ALASKA RETIREMENT MANAGEMENT BOARD

BOARD OF TRUSTEES MEETING

December 5-6, 2013

Anchorage Marriott Hotel
820 W. 7th Avenue
Anchorage, Alaska
907 279-8000
907 279-8005

Thursday, December 5, 2013

I.	9:00 am	Call to Order
II.		Roll Call
III.		Public Meeting Notice
IV.		Approval of Agenda
V.		Public/Member Participation, Communications, and Appearances (Three Minute Limit)
VI.		Approval of Minutes – September 19-20, 2013
VII.		Election of Officers
VIII.	9:15	Reports

1. Chair Report, *Gail Schubert*

2. Committee Reports
   A. Audit Committee, *Martin Pihl, Chair*
   B. Legislative Committee, *Gail Schubert, Chair*

3. Retirement & Benefits Division Report
   A. Membership Statistics (informational)
   B. Buck Consulting Invoices (informational)
   Director Jim Puckett

4. Treasury Division Report
   Commissioner Angela Rodell

5. CIO Report, *Gary Bader, Chief Investment Officer*

10:00-10:20 6. Fund Financial Presentation and Cash Flow Update
Pamela Leary, Comptroller, Department of Revenue
Kevin Worley, CFO, Division of Retirement & Benefits

10:20 – Break
10 Minutes

10:30-11:00 7. KPMG - Audit Report
Michael Hayhurst and Melissa Beedle, KPMG

11:00-11:40	8.	FY 2015 Budget *Karen Rehfeld, Director* *Office of Management and Budget*

Lunch – 11:45 – 1:00 pm

Thursday Afternoon

1:00	9.	Infrastructure Manager Search *Gary Bader, Chief Investment Officer* *Michael O'Leary, Callan Associates Inc.*	
1:15-1:45		Lazard Asset Management *Tony Dote and Matt Landy*	
1:50-2:20		Brookfield Investment Management Inc. *Richard Torykian and Sam Arnold*	
2:25		Board Action	
2:45	10.	Addition to DC Investment Options:	
2:50-3:30		A.	Retirement Portfolio Completion Fund *Mark Brown and Matt Hoehn* *Goldman Sachs Asset Management*

3:30– Break
10 Minutes

3:40-4:20		B.	Building Block/Benchmark/Contract Changes *Charles Shriver, Rob Larkins, Chris Dyer & Bob Birch* *T Rowe Price*
4:20		C.	Board Action

End of Meeting Day

Friday, December 6, 2013

9:00		Call to Order
9:00-10:00	11.	Performance Measurement – 3rd Quarter *Michael O'Leary and Paul Erlendson, Callan Associates, Inc.*

10:00 - Break
5 Minutes

10:05-10:35	12.	Liquidity *Gary Bader, Chief Investment Officer*
10:35-11:00	13.	IAC Presentation *Dr. William Jennings, Investment Advisory Council*

11:00 - Break
5 Minutes

11:05-11:40	14.	Private Equity Evaluation *Gary Robertson, Callan Associates, Inc.*
11:40-11:55	15.	Investment Actions *Gary Bader, Chief Investment Officer*

IX. Unfinished Business
1. Calendar, *Judy Hall, Liaison Officer*
2. Disclosure Report, *Judy Hall, Liaison Officer*
3. Legal Report, *Rob Johnson, Legal Counsel*

X. Action Items - New Business
XI. Other Matters to Properly Come Before the Board
XII. Public/Member Comments
XIII. Investment Advisory Council Comments
XIV. Trustee Comments
XV. Future Agenda Items
XVI. Adjournment

(Times are approximate. Every attempt will be made to stay on schedule; however, adjustments may be made.)

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
MEETING

Location:
Fairbanks Westmark Hotel
813 Noble Street
Fairbanks, Alaska

MINUTES OF
September 19-20, 2013

Thursday, September 19, 2013

CALL TO ORDER

CHAIR GAIL SCHUBERT called the meeting of the Alaska Retirement Management Board (ARMB) to order at 9:00 a.m.

ROLL CALL

Nine ARMB trustees were present at roll call to form a quorum.

Board Members Present
Gail Schubert, *Chair*
Sam Trivette, *Vice Chair*
Gayle Harbo, *Secretary*
Kristin Erchinger
Acting Commissioner Angela Rodell
Commissioner Becky Hultberg
Tom Brice
Sandi Ryan
Martin Pihl

Investment Advisory Council Members Present
Dr. William Jennings
Dr. Jerrold Mitchell
Robert Shaw

Department of Revenue Staff Present
Gary M. Bader, Chief Investment Officer
Steve Sikes, State Investment Officer
Pamela Leary, State Comptroller
Judy Hall, Board Liaison

Department of Administration Staff Present

Mike Barnhill, Deputy Commissioner

Consultants, Invited Participants, and Others Present
Robert Johnson, ARMB Legal Counsel
Michael O'Leary, Callan Associates, Inc.
Paul Erlendson, Callan Associates, Inc.
Micolyn Magee, Townsend Group
Oliver Williams, Hancock Agricultural Investment Group
Tom Sarno, Hancock Timber Resource Group
David Weiner, Sentinel Real Estate Corporation
David Stenger, Sentinel Real Estate Corporation
Michael Gately, Cornerstone Real Estate Advisors
Denise Stake, Cornerstone Real Estate Advisors
Charles Gallagher, Northern Region Chair RPEA
Ron Johnson, Public

PUBLIC MEETING NOTICE

JUDY HALL confirmed that public meeting notice requirements had been met.

APPROVAL OF AGENDA

<u>MS. RYAN moved to approve the agenda</u>. <u>MS. HARBO seconded the motion</u>.

Chief Investment Officer GARY BADER requested Item 16.E., Exercise First Year Option on the MAP Contract, be added to the agenda. With that addition, the agenda was approved.

PUBLIC/MEMBER PARTICIPATION, COMMUNICATIONS AND APPEARANCES

CHARLES GALLAGHER, Northern Region Chair of RPEA, welcomed the ARM Board members to Fairbanks on behalf of the Northern Region Retired Public Employees of Alaska. MR. GALLAGHER expressed his gratitude to the Administration for inviting his Chapter to this meeting and to last week's TPA meeting. He was pleased with the question and answer portion of the meeting. MR. GALLAGHER was astonished by the approximate number of 100,000 retirees and beneficiaries predicted to be the population of the system in 2017. He thanked the Board for their diligence.

APPROVAL OF MINUTES

<u>MS. HARBO moved to approve the minutes of the June 20-21, 2013 meeting. MR. BRICE seconded the motion</u>.

The minutes were approved.

REPORTS

1. CHAIR REPORT

CHAIR SCHUBERT welcomed MR. ROBERT SHAW, the new IAC member, to his first meeting.

2. COMMITTEE REPORTS

A. Audit Committee

MR. PIHL reported the Audit Committee met on September 18. The chief subject was the report from KPMG on the nearing completion of the Treasury Division June 30, 2013 audit. The Audit Committee continued discussion of GASB 67 and 68. The Department of Administration will soon release a draft paper of interpretation for review and comment. MR. PIHL noted this issue has serious implications for all employers across the state and will receive continuing attention and study.

CHAIR SCHUBERT asked if the ARM Board will receive a copy of the draft paper. Deputy Commissioner MIKE BARNHILL replied the draft paper will be sent to the Board.

B. Salary Review Committee

MR. PIHL reported the Salary Review Committee met on September 18 and was very well-attended. He commented that Comptroller Pam Leary has done an excellent job providing a good review of how the system is working. The differences in salary comparisons with the Permanent Fund for many positions and overall has narrowed significantly. MR. PIHL commented the Committee has long been concerned about the salaries for the Chief Financial Officers in both the Department of Revenue and Department of Administration.

<u>MS. PIHL moved to authorize a letterfrom the Board to the Commissioners of Revenue and Adminsitration offering any assistance to increase the chief financial officer and comptroller's salaries; the motion was seconded by MS. ERCHINGER</u>.

<u>The motion carried unanimously.</u>

C. Budget Committee

CHAIR SCHUBERT reported the Budget Committee met September 18 and reviewed the fiscal year final 2013 budget and fiscal year 2014 budget, as approved by the Legislature. The FY2015 budget was also reviewed and will be discussed further under the Treasury Division Report. CHAIR SCHUBERT expressed appreciation to Ms. Leary for the work she does and presenting the information is an easy to understand manner.

D. Legislative Committee

CHAIR SCHUBERT stated the Legislative Committee met September 18. She noted Trustee Erchinger provided a really good recap of the August 8th workshop and has included in the Board's packets a document summarizing the work session, including a good summary of the unfunded liability issue. The upcoming legislative session was discussed in detail resulting in three specific items. The first item is getting information to the Board about GASB 67 and 68.

The second item is to present a packet of information to the Legislature and the Governor addressing the unfunded liability issue, including information from Buck on the upfront contribution that would be required of the state to help close that gap and come to some resolution. CHAIR SCHUBERT stated Ms. Rodell provided a detailed presentation on the constitutional statutory budget reserve and requested MS. RODELL give a presentation to the full Board at a future meeting.

MR. BARNHILL noted, as a point of clarification, that everything the ARM Board and Mr. Pihl have requested from Buck has been provided and if there is a specific deliverable the ARM Board wants from Buck, they need to know what it is. MR. TRIVETTE stated there was an additional important item, which authorized the Chair to work with the staff to develop a plan for meetings with the Legislature before this fall, outlining the kinds of information to present and providing education to the Finance Committee.

MR. PIHL commented a motion needs to be made if Board authorization is necessary for the Legislative Committee to pursue the information request of the follow-up/research items on page 11 of the August 8 study report, particularly the question of the front-end number. MR. TRIVETTE advised he intends to offer a motion to that effect when the August 8 meeting agenda item is discussed.

E. Real Assets Committee

MS. ERCHINGER reported the Real Assets Committee met September 18. She noted much of the agenda today will involve real assets, including four presentations on timber and real estate matters, a presentation on real assets' issues, and the Committee-recommended adoption of two resolutions, which she will move during the appropriate agenda item.

3. RETIREMENT & BENEFITS DIVISION REPORT

A. Membership Statistics (informational)

MR. BARNHILL stated MR. PUCKETT is swamped at the Division of Retirement & Benefits conducting interviews and continuing the extraordinary task of transitioning to the new third-party administrator. He sends his regrets for not being able to attend the meeting. MR. BARNHILL provided the Board with a replacement membership statistics report and noted the report provided in the packet is incorrect and the membership statistics have been incorrect for a number of meetings. The total population of retirees as of June 30, 2013, was 29,695 for PERS and 11,388 for TRS.

MR. TRIVETTE inquired about the reason for the discrepancy. MR. BARNHILL stated there was a database issue within the Division of Retirement & Benefits and incorrect numbers have been given to the ARM Board. He noted the actuaries have projected the number of retirees would currently be around 42,000, which is pretty close to the actual number of 41,000.

MR. BARNHILL explained the defined contribution retiree health plan is not fully implemented and the four people listed in the DC column do not qualify for health insurance under the DC health statute. MS. ERCHINGER asked what the anticipated roll-out date is for the defined contribution health plan. MR. BARNHILL stated the defined contribution health plan work has been put on hold because they are completely devoted to a "seamless" transition from Health Smart to Aetna. He noted the focus will return to defined contribution work after the transition.

MR. PIHL asked for clarification regarding the number of retirees and beneficiaries and if that number related to the number of checks going out. MR. BARNHILL responded the 41,000 number does not include beneficiaries. The covered life population of the retiree plans, which includes beneficiaries, is closer to 65,000. MR. BARNHILL explained further that this data was erroneously being pulled from a static table, which was a snapshot in time, as opposed to a dynamic table within the database.

MS. HARBO requested the definition of "full disbursement" and "terminated" as used in the table. MR. BARNHILL directed the Board use the legend on page four for clarity. MR. TRIVETTE commented the questions he had regarding the report are no longer valid, since the data is inaccurate. He stated he will not be able to compare the two reports during the meeting, but will ask his questions after he has time to review the new data.

B. Buck Consulting Invoices (informational)

MR. BARNHILL focused the Board's attention to the 12 months ending June 30, 2013. The bulk of the work that totaled $622,500 goes to the standard actuarial evaluations that are done every year. He noted the DCR Health Care Plan design modeling tool totaled $32,000. The goal is to design a plan in which the HRA account will last until the retiree's early 80's or some typical time period when we might expect the retiree to pass on. The Department of Revenue and the secondary actuary GRS recommended the conclusions be measured against a population-based retiree, which means it will work for most of the population, rather than a typical retiree. Continued actuarial work needs to be performed before the DCR plan can be completed.

MR. BADER noted the current approach to the investments in the health reimbursement is long-term and as the plan matures, that approach may not meet the investment goals of all the people in the plan. He suggested the Department factor in the investment component in their planning. MR. BARNHILL stated it is well worth considering the investments be done by age cohorts.

MR. BARNHILL reported the design of Plan B Health Care Benefits has been put on hold. Plan B would have provided desired healthcare enhancements, including coverage for dependants to age 26 and preventative care coverage, such as colonoscopies, which are not covered in the current design of the defined benefit retiree health plan. MR. BARNHILL noted a set of stakeholders has emerged intending to advocate for those same enhancements in the existing retiree healthcare plan within the context of the next legislative session. MR. BARNHILL stated the focus is now on what can be done in the existing plan regarding enhancements and making some adjustments to the cost structure. This issue will be brought back to the Board.

MS. ERCHINGER requested additional information about putting Plan B on hold and possibly introducing preventative care into Plan A. MR. BARNHILL expressed his concern about the current $3.8 billion unfunded liability attributable to the healthcare plan. There is reluctance to introduce enhancements that exacerbate the existing unfunded liability, but there may be some offsets that could make it cost neutral or some element of savings to directly adjust the unfunded liability. Any proposal would be brought to all the stakeholders with opportunity to comment.

MS. HARBO inquired about how the HRA and major medical accounts are being handled. MR. BARNHILL stated the HRA funds go to the Division of Treasury and it is invested into an aggregate account. The ARM Board annually sets a major medical employer contribution rate, which is collected from employers and goes to the Division of Treasury for investment. Since there are no retirees in the system yet, the only revenue collected for major medical is coming from employers.

MS. HARBO asked how the Affordable Care Act will affect retirees, who are considered in a Cadillac plan. MR. BARNHILL stated the Affordable Care Act does not apply to public pensions and retiree plans, but the Cadillac tax is an issue in the active plan.

MR. BARNHILL noted the other big ticket item on this list is the actuarial study regarding the Aleutian Region School District, who has brought a claim against the system to refund the two million-dollar balance of their employer account as of when we went from an agent multiple-employer system to a cost-share system. The state is defending against that right now and it is in the early stages of discovery.

MS. ERCHINGER noted, for the record, there is a charge for a 60-year projection scenario of additional state appropriation requested by the ARMB, which MS. ERCHINGER does not believe the Board ever requested a 60-year scenario for amortization. She stated the conversations have been centered around paying off the unfunded liability by 2032, and wanted to clarify that the actuaries and the ARMB are using different terminology for different purposes. MS. ERCHINGER does not want that line item to be misinterpreted.

4. TREASURY DIVISION REPORT

A. FY15 Budget - Action

MS. LEARY directed the Board's attention to the proposed working budget for fiscal year 2015, which includes MR. BADER's request of a full year's worth of risk management contract as was discussed at the Budget Committee meeting held September 18. MS. LEARY reported the overall budget increased 7.2% over fiscal year 2014, primarily due to an increase in staff costs of about 6% and an increase in management paid projects of about 8%.

CHAIR SCHUBERT advised the Budget Committee moved at their meeting to recommend that the full Board adopt the budget. She noted as Chair, she cannot make that motion.

<u>MS. HARBO moved to adopt the Fiscal Year 2015 Budget</u>; <u>the motion was seconded by MS. ERCHINGER</u>.

A roll call vote was taken and <u>the motion carried.</u>

5. CHIEF INVESTMENT OFFICER REPORT

MR. BADER stated in conformance with the Board policy, on July 23rd, the Board Chair was notified of the intent to commit $50 million to Neuberger Berman Secondary Opportunities Fund III. MR. BADER reported each of the ARMB fund allocation rebalances during August 2013. The rebalances are necessary to stay within the Board policy. A transfer of $25 million from short-term fixed income to TIPS occurred, also due to staying within limits of the Board policy. MR. BADER requested the Board take action to remove Lord Abbett Small Cap from the watch list, since a change to Lord Abbett Small Cap Growth has already been made. MR. BADER requested the Board take action to add Relational Investors to the watch list due to sub-par investment return performance.

<u>MS. HARBO moved to remove Lord Abbett Small Cap from the watch list and add Relational Investors to the watch list; the motion was seconded by MR. BRICE.</u>

<u>The motion carried unanimously.</u>

6. FUND FINANCIAL PRESENTATION with Cash Flow Update

MS. LEARY reviewed the fund financial report for the month ending July 31, 2013. The cumulative report is the same because it is for only one month. Ending invested assets for PERS was at $13.7 billion; TRS, $5.8 billion; Judicial Retirement system, $149 million; and National Guard/Naval Militia, $35.6 million. For participant-directed plans, the Supplemental Annuity Plan was at $2.9 billion, and the Deferred Compensation Plan was a $705 million. For the month ending July 31, 2013, the total for all the DB and DC plans is $23.4 billion.

MS. LEARY noted the asset classes are all within their asset allocation targets, with domestic equity being slightly above and global equity being slightly below. This is a pattern that is seen through all the DB plans.

MR. BARNHILL commented they are understaffed. He reviewed the report illustrating the non-investment changes in the fund, which are the deposits and withdrawals without showing investment gains or losses. Normally, the numbers in the far right column of the defined benefit plans are negative because more money is being expended than being brought it. The reason it is positive is due to the SB125 state assistance payments, which are booked in July.

MS. ERCHINGER noted for the record the state assistance payment was $312 million for PERS, $316.8 million for TRS, and $4.4 million for JRS, totalling $633.7 million in July.

7. TRUST FUND LIQUIDITY

MR. BADER commented this report should be entitled "Liquidity Analysis; A Work in Progress." He noted this report is in response to comments and requests made byTrustees Pihl, Erchinger and Trivette and Deputy Commissioner Barnhill. MR. BADER emphasized there are sufficient assets to pay benefits for years to come and does not want to sound an alarm, worrying participants. He stated the purpose of the presentation is to define liquidity as the ability to pay fund benefits without material impairment of the value of the fund's assets.

MR. BADER explained the liquidity chart for a normal environment on page two and noted the total portfolio has less than one-year liquidity at about 85%. The next chart shows for a stressed environment, the total portfolio has less than one-year liquidity at about 73%. This is due primarily to potential contractual obligations to supply money to private equity investments.

MR. BADER reviewed the program's current annual cash generation from fixed income at $64 million, public equity at $244 million, and real assets at $81 million. In terms of planning, no cash is included from the asset classes of private equity and absolute return. The annual cash yield of the entire portfolio is estimated at $389 million, which is about 2.17% return of cash on the portfolio annually. The 2.17% is the number used to make the projections in the presentation.

MR. BADER noted the PERS chart on page nine illustrates in 2019, the amount of benefits paid will exceed the amount of cash earned on assets. MR. BADER estimates for TRS, 2021 is the year that the amount of benefits paid will exceed the amount of cash earned on assets. The PERS and TRS DCR plans are both cash positive. They are not mature plans yet. MR. BADER advised the Board currently pools its investments and there is a financial benefit experienced by combining all the different plans.

MR. BADER directed the Board's attention to the ARMB Liquidity Projection chart on page 13, specifically to the year 2025, when we are going to need $1.2 billion a year in either dividends, interest, return of capital or selling assets to pay benefits. He noted a yield and/or return of capital of 3.94% is necessary to generate the $1.2 billion. The current portfolio yield is $2.17%. MR. BADER expressed the importance to plan ahead in terms of what the best investment program is to accomplish the needs of the fund.

MR. BADER discussed some of the implications, which include the ARM considering investments where the current yield is a larger component of annual returns, tilting away from higher earning, but illiquid assets, and lowering the earnings assumption. MR. BADER noted he does not have a solution to propose at this meeting and believes it requires more thought. He has alerted his staff this is a priority and will evaluate strategies and report to the Board at the December meeting. MR. BADER hopes to have more information at that time regarding the budget and the intent of future funding arrangements, which is important to the investment program strategy.

DR. JENNINGS commented on the importance of getting the time period buckets correct on the chart on page three. He has had experience as the long-term bucket being anything longer than five years and the short-term buckets including daily and monthly periods. DR. JENNINGS considers a stressed environment as one when liquidity went away, but also when the portfolio experienced significant losses on the equity side. He asked if that was included in the current chart, and if not, he encouraged to roll both of those together into the stressed environment. MR. BADER responded he will do that. DR. JENNINGS stated he agreed with most of the implications going forward, but encouraged total return investing be kept in the forefront, as opposed to yield-oriented investing.

MR. JOHNSON believes the analysis presented by MR. BADER falls squarely within the mandate stating, "Consistent with the standards of prudence, the Board has a fiduciary obligation to manage and invest these assets in a manner that is sufficient to meet the liabilities and pension obligations of the system plan, program and trusts."

MS. ERCHINGER thanked MR. BADER for this very helpful presentation. She does not believe the Board can address the unfunded liability issues within the fiduciary requirements in terms of being prudent investors, unless major injections of funding into the system are obtained. She recommended the Board make a major effort to determine a more effective way of educating the Legislature regarding these issues that could become a major problem for fiduciaries on this Board within the next decade.

MR. PIHL suggested the liquidity projections be continued out beyond 2033 because the outflow continues and at some point, the projection will run out of cash. MR. BADER commented it is tough to get the returns that are in the assumptions right now, unless there are some changes in the economic environment in this country or we look offshore.

MR. MICHAEL O'LEARY from Callan Associates underscored the relevance of DR. JENNINGS' comments and how during the meltdown, the allocation to illiquid assets increased significantly as a proportion of total assets. MR. O'LEARY noted the highest performing, expected return asset category within the portfolio is private equity, but has to be limited because of anticipating liquidity needs. MR. O'LEARY commented it is entirely prudent to expect a large portion of significant liquidity needs to be met through current income production.

MR. SHAW inquired if changing the yield to 3.94% would require a radical revision to the investment policy statement. MR. BADER wanted to emphasize the seriousness of the problem if it is not addressed, but does not anticipate having to revise the investment policy statement.

MR. TRIVETTE appreciated MS. ERCHINGER'S comments. He agrees with her and believes this will come into some serious discussion.

8. REAL ASSETS

A. Real Assets FY14 Annual Plan
Real Estate Guidelines Policies and Procedures

MR. STEVE SIKES, Manager of Real Assets Investments, gave a detailed presentation on the Real Assets Fiscal Year 2014 Investment Plan. As of June 30, 2013, 17.3% of ARMB's portfolio comprised of real assets, of which 9.2% is real estate, 4% is farmland, 1.5% is timberland, 2.6% is energy, and .05% is TIPS. MR. SIKES stated the role of the portfolio is to generate attractive returns, which provide diversification and inflation hedging. Many of the sectors in the portfolio have historically exhibited lower volatility and a higher income component of total return. It is a lower risk, lower return approach in these sectors with a conservative use of leverage and a focus on higher quality assets producing stable returns.

MR. SIKES noted the use of custom benchmarks to evaluate each one of the sectors. The structure of the portfolio, except for the REITs, TIPS and MLPs, are private illiquid assets requiring long-term holding periods. These assets are held in limited liability structures. The implementation of the portfolio is delegated among staff. MR. SIKES reported he oversees the real estate, farmland and timberland components. The fixed income group oversees the TIPS portfolio and the private equity group oversees the energy portfolio.

MR. SIKES discussed the pie chart on page five, which shows the breakout of the portfolio currently and stated the mix of the portfolio is primarily a function of the historical evolution of the components with the longest history being in real estate. The table at the bottom of the page indicates actual asset allocation compared to target allocation. The purpose of the target was not to compel immediate action shifting the portfolio to the target, but rather to take a long-term approach in determining the optimum mix of the assets.

MR. SIKES presented the real assets returns for the periods ending June 30, 2013. The aggregate return for the fiscal year was 10.19%. Over the fiscal year, the last quarter and the last three years, it has outperformed its target. For the last five years, it has underperformed its target, mainly due to the five-year number continuing to reflect the challenging time for the real estate portfolio in the '08/'09 period. MR. SIKES reported the real estate portfolio, as of June 30, was valued at $1.7 billion and it represented 23 properties where the Board has a direct interest and interest in commingled funds. He believes the portfolio is well-diversified based on property type and geographic region. MS. MICOLYN MAGEE from Townsend Group will discuss the performance of real estate in more detail.

MR. SIKES stated the REIT portfolio underperformed last year, but has outperformed last quarter and over the last three years. He noted the five-year number includes a time period when a different investment strategy was used, so the tracking error suggested with the five-year number is not expected going forward. MR. SIKES noted farmland has done very well for the Board, returning 15.5% for the fiscal year and 10.33% over the last five years. The timberland portfolio showed improving results last fiscal year at 7.17%, even though it underperformed its index.

MR. SIKES commented the farmland market continues to be a challenging market to find acquisitions that fit ARMB's minimum income requirements. The speculation is that land owners are doing quite well holding their property and are not highly motivated to sell. MR. BADER requested a description of the criteria the managers must follow regarding portfolio yield. MR. SIKES advised the minimum yield requirement is 5% at the portfolio level and 4% for individual properties.

MR. SIKES stated there are no current investments in the infrastructure portfolio sector. He noted ARMB directed Callan to perform a manager search, which has been completed and presented to staff. Staff conducted further due diligence and has invited two open-end private investment fund managers to present this afternoon. Staff's plan is to perform additional due diligence on infrastructure public strategies and bring those strategies to the Board at the December meeting, along with a proposed benchmark and guidelines for the sector. The proposed target allocation is 12.5%, which is a commitment of $450 million, of which $300 million is committed to private open-end funds and $150 million to publicly traded strategies.

CHAIR SCHUBERT asked MR. O'LEARY why now is the right time to invest in the infrastructure sector. MR. O'LEARY responded that the number of viable candidates has slowly increased and many of those candidates have developed some reasonable history. The listed market has also matured within the United States.

MR. SIKES stated a global strategy is being recommended for both the private and public portfolios, due to the early stage of the U.S. private infrastructure market. The portfolios will be U.S. dollar-based, but unhedged as it relates to the international investment positions, due to the long-term nature of those holdings. MR. SIKES noted the expected total returns are 10% to 12% net over the long-term, with a current yield of 5% to 7%, while providing diversification, predictable cash flows and inflation protection over time.

MR. SIKES reported the energy portfolio increased fairly significantly last year to just over $470 million. This reflects the $360 million investments into MLPs. The TIPS portfolio was reduced last year as a result of yields and to fund the MLP portfolio. MR. SIKES believes the economy, while choppy, continues to show improvement in GDP, non-farm payrolls, consumer sentiment, and in both sales and prices of the housing market. He feels the real estate market is back to its pre-recession levels. Debt is fairly available and yields are relatively attractive.

MR. SIKES recommends some adjustments to the target allocations of the components, primarily to accommodate the infrastructure sleeve that is being added this year. The recommendation is no change to the real estate and farmland numbers, a reduction to timberland from 25% to 15% and modify that band accordingly, an addition to infrastructure to 12.5% and modify that band accordingly, an increase to energy from 5% to 12.5% to accommodate the MLP strategy, a reduction to TIPS from 10% to 0% and modify that band to

20% to give the CIO discretion to allocate to that sector if it becomes more attractive. The proposed core/non-core target recommendation is a change from 75%/25% to 100%/0% with appropriate bands. MR. SIKES noted an error that the 25% for non-core does not encompass the current portfolio mix and he would revise that number to 27%.

MR. SIKES discussed that the staff is in the very early stages of exploring the potential of establishing one or more separate accounts to focus on the medical office sector. There is an informational item on the agenda tomorrow to discuss this issue further.

MR. TRIVETTE expressed appreciation for MR. SIKES providing clear explanations of the recommended changes. DR. MITCHELL asked if there is any interest in hard commodities and gold at the current market levels. MR. SIKES explained there is hesitancy with the gold market and it is not being considered. He noted they had looked at some futures strategies but found infrastructure more appealing than commodities.

DR. JENNINGS asked if the definitions of core real estate and core barrier cities change as investments are added into the portfolio. MR. SIKES responded that for the ARM Board it means the location needs to have a high restriction on new supply; physical, zoning, or geographic. MS. MAGEE commented core markets generally have good economic drivers, stable demand, long-term trends for good absorption of rents and occupancies, and good job growth. She noted just because an asset is in a core market does not mean it is a core asset.

MR. BRICE asked what the demand is for farmland in the marketplace now. MR. SIKES responded the current condition of the market is very much a seller's market.

CHAIR SCHUBERT recessed the meeting from 11:09 a.m. to 11:19 a.m.

B. Consultant Evaluation of Real Estate Plan: Diversification, Compliance, & Performance Measurement

MS. MAGEE gave a detailed presentation on the ARMB real estate portfolio. The portfolio peaked in March of 2008 and the trough of the market cycle was March of 2010, at which point the portfolio was down 45%. This was primarily due to the fact the portfolio is 47% leveraged. The NCREIF Index is an unleveraged index and was down 32% in March of 2010. The NCREIF Index is also a core only index, whereas the ARMB real estate portfolio is 60% core/40% non-core asset mix. That same leverage has benefited the portfolio during the recovery. The ARMB real estate portfolio is up 30% relative to the market's 24%.

MS. MAGEE noted real estate is moving closer to the 35% target allocation within the real assets portfolio. It is currently at 53%. She commented the Townsend Group will be working with staff on strategies to compose a purely core portfolio, which allows for both liquidity and an income stream. MS. MAGEE explained the performance chart, as of June 30, 2013, on page seven on the presentation. She noted that the more recent quarters, part of the one-year and three-year performance is beginning to perform well, but explained the portfolio will lag the market recovery because the real estate portfolio size has been reduced. The five-year and since inception numbers continue to significantly reflect the global financial crisis and decline.

MS. MAGEE reported the public securities are managed internally by the staff. The three-year return and the more current returns reflect the staff's repositioning of the portfolio and they have done an excellent job of tracking the market efficiently. She believes the staff has complied during the year with the objectives established in the prior year. There are no issues regarding diversification of the assets in the portfolio. MS. MAGEE commented Townsend has focused very heavily on those asset types that are driven by demand, derived from demographics, which is consistent with the staff's interest in medical office. Medical office is part of the Other category and includes senior housing, student housing and self-storage.

MS. MAGEE discussed the equity multiples provided by each of the core managers. LaSalle is 1.5, Sentinel is 1.5, UBS is 1.9, and Cornerstone is 1.5. MS. MAGEE noted that key to the success of the core portfolio has been the selection of the open-ended funds. The open-ended funds use the ODCE, Open-Ended Diversified Core Equity Index as their benchmark. The non-core portfolio has challenging vintage year exposure, with significant amounts of investments in '06, '07, and '08. This ended up being a high risk time to be investing and virtually everybody suffered from those investments.

MS. MAGEE reported there has been a correction in the REIT market and this generally is an indicator of what the core markets might do. MS. MAGEE gave Townsend's perspectives on the world markets. They are cooling off in the U.S., believing it is fairly priced and difficult to find good opportunities. They are bearish on Europe, but becoming more neutral. They are neutral on the Asian market, with improving perspectives. MS. MAGEE noted Townsend is about to hire a third compliance person.

DR. MITCHELL stated the Callan asset allocation estimate for real estate is about 7.5%. He asked if MS. MAGEE endorses that number and believes the ARMB real estate portfolio, as it stands today, can meet that target. She commented 7.5% is a perfectly accurate number to use, but it might not be what real estate would do for the next five to 10 years, but over the long-term, believes real estate can have a cap rate of 6% to 7% and appreciation of 1% to 2%. MS. MAGEE stated the portfolio will be challenged to reach the 7.5% net, because the non-core portfolio is not recovering at that level and not making new investments also adds to the difficulty. She said Townsend will work with the staff in repositioning the core portfolio and looking for opportunities to get as close to that number as possible.

C. Adoption: Real Assets FY14 Plan & Policies Board Discussion
Action: Real Assets FY14 Annual Plan, Res. 2013-15
Action: Real Estate policies and procedures, Res. 2013-16

<u>MS. ERCHINGER moved to adopt Resolution 2013-15, Relating to Real Assets Annual Investment Plan, including revisions by MR. SIKES and the modification to the proposed band for the private core/non-core from 25% to 27%; the motion was seconded by MS. HARBO.</u>

A roll call vote was taken and the motion carried unanimously.

MS. ERCHINGER moved to approve Resolution 2013-16; the motion was seconded by MR. PIHL.

MR. TRIVETTE asked if MR. SIKES has any issue with the new contact folks. MR. SIKES noted he was comfortable with them.

A roll call vote was taken and the motion carried unanimously.

CHAIR SCHUBERT recessed the meeting from 11:48 a.m. to 1:15 p.m.

9. HANCOCK AGRICULTUARAL INVESTMENT GROUP

MR. BADER introduced the President of Hancock Agricultural Investment Group, HAIG, OLIVER WILLIAMS. MR. WILLIAMS gave a detailed presentation reviewing ARMB's Combined Northern Agricultural Portfolio. He noted HAIG is one of three operating divisions for the Hancock Natural Resource Group, which is a wholly-owned indirect subsidiary of Manulife Financial Corporation.

MR. WILLIAMS discussed the organizational changes reflected on page four of the presentation. MR. O'LEARY requested explanations for the organizational changes. MR. WILLIAMS noted in September of 2011, the original President for the group retired and MR. WILLIAMS was moved into that position, which created a vacancy for the Director of Asset Management. This past May, the Director of Acquisitions decided to leave the firm and strike out on his own, which created that vacancy. MR. WILLIAMS, as President for almost two years, felt there was a strong case to round out the senior management team and bring in extra capacity by hiring a CIO.

MR. O'LEARY asked how business has been during this transition phase. MR. WILLIAMS responded he always looks at business from the client's perspective, which is returns. He noted the returns have been very good and farmlands have continued to perform very well. HAIG has not added any new clients this year, but are working with a number of prospects. MR. WILLIAMS advised the farmland market in some areas is relatively expensive and they are having to look at more investments in order to find acquisitions that meet the underwriting criteria.

MR. O'LEARY stated MR. WILLIAMS' coworkers are keenly interested in how successful HAIG is and asked for further perspective on that issue. MR. WILLIAMS commented people leave for their own reasons and believes it has been a fairly stable organization. MR. WILLIAMS explained HAIG's compensation structure is very competitive with the market, but is tied to clients doing well. He advised compensation is also tied to financial discipline, and finding good acquisitions that ultimately perform as expected.

MR. WILLIAMS noted when we think about farmland, there are two crop types; annual row crops, in which the crop can switch from year-to-year, and leased permanent crops, in which you add to the land, a tree or a vine, and then that combination is leased to a third-party. Row crops have lower risk and lower volatility. Permanent crops have higher risk and higher volatility, which could provide extra return. MR. WILLIAMS reported the account was established in January 2005. The aim was to achieve portfolio diversification, optimize returns, while taking into account the assumption of prudent risk and safety of principal. This was accomplished by the allocation. The total asset allocation is 80% in row crops and 20% is permanent crops, both of which are leased. The current asset allocation is 81% row crops and 19% permanent crops, which is in line with the investment management agreement.

MR. WILLIAMS stated the total allocation is $245.25 million, of which $211 million has been spent, invested or committed, which leaves approximately $34 million of available funds to utilize if appropriate transactions are found. The list of operating entities on page six of the presentation is currently investing for the plan. MR. WILLIAMS showed a chart on page seven revealing relatively equal weights of diversification in the Pacific West, Mountain States, Southern Plains, Delta States, and Corn Belt. Another way the plan looks at diversification is by commodity type grown. The plan has 13 different commodities. The highest weightings are corn, soybeans, and wine grapes.

MR. WILLIAMS noted there are two key objectives for the portfolio's benchmark returns. The first is a total return for the program over rolling five-year periods. It needs to generate a real return of 5% after fees. As of June 30, 2013, the portfolio was above that benchmark. The next benchmark is income return. It needs to have an income return that is greater than 4% net of fees. As of June 30, 2013, the portfolio was also above that benchmark.

MR. WILLIAMS explained the graph on page 10, which illustrates the portfolio's income returns, net of fees, of 2.95%, versus the NCREIF Income Index, gross of fees, of 4.81%. The portfolio trails the index in each category. The graph on page 11 illustrates the portfolio's total returns, net of fees, of 10.27%, versus the NCREIF Total Return Index, gross of fees, of 17.72%. The portfolio trails the index in each of the categories. A correction was made to the graph on the 5-year return for the index should read 12.41. MR. WILLIAMS believes the underperformance on the income side is driven by an underperformance in the Sonoma 12 region. He believes the underperformance on the total return side is mainly from the Southern Plains region, where there was depreciation in the assets as result of the drought.

MR. O'LEARY asked what the implications were in the Mountain region regarding the flooding in Colorado. MR. WILLIAMS responded the flooding in Colorado has not impacted any of the portfolio's agriculture assets because the majority of the assets are in Idaho. He noted the only upside of the flooding is the recharging of the Ogallala Aquifer, which is positive for farmland in the long-term.

MR. WILLIAMS stated the portfolio is performing as expected. He reviewed the market outlook, noting the U.S. farm sector remains strong and competitive. Net income and cash incomes numbers are at highs. There is price volatility in the corn market, but the expectation is to have a normal crop. Normalized volumes are good to help maintain demand. Farm balance sheets are healthy and debt levels are at historic lows. The portfolio has some funds remaining to invest and Hancock is busy looking to find investments that meet the underwriting criteria.

MR. PIHL noted the 5-year rolling income return for the portfolio on page nine is trending down for quite a period of time and asked if they see that turning back up. MR. WILLIAMS commented that one of the components that goes into that income is the level of income generated off the investments. As leases are reset, the net income generally trends up. There has been an appreciation in the underlying assets, in some cases increasing faster than income, causing that income number to come down. MR. WILLIAMS stated when negotiations with tenants occur, the rental rates may be set even higher.

MS. HULTBERG MR. WILLIAMS' for his perspective on the market for corn. MR. WILLIAMS responded corn is one of the staple crops in the U.S. It can be found in so many different products, ranging from consumer packaged foods to clothing and apparel, and many more. He noted there has been no recent corn price subsidy support because the prices exceed those levels. The direct payment subsidies are being replaced by revenue insurance, but the process is being held up by congressional gridlock. MR. WILLIAMS believes the food supply is going to make adjustment regarding corn syrup based on whatever the appropriate health reaction is and the corn people are going to find other uses for their product.

10. HANCOCK TIMBER RESOURCE GROUP

Senior Portfolio Manager TOM SARNO of Hancock Timber Resource Group gave a detailed presentation on the ARMB's Timberland Portfolio. He discussed the objective of the portfolio is total return, comprised of income, preservation of capital, and long-term appreciation. The performance guidelines are a minimum of 5% real total return after fees. The timberlands are to be diversified by tree species, geography, product and merchantability. The portfolio is structured with a main holding company and a series of limited liability companies. The two limited liability companies currently hold three properties. There is additional uninvested allocation, which will go into the Salmon Timberland II, LLC, once it is invested, and if there is a further need, a Salmon Timberland III, LLC will be developed.

MR. SARNO reported the total allocations to the portfolio total $244 million over the last three or four years. Of that, $76.9 million has been contributed and invested since inception, which leaves an outstanding commitment of $167.1 million. To date, $7.8 million has been returned back in distributions from operations. The current net asset value is $86.6 million. For fiscal year 2013, the total return was 10.1%. Of that, 10.3% was appreciation and -0.1% was income. The income return is a function of accounting depletion, which is similar to depreciation in other assets. The distributions were $1.7 million, which is a positive income, despite the negative income return on the balance sheet. This equates to a 2.1% cash yield for the year.

The portfolio is exceeding its NCREIF Timberland Index on the 1-year by 70 basis points, 3-year by 500 basis points, and Since Inception by 390 basis points. There are no 5-year numbers yet. MR. SARNO reviewed the geographical diversification of the timberland investments. The Fishhawk property is located in Oregon and is a younger plantation of

Douglas fir, hemlock, and red alder. This property has a low cash forecast in the near-term because the timber is not yet financially mature. It is growing. This is part of the diversification by age class, so timber will mature in different years. The returns since inception are 9.2% and the projected return is 10.7%.

MR. SARNO described the Elk River property as having the same species mix of Douglas fir, hemlock, and red alder, but it is a much more financially mature property. It is located in Washington. The cash flows are steady for the next seven years. About 40% of the value of the timber produced from this property is exported to Asia, primarily China. The returns since inception are 19% and the projected return is 8%. MR. SARNO noted the 19% return is a function of a very strong China market, along with some increase in the U.S. domestic market, which has led to some very good timber prices on this property.

MR. SARNO reviewed the final property Tallapoosa, which is located in Alabama and Georgia. It is comprised of middle-aged to mature pine plantations, but there is also a land sale component to this property. The returns since inception are quite low at 0.5% and the projected return is 8.1%. U.S. timberlands in the south have not benefitted from the Asian export demand and as such, are really a function of U.S. housing demand. The prices of logs coming off this property and others in the south have been very muted. During periods like these less timber is cut to allow growth. The component of land sales in the returns are in the cash yields.

MR. SARNO believes the timber market will have continuing demand from China and that will drive performance for the near and long-term. He expects housing starts to continue their recovery adding to lumber demand in the U.S. south. There is currently a very large gap of log price between the U.S. northwest and the U.S. south, which he does not believe is sustainable.

MR. TRIVETTE asked if timber begins to deteriorate as a product if it is left for a period of time. MR. SARNO stated the net present value curve of a timberland stand is relatively flat-top, which means there is typically a period of time around seven to 10 years to harvest the timber without having a meaningful change to the net present value, provided the appropriate treatments, such as thinning and fertilizing, are conducted.

11. SENTINEL REAL ESTATE CORPORATION

Vice Chairman/Co-Portfolio Manager DAVID WEINER and Vice President/Co-Portfolio Manager DAVID STENGER of Sentinel Realty Advisors Corporation gave a detailed presentation for the ARMB's Sentinel Multifamily Separate Account. Sentinel has been involved with the State of Alaska working in their real estate program since 1984. MR. STENGER noted that coming out of the recession, the U.S. apartment market saw a pretty decent rebound in rents. The projections are for rents to continue increasing and to grow by 3% from 2013 to 2017, while maintaining a relatively high occupancy rate driven by apartment demand.

MR. STENGER described the three core multifamily properties owned, consisting of roughly 1,000 units. Preserve at Blue Ravine Apartments is a 260-unit apartment community located in Folsom, California, with easy access to Sacramento. The property is currently valued at $46 million. A benefit of the Folsom market is that supply is highly constrained and there has been virtually no construction in this market and no future plans for construction.

MR. O'LEARY requested comment on the potential impact of the institutionalization of homes for rent in markets such as Sacramento. MR. WEINER stated in areas where there is a large supply of foreclosed homes of moderate price, there is generally fairly strong competition with traditional apartments. MR. WEINER noted they have not seen any problems with competition from rental housing, as much as competition from the higher-qualified people that move into the levels of this rental levels being able to qualify for mortgages and then buy homes in that community. He commented the rental housing market doesn't really affect the 18 to 30-year old that typically represents the largest portion of their renters. Those are not the people who are interested in taking on the responsibility of a house.

MR. STENGER described the next property owned in the portfolio, which is Valleybrook at Chadds Ford, located in Chadds Ford, Pennsylvania. This is near the Delaware border, which is appealing to a lot of people because Delaware has no sales tax. There are also major employers in the area and there is easy access to Philadelphia. MR. STENGER explained this property has limited competition, a great school district and very high single-family home prices, which should help facilitate income growth for the property.

MR. STENGER described the last property owned in the portfolio, which is Versant Place, located in Brandon, Florida. It has excellent access to Tampa and to the I-75 corridor. The property was acquired in 2000 and is nearing the end of the holding period. MR. STENGER noted the anticipated sale of the property after about four more years. There are 384 units and the value is $39.8 million.

MR. O'LEARY asked what happens to the money when a property is sold. MR. WEINER responded in this particular case, they gave it back. He noted there was a previous allocation to buy the Valleybrook Apartment in anticipation of selling out of the Las Vegas market. The fund granted $65 million and was given back $38 million. MR. WEINER noted if appropriate investments are found in this competitive market, which fit the profile of the fund for a reasonable return, they will be brought to the Board's attention.

MR. TRIVETTE asked MR. WEINER if he was happy to see the Las Vegas property sold, mainly because it wasn't a barrier to entry kind of apartment. MR. WEINER explained this was an earlier phase of the operation and he is happy to see it sold. He believes it was purchased at the right price and actually generated a fairly decent return for what was a difficult situation.

MR. PIHL asked if the value of Valleybrook has gone down slightly. MR. WEINER advised the value as of June 30th is conservative because the cap rates have moved dramatically downward since the beginning of the year and that will be reflected in the value next quarter. MR. WEINER noted, in terms for the year, a negative is created when cost of capital to the investment is added by continuously improving the property without raising the value. MS. MAGEE added it has been Sentinel's practice to be very conservative in their valuations, but she has not seen any downward motion realized in losses.

MR. BRICE asked if there is a certain sector or geographical area that Sentinel is foreseeing for their next property acquisition. MR. WEINER stated Sentinel has a nationwide platform that focuses on the barrier to entry market, which is typically found in major cities with difficult codes and high land costs or coastal areas where development is limited. MR. WEINER noted this is a difficult process, but it is worthwhile for the long-term safety of the account.

12. CORNERSTONE REAL ESTATE ADVISORS

Cornerstone Real Estate Advisers' Portfolio Manager DENISE STAKE and Head of Research MICHAEL GATELY gave a detailed presentation on the ARMB's individually managed portfolio. MR. GATELY believes there are still some significant risks with regard to the U.S. economy that will play out in Washington over the next month or so. The commercial property market is coming off a historically low supply growth rate and that coupled with a stead and slow recovery in employment growth really bodes well for fundamentals. This market has shown steady recovery, led by the six major Gateway markets. The apartment sector and the Gateway CBD Office sector have been attracting the most capital.

MS. STAKE advised the portfolio has a $175 million mandate of investment across the four property types of office, apartment, industrial, and retail. The focus of the portfolio is core, barrier, and long-term hold investments in the U.S. There are three properties in the portfolio. The first is 330 North Brand, which is an office property in Glendale, California. This market has not recovered yet and the property has been dragging performance. It is currently at 75% leased. There is a fairly flat lease rollover schedule, which provides an opportunity as the market recovers.

MS. STAKE noted Arden Hills I, II & III is an industrial property purchased in 2004 with a five-year target. It was placed on the market and taken off the market during the economic downturn. Last month, it was placed back on the market with 97% occupancy and best and final bids are being delivered. Cornerstone expects to have a very strong sale in the next quarter. She does not see long-term rent growth in the industrial market and believes they are taking advantage of an opportune time to sell.

MR. O'LEARY asked what caused the spike in Q1, 2012. MS. STAKE noted that income was due to a million-dollar termination fee paid by a tenant who left the building. MS. STAKE described the next property in the portfolio, Parallel 41, which is the newest Class A apartment acquisition in Stamford, Connecticut. The location provides excellent access to New York and Fairfield County employment markets, as well as significant amenities in the Stamford downtown. This property diversifies the portfolio, allowing ARMB to have an investment in a New York-driven barrier market at a reasonable basis.

MS. STAKE noted the Cornerstone Apartment Venture III is a closed-end fund with a balance of investment of $27 million. The fund started in 2007, consisting of nine apartment developments. Five have been sold, including one this past July, and of the remaining four, one is currently on the market. The term of the fund expires December 2013 and Cornerstone has the intent to utilize the one-year option to extend. MS. STAKE believes all the assets will be sold by midyear 2014. The portfolio produced top quartile performance of 6.2% IRR since inception and the fund has operated within its parameters. Only 65% of investor committed capital was invested because the economic environment did not produce investments which met the disciplined objectives of the account.

CHAIR SCHUBERT recessed the meeting from 2:44 p.m. to 3:01 p.m.

13. MANAGER SEARCH - INFRASTRUCTURE

MR. O'LEARY described the process Callan followed during their extensive search for the infrastructure managers who will be presenting today. MS. ERCHINGER inquired if the recommendation about open-end funds or closed-end funds would be different if the DB plan were 90% fully-funded. MR. O'LEARY noted the disadvantages of a closed-end fund would be significantly less meaningful if the plan was 90% funded. He advised the emerging liquidity needs for the system is an important consideration in the structure of infrastructure manager candidates. He encouraged the Board to view this as they would an active REIT portfolio.

MR. O'LEARY explained that infrastructure is inherently illiquid and there are queues for investment and withdrawal from the funds. These provide an orderly process for the reduction in exposure within a reasonable timeframe, given the illiquidity inherent in the asset class.

MR. BADER commented he worked diligently with MR. SIKES in reviewing the open-end and closed-end fund recommendations brought forth by Callan. The recommendations for the public fund firms will be brought before the Board in December. MR. BADER stated he and MR. SIKES talked with JP Morgan and Infrastructure Fund Management and are very impressed with their management. He believes they have a good understanding of how the firms' financials, offering memorandums and operations.

MR. BADER explained closed-end funds see losses as they book their start-up costs, which is called a J-curve in their performance. He encouraged the Board not to be overly concerned about the long-term returns of JP Morgan and IFM because they have already experienced the J-curves and we should be looking forward, not backward. MR. BADER recommended both of these funds today in different amounts, mainly because one firm has higher fees than the other, even though fees are still being negotiated. MR. BADER believes both firms compliment each other in their portfolio size and diversification in the asset class. The target is to be invested within the next year.

A. Industry Funds Management

RENA PULIDO, Director of Business Development - North America, and ALEC MONTGOMERY, Head of Infrastructure, for Industry Funds Management gave a presentation describing the company and the Global Infrastructure Fund. IFM is a global investment management company, wholly owned by its investors, with offices in New York, London and Melbourne. MR. MONTGOMERY manages the existing portfolio and oversees the sourcing and execution of investment opportunities in North America. He sits on the Board of Essential Power, an IFM business owned in the Global Infrastructure Fund.

MS. PULIDO noted transparency is a critical part of IFM's process, giving investors access to independent valuation reports, investment papers to the investment committee, as well as the methodology used to pursue assets. MS. PULIDO commented fees have a direct negative impact on performance returns and for this reason, IFM's fee program is designed to capture the accretive value of scale that is built in the business and directly return that scale back to the investors. MS. PULIDO highlighted that IFM's investment team is purely focused on acquiring and managing infrastructure assets and they do not manage separate accounts for infrastructure equity. IFM has an independent Board of Directors, who by charter can have no affiliation with the pension fund owners.

MS. PULIDO stated IFM manages $42 billion across four different product strategies; debt and fixed income investments, listed equities, private equity, and infrastructure equity. Infrastructure equity is core to the business comprising of $14 billion. The infrastructure equity is managed across two funds; the Australian Infrastructure Fund and the Global Infrastructure Fund, which is the one ARMB is considering. The Global Infrastructure Fund is an open-end fund, $8 billion in size, consisting of eight assets. It was started in 2004 by Australian investors and was opened to international investors in 2009.

MR. BRICE asked where the eight assets are located. MS. PULIDO stated the assets are currently in the U.S., U.K., Germany, and Poland. MR. MONTGOMERY noted the map on page 14 of the presentation depicts the current portfolio. MS. PULIDO described the strategy as focusing on core infrastructure businesses, primarily in developed markets that are fundamentally underpinned by stable and strong current yield. Since 2009, MS. PULIDO stated the fund has generated a net return of 10.4%, which is represented by the green line on page 8 of the presentation. The performance is benchmarked against a three-year rolling average total return expectation of 10% per annum back to investors. The cash yield target in the fund is 6% to 8% per annum and because there is an existing portfolio, this yield will be enjoyed once the capital is drawn.

MR. BRICE asked for an explanation of how the cash yield is distributed, whether it is a dividend or has to be requested. MR. MONTGOMERY explained the structure of the cash yield, whether distributed or reinvested, is determined by each investor. He further described the attributes which makes infrastructure interesting for pension funds. He noted this is a long-term asset class, remaining relatively stable generating cash flow through economic cycles, and ideally have an inflation link inherent in its longer-term returns.

MR. MONTGOMERY advised the portfolio diversification is sophisticated and determined by the risks and the returns within the portfolio. It is roughly 50/50, North America/OECD

Europe. He noted the investment team's compensation is linked to fund performance over the long-term. MR. MONTGOMERY walked through the extensive business steps of sourcing the deals, executing the transactions and then, as a long-term owner, managing those investments for the best long-term value.

MR. TRIVETTE asked who from IFM would be involved on a day-to-day basis with the ARM Board. MR. MONTGOMERY noted those communications would be with Director of Investor Relations Jojo Granoff, Executive Director Brian Clarke, or Ms. Pulido.

MS. RODELL requested explanation of how the fund finds investment opportunities. MR. MONTGOMERY described that is the most challenging part of the business. He stated they work with investment banks, like everyone else, but their main approach is developing true strategic relationships. He commented the real art is anticipating where the deals are going to be and then working today to establish those relationships in order to ideally bid on the asset when it comes to market. MS. RODELL followed by asking where they believe the biggest opportunity is. MR. MONTGOMERY responded in North America, the focus is more on the energy sectors. He noted because of municipal debt, North America has been challenging the traditional public/private partnership approach to privatizing infrastructure.

PAUL ERLENDSON requested an explanation of how the underlying currency exposure to OECD Europe is managed so that it doesn't become disadvantageous as part of the return stream to a U.S. investor. MR. MONTGOMERY stated their conclusion is that most investors are probably in a better position to manage that currency exposure within their broader portfolio. He noted as much information as necessary, in terms of currency exposure, will be provided to factor into the pension fund's global currency exposures.

MR. SHAW asked who on the team listed on page 16 of the presentation sits on the decision-making bodies. MR. MONTGOMERY explained the deals first go through the Investment Sub-Committee, listed on page 15, Kyle Mangini and the three regional heads. Then it gets reviewed by the Board Investment Committee, which is headed by the CEO of IFM, Brett Himbury. A final check is completed by a Board subcommittee, which is a two-member board, chaired by Murray Bleach.

MS. MAGEE asked if, on page 13, the link to inflation and the inherent hedge means if the asset is in Europe, it is hedging European inflation because that is the denomination of the fund. MS. PULIDO commented MS. MAGEE is correct because it is hedging inflation within the specific region of the asset. She noted it is also important for that reason to have a diversified portfolio. MR. MONTGOMERY commented that theoretically, inflation will come through in the currency.

DR. MITCHELL asked for an explanation of the fee structure on page 23, particularly the management fee and the total expense ratio. MS. PULIDO commented there has been a recent fee reduction from 125 basis points to 97 basis points for commitments less than $300 million, and then 85 basis points for commitments at $300 million and above, which will take effect on January 1, 2014, for all capital drawn from that date. The 2.62% includes the 1.25% management fee and the balance relates to third-party expenses at the fund level, including third-party valuists. MS. PULIDO added there is a performance fee, which is 20% above an 8% with no catch-up, and 50% of any performance fee earned is held back to ensure the valuations true up the following year.

MR. O'LEARY asked how long it would take to get money invested and if a scenario came up in three years where ARMB needed to disinvest, how long would it take to get the money back. MS. PULIDO stated there are three years from the time of the commitment where the capital is committed to the fund. Based on historical draw down of capital and the opportunities in the pipeline, she anticipates the capital to be drawn down between 12 to 18 months from the time of commitment. Once the capital is drawn, there is no lock-out and ARMB has the ability to withdraw all or part of the investment within a 90-day notice period. MS. PULIDO noted every investor has the preemption right to acquire other investors' units.

MR. MONTGOMERY explained further that there is a queue for redemptions and when that queue reaches 5%, all investors are informed to ensure everyone is treated equally. If the queue reaches 10% redemption, then the queue collapses and it is no longer first in/first out. It becomes pro rata. If the queue reaches 25% redemption, then a proposal would be made to the investors as to how to address the problem. MR. MONTGOMERY noted this is generally an illiquid asset class. The fund structure provides a lot of liquidity, especially with investors reinvesting their dividends, but when there is a liquidity crisis, IFM cannot guarantee liquidity.

B. JP Morgan Asset Management

Executive Director AMY CUMMINGS, Client Portfolio Manager with JP Morgan's Global Real Assets Group, Executive Director Chris Hawkins, the Relationship Manager across all of JP Morgan's Asset Management products, Managing Director PAUL RYAN, CEO of the OECD Infrastructure Equity and Debt strategies, and Managing Director MARK WEISDORF, Portfolio Manager of Infrastructure Investments Fund (IIF), gave a detailed presentation on JP Morgan's Infrastructure Investments Fund. MS. CUMMINGS stated over the last seven years, MR. WEISDORF has assembled a portfolio of nine assets providing great diversification and predictable, stable income with low volatility in the returns. She noted that built into these assets are increases in the income stream over time, which is a great inflation hedge and also provides long-term liability matching.

MR. RYAN gave an overview of JP Morgan Asset Management. He explained the Global Infrastructure Investments Platform stands within Global Real Assets. The IIF is an OECD focused core equity fund delivering a cash yield over the last two years of around 5.5% to 6%. MR. RYAN explained the fund actively manages the assets, in terms of governance positions, board of directors, qualified management teams, investors' interests, and asset management decisions.

MR. RYAN described JP Morgan's platform investment strategy, which is supporting the management team to grow organically and provide attractive opportunities for expansion. This requires a long-term view and a structure that facilitates a long-term approach to delivering value. He noted the open-ended structure of the IIF fund is consistent with achieving the goals of a diversified and stabilized portfolio.

MR. WEISDORF continued the presentation reviewing the basic elements of the core strategy for the IIF fund. Investments are only in OECD member countries, principally in North America, Western Europe, Australia, and New Zealand. The asset diversification is along sector and subsector, of which 17% is in contracted power generation, 56% is in regulated utilities, and 27% is in transportation. The intended focus now is on adding transportation assets to the portfolio. There was a deliberate decision not to add transportation to the portfolio prior to the financial crisis. MR. WEISDORF noted his excitement about the tremendous opportunities in the U.S. to add assets to the portfolio.

MR. WEISDORF commented that control and active asset management is critical in delivering the promises made to regulators and communities, and in generating the returns targeted for the investor. MR. WEISDORF noted the IIF fund has access to deep and global resources. There are 93 institutional investors, of which about 70% are pension investors and the balance is comprised of insurance companies, endowments, and foundations. The net asset value is $3 billion and the gross asset value is $7.3 billion.

MR. RYAN discussed the team of 25 investment professionals listed on page seven of the presentation. They are based in London and New York with deep experience in financial and operational skills relevant to each asset class. They are responsible for finding new investment opportunities, structuring investment opportunities and managing the assets within the portfolio. MR. RYAN commented an important philosophical point in their strategy is the acquisitions group and the asset managers are the same people. There is not a sense that someone can buy the asset and someone else manage it. The team is supported by accounting, finance functions, and a very strong research department providing fundamental optimization analysis.

MR. WEISDORF gave an overview of the current portfolio as described on page 10 of the presentation. MR. O'LEARY asked for an explanation of why the total leverage line on page 10 is 59%. MR. WEISDORF responded the core infrastructure strategy invests in assets that are pure outright monopolies, such as electricity, gas, and water. Rates are based on an allowed rate of return and the allowed capital structure imposed by a regulator. The regulators know higher levels of debt of 60% to 70% is not unusual for a regulated utility.

MR. WEISDORF noted IIF has been meeting its cash distribution and total return targets for the last three years and believes there is a particularly attractive opportunity going forward to continue to grow the cash flows. MR. TRIVETTE asked if foreign exchange fees are a big issue, as reflected by the graph on page 11. MR. WEISDORF responded the foreign exchange fees were a big issue in the fourth quarter of 2008 when the portfolio was young and developing because over 60% of the portfolio at that time was in the U.K. MR. WEISDORF noted the portfolio today has less than 43% concentration is in the U.K. and investments are continuing to grow in the U.S., which will contribute to less currency volatility going forward.

MR. ERLENDSON asked how capital is raised in order to complete the fairly large transactions. MR. WEISDORF stated IIF is an open-end perpetual fund and as such, they are constantly meeting with investors to make the case for opportunities to invest their money prudently. There is currently a comfortable $300 million of dry powder, with additional commitments expected this quarter. MR. RYAN added they are seeing an increasing demand for co-investment, particularly by large U.S. pensions and insurance companies, to achieve the portfolio construction goals and have access to larger pools of capital.

MR. WEISDORF noted there are two withdrawal periods per year, March and September quarters, and a three months' notice is required. MR. BRICE asked if there are limits, in terms of withdrawal amount. MR. WEISDORF stated there are no amount limits, only the redemption queue period. MR. BADER requested disclosure regarding the four-year redemption period. MR. WEISDORF explained if an investor wanted to redeem its commitment within the first four years of investment, there would be a redemption fee. It is normally 6%, of which 2/3 goes to the remaining investors in the fund and 1/3 goes to JP Morgan. MS. CUMMINGS advised staff has already negotiated hard and that fee is now 4%, none of which would go to JP Morgan. Then after the first four-year period, there is zero redemption fee. The redemption fee is designed to discourage any investors who might have a short-term investment strategy.

MR. WEISDORF underscored the importance of risk management for the core strategy portfolio. Risk registers are built for each company, which are 100 of the biggest risks, value drivers, and mitigants. Those are updated monthly by the asset management team. MR. RYAN noted Phase One of infrastructure investing ended with the financial crisis. Currently, we are in Phase Two, which he believes is incredibly exciting in terms of the opportunities on the radar today.

MR. TRIVETTE asked what assets the fund is reviewing in terms of transportation. MR. WEISDORF believes the port opportunities on both coasts are tremendous. MR. RYAN commented they are seeing some fantastic opportunities in surface transportation, ranging from standalone toll roads to managed lanes to transit systems.

DR. MITCHELL asked if the hurdle return listed on page 24 was an IRR and for an explanation of the cap. MR. WEISDORF responded the hurdle return is an IRR and the cap is in place to ensure there is no incentive, financial or otherwise, to consider taking more risk in order to generate higher returns than was designed for the strategy.

C. Board Discussion and Selection

<u>MS. HARBO moved to authorize the staff to invest up to $300 million in infrastructure investments with managers IFM and JP Morgan, after successful contract and fee negotiations</u>; <u>MR. TRIVETTE seconded the motion</u>.

DR. MITCHELL stated his believe that infrastructure does belong in a real assets portfolio and believes these two firms are very capable. He noted the fee structure is pretty stiff for the return being compared to an income fund. DR. MITCHELL advised in favor of the investment because it is an important part of what ARMB is trying to do with real assets.

MR. SHAW agreed with DR. MITCHELL's comments and found the holdbacks on the preferred returns above the hurdles compelling and comforting.

MR. TRIVETTE clarified that ARMB is not directing the allocation of the funds, but leaving that to the discretion of the staff. MR. BADER agreed. MR. TRIVETTE verified that fee negotiations were included in the motion and on the record.

A roll call vote was taken and <u>the motion carried unanimously.</u>

RECESS FOR THE DAY

CHAIR SCHUBERT recessed the meeting at 4:33 p.m.

Friday, September 20, 2013

CALL BACK TO ORDER

CHAIR SCHUBERT reconvened the meeting at 9:00 a.m. Trustees Trivette, Harbo, Erchinger, Hultberg, Brice, Ryan, and Pihl were present.

14. REVIEW OF ACTIVE DOMESTIC ASSET MANAGEMENT

MR. BADER began his presentation with a story illustrating that some things are based upon preferences, style and the moment in which they are addressed. He stated he was asked to talk a little bit about active and passive investing and why the target of 65% in large cap passive was chosen for the fund. MR. BADER described it as a combination of timing, preference and objectives, all of which shift over time.

He said Callan was asked to give staff as much information as they could about similar sized public funds in their database and the constitution of their large cap passive allocations. MR. BADER explained the graph on page one of his presentation illustrating this comparison and noted any manager that a fund was calling SMid cap, which is small and mid cap, was treated as a large cap and any manager that a fund was calling a small cap was indeed treated as a small cap. The ARMB is within target at 64.7% large cap passive. The eight funds to the left of ARMB on this table are larger in fund size. Four of those have a higher percentage of passive large cap allocation and four have a lower percentage of passive large cap allocation. Of the 13 smaller fund size portfolios to the right of ARMB on the table, only three have a higher percentage of passive large cap allocation.

MR. BADER stated he uses this table to say there is no perfect answer in this and that ARMB is typical of many large public funds in terms of asset allocations. He believes the Board can feel comfortable with the current allocation.

MR. PIHL asked if it was possible to know the names of the two public funds that are allocated at 100% large cap passive. MR. BADER answered Callan did not reveal that information and believes they probably felt it should be confidential, but he thinks that Fund F, who is at 100%, is the state of Washington. MR. O'LEARY added this issue may seem like a simple question between active and passive, but it is more complex than it seems because each fund has a unique way of characterizing its policies and it depends on the type of management structure the fund has. For instance, a fund may have U.S. domestic large cap equities which are part of a global portfolio that is actively managed. MR. O'LEARY does believe the charts on page one and two are reasonably accurate in giving a sense that among large public funds, the majority of their domestic equity assets are passively managed.

MS. ERCHINGER requested to have some dialog over time on the issue of how the ARMB's closed-end fund liquidity concerns, beginning in less than a decade, will impact the thinking relative to active versus passive management allocation and the fees associated with both. MR. BADER responded he does believe it takes analysis and not just preferences and style like his story illustrated. He noted the strategy used by each manager is important to consider when focusing on this issue.

MR. HARBO inquired if more capital will be contributed to the Dow Jones 100 Index fund currently owned in the portfolio, because it seems to be doing well and has no fees, other than the fund fees. MR. BADER answered there would be no additional fees, because the existing staff would provide the active investment management and he believes the more management brought into Alaska, the better off the fund is. MR. BADER noted the current fees are for proxy services and are insignificant. He reported that right now, the domestic returns are outperforming its index. The return for the alternative equity strategies is also outperforming its index.

MR. SHAW commented there is an exposure issue of the active managers, who won't cover the entire landscape and may be focused on certain areas. The passive benchmark investments will get exposure to all areas. He believes it makes sense to have a good chunk of passive investments to have exposure to certain areas within the domestic and international assets.

15. PERFORMANCE MEASUREMENT - 2ND QUARTER

CHAIR SCHUBERT invited MR. O'LEARY and MR. ERLENDSON of Callan Associates, Inc. to give their presentation. MR. O'LEARY noted many of the graphs presented were taken from JP Morgan's Quarterly Guide to Markets. He commented since we are currently so far from the end of June, the data and projections have been revised, but he believes the pattern is still the same and is important for the outlook of both stocks and bonds.

MR. O'LEARY said we have been buffeted in calendar 2013 with concern about the emerging economies' strength and the graph on page three shows at midyear, the expectations were still that emerging economies would be significantly stronger. Another issue is the Fed's balance sheet and what becomes of it. MR. O'LEARY thought that taper was happening and was happy because it seemed to be the way to bring interest rates gradually back into the real world and reduce the probability of a bubble emerging somewhere.

MR. O'LEARY noted in June, July, and August rates increased a little, but then backed off again with the recent Fed announcement. We are still at extraordinarily low levels of interest rates. He stated liquidity across the board in bond markets is significantly lower than it has been in most of modern history. He referred to members' previous comments regarding ARMB's closed-end plan and liquidity concerns and advised the Board to be mindful that liquidity in fixed income obligations has become comparatively expensive.

MR. O'LEARY explained graphs in his presentation showing yield curves changes and rates of return and implications of a rise in interest rates. MS. ERCHINGER stated she is a finance director and noted her city invests in mostly fixed income because it is allowed and the idea is to maintain diversity and reduce risk. She posed the question of why not just completely get out of fixed income, since it is known fixed income has extreme risk because rising interest rates is a matter of when it will happen and not if it will happen.

MR. O'LEARY responded he, Mr. Bader and MR. Erlendson have spoken quite a bit about that issue in trying to formulate an asset allocation recommendation. He advised the most prudent way to structure that recommendation, which was adopted and became effective July 1st, was to have extraordinarily low exposure to fixed income. MR. O'LEARY stated some other major plans have made moves in the same direction. Given the current level of interest rates, it was not a justifiable policy to have significant exposure to inherent negative real returns.

MR. BADER added the duration of the fixed income in the portfolio has been shortened considerably. There is a large cash allocation and also intermediate treasuries. MR. O'LEARY explained the graph on page eight, noting the example of the 20-year treasury, given the yield curve change that occurred during the quarter, there would have been a negative total return of about 7%. The norm is more in the five-year range, but this provides a useful perspective to the change in values that can occur.

MR. O'LEARY discussed the charts on page 10 and noted the U.S. is the largest single economy and the U.S. has a 49% weight in MSCI All Country Wold Index. Emerging markets account for about 11% of the world. MR. JOHNSON commented this seems like a categorization issue, because at what point has China emerged or Korea emerged, in terms of the placement in the emerging markets index. MR. O'LEARY advised Korea has emerged and been moved into the developed market index for S&P, but not for MSCI. Whereas, Greece is no longer in the developed market index for MSCI. There is fluidity because of the definitions for emerging markets and developed markets and the generalizations can be very deceptive. These numbers do suggest emerging markets are not grossly overvalued.

MS. HARBO requested clarification regarding frontier markets. MR. O'LEARY explained the definitions are not clear-cut, but there are certain things that can keep a country out of an index, for example, if there are no publically traded securities, if there are real problems with property rights, and the major differentiator is the level of income per capita. The best a poor country could hope for is to be an emerging market.

MR. O'LEARY explained some of the differences by sector in several of the major emerging markets as shown on the graph on page 11. MR. PIHL asked what Russia's commodities are besides oil and maybe timber. MR. O'LEARY stated oil and gas are the primary drivers. Timber is not significant in terms of dollars because of the cost to transport and the extreme weather.

MR. O'LEARY showed the chart on page 12 in which value outperformed growth in the U.S. for the fiscal year ending June 30, 2013. As far as global and international equity index returns, the real drag on performance was emerging markets. MR. O'LEARY noted the greater exposure in emerging markets, the poorer the performance. The table on page 15 shows hedge fund-of-fund index returns over various time periods. MR. O'LEARY explained there have been pockets where the returns have been competitive.

MR. O'LEARY reported most countries appear to be selling at valuation levels that are below their own average, with the exception of the U.S. and Switzerland. MR. BRICE asked if there are some opportunities in Canada and Japan because their current valuation seems to be lower than the average. MR. O'LEARY believes that is partly due to oil, and financials have not been great. He stated he is open-minded about reviewing Canada.

MR. O'LEARY took the Board through an exercise of determining whether the S&P 500 is overvalued or undervalued using forward earnings. He believes stocks are not cheap, but are more exciting than bonds. The Employees' Retirement Plan, ERP, had a great second quarter relative to the target and most of this was attributable to managers doing better than their targets. The return was 12.5% for the year. The trailing three-year return is 11.05%, which is a tad below the target of 11.32%. For PERS and TRS, the return numbers look pretty good for the quarter, fiscal year, two years, and three years, but the the five-year number still looks terrible because of the real estate and private equity meltdown that hit the portfolio in 2009.

MR. O'LEARY stressed that the focus of how the portfolio is doing is always relative to the target. The pattern of the bond performance in the portfolio is good and it has been comparatively conservative in aggregate. The intermediate treasury portfolio performed better than the index. The Mondrian portfolio had poor performance in both the absolute and the relative sense, largely due to what happened to the currency in Japan. The five-year and longer returns for Mondrian are still extraordinary and MR. O'LEARY stated he has no concern with regard to Mondrian as an investment manager. The MacKay Shields fund returned 9.28% for the fiscal year compared to the index of 9.57%.

The total domestic equity returned 21.23% for the fiscal year, which is essentially at the Russell 3000 Index and better than the S&P 500. The large cap managers in aggregate returned 20.92% for the fiscal year. The small cap managers in aggregate returned 26.77% for the fiscal year. The Other Equity category returned 9.01% for the fiscal year. This category will change to include the Relational portfolio, the internally managed yield-oriented portfolio, the converts and the BuyWrites portfolios. The international equity return for the fiscal year was 15.01%, which was better than the ACWI Index. The International ex EM returned 16.73% for the fiscal year, which was below the EAFE Index of 18.62%. The EM-only pools provided returns just above the benchmark. MR. O'LEARY noted Lazard has been managing the global portfolio for ARMB for 20 years and they have continually beaten their two benchmarks, ACWI and the MSCI World.

The chart on page 44 shows the Real Assets Category. The absolute returns for farmland have been very attractive and significantly better than timber. The five-year returns for real estate are negative, which is still showing the lingering effect of the meltdown. The past three years have shown pretty competitive performance for real estate, just a tad below the target. Private real estate has suffered in the same way, but the REITs have actually done better. MR. O'LEARY noted since the REIT portfolio has been internally managed, it has performed much more like the index, with only small variances. The TIPS portfolio is also internally managed and the performance has been slightly better than the benchmark. The Absolute Return Composite gave higher than benchmark returns for the fiscal year.

MR. ERLENDSON explained the Individual Account Option Performance chart on page 49 noting the green boxes essentially mean the managers have been ranking well versus peers and they have been beating their benchmarks. MR. ERLENDSON noted it is important to frame how the Alaska Balanced Fund and Long Term Balanced Fund are viewed and why they are in the red and yellow zone. Both have fund returns above their benchmarks. These are custom-constructed balanced funds which have a risk profile that is more risk-adverse than its index. The Alaska Balanced Fund ranks in the 96th percentile because is has more of a fixed income allocation and over the last three years, the S&P was up 18.5% and the fixed income was up 3.5%, which is a 15% difference in return and that is why it ranks lower. Back in the 2008 period, this fund would have been a top performer because of its allocation. The two balanced funds are beating their benchmarks and doing exactly what they are supposed to be doing.

MR. ERLENDSON discussed the chart on page 51 and stated Brandes has been a disappointment and has underperformed their benchmark for the last three years. He advised this is a manager characteristic because they are not trying to mimic the benchmark and when their ideas come into favor, it should make up for any underperformance experienced. MR. ERLENDSON stated he is still very confident in Brandes for the long-term. MR. O'LEARY added one of the issues with managers who use a non-benchmark type of approach, is determining whether it is appropriate for the needs of the DC plan. Many participants have benefitted from Brandes' long-term approach, but increasingly today, there are a number of participants who may not have that familiarity.

MR. ERLENDSON explained why RCM Socially Responsible is ranked in the 59th percentile over the last three years. The benchmark used does not have the same constraints imposed on RCM. Active share is how much a manager is dissimilar to their benchmark and so benchmark selection is critical for a manager like RCM, who has a unique investment strategy. MR. ERLENDSON encouraged the Board to listen to staff's recommendation regarding the benchmark for RCM.

MR. ERLENDSON gave an update on a possible revision of money market fund rules, which are being considered in a House subcommittee with the SEC. Instead of carrying the money market funds at a dollar unit value, they would be carried as a floating net asset value. There is also discussion about a rule allowing money market managers to gate their funds in the event of a market crisis. There is a big debate about the nature of the problem and what some of the proposed solutions are. Callan is on record with the SEC as saying defined contribution plans should be exempted from any of these kinds of rules that come forward. MR. ERLENDSON stated the rules have not been revised yet and Callan is following this issue very closely and will continue to keep the staff and Board apprised.

MR. TRIVETTE asked what kind of perspective should be taken in viewing charts, such as on page 38, where there are two different indexes on the same chart. MR. O'LEARY explained that originally the EAFE was the official international benchmark and then changed to ACWI ex US. He noted there may still be a manager who is operating with an EAFE mandate and does not want to inadvertently hurt the perception of the managers' relative results by eliminating their index.

CHAIR SCHUBERT recessed the meeting from 10:24 a.m. to 10:32 a.m.

16. INVESTMENT ACTIONS

A. Global Ex-US Manager Search

MS. HARBO moved to direct staff to engage Callan to conduct a search for one or more global ex US investment managers; the motion was seconded by MS. RYAN .

DR. JENNINGS asked if this is a movement away from indexing or would the intent be to retain some portion in the index fund. MR. BADER believes it would more likely be a reallocation among managers and doesn't have any plans for using much, if any, of the index, but the determination is really dependent on what the search reveals.

The motion carried unanimously.

B. Benchmark Change Allianz RCM ESG Fund

MR. TRIVETTE moved to authorize staff to work with Allianz to amend the investment management agreement to change the Allianz ESG Fund's performance benchmark to the MSCI USA ESG Index effective October 1, 2013; the motion was seconded by MR. PIHL.

MR. O'LEARY commented sustainable investing has received more attention in recent years and believes the MSCI index will be a good choice to use for this program.

The motion carried unanimously.

C. Investment Guidelines: Municipal Taxable Bond Funds Resolution 2013-17

MR. BRICE moved to adopt Resolution 2013-17; the motion was seconded by MR. TRIVETTE.

MR. TRIVETTE asked if the portfolio constraints outlined is Section E of the resolution will be a workload burden to the staff. MR. BADER answered no.

The motion carried unanimously.

D. Information-Medical Office Separate Accounts

MR. BADER reported there is a closed-end fund coming up for termination, which manages the medical office investments. The Board has given staff authority to make investments with separate account managers where there is a longstanding and satisfactory relationship. MR. BADER advised the Board of the intent to investigate that possibility with some of the current real estate investment managers.

E. Exercise First Year Option on the MAP Contract

MS. HARBO moved to approve the one-year extension to the MAP Alternative Investment contract; the motion was seconded by MR. BRICE.

The motion carried unanimously.

17. RECAP - AUGUST 8 TRUSTEE WORKSHOP

CHAIR SCHUBERT stated the Board was given a copy of the detailed notes taken at the August 8th trustee workshop, which includes an excellent summary of the issue. She noted there should be an action item with regard to the follow-up/research items on page 11 of the summary.

MR. BRICE commented he is prepared to make a motion the ARM Board pursue the follow-up and research, but believes there is a more articulate or intelligent way to frame the motion. MR. BADER asked if the ARMB would be directing the Department of Revenue to conduct the follow-up/research bullet points noted on page 11. MR. TRIVETTE noted his motion will address that question.

MR. TRIVETTE moved to direct the Department of Revenue to address the bullet points listed in the follow-up/research summary of the August 8, 2013 unfunded liability work session and to work collaboratively with the Department of Administration to gather the information and provide that information to the Legislative Committee in a timely manner; the motion was seconded by MS HARBO.

MR. BARNHILL commented he believes the motion is unnecessary and the request could be easily fulfilled the same way requests have been fulfilled for years with MR. PIHL. MS. ERCHINGER believes these bullet point items will require involvement and a collaborative discussion from the Legislative Committee, the Department of Revenue, and the Administration. MS. HARBO stated she is more comfortable passing a motion, so it is part of the minutes. MR. BRICE assumed that part of the motion was for the information to be presented to the Legislative and Finance Committees.

MR. BADER commented the work obviously takes collaboration between departments, but in order to move the process forward, the Board needs to clearly establish who will produce a work product for the Board's consideration.

MR. PIHL added the Board is authorized to obtain actuarial work and the Legislative Committee would be working with the Department of Revenue to get this follow-up information. MR. TRIVETTE noted the intent is to get this process moving so the information could be brought to the Legislative Committee as soon as possible, within the next couple of weeks. MR. BARNHILL expressed the Department of Administration has no objection whatsoever to working with the Department of Revenue, the Legislative Committee or with the Board to facilitate obtaining actuarial information. MR. BARNHILL withdrew his earlier objection to the motion and made it clear it has always been the policy and will continue to be the policy to provide actuarial information.

CHAIR SCHUBERT restated the motion and added that after receiving the information, the Legislative Committee will create the report for the Governor and the Legislature. MR. TRIVETTE commented the Legislative Committee tasked itself with developing a plan to educate legislators and the public regarding this issue and that plan cannot be developed until this information is brought to the Committee.

MS. HULTBERG made a comment, which she said is indirectly related to the motion, that there is a bit of a conflict between access to the actuary by this motion and the previous open access to the actuary over the last three years. She noted the Board reviews actuarial costs and highlighted a recommendation for the Board to consider how to manage the relationship with the actuary because it has been handled in two different ways.

<u>The motion carried unanimously.</u>

MR. BADER stated unrelated to this report or anything, he requests authority from the Board to confer with the actuary to do further work on liquidity analysis, unrelated to this agenda item. He explained he can develop spreadsheets, but needs the actuary's help in order to perform stress tests. MR. BADER believes this would greatly enhance the work he can provide at the December meeting regarding liquidity analysis.

<u>MS. HARBO moved to authorize MR. BADER to confer with the actuary to do further work on liquidity analysis; the motion was seconded by MS. RYAN</u>.

MR. BADER said he brought this motion before the Board because of the resolution the Board passed saying that access to the actuary, to spend money with the actuary, had to be approved by the Board.

MR. BRICE asked MR. BARNHILL if the actuaries would be able to handle the extra workload currently. MR. BARNHILL responded, capacity has definitely been an issue for the actuaries. There are two sets of actuaries, the pension actuaries and the healthcare actuaries. They are both employed by Buck. The capacity issues have been more on the healthcare side recently. If there are many requests during the legislative session, there will be a backup. MR. PIHL believes the question of upfront contribution can be run by Buck relatively quickly by pushing a few buttons.

<u>The motion carried unanimously.</u>

MR. TRIVETTE requested MS. ERCHINGER give a short presentation on a meeting she had with the Senate Finance Subcommittee on Education, as a result of the August 8th Unfunded Liability Work Session, which may provide guidance to the Board and Legislative Committee on how to better approach the issues. MS. ERCHINGER stated she gave a presentation to the Senate Finance Subcommittee on Education in Anchorage the week after the trustee workshop. The presentation is available for anyone to view. It provided some of the history of the differences between the mandates of the previous boards and the limited role the Board has on the ability to impact the unfunded liability. MS. ERCHINGER reported she also gave a portion of the presentation from the workshop that was held with the stakeholders as it relates to the actions the Board has taken over the last few years to try to impact the unfunded liability, as well as a recap of current recommendations resulting from the stakeholder meeting.

MS. ERCHINGER stated that educating members of the Legislature regarding the unfunded liability issues is going to be an uphill climb because they are very busy and have many important issues on their plate. She suggested the Board's message has to be succinct, but not shy away from the complexity of the issue. MS. ERCHINGER said she does not believe the current path the Board is on, as individual trustees educating legislative committees, is the most effective way to get the message across. MS. ERCHINGER stated she does not know whether hiring a consultant or a lobbyist is the best way to engage with the Legislature so that they are hearing the Board's message, but the message is very important and the Board needs to consider a more effective way to educate the Legislature.

MS. RYAN noted the task of educating the Legislature is daunting and recommended the consideration of an outside entity, whether a lobbyist or a consultant, to help with the education process by being a consistent voice and updating information as quickly as possible. MS. HARBO stated she would second MS. RYAN's comments and hopes the Legislative Committee would come with a recommendation to the Board.

MR. BADER said he understands the desire to want to communicate information to the Legislature, but he does not believe he has ever heard of a state agency or a committee hiring somebody as a lobbyist and he fears the reaction to that would detract from the message being delivered. MR. BADER stated he does not think the Legislative Committee is going to say, "We are in debt, underfunded, and the ARM Board is hiring this person when they have staff at the Department of Revenue and the Department of Administration to carry the message." MR. BADER advised the Board to take some time to think about the impacts of that decision and revisit it. MR. PIHL agreed with MR. BADER's comments and feels this is a job the trustees of the retirement system must take on.

CHAIR SCHUBERT stated she was going to comment along the same lines as MR. BADER's comments and is not prepared to entertain any sort of action at this meeting. CHAIR SCHUBERT understands the intent of the communication, but believes it is a really unusual move and suggested it be added as a discussion item for the next meeting to determine a way to move forward.

MR. TRIVETTE does not believe hiring an outside person to carry the message is going to work and agrees with the comments of MR. BADER and CHAIR SCHUBERT. MR. TRIVETTE noted the Legislative Committee has already been tasked with developing a plan on how to move forward, which might include hiring somebody to assist with some writing, but a plan on how to approach committees and individuals needs to be devised within the next two to three weeks, because there are too many things going on for legislators once the session begins.

MS. ERCHINGER appreciated MR. BADER's comments and stated she had those thoughts yesterday and then forgot them today. She believes this is a collaboration and wants to stay clear of political land mines and unintended political consequences that may arise from any of the Board's actions. She stated it would be helpful to have folks who understand the political process advise and caution the Legislative Committee as the plan develops.

CHAIR SCHUBERT noted the issue of hiring a lobbyist is entirely separate from the issue of getting the information and preparing a report. She stated the she heard MR. BADER volunteer to pull the information together in a format the Legislative Committee can use. There is a sense of urgency to this task and she believes the staff understands that.

MS. HARBO appreciated MR. BADER's comments and believes the most important task is to educate. MR. PIHL recommended the Legislative Committee meet for an hour to get a follow-up from MR. BADER and the Department of Administration while everyone is in New York for the conference. MR. BADER responded he will not have a report by the New York conference because there are too many time demands between now and then. He said the Committee could meet, but noted the New York agenda is full.

MR. BRICE believes the purpose is to position the ARM Board in a supportive role of what might come out of the Governor's budget release in mid-December, and at the same time develop a plan to address the issues in the Legislature.

UNFINISHED BUSINESS

1. Disclosure Report

MS. HALL stated that the disclosure report was included in the packet and there was nothing unusual to report.

2. Calendar

MS. HALL added an Audit Committee teleconference meeting on October 16th to the calendar. CHAIR SCHUBERT noted it was agreed to delete the October 28th meeting from the calendar.

3. Legal Report

MR. JOHNSON believes the Board is complying with the directives from the Legislature in educating the stakeholders in order to achieve the goals set out by statute. This view is consistent with the memorandum submitted to the Board prior to the August 8th meeting and the discussions at the meeting. MR. JOHNSON stated there is no directive prohibiting the Board from hiring a lobbyist and it probably falls within the Board's general authority. He advised the choice on that issue is in regard to what is best and what is wisest, rather than a legal issue.

NEW BUSINESS

None

OTHER MATTERS TO PROPERLY COME BEFORE THE BOARD

None

PUBLIC/MEMBER COMMENTS

MR. RON JOHNSON, retired faculty member from UAF School of Engineering, informed the Board that several people from the Northern Section of the Retired Public Employees Association will conduct a class at the University in October dealing with the state retirement plan, discussing the pension and healthcare parts, with special emphasis on the unfunded liability. Currently there are 55 people registered. The aim is to get people involved, similarly to educate the Legislature as to the issues.

MR. RON JOHNSON stated in his experience during the past two years testifying to the Legislature, he has heard very little discussion in terms of public testimony about dealing with the unfunded liability. He believes just a few people testifying publically to Senate Finance, House Finance, et cetