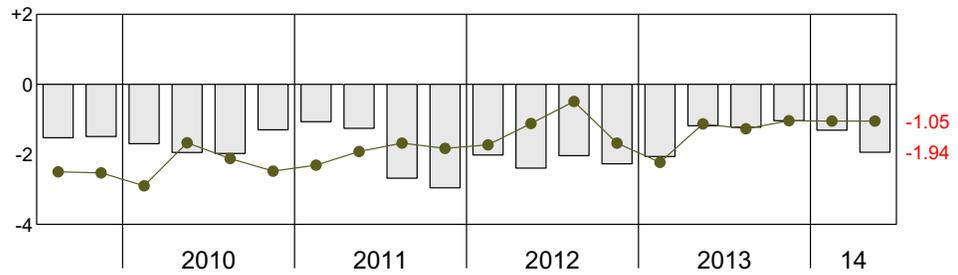
History of Fixed Income Characteristics

Period June 30, 2014

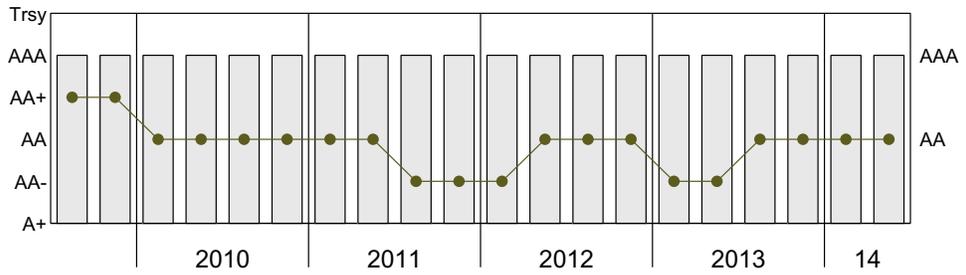
Duration



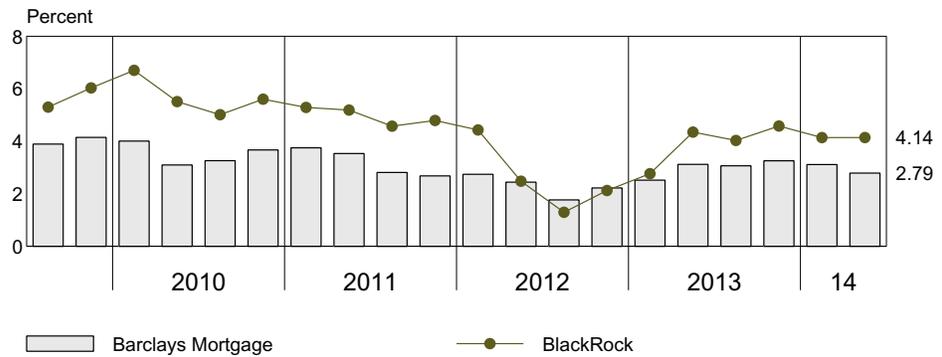
OA Convexity



Quality Rating



Effective Yield



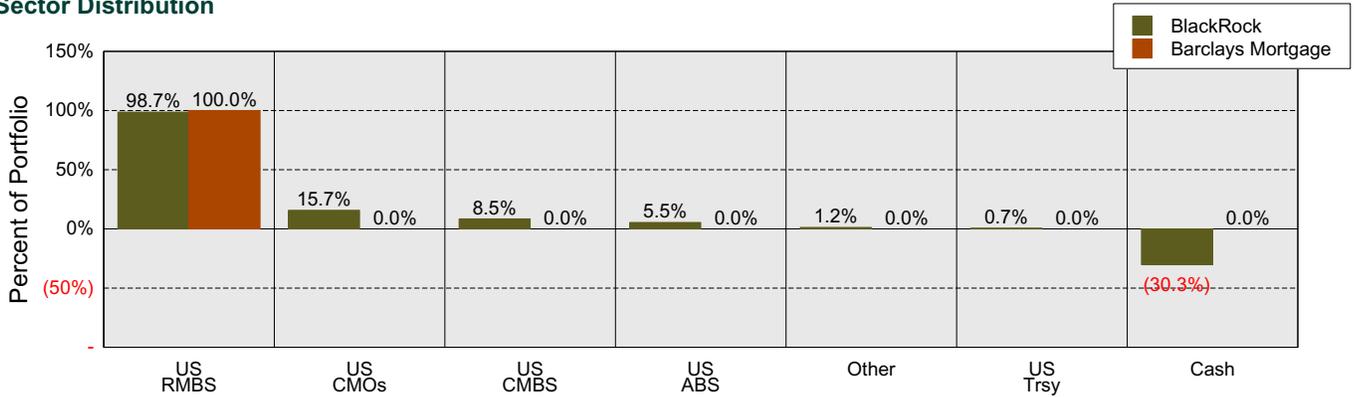
Barclays Mortgage BlackRock

BlackRock Portfolio Characteristics Summary As of June 30, 2014

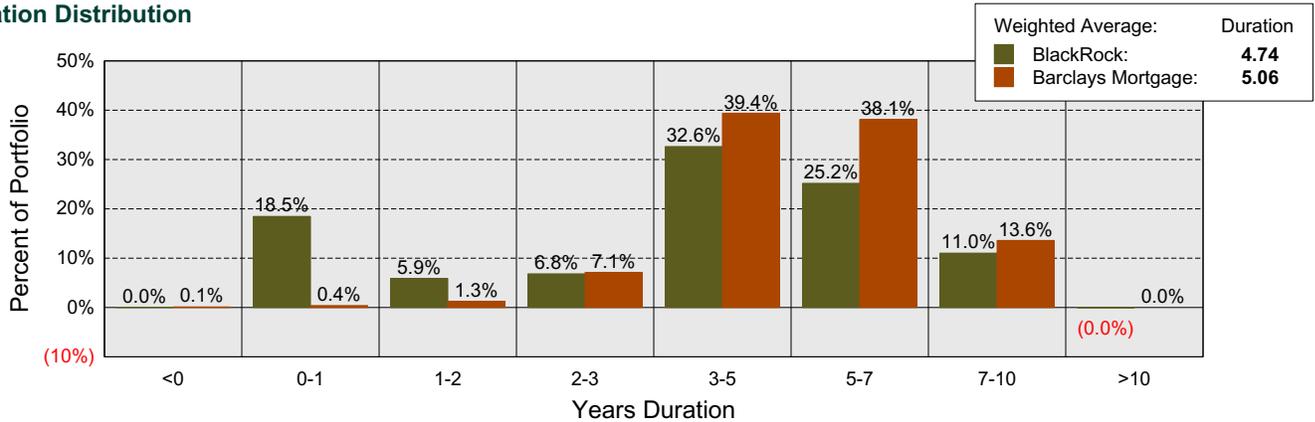
Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

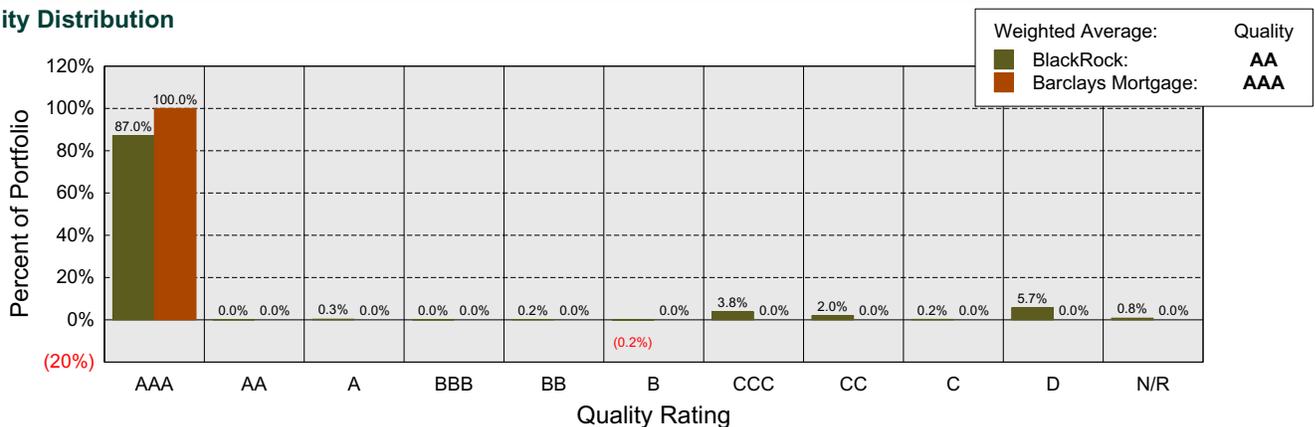
Sector Distribution



Duration Distribution



Quality Distribution



J.P. Morgan Asset Management
245 Park Avenue
New York, NY 10167

History

J.P. Morgan Asset Management ("JPMAM") was incorporated in Delaware in February 1984 and began operations in July 1984. The company evolved from the Trust and Investment Division of Morgan Guaranty Trust Company, which acquired its first tax-exempt account in 1913 and its first pension fund account in 1940. JPMAM was a wholly owned subsidiary of J.P. Morgan & Co. Incorporated, a bank holding company founded in 1861 and which also owns Morgan Guaranty Trust Company, J.P. Morgan Securities Inc. and J.P. Morgan Futures Inc. In January 2001, Chase Manhattan and J.P. Morgan merged and renamed the firm J.P. Morgan Chase & Co, NYSE. On July 1, 2004, JPMorgan Chase & Co. and Bank One Corporation merged. The combined company retained the name of J.P. Morgan Chase & Co. In May 2008, J.P. Morgan Chase acquired Bear Stearns.

Structure

Founded: 1984
 Parent: JPMorgan Chase & Co.
 Ownership: Publicly Owned
 Errors and omissions insurance: Yes
 In compliance with SEC and DOL: Yes
 GIPS Compliant: Yes

Contact: Thomas Fisher
 270 Park Avenue 6th Floor
 New York, NY 10017
 Phone: (212) 648-1545
 Fax: (415) 315-5195
 Email: thomas.j.fisher@jpmorgan.com

Key Professionals

Mary Erdoes - CEO
 Paul Bateman - Chairman

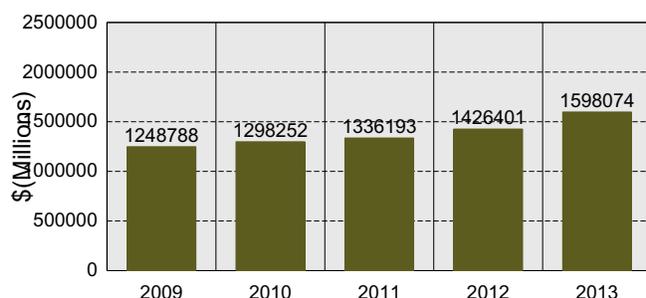
Joined Investment Firm Experience

1996 1992
 1967 1967

Employee Structure

Client Services/Marketing	625
Dedicated Fundamental Analyst	294
Dedicated Quantitative Analyst	28
Economist	3
Executive Management	38
Portfolio Manager	424
Trader	52
Total	1464

Total Asset Growth



Total Asset Structure

Asset Type	\$(mm)	
U.S. Tax-Exempt	241,014	15%
U.S. Taxable	300,445	19%
Non-U.S.	252,155	16%
Mutual Fund	804,460	50%
Total	1,598,074	100%

U.S. Tax-Exempt Separate/Commingled Assets as of December 31, 2013

Asset Class	\$(mm)		Client Type	\$(mm)	
Domestic Broad Equity	34,985	15%	Corporate	158,002	66%
Domestic Broad Fixed-Income	102,606	43%	Endowment/Foundation	6,279	3%
Domestic Real Estate	32,539	14%	Multi-Employer	8,106	3%
Hedge Fund of Funds	1,823	1%	Public	62,391	26%
Intl Equity	20,668	9%	High Net Worth	2,019	1%
Intl/Global Balanced	27,863	12%	Sub-Advised	4,217	2%
Intl/Global Fixed-Income	1,995	1%	Total	241,014	100%
Other Alternatives	16,062	7%			
Real Estate Securities	2,473	1%			
Total	241,014	100%			

Note(s): Assets categorized as "Other Alternatives" represent off-shore mutual funds.

**J.P. Morgan Asset Management
Mortgage-Backed Securities (Columbus)
As of December 31, 2013**

Key Professionals	Joined	Investment
	Firm	Experience
Douglas Swanson - PM	1983	1983
Christopher Nauseda - PM	1982	1982
Michael Sais - PM	1987	1987
Scott Grimshaw - PM	1988	1988

Investment Professionals

Function	#	5 Years	
		Gained	Lost
Dedicated Fundamental Analyst	13	3	1
Portfolio Manager	13	0	1
Portfolio Decision: Team Management			

Product Highlights:

Investment Style: Mortgages
Benchmark: Barclays Mortgage
Invest. Strategy: Bottom Up Bond Selection

Investment Process:

- 5% Duration Management
- 25% Industry/Sector Allocation
- 60% Security Selection
- 10% Yield Curve Management

Portfolio Characteristics

	Year End
Quality Rating	AA
Effective Duration (years)	3.9

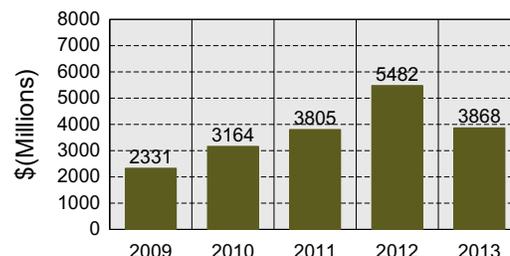
Portfolio Sector Exposures

	Year End
US Treasuries	0.3
US \$ Govt Related	0.1
US \$ Corporate	0.3
US Asset Backed	3.7
US Agency RMBS	36.4
US CMBS	4.2
US CMOs	53.6
Cash	1.3

Total Asset Structure

Asset Type	\$(mm)	
U.S. Tax-Exempt Commingled	828	21%
U.S. Tax-Exempt Sep Acct	145	4%
Mutual Fund	2,895	75%
Total	3,868	100%

Total Asset Growth



U.S. Tax-Exempt Assets

Vehicle	Largest Acct	# of Accts	\$(mm) Assets	5 Years Net Flows
Commingled	0	1	828	0
Separate	0	1	145	0

Fee Schedule:

Min Acct Size (\$mm): 100

Account Size (\$mm)	Fee (%)
Balance	0.25
Client Allocation	
\$110	0.25

Performance Composite:

Assets in composite (\$mm): 3,868
 Number of Accts in Composite: 3

2013 Annual Dispersion Range:
 Composite Return: (0.19%)
 Highest Return: 0.08%
 Lowest Return: 0.02%

Note(s): Performance represents the composite, gross-of-fees. Only lead portfolio managers have been listed above. Asset increase in 2012 was attributed to existing account inflows. Asset decrease in 2013 was attributed to mutual fund outflows.

J.P. Morgan Asset Management Mortgage-Backed Securities (Columbus)

Investment Philosophy:

JP Morgan seeks to outperform the benchmark over longer horizons regardless of the market environment.

Portfolio Construction:

The Mortgage-Backed Securities portfolio strives to be fully-invested at all times. Investment within cash is a residual of the investment process and is limited to a 10% exposure.

Duration Description:

JP Morgan carefully manages duration to control interest rate risk. In the fixed income portfolios, they use it sparingly as an active management tool. The duration decision is based on the interest rate forecast, which uses many factors including the outlook for inflation, the monetary aggregates, anticipated Federal Reserve policy and the overall economic environment. Duration is adjusted periodically, typically in small increments, to enhance returns when the market is undervalued and to protect portfolio value when the market is overvalued.

Yield Curve Description:

In concert with the economic analysis conducted with respect to duration decision, broad interest rate trend and supply and demand relationships which are anticipated to influence the shape of the yield curve are also identified. The yield curve management process includes the evaluation of the risk/reward posture of every maturity along the yield curve. For a given duration target, the yield curve strategy seeks to find the optimal yield curve exposure. Expected returns are established via scenario analysis, which incorporates yield curve shifts, the roll down effect, and time horizon.

Sector Selection:

Although the fixed income investment process is driven largely by bottom-up approach emphasizing security selection, close attention is paid to sector and sub-sector valuations and the weightings of sectors and sub-sectors in all portfolios. Sub-sectors are analyzed and value-based on an assessment of economic and industry factors as well as supply and demand conditions. Historical spread analysis is conducted to identify sub-sectors, which are over- or under-valued and to establish the risk/return tradeoff between sub-sectors. Analysis is then focused on individual securities in the undervalued sub-sectors that are identified.

Security Selection:

The universe of securities that JP Morgan considers for mortgage-backed securities portfolios is generally guided by the benchmark. However, due to a focus on identifying undervalued securities, they are not limited to securities within the index. Because the mortgage-backed sector, in particular, has been less efficient relative to other sectors in recent years, this sector tends to be overweight relative to the benchmark index in most of the fixed income portfolios. Through the security selection process, the ability to add value in the portfolio management process is demonstrated by utilizing select mortgage-backed securities, including pass-throughs, CMO's and select other complex structures such as IO's, PO's and inverse floaters to the extent they are consistent with client investment guidelines

Sell Discipline:

The securities held in the fixed income portfolios are continually monitored and analyzed. Quantitative valuation methodologies are used on an ongoing basis to identify securities that are undervalued, fairly valued and overvalued. Securities are purchased that are undervalued and offer a superior total return profile as compared to similar securities. Securities are sold that become fairly valued, suffer due to a change in fundamentals, or if a substitute security with a superior total return profile is identified.

Research Process:

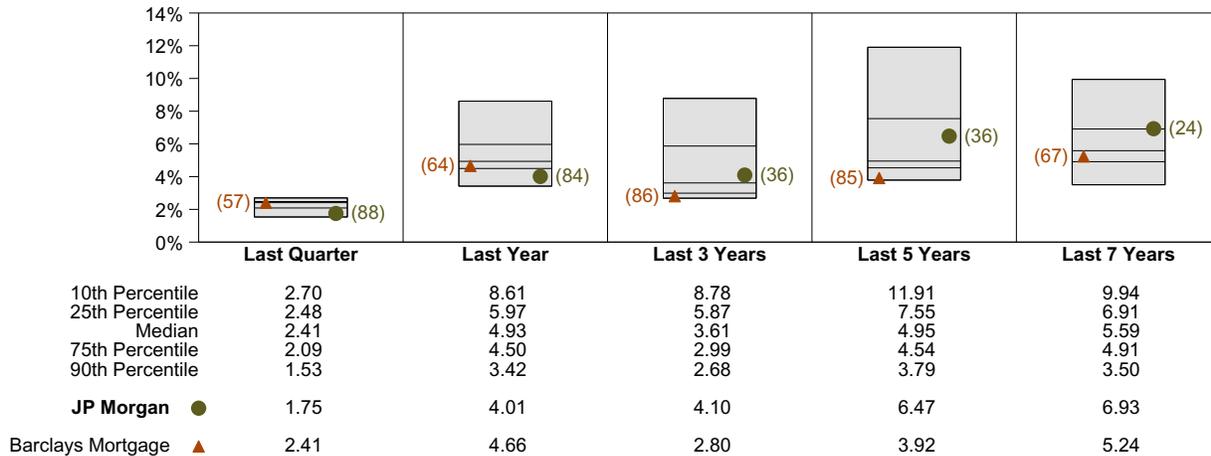
JP Morgan fixed income research process is comprised of a team of dedicated investment professionals. Areas of specialty include treasury/agency, mortgage-backed, corporate, municipal, asset-backed, money market and securities lending, GIC insurance compliance, and economic analysis. The fixed income research group provides four major areas of analysis (1) the fixed income market (2) quantitative methods for portfolio management (3) qualitative company analysis and (4) fundamental credit research. Analysis consists of yield curve examination and sector spread comparisons with emphasis on the mortgage/corporate security areas and individual issue "rich/cheap" analysis. Historical databases provide the necessary price information for comparisons across quality, maturity and economic sector categories relative to the appropriate investment style benchmark(s).

J.P. Morgan Asset Management Mortgage-Backed Securities (Columbus) Return Analysis Summary

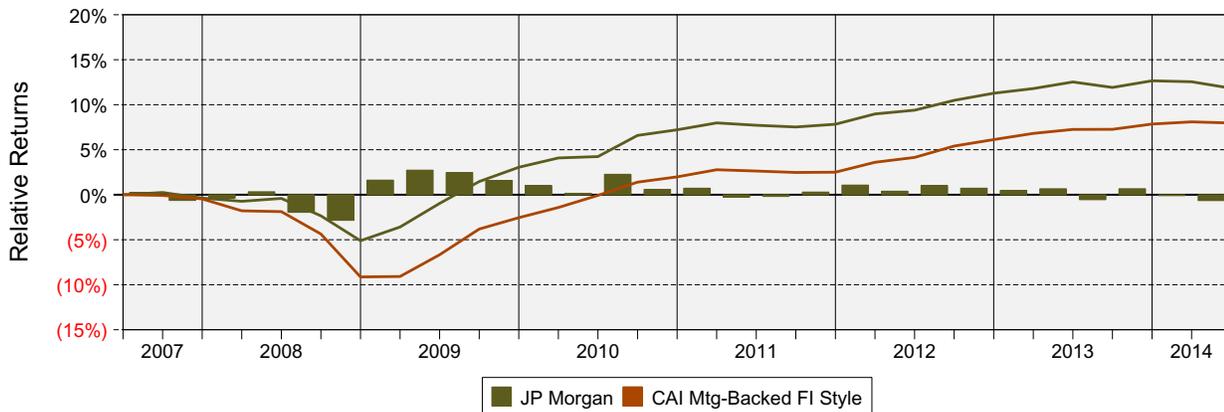
Return Analysis

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.

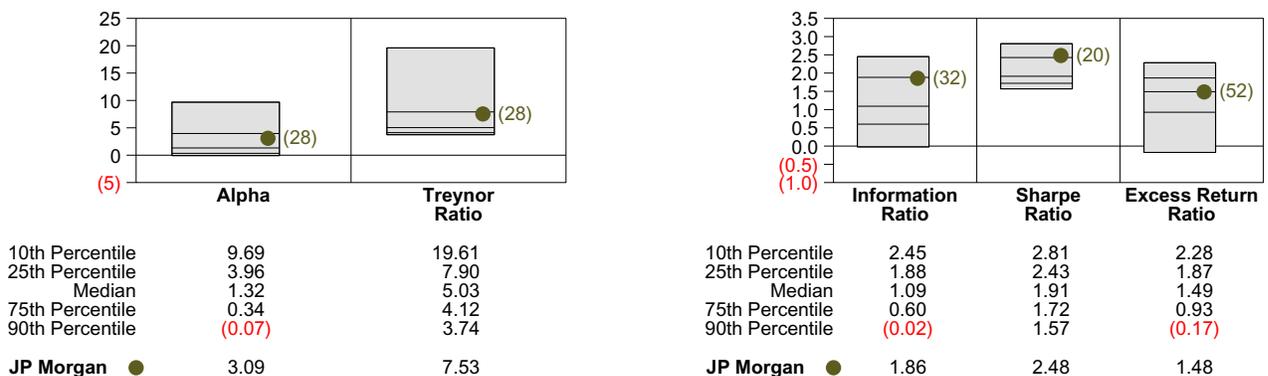
Performance vs CAI Mtg-Backed FI Style (Gross) Periods ended June 30, 2014



Cumulative and Quarterly Relative Return vs Barclays Mortgage



Risk Adjusted Return Measures vs Barclays Mortgage Rankings Against CAI Mtg-Backed FI Style (Gross) Five Years Ended June 30, 2014

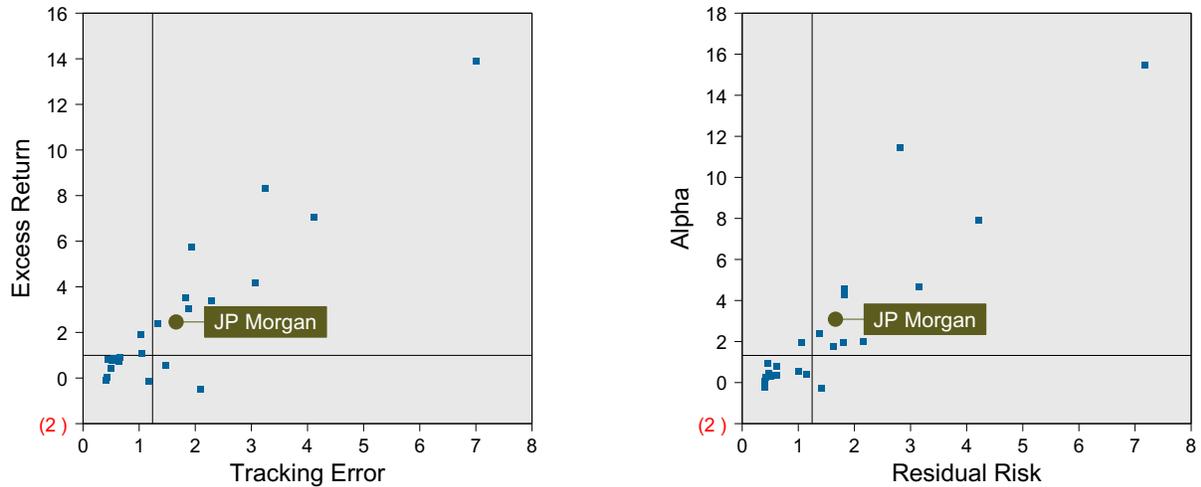


J.P. Morgan Asset Management Mortgage-Backed Securities (Columbus) Risk Analysis Summary

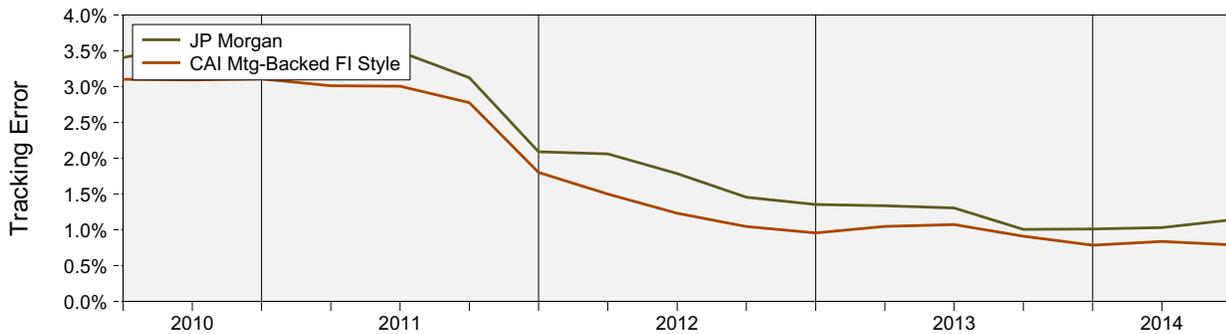
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second scatter chart displays the relationship, sometimes called Information Ratio, between alpha (market-risk or "beta" adjusted return) and residual risk (non-market or "unsystematic" risk). The third chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

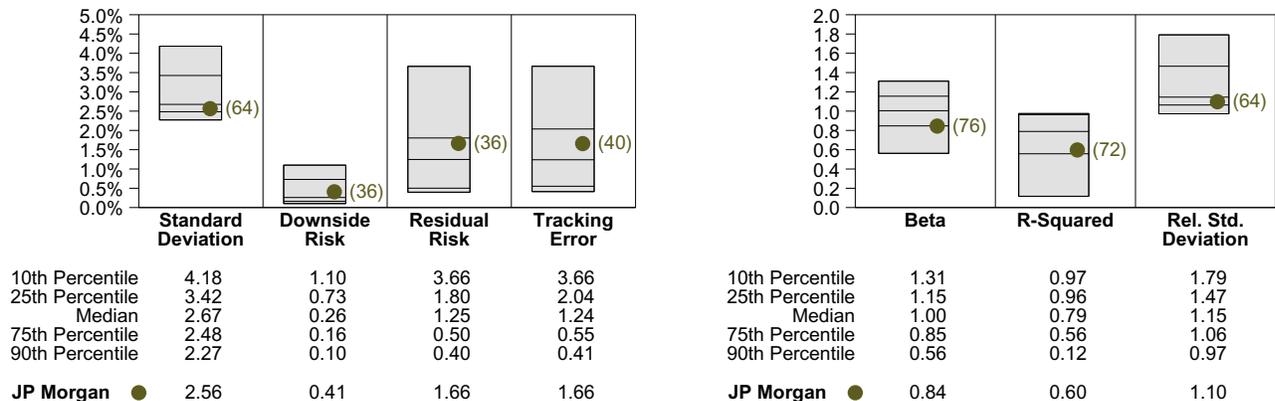
Risk Analysis vs CAI Mtg-Backed FI Style (Gross) Five Years Ended June 30, 2014



Rolling 12 Quarter Tracking Error vs Barclays Mortgage

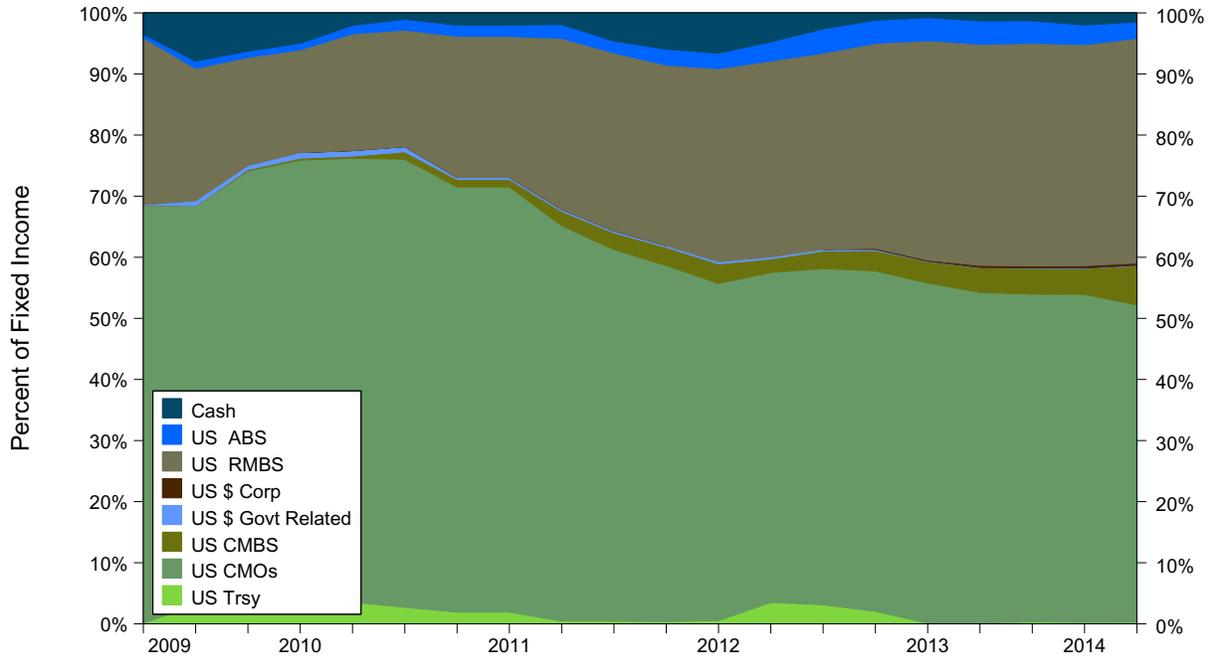


Risk Statistics Rankings vs Barclays Mortgage Rankings Against CAI Mtg-Backed FI Style (Gross) Five Years Ended June 30, 2014

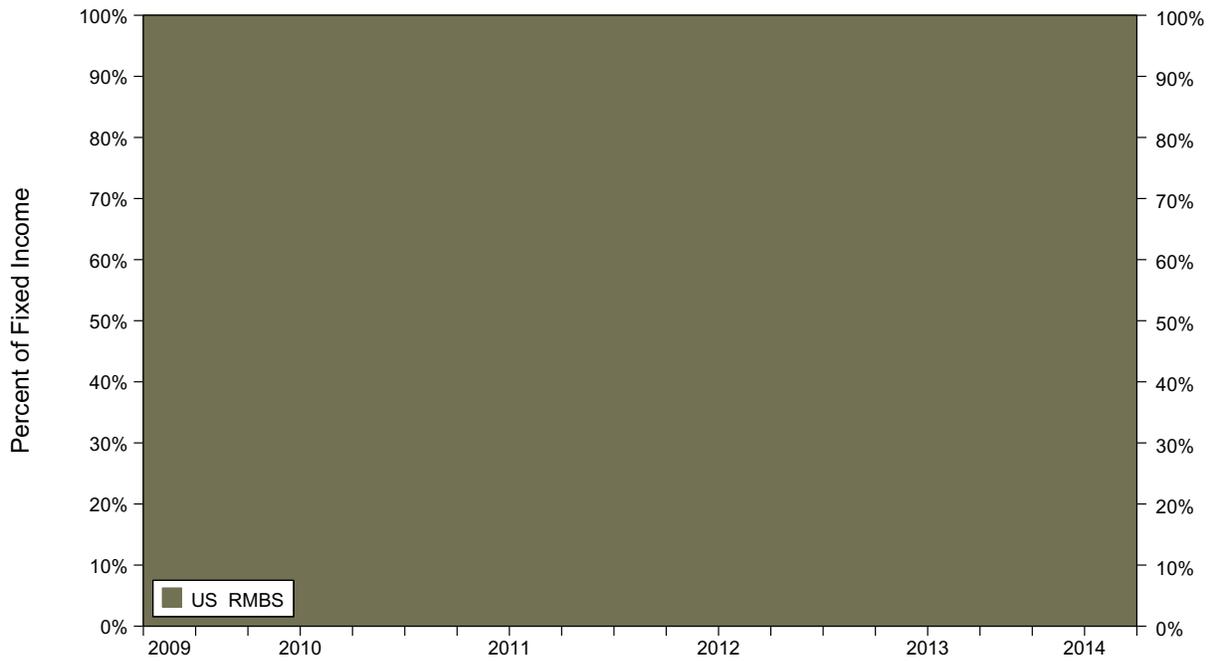


Historical Distribution of Sectors Percent of Fixed Income by Ending Weights in Each Sector

JP Morgan



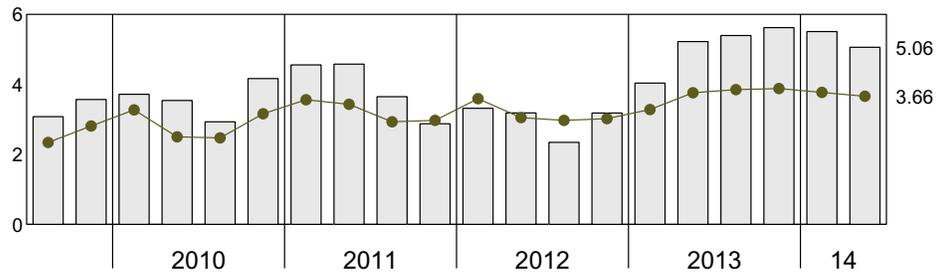
Barclays Mortgage



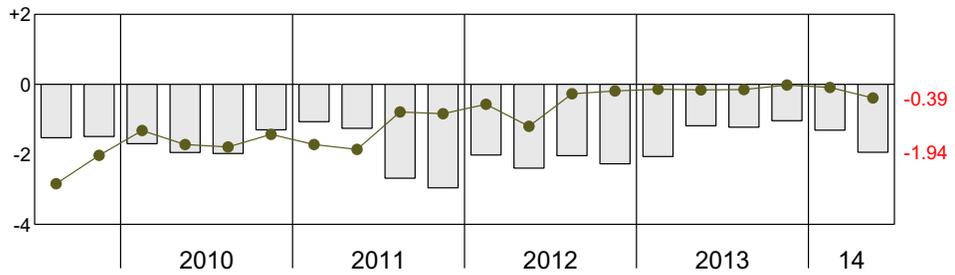
History of Fixed Income Characteristics

Period June 30, 2014

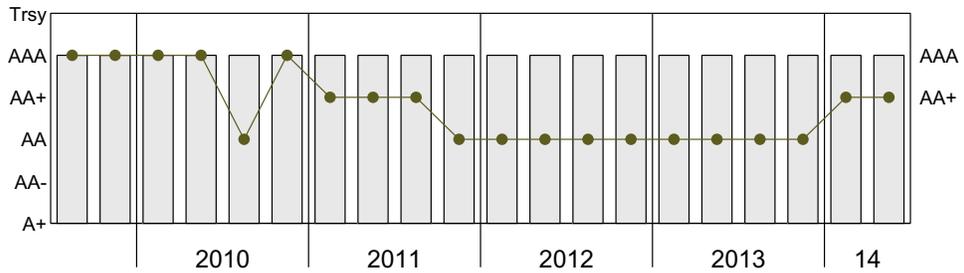
Duration



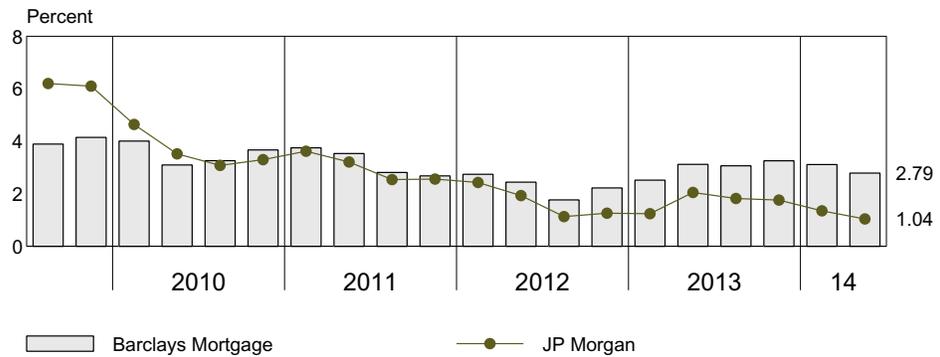
OA Convexity



Quality Rating



Effective Yield

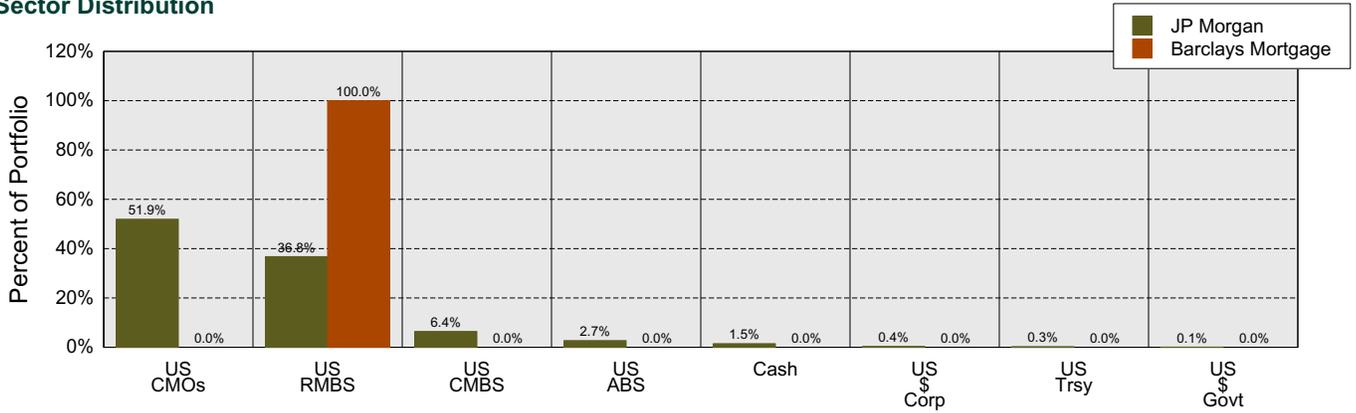


**JP Morgan
Portfolio Characteristics Summary
As of June 30, 2014**

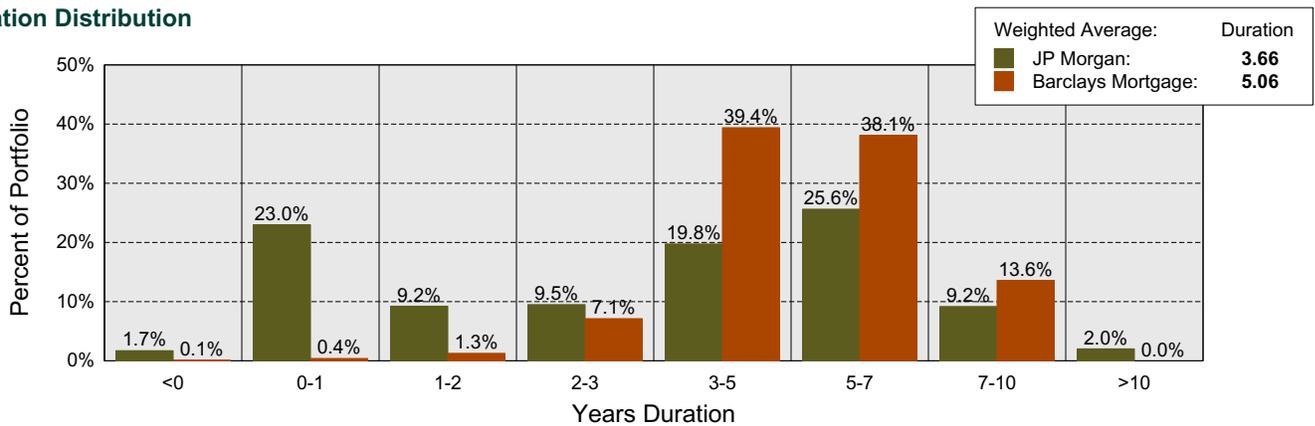
Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

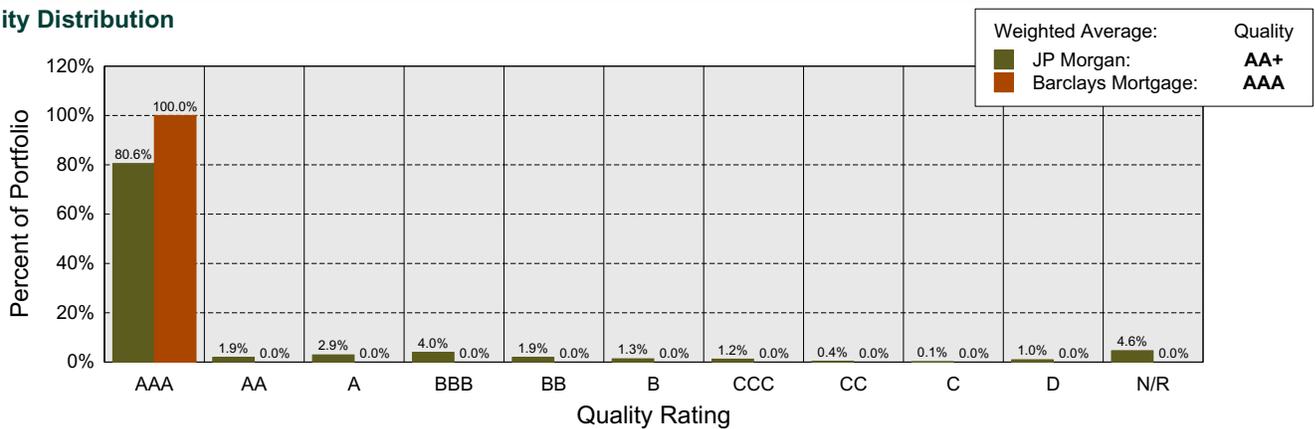
Sector Distribution



Duration Distribution



Quality Distribution



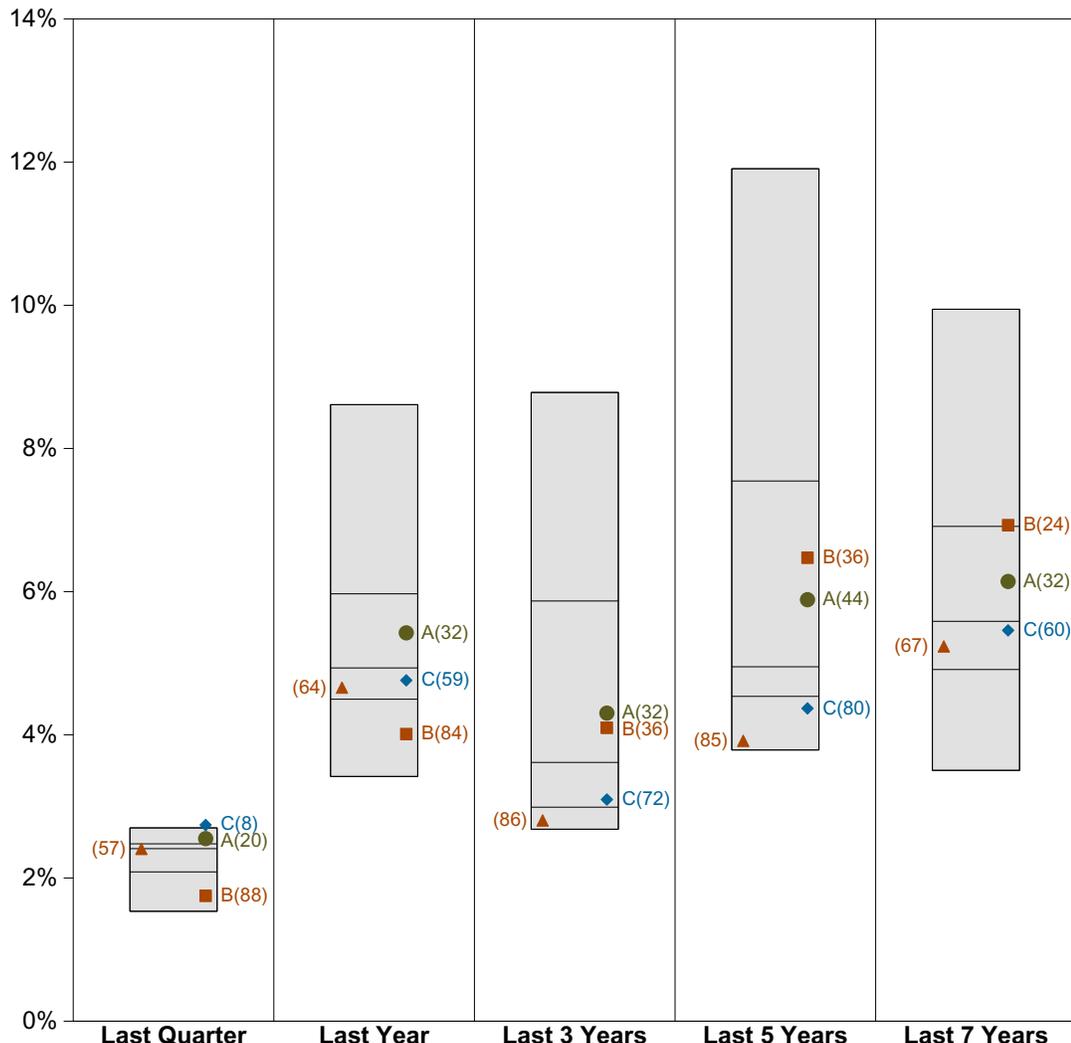
North Dakota State Investment Board
Mortgage Backed Securities
Summary Matrix as of June 30, 2014

Organization / Product	Proposed Vehicle	Investment Minimum (mm)	All-in Fee on \$110mm	Product AUM (mm)	Notes
BlackRock BlackRock Mortgages	Separate Account	\$100	0.27%	\$9,347	
J.P. Morgan Asset Management Mortgage-Backed Securities (Columbus)	Separate Account	\$100	0.25%	\$3,502	

Performance vs CAI Mtg-Backed FI Style Periods Ended June 30, 2014

Return Ranking

The chart below illustrates fund rankings over various periods versus the CAI Mtg-Backed FI Style. The bars represent the range of returns from the 10th percentile to the 90th percentile for each period for all funds in the CAI Mtg-Backed FI Style. The numbers to the right of the bar represent the percentile rankings of the funds being analyzed. The table below the chart details the rates of return plotted in the graph above.



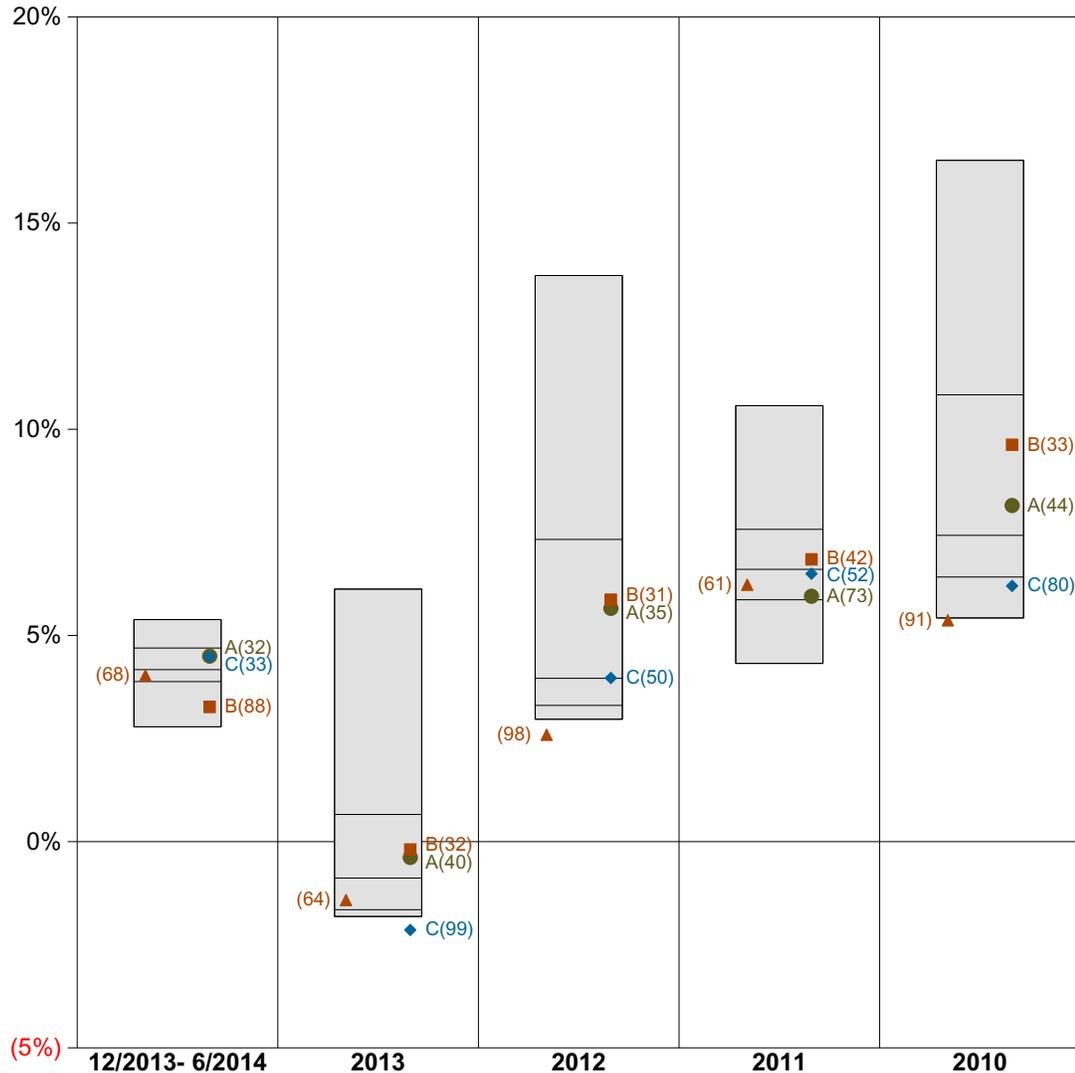
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	2.70	8.61	8.78	11.91	9.94
25th Percentile	2.48	5.97	5.87	7.55	6.91
Median	2.41	4.93	3.61	4.95	5.59
75th Percentile	2.09	4.50	2.99	4.54	4.91
90th Percentile	1.53	3.42	2.68	3.79	3.50
BlackRock ● A	2.55	5.42	4.30	5.89	6.14
JP Morgan ■ B	1.75	4.01	4.10	6.47	6.93
Current Manager					
Western ◆ C	2.74	4.76	3.10	4.37	5.46
Barclays Mortgage ▲	2.41	4.66	2.80	3.92	5.24

Note(s): Performance is shown gross-of-fees.

Performance vs CAI Mtg-Backed FI Style Recent Periods

Return Ranking

The chart below illustrates fund rankings over various periods versus the CAI Mtg-Backed FI Style. The bars represent the range of returns from the 10th percentile to the 90th percentile for each period for all funds in the CAI Mtg-Backed FI Style. The numbers to the right of the bar represent the percentile rankings of the funds being analyzed. The table below the chart details the rates of return plotted in the graph above.



	12/2013- 6/2014	2013	2012	2011	2010
10th Percentile	5.39	6.12	13.73	10.57	16.52
25th Percentile	4.70	0.66	7.33	7.57	10.84
Median	4.17	(0.88)	3.96	6.60	7.43
75th Percentile	3.88	(1.65)	3.30	5.87	6.42
90th Percentile	2.78	(1.81)	2.97	4.32	5.42
BlackRock ● A	4.50	(0.38)	5.66	5.95	8.15
JP Morgan ■ B	3.27	(0.19)	5.87	6.85	9.62
Current Manager					
Western ◆ C	4.49	(2.14)	3.97	6.50	6.20
Barclays Mortgage ▲	4.03	(1.41)	2.59	6.23	5.37

Performance vs CAI Mtg-Backed FI Style Recent Periods

Return Ranking

The chart below illustrates fund rankings over various periods versus the CAI Mtg-Backed FI Style. The bars represent the range of returns from the 10th percentile to the 90th percentile for each period for all funds in the CAI Mtg-Backed FI Style. The numbers to the right of the bar represent the percentile rankings of the funds being analyzed. The table below the chart details the rates of return plotted in the graph above.

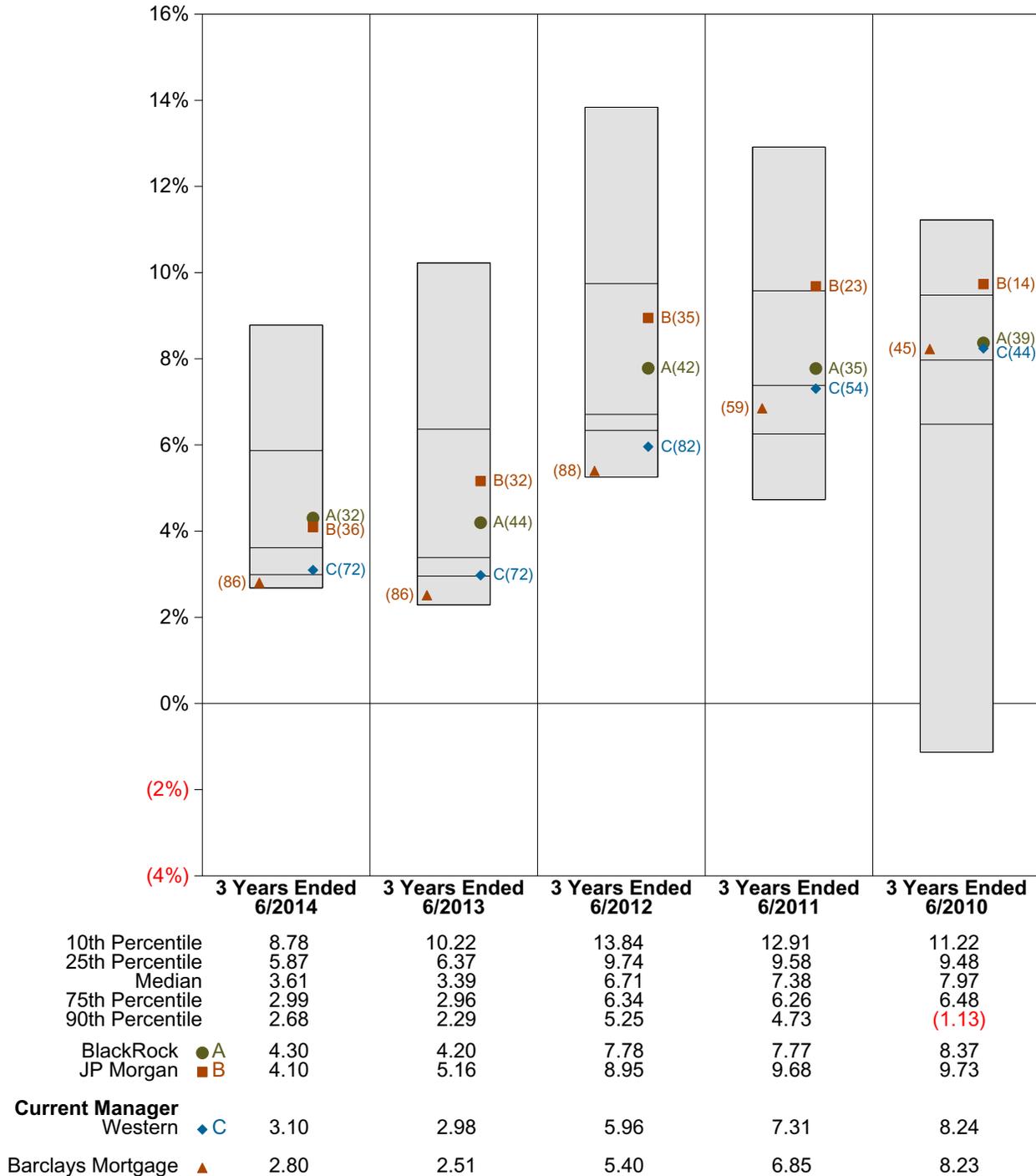


	2009	2008	2007	2006	2005
10th Percentile	30.77	7.84	7.29	5.78	3.44
25th Percentile	15.62	5.93	7.12	5.48	3.20
Median	10.09	2.54	6.74	5.19	2.90
75th Percentile	7.74	(2.08)	6.24	4.95	2.60
90th Percentile	6.79	(16.94)	5.20	4.45	1.71
BlackRock (A)	11.02	2.64	6.90	5.24	2.84
JP Morgan (B)	15.00	3.19	6.90	4.97	3.14
Western (C)	6.10	7.70	6.20	-	-
Barclays Mortgage (▲)	5.89	8.34	6.90	5.22	2.61

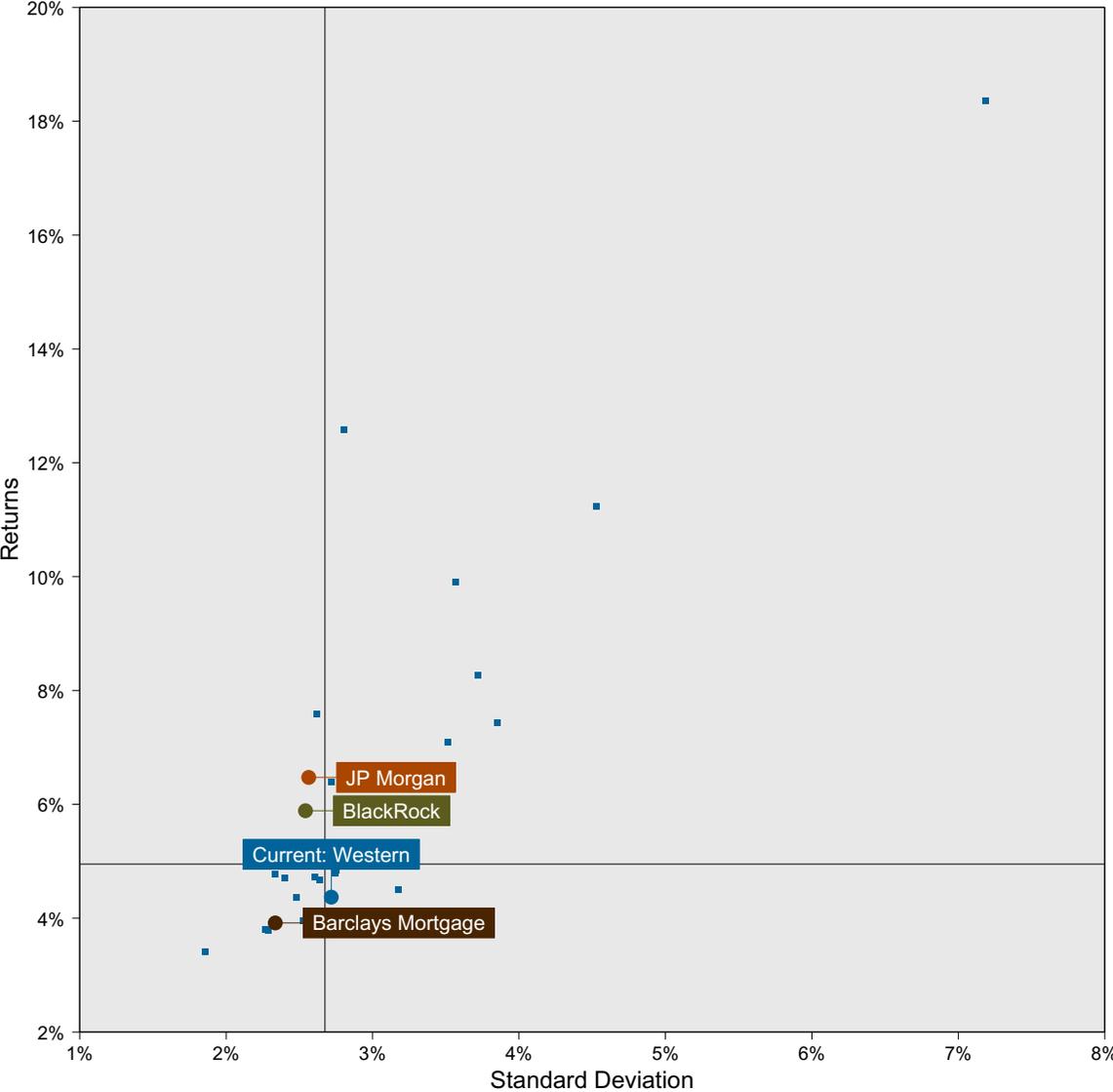
Performance vs CAI Mtg-Backed FI Style Rolling Periods

Return Ranking

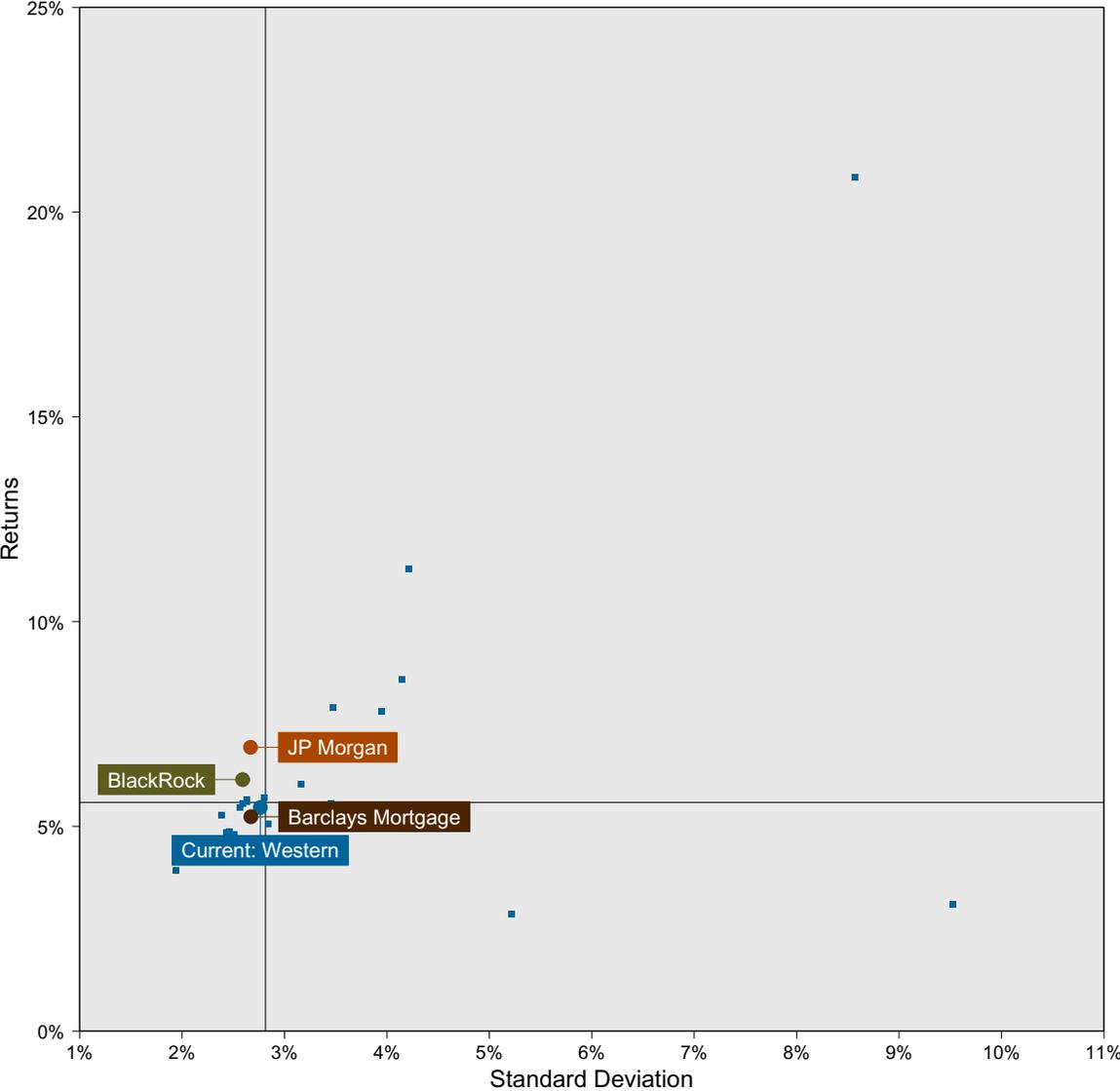
The chart below illustrates fund rankings over various periods versus the CAI Mtg-Backed FI Style. The bars represent the range of returns from the 10th percentile to the 90th percentile for each period for all funds in the CAI Mtg-Backed FI Style. The numbers to the right of the bar represent the percentile rankings of the funds being analyzed. The table below the chart details the rates of return plotted in the graph above.



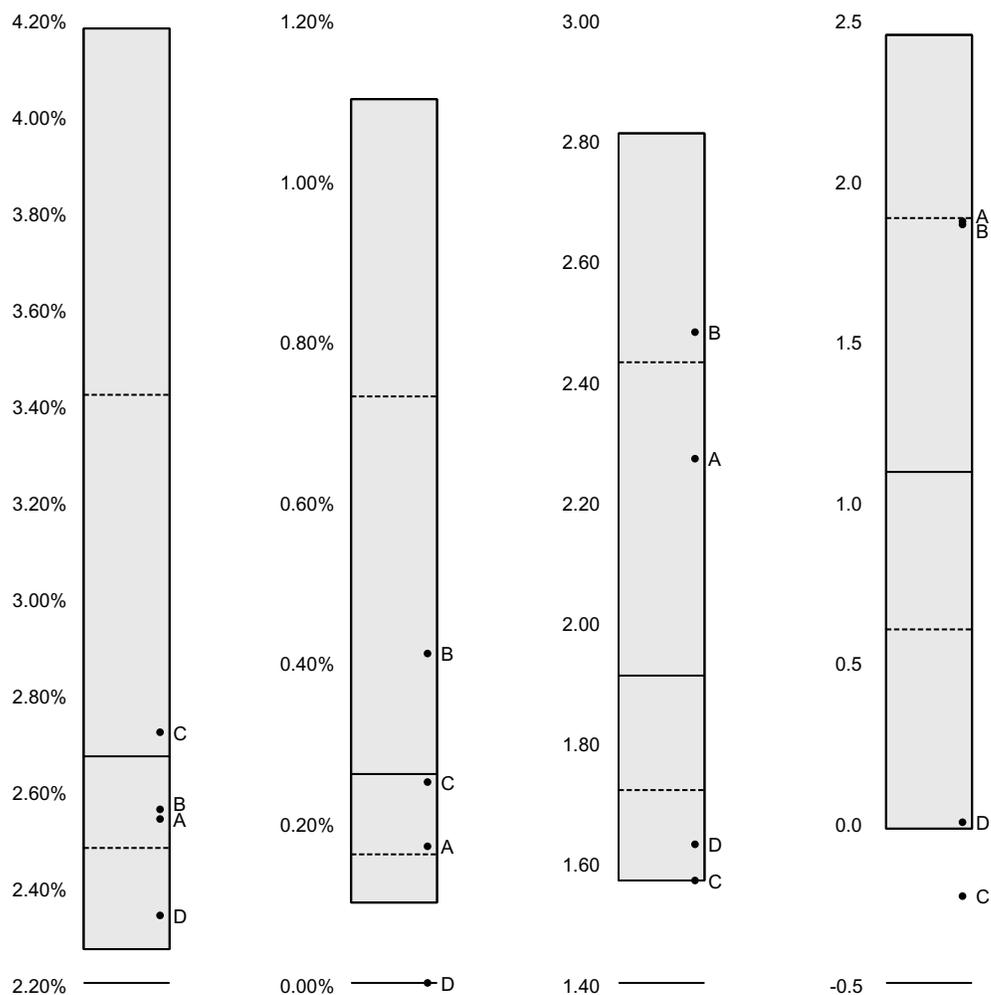
Risk/Reward vs CAI Mtg-Backed FI Style
Five Years Ended June 30, 2014



**Risk/Reward vs CAI Mtg-Backed FI Style
Seven Years Ended June 30, 2014**

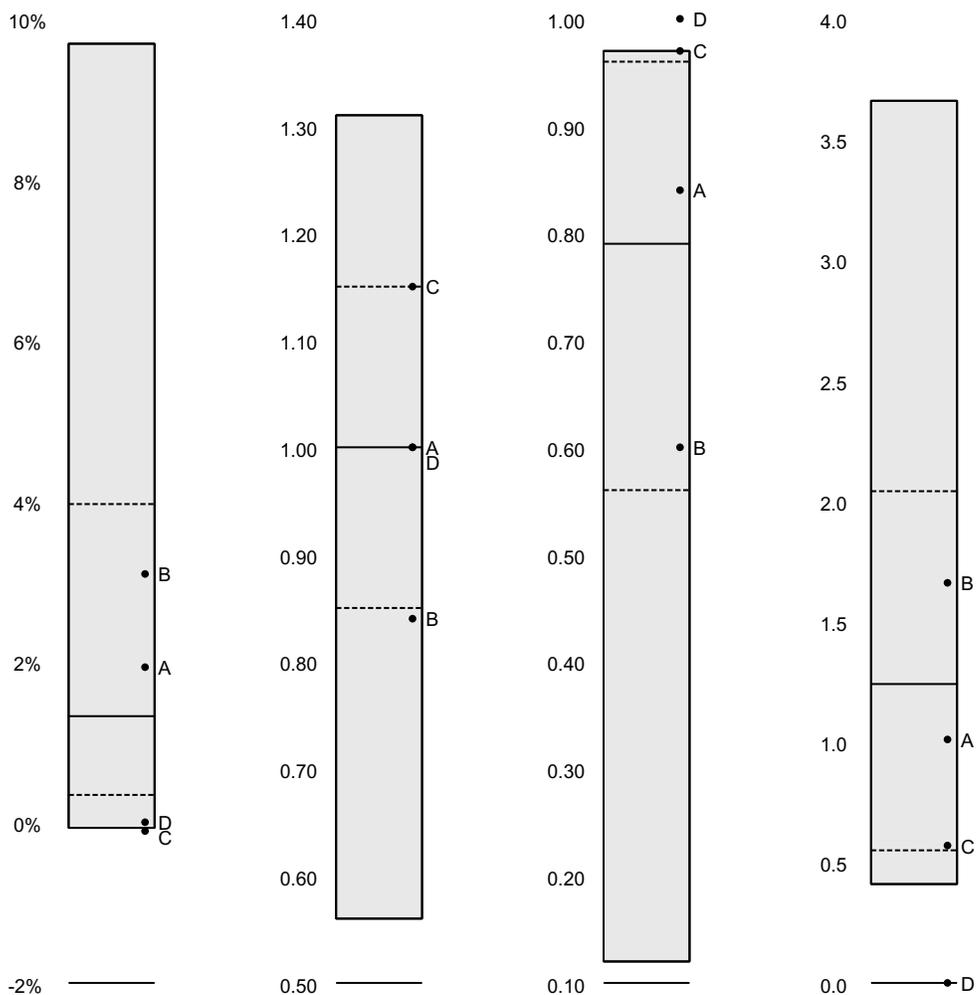


Risk Statistics Relative to Barclays Mortgage Index vs CAI Mtg-Backed FI Style Five Years Ended June 30, 2014



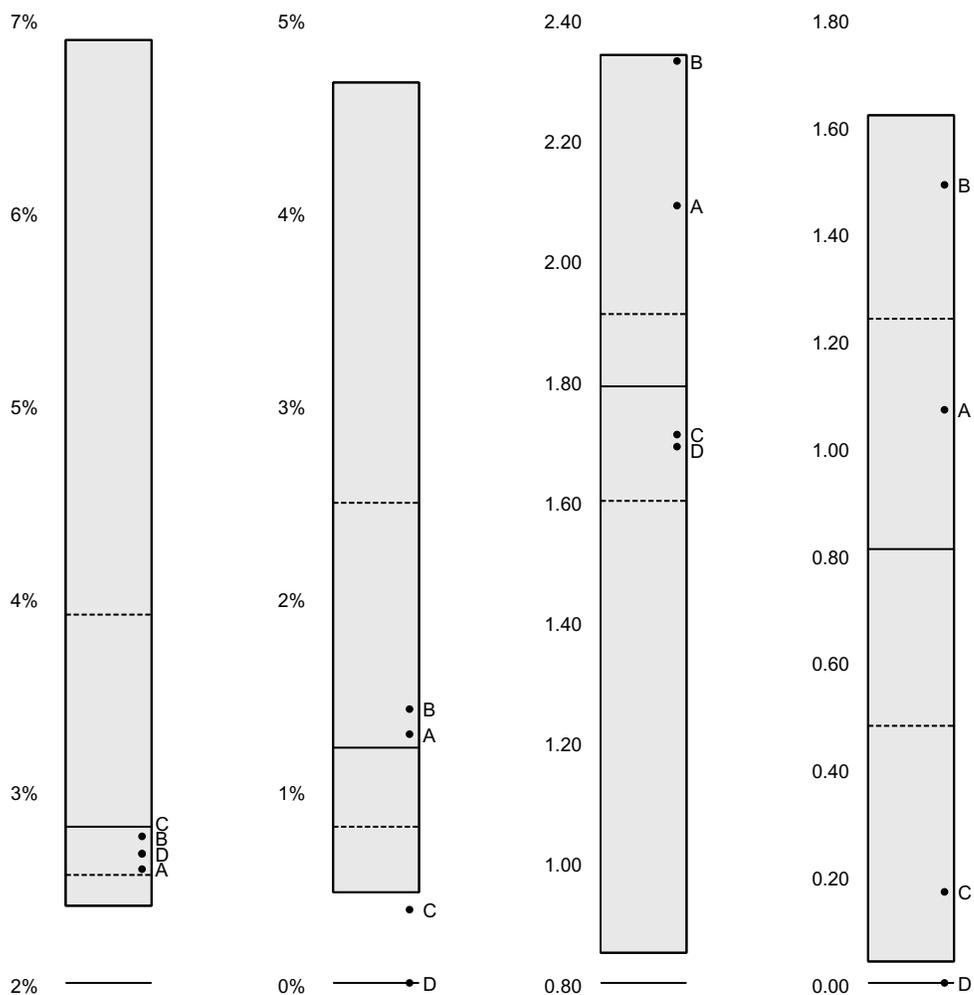
		Standard Deviation	Downside Risk(%)	Sharpe Ratio	Information Ratio
CAI MTG-BACKED FI STYLE		▼	▼	▼	▼
10th Percentile		4.18	1.10	2.81	2.45
25th Percentile		3.42	0.73	2.43	1.88
Median		2.67	0.26	1.91	1.09
75th Percentile		2.48	0.16	1.72	0.60
90th Percentile		2.27	0.10	1.57	(0.02)
BlackRock	A	2.54	0.17	2.27	1.87
JP Morgan	B	2.56	0.41	2.48	1.86
Current Manager					
Western	C	2.72	0.25	1.57	(0.23)
Market Indicator					
Barclays Mortgage	D	2.34	0.00	1.63	0.00

Risk Statistics Relative to Barclays Mortgage Index vs CAI Mtg-Backed FI Style Five Years Ended June 30, 2014



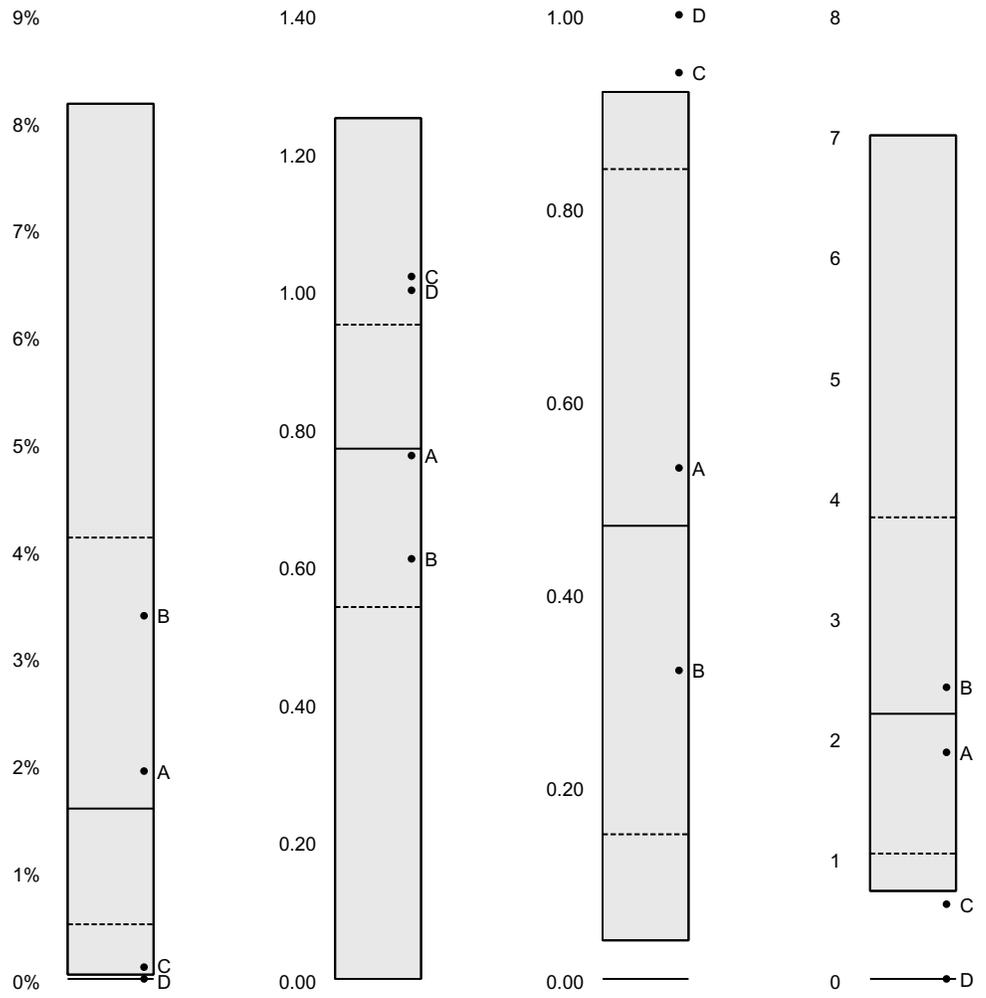
		Alpha(%)	Beta	R-Squared	Tracking Error
CAI MTG-BACKED FI STYLE					
10th Percentile		9.69	1.31	0.97	3.66
25th Percentile		3.96	1.15	0.96	2.04
Median		1.32	1.00	0.79	1.24
75th Percentile		0.34	0.85	0.56	0.55
90th Percentile		(0.07)	0.56	0.12	0.41
BlackRock	A	1.93	1.00	0.84	1.01
JP Morgan	B	3.09	0.84	0.60	1.66
Current Manager					
Western	C	(0.11)	1.15	0.97	0.57
Market Indicator					
Barclays Mortgage	D	0.00	1.00	1.00	0.00

Risk Statistics Relative to Barclays Mortgage Index vs CAI Mtg-Backed FI Style Seven Years Ended June 30, 2014



		Standard Deviation	Downside Risk(%)	Sharpe Ratio	Information Ratio
CAI MTG-BACKED FI STYLE					
	10th Percentile	6.89	4.67	2.34	1.62
	25th Percentile	3.91	2.49	1.91	1.24
	Median	2.81	1.22	1.79	0.81
	75th Percentile	2.56	0.81	1.60	0.48
	90th Percentile	2.40	0.47	0.85	0.04
	BlackRock A	2.59	1.29	2.09	1.07
	JP Morgan B	2.67	1.42	2.33	1.49
	Current Manager				
	Western C	2.76	0.38	1.71	0.17
	Market Indicator				
	Barclays Mortgage D	2.67	0.00	1.69	0.00

**Risk Statistics Relative to Barclays Mortgage Index
vs CAI Mtg-Backed FI Style
Seven Years Ended June 30, 2014**

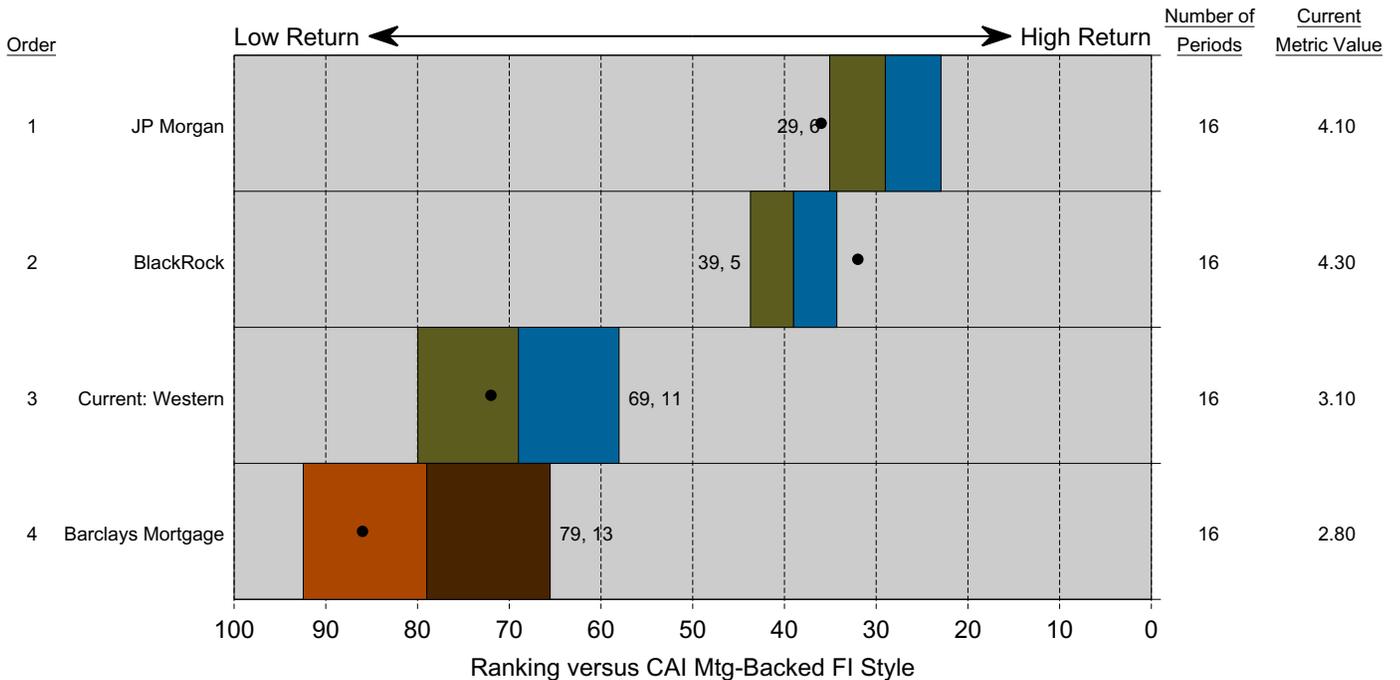


		Alpha(%)	Beta	R-Squared	Tracking Error
CAI MTG-BACKED FI STYLE					
10th Percentile		8.17	1.25	0.92	7.00
25th Percentile		4.12	0.95	0.84	3.83
Median		1.59	0.77	0.47	2.20
75th Percentile		0.51	0.54	0.15	1.04
90th Percentile		0.04	0.00	0.04	0.73
BlackRock	A	1.94	0.76	0.53	1.88
JP Morgan	B	3.39	0.61	0.32	2.42
Current Manager					
Western	C	0.11	1.02	0.94	0.62
Market Indicator					
Barclays Mortgage	D	0.00	1.00	1.00	0.00

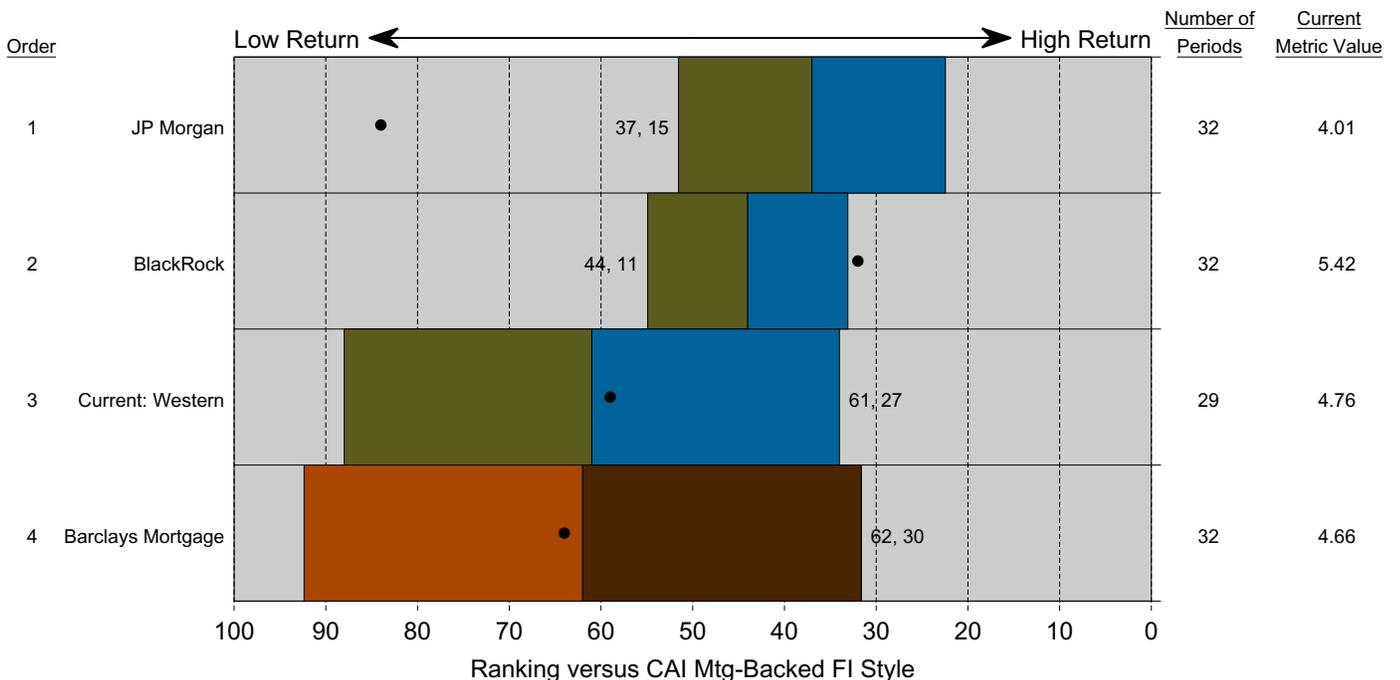
Historical Ranking Analysis

This page compares multiple portfolios to each other by analyzing both the historical average ranking for a given metric versus a relevant peer group, as well as the consistency and range (standard deviation) of that ranking over time. The midpoint of each sideways bar represents the average ranking of a given portfolio over time, and the width of the bar represents the consistency and range of that ranking (+/- 1 standard deviation). The comma-separated numbers show the average and standard deviation respectively, of the portfolios ranking. Each portfolio's current ranking is demarcated by a dot, while the corresponding current value of the metric is displayed on the far right.

Three-Year Rolling Return - Ranking For Four Years Ended June 30, 2014



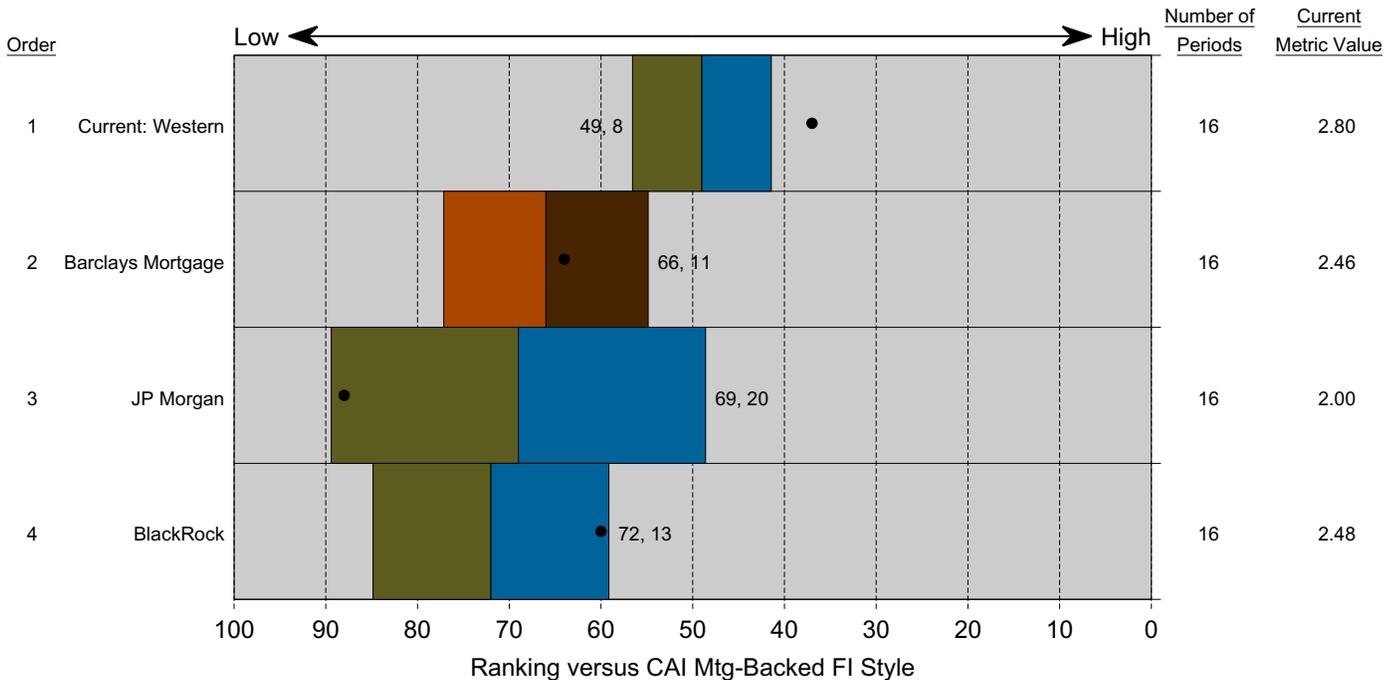
One-Year Rolling Return - Ranking For Eight Years Ended June 30, 2014



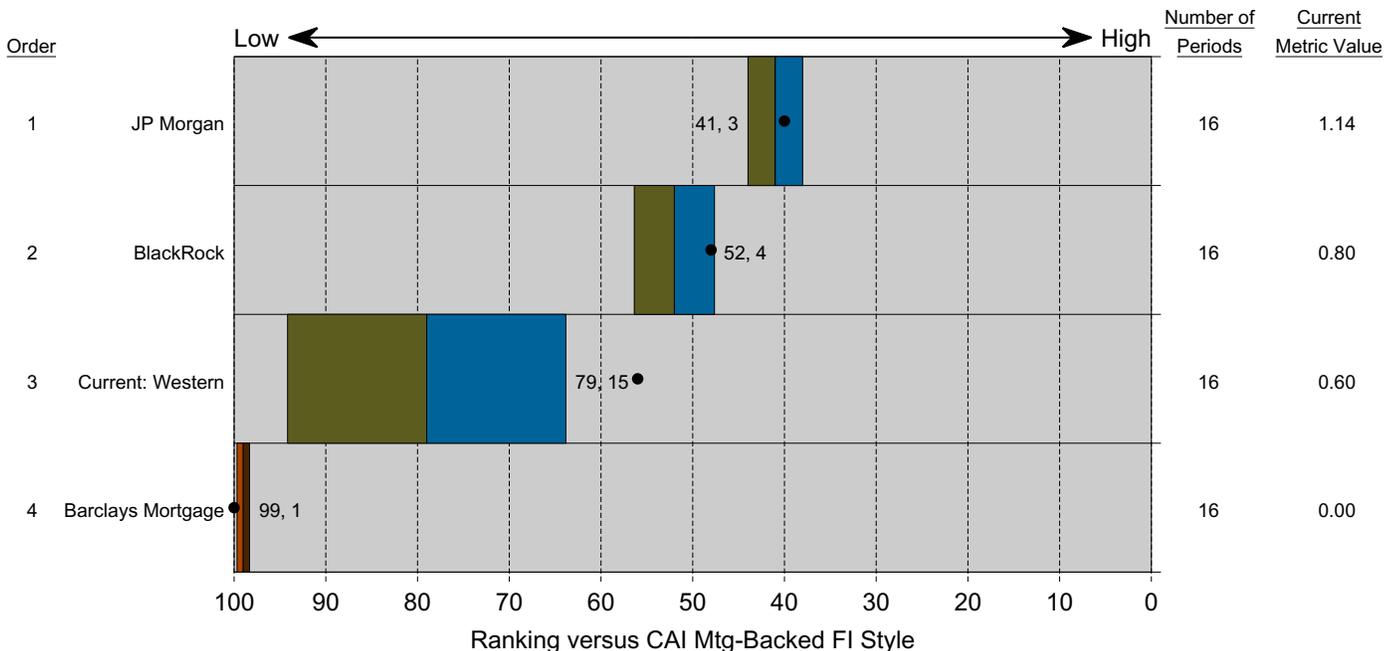
Historical Ranking Analysis

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Three-Year Rolling Standard Deviation - Ranking For Four Years Ended June 30, 2014



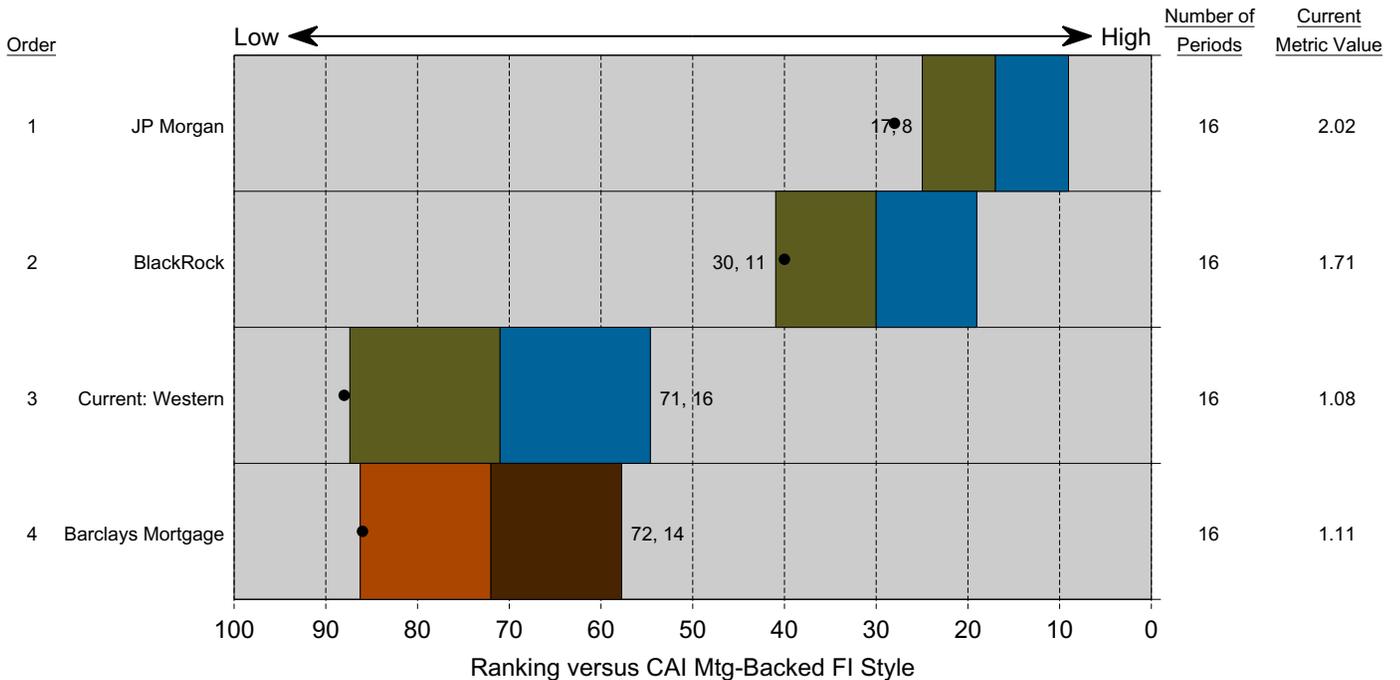
Three-Year Rolling Tracking Error Versus Barclays Mortgage Ranking For Four Years Ended June 30, 2014



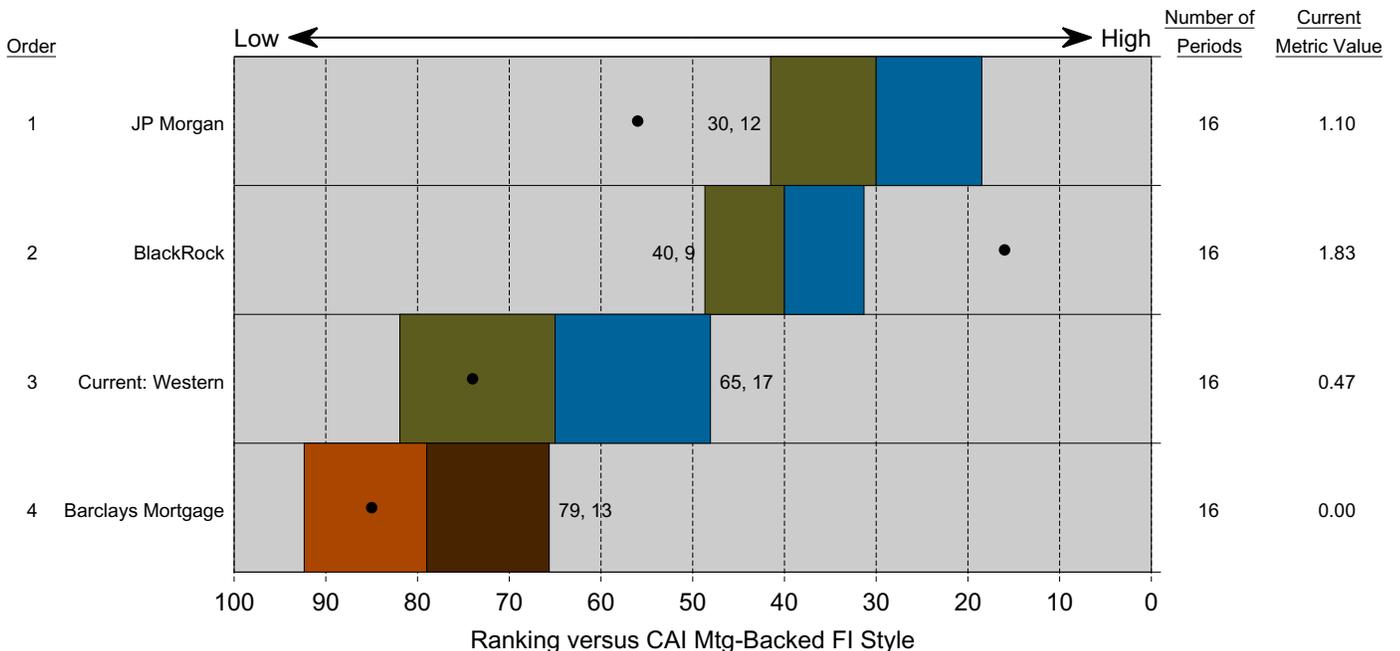
Historical Ranking Analysis

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Three-Year Rolling Sharpe Ratio - Ranking For Four Years Ended June 30, 2014



Three-Year Rolling Excess Return Ratio Versus Barclays Mortgage Ranking For Four Years Ended June 30, 2014



Comparative Manager Matrix

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can evaluate, for each portfolio pair, one portfolio's performance and risk patterns relative to the other portfolio's performance patterns. The excess return correlation matrices illustrate the extent to which various manager's excess returns versus the appropriate index are correlated to each other. Managers whose excess returns are less correlated with each other tend to diversify each other's active risk. This complementary type of manager mix can have a beneficial effect on the resulting active risk/return tradeoff.

Excess Return Correlations for 5 Years Ended June 30, 2014 vs the Barclays Mortgage

(20)	BlackRock	0.00	0.32	0.81	1.00
(20)	JP Morgan	0.00	0.08	1.00	0.81
(20)	Current: Western	0.00	1.00	0.08	0.32
(20)	Barclays Mortgage	0.00	0.00	0.00	0.00
		Barclays Mortgage	Current: Western	JP Morgan	BlackRock

Comparative Manager Matrix

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can evaluate, for each portfolio pair, one portfolio's performance and risk patterns relative to the other portfolio's performance patterns. The excess return correlation matrices illustrate the extent to which various manager's excess returns versus the appropriate index are correlated to each other. Managers whose excess returns are less correlated with each other tend to diversify each other's active risk. This complementary type of manager mix can have a beneficial effect on the resulting active risk/return tradeoff.

Excess Return Correlations for 7 Years Ended June 30, 2014 vs the Barclays Mortgage

(28)	BlackRock	0.00	0.31	0.90	1.00
(28)	JP Morgan	0.00	0.26	1.00	0.90
(28)	Current: Western	0.00	1.00	0.26	0.31
(28)	Barclays Mortgage	0.00	0.00	0.00	0.00
		Barclays Mortgage	Current: Western	JP Morgan	BlackRock

Comparative Manager Matrix

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can involve various types of performance statistics and holdings-based portfolio analysis over multiple time periods. The number in the middle of each box is the relevant value for a given portfolio, and the smaller number in the lower right corner is the relevant peer group ranking of that value.

Return Based Risk Statistics for 5 Years Ended June 30, 2014 vs the Barclays Mortgage and the CAI Mtg-Backed FI Style PEER GROUP

(20)	BlackRock	2.54% (68)	1.01 (60)	0.17% (72)	0.84 (44)	2.27 (32)	1.89 (24)	0.92% (44)
(20)	JP Morgan	2.56% (64)	1.66 (40)	0.41% (36)	0.60 (72)	2.48 (20)	1.48 (52)	0.80% (72)
(20)	Current: Western	2.72% (47)	0.57 (74)	0.25% (52)	0.97 (11)	1.57 (90)	0.77 (77)	0.99% (17)
(20)	Barclays Mortgage	2.34% (83)	0.00 (100)	0.00% (96)	1.00 (1)	1.63 (84)	0.00 (86)	1.00% (1)
		Standard Deviation	Tracking Error	Downside Risk	R-Squared	Sharpe Ratio	Excess Return Ratio	Correlation

Comparative Manager Matrix

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can involve various types of performance statistics and holdings-based portfolio analysis over multiple time periods. The number in the middle of each box is the relevant value for a given portfolio, and the smaller number in the lower right corner is the relevant peer group ranking of that value.

Return Based Risk Statistics for 7 Years Ended June 30, 2014 vs the Barclays Mortgage and the CAI Mtg-Backed FI Style PEER GROUP

(28)	BlackRock	2.59% (68)	1.88 (56)	1.29% (48)	0.53 (48)	2.09 (16)	0.46 (40)	0.74% (48)
(28)	JP Morgan	2.67% (56)	2.42 (44)	1.42% (44)	0.32 (56)	2.33 (12)	0.66 (24)	0.59% (56)
(28)	Current: Western	2.76% (53)	0.62 (97)	0.38% (99)	0.94 (2)	1.71 (56)	0.34 (46)	0.97% (2)
(28)	Barclays Mortgage	2.67% (56)	0.00 (100)	0.00% (100)	1.00 (1)	1.69 (61)	0.00 (67)	1.00% (1)
		Standard Deviation	Tracking Error	Downside Risk	R-Squared	Sharpe Ratio	Excess Return Ratio	Correlation



Definitions and Disclosures

Definitions

Alpha measures a portfolio's return in excess of the market return adjusted for risk. It is a measure of the manager's contribution to performance with reference to security selection. A positive alpha indicates that a portfolio was positively rewarded for the residual risk which was taken for that level of market exposure.

Beta measures the sensitivity of rates of portfolio returns to movements in the market index. A portfolio's beta measures the expected change in return per 1% change in the return on the market. If a beta of a portfolio is 1.5, a 1 percent increase in the return on the market will result, on average, in a 1.5 percent increase in the return on the portfolio. The converse would also be true.

Downside Risk stems from the desire to differentiate between "good risk" (upside volatility) and "bad risk" (downside volatility). Whereas standard deviation punishes both upside and downside volatility, downside risk measures only the standard deviation of returns below the target. Returns above the target are assigned a deviation of zero. Both the frequency and magnitude of underperformance affect the amount of downside risk.

Excess Return Ratio is a measure of risk adjusted relative return. This ratio captures the amount of active management performance (value added relative to an index) per unit of active management risk (tracking error against the index.) It is calculated by dividing the manager's annualized cumulative excess return relative to the index by the standard deviation of the individual quarterly excess returns. The Excess Return Ratio can be interpreted as the manager's active risk/reward tradeoff for diverging from the index when the index is mandated to be the "riskless" market position.

Information Ratio measures the manager's market risk-adjusted excess return per unit of residual risk relative to a benchmark. It is computed by dividing alpha by the residual risk over a given time period. Assuming all other factors being equal, managers with lower residual risk achieve higher values in the information ratio. Managers with higher information ratios will add value relative to the benchmark more reliably and consistently.

R-Squared indicates the extent to which the variability of the portfolio returns are explained by market action. It can also be thought of as measuring the diversification relative to the appropriate benchmark. An r-squared value of .75 indicates that 75% of the fluctuation in a portfolio return is explained by market action. An r-squared of 1.0 indicates that a portfolio's returns are entirely related to the market and it is not influenced by other factors. An r-squared of zero indicates that no relationship exists between the portfolio's return and the market.

Definitions (continued)

Relative Standard Deviation is a simple measure of a manager's risk (volatility) relative to a benchmark. It is calculated by dividing the manager's standard deviation of returns by the benchmark's standard deviation of returns. A relative standard deviation of 1.20, for example, means the manager has exhibited 20% more risk than the benchmark over that time period. A ratio of .80 would imply 20% less risk. This ratio is especially useful when analyzing the risk of investment grade fixed-income products where actual historical durations are not available. By using this relative risk measure over rolling time periods one can illustrate the "implied" historical duration patterns of the portfolio versus the benchmark.

Residual Portfolio Risk is the unsystematic risk of a fund, the portion of the total risk unique to the fund (manager) itself and not related to the overall market. This reflects the "bets" which the manager places in that particular asset market. These bets may reflect emphasis in particular sectors, maturities (for bonds), or other issue specific factors which the manager considers a good investment opportunity. Diversification of the portfolio will reduce or eliminate the residual risk of that portfolio.

Sharpe Ratio is a commonly used measure of risk-adjusted return. It is calculated by subtracting the "risk-free" return (usually 3 Month Treasury Bill) from the portfolio return and dividing the resulting "excess return" by the portfolio's risk level (standard deviation). The result is a measure of return gained per unit of risk taken.

Standard Deviation is a statistical measure of portfolio risk. It reflects the average deviation of the observations from their sample mean. Standard deviation is used as an estimate of risk since it measures how wide the range of returns typically is. The wider the typical range of returns, the higher the standard deviation of returns, and the higher the portfolio risk. If returns are normally distributed (i.e., has a bell shaped curve distribution) then approximately 2/3 of the returns would occur within plus or minus one standard deviation from the sample mean.

Total Portfolio Risk is a measure of the volatility of the quarterly excess returns of an asset. Total risk is composed of two measures of risk: market (non-diversifiable or systematic) risk and residual (diversifiable or unsystematic) risk. The purpose of portfolio diversification is to reduce the residual risk of the portfolio.

Tracking Error is a statistical measure of a portfolio's risk relative to an index. It reflects the standard deviation of a portfolio's individual quarterly or monthly returns from the index's returns. Typically, the lower the Tracking Error, the more "index-like" the portfolio.

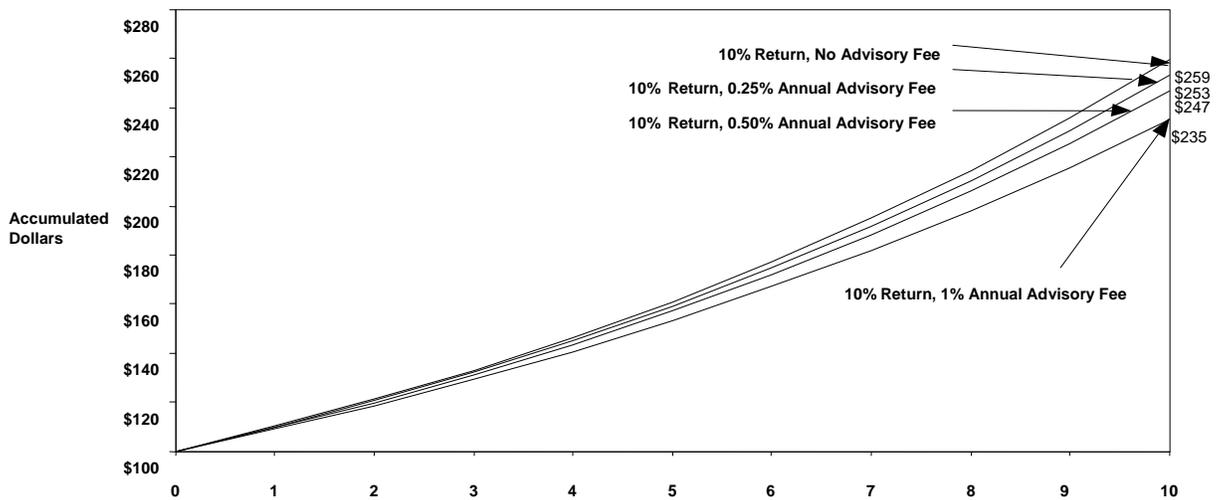
Treynor Ratio represents the portfolio's average excess return over a specified period divided by the beta relative to its benchmark over that same period. This measure reflects the reward over the risk-free rate relative to the systematic risk assumed.

Disclosure Statement

The preceding report has been prepared for the exclusive use of the North Dakota State Investment Board. Unless otherwise noted, performance returns contained in this report do not reflect the deduction of investment advisory fees. The returns in this report will be reduced by the advisory fees and any other expenses incurred in the management of an investment account. The investment advisory fees applicable to the advisors listed in this report are described in Part II of each advisor's form ADV.

The following graphical and tabular example illustrates the cumulative effect of investment advisory fees on a \$100 investment growing at 10% over ten years. Fees are assumed to be paid monthly.

The Cumulative Effect of Advisory Fees



	Accumulated Dollars at End of Years									
	1	2	3	4	5	6	7	8	9	10
No Fee	110.0	121.0	133.1	146.4	161.1	177.2	194.9	214.4	235.8	259.4
25 Basis Points	109.7	120.4	132.1	145.0	159.1	174.5	191.5	210.1	230.6	253.0
50 Basis Points	109.5	119.8	131.1	143.5	157.1	172.0	188.2	206.0	225.5	246.8
100 Basis Points	108.9	118.6	129.2	140.7	153.3	166.9	181.8	198.0	215.6	234.9

10% Annual Return Compounded Monthly, Annual Fees Paid Monthly.

List of Managers That Do Business with Callan Associates Inc.

Confidential – For Callan Client Use Only

Callan Associates takes its fiduciary and disclosure responsibilities to clients very seriously. The list below is compiled and updated quarterly because we believe our fund sponsor clients should have a clear understanding of the investment management organizations that do business with our firm. As of 06/30/14, Callan provided educational, consulting, software, database, or reporting services to this list of managers through one or more of the following business units: Institutional Consulting Group, Independent Adviser Group, Fund Sponsor Consulting, the Callan Investments Institute and the “Callan College.” Per strict policy these manager relationships do not affect the outcome or process by which any of Callan’s services are conducted.

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Clients should also be aware that Callan maintains an asset management division, the Trust Advisory Group (TAG). TAG specializes in the design, implementation and on-going management of multi-manager portfolios for institutional investors. Currently TAG serves as the sponsor and advisor to a multi-manager small cap equity fund and as the non-discretionary adviser to a series of Target Maturity Funds known as the Callan GlidePath® Funds. We are happy to provide clients with more specific information regarding TAG, including detail on the portfolios that it oversees. Per company policy these requests are handled by TAG’s Chief Investment Officer.

Manager Name	Educational Services	Consulting Services
1607 Capital Partners, LLC		Y
Aberdeen Asset Management	Y	Y
Acadian Asset Management, Inc.	Y	
Advisory Research	Y	
Affiliated Managers Group		Y
AllianceBernstein	Y	
Allianz Global Investors U.S. LLC	Y	Y
Allianz Life Insurance Company of North America		Y
Altrinsic Global Advisors, LLC		Y
American Century Investment Management	Y	
Apollo Global Management	Y	
AQR Capital Management	Y	
Ares Management	Y	
Ariel Investments	Y	
Aristotle Capital Management	Y	
Aronson + Johnson + Ortiz	Y	
Artisan Holdings		Y
Atlanta Capital Management Co., L.L.C.	Y	Y
AXA Rosenberg Investment Management	Y	
Babson Capital Management LLC	Y	
Baillie Gifford International LLC	Y	Y
Baird Advisors	Y	Y
Bank of America		Y
Baring Asset Management	Y	
Barrow, Hanley, Mewhinney & Strauss, Inc.		Y
BlackRock	Y	
BMO Asset Management	Y	
BNP Paribas Investment Partners	Y	
BNY Mellon Asset Management	Y	Y
Boston Company Asset Management, LLC (The)	Y	Y
Boston Partners (aka Robeco Investment Management)	Y	Y
Brandes Investment Partners, L.P.	Y	Y
Brandywine Global Investment Management, LLC	Y	
Brown Brothers Harriman & Company	Y	
Cadence Capital Management	Y	

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Capital Group	Y	
CastleArk Management, LLC		Y
Causeway Capital Management	Y	
Central Plains Advisors, Inc.		Y
Chartwell Investment Partners	Y	
ClearBridge Investments, LLC (fka ClearBridge Advisors)	Y	
Cohen & Steers	Y	Y
Columbia Management Investment Advisors, LLC	Y	Y
Columbus Circle Investors	Y	Y
Corbin Capital Partners	Y	
Cornerstone Capital Management Holdings (fka Madison Square)	Y	
Cramer Rosenthal McGlynn, LLC	Y	
Crawford Investment Council		Y
Credit Suisse Asset Management	Y	
Crestline Investors	Y	Y
Cutwater Asset Management	Y	
DB Advisors	Y	Y
Delaware Investments	Y	Y
DePrince, Race & Zollo, Inc.	Y	Y
Deutsche Asset & Wealth Management	Y	Y
Diamond Hill Investments	Y	
DSM Capital Partners		Y
Duff & Phelps Investment Mgmt.	Y	Y
Eagle Asset Management, Inc.		Y
EARNEST Partners, LLC	Y	
Eaton Vance Management	Y	Y
Epoch Investment Partners	Y	
Fayez Sarofim & Company		Y
Federated Investors		Y
First Eagle Investment Management	Y	
First State Investments	Y	
Fisher Investments	Y	
Franklin Templeton	Y	Y
Fred Alger Management Co., Inc.	Y	
Fuller & Thaler Asset Management	Y	
GAM (USA) Inc.	Y	
GE Asset Management	Y	Y
Geneva Capital Management	Y	
Goldman Sachs Asset Management	Y	Y
Grand-Jean Capital Management	Y	Y
GMO (fka Grantham, Mayo, Van Otterloo & Co., LLC)	Y	
Great Lakes Advisors, Inc.		Y
The Guardian Life Insurance Company of America		Y
Guggenheim Investments Asset Management (fka Security Global)	Y	
Harbor Capital		Y
Hartford Investment Management Co.	Y	Y

List of Managers That Do Business with Callan Associates Inc. (continued)

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Heightman Capital Management Corporation		Y
Henderson Global Investors	Y	Y
Hotchkis & Wiley	Y	
Income Research & Management	Y	
Insight Investment Management		Y
Institutional Capital LLC	Y	
INTECH Investment Management	Y	
Invesco	Y	Y
Investec Asset Management	Y	
Jacobs Levy Equity Management		Y
Janus Capital Group (fka Janus Capital Management, LLC)	Y	Y
Jensen Investment Management		Y
J.M. Hartwell	Y	
J.P. Morgan Asset Management	Y	Y
KeyCorp		Y
Lazard Asset Management	Y	Y
Lee Munder Capital Group	Y	
Lincoln National Corporation		Y
Logan Circle Partners, L.P.	Y	
Longview Partners	Y	
Loomis, Sayles & Company, L.P.	Y	Y
Lord Abbett & Company	Y	Y
Los Angeles Capital Management	Y	
LSV Asset Management	Y	
Lyrical Partners	Y	
MacKay Shields LLC	Y	Y
Man Investments	Y	
Manulife Asset Management	Y	
Martin Currie	Y	
Marvin & Palmer Associates, Inc.	Y	
MFS Investment Management	Y	Y
Mondrian Investment Partners Limited	Y	Y
Montag & Caldwell, Inc.	Y	Y
Morgan Stanley Alternative Investment Partners	Y	
Morgan Stanley Investment Management	Y	Y
Mountain Lake Investment Management LLC		Y
Neuberger Berman, LLC (fka, Lehman Brothers)	Y	Y
Newton Capital Management	Y	
Northern Lights Capital Group		Y
Northern Trust Global Investment Services	Y	Y
Nuveen Investments Institutional Services Group LLC	Y	
Old Mutual Asset Management	Y	Y
OppenheimerFunds, Inc.	Y	
Pacific Investment Management Company	Y	
Palisade Capital Management LLC	Y	
Parametric Portfolio Associates	Y	

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Peregrine Capital Management, Inc.	Y	Y
Philadelphia International Advisors, LP	Y	
PineBridge Investments (formerly AIG)	Y	
Pinnacle Asset Management	Y	
Pioneer Investment Management, Inc.	Y	
PNC Capital Advisors (fka Allegiant Asset Mgmt)	Y	Y
Post Advisory	Y	
Principal Financial Group		Y
Principal Global Investors	Y	Y
Private Advisors	Y	
Prudential Fixed Income Management	Y	
Prudential Investment Management, Inc.	Y	Y
Putnam Investments, LLC	Y	Y
Pyramis Global Advisors	Y	
Rainier Investment Management	Y	
RBC Global Asset Management (U.S.) Inc.		Y
Research Affiliates		Y
Regions Financial Corporation		Y
RCM		Y
Robeco Investment Management (aka Boston Partners)	Y	Y
Rothschild Asset Management, Inc.	Y	Y
RS Investments	Y	
Russell Investment Management	Y	
Santander Global Facilities		Y
Schroder Investment Management North America Inc.	Y	Y
Scout Investments	Y	
SEI Investments		Y
SEIX Investment Advisors, Inc.	Y	
Select Equity Group	Y	
Smith Graham and Company		Y
Smith Group Asset Management		Y
Standard Life Investments	Y	
Standish (fka, Standish Mellon Asset Management)	Y	
State Street Global Advisors	Y	
Stone Harbor Investment Partners, L.P.		Y
Systematic Financial Management	Y	
T. Rowe Price Associates, Inc.	Y	Y
Taplin, Canida & Habacht	Y	
TCW Asset Management Company	Y	
UBS	Y	Y
Union Bank of California		Y
Van Eck	Y	
Victory Capital Management Inc.	Y	
Voya Investment Management (fka ING Investment Management)	Y	Y
Vulcan Value Partners, LLC		Y

List of Managers That Do Business with Callan Associates Inc. (continued)

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Waddell & Reed Asset Management Group	Y	Y
WCM Investment Management	Y	
WEDGE Capital Management		Y
Wellington Management Company, LLP	Y	
Wells Capital Management	Y	
Western Asset Management Company	Y	
William Blair & Co., Inc.	Y	Y

Callan

Of the investment manager candidates listed in this report, the firms specified below do business with Callan Associates Inc. as of the date the most recent quarter end. Given complex corporate and organizational ownership structures, parent and affiliate firm relationships are not listed here. Parent company ownership of the firms included in this report and any relationship with Callan can be provided at your request. A list of Callan's investment manager clients as of the most recent quarter end is attached for your reference. Because Callan's client list of investment managers changes periodically, the above information may not reflect recent changes. Clients are welcome to request a list of Callan's investment manager clients at any time.

In no way do these affiliations affect the outcome or process by which Callan's investment manager searches are conducted.

Firm	Does Business with Callan*	Does Not Do Business with Callan*
BlackRock	X	
J.P. Morgan Asset Management	X	

*Based upon Callan manager clients as of the most recent quarter end.

North Dakota State Investment Board

US Mortgage Due Diligence

22 August 2014

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6. **Risk Management at BlackRock**
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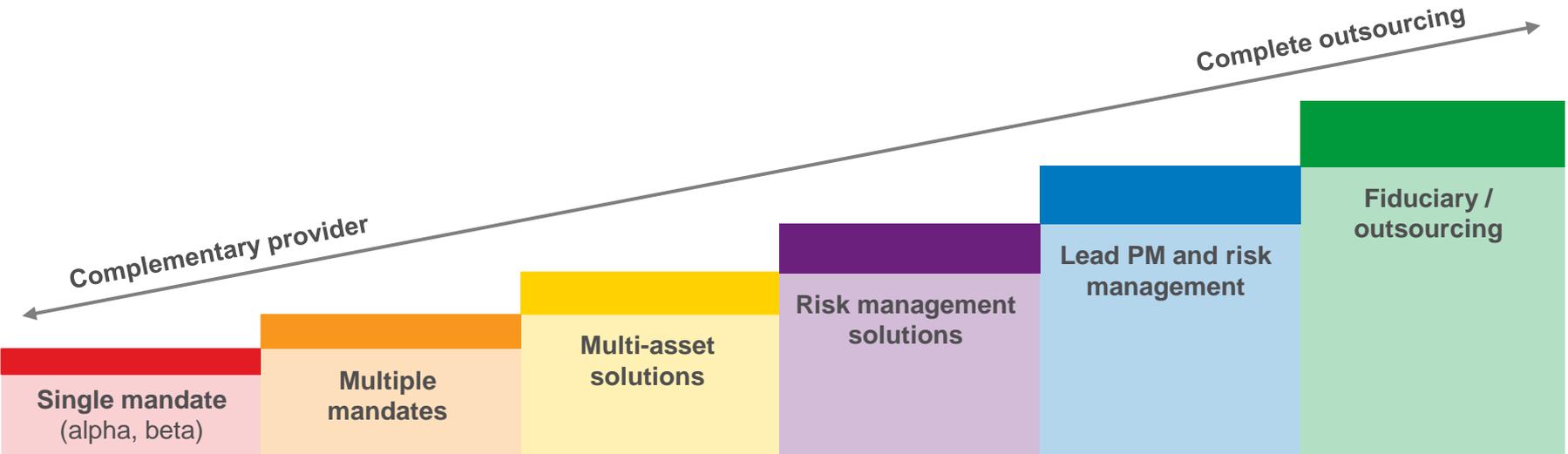
1. BlackRock Overview

BlackRock: Clients are our sole focus

We aspire to be the most respected investment and risk manager in the world for clients

- ▶ Understand the outcome each client is looking to achieve
- ▶ Recognize the core of any investment solution is performance
- ▶ Protect our clients' interests through our investments in risk management, analytics and systems

We seek to provide what investors need – from a single asset class mandate to full outsourcing



Firm culture and structure reinforce our client-centric approach

Independent asset manager focused only on clients

- ▶ Established in 1988 and public since 1999 (NYSE: BLK)
- ▶ Independent Board of Directors
- ▶ No proprietary trading
- ▶ Group dedicated to corporate governance

Deep understanding of regulatory requirements

- ▶ Manage portfolios for clients subject to varied and complex regulatory regimes
- ▶ Operate on behalf of investors under 50 regulatory authorities worldwide
- ▶ Significant experience managing portfolios for official institutions and governments

BlackRock Solutions® foundation for managing risk

- ▶ Deliberate, diversified and scaled risk enables us to invest with conviction in pursuit of alpha
- ▶ Internally developed risk tools and analysis offered directly to clients as a service
- ▶ Reinforces transparency and our responsibility to clients

History of innovation and evolution to better serve investors

1970s	<ul style="list-style-type: none">• Pioneered index and quantitative investing
1980s	<ul style="list-style-type: none">• Created the First Term Trust (closed-end fund)• Initiated fixed income and international indexing
1990s	<ul style="list-style-type: none">• Created the industry's first target date fund• Introduced exchange-traded funds under World Equity Benchmark Shares (WEBS) brand (now iShares® ETFs)
2000s	<ul style="list-style-type: none">• Launched BlackRock Solutions® for risk management and advisory services• Enhanced capabilities by strengthening equities, and adding alternatives, real estate, passive, and scientific investments• Launched Financial Markets Advisory business
2010s	<ul style="list-style-type: none">• Engaged by US and European governments for critical risk assessments and banking sector stabilization strategies• Launched BlackRock Investment Institute• Introduced Global Capital Markets desk• Launched first target maturity fixed income ETF• Created an index to track sovereign credit risk (BlackRock Sovereign Risk Index)

Timeline includes history from predecessor entities

Depth of investment resources maximizes performance potential

Organization drives idea and analysis sharing

- ▶ 124 investment teams located in 17 countries connect through a common culture and operating platform*
- ▶ The BlackRock Investment Institute (BII), our internal investor forum, facilitates sharing and debates insights
- ▶ Daily global meeting for BlackRock's 1,900+ investment professionals to discuss markets, portfolio positioning and ongoing trends
- ▶ Chief Investment Officers ensure rigorous, deliberate and repeatable investment processes

Investors potential benefit from scale of infrastructure

- ▶ Global trading function seeks to enable increased access to liquidity and produces trading efficiencies, improving execution
- ▶ Capital Markets Group leverages scale and breadth of platform to help maximize allocations and to seek alpha opportunities in primary markets
- ▶ Dedicated Risk & Quantitative Analysis (RQA) professionals partner with portfolio teams to monitor and analyze risk
- ▶ Proprietary **Aladdin**[®] platform integrates portfolio management, risk analytics, trading and operations

*Data as of 31 March 2014

Built to generate alpha

Collective expertise

Investment
Research

Daily
Global Meeting

BlackRock
Investment
Institute

Chief Investment
Officers

Global infrastructure

Trading

Dedicated Capital
Markets

Aladdin[®]

Risk &
Quantitative
Analysis

Positioned to address client needs

Breadth of capabilities enables outcome-based solutions tailored to individual client objectives

\$4.59 trillion in assets under management

Equity

\$2.5 trillion

- Capabilities across investment styles: index, active fundamental, scientific and absolute return
- Global, regional and sector-specific investing

Fixed Income

\$1.3 trillion

- Manage strategies across benchmark types and styles: index, fundamental, model-based and absolute return
- Specialized experts covering all market sectors

Alternatives

\$117 billion

- Specialized capabilities across real estate, private equity, direct hedge funds, fund of hedge funds, infrastructure and renewable power
- Solutions-oriented approach extends to alternatives portfolio construction

Multi-asset

\$374 billion

- Outcome focused: target-date, balanced risk factor, and liability-driven investing
- Asset-class agnostic perspective facilitates unbiased market views, advice, and portfolio solutions

Cash

\$268 billion

- Recognized as 'go to' leader in credit and liquidity
- Flexible product range across multiple currencies

Scalable services and infrastructure

Risk Management

- Centralized platform analyzes risk across asset classes
- Leverage for risk management, investment decision support and performance analytics

Advisory

- Advise public and private financial institutions on complex capital markets and balance sheet exposures
- Managed or advised on over \$8 trillion in asset and derivative portfolios

Transition Management

- Partner with clients to help save costs and reduce risks when changing investment exposures
- Executed over 3,000 individual transitions with assets totaling \$2.3 trillion over the past five years

Securities Lending

- Focus on research, technology and coordination with portfolio management functions that seek to deliver above market returns
- Covers securities in over 30 markets globally

Trading

- More than 50,000 trades per day across equity, fixed income, cash, currency and futures
- 24-hour global coverage across seven trading desks

AUM As of 30 June 2014

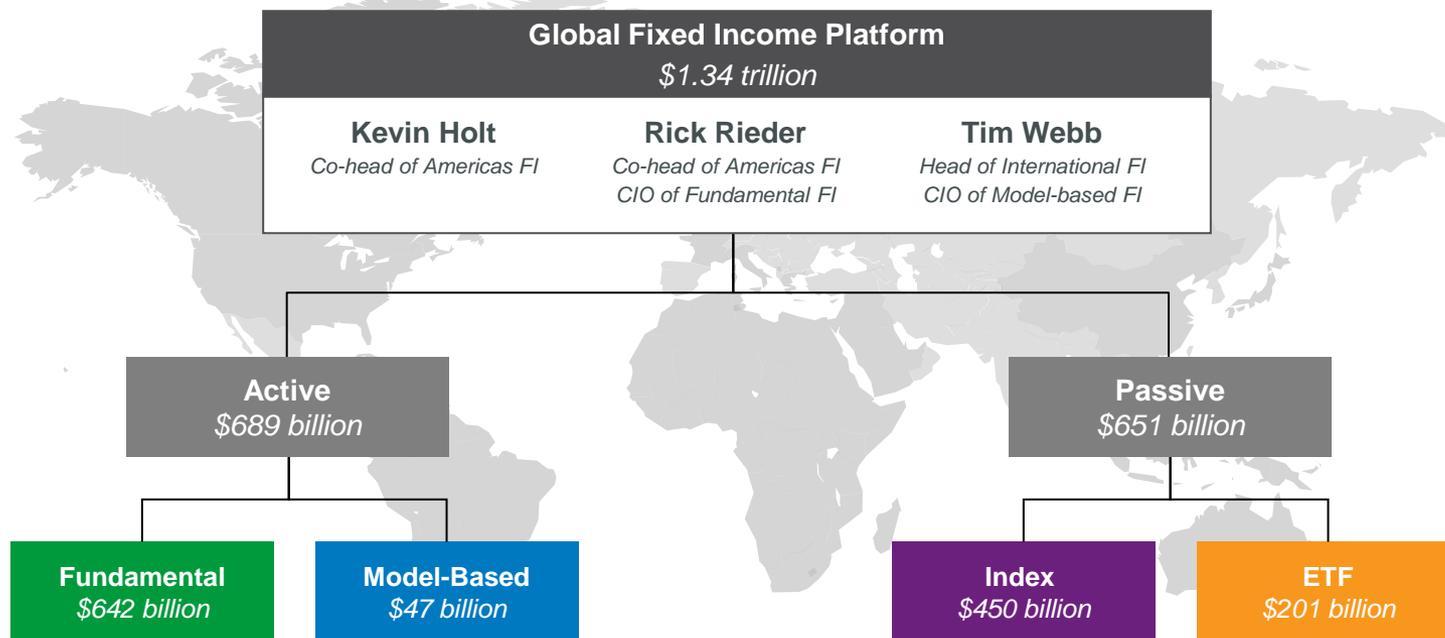
2. Global Fixed Income Platform Overview

Global fixed income platform provides greater access to investment opportunities

Benefits of BlackRock's breadth and depth

- ▶ **Talent:** 400+ fixed income professionals generate ideas and identify insights to create alpha opportunities
- ▶ **Trading:** Global execution platform provides deep market access
- ▶ **Technology:** Best-in-class analytics and risk management enables us to better understand and take risk in pursuit of alpha
- ▶ **Culture:** Fiduciary commitment to advising and serving clients drives our investment culture

Experienced leadership team oversees portfolio teams with decision-making autonomy



AUM in USD as of 30 June 2014; excludes fixed income alternative assets

BlackRock's Global Fixed Income Platform

Portfolio Management Teams

Responsible for asset allocation, positioning, and performance

Multi-sector

- **Unconstrained** (Rieder, Miller)
- **Core/Core Plus Funds** (Rieder, Miller)
- **Customized Multi-Sector** (Dickstein)
- **Short Duration** (Musmanno)
- **US Model-based** (Radell)
- **Financial Institutions Group** (Jacobs)

Sector-specific

- **High Yield** (Keenan)
- **Bank Loans** (Hart)
- **Liability-Driven** (Bassas)
- **US IG Credit** (Cucunato)
- **Agency Mortgages** (Kraeger)
- **Inflation-linked** (Hegarty)
- **Securitized Assets** (Robertson)
- **Municipals** (Hayes)

International

- **Global** (Thiel)
- **Emerging Markets** (Trigo-Paz)
- **European Credit** (Phelps)
- **Euro** (Krautzberger)
- **Sterling** (Winship)
- **UK Model-based** (Harper)
- **Asia-Pacific** (Kim)
- **Yen FI** (Endo)

Alternatives

- **Fundamental Global FI** (Spodek)
- **Model-based FI Multi-Strategy** (Webb)
- **Opportunistic Credit—value/event-driven** (Trucano)
- **Opportunistic Credit—structured finance** (Bacro, Redmond)
- **Aviation** (Tarnow)

Global Sector Specialist Teams

Responsible for sector oversight, research, and analysis

Rates & FX

Securitized Assets

Credit

Municipals

Emerging Markets

BlackRock resources directly benefit investment teams

Portfolio Solutions

Investment professionals implement ideas and ensure scalability and consistency in portfolio construction

Trading

Centralized trading function and capital markets presence helps increase liquidity and improve execution

Risk Management

Leverage BlackRock Solutions® analytics and Risk & Quantitative Analysis Group to generate alpha

Product Strategy

Investment professionals serving as bridge between portfolio teams and clients

COO

COOs and business managers align the firm's non-investment resources

As of 30 June 2014 / () Lead portfolio manager

BlackRock's comprehensive fixed income capabilities are designed to meet the challenges of the current investment environment

Today's investor landscape

Investors should consider casting a wider net to uncover opportunity and deliver returns

Investor demand for return, liquidity and lower volatility makes timely access to the best fixed income opportunities crucial

With diversification becoming increasingly vital, the way you structure your portfolio can matter as much as the securities in it

Deep expertise and analytical resources are increasingly instrumental given the amount and complexity of data that drives today's markets

The BlackRock advantage

Having specialists in every fixed income sector located throughout the world helps us identify hidden opportunities

The breadth and depth of our investment platform allows us to capture and implement investment opportunities in a competitive environment

We assemble portfolios to meet the specific needs of our clients given our complete range of capabilities and vast expertise in investments

Aladdin's® unique integrative technology and risk analytics help put investment and market insights at the fingertips of portfolio managers

Extensive insight

Robust access

Breadth of platform

Stronger technology

The opinions expressed are as of June 2014 and are subject to change at any time due to changes in market or economic conditions

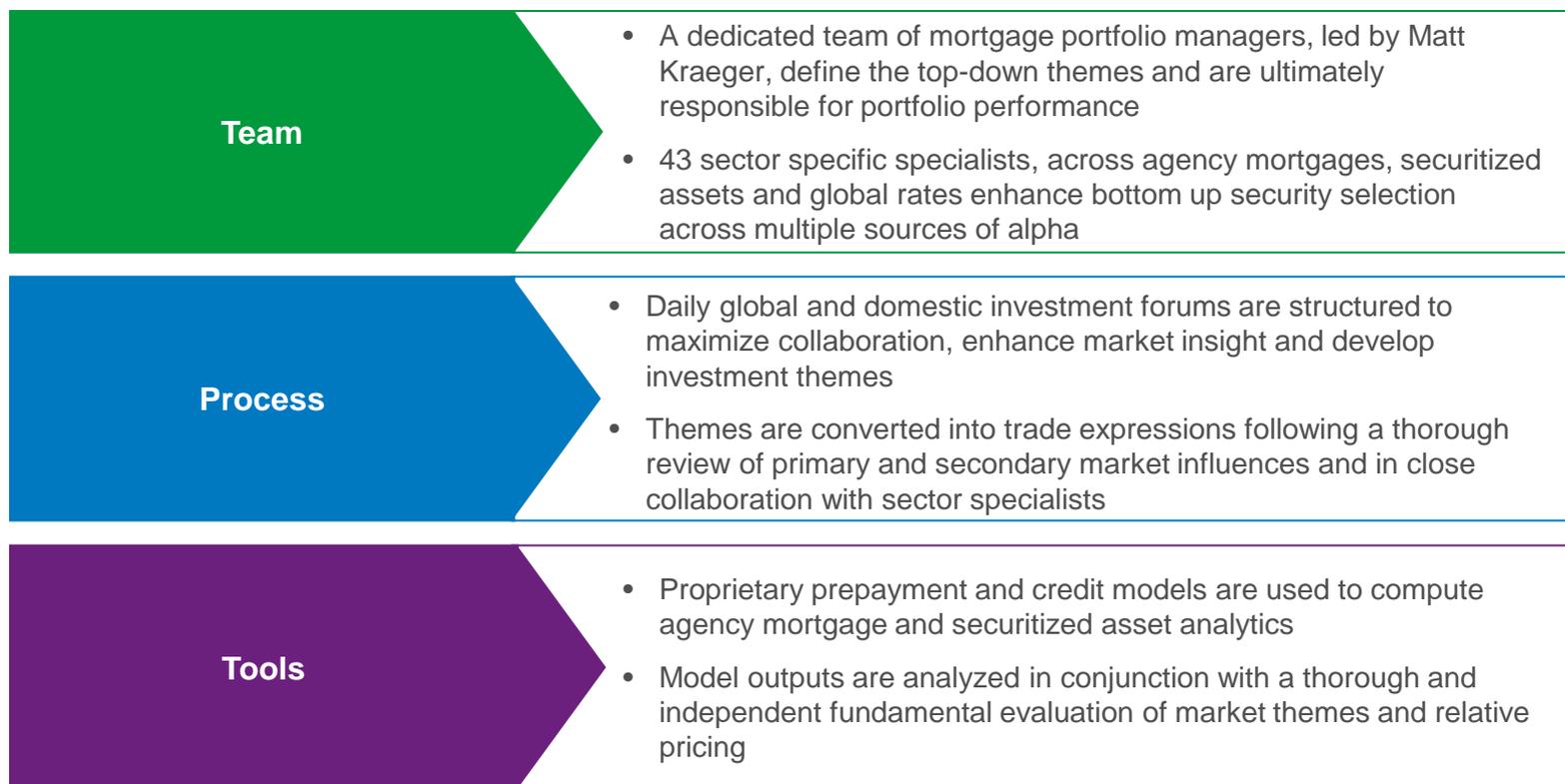
3. BlackRock US Mortgage Bond Team, Philosophy and Process

Significant mortgage expertise and key differentiating factors

Mortgage strategies are a core part of BlackRock's fundamental fixed income business with over \$140 billion in agency MBS and securitized assets under management

BlackRock's investment, allocated across both team and infrastructure, has resulted in the consistent long-term success of the US mortgage strategy

Key differentiators:



As of June 30, 2014

Sub-sector teams within Global Rates and Securitized Assets help to support the Mortgage Team

Portfolio management team allocates capital to sectors with the most value and manages portfolio risk exposures in accordance with client guidelines and goals

Sector teams provide sector relative value input and individual security selection expertise for the portfolio management team

Models

Proprietary Mortgage Analytics

BlackRock Solutions® provides real-time analytics & customized reports across Agency, Non-Agency RMBS and CMBS securities and portfolios

- Detailed Agency Prepayment Model
- Option Adjusted Spreads (OAS) across coupons
- Loan level credit models across both Non-Agency RMBS and CMBS



Portfolio Team

Portfolio Managers

Matt Kraeger, Lead Portfolio Manager
Siddharth Mehta · Jason Bennett

Product Strategists

Sam Brindley · Matthew Callahan



Portfolio Analysis & Feedback

Risk & Quantitative Analysis (RQA)

Independent top-down and bottom-up risk oversight on portfolios
Ensure risks are in line with client guidelines and consistent with the team's current investment themes

Portfolio Analytics Group (PAG)

Provide real-time analytics and customized portfolio reports



Sector Specialists

Global Rates (20)

Government bond specialists help to identify relative value across the curve, in both Treasuries and Swaps and across the volatility surface

Agency MBS (10)

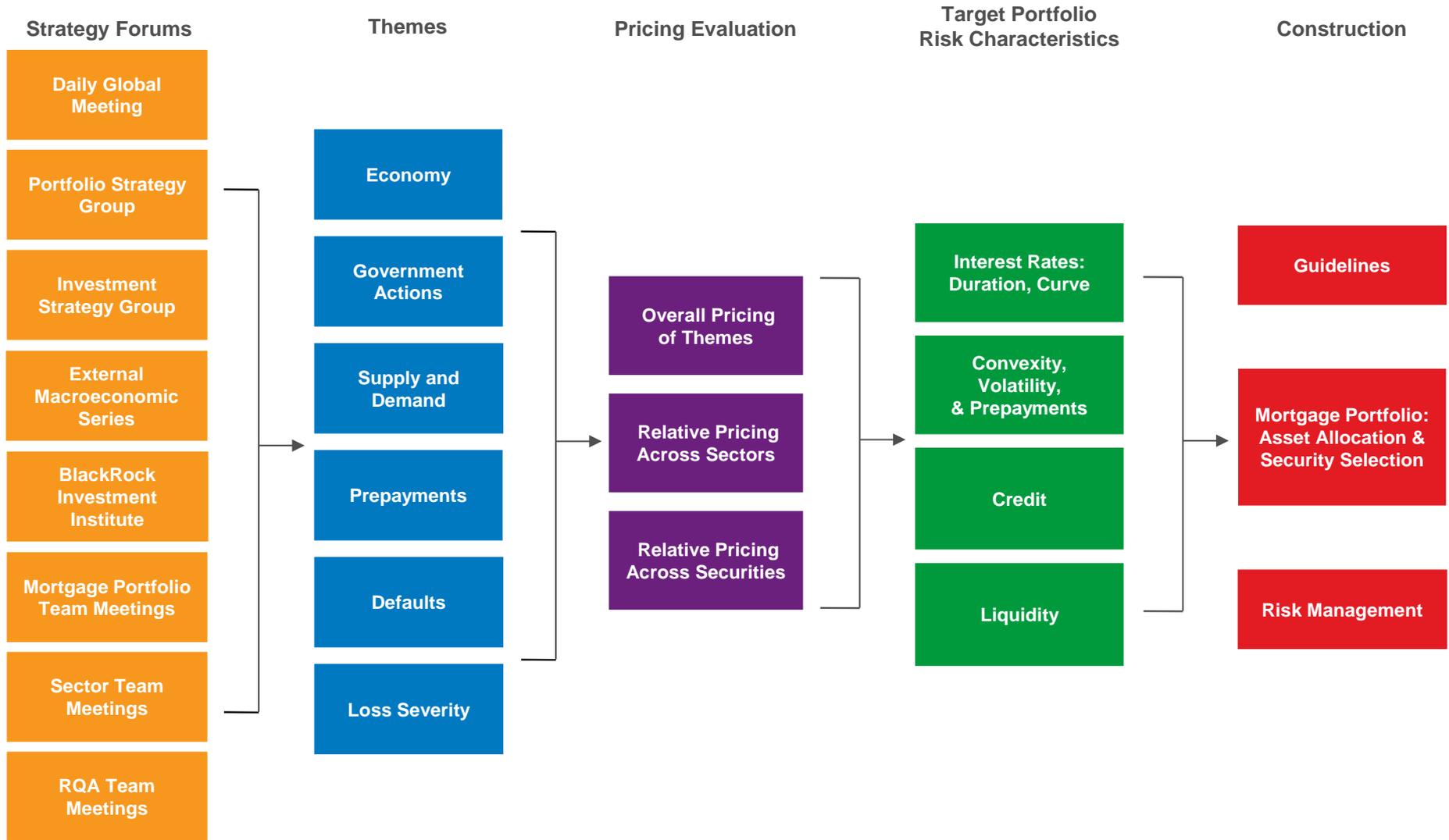
Sector specialist across Specified Pools, CMO's, ARM's and Derivatives allow for deep dives into sector trends and bond level detail

Securitized Assets (13)

Sector specialists across Non-Agency RMBS, CMBS, ABS and CLO's provide insights on sector trends, along with bond level collateral and structural relative value

() number of investment professionals as of June 30, 2014

MBS Portfolio Construction Philosophy



Source: BlackRock

Sources of alpha across both agency and mortgage credit

BlackRock's US Mortgage Bond Team seeks alpha via the mortgage basis, coupon/product swaps, specified pools, CMO's, derivatives and mortgage credit where permissible

- ▶ Multiple alpha sources provide US Mortgage bond portfolios with high potential for consistent, positive active returns

Agency Mortgage Alpha Sources	
Mortgage "Basis"	Relative value vs. other liquid products such as Treasuries or Swaps
Coupon Swaps	Generally a prepayment view, but also dependent on supply and curve
15yr vs. 30yr GN vs. Conventionals	Depends on supply, convexity, volatility, prepayments and structured support
Specified Pools	Depends on convexity, prepayments, financing and structured support
Agency CMO	Depends on convexity, prepayments and financing
Agency Derivatives	Allows us to express targeted views on absolute and relative prepayments

Mortgage Credit Alpha Sources	
Non-Agency RMBS	Can add additional yield, but with an added element of credit risk
Sub-Sector Allocation	Dependent of relative pricing between Prime, Alt-A, Option ARM and Subprime
Fixed vs. Floating	Dependent on duration considerations and relative value vs. Agency (carry adjusted)
CMBS	Can add additional yield with multiple options across both the maturity and credit spectrum
Conduit vs. Agency	Dependent on portfolio mandate and general risk tolerance
Investment Grade vs. High Yield	Deep collateral study allows us to take advantage of additional yield further down in credit
ABS	Allows for additional yield picks, with typically shorter duration profiles

BlackRock MBS Risk Analytics

Best-in-class MBS analytics provided through BlackRock Solutions®

- ▶ Analytics produced for BlackRock and 130+ external clients, including major MBS market participants
- ▶ Several hundred billion of mortgage securities currently modeled and processed on BlackRock's platform

Significant resources dedicated to MBS

- ▶ Dedicated mortgage research team with 39 professionals
- ▶ Commitment to continually developing and enhancing models

Proprietary prepayment and credit models produce quality-controlled analytics across Agency, Non-Agency RMBS and CMBS collateral

- ▶ Agency Prepayment, Non-Agency Default, Delinquency, Loss Severity, and Prepayment models
- ▶ Agency and whole loan transition matrix prepayment and credit models
- ▶ Many factors used to estimate prepayment speeds and credit performance
 - Examples include seasoning, occupancy, FICO, current LTV, Refi-incentive, media effect, HPA, underwriting condition, etc.
- ▶ Analytics calculated include Option Adjusted Duration (OAD), Option Adjusted Convexity (OAC), Key Rate Durations (KRD), spread duration, cumulative loss, principal writedown, etc.
- ▶ BlackRock Solutions' proprietary commercial real estate loan loss modeling platform (SPEAR) uses property specific information derived from periodic underwriting reviews on underlying properties
- ▶ Model output and analytics are constantly monitored

MBS and CMO Executive Sector Report 31-DEC-2008

Market Date	1M Libor	3M Libor	FGPC YLD	1Yr TSY	2Yr TSY	3Yr TSY	5Yr TSY	10Yr TSY	30Yr TSY	5Y SwSp
31-DEC-2008	0.4363	1.4250	3.8155	0.3403	0.7682	0.9849	1.5538	2.2469	2.6927	58.8

Portfolio	NAV (m)	Benchmark	%NAV			Agency CHO			TOTAL			< 2 WAL			
			Htg. Prod.	30Yr	15Yr	Htg Deriv	Fit CHO	Agency CHO	Agency CHO	Agency CHO	Agency CHO				
Mortgage	4,634,786		99.65	77.30	18.74	0.15	0.05	0.21	0.47	0.47	0.01	1.99	0.48	1.88	0.55
BRS-MBS1	927,907 LEH_MBS		104.26	82.84	20.04				0.13	0.13		1.18	0.09	1.18	
BRS-MBS2	642,222 LEH_MBS		99.26	81.78	16.70	0.07	0.01	0.08				0.55	0.09	0.64	
BRS-MBS3	464,554 CG_MTG		92.21	75.68	10.86	0.03	0.01	0.04	-0.22	-0.22	0.12	0.86	4.38	5.37	0.35
BRS-MBS4	2,600,102 CG_MTG		99.42	74.51	20.18	0.25	0.09	0.34	0.83	0.83		1.77	0.06	1.82	0.52

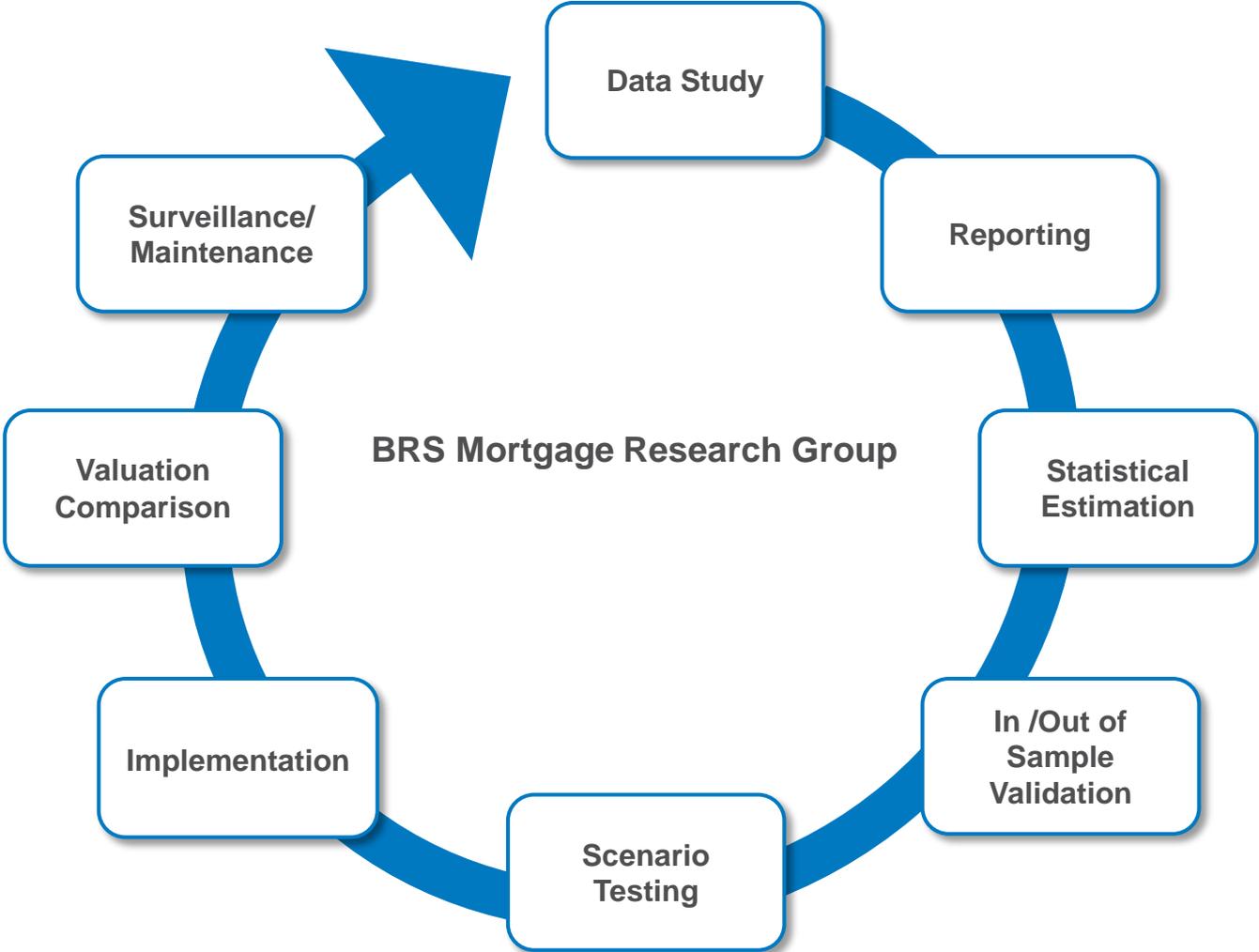
Mortgages by Product and Coupon Exposure Report 31-DEC-2008

Market Date	1M Libor	3M Libor	FGPC YLD	1Yr TSY	2Yr TSY	3Yr TSY	5Yr TSY	10Yr TSY	30Yr TSY	5Y SwSp	10Y SwSp	30Y SwSp	COO.NA.IG.11	COO.NA.FPI.10
31-DEC-2008	0.4363	1.4250	3.8155	0.3403	0.7682	0.9849	1.5538	2.2469	2.6927	58.8	25.1	1.73	127.1	737.6

Fund/ Sector	Market Value (m)	Count	Port	Bench	Active	Port	Bench	Active	Duration	Contribution	Convexity	Spread	Duration	Yield	QR							
Sample MBS 1	927,907	450	100.00	100.00		2.29	2.67	-0.37	2.29	2.67	-0.37	-1.43	-1.44	0.02	2.98	2.97	0.01	4.10	4.12	-0.03	222	
TOTAL ASSETS	927,907	450	100.00	100.00		2.29	2.67	-0.37	2.29	2.67	-0.37	-1.43	-1.44	0.02	2.98	2.97	0.01	4.10	4.12	-0.03	222	
CASH	0	0																	0.44	0.44	0.00	106
Residential Mortgages	927,907	447	104.26	100.00	4.26	2.50	2.67	-0.17	2.60	2.67	-0.06	-1.32	-1.44	0.13	2.96	2.97	-0.01	4.28	4.12	0.16	239	
30 Yr Conv	278,514	286	30.02	68.33	-38.32	3.15	2.97	0.17	0.94	2.03	-1.09	-1.54	-1.56	0.02	3.31	3.11	0.20	4.35	4.26	0.08	179	
COUPON<=4.5%	7,396	2	0.80	1.92	-1.12	3.59	3.50	0.09	0.03	0.07	-0.04	-1.88	-1.24	-0.63	4.05	3.93	0.12	4.00	4.02	-0.02	97	
COUPON 5.0%	72,603	4	7.94	16.25	-8.31	2.94	2.99	-0.06	0.23	0.49	-0.25	-1.86	-1.82	-0.04	3.27	3.23	-0.05	3.82	3.96	-0.04	122	
COUPON 5.5%	135,791	120	14.63	25.69	-11.05	3.07	2.88	0.19	0.45	0.74	-0.29	-1.60	-1.66	0.06	3.20	3.01	0.18	4.28	4.12	0.16	176	
COUPON 6.0%	23,492	120	2.53	17.55	-15.02	3.75	2.86	0.89	0.10	0.50	-0.41	-1.02	-1.37	0.35	3.77	2.86	0.91	4.98	4.43	0.55	242	
COUPON 6.5%	35,310	27	3.83	5.28	-1.45	3.33	3.33	0.00	0.13	0.18	-0.05	-0.97	-1.01	0.03	3.35	3.29	0.06	5.02	4.99	0.03	268	
COUPON 7.0%	1,487	6	0.16	1.24	-1.19	3.89	3.61	0.28	0.01	0.05	-0.04	-0.42	-0.76	0.15	3.98	3.55	0.43	5.59	5.56	0.03	317	
COUPON 7.5%	227	6	0.02	0.25	-0.23	3.65	3.58	0.07	0.00	0.01	-0.01	-0.33	-0.57	0.05	3.81	3.65	0.16	6.02	6.01	0.00	368	
COUPON 8.0%	937	1	0.10	0.04	0.06	3.23	3.54	-0.31	0.00	0.00	0.00	-0.41	-0.48	0.08	3.41	3.59	-0.18	6.54	6.64	-0.10	443	
15 Yr Conv	183,562	120	19.78	12.15	7.63	1.99	1.99	-0.01	0.39	0.24	0.15	-0.83	-1.03	0.20	2.56	2.61	-0.05	3.76	3.48	0.28	211	
COUPON<=4.5%	36,082	9	3.89	5.14	-1.25	2.28	2.20	0.08	0.09	0.11	-0.02	-0.64	-1.10	0.46	2.80	2.81	-0.01	3.43	3.34	0.09	188	
COUPON 5.0%	74,505	5	8.03	4.05	3.98	1.90	1.90	0.00	0.15	0.08	0.08	-1.04	-1.07	0.02	2.59	2.55	0.04	3.56	3.47	0.09	179	
COUPON 5.5%	19,633	9	2.12	1.92	0.19	1.92	1.79	0.14	0.04	0.03	0.01	-0.74	-0.94	0.20	2.47	2.37	0.11	3.83	3.65	0.18	229	
COUPON 6.0%	28,801	86	3.19	0.88	2.22	1.76	1.74	0.02	0.05	0.02	0.04	-0.76	-0.72	0.05	3.21	2.28	0.93	3.90	3.82	0.08	234	
COUPON 6.5%	24,501	8	2.64	0.15	2.49	2.14	1.84	0.31	0.06	0.00	0.05	-0.58	-0.46	-0.09	2.45	2.23	0.22	4.42	4.31	0.10	304	
COUPON 7.0%	40	1	0.00	0.00	0.00	1.61	1.61	0.00	0.00	0.00	0.00	-0.39	-0.29	0.06	2.06	2.06	0.00	4.36	4.36	0.00	326	
CMBS	492,494	24	53.08	12.00	41.08	2.34	2.36	-0.02	1.24	0.28	0.96	-1.39	-1.68	0.29	2.93	3.03	-0.10	4.42	4.11	0.31	206	

Screenshots provided here for illustrative purposes only

BlackRock's Model Development Cycle



Model outputs are used in conjunction with model-independent approaches

▶ In addition to model-based analysis, the BlackRock US Mortgage Team examines historical relationships, positioning themes and sentiment, originator disclosures, carry differentials, political/policy analysis, and other valuation signals during the investment process

- Access to primary market resources including interaction with originators, servicers and policy makers help to identify emerging themes across the agency MBS market

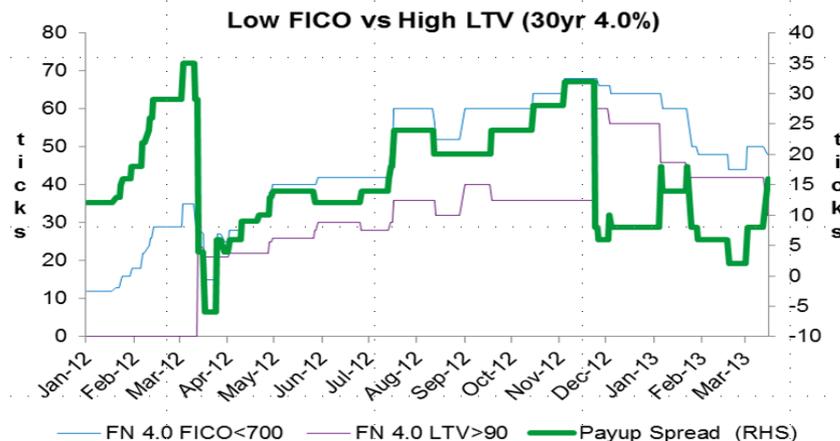
▶ Differences between model-based and model-independent approaches lead to further discussions across the team and throughout the firm

A study of origination trends, including the influence of non-bank servicers...

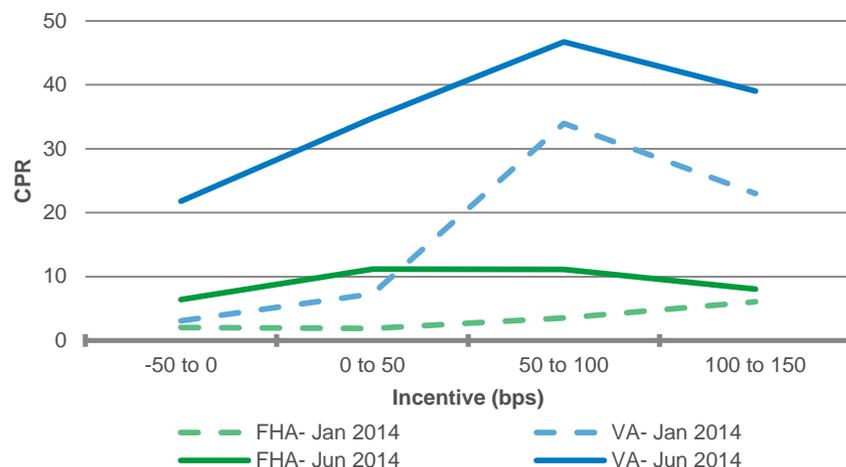
Rank	Lender	Total Mortgage Originations (\$bn)										Mkt Share
		1Q12	2Q12	3Q12	4Q12	1Q13	2Q13	3Q13	4Q13	1Q14	1Q14	
1	WFC	\$130	\$131	\$141	\$126	\$110	\$114	\$ 82	\$ 51	\$ 37	15.9%	
2	JPM	\$ 41	\$ 47	\$ 50	\$ 54	\$ 56	\$ 53	\$ 45	\$ 26	\$ 19	8.1%	
3	Quicken Loans Inc.	\$ 11	\$ 14	\$ 20	\$ 25	\$ 26	\$ 24	\$ 17	\$ 13	\$ 11	4.8%	
4	BAC	\$ 16	\$ 19	\$ 21	\$ 22	\$ 25	\$ 27	\$ 24	\$ 14	\$ 11	4.6%	
5	USB	\$ 20	\$ 23	\$ 23	\$ 23	\$ 22	\$ 19	\$ 16	\$ 9	\$ 7	2.9%	
6	PHH	\$ 14	\$ 13	\$ 14	\$ 14	\$ 13	\$ 15	\$ 15	\$ 10	\$ 6	2.7%	
7	C	\$ 16	\$ 14	\$ 17	\$ 19	\$ 19	\$ 19	\$ 17	\$ 9	\$ 6	2.7%	
8	Flagstar Bank	\$ 11	\$ 13	\$ 15	\$ 15	\$ 12	\$ 11	\$ 8	\$ 6	\$ 5	2.1%	
9	PennyMac	\$ 2	\$ 3	\$ 6	\$ 10	\$ 9	\$ 9	\$ 8	\$ 6	\$ 5	2.1%	
10	NSM	\$ 1	\$ 2	\$ 2	\$ 3	\$ 3	\$ 7	\$ 8	\$ 6	\$ 5	1.9%	
11	WAC	NA	NA	NA	\$ -	\$ -	\$ 5	\$ 6	\$ 5	\$ 4	1.6%	
12	Freedom Mortgage Corp.	NA	NA	NA	\$ 5	\$ 6	\$ 4	\$ 3	\$ 3	\$ 4	1.6%	
13	BBT	\$ 8	\$ 8	\$ 8	\$ 9	\$ 9	\$ 9	\$ 8	\$ 5	\$ 4	1.6%	
14	STI	\$ 8	\$ 8	\$ 8	\$ 8	\$ 9	\$ 9	\$ 8	\$ 4	\$ 3	1.3%	
15	Franklin American Mortgage Co.	\$ 5	\$ 5	\$ 6	\$ 6	\$ 6	\$ 6	\$ 5	\$ 4	\$ 3	1.3%	
Top 30 mkt share of total		80%	79%	77%	69%	69%	69%	69%	66%	67%		
Non-bank mkt share of top 30		17%	17%	21%	24%	24%	26%	27%	33%	36%		

Source: BlackRock, Goldman Sachs, BlackRock

Specified pool pay-up behavior can vary substantially, even between stories that are seemingly alike



...lead to alpha generating opportunities, perhaps not identified by models which analyze historic relationships



Spectrum of US Mortgage Mandates

\$19.76 billion in US Mortgage mandates*, including both agency only and broader strategies that include mortgage credit

- ▶ \$4B in specific mortgage credit mandates including Non-Agency RMBS, CMBS and ABS

BlackRock works with clients to determine appropriate benchmark and guidelines

Type of Portfolio	Common Indices	Eligible Assets
Mortgage/Treasury	Barclays or Citigroup Mortgage/Treasury Index	Agency MBS — Pass-throughs, CMOs, Derivatives Treasuries, Swaps, Futures, Swaptions, Agency Debt
Agency	Barclays or Citigroup Mortgage Index ex-Hybrid ARMs	Agency MBS — Pass-throughs, CMOs, Derivatives Treasuries, Swaps, Futures, Swaptions, Agency Debt Maximum 20% NAV in Non-Agency MBS, CMBS, ABS
Commercial Mortgage-Backed Securities (CMBS)	Barclays Capital CMBS Investment Grade (or similar) Index	CMBS, CMBX, Treasuries, Futures, Swaps, Swaptions Maximum 20% NAV in Agency MBS
Non-Agency MBS	Merrill 3-Month LIBOR Index	Non-Agency MBS — Pass-throughs, CMOs, Derivatives Treasuries, Futures, Swaps, Swaptions, ABS, ABX, Agency MBS
Hybrid Agency, Non-Agency, and CMBS	Barclays MBS Index or Merrill 3-Month LIBOR Index	Non-Agency MBS — Pass-throughs, CMOs, Derivatives CMBS, CMBX Treasuries, Futures, Swaps, Swaptions, ABS, ABX, Agency MBS

*Across all portfolios within Fundamental Fixed Income including total return accounts, insurance accounts, mutual funds

Client Investment Guideline Considerations

Investment guidelines are designed with the client to ensure that market, liquidity, and credit risks within each portfolio are well defined and acceptable

MBS Guideline Checklist

Benchmark Selection*

- Barclays Capital MBS Index (with or without Hybrid ARMs)
- Citigroup MBS Index
- Absolute Return

Duration Tolerance

- Typical band: +/- 20% or +/- 0.5 to 1.0 years, depending on risk tolerance

CMO/Mortgage Derivative Inclusion

- Standard CMOs (PAC bonds, TAC bonds, sequential pay bonds, floaters)
- Stripped mortgage-backed securities (IOs, POs)
- “Derivative CMOs” (inverse floaters, IIOs, support bonds)

Other Non-Index holdings to be considered

- Treasuries
- Futures
- Swaps
- Swaptions
- Non-Agency RMBS
- CMBS (Private label and Agency)
- ABS

Average Minimum Credit Quality

Derivatives Usage/Policy

Counterparty Limitations

Use of Leverage

*Benchmark's listed above represent common mortgage benchmarks, however the list is not comprehensive

Why BlackRock for Mortgage-Backed Securities?

Superior performance

Long-term track record of strong risk adjusted performance on a 1yr, 3yr , 5yr, 7yr and 10yr basis

Team, Process & Tools

A dedicated portfolio management team, focused solely on US mortgage portfolios, draws from the broad reach of BlackRock's global investment platform. Used in combination with dedicated teams of sector specialists and our full suite of proprietary mortgage analytics, the US Mortgage portfolio team executes a proven investment process.

Comprehensive risk management platform

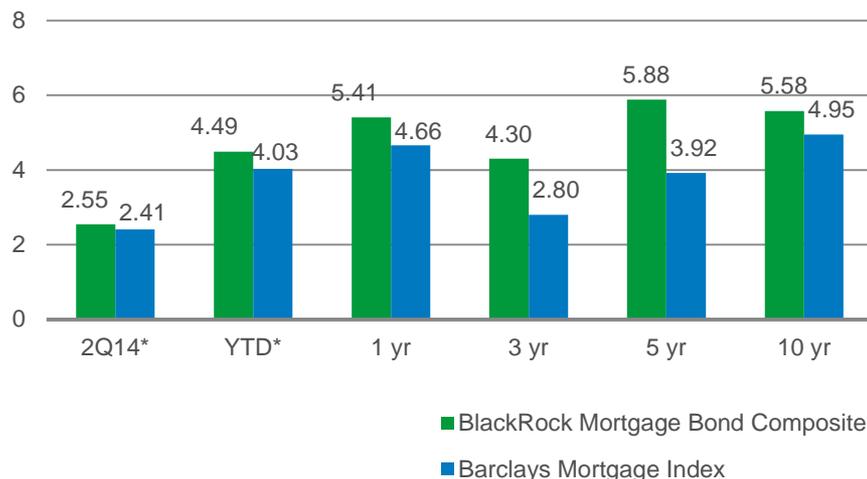
A firm focus on MBS with an emphasis on risk management, founded at the firm's inception, has created a strong partnership with the Risk & Quantitative Analysis group (RQA) to ensure that risks and returns across portfolios are accurately depicted and are in-line with client specific objectives.

4. US Mortgage Bond Composite, Representative Portfolio and Attribution

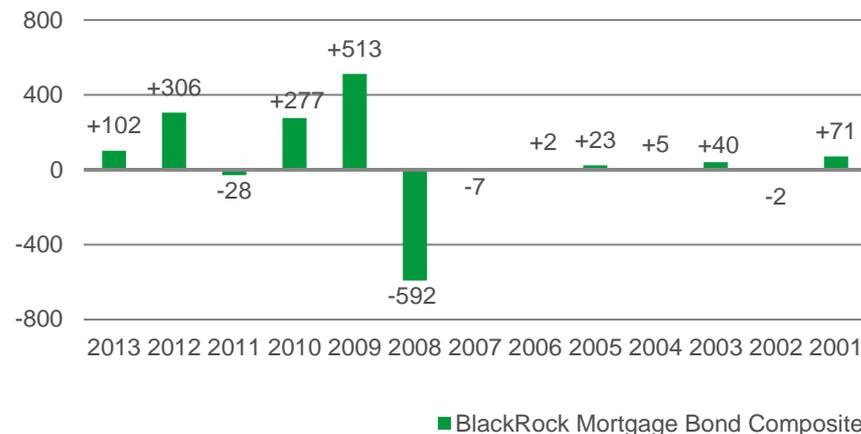
BlackRock Mortgage Bond Composite Performance

Supplemental Information†
As of 30 June 2014

Gross total return in USD (annualized %)



Calendar year gross active return in basis points



	1 yr	3 yr	5 yr	10 yr
Active return	0.75	1.50	1.96	0.63
Tracking error	0.21	0.58	0.76	1.24
Info ratio	3.38	2.48	2.48	0.49
T statistic	3.38	4.29	5.54	1.54

* Unannualized

Results do not reflect the deduction of management/advisory fees and other expenses; management/advisory fees and other expenses will reduce a client's return. For example, assuming an annual gross return of 8% and an annual management/advisory fee of 0.25%, the net annualized total return of the portfolio would be 7.74% over a 5-year period. Fees are described in Part II of BlackRock's Form ADV. Past results are not necessarily indicative of future results.

The BlackRock Mortgage Bond Composite is comprised of all fully discretionary, total return, mortgage accounts which invest in the full spectrum of high quality, mortgage-backed securities. These portfolios have at least \$25 million in assets and are actively managed to exceed the performance of an appropriate index such as the Citigroup Mortgage Index or the Barclays Mortgage Index (or other similar indices). All accounts included in the composite follow a similar investment philosophy. The composite excludes mortgage portfolios that: (i) have gain/loss constraints, (ii) are managed to emphasize income, or (iii) are managed against customized or other benchmarks. The composite can include accounts that use futures and options, as well as those accounts that restrict futures and options but have the ability to use non-agency MBS securities to establish a similar duration and risk. Futures and options are not used to create leverage in any of the composite eligible portfolios.

† See page titled "Historical data: BlackRock Mortgage Bond Composite" for GIPS compliant data related to this composite.

Historical data

BlackRock Mortgage Bond Composite

Calendar year	Gross of fee composite return (%)	Net of fee composite return (%)	Benchmark return (%)	Number of portfolios	Composite dispersion (%)	Composite 3 yr Annualized Standard Deviation (%)	Benchmark 3 yr Annualized Standard Deviation (%)	Total assets at end of period (USD millions)	Percentage of firm assets	Total firm assets (USD millions)
2004	4.75	4.49	4.70	15	0.10	2.78	2.78	8,278	2	341,397
2005	2.85	2.59	2.61	16	0.10	2.57	2.65	9,051	2	443,032
2006	5.24	4.98	5.22	17	0.10	2.27	2.48	9,645	1	1,078,217
2007	6.83	6.57	6.90	15	0.19	2.11	2.32	5,948	<1	1,278,333
2008	2.42	2.12	8.34	9	1.11	3.26	3.24	4,394	<1	1,251,370
2009	11.02	10.69	5.89	9	0.54	3.47	3.24	4,090	<1	3,265,523
2010	8.14	7.82	5.37	8	0.36	3.44	3.22	3,268	<1	3,527,898
2011	5.95	5.64	6.23	7	0.15	2.17	2.06	3,092	<1	3,495,787
2012	5.66	5.34	2.59	6	0.31	1.64	1.68	3,055	<1	3,775,033
2013	-0.39	-0.69	-1.41	6	0.24	2.11	2.05	3,298	<1	4,307,669

Past performance is not indicative of future results.

Data shown may be subject to revisions from time to time based on availability of new information. Any such revisions are not material.

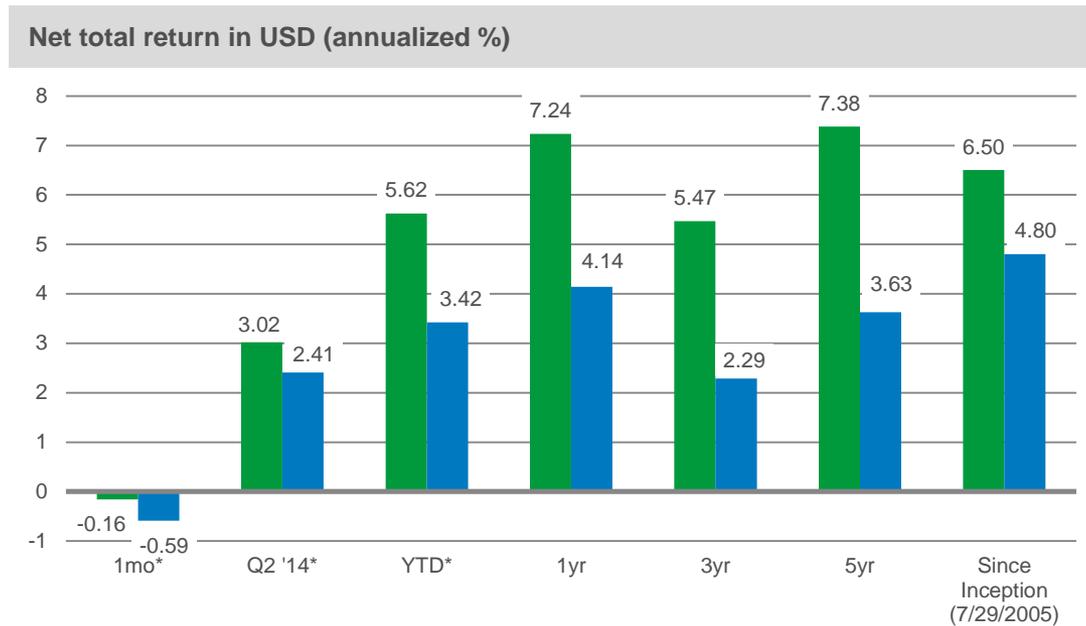
Notes

- For purposes of compliance with the Global Investment Performance Standards (GIPS[®]), the "firm" refers to the investment adviser and national trust bank subsidiaries of BlackRock, Inc., located globally, with the exception of BlackRock Kelso Capital Advisors, LLC. This definition excludes: i) any accounts managed through "wrap fee" or other separately managed account programs, ii) BlackRock subsidiaries that do not provide investment advisory or management services, and iii) the Absolute Return Strategies (funds-of-hedge-funds) business unit under the "BlackRock Alternative Advisers" platform.
- BlackRock claims compliance with the GIPS standards and has prepared and presented this report in compliance with the GIPS standards. BlackRock has been independently verified for the periods 1 January 1993 through 31 December 2012. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. The BlackRock Mortgage composite has been examined for the periods 1 July 1989 (Inception) through 31 December 2012. The verification and performance examination reports are available upon request. The firm is verified annually by Deloitte & Touche LLP.
- BlackRock uses a time-weighted linked rate of return formula with adjustments for cash flows to calculate rates of return. Trade date accounting has been used since the inception of the composite. The currency used to calculate performance is US dollars.
- The benchmark index shown is the Barclays Mortgage Index.
- Composite dispersion measures represent the consistency of a firm's composite performance results with respect to the individual portfolio returns within a composite. Composite dispersion is the square root of the sum of monthly variances of portfolio returns around the composite returns. The monthly variance is the sum of the asset-weighted squared differences between the individual portfolio returns and the composite returns. Only portfolios that have been included in the composite style for a full month are accounted for in the dispersion calculation. For composites containing only one account, a measure of dispersion is not meaningful.
- Percentage of Firm Assets and Percentage of Non-Fee Paying Assets are rounded to the nearest whole percent. Percentage of non-fee paying assets for the years ended 2006, 2007, 2008, 2009, 2010, and 2011 were 1%, 2%, 3%, 3%, 4%, and 5% respectively.
- There have been no alterations of the composite due to changes in personnel or other reasons.
- When permitted by investment guidelines, derivatives may be used in the portfolio, but are not integral to the investment process. Leverage and shorting is not allowed.
- Gross of fee performance results are presented before management and custodial fees and net of broker fees, transaction costs, and withholding taxes (if applicable). Net performance reflects the deduction of the highest management fee that can be charged to any account in the composite. The management fee schedule for this strategy for institutional separate accounts in excess of \$100 million is as follows: first \$100 million of assets, 0.25 of 1%; next \$100 million of assets, 0.20 of 1%; next \$100 million of assets, 0.175 of 1%; next \$200 million of assets, 0.15 of 1%; next \$500 million of assets, 0.10 of 1%; remaining assets in excess of \$1 billion, 0.08 of 1%.
- A complete list and description of all composites maintained by BlackRock and the related performance results are available upon request. Additional information regarding policies for calculating and reporting returns as well as valuation policies is also available upon request. The **BlackRock Mortgage Bond Composite** is comprised of all fully discretionary, total return, mortgage accounts which invest in the full spectrum of high quality, mortgage-backed securities. These portfolios have at least \$25 million in assets and are actively managed to seek to exceed the performance of an appropriate index such as the Citigroup Mortgage Index or the Barclays Mortgage Index (or other similar indices). All accounts included in the composite follow a similar investment philosophy. The composite excludes mortgage portfolios that: (i) have gain/loss constraints, (ii) are managed to emphasize income, or (iii) are managed against customized or other benchmarks. The composite can include accounts that use futures and options, as well as those accounts that restrict futures and options but have the ability to use non-agency MBS securities to establish a similar duration and risk. Futures and options are not used to create leverage in any of the composite eligible portfolios. The creation date of the composite is 1 January 1993. As of 1 July 2011, the composite has a Significant Cash Flow (SCF) policy to temporarily remove accounts from the Composite. A significant cash flow is defined as a series of cash flows greater than 5 percent of an account's net asset value in a calendar month. The account is removed from the Composite as of the month-end prior to the occurrence of the SCF, and re-entered into the composite at the beginning of the first full month after the occurrence of the SCF, subject to it still being eligible for inclusion. For significant cash flow occurrences onwards from 1 July 2011, accounts will only be removed from a composite temporarily if there are more than 3 accounts active in the composite for the period under review. From 1 January 2010 through 30 June 2011, the Composite did not have a SCF policy. From 31 December 2009 to 1 July 2004, accounts were removed from the Composite if a series of cash flows were greater than 100 percent of an account's net asset value in a calendar month. Prior to 1 July 2004, the composite did not have a significant cash flow policy. Additional information regarding the treatment of SCF is available upon request.

Performance: Representative Portfolio

July 31, 2014

As of July 31, 2014



	1mo*	Q2 '14*	YTD*	1-Year	3-Year	5-Year	Since Inception
Active return(%)	+43	+61	+220	+310	+318	+376	+170

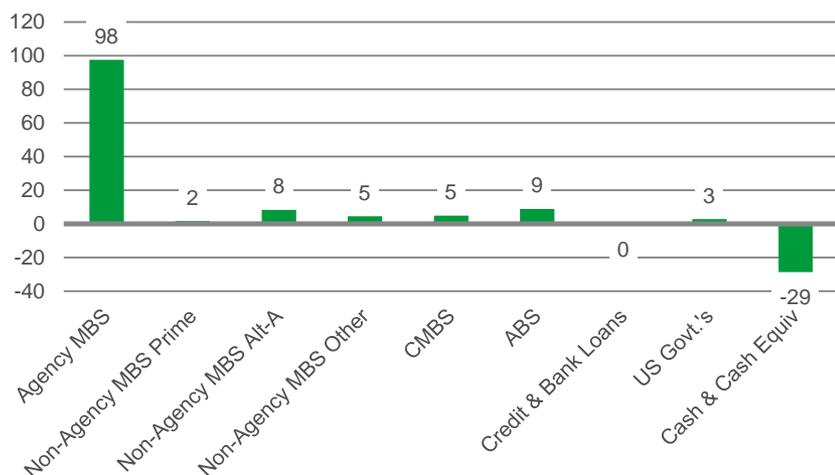
■ Representative Portfolio

■ Barclays US MBS Index

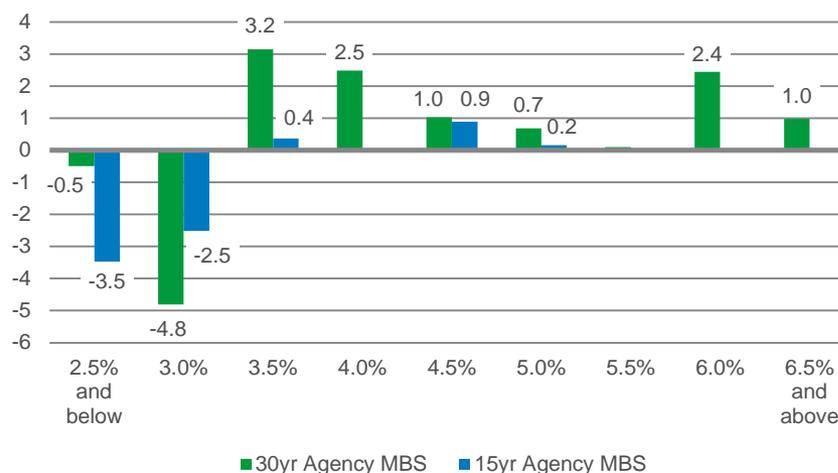
*Unannualized
 Source: BlackRock.
 Benchmark is the Barclays US MBS Index. Past results are not necessarily indicative of future results.

Representative Portfolio: Positioning as of 7/31/14

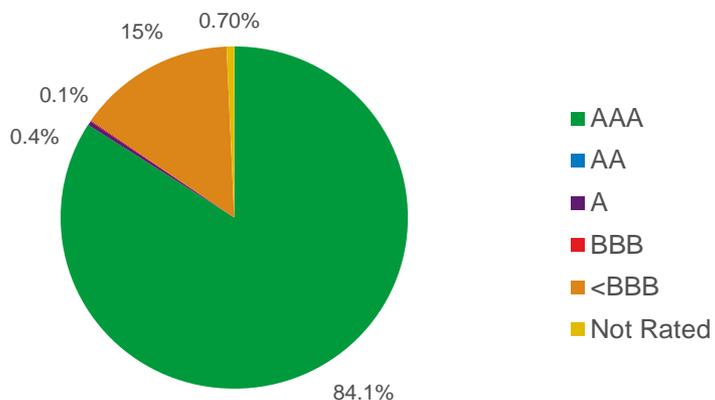
Sector Allocation % NAV



Agency MBS Coupon Stack Breakdown % Active NAV



Credit Quality Breakdown % NAV



Portfolio Characteristics

	Portfolio	Benchmark	Difference
Effective Duration (yrs)	4.36	4.46	-0.10
Convexity	-1.13	-1.33	0.19
Yield (%)	3.71%	2.70%	1.01
Average Moody's/S&P Credit Quality	Aa2/AA	Aaa/AA+	-

Benchmark is the Barclays MBS Index

Representative Account Attribution Summary: YTD 2014

Returns (Percent)	Q1 2014	Q2 2014	July 2014	YTD 2014
Portfolio Return	2.68	2.99	-0.16	5.52
Benchmark Return	1.59	2.39	-0.59	3.39
Active Return	1.10	0.60	0.43	2.13
Attribution (Basis points)				
Duration/Curve	+12	-5	+2	+9
Allocation:				
Swaps	+2	-2	+3	+3
Treasuries				
30 Yr. PT	+18	+8	-3	+23
15 Yr. PT		+1	+3	+4
CMOs				
Mortgage Derivatives				
Securitized Assets:				
CMBS	+6	+14	+3	+23
ABS	-9	-5	+5	-9
Non-Agency RMBS	+78	+40	+15	+133
Credit		-2	+5	+3
Selection:				
30 Yr PT		+12	+7	+19
15 Yr PT	+3	-1	+3	+5
Totals	+110	+60	+43	+213

Benchmark is the Barclays MBS 1-30yr Maturity Index

Above is the attribution that we have for our US mortgage representative account, which attributes active returns to our macro allocation, sector allocation, and security selection.

Given changes to our attribution methodology, this is the extent of data we are able to provide, but we will be able to provide in this format going forward.

Official Returns may differ from attribution results due to price differences between BlackRock and the custodian.

Representative Account Attribution Summary: 2013

Returns (Percent)	Q1 2013	Q2 2013	Q3 2013	Q4 2013	2013
Portfolio Return	0.74	-1.99	1.48	-0.05	0.14
Benchmark Return	-0.05	-1.96	1.03	-0.42	-1.41
Active Return	0.78	-0.02	0.46	0.36	1.56
Attribution (Basis points)					
Duration/Curve	-13	+5	-7	-7	-22
Allocation:					
Treasuries		-11	+10	-9	-10
30 Yr. PT	-3	-3	+17	+4	+15
15 Yr. PT	-1	+2		+1	+2
CMOs	+1	+1	+2		+4
Mortgage Derivatives			+1	-4	-3
Securitized Assets:					
CMBS	+11	+4	+5	+7	+27
ABS	-6	+5	+5	+6	+10
Non-Agency RMBS	+88	-7	+10	+42	+133
Credit		+3	+4	-12	-5
Selection:					
30 Yr PT	-2	-7	-5	+6	-8
15 Yr PT	+1	+2	+5	-2	+6
Totals	+76	-6	+47	+32	+149

Benchmark is the Barclays MBS 1-30yr Maturity Index

Above is the attribution that we have for our US mortgage representative account, which attributes active returns to our macro allocation, sector allocation, and security selection.

Given changes to our attribution methodology, this is the extent of data we are able to provide, but we will be able to provide in this format going forward.

Official Returns may differ from attribution results due to price differences between BlackRock and the custodian.

5. Agency Mortgage Market Update

Fixed income rates outlook

Following a weaker than anticipated Q1 2014, likely influenced by weather and a large inventory overhang from Q4 2013, domestic economic data has rebounded in Q2

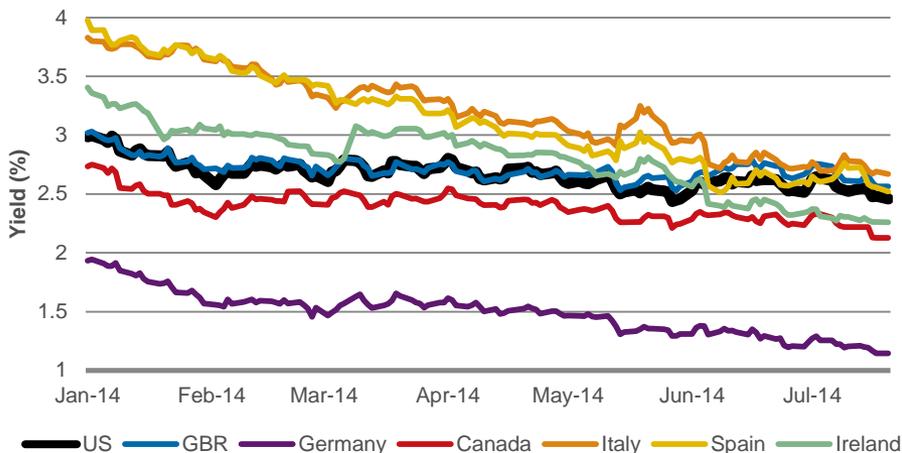
The improvement in economic data however has not resulted in a commensurate rise in US treasury yields, even as risk assets have continued to move higher/tighter

We believe that the downward pressure on US yields has been the result of a global need for financial assets, further supported by continued Central Bank accommodation; most recently from the ECB

While we believe that the US economy will continue to improve at a pace consistent with a 2.0% to 2.5% GDP, we feel a substantial move higher in yields will be difficult to achieve given the current accommodation offered by global central banks along with competing yield levels

That said, we believe that the front end of the US yield curve is susceptible to adjustments in US monetary policy from the Fed

US rates have benefitted from a global compression of bond yields, helped by Central Bank intervention



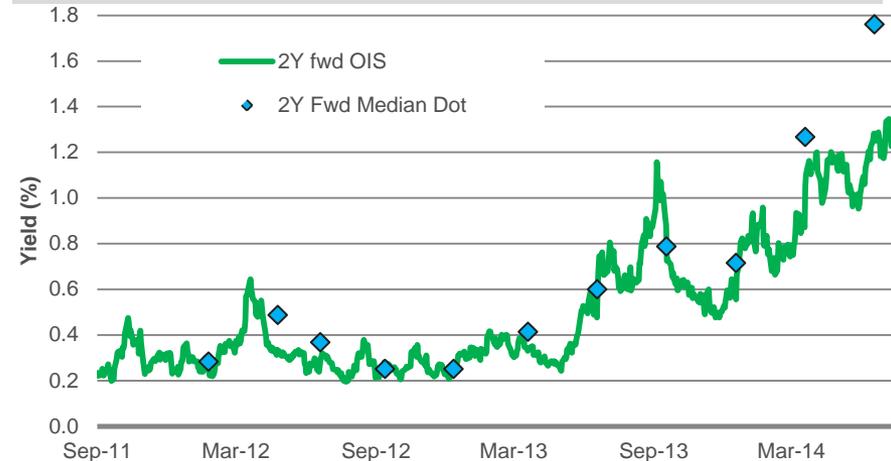
Source: Credit Suisse

Despite the general improvement in US economic data through Q2, US rates have pushed lower



Source: Goldman Sachs, BlackRock

Front end rates continue to price well below the Fed's "dot plot"



Source: BlackRock, Federal Reserve

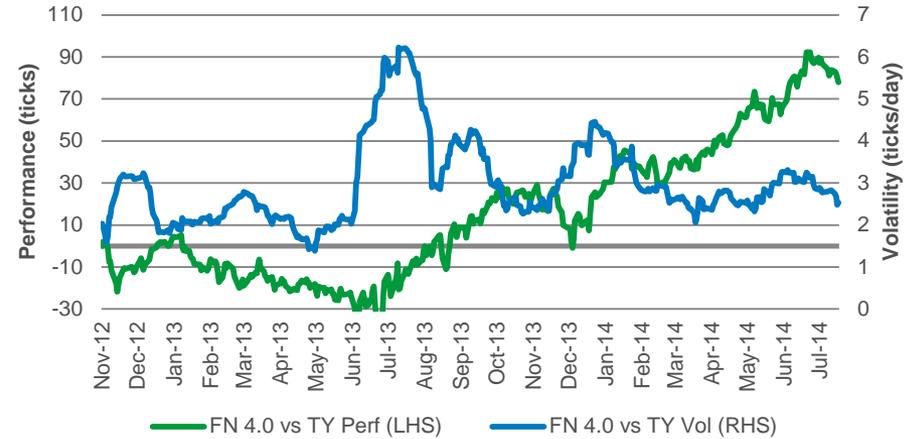
Mortgage basis outlook

Mortgage spreads tightened vs. Swaps and Treasuries in H1, outperforming consensus expectations. The primary factors driving this performance have been low realized and implied volatility, favorable supply/demand technicals, and a benign prepayment environment.

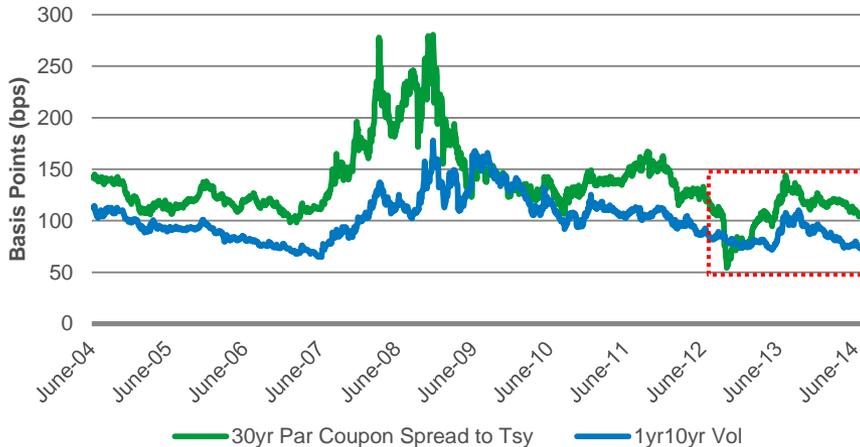
While the par coupon 30yr mortgage spread is near the low end of the long term range, the factors mentioned above are supportive of current levels. In addition, valuations on competing, and less liquid, spread products appear less compelling than Agency MBS.

However, with much of the 'good news' priced into MBS we do not expect spreads to move materially tighter from current levels, and are holding a only modest underweight.

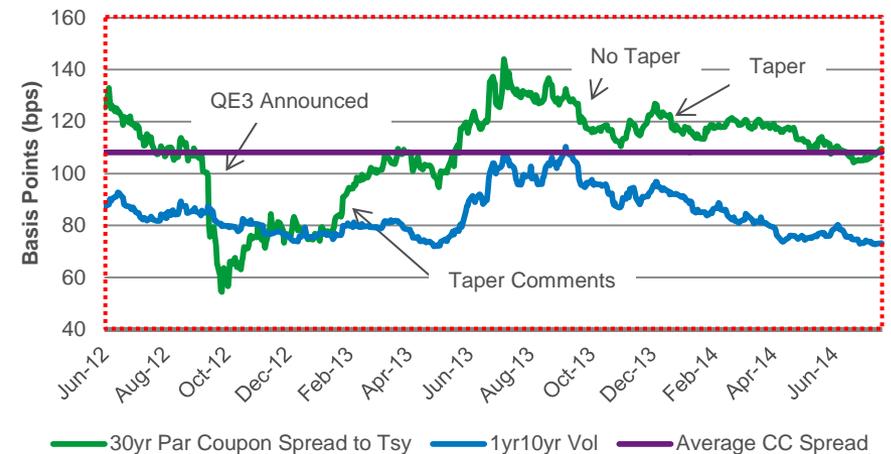
Since December's taper announcement, mortgages have outperformed, broadly supported by a favorable technical backdrop, but also a continued push lower in volatility



Current coupon MBS spreads have retraced from the QE3 tightens and are currently in-line with more historical, pre-crisis levels



However, over the more recent term, mortgages and volatility are approaching levels last seen prior to last summers taper comments



Source: BlackRock; Credit Suisse; Credit Suisse

Mortgage convexity risk has diminished due to shifts in ownership and changes in the composition of the coupon stack

The Fed's QE program will continue to have an impact for years to come through the powerful 'stock effect' of their net MBS purchases

- ▶ Since 2008, the Fed has been the largest purchaser of Agency MBS, growing by \$1.56T while the size of the Agency MBS market has only increased by \$600B. The largest sellers have been domestic money managers and insurance companies along with GSE's and overseas investors

The large shift in MBS ownership since 2008 has helped to reduce the overall convexity hedging flows that historically influenced the agency MBS market

- ▶ Over half of the Agency MBS market is now owned by investors who don't hedge the convexity of MBS (Fed and Banks). This is a significant change from pre-2008 when active convexity hedgers (GSEs and non-indexed money managers) were the largest stakeholders

Additionally, the convexity of the mortgage universe continues to improve as both coupon concentration risk and overall refi-incentive diminish.

Real money selling in MBS funded purchases in credit through QE.

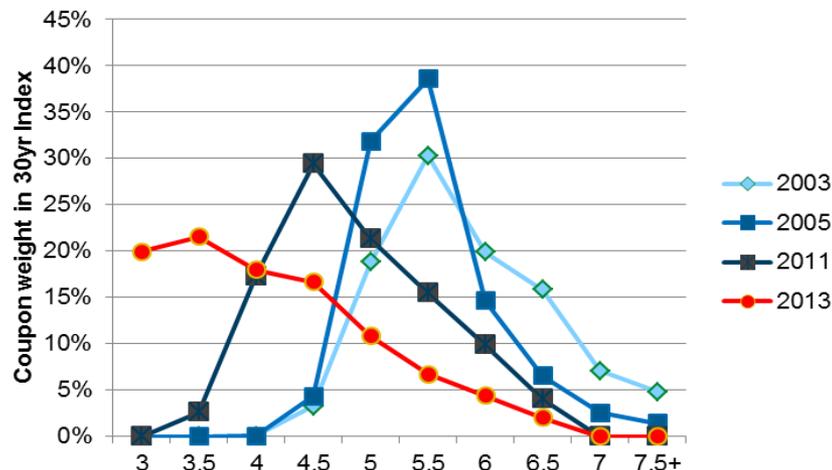


Source: Nomura; Credit Suisse, JP Morgan; BofAML

Ownership of the Agency MBS Market

Size of the Agency MBS Market	Dec-08	Jun-14	Change
Federal Reserve+Treasury	\$0.07	\$1.70	+\$1.63
Banks+Savings+Credit Unions	\$1.06	\$1.47	+\$0.41
GSE's (Fannie+Freddie+FHLBs)	\$0.91	\$0.38	-\$0.53
Overseas Investors	\$0.75	\$0.59	-\$0.16
State/Local Governments	\$0.25	\$0.25	\$0.00
Mortgage REITs	\$0.09	\$0.25	+\$0.16
All Other Domestic Money Managers	\$1.67	\$0.76	-\$0.91

Convexity Profile: A 50bp move in mortgage rates changes the refi eligibility of fewer borrowers today than in the past



Post Fed, who will support mortgages?

We continue to believe that most market participants remain cautiously positioned mid-way through the Fed's taper.

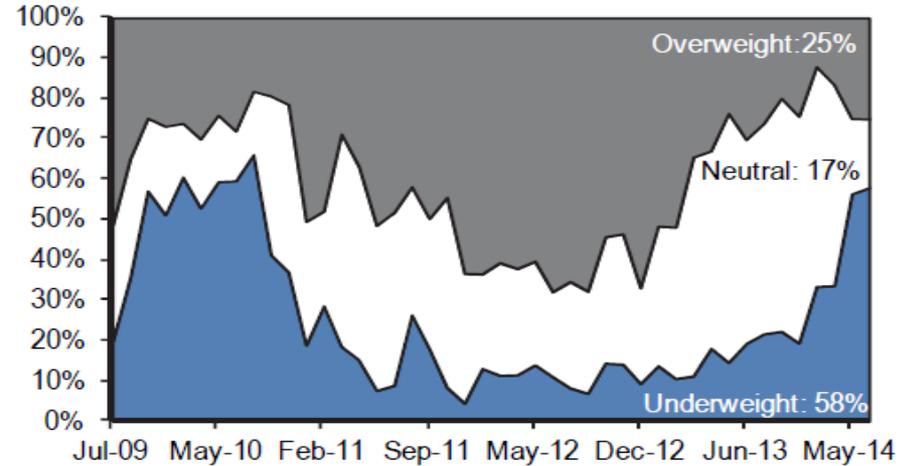
This defensive positioning in MBS has left the agency mortgage market in strong technical shape as the majority of real money investors remain underweight in favor of competing assets such as investment grade credit

- ▶ We anticipate real money sponsorship for mortgages on any supply induced widening, or drift higher in interest rates

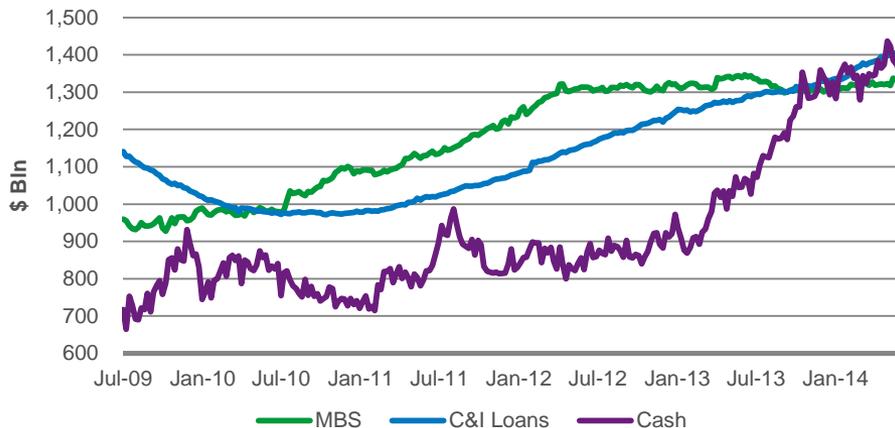
While we expect both deposit and loan growth to grow only modestly in 2014, cash balances at banks are at historically high levels. However, new regulatory and accounting related issues may impact the degree of participation in the Agency MBS market

Though we don't expect REITs to be large supporters of agency MBS given low price to book valuations, we have seen buying from the community to begin the year

Investor Sentiment (July 2014)

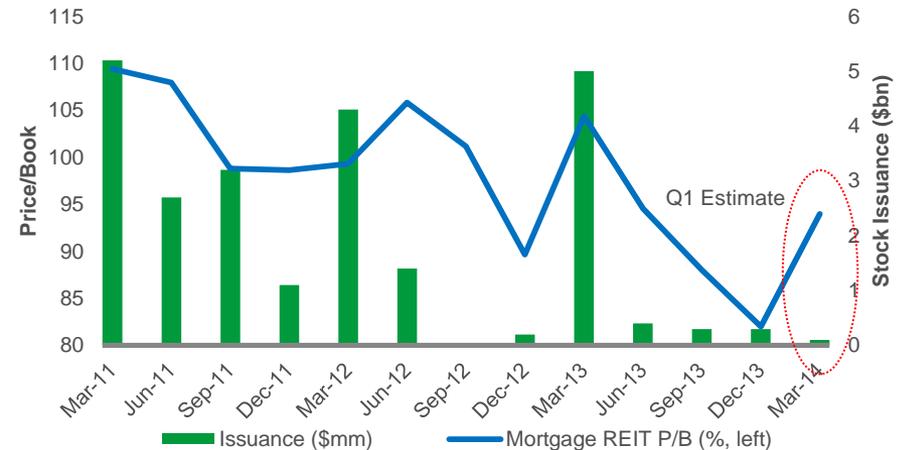


Cash balances at domestically chartered banks remains high with mortgage balances remaining steady since mid-2012



Source: JP Morgan; H8 Report; Morgan Stanley

REIT Stock Issuance and Price/Book



Sector opportunities: 15yrs vs. 30yrs

We moved to an underweight in low coupon 15s vs. 30s late in Q1 2014

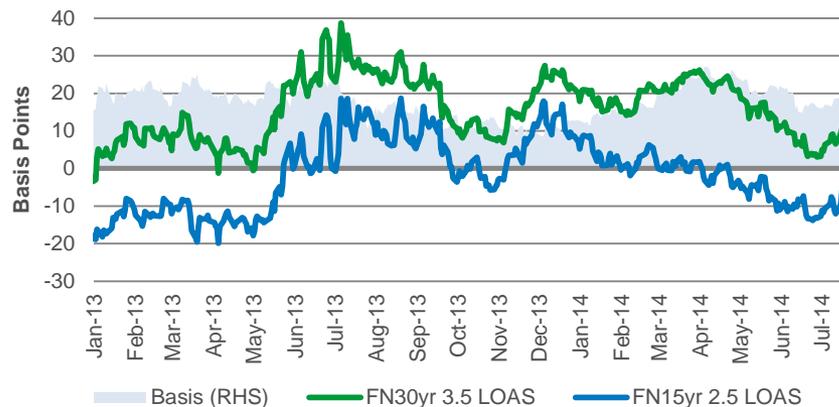
15yrs had performed extremely well vs. 30yrs, and we believed offered investors little upside given valuations. Several factors contributed the strong Q1 performance of 15yr MBS vs. 30yrs

- ▶ Banks have preferred shorter duration assets due to favorable regulatory capital treatment
- ▶ REITS remain reluctant to take on duration risk following last summer's convexity related selling in both 30yr TBA and specified pools
- ▶ Origination of MBS was unusually low in Q1

These factors are likely temporary as supply is set to increase from the current anemic levels, and banks should find similar duration CMOs that offer additional spread more attractive

An underweight in 15yrs vs. 30yrs is also a curve flattening expression which has a far more benign carry profile than flatteners in Treasuries

15yr vs. 30yr OAS levels have only recently begun to converge due to the weakness in 15yrs



Though 15yrs had richened vs. 30yrs through much of Q2, despite the curve flattening, they have recently begun to underperform



Source: Credit Suisse

6. Risk Management at BlackRock

Risk Management at BlackRock

Propagate our risk culture

Risk management has been a core part of BlackRock's culture since its inception

- ▶ BlackRock's founding in 1988 was profoundly impacted by the Crash of 1987
- ▶ Senior management had visceral first-hand experiences dealing with the consequences of the inadequate understanding of risk and has sought, since BlackRock's inception, to protect the firm and its clients from similar experiences

Know the risks

Risk management is knowing the risks by thoroughly understanding the investments and providing the best analytics and tools

- ▶ Partnering with BlackRock Solutions, create state-of-the-practice risk analytics that are easy to put into practice

Open information architecture

Risk management at BlackRock follows an open information architecture

- ▶ The portfolio manager, risk manager, account manager and senior management share the same timely information on portfolio risk, creating a "virtuous circle"
- ▶ Risk management becomes a self-enforcing process

Assist portfolio managers in managing risk

Risk management helps portfolio managers know and manage the risk in their investment portfolios

- ▶ Assisting PMs to do "the right thing" is always the best way to manage risk
- ▶ "Policing" risk is a last resort and usually demonstrates a failure to communicate effectively

Clients come first

Meeting the reasonable expectations of clients will ultimately protect BlackRock and its reputation

- ▶ Ensure that the risk and performance targets of the portfolios managed by BlackRock are properly understood by our portfolio managers, reflected in their portfolios and consistent with client objectives

Risk Management for MBS Portfolios

Daily

- Monitor portfolio risk levels and ensure adherence with RPT targets; recommend remediation as needed
- Review performance and identify drivers of returns
- Assist with portfolio construction and hedging analysis; monitor Agency MBS empirical and model duration, highlight and investigate D/D changes/themes

Weekly

- RQA Fixed Income Meeting – review risk levels, risk contributions, portfolio positions, MTD/YTD performance
- Monitor portfolio positions (active coupon, duration, and curve positions)
- Investigate and report outlier performance exceptions

Monthly

- Portfolio Risk Meetings – review portfolio risk levels and composition, active positions, volatilities, correlations, stress scenarios; recommend changes, as appropriate
- Review MTD/YTD performance attribution; discuss portfolio direction, market events, and review ad hoc analysis
- Review portfolio risk exceptions with Portfolio Risk Advisory Committee chaired by CRO as appropriate

Ad Hoc

- Establish RPT risk thresholds consistent with client expectations for new portfolios; assess appropriateness of thresholds for ongoing portfolios
- Review performance attribution, risk decomposition, and assess future potential sources of returns
- Investigate changes in mortgage trade correlations, volatilities, and durations; discuss risk meeting follow-ups
- Monitor performance of mortgage risk models; provide input to BRS and RQA methodology teams for ongoing model management and development

Computing Portfolio Risk

Estimating the P&L of a portfolio

- Exposure profile of each security is mapped to systematic market risk factors including rates, spreads, mortgage rate basis, foreign exchange rates, etc.
 - Main sensitivities include duration (interest rate risk factors) and MBS spread duration (TBA moneyness¹ risk factors)
- Security-level exposures are then aggregated into portfolio exposure by market weights
- Stand alone risk is the exposure of each factor to the factor volatility, in isolation from the rest of the portfolio
- Risk contribution considers both stand alone risk as well as the correlations between the isolated risk factors and other factors in the portfolio

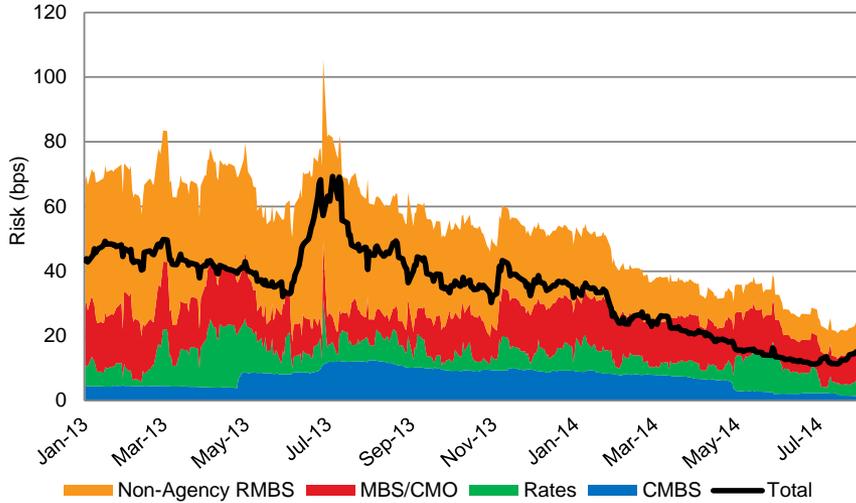
Green Package					
Portfolio Risk Barclays MBS Index					
7/21/2014					
Risk Group	Factor Level	Factor Vol	Exposure	Stand-alone Risk	Risk Contribution
Rates				215	194
USD Int Rates			4.27	215	193
Tsy 3M	0.04	9	0.01	0	0
Tsy 1Y	0.13	9	0.20	2	1
Tsy 2Y	0.52	29	0.25	7	5
Tsy 3Y	1.03	43	0.40	17	13
Tsy 5Y	1.73	55	0.52	29	26
Tsy 7Y	2.18	58	0.67	38	35
Tsy 10Y	2.58	60	0.77	46	41
Tsy 15Y	3.01	63	0.73	46	37
Tsy 20Y	3.23	63	0.57	36	28
Tsy 25Y	3.37	61	0.26	16	11
Tsy 30Y	3.47	58	-0.10	6	-4
Unexpected Convexity			-1.43	4	0
Tsy 2Y Convexity		1	0.13	0	0
Tsy 5Y Convexity		3	-0.29	1	0
Tsy 10Y Convexity		3	-0.94	3	0
Tsy 30Y Convexity		2	-0.34	1	0
Volatility			3.19	23	10
Norm ImpVol Mtq30y	0.85	7	3.03	22	9
Norm ImpVol Mtq15y	0.85	7	0.16	1	0

¹Moneyness is the difference between MBS WAC and the current primary mortgage rate, which is estimated via par coupon plus primary-secondary spread; e.g., an MBS pass-through with a WAC of 4.50% would be 20 bps ITM given a primary mortgage rate of 4.30% and its spread duration would be mapped to the ATM and ITM50bps factors

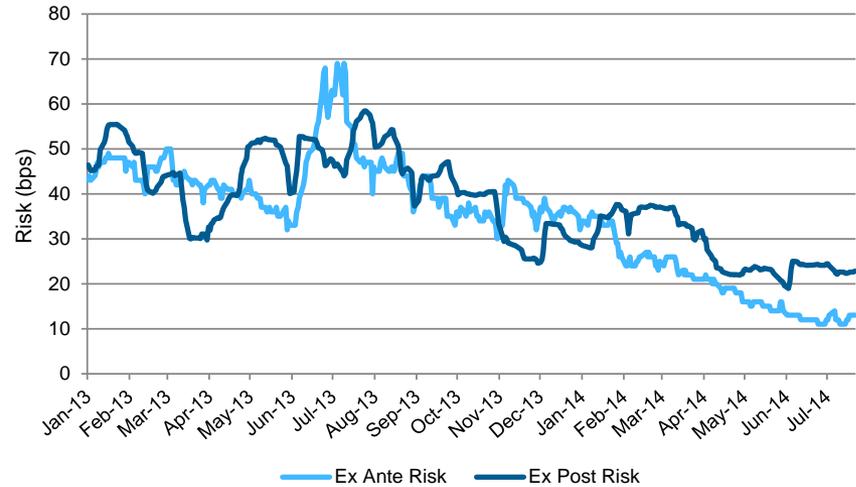
Green Package					
Portfolio Risk Barclays MBS Index					
7/21/2014					
Risk Group	Factor Level	Factor Vol	Exposure	Stand-alone Risk	Risk Contribution
Spreads		matrix...		99	27
Other Spreads		matrix...		99	27
Mortgage		matrix...		99	27
TBA Spreads		matrix...		114	34
Moneyness 30 year		matrix...	4.80	106	26
TBA30 ATM v540	0.21	22	1.17	26	11
TBA30 ITM100 v540	0.20	31	0.61	19	0
TBA30 ITM150 v540	0.11	37	0.31	12	-1
TBA30 ITM200 v540	0.04	36	0.16	6	0
TBA30 ITM250 v540	0.18	30	0.10	3	-1
TBA30 ITM300 v540	0.48	33	0.03	1	0
TBA30 ITM350 v540	1.19	46	0.00	0	0
TBA30 ITM50 v540	0.16	25	1.07	27	8
TBA30 OTM100 v540	0.32	16	0.08	1	0
TBA30 OTM50 v540	0.29	17	1.26	22	9
TBA GNvsFN		matrix...	1.46	16	6
TBA GNvsFN v540	-0.12	11	1.46	16	6
Moneyness 15 year		matrix...	0.61	13	4
TBA15 ATM v540	0.21	22	0.20	4	2
TBA15 ITM100 v540	0.20	31	0.07	2	0
TBA15 ITM150 v540	0.11	37	0.04	1	0
TBA15 ITM200 v540	0.04	36	0.02	1	0
TBA15 ITM250 v540	0.18	30	0.01	0	0
TBA15 ITM300 v540	0.48	33	0.00	0	0
TBA15 ITM50 v540	0.16	25	0.13	3	1
TBA15 OTM100 v540	0.32	16	0.01	0	0
TBA15 OTM50 v540	0.29	17	0.15	3	1
TBA 15vs30		matrix...	0.61	7	-2
TBA 15vs30 v540	0.02	12	0.61	7	-2
Mortgage Basis		matrix...	-1.52	19	-4
15yr Mtq Tsy Basis	0.37	18	-0.06	1	0
30yr Mtq Tsy Basis	0.98	13	-1.46	18	-4
Specified Pool Payups		matrix...	3.56	2	-2
10/20 Stories		matrix...	3.56	2	-2
Payup 20year Mat	57.00	65	3.56	2	-2
Other		matrix...	0.05	1	0
5/1 Agy Hyb ARM	0.55	12	0.02	0	0
7/1 Agy Hyb ARM	0.39	21	0.02	0	0
10/1 Agy Hyb ARM	0.39	21	0.00	0	0
3/1 Jumbo ARM	0.41	48	0.00	0	0
5/1 Jumbo ARM	0.55	12	0.01	0	0
Total		matrix...		230	230

Sample Portfolio Risk & Return

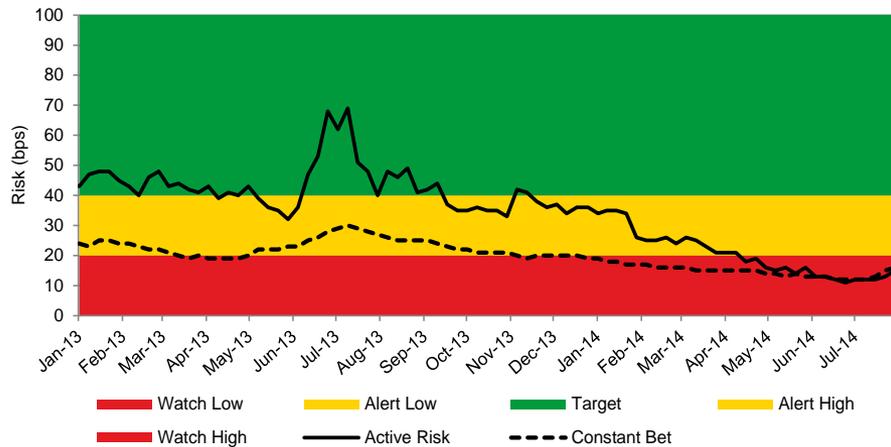
Portfolio Stand Alone and Risk Contribution (Active)



Ex Post vs Ex Ante Historical Risk (Active)



Portfolio Historical Risk Target



YTD Attribution (Active, bps)

	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14
ACTIVE RETURN	6	1	3	2	4	2	2
INTEREST RATES	4	1	4	0	-4	1	1
Duration	4	0	1	0	-3	0	-2
Curve	0	1	4	1	0	2	3
RF + Rldn	1	0	-1	-1	-1	-1	-1
ALLOCATION	0	0	1	1	1	1	0
US Rates	0	0	1	1	1	1	0
30YR PT	0	0	0	2	2	2	-3
15YR PT	0	0	1	-1	-1	-1	3
Agency ARMs	0	0	0	0	0	0	0
Agency CMOs	0	0	0	0	0	0	-1
Securitized Assets	0	0	0	0	0	0	0
CMBS	0	0	0	0	0	0	0
ABS	0	0	0	0	0	0	0
Non-Agency	0	0	0	0	0	0	0
SELECTION	2	-1	-2	1	7	1	3
US Rates	2	-1	-2	1	7	1	3
30YR PT	2	-1	-3	1	7	2	2
15YR PT	1	0	1	-1	0	0	1
Agency ARMs	-1	0	0	0	0	-1	0
Securitized Assets	0	0	0	0	0	0	0
CMBS	0	0	0	0	0	0	0
ABS	0	0	0	0	0	0	0
Other	0	0	0	0	0	-1	-1

7. Important Notes

Important notes

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BLK-1770

North Dakota State Investment Board

U.S. Value Driven Mortgage- Backed Securities Overview

Data as of July 31, 2014

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312-732-6331, james.g.sakelaris@jpmorgan.com

Jim Cavanaugh, Executive Director, Client Portfolio Manager
312-732-2486, jim.b.cavanaugh@jpmorgan.com

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Why hire J.P. Morgan U.S. Value Driven Mortgage-Backed Securities team?

- **J.P. Morgan Global Fixed Income Overview**
- U.S. Value Driven MBS Overview
 - Investment Process
 - Investment Performance
- Risk Management
- Market Update
- Appendix

J.P. Morgan Asset Management

GFICC Senior Investors

Bob Michele, CFA
CIO and Global Head of GFICC

Investors

U.S.	U.S.	International	Global IG Corporates	Global High Yield	High Yield/Loans/Distressed
Steve Lear, CFA	Doug Swanson	Nick Gartside, CFA	Lisa Coleman, CFA	Rob Cook, CFA	Bill Morgan/Jim Shanahan
Portfolio Managers/Traders	Portfolio Managers/Traders	Portfolio Managers	Portfolio Managers/Traders	Portfolio Managers/Traders	Portfolio Managers/Traders
Betsy Borowiec	Richard Figuly	David Oliver	Robin Green	Peter Aspbury	James Gibson
Tony Candelmo	Scott Grimshaw, CFA	Jeff Sawyer	Jodi Irwin	Joan Boyer	Christopher Musbach
Donald Clark, CFA	Gregg Hrivnak, CFA	Prashant Sharma	Jeremy Klein, CFA	Ben Callan	Frederick Sabetta, CFA
Don Clemmenson	Mark Jackson, CFA	Liliana Slavova	Andreas Michalitsianos, CFA	Thomas Davis, CFA	Credit Research
Cary Fitzgerald	Peter Simons, CFA	Iain Stealey, CFA	Bryan Wallace	Thomas Hauser, CFA	Kevin Aug, CFA
Ed Fitzpatrick, CFA	Henry Song, CFA	Global Rates	Credit Research	John Lux, CFA	Casey Basil
Jan Ho	Erin Spalsbury, CFA	Lee Isley	Matthew Anavy, CFA	Credit Research	Michael Borowske
Pete Kocubinski, CFA	Credit Research	Seamus Mac Gorain, CFA	Yoann Belmere	Robert Amenta	Chad Engelbert, CFA
Deepa Majmudar, PhD	Greg Reed, CFA	David Tan	Robert Emes	Andrew Clouse, CFA	Andrew Guest
Robert Manning, CFA	Tim Bond	Genji Tsukatani	Russell Klein	Chris Fetes, CFA	Matthew Kline
Andy Maschhoff, CFA	Mark Gannon	Quant Research	Michael Kolster	Jeffrey Hutz, CFA	David Matherly
Dhruv Mohindra, CFA	Josh Golden	Bhupinder Bahra	Warren Leonard, CFA	Naiara Irastorza	Alexander Sammarco, CFA
Michael Murray, CFA	Kevin Martinez	Frederick Bourgoin	Beate Muenstermann	Jeffrey Lovell, CFA	W. Scott Telford III, CFA
Andrew Norelli	Stephen Mayes, CFA	Nick Handley, CFA	Emerging Markets Debt	Matthew Nelson, CFA	Eric Tutterow
Matthew Pallai	Steve Sun	Currency	Pierre-Yves Bareau	Mark Prenger, CFA	Tax Aware
Michael Sais, CFA	Scott Thomas, CFA	Roger Hallam, CFA	Portfolio Managers & Research	Russell Taylor	Rick Taormina
Diana Wagner, CFA	Kent Weber, CFA	Danny Sage	Eduardo Alhadeff		Portfolio Managers/Traders
Mortgage Specialists	Mid-Institutional	Nima Tayebi	Emil Babayev		James Ahn
Kevin Beck	Barb Miller	Neil Weller, CFA	Joanne Baxter		Kimberly Bingle, CFA
Jay DeWaltoff	Portfolio Managers/Traders	Trading	Julio Callegari		Josh Brunner, CFA
Richard Dugoff	Steve Deibel, CFA	Nick Cox	Stephen Chang, CFA		Michael Buscemi
Drew Headley, CFA	Wendy Fletcher	Traders	Charles Chen		Kevin Ellis, CFA
Andrew Kazior, CFA	Toby Maczka, CFA	Jack Crawford	Namdev Chougule, CFA		Michelle Hallam, CFA
Raymond McGarrigal	Mike McClinchie		Shaw Yann Ho		John Kowalski
Mark Rasimas, CFA	Thad Paskell		John-Paul Kelly		Kevin Mortimer
Daniel Sang			Didier Lambert, CFA		Michael Myers
			Scott McKee		David Sivinski, CFA
			Ai Ling Ngiam		Jennifer Tabak, CFA
			Anna Shamina		Credit Research
			Matias Silvani, PhD		John Blakely
			Samrawit Soquar		Jeff Fountain, CFA
			Nima Tayebi		David Fucio
					Kyle Gephart
					John Updegraff

As of July 2014

The above is reflective of senior team members only (managing director (bolded) and executive director levels). There can be no assurance that the professionals currently employed by J.P. Morgan will continue to be employed by J.P. Morgan or that the past performance or success of any such professional serves as an indicator of such professional's future performance or success.

U.S. Value Driven: Teamwork defines how we do business

Global Chief Investment Officer, Robert Michele, CFA

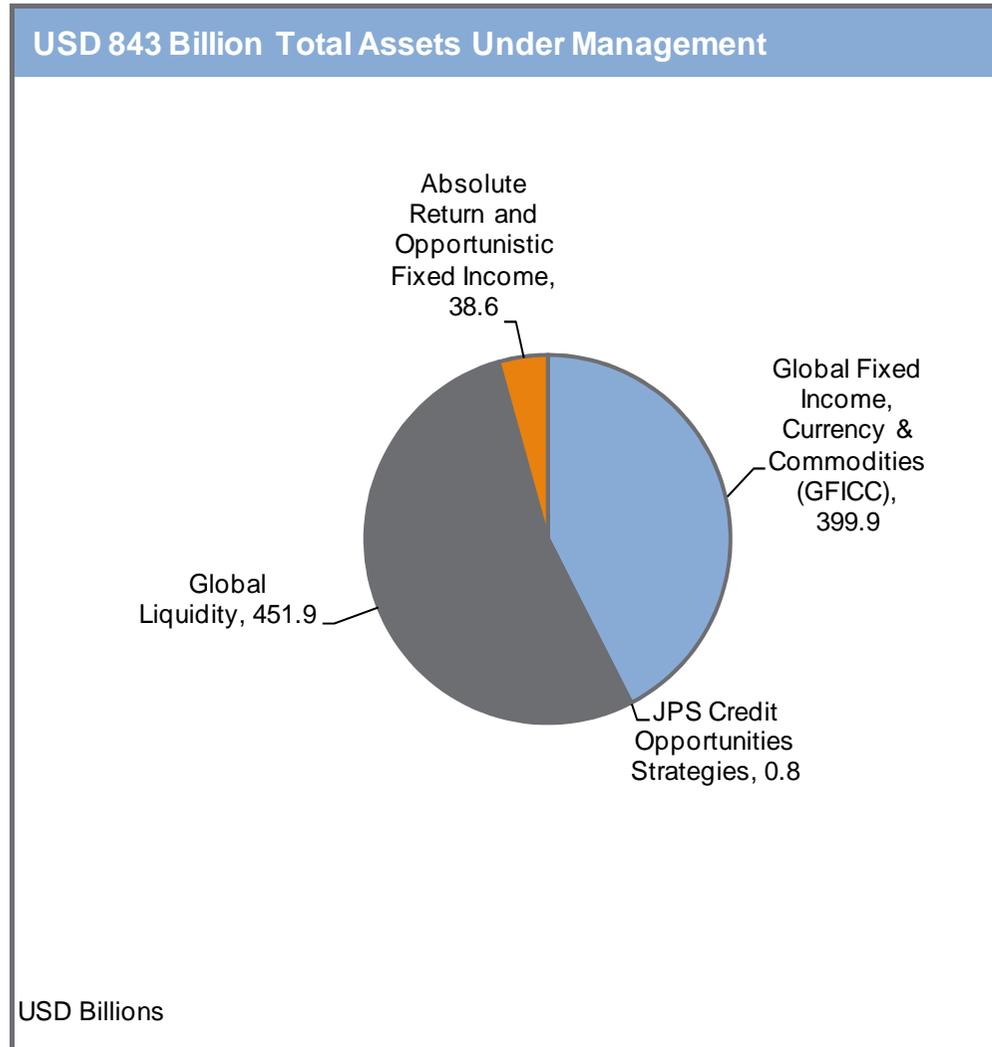
U.S. Value Driven

Institutional Portfolio Management	Mid-Institutional Portfolio Management	Investment Grade Credit Research	Risk Management	Client Portfolio Managers
<p>Douglas Swanson Daniel Ateru Mark Byers, CFA, CPA Tim Eisel Rick Figuly Scott Grimshaw, CFA Gregg Hrivnak, CFA Mark Jackson, CFA Andy Melchiorre, CFA Chris Nauseda Susan Parekh Michael Sais, CFA Peter Simons, CFA Henry Song, CFA Erin Spalsbury, CFA</p>	<p>Barb Miller Kris Beachnau Stephen Deibel, CFA Wendy Fletcher Darryl Jenkins Toby Maczka, CFA Michael McClinchie Thad Paskell Justin Rucker, CFA Jeff Taylor</p>	<p>Greg Reed, CFA Tim Bond Mark Gannon Josh Golden Theo Hadiwidjaja, CFA Kevin Martinez Stephen Mayes, CFA Balakrishnan Prakash, CFA Tim Schoening Steve Sun Scott Thomas, CFA Kent Weber, CFA George Williams</p>	<p><u>Analytics & Risk</u> Rene Noel Sylvia Kambouris Patricia Krauss Jerica Norasing Mingsheng Li, CFA Michael Sheldon</p> <p><u>Quantitative Research</u> Rene Noel Kate He, PhD Richard Lahiere, CFA, PhD George Qiao, CFA</p> <p><u>Oversight & Control</u> Alvey Smith, CFA Scott Sabin Jeffrey Whipple, CFA</p>	<p>Tim Holihen, CFA Brett Cambern Jim Cavanaugh Douglas Gimple Joseph Hisdorf John Nicely Mark Peterson, CFA Julie Rancourt Paul Swoboda Wally Theado III, CFA</p>
<i>21 years average investment experience</i>	<i>22 years average investment experience</i>	<i>18 years average investment experience</i>	<i>18 years average investment experience</i>	<i>20 years average investment experience</i>

A stable investment team

As of May 2014

Global Fixed Income and Liquidity – AUM



GFICC Investment Strategies (USD Billion)	June 2014
US	136.9
Core	74.1
Short Duration	40.0
Government, Mortgages, Inflation Linked	12.7
Intermediate	10.2
Global	40.2
Global Rates	11.5
Global Aggregate	9.9
Global Credit	17.2
Asia Fixed Income	1.7
High Yield¹	61.8
High Yield Broad	33.2
High Yield Upper Tier	7.4
High Yield Global	8.0
High Yield Distressed Debt	5.6
High Yield Leveraged Loans	5.7
High Yield Other ²	1.9
EMD	39.2
EMD Sovereign	14.4
EMD Local Currency	6.8
EMD Corporate Debt	6.4
EMD Blended	11.6
Municipals	29.5
Unconstrained/Specialty	19.3
Currency ³	12.7
Multi-Sector/Strategic Bond	5.6
Infrastructure Debt	0.7
Commodities	0.2
Global Solutions	72.8
Liability Driven Investing	24.4
Insurance	36.6
Stable Value ⁴	11.9
GFICC Total	\$399.9

Note: Global Fixed Income and Liquidity strategies highlighted above may not sum to the total assets under management ("AUM") figure due to the inclusion/exclusion of assets managed on behalf of other product groups within J.P. Morgan Asset Management.

Source: JPMorgan Asset Management. Data as of June 30, 2014

¹ Includes assets managed on behalf of Absolute Return and Opportunistic Fixed Income.

² Includes short high yield and other high yield fixed income

³ Currency AUM represents exposure hedged by GFICC currency team.

⁴ Market Value figures shown

J.P. Morgan U.S. Value Driven is a significant investor in MBS

Mortgage-Backed Securities (MBS) Assets Under Management

As of July 31, 2014

MBS Type	\$ Millions	% of MBS
Agency Pass-through	19,914.6	42.9
Agency CMOs	20,348.4	43.8
Non- Agency CMOs	6,184.8	13.3
Total MBS	46,447.8	100.0

MBS as % of Total Taxable Fixed Income Assets* 28.8%

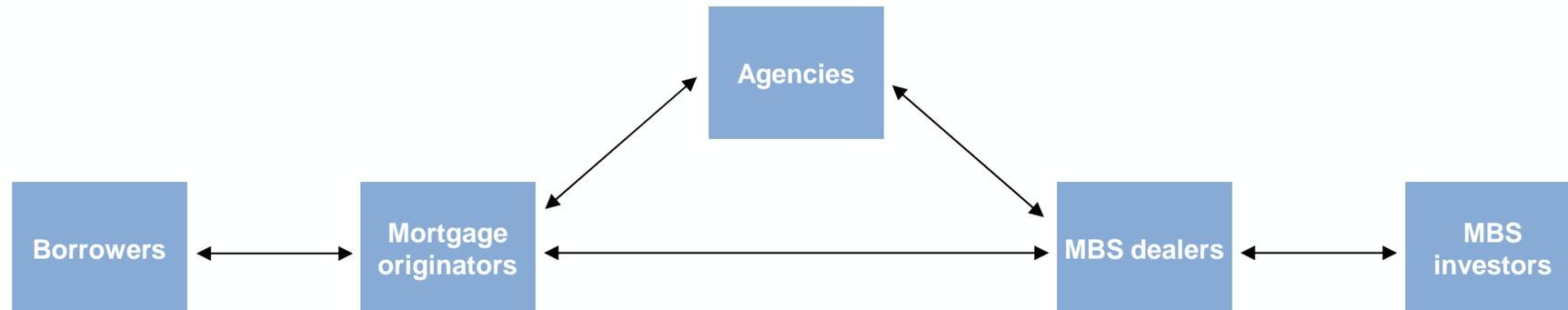
* Specific investment styles may have significantly more or less MBS as a percentage of assets

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Why hire J.P. Morgan U.S. Value Driven Mortgage-Backed Securities team?

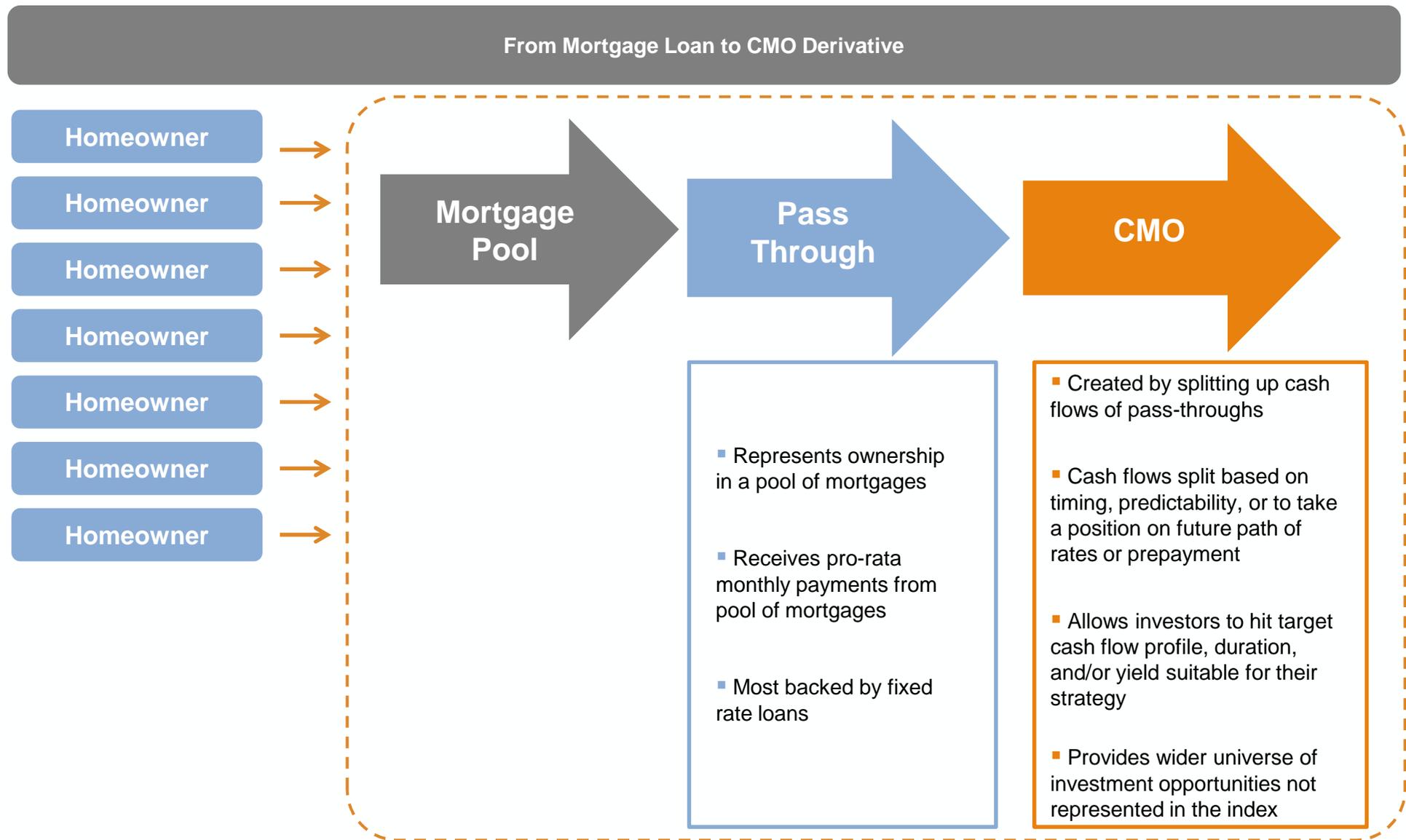
- J.P. Morgan Global Fixed Income Overview
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Mortgage backed securities market



- The U.S. residential mortgage market is roughly \$13 trillion; with around \$6 trillion being securitized agency MBS
- Mortgage originators (commercial banks, savings & loans, mortgage bankers, etc.) do not have enough capital to fund all these loans, nor want hold that many on their balance sheet.
- Therefore mortgages are sold off and packaged together to sell to investors
- Mortgage backed securities generally offered as:
 - agency pass-throughs
 - agency CMOs
 - non-agency CMOs

MBS Origination



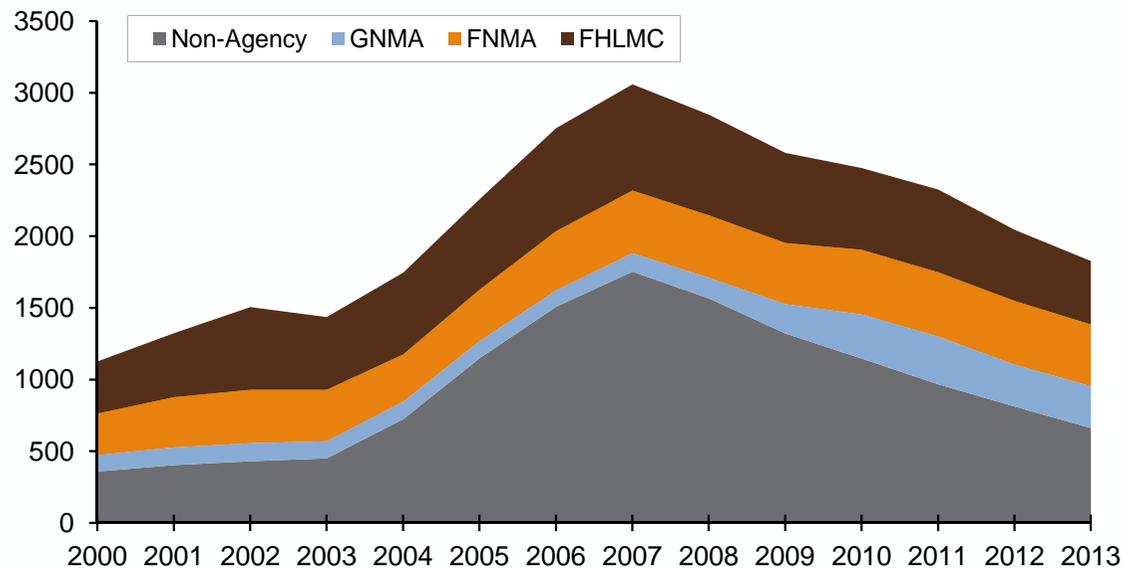
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CMOs are a large and active market

As of December 31, 2013

Outstanding CMOs since 2000
(In US\$ Billions)



- Total outstanding CMOs reached \$1.8 trillion in December 2013
- Annual issuance was a total of \$316 billion issued, versus \$334 billion in 2013
- CMOs represent a significant portion of our mortgage allocation
- We have a long track record investing in this market

*Amount outstanding includes Re-Remics.

Source: Bloomberg and J.P. Morgan Investment Management Inc.

The charts and/or graphs shown above and throughout the presentation are for illustration and discussion purposes only.

We believe in a disciplined value-driven approach based on bottom-up fundamental analysis

- Process built on longer term investing versus trading mentality
- Style emphasizes research and individual security analysis, rather than large macro bets
- We seek to maintain duration within +/- 1 year of the Barclays MBS Index
- Portfolios are well diversified and of AA+/AA average credit quality, helping to minimize individual security risk
- We seek to create portfolios that offer superior stability of cash-flows (over a wide range of interest rate scenarios) versus those of the underlying benchmark
- Many small decisions drive overall portfolio strategy, making us less dependent on a few top-down decisions
- Low turnover minimizes trading costs
- Risk management, embedded throughout the process, seeks to limit downside risk relative to a benchmark

This approach has resulted in consistent, long-term outperformance versus the benchmark

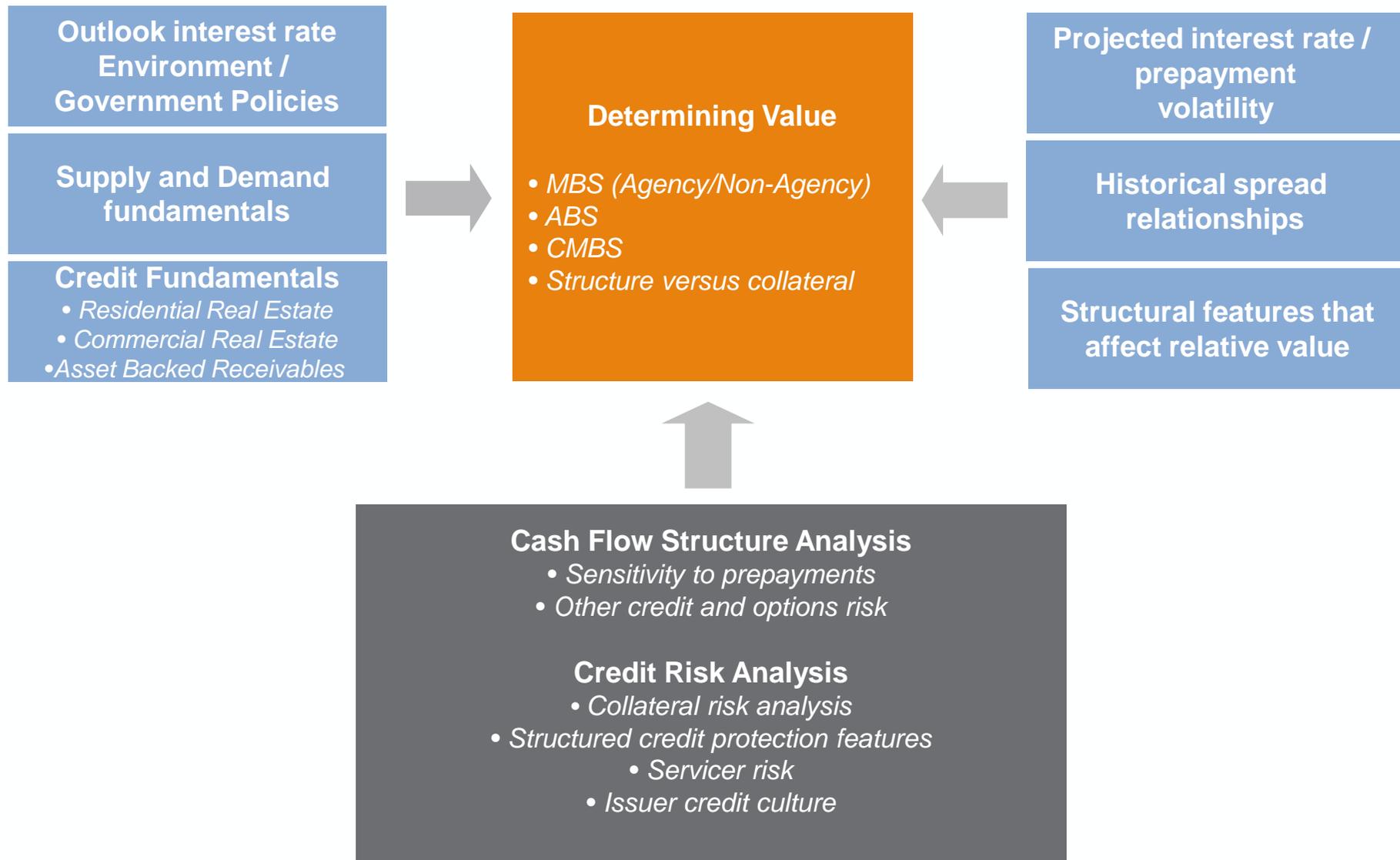
The manager seeks to achieve the stated objectives. There can be no guarantee the objectives will be met. Past performance is not indicative of future results

How do we Determine Relative Value?

- Historical nominal spread relationships
- Historical option adjusted spread (OAS) relationships
- Historical price spread relationships
- Total rate of return scenario analysis
- Sensitivity of returns to changes in prepayments, interest rate volatility and credit performance
- Prepayment differentials
- Other supply/demand issues

The manager seeks to achieve the stated objectives. There can be no guarantee the objectives will be met.

Mortgage-Backed Securities– Sector and Security Specific Analysis



The manager seeks to achieve the stated objectives. There can be no guarantee the objectives will be met.

Fannie Mae High LTV (CR) Floater

1 Month LIBOR	Floater Coupon
0.15% (Current LIBOR01M)	0.75%
1.00%	1.60%
2.00%	2.60%
4.00%	4.60%
6.00%	6.50%
10.00%	6.50%

Security analysis example (12-month horizon stress test)

Security	Description	Price	Yield	Duration	OAS
Treasury	T 0.625% 05/31/2017	99.07	0.943	2.953	3
High LTV Floater	FNMA13.101 CF 0.75% 10/25/43	100.19	0.731	1.247	28

Change in interest rates

	-50	0	+50	+100	+150
Total expected return Treasury note	1.89	0.91	-0.06	-1.02	-1.97
Total expected return High LTV Floater	1.28	0.86	0.54	0.12	-0.45
High LTV Floater advantage	-0.61	-0.05	0.60	1.14	1.52

Key point:

- A high LTV floater can offer an attractive total return profile in a rising rate environment

Snapshot	1 Year	2 Year	3 Year	5 Year	7 year	10 Year	30 Year
Treasury Curve	0.14	0.42	0.90	1.69	2.21	2.64	3.45

Source: J.P. Morgan Investment Management Inc.; data as of 06/10/2014

The above example is shown for illustrative purposes only and is not representative of any specific portfolio. The manager seeks to achieve the stated objective. There can be no guarantee the objective will be met.

Putting it all together — Mortgage-Backed Securities Composite

All data as of July 31, 2014

Discretionary assets: \$3.48 billion

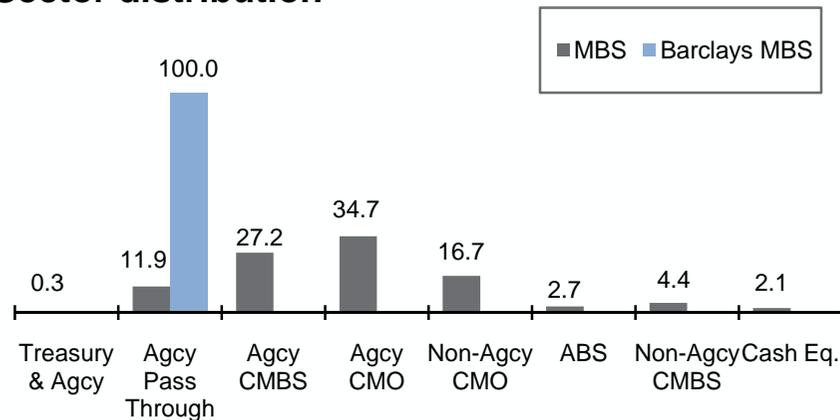
Portfolio statistics

	MBS	Barclays MBS
Yield to Maturity	2.51%	2.51%
OAS (bps)	97	20
Weighted Avg. Life (yrs)	5.12 yrs	6.75 yrs
Duration	3.68	4.57
Convexity	(0.31)	(1.55)
Average Quality	AA	AAA
Turnover	9.0%	---
Number of holdings	682	436

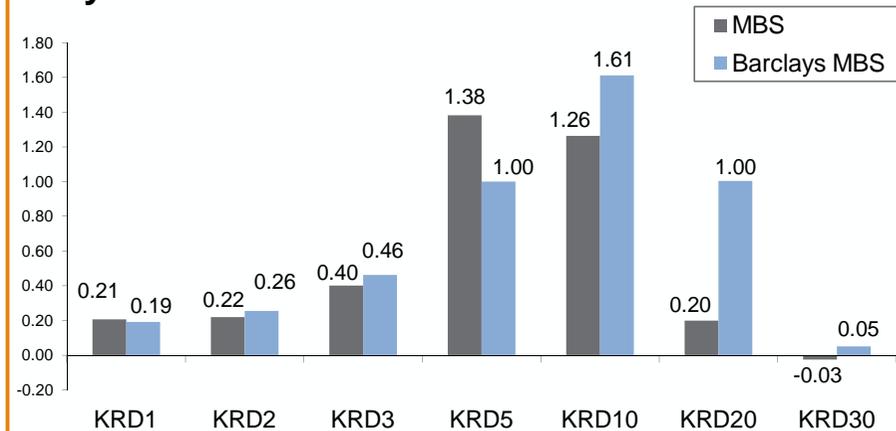
Quality Distribution*

	MBS	Barclays MBS
AAA	80.6%	100.0%
AA	2.1%	0.0%
A	2.8%	0.0%
BBB	3.9%	0.0%
BB and below	6.0%	0.0%
NR	4.6%	0.0%
Total	100.0%	100.0%

Sector distribution¹



Key Rate Duration



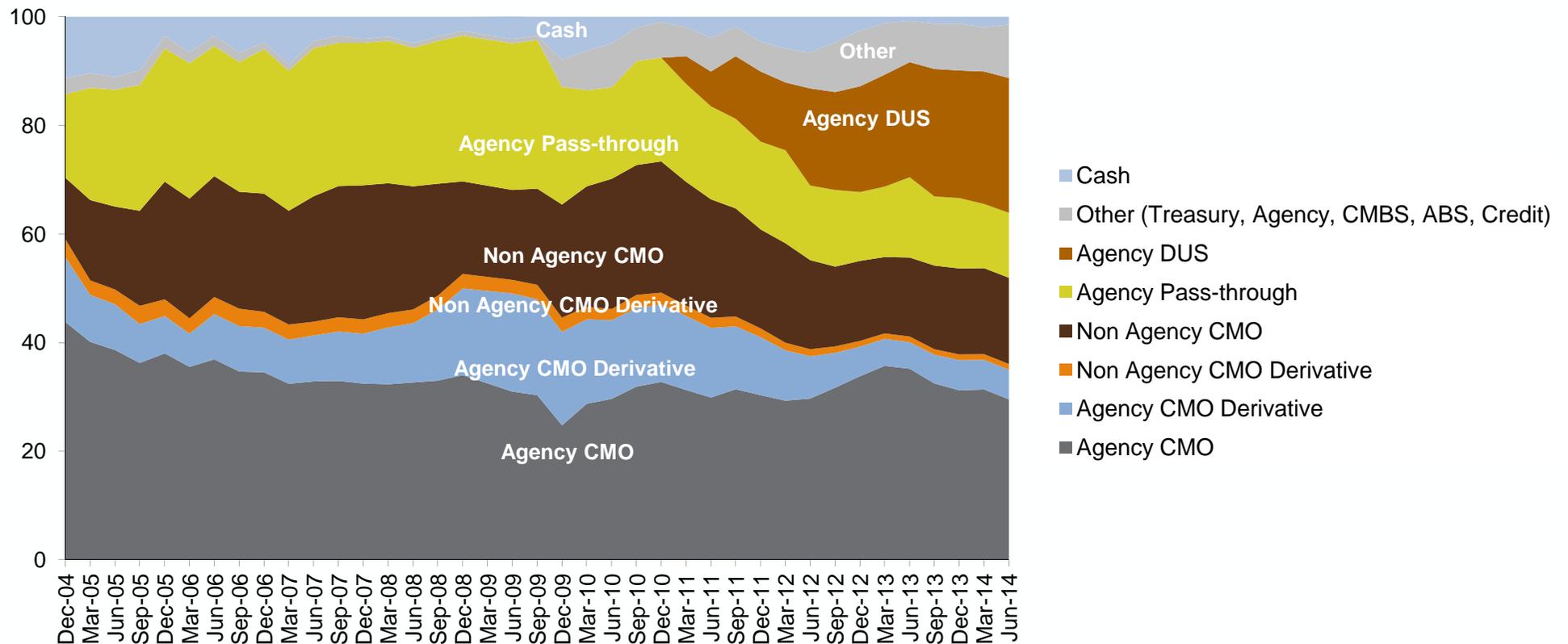
*See Appendix Disclosure Page regarding the quality rating methodology used above.

¹Measurements in percents. Index statistics compiled by running Barclays constituents through Yield Book models. Please see performance disclosures which accompany this presentation. Actual account characteristics may differ.

U.S. Value Driven MBS Composite Sector Distribution

Periods ending 12/31/04 through 6/30/14

MBS Sector Breakdown (as a percentage)



Source: J.P. Morgan Investment Management Inc.

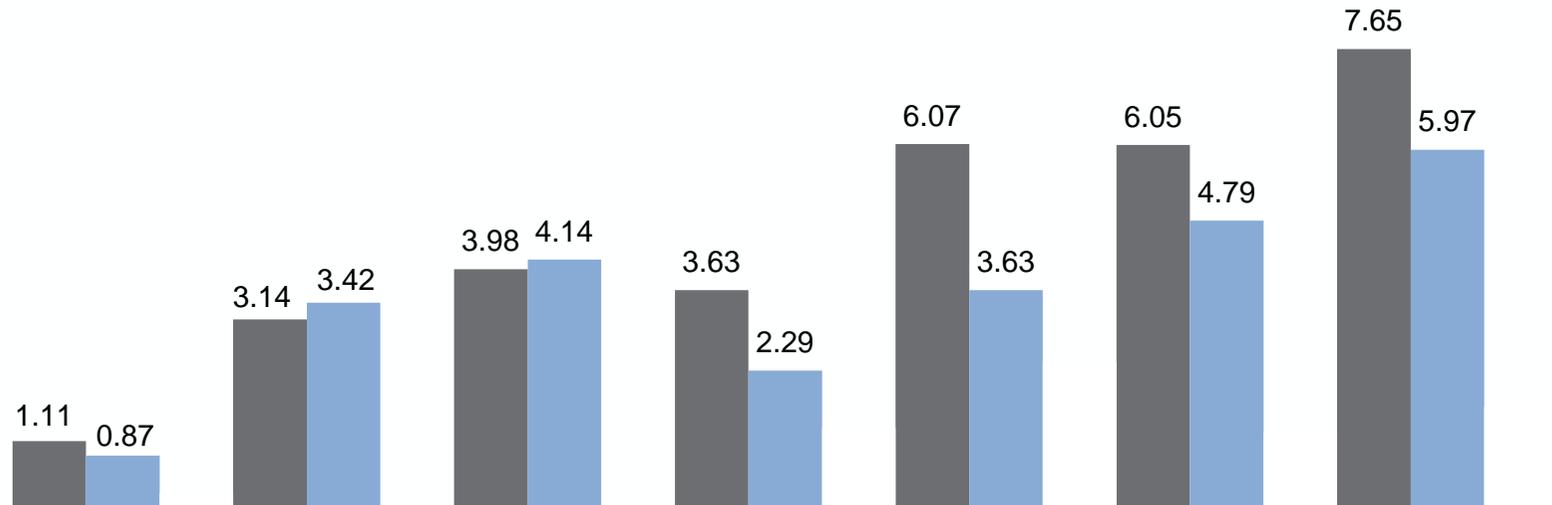
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Mortgage-Backed Securities Composite Investment Performance

Period ending July 31, 2014 – Gross of fees (%)

Supplemental to annual performance report



	3 Months	YTD	1 year	3 years	5 years	10 years	20 years
■ MBS Composite	1.11	3.14	3.98	3.63	6.07	6.05	7.65
■ Barclays MBS Index	0.87	3.42	4.14	2.29	3.63	4.79	5.97
Excess Return	0.24	(0.28)	(0.16)	1.34	2.44	1.26	1.68

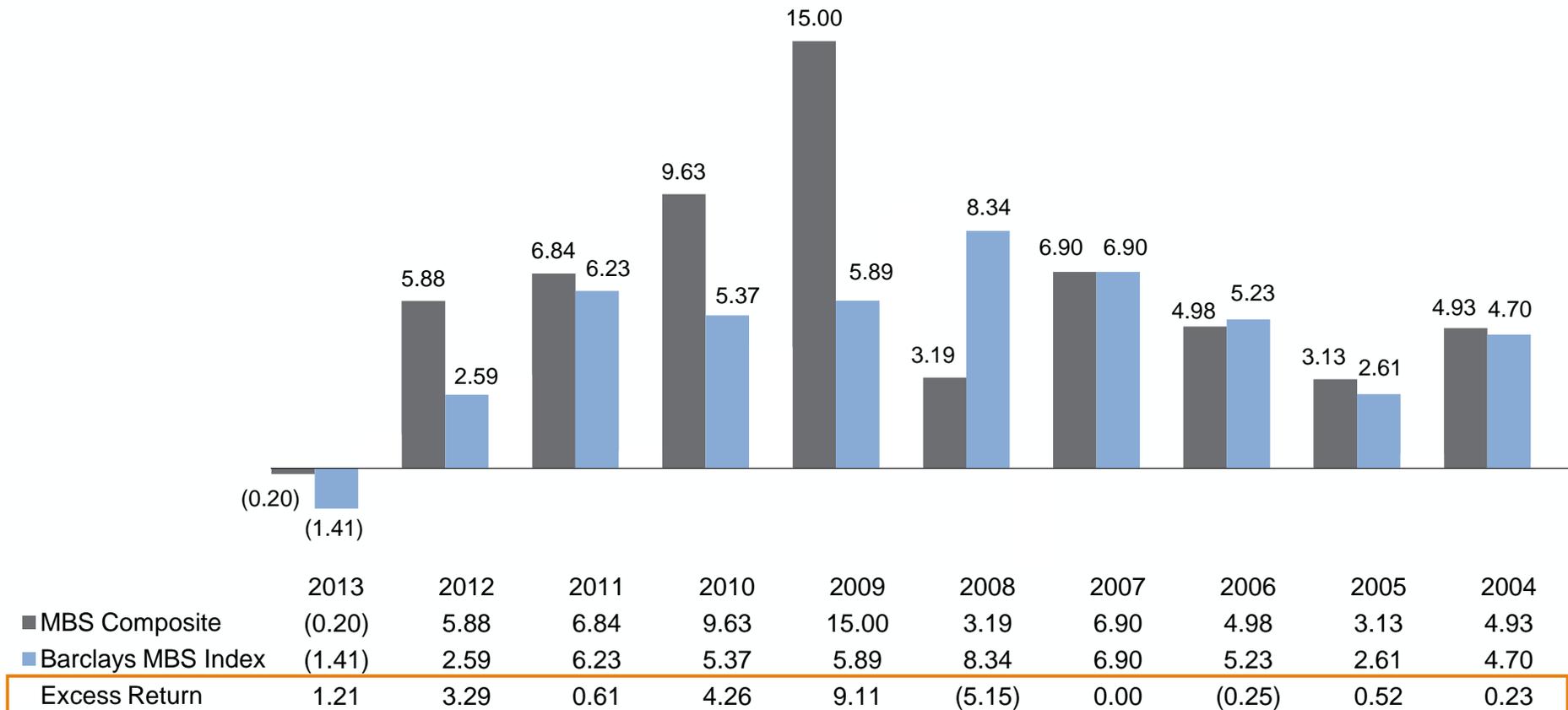
Past performance is not indicative of future returns. Performance includes the reinvestment of income.

Performance results are gross of investment management fees. The deduction of an advisory fee reduces an investor's return. Actual account performance will vary depending on individual portfolio security selection and the applicable fee schedule. Fees are described in Part II of the Advisor's ADV which is available upon request. (Please see back for additional performance disclosure)

Mortgage-Backed Securities Composite Investment Performance

Calendar Year Periods – Gross of fees (%)

Supplemental to annual performance report



Past performance is not indicative of future returns. Performance includes the reinvestment of income.

Performance results are gross of investment management fees. The deduction of an advisory fee reduces an investor's return. Actual account performance will vary depending on individual portfolio security selection and the applicable fee schedule. Fees are described in Part II of the Advisor's ADV which is available upon request. (Please see back for additional performance disclosure)

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Why hire J.P. Morgan U.S. Value Driven Mortgage-Backed Securities team?

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- U.S. Value Driven MBS Overview
 - Investment Process
 - Investment Performance
- **Risk Management**
- Market Update
- Appendix

Risk management is an integral part of our investment process

Objectives

- Limit downside risk relative to benchmark
- Consciously identify and manage risk exposures

Foundations

- Portfolio guidelines
 - provide diversification framework relative to benchmark
 - serve as the primary basis for monitoring portfolios versus benchmarks
- Stress testing
 - total return simulations for portfolio versus benchmark
 - stress changes in interest rates, yield curve and spreads
- Extensive portfolio reporting and oversight
- Performance review

Participants

- Portfolio managers — portfolio construction and monitoring
- Quantitative/risk managers — risk environment, analysis and monitoring
- Credit analysts — security review
- Senior management — oversight and accountability
- Client portfolio managers — client policy and communication

The manager seeks to achieve the stated objectives. There can be no guarantee the objectives will be met.

Risk management stress testing scenarios

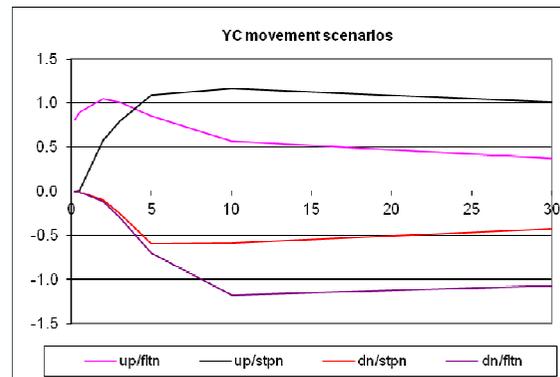
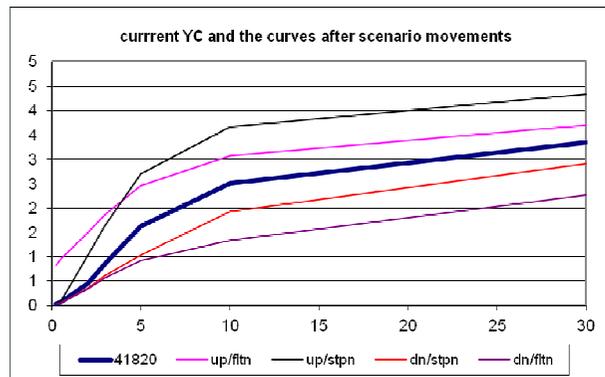
Statistical modeling is enhanced by interest rate scenario analysis and testing

Stress testing foundations

- Stress test scenarios are dynamic in character. Scenarios are updated monthly and incorporate both historical volatility and current market characteristics,
- Stress tests are conducted over a 3-month forward horizon. Portfolio and benchmark structures are assumed to be static and scenarios are assumed to evolve linearly over the horizon.
- Market movements expressed in the stress scenarios approximate the 98th percentile.
- Stress scenarios assume either 0 and +1 correlation among sectors and along the yield curve

Stress test scenario as of 06/30/2014

Yield Curve Scenarios		98 th percentile		
Maturity	down/ flattening	up/ steepening	up/ flattening	down/ steepening
0.25	0	0	80	0
0.5	-1	1	89	-1
2	-12	57	104	-10
3	-30	79	100	-25
5	-70	108	84	-60
10	-118	115	56	-59
30	-107	101	36	-43



The charts shown are for illustrative purposes only.

Spread Change Scenarios Based on Recent Market Movements

Sector	Widen	Tighten
Mgt Index	45	-15
AAA	25	-5
AA	55	-20
A	60	-25
BBB	85	-30
BB	170	-60
B	240	-75
CCC	300	-110
CC-D	300	-110
NR	300	-110
IO	150	-125
PO	-50	40
Inv IO	150	-75
Agency	15	-5

Statistical modeling is enhanced by interest rate scenario analysis and testing

Scenario testing for the MBS Composite Portfolio vs. Barclays MBS Index as of 06/30/14

What happens to the portfolio as interest rates change

Market Environment

	Portfolio	Index	Exposure Difference	Test exposure guideline limit	Excess Exposure	Within Guideline limit
Curve Reshape Down/Flatten	3.13%	2.71%	0.42%	-0.50%	None	YES
Curve Reshape Up/Steepen	-3.00%	-4.78%	1.78%	-0.50%	None	YES
Curve Reshape Down/Steepen	2.38%	2.29%	0.09%	-0.50%	None	YES
Curve Reshape Up/Flatten	-2.01%	-2.63%	0.62%	-0.50%	None	YES
Spreads Tighten	1.55%	1.38%	0.17%	-0.50%	None	YES
Spreads Widen	-1.56%	-1.61%	0.05%	-0.50%	None	YES

Sector contribution to exposure

	Spread tighten			Spread widen		
	Portfolio	Index	Difference	Portfolio	Index	Difference
Agency	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Mortgage	1.38%	1.38%	0.01%	-1.47%	-1.61%	0.14%
Asset Backed	0.05%	0.00%	0.05%	-0.04%	0.00%	-0.04%
CMBS	0.11%	0.00%	0.11%	-0.05%	0.00%	-0.05%
Corporate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other (Non Spread Sectors)*	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Return	1.55%	1.38%	0.17%	-1.56%	-1.61%	0.05%

Source: J.P. Morgan Investment Management Inc.

*Non-spread sectors include all Treasuries, futures and cash.

Interpretation of stress test results must be considered in light of the scenarios and methodology used to conduct the stress tests. Some of the foundations, for example the assumption that the character of the portfolio will remain unchanged over the test horizon, may not be reasonable under real market circumstances. There is no assurance that stress scenarios or resulting composite, individual account or benchmark forward return and risk assessments will be realized. Consequently, stress test results should not be used as projections of future rates of return. Within J.P. Morgan Investment Management Inc., internal guideline exposure limits serve as a supplement to fund prospectuses, client policies and other risk policies and procedures. Guidelines Limits serve as precautionary risk warnings not as absolute mandates. Periodic exceptions and changes to the guideline limits may occur as a result of market or business developments. There is no assurance that tracking error targets or other risk objectives will be achieved. The above chart is for illustrative purposes only.

Columbus Based Fixed Income Committee Structure

Fixed Income Policy Committee – Doug Swanson, CFA, Chair; Ric Butler, Vice Chair

- Senior Committee; Meets monthly; Special Sessions for Trading Oversight & significant events
- Participants include Senior Managers from all of the CMH FI Teams
- Approves & Administers Fixed Income investment guidelines & policies;
- Reviews performance; Reviews strategies and positions w/r/t guidelines and policies;
- Delegates authorities and reviews activities of Subcommittees.

Quantitative Subcommittee – Rene Noel, Chair

- Participants include the Risk and Quantitative Analysts and PM Team representatives
- Forum to discuss, create, and evaluate quantitative methods, tools, and guidelines
- Participates in the development and implementation of new quantitative and derivatives strategies
- Provides oversight and follow up on FIPC assigned risk management processes
- Policy/guideline development and input prior to approval by FIPC

Asset Review Subcommittee – Kyle Gephart, Chair

- Participants include Credit and Quantitative Analysts and PM and FI Wealth Advisory Team representatives
- Focus of Monthly Meetings is “At Risk” credit exposures, concentration/exposure monitoring and data maintenance/integrity
- Oversees Private Placements
- Policy/guideline development and input prior to approval by FIPC

Taxable Asset Review Subcommittee – Greg Reed, CFA, Chair

- Participants include Credit and Quantitative Analysts and PM and CPM Team representatives
- Focus of Monthly Meetings is “At Risk” credit exposures, concentration/exposure monitoring and data maintenance/integrity
- Policy/guideline development and input prior to approval by FIPC

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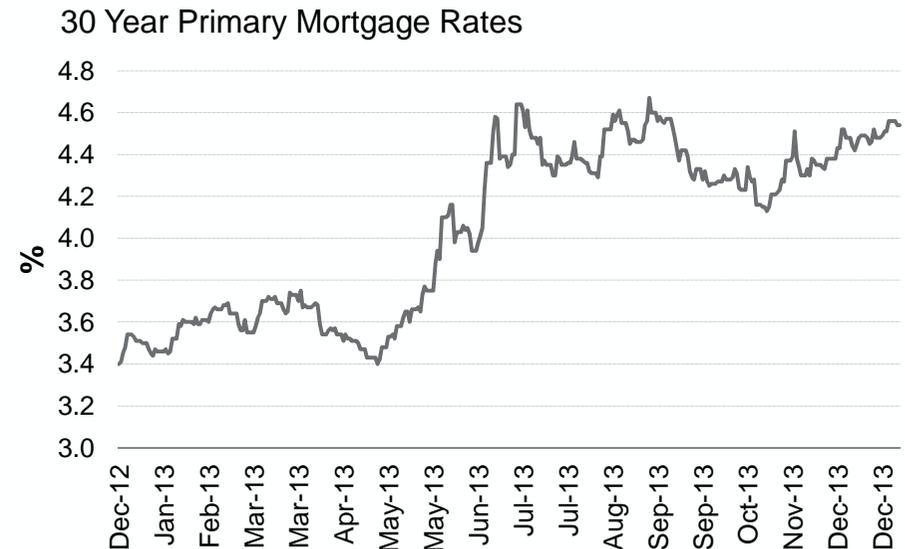
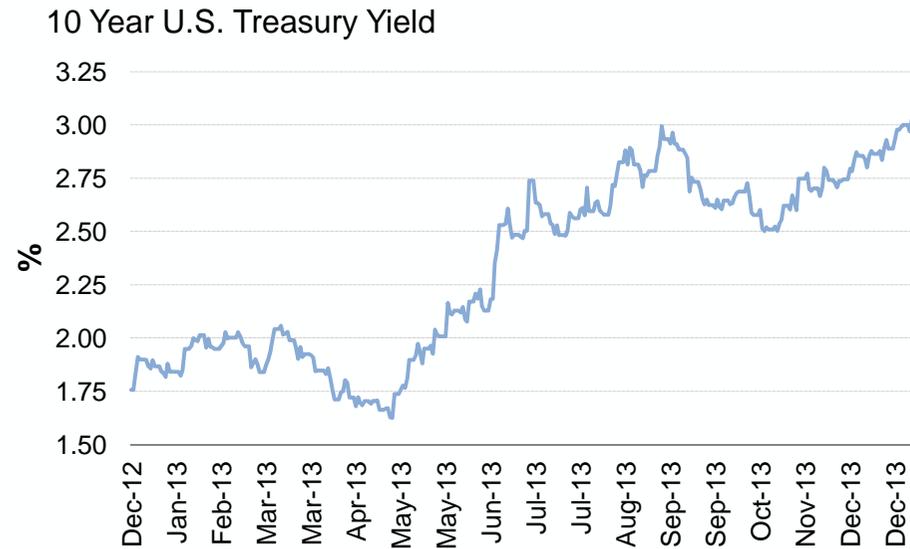
2014 Mortgage Market Outlook and Strategy

- The mortgage market is still a huge part of the American consumer balance sheet. The U.S. government is committed to a fluid mortgage market and an orderly wind down of asset purchases.
- The Federal Reserve should continue to taper asset purchases at a rate of \$10bn per month (\$5bn in MBS), which would conclude QE3 by November 2014. The expectation is for the Fed to reinvest pay downs into 2015.
- Housing affordability is off 2013 highs, and should continue to move slightly lower as interest rates rise, wage growth remains low, and home prices drift higher. We expect HPA more modest at 3-5%.
- Despite the headlines on housing reform, the agencies influence on the mortgage market is as large as ever. GSE reform will be a long term goal, with little progress made in 2014.
- A strong technical backdrop and significantly lower issuance in the MBS market should support valuations in the short term. This should reach an inflection point during the second half of 2014, with the Fed taper concluding.
- The evolution of mortgage lending has created new sub-sectors of the market not prevalent a few years ago. Three examples that have created opportunity are the non-performing loan (NPL) market, Agency CMBS, and the HARP sponsored high LTV collateral.
- Regardless of the environment, the relative value process comes down to the analysis of each deals collateral and / or structural attributes.

Opinions, estimates, forecasts, projections and statements of financial market trends that are based on current market conditions constitute our judgment and are subject to change without notice. There can be no guarantee they will be met.

Source: JPMAM; Federal Reserve

The Fed influenced market performance throughout 2013, with interest and mortgage rates closing near their highs



Maturity	U.S. Treasury Yield as of 12/31/13	Total Return as of 12/31/13	U.S. Treasury Yield as of 7/31/14	YTD Total Return as of 7/31/14
3 Months	0.07	0.09	0.02	0.05
6 Months	0.09	0.19	0.05	0.09
2 Years	0.38	0.30	0.53	0.39
5 Years	1.74	-2.47	1.75	1.43
10 Years	3.03	-7.81	2.56	5.98
30 Years	3.97	-15.03	3.32	14.64

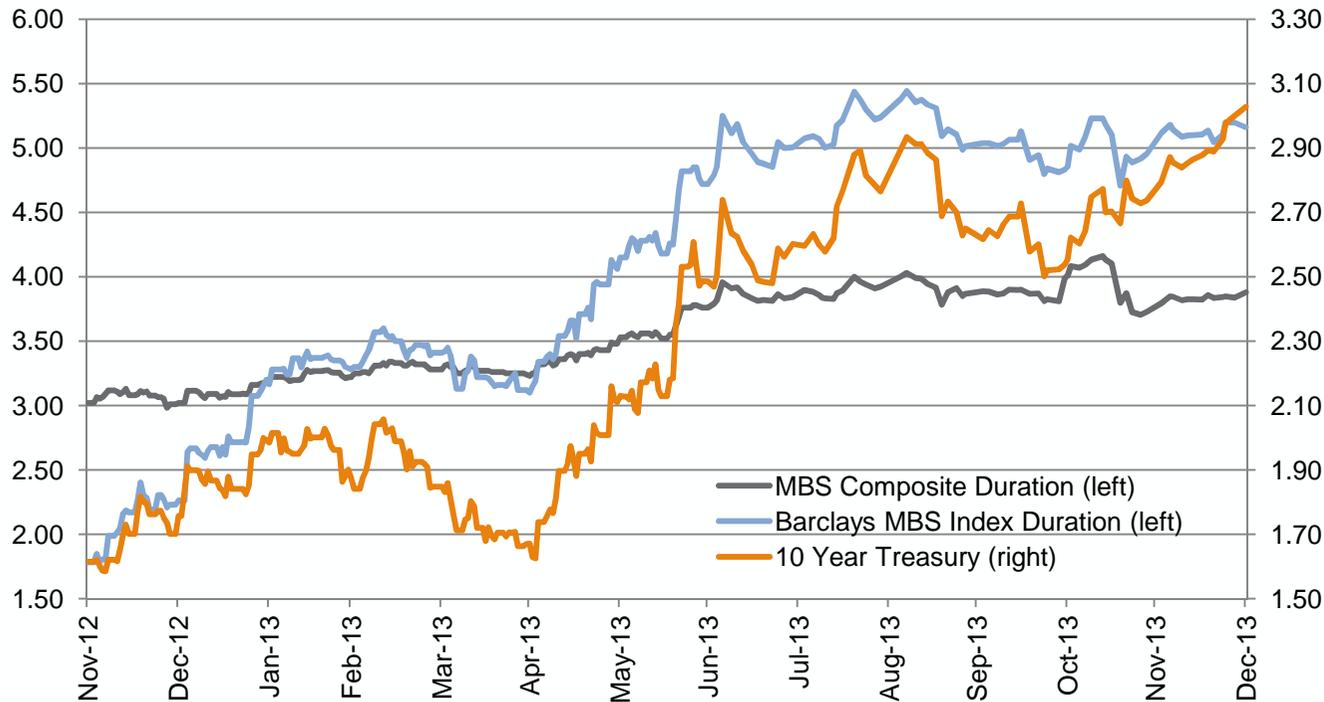
*Annualized

Source: Barclays Live; Bloomberg as of December 31, 2013

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2013 proved not all mortgages react the same to interest rate movement

The Mortgage composite duration versus the Barclays MBS Index



Key points

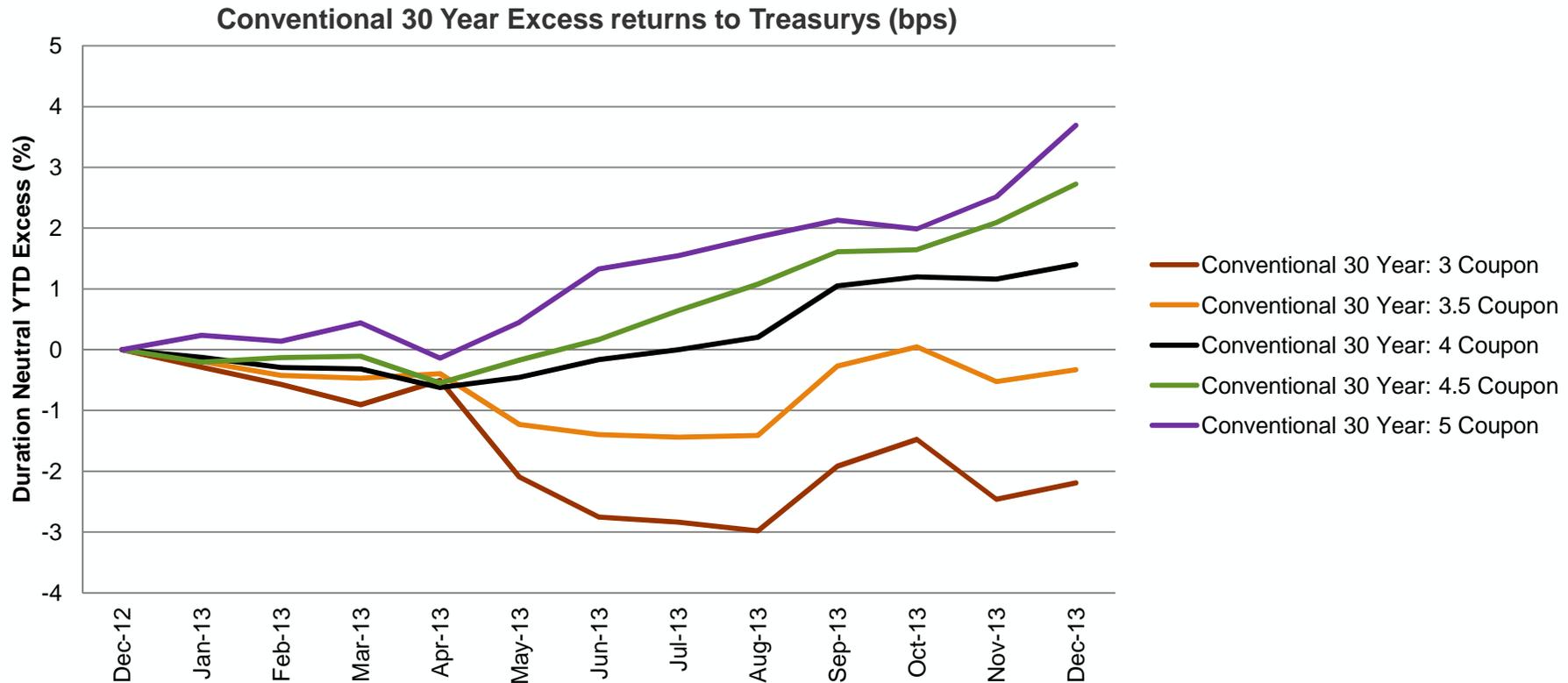
- Columbus mortgages collectively exhibit tremendous duration stability versus an index heavier in current vintages
- Our mortgage allocation shows that the selection of specific collateral and CMO structures can help foster stability in a variety of interest rate environments

Sector	11/30/12	12/31/13	Change
10 Yr Treasury Rate	1.62%	3.03%	1.41%
Average 30 Yr Primary rate	3.41%	4.54%	1.13%
MBS Index Duration (years)	1.78	5.16	3.38
MBS Composite Duration (years)	3.02	3.88	0.86

Source: Bloomberg; Barclays Live; bankrate.com; Index and composite constituents ran through Citigroup Yieldbook for comparison

* Prepayment activity as a function of interest rate changes

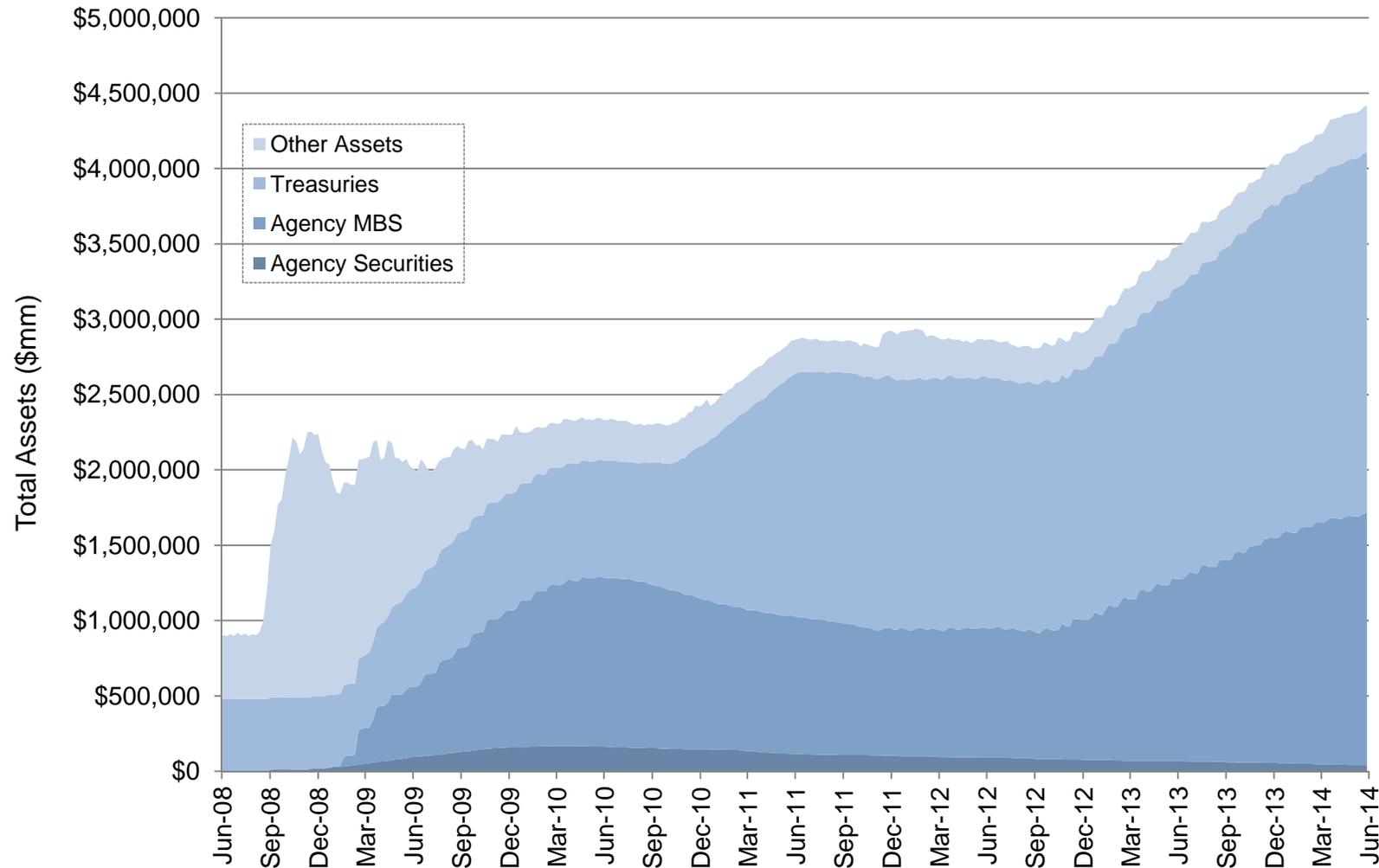
2013 Barclays MBS index performance by coupon



- Many index mortgages had sizeable negative convexity, causing duration to extend significantly as rates rose
- The Fed was not concerned with valuation, and thus was absorbing a large percentage of this paper
- A strong technical backdrop and significantly lower issuance in the MBS market should support valuations in the short term. This should reach an inflection point during the second half of 2014, with the Fed taper concluding.

Source: Bloomberg; Barclays Live; bankrate.com; Index and composite constituents ran through Citigroup Yieldbook for comparison; as of 12/31/13. Indices do not include fees or operating expenses and are not available for actual investment.

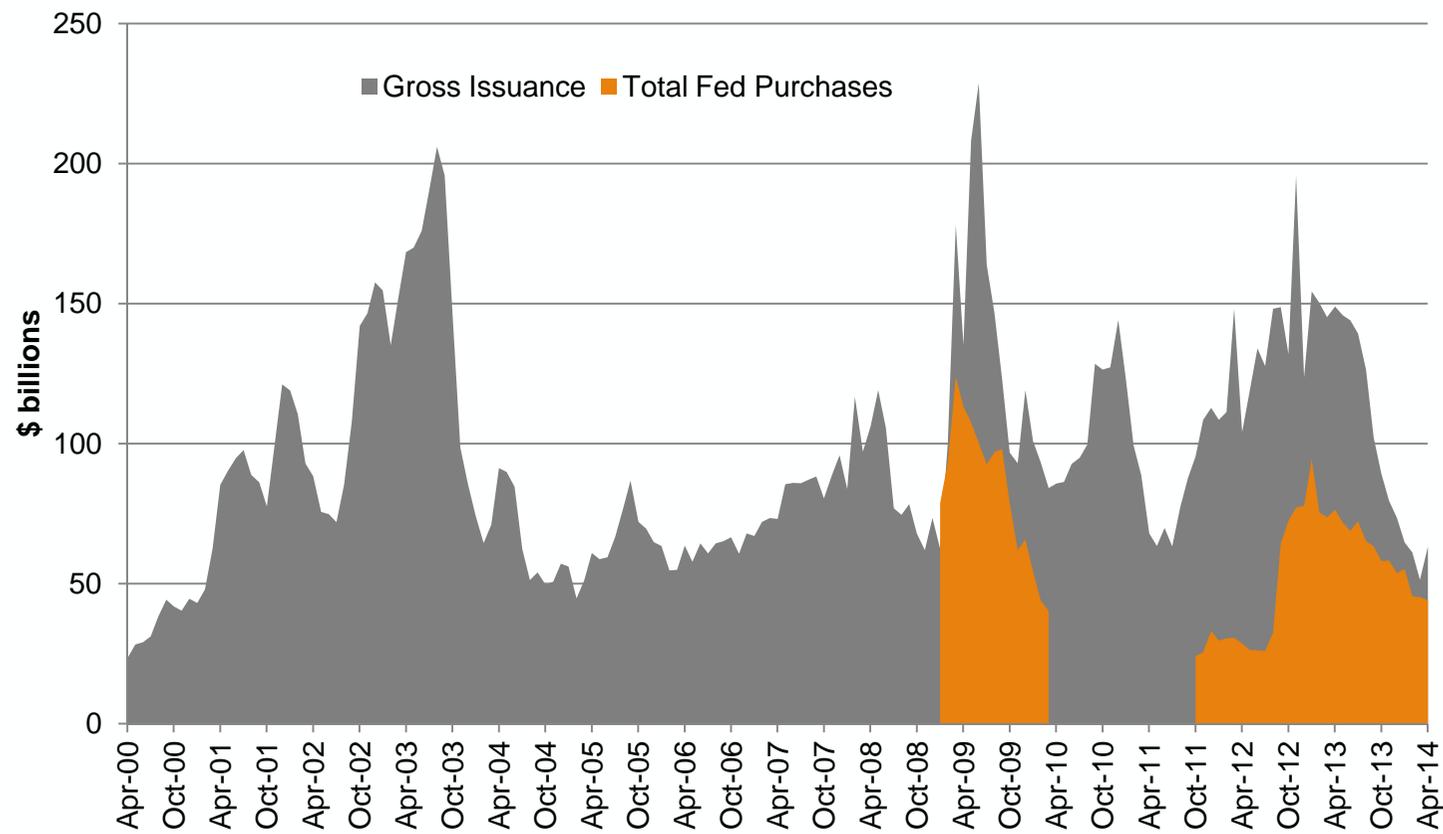
The Federal Reserve balance sheet continues to grow



The above graph is for illustrative purposes only; last data point 6/26/2014
Source: Federal Reserve

Fed absorption of gross agency MBS issuance remains high, but should decline going forward

New sources of demand will need to emerge in the post-QE era...



- Fed should be done tapering by November
- Fed reinvestment likely to continue past tapering (\$10-\$15bn/month)

The above graph is for illustrative purposes only; last data point 4/30/2014
Source: Federal Reserve Bank of New York, eMBS, JPMAM

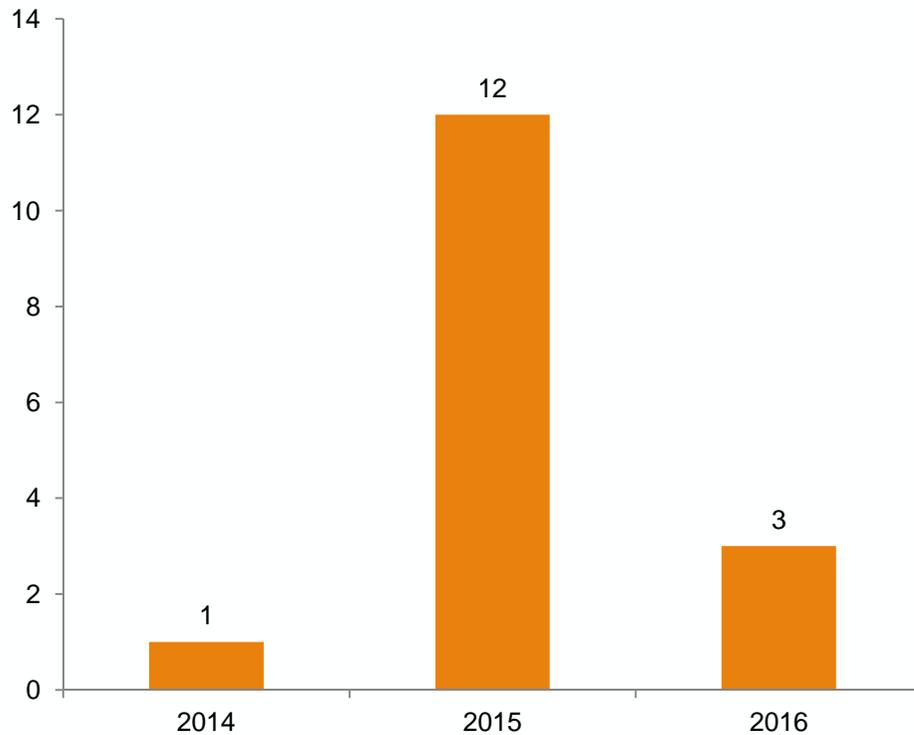
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When will interest rates rise?

When does the Fed expect interest rate to rise?

Appropriate Timing of Policy Firming

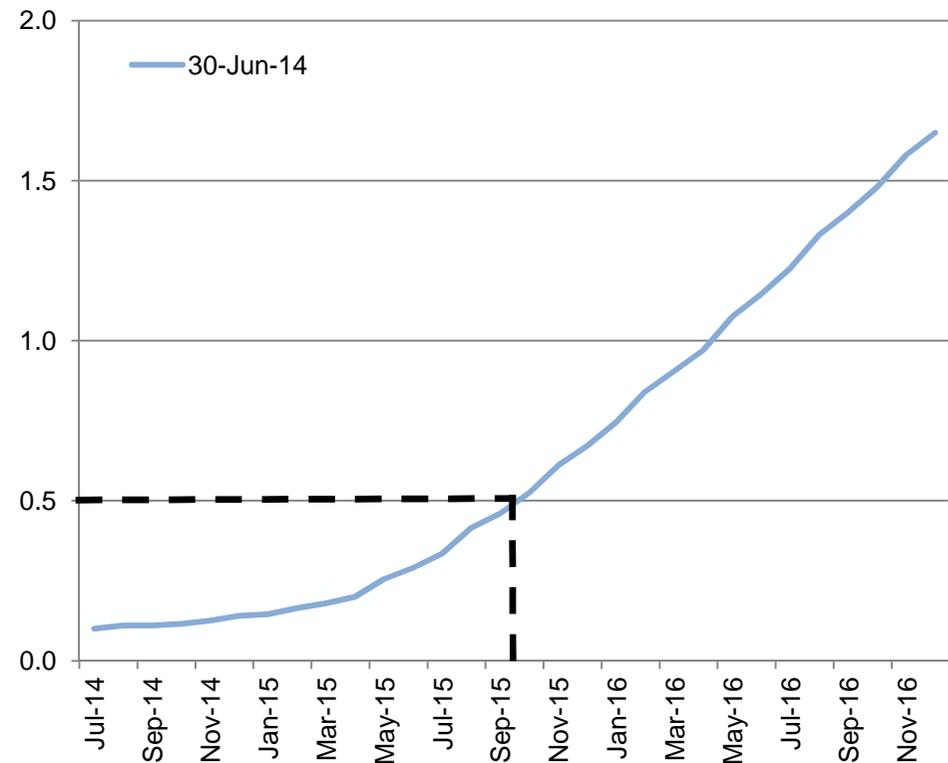
Number of Respondents



Source: Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents, June 2014. Note: The height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy, the first increase in the target federal funds rate from its current range of 0 to ¼ percent will occur in the specified calendar year. The chart is shown for illustrative purposes only.

When does the market expect interest rate to rise?

Fed Funds (%)



Source: Bloomberg. Data as of 6/30/14. The chart is shown for illustrative purposes only.

Summary

- Stable and seasoned investment team
- Well-defined, consistent investment process
 - Security selection drives the investment process
 - High quality, well diversified portfolios
 - Value bias leads to focus on CMOs
- Consistently generated excess returns over market cycles
- Client service-oriented approach

Opinions, estimates, forecasts, projections and statements of financial market trends that are based on current market conditions constitute our judgment and are subject to change without notice. There can be no guarantee they will be met.

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Structured MBS - Components of our Bottom-up, Fundamental Analysis

- Loan level data is downloaded from Loan Performance database and uploaded into proprietary model
- FICOs are adjusted based on payment history
- CLTVs are adjusted based on OFHEO and Case-Shiller price data at the MSA level plus an additional market specific stress down
- Borrowers ability to refinance is calculated based on the adjusted FICO and CLTV
- Projected defaults are calculated based on:
 - Current delinquency status along with adjusted FICO and CLTV
 - Adjusted based on loan product, occupancy status, documentation status, and housing price forecasts
- Severity rates are determined by:
 - Value of home is adjusted by Case-Shiller or OFHEO price data at the MSA level plus an additional stress down
 - Recovery rate based on property value net off liquidation expenses
 - Adjusted by presence of mortgage insurance
- Model helps create prepay, default and delinquency curves which are loaded into Intex
- Additional stress tests are run based on a multiple of the base case along with other custom scenarios

The manager seeks to achieve the stated objectives. There can be no guarantee the objectives will be met.

MBS Composite Mortgage-backed Securities Summary

As of July 31, 2014

MBS exposure	% of MBS Composite
U.S. Government/Agency	73.77%
Non-Agency	16.72%
Total	90.49%

U.S Gov't/Agency detail	% of MBS Composite
Fannie Mae	43.40%
Freddie Mac	12.62%
Ginnie Mae	17.12%
VA	0.28%
NCUA	0.35%
Non-Agency	16.72%
Total	90.49%

	% of MBS Composite
CMOs	51.46%
Pass-throughs	11.85%
Agency CMBS	27.18%
Total	90.49%

	% of MBS Composite
Fixed Rate	68.01%
Hybrid/Floating Rate	22.48%
Total	90.49%

Source: J.P. Morgan Investment Management Inc.
Actual account characteristics may differ.

Mortgage-Backed Securities by Vintage

As of July 31, 2014

Origination Year	% of total	% cumulative
< 2002	5.7	5.7
2002	2.0	7.6
2003	8.4	16.0
2004	5.8	21.7
2005	6.5	28.2
2006	7.6	35.8
2007	5.0	40.8
2008	1.5	42.3
2009	2.6	44.9
2010	10.1	55.0
2011	11.2	66.2
2012	21.8	88.0
2013	11.6	99.6
2014	0.4	100.0

Source: J.P. Morgan Investment Management Inc. based on loan origination year
Actual account characteristics may differ.

MBS Composite Non-Agency MBS Summary

Alt-A Quality*	% of MBS Composite
AAA	0.08%
AA	0.09%
A	0.13%
BBB	0.23%
BB	0.29%
≤ B & NR	2.48%
Total	3.30%

Alt-A Vintage	% of MBS Composite
≤2003	0.59%
2004	0.56%
2005	0.87%
2006	0.55%
2007	0.71%
2008	0.02%
Total	3.30%

Prime Quality	% of MBS Composite
AAA	1.47%
AA	1.35%
A	1.90%
BBB	3.24%
BB	1.24%
≤ B & NR	4.22%
Total	13.42%

Prime Vintage	% of MBS Composite
≤ 2006	10.90%
2007	1.44%
2009	0.09%
2012	0.22%
2013	0.56%
2014	0.21%
Total	13.42%

Alt-A (Alternative A) are loans made to borrowers whose qualifying mortgage characteristics do not meet the underwriting criteria established by the GSEs (Government-Sponsored Enterprises). The typical Alt-A borrower has a credit score high enough to obtain an A standing, which is especially important to the originator since the score must compensate for the lack of other necessary documentation. Actual account characteristics may differ.

Source: J.P. Morgan Investment Management Inc.; data as of July 31, 2014

*See Appendix Disclosure Page regarding the quality rating methodology used above.

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Security selection: Assessing value begins with the collateral

Collateral profile of the DUS pass-through

Issuer	Fannie Mae
Coupon	3.50%
Original Term	10 Years
Vintage	2013
WALA	2
Deal Size	8,000,000
Loans	1
Underwritten Prop Value	12,300,000
Total Units	197
Underwritten Occupancy	96%
WA OLV	65
Collateral Type	Full IO
Property Type	Tier 3
Property Location	Hanover, MD

DUS pools come with strong prepay protection due to steep prepay penalties and loss sharing measures if a loan defaults

Security analysis example (12-month horizon stress test)

Security	Description	Price	Yield	Duration	Convex	OAS
TBA Pass-through	FNMA TBA 30yr 3.5% 05/01/2043	98.91	3.22	7.31	(0.07)	30
DUS Pass-through	FN DUS 3.5% 07/01/2023	101.125	3.61	8.00	0.74	75

Change in interest rates

	-150	-100	-50	0	+50	+100	+150
TBA Pass-through	10.67	9.29	7.06	4.02	0.70	(2.64)	(5.97)
DUS Pass-through	16.43	12.51	8.66	4.92	1.33	(2.12)	(5.42)
DUS advantage	5.76	3.22	1.60	0.90	0.63	0.52	0.55

Key point:

- A pass-through off of DUS collateral is a good example of mortgage types which provide attractive total return vs. index mortgages

Snapshot	1 Year	2 Year	3 Year	5 Year	7 year	10 Year	30 Year
Treasury Curve	0.17	0.49	0.93	1.77	2.38	2.99	3.88

Source: J.P. Morgan Investment Management Inc.; Citigroup Yield book data as of 09/10/2013;

Analysis run using off-the-run Treasury curve, parallel & gradual shifts, no change in OAS, and a reinvestment rate at current YTM +/- the scenario

The above example is shown for illustrative purposes only and is not representative of any specific portfolio. The manager seeks to achieve the stated objective. There can be no guarantee the objective will be met.

Mortgage-Backed Securities Composite Disclosure

Mortgage Backed Securities Composite January 1, 2004 through December 31, 2013

Year	Gross Return (%)	Net Return (%)	Benchmark Return (%)	Composite		Benchmark		Internal Dispersion (%)	Number of Accounts	Composite Assets (\$ millions)	Total Firm Assets ¹ (\$ billions)
				3-yr St Dev (%)	St Dev (%)	3-yr St Dev (%)	St Dev (%)				
2013	-0.20	-0.45	-1.41	1.62	2.08	N/A	5 or fewer	3,868	771		
2012	5.88	5.61	2.59	1.33	1.70	N/A	5 or fewer	5,482	692		
2011	6.84	6.57	6.23	2.09	2.09	N/A	5 or fewer	3,805	653		
2010	9.63	9.35	5.37	2.85	3.27	N/A	5 or fewer	3,164	625		
2009	15.00	14.77	5.89	3.16	3.29	N/A	5 or fewer	2,330	616		
2008	3.19	2.99	8.34	2.70	3.28	N/A	5 or fewer	2,065	547		
2007	6.90	6.69	6.90	2.51	2.35	N/A	5 or fewer	1,989	442		
2006	4.98	4.77	5.23	2.68	2.52	N/A	5 or fewer	1,851	374		
2005	3.13	2.92	2.61	2.72	2.69	N/A	5 or fewer	1,597	348		
2004	4.93	4.72	4.70	3.05	2.82	N/A	5 or fewer	1,947	172		

¹ Firm assets prior to 2005 are those of Banc One Investment Advisors Corporation (BOIA), which subsequently merged with JPMorgan Chase and Company and are included in the JPMIM firm definition.

J.P. Morgan Investment Management Inc. claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. J.P. Morgan Investment Management Inc. has been independently verified for the period 2001-2010.

Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation. The Mortgage Backed Securities composite has been examined for the periods 1994-2010. The verification and performance examination reports are available upon request.

1. J.P. Morgan Investment Management Inc. (JPMIM or the Firm) consists of the assets of institutional clients invested in US managed products including 1) the fixed income and cash assets formerly part of Chase Asset Management and MDS&Chase Partners, 2) the New York institutional investment division of JPMorgan Chase Bank, N.A., formerly Morgan Guaranty Trust Company of New York, 3) the institutional investment assets of JPMorgan Investment Advisors, Inc. (JPMIA), formerly known as Banc One Investment Advisors Corporation (BOIA), the advisor to institutional assets directly managed by JPMIA or sub-advised by an affiliate institution, and 4) the institutional assets of Bear Stearns Asset Management Inc. The Firm also includes Separately Managed Accounts over which JPMIM has full and sole discretion. JPMIM is marketed under JPMorgan Asset Management.

2. The composite seeks to outperform the Barclays Capital Mortgage Backed Securities (MBS) Bond Index over a market cycle while maintaining a risk profile that is similar to the index. Sector allocations are managed relative to the index. The Barclays Capital MBS Bond Index measures the performance of securities issued by the U.S. government and publicly issued corporate debt with a maturity range from one to ten years. The composite was created in January 1988.

3. Both gross and net returns reflect the reinvestment of income, deduction of transaction costs, and are net of withholding taxes where applicable. All returns are expressed in U.S. dollars. Gross returns do not reflect the deduction of investment advisory fees or any other expenses that may be incurred in the management of the account. Net returns are net of model investment advisory fees in effect for the respective time period. Model net returns are calculated by subtracting the highest applicable fee on a monthly basis from the gross composite return. As of December 31, 2013, the standard annual fee schedule is as follows: 0.25% on the balance. Actual advisory fees charged and actual account minimum size may vary by account due to various conditions described in Part IIA of Form ADV. Since January 2012 a composite-specific minimum asset level of \$50MM has applied. Prior to January 2012 a composite-specific minimum asset level of \$100MM has applied. Prior to April 2004, the composite-specific minimum was \$10MM.

4. A list of composite descriptions and policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.

5. The benchmark is the Barclays Capital Mortgage Backed Securities (MBS) Bond Index. The index returns are provided to represent the investment environment existing during the time periods shown and are not covered by the report of independent verifier. For comparison purposes the index is fully invested, which includes the reinvestment of income. The returns for the index do not include any transaction costs, management fees or other costs.

6. The three-year annualized standard deviation measures the variability of the composite and the benchmark returns over the preceding 36-month period.

7. The internal dispersion of annual returns is measured by the asset-weighted standard deviation of gross account returns included in the composite for the full year. For periods with 5 or fewer accounts included for the entire year, internal dispersion is not presented (n/a) as it is not considered meaningful.

8. Beginning 1/1/2005 an account is temporarily removed from the composite if it experiences a cash and/or securities inflow or outflow greater than or equal to 10% of the account's beginning market value.

9. Past performance is no guarantee of future results. As with any investment vehicle, there is always the potential for gains as well as the possibility of losses.

J.P. Morgan Asset Management

This document is intended solely to report on various investment views held by J.P. Morgan Asset Management. Opinions, estimates, forecasts, and statements of financial market trends that are based on current market conditions constitute our judgment and are subject to change without notice. We believe the information provided here is reliable but should not be assumed to be accurate or complete. The views and strategies described may not be suitable for all investors. References to specific securities, asset classes and financial markets are for illustrative purposes only and are not intended to be, and should not be interpreted as, recommendations. Indices do not include fees or operating expenses and are not available for actual investment. The information contained herein employs proprietary projections of expected returns as well as estimates of their future volatility. The relative relationships and forecasts contained herein are based upon proprietary research and are developed through analysis of historical data and capital markets theory. These estimates have certain inherent limitations, and unlike an actual performance record, they do not reflect actual trading, liquidity constraints, fees or other costs. References to future net returns are not promises or even estimates of actual returns a client portfolio may achieve. The forecasts contained herein are for illustrative purposes only and are not to be relied upon as advice or interpreted as a recommendation.

Selected Risks

Mortgage Risks Mortgage-related and asset-backed securities are subject to certain other risks. The value of these securities will be influenced by the factors affecting the housing market and the assets underlying such securities. As a result, during periods of declining asset value, difficult or frozen credit markets, swings in interest rates, or deteriorating economic conditions, mortgage-related and asset-backed securities may decline in value, face valuation difficulties, become more volatile and/or become illiquid. Additionally, during such periods and also under normal conditions, these securities are also subject to prepayment and call risk. When mortgages and other obligations are prepaid and when securities are called, the strategy may have to reinvest in securities with a lower yield or fail to recover additional amounts (i.e., premiums) paid for securities with higher interest rates, resulting in an unexpected capital loss. Some of these securities may receive little or no collateral protection from the underlying assets and are thus subject to the risk of default described under "Credit Risk". The risk of such defaults is generally higher in the case of mortgage-backed investments that include so-called "sub-prime" mortgages. The structure of some of these securities may be complex and there may be less available information than other types of debt securities.

Credit Risk. There is a risk that issuers and counterparties will not make payments on securities and investments held by the portfolio. Such default could result in losses to an investment in the portfolio. In addition, the credit quality of securities held by a portfolio may be lowered if an issuer's financial condition changes. Lower credit quality may lead to greater volatility in the price of a security. Lower credit quality also may affect liquidity and make it difficult for the portfolio to sell the security. The portfolio may invest in securities that are rated in the lowest investment grade category. Such securities are considered to have speculative characteristics similar to high yield securities, and issuers of such securities are more vulnerable to changes in economic conditions than issuers of higher grade securities.

The strategy may invest in collateralized mortgage obligations (CMOs). CMOs are issued in multiple classes, and each class may have its own interest rate and/or final payment date. A class with an earlier final payment date may have certain preferences in receiving principal payments or earning interest. As a result, the value of some classes in which the Fund invests may be more volatile and may be subject to higher risk of nonpayment.

There can be no assurance that the professionals currently employed by J.P. Morgan Asset Management will continue to be employed by J.P. Morgan Asset Management or that the past performance or success of any such professional serves as an indicator of such professional's future performance or success.

The Barclays U.S. MBS Index (formerly Lehman Brothers U.S. MBS Index) covers the mortgage-backed pass-through securities of Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC). The index includes fixed-rate and hybrid ARM pass-through securities. The performance of the index does not reflect the deduction of expenses associated with a mutual fund, such as investment management fees. By contrast, the performance of the Fund reflects the deduction of the mutual fund expenses, including sales charges if applicable. An individual cannot invest directly in an index. The deduction of an advisory fee reduces an investor's return. Actual account performance will vary depending on individual portfolio security selection and the applicable fee schedule. Fees are available upon request.

The following is an example of the effect of compounded advisory fees over a period of time on the value of a client's portfolio: A portfolio with a beginning value of \$100 million, gaining an annual return of 10% per annum would grow to \$259 million after 10 years, assuming no fees have been paid out. Conversely, a portfolio with a beginning value of \$100 million, gaining an annual return of 10% per annum, but paying a fee of 1% per annum, would only grow to \$235 million after 10 years. The annualized returns over the 10 year time period are 10.00% (gross of fees) and 8.91% (net of fees). If the fee in the above example was 0.25% per annum, the portfolio would grow to \$253 million after 10 years and return 9.73% net of fees. The fees were calculated on a monthly basis, which shows the maximum effect of compounding.

The value of investments and the income from them may fluctuate and your investment is not guaranteed. Past performance is no guarantee of future results. Please note current performance may be higher or lower than the performance data shown. Please note that investments in foreign markets are subject to special currency, political, and economic risks. Exchange rates may cause the value of underlying overseas investments to go down or up. Investments in emerging markets may be more volatile than other markets and the risk to your capital is therefore greater. Also, the economic and political situations may be more volatile than in established economies and these may adversely influence the value of investments made

Quality Rating Methodology. J.P. Morgan Investment Management Inc. (JPMIM) receives credit quality ratings on underlying securities of the portfolio from the three major ratings agencies – S&P, Moody's and Fitch. When calculating the credit quality breakdown, JPMIM selects the middle rating of the agencies when all three agencies rate a security. JPMIM will use the lower of the two ratings if only two agencies rate a security and JPMIM will use one rating if that is all that is provided. We will use the DBRS rating for securities that are not rated by SP, Moody's, or Fitch. Securities that are not rated by all four agencies are reflected as such.

All case studies are shown for illustrative purposes only and should not be relied upon as advice or interpreted as a recommendation. They are based on current market conditions that constitute our judgment and are subject to change. Results shown are not meant to be representative of actual investment results. Past performance is not necessarily indicative of the likely future performance of an investment.

Any securities mentioned throughout the presentation are shown for illustrative purposes only and should not be interpreted as recommendations to buy or sell. A full list of firm recommendations for the past year is available upon request.

J.P. Morgan Asset Management is the marketing name for the asset management business of JPMorgan Chase & Co. Those businesses include, but are not limited to, J.P. Morgan Investment Management Inc., Security Capital Research & Management Incorporated and J.P. Morgan Alternative Asset Management, Inc.

State Investment Board

Asset and Investment Performance Overview

August 22, 2014

Dave Hunter, Executive Director / CIO
Darren Schulz, Deputy Chief Investment Officer
ND Retirement & Investment Office (RIO)
State Investment Board (SIB)

State Investment Board – Client Assets Under Management

Fund Name	Market Values as of 6/30/14 ⁽¹⁾	Market Values as of 12/31/13 ⁽¹⁾	Market Values as of 6/30/13 ⁽²⁾
Pension Trust Fund			
Public Employees Retirement System (PERS)	2,332,744,038	2,204,819,633	2,000,899,336
Teachers' Fund for Retirement (TFFR)	2,061,684,912	1,970,377,031	1,810,735,455
Job Service of North Dakota Pension	97,825,769	95,276,201	90,442,764
City of Bismarck Employees Pension	78,804,326	74,832,971	68,822,847
City of Grand Forks Employees Pension	57,896,611	53,459,799	50,148,061
City of Bismarck Police Pension	34,643,204	32,887,889	30,072,819
Grand Forks Park District	5,938,993	5,653,023	5,109,311
City of Fargo Employees Pension	9,702	4,742,525	34,133,671
Subtotal Pension Trust Fund	4,669,547,558	4,442,049,072	4,090,364,264
Insurance Trust Fund			
Legacy Fund	2,215,941,142	1,695,950,111	1,194,779,193
Workforce Safety & Insurance (WSI)	1,703,987,980	1,627,545,930	1,557,719,286
Budget Stabilization Fund	586,199,881	588,744,084	401,353,181
City of Fargo FargoDome Permanent Fund	41,775,992	38,668,924	36,411,591
PERS Group Insurance Account	37,425,567	39,626,348	42,792,878
State Fire and Tornado Fund	29,223,707	28,625,262	26,633,417
Petroleum Tank Release Compensation Fund	7,092,998	6,899,622	6,839,483
State Risk Management Fund	6,948,162	6,593,046	6,187,298
State Risk Management Workers Comp Fund	5,965,322	5,654,121	5,247,448
ND Association of Counties (NDACo) Fund	3,445,373	2,894,408	2,717,444
State Bonding Fund	3,268,991	3,171,622	3,141,218
ND Board of Medical Examiners	1,889,897		
Insurance Regulatory Trust Fund	1,146,038	1,107,837	1,043,647
Bismarck Deferred Sick Leave Account	849,818	807,624	1,016,834
Cultural Endowment Fund	364,979	359,577	323,914
Subtotal Insurance Trust Fund	4,645,525,847	4,046,648,516	3,286,206,832
PERS Retiree Insurance Credit Fund	90,360,366	83,492,581	73,677,263
Total Assets Under SIB Management	9,405,433,771	8,572,190,169	7,450,248,360

⁽¹⁾ 6/30/14 and 12/31/13 market values are unaudited and subject to change.

⁽²⁾ 6/30/13 market values as stated in the Comprehensive Annual Financial Report.

- **SIB Client Assets Under Management grew by over 26% or \$1.96 billion in the last year.**
- ***The Pension Trust posted a net return of over 16.3%, while the Insurance Trust generated an 8.3% net return in fiscal 2014. Investments were responsible for gains of \$669 million for the Pension Trust and \$273 million for the Insurance Trust.***
- ***Legacy assets increased by over 85% (or \$1.0 billion) primarily due to tax collections, although net returns were 6.6% for the year ended June 30, 2014.***
- **SIB client assets approximated \$9.4 billion based on unaudited valuations as of June 30, 2014.**

Client Level Return and Risk Summary – June 30, 2014

Overview:

Investment performance is summarized for each SIB Client over the following three pages. Actual client level returns, net of fees, are reported for the 1-, 3- and 5-year periods ended June 30, 2014. In order to determine relative performance, actual returns (net of fees) are compared to the policy benchmark for each relevant period. Risk metrics (standard deviation and risk adjusted excess return) are also reported for each SIB client, if applicable, for the 5-year period ended June 30, 2014.

Pension Trust:

All current Pension Trust clients generated positive Excess Returns for the 1-, 3- and 5-year periods ended June 30, 2014, as summarized on the following page. PERS generated a net return of over 16.3% during the past year which exceeded the policy benchmark by 0.7%. TFFR generated a net return of 16.5% for the last year which also surpassed the policy benchmark by over 0.7%. *The top three drivers of excess returns were Global Real Estate, Infrastructure and Domestic Fixed Income within the Pension Trust during the last year, while Timber was the largest detractor.* **Risk Adjusted Excess Returns** for the five-years ended June 30, 2014 were positive for all current Pension Trust clients with one exception for PERS (-0.23%) mostly due to Emerging Market equity performance which was below expectations and prompted the recent restructuring of this sector.

Insurance Trust:

All Insurance Trust clients generated positive Excess Returns for the 1-, 3- and 5-year periods ended June, 2014, with one exception. The PERS Group Insurance fund (\$37.4 million) generated a negative excess return of 0.04% during the past year, but generated a positive excess return for the 3- and 5-year periods ended June 30, 2014. The Legacy Fund generated a net return of 6.6% during the past year which exceeded the policy benchmark by 1.1%. Workforce Safety and Insurance generated a net return of 11.7% during the last year which exceeded the policy benchmark by over 1.7%. *Fixed income mandates which focused on opportunistic credit and value driven strategies were predominantly responsible for these above benchmark returns in this trust.*

All Insurance Trust clients generated positive Risk Adjusted Excess Return for the 5-year period ended June, 2014.

Actual asset allocations are within Target ranges and guidelines as confirmed by Callan Associates as of June 30, 2014.

Note: Current fiscal year returns are unaudited and subject to change.

Pension Excess Returns and Risk Summary - June 30, 2014

	1 Yr Ended 6/30/2014	3 Yrs Ended 6/30/2014	5 Yrs Ended 6/30/2014	Risk (Std.Dev.) 5 Yrs End. 6/30/2014	Risk Adj Excess Return 5 Yrs Ended 6/30/2014		1 Yr Ended 6/30/2014	3 Yrs Ended 6/30/2014	5 Yrs Ended 6/30/2014	Risk (Std.Dev.) 5 Yrs End. 6/30/2014	Risk Adj Excess Return 5 Yrs Ended 6/30/2014
PUBLIC EMPLOYEES RETIREMENT SYSTEM (PERS)						JOB SERVICE PENSION PLAN (2014)					
\$	2,332,744,038			115% Limit		\$	97,825,769				
Total Fund Return - Net	16.38%	9.66%	12.70%	9.5%	-0.23%	Total Fund Return - Net	13.54%	9.36%	11.58%	7.4%	0.05%
Policy Benchmark Return	15.67%	9.35%	12.33%	9.0%		Policy Benchmark Return	13.02%	8.31%	10.60%	6.8%	
Attribution Analysis				105%		Attribution Analysis				109%	
Asset Allocation	0.15%	-0.06%		Actual Risk /		Asset Allocation	-0.02%	-0.14%		Actual Risk /	
Manager Selection	0.56%	0.37%		Policy Risk		Manager Selection	0.53%	1.19%		Policy Risk	
Total Relative Return	0.71%	0.31%	0.37%			Total Relative Return	0.52%	1.04%	0.98%		
TEACHERS' FUND FOR RETIREMENT (TFRR)						CITY OF FARGO PENSION PLAN - Not Meaningful as a Liquidating Client					
\$	2,061,684,912			115% Limit		\$	9,702			Investment < \$10,000	
Total Fund Return - Net	16.53%	9.38%	13.07%	10.5%	0.20%	Total Fund Return - Net	8.42%	7.63%	11.72%	10.10%	-0.20%
Policy Benchmark Return	15.74%	8.73%	12.23%	10.0%		Policy Benchmark Return	8.44%	7.49%	11.17%	9.45%	
Attribution Analysis				105%		Attribution Analysis				107%	
Asset Allocation	0.23%	0.18%		Actual Risk /		Asset Allocation	-0.23%	-0.01%		Actual Risk /	
Manager Selection	0.56%	0.47%		Policy Risk		Manager Selection	0.21%	0.15%		Policy Risk	
Total Relative Return	0.79%	0.65%	0.83%			Total Relative Return	-0.02%	0.14%	0.55%		
CITY OF BISMARCK EMPLOYEES PENSION						CITY OF GRAND FORKS PENSION PLAN (2009-12)					
\$	78,804,326			Limit 9.7%		\$	57,896,611				
Total Fund Return - Net	14.56%	9.37%	12.15%	8.1%	0.27%	Total Fund Return - Net	16.33%	10.26%	13.19%	9.45%	0.06%
Policy Benchmark Return	13.73%	8.77%	11.31%	7.7%		Policy Benchmark Return	15.97%	9.92%	12.68%	9.13%	
Attribution Analysis				105%		Attribution Analysis				104%	
Asset Allocation	-0.04%	-0.04%				Asset Allocation	0.02%	0.11%		Actual Risk /	
Manager Selection	0.88%	0.63%				Manager Selection	0.34%	0.23%		Policy Risk	
Total Relative Return	0.84%	0.60%	0.85%			Total Relative Return	0.36%	0.34%	0.51%		
CITY OF BISMARCK POLICE PENSION						GRAND FORKS PARK DISTRICT PENSION PLAN (2009)					
\$	34,643,204			Limit 10.6%		\$	5,938,993				
Total Fund Return - Net	15.27%	9.70%	12.61%	8.8%	0.25%	Total Fund Return - Net	16.44%	10.35%	N/A	N/A	N/A
Policy Benchmark Return	14.45%	9.15%	11.88%	8.5%		Policy Benchmark Return	16.21%	10.26%			
Attribution Analysis				104%		Attribution Analysis					
Asset Allocation	0.02%	-0.01%				Asset Allocation	-0.02%	-0.07%			
Manager Selection	0.79%	0.56%				Manager Selection	0.25%	0.16%			
Total Relative Return	0.81%	0.55%	0.73%			Total Relative Return	0.23%	0.09%			

Insurance Excess Return & Risk Summary - June 30, 2014

	1 Yr Ended 6/30/2014	3 Yrs Ended 6/30/2014	5 Yrs Ended 6/30/2014	Risk (Std.Dev.) 5 Yrs Ended 6/30/2014	Risk Adj Excess Return 5 Yrs Ended 6/30/2014		1 Yr Ended 6/30/2014	3 Yrs Ended 6/30/2014	5 Yrs Ended 6/30/2014	Risk (Std.Dev.) 5 Yrs Ended 6/30/2014	Risk Adj Excess Return 5 Yrs Ended 6/30/2014
WORKFORCE SAFETY & INSURANCE (WSI) (2014)						STATE BONDING FUND (2009)					
\$	1,703,987,980					\$	3,268,991				
Total Fund Return - Net	11.71%	8.71%	10.24%	4.74%	1.15%	Total Fund Return - Net	4.06%	4.11%	5.18%	2.25%	1.39%
Policy Benchmark Return	9.95%	6.31%	7.72%	4.10%		Policy Benchmark Return	2.42%	2.05%	2.70%	1.77%	
Attribution Analysis						Attribution Analysis					
Asset Allocation	0.16%	0.06%				Asset Allocation	-0.02%	0.05%			
Manager Selection	1.61%	2.34%				Manager Selection	1.66%	2.01%			
Total Relative Return	1.76%	2.40%	2.52%			Total Relative Return	1.64%	2.06%	2.47%		
LEGACY FUND (2013)						INSURANCE REGULATORY TRUST FUND (IRTF) (2009)					
\$	2,215,941,142					\$	1,146,038				
Total Fund Return - Net	6.64%	N/A	N/A	N/A	N/A	Total Fund Return - Net	9.88%	7.02%	8.57%	5.73%	0.61%
Policy Benchmark Return	5.54%	N/A	N/A	N/A		Policy Benchmark Return	8.59%	5.50%	6.80%	4.94%	
Attribution Analysis						Attribution Analysis					
Asset Allocation	-0.01%					Asset Allocation	-0.05%	0.03%			
Manager Selection	1.11%					Manager Selection	1.34%	1.49%			
Total Relative Return	1.10%	N/A				Total Relative Return	1.29%	1.51%	1.77%		
BUDGET STABILIZATION (2009)						PETROLEUM TANK RELEASE COMPENSATION FUND (2009)					
\$	586,199,881					\$	7,092,998				
Total Fund Return - Net	1.94%	1.95%	3.37%	1.96%	0.03%	Total Fund Return - Net	3.68%	3.66%	4.74%	2.02%	1.33%
Policy Benchmark Return	0.61%	0.41%	0.31%	0.14%		Policy Benchmark Return	2.20%	1.87%	2.47%	1.61%	
Attribution Analysis						Attribution Analysis					
Asset Allocation	0.00%	-0.07%				Asset Allocation	-0.02%	0.00%			
Manager Selection	1.34%	1.62%				Manager Selection	1.50%	1.79%			
Total Relative Return	1.34%	1.55%	3.06%			Total Relative Return	1.48%	1.80%	2.27%		
FIRE & TORNADO FUND (2009)						STATE RISK MANAGEMENT FUND (2007)					
\$	29,223,707					\$	6,948,162				
Total Fund Return - Net	12.78%	9.38%	11.41%	6.94%	0.67%	Total Fund Return - Net	12.29%	10.02%	12.06%	Limit 6.6% 6.12%	0.46%
Policy Benchmark Return	10.74%	7.08%	8.77%	5.73%		Policy Benchmark Return	10.09%	7.40%	9.07%	4.82%	
Attribution Analysis						Attribution Analysis					
Asset Allocation	-0.03%	0.07%				Asset Allocation	-0.06%	0.06%			
Manager Selection	2.07%	2.23%				Manager Selection	2.26%	2.56%			
Total Relative Return	2.04%	2.30%	2.64%			Total Relative Return	2.21%	2.62%	3.00%		

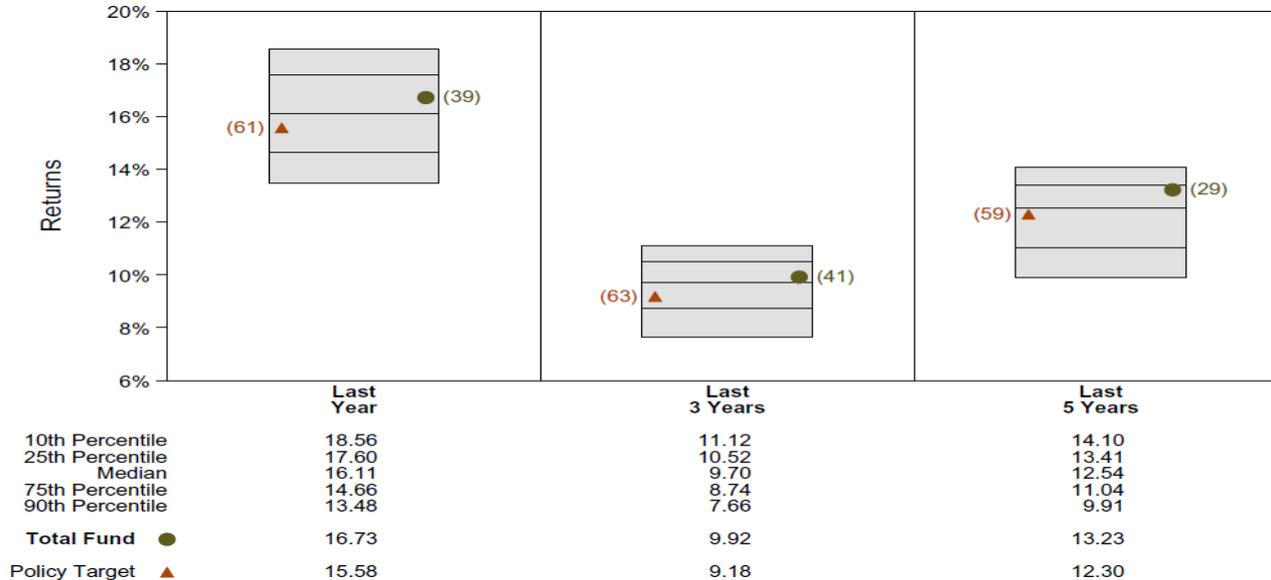
Insurance Client - Excess Returns and Risk - June 30, 2014

	1 Yr Ended 6/30/2014	3 Yrs Ended 6/30/2014	5 Yrs Ended 6/30/2014	Risk (Std.Dev.) 5 Yrs Ended 6/30/2014	Risk Adj Excess Return 5 Yrs Ended 6/30/2014		1 Yr Ended 6/30/2014	3 Yrs Ended 6/30/2014	5 Yrs Ended 6/30/2014	Risk (Std.Dev.) 5 Yrs Ended 6/30/2014	Risk Adj Excess Return 5 Yrs Ended 6/30/2014
STATE RISK MANAGEMENT WORKERS COMP FUND (2007)						CULTURAL ENDOW (2005)					
\$	5,965,322			Limit 7.6%		\$	364,979			Limit 10.5%	
Total Fund Return - Net	13.68%	10.87%	13.02%	7.11%	0.71%	Total Fund Return - Net	16.94%	12.25%	14.54%	9.81%	1.04%
Policy Benchmark Return	11.59%	8.37%	10.19%	5.94%		Policy Benchmark Return	15.52%	10.28%	12.28%	8.98%	
Attribution Analysis						Attribution Analysis					
Asset Allocation	-0.06%	0.06%				Asset Allocation	-0.10%	0.08%			
Manager Selection	2.15%	2.44%				Manager Selection	1.51%	1.89%			
Total Relative Return	2.09%	2.50%	2.83%			Total Relative Return	1.41%	1.97%	2.26%		
ND ASSOCIATION OF COUNTIES FUND (NDACo) (2010)						PERS RETIREE HEALTH (2014)					
\$	3,445,373					\$	90,360,366			115% Limit	
Total Fund Return - Net	11.61%	7.50%	11.02%	8.86%	1.42%	Total Fund Return - Net	16.53%	11.13%	14.30%	11.04%	0.82%
Policy Benchmark Return	9.60%	5.28%	8.59%	8.04%		Policy Benchmark Return	16.33%	10.24%	12.72%	10.45%	
Attribution Analysis						Attribution Analysis					
Asset Allocation	-0.08%	0.04%				Asset Allocation				106%	
Manager Selection	2.09%	2.18%				Manager Selection					
Total Relative Return	2.01%	2.21%	2.43%			Total Relative Return	0.20%	0.89%	1.58%		
CITY OF BISMARCK DEFERRED SICK LEAVE ACCOUNT (2005)						PERS GROUP INSURANCE (2014)					
\$	849,818			Limit 6.5%		\$	37,425,567				
Total Fund Return - Net	12.32%	9.25%	11.34%	6.46%	0.44%	Total Fund Return - Net	0.01%	0.18%	0.24%	0.06%	0.07%
Policy Benchmark Return	9.97%	6.63%	8.29%	4.96%		Policy Benchmark Return	0.06%	0.07%	0.11%	0.03%	
Attribution Analysis						Attribution Analysis					
Asset Allocation	-0.02%	0.06%				Asset Allocation					
Manager Selection	2.38%	2.56%				Manager Selection					
Total Relative Return	2.35%	2.62%	3.05%			Total Relative Return	-0.04%	0.11%	0.14%		
FARGODOME PERMANENT FUND (2010)											
\$	41,775,992										
Total Fund Return - Net	16.34%	10.83%	13.63%	9.22%	0.97%						
Policy Benchmark Return	14.76%	8.95%	11.51%	8.44%							
Attribution Analysis											
Asset Allocation	-0.07%	0.07%									
Manager Selection	1.65%	1.81%									
Total Relative Return	1.58%	1.88%	2.12%								

Peer Performance - Pension Trust Total Fund Ranking

The chart displays the ranking of the Total Pension Fund's performance relative to that of the Public Fund Sponsor Database for periods ended June 30, 2014, without any adjustment for the historical asset allocations of the Total Pension Fund (versus other public fund sponsors).

Callan Public Fund Sponsor Database

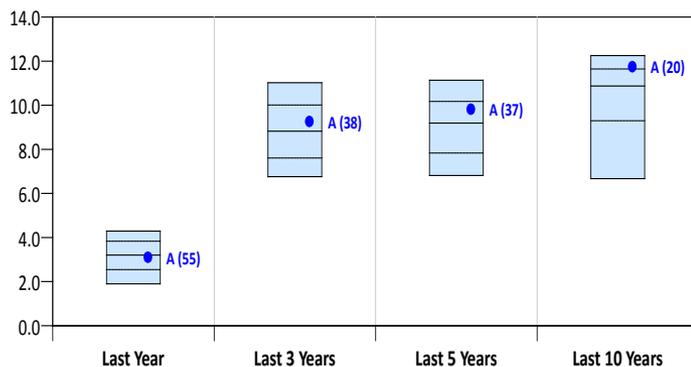


* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 13.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 9.7% NCREIF Total Index, 5.0% Barclays HY Corp 2% Issue, 5.0% Barclays Global Agg ex US, 4.9% CPI-W, 4.9% Russell 2000 Index, 4.9% NDSIB PEN - Private Equity, 4.9% NCREIF Timberland Index, 3.1% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

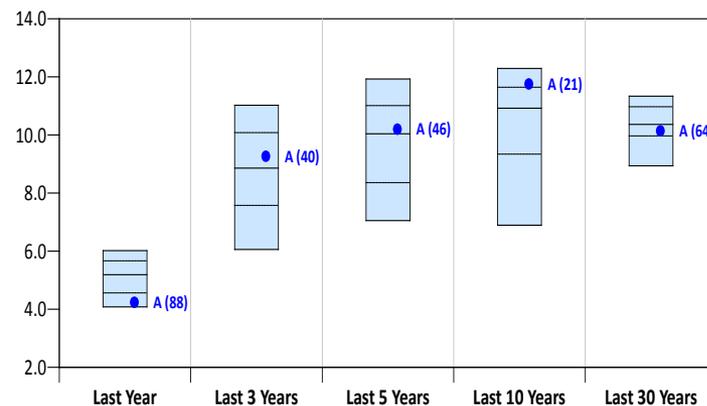
Gross Returns: The Pension Trust generated 2nd quartile returns for the 1-, 3- and 5-year periods ended June 30, 2014 based on the Callan Associates Public Fund Sponsor Database (unadjusted basis).

Pension “Risk” has declined as measured by Standard Deviation

Standard Deviation
for Periods Ended June 30, 2014
Group: CAI Public Fund Sponsor Database



Standard Deviation
for Periods Ended March 31, 2014
Group: CAI Public Fund Sponsor Database



10th Percentile	4.3	11.0	11.1	12.3
25th Percentile	3.8	10.0	10.2	11.6
Median	3.2	8.8	9.2	10.9
75th Percentile	2.5	7.6	7.8	9.3
90th Percentile	1.9	6.8	6.8	6.7
Member Count	222	213	200	174
ND Pen-Total Fund ● A	3.1	9.3	9.8	11.8

10th Percentile	6.0	11.0	11.9	12.3	11.3
25th Percentile	5.7	10.1	11.0	11.6	11.0
Median	5.2	8.9	10.0	10.9	10.4
75th Percentile	4.6	7.6	8.4	9.3	10.0
90th Percentile	4.1	6.1	7.1	6.9	8.9
Member Count	229	215	205	175	24
ND Pen-Total Fund ● A	4.2	9.3	10.2	11.8	10.1

Portfolio volatility, as measured by Standard Deviation, has declined significantly in recent years. The standard deviation of the Pension Trust declined from 4.2% as of March 31, 2014 to 3.1% as of June 30, 2014 (and currently resides in the 3rd quartile).

Strategic Initiatives - Executive Summary Update August 22, 2014

- **Client Reporting (3Q)** - RIO and Callan worked diligently over the past year to expand performance and attribution reporting for PERS, TFFR, the Legacy Fund, WSI and the Budget Stabilization Fund. These enhancements have been implemented for the reporting period ended June 30, 2014 and highlighted in Callan's performance reporting package this period. (July 1, 2010)
- **Staffing (3Q)** - RIO will interview eligible candidates for the audit supervisor and investment analyst positions during the third quarter of 2014.
- **Emerging Market Equity (3Q)** – RIO staff completed the Emerging Market Equity transition to Axiom on August 1, 2014.
- **Mortgage Backed Securities (3Q/4Q)** – RIO will complete the MBS transition during the next 60 to 90 days.
- **Custody and Fee Review (3Q/4Q)** – Callan will complete its custody and fee review of Northern Trust to confirm performance standards including a conservative securities lending program. These presentations will be made to the SIB in 2014.
- **Private Capital (3Q/4Q)** - RIO commenced a review of our existing Timber, Infrastructure, Real Estate and Private Equity mandates during 2Q to confirm our investment approach to less liquid strategies, rationalize smaller investments, ease administrative reporting and identify potential fee savings. RIO intends to focus on Infrastructure investments next as we need to expand our investment universe due to strong asset growth within the SIB client base in recent years.
- **Global Fixed Income (4Q)** – RIO will commence a review of our fixed income strategies with Callan so as to confirm sector allocations in light of our long-term strategic goals and strong performance.
- **Board Education (Ongoing)** - Introductory “Callan College” sessions were (or will be) presented to the SIB in July and August. Investment topics includes Asset Allocation, Capital Markets Theory, Fiduciary Role, Performance Measurement and Current Trends. Two-day sessions are also offered by Callan in San Francisco on October 28-29, 2014.
- **Watch List (Ongoing)** – Timber Investment Resources, PIMCO and Western Asset Management Company will be retained on the Watch List until performance improves and/or recent firm developments are satisfactorily resolved.

Historical Asset Class Market Returns and Key Economic Indicators

Asset Class	Benchmark	Period Ended June 30, 2014			
		1-Year	3-Years	5-Years	10-Years
Large Cap US Stocks	Russell 1000	25.35%	16.63%	19.25%	8.19%
Small Cap US Stocks	Russell 2000	23.64%	14.57%	20.21%	8.70%
Non-US Stocks (Developed)	MSCI EAFE	23.57%	8.10%	11.77%	6.93%
Non-US Stocks (Emerging)	MSCI Emerging Markets	14.68%	-0.06%	9.58%	12.30%
US Bonds	Barclays Aggregate	4.37%	3.66%	4.85%	4.93%
High Yield Bonds	Barclays Corporate High Yield	11.73%	9.48%	13.98%	9.05%
Non-US Debt	Citi Non-US World Govt	8.88%	1.03%	3.59%	4.90%
Inflation Protected	Barclays Global Inflation Linked	10.42%	4.44%	6.03%	5.81%
Real Estate	NCREIF	11.21%	11.32%	9.67%	8.63%

Recent Quarterly Indicators	2Q14	1Q14	4Q13	3Q13	2Q13	1Q13	4Q12	3Q12
GDP Growth	4.0%	-2.1%	3.5%	4.5%	1.8%	2.7%	0.1%	2.5%
Unemployment Rate	6.1%	6.7%	6.7%	7.2%	7.5%	7.5%	7.9%	7.8%
CPI	2.1%	1.5%	1.5%	1.2%	1.8%	1.5%	1.7%	2.0%
Consumer Sentiment	82.8	80.9	769.0	81.6	81.7	76.7	79.4	75.0

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
MSCI EAFE	S&P 500 Growth	S&P 500 Growth	S&P 500 Growth	S&P 500 Growth	MSCI Emerging Markets	Russell 2000 Value	Russell 2000 Value	Barclays Agg	MSCI Emerging Markets	MSCI Emerging Markets	MSCI Emerging Markets	MSCI Emerging Markets	MSCI Emerging Markets	Barclays Agg	MSCI Emerging Markets	Russell 2000 Growth	Barclays Agg	MSCI Emerging Markets	Russell 2000 Growth
7.78%	38.13%	23.97%	36.52%	42.16%	66.42%	22.83%	14.02%	10.26%	56.28%	25.95%	34.54%	32.59%	39.78%	5.24%	79.02%	29.09%	7.84%	18.63%	43.30%
S&P 500 Growth	S&P 500	S&P 500	S&P 500	S&P 500	Russell 2000 Growth	Barclays Agg	Barclays Agg	Barclays Corp High Yield	Russell 2000 Growth	Russell 2000 Value	MSCI EAFE	MSCI EAFE	MSCI EAFE	Barclays Corp High Yield	Barclays Corp High Yield	Russell 2000	Barclays Corp High Yield	Russell 2000 Value	Russell 2000
3.13%	37.58%	22.96%	33.36%	28.58%	43.09%	11.63%	8.43%	-1.41%	48.54%	22.25%	13.54%	26.34%	11.17%	-26.16%	58.21%	26.85%	4.98%	18.05%	38.82%
S&P 500	S&P 500 Value	S&P 500 Value	Russell 2000 Value	MSCI EAFE	S&P 500 Growth	S&P 500 Value	Barclays Corp High Yield	MSCI Emerging Markets	Russell 2000	MSCI EAFE	S&P 500 Value	Russell 2000 Value	S&P 500 Growth	Russell 2000 Value	Russell 2000 Growth	Russell 2000 Value	S&P 500 Growth	S&P 500 Value	Russell 2000 Value
1.32%	36.99%	22.00%	31.78%	20.00%	28.24%	6.08%	5.28%	-6.00%	47.25%	20.25%	5.82%	23.48%	9.13%	-28.92%	34.47%	24.50%	4.65%	17.68%	34.52%
S&P 500 Value	Russell 2000 Growth	Russell 2000 Value	S&P 500 Value	S&P 500 Value	MSCI EAFE	Russell 2000	Russell 2000	Russell 2000 Value	Russell 2000 Value	Russell 2000	S&P 500	S&P 500 Value	Russell 2000 Growth	Russell 2000	MSCI EAFE	MSCI Emerging Markets	S&P 500	MSCI EAFE	S&P 500 Growth
-0.64%	31.04%	21.37%	29.98%	14.69%	26.96%	-3.02%	2.49%	-11.43%	46.03%	18.33%	4.91%	20.81%	7.05%	-33.79%	31.78%	19.20%	2.11%	17.32%	32.75%
Barclays Corp High Yield	Russell 2000	Russell 2000	Russell 2000	Barclays Agg	Russell 2000	Barclays Corp High Yield	MSCI Emerging Markets	MSCI EAFE	MSCI EAFE	S&P 500 Value	Russell 2000 Value	Russell 2000	Barclays Agg	S&P 500 Growth	S&P 500 Growth	Barclays Corp High Yield	S&P 500 Value	Russell 2000	S&P 500
-1.03%	28.45%	16.49%	22.36%	8.70%	21.26%	-5.86%	-2.37%	-15.94%	38.59%	15.71%	4.71%	18.37%	6.97%	-34.92%	31.57%	15.12%	-0.48%	16.35%	32.39%
Russell 2000 Value	Russell 2000 Value	Barclays Corp High Yield	Russell 2000 Growth	Barclays Corp High Yield	S&P 500	S&P 500	Russell 2000 Growth	Russell 2000	S&P 500 Value	Russell 2000 Growth	Russell 2000	S&P 500	S&P 500	S&P 500	Russell 2000	S&P 500 Value	Russell 2000	S&P 500	S&P 500 Value
-1.54%	25.75%	11.35%	12.95%	1.87%	21.04%	-9.11%	-9.23%	-20.48%	31.79%	14.31%	4.55%	15.79%	5.49%	-37.00%	27.17%	15.10%	-2.91%	16.00%	31.99%
Russell 2000	Barclays Corp High Yield	Russell 2000 Growth	Barclays Corp High Yield	Russell 2000 Growth	S&P 500 Value	MSCI EAFE	S&P 500 Value	S&P 500 Value	Barclays Corp High Yield	Barclays Corp High Yield	Russell 2000 Growth	Russell 2000 Growth	S&P 500 Value	Russell 2000 Growth	S&P 500	S&P 500	Russell 2000	Barclays Corp High Yield	MSCI EAFE
-1.82%	19.18%	11.26%	12.76%	1.23%	12.73%	-14.17%	-11.71%	-20.85%	28.97%	11.13%	4.15%	13.35%	1.99%	-38.54%	26.47%	15.06%	-4.18%	15.81%	22.78%
Russell 2000 Growth	Barclays Agg	MSCI EAFE	Barclays Agg	Russell 2000	Barclays Corp High Yield	S&P 500 Growth	S&P 500	S&P 500 Growth	Barclays Corp High Yield	Barclays Corp High Yield	S&P 500 Value	S&P 500 Value	S&P 500 Growth	Russell 2000 Value	S&P 500 Growth				
-2.43%	18.46%	6.05%	9.64%	-2.55%	2.39%	-22.08%	-11.89%	-22.10%	28.68%	10.88%	4.00%	11.85%	1.87%	-39.22%	21.17%	15.05%	-5.50%	14.61%	7.44%
Barclays Agg	MSCI EAFE	MSCI Emerging Markets	MSCI EAFE	Russell 2000 Value	Barclays Agg	Russell 2000 Growth	S&P 500 Growth	S&P 500 Growth	S&P 500 Growth	S&P 500 Growth	Barclays Corp High Yield	S&P 500 Growth	Russell 2000	MSCI EAFE	Russell 2000 Value	MSCI EAFE	MSCI EAFE	Russell 2000 Growth	Barclays Agg
-2.92%	11.21%	6.03%	1.78%	-6.45%	-0.82%	-22.43%	-12.73%	-23.59%	25.66%	6.13%	2.74%	11.01%	-1.57%	-43.38%	20.58%	7.75%	-12.14%	14.59%	-2.02%
MSCI Emerging Markets	MSCI Emerging Markets	Barclays Agg	MSCI Emerging Markets	MSCI Emerging Markets	Russell 2000 Value	MSCI Emerging Markets	MSCI EAFE	Russell 2000 Growth	Barclays Agg	Barclays Agg	Barclays Agg	Barclays Agg	Russell 2000 Value	MSCI Emerging Markets	Barclays Agg	Barclays Agg	MSCI Emerging Markets	Barclays Agg	MSCI Emerging Markets
-7.32%	-5.21%	3.64%	-11.59%	-25.34%	-1.49%	-30.61%	-21.44%	-30.26%	4.10%	4.34%	2.43%	4.33%	-9.78%	-53.18%	5.93%	6.54%	-18.17%	4.21%	-2.27%



MEMO

TO: STATE INVESTMENT BOARD

FROM: David Hunter, Executive Director/CIO
Darren Schulz, Deputy Chief Investment Officer

DATE: AUGUST 22, 2014

SUBJECT: ASSET CLASS DEFINITIONS

The Executive Director/CIO and Deputy CIO prepared the attached Asset Class Definitions in conjunction with the PERS Investment Sub-Committee.

There are three major asset classes:

1. **Equity**
2. **Debt**
3. **Real Assets** (or Other)

Alternative Investments are often cited as the fourth major asset class, but can frequently be re-classified into one of the other three categories with some exceptions (i.e. total return strategies using debt and equity).

Equity investments represent an ownership claim on the residual assets of a company after paying off debt.

Equities should be segregated into two major sectors, Public and Private, given major differences in liquidity:

1. Public equities are generally highly liquid and *valued on a daily basis* in the financial markets. Examples include common stock (Apple, Coca-Cola or McDonalds), options and futures.
2. Private equities are generally less liquid and often *valued on a less frequent basis* (monthly or quarterly). Major private equity firms include Apollo, Bain, Blackstone, Carlyle, KKR and TPG.

Public equity markets are often sub-classified by geographic region (U.S., International or Global), market capitalization (Large, Medium or Small), investment style (core, growth or value) and level of economic development (developed or emerging markets). The top U.S. and global equity benchmarks are discussed below.

Five major U.S. equity benchmarks include the **S&P 500**, **Russell 1000**, **2000** and **3000**, and **Dow Jones Industrial Average (“Dow”)**. The **S&P 500** is based on the market capitalizations of 500 large companies having common stock listed on the NYSE or NASDAQ. The **Russell 1000** represents the highest-ranking 1,000 stocks in the Russell 3000 Index, and represents about 90% of the total market capitalization of that index. The Russell 1000 has a weighted average market capitalization of over \$100 billion with a median of approximately \$8 billion. The **Russell 2000 Index** is a small-cap index and represents the bottom 2,000 stocks in the Russell 3000 Index. The Russell 2000 has a weighted average market capitalization of less than \$2 billion with a median of less than \$1 billion. The Russell 2000 is the most common benchmark for funds that identify themselves as “small-cap”, while the **S&P 500** index is used primarily for large capitalization stocks. The **Dow** is a price-weighted measure of 30 U.S. blue-chip companies. **The Dow** covers all industries with the exception of transportation and utilities, which are covered by the Dow Jones Transportation Average and Dow Jones Utility Average. While stock selection is not governed by quantitative rules, a stock typically is added to The Dow only if the company has an excellent reputation, demonstrates sustained growth and is of interest to a large number of investors. Maintaining adequate sector representation within the indices is also a consideration in the selection process.

The **MSCI All Country World Index** (or “ACWI”) measures the equity market performance of developed and emerging markets and consists of 46 country indexes comprising 23 developed and 23 emerging market country indexes. The developed market countries are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom and the United States. The emerging market countries are listed below. The **MSCI EAFE Index (Europe, Australasia, Far East)** measures the equity market performance of the developed market countries, excluding the US & Canada. The **MSCI Emerging Markets Index** measures equity market performance of emerging markets and consists of the following 23 countries: Brazil, Chile, China, Colombia, Czech Republic, Egypt, **Greece**, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Poland, **Qatar**, Russia, South Africa, Taiwan, Thailand, Turkey, and **United Arab Emirates**. **On June 2, 2014, Greece was moved to the Emerging Markets from the Developed Markets, while Qatar and United Arab Emirates were added to the Emerging Markets.**

Public equity has historically provided **high investment returns with high volatility and high liquidity when compared to Bonds or Real Assets**. Currently, many investment consultants believe that Private Equity will provide an even higher investment return than Public Equity, albeit with higher volatility and less liquidity.

Debt represents a legal obligation between a borrower and a lender for a stated period of time and rate.

Debt or “Bonds” are classified as fixed or floating depending upon whether the interest rate is derived using a fixed rate (i.e. 5%) or a floating rate (i.e. Prime + 1.00%). Duration risk within fixed income is a major driver of investment risk and return particularly for longer term securities, including U.S. Treasury bonds.

Debt is often sub-classified into investment grade (rated BBB- or better) or non-investment grade (rated less than BBB- or non-rated) or by geographic region (U.S., International, Developed Markets or Emerging Markets). Debt can be issued by governments, agencies or companies and represent general obligations of the issuer or be backed by a specified pool of assets (i.e. mortgage backed securities). Bonds serve to diversify a portfolio by offering **lower volatility** than equities along with a **lower expected return and generally high liquidity**.

Real Assets represent an ownership interest in physical assets such as real estate, infrastructure (airports, toll roads), timberland and commodities (gold, oil, wheat). Real assets are expected to provide inflation hedging characteristics in periods of unanticipated inflation and diversify a portfolio consisting of debt and equity.

Alternative Investments can include precious metals, art, antiques, and financial assets such as derivatives, commodities, private equity, distressed debt and hedge funds. Real estate and forestry are also often termed alternative. Alternatives are sometimes used as a tool to reduce overall investment risk through diversification and may offer lower correlation with traditional financial investments such as stocks and bonds, although it may be difficult to determine the current market value of the asset, may be illiquid, purchase and sales costs may be high, and there may be limited historical risk and return data, all of which makes analysis complex.

Callan's 2014 Capital Markets Expectations for Return and Risk by major asset class and sector are summarized below and helpful when comparing the projected benefits and risks of each investment class.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
MSCI EAFE	S&P 500 Growth	S&P 500 Growth	S&P 500 Growth	S&P 500 Growth	MSCI Emerging Markets	Russell 2000 Value	Russell 2000 Value	Barclays Agg	MSCI Emerging Markets	Barclays Agg	MSCI Emerging Markets	Russell 2000 Growth	Barclays Agg	MSCI Emerging Markets	Russell 2000 Growth				
7.78%	38.13%	23.97%	36.52%	42.16%	66.42%	22.83%	14.02%	10.26%	56.28%	25.95%	34.54%	32.59%	39.78%	5.24%	79.02%	29.09%	7.84%	18.63%	43.30%
S&P 500 Growth	S&P 500	S&P 500	S&P 500	S&P 500	Russell 2000 Growth	Barclays Agg	Barclays Agg	Barclays Corp High Yield	Russell 2000 Growth	Russell 2000 Value	MSCI EAFE	MSCI EAFE	MSCI EAFE	Barclays Corp High Yield	Barclays Corp High Yield	Russell 2000	Barclays Corp High Yield	Russell 2000 Value	Russell 2000
3.13%	37.58%	22.96%	33.36%	28.58%	43.09%	11.63%	8.43%	-1.41%	48.54%	22.25%	13.54%	26.34%	11.17%	-26.16%	58.21%	26.85%	4.98%	18.05%	38.82%
S&P 500	S&P 500 Value	S&P 500 Value	Russell 2000 Value	MSCI EAFE	S&P 500 Growth	S&P 500 Value	Barclays Corp High Yield	MSCI Emerging Markets	Russell 2000	MSCI EAFE	S&P 500 Value	Russell 2000 Value	S&P 500 Growth	Russell 2000 Value	Russell 2000 Growth	Russell 2000 Value	S&P 500 Growth	S&P 500 Value	Russell 2000 Value
1.32%	36.99%	22.00%	31.78%	20.00%	28.24%	6.08%	5.28%	-6.00%	47.25%	20.25%	5.82%	23.48%	9.13%	-28.92%	34.47%	24.50%	4.65%	17.68%	34.52%
S&P 500 Value	Russell 2000 Growth	Russell 2000 Value	S&P 500 Value	S&P 500 Value	MSCI EAFE	Russell 2000	Russell 2000	Russell 2000 Value	Russell 2000 Value	Russell 2000	S&P 500	S&P 500 Value	Russell 2000 Growth	Russell 2000	MSCI EAFE	MSCI Emerging Markets	S&P 500	MSCI EAFE	S&P 500 Growth
-0.64%	31.04%	21.37%	29.98%	14.69%	26.96%	-3.02%	2.49%	-11.43%	46.03%	18.33%	4.91%	20.81%	7.05%	-33.79%	31.78%	19.20%	2.11%	17.32%	32.75%
Barclays Corp High Yield	Russell 2000	Russell 2000	Russell 2000	Barclays Agg	Russell 2000	Barclays Corp High Yield	MSCI Emerging Markets	MSCI EAFE	MSCI EAFE	S&P 500 Value	Russell 2000 Value	Russell 2000	Barclays Agg	S&P 500 Growth	S&P 500 Growth	Barclays Corp High Yield	S&P 500 Value	Russell 2000	S&P 500
-1.03%	28.45%	16.49%	22.36%	8.70%	21.26%	-5.86%	-2.37%	-15.94%	38.59%	15.71%	4.71%	18.37%	6.97%	-34.92%	31.57%	15.12%	-0.48%	16.35%	32.39%
Russell 2000 Value	Russell 2000 Value	Barclays Corp High Yield	Russell 2000 Growth	Barclays Corp High Yield	S&P 500	S&P 500	Russell 2000 Growth	Russell 2000	S&P 500 Value	Russell 2000 Growth	Russell 2000	S&P 500	S&P 500	S&P 500	Russell 2000	S&P 500 Value	Russell 2000 Growth	S&P 500	S&P 500 Value
-1.54%	25.75%	11.35%	12.95%	1.87%	21.04%	-9.11%	-9.23%	-20.48%	31.79%	14.31%	4.55%	15.79%	5.49%	-37.00%	27.17%	15.10%	-2.91%	16.00%	31.99%
Russell 2000	Barclays Corp High Yield	Russell 2000 Growth	Barclays Corp High Yield	Russell 2000 Growth	S&P 500 Value	MSCI EAFE	S&P 500 Value	S&P 500 Value	Barclays Corp High Yield	Barclays Corp High Yield	Russell 2000 Growth	Russell 2000 Growth	S&P 500 Value	Russell 2000 Growth	S&P 500	S&P 500	Russell 2000	Barclays Corp High Yield	MSCI EAFE
-1.82%	19.18%	11.26%	12.76%	1.23%	12.73%	-14.17%	-11.71%	-20.85%	28.97%	11.13%	4.15%	13.35%	1.99%	-38.54%	26.47%	15.06%	-4.18%	15.81%	22.78%
Russell 2000 Growth	Barclays Agg	MSCI EAFE	Barclays Agg	Russell 2000	Barclays Corp High Yield	S&P 500 Growth	S&P 500	S&P 500	S&P 500	S&P 500	S&P 500 Growth	Barclays Corp High Yield	Barclays Corp High Yield	S&P 500 Value	S&P 500 Value	S&P 500 Growth	Russell 2000 Value	S&P 500 Growth	Barclays Corp High Yield
-2.43%	18.46%	6.05%	9.64%	-2.55%	2.39%	-22.08%	-11.89%	-22.10%	28.68%	10.88%	4.00%	11.85%	1.87%	-39.22%	21.17%	15.05%	-5.50%	14.61%	7.44%
Barclays Agg	MSCI EAFE	MSCI Emerging Markets	MSCI EAFE	Russell 2000 Value	Barclays Agg	Russell 2000 Growth	S&P 500 Growth	S&P 500 Growth	S&P 500 Growth	S&P 500 Growth	Barclays Corp High Yield	S&P 500 Growth	Russell 2000	MSCI EAFE	Russell 2000 Value	MSCI EAFE	MSCI EAFE	Russell 2000 Growth	Barclays Agg
-2.92%	11.21%	6.03%	1.78%	-6.45%	-0.82%	-22.43%	-12.73%	-23.59%	25.66%	6.13%	2.74%	11.01%	-1.57%	-43.38%	20.58%	7.75%	-12.14%	14.59%	-2.02%
MSCI Emerging Markets	MSCI Emerging Markets	Barclays Agg	MSCI Emerging Markets	MSCI Emerging Markets	Russell 2000 Value	MSCI Emerging Markets	MSCI EAFE	Russell 2000 Growth	Barclays Agg	Barclays Agg	Barclays Agg	Barclays Agg	Russell 2000 Value	MSCI Emerging Markets	Barclays Agg	Barclays Agg	MSCI Emerging Markets	Barclays Agg	MSCI Emerging Markets
-7.32%	-5.21%	3.64%	-11.59%	-25.34%	-1.49%	-30.61%	-21.44%	-30.26%	4.10%	4.34%	2.43%	4.33%	-9.78%	-53.18%	5.93%	6.54%	-18.17%	4.21%	-2.27%



The Callan Periodic Table of Investment Returns 1994–2013

Callan's Periodic Table of Investment Returns depicts annual returns for 10 asset classes, ranked from best to worst performance for each calendar year. The asset classes are color-coded to enable easy tracking over time. We describe the well-known, industry-standard market indices that we use as proxies for each asset class in the text below.

-
- **Barclays Aggregate Bond Index** (formerly the Lehman Brothers Aggregate Bond Index) includes U.S. government, corporate, and mortgage-backed securities with maturities of at least one year.
-
- **Barclays High Yield Bond Index** measures the market of USD-denominated, non-investment grade, fixed-rate, taxable corporate bonds. Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or below, excluding emerging market debt.
-
- **MSCI EAFE** is a Morgan Stanley Capital International Index that is designed to measure the performance of the developed stock markets of Europe, Australasia, and the Far East.
-
- **MSCI Emerging Markets** is a Morgan Stanley Capital International Index that is designed to measure the performance of equity markets in 21 emerging countries around the world.
-
- **Russell 2000** measures the performance of small capitalization U.S. stocks. The Russell 2000 is a market-value-weighted index of the 2,000 smallest stocks in the broad-market Russell 3000 Index. These securities are traded on the NYSE, AMEX, and NASDAQ.
-
- **Russell 2000 Value** and ● **Russell 2000 Growth** measure the performance of the growth and value styles of investing in small cap U.S. stocks. The indices are constructed by dividing the market capitalization of the Russell 2000 Index into Growth and Value indices, using style "factors" to make the assignment. The Value Index contains those Russell 2000 securities with a greater-than-average value orientation, while the Growth Index contains those securities with a greater-than-average growth orientation. Securities in the Value Index generally have lower price-to-book and price-earnings ratios than those in the Growth Index. The indices are market-capitalization-weighted. The constituent securities are not mutually exclusive.
-
- **S&P 500** measures the performance of large capitalization U.S. stocks. The S&P 500 is a market-value-weighted index of 500 stocks that are traded on the NYSE, AMEX, and NASDAQ. The weightings make each company's influence on the Index performance directly proportional to that company's market value.
-
- **S&P 500 Growth** and ● **S&P 500 Value** measure the performance of the growth and value styles of investing in large cap U.S. stocks. The indices are constructed by dividing the market capitalization of the S&P 500 Index into Growth and Value indices, using style "factors" to make the assignment. The Value Index contains those S&P 500 securities with a greater-than-average value orientation, while the Growth Index contains those securities with a greater-than-average growth orientation. The indices are market-capitalization-weighted. The constituent securities are not mutually exclusive.
-

Callan

Callan was founded as an employee-owned investment consulting firm in 1973. Ever since, we have empowered institutional clients with creative, customized investment solutions that are uniquely backed by proprietary research, exclusive data, ongoing education and decision support. Today, Callan advises on more than \$1.8 trillion in total assets, which makes us among the largest independently owned investment consulting firms in the U.S. We use a client-focused consulting model to serve public and private pension plan sponsors, endowments, foundations, operating funds, smaller investment consulting firms, investment managers, and financial intermediaries. For more information, please visit www.callan.com.

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Asset Class Definitions (previously distributed to PERS Investment Subcommittee)

Global Equity

Definition

Investment represents an ownership claim on the residual assets of a company after the discharge of all senior claims such as secured and unsecured debt.

Public Equity

Public equity is traded on a national exchange. Includes common stock, preferred stock, convertible to stock, options, warrants, futures and other derivatives on equities or composites of equities, exchange-traded funds and equity-linked notes, units and partnership shares representing ownership interests in an underlying equity investment.

Private Equity

Private equity represents equity or equity linked securities in operating companies that are not publicly traded on a stock exchange.

Types of investment strategies

- *Leveraged buyout (LBO)* – Acquisition of a company with the use of financial leverage
- *Growth capital* – Investment in mature companies looking for capital to expand, restructure, enter new markets
- *Venture capital* – Investment in typically less mature companies, for launch, early development, or expansion
- *Mezzanine* – Subordinated debt/preferred equity used to reduce amount of equity capital required to finance LBOs
- *Distressed* – Equity securities of financially stressed companies
- *Secondaries* – Investment in existing private equity assets

Types of structures

- *Direct investment* – Direct purchase of equity securities of a private company
- *Co-investments* – Investments in equity securities of a private company alongside the manager of a direct fund
- *Direct fund* – Pool of capital formed to make direct investments
- *Fund-of-funds* – Pool of capital formed to make investments in direct funds

Strategic Role

- High long-term real returns
- Hedge against active (pre-retirement) liabilities
- Private equity enhances total portfolio return as a tradeoff for illiquidity

Characteristics

Public Developed Markets

- Relatively high returns (long-term) as compared to fixed income and real assets
- Relatively high volatility (standard deviation of returns) as compared to fixed income and real assets
- Relatively high liquidity
- Diversification
- Historically, public developed equities exhibit high correlation with private equity and high yield bonds, moderate correlation with investment grade corporate bonds and real assets, and negative correlation with sovereign debt.
- Currency adds to volatility but can be hedged, which mutes the diversification benefits

Public Emerging Markets

- Higher expected returns due to economic growth potential
- Liquidity risk is significant, particularly in frontier markets
- High volatility, particularly in frontier markets
- Historically, public emerging equities exhibit high correlation with high yield bonds, moderate correlation with investment grade corporate bonds and real assets, and negative correlation with sovereign debt.
- FX markets not sufficiently developed to hedge currency risk
- Limited access to markets
- Market information less abundant than for developed markets
- Counterparty risk and settlement delays pronounced in frontier markets

Private Equity

- Illiquid, long-term time horizon (7-12 year closed-end partnerships)
- Quality of the managers selected is the key determinant of success
- High volatility of returns compensated by higher expected returns
- Historically, public emerging equities exhibit high correlation with high yield bonds, moderate correlation with investment grade corporate bonds and real assets, and negative correlation with sovereign debt.
- Encompasses three stages: fundraising, portfolio construction and investment, exit and return realization

Risks

Public Equity

- *Absolute risk* – Possible magnitude of price decline
- *Liability hedging risk* – Risk that assets will not increase when liabilities increase
- *Regulatory risk* – Changes may adversely affect markets

- *Tax risk* – Changes may adversely affect markets
- *Liquidity risk* – Difficulty trading securities under adverse market conditions
- *Firm specific risk* – Unique risks associated with a specific firm
- *Tracking risk* – Magnitude of performance deterioration from a benchmark
- *Time horizon* – Horizon too short to weather cycles
- *Benchmark risk* – Benchmark not appropriate proxy
- *Market risks* – Price decline
- *Currency risk* – Unanticipated changes in exchange rate between two currencies
- *Counterparty risk* – Counterparty does not live up to its contractual obligations

Private Equity

- *Liquidity risk* – Absence of liquidity and appropriate exits could significantly increase time horizon
- *Firm specific risk* – Unique risks associated with a specific firm
- *Leverage risk* – Historical excess use of leverage and current inability to secure financing may adversely affect LBOs
- *Manager selection risk* – Selecting managers that fail to deliver top performance results
- *Diversification risk* – Inability to properly diversify the portfolio by vintage year, industry groups, geography
- *Tax risk* – Changes may adversely affect markets
- *Regulatory risk* – Changes may adversely affect markets
- *Strategy risk* – Continuing applicability of investment strategy in context of capital flows
- *Market risks* – Price decline

Global Fixed Income

Definition

Investment represents a legal obligation between a borrower and the lender with a maturity in excess of one year. Evidence of indebtedness and securities that evidence an ownership interest in debt obligations that are issued, insured, guaranteed by, or based on the credit of the following: companies, governmental entities or agencies, banks and insurance companies. Includes agency and non-agency mortgage-backed securities, collateralized mortgage obligations, commercial mortgage-backed securities, asset-backed securities, private placements, and options, futures or other derivatives on fixed income securities or components of fixed income.

Strategic Role

- Diversification within a multi-asset class, total return portfolio
- Hedge against a long duration accrued liability
- Current income
- Non-U.S. provides hedge against unanticipated domestic inflation and diversification to U.S. assets

Characteristics

- Medium volatility asset class
- Relatively high liquidity
- Broadly diversified by market sector, quality, and maturity
- Historically, developed sovereign debt exhibits low to negative correlation with real assets and negative correlation with equities; investment grade corporate bonds exhibit moderate correlation with equities and low correlation with real assets; high yield exhibits high correlation with equities and moderate correlation with real assets.
- A large currency component exists within international fixed income returns
- Developed markets are extremely liquid. Many issues of less developed markets are also relatively liquid.

Risks

- *Duration risk* – Price volatility from a change in overall interest rates
- *Convexity risk* – Negative convexity is the risk of price declines being greater than the price increase due to interest rates moving equally up versus down
- *Default or credit risk* – The uncertainty surrounding the borrower's ability to repay its obligations
- *Structure risk* – Risk that arises from the options implicit in bonds (like call ability and sinking funds) or the rules that govern cash flow differ from expectations
- *Sector risk* – Risk of holding sectors that are in different proportions than the benchmark
- *Liquidity risk* – Cost of trading in a security which is reflected in the bid-ask spread or the cost of selling due to cash flow needs
- *Reinvestment risk* – The uncertainty surrounding future yield opportunities to invest funds which come available due to call, maturities, or coupon payments
- *Benchmark risk* – Risk of the benchmark being inappropriate
- *Yield curve risk* – Price changes induced by changes in the slope of the yield curve
- *Currency risk* – The risk of currency movements vs. the dollar for each market. Currency may contribute greatly to return and lower correlation.

Global Real Assets

Definition

Investment represents an ownership interest in real return assets that provide inflation hedging characteristics in periods of unanticipated inflation. Includes inflation-linked securities, private or public real estate equity or equity-linked investments, private or public real estate debt, infrastructure, timber, real asset mezzanine debt or equity, non-fixed assets and other opportunistic investments in real assets.

Strategic Role

- Reduces risk of composite multi-asset portfolios through diversification
- Relatively low correlations to traditional asset classes
- Can serve as a possible inflation hedge during periods of high inflation
- Provides an attractive return relative to fixed income asset class in periods of low to moderate inflation
- Infrastructure provides inflation protection as the revenues of the underlying assets are typically linked to CPI
- Potential for high returns in niche opportunities

Characteristics

Real Estate

- *Risk* – Volatility of private real estate falls between publicly-traded debt and publicly-traded equities
- *Returns* – Nominal returns are expected to fall between equities and fixed income
- *Correlation* – Expected to exhibit low to no correlation with government and investment grade corporate bonds, and moderate correlation with high yield and equities.
- *Illiquidity* – Transactions require a significantly longer period to execute than other asset classes
- *Inefficient Market* – Information affecting real estate asset valuation and market trading is not rapidly, accurately, or efficiently reflected or interpreted in its pricing

Infrastructure

- *Long life assets* – Capital intensive assets with 25 to 99 year concessions, match for liability duration
- *Inflation protection* – Revenues typically linked to CPI
- *Monopoly or quasi monopoly* – High barriers to entry due to scale and capital cost
- *Steady and predictable cash flow* – Produce strong and predictable yields
- *Low correlation* – Provides portfolio diversification, low beta; expected to exhibit low to no correlation with fixed income and equities
- *Inelastic demand* – Predictable demand with little volatility, less susceptibility to economic downturns
- *Limited commodity risk* – Not subject to commodity pricing
- *Insensitive to changes in technology* – Low risk of redundancy or technology obsolescence
- Investments are usually illiquid and involve a long (10 to 20 year) holding period

Timberland

- *Return* – Low correlation with other asset classes, returns stem from four distinct sources: biological growth, timber prices, land values and management strategy
- *Income* – Driven almost entirely by the sale of harvested mature trees
- *Correlation* – Expected to exhibit low to no correlation with government and investment grade corporate bonds, and moderate correlation with high yield and equities.
- *Appreciation* – Driven by increased volume and value on timber and appreciation of underlying land
- Categorized by type of land (e.g. plantation, natural forest), type of tree (e.g., hardwood, softwood), country and region

Commodities

- *Real assets* – Raw materials that are the physical inputs of production, relatively homogenous in nature, lending itself to be traded via contracts with standardized terms
- *Inflation protection* – Storable commodities (such as energy) directly related to the intensity of economic activity exhibit positive correlation with unexpected inflation
- *Insurance risk premium* – Commodity futures prices tend to be priced at a discount to spot prices in order to induce speculators to bear volatile commodity price risk that inventory holders and producers wish to lay off

- *Positive event risk* – Surprises that occur in the commodities markets tend to be those that unexpectedly reduce the supply of the commodity to the market, resulting in price spikes
- *Negatively correlated with financial assets* – Unlike stocks and bonds, commodities are not as directly impacted by changes in discount rates as they are by the current supply and demand of the underlying commodity, thus they should be expected to have little or even negative correlation with capital assets.

Risks

Real Estate

- *Property type risks* – Negative changes in demand/supply conditions by property type (e.g., office, industrial, retail, lodging, mixed-use, multi-family)
- *Location risks* – Local market condition relative to the adverse changes surrounding a property, or in discovery of hazardous underlying conditions, such as toxic waste
- *Tenant credit risks* – Failure by a tenant to pay what is contractually owed
- *Physical/functional obsolescence* – Negative influences on buildings due to technological changes, outdated layout and design features, and physical depreciation
- *Interest rate risk* – Higher rates can negatively impact both sales strategies and leveraged properties at refinancing
- *Reinvestment risk* – In a declining rental rate market, cash flow received may not be reinvested at the same level
- *Business cycle risk* – As economies slow down, there may be less demand for space
- *Inflationary risk* – Rent levels may not always keep up with rising operating expense levels
- *Illiquidity* – Inability to effectively liquidate a property into cash
- *Natural disaster risk* – Weather, floods, earthquake
- Regulatory concerns are critical, especially in emerging markets
- Capital and managerial intensive

Infrastructure

- *Leverage* – Deals with leverage between 40% and 80% can transform low risk assets into risky investments. Changes in the credit environment alter refinancing risk.
- *Market inefficiencies* – Competitive auctions lead to overpaying. There is a limited history and track record in the U.S. infrastructure space.
- *Political and headline risk* – Public acceptance and understanding of infrastructure needs to expand. In addition, the political landscape in every state and municipality differs.
- *Regulatory risk* – Regulated assets are subject to government changes
- *Construction and development* – Project overruns and delays should be shared with construction partners. Volume/demand risk for new developments can vary.
- *Labor issues* – Greenfield projects could generate new jobs while the privatization of brownfield assets could eliminate skilled labor members
- *Asset control* – Stipulations via concession agreements limit some management control (pricing, growth, decision approvals, etc.). Asset control needs to be appropriately priced.
- *Firm specific risk* – Unique risks are associated with specific firm

Timberland

- *Liquidity risk* – Liquidity is thin, marketplace characterized by few buyers and sellers, transactions are complicated and can take many months to execute
- *Valuation risk* – Annual appraisal process can lead to disparities between carrying value and realized sales prices during downturns
- *Physical risk* – Subject to losses from natural and human-caused events such as fire, insect and vermin infestations, disease, inclement weather, and theft
- *Political and regulatory risk* – Environmental regulations can restrain or prohibit timberland management activities
- *Leverage* – Can amplify volatility and potentially lead to an inability to refinance properties or lead to a distressed sale, requires a minimum level of generated income
- *Location risks* – Real estate dispositions may also be impacted by weakness in local residential real estate markets

Commodities

- *Price risk* – Commodities with difficult or non-existent storage situations (heating oil, live cattle, live hogs, copper) coupled with a long-lead time between the production decision and the actual production of the commodity can lead to very volatile spot prices
- *Negative futures roll* – When the future contract's price is at a premium to the spot price, the cost to roll contracts forward is negative: an investor continuously locks in losses from the futures contracts converging to a lower spot price
- *Regulatory risk* – Concerns about the role played by investors in commodity markets could lead to new regulations impacting available investment opportunities, ultimately affecting investors' "license to invest".
- *Leverage* – A commodity futures program that is not fully collateralized (for every desired \$1 in commodity futures exposure, an investor sets aside \$1 in cash) can amplify volatility and potentially lead to greater losses
- *Implementation* – Because futures contracts are levered, cash management for the collateral is an important consideration due to the value

Global Alternatives

Definition

Investment has a distinct return/risk factor profile as compared to other specified broad asset class groupings. Examples: Low market exposure/absolute return strategies such as market neutral, and other niche strategies with low asset class beta such as insurance-linked investments, volatility, intellectual property, healthcare royalty, shipping, litigation finance and fine art.

Strategic Role

- More robust diversification achieved through the introduction of non-traditional return drivers/risk factors
- Low or negative correlations to other asset classes
- Return profile less dependent on economic growth and interest rates
- Potential for attractive risk-adjusted returns

Characteristics

- *Returns* – Exhibits lower correlations to broader equity and credit markets in periods of market distress
- *Illiquidity* – Transactions may require a longer period to execute than other asset classes
- *Inefficient Market* – Information affecting asset valuation and market trading may not be accurately or efficiently reflected or interpreted in its pricing

Risks

- *Market risk* – Cost of carry on being long volatility
- *Natural disaster risk* – Weather, floods, earthquake affect natural catastrophe-based insurance-linked products
- *Due diligence* – Complicated to evaluate and monitor
- *Illiquidity* – Transactions may require a longer period to execute than other asset classes
- *Implementation* – Complexity of implementation may be an impediment

MEMORANDUM

TO: STATE INVESTMENT BOARD

FROM: DAVID HUNTER
EXECUTIVE DIRECTOR

DATE: AUGUST 22, 2014

RE: AUDIT COMMITTEE APPOINTMENT – KAROL RIEDMAN

As directed by SIB Policy B-6, Governance Process/Standing Committees, the Audit Committee shall consist of five members selected by the SIB. Three members of the Audit Committee will represent the three groups on the SIB (TFFR board, PERS board, and the elected and appointed officials). The other two members will be selected from outside of the SIB and will be auditors with at least a Certified Public Accountant (CPA) or Certified Internal Auditor (CIA) designation.

The SIB previously approved the following four Board representatives for the upcoming year (each of which also served during the past year):

Cindy Ternes (designee for the Director of Workforce Safety & Insurance) representing elected and appointed officials
Mike Sandal, representing PERS
Michael Gessner, representing TFFR
Rebecca Dorwart, CPA, CIA

Update and Recommendation:

As stated in our prior SIB meeting, Lonny Mertz recommended Karol Riedman to assume his place on the Committee in the upcoming year. During the past month, the Executive Directors of RIO and TFFR met with Karol Riedman and reviewed her outstanding qualifications and stated desire to join the SIB Audit Committee. This recommendation was also shared with the existing SIB Audit Committee Chairman which noted the impressive credentials and strong qualifications of Ms. Riedman. Based on the above recommendations and review, I recommend that Ms. Riedman be appointed as an SIB Audit Committee member for the period of July 1, 2014 - June 30, 2015, thereby replacing Lonny Mertz.

Karol K Riedman, CPA, CIA, CGMA

As of August 11, 2014, Karol is the Chief Audit Executive for the Office of Internal Audit of the North Dakota Department of Health. Karol is responsible for the entire internal audit function, risk assessment and fraud prevention programs for this state government agency. She reports directly to the State Health Council Audit Committee. Prior to this current assignment, Karol served as a CPA and consultant to the North Dakota Department of Health and was President and CEO of her own private CPA firm, KKR Accounting PC in Bismarck. During the last 30 years, Karol has also served as a CPA for BNC National Bank in Bismarck, Director of Finance & Personnel for the Oregon Bach Festival in Eugene, Oregon, Audit Supervisor for Eide Bailly in Bismarck, and Senior Accountant for McGladrey & Pullen in Iowa City. She also serves on the Board of Directors for the Gateway to Science Center in Bismarck.

Karol K Riedman

Office of State Health Officer, Room 201
600 E Boulevard Ave., Dept 301
Bismarck, ND 58505-0200

Phone: 701-328-4925
Fax: 701-328-4727
E-mail: kkriedman@nd.gov

Objective

Serve as a member of the State Investment Board Audit Committee

Qualifications

30 years varied and advancing positions in accounting, auditing, and finance areas, as well as management, government, board of directors and committee experience

Professional Experience

Sep 2010 to present, Chief Audit Executive - Office of Internal Audit, ND Department of Health
Design and implement entire internal audit function, risk assessment and fraud prevention programs for this state government agency
Report directly to the State Health Council Audit Committee

May 2005 to Sep 2010, CPA Consultant, ND Department of Health, Bismarck, ND
Provide accounting, budgeting, and grant compliance services to the Emergency Preparedness and Response Section of the ND Department of Health

Mar 2000 to Dec 2009, President and CEO, KKR Accounting PC, Bismarck, ND
Owned and managed private CPA firm with five employees
Provided full cycle accounting, financial statement preparation, payroll and HR services, tax consulting and preparation, and Financial Statement Review and Compilation services

Sep 1997 to Sep 1999, CPA Professional Staff, BNC National Bank, Bismarck, ND
Full cycle accounting and financial statement preparation, business and individual tax preparation

Sep 1993 to Jul 1997, Dir of Finance & Personnel, Oregon Bach Festival, Univ of Oregon, Eugene, OR
Full cycle accounting and reporting, supervising two staff
Human Resource officer
Management team for international music festival

Jul 1987 to Apr 1993, Audit Supervisor/Tax preparer, Eide Bailly LLP, Bismarck ND
Planned and supervised audits of private sector businesses and financial institutions
Prepared business and individual tax returns

Jun 1984 to Jul 1987, Senior accountant/auditor, McGladrey & Pullen LLP, Iowa City, IA
Accounting, auditing, financial statement preparation, tax preparation

Education

Jun 1983 to May 1984, Coe College, Cedar Rapids, IA
Bachelor of Arts degrees: Accounting, Business Administration, Music

Sep 1980 to May 1983, University of North Dakota, Grand Forks, ND
Coursework in Accounting, Business Administration, Music

Certifications

Certified Public Accountant (CPA)
Certified Internal Auditor (CIA)
Certified Global Management Accountant (CGMA)

Interests and Activities

Board of Directors, Gateway to Science Center, Bismarck ND
Cellist, Bismarck-Mandan Symphony, Bismarck, ND
Pianist, Church of Saint Anne, Bismarck, ND

MEMO

TO: STATE INVESTMENT BOARD

FROM: EXECUTIVE REVIEW COMMITTEE
ROB LECH, CHAIR
MIKE SANDAL
CINDY TERNES

DATE: AUGUST 22, 2014

SUBJECT: EXECUTIVE REVIEW SURVEY

The Executive Review Committee met on August 12, 2014, to review and finalize the evaluation survey for the Executive Director/CIO.

The Committee is requesting the SIB's acceptance of the survey.

David Hunter - Ends and Compliance with Executive Limitations (State Investment Board)

Introduction

This evaluation tool assesses on six major categories. When evaluating, use the following categories (indicate a rating of 1, 2, or 3 in each area):

- 1) DOES NOT MEET EXPECTATIONS: Executive Director/CIO is not performing acceptably and expectations are not being met. Goals for improvement must be set and performance review date established (3-6 months).
- 2) MEETS EXPECTATIONS: Executive Director/CIO is performing acceptably and is meeting all standards and expectations.
- 3) EXCEEDS EXPECTATIONS: Executive Director is performing beyond and exceeds the established standards and expectations.

To ensure the best possible feedback for the Executive Director/CIO, it is suggested that ratings of DOES NOT MEET EXPECTATIONS and EXCEEDS EXPECTATIONS include comments that qualify that rating.

* 1. State Investment Board Member Completing the Evaluation:



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David Hunter - Ends and Compliance with Executive Limitations (State Investment Board)

CATEGORY 1 - Board Meetings

(Reference: Executive Limitations A-6)

2. The Executive Director/CIO prepares agenda items with supporting information and disseminates to State Investment Board members at least three days prior to the meeting.

- 1
- 2
- 3
- Not Applicable

Comments

3. The Executive Director/CIO provides appropriate information to the State Investment Board either in writing or verbally to aid in decision-making related to policy development, asset allocation, portfolio structure, and investment strategies.

- 1
- 2
- 3
- Not Applicable

Comments

4. The Executive Director/CIO provides board material that identify items, which need "Board Action" and makes a staff recommendation where appropriate.

- 1
- 2
- 3
- Not Applicable

Comments

5. The Executive Director/CIO provides education at board meetings in order for the State Investment Board to adequately perform their role.

- 1
- 2
- 3
- Not Applicable

Comments

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David Hunter - Ends and Compliance with Executive Limitations (State Investment Board)

CATEGORY 2 - Board Relations

(Reference: Executive Limitations A-6)

6. The Executive Director/CIO is responsive to requests of the State Investment Board, adapts to the State Investment Board's direction on policy, and works with the board as a team member.

- 1
- 2
- 3
- Not Applicable

Comments

7. The Executive Director/CIO keeps the State Investment Board aware of current issues and, when appropriate, provides information between board meetings.

- 1
- 2
- 3
- Not Applicable

Comments

8. The Executive Director/CIO provides timely and accurate problem identification to the State Investment Board as well as solutions and options for consideration.

- 1
- 2
- 3
- Not Applicable

Comments

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David Hunter - Ends and Compliance with Executive Limitations (State Investment Board)

CATEGORY 3 - Office Operations

(Reference: Executive Limitations A-2, A-4, A-5 and A-7)

9. The Executive Director/CIO adequately prepares a biennial budget, which includes, but is not limited to the following sub-categories:

3.2.1 - Biennial budget is prepared pursuant to OMB guidelines and submitted pursuant to guidelines established by the Office of the Governor.

3.2.2 - Does not reduce the level of service, or anticipate a reduction in the level of service, of any Retirement and Investment Office program without the prior approval of the State Investment Board.

3.2.3 - Expenditures for budget items do not exceed the appropriation without approval of the State Investment Board.

1

2

3

Not Applicable

Comments

10. The Executive Director/CIO provides leadership, coaching and effective feedback to RIO staff, recommending measures to improve performance and increase efficiency.

1

2

3

Not Applicable

Comments

11. The Executive Director/CIO maintains and continues to develop positive working relationships across all organizational units and levels.

- 1
- 2
- 3
- Not Applicable

Comments

12. The Executive Director/CIO provides adequate staffing for the NDRIO, which includes, but is not limited to the following sub-categories:

3.4.1 - All applicable personnel rules of the State of North Dakota are followed.

3.4.2 - Staff performance evaluations are completed at least annually.

- 1
- 2
- 3
- Not Applicable

Comments

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David Hunter - Ends and Compliance with Executive Limitations (State Investment Board)

CATEGORY 4 - Investment Programs and Program Operations

(Reference: Executive Limitations A-6, A-7, A-9 and Ends D-3, D4)

13. The Executive Director/CIO maintains approved Investment Objectives and Policies.

- 1
- 2
- 3
- Not Applicable

Comments

14. The Executive Director/CIO effectively advises, monitors and reports investment performances, which includes, but is not limited to the following sub-categories:

4.2.1 - Produces accurate and timely reports which are provided to the State Investment Board concerning investments, progress and compliance with investment policies.

4.2.2 - Advises and makes recommendations to the State Investment Board regarding investment programs and strategies.

4.2.3 - Recommends corrective actions as necessary to investment strategies.

4.2.4 - Monitors, analyzes, and recommends changes for all investment costs, including commissions, manager fees, and other costs.

- 1
- 2
- 3
- Not Applicable

Comments

15. The Executive Director/CIO effectively monitors investment strategies, which includes, but is not limited to the following sub-categories:

- 4.3.1 - Formulates, evaluates, and recommends an investment policy for all of the State Investment Board client assets, including asset allocation, structure of investment assets and, upon approval, implementation of the policy.**
- 4.3.2 - Makes recommendations to the State Investment Board related to the Watch List.**
- 4.3.3 - Monitors and evaluates total portfolio risk and return and recommend adjustments to the asset allocation, investment strategy, manager structure and guidelines.**
- 4.3.4 - Researches and recommends new asset classes and innovative investment management styles that can increase the return on assets, reduce risk, or reduce costs to the plan.**

- 1
- 2
- 3
- Not Applicable

Comments

16. The Executive Director/CIO effectively monitors investment managers, which includes, but is not limited to the following sub-categories:

- 4.4.1 - Adjust managers' assets to maintain proper risk levels and asset allocation targets.**
- 4.4.2 - At least quarterly, evaluates and reviews the investment activity and portfolio management of the investment managers.**
- 4.4.3 - Reports a summary of investment manager activity and compliance with investment policy and contractual guidelines to the State Investment Board and individual plan governing boards.**
- 4.4.4 - Regularly meets with the investment managers to review performance and other activity.**
- 4.4.5 - Oversees and, when necessary, participates in searches for new investment managers and consultants, negotiates fees and contracts, and recommends termination of managers.**

- 1
- 2
- 3
-

Not Applicable

Comments

17. The Executive Director/CIO maintains high fiduciary standards.

- 1
- 2
- 3
- Not Applicable

Comments

18. The Executive Director/CIO adequately provides State Investment Board contract management, which includes, but is not limited to the following sub-categories:

- 4.6.1 - Distributes and analyzes bids for services to facilitate decision-making for the State Investment Board.**
- 4.6.2 - Monitors contractor performance and advises the State Investment Board of any issues, including options for responding and recommendations for associated action plans.**
- 4.6.3 - Provide direction to all contracts to insure that State Investment Board objectives are achieved.**
- 4.6.4 - Insure that all contractors comply with contract provision, state law and administrative rules.**

- 1
- 2
- 3
- Not Applicable

Comments

David Hunter - Ends and Compliance with Executive Limitations (State Investment Board)

CATEGORY 5 - Public/Legislative Relations

(Reference: Executive Limitations A-3, A-9)

19. The Executive Director/CIO provides necessary information, through regular effective communications and timely programs, to various stakeholders.

- 1
- 2
- 3
- Not Applicable

Comments

20. The Executive Director/CIO represents RIO and promotes State Investment Board programs to various stakeholders, constituencies, political subdivisions and the state legislature.

- 1
- 2
- 3
- Not Applicable

Comments

21. The Executive Director/CIO develops legislative proposals in concert with the State Investment Board and represents the board in communications and presentations to the legislature.

- 1
- 2
- 3
- Not Applicable

Comments

22. The Executive Director/CIO properly informs the Legislature, through the Interim Committee, regarding the status of the investment funds which fall under the oversight of the State Investment Board.

- 1
- 2
- 3
- Not Applicable

Comments

23. The Executive Director/CIO has developed a rapport with legislators to ensure the credible recognition of the positions of the State Investment Board.

- 1
- 2
- 3
- Not Applicable

Comments

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David Hunter - Ends and Compliance with Executive Limitations (State Investment Board)

CATEGORY 6 - Professional Skills and Development

(Reference: Executive Limitations A-2, A-6)

24. The Executive Director/CIO maintains membership and involvement in professional organizations and is current with applicable certifications.

- 1
- 2
- 3
- Not Applicable

Comments

25. The Executive Director/CIO provides visionary and strategic leadership to the State Investment Board.

- 1
- 2
- 3
- Not Applicable

Comments

26. The Executive Director/CIO exhibits a positive and results-oriented style with a predisposition to building consensus and goal achievement through collaboration.

- 1
- 2
- 3
- Not Applicable

Comments

27. The Executive Director/CIO demonstrates the ability to dissect highly complex issues and effectively develop and communicate a corresponding plan of action.

- 1
- 2
- 3
- Not Applicable

Comments

28. The Executive Director/CIO has reasonably attained professional goals for present year.

- 1
- 2
- 3
- Not Applicable

Comments

29. The Executive Director/CIO adheres to all laws, rules, policies, procedures, and professional ethics.

- 1
- 2
- 3
- Not Applicable

Comments

30. The Executive Director/CIO exhibits courtesy and respect in all interactions.

- 1
- 2
- 3
- Not Applicable

Comments

31. The Executive Director/CIO understands motivational drivers and is skilled at getting individuals, teams, and the entire organization to perform at the highest possible level and to embrace change.

- 1
- 2
- 3
- Not Applicable

Comments

Prev

Done

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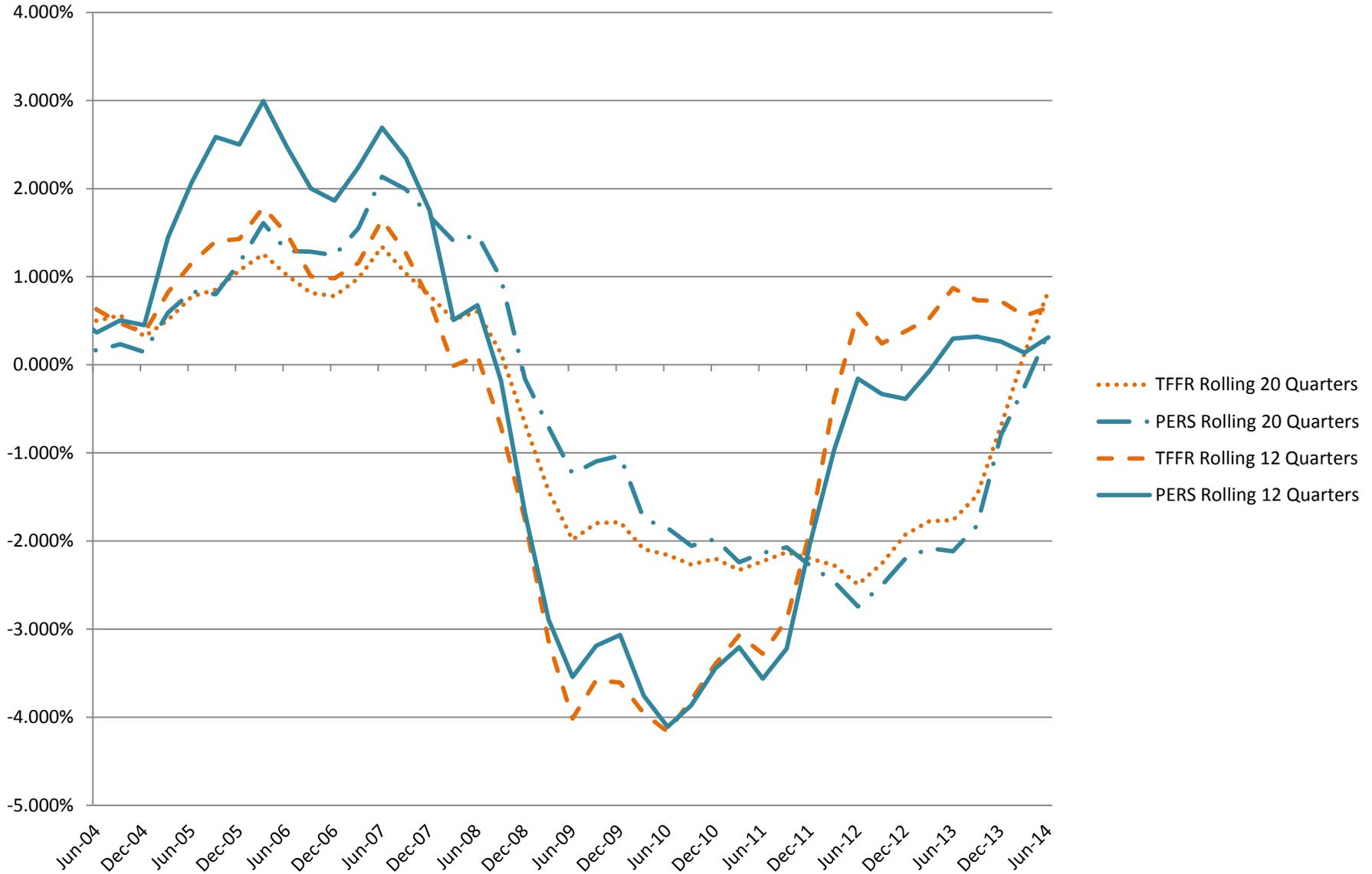
INVESTMENT PERFORMANCE SUMMARY REPORT
PENSION TRUST FUNDS
June 30, 2014

	Quarter Ended 6/30/2014	1 Yr Ended 6/30/2014	3 Yrs Ended 6/30/2014	5 Yrs Ended 6/30/2014	Risk 5 Yrs Ended 6/30/2014	Risk Adj Excess Return 5 Yrs Ended 6/30/2014
PUBLIC EMPLOYEES RETIREMENT SYSTEM (PERS)						
\$	2,332,744,038					
Total Fund Return - Net	3.66%	16.38%	9.66%	12.70%	9.46%	-0.23%
Policy Benchmark Return	3.33%	15.67%	9.35%	12.33%	9.01%	
Attribution Analysis						
Asset Allocation	0.04%	0.15%	-0.06%			
Manager Selection	0.29%	0.56%	0.37%			
Total Relative Return	0.33%	0.71%	0.31%	0.37%	105.0%	
TEACHERS' FUND FOR RETIREMENT (TFFR)						
\$	2,061,684,912					
Total Fund Return - Net	3.65%	16.53%	9.38%	13.07%	10.48%	0.20%
Policy Benchmark Return	3.31%	15.74%	8.73%	12.23%	9.97%	
Attribution Analysis						
Asset Allocation	0.04%	0.23%	0.18%			
Manager Selection	0.30%	0.56%	0.47%			
Total Relative Return	0.34%	0.79%	0.65%	0.83%	105.1%	
CITY OF BISMARCK EMPLOYEES PENSION						
\$	78,804,326					
Total Fund Return - Net	3.46%	14.56%	9.37%	12.15%	8.12%	0.27%
Policy Benchmark Return	3.05%	13.73%	8.77%	11.31%	7.73%	
Attribution Analysis						
Asset Allocation	-0.01%	-0.04%	-0.04%			
Manager Selection	0.41%	0.88%	0.63%			
Total Relative Return	0.41%	0.84%	0.60%	0.85%	105.0%	
CITY OF BISMARCK POLICE PENSION						
\$	34,643,204					
Total Fund Return - Net	3.51%	15.27%	9.70%	12.61%	8.79%	0.25%
Policy Benchmark Return	3.13%	14.45%	9.15%	11.88%	8.45%	
Attribution Analysis						
Asset Allocation	0.00%	0.02%	-0.01%			
Manager Selection	0.38%	0.79%	0.56%			
Total Relative Return	0.38%	0.81%	0.55%	0.73%	104.0%	
JOB SERVICE PENSION PLAN						
\$	97,825,769					
Total Fund Return - Net	3.18%	13.54%	9.36%	11.58%	7.36%	0.05%
Policy Benchmark Return	3.13%	13.02%	8.31%	10.60%	6.76%	
Attribution Analysis						
Asset Allocation	-0.01%	-0.02%	-0.14%			
Manager Selection	0.06%	0.53%	1.19%			
Total Relative Return	0.05%	0.52%	1.04%	0.98%	108.9%	

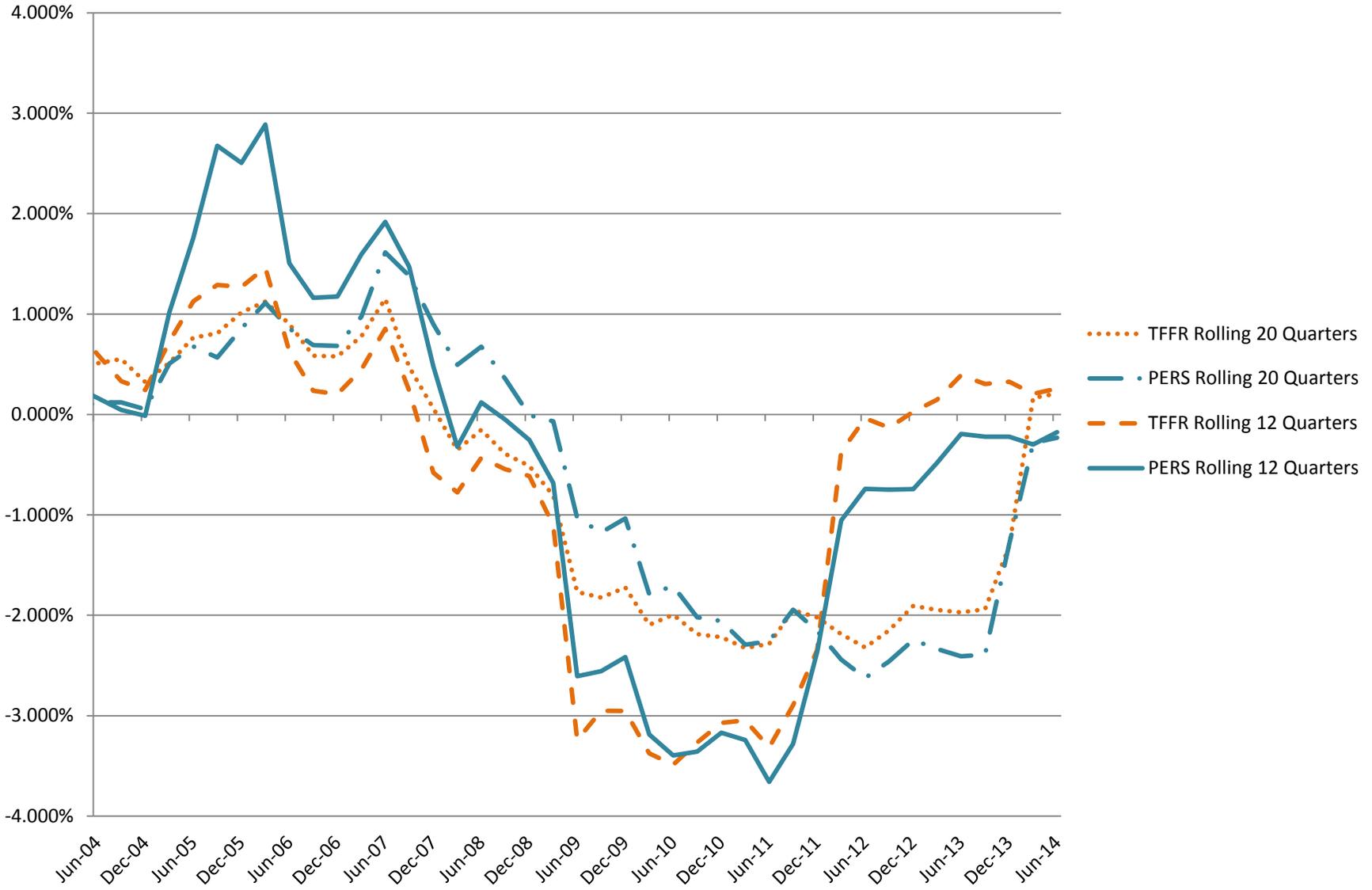
INVESTMENT PERFORMANCE SUMMARY REPORT
PENSION TRUST FUNDS
June 30, 2014

	Quarter Ended 6/30/2014	1 Yr Ended 6/30/2014	3 Yrs Ended 6/30/2014	5 Yrs Ended 6/30/2014	Risk 5 Yrs Ended 6/30/2014	Risk Adj Excess Return 5 Yrs Ended 6/30/2014
CITY OF FARGO PENSION PLAN - Liquidating						
\$	9,702					
Total Fund Return - Net	0.01%	8.42%	7.63%	11.72%	10.10%	-0.20%
Policy Benchmark Return	0.01%	8.44%	7.49%	11.17%	9.45%	
Attribution Analysis						
Asset Allocation	0.00%	-0.23%	-0.01%			
Manager Selection	0.00%	0.21%	0.15%			
Total Relative Return	0.00%	-0.02%	0.14%	0.55%	106.9%	
CITY OF GRAND FORKS PENSION PLAN						
\$	57,896,611					
Total Fund Return - Net	3.52%	16.33%	10.26%	13.19%	9.45%	0.06%
Policy Benchmark Return	3.36%	15.97%	9.92%	12.68%	9.13%	
Attribution Analysis						
Asset Allocation	0.03%	0.02%	0.11%			
Manager Selection	0.14%	0.34%	0.23%			
Total Relative Return	0.16%	0.36%	0.34%	0.51%	103.5%	
GRAND FORKS PARK DISTRICT PENSION PLAN						
\$	5,938,993					
Total Fund Return - Net	3.36%	16.44%	10.35%	N/A	N/A	N/A
Policy Benchmark Return	3.50%	16.21%	10.26%			
Attribution Analysis						
Asset Allocation	0.01%	-0.02%	-0.07%			
Manager Selection	-0.15%	0.25%	0.16%			
Total Relative Return	-0.14%	0.23%	0.09%			

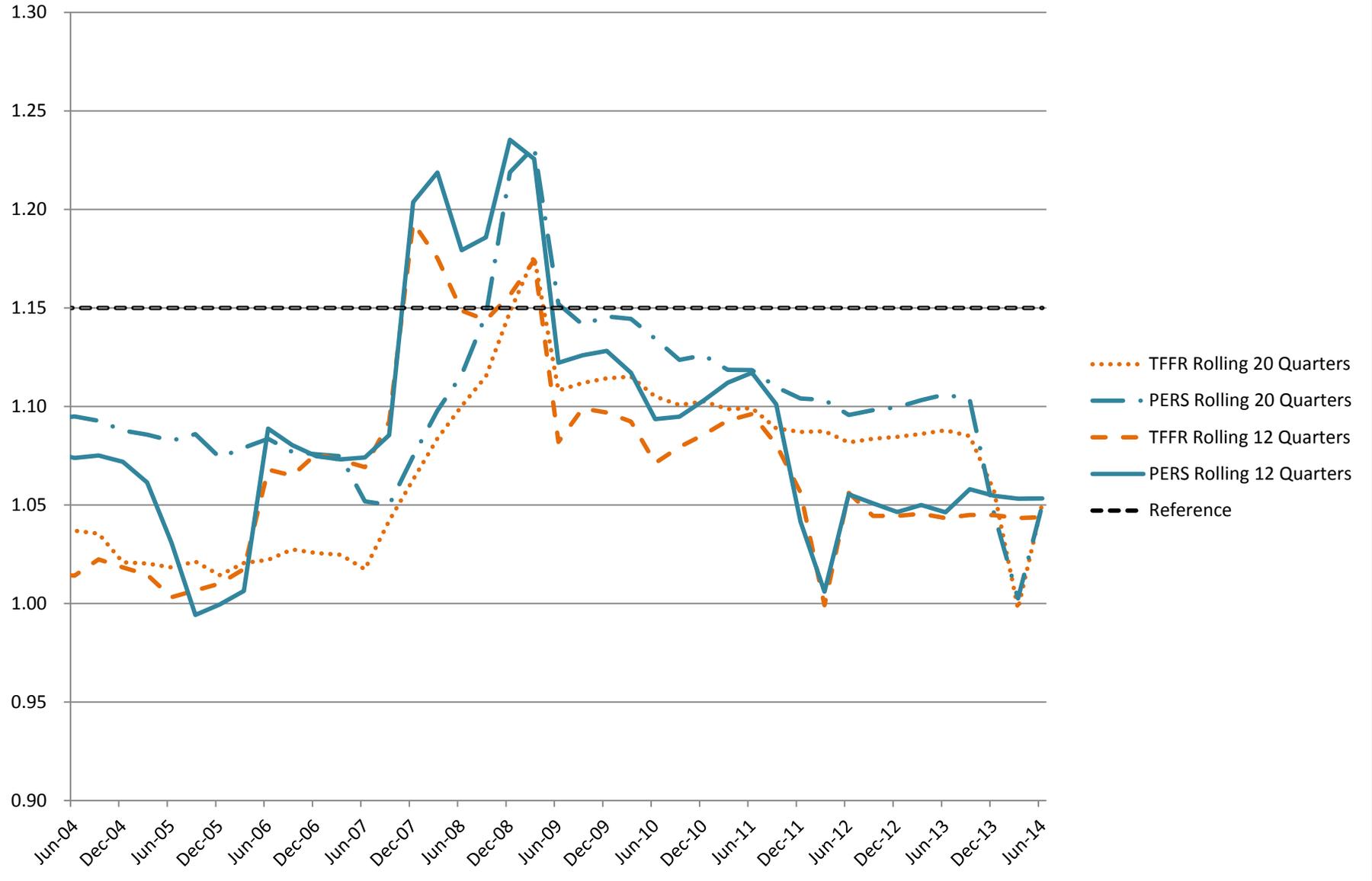
Excess Returns Relative to Policy Benchmarks 10 Years Ended 6/30/2014



Risk Adjusted Excess Returns 10 Years Ended 6/30/2014

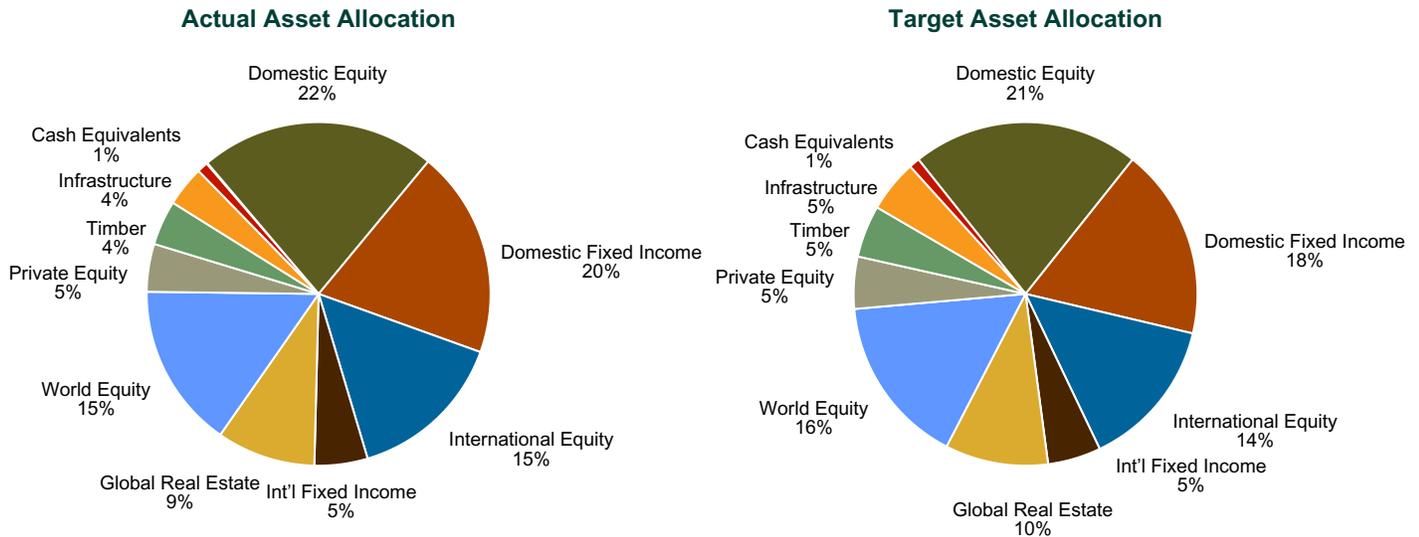


Relative Standard Deviation Relative to Policy Benchmarks 10 Years Ended 6/30/2014



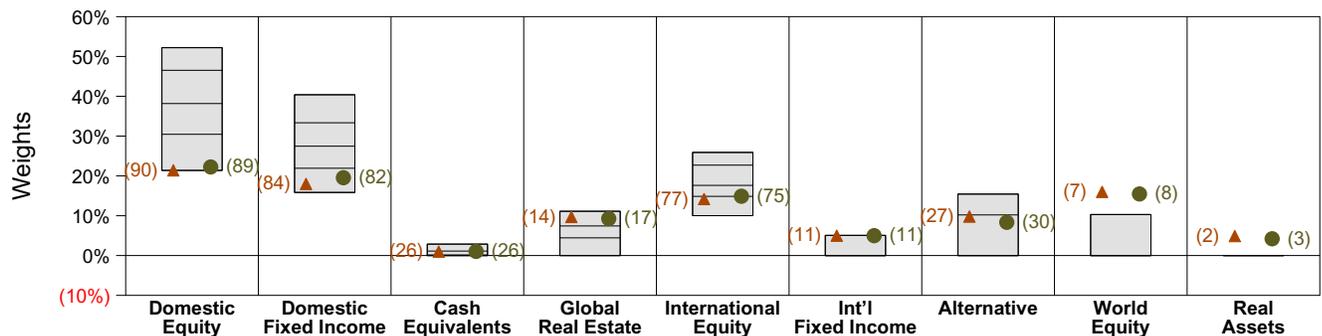
Actual vs Target Asset Allocation As of June 30, 2014

The top left chart shows the Fund's asset allocation as of June 30, 2014. 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	1,038,498	22.2%	21.4%	0.8%	39,214
Domestic Fixed Income	912,721	19.5%	18.0%	1.5%	72,202
International Equity	695,320	14.9%	14.2%	0.7%	32,243
Int'l Fixed Income	233,043	5.0%	5.0%	0.0%	(434)
Global Real Estate	432,889	9.3%	9.7%	(0.4%)	(20,058)
World Equity	722,148	15.5%	16.0%	(0.5%)	(24,981)
Private Equity	211,423	4.5%	4.9%	(0.4%)	(17,385)
Timber	196,673	4.2%	4.9%	(0.7%)	(32,135)
Infrastructure	178,426	3.8%	4.9%	(1.1%)	(50,382)
Cash Equivalents	48,412	1.0%	1.0%	0.0%	1,716
Total	4,669,553	100.0%	100.0%		

Asset Class Weights vs Public Fund Sponsor Database



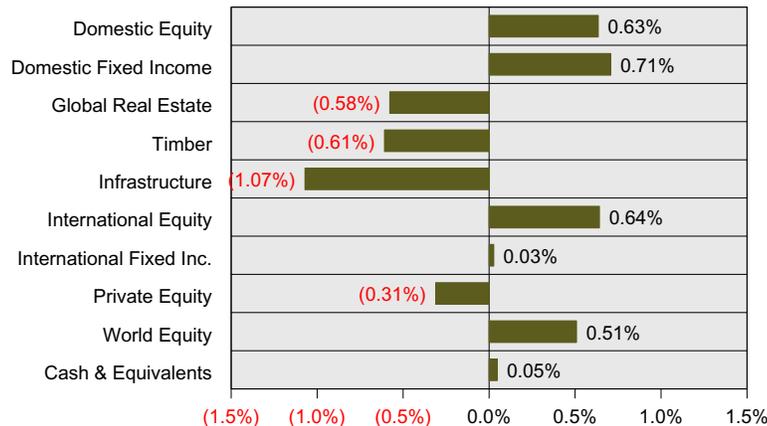
	Domestic Equity	Domestic Fixed Income	Cash Equivalents	Global Real Estate	International Equity	Int'l Fixed Income	Alternative	World Equity	Real Assets
10th Percentile	52.20	40.38	2.87	11.13	25.90	5.07	15.44	10.30	0.00
25th Percentile	46.52	33.34	1.12	7.44	22.70	0.00	10.20	0.00	0.00
Median	38.17	27.46	0.15	4.45	17.62	0.00	0.00	0.00	0.00
75th Percentile	30.46	21.93	0.00	0.00	14.86	0.00	0.00	0.00	0.00
90th Percentile	21.37	15.84	0.00	0.00	10.02	0.00	0.00	0.00	0.00
Fund	22.24	19.55	1.04	9.27	14.89	4.99	8.35	15.47	4.21
Target	21.40	18.00	1.00	9.70	14.20	5.00	9.80	16.00	4.90
% Group Invested	96.97%	97.58%	63.64%	58.79%	90.30%	20.00%	45.45%	17.58%	4.24%

* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 13.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 9.7% NCREIF Total Index, 5.0% Barclays HY Corp 2% Issue, 5.0% Barclays Global Agg ex US, 4.9% CPI-W, 4.9% Russell 2000 Index, 4.9% NDSIB PEN - Private Equity, 4.9% NCREIF Timberland Index, 3.1% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

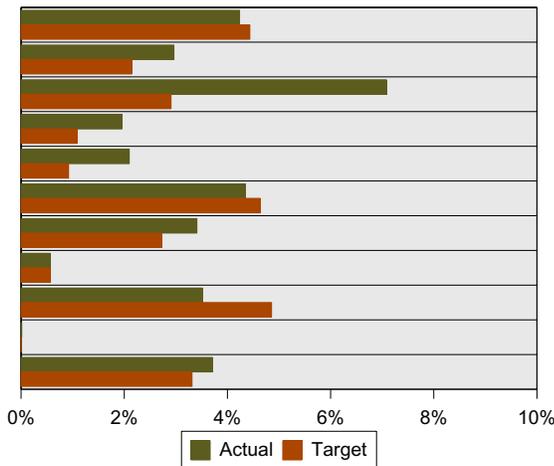
Quarterly Total Fund Relative Attribution - June 30, 2014

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: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

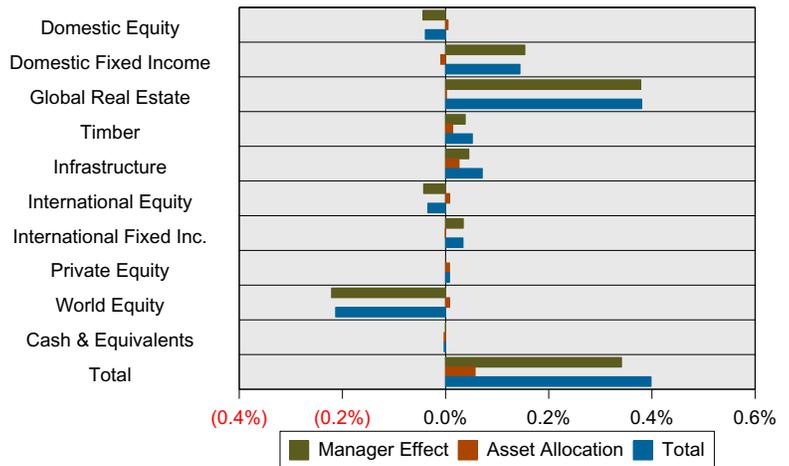
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended June 30, 2014

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	22%	21%	4.24%	4.43%	(0.04%)	0.00%	(0.04%)
Domestic Fixed Income	19%	18%	2.96%	2.15%	0.15%	(0.01%)	0.14%
Global Real Estate	9%	10%	7.08%	2.91%	0.38%	0.00%	0.38%
Timber	4%	5%	1.96%	1.08%	0.04%	0.01%	0.05%
Infrastructure	4%	5%	2.10%	0.92%	0.05%	0.03%	0.07%
International Equity	15%	14%	4.35%	4.64%	(0.04%)	0.01%	(0.03%)
International Fixed Inc.	5%	5%	3.41%	2.72%	0.03%	(0.00%)	0.03%
Private Equity	5%	5%	0.56%	0.56%	0.00%	0.01%	0.01%
World Equity	17%	16%	3.51%	4.86%	(0.22%)	0.01%	(0.21%)
Cash & Equivalents	1%	1%	0.01%	0.01%	0.00%	(0.00%)	(0.00%)

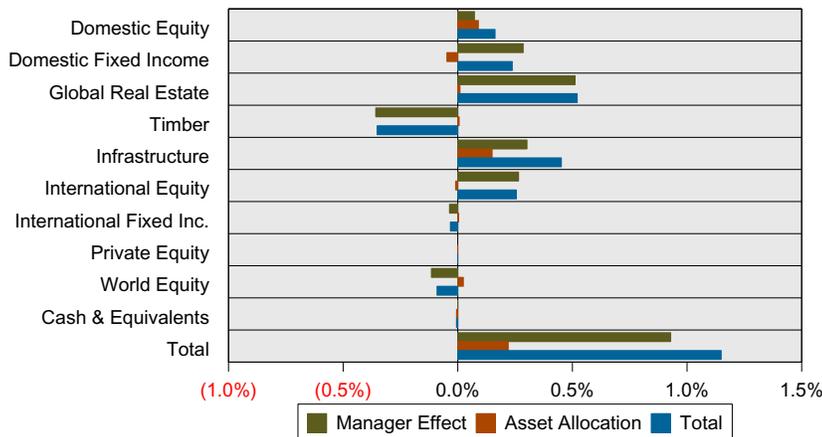
Total **3.71% = 3.31% + 0.34% + 0.06%** **0.40%**

* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 13.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 9.7% NCREIF Total Index, 5.0% Barclays HY Corp 2% Issue, 5.0% Barclays Global Agg ex US, 4.9% CPI-W, 4.9% Russell 2000 Index, 4.9% NDSIB PEN - Private Equity, 4.9% NCREIF Timberland Index, 3.1% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

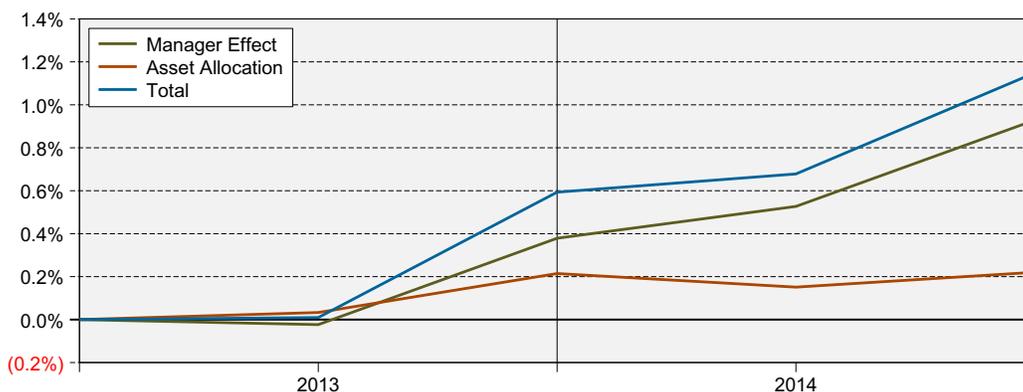
Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

One Year Relative Attribution Effects



Cumulative Relative Attribution Effects



One Year Relative Attribution Effects

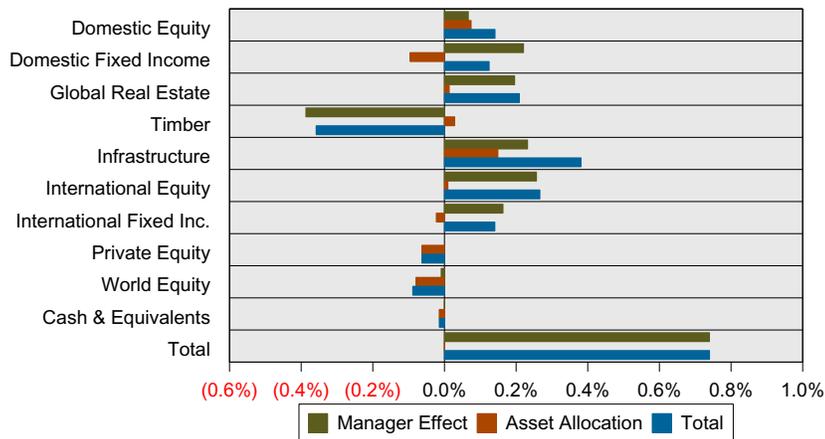
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	25.33%	25.02%	0.07%	0.09%	0.16%
Domestic Fixed Income	18%	18%	7.79%	6.37%	0.29%	(0.05%)	0.24%
Global Real Estate	9%	10%	16.77%	11.21%	0.51%	0.01%	0.52%
Timber	4%	5%	2.62%	9.92%	(0.36%)	0.01%	(0.35%)
Infrastructure	4%	5%	9.47%	2.04%	0.30%	0.15%	0.45%
International Equity	15%	14%	23.52%	21.56%	0.27%	(0.01%)	0.26%
International Fixed Inc.	5%	5%	8.57%	9.42%	(0.04%)	0.00%	(0.03%)
Private Equity	5%	5%	4.10%	4.10%	0.00%	(0.00%)	(0.00%)
World Equity	17%	16%	23.31%	24.05%	(0.12%)	0.02%	(0.09%)
Cash & Equivalents	1%	1%	0.04%	0.05%	(0.00%)	(0.01%)	(0.01%)
Total			16.73%	15.58%	+ 0.93%	+ 0.22%	1.15%

* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 13.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 9.7% NCREIF Total Index, 5.0% Barclays HY Corp 2% Issue, 5.0% Barclays Global Agg ex US, 4.9% CPI-W, 4.9% Russell 2000 Index, 4.9% NDSIB PEN - Private Equity, 4.9% NCREIF Timberland Index, 3.1% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Three Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Three Year Annualized Relative Attribution Effects

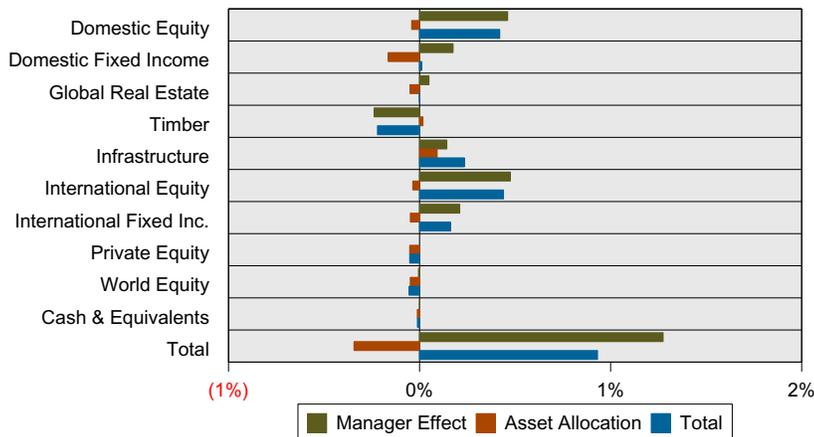
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	27%	26%	16.90%	16.40%	0.07%	0.07%	0.14%
Domestic Fixed Income	19%	19%	7.02%	5.37%	0.22%	(0.10%)	0.12%
Global Real Estate	9%	9%	13.57%	11.32%	0.20%	0.01%	0.21%
Timber	5%	5%	-	-	(0.39%)	0.03%	(0.36%)
Infrastructure	3%	4%	-	-	0.23%	0.15%	0.38%
International Equity	16%	16%	7.87%	6.20%	0.26%	0.01%	0.27%
International Fixed Inc.	5%	5%	4.62%	1.75%	0.16%	(0.02%)	0.14%
Private Equity	5%	5%	5.30%	5.30%	0.00%	(0.06%)	(0.06%)
World Equity	10%	10%	-	-	(0.01%)	(0.08%)	(0.09%)
Cash & Equivalents	1%	1%	0.09%	0.07%	0.00%	(0.01%)	(0.01%)
Total			9.92%	9.18%	+ 0.74%	+ 0.00%	0.74%

* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 13.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 9.7% NCREIF Total Index, 5.0% Barclays HY Corp 2% Issue, 5.0% Barclays Global Agg ex US, 4.9% CPI-W, 4.9% Russell 2000 Index, 4.9% NDSIB PEN - Private Equity, 4.9% NCREIF Timberland Index, 3.1% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

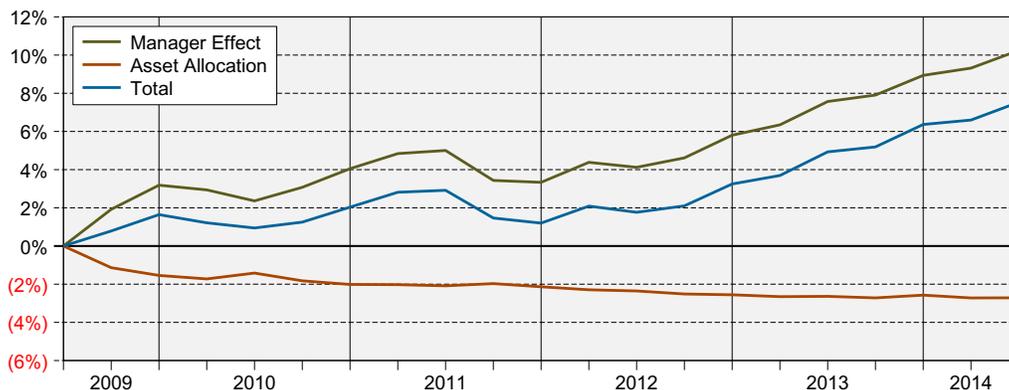
Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Five Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Five Year Annualized Relative Attribution Effects

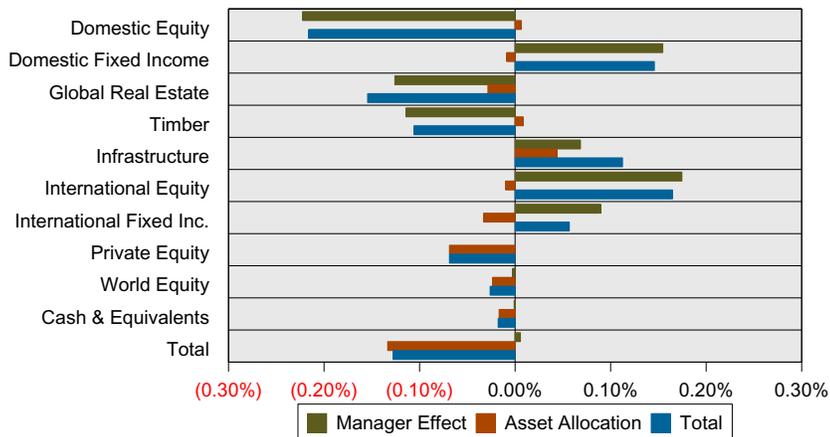
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	31%	31%	20.97%	19.41%	0.46%	(0.04%)	0.42%
Domestic Fixed Income	22%	21%	8.40%	7.20%	0.18%	(0.16%)	0.01%
Global Real Estate	8%	8%	9.91%	9.67%	0.05%	(0.05%)	(0.00%)
Timber	3%	3%	-	-	(0.24%)	0.02%	(0.22%)
Infrastructure	2%	3%	-	-	0.14%	0.09%	0.23%
International Equity	17%	17%	13.79%	10.91%	0.48%	(0.04%)	0.44%
International Fixed Inc.	5%	5%	7.68%	4.15%	0.21%	(0.05%)	0.16%
Private Equity	5%	5%	9.84%	9.84%	0.00%	(0.05%)	(0.05%)
World Equity	6%	6%	-	-	(0.01%)	(0.05%)	(0.05%)
Cash & Equivalents	1%	1%	0.14%	0.11%	0.00%	(0.01%)	(0.01%)
Total			13.23%	12.30%	+ 1.27%	+ (0.34%)	0.93%

* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 13.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 9.7% NCREIF Total Index, 5.0% Barclays HY Corp 2% Issue, 5.0% Barclays Global Agg ex US, 4.9% CPI-W, 4.9% Russell 2000 Index, 4.9% NDSIB PEN - Private Equity, 4.9% NCREIF Timberland Index, 3.1% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

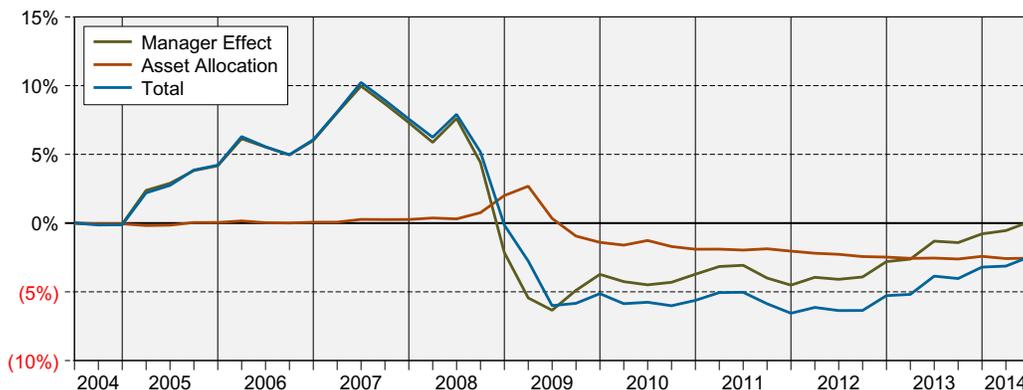
Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Ten Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Ten Year Annualized Relative Attribution Effects

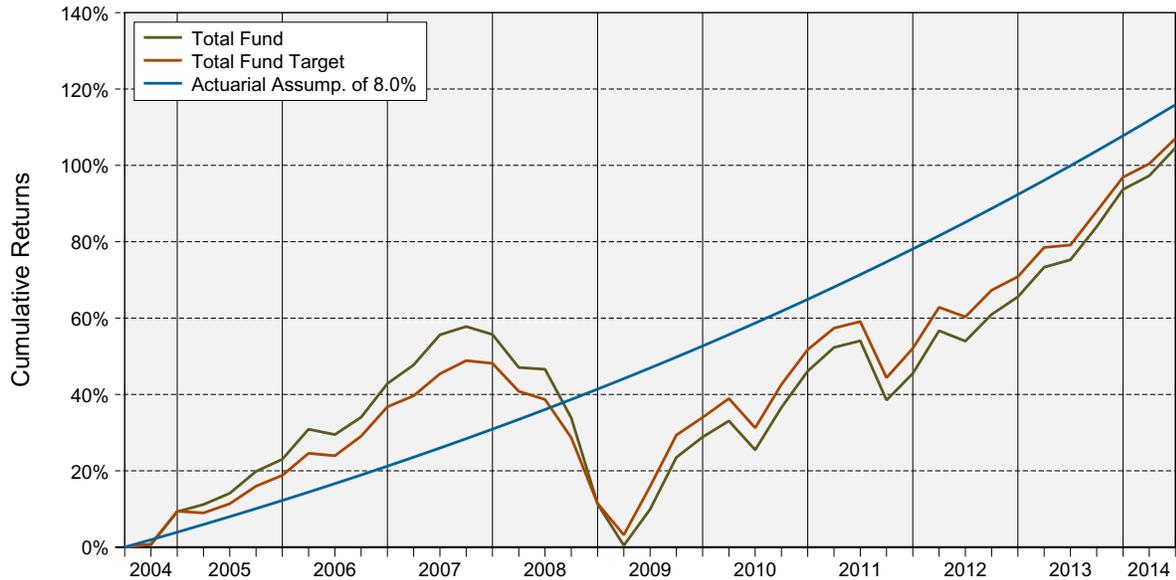
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	35%	35%	7.40%	8.15%	(0.22%)	0.01%	(0.22%)
Domestic Fixed Income	24%	23%	7.47%	6.15%	0.15%	(0.01%)	0.15%
Global Real Estate	8%	8%	7.27%	8.63%	(0.13%)	(0.03%)	(0.15%)
Timber	1%	1%	-	-	(0.11%)	0.01%	(0.11%)
Infrastructure	1%	1%	-	-	0.07%	0.04%	0.11%
International Equity	17%	18%	9.60%	8.57%	0.17%	(0.01%)	0.16%
International Fixed Inc.	5%	5%	6.86%	5.19%	0.09%	(0.03%)	0.06%
Private Equity	4%	5%	5.14%	5.14%	0.00%	(0.07%)	(0.07%)
World Equity	3%	3%	-	-	(0.00%)	(0.02%)	(0.03%)
Cash & Equivalents	1%	1%	1.42%	1.63%	(0.00%)	(0.02%)	(0.02%)
Total			7.42%	7.55%	+ 0.01%	+ (0.13%)	(0.13%)

* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 13.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 9.7% NCREIF Total Index, 5.0% Barclays HY Corp 2% Issue, 5.0% Barclays Global Agg ex US, 4.9% CPI-W, 4.9% Russell 2000 Index, 4.9% NDSIB PEN - Private Equity, 4.9% NCREIF Timberland Index, 3.1% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

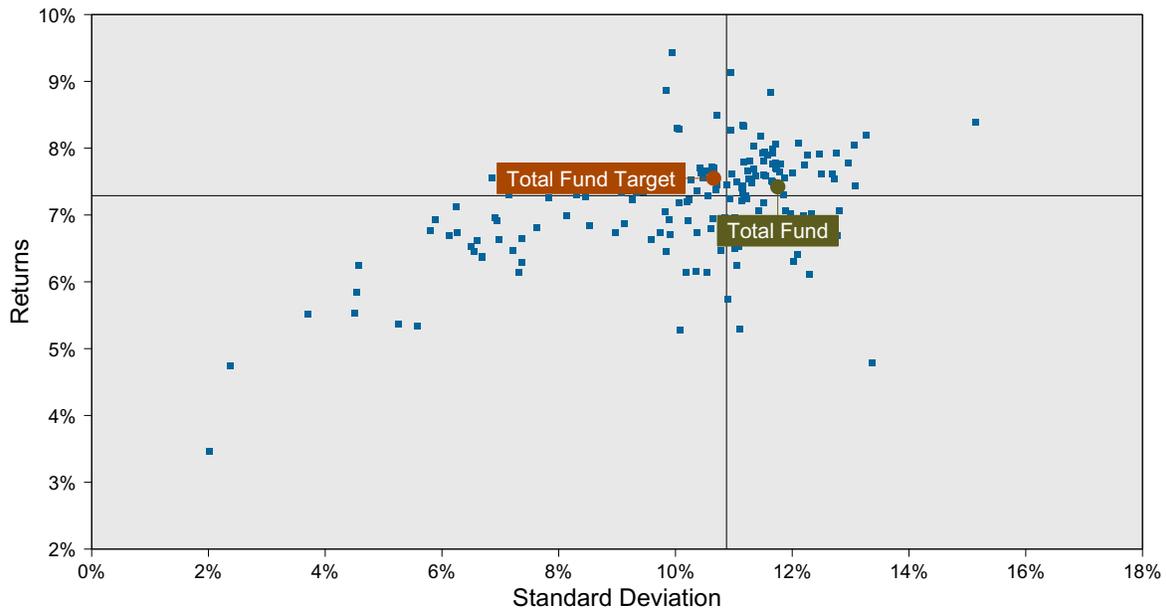
Cumulative Performance Relative to Target

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 difference between the Total Fund return and the Target Mix return is explained by the performance attribution on the next page. 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



Ten Year Annualized Risk vs Return



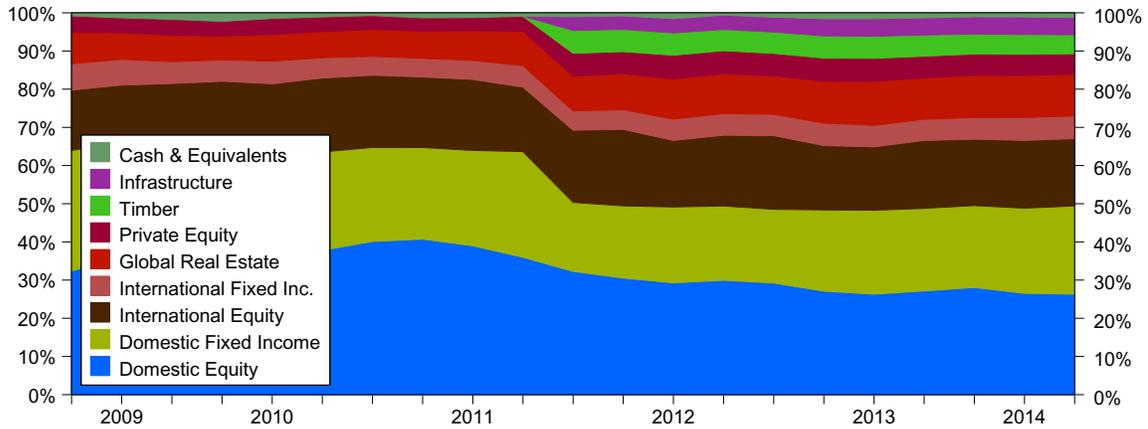
Squares represent membership of the Public Fund Sponsor Database

* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 13.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 9.7% NCREIF Total Index, 5.0% Barclays HY Corp 2% Issue, 5.0% Barclays Global Agg ex US, 4.9% CPI-W, 4.9% Russell 2000 Index, 4.9% NDSIB PEN - Private Equity, 4.9% NCREIF Timberland Index, 3.1% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

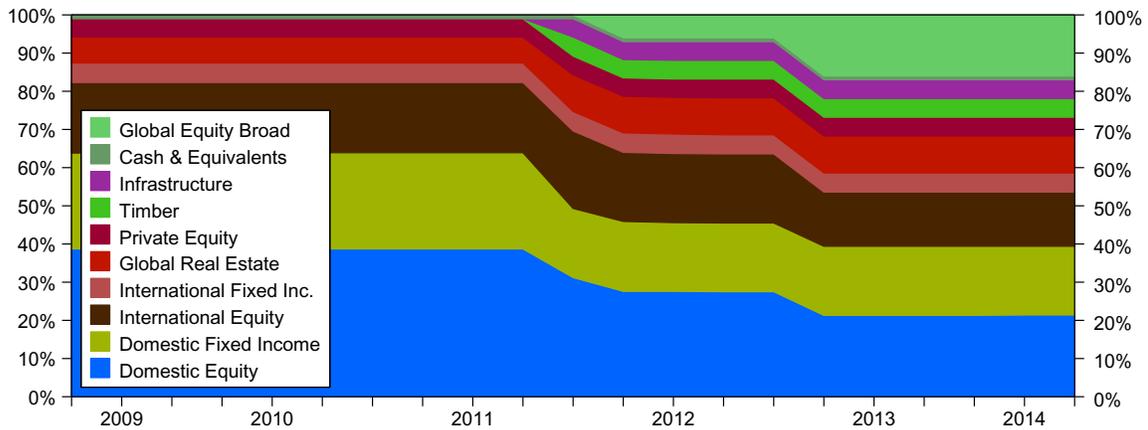
Actual vs Target Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, the fund's historical target asset allocation, and the historical asset allocation of the average fund in the Public Fund Sponsor Database.

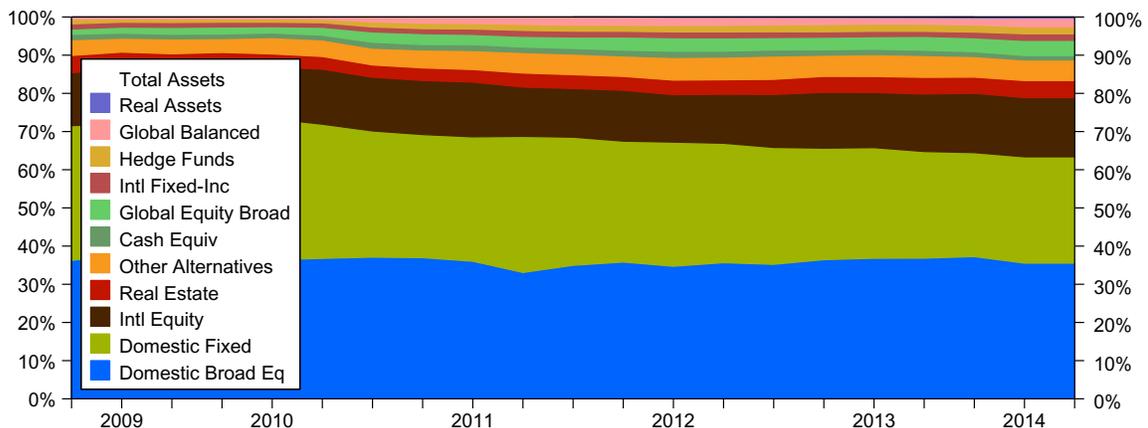
Actual Historical Asset Allocation



Target Historical Asset Allocation



Average Public Fund Sponsor Database Historical Asset Allocation

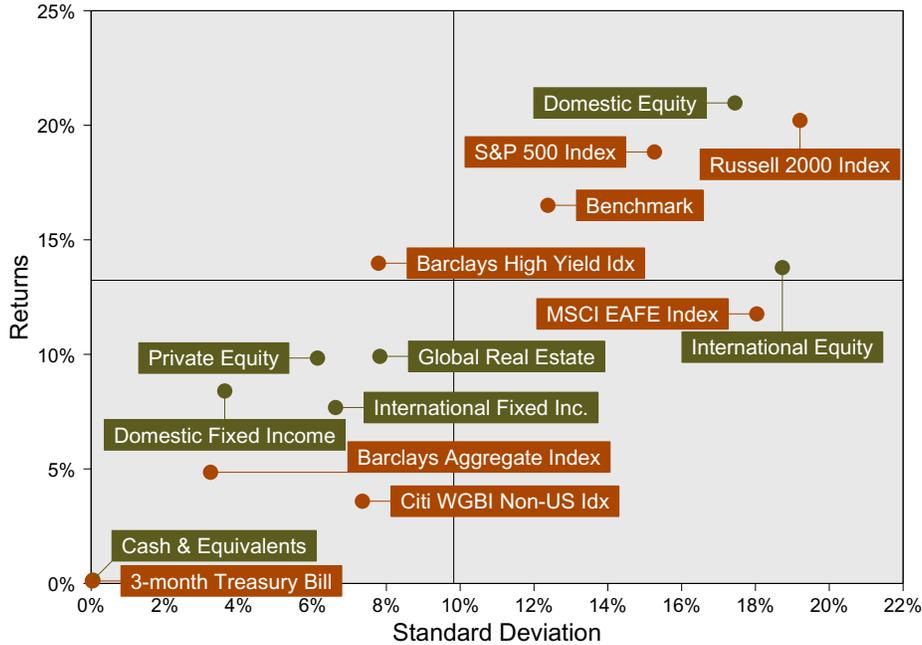


* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 13.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 9.7% NCREIF Total Index, 5.0% Barclays HY Corp 2% Issue, 5.0% Barclays Global Agg ex US, 4.9% CPI-W, 4.9% Russell 2000 Index, 4.9% NDSIB PEN - Private Equity, 4.9% NCREIF Timberland Index, 3.1% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

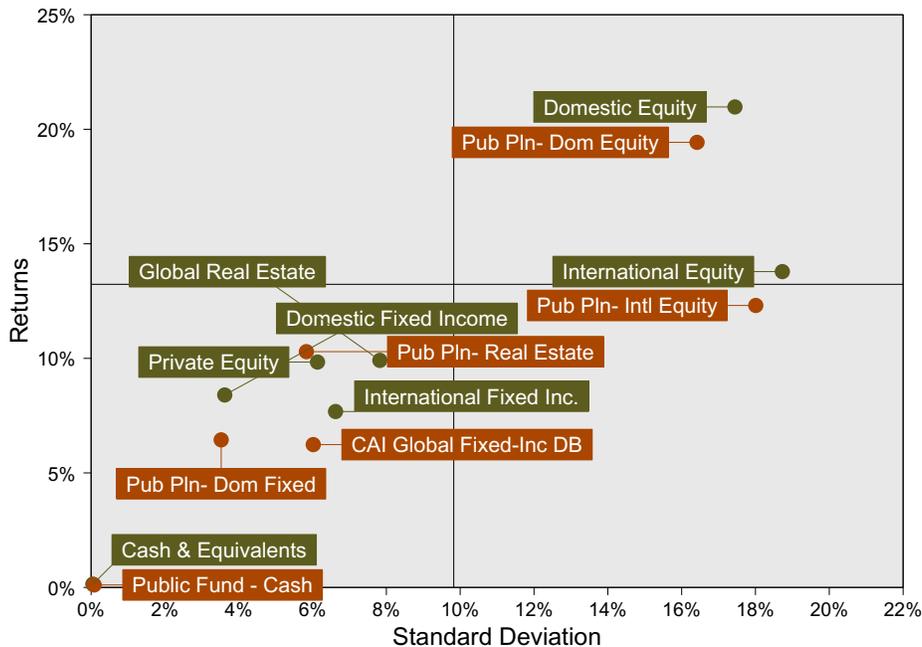
Asset Class Risk and Return

The charts below show the five year annualized risk and return for each asset class component of the Total Fund. The first graph contrasts these values with those of the appropriate index for each asset class. The second chart contrasts them with the risk and return of the median portfolio in each of the appropriate CAI comparative databases. In each case, the crosshairs on the chart represent the return and risk of the Total Fund.

Five Year Annualized Risk vs Return Asset Classes vs Benchmark Indices



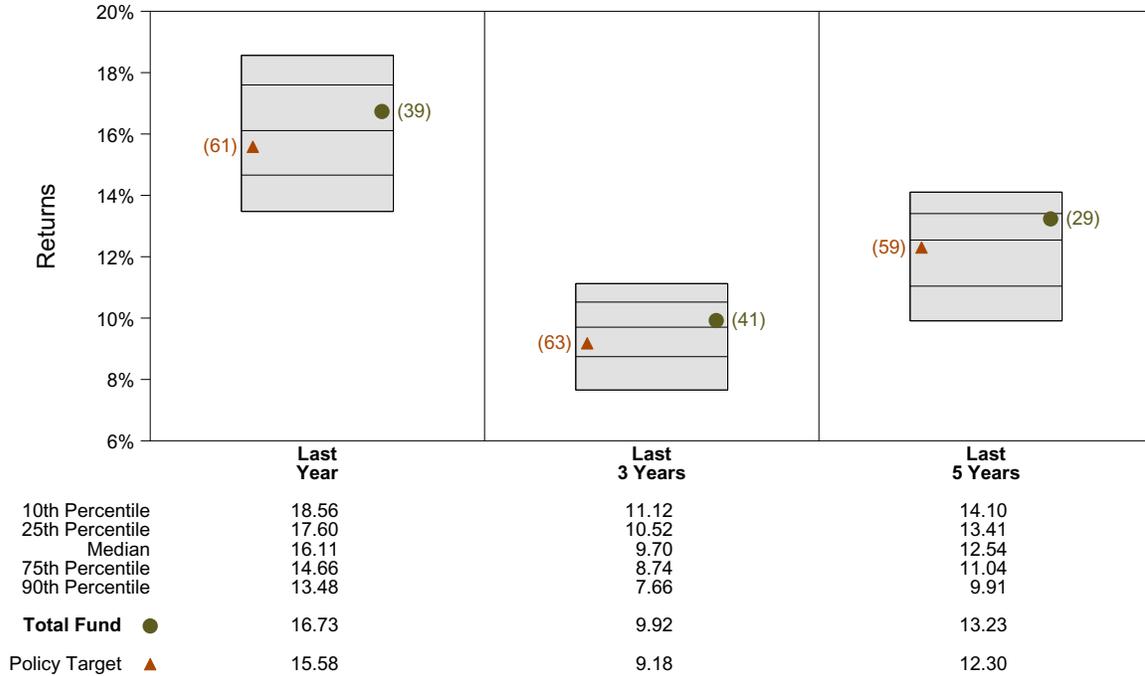
Five Year Annualized Risk vs Return Asset Classes vs Asset Class Median



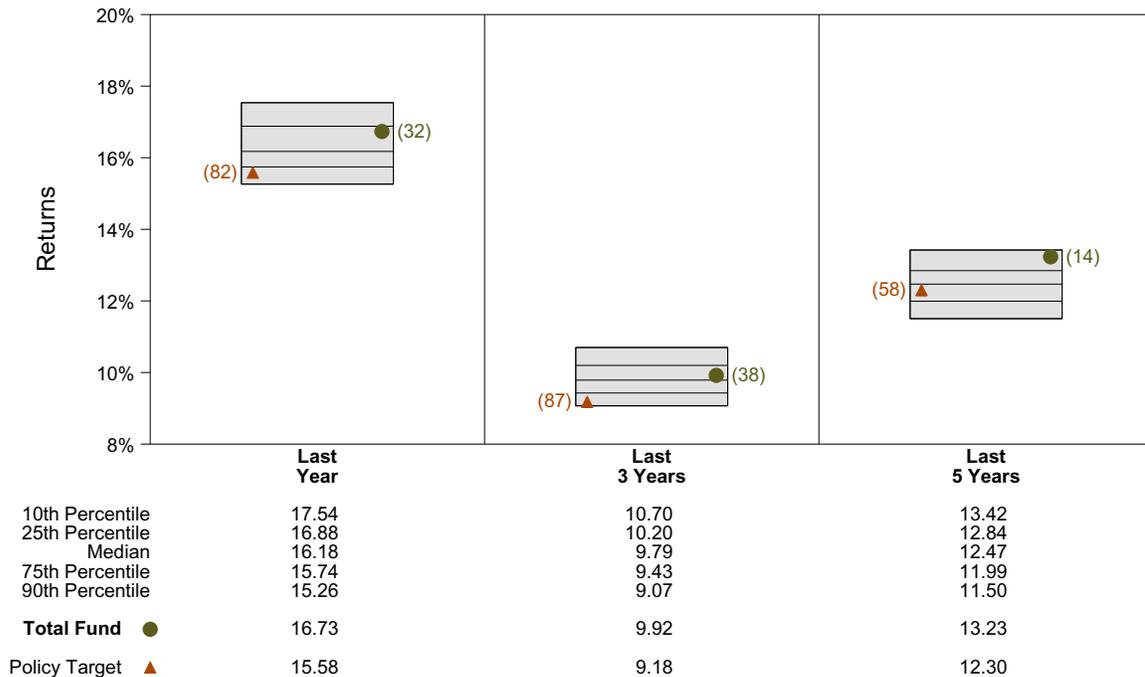
Total Fund Ranking

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 June 30, 2014. 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

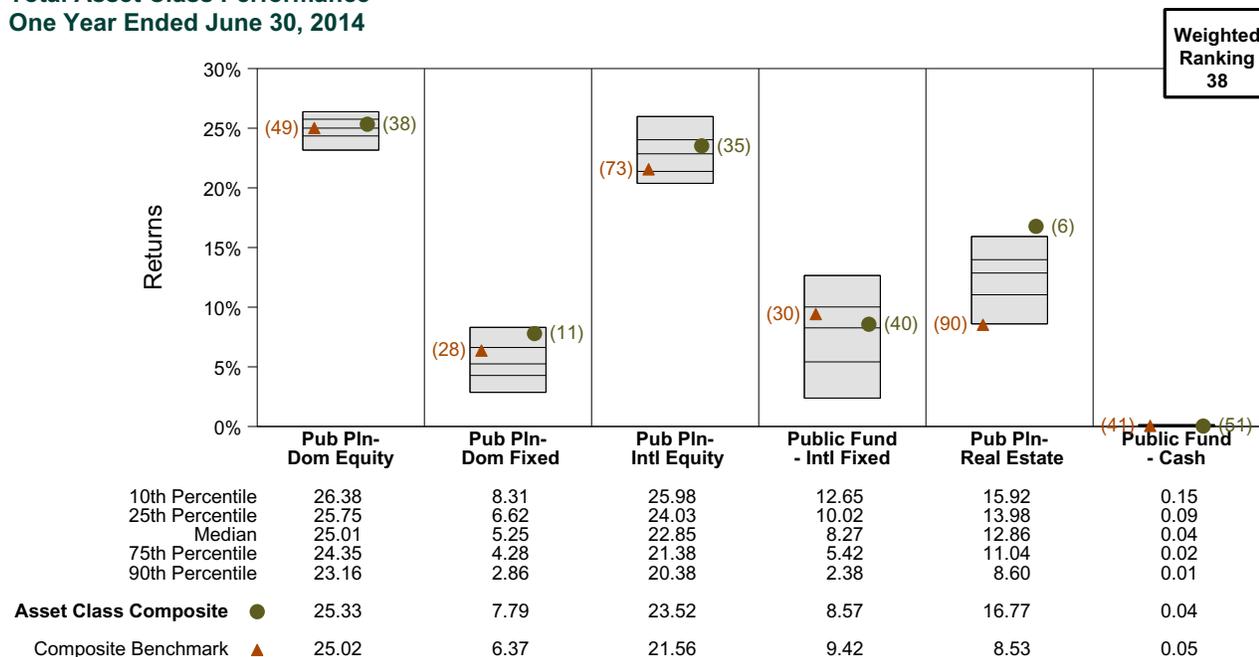


* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 13.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 9.7% NCREIF Total Index, 5.0% Barclays HY Corp 2% Issue, 5.0% Barclays Global Agg ex US, 4.9% CPI-W, 4.9% Russell 2000 Index, 4.9% NDSIB PEN - Private Equity, 4.9% NCREIF Timberland Index, 3.1% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

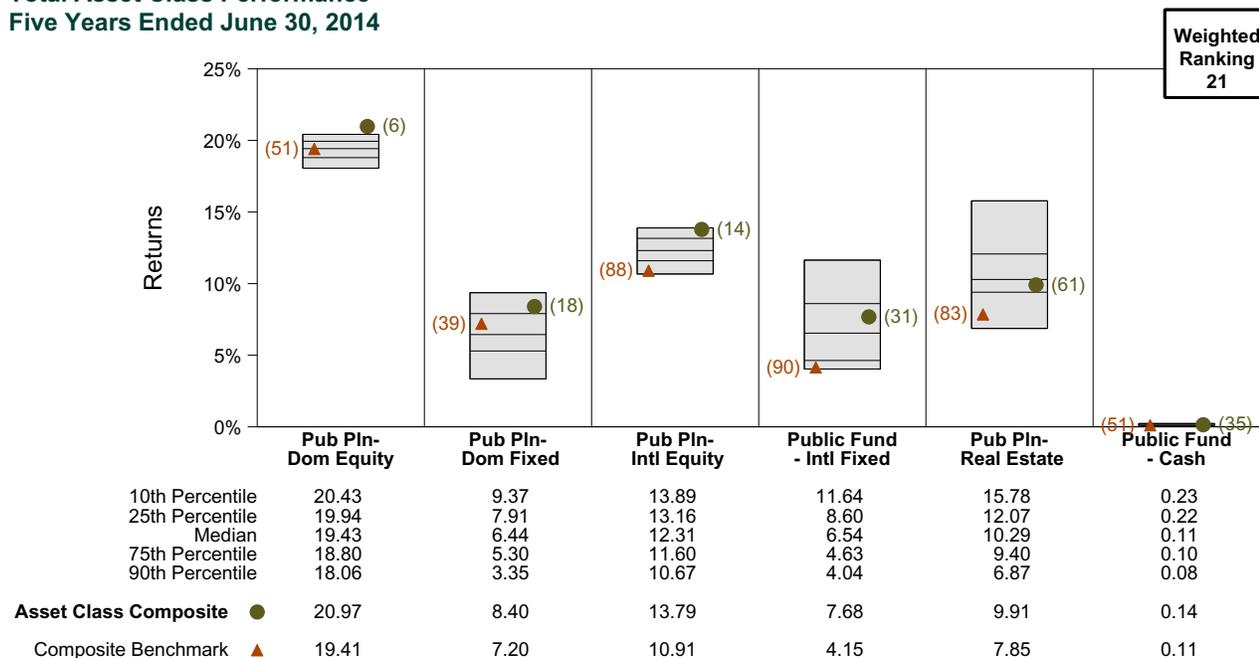
Asset Class Rankings

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 June 30, 2014



Total Asset Class Performance Five Years Ended June 30, 2014



* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 13.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 9.7% NCREIF Total Index, 5.0% Barclays HY Corp 2% Issue, 5.0% Barclays Global Agg ex US, 4.9% CPI-W, 4.9% Russell 2000 Index, 4.9% NDSIB PEN - Private Equity, 4.9% NCREIF Timberland Index, 3.1% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2014, with the distribution as of March 31, 2014. 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

	June 30, 2014		Net New Inv.	Inv. Return	March 31, 2014	
	Market Value	Weight			Market Value	Weight
GLOBAL EQUITY	\$2,667,388,639	57.12%	\$(51,485,104)	\$98,438,737	\$2,620,435,006	58.18%
Domestic Equity	\$1,038,498,285	22.24%	\$(687,666)	\$42,202,421	\$996,983,530	22.13%
Large Cap Domestic Equity	\$800,948,973	17.15%	\$(487,692)	\$38,028,496	\$763,408,168	16.95%
L.A. Capital	308,606,731	6.61%	(154,638)	14,557,412	294,203,956	6.53%
LACM Enhanced Index	208,087,875	4.46%	(63,951)	9,779,463	198,372,363	4.40%
Northern Trust AM Enh S&P 500	118,554,342	2.54%	(269,103)	5,027,366	113,796,079	2.53%
Parametric Clifton Enh S&P 500	165,700,026	3.55%	0	8,664,255	157,035,770	3.49%
Small Cap Domestic Equity	\$237,549,312	5.09%	\$(199,974)	\$4,173,924	\$233,575,362	5.19%
Callan	119,313,107	2.56%	(199,974)	1,375,647	118,137,434	2.62%
Parametric Clifton Enh Small Cap	118,225,528	2.53%	0	2,798,276	115,427,252	2.56%
SEI Investments	10,678	0.00%	0	1	10,677	0.00%
International Equity	\$695,319,843	14.89%	\$(721,973)	\$28,971,807	\$667,070,009	14.81%
Developed Int'l Equity	\$539,906,403	11.56%	\$(589,766)	\$19,150,254	\$521,345,916	11.57%
Capital Group	107,558,148	2.30%	(119,107)	2,462,975	105,214,281	2.34%
DFA Int'l Small Cap	81,964,962	1.76%	(130,168)	1,695,171	80,399,959	1.78%
Northern Trust AM World Ex US	259,962,014	5.57%	(20,656)	11,931,836	248,050,834	5.51%
Wellington Management Co.	90,419,925	1.94%	(181,843)	3,059,384	87,542,384	1.94%
Transition Account	1,354	0.00%	(137,992)	889	138,457	0.00%
Emerging Markets Equity	\$155,413,439	3.33%	\$(132,206)	\$9,821,553	\$145,724,093	3.24%
DFA	37,109,342	0.79%	(58,061)	2,457,774	34,709,629	0.77%
JP Morgan	25,817,147	0.55%	(46,648)	1,606,547	24,257,248	0.54%
Northern Trust AM Emerging Mkts.	92,486,950	1.98%	(27,497)	5,757,231	86,757,216	1.93%
World Equity	\$722,147,855	15.47%	\$(50,651,413)	\$26,088,979	\$746,710,288	16.58%
EPOCH Investment Partners	295,540,126	6.33%	(537,675)	2,897,826	293,179,975	6.51%
LSV Asset Management	426,607,729	9.14%	(50,113,738)	23,191,153	453,530,314	10.07%

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2014, with the distribution as of March 31, 2014. 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

	June 30, 2014			March 31, 2014		
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Private Equity	\$211,422,656	4.53%	\$575,947	\$1,175,531	\$209,671,178	4.65%
Adams Street Direct Co-Invest Fd	17,675,365	0.38%	0	1,764,508	15,910,857	0.35%
Adams Street Direct Fund 2010	1,587,186	0.03%	28,202	209,739	1,349,245	0.03%
Adams Street 1998 Partnership	121,622	0.00%	0	1,447	120,175	0.00%
Adams Street 1999 Partnership	928,099	0.02%	0	23,797	904,302	0.02%
Adams Street 2000 Partnership	2,726,985	0.06%	0	65,857	2,661,128	0.06%
Adams Street 2001 Partnership	2,848,421	0.06%	(532,594)	204,995	3,176,020	0.07%
Adams Street 2002 Partnership	1,307,304	0.03%	(505,004)	64,966	1,747,342	0.04%
Adams Street 2003 Partnership	675,132	0.01%	(81,357)	56,384	700,105	0.02%
Adams Street 2010 Partnership	3,963,374	0.08%	151,593	168,597	3,643,184	0.08%
Adams Street 2008 Fund	6,577,397	0.14%	494,383	219,501	5,863,513	0.13%
Adams Street 1999 Non-US	557,053	0.01%	0	70	556,983	0.01%
Adams Street 2000 Non-US	1,019,225	0.02%	0	26,873	992,352	0.02%
Adams Street 2001 Non-US	477,886	0.01%	(151,715)	21,909	607,692	0.01%
Adams Street 2002 Non-US	1,545,921	0.03%	(185,609)	90,953	1,640,577	0.04%
Adams Street 2003 Non-US	1,790,906	0.04%	0	79,244	1,711,662	0.04%
Adams Street 2004 Non-US	1,221,367	0.03%	(119,957)	219,360	1,121,964	0.02%
Adams Street 2010 Non-US	1,927,907	0.04%	110,546	61,204	1,756,157	0.04%
Adams Street 2010 Non-US Emg	686,463	0.01%	84,000	3,865	598,598	0.01%
Adams Street BVCF IV Fund	6,170,091	0.13%	0	511,773	5,658,318	0.13%
Coral Partner VI	599,294	0.01%	0	(1,619,254)	2,218,548	0.05%
Hearthstone Advisors MSII	1	0.00%	0	0	1	0.00%
Hearthstone Advisors MSIII	150,435	0.00%	0	(13,249)	163,684	0.00%
CorsAir III	11,840,263	0.25%	28,804	(518,266)	12,329,724	0.27%
ND Investors	11,560,996	0.25%	25,000	(74,724)	11,610,720	0.26%
CorsAir IV	11,960,258	0.26%	133,653	1,417,472	10,409,133	0.23%
Capital International V	21,260,349	0.46%	(74,574)	322,988	21,011,935	0.47%
Capital International VI	14,088,859	0.30%	188,075	77,343	13,823,441	0.31%
EIG Energy Fund XIV	24,485,840	0.52%	348,972	576,443	23,560,425	0.52%
Lewis & Clark, LP	4,012,037	0.09%	0	(956,750)	4,968,787	0.11%
Lewis & Clark II	10,111,995	0.22%	677,198	(721,928)	10,156,725	0.23%
Quantum Energy Partners	9,841,586	0.21%	(163,670)	1,225,424	8,779,832	0.19%
Quantum Resources	7,667,986	0.16%	0	(1,196,583)	8,864,569	0.20%
Matlin Patterson I	11,987	0.00%	0	0	11,987	0.00%
Matlin Patterson II	1,267,305	0.03%	0	(16,756)	1,284,061	0.03%
Matlin Patterson III	28,755,761	0.62%	120,000	(1,121,671)	29,757,432	0.66%

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2014, with the distribution as of March 31, 2014. 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

	June 30, 2014		Net New Inv.	Inv. Return	March 31, 2014	
	Market Value	Weight			Market Value	Weight
GLOBAL FIXED INCOME	\$1,145,764,799	24.54%	\$49,746,246	\$32,515,182	\$1,063,503,371	23.61%
Domestic Fixed Income	\$912,721,324	19.55%	\$49,861,241	\$24,833,135	\$838,026,948	18.61%
Inv. Grade Fixed Income	\$662,062,233	14.18%	\$49,794,247	\$14,999,994	\$597,267,992	13.26%
Declaration Total Return	71,963,350	1.54%	(15,360)	2,119,071	69,859,639	1.55%
PIMCO DiSCO II	84,219,329	1.80%	0	1,907,222	82,312,107	1.83%
PIMCO MBS	175,424,984	3.76%	(75,449)	3,718,455	171,781,979	3.81%
PIMCO Unconstrained	94,065,931	2.01%	(65,866)	1,053,486	93,078,311	2.07%
SSgA Long US Treas Index	118,584,966	2.54%	49,994,198	3,254,219	65,336,549	1.45%
Western Asset Management Co.	117,803,672	2.52%	(43,276)	2,947,541	114,899,407	2.55%
Below Inv. Grade Fixed Income	\$250,659,090	5.37%	\$66,994	\$9,833,141	\$240,758,956	5.35%
Goldman Sachs 2006 Offshore	2,470,000	0.05%	(206,666)	234,875	2,441,791	0.05%
Goldman Sachs Offshore V	9,360,000	0.20%	(1,901,019)	617,860	10,643,159	0.24%
Loomis Sayles	226,108,304	4.84%	(272,810)	8,132,933	218,248,182	4.85%
PIMCO Bravo II Fund	12,720,786	0.27%	2,447,489	847,473	9,425,824	0.21%
Internationall Fixed Income	\$233,043,475	4.99%	\$(114,995)	\$7,682,046	\$225,476,424	5.01%
Brandywine	117,749,288	2.52%	(114,995)	4,635,443	113,228,839	2.51%
UBS Global Asset Mgmt.	115,294,188	2.47%	0	3,046,604	112,247,584	2.49%
GLOBAL REAL ASSETS	\$807,988,224	17.30%	\$(8,372,853)	\$36,206,036	\$780,155,041	17.32%
Global Real Estate	\$432,888,572	9.27%	\$(9,244,573)	\$28,790,779	\$413,342,366	9.18%
Invesco Core Real Estate	157,461,865	3.37%	(157,574)	4,850,137	152,769,302	3.39%
Invesco Real Estate Fund II	25,684,576	0.55%	0	1,608,523	24,076,053	0.53%
Invesco Real Estate Fund III	36,217,918	0.78%	0	2,229,503	33,988,415	0.75%
Invesco Asia RE Feeder	29,974,416	0.64%	0	3,692,379	26,282,038	0.58%
JP Morgan	145,809,464	3.12%	(330,297)	4,828,212	141,311,550	3.14%
JP Morgan Alternative Fd	3,482,994	0.07%	(1,003,652)	279,346	4,207,300	0.09%
JP Morgan China Property Fd	10,200,009	0.22%	(7,743,297)	2,997,136	14,946,170	0.33%
JP Morgan Greater European Opp Fd	24,057,330	0.52%	(9,752)	8,305,544	15,761,538	0.35%
Timber	\$196,673,274	4.21%	\$(785,916)	\$3,782,264	\$193,676,926	4.30%
TIR - Teredo	76,412,745	1.64%	0	4,416,385	71,996,360	1.60%
TIR - Springbank	120,260,529	2.58%	(785,916)	(634,121)	121,680,566	2.70%
Infrastructure	\$178,426,378	3.82%	\$1,657,635	\$3,632,993	\$173,135,749	3.84%
JP Morgan Asian Infrastructure	32,600,000	0.70%	(25,501)	1,377,961	31,247,540	0.69%
JP Morgan IIF	105,092,058	2.25%	(286,623)	(1,496,094)	106,874,774	2.37%
Grosvenor Cust. Infrastructure	40,734,320	0.87%	1,969,759	3,751,126	35,013,435	0.78%
CASH & CASH EQUIVALENTS	\$48,411,616	1.04%	\$8,201,836	\$6,628	\$40,203,153	0.89%
Cash Account	48,411,616	1.04%	8,201,836	6,628	40,203,153	0.89%
Total Fund	\$4,669,553,278	100.0%	\$(1,909,875)	\$167,166,583	\$4,504,296,571	100.0%

Investment Manager Returns

The table below details the rates of return for the Sponsor's investment managers over various time periods ended June 30, 2014. 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 June 30, 2014

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
GLOBAL EQUITY	3.77%	22.44%	-	-	-
Wtd Avg Global Equity Bench	4.27%	22.07%	-	-	-
Domestic Equity	4.24%	25.33%	16.90%	20.97%	7.40%
Wtd Avg Domestic Equity Bench	4.43%	25.02%	16.40%	19.41%	8.15%
Large Cap Domestic Equity	4.98%	25.32%	16.96%	19.98%	6.49%
Large Cap Benchmark (1)	5.12%	25.35%	16.99%	19.08%	7.89%
L.A. Capital	4.95%	25.82%	16.89%	19.48%	9.49%
Russell 1000 Growth Index	5.13%	26.92%	16.26%	19.24%	8.20%
LACM Enhanced Index	4.93%	24.42%	17.20%	19.53%	8.95%
Russell 1000 Index	5.12%	25.35%	16.63%	19.25%	8.19%
Northern Trust AM Enh S&P 500	4.42%	26.83%	18.64%	20.16%	8.19%
Parametric Clifton Enh S&P 500	5.52%	24.65%	16.95%	-	-
S&P 500 Index	5.23%	24.61%	16.58%	18.83%	7.78%
Small Cap Domestic Equity	1.79%	25.16%	16.75%	24.15%	9.81%
Callan	1.17%	25.27%	15.73%	21.97%	-
Parametric Clifton Enh Small Cap	2.42%	24.95%	15.88%	-	-
Russell 2000 Index	2.05%	23.64%	14.57%	20.21%	8.70%
International Equity	4.35%	23.52%	7.87%	13.79%	9.60%
Wtd Avg Int'l Equity Bench	4.64%	21.56%	6.20%	10.91%	8.57%
Developed Int'l Equity	3.68%	26.40%	9.24%	14.06%	7.86%
Capital Group	2.34%	21.31%	9.29%	12.47%	7.02%
Benchmark(2)	4.09%	23.57%	8.10%	11.11%	7.04%
DFA Int'l Small Cap Value	2.11%	36.64%	12.26%	16.48%	-
World ex US SC Value	3.40%	30.90%	9.75%	15.33%	9.71%
Northern Trust AM World ex US	4.81%	-	-	-	-
MSCI World ex US	4.62%	23.83%	7.58%	11.67%	7.18%
Wellington Management Co.	3.51%	29.23%	14.67%	18.76%	10.18%
BMI, EPAC, <\$2 B	3.61%	26.39%	8.21%	13.12%	8.54%
Emerging Markets Equity	6.74%	12.79%	2.30%	11.03%	13.37%
JP Morgan	6.62%	11.04%	0.53%	9.58%	-
MSCI Emerging Mkts Idx Net (3)	6.60%	14.31%	(0.39%)	9.36%	12.19%
DFA Emerging Markets	7.09%	16.64%	2.20%	14.16%	-
Northern Trust AM Emerging Markets	6.64%	14.40%	-	-	-
Emerging Mkts - Net	6.60%	14.31%	(0.39%)	9.24%	11.94%
World Equity	3.51%	23.31%	-	-	-
EPOCH Investment Partners (4)	0.99%	18.24%	-	-	-
MSCI World Index	4.86%	24.05%	11.81%	14.99%	7.25%
LSV Asset Management (5)	5.14%	27.77%	-	-	-
MSCI ACWI Idx	5.23%	23.58%	10.85%	14.88%	8.02%

(1) S&P 500 Index through 12/31/2011 and Russell 1000 Index thereafter.

(2) MSCI EAFE through 12/31/1996; 50% Hedged EAFE through 3/31/2011 and MSCI EAFE again thereafter.

(3) MSCI Emerging Mkts Idx (Gross) through 6/30/2011 and MSCI Emerging Mkts Idx Net thereafter.

(4) EPOCH Investment was removed from the Domestic Equity Composite to the World Equity Composite as of 1/1/2012.

(5) LSV Asset Management was removed from the Domestic Equity and International Equity Composites to the World Equity Composite as of February 1, 2013.

Investment Manager Returns

The table below details the rates of return for the Sponsor's investment managers over various time periods ended June 30, 2014. 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 June 30, 2014

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Private Equity*	0.56%	4.10%	5.30%	9.84%	5.14%
Adams Street Direct Co-Invest Fd	11.09%	18.68%	11.96%	14.68%	-
Adams Street Direct Fund 2010	14.76%	36.22%	19.44%	-	-
Adams Street 1998 Partnership	1.20%	1.90%	0.45%	2.56%	3.85%
Adams Street 1999 Partnership	2.63%	17.53%	6.67%	10.58%	7.30%
Adams Street 2000 Partnership	2.47%	8.14%	6.97%	11.24%	9.57%
Adams Street 2001 Partnership	7.75%	19.41%	12.09%	13.80%	8.22%
Adams Street 2002 Partnership	5.23%	19.24%	12.60%	18.49%	7.98%
Adams Street 2003 Partnership	9.11%	31.54%	9.56%	13.47%	8.86%
Adams Street 2010 Partnership	4.62%	16.95%	11.98%	-	-
Adams Street 2008 Fund	3.61%	18.99%	8.91%	8.15%	-
Adams Street 1999 Non-US	0.01%	5.47%	10.35%	17.54%	20.34%
Adams Street 2000 Non-US	2.71%	5.13%	0.11%	8.17%	11.07%
Adams Street 2001 Non-US	4.80%	32.42%	7.55%	10.97%	3.78%
Adams Street 2002 Non-US	6.25%	5.38%	3.61%	10.53%	12.08%
Adams Street 2003 Non-US	4.63%	18.51%	11.64%	19.76%	16.74%
Adams Street 2004 Non-US	21.89%	37.77%	11.11%	14.45%	9.27%
Adams Street 2010 Non-US	3.28%	13.58%	9.81%	-	-
Adams Street 2010 Non-US Emg	0.60%	3.92%	(8.27%)	-	-
Adams Street BVCF IV Fund	9.04%	18.15%	37.12%	60.50%	29.00%
Coral Partner VI	(72.99%)	(79.77%)	(37.74%)	(32.29%)	(22.84%)
CorsAir III	(4.19%)	0.28%	(4.39%)	(1.29%)	-
ND Investors	(0.64%)	(1.11%)	3.97%	2.00%	-
CorsAir IV	13.45%	15.69%	1.85%	-	-
Capital International V	1.56%	10.66%	(1.25%)	8.17%	-
Capital International VI	0.52%	(5.75%)	-	-	-
EIG Energy Fund XIV	2.39%	(5.04%)	0.71%	6.64%	-
Lewis & Clark, LP	(19.26%)	(19.26%)	0.31%	4.03%	2.78%
Lewis & Clark II	(7.13%)	(7.13%)	(4.87%)	(8.67%)	-
Quantum Energy Partners	14.22%	31.13%	26.61%	19.94%	-
Quantum Resources	(13.50%)	(17.20%)	3.89%	(5.80%)	-
Matlin Patterson I	0.00%	0.00%	2647.49%	908.90%	196.15%
Matlin Patterson II	(1.30%)	(14.36%)	(45.96%)	(40.14%)	-
Matlin Patterson III	(3.77%)	4.46%	43.22%	31.56%	-

* Corsair III and North Dakota Investors were taken out from the Private Equity Composite on July 1, 2009. They were then added back into the Private Equity Composite on October 1, 2011. At this time Corsair IV, Capital Intl and EIG were also added to this composite.

Investment Manager Returns

The table below details the rates of return for the Sponsor's investment managers over various time periods ended June 30, 2014. 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 June 30, 2014

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
GLOBAL FIXED INCOME	3.06%	7.93%	-	-	-
Wtd Avg Global FI Bench	2.27%	7.03%	-	-	-
Domestic Fixed Income	2.96%	7.79%	7.02%	8.40%	7.47%
Wtd Avg Domestic FI Bench	2.15%	6.37%	5.37%	7.20%	6.15%
Inv. Grade Fixed Income	2.50%	5.63%	5.67%	5.89%	7.13%
Barclays Aggregate Index	2.04%	4.37%	3.66%	4.85%	4.93%
Declaration Total Return	3.03%	6.71%	-	-	-
Libor-3 Month	0.05%	0.24%	0.35%	0.35%	2.07%
PIMCO Unconstrained(1)	1.13%	1.46%	-	-	-
Blended Benchmark(2)	0.05%	0.45%	-	-	-
PIMCO DiSCO II	2.32%	12.00%	-	-	-
Barclays Aggregate Index	2.04%	4.37%	3.66%	4.85%	4.93%
PIMCO MBS	2.17%	4.06%	-	-	-
Barclays Mortgage	2.41%	4.66%	2.80%	3.92%	4.95%
Western Asset Management Co.	2.57%	4.73%	3.38%	7.23%	4.38%
Custom Index(3)	2.41%	4.66%	3.28%	4.62%	4.82%
SSgA Long US Treas Index	4.70%	6.23%	-	-	-
Barclays Long Treas	4.70%	6.26%	8.80%	7.36%	7.18%
Below Inv. Grade Fixed Income	4.11%	13.52%	10.25%	15.86%	7.98%
Goldman Sachs 2006 Offshore	10.07%	25.57%	5.86%	27.31%	-
Goldman Sachs Offshore V	6.90%	10.04%	11.32%	18.65%	-
Loomis Sayles	3.73%	13.27%	9.41%	15.21%	9.85%
PIMCO Bravo II Fund	9.02%	-	-	-	-
Barclays HY Corp 2% Issuer Cap	2.41%	11.72%	9.46%	13.92%	9.04%
International Fixed Income	3.41%	8.57%	4.62%	7.68%	6.86%
Wtd Avg Int'l FI Bench	2.72%	9.42%	1.75%	4.15%	5.19%
Brandywine	4.10%	8.78%	7.80%	10.72%	8.60%
Barclays Global Aggregate	2.47%	7.39%	2.57%	4.60%	5.06%
UBS Global Asset Mgmt.	2.71%	8.49%	1.27%	4.14%	4.87%
Blended Benchmark(4)	2.72%	9.42%	1.75%	4.15%	5.19%
GLOBAL REAL ASSETS	4.69%	11.38%	-	-	-
Wtd Avg Global Real Assets Bench	1.94%	8.58%	-	-	-
Global Real Estate	7.08%	16.77%	13.57%	9.91%	7.27%
Invesco Core Real Estate	3.17%	10.91%	11.07%	9.65%	8.03%
Invesco Real Estate Fund II	6.68%	14.49%	22.06%	5.16%	-
Invesco Real Estate Fund III	6.56%	18.28%	-	-	-
Invesco Asia RE Feeder	14.05%	15.25%	3.22%	(12.99%)	-
JP Morgan	3.42%	15.10%	14.36%	10.96%	7.96%
JP Morgan Alternative Fd	7.53%	4.18%	14.87%	5.28%	-
JP Morgan China Property Fd	34.04%	66.58%	15.05%	12.05%	-
JP Morgan Greater European Opp Fd	52.71%	70.54%	(33.34%)	-	-
NCREIF Total Index	2.91%	11.21%	11.32%	9.67%	8.63%
Timber	1.96%	2.62%	-	-	-
TIR - Teredo	6.13%	6.64%	3.09%	5.33%	9.49%
TIR - Springbank	(0.52%)	0.22%	(2.60%)	(5.35%)	-
NCREIF Timberland Index	1.08%	9.92%	6.73%	3.33%	8.35%
Infrastructure	2.10%	9.47%	-	-	-
JP Morgan Asian Infrastructure	4.41%	3.71%	7.17%	4.73%	-
JP Morgan IIF	(1.41%)	9.82%	8.29%	7.59%	-
Grosvenor Cust. Infrastructure	10.58%	12.90%	-	-	-
CPI-W	0.92%	2.04%	1.79%	2.15%	2.39%
CASH & CASH EQUIVALENTS	0.01%	0.04%	0.09%	0.14%	1.42%
Cash Account	0.01%	0.04%	0.09%	0.11%	1.41%
3-month Treasury Bill	0.01%	0.05%	0.07%	0.11%	1.63%
Total Fund	3.71%	16.73%	9.92%	13.23%	7.42%
Target*	3.31%	15.58%	9.18%	12.30%	7.55%

* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 13.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 9.7% NCREIF Total Index, 5.0% Barclays HY Corp 2% Issue, 5.0% Barclays Global Agg ex US, 4.9% CPI-W, 4.9% Russell 2000 Index, 4.9% NDSIB PEN - Private Equity, 4.9% NCREIF Timberland Index, 3.1% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

(1) The product changed from Commingled Fund to Separate Account in March 2014.

(2) Libor-3 month through Feb. 28, 2014; Fund's performance through March 31, 2014; Libor-3 month thereafter.

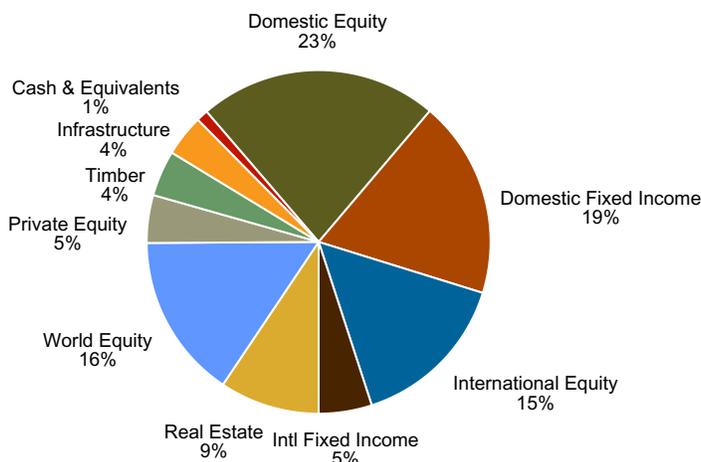
(3) Barclays Aggregate Index through 3/31/2012 and the Barclays Mortgage Index thereafter.

(4) Citigroup Non-US Govt through 12/31/2009 and the Barclays Global Aggregate Index ex US thereafter.

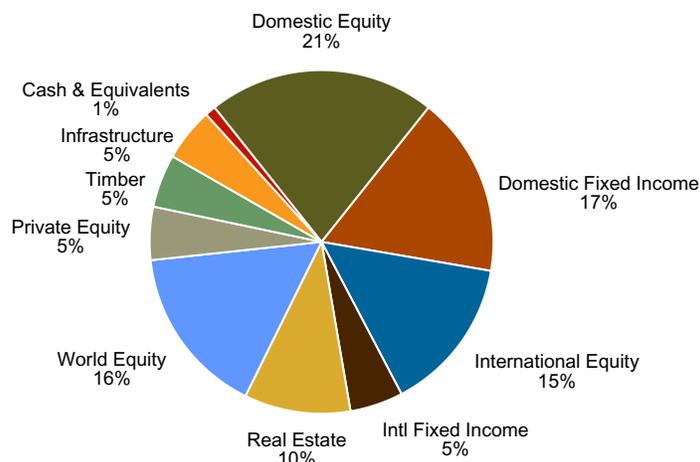
Actual vs Target Asset Allocation As of June 30, 2014

The top left chart shows the Fund's asset allocation as of June 30, 2014. 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.

Actual Asset Allocation

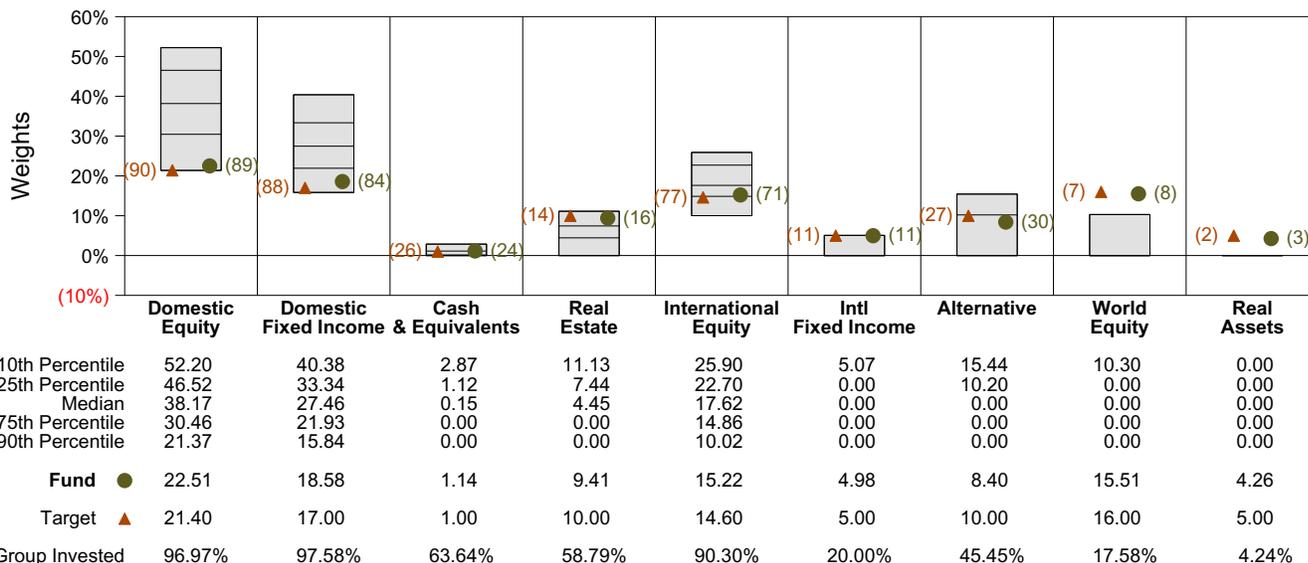


Target Asset Allocation



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equity	525,048	22.5%	21.4%	1.1%	25,841
Domestic Fixed Income	433,382	18.6%	17.0%	1.6%	36,815
International Equity	355,002	15.2%	14.6%	0.6%	14,421
Intl Fixed Income	116,173	5.0%	5.0%	0.0%	(464)
Real Estate	219,449	9.4%	10.0%	(0.6%)	(13,825)
World Equity	361,746	15.5%	16.0%	(0.5%)	(11,494)
Private Equity	106,068	4.5%	5.0%	(0.5%)	(10,570)
Timber	99,343	4.3%	5.0%	(0.7%)	(17,294)
Infrastructure	89,834	3.9%	5.0%	(1.1%)	(26,804)
Cash & Equivalents	26,701	1.1%	1.0%	0.1%	3,374
Total	2,332,746	100.0%	100.0%		

Asset Class Weights vs Public Fund Sponsor Database

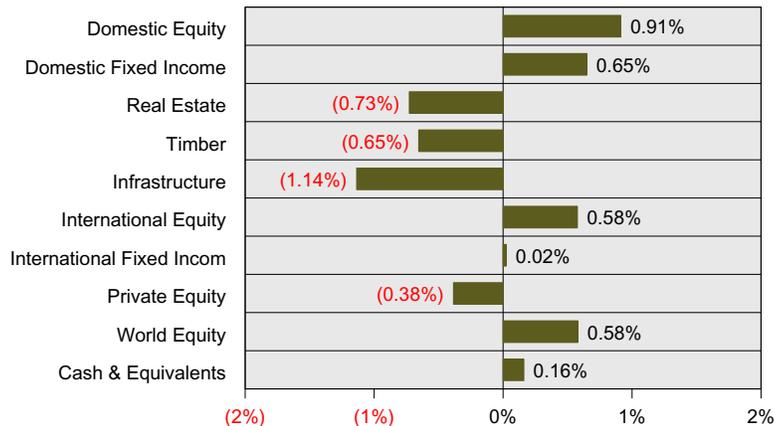


* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

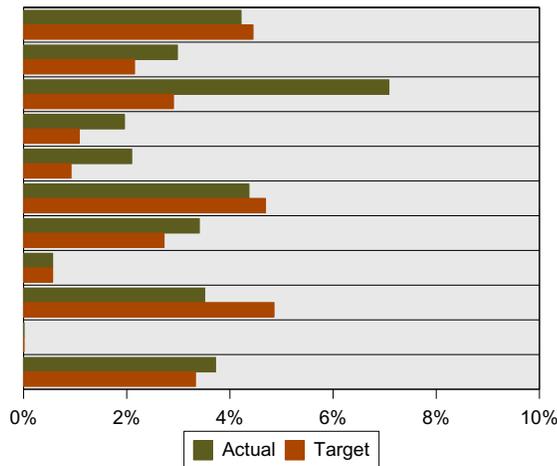
Quarterly Total Fund Relative Attribution - June 30, 2014

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: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

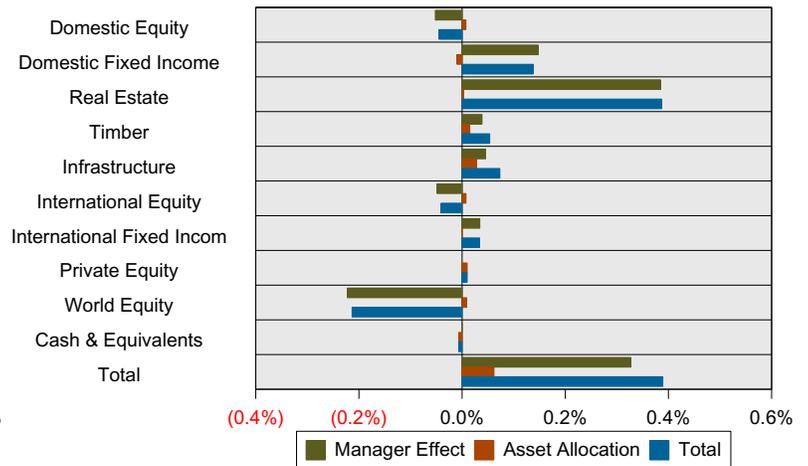
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended June 30, 2014

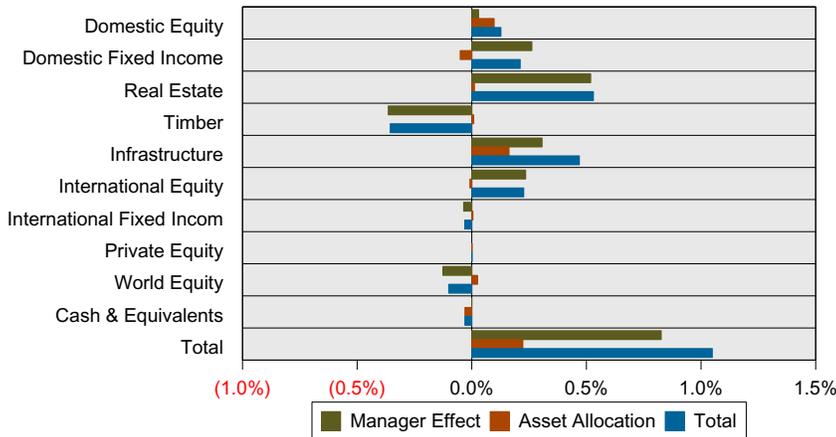
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	22%	21%	4.22%	4.45%	(0.05%)	0.01%	(0.04%)
Domestic Fixed Income	18%	17%	2.98%	2.15%	0.15%	(0.01%)	0.14%
Real Estate	9%	10%	7.08%	2.91%	0.38%	0.00%	0.39%
Timber	4%	5%	1.96%	1.08%	0.04%	0.01%	0.05%
Infrastructure	4%	5%	2.10%	0.92%	0.05%	0.03%	0.07%
International Equity	15%	15%	4.37%	4.69%	(0.05%)	0.01%	(0.04%)
International Fixed Income	5%	5%	3.41%	2.72%	0.03%	(0.00%)	0.03%
Private Equity	5%	5%	0.56%	0.56%	0.00%	0.01%	0.01%
World Equity	17%	16%	3.51%	4.86%	(0.22%)	0.01%	(0.21%)
Cash & Equivalents	1%	1%	0.01%	0.01%	0.00%	(0.01%)	(0.01%)
Total			3.72%	3.33%	+ 0.33%	+ 0.06%	0.39%

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

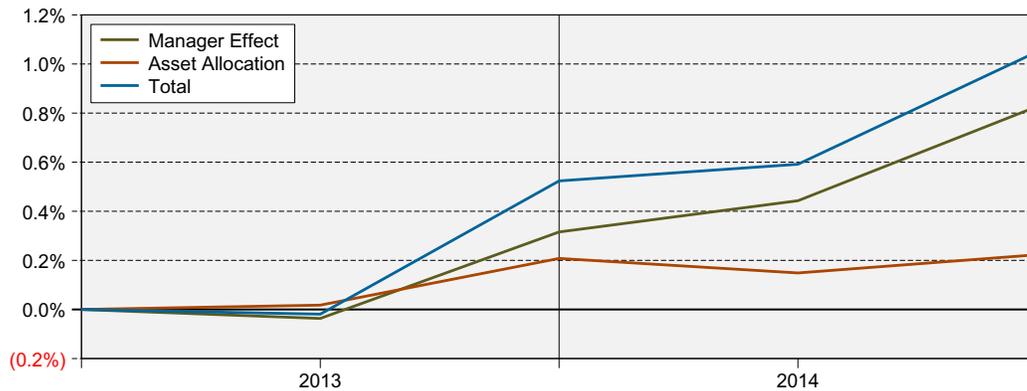
Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

One Year Relative Attribution Effects



Cumulative Relative Attribution Effects



One Year Relative Attribution Effects

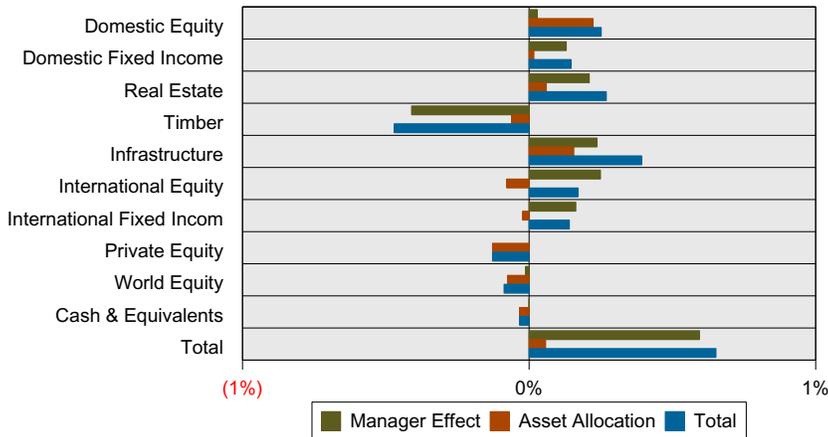
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	25.13%	25.02%	0.03%	0.10%	0.13%
Domestic Fixed Income	17%	17%	7.88%	6.49%	0.26%	(0.05%)	0.21%
Real Estate	9%	10%	16.77%	11.21%	0.52%	0.01%	0.53%
Timber	5%	5%	2.62%	9.92%	(0.36%)	0.01%	(0.36%)
Infrastructure	4%	5%	9.50%	2.04%	0.31%	0.16%	0.47%
International Equity	15%	15%	23.07%	21.36%	0.24%	(0.01%)	0.23%
International Fixed Income	5%	5%	8.58%	9.42%	(0.04%)	0.00%	(0.03%)
Private Equity	5%	5%	4.07%	4.07%	0.00%	0.00%	0.00%
World Equity	17%	16%	23.25%	24.05%	(0.13%)	0.03%	(0.10%)
Cash & Equivalents	1%	1%	0.04%	0.05%	(0.00%)	(0.03%)	(0.03%)
Total			16.72%	15.67%	+ 0.83%	+ 0.22%	1.05%

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Three Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Three Year Annualized Relative Attribution Effects

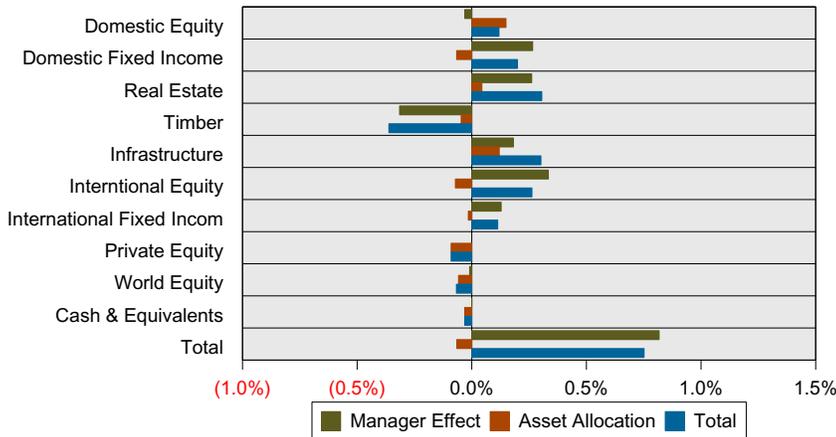
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	27%	26%	16.77%	16.39%	0.03%	0.22%	0.25%
Domestic Fixed Income	18%	18%	7.27%	5.81%	0.13%	0.02%	0.15%
Real Estate	9%	10%	13.56%	11.32%	0.21%	0.06%	0.27%
Timber	5%	5%	-	-	(0.41%)	(0.06%)	(0.47%)
Infrastructure	3%	5%	-	-	0.24%	0.16%	0.39%
International Equity	16%	17%	7.62%	5.95%	0.25%	(0.08%)	0.17%
International Fixed Income	5%	5%	4.63%	1.75%	0.16%	(0.02%)	0.14%
Private Equity	5%	5%	5.23%	5.23%	0.00%	(0.13%)	(0.13%)
World Equity	10%	10%	-	-	(0.01%)	(0.08%)	(0.09%)
Cash & Equivalents	1%	1%	0.06%	0.07%	(0.00%)	(0.03%)	(0.03%)
Total			10.00%	9.35%	+ 0.59%	+ 0.06%	0.65%

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Four Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Four Year Annualized Relative Attribution Effects

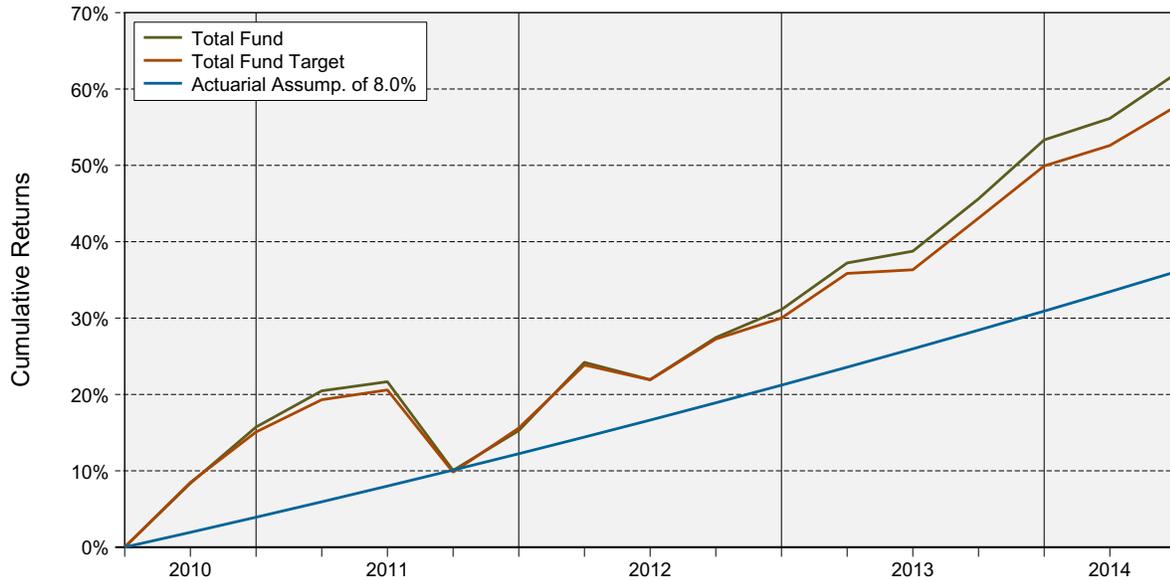
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	30%	29%	20.38%	20.20%	(0.03%)	0.15%	0.12%
Domestic Fixed Income	21%	21%	7.48%	5.82%	0.27%	(0.07%)	0.20%
Real Estate	8%	8%	16.27%	12.65%	0.26%	0.04%	0.31%
Timber	4%	3%	-	-	(0.31%)	(0.05%)	(0.36%)
Infrastructure	3%	3%	-	-	0.18%	0.12%	0.30%
International Equity	16%	16%	12.73%	10.48%	0.33%	(0.07%)	0.26%
International Fixed Income	5%	5%	7.31%	5.01%	0.13%	(0.02%)	0.11%
Private Equity	5%	5%	7.60%	7.60%	0.00%	(0.09%)	(0.09%)
World Equity	7%	7%	-	-	(0.01%)	(0.06%)	(0.07%)
Cash & Equivalents	1%	1%	0.09%	0.10%	(0.00%)	(0.03%)	(0.03%)
Total			12.81%	12.06%	+ 0.82%	+ (0.07%)	0.75%

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

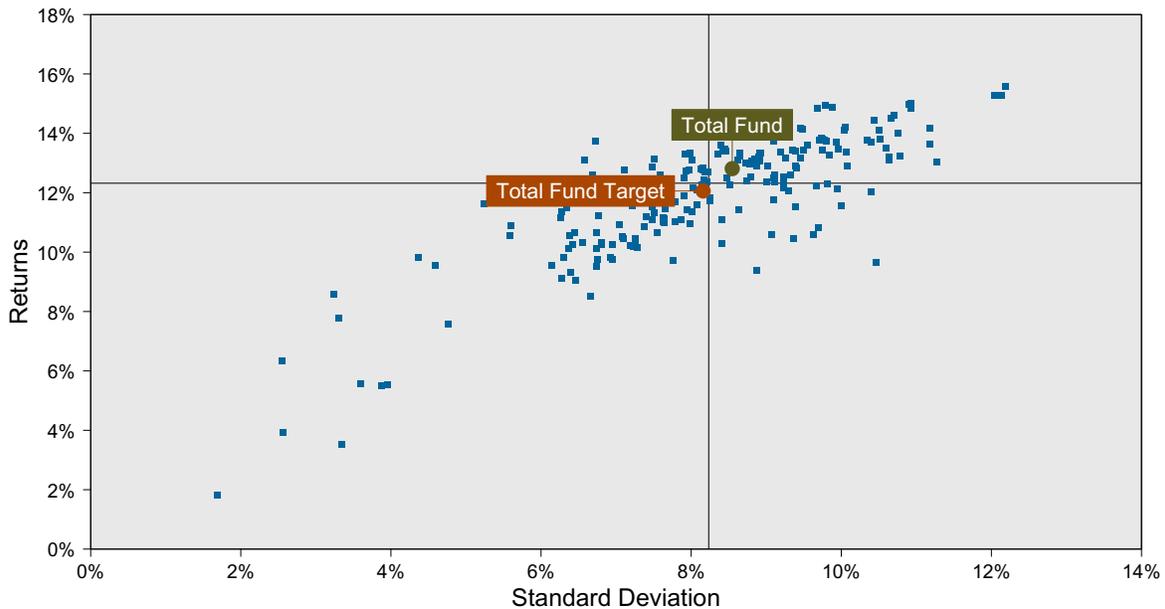
Cumulative Performance Relative to Target

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 difference between the Total Fund return and the Target Mix return is explained by the performance attribution on the next page. 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



Four Year Annualized Risk vs Return



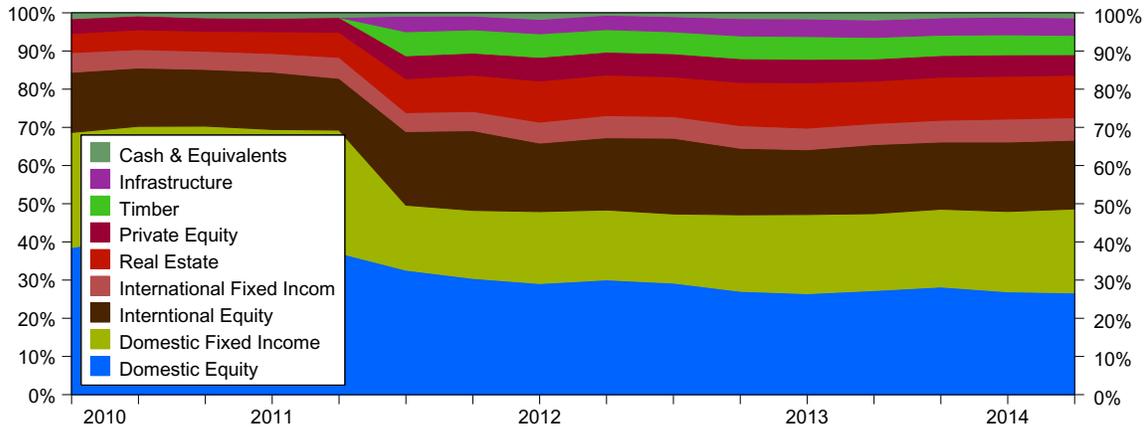
Squares represent membership of the Public Fund Sponsor Database

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

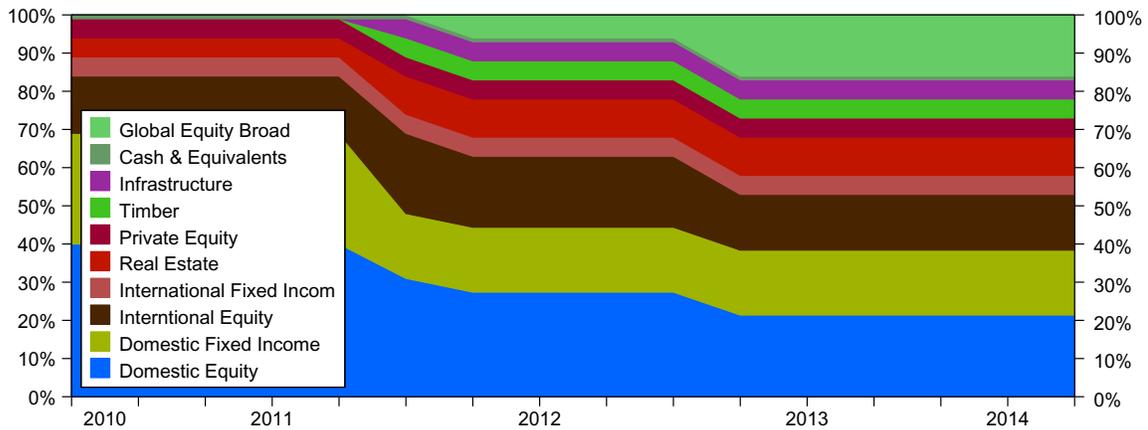
Actual vs Target Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, the fund's historical target asset allocation, and the historical asset allocation of the average fund in the Public Fund Sponsor Database.

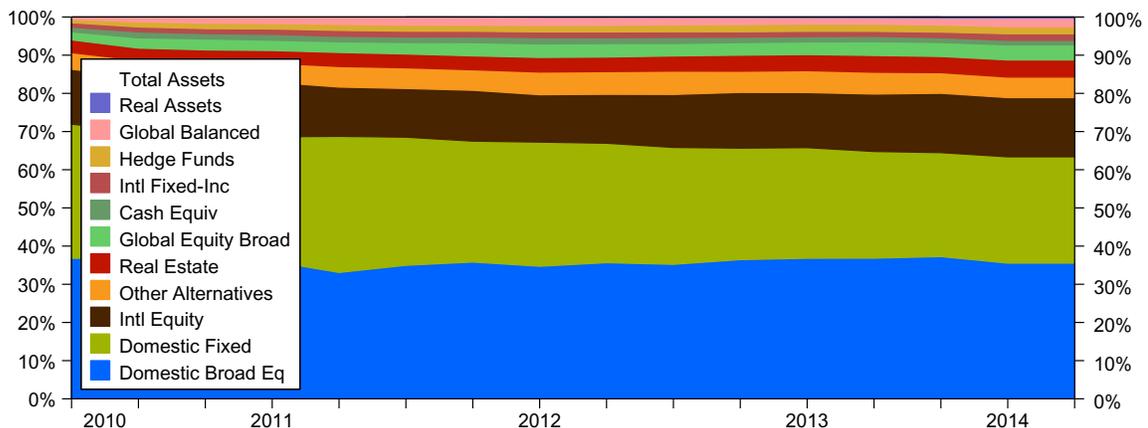
Actual Historical Asset Allocation



Target Historical Asset Allocation



Average Public Fund Sponsor Database Historical Asset Allocation

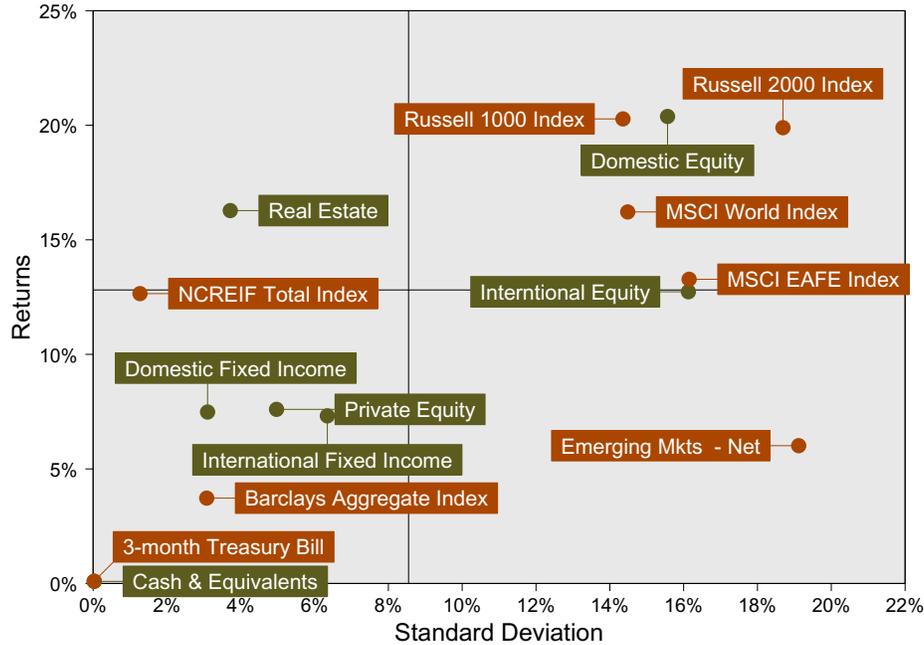


* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

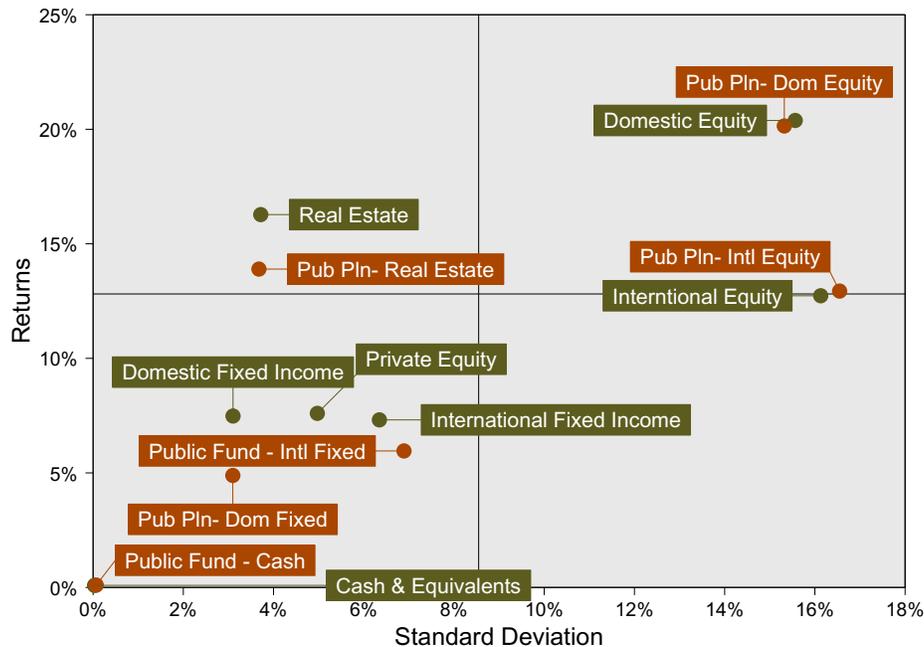
Asset Class Risk and Return

The charts below show the four year annualized risk and return for each asset class component of the Total Fund. The first graph contrasts these values with those of the appropriate index for each asset class. The second chart contrasts them with the risk and return of the median portfolio in each of the appropriate CAI comparative databases. In each case, the crosshairs on the chart represent the return and risk of the Total Fund.

Four Year Annualized Risk vs Return Asset Classes vs Benchmark Indices



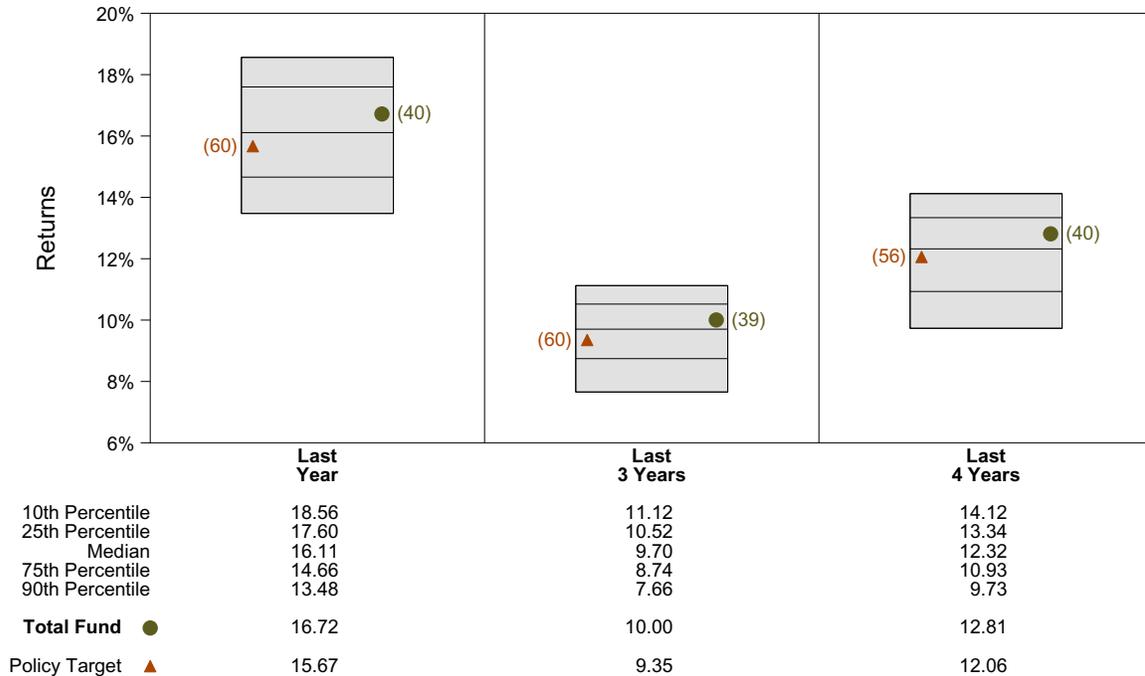
Four Year Annualized Risk vs Return Asset Classes vs Asset Class Median



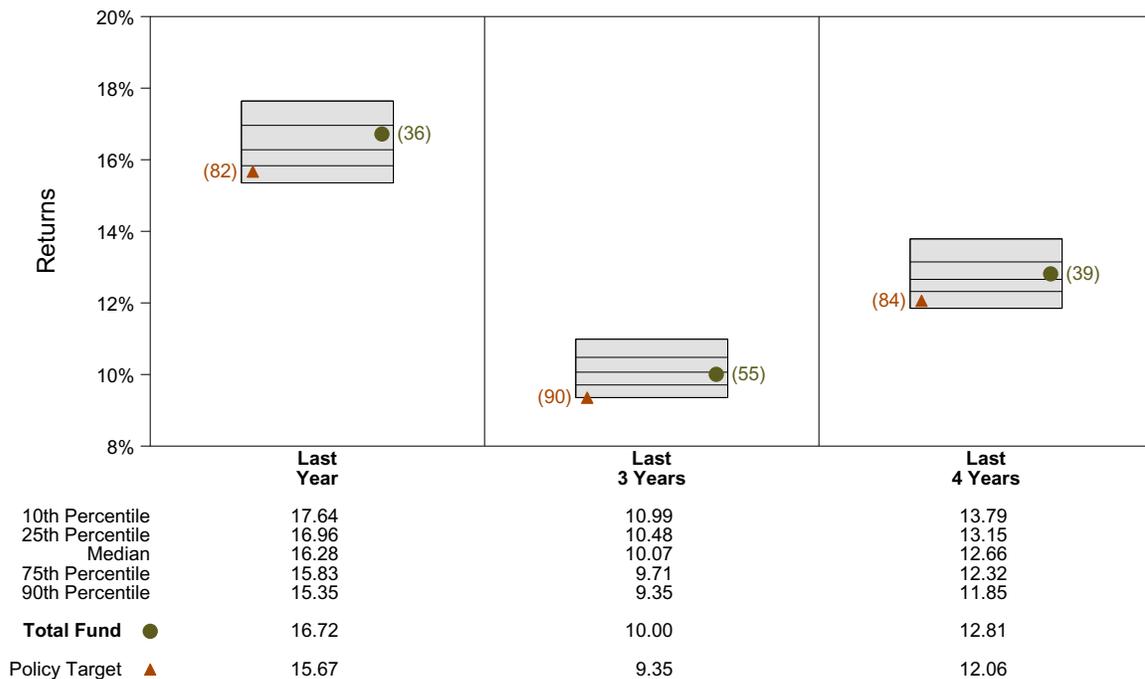
Total Fund Ranking

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 June 30, 2014. 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

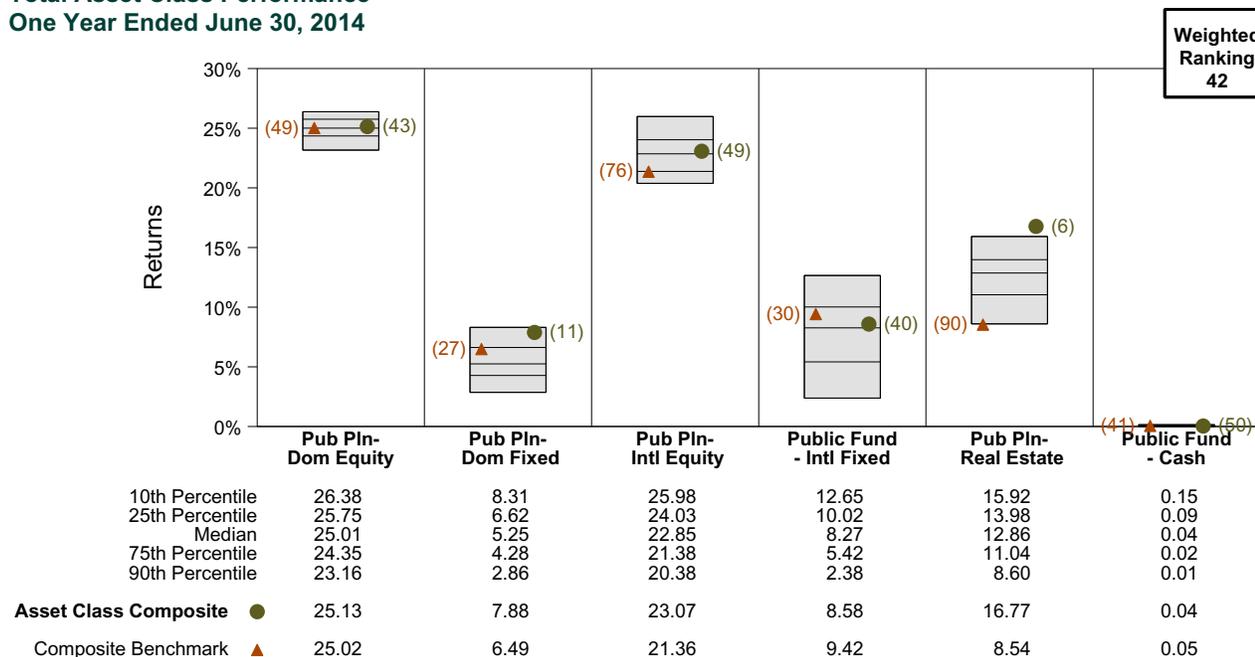


* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

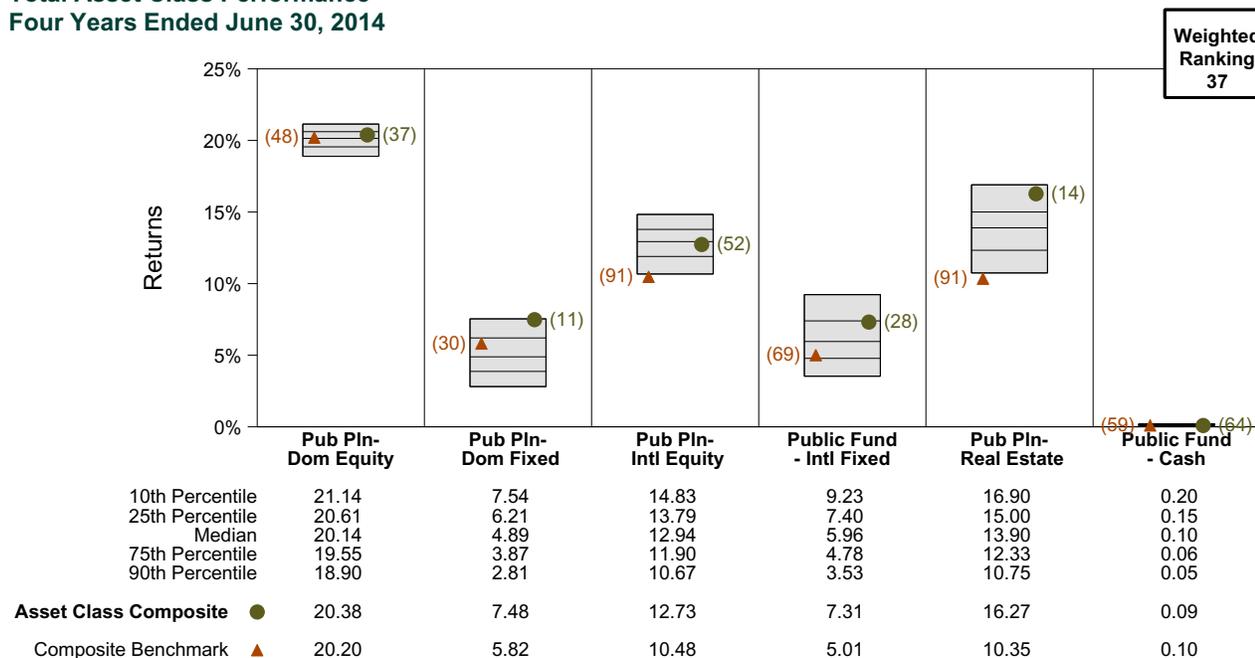
Asset Class Rankings

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 June 30, 2014



Total Asset Class Performance Four Years Ended June 30, 2014



* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2014, with the distribution as of March 31, 2014. 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 Class Allocation

	June 30, 2014		Net New Inv.	Inv. Return	March 31, 2014	
	Market Value	Weight			Market Value	Weight
GLOBAL EQUITY	\$1,347,863,322	57.78%	\$(24,907,566)	\$49,733,835	\$1,323,037,052	58.97%
Domestic Equity	\$525,048,226	22.51%	\$206,177	\$21,219,130	\$503,622,919	22.45%
Large Cap	405,547,319	17.38%	231,396	19,230,557	386,085,367	17.21%
Small Cap	119,500,906	5.12%	(25,219)	1,988,573	117,537,552	5.24%
International Equity	\$355,001,957	15.22%	\$(26,468)	\$14,855,009	\$340,173,416	15.16%
Developed Intl Equity	269,490,328	11.55%	13,808	9,483,458	259,993,063	11.59%
Emerging Markets	85,511,629	3.67%	(40,276)	5,371,551	80,180,354	3.57%
World Equity	\$361,745,569	15.51%	\$(25,376,318)	\$13,070,050	\$374,051,837	16.67%
Private Equity	\$106,067,570	4.55%	\$289,044	\$589,647	\$105,188,880	4.69%
GLOBAL FIXED INCOME	\$549,555,031	23.56%	\$28,384,423	\$15,584,508	\$505,586,100	22.54%
Domestic Fixed Income	\$433,381,839	18.58%	\$28,441,748	\$11,754,974	\$393,185,117	17.53%
Inv. Grade Fixed Income	310,441,343	13.31%	28,232,661	6,935,840	275,272,843	12.27%
Below Inv. Grade Fixed Income	122,940,496	5.27%	209,087	4,819,135	117,912,275	5.26%
International Fixed Income	\$116,173,192	4.98%	\$(57,325)	\$3,829,533	\$112,400,983	5.01%
GLOBAL REAL ASSETS	\$408,626,247	17.52%	\$(4,248,854)	\$18,334,859	\$394,540,241	17.59%
Real Estate	219,449,081	9.41%	(4,686,455)	14,595,234	209,540,303	9.34%
Timber	99,343,476	4.26%	(396,981)	1,910,495	97,829,963	4.36%
Infrastructure	89,833,689	3.85%	834,583	1,829,131	87,169,976	3.89%
Cash & Equivalents	\$26,701,034	1.14%	\$6,346,097	\$2,952	\$20,351,984	0.91%
Total Fund	\$2,332,745,633	100.0%	\$5,574,100	\$83,656,154	\$2,243,515,379	100.0%

PLEASE REFER TO PAGES 38-40 FOR INVESTMENT MANAGER LEVEL ASSET ALLOCATION.

Asset Class Returns

The table below details the rates of return for the Sponsor's investment managers over various time periods ended June 30, 2014. 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 June 30, 2014

	Last Quarter	Last Year	Last 3 Years	Last 4 Years
GLOBAL EQUITY	3.77%	22.22%	-	-
Wtd Avg Global Equity Benchmark	4.27%	21.86%	-	-
Domestic Equity	4.22%	25.13%	16.77%	20.38%
Wtd Avg Domestic Equity Benchmark	4.45%	25.02%	16.39%	20.20%
Large Cap	4.98%	25.21%	16.94%	20.21%
Benchmark(1)	5.12%	25.35%	16.99%	20.27%
Small Cap	1.70%	24.73%	16.51%	21.02%
Russell 2000 Index	2.05%	23.64%	14.57%	19.89%
International Equity	4.37%	23.07%	7.62%	12.73%
Wtd Avg Intl Equity Benchmark	4.69%	21.36%	5.95%	10.48%
Developed Intl Equity	3.65%	26.19%	8.92%	14.04%
Benchmark(2)	4.09%	23.57%	8.10%	11.77%
Emerging Markets	6.70%	12.58%	2.32%	8.17%
Benchmark(3)	6.60%	14.31%	(0.39%)	6.09%
World Equity	3.51%	23.25%	-	-
MSCI World Index	4.86%	24.05%	11.81%	16.22%
Private Equity	0.56%	4.07%	5.23%	7.60%
GLOBAL FIXED INCOME	3.08%	8.03%	-	-
Wtd Avg Global Fixed Income Benchmark	2.28%	7.17%	-	-
Domestic Fixed Income	2.98%	7.88%	7.27%	7.48%
Wtd Avg Domestic FI Benchmark	2.15%	6.49%	5.81%	5.82%
Inv. Grade Fixed Income	2.51%	5.64%	5.66%	5.79%
Barclays Aggregate Index	2.04%	4.37%	3.66%	3.72%
Below Inv. Grade Fixed Income	4.11%	13.51%	10.24%	12.19%
Barclays HY Corp 2% Issue	2.41%	11.72%	9.46%	10.95%
International Fixed Income	3.41%	8.58%	4.63%	7.31%
Wtd Avg Intl Fixed Income Benchmark	2.72%	9.42%	1.75%	5.01%
GLOBAL REAL ASSETS	4.69%	11.40%	-	-
Wtd Avg Global Real Assets Benchmark	1.95%	8.57%	-	-
Real Estate	7.08%	16.77%	13.56%	16.27%
NCREIF Total Index	2.91%	11.21%	11.32%	12.65%
Timber	1.96%	2.62%	-	-
NCREIF Timberland Index	1.08%	9.92%	6.73%	5.14%
Infrastructure	2.10%	9.50%	-	-
CPI-W	0.92%	2.04%	1.79%	2.35%
Cash & Equivalents	0.01%	0.04%	0.06%	0.09%
3-month Treasury Bill	0.01%	0.05%	0.07%	0.10%
Total Fund	3.72%	16.72%	10.00%	12.81%
Target*	3.33%	15.67%	9.35%	12.06%

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

(1) S&P 500 Index through 12/31/2011 and the Russell 1000 Index thereafter.

(2) 50% Hedged EAFE through 3/31/2011 and MSCI EAFE thereafter.

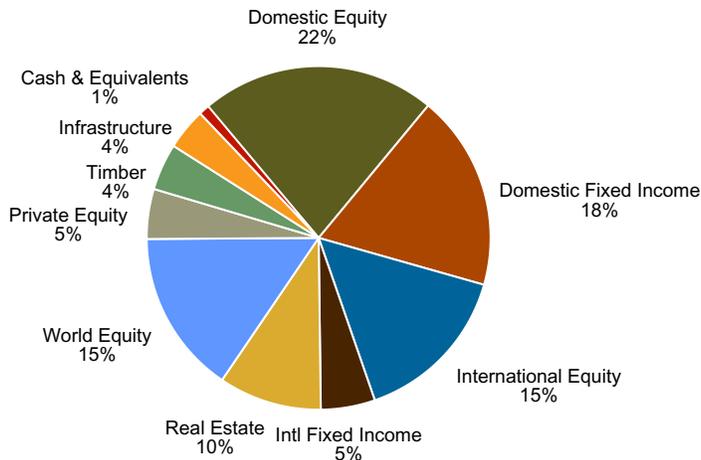
(3) MSCI Emerging Mkts Idx (Gross) through 6/30/2011 and MSCI Emerging Mkts Idx Net thereafter.

PLEASE REFER TO PAGES 41-43 FOR INVESTMENT MANAGER LEVEL RETURNS.

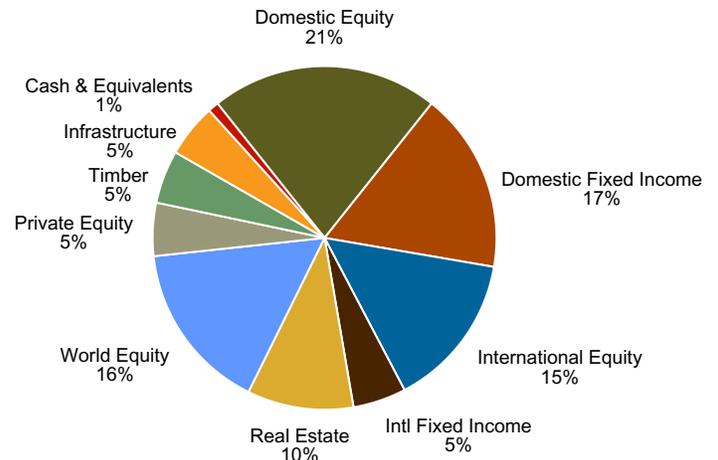
Actual vs Target Asset Allocation As of June 30, 2014

The top left chart shows the Fund's asset allocation as of June 30, 2014. 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.

Actual Asset Allocation

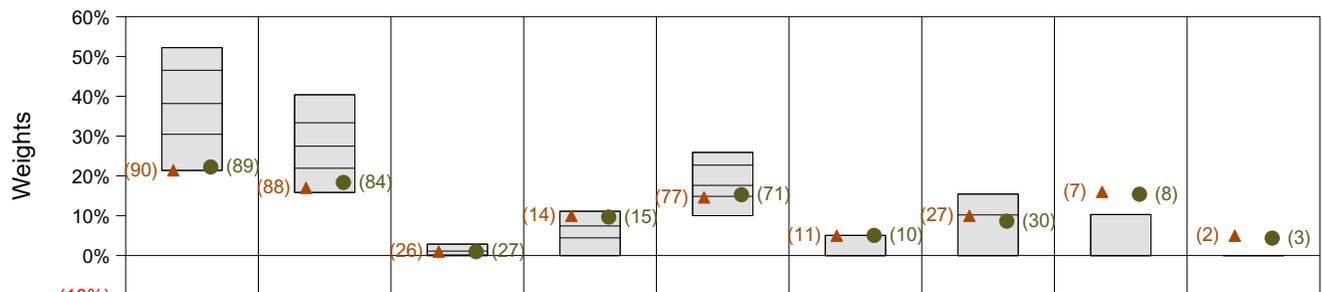


Target Asset Allocation



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equity	458,458	22.2%	21.4%	0.8%	17,257
Domestic Fixed Income	378,339	18.4%	17.0%	1.4%	27,852
International Equity	315,184	15.3%	14.6%	0.7%	14,178
Intl Fixed Income	104,446	5.1%	5.0%	0.1%	1,362
Real Estate	199,446	9.7%	10.0%	(0.3%)	(6,723)
World Equity	317,489	15.4%	16.0%	(0.6%)	(12,380)
Private Equity	97,358	4.7%	5.0%	(0.3%)	(5,726)
Timber	90,108	4.4%	5.0%	(0.6%)	(12,976)
Infrastructure	80,818	3.9%	5.0%	(1.1%)	(22,267)
Cash & Equivalents	20,041	1.0%	1.0%	0.0%	(576)
Total	2,061,686	100.0%	100.0%		

Asset Class Weights vs Public Fund Sponsor Database



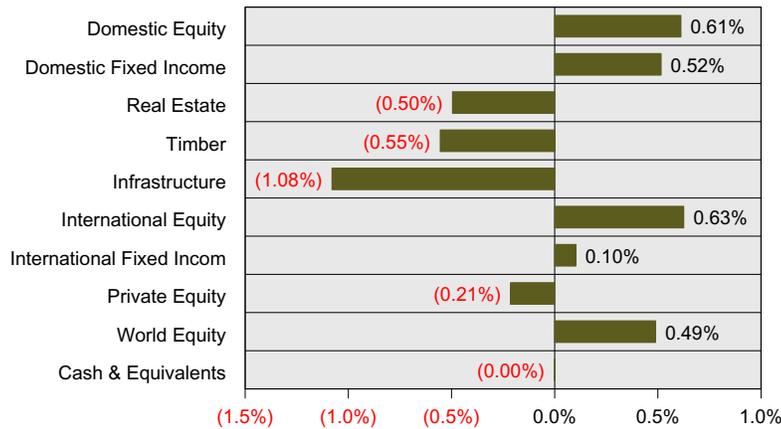
	Domestic Equity	Domestic Fixed Income & Equivalents	Cash	Real Estate	International Equity	Intl Fixed Income	Alternative	World Equity	Real Assets
10th Percentile	52.20	40.38	2.87	11.13	25.90	5.07	15.44	10.30	0.00
25th Percentile	46.52	33.34	1.12	7.44	22.70	0.00	10.20	0.00	0.00
Median	38.17	27.46	0.15	4.45	17.62	0.00	0.00	0.00	0.00
75th Percentile	30.46	21.93	0.00	0.00	14.86	0.00	0.00	0.00	0.00
90th Percentile	21.37	15.84	0.00	0.00	10.02	0.00	0.00	0.00	0.00
Fund	22.24	18.35	0.97	9.67	15.29	5.07	8.64	15.40	4.37
Target	21.40	17.00	1.00	10.00	14.60	5.00	10.00	16.00	5.00
% Group Invested	96.97%	97.58%	63.64%	58.79%	90.30%	20.00%	45.45%	17.58%	4.24%

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

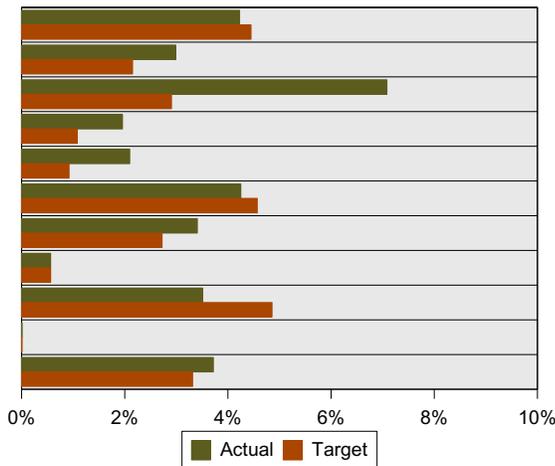
Quarterly Total Fund Relative Attribution - June 30, 2014

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: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

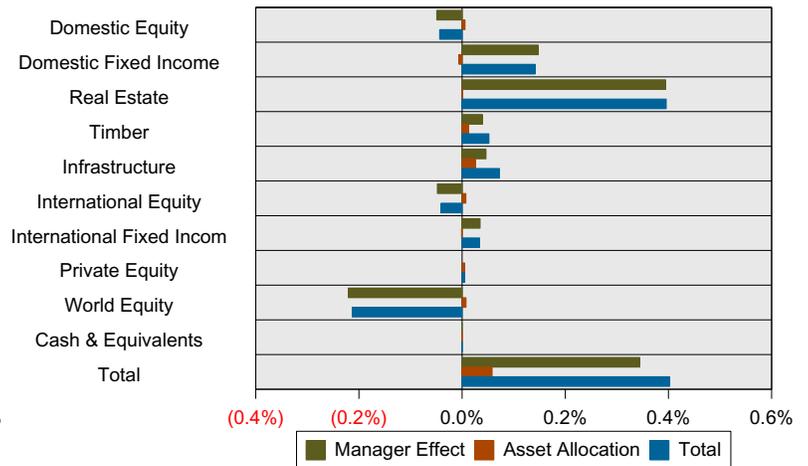
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended June 30, 2014

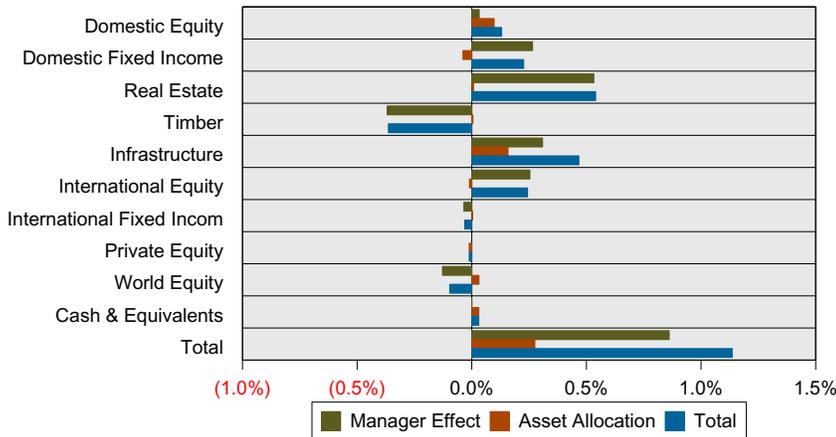
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	22%	21%	4.23%	4.45%	(0.05%)	0.01%	(0.04%)
Domestic Fixed Income	18%	17%	2.99%	2.15%	0.15%	(0.01%)	0.14%
Real Estate	10%	10%	7.08%	2.91%	0.39%	0.00%	0.40%
Timber	4%	5%	1.96%	1.08%	0.04%	0.01%	0.05%
Infrastructure	4%	5%	2.10%	0.92%	0.05%	0.03%	0.07%
International Equity	15%	15%	4.25%	4.57%	(0.05%)	0.01%	(0.04%)
International Fixed Income	5%	5%	3.41%	2.72%	0.03%	(0.00%)	0.03%
Private Equity	5%	5%	0.56%	0.56%	0.00%	0.01%	0.01%
World Equity	16%	16%	3.51%	4.86%	(0.22%)	0.01%	(0.21%)
Cash & Equivalents	1%	1%	0.01%	0.01%	0.00%	(0.00%)	(0.00%)
Total			3.72%	3.32%	+ 0.34%	+ 0.06%	0.40%

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

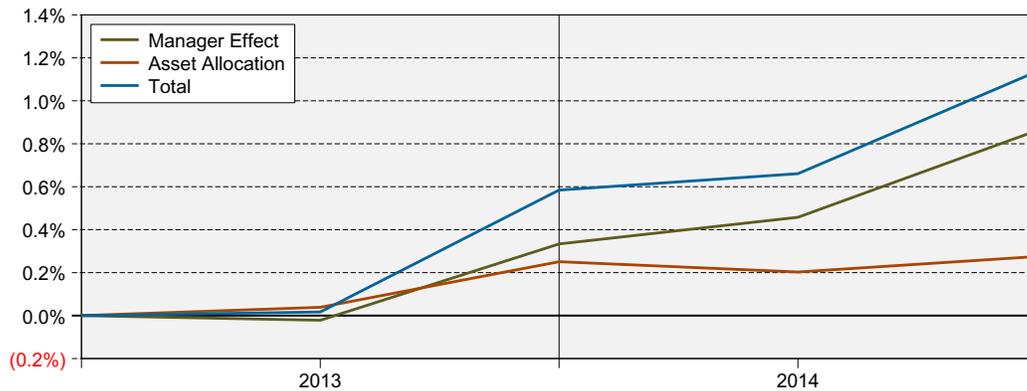
Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

One Year Relative Attribution Effects



Cumulative Relative Attribution Effects



One Year Relative Attribution Effects

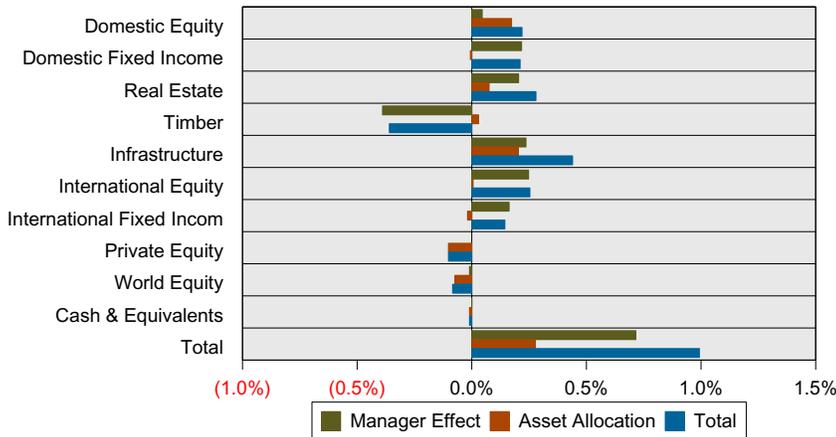
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	25.15%	25.02%	0.03%	0.10%	0.13%
Domestic Fixed Income	17%	17%	7.91%	6.49%	0.27%	(0.04%)	0.23%
Real Estate	10%	10%	16.77%	11.21%	0.53%	0.01%	0.54%
Timber	5%	5%	2.62%	9.92%	(0.37%)	0.01%	(0.36%)
Infrastructure	4%	5%	9.50%	2.04%	0.31%	0.16%	0.47%
International Equity	15%	15%	23.62%	21.80%	0.25%	(0.01%)	0.24%
International Fixed Income	5%	5%	8.58%	9.42%	(0.03%)	0.00%	(0.03%)
Private Equity	5%	5%	4.07%	4.07%	0.00%	(0.01%)	(0.01%)
World Equity	17%	16%	23.24%	24.05%	(0.13%)	0.03%	(0.10%)
Cash & Equivalents	1%	1%	0.04%	0.05%	(0.00%)	0.03%	0.03%
Total			16.87%	15.73%	+ 0.86%	+ 0.27%	1.14%

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

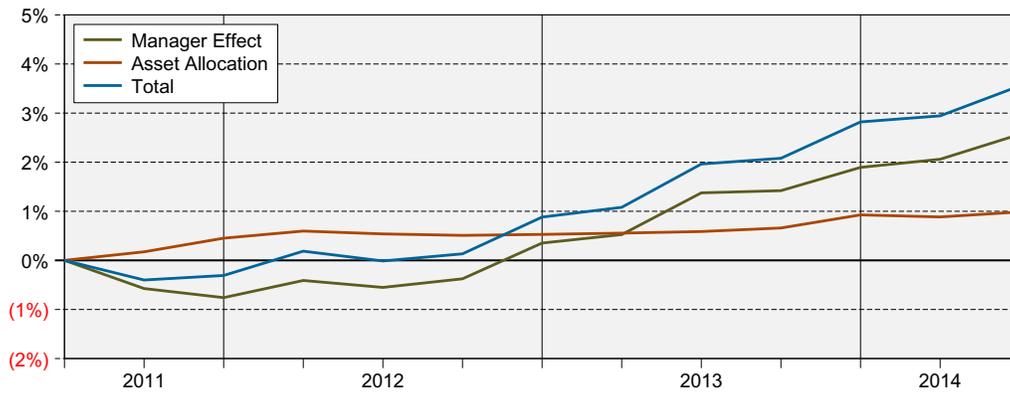
Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Three Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Three Year Annualized Relative Attribution Effects

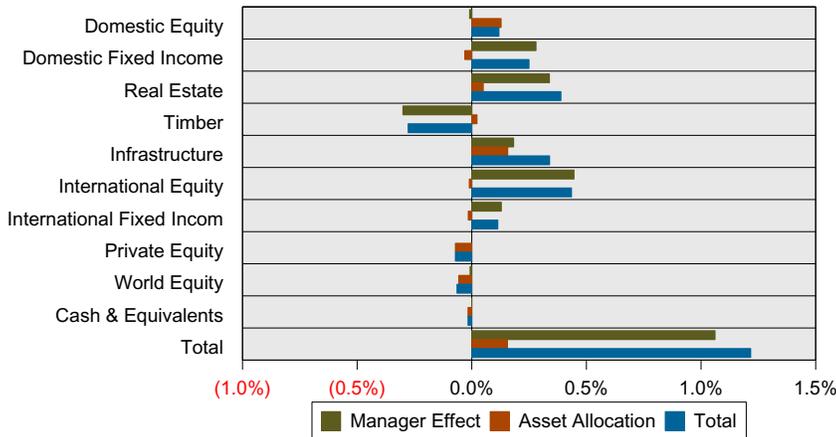
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	26%	26%	16.74%	16.34%	0.05%	0.17%	0.22%
Domestic Fixed Income	17%	17%	6.52%	5.12%	0.22%	(0.01%)	0.21%
Real Estate	10%	10%	13.55%	11.32%	0.20%	0.08%	0.28%
Timber	5%	5%	-	-	(0.39%)	0.03%	(0.36%)
Infrastructure	3%	5%	-	-	0.24%	0.20%	0.44%
International Equity	17%	17%	7.95%	6.46%	0.25%	0.01%	0.25%
International Fixed Income	5%	5%	4.63%	1.75%	0.16%	(0.02%)	0.14%
Private Equity	5%	5%	5.25%	5.25%	0.00%	(0.10%)	(0.10%)
World Equity	10%	10%	-	-	(0.01%)	(0.07%)	(0.08%)
Cash & Equivalents	1%	1%	0.07%	0.07%	(0.00%)	(0.01%)	(0.01%)
Total			9.72%	8.73%	+ 0.72%	+ 0.28%	0.99%

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

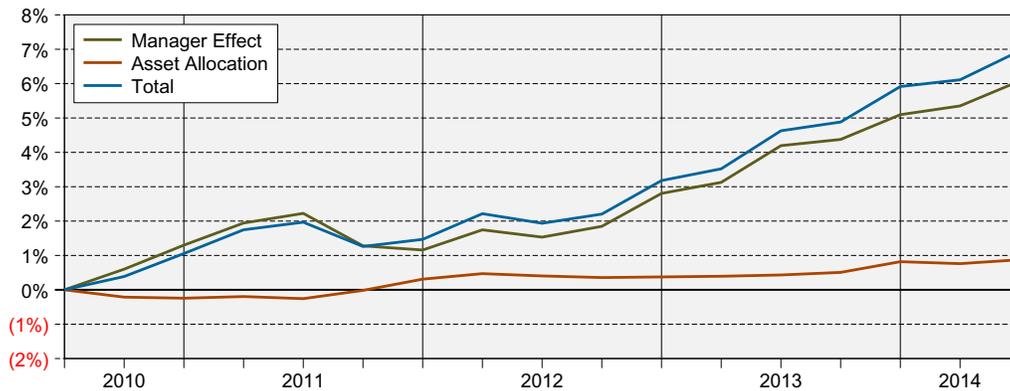
Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Four Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Four Year Annualized Relative Attribution Effects

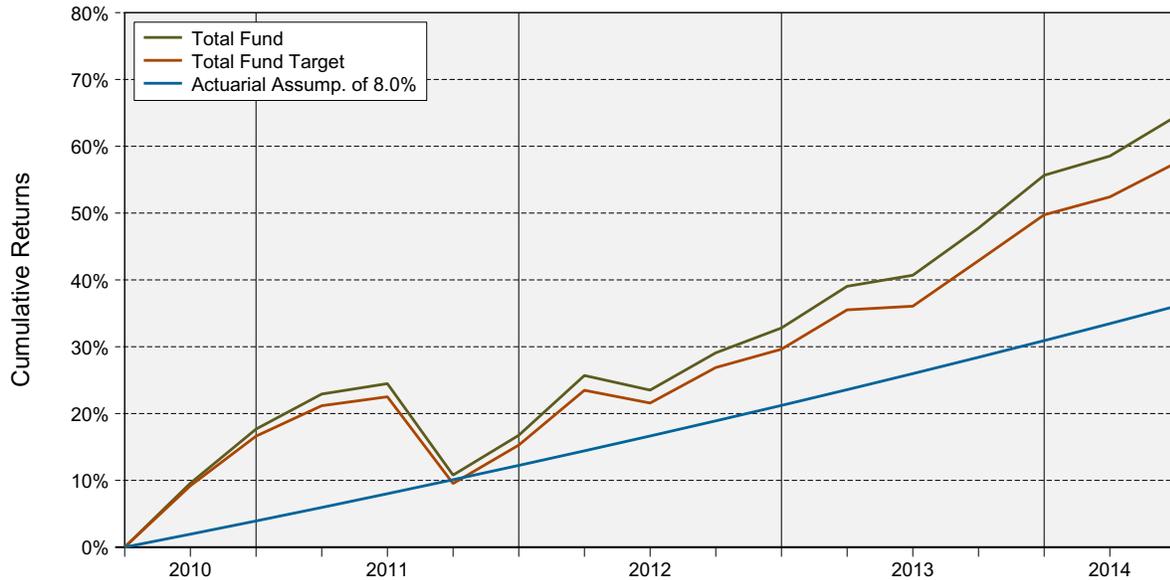
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	29%	29%	20.39%	20.18%	(0.01%)	0.13%	0.12%
Domestic Fixed Income	17%	18%	7.52%	5.86%	0.28%	(0.03%)	0.25%
Real Estate	10%	10%	16.27%	12.65%	0.34%	0.05%	0.39%
Timber	3%	3%	-	-	(0.30%)	0.02%	(0.28%)
Infrastructure	2%	3%	-	-	0.18%	0.16%	0.34%
International Equity	19%	19%	13.00%	10.75%	0.45%	(0.01%)	0.43%
International Fixed Income	5%	5%	7.32%	5.01%	0.13%	(0.02%)	0.11%
Private Equity	5%	5%	7.64%	7.64%	0.00%	(0.07%)	(0.07%)
World Equity	7%	7%	-	-	(0.01%)	(0.06%)	(0.06%)
Cash & Equivalents	1%	1%	0.09%	0.10%	(0.00%)	(0.02%)	(0.02%)
Total			13.24%	12.02%	+ 1.06%	+ 0.16%	1.22%

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

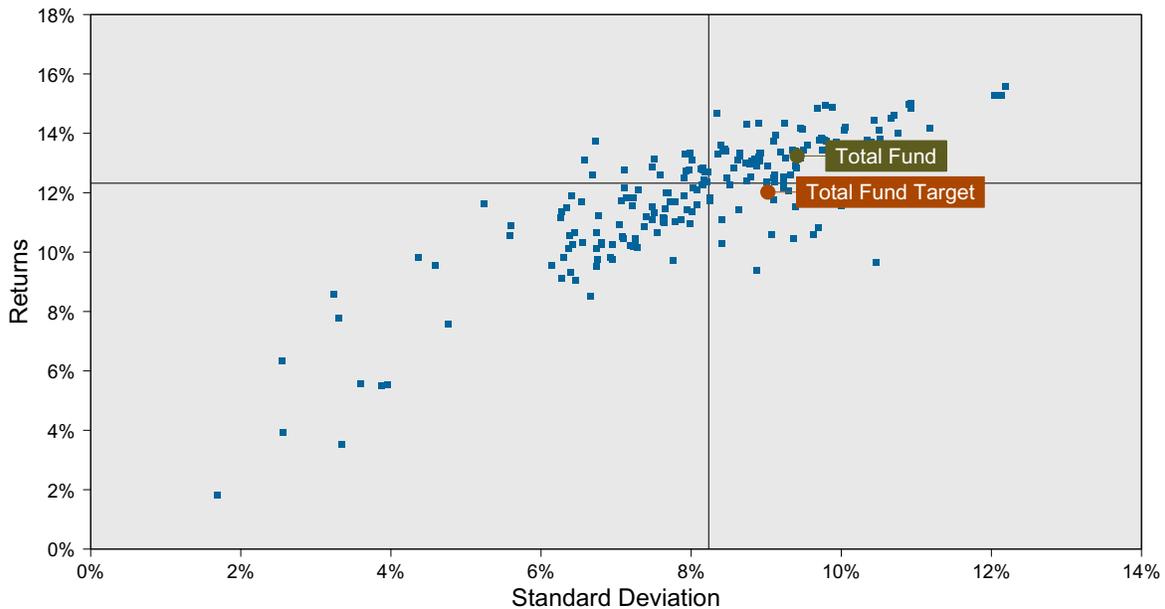
Cumulative Performance Relative to Target

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 difference between the Total Fund return and the Target Mix return is explained by the performance attribution on the next page. 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



Four Year Annualized Risk vs Return



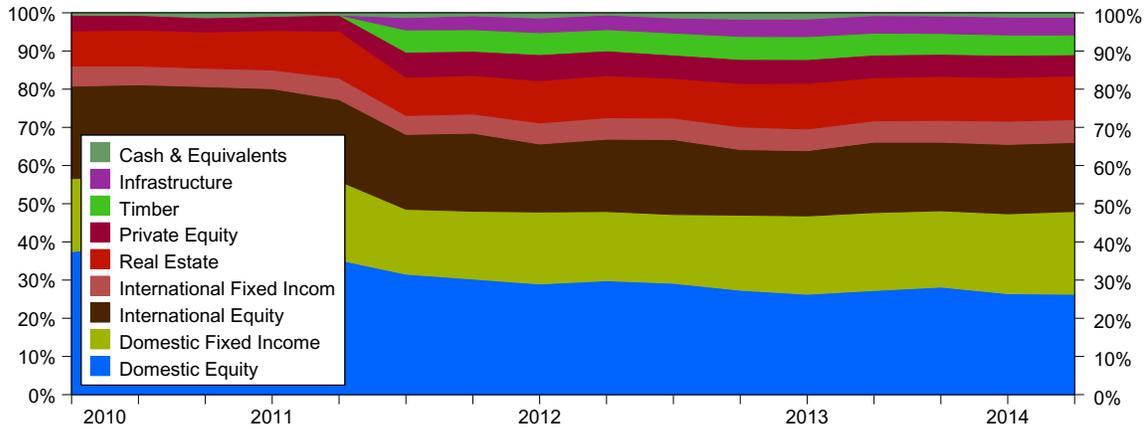
Squares represent membership of the Public Fund Sponsor Database

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

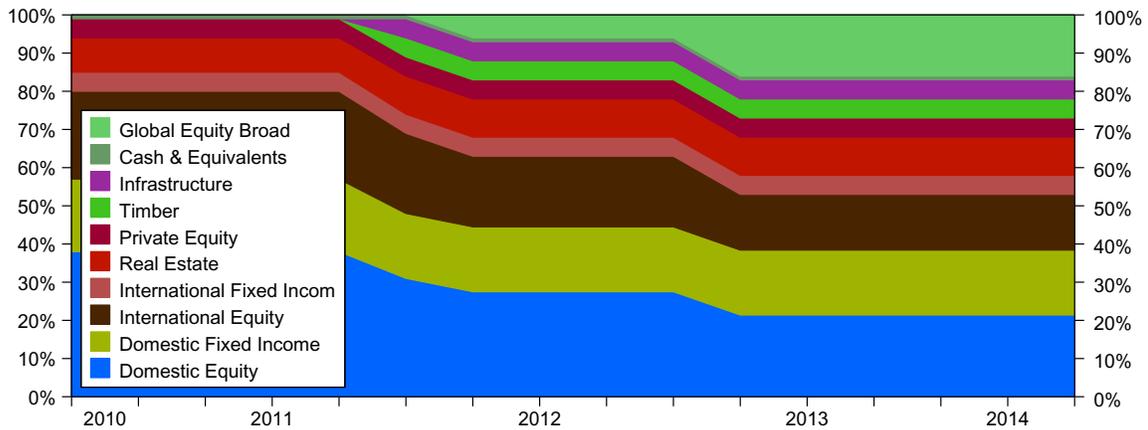
Actual vs Target Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, the fund's historical target asset allocation, and the historical asset allocation of the average fund in the Public Fund Sponsor Database.

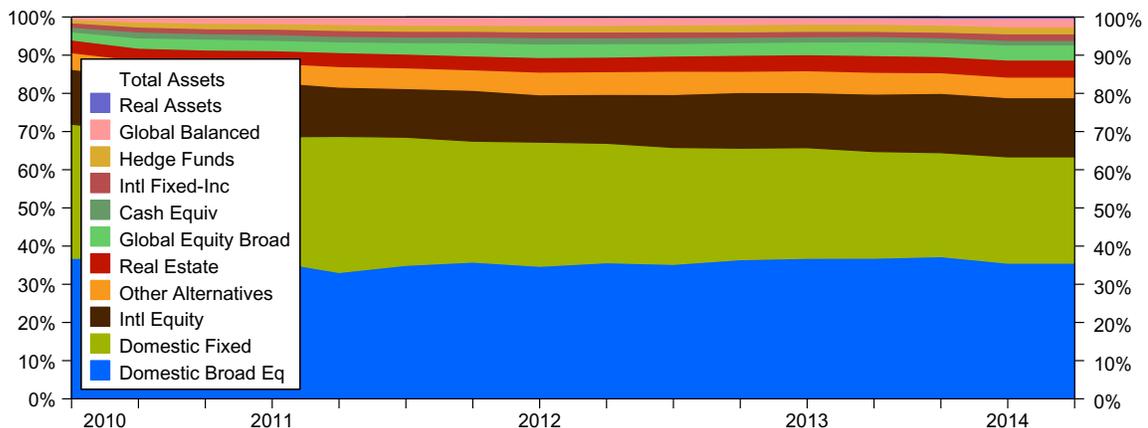
Actual Historical Asset Allocation



Target Historical Asset Allocation



Average Public Fund Sponsor Database Historical Asset Allocation

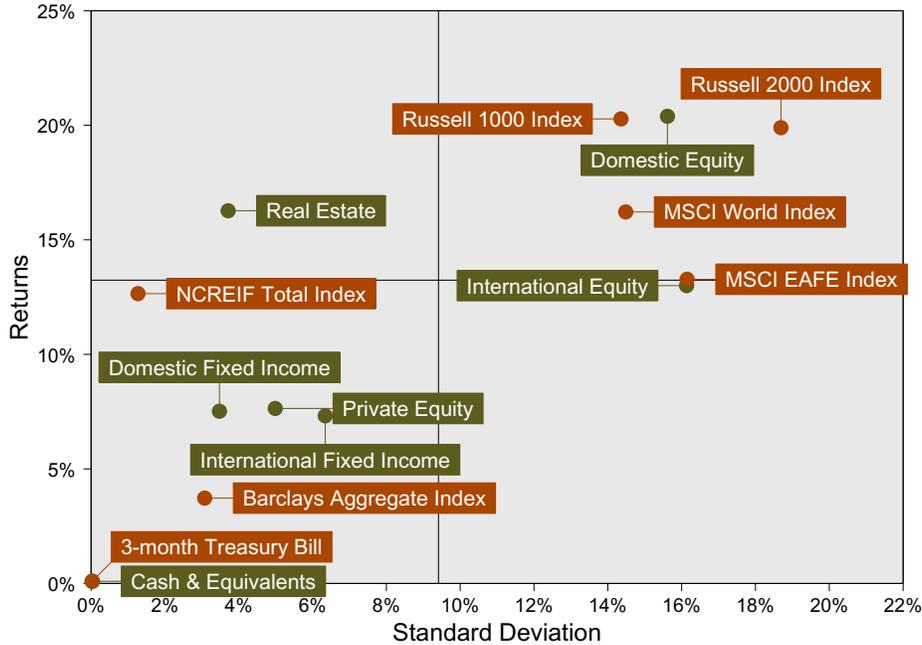


* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

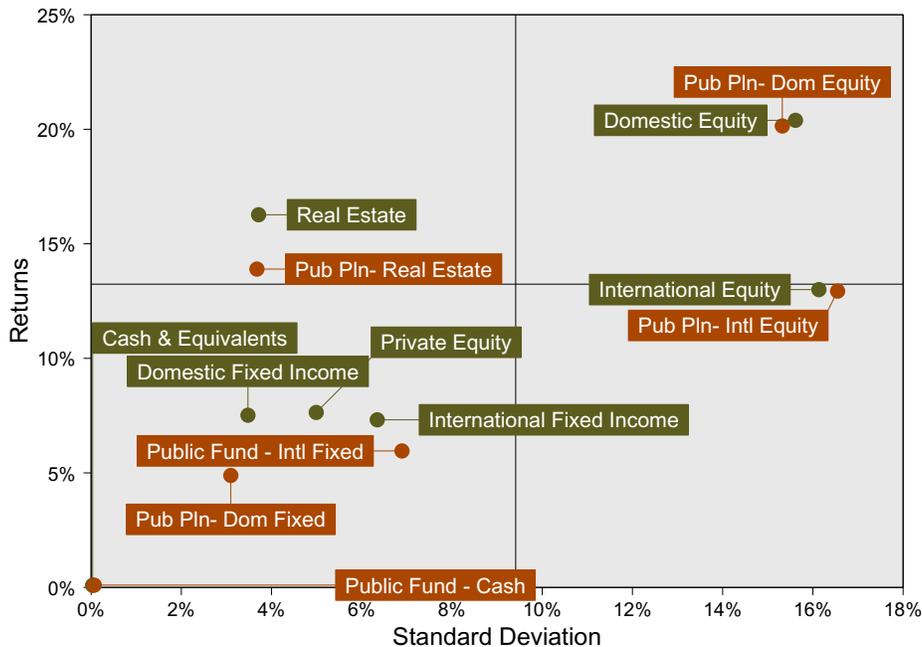
Asset Class Risk and Return

The charts below show the four year annualized risk and return for each asset class component of the Total Fund. The first graph contrasts these values with those of the appropriate index for each asset class. The second chart contrasts them with the risk and return of the median portfolio in each of the appropriate CAI comparative databases. In each case, the crosshairs on the chart represent the return and risk of the Total Fund.

Four Year Annualized Risk vs Return Asset Classes vs Benchmark Indices



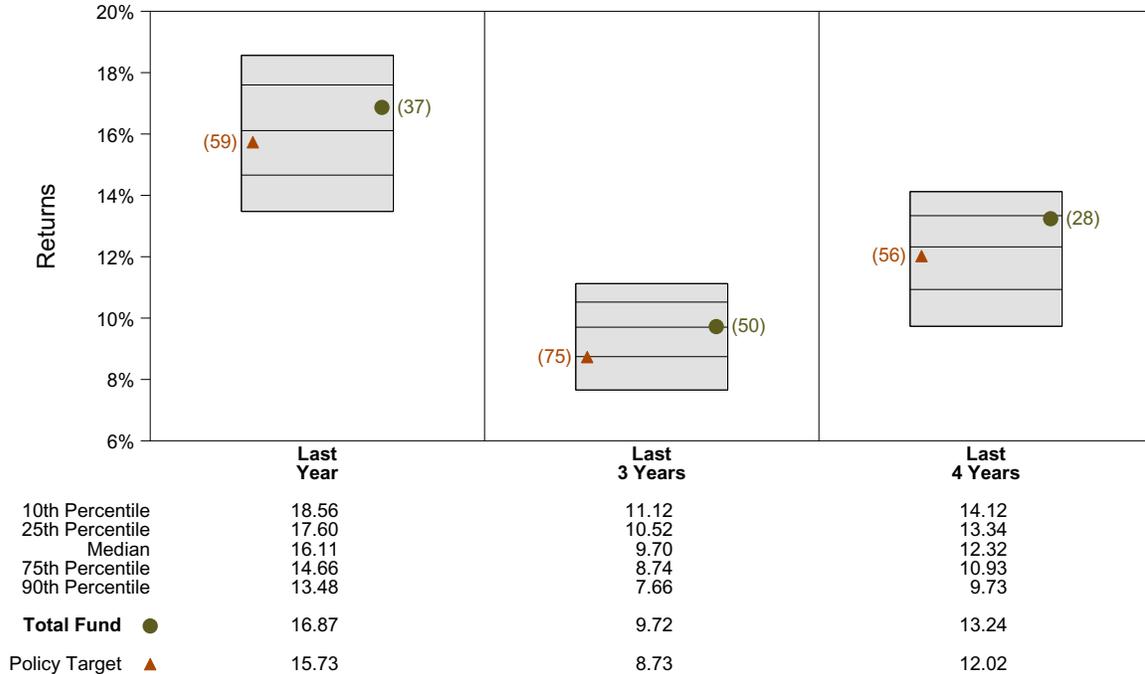
Four Year Annualized Risk vs Return Asset Classes vs Asset Class Median



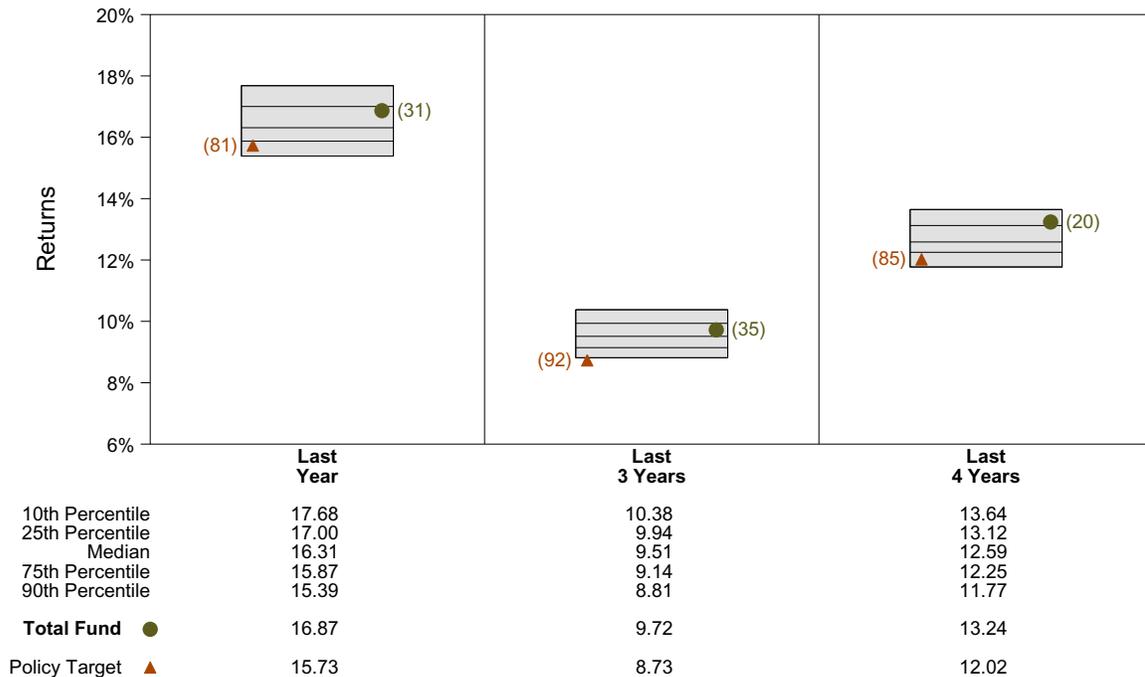
Total Fund Ranking

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 June 30, 2014. 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

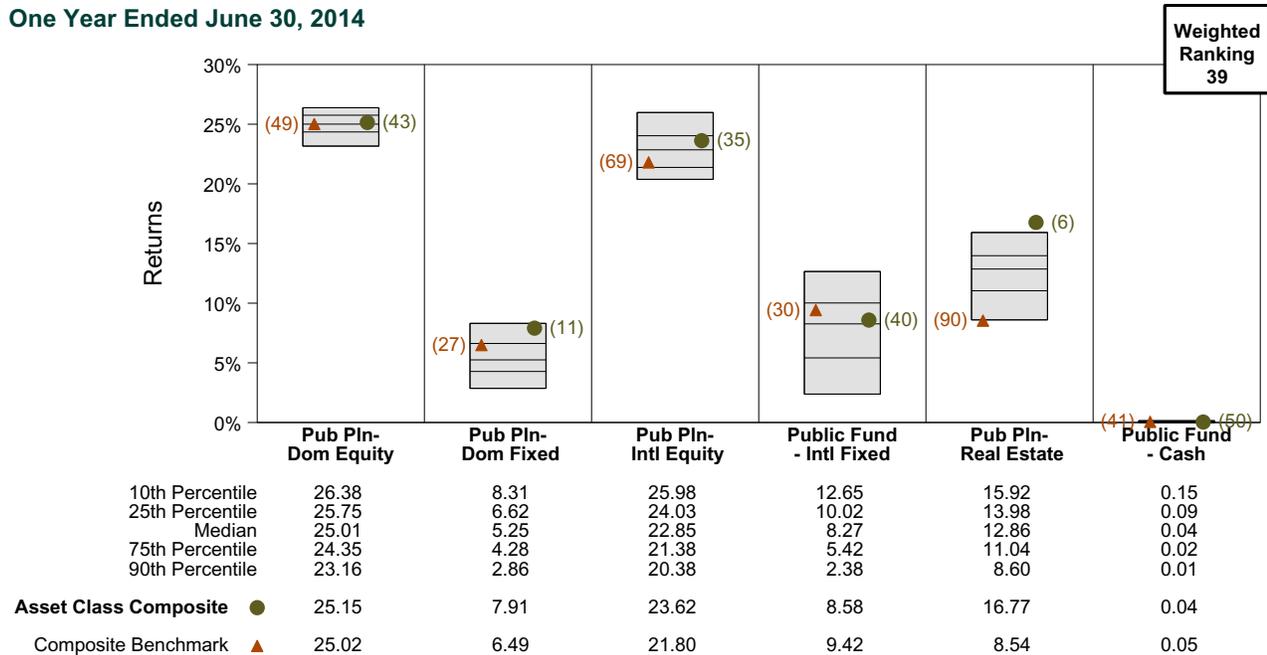


* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

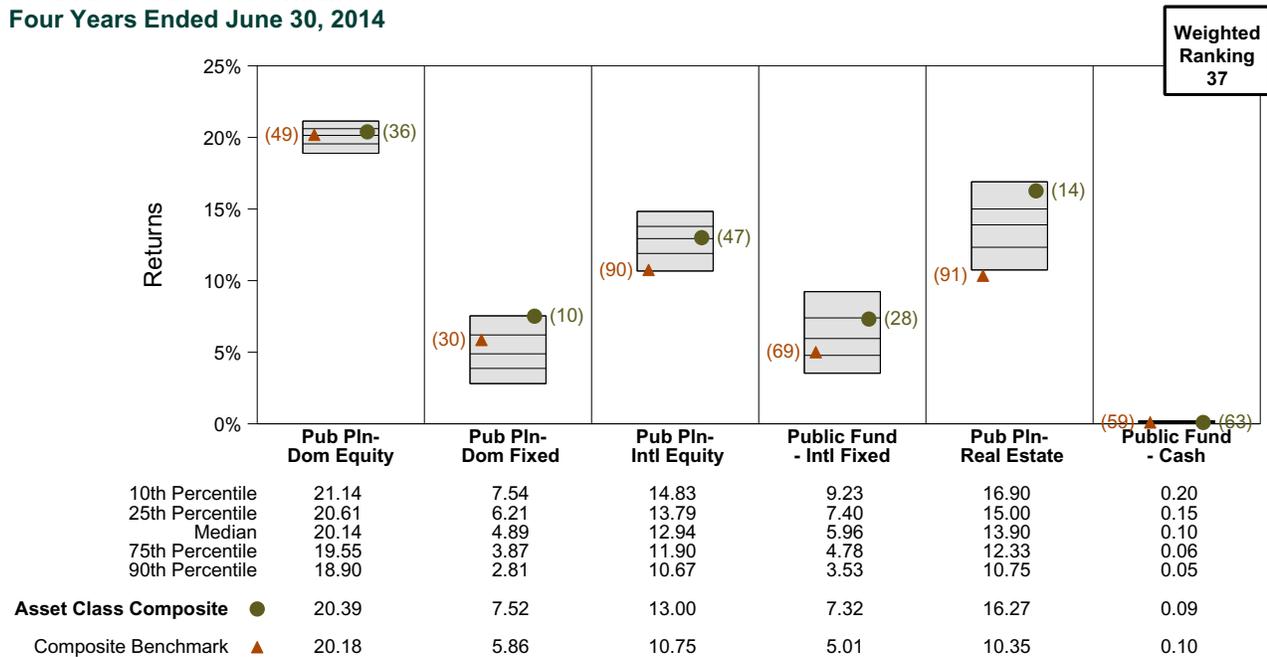
Asset Class Rankings

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 June 30, 2014



Total Asset Class Performance Four Years Ended June 30, 2014



* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2014, with the distribution as of March 31, 2014. 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 Class Allocation

	June 30, 2014		Net New Inv.	Inv. Return	March 31, 2014	
	Market Value	Weight			Market Value	Weight
GLOBAL EQUITY	\$1,188,489,003	57.65%	\$(25,130,038)	\$43,523,032	\$1,170,096,009	58.62%
Domestic Equity	\$458,457,668	22.24%	\$(691,782)	\$18,603,816	\$440,545,634	22.07%
Large Cap	355,605,933	17.25%	(466,593)	16,890,791	339,181,735	16.99%
Small Cap	102,851,736	4.99%	(225,189)	1,713,025	101,363,899	5.08%
International Equity	\$315,184,022	15.29%	\$(369,649)	\$12,856,460	\$302,697,212	15.17%
Developed Intl Equity	251,746,290	12.21%	(339,401)	8,871,147	243,214,544	12.19%
Emerging Markets	63,437,732	3.08%	(30,248)	3,985,312	59,482,668	2.98%
World Equity	\$317,489,390	15.40%	\$(24,032,883)	\$11,523,371	\$329,998,902	16.53%
Private Equity	\$97,357,922	4.72%	\$(35,724)	\$539,386	\$96,854,261	4.85%
GLOBAL FIXED INCOME	\$482,785,176	23.42%	\$19,012,808	\$13,846,864	\$449,925,504	22.54%
Fixed Income Comp	\$378,338,820	18.35%	\$19,314,467	\$10,398,161	\$348,626,192	17.47%
Investment Grade Fixed	268,496,162	13.02%	19,285,109	6,089,128	243,121,925	12.18%
Below Inv. Grade Fixed Income	109,842,658	5.33%	29,358	4,309,033	105,504,267	5.29%
International Fixed Income	\$104,446,356	5.07%	\$(301,659)	\$3,448,703	\$101,299,312	5.08%
GLOBAL REAL ASSETS	\$370,371,566	17.96%	\$(3,868,530)	\$16,643,290	\$357,596,806	17.92%
Real Estate	199,445,893	9.67%	(4,259,277)	13,264,852	190,440,318	9.54%
Timber	90,107,889	4.37%	(360,076)	1,732,883	88,735,081	4.45%
Infrastructure	80,817,784	3.92%	750,822	1,645,555	78,421,407	3.93%
Cash & Equivalents	\$20,040,716	0.97%	\$1,686,674	\$2,396	\$18,351,646	0.92%
Total Fund	\$2,061,686,462	100.0%	\$(8,299,086)	\$74,015,583	\$1,995,969,965	100.0%

PLEASE REFER TO PAGES 38-40 FOR INVESTMENT MANAGER LEVEL ASSET ALLOCATION.

Asset Class Returns

The table below details the rates of return for the Sponsor's investment managers over various time periods ended June 30, 2014. 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 June 30, 2014

	Last Quarter	Last Year	Last 3 Years	Last 4 Years
GLOBAL EQUITY	3.73%	22.32%	-	-
Wtd Avg Global Equity Benchmark	4.23%	21.97%	-	-
Domestic Equity	4.23%	25.15%	16.74%	20.39%
Wtd Avg Domestic Equity Benchmark	4.45%	25.02%	16.34%	20.18%
Large Cap	4.98%	25.21%	16.91%	20.19%
Benchmark(1)	5.12%	25.35%	16.99%	20.27%
Small Cap	1.70%	24.73%	16.51%	21.06%
Russell 2000 Index	2.05%	23.64%	14.57%	19.89%
International Equity	4.25%	23.62%	7.95%	13.00%
Wtd Avg Intl Equity Benchmark	4.57%	21.80%	6.46%	10.75%
Developed Intl Equity	3.65%	26.19%	9.21%	14.14%
Benchmark(2)	4.09%	23.57%	8.10%	11.77%
Emerging Markets	6.70%	12.58%	2.26%	8.11%
Benchmark(3)	6.60%	14.31%	(0.39%)	6.09%
World Equity	3.51%	23.24%	-	-
MSCI World Index	4.86%	24.05%	11.81%	16.22%
Private Equity	0.56%	4.07%	5.25%	7.64%
GLOBAL FIXED INCOME	3.08%	8.05%	-	-
Wtd Avg Global Fixed Inc. Benchmark	2.28%	7.17%	-	-
Domestic Fixed Income	2.99%	7.91%	6.52%	7.52%
Wtd Avg Domestic FI Benchmark	2.15%	6.49%	5.12%	5.86%
Inv. Grade Fixed Income	2.51%	5.64%	5.66%	5.80%
Barclays Aggregate Index	2.04%	4.37%	3.66%	3.72%
Below Inv. Grade Fixed Income	4.11%	13.51%	10.23%	12.17%
Barclays HY Corp 2% Issue	2.41%	11.72%	9.46%	10.95%
International Fixed Income	3.41%	8.58%	4.63%	7.32%
Wtd Avg Intl Fixed Income Benchmark	2.72%	9.42%	1.75%	5.01%
GLOBAL REAL ASSETS	4.70%	11.41%	-	-
Wtd Avg Global Real Assets Benchmark	1.95%	8.57%	-	-
Real Estate	7.08%	16.77%	13.55%	16.27%
NCREIF Total Index	2.91%	11.21%	11.32%	12.65%
Timber	1.96%	2.62%	-	-
NCREIF Timberland Index	1.08%	9.92%	6.73%	5.14%
Infrastructure	2.10%	9.50%	-	-
CPI-W	0.92%	2.04%	1.79%	2.35%
Cash & Equivalents	0.01%	0.04%	0.07%	0.09%
3-month Treasury Bill	0.01%	0.05%	0.07%	0.10%
Total Fund	3.72%	16.87%	9.72%	13.24%
Target*	3.32%	15.73%	8.73%	12.02%

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World Index, 12.0% Barclays Aggregate Index, 11.8% MSCI EAFE Index, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays HY Corp 2% Issue, 5.0% NDSIB TFFR - Private Equity, 5.0% Barclays Global Agg ex US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 2.8% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

(1) S&P 500 Index through 12/31/2011 and the Russell 1000 Index thereafter.

(2) 50% Hedged EAFE through 3/31/2011 and MSCI EAFE thereafter.

(3) MSCI Emerging Mkts Idx (Gross) through 6/30/2011 and MSCI Emerging Mkts Idx Net thereafter.

PLEASE REFER TO PAGES 41-43 FOR INVESTMENT MANAGER LEVEL RETURNS.

INVESTMENT PERFORMANCE SUMMARY REPORT
INSURANCE TRUST FUNDS
June 30, 2014

	Quarter Ended 6/30/2014	Current FYTD 6/30/2014	3 Yrs Ended 6/30/2014	5 Yrs Ended 6/30/2014	Risk 5 Yrs Ended 6/30/2014	Risk Adj Excess Return 5 Yrs Ended 6/30/2014
WORKFORCE SAFETY & INSURANCE (WSI)						
\$	1,703,987,980					
Total Fund Return - Net	3.14%	11.71%	8.71%	10.24%	4.74%	1.15%
Policy Benchmark Return	2.87%	9.95%	6.31%	7.72%	4.10%	
Attribution Analysis						
Asset Allocation	0.00%	0.16%	0.06%			
Manager Selection	0.27%	1.61%	2.34%			
Total Relative Return	0.27%	1.76%	2.40%	2.52%		
LEGACY FUND						
\$	2,215,941,142					
Total Fund Return - Net	2.54%	6.64%	N/A	N/A	N/A	N/A
Policy Benchmark Return	2.44%	5.54%	N/A	N/A	N/A	
Attribution Analysis						
Asset Allocation	0.00%	-0.01%				
Manager Selection	0.11%	1.11%				
Total Relative Return	0.11%	1.10%	N/A			
BUDGET STABILIZATION FUND						
\$	586,199,881					
Total Fund Return - Net	0.56%	1.94%	1.95%	3.37%	1.96%	0.03%
Policy Benchmark Return	0.21%	0.61%	0.41%	0.31%	0.14%	
Attribution Analysis						
Asset Allocation	0.00%	0.00%	-0.07%			
Manager Selection	0.34%	1.34%	1.62%			
Total Relative Return	0.34%	1.34%	1.55%	3.06%		
FIRE & TORNADO FUND						
\$	29,223,707					
Total Fund Return - Net	2.89%	12.78%	9.38%	11.41%	6.94%	0.67%
Policy Benchmark Return	2.63%	10.74%	7.08%	8.77%	5.73%	
Attribution Analysis						
Asset Allocation	0.00%	-0.03%	0.07%			
Manager Selection	0.26%	2.07%	2.23%			
Total Relative Return	0.26%	2.04%	2.30%	2.64%		
STATE BONDING FUND						
\$	3,268,991					
Total Fund Return - Net	1.55%	4.06%	4.11%	5.18%	2.25%	1.39%
Policy Benchmark Return	1.13%	2.42%	2.05%	2.70%	1.77%	
Attribution Analysis						
Asset Allocation	0.00%	-0.02%	0.05%			
Manager Selection	0.42%	1.66%	2.01%			
Total Relative Return	0.42%	1.64%	2.06%	2.47%		
INSURANCE REGULATORY TRUST FUND (IRTF)						
\$	1,146,038					
Total Fund Return - Net	2.12%	9.88%	7.02%	8.57%	5.73%	0.61%
Policy Benchmark Return	2.00%	8.59%	5.50%	6.80%	4.94%	
Attribution Analysis						
Asset Allocation	0.00%	-0.05%	0.03%			
Manager Selection	0.12%	1.34%	1.49%			
Total Relative Return	0.12%	1.29%	1.51%	1.77%		

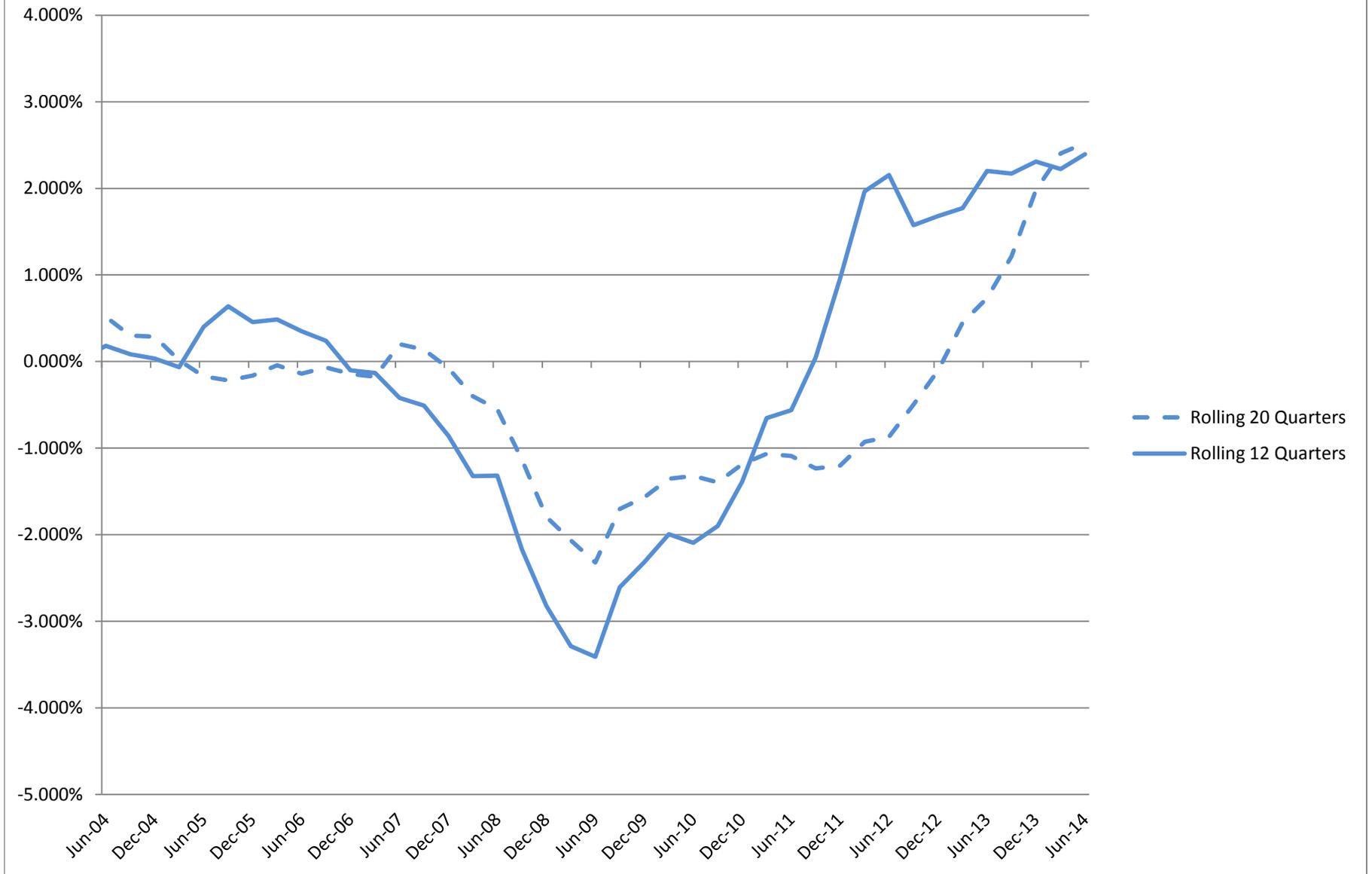
INVESTMENT PERFORMANCE SUMMARY REPORT
INSURANCE TRUST FUNDS
June 30, 2014

	Quarter Ended 6/30/2014	Current FYTD 6/30/2014	3 Yrs Ended 6/30/2014	5 Yrs Ended 6/30/2014	Risk 5 Yrs Ended 6/30/2014	Risk Adj Excess Return 5 Yrs Ended 6/30/2014
PETROLEUM TANK RELEASE COMPENSATION FUND						
\$	7,092,998					
Total Fund Return - Net	1.41%	3.68%	3.66%	4.74%	2.02%	1.33%
Policy Benchmark Return	1.02%	2.20%	1.87%	2.47%	1.61%	
Attribution Analysis						
Asset Allocation	0.00%	-0.02%	0.00%			
Manager Selection	0.38%	1.50%	1.79%			
Total Relative Return	0.38%	1.48%	1.80%	2.27%		
STATE RISK MANAGEMENT FUND						
\$	6,948,162					
Total Fund Return - Net	3.06%	12.29%	10.02%	12.06%	6.12%	0.46%
Policy Benchmark Return	2.65%	10.09%	7.40%	9.07%	4.82%	
Attribution Analysis						
Asset Allocation	0.00%	-0.06%	0.06%			
Manager Selection	0.41%	2.26%	2.56%			
Total Relative Return	0.42%	2.21%	2.62%	3.00%		
STATE RISK MANAGEMENT WORKERS COMP FUND						
\$	5,965,322					
Total Fund Return - Net	3.21%	13.68%	10.87%	13.02%	7.11%	0.71%
Policy Benchmark Return	2.85%	11.59%	8.37%	10.19%	5.94%	
Attribution Analysis						
Asset Allocation	0.00%	-0.06%	0.06%			
Manager Selection	0.35%	2.15%	2.44%			
Total Relative Return	0.36%	2.09%	2.50%	2.83%		
ND ASSOCIATION OF COUNTIES FUND (NDACo)						
\$	3,445,373					
Total Fund Return - Net	2.74%	11.61%	7.50%	11.02%	8.86%	1.42%
Policy Benchmark Return	2.45%	9.60%	5.28%	8.59%	8.04%	
Attribution Analysis						
Asset Allocation	0.00%	-0.08%	0.04%			
Manager Selection	0.29%	2.09%	2.18%			
Total Relative Return	0.29%	2.01%	2.21%	2.43%		
CITY OF BISMARCK DEFERRED SICK LEAVE ACCOUNT						
\$	849,818					
Total Fund Return - Net	2.97%	12.32%	9.25%	11.34%	6.46%	0.44%
Policy Benchmark Return	2.62%	9.97%	6.63%	8.29%	4.96%	
Attribution Analysis						
Asset Allocation	0.00%	-0.02%	0.06%			
Manager Selection	0.35%	2.38%	2.56%			
Total Relative Return	0.35%	2.35%	2.62%	3.05%		
FARGODOME PERMANENT FUND						
\$	41,775,992					
Total Fund Return - Net	3.28%	16.34%	10.83%	13.63%	9.22%	0.97%
Policy Benchmark Return	3.21%	14.76%	8.95%	11.51%	8.44%	
Attribution Analysis						
Asset Allocation	0.00%	-0.07%	0.07%			
Manager Selection	0.07%	1.65%	1.81%			
Total Relative Return	0.07%	1.58%	1.88%	2.12%		

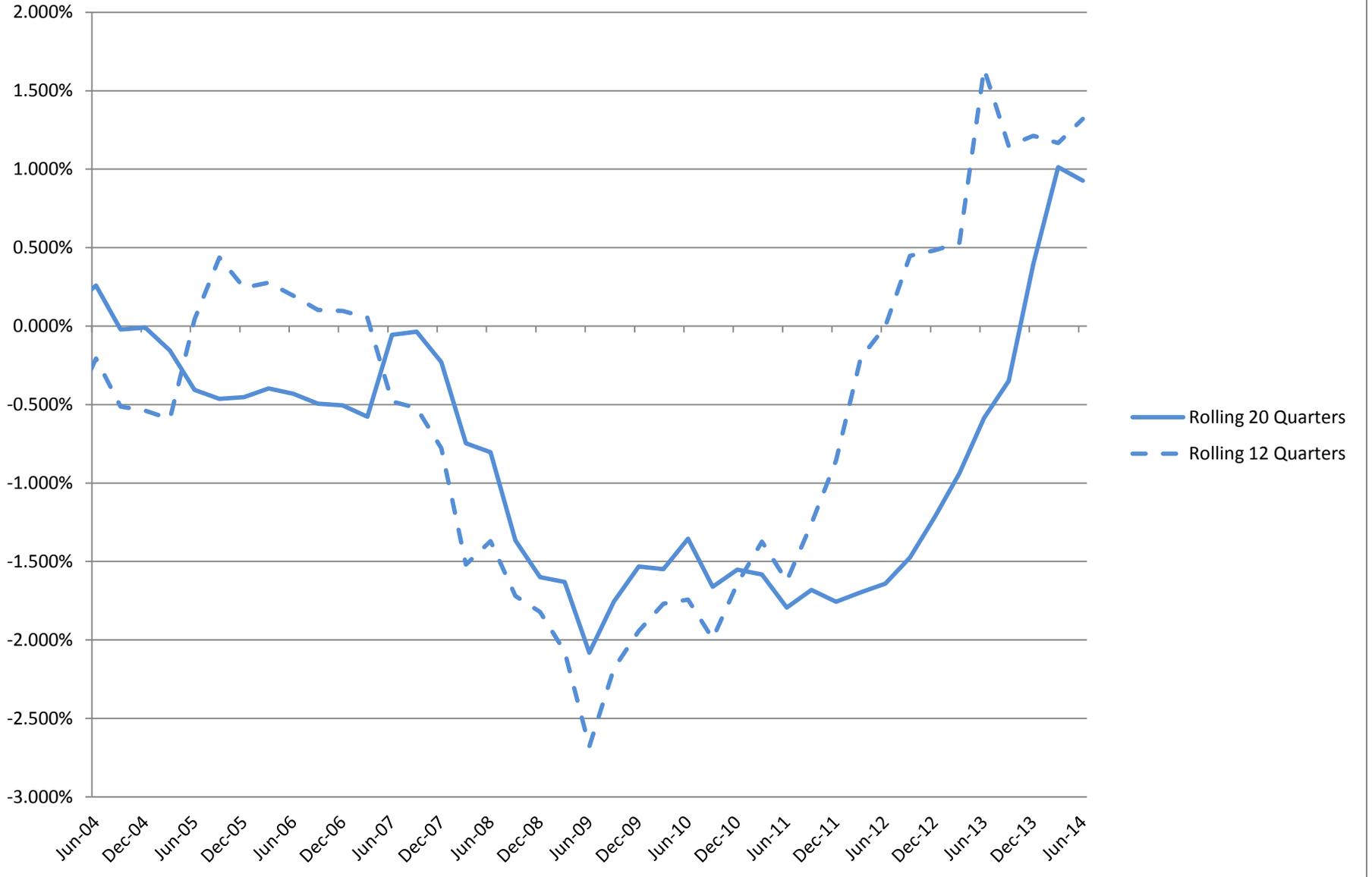
INVESTMENT PERFORMANCE SUMMARY REPORT
INSURANCE TRUST FUNDS
June 30, 2014

	Quarter Ended 6/30/2014	Current FYTD 6/30/2014	3 Yrs Ended 6/30/2014	5 Yrs Ended 6/30/2014	Risk 5 Yrs Ended 6/30/2014	Risk Adj Excess Return 5 Yrs Ended 6/30/2014
CULTURAL ENDOWMENT FUND						
\$	364,979					
Total Fund Return - Net	3.32%	16.94%	12.25%	14.54%	9.81%	1.04%
Policy Benchmark Return	3.28%	15.52%	10.28%	12.28%	8.98%	
Attribution Analysis						
Asset Allocation	0.00%	-0.10%	0.08%			
Manager Selection	0.04%	1.51%	1.89%			
Total Relative Return	0.03%	1.41%	1.97%	2.26%		
PERS RETIREE HEALTH						
\$	90,360,366					
Total Fund Return - Net	3.68%	16.53%	11.13%	14.30%	11.04%	0.82%
Policy Benchmark Return	3.48%	16.33%	10.24%	12.72%	10.45%	
Attribution Analysis						
Asset Allocation						
Manager Selection						
Total Relative Return	0.20%	0.20%	0.89%	1.58%		
PERS GROUP INSURANCE						
\$	37,425,567					
Total Fund Return - Net	0.00%	0.01%	0.18%	0.24%	0.06%	0.07%
Policy Benchmark Return	0.01%	0.06%	0.07%	0.11%	0.03%	
Attribution Analysis						
Asset Allocation						
Manager Selection						
Total Relative Return	-0.01%	-0.04%	0.11%	0.14%		

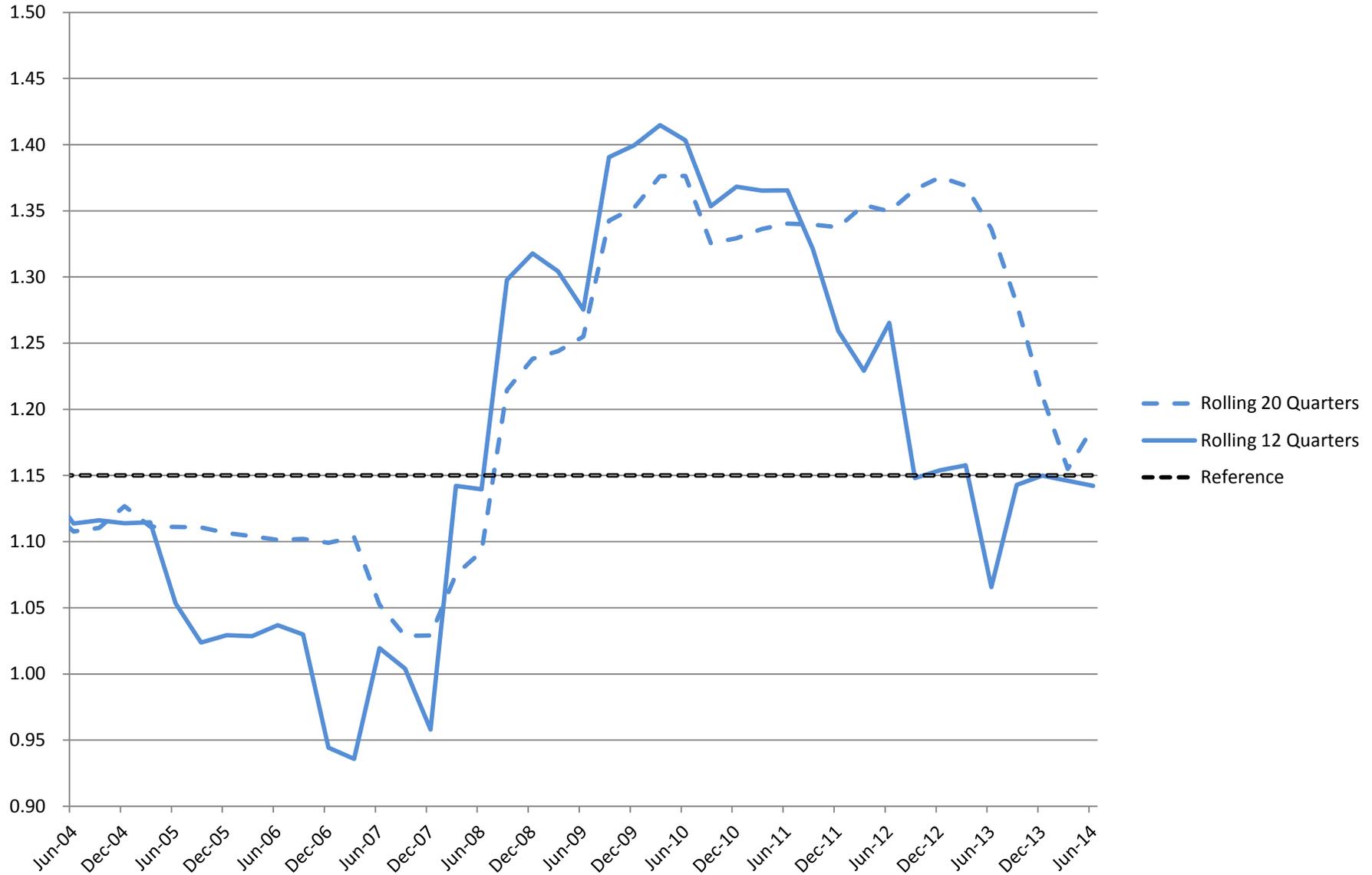
WSI - Excess Returns Relative to Policy Benchmark 10 Years Ended 6/30/2014



WSI - Risk Adjusted Excess Returns 10 Years Ended 6/30/2014



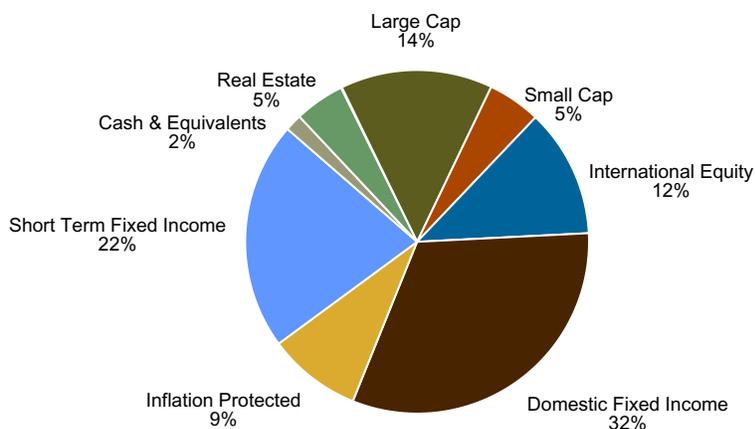
WSI - Relative Standard Deviation Relative to Policy Benchmark 10 Years Ended 6/30/2014



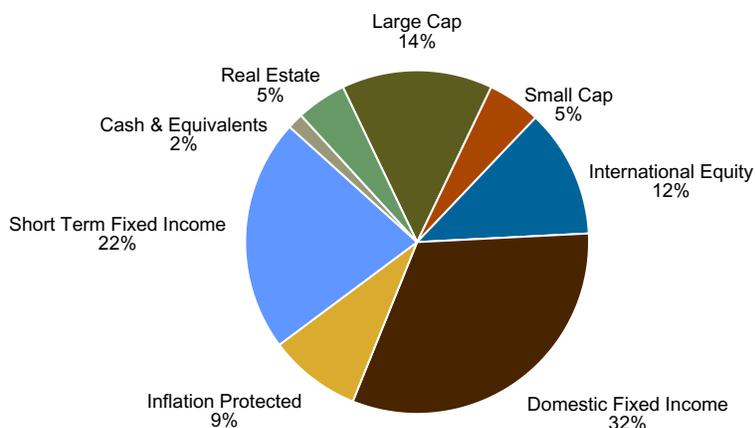
Actual vs Target Asset Allocation As of June 30, 2014

The first chart below shows the Fund's asset allocation as of June 30, 2014. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

Actual Asset Allocation



Target Asset Allocation



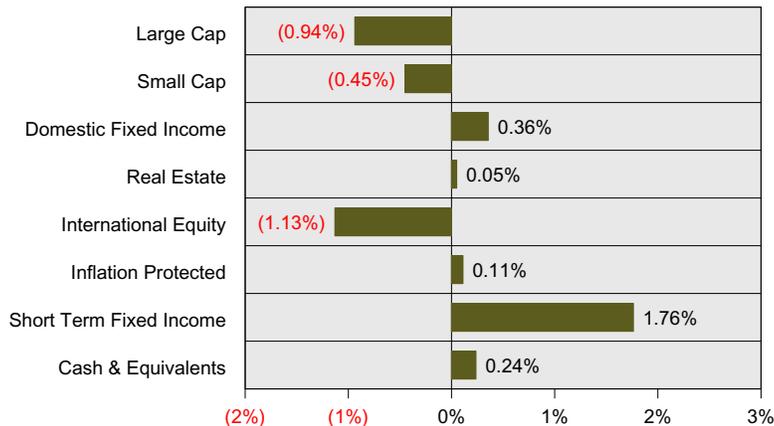
Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Large Cap	647,846	14.3%	14.2%	0.1%	3,461
Small Cap	229,159	5.0%	5.0%	0.0%	2,263
International Equity	549,612	12.1%	12.1%	0.0%	524
Domestic Fixed Income	1,449,853	31.9%	31.9%	0.0%	2,256
Inflation Protected	399,828	8.8%	8.7%	0.1%	5,029
Short Term Fixed Income	977,063	21.5%	21.9%	(0.4%)	(16,742)
Cash & Equivalents	71,889	1.6%	1.5%	0.1%	3,820
Real Estate	212,673	4.7%	4.7%	0.0%	(610)
Total	4,537,923	100.0%	100.0%		

* Current Quarter Target = 31.9% Barclays Aggregate Index, 21.9% Barclays Gov 1-3 Yr, 14.2% Russell 1000 Index, 12.1% MSCI EAFE Index, 8.7% Barclays Gbl Infn-Linked, 5.0% Russell 2000 Index, 4.7% NCREIF Total Index and 1.5% 3-month Treasury Bill.

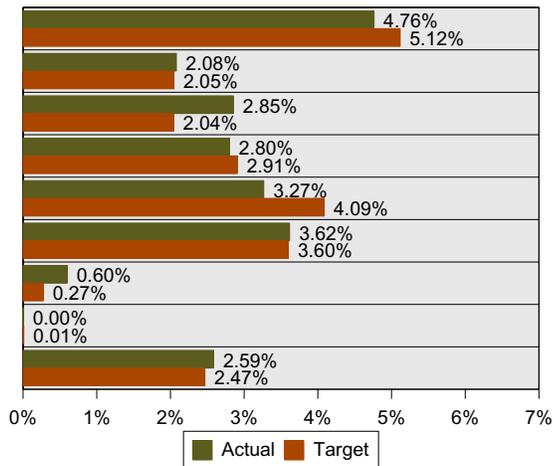
Quarterly Total Fund Relative Attribution - June 30, 2014

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: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

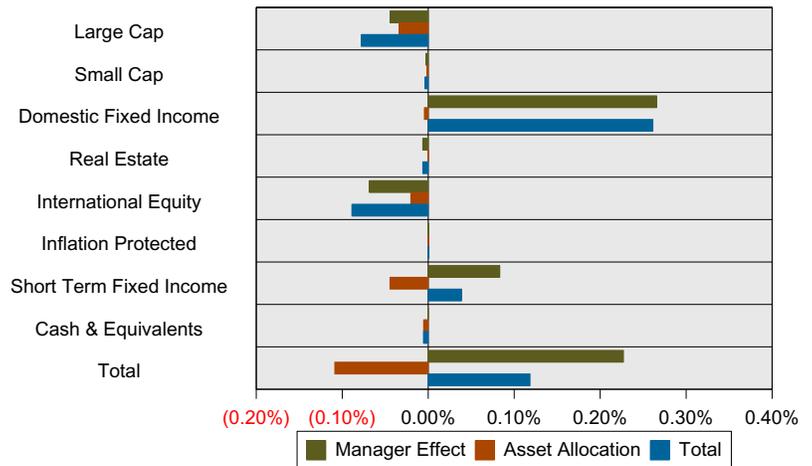
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended June 30, 2014

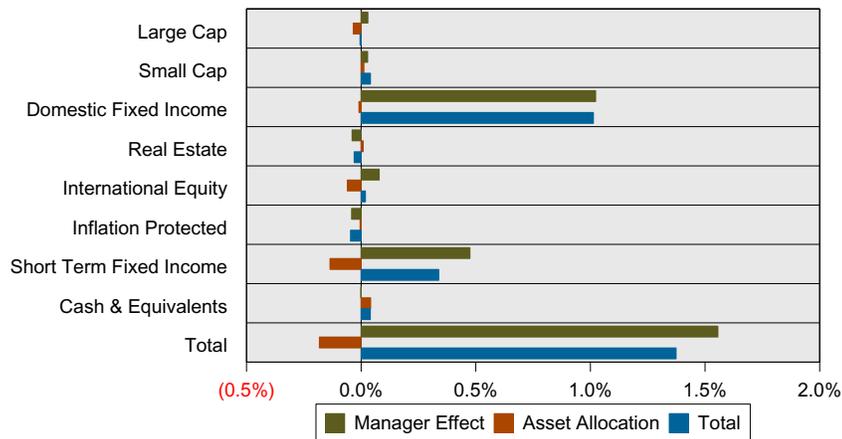
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	12%	13%	4.76%	5.12%	(0.04%)	(0.03%)	(0.08%)
Small Cap	4%	4%	2.08%	2.05%	(0.00%)	(0.00%)	(0.00%)
Domestic Fixed Income	33%	32%	2.85%	2.04%	0.27%	(0.00%)	0.26%
Real Estate	5%	5%	2.80%	2.91%	(0.01%)	0.00%	(0.01%)
International Equity	10%	11%	3.27%	4.09%	(0.07%)	(0.02%)	(0.09%)
Inflation Protected	9%	9%	3.62%	3.60%	0.00%	0.00%	0.00%
Short Term Fixed Income	25%	24%	0.60%	0.27%	0.08%	(0.04%)	0.04%
Cash & Equivalents	2%	2%	0.00%	0.01%	(0.00%)	(0.01%)	(0.01%)
Total			2.59%	2.47%	+ 0.23%	+ (0.11%)	0.12%

* Current Quarter Target = 31.9% Barclays Aggregate Index, 21.9% Barclays Gov 1-3 Yr, 14.2% Russell 1000 Index, 12.1% MSCI EAFE Index, 8.7% Barclays Gbl Infn-Linked, 5.0% Russell 2000 Index, 4.7% NCREIF Total Index and 1.5% 3-month Treasury Bill.

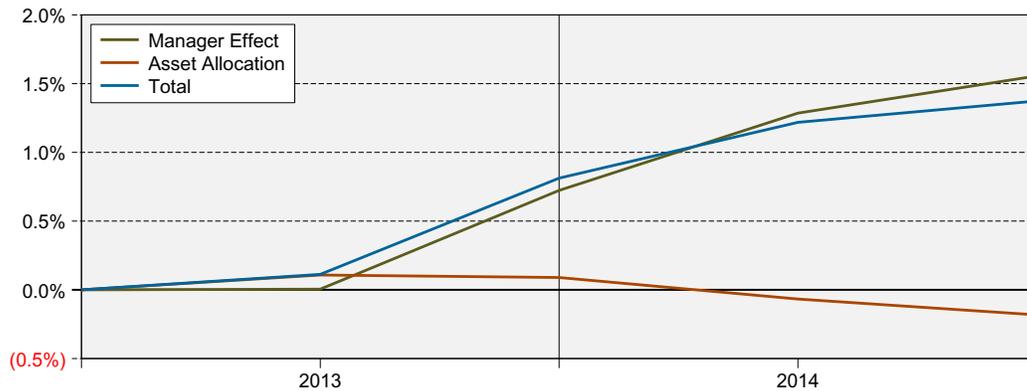
Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

One Year Relative Attribution Effects



Cumulative Relative Attribution Effects



One Year Relative Attribution Effects

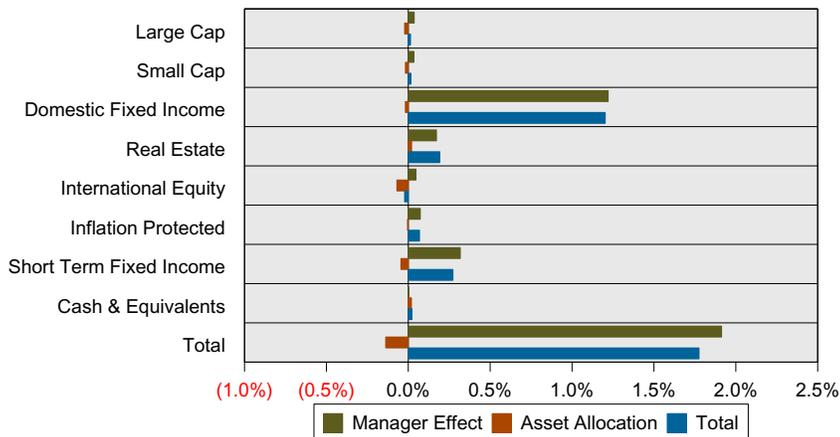
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	9%	9%	26.07%	25.35%	0.03%	(0.03%)	(0.00%)
Small Cap	3%	3%	24.79%	23.64%	0.03%	0.01%	0.04%
Domestic Fixed Income	29%	30%	7.76%	4.37%	1.02%	(0.01%)	1.01%
Real Estate	4%	4%	10.45%	11.21%	(0.04%)	0.01%	(0.03%)
International Equity	7%	7%	25.76%	23.57%	0.08%	(0.06%)	0.02%
Inflation Protected	9%	9%	10.19%	10.42%	(0.04%)	(0.00%)	(0.05%)
Short Term Fixed Income	37%	35%	2.04%	0.77%	0.47%	(0.14%)	0.34%
Cash & Equivalents	3%	3%	0.01%	0.05%	(0.00%)	0.04%	0.04%
Total			8.53%	7.15%	+ 1.56%	+ (0.18%)	1.37%

* Current Quarter Target = 31.9% Barclays Aggregate Index, 21.9% Barclays Gov 1-3 Yr, 14.2% Russell 1000 Index, 12.1% MSCI EAFE Index, 8.7% Barclays Gbl Inftn-Linked, 5.0% Russell 2000 Index, 4.7% NCREIF Total Index and 1.5% 3-month Treasury Bill.

Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Three Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Three Year Annualized Relative Attribution Effects

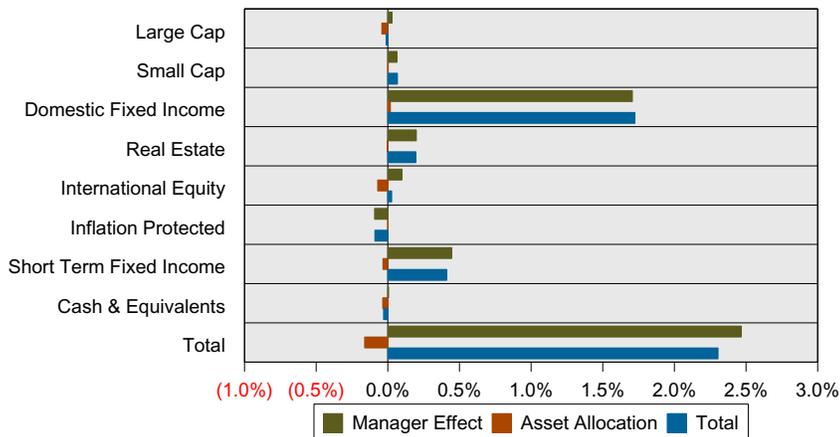
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	8%	8%	17.73%	16.99%	0.04%	(0.02%)	0.01%
Small Cap	3%	3%	16.10%	14.57%	0.03%	(0.02%)	0.02%
Domestic Fixed Income	33%	33%	7.48%	3.66%	1.22%	(0.02%)	1.20%
Real Estate	4%	4%	15.96%	11.32%	0.17%	0.02%	0.19%
International Equity	5%	6%	9.31%	8.10%	0.05%	(0.07%)	(0.02%)
Inflation Protected	12%	13%	5.22%	4.44%	0.07%	(0.00%)	0.07%
Short Term Fixed Income	32%	32%	1.19%	0.51%	0.32%	(0.05%)	0.27%
Cash & Equivalents	3%	3%	0.17%	0.07%	0.00%	0.02%	0.02%
Total			6.47%	4.70%	1.91%	(0.14%)	1.78%

* Current Quarter Target = 31.9% Barclays Aggregate Index, 21.9% Barclays Gov 1-3 Yr, 14.2% Russell 1000 Index, 12.1% MSCI EAFE Index, 8.7% Barclays Gbl Infn-Linked, 5.0% Russell 2000 Index, 4.7% NCREIF Total Index and 1.5% 3-month Treasury Bill.

Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Five Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Five Year Annualized Relative Attribution Effects

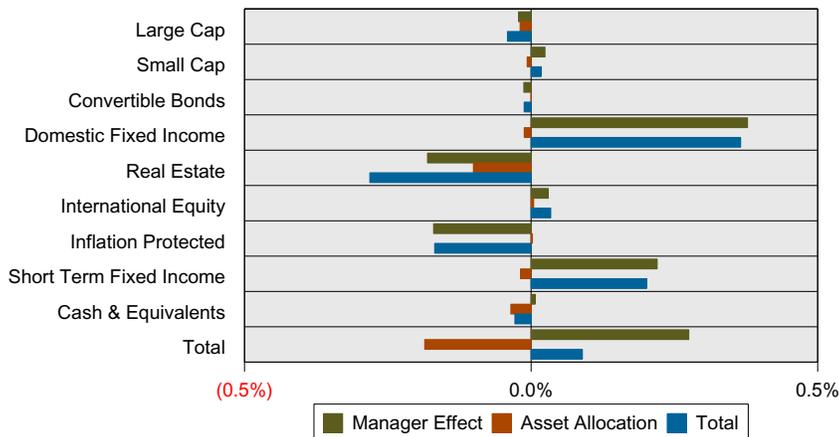
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	8%	8%	19.57%	19.08%	0.03%	(0.04%)	(0.01%)
Small Cap	3%	3%	22.49%	20.21%	0.06%	0.00%	0.07%
Domestic Fixed Income	37%	37%	9.42%	4.85%	1.71%	0.02%	1.72%
Real Estate	4%	4%	12.52%	9.67%	0.20%	(0.00%)	0.20%
International Equity	6%	6%	12.94%	11.10%	0.10%	(0.07%)	0.03%
Inflation Protected	15%	15%	5.55%	5.81%	(0.09%)	0.00%	(0.09%)
Short Term Fixed Income	24%	23%	3.79%	1.44%	0.45%	(0.03%)	0.41%
Cash & Equivalents	4%	3%	0.24%	0.11%	0.01%	(0.04%)	(0.03%)
Total			8.70%	6.39%	+ 2.47%	+ (0.16%)	2.30%

* Current Quarter Target = 31.9% Barclays Aggregate Index, 21.9% Barclays Gov 1-3 Yr, 14.2% Russell 1000 Index, 12.1% MSCI EAFE Index, 8.7% Barclays Gbl Inftn-Linked, 5.0% Russell 2000 Index, 4.7% NCREIF Total Index and 1.5% 3-month Treasury Bill.

Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Ten Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Ten Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	9%	9%	7.80%	7.89%	(0.02%)	(0.02%)	(0.04%)
Small Cap	3%	3%	9.33%	8.70%	0.02%	(0.01%)	0.02%
Convertible Bonds	1%	1%	-	-	(0.01%)	0.00%	(0.01%)
Domestic Fixed Income	42%	42%	6.30%	4.98%	0.38%	(0.01%)	0.37%
Real Estate	4%	5%	2.29%	8.63%	(0.18%)	(0.10%)	(0.28%)
International Equity	7%	7%	7.51%	7.04%	0.03%	0.00%	0.03%
Inflation Protected	18%	18%	4.67%	5.37%	(0.17%)	0.00%	(0.17%)
Short Term Fixed Income	12%	12%	-	-	0.22%	(0.02%)	0.20%
Cash & Equivalents	4%	4%	1.79%	1.63%	0.01%	(0.04%)	(0.03%)
Total			5.41%	5.32%	+ 0.28%	+ (0.19%)	0.09%

* Current Quarter Target = 31.9% Barclays Aggregate Index, 21.9% Barclays Gov 1-3 Yr, 14.2% Russell 1000 Index, 12.1% MSCI EAFE Index, 8.7% Barclays Gbl Infn-Linked, 5.0% Russell 2000 Index, 4.7% NCREIF Total Index and 1.5% 3-month Treasury Bill.

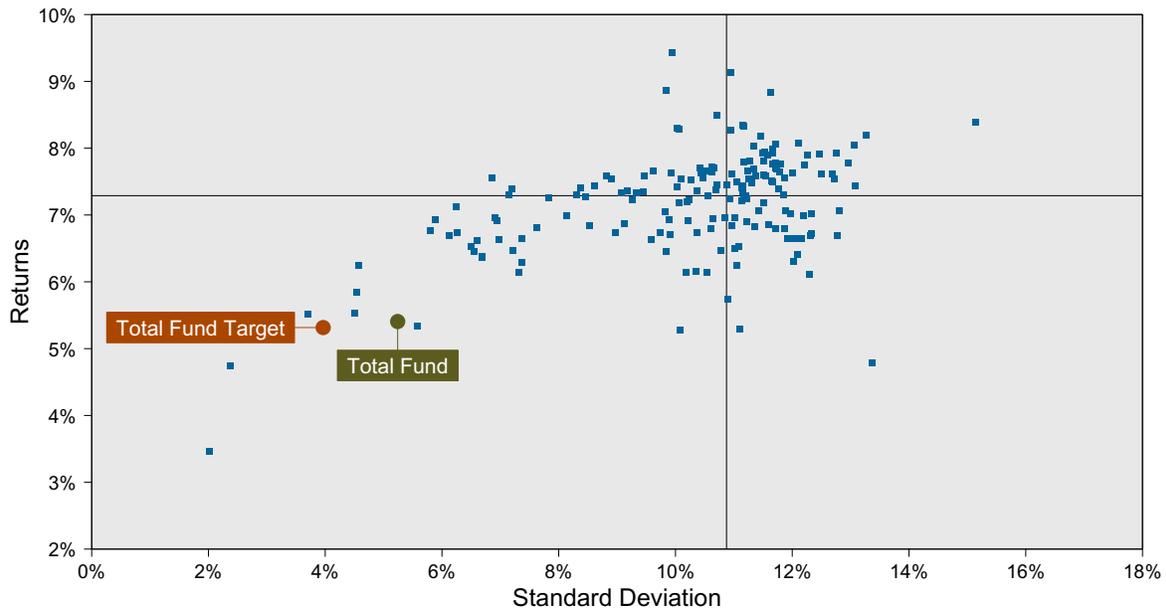
Cumulative Performance Relative to Target

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 difference between the Total Fund return and the Target Mix return is explained by the performance attribution on the next page. 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



Ten Year Annualized Risk vs Return



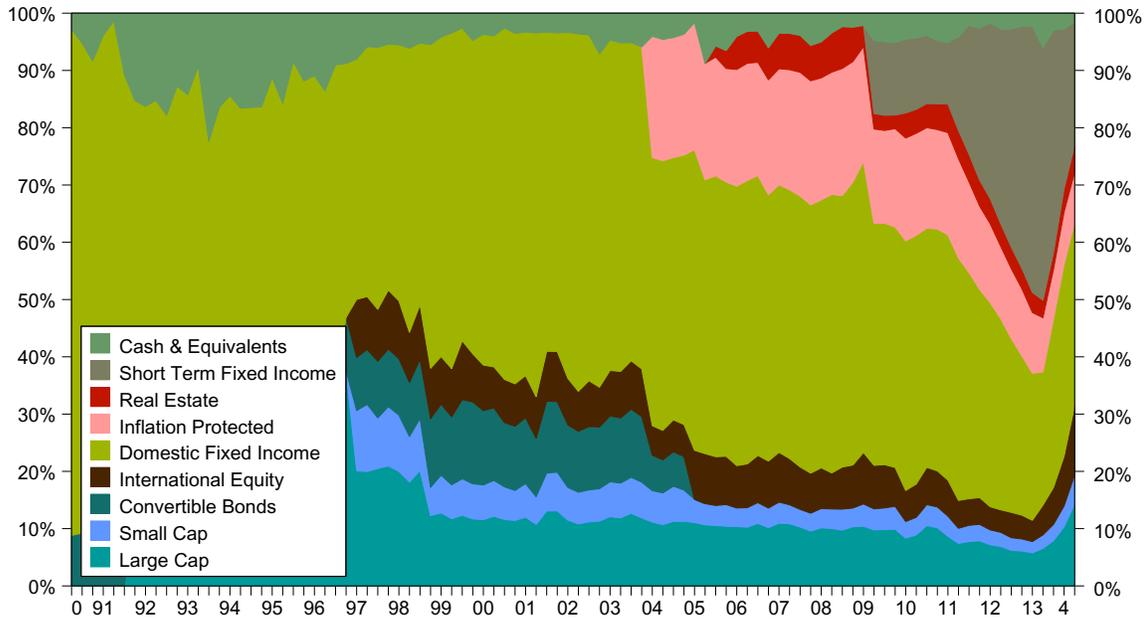
Squares represent membership of the Public Fund Sponsor Database

* Current Quarter Target = 31.9% Barclays Aggregate Index, 21.9% Barclays Gov 1-3 Yr, 14.2% Russell 1000 Index, 12.1% MSCI EAFE Index, 8.7% Barclays Gbl Infn-Lnked, 5.0% Russell 2000 Index, 4.7% NCREIF Total Index and 1.5% 3-month Treasury Bill.

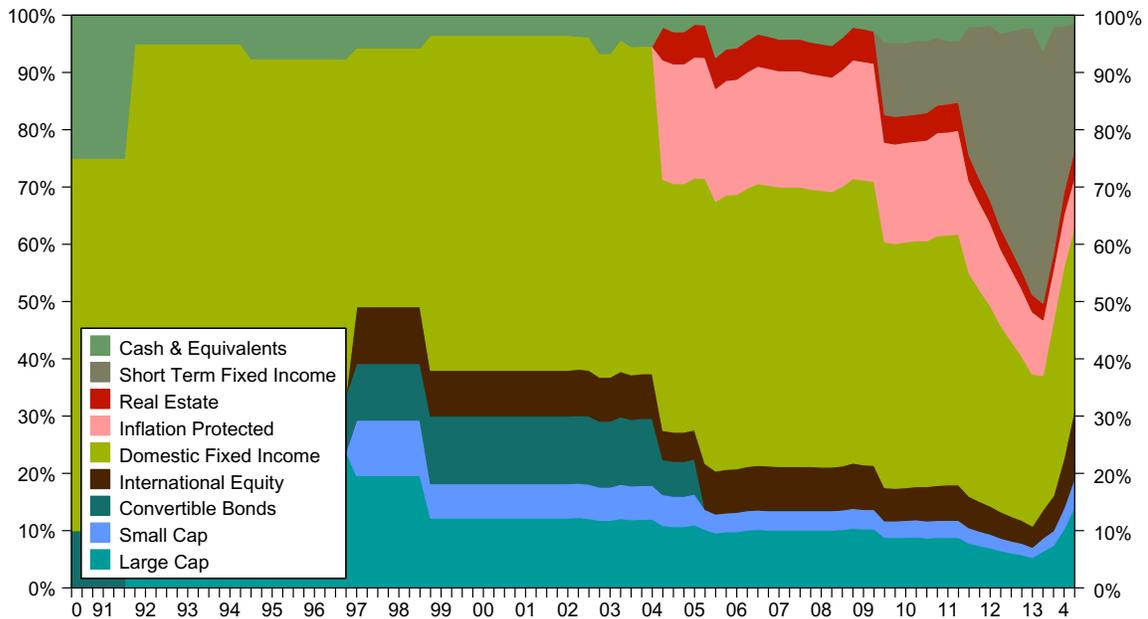
Actual vs Target Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, and the fund's historical target asset allocation.

Actual Historical Asset Allocation



Target Historical Asset Allocation

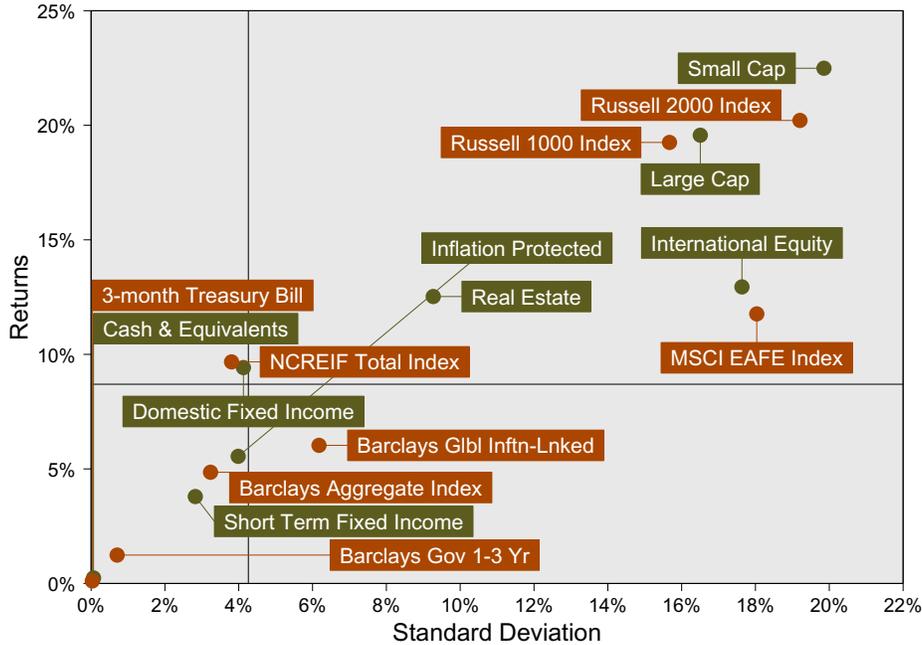


* Current Quarter Target = 31.9% Barclays Aggregate Index, 21.9% Barclays Gov 1-3 Yr, 14.2% Russell 1000 Index, 12.1% MSCI EAFE Index, 8.7% Barclays Gbl Infn-Lnked, 5.0% Russell 2000 Index, 4.7% NCREIF Total Index and 1.5% 3-month Treasury Bill.

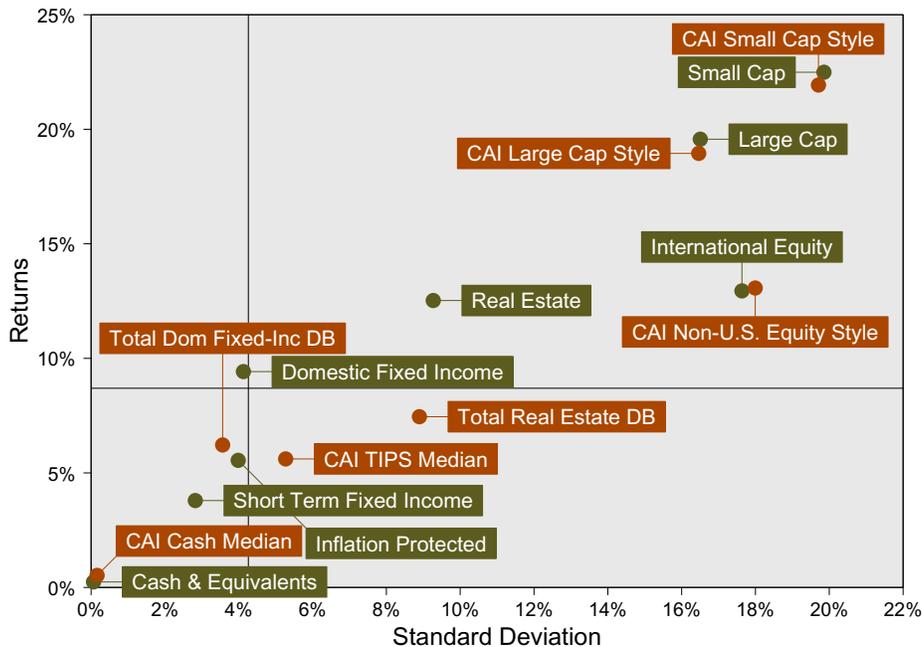
Asset Class Risk and Return

The charts below show the five year annualized risk and return for each asset class component of the Total Fund. The first graph contrasts these values with those of the appropriate index for each asset class. The second chart contrasts them with the risk and return of the median portfolio in each of the appropriate CAI comparative databases. In each case, the crosshairs on the chart represent the return and risk of the Total Fund.

Five Year Annualized Risk vs Return Asset Classes vs Benchmark Indices



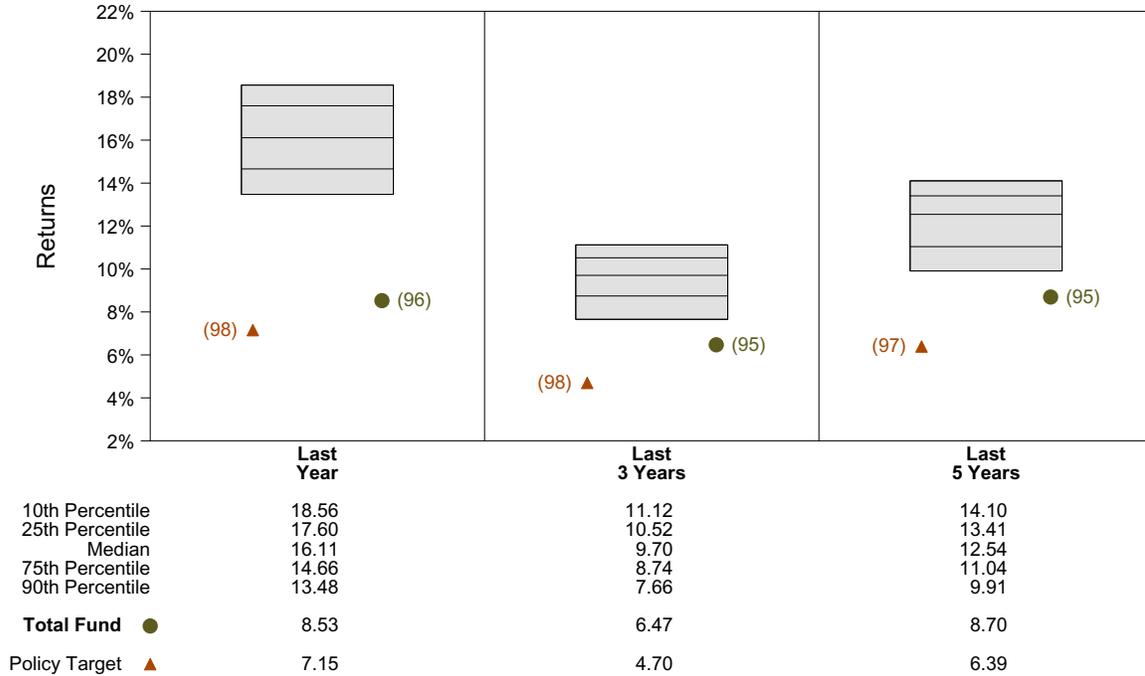
Five Year Annualized Risk vs Return Asset Classes vs Asset Class Median



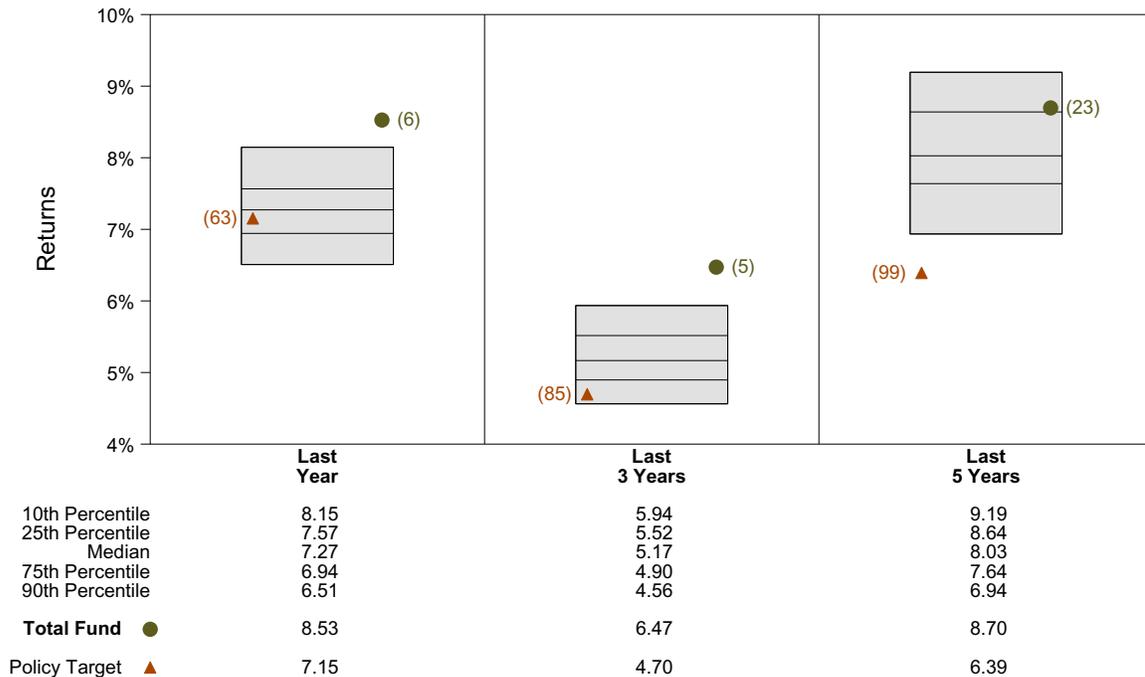
Total Fund Ranking

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 June 30, 2014. 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

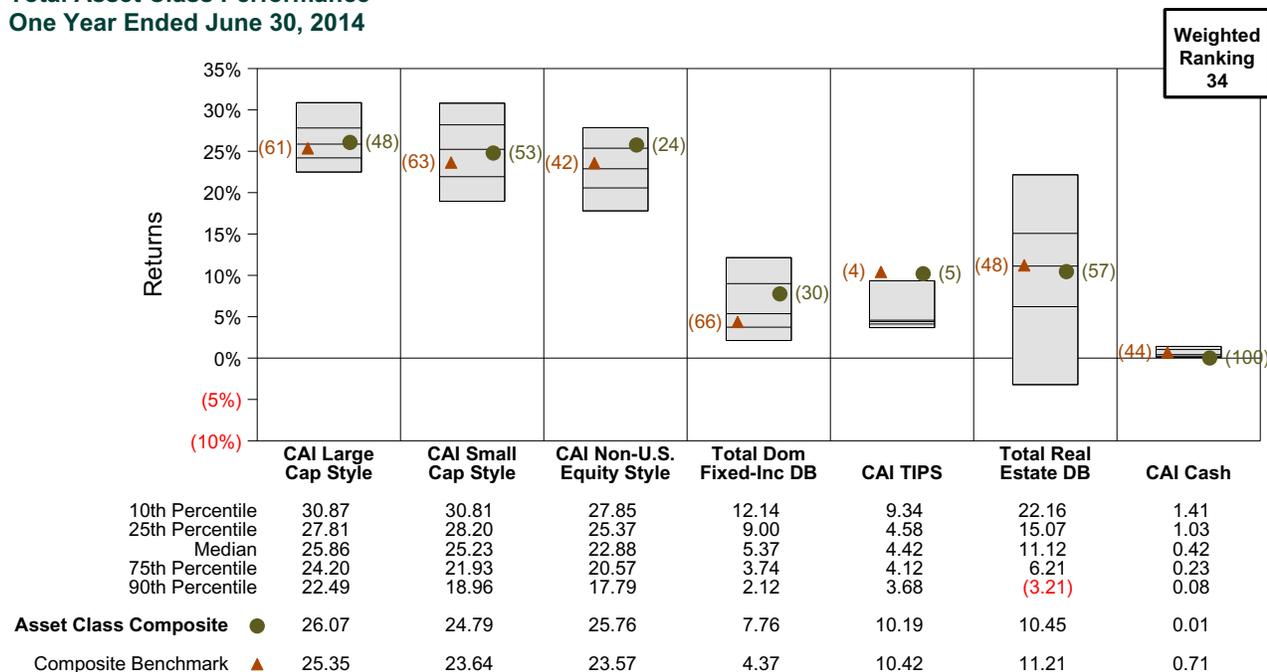


* Current Quarter Target = 31.9% Barclays Aggregate Index, 21.9% Barclays Gov 1-3 Yr, 14.2% Russell 1000 Index, 12.1% MSCI EAFE Index, 8.7% Barclays Gbl Inftn-Linked, 5.0% Russell 2000 Index, 4.7% NCREIF Total Index and 1.5% 3-month Treasury Bill.

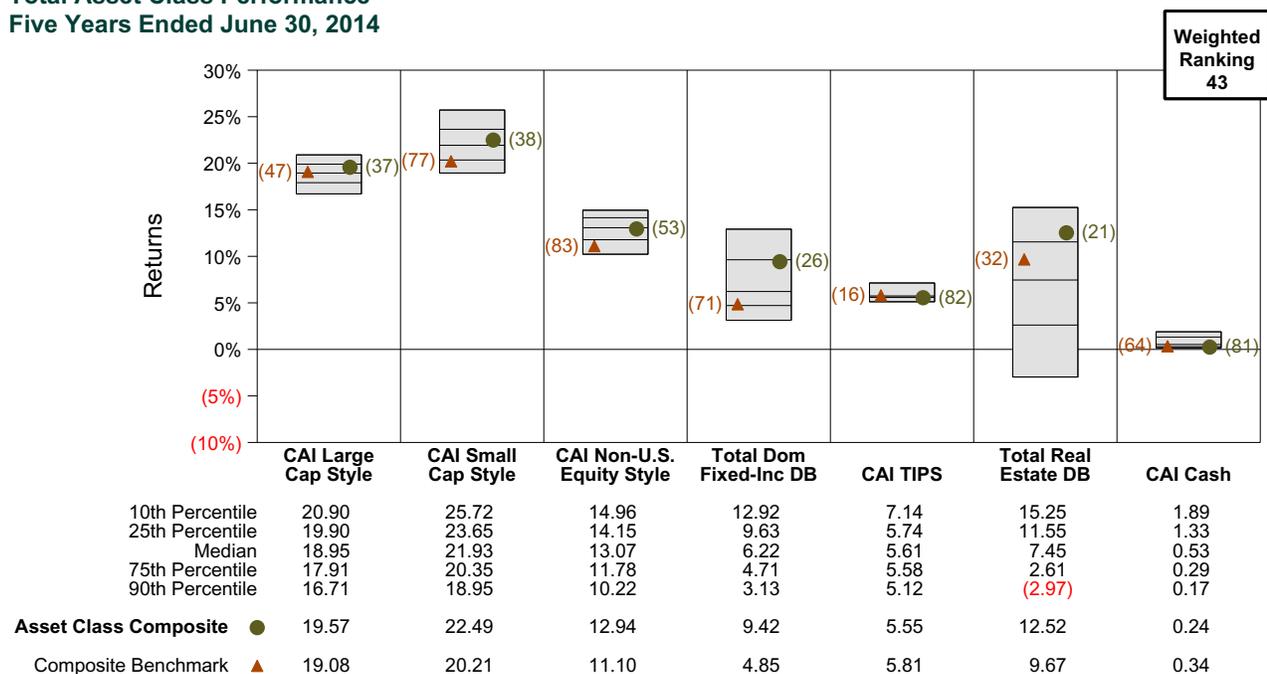
Asset Class Rankings

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 June 30, 2014



Total Asset Class Performance Five Years Ended June 30, 2014



* Current Quarter Target = 31.9% Barclays Aggregate Index, 21.9% Barclays Gov 1-3 Yr, 14.2% Russell 1000 Index, 12.1% MSCI EAFE Index, 8.7% Barclays Gbl Infn-Linked, 5.0% Russell 2000 Index, 4.7% NCREIF Total Index and 1.5% 3-month Treasury Bill.

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2014, with the distribution as of March 31, 2014. 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

	June 30, 2014		Net New Inv.	Inv. Return	March 31, 2014	
	Market Value	Weight			Market Value	Weight
Domestic Equity	\$877,005,356	19.33%	\$258,760,955	\$31,442,957	\$586,801,443	13.95%
Large Cap	\$647,846,412	14.28%	\$189,020,565	\$25,361,533	\$433,464,314	10.31%
Parametric Clifton Large Cap	129,463,256	2.85%	37,300,000	5,592,583	86,570,673	2.06%
L.A. Capital	194,465,428	4.29%	57,436,297	8,064,468	128,964,663	3.07%
L.A. Capital Enhanced	128,723,294	2.84%	37,871,191	5,123,724	85,728,378	2.04%
LSV Asset Management	195,194,434	4.30%	56,413,077	6,580,758	132,200,600	3.14%
Small Cap	\$229,158,943	5.05%	\$69,740,390	\$6,081,424	\$153,337,130	3.65%
Parametric Clifton Small Cap	138,373,676	3.05%	57,300,000	4,226,997	76,846,679	1.83%
Research Affiliates	90,785,268	2.00%	12,440,390	1,854,427	76,490,451	1.82%
International Equity	\$549,612,247	12.11%	\$171,398,692	\$14,162,550	\$364,051,005	8.66%
Capital Group	218,401,315	4.81%	69,061,560	4,733,980	144,605,775	3.44%
DFA Int'l Small Cap Value	54,852,861	1.21%	16,430,272	1,012,370	37,410,220	0.89%
LSV Asset Management	221,773,617	4.89%	68,950,119	7,181,802	145,641,697	3.46%
Vanguard Intl Explorer Fund	54,584,453	1.20%	16,956,741	1,234,398	36,393,314	0.87%
Domestic Fixed Income	\$1,449,853,129	31.95%	\$1,035,854	\$40,178,725	\$1,408,638,550	33.50%
Declaration	-	-	(903,501)	110,742	792,759	0.02%
Declaration Total Return	128,911,075	2.84%	(18,686)	3,775,756	125,154,005	2.98%
PIMCO DiSCO II	75,713,476	1.67%	0	1,714,600	73,998,876	1.76%
PIMCO Bravo II Fund	12,720,786	0.28%	2,447,490	847,472	9,425,824	0.22%
Prudential	115,284,748	2.54%	(80,996)	2,604,277	112,761,468	2.68%
SSgA US Govt Credit Bd Idx	205,745,183	4.53%	(17,444)	3,873,555	201,889,072	4.80%
Wells Capital	460,120,438	10.14%	(230,393)	15,511,661	444,839,170	10.58%
Western Asset Management	451,357,423	9.95%	(160,616)	11,740,662	439,777,377	10.46%
Inflation Protected	\$399,827,822	8.81%	\$185,095	\$13,936,301	\$385,706,426	9.17%
Western Asset Management	243,829,454	5.37%	(83,742)	8,972,477	234,940,719	5.59%
JP Morgan Infrastructure	71,905,950	1.58%	(196,112)	(1,023,655)	73,125,718	1.74%
Eastern Timber Opportunities	63,725,267	1.40%	(519,930)	4,111,914	60,133,283	1.43%
Grosvenor Cust. Infrastructure	20,367,151	0.45%	984,880	1,875,565	17,506,706	0.42%
Real Estate	\$212,672,760	4.69%	\$38,171,237	\$5,802,781	\$168,698,742	4.01%
Invesco Core Real Estate	79,811,896	1.76%	14,919,082	2,458,617	62,434,197	1.48%
JP Morgan RE	132,860,865	2.93%	23,252,155	3,344,164	106,264,545	2.53%
Short Term Fixed Income	\$977,063,330	21.53%	\$(205,237,768)	\$6,686,782	\$1,175,614,316	27.96%
JP Morgan Short Term Bonds	236,876,578	5.22%	4,000,000	1,098,218	231,778,360	5.51%
Babson Short Term Bonds	238,945,099	5.27%	3,916,122	1,550,023	233,478,954	5.55%
Babson Short Term - Legacy	255,376,231	5.63%	(106,653,890)	2,850,533	359,179,588	8.54%
JP Morgan Short Term - Legacy	245,865,422	5.42%	(106,500,000)	1,188,008	351,177,414	8.35%
Cash & Equivalents	\$71,888,654	1.58%	\$(43,745,601)	\$2,784	\$115,631,471	2.75%
Cash Account	71,888,654	1.58%	(43,745,601)	2,784	115,631,471	2.75%
Total Fund	\$4,537,923,298	100.0%	\$220,568,463	\$112,212,882	\$4,205,141,954	100.0%

Investment Manager Returns

The table below details the rates of return for the Sponsor's investment managers over various time periods ended June 30, 2014. 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 June 30, 2014

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Domestic Equity	4.10%	25.80%	17.27%	20.34%	7.93%
Large Cap	4.76%	26.07%	17.73%	19.57%	7.80%
Parametric Clifton Large Cap	5.41%	24.75%	16.93%	19.96%	-
L.A. Capital	4.93%	25.79%	17.16%	19.70%	9.47%
L.A. Capital Enhanced	4.90%	24.28%	17.14%	19.55%	9.34%
LSV Asset Management	4.05%	28.33%	19.09%	21.33%	9.88%
Benchmark(1)	5.12%	25.35%	16.99%	19.08%	7.89%
Small Cap	2.08%	24.79%	16.10%	22.49%	9.33%
Parametric Clifton Small Cap	2.51%	24.67%	15.76%	22.16%	-
Research Affiliates	1.60%	24.68%	16.34%	22.98%	-
Russell 2000	2.05%	23.64%	14.57%	20.21%	8.70%
International Equity	3.27%	25.76%	9.31%	12.94%	7.51%
Capital Group	2.67%	20.70%	8.58%	12.11%	7.00%
DFA International Small Cap Value	2.11%	36.58%	12.25%	16.47%	-
LSV Asset Management	4.34%	27.25%	9.54%	12.20%	-
Vanguard Intl Explorer Fund	2.53%	29.97%	9.31%	14.95%	10.06%
Benchmark(2)	4.09%	23.57%	8.10%	11.11%	7.04%
Domestic Fixed Income	2.85%	7.76%	7.48%	9.42%	6.30%
Declaration Total Return	3.02%	-	-	-	-
PIMCO DISCO II	2.32%	12.02%	-	-	-
PIMCO Bravo II Fund	9.02%	-	-	-	-
Prudential	2.31%	6.71%	6.06%	8.55%	-
Wells Capital	3.49%	10.01%	7.70%	10.19%	7.63%
Western Asset Management	2.67%	6.13%	5.69%	8.72%	5.80%
Barclays Aggregate	2.04%	4.37%	3.66%	4.85%	4.93%
SSgA US Govt Credit Bond Idx	1.92%	4.26%	-	-	-
Barclays Govt/Credit Bd	1.92%	4.28%	4.08%	5.09%	4.94%
Inflation Protected	3.62%	10.19%	5.22%	5.55%	4.67%
Western Asset Management	3.82%	10.09%	3.72%	5.09%	4.67%
JP Morgan Infrastructure	(1.41%)	9.94%	8.32%	7.37%	-
Eastern Timber Opportunities	6.88%	9.89%	5.69%	4.00%	-
Grosvenor Cust. Infrastructure	10.58%	12.90%	-	-	-
Benchmark(3)	3.60%	10.42%	4.44%	5.81%	5.37%
Real Estate	2.80%	10.45%	15.96%	12.52%	-
Invesco Core Real Estate	3.18%	10.92%	-	-	-
JP Morgan RE	2.58%	10.12%	17.19%	13.24%	-
NCREIF Total Index	2.91%	11.21%	11.32%	9.67%	8.63%
Short Term Fixed Income	0.60%	2.04%	1.19%	3.79%	-
Babson Short Term Bonds	0.66%	2.39%	-	-	-
Babson Short Term Legacy	0.87%	2.82%	-	-	-
Barclays Gov 1-3 Yr	0.27%	0.77%	0.66%	1.24%	2.72%
JP Morgan Short Term Bonds	0.47%	1.44%	-	-	-
JP Morgan Short Term - Legacy	0.36%	1.36%	-	-	-
Barclays Gov/Credit 1-3 Y	0.33%	1.14%	1.00%	1.73%	2.96%
Cash & Equivalents	0.00%	0.01%	0.17%	0.24%	1.79%
Cash Account	0.00%	0.01%	0.18%	0.24%	1.79%
90 Day Treasury Bills	0.01%	0.05%	0.07%	0.11%	1.63%
Total Fund	2.59%	8.53%	6.47%	8.70%	5.41%
Target*	2.47%	7.15%	4.70%	6.39%	5.32%

* Current Quarter Target = 31.9% Barclays Aggregate Index, 21.9% Barclays Gov 1-3 Yr, 14.2% Russell 1000 Index, 12.1% MSCI EAFE Index, 8.7% Barclays Gbl Infn-Lnked, 5.0% Russell 2000 Index, 4.7% NCREIF Total Index and 1.5% 3-month Treasury Bill.

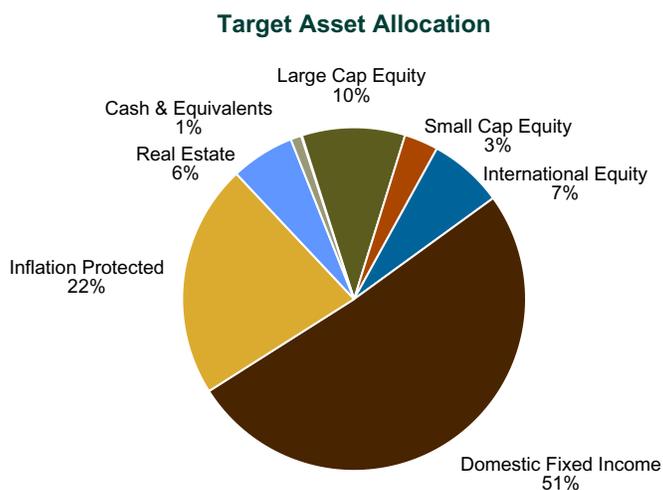
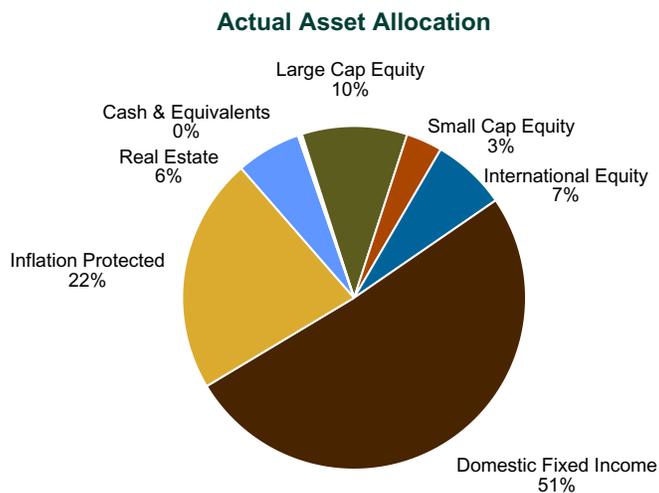
(1) S&P 500 Index through 12/31/2011 and Russell 1000 Index thereafter.

(2) MSCI EAFE through 9/30/2000; 50% Hedged EAFE through 3/31/2011 and MSCI EAFE again thereafter.

(3) Barclays US TIPS through 12/31/2009 and Barclays Global Inflation-Linked thereafter.

Actual vs Target Asset Allocation As of June 30, 2014

The first chart below shows the Fund's asset allocation as of June 30, 2014. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.



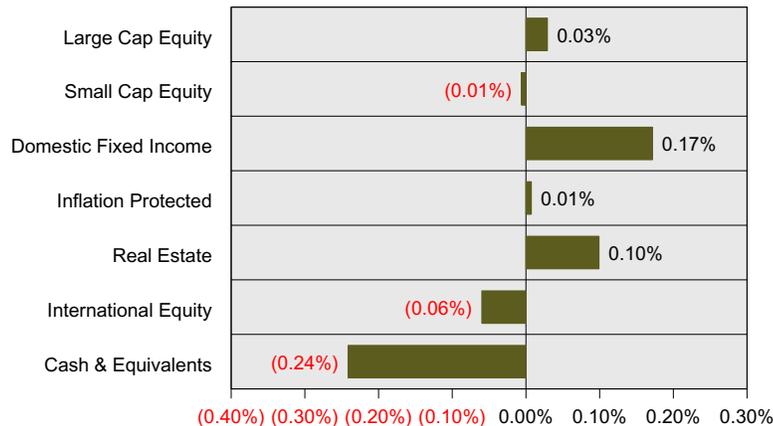
Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Large Cap Equity	169,993	10.0%	9.8%	0.2%	3,854
Small Cap Equity	57,632	3.4%	3.2%	0.1%	2,252
International Equity	118,715	7.0%	7.0%	0.0%	(564)
Domestic Fixed Income	869,574	51.0%	51.0%	0.0%	540
Inflation Protected	377,720	22.2%	22.0%	0.2%	2,842
Real Estate	103,717	6.1%	6.0%	0.1%	1,478
Cash & Equivalents	6,638	0.4%	1.0%	(0.6%)	(10,402)
Total	1,703,989	100.0%	100.0%		

* Current Quarter Target = 51.0% Barclays Aggregate Index, 22.0% Barclays Gbl Inftn-Lnked, 9.8% Russell 1000 Index, 7.0% MSCI EAFE Index, 6.0% NCREIF Total Index, 3.2% Russell 2000 Index and 1.0% 3-month Treasury Bill.

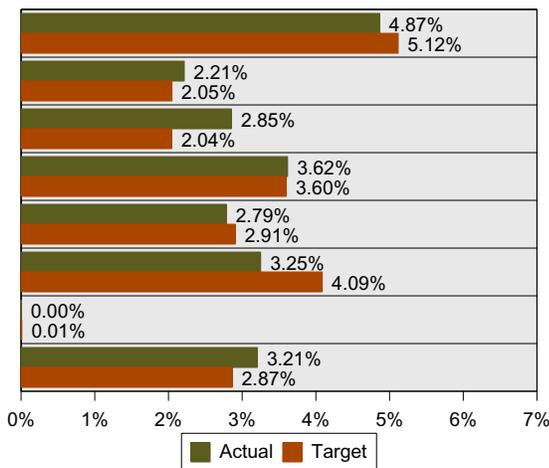
Quarterly Total Fund Relative Attribution - June 30, 2014

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: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

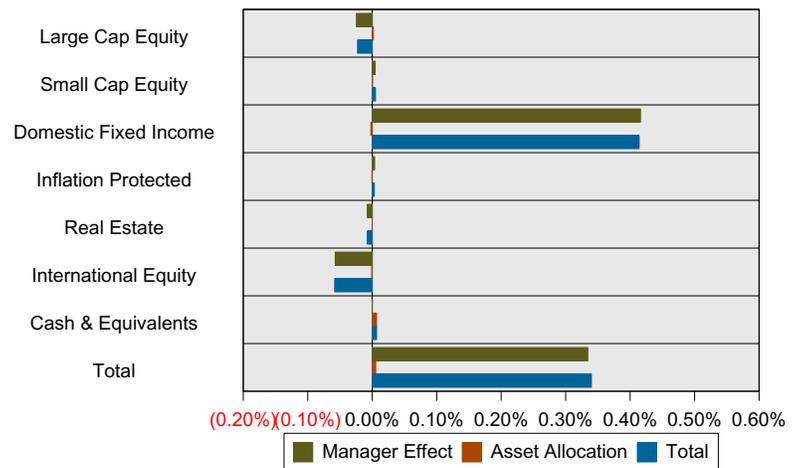
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended June 30, 2014

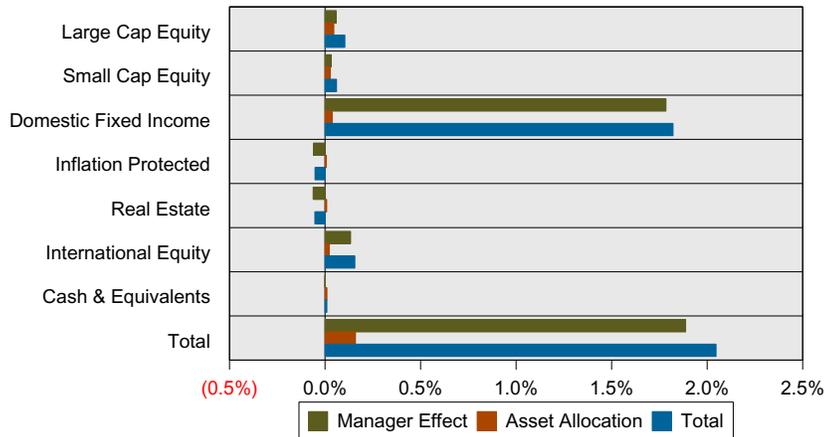
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	10%	10%	4.87%	5.12%	(0.02%)	0.00%	(0.02%)
Small Cap Equity	3%	3%	2.21%	2.05%	0.00%	0.00%	0.01%
Domestic Fixed Income	51%	51%	2.85%	2.04%	0.42%	(0.00%)	0.41%
Inflation Protected	22%	22%	3.62%	3.60%	0.00%	(0.00%)	0.00%
Real Estate	6%	6%	2.79%	2.91%	(0.01%)	0.00%	(0.01%)
International Equity	7%	7%	3.25%	4.09%	(0.06%)	(0.00%)	(0.06%)
Cash & Equivalents	1%	1%	0.00%	0.01%	(0.00%)	0.01%	0.01%
Total			3.21%	2.87%	+ 0.33%	+ 0.01%	0.34%

* Current Quarter Target = 51.0% Barclays Aggregate Index, 22.0% Barclays Gbl Inftn-Lnked, 9.8% Russell 1000 Index, 7.0% MSCI EAFE Index, 6.0% NCREIF Total Index, 3.2% Russell 2000 Index and 1.0% 3-month Treasury Bill.

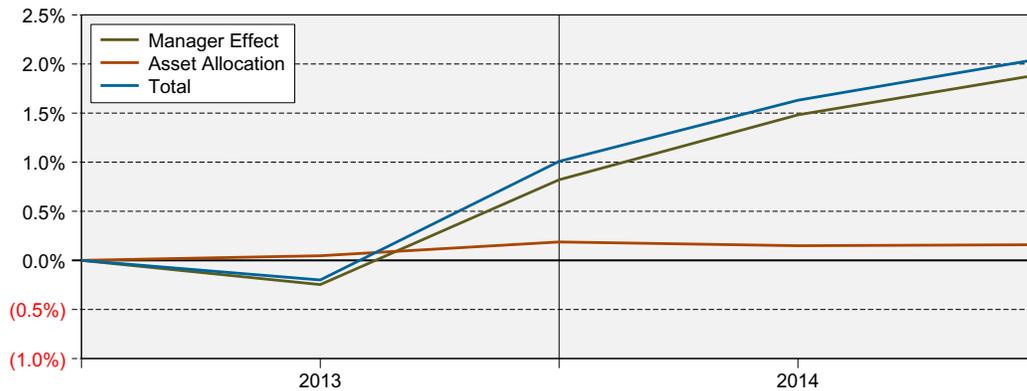
Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

One Year Relative Attribution Effects



Cumulative Relative Attribution Effects



One Year Relative Attribution Effects

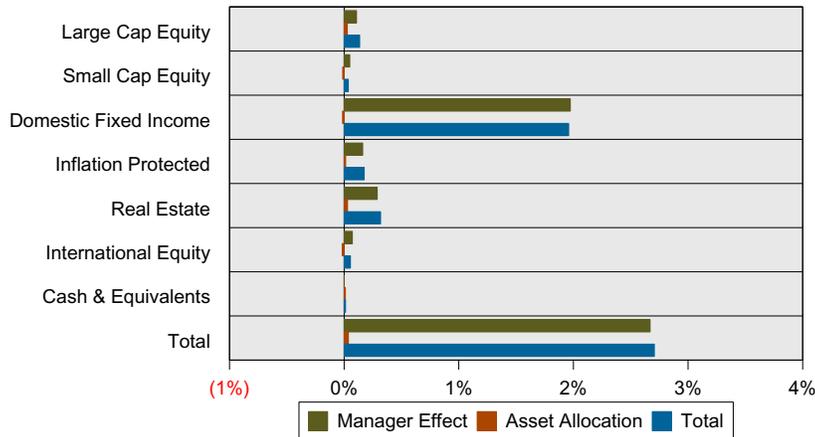
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	10%	10%	25.97%	25.35%	0.06%	0.05%	0.10%
Small Cap Equity	3%	3%	24.82%	23.64%	0.03%	0.03%	0.06%
Domestic Fixed Income	50%	51%	7.79%	4.37%	1.78%	0.04%	1.82%
Inflation Protected	21%	22%	10.19%	10.42%	(0.06%)	0.01%	(0.05%)
Real Estate	6%	6%	10.41%	11.21%	(0.06%)	0.01%	(0.05%)
International Equity	7%	7%	25.49%	23.57%	0.13%	0.02%	0.16%
Cash & Equivalents	1%	1%	0.01%	0.05%	(0.00%)	0.01%	0.01%
Total			12.00%	9.95%	+ 1.89%	+ 0.16%	2.05%

* Current Quarter Target = 51.0% Barclays Aggregate Index, 22.0% Barclays Gbl Inftn-Linked, 9.8% Russell 1000 Index, 7.0% MSCI EAFE Index, 6.0% NCREIF Total Index, 3.2% Russell 2000 Index and 1.0% 3-month Treasury Bill.

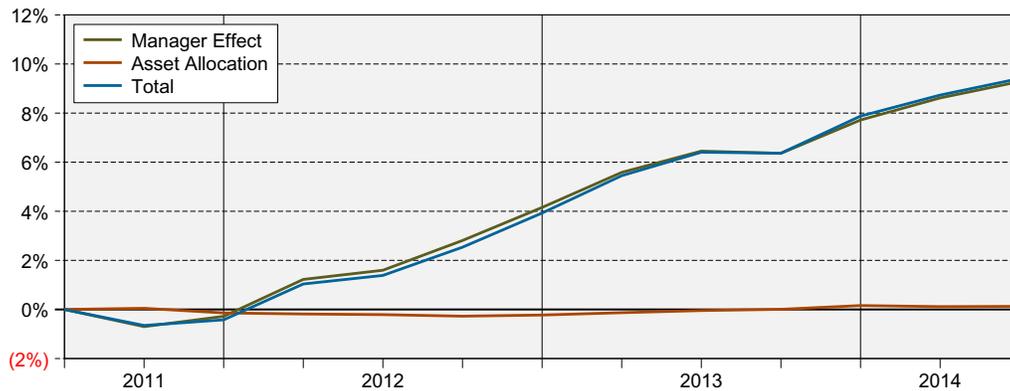
Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Three Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Three Year Annualized Relative Attribution Effects

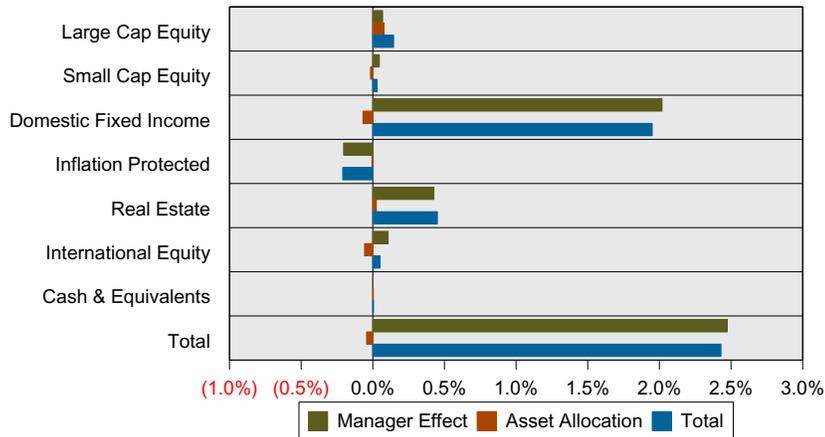
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	10%	10%	17.72%	16.63%	0.11%	0.03%	0.14%
Small Cap Equity	3%	3%	16.12%	14.57%	0.05%	(0.01%)	0.04%
Domestic Fixed Income	51%	51%	7.49%	3.66%	1.97%	(0.01%)	1.96%
Inflation Protected	21%	22%	5.23%	4.44%	0.16%	0.01%	0.18%
Real Estate	7%	6%	15.92%	11.32%	0.29%	0.03%	0.32%
International Equity	7%	7%	9.10%	8.10%	0.07%	(0.02%)	0.05%
Cash & Equivalents	1%	1%	0.18%	0.07%	0.00%	0.01%	0.01%
Total			9.02%	6.31%	+ 2.67%	+ 0.04%	2.71%

* Current Quarter Target = 51.0% Barclays Aggregate Index, 22.0% Barclays Gbl Inftn-Linked, 9.8% Russell 1000 Index, 7.0% MSCI EAFE Index, 6.0% NCREIF Total Index, 3.2% Russell 2000 Index and 1.0% 3-month Treasury Bill.

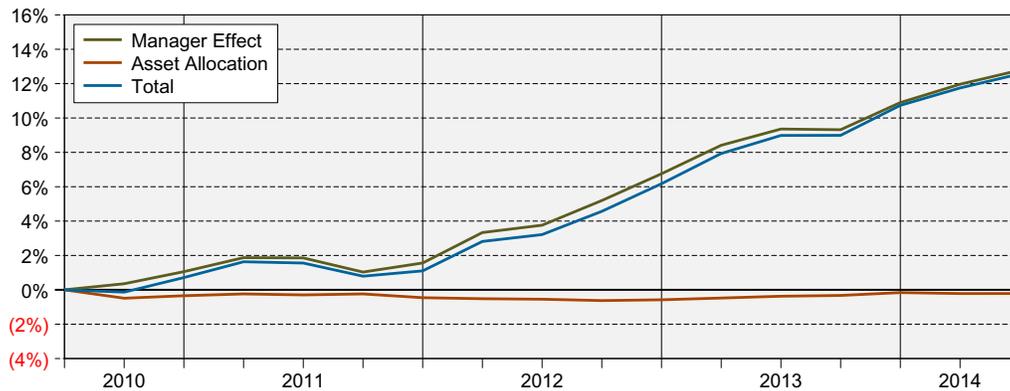
Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Four Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects

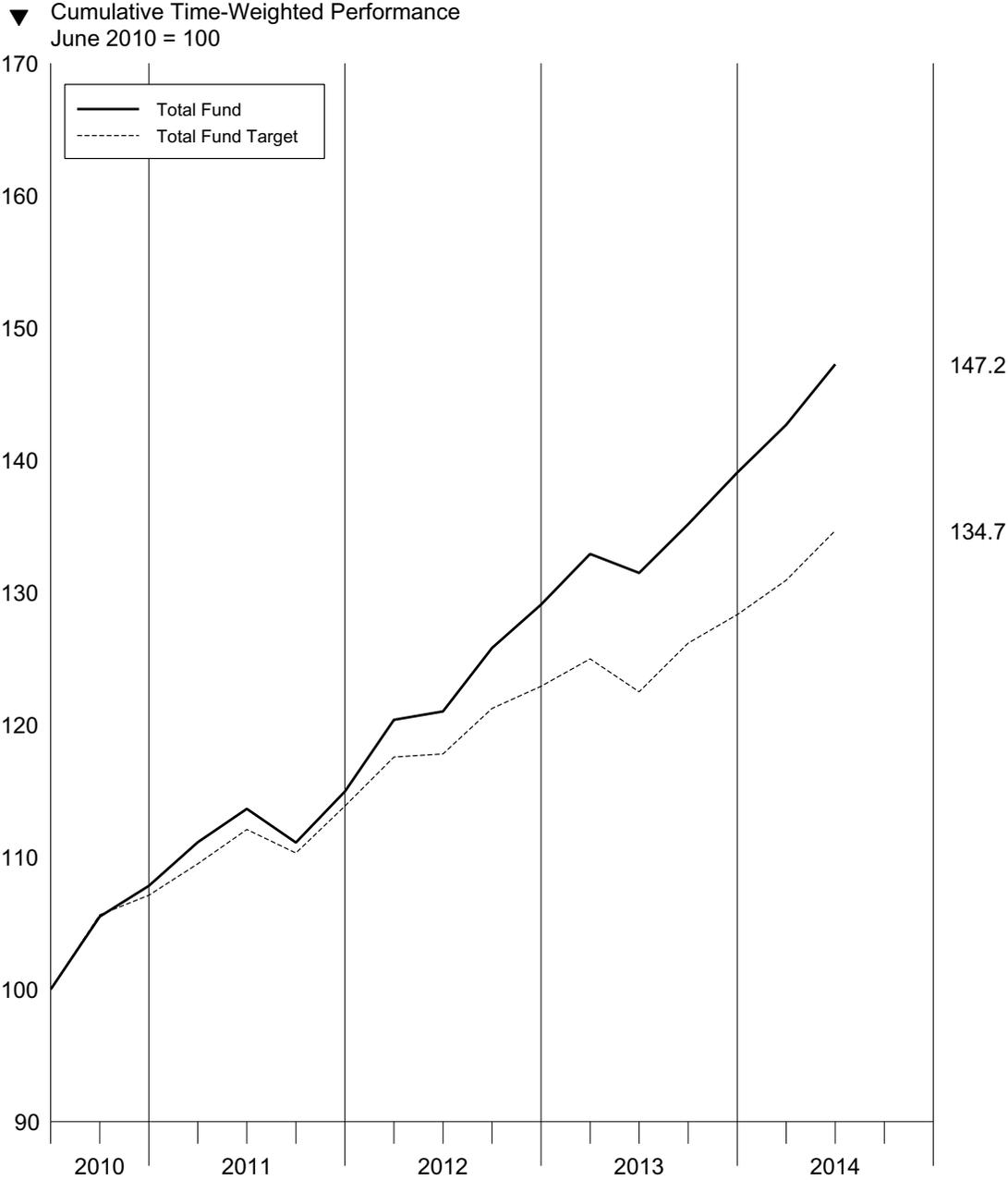


Four Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	10%	10%	20.97%	20.28%	0.07%	0.08%	0.15%
Small Cap Equity	3%	3%	21.38%	19.89%	0.05%	(0.02%)	0.03%
Domestic Fixed Income	51%	51%	7.55%	3.72%	2.02%	(0.07%)	1.95%
Inflation Protected	21%	22%	5.93%	7.00%	(0.20%)	(0.01%)	(0.21%)
Real Estate	6%	6%	19.97%	12.65%	0.43%	0.02%	0.45%
International Equity	7%	7%	13.33%	11.77%	0.11%	(0.06%)	0.05%
Cash & Equivalents	1%	1%	0.21%	0.10%	0.00%	0.00%	0.01%
Total			10.16%	7.73%	+ 2.47%	+ (0.04%)	2.43%

* Current Quarter Target = 51.0% Barclays Aggregate Index, 22.0% Barclays Gbl Inftn-Linked, 9.8% Russell 1000 Index, 7.0% MSCI EAFE Index, 6.0% NCREIF Total Index, 3.2% Russell 2000 Index and 1.0% 3-month Treasury Bill.

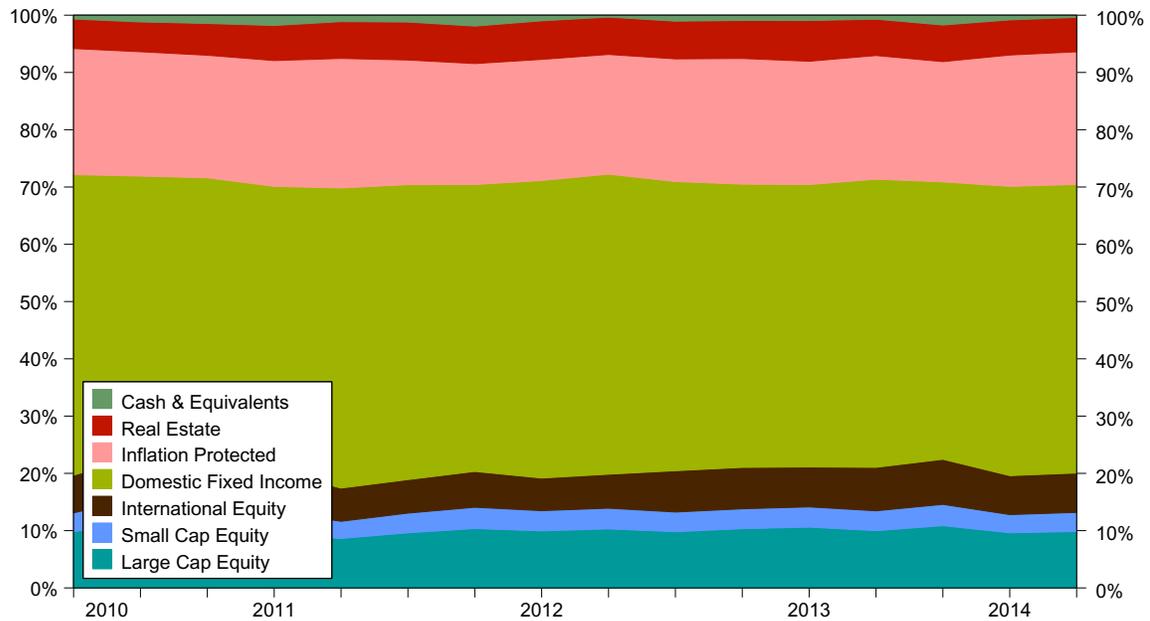
**NDSIB - Workforce Safety & Insurance
Cumulative Results**



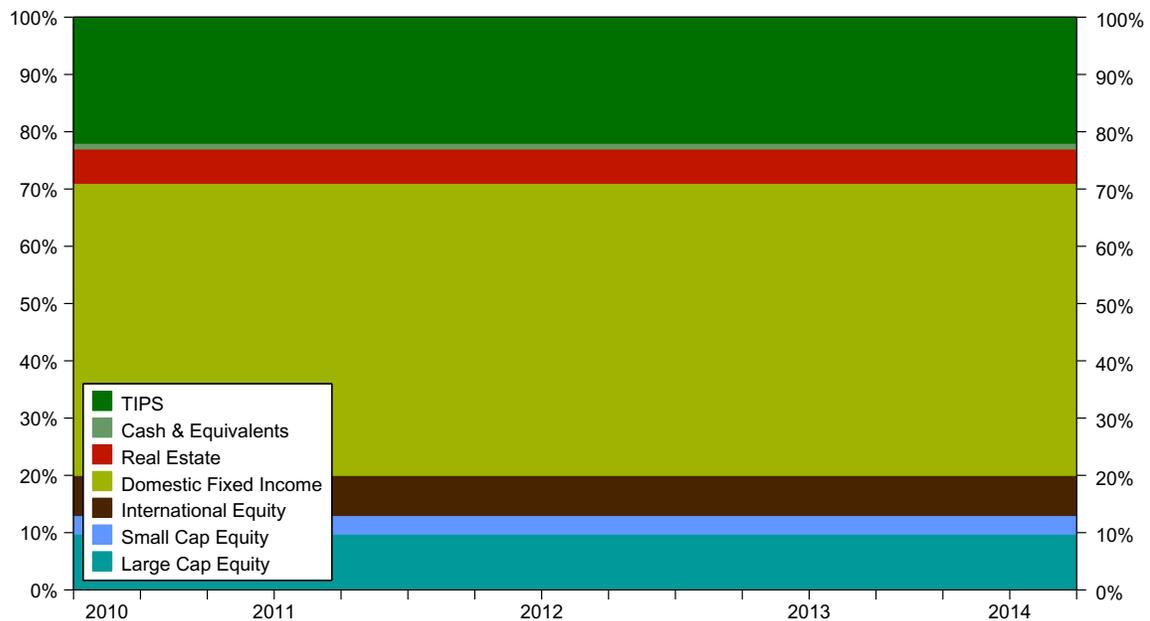
Actual vs Target Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, and the fund's historical target asset allocation.

Actual Historical Asset Allocation



Target Historical Asset Allocation

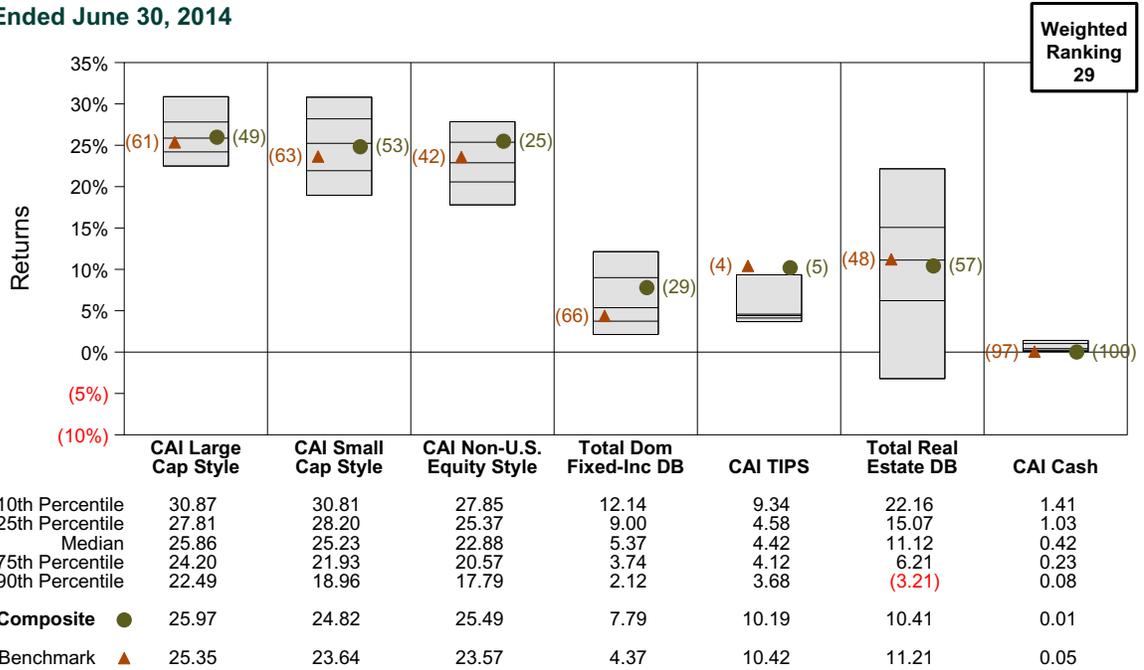


* Current Quarter Target = 51.0% Barclays Aggregate Index, 22.0% Barclays Gbl Inftn-Linked, 9.8% Russell 1000 Index, 7.0% MSCI EAFE Index, 6.0% NCREIF Total Index, 3.2% Russell 2000 Index and 1.0% 3-month Treasury Bill.

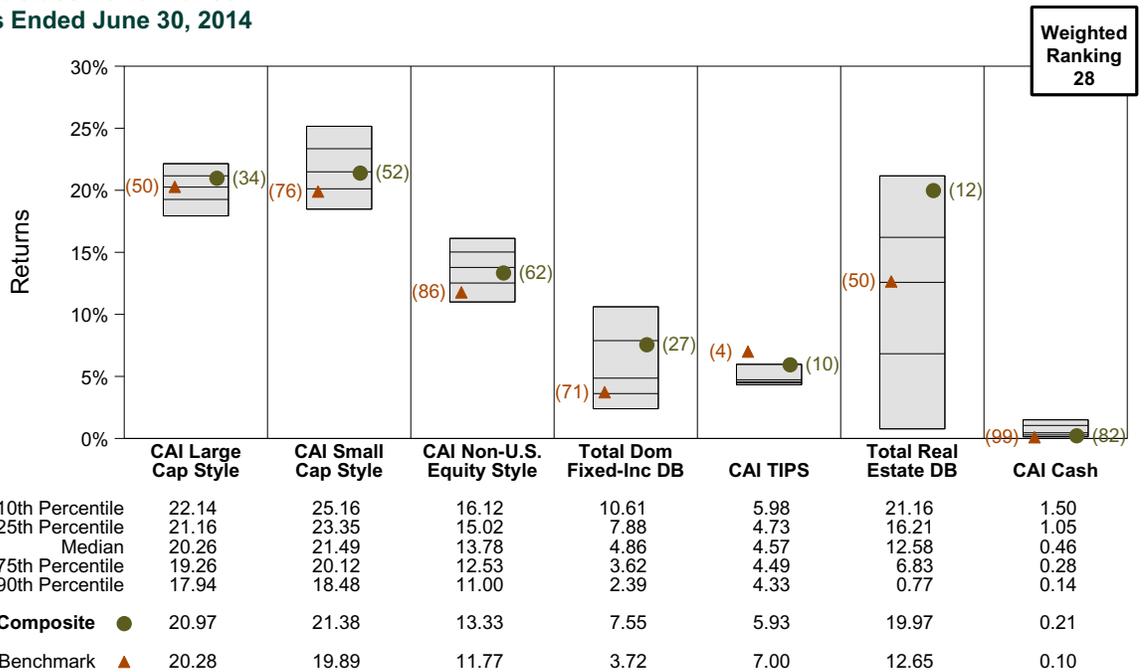
Asset Class Rankings

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 June 30, 2014



Total Asset Class Performance Four Years Ended June 30, 2014



* Current Quarter Target = 51.0% Barclays Aggregate Index, 22.0% Barclays Gbl Infn-Linked, 9.8% Russell 1000 Index, 7.0% MSCI EAFE Index, 6.0% NCREIF Total Index, 3.2% Russell 2000 Index and 1.0% 3-month Treasury Bill.

Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2014, with the distribution as of March 31, 2014. 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 Class Allocation

	June 30, 2014		Net New Inv.	Inv. Return	March 31, 2014	
	Market Value	Weight			Market Value	Weight
Large Cap Equity	\$169,992,720	9.98%	\$360,926	\$7,886,407	\$161,745,388	9.74%
Small Cap Equity	\$57,632,000	3.38%	\$2,736,051	\$1,340,464	\$53,555,486	3.22%
International Equity	\$118,714,771	6.97%	\$614,238	\$3,745,416	\$114,355,117	6.89%
Domestic Fixed Income	\$869,573,954	51.03%	\$(3,905,559)	\$24,166,125	\$849,313,388	51.14%
Inflation Protected	\$377,720,088	22.17%	\$(143,311)	\$13,172,313	\$364,691,086	21.96%
Real Estate	\$103,717,471	6.09%	\$(2,300,978)	\$2,825,604	\$103,192,844	6.21%
Cash & Equivalents	\$6,638,133	0.39%	\$(7,146,479)	\$329	\$13,784,283	0.83%
Total Fund	\$1,703,989,138	100.0%	\$(9,785,112)	\$53,136,659	\$1,660,637,591	100.0%

PLEASE REFER TO PAGE 38 FOR INVESTMENT MANAGER LEVEL ASSET ALLOCATION.

Asset Class Returns

The table below details the rates of return for the Sponsor's investment managers over various time periods ended June 30, 2014. 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 June 30, 2014

	Last Quarter	Last Year	Last 3 Years	Last 4 Years
Large Cap Equity	4.87%	25.97%	17.72%	20.97%
Benchmark(1)	5.12%	25.35%	16.99%	20.27%
Small Cap Equity	2.21%	24.82%	16.12%	21.38%
Russell 2000	2.05%	23.64%	14.57%	19.89%
International Equity	3.25%	25.49%	9.10%	13.33%
Benchmark(2)	4.09%	23.57%	8.10%	11.77%
Domestic Fixed Income	2.85%	7.79%	7.49%	7.55%
Barclays Aggregate	2.04%	4.37%	3.66%	3.72%
Inflation Protected	3.62%	10.19%	5.23%	5.93%
Barclays Gbl Inftn-Lnked	3.60%	10.42%	4.44%	7.00%
Real Estate	2.79%	10.41%	15.92%	19.97%
NCREIF Total Index	2.91%	11.21%	11.32%	12.65%
Cash & Equivalents	0.00%	0.01%	0.18%	0.21%
90 Day Treasury Bills	0.01%	0.05%	0.07%	0.10%
Total Fund	3.21%	12.00%	9.02%	10.16%
Target*	2.87%	9.95%	6.31%	7.73%

* Current Quarter Target = 51.0% Barclays Aggregate Index, 22.0% Barclays Gbl Inftn-Lnked, 9.8% Russell 1000 Index, 7.0% MSCI EAFE Index, 6.0% NCREIF Total Index, 3.2% Russell 2000 Index and 1.0% 3-month Treasury Bill.

(1) S&P 500 Index through 12/31/2011 and Russell 1000 Index thereafter.

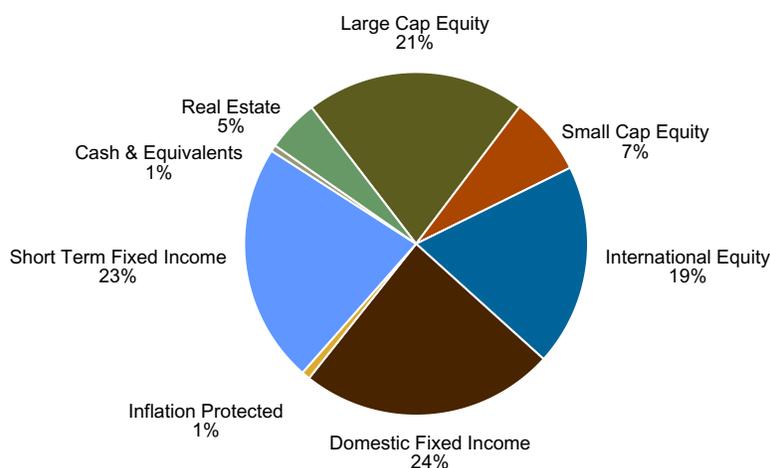
(2) MSCI EAFE through 9/30/2000; 50% Hedged EAFE through 3/31/2011 and MSCI EAFE again thereafter.

PLEASE REFER TO PAGE 39 FOR INVESTMENT MANAGER LEVEL RETURNS.

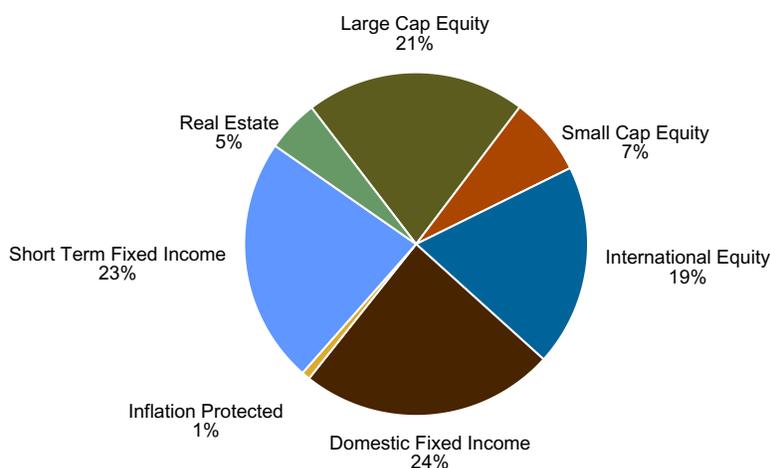
Actual vs Target Asset Allocation As of June 30, 2014

The first chart below shows the Fund's asset allocation as of June 30, 2014. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

Actual Asset Allocation



Target Asset Allocation



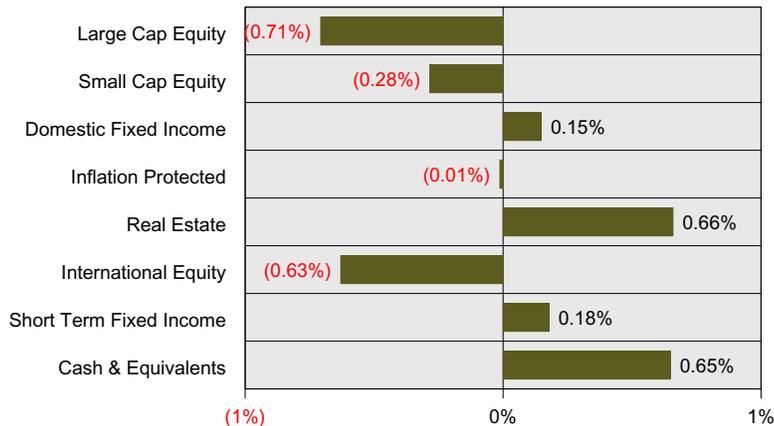
Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Large Cap Equity	458,468	20.7%	20.7%	0.0%	(232)
Small Cap Equity	163,261	7.4%	7.4%	0.0%	(719)
International Equity	421,022	19.0%	19.0%	0.0%	(7)
Domestic Fixed Income	531,032	24.0%	24.0%	0.0%	(795)
Inflation Protected	17,883	0.8%	0.8%	0.0%	156
Short Term Fixed Income	501,242	22.6%	23.2%	(0.6%)	(12,857)
Cash & Equivalents	14,139	0.6%	0.0%	0.6%	14,139
Real Estate	108,898	4.9%	4.9%	0.0%	316
Total	2,215,944	100.0%	100.0%		

* Current Quarter Target = 24.0% Barclays Aggregate Index, 23.2% Barclays Gov 1-3 Yr, 20.7% Russell 1000 Index, 19.0% MSCI EAFE Index, 7.4% Russell 2000 Index, 4.9% NCREIF Total Index and 0.8% Barclays Gbl Infn-Linkd.

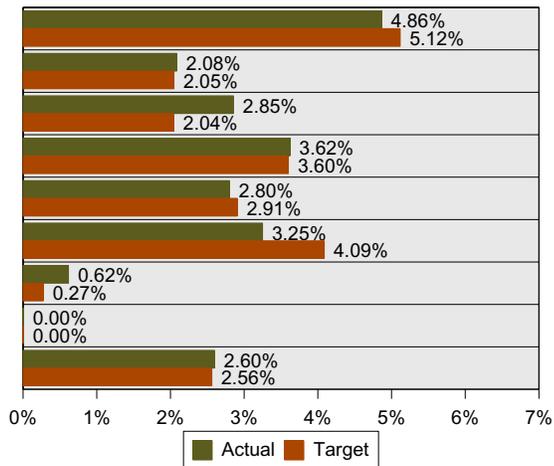
Quarterly Total Fund Relative Attribution - June 30, 2014

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: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

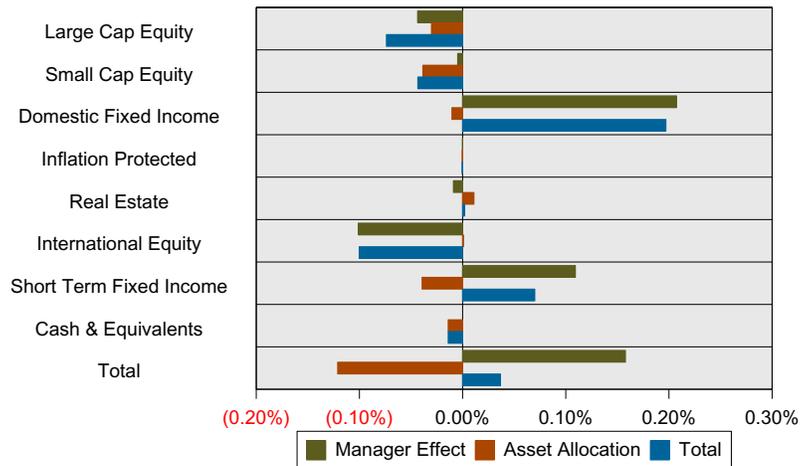
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended June 30, 2014

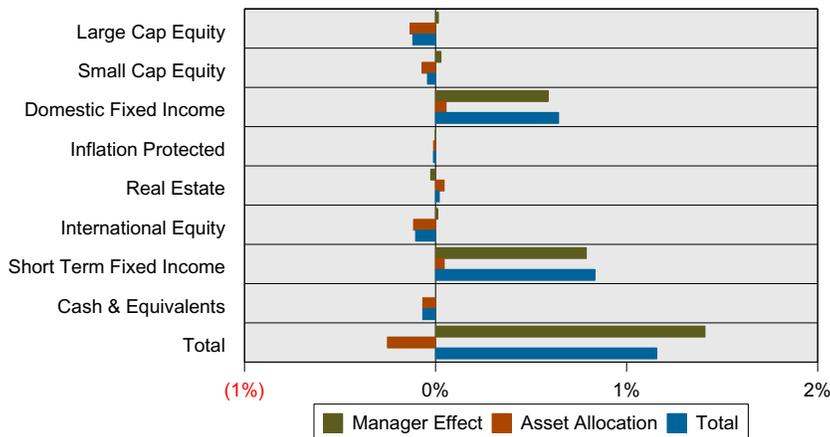
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	16%	17%	4.86%	5.12%	(0.04%)	(0.03%)	(0.07%)
Small Cap Equity	6%	6%	2.08%	2.05%	(0.00%)	(0.04%)	(0.04%)
Domestic Fixed Income	26%	25%	2.85%	2.04%	0.21%	(0.01%)	0.20%
Inflation Protected	1%	1%	3.62%	3.60%	(0.00%)	(0.00%)	(0.00%)
Real Estate	5%	5%	2.80%	2.91%	(0.01%)	0.01%	0.00%
International Equity	15%	15%	3.25%	4.09%	(0.10%)	0.00%	(0.10%)
Short Term Fixed Income	32%	31%	0.62%	0.27%	0.11%	(0.04%)	0.07%
Cash & Equivalents	1%	0%	0.00%	0.00%	0.00%	(0.01%)	(0.01%)
Total			2.60%	2.56%	+ 0.16%	+ (0.12%)	0.04%

* Current Quarter Target = 24.0% Barclays Aggregate Index, 23.2% Barclays Gov 1-3 Yr, 20.7% Russell 1000 Index, 19.0% MSCI EAFE Index, 7.4% Russell 2000 Index, 4.9% NCREIF Total Index and 0.8% Barclays Gbl Infn-Lnked.

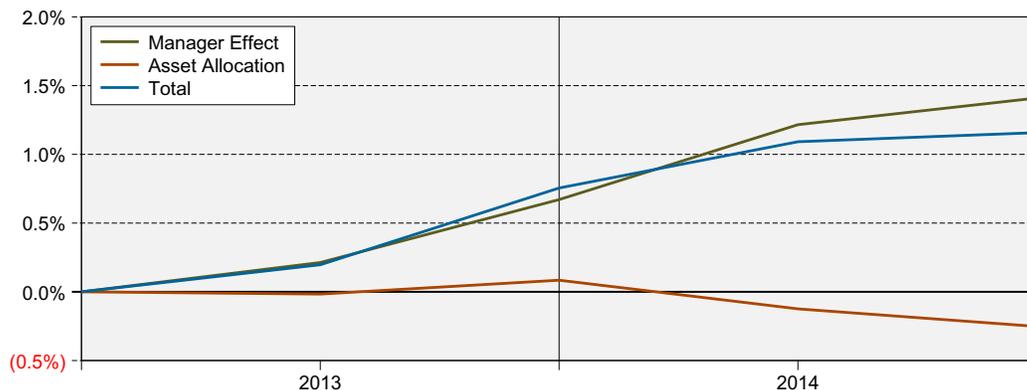
Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

One Year Relative Attribution Effects



Cumulative Relative Attribution Effects



One Year Relative Attribution Effects

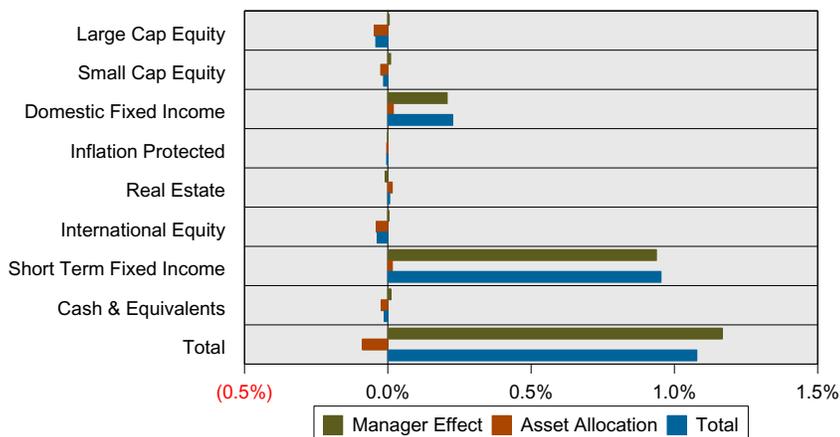
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	9%	8%	22.76%	22.12%	0.01%	(0.13%)	(0.12%)
Small Cap Equity	3%	3%	20.49%	19.09%	0.03%	(0.07%)	(0.04%)
Domestic Fixed Income	15%	14%	-	-	0.59%	0.06%	0.64%
Inflation Protected	0%	0%	-	-	(0.00%)	(0.01%)	(0.01%)
Real Estate	2%	2%	10.23%	9.37%	(0.03%)	0.04%	0.02%
International Equity	8%	8%	19.77%	18.86%	0.01%	(0.12%)	(0.10%)
Short Term Fixed Income	60%	64%	2.10%	0.77%	0.79%	0.05%	0.83%
Cash & Equivalents	1%	0%	0.02%	0.02%	0.00%	(0.07%)	(0.07%)
Total			6.82%	5.67%	1.41%	(0.25%)	1.16%

* Current Quarter Target = 24.0% Barclays Aggregate Index, 23.2% Barclays Gov 1-3 Yr, 20.7% Russell 1000 Index, 19.0% MSCI EAFE Index, 7.4% Russell 2000 Index, 4.9% NCREIF Total Index and 0.8% Barclays Gbl Infn-Lnked.

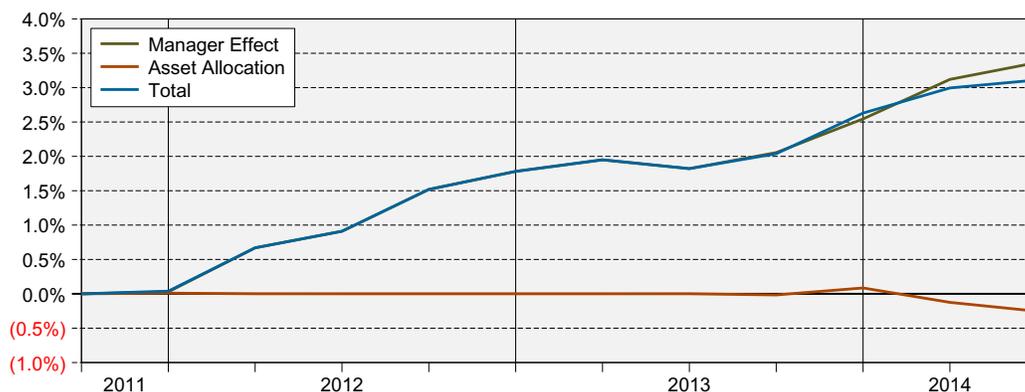
Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Two and Three-Quarter Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Two and Three-Quarter Year Annualized Relative Attribution Effects

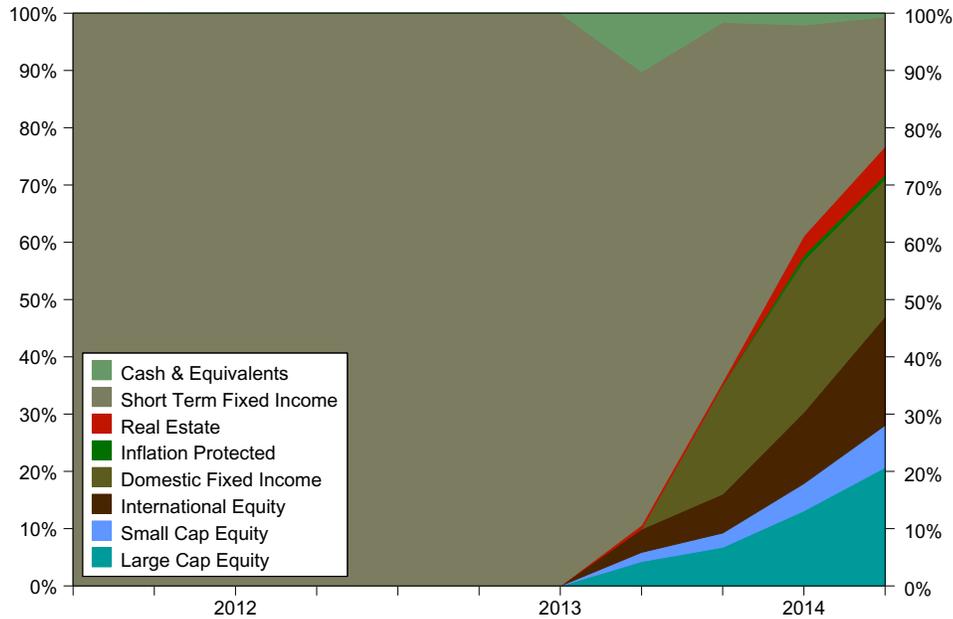
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	3%	3%	-	-	0.01%	(0.05%)	(0.04%)
Small Cap Equity	1%	1%	-	-	0.01%	(0.02%)	(0.01%)
Domestic Fixed Income	6%	5%	-	-	0.21%	0.02%	0.23%
Inflation Protected	0%	0%	-	-	(0.00%)	(0.00%)	(0.00%)
Real Estate	1%	1%	-	-	(0.01%)	0.02%	0.01%
International Equity	3%	3%	-	-	0.00%	(0.04%)	(0.04%)
Short Term Fixed Income	79%	81%	1.62%	0.49%	0.94%	0.02%	0.95%
Cash & Equivalents	8%	6%	0.14%	0.13%	0.01%	(0.02%)	(0.01%)
Total			3.32%	2.24%	1.17%	(0.09%)	1.08%

* Current Quarter Target = 24.0% Barclays Aggregate Index, 23.2% Barclays Gov 1-3 Yr, 20.7% Russell 1000 Index, 19.0% MSCI EAFE Index, 7.4% Russell 2000 Index, 4.9% NCREIF Total Index and 0.8% Barclays Gbl Inftn-Lnked.

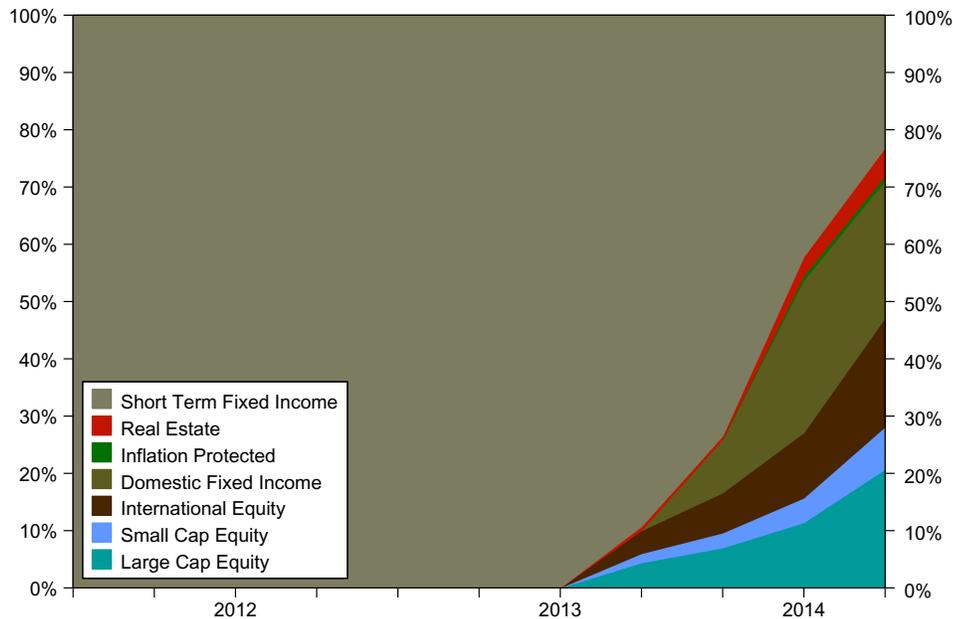
Actual vs Target Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, and the fund's historical target asset allocation.

Actual Historical Asset Allocation



Target Historical Asset Allocation

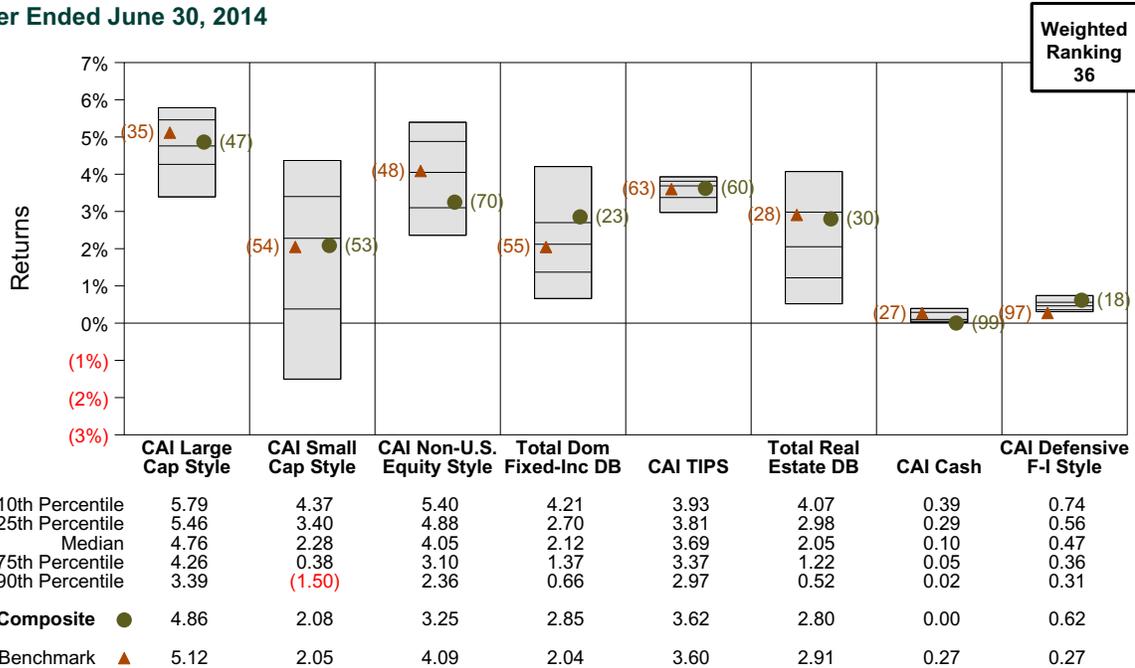


* Current Quarter Target = 24.0% Barclays Aggregate Index, 23.2% Barclays Gov 1-3 Yr, 20.7% Russell 1000 Index, 19.0% MSCI EAFE Index, 7.4% Russell 2000 Index, 4.9% NCREIF Total Index and 0.8% Barclays Gbl Inftn-Linkd.

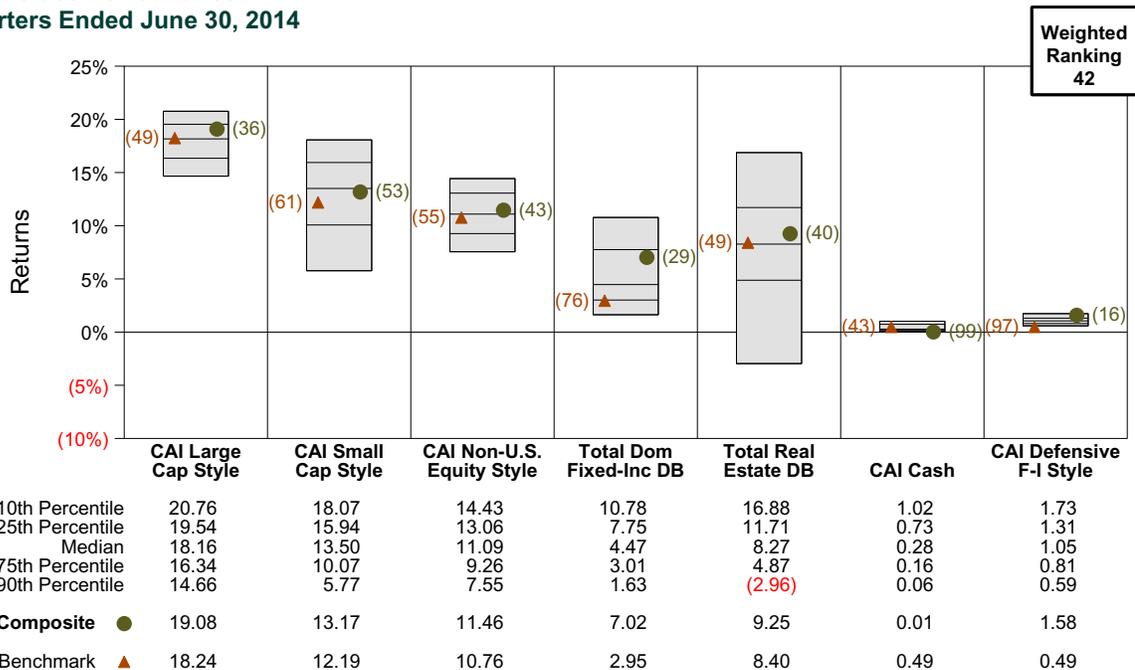
Asset Class Rankings

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 Quarter Ended June 30, 2014



Total Asset Class Performance Three Quarters Ended June 30, 2014



* Current Quarter Target = 24.0% Barclays Aggregate Index, 23.2% Barclays Gov 1-3 Yr, 20.7% Russell 1000 Index, 19.0% MSCI EAFE Index, 7.4% Russell 2000 Index, 4.9% NCREIF Total Index and 0.8% Barclays Gbl Infn-Linked.

Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2014, with the distribution as of March 31, 2014. 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 Class Allocation

	June 30, 2014		Net New Inv.	Inv. Return	March 31, 2014	
	Market Value	Weight			Market Value	Weight
Large Cap Equity	\$458,468,287	20.69%	\$188,698,945	\$16,573,808	\$253,195,534	13.12%
Small Cap Equity	\$163,261,037	7.37%	\$66,791,887	\$4,546,163	\$91,922,988	4.76%
International Equity	\$421,022,238	19.00%	\$170,594,319	\$10,000,680	\$240,427,239	12.46%
Domestic Fixed Income	\$531,031,634	23.96%	\$4,570,326	\$14,665,354	\$511,795,954	26.51%
Inflation Protected	\$17,883,247	0.81%	\$242,543	\$621,030	\$17,019,673	0.88%
Real Estate	\$108,897,735	4.91%	\$40,449,993	\$2,959,880	\$65,487,862	3.39%
Short Term Fixed Income	\$501,241,653	22.62%	\$(213,153,890)	\$4,038,541	\$710,357,002	36.80%
Cash & Equivalents	\$14,138,572	0.64%	\$(25,880,464)	\$739	\$40,018,298	2.07%
Total Fund	\$2,215,944,403	100.0%	\$232,313,659	\$53,406,194	\$1,930,224,550	100.0%

PLEASE REFER TO PAGE 38 FOR INVESTMENT MANAGER LEVEL ASSET ALLOCATION.

Asset Class Returns

The table below details the rates of return for the Sponsor's investment managers over various time periods ended June 30, 2014. 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 June 30, 2014

	Last Quarter	Last Year	Last 2-3/4 Years
Large Cap Equity	4.86%	-	-
Russell 1000 Index	5.12%	25.35%	25.30%
Small Cap Equity	2.08%	-	-
Russell 2000	2.05%	23.64%	26.88%
International Equity	3.25%	-	-
MSCI EAFE Index	4.09%	23.57%	17.54%
Domestic Fixed Income	2.85%	-	-
Barclays Aggregate	2.04%	4.37%	2.60%
Inflation Protected	3.62%	-	-
Barclays Gbl Inftn-Lnked	3.60%	10.42%	4.91%
Real Estate	2.80%	-	-
NCREIF Total Index	2.91%	11.21%	11.09%
Short Term Fixed Income	0.62%	2.10%	-
Barclays Gov 1-3 Yr	0.27%	0.77%	0.55%
Cash & Equivalents	0.00%	0.02%	0.14%
90 Day Treasury Bills	0.01%	0.05%	0.07%
Total Fund	2.60%	6.82%	3.32%
Target*	2.56%	5.67%	2.24%

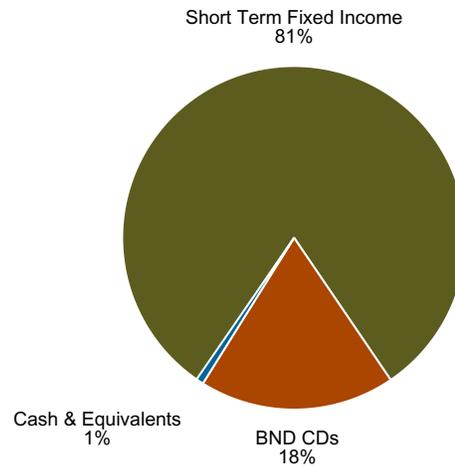
* Current Quarter Target = 24.0% Barclays Aggregate Index, 23.2% Barclays Gov 1-3 Yr, 20.7% Russell 1000 Index, 19.0% MSCI EAFE Index, 7.4% Russell 2000 Index, 4.9% NCREIF Total Index and 0.8% Barclays Gbl Inftn-Lnked.

PLEASE REFER TO PAGE 39 FOR INVESTMENT MANAGER LEVEL RETURNS.

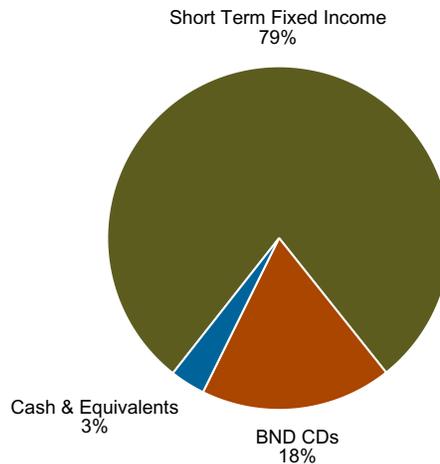
Actual vs Target Asset Allocation As of June 30, 2014

The first chart below shows the Fund's asset allocation as of June 30, 2014. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

Actual Asset Allocation



Target Asset Allocation



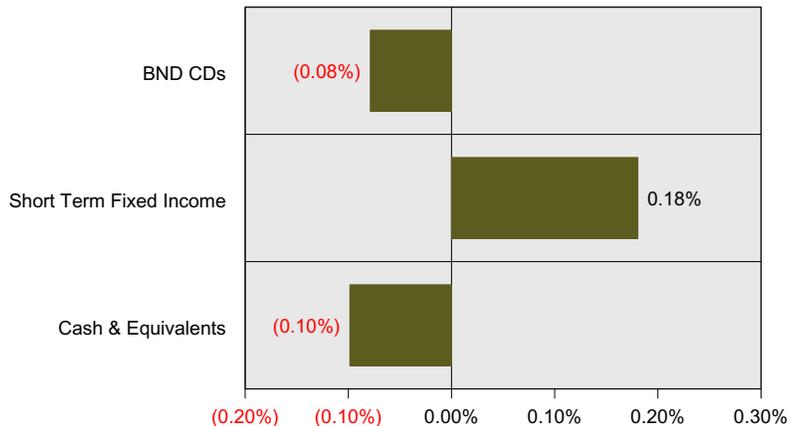
Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Short Term Fixed Income	474,605	81.0%	78.7%	2.3%	13,559
BND CDs	107,607	18.4%	18.0%	0.3%	1,974
Cash & Equivalents	3,987	0.7%	3.3%	(2.6%)	(15,475)
Total	586,200	100.0%	100.0%		

* Current Quarter Target = 78.6% Barclays Gov 1-3 Yr, 18.0% 3-month Treasury Bill and 3.3% 3-month Treasury Bill.

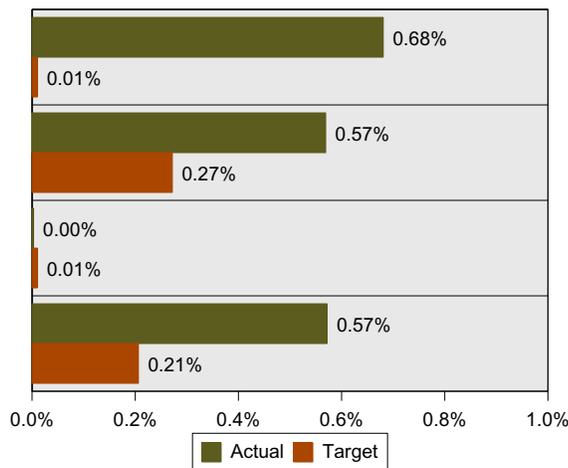
Quarterly Total Fund Relative Attribution - June 30, 2014

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: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

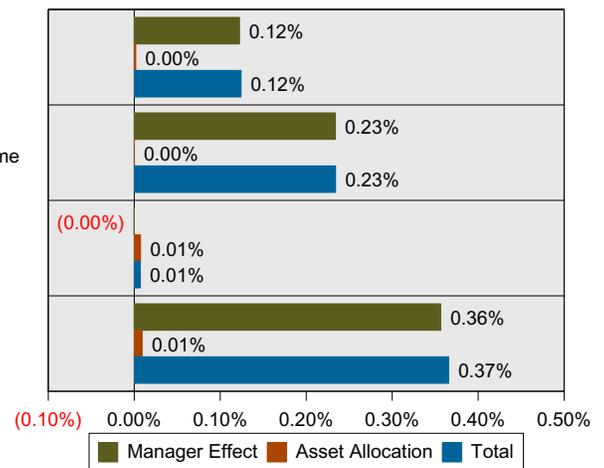
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended June 30, 2014

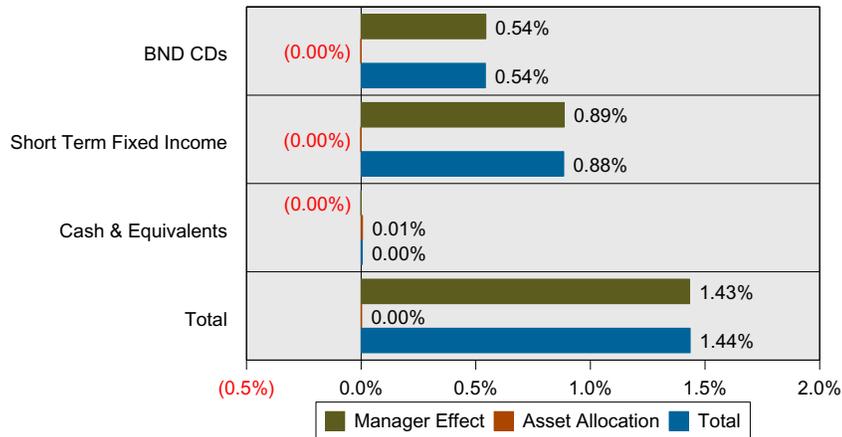
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
BND CDs	18%	18%	0.68%	0.01%	0.12%	0.00%	0.12%
Short Term Fixed Income	79%	79%	0.57%	0.27%	0.23%	0.00%	0.23%
Cash & Equivalents	3%	3%	0.00%	0.01%	(0.00%)	0.01%	0.01%
Total			0.57%	0.21%	+ 0.36%	+ 0.01%	0.37%

* Current Quarter Target = 78.6% Barclays Gov 1-3 Yr, 18.0% 3-month Treasury Bill and 3.3% 3-month Treasury Bill.

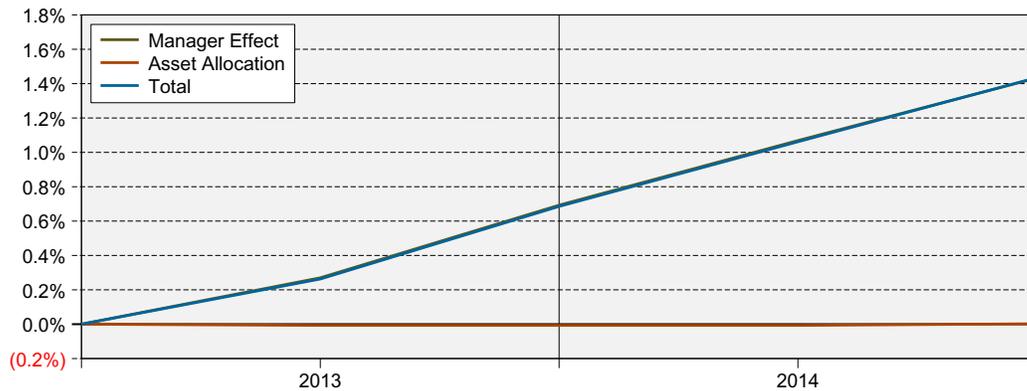
Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

One Year Relative Attribution Effects



Cumulative Relative Attribution Effects



One Year Relative Attribution Effects

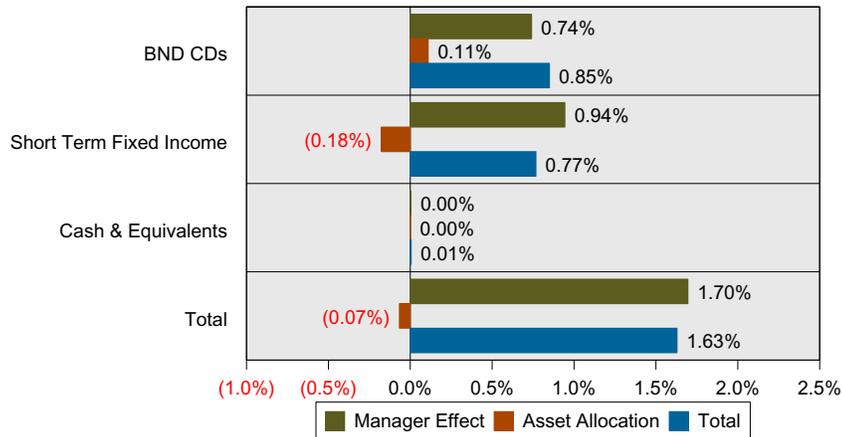
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
BND CDs	20%	21%	2.81%	0.05%	0.54%	(0.00%)	0.54%
Short Term Fixed Income	78%	77%	1.92%	0.77%	0.89%	(0.00%)	0.88%
Cash & Equivalents	2%	2%	0.01%	0.05%	(0.00%)	0.01%	0.00%
Total			2.04%	0.61%	+ 1.43%	+ 0.00%	1.44%

* Current Quarter Target = 78.6% Barclays Gov 1-3 Yr, 18.0% 3-month Treasury Bill and 3.3% 3-month Treasury Bill.

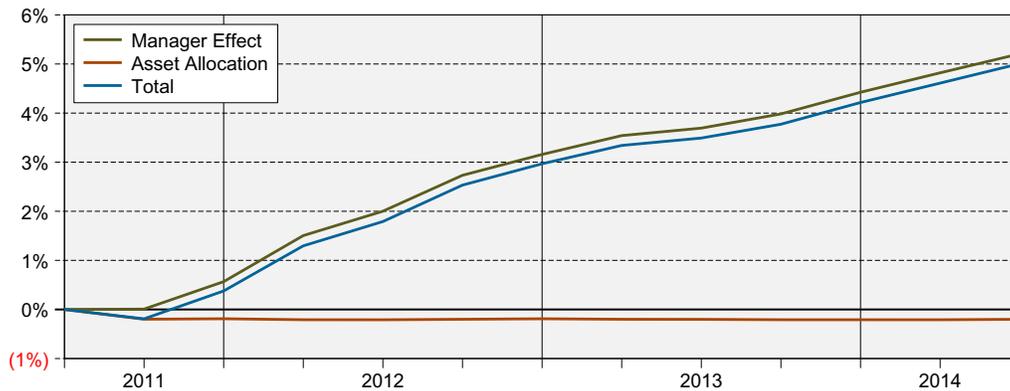
Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Three Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Three Year Annualized Relative Attribution Effects

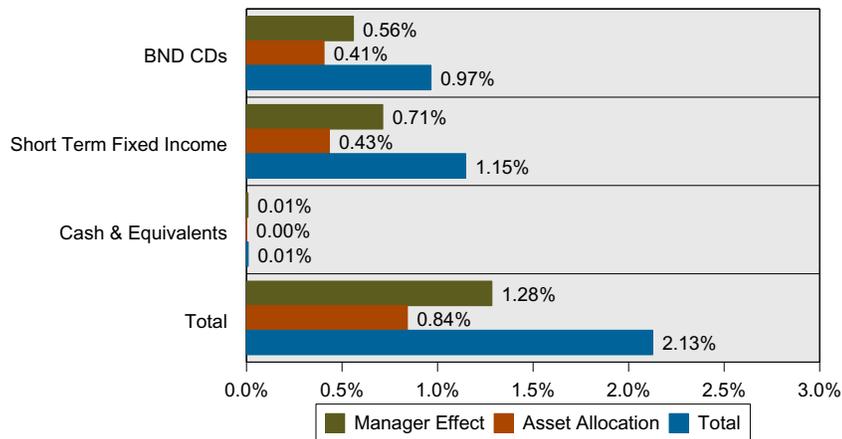
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
BND CDs	24%	21%	3.63%	0.43%	0.74%	0.11%	0.85%
Short Term Fixed Income	73%	68%	1.45%	0.19%	0.94%	(0.18%)	0.77%
Cash & Equivalents	3%	10%	0.18%	0.07%	0.00%	0.00%	0.01%
Total			2.03%	0.40%	+ 1.70%	+ (0.07%)	1.63%

* Current Quarter Target = 78.6% Barclays Gov 1-3 Yr, 18.0% 3-month Treasury Bill and 3.3% 3-month Treasury Bill.

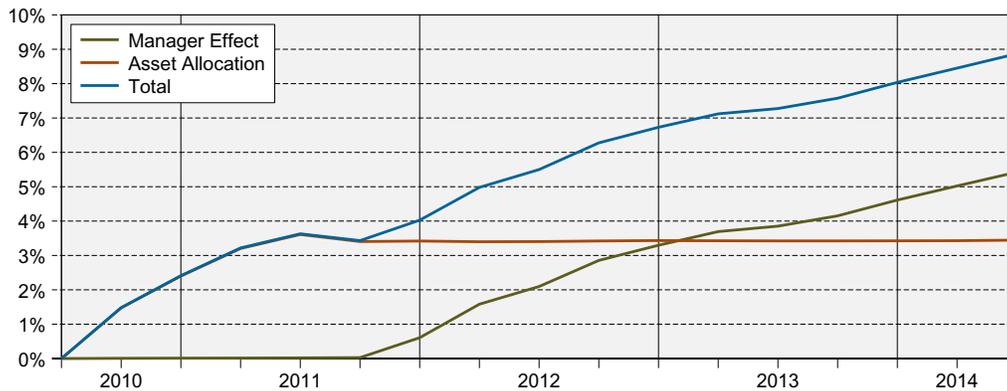
Cumulative Total Fund Relative Attribution - June 30, 2014

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 asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Four Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects

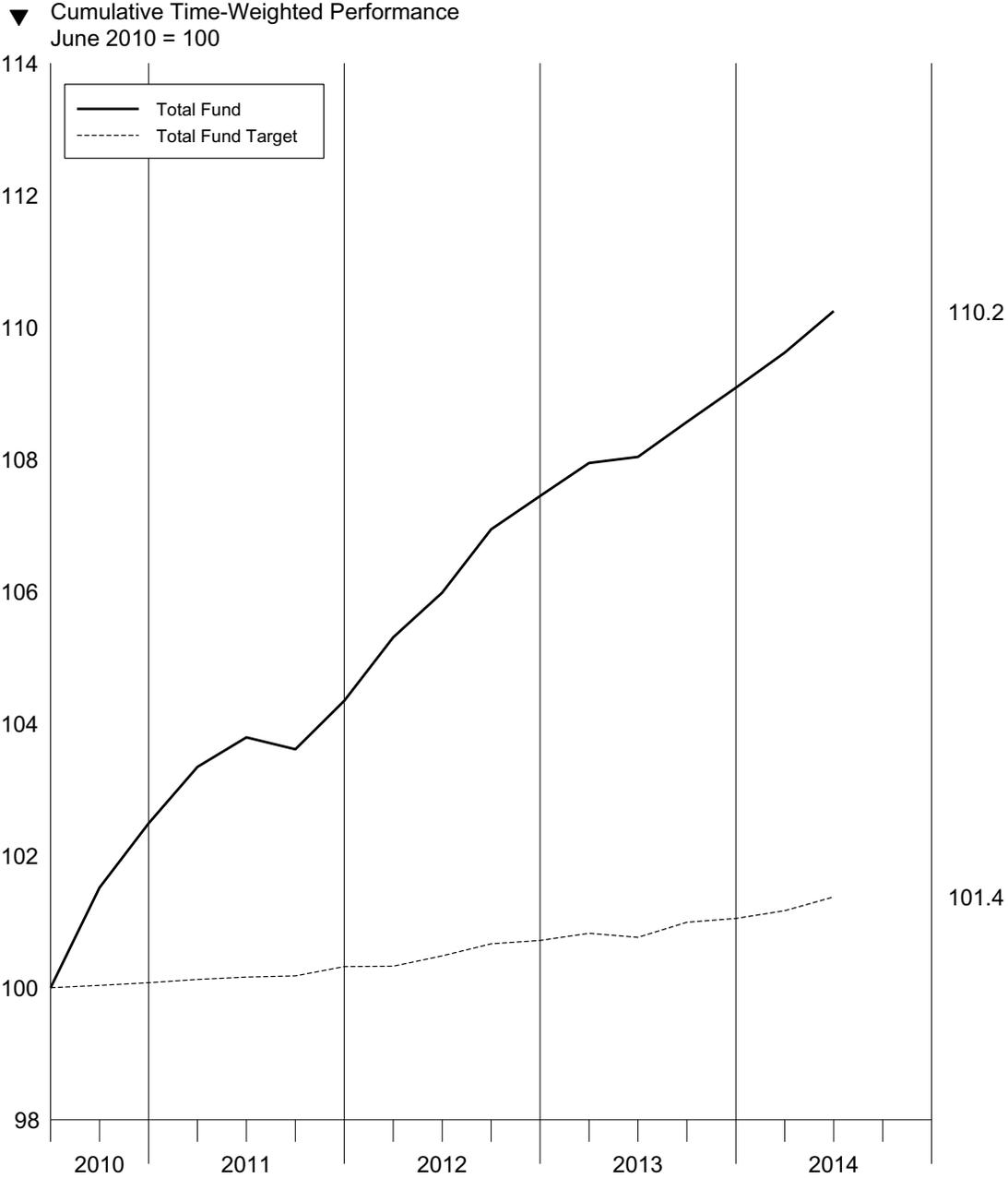


Four Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
BND CDs	26%	16%	3.82%	1.41%	0.56%	0.41%	0.97%
Short Term Fixed Income	69%	51%	2.10%	1.15%	0.71%	0.43%	1.15%
Cash & Equivalents	5%	33%	0.21%	0.10%	0.01%	0.00%	0.01%
Total			2.47%	0.34%	1.28%	0.84%	2.13%

* Current Quarter Target = 78.6% Barclays Gov 1-3 Yr, 18.0% 3-month Treasury Bill and 3.3% 3-month Treasury Bill.

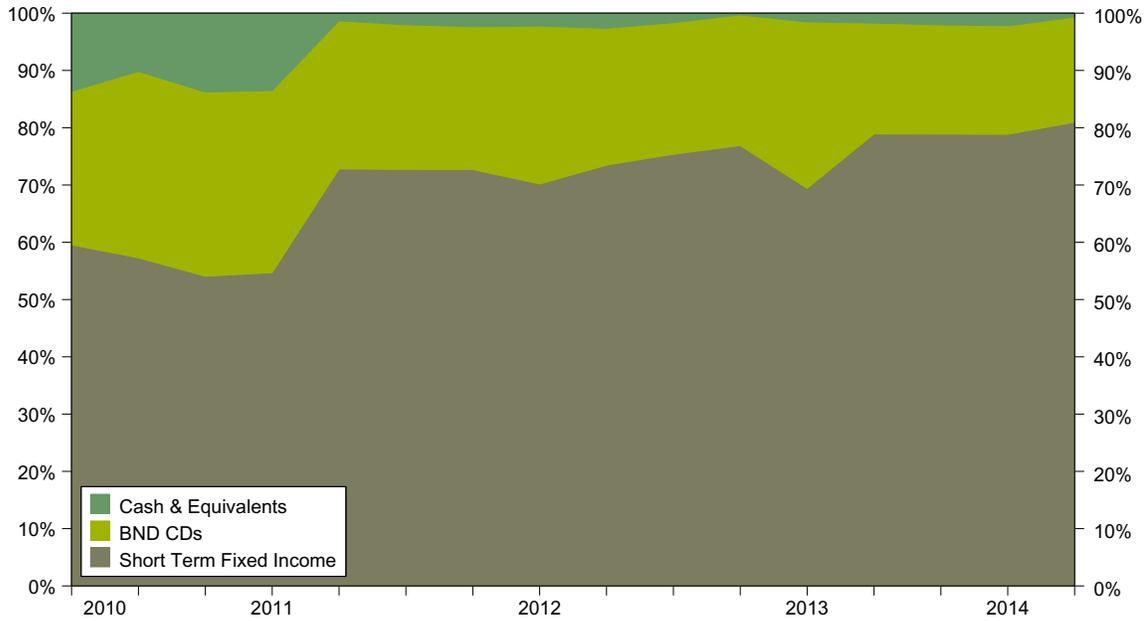
**NDSIB - Budget Stabilization Fund
Cumulative Results**



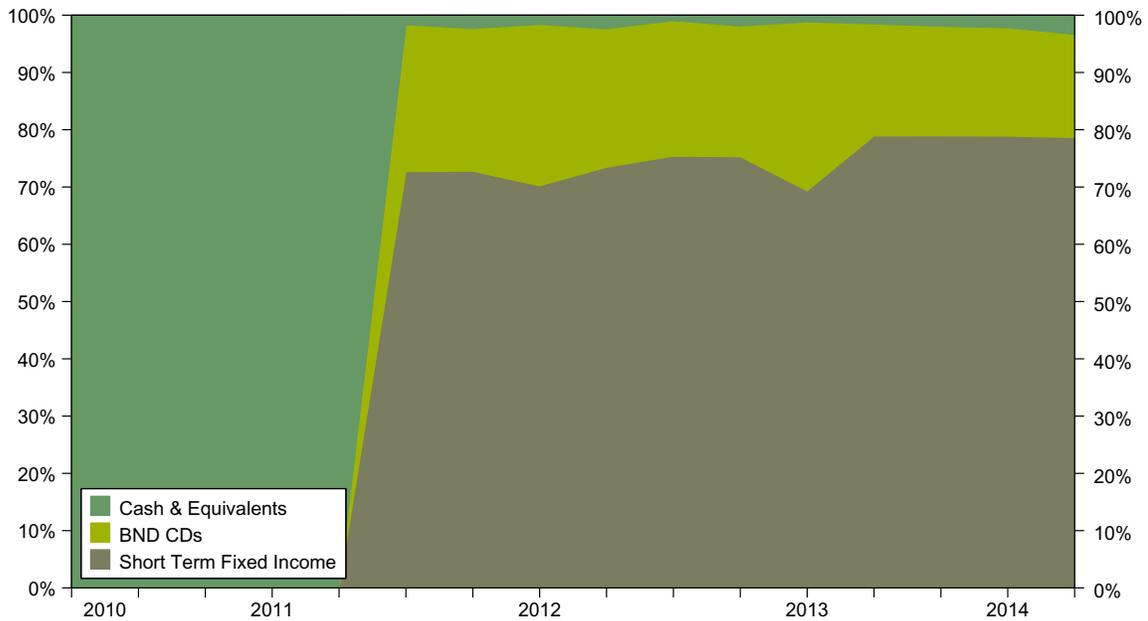
Actual vs Target Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, and the fund's historical target asset allocation.

Actual Historical Asset Allocation



Target Historical Asset Allocation



* Current Quarter Target = 78.6% Barclays Gov 1-3 Yr, 18.0% 3-month Treasury Bill and 3.3% 3-month Treasury Bill.

Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2014, with the distribution as of March 31, 2014. 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 Class Allocation

	June 30, 2014		Net New Inv.	Inv. Return	March 31, 2014	
	Market Value	Weight			Market Value	Weight
Short Term Fixed Income	\$474,605,355	80.96%	\$6,705,340	\$2,642,701	\$465,257,314	78.84%
BND CDs	\$107,607,396	18.36%	\$(4,965,379)	\$727,481	\$111,845,294	18.95%
Cash & Equivalents	\$3,987,080	0.68%	\$(9,045,400)	\$468	\$13,032,011	2.21%
Total Fund	\$586,199,830	100.0%	\$(7,305,439)	\$3,370,651	\$590,134,619	100.0%

PLEASE REFER TO PAGE 38 FOR INVESTMENT MANAGER LEVEL ASSET ALLOCATION.

Asset Class Returns

The table below details the rates of return for the Sponsor's investment managers over various time periods ended June 30, 2014. 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 June 30, 2014

	Last Quarter	Last Year	Last 3 Years	Last 4 Years
Short Term Fixed Income	0.57%	1.92%	1.45%	2.10%
Barclays Gov 1-3 Yr	0.27%	0.77%	0.66%	0.84%
BND CDs	0.68%	2.81%	3.63%	3.82%
3-month Treasury Bill	0.01%	0.05%	0.07%	0.10%
Cash & Equivalents	0.00%	0.01%	0.18%	0.21%
3-month Treasury Bill	0.01%	0.05%	0.07%	0.10%
Total Fund	0.57%	2.04%	2.03%	2.47%
Target*	0.21%	0.61%	0.40%	0.34%

* Current Quarter Target = 78.6% Barclays Gov 1-3 Yr, 18.0% 3-month Treasury Bill and 3.3% 3-month Treasury Bill.

PLEASE REFER TO PAGE 39 FOR INVESTMENT MANAGER LEVEL RETURNS.

Watch List as of August 22, 2014

Western Asset Management Company (“WAMCO”) – Staff continues to recommend that the WAMCO Mortgage Backed Securities (“MBS”) mandate (\$109 million) remain on the watch list due to significant portfolio management turnover. Staff intends to recommend this MBS strategy be replaced by either BlackRock or JPMorgan.

Pacific Investment Management Company (“PIMCO”) – Staff continues to recommend that all PIMCO strategies remain on the watch list until further notice due to senior management changes in early-2014 including Agency MBS (\$175 million), Unconstrained Bond (\$94 million), DISCO II (\$196 million) and BRAVO II (\$25 million).

Timber Investment Resources LLC (“TIR”) – The Staff continues to recommend that TIR (\$261 million) remain on the watch list due to recent performance not meeting expectations. The SIB initially approved this watch list recommendation by Staff and Callan on July 25, 2014, following a timber review. RIO conducted an onsite visit on May 27-28, 2014, and engaged with extensive discussions with the consultant community in recent months.



NDSIB Watch List

Data as of 6/30/14

TIR Teredo		\$78,633,105	
	Returns	Index ¹	Excess
1 Year	6.64	9.92	(3.28)
3 Year	3.09	6.73	(3.64)
5 Year	5.33	3.33	2.00
Inception*	10.64	6.87	3.78

*Funded 06/12/2001

TIR Springbank		\$120,851,989	
	Returns	Index ¹	Excess
1 Year	0.22	9.92	(9.70)
3 Year	(2.60)	6.73	(9.32)
5 Year	(5.35)	3.33	(8.68)
Inception*	7.61	8.35	(0.74)

*Funded 09/20/2004

TIR Eastern Timber		\$61,853,153	
	Returns	Index ¹	Excess
1 Year	9.89	10.42	(0.54)
3 Year	5.69	4.44	1.25
5 Year	4.00	6.03	(2.03)
Inception*	4.15	5.31	(1.16)

*Funded 10/14/2008

Western MBS (Pen.)		\$108,855,747	
	Returns	Index ³	Excess
1 Year	4.56	4.66	(0.10)
2 Year	1.49	1.74	(0.24)
Inception*	1.86	2.03	(0.17)

*Current Mandate started April 2012

PIMCO Disco II* (Ins.)		\$91,932,953	
	Returns	Index ⁵	Excess
1 Year	12.02	4.37	7.64
2 Year	22.09	1.81	20.28
Inception*	21.71	2.60	19.11

*Funded 10/07/2011

PIMCO Disco II (Pen.)		\$104,409,176	
	Returns	Index ⁵	Excess
1 Year	12.00	4.37	7.62
2 Year	22.08	1.81	20.27
Inception*	21.98	2.60	19.38

*Funded 10/07/2011

PIMCO Bravo II (Ins.)		\$12,720,786	
	Returns	Index ⁵	Excess
Inception*	22.09	3.78	18.31

*Funded 10/01/2013 (6th Close)

PIMCO Bravo II (Pen.)		\$12,720,786	
	Returns	Index ⁴	Excess
Inception	22.09	9.23	12.87

*Funded 10/01/2013 (6th Close)

PIMCO MBS (Pen.)		\$175,125,277	
	Returns	Index ³	Excess
1 Year	3.88	4.66	(0.78)
2 Year	1.60	1.74	(0.13)
Inception*	1.86	2.03	(0.17)

*Funded 3/31/2012

PIMCO Unconstrained* (Pen.)		\$94,065,931	
	Returns	Index ²	Excess
1 Year	1.39	0.24	1.15
2 Year	1.79	0.29	1.50
Inception*	3.20	0.31	2.89

*Funded 3/12/2012

¹ NCREIF Timberland Index

² Libor 3-Month

³ Barclays Mortgage Index

⁴ Barclays High Yield 2% Index

⁵ Barclays Aggregate Index

Note: All returns are net of fees.

Annual Certification of Compliance with Investment Guidelines

Manager	6-30-14 Certification Rec'd	Exceptions Noted
Adams Street Partners (All Funds)	7/7/2014	None noted
Babson Capital	6/30/2014	See Exception Log
Brandywine	8/6/2014	None noted *
Callan	7/24/2014	None noted
Capital Guardian	7/18/2014	None noted *
Capital International V, VI	6/30/2014	None noted
Clifton Group	6/30/2014	None noted *
Coral Momentum Fund	6/30/2014	None noted
Corsair III,IV,ND Inv LLC	6/30/2014	None noted
Declaration	7/15/2014	None noted
DFA	7/3/2014	None noted
EIG (TCW)	7/24/2014	None noted
Epoch	8/6/2014	None noted
Goldman Sachs 2006 & V	7/7/2014	None noted
Grosvenor	8/8/2014	None noted
Hearthstone II, III	8/6/2014	None noted
INVESCO (Core, II & III)	7/17/2014	None noted
Invest America (L & C & L & C II)	8/6/2014	None noted
JP Morgan	8/15/2014	None noted
LACM	7/3/2014	None noted
Loomis Sayles	7/15/2014	None noted *
LSV	7/8/2014	None noted
Matlin Patterson I, II, III	ETA 8/20 - 8/23	
Northern Trust Global Investments	6/30/2014	None noted
PIMCO	7/8/2014	None noted
Prudential (Fixed Income)	8/6/2014	None noted
Quantum Energy	6/30/2014	None noted
Quantum Resources	8/19/2014	None noted
Research Affiliates	7/15/2014	None noted
SEI	6/30/2014	None noted
State Street	8/1/2014	None noted
TIR (3 accounts)	8/7/2014	None noted
UBS	7/23/2014	None noted
Vanguard	6/30/2014	None noted
Wellington	7/28/2014	None noted
Wells Capital	7/1/2014	None noted
Western	7/7/2014	None noted

multiple accounts

Certification due date was 7/31/14.

* Manager reported exceptions previously but did not include in certification letter (see Exceptions Log).

**Investment Guideline Exceptions Log
For Fiscal Year Ended June 30, 2014**

Date Received	Manager	Guideline Exception	Cusip	Description	Manager Recommendation	Action Taken	Maturity Date	Par/Shares	Cost	Fair Value
10/17/2011	Clifton Group	Minimum Quality Issue (min BBB - currently Ba2)	75970NAK3	Renaissance Mtge	HOLD until maturity or until opp to liq	concur	8/25/2035	19,468	19,006	19,593
10/17/2011	Clifton Group	Minimum Quality Issue (min BBB - currently Ba2)	75970NAK3	Renaissance Mtge	HOLD until maturity or until opp to liq	concur	8/25/2035	19,468	17,607	19,593
1/16/2013	Clifton Group	Minimum Quality Issue (min BBB - currently B)	76110HJR1	Residential Accredi Loans, Inc.	HOLD until maturity or until opp to liq	concur	9/25/2018	202,609	210,966	207,351
2/7/2013	Loomis Sayles	Illiquid Security due to small size and structure	05462GAF1	Axtel SAB	HOLD	concur	1/31/2020	183,600	133,574	27,917
7/2/2013	Babson (Legacy Fund)	Minimum Quality Issue (min BBB - currently B)	92769VAB5	Virgin Media Finance	Continue to hold	concur	10/15/2019	100,000	114,875	105,000
5/7/2014	Capital Group	Security traded on US Exchange	SEDOL: 2208987	C-Trip	Headquartered outside US - Purchase in Int'l portfolio	concur	NA	5,200	234,182	342,680
5/7/2014	Capital Group	Security traded on US Exchange	SEDOL: B4VLR19	Ensco PLC	Headquartered outside US - Purchase in Int'l portfolio	concur	NA	21,500	1,164,737	1,049,200
5/7/2014	Capital Group	Security traded on US Exchange	SEDOL: B8W6766	Liberty Global	Headquartered outside US - Purchase in Int'l portfolio	concur	NA	24,400	1,052,840	1,067,744
5/7/2014	Capital Group	Security traded on US Exchange	SEDOL: B8W6766	Liberty Global	Headquartered outside US - Purchase in Int'l portfolio	concur	NA	10,200	434,267	446,352
8/23/2013	Brandywine	Exposure to New Zealand dollars was -0.01%		Currency exposure	Adjust exposure to prevent net short	concur	NA	NA	NA	NA
									3,382,054	3,285,429

Internal Control (SSAE 16) and Audit Reports Received for Fiscal Year 2014

Manager	Audit	Date rec'd	Opinion	Internal Controls	Notes
Adams Street					
Adams Street Direct Co-Investment	12/31/2013	3/4/2014	clean	NA - No Custody	
Non-US 1999 Primary	12/31/2013	4/29/2014	clean	NA - No Custody	
Non-US 2000 Primary	12/31/2013	4/29/2014	clean	NA - No Custody	
Non-US 2001 Primary	12/31/2013	4/29/2014	clean	NA - No Custody	
Non-US 2002 Primary	12/31/2013	4/29/2014	clean	NA - No Custody	
Non-US 2002 Secondary	12/31/2013	4/29/2014	clean	NA - No Custody	
Non-US 2003 Primary	12/31/2013	4/29/2014	clean	NA - No Custody	
Non-US 2004 Primary	12/31/2013	4/29/2014	clean	NA - No Custody	
US 1998 Primary	12/31/2013	4/29/2014	clean	NA - No Custody	
US 1998 Secondary	12/31/2013	4/29/2014	clean	NA - No Custody	
US 1999 Primary	12/31/2013	4/29/2014	clean	NA - No Custody	
US 2000 Primary	12/31/2013	4/29/2014	clean	NA - No Custody	
US 2001 Primary	12/31/2013	4/29/2014	clean	NA - No Custody	
US 2002 Primary	12/31/2013	4/29/2014	clean	NA - No Custody	
US 2003 Primary	12/31/2013	4/29/2014	clean	NA - No Custody	
BVCF IV	12/31/2013	2/28/2014	clean	NA - No Custody	
2008 Non-US Ptr Fund	12/31/2013	4/29/2014	clean	NA - No Custody	
ASP Direct 2010	12/31/2013	4/29/2014	clean	NA - No Custody	
ASP Non US Developed 2010	12/31/2013	4/29/2014	clean	NA - No Custody	
ASP Non US Emerging 2010	12/31/2013	4/29/2014	clean	NA - No Custody	
ASP US 2010	12/31/2013	4/29/2014	clean	NA - No Custody	
Callan Associates	12/31/2013	5/1/2014	clean	N/A	*BNY Mellon wanted NDA-decided not to pursue
Capital International (CIPEF V)	12/31/2013	3/28/2014	clean	N/A	
Capital International (CIPEF VI)	12/31/2013	3/28/2014	clean	N/A	
Coral Partners Momentum Fund	12/31/2013	2/6/2014	clean	N/A	
Corsair Capital III	12/31/2013	3/31/2014	clean	N/A	
Corsair Capstar (ND Investors LLC)	12/31/2013	3/31/2014	clean	N/A	
Corsair IV	12/31/2013	3/31/2014	clean	N/A	
Declaration Management (Total Return)	12/31/2013	ETA 8/31	In Progress	9/30/2013	
Dimensional Fund Advisors (both funds)	10/31/2013	8/7/2014	clean	9/30/2013	
EIG (formerly TCW)	12/31/2013	3/28/2104	clean		MGR request NDA
Goldman Sachs 2006	12/31/2013	3/18/2014	clean	N/A - annual audit only	Firm level report online
Goldman Sachs V	12/31/2013	3/18/2014	clean	N/A - annual audit only	Firm level report online
Grosvenor Customized Infastructure (Pens. & Ins.)	12/31/2013	7/1/2014	clean	6/30/2013	
Hearthstone MSII	12/31/2013	4/2/2014	clean	N/A	
Hearthstone MSIII	12/31/2013	4/2/2014	clean	N/A	
Invesco Asia RE Fund I	12/31/2013	4/7/2014	clean	9/30/2013	
Invesco Core Fund	12/31/2013	2/14/2014	clean	9/30/2013	
Invesco Fund II	12/31/2013	4/4/2014	clean	9/30/2013	
Invesco Fund III	12/31/2013	4/3/2014	clean	9/30/2013	
InvestAmerica L&C I	12/31/2013	4/3/2014	clean	N/A	
InvestAmerica L&C II	12/31/2013	4/3/2014	clean	N/A	
JP Morgan - Income & Growth	12/31/2013	3/14/2014	clean	3/31/2014	
JP Morgan - Strategic Prop	09/30/2013	11/29/2013	clean	3/31/2014	
JP Morgan - Special Situations	09/30/2013	11/29/2013	clean	3/31/2014	
JP Morgan - Alternative Prop. Fund	12/31/2013	4/21/2014	clean	3/31/2014	
JP Morgan - Emerging Markets	04/30/2013	08/15/2013	clean	3/31/2014	
JP Morgan - Greater China	12/31/2013	3/26/2014	clean	3/31/2014	
JP Morgan - Asian Infrastructure	12/31/2013	3/28/2014	clean	3/31/2014	
JP Morgan - Infrastructure (Ins.)	12/31/2013	4/1/2014	clean	3/31/2014	
JP Morgan - Greater Europe	12/31/2013	5/19/2014	clean	3/31/2014	
JP Morgan - IIF (Pension & Insurance)	12/31/2013	3/31/2014	clean	3/31/2014	
LA Capital Large Cap Alpha	12/31/2013	4/29/2014	clean	10/31/2013	
Loomis Sayles Full Discretion Fund	10/31/2013	4/19/2014	clean	N/A	Seperately Managed
Matlin Patterson I	12/31/2013	3/25/2014	clean	N/A	
Matlin Patterson II	12/31/2013	3/25/2014	clean	N/A	
Matlin Patterson III	12/31/2013	3/25/2014	clean	N/A	
Northern Trust Custodian	7/31/2013	8/14/2014	clean	9/30/2013	
Northern Trust World Ex US	7/31/2013	8/14/2014	clean	9/30/2013	
Northern Trust EM	7/31/2013	8/14/2014	clean	9/30/2013	
Northern Trust STIF	7/31/2013	8/19/2014	clean	9/30/2013	
Northern Trust Insurance Cash	7/31/2013	8/19/2014	clean	9/30/2013	
PIMCO DiSCO II	12/31/2013	3/25/2014	clean	9/30/2013	
PIMCO Unconstrained	3/31/2013	8/16/2013	clean	9/30/2013	
PIMCO Bravo II	12/31/2013	8/19/2014	clean	9/30/2013	
Quantum Energy	12/31/2013	8/13/2014	clean	9/30/2013	

Manager	Audit	Date rec'd	Opinion	Internal Controls	Notes
Quantum Resources	12/31/2013	4/10/2014	clean	N/A	
SEI (unaudited)	5/31/2013	8/15/2013	clean	7/31/2013	Gap Letter: 06/30/2014
State Street US Treasury	12/31/2013	5/16/2014	clean	3/31/2014	
State Street US Gov't/Credit Bond	12/31/2013	5/16/2014	clean	3/31/2014	Gap Letters: 12/13 & 06/2014
TIR Springbank	12/31/2013	4/1/2014	clean	N/A	
TIR Teredo	12/31/2013	3/31/2014	clean	N/A	
TIR Eastern Timberland Opp. LLC	12/31/2013	3/31/2014	clean	N/A	
UBS	6/30/2013	8/15/2014	clean	3/31/2014	
Vanguard	10/31/2012	3/3/2014	clean	N/A: N-SAR file w/ SEC	
Wellington Management	8/31/2012	8/31/2013	clean	10/31/2013	
Western Opp US \$ High Yield Security Port. (Ins.)	12/31/2013	3/31/2014	clean	6/30/2013	
Western Floating Rate High Income Fund (Ins.)	12/31/2013	3/31/2014	clean	6/30/2013	
Western Asset Management TIPS	12/31/2013	3/31/2014	clean	6/30/2013	
Western Mortgage Backed Securities Portfolio (Ins.)	12/31/2013	4/24/2014	clean	6/30/2013	

All Separately Managed Accounts

Northern Trust as Custodian

Statement on Standards for Attestation Engagement (SSAE) No. 16

A compliance audit for assessing the internal control framework on service organizations that provide critical outsourcing activities for other entities.

SSAE 16 is the reporting standard for all service auditors' reports from June 15th 2011, and beyond. SSAE 16 was preceded by SAS 70. A main difference between SSAE 16 and SAS70 is the SSAE 16 requires the management of the service company to provide written assertion to the auditor that their description accurately represents their organizational system.

N/A - SSAE 16 reviews generally apply to service organizations with a large number of transactions, such as custody services. These firms have determined that a SSAE 16 review is not necessary based on the number of transactions and types of investments held. We will continue to monitor them but concur with their determination at this time.

CALLAN COLLEGE

Bryan Summers, Assistant Vice President



Bryan M. Summers, CFA, is an Assistant Vice President in Callan's Denver Fund Sponsor Consulting office. He joined Callan in 2009. Bryan works directly with several plan sponsors and provides analytical support to the general consultants in the Denver office in a variety of areas including performance evaluation, manager research, and client projects.

Prior to joining Callan, Bryan worked at UDR, Inc., a large residential REIT. Before joining UDR he worked as a tax consultant at Deloitte, focusing on the financial services industry. He also served in the Air Force as a budget analyst supporting the military's weather satellite program.

Bryan holds an MS in Finance from the University of Utah. He graduated from the U.S. Air Force Academy with a BS in Economics and a minor in Russian. Bryan has earned the right to use the Chartered Financial Analyst designation and is a member of CFA Institute and the CFA Society of Colorado. He is also an inactive Certified Public Accountant and member of the AICPA.



Paul M. Erlendson is a Senior Vice President and Senior consultant in Callan's Denver Consulting Office. He is a member of Callan's Client Policy Review, Manager Search and Defined Contribution Committees, and is a shareholder of the firm. Paul has assisted a variety of institutional investors with a broad array of investment policy formulation, implementation, and evaluation decisions. Paul has twenty-eight years of industry experience and has been with Callan for twenty-five years.

Prior to joining Callan Associates in 1986, Paul served on the staff of a state pension system. His background also includes work in the insurance industry, and a stint as a college instructor. His commitment to education extends to participating in speaking roles at various investment forums. Paul served as a member of the Pitzer College Parent Leadership Council. Paul earned a BA and an MA from North Dakota State University.



August 22, 2014

**North Dakota
State Investment Board**

Performance Monitoring

Paul Erlendson

Senior Vice President

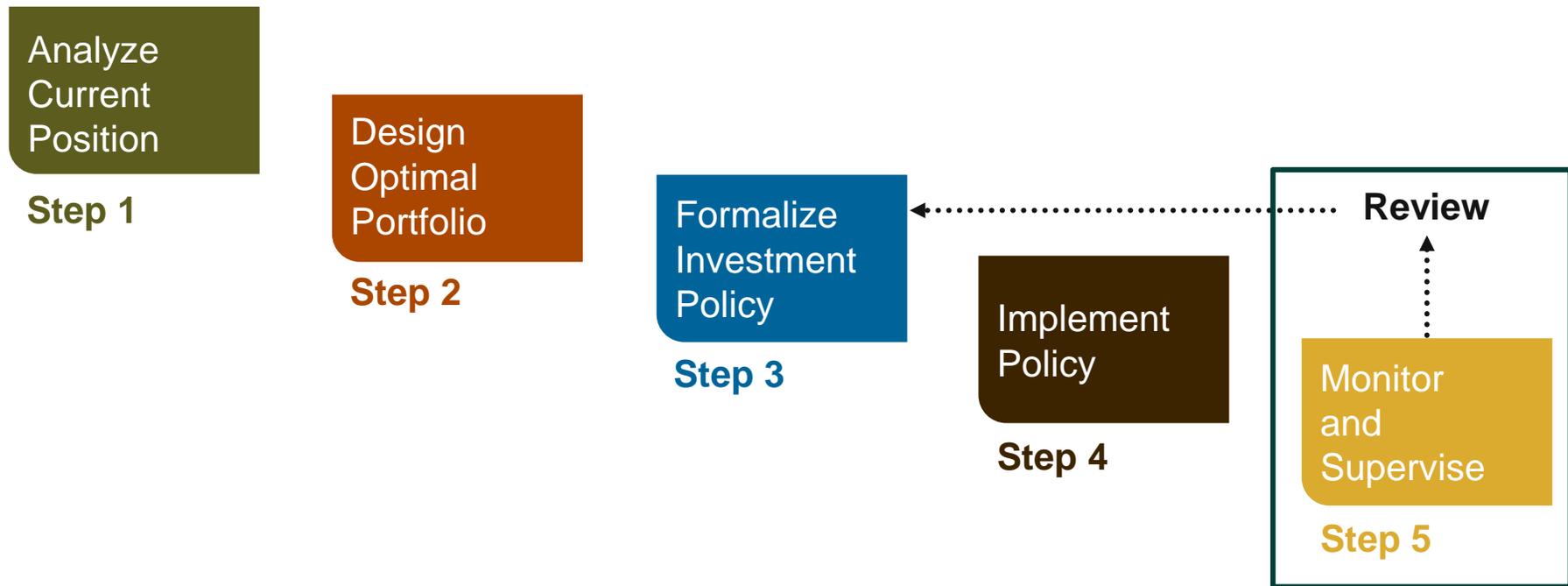
Bryan Summers, CFA

Assistant Vice President

Framing the Discussion

A Recommended Fiduciary Process for All Types of Funds

There is an increased focus on the fiduciary oversight of institutional investment programs.



- Performance monitoring is the only way to know if the plan is being managed prudently, which is required of fiduciaries by law.
- Is the plan meeting overall return objectives within its constraints? Are asset classes structured properly? Are investment managers abiding by their guidelines (as stated in the investment policy statement)?

Critical Concepts

Criteria for Effective Investment Objectives

- Unambiguous and measurable
 - *“The fund should generate returns that are commensurate with the risk assumed.”*
 - *“The fund’s performance objective is to achieve a total annualized return that matches or exceeds a policy index comprised of 70% global equities and 30% investment grade bonds over rolling 5-year periods.”*
- Specified in advance
- Actionable and attainable
 - Can an objective of outperforming a blended benchmark by 100 basis points be achieved if “active” management is not permitted?
- Reflective of governing body’s (Committee and/or Board) risk tolerance
 - Is it reasonable to expect to outperform a bond market benchmark that includes Baa bonds while not permitting the bond manager to invest in such securities?
- Consistent with the Trust’s mission

Illustrations of Good and Poor Objectives

- Good Objectives

- Achieve an investment return in excess of the policy mix's return over a five-year period.
- Generate active management performance in excess of an appropriate benchmark over a five-year time period.
- Maintain a funded ratio (assets/liabilities) in excess of 0.9 measured annually).
 - Only reasonable if liabilities and expected outflows have been specified and the fund has access to source of contributions.

- Poor Objectives

- Attain return (equal to or greater than) the actuarial rate of return.
 - May be achievable but highly dependent on short-term results and not “controllable.”
- Attain return (equal to or greater than) the S&P 500 Index + 3 percent.
 - Highly unlikely given the history of active management returns.
- No negative investment performance years.
- Attain a total fund return of the Consumer Price Index plus 5%.
 - No such investable alternative exists. Purely aspirational.

Source: [A Primer for Investment Trustees](#), Bailey, Phillips & Richards; Research Foundation of the CFA Institute, January 2011

Monitoring the Investment Program

Science

Performance Measurement

- Collect and categorize raw transaction data and market value information.
- Calculate time-weighted returns over various periods – see note.
- Calculate measures of risk and risk/reward tradeoffs.
- Compare ROR with benchmarks and appropriate style groups.
- Calculate characteristics (P/E, Beta, etc.) and attribution.

Art

Performance Evaluation

- Analyze and interpret quantitative information.
- Form judgments and make recommendations.
- Educate to foster reasonable expectations.
- Consider qualitative factors:
 - Client policies
 - Client needs and tolerances
 - Market trends
 - Changes at firm
 - Manager strategies

Certain investments, for example, private equity is most fairly evaluated through the use of “internal rate of return” (IRR) or Dollar weighted return

Common Performance Measurement Techniques

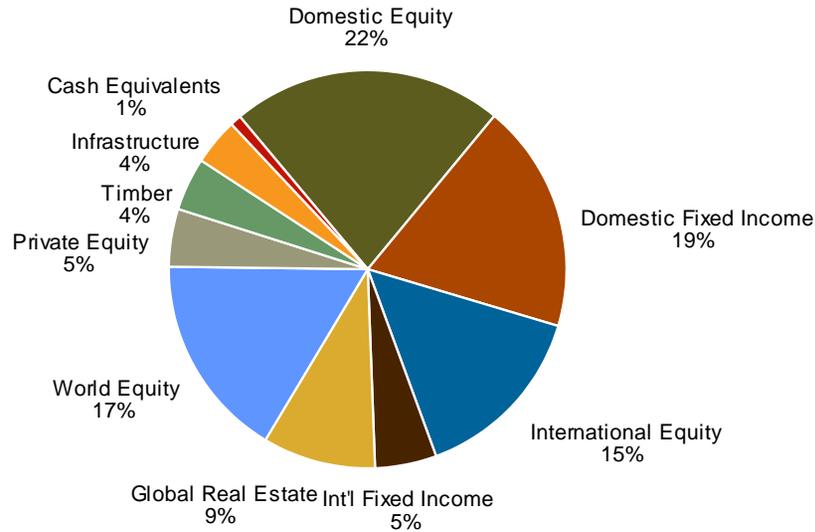
- Total fund, asset class, and manager level analysis
- Rates of return in relation to benchmark
- Rates of return in relation to a peer group median
- Risk measures and risk-adjusted returns
- Portfolio characteristics (holdings analysis)



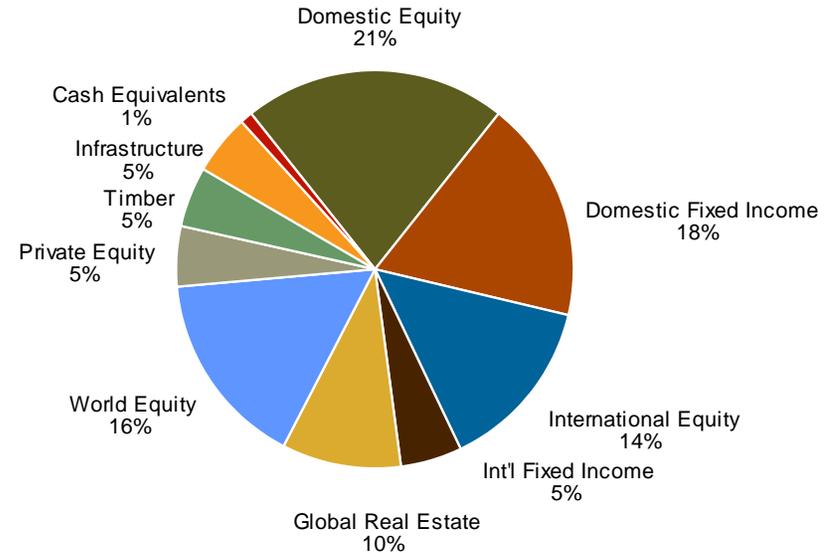
Total Fund Return Evaluation

Actual versus Policy Asset Allocation

Actual Asset Allocation



Target Asset Allocation



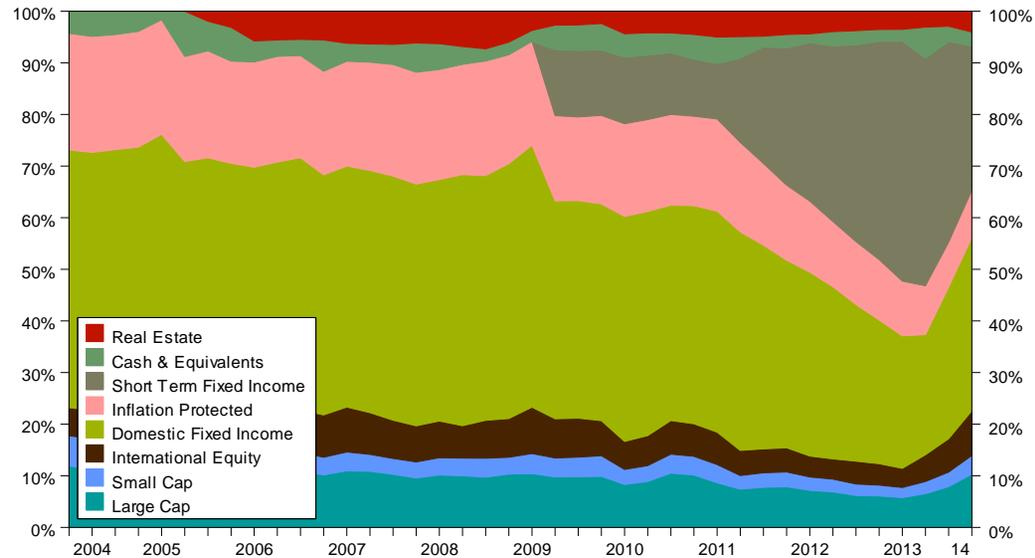
Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equity	996,984	22.1%	21.4%	0.7%	33,064
Domestic Fixed Income	838,027	18.6%	18.0%	0.6%	27,254
International Equity	667,070	14.8%	14.2%	0.6%	27,460
Int'l Fixed Income	225,476	5.0%	5.0%	0.0%	262
Global Real Estate	413,342	9.2%	9.7%	(0.5%)	(23,574)
World Equity	746,710	16.6%	16.0%	0.6%	26,023
Private Equity	209,671	4.7%	4.9%	(0.2%)	(11,039)
Timber	193,677	4.3%	4.9%	(0.6%)	(27,034)
Infrastructure	173,136	3.8%	4.9%	(1.1%)	(47,575)
Cash Equivalents	40,203	0.9%	1.0%	(0.1%)	(4,840)
Total	4,504,297	100.0%	100.0%		

- Highlight differences between actual and policy asset allocation targets
- Determine whether or not differences are reasonable and consistent with expectations (e.g., Are under allocated categories expected?)

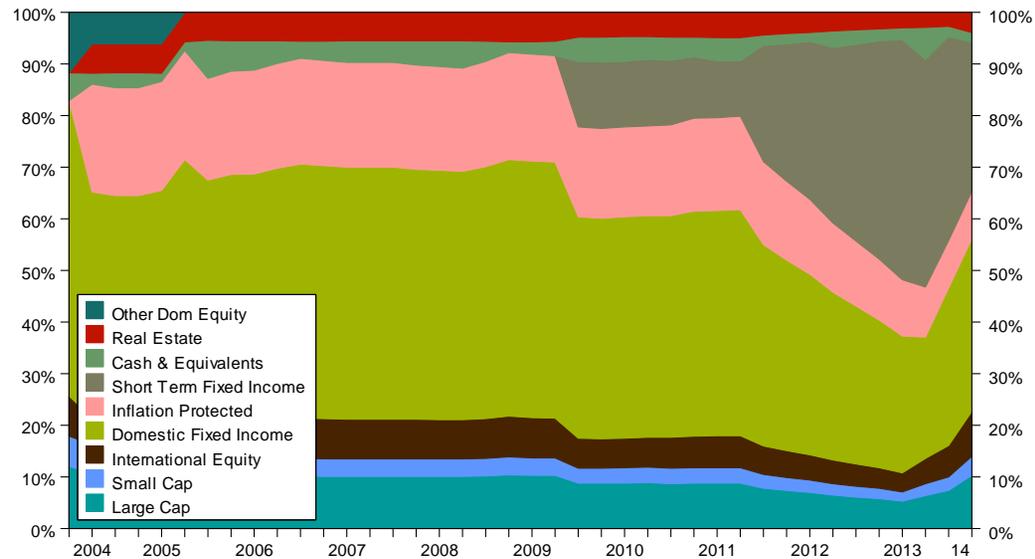
As of March 31, 2014

Total Fund Actual and Target Asset Allocation

Actual Historical Asset Allocation



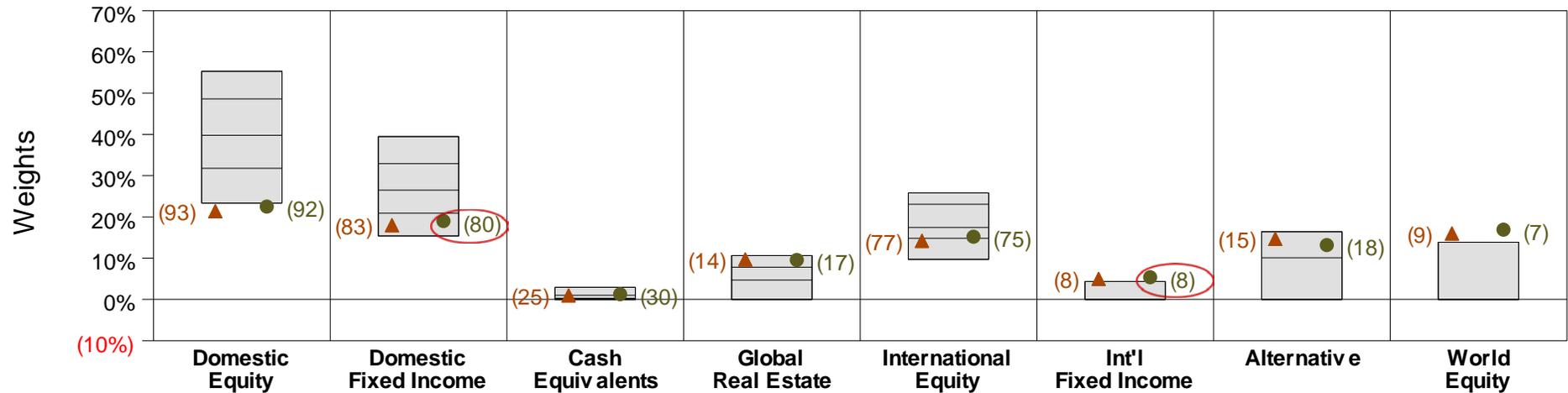
Target Historical Asset Allocation



As of March 31, 2014

How Does Our Asset Allocation Compare to Peers?

Asset Class Weights vs Public Fund Sponsor Database



	Domestic Equity	Domestic Fixed Income	Cash Equivalents	Global Real Estate	International Equity	Int'l Fixed Income	Alternative	World Equity
10th Percentile	55.30	39.48	2.93	10.63	25.81	4.36	16.39	13.88
25th Percentile	48.59	32.90	0.99	7.81	23.06	0.00	10.10	0.00
Median	39.76	26.49	0.27	4.68	17.43	0.00	0.00	0.00
75th Percentile	31.80	20.91	0.00	0.00	14.83	0.00	0.00	0.00
90th Percentile	23.32	15.38	0.00	0.00	9.71	0.00	0.00	0.00
Fund ●	22.13	18.61	0.89	9.18	14.81	5.01	12.80	16.58
Target ▲	21.40	18.00	1.00	9.70	14.20	5.00	14.70	16.00
% Group Invested	96.13%	98.06%	63.87%	59.35%	87.10%	17.42%	43.87%	22.58%

- Comparison lets the reader readily see if the current policy is similar to the public fund peer group.
- Similar comparisons can be made by plan size and/or sponsor type.
- Potential challenge is dealing with plan sponsor's preference for characterization of certain types of investments. For example, hedge funds may be considered as "Other" by most but grouped by primary return expectations (e.g., long biased hedge funds as a part of domestic equity, etc.).

As of March 31, 2014

How Did the Capital Markets Perform?

Returns as of 1Q 2014

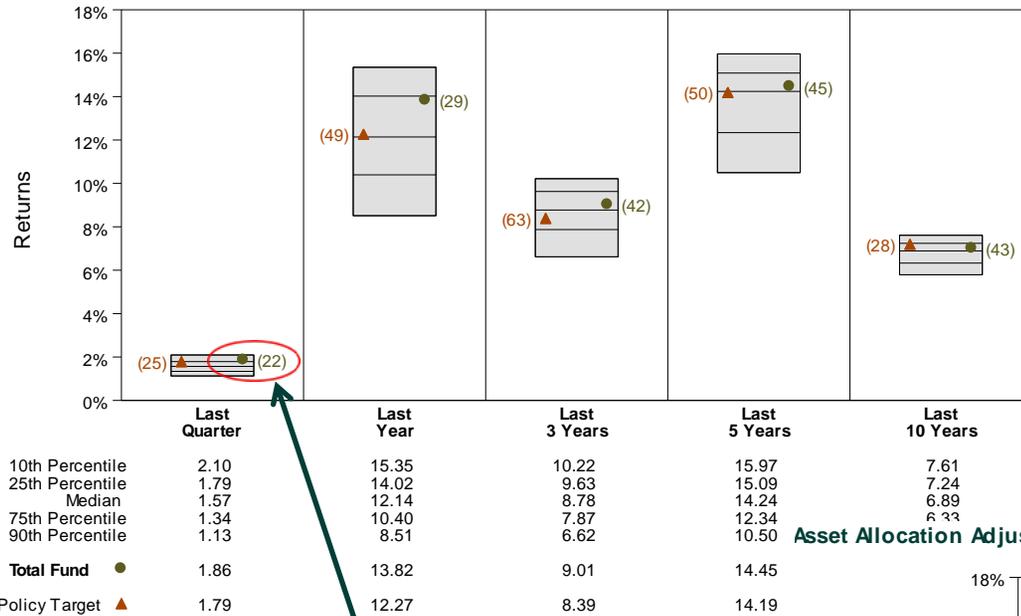
Index	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Russell 3000	2.0	22.6	14.6	21.9	7.9
Russell 1000 Growth	1.1	23.2	14.6	21.7	7.9
Russell 1000 Value	3.0	21.6	14.8	21.8	7.6
Russell 2000	1.1	24.9	13.2	24.3	8.5
MSCI EAFE	0.7	17.6	7.2	16.0	6.5
MSCI Emerging Markets	-0.4	-1.1	-2.5	14.8	10.5
BC Aggregate Bond	1.8	-0.1	3.7	4.8	4.5
Citi Non-U.S. Gov't Bond	3.2	2.4	1.4	4.1	4.3
NCREIF	2.7	11.2	11.7	7.9	8.7
NCREIF Timber	1.6	9.8	6.6	2.9	8.3

- The capital markets are the driving force behind total fund returns; alpha (or active management) can only affect total fund returns at the margins.
- This is why a plan's strategic asset allocation is so important and why understanding the performance of the markets is vital in assessing total fund, asset class and manager returns.

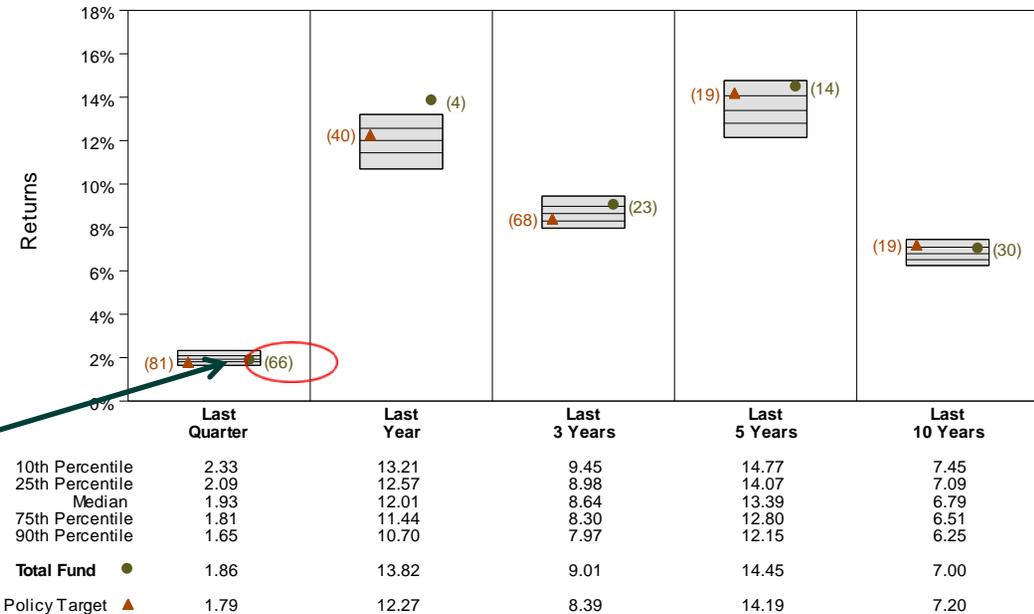
As of March 31, 2014

How Does Our Return Compare to Peers?

Public Fund Sponsor Database



Asset Allocation Adjusted Ranking



- The Pension Trust performed very well versus peers in the first quarter of 2014
- Some of this relative outperformance was due to the lower allocation to domestic bonds and higher allocation to international bonds as shown on slide 9
- Once asset allocation differences are taken into account relative performance moderates, but looks very good over the long run

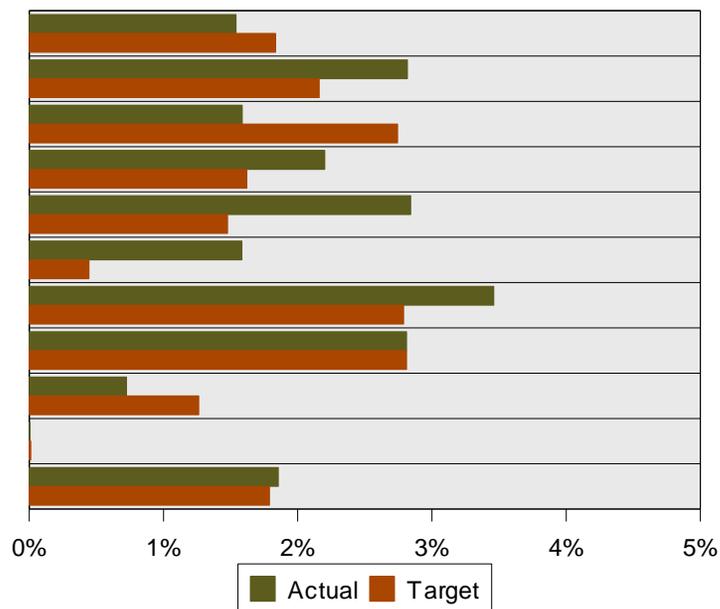
As of March 31, 2014

Total Fund Evaluation Attribution – Comparison to Policy Index

● Difference between actual Pension Trust return and policy target return attributed to:

- Asset class over and under-weighting versus policy mix (asset allocation effect)
- Asset class over and under-performance versus policy index (manager effect)

Actual vs Target Returns



Relative Attribution Effects for Quarter ended March 31, 2014

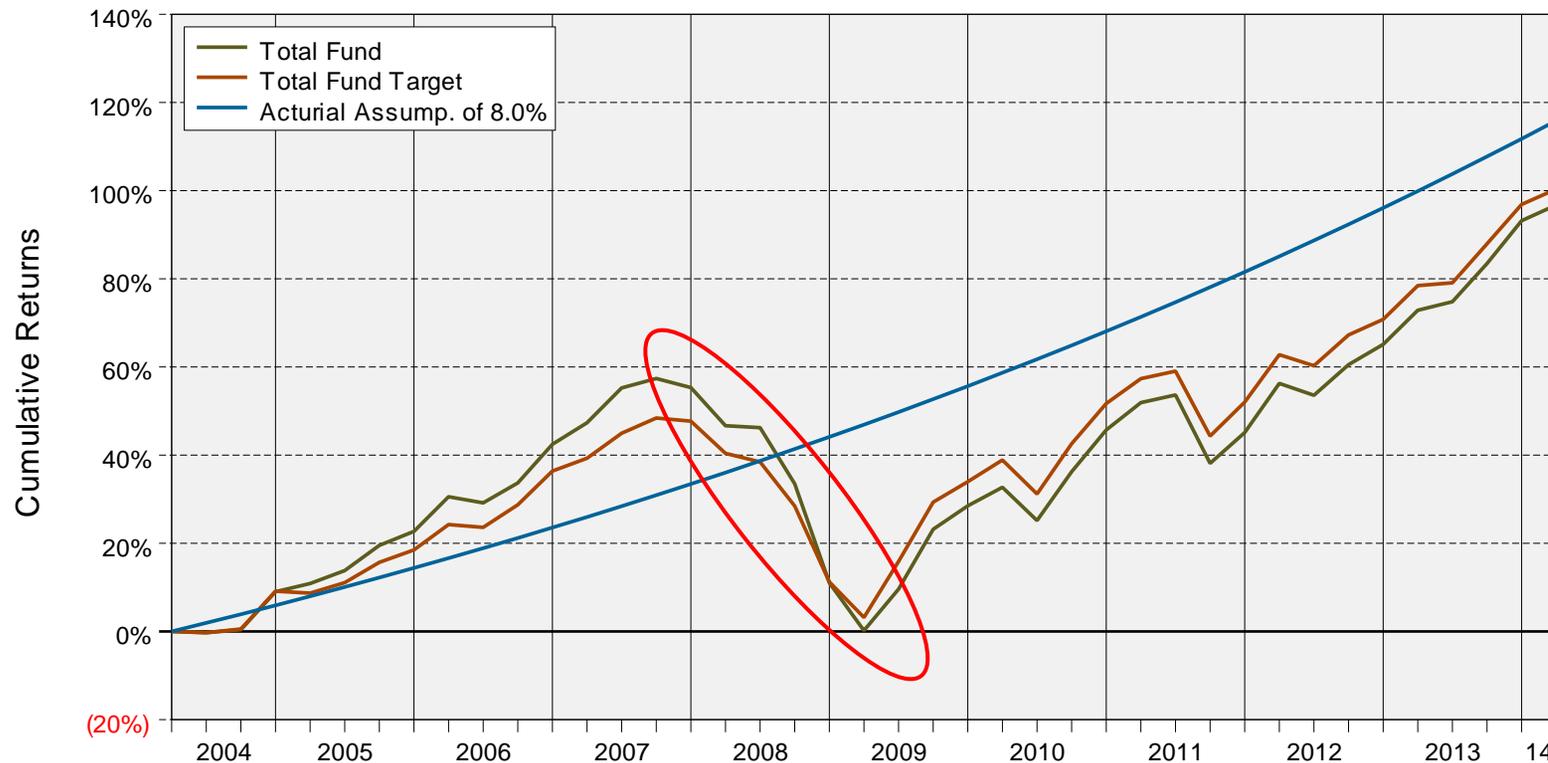
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	1.54%	1.84%	(0.07%)	(0.00%)	(0.07%)
Domestic Fixed Income	18%	18%	2.82%	2.16%	0.12%	(0.02%)	0.10%
Global Real Estate	9%	10%	1.59%	2.74%	(0.11%)	(0.01%)	(0.12%)
Timber	4%	5%	2.20%	1.62%	0.03%	(0.00%)	0.03%
Infrastructure	4%	5%	2.84%	1.48%	0.05%	0.00%	0.05%
International Equity	14%	14%	1.58%	0.44%	0.16%	(0.01%)	0.15%
International Fixed Inc.	5%	5%	3.46%	2.79%	0.03%	(0.01%)	0.03%
Private Equity	5%	5%	2.81%	2.81%	0.00%	(0.01%)	(0.01%)
World Equity	17%	16%	0.72%	1.26%	(0.09%)	(0.01%)	(0.11%)
Cash & Equivalents	1%	1%	0.01%	0.01%	(0.00%)	0.00%	0.00%
Total			1.86%	1.79%	+ 0.13%	+ (0.06%)	0.07%

As of March 31, 2014

Total Fund Evaluation – Comparison to Actuarial Assumption

Performance vs. Benchmark Policy Mix

Cumulative Returns Actual vs Target



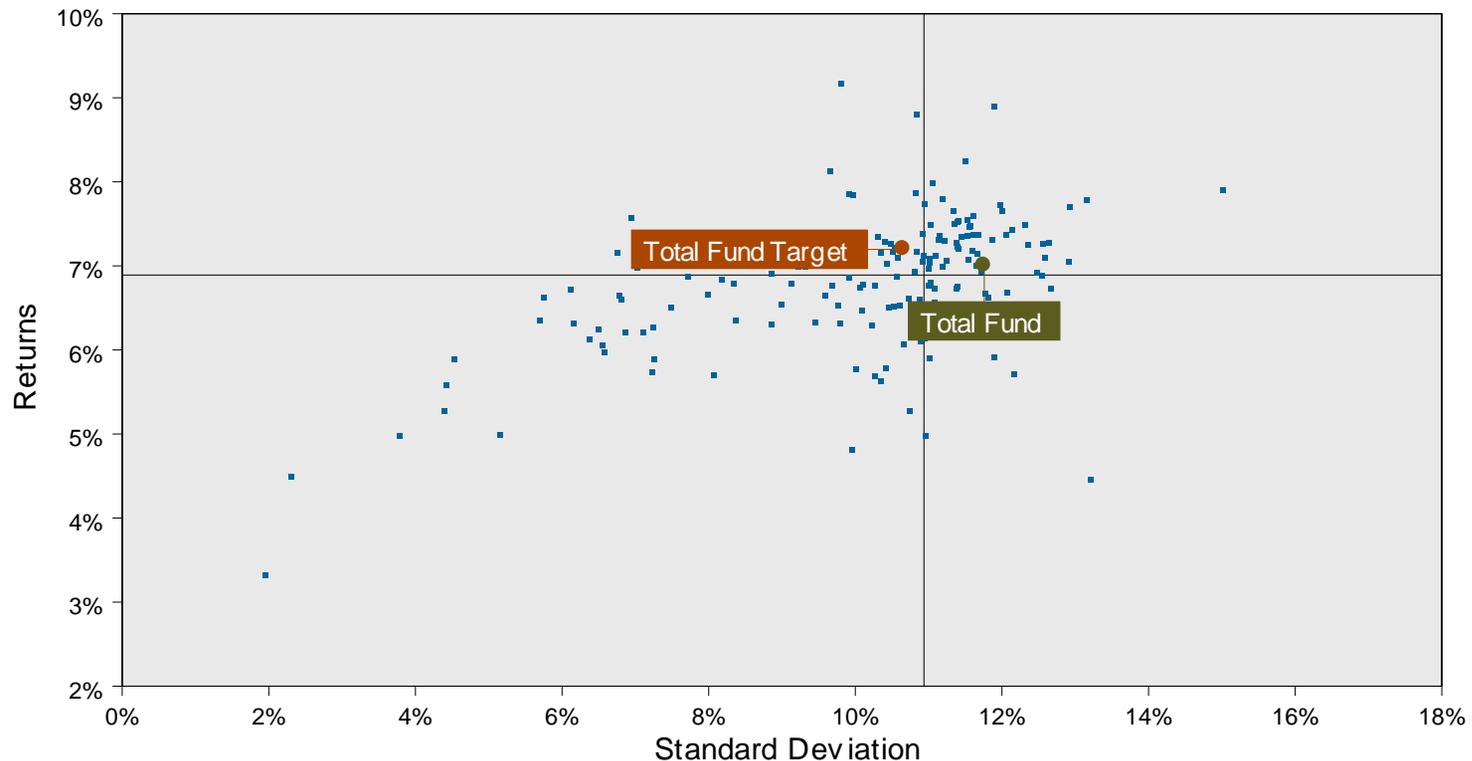
- Performance slightly below Policy Index and trailing actuarial expected return.
- Red circle encapsulates the “Global Financial Crisis,” when markets across the world, across sectors and across asset classes fell sharply.

As of March 31, 2014

Total Fund Evaluation

Reward Tradeoff vs. Peer Group

Ten Year Annualized Risk vs Return



Squares represent membership of the Public Fund Sponsor Database

- Standard Deviation is a measurement of absolute risk.
- Standard Deviation represents the volatility of returns around the portfolio's average return during the period of time represented by the chart.

As of March 31, 2014

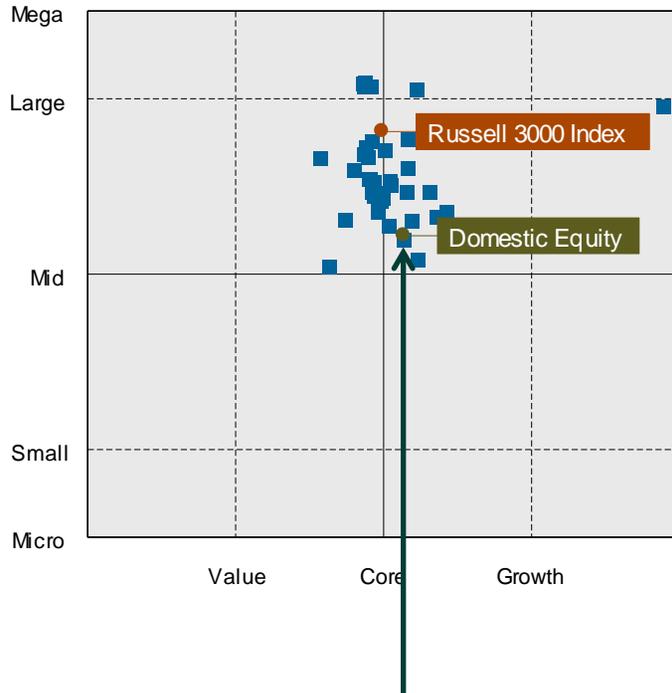


Individual Manager Evaluation
Performance & Risk Analysis

Asset Class Performance

Performance vs. Index and Style

Style Map vs Pub Pln- Dom Equity Holdings as of March 31, 2014



Returns as of 1Q 2014

Index	Last Quarter
Russell 3000	2.0
Russell 1000 Growth	1.1
Russell 1000 Value	3.0
Russell 2000	1.1
MSCI EAFE	0.7
MSCI Emerging Markets	-0.4
BC Aggregate Bond	1.8
Citi Non-U.S. Gov't Bond	3.2
NCREIF	2.7
NCREIF Timber	1.6

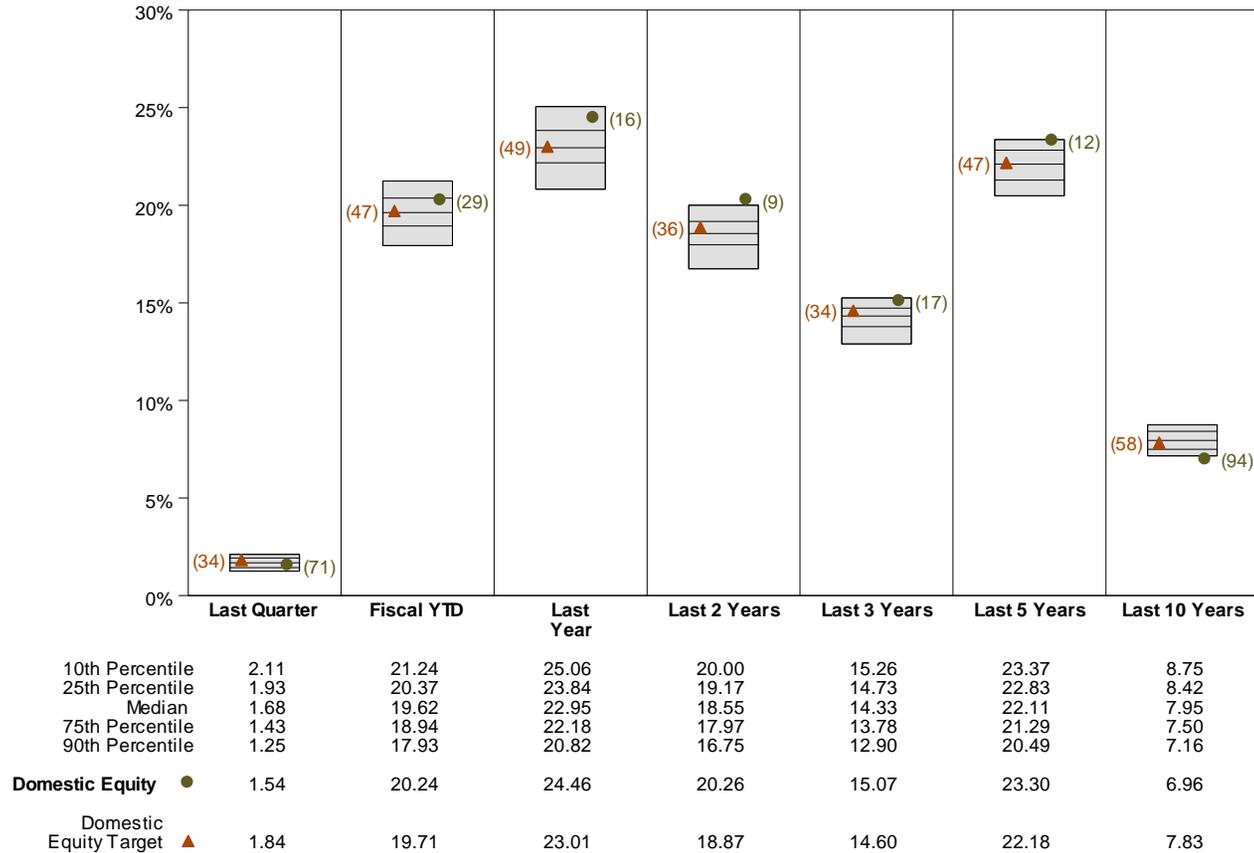
- Pension Trust Domestic Equity composite has a distinct small cap bias compared to the overall equity market, as measured by the Russell 3000 Index, and compared to other public plans.
- Small cap stocks underperformed the broader market during the quarter.
- Based on these factors, the Pension Trust's Domestic Equity portfolio faced headwinds during the quarter.

As of March 31, 2014

Asset Class Performance

Performance vs. Index and Style

Performance vs Pub Pln- Domestic Equity (Gross)



- Domestic equity underperformed its passive target during the quarter.
- This could be due to **manager structure** (as shown on the previous slide), or
- This could be due to active manager(s) trailing their respective benchmark.

As of March 31, 2014

Individual Manager Evaluation

Performance vs. Index and Style

Performance vs CAI Large Cap Growth Style (Gross)



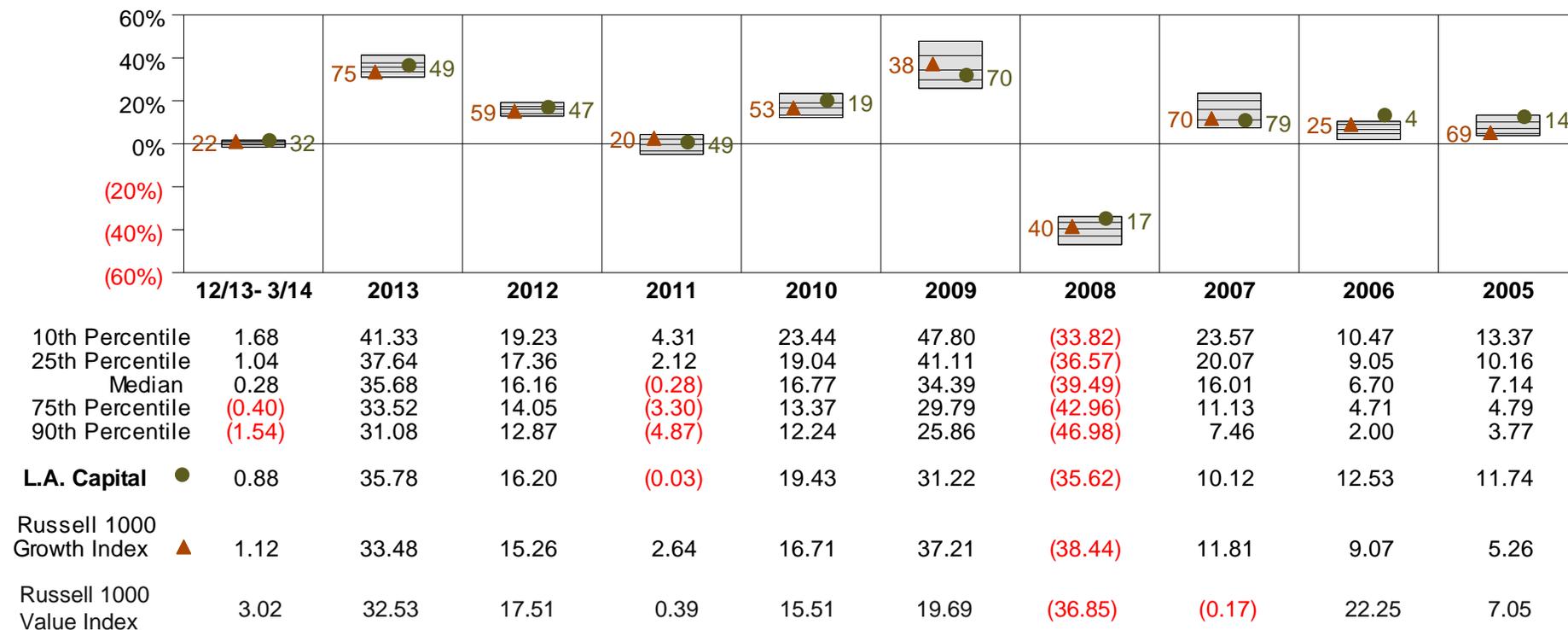
- Be careful, cumulative performance time frames can be significantly affected by short-term performance extremes.
- Peer group rankings are affected by how extreme a manager's style is relative to its peer group.

As of March 31, 2014

Individual Manager Evaluation

Consider Multiple Time Periods for Context

Performance vs CAI Large Cap Growth Style (Gross)



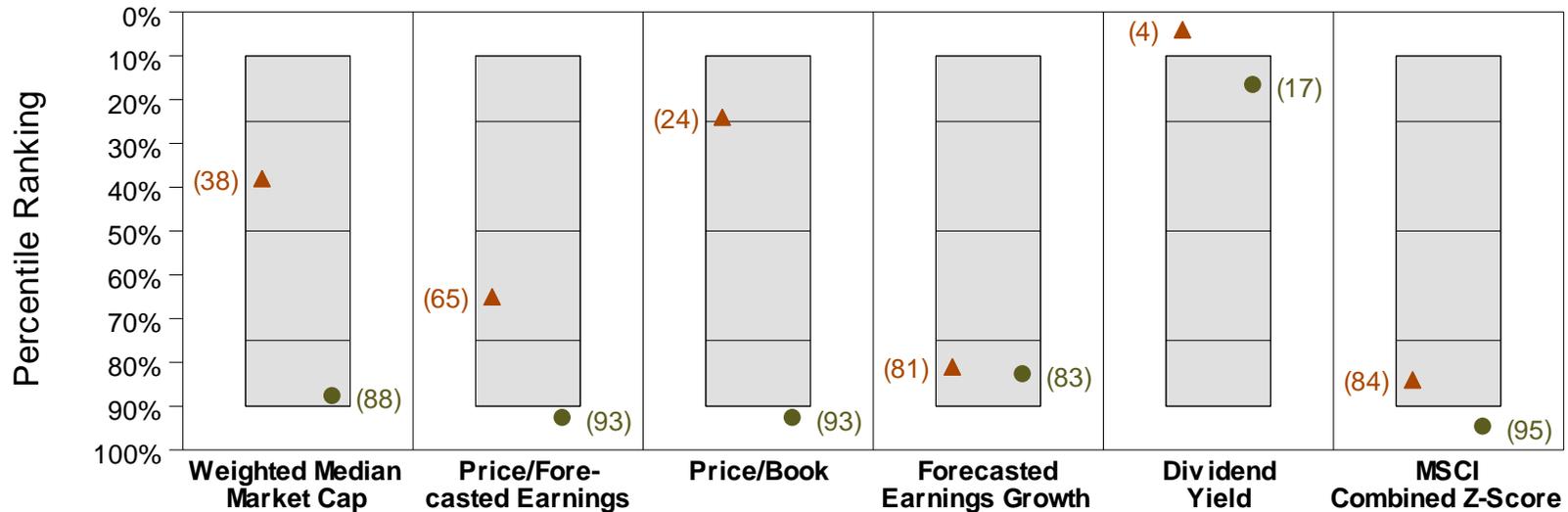
- Same manager as shown on the preceding page but important to observe that manager usually outperforms peers when value is in favor.

As of March 31, 2014

Individual Manager Evaluation

Portfolio Characteristics Profile Illustrations

Portfolio Characteristics Percentile Rankings Rankings Against CAI Large Cap Growth Style as of March 31, 2014



10th Percentile	62.98	23.52	5.45	21.11	1.46	1.77
25th Percentile	59.59	21.26	4.56	19.09	1.32	1.42
Median	52.32	19.17	4.16	16.62	1.00	1.11
75th Percentile	39.77	17.52	3.82	14.83	0.78	0.84
90th Percentile	31.46	16.51	3.67	13.78	0.59	0.65

L.A. Capital ● 34.15 16.08 3.62 14.17 1.35 0.51

Russell 1000 Growth Index ▲ 55.35 17.84 4.60 14.21 1.63 0.72

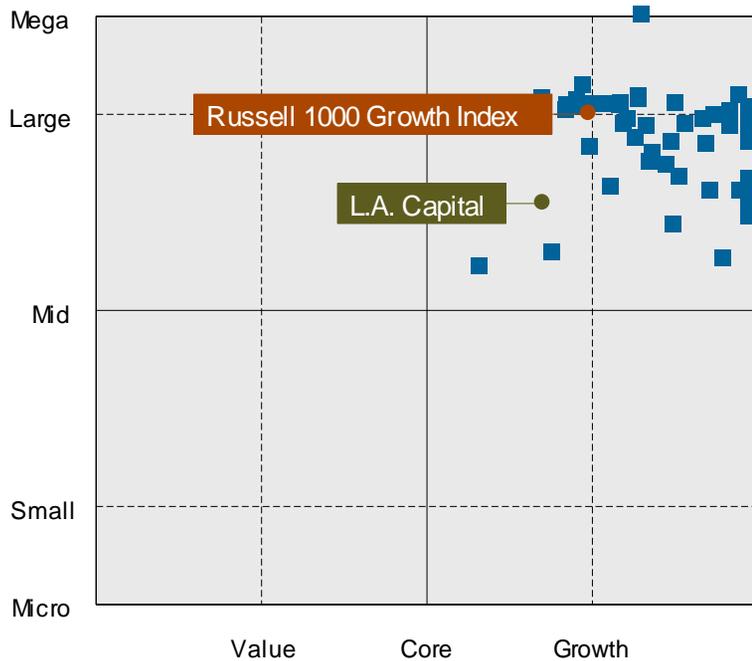
- Illustration of one of many comparative comparisons that consider underlying portfolio holdings relative to both peers and market indexes.

As of March 31, 2014

Individual Manager Evaluation

Holdings-Based Style Analysis

Style Map vs CAI Lrg Cap Growth Style Holdings as of March 31, 2014



Style Exposure Matrix Holdings as of March 31, 2014

Large	5.7% (15)	24.3% (37)	34.7% (55)	64.8% (107)
	5.7% (21)	27.9% (69)	44.7% (105)	78.3% (195)
Mid	8.0% (32)	11.2% (43)	13.9% (47)	33.1% (122)
	2.1% (56)	6.7% (127)	11.9% (170)	20.7% (353)
Small	0.8% (6)	0.7% (7)	0.7% (3)	2.2% (16)
	0.2% (16)	0.5% (36)	0.4% (23)	1.1% (75)
Micro	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	0.0% (0)	0.0% (1)	0.0% (0)	0.0% (1)
Total	14.5% (53)	36.3% (87)	49.2% (105)	100.0% (245)
	7.9% (93)	35.0% (233)	57.0% (298)	100.0% (624)
	Value	Core	Growth	Total

As of March 31, 2014

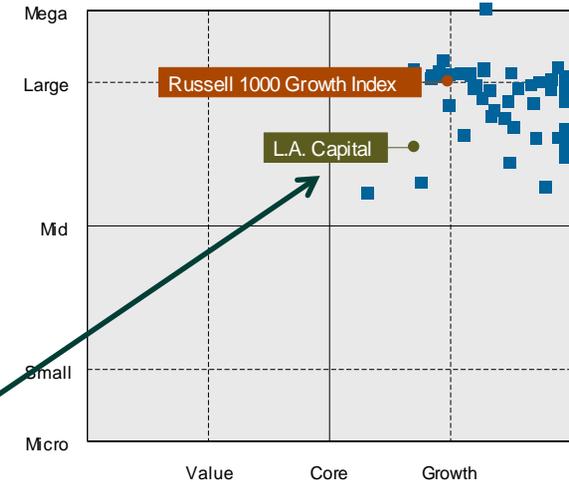
Individual Manager Evaluation

Putting It Together

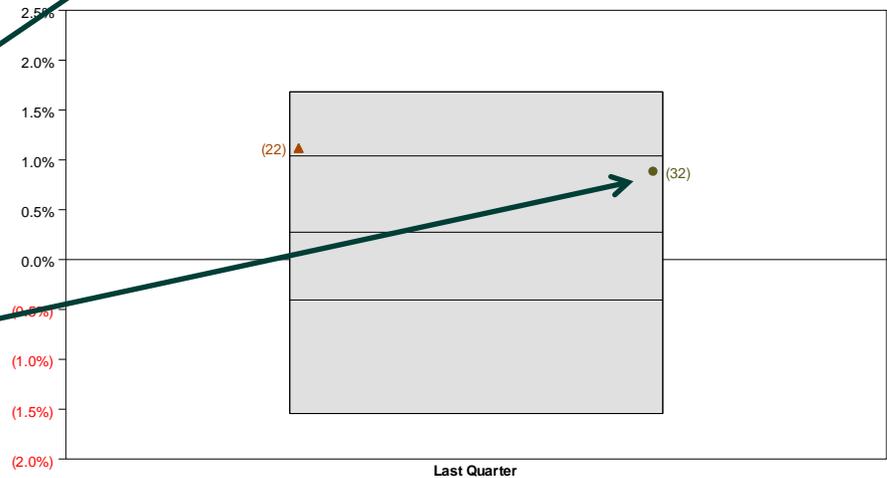
Returns as of 1Q 2014

Index	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Russell 3000	2.0	22.6	14.6	21.9	7.9
Russell 1000 Growth	1.1	23.2	14.6	21.7	7.9
Russell 1000 Value	3.0	21.6	14.8	21.8	7.6
MSCI EAFE	0.7	17.6	7.2	16.0	6.5
MSCI Emerging Markets	-0.4	-1.1	-2.5	14.8	10.5
BC Aggregate Bond	1.8	-0.1	3.7	4.8	4.5
Citi Non-U.S. Gov't Bond	3.2	2.4	1.4	4.1	4.3
NCREIF	2.7	11.2	11.7	7.9	8.7
NCREIF Timber	1.6	9.8	6.6	2.9	8.3

Style Map vs CAI Lrg Cap Growth Style Holdings as of March 31, 2014



Performance vs CAI Large Cap Growth Style (Gross)



- Growth was out of favor in the first quarter
- L.A. Capital is less “growthy” than other managers in the CAI Large Cap Growth Style group
- This combination provided a strong tailwind to L.A. Capital during the quarter, which outperformed large cap growth peers

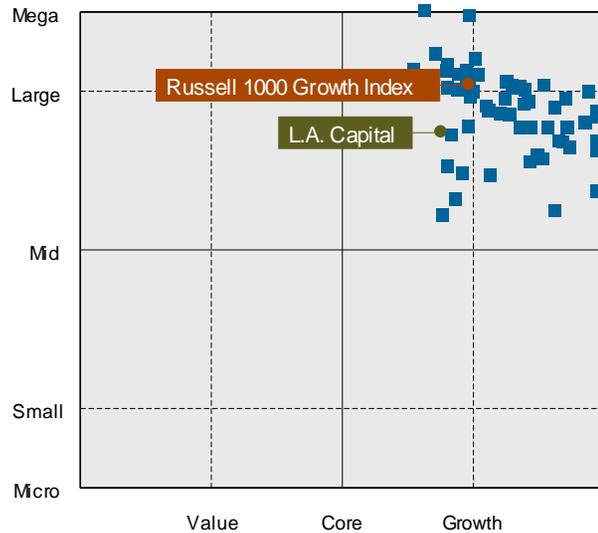
10th Percentile	1.68
25th Percentile	1.04
Median	0.28
75th Percentile	(0.40)
90th Percentile	(1.54)
L.A. Capital	0.88
Russell 1000 Growth Index	1.12

As of March 31, 2014

Individual Manager Evaluation

Holdings-Based Style Analysis

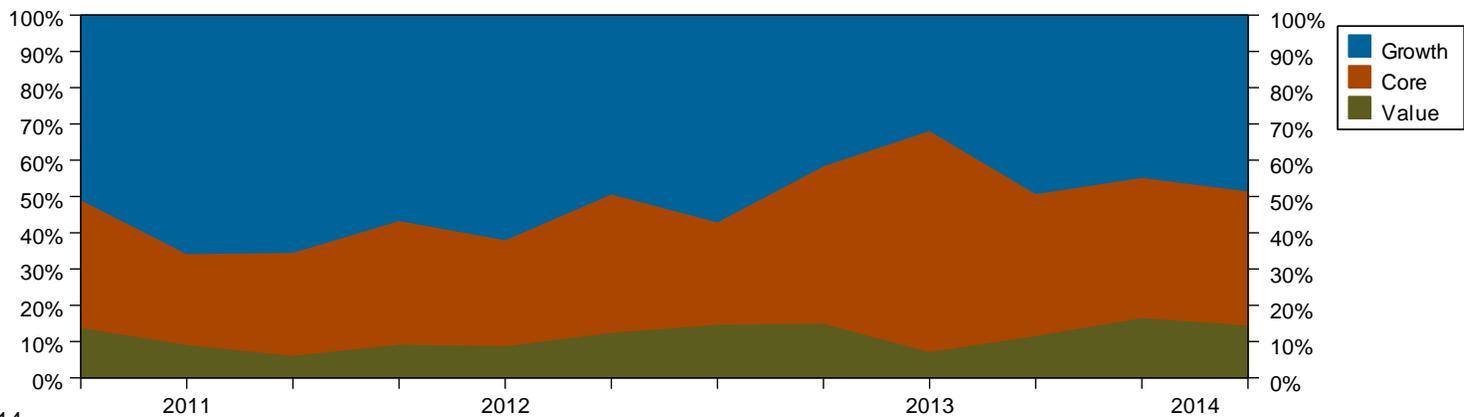
Average Style Map vs CAI Lrg Cap Growth Style Holdings for Three Years Ended March 31, 2014



Average Style Exposure Matrix Holdings for Three Years Ended March 31, 2014

Large	6.4% (16)	24.3% (39)	36.1% (51)	66.8% (106)
	4.6% (16)	29.8% (72)	45.4% (98)	79.9% (186)
Mid	3.5% (15)	9.3% (35)	14.0% (40)	26.8% (90)
	1.3% (36)	6.1% (130)	11.8% (172)	19.1% (338)
Small	1.8% (9)	2.8% (9)	1.7% (5)	6.4% (23)
	0.1% (12)	0.4% (26)	0.5% (24)	1.0% (62)
Micro	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	0.0% (0)	0.0% (1)	0.0% (0)	0.0% (1)
Total	11.7% (40)	36.5% (83)	51.8% (96)	100.0% (219)
	6.0% (64)	36.3% (229)	57.7% (294)	100.0% (587)
	Value	Core	Growth	Total

L.A. Capital Historical Style Only Exposures



As of March 31, 2014

Questions About Manager Performance

- What role was the investment manager hired to fill?
- Are they filling that role or have they changed?
 - Investment philosophy
 - Investment process
 - Has the portfolio manager left or taken on significantly more responsibility
 - Have assets under management grown quickly or become very large over time?
 - Are the investment outcomes or portfolio characteristics different than when they were hired?
 - Are there organizational issues that may inhibit the manager from delivering the same performance as the past?
- Has the need for the role filled by the manager changed, or does that need no longer exist?

Final Thoughts and Observations

- Time is your friend – It is Archimedes' lever in investing. Given enough time, investments that appear least attractive now can be most attractive in the future.
- Do not base manager termination decisions solely “on the numbers.” When a manager's performance does not meet your expectations: conduct appropriate due diligence, take a balanced and long-term view, and consider the manager's role in your manager structure.



August 22, 2014

**North Dakota
State Investment Board**

Fund Sponsor Trends

Paul Erlendson

Senior Vice President

Bryan Summers, CFA

Assistant Vice President

Callan Fund Sponsor Clients

As of December 31, 2013

By Fund Type	Retainer		Project		Total	
	Count	Sum (\$mm)	Count	Sum (\$mm)	Count	Sum (\$mm)
Defined Benefit	133	962,926	17	709,549	150	1,672,475
Defined Contribution	83	134,294	11	42,480	94	176,774
Family	6	8,362	-	-	6	8,362
Endowment	16	10,446	3	1,708	19	12,154
Foundation	17	3,690	2	514	19	4,204
Insurance	17	23,358	2	400	19	23,758
529 Plans	13	20,932	-	-	13	20,932
Other Post-Retirement	16	2,992	-	-	16	2,992
Operating Funds	16	9,094	1	6,500	17	15,594
Nuclear Decommissioning	1	1,303	4	6,708	5	8,011
Other	2	636	1	-	3	636
Total	320	\$1,178,033	41	\$767,859	361	\$1,945,892
By Sponsor Type						
Corporate	141	264,848	18	38,294	159	303,142
Public	113	870,774	20	727,736	133	1,598,510
Taft-Hartley	10	6,970	-	-	10	6,970
High-Net	2	2,558	-	-	2	2,558
Non-Profit	54	32,883	3	1,829	57	34,712
Total	320	\$1,178,033	41	\$767,859	361	\$1,945,892

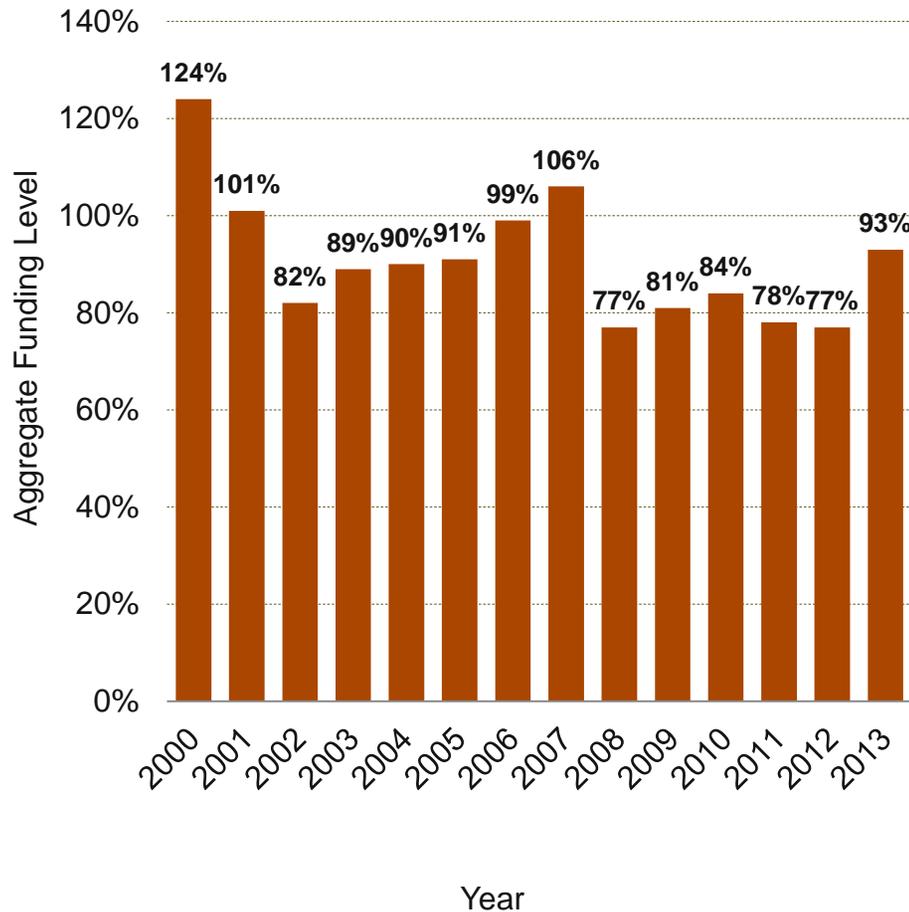
Why Are We Even Talking About This?

Historical Capital Market Performance Ended December 31, 2013

	1Q 2014	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 20 Years	Last 30 Years
U.S. Equity							
Russell 3000	1.97	33.55	16.24	18.71	7.88	9.32	10.97
S&P 500	1.81	32.39	16.18	17.94	7.41	9.22	11.09
Russell 2000	1.12	38.82	15.67	20.08	9.07	9.27	9.82
Non-U.S. Equity							
MSCI EAFE US\$	0.66	22.78	8.17	12.44	6.91	5.68	9.49
MSCI Emerging Markets	-0.37	-2.27	-1.74	15.15	11.52	5.70	-
S&P Dev x US Small Cap	3.72	26.06	8.52	17.72	9.96	7.54	-
Fixed Income							
Barclays Aggregate	1.84	-2.02	3.26	4.44	4.55	5.74	7.74
3-Month T-Bill	0.01	0.07	0.10	0.12	1.68	3.03	4.23
Barclays Gov/Credit Long	6.55	-8.83	6.70	6.40	6.36	7.19	9.47
Citi WGBI Non-US	3.22	-4.56	0.62	2.27	4.10	5.41	-
Real Estate							
NCREIF Property	2.74	10.98	11.92	5.68	8.64	9.34	7.90
NAREIT Equity	9.98	2.47	9.42	16.50	8.42	10.22	10.94
Alternatives							
CS HF Index	0.93	9.73	4.82	8.66	6.37	8.72	-
Venture Economics All Private Equity		20.84	14.5	15.51	13.11	15.51	12.58
DJ UBS Commodity TR	6.99	-9.52	-8.11	1.51	0.87	4.93	-
Gold Spot Price Index	6.78	-28.26	-5.43	6.34	11.19	5.76	3.84
Inflation – CPI All Urban Cons	1.39	1.30	2.00	2.04	2.35	2.36	2.81

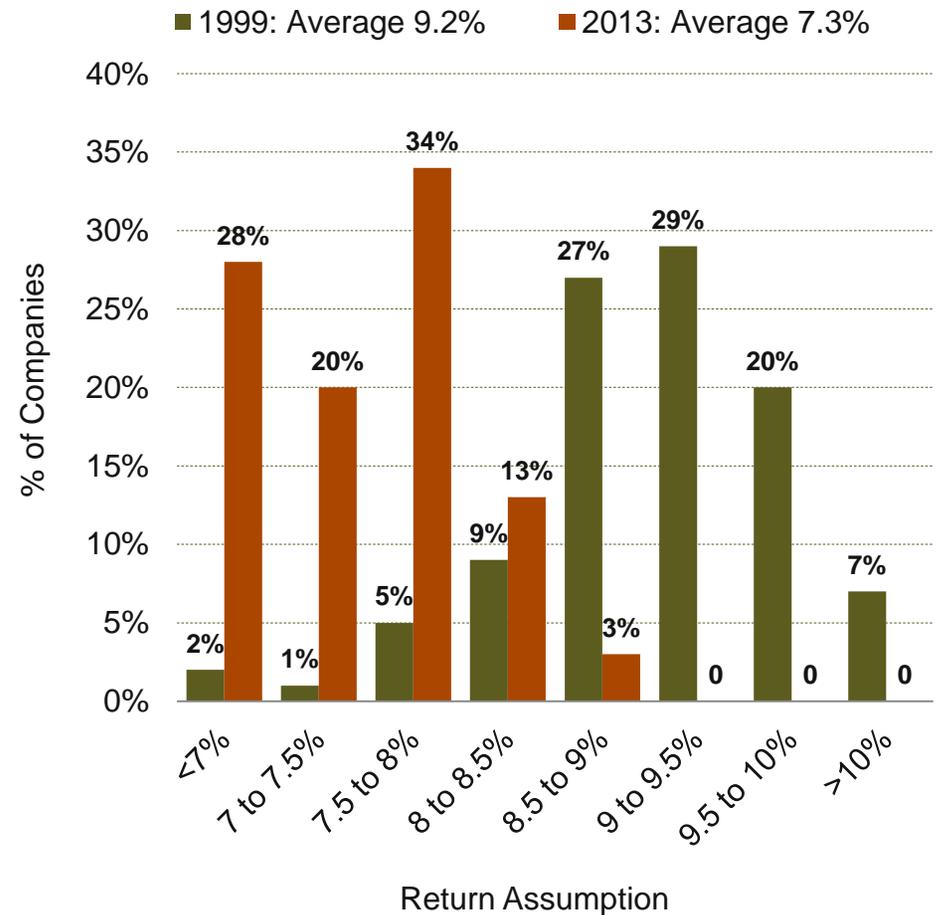
Corporate DB Funded Status and Return Assumptions

Fortune 1000 Companies



Source: Towers Watson, January 2014

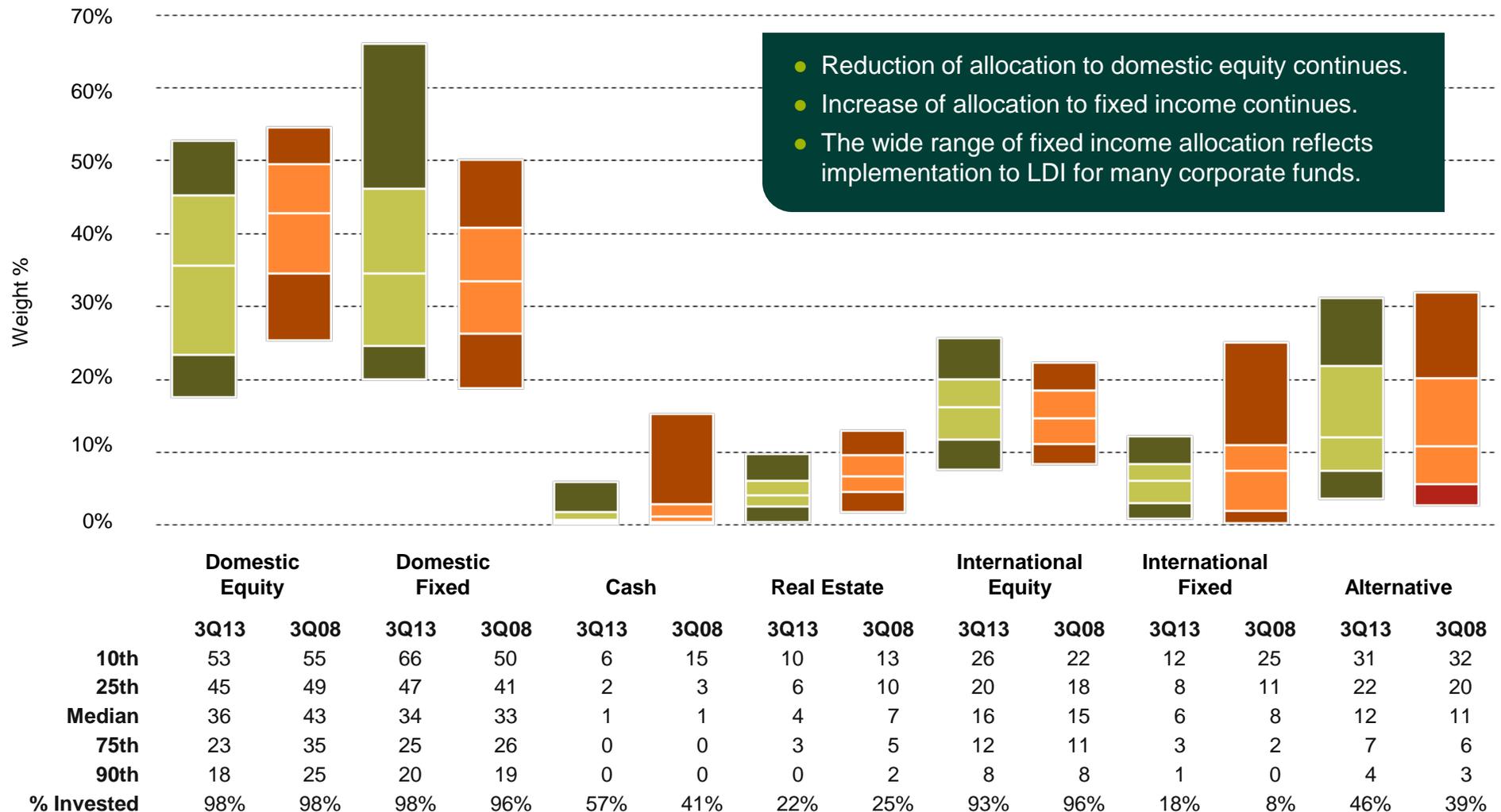
S&P 500 Companies



Source: JP Morgan Guide to the Markets, 1q2014

Asset Allocation Style Trends – Corporate Sponsor Database

Third Quarter 2013 vs. Third Quarter 2008

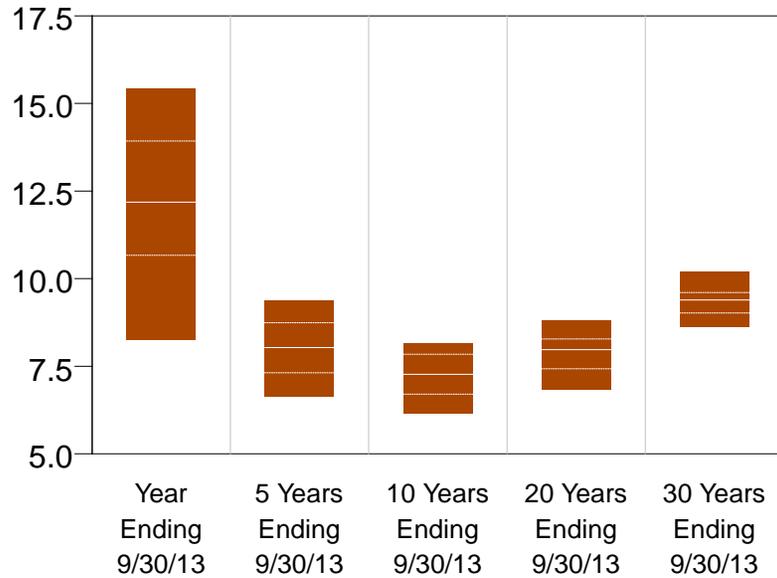


Source: Callan's Corporate Fund Sponsor database as of September 30, 2013

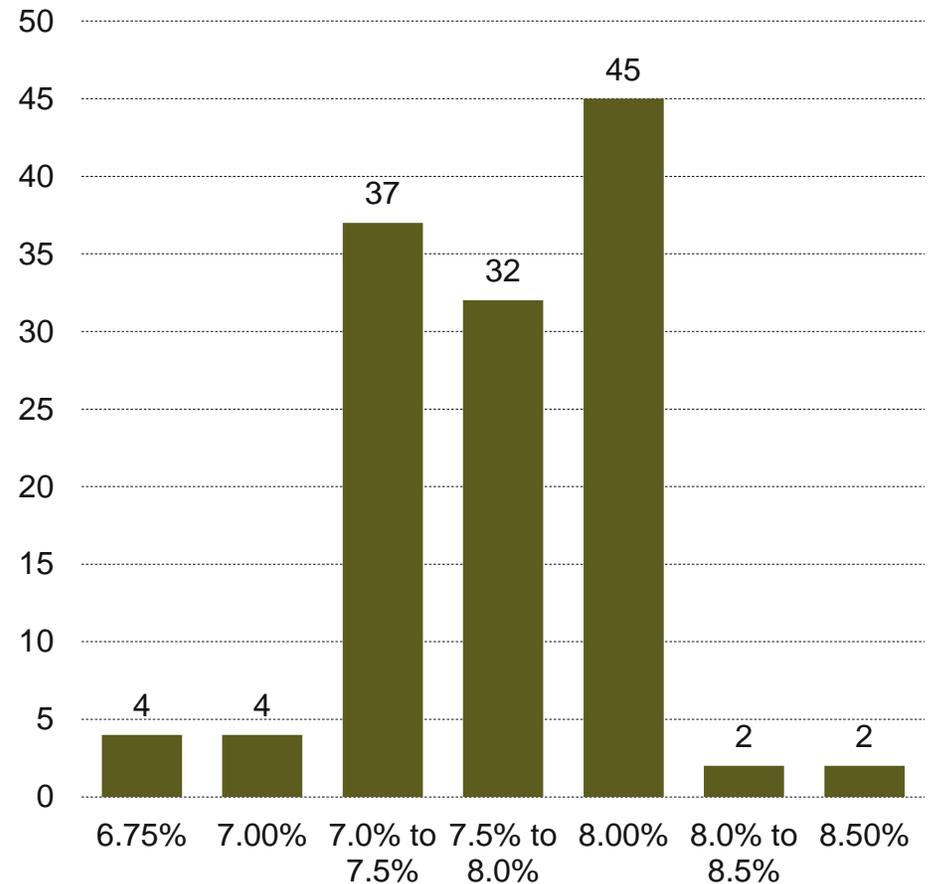
Public Funds

Annualized Returns and Return Assumptions

Callan Public Fund Sponsor Database
Returns for Periods ended September 30, 2013



Distribution of Investment Return Assumptions
for Public Funds

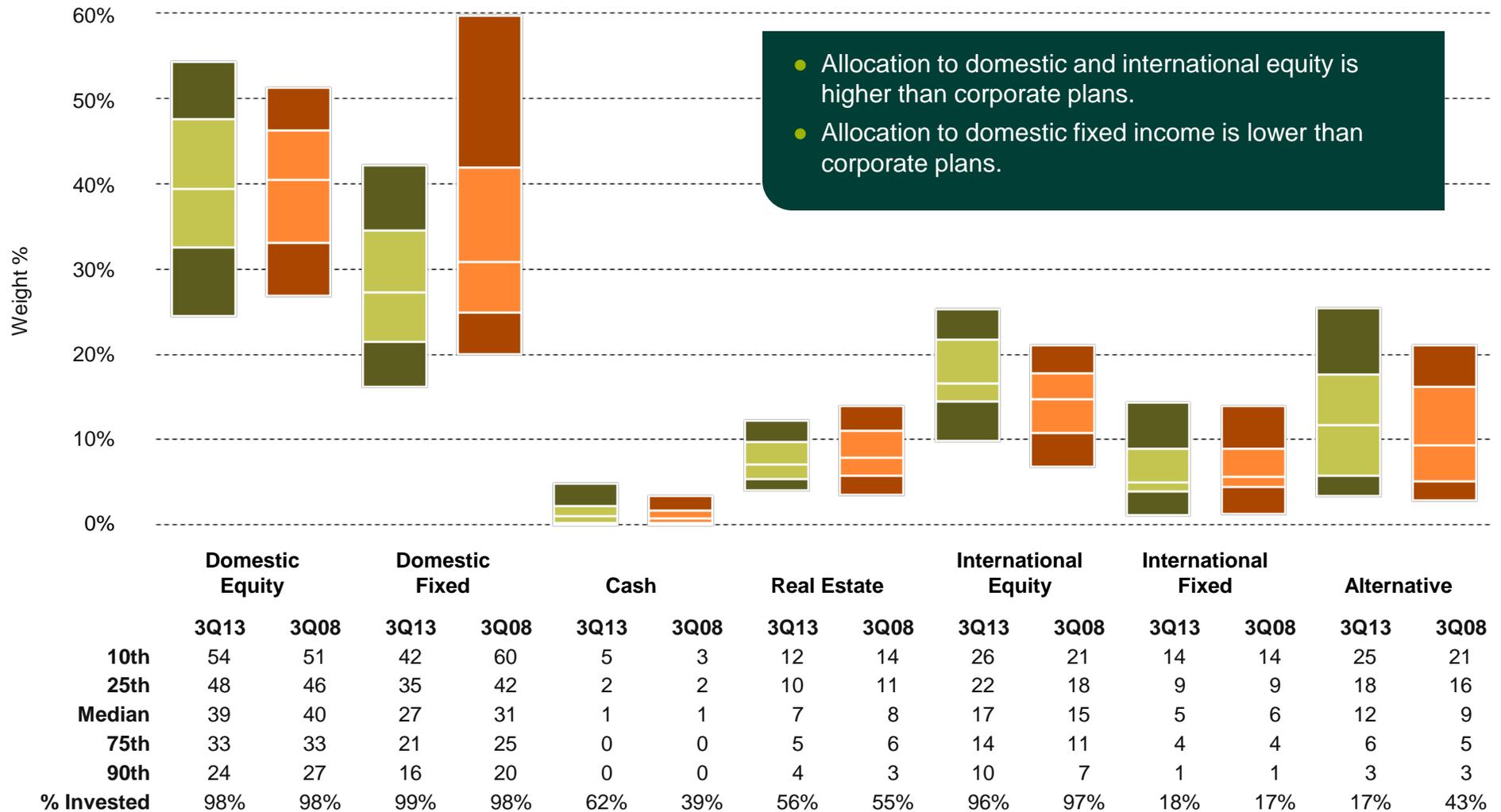


Source: Callan's Public Fund Sponsor database as of September 30, 2013

Source: NASRA ISSUE BRIEF: Public Pension Plan Investment Return Assumptions, Dec. 2013

Asset Allocation Style Trends – Public Fund Sponsor Database

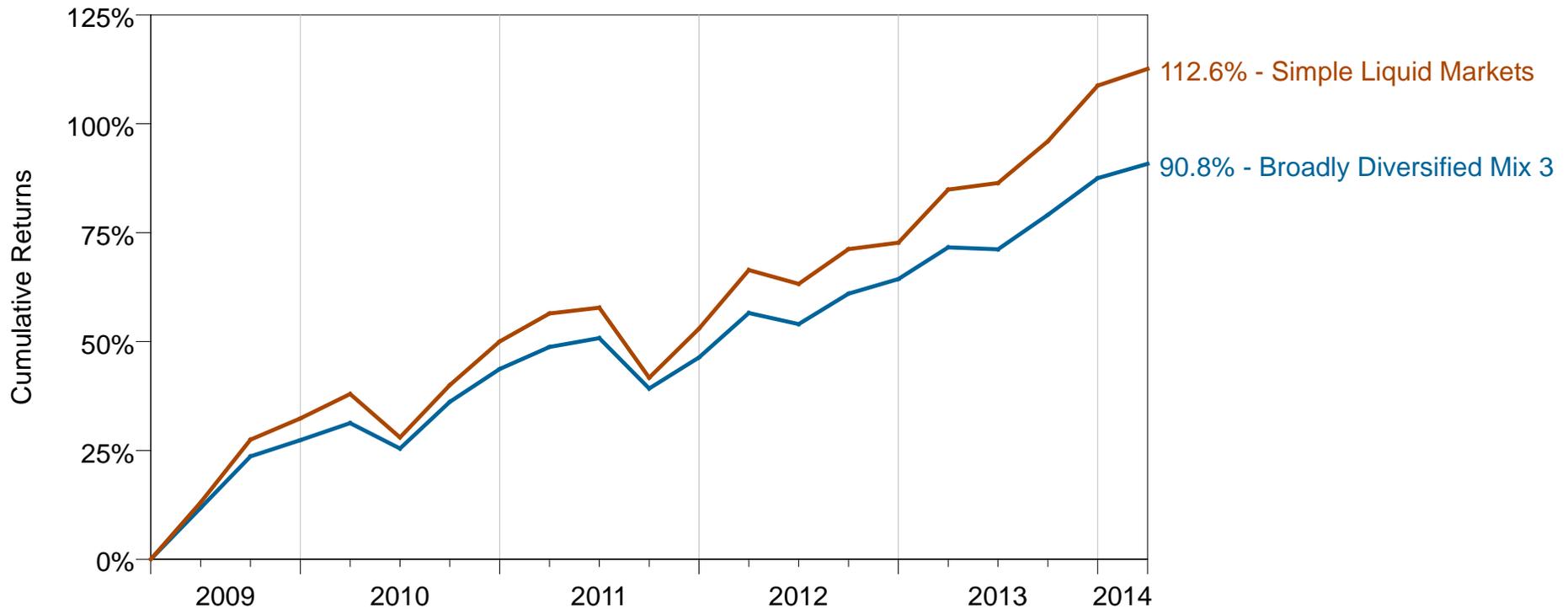
Third Quarter 2013 vs. Third Quarter 2008



Source: Callan's Public Fund Sponsor database as of September 30, 2013

Diversification Hurt During the Last Five Years

Cumulative Returns for 5 Years ended March 31, 2014



- Simple Liquid Markets = 60% Russell 3000, 10% MSCI EAFE, 30% Barclays Aggregate.
- Broadly Diversified = Mix 3 from the optimization table on the previous page.
- Diversifiers could not keep up with roaring U.S. stock market.

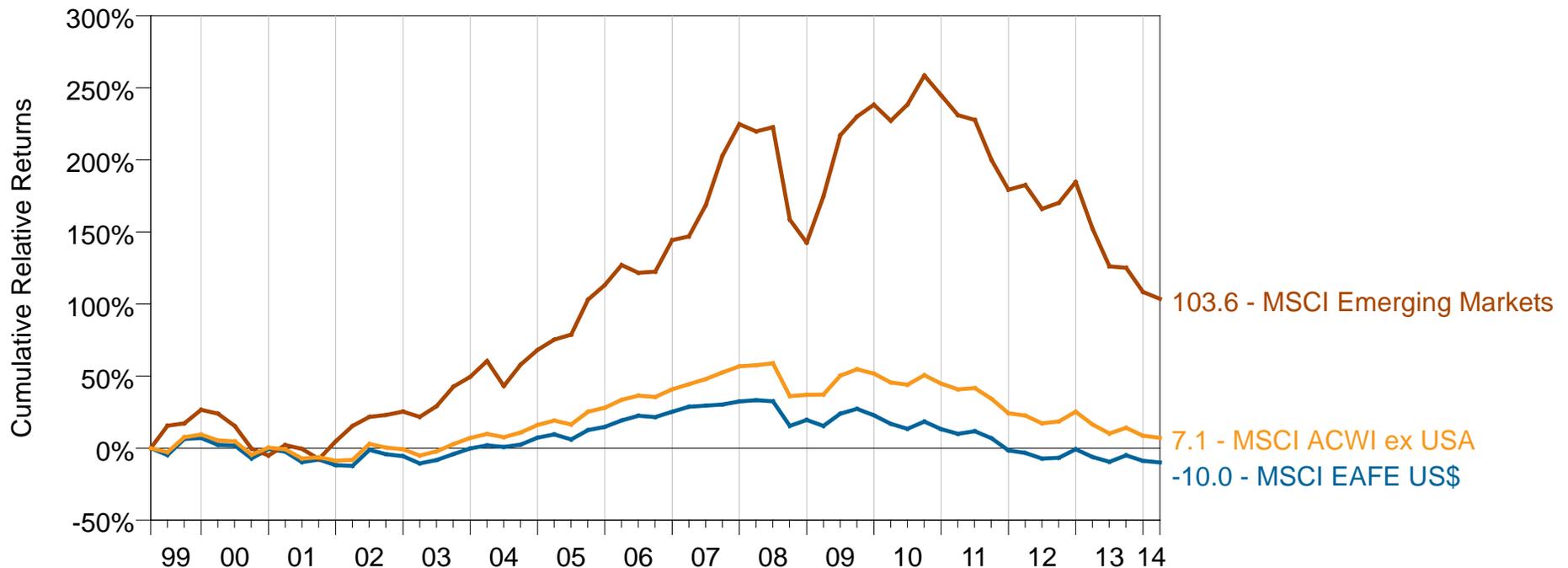
Common Biases in Asset Class Implementation

- **Small cap overweight in U.S. equity:**
 - Long-term expected return premium, but very long periods of potential underperformance.
 - Substantially higher volatility and tracking error to the broad market.
 - More potent argument: fertile ground for active management.
 - Active management can double down on the smaller cap bias.
- **Value bias in active equity management.**
- **U.S. bias in all asset classes.**
- **Emerging market bias in non-U.S. equity – both for and against.**
- **Pursuit of yield in fixed income:**
 - Bias toward credit, away from Treasuries
 - Lower quality
 - Higher volatility and tracking error to the broad fixed income market
 - Loading on factor risks found elsewhere in the portfolio, particularly equity

The Promise of Emerging Markets

Fading or Cyclical?

Cumulative Relative Returns relative to Russell 3000 for 15 Years ended March 31, 2014

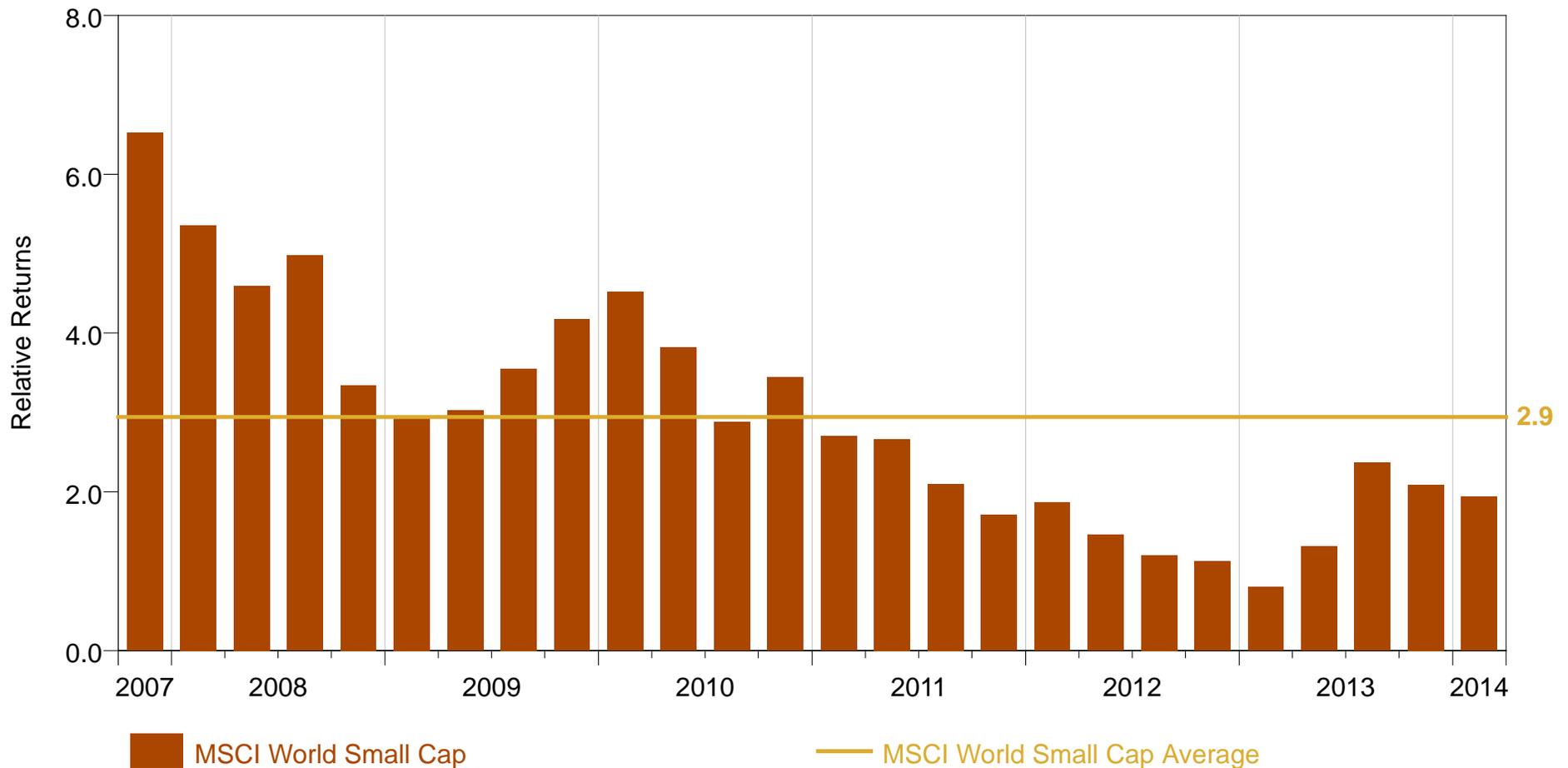


- Emerging Markets came of age for institutional investors at the start of the 2000s, more than doubling their share to almost 30% of non-U.S. equity market cap by 2007.
- The promise remains: emerging markets are likely the source of the strongest growth in the global economy for the next 10 and 20 years. But these markets are very volatile and remain subject to long and severe cycles.

Small Cap Bias?

Global Developed – World Small Cap vs. World – 7-Year Horizons

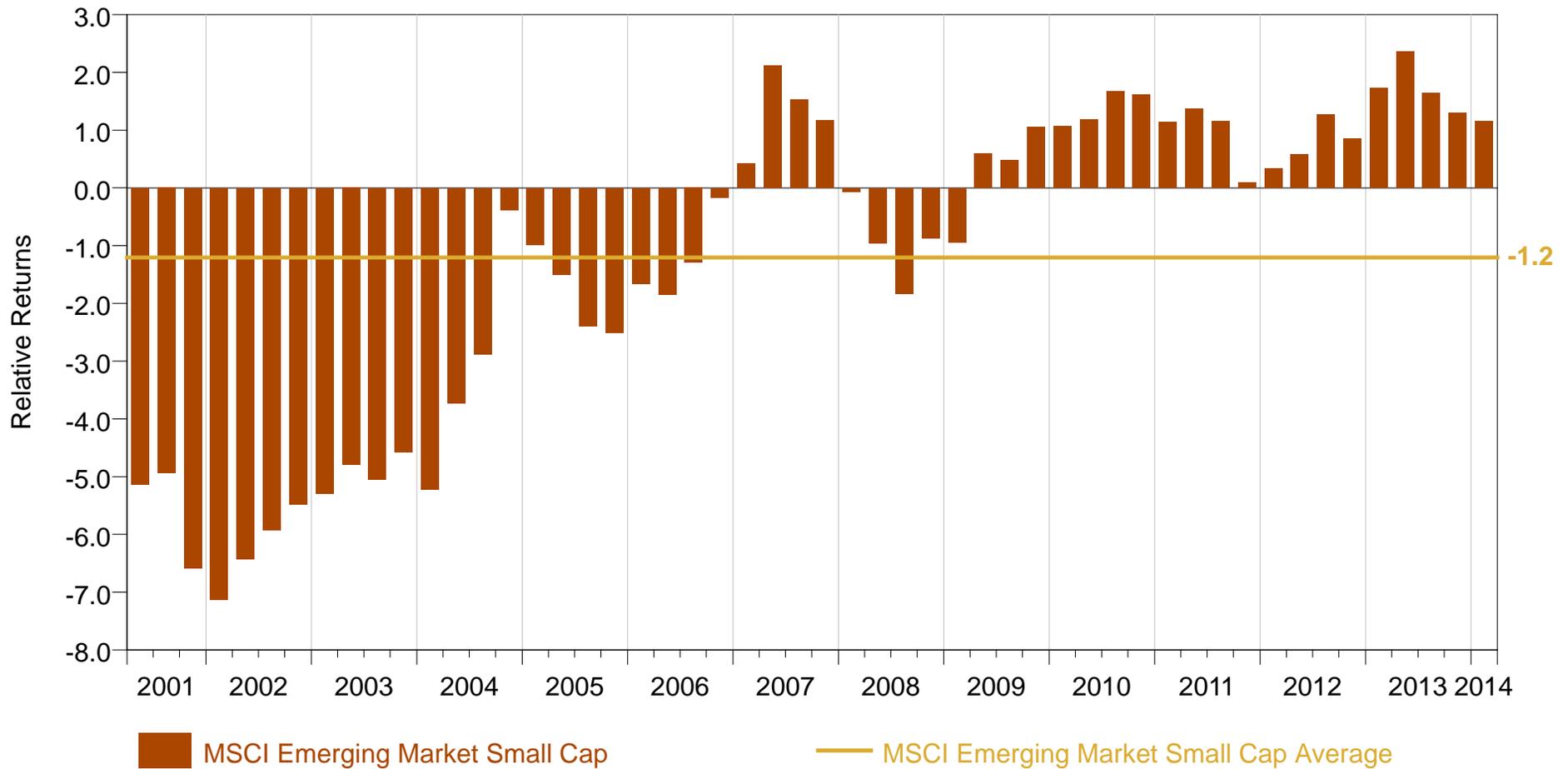
Rolling 7-Year Relative Returns relative to MSCI World
Since Inception of MSCI World Small Cap ended March 31, 2014



Small Cap Bias?

Emerging Markets – Emerging Market Small Cap vs. Emerging Markets – 7-Year Horizons

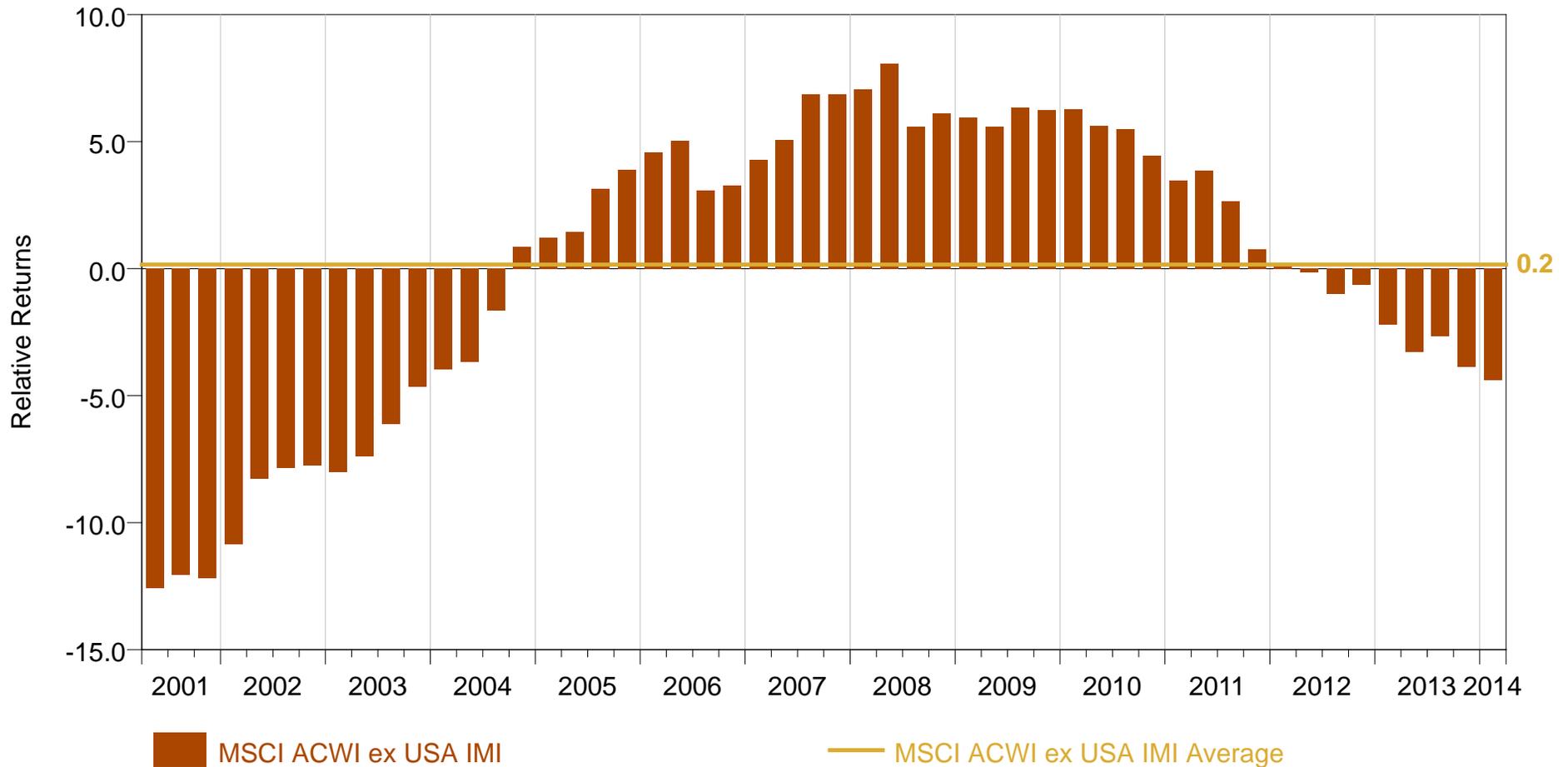
Rolling 7-Year Relative Returns relative to MSCI Emerging Markets
Since Inception of MSCI Emerging Market Small Cap ended March 31, 2014



Home Bias?

ACWI ex USA IMI vs. Russell 3000 (All Cap) – 7-Year Horizons

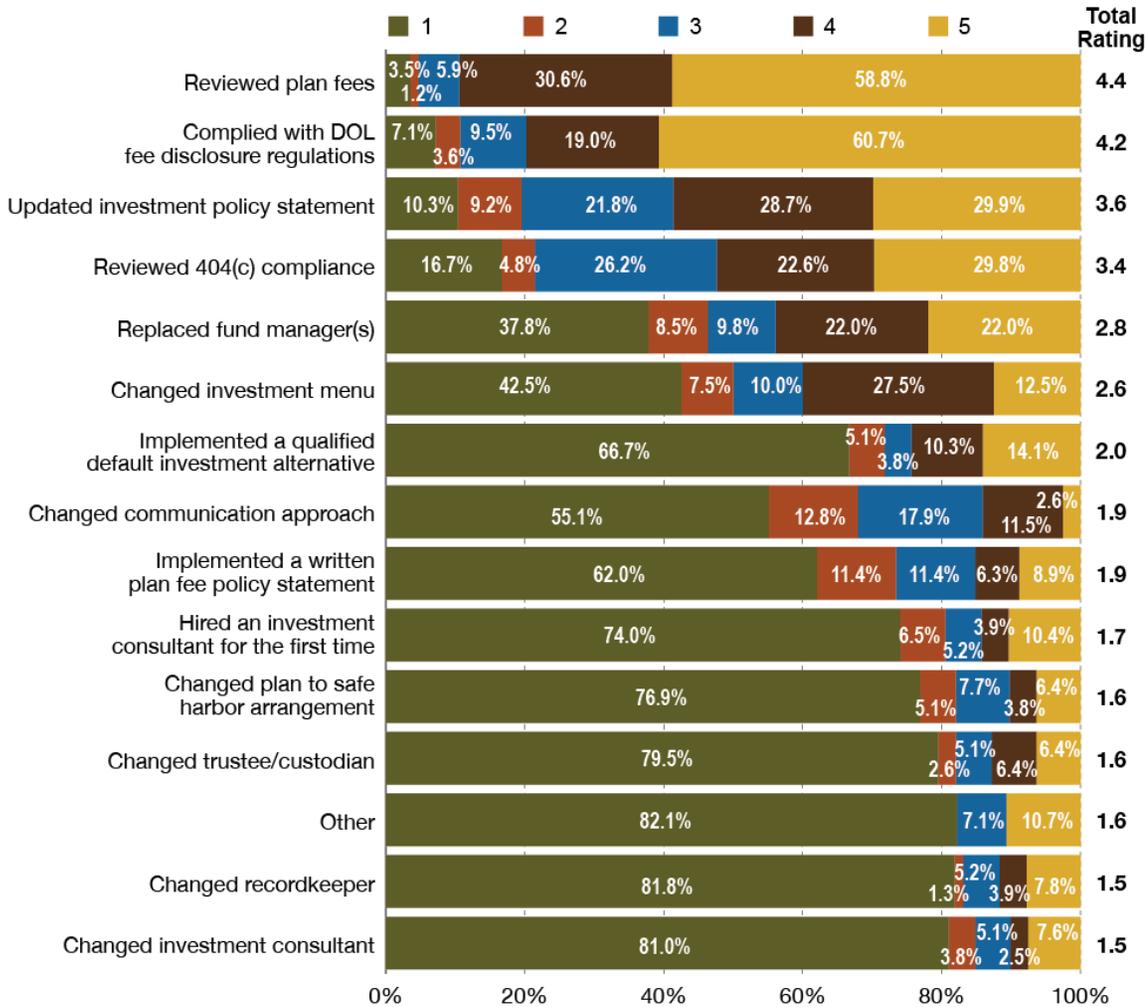
Rolling 7-Year Relative Returns relative to Russell 3000
Since Inception of MSCI ACWI ex USA IMI ended March 31, 2014



Defined Contribution Trends

Callan 2014 DC Trends Survey – Areas of Focus For Plan Fiduciaries

Rate each of the following actions in terms of their importance in improving the fiduciary positioning of your DC plan within the past 12 months? (1=least important, 5+most important. Total rating is the weighted average score.)



Defined Contribution Allocation Trends

Callan DC Index Asset Allocation

- The number of options has been increasing, but allocations to emerging markets equity, international and high yield fixed income, real return and other “alternative” strategies remains low.
- The percentage allocation to target date funds is growing rapidly and has nearly doubled since the end of 2010.
- Outside of target date funds the allocation to equity has been decreasing and the allocation to fixed income increasing.
- Allocation to passive strategies has been increasing steadily since 2006.

	12/31/2006	12/31/2010	09/30/2013
Domestic Large Cap	30.2%	24.1%	23.3%
Target Date Funds	8.9%	10.5%	20.1%
Domestic Small/Mid Cap	11.5%	10.6%	12.0%
Stable Value	11.8%	12.2%	10.6%
Domestic Fixed	5.5%	9.3%	8.0%
Domestic/Global Balanced*	6.5%	12.2%	8.3%
International Equity	9.1%	7.7%	6.3%
Global Equity	0.8%	0.6%	1.2%
Company Stock	8.3%	6.9%	4.4%
Money Market	4.5%	3.1%	2.4%
Brokerage Window	1.2%	1.5%	2.1%
Other**	1.1%	0.6%	0.7%
Real Return/TIPS	0.2%	0.3%	0.4%
Emerging Markets Equity	0.3%	0.4%	0.3%
% Fixed	29.5%	35.1%	34.4%
% Equity	70.5%	64.9%	65.6%
% Invested Passively	13.8%	18.2%	19.1%
Average Total Option Count	17.3	22.8	25.6
Average Count Excluding TD Funds	11.5	12.3	13.8

* Includes risk based asset allocation funds after 2008.

**"Other" includes high yield, intl/global fixed income, real estate and other strategies with less than 0.3% allocation

Source: Callan Associates DC Index 3rd Quarter 2013 The Callan DC Index™ tracks the cash flows and performance of nearly 80 plans, representing more than 800,000 DC participants and over \$100 billion in assets.

Return History

Defined Benefit, Endowment & Foundation, and Defined Contribution

- 2013 performance provides significant improvement in long-term performance.
- Fund sponsors continue to be aware of the impact of 2008 and 2011, but funded status has improved.
- The outlook for fixed income is an important current issue.

Annualized Returns for Periods ended September 30, 2013

	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 20 Years
Callan Corp Funds DB	10.3	9.7	8.7	7.4	8.2
Callan Public Fund Total DB	12.2	9.7	8.0	7.3	8.0
Callan End/Foundation DB	11.9	9.2	7.7	7.3	8.1
Callan Taft-Hartley DB	12.6	10.2	7.4	6.7	7.5
Callan TD Thru Index 2035	15.6	11.9	8.6	8.0	--
Callan DC Index	14.8	10.4	7.8	--	--
S&P 500	19.3	16.3	10.0	7.6	8.8
Barclays Aggregate	-1.7	2.9	5.4	4.6	5.8

Calendar Year Returns

	2012	2011	2010	2009	2008
Callan Corporate Fund DB	13.0	2.0	13.1	20.6	-24.7
Callan Public Fund DB	12.7	0.9	13.0	20.2	-25.4
Callan End/Foundation DB	12.3	-0.4	12.6	21.2	-26.5
Callan Taft-Hartley DB	12.0	1.5	12.8	15.3	-23.4
Callan TD Thru Index 2035	14.6	-1.4	14.6	27.9	-34.5
Callan DC Index	12.3	-1.1	12.1	22.2	-28.5
S&P 500	16.0	2.1	15.1	26.5	-37.0
Barclays Aggregate	4.2	7.8	6.5	5.9	5.2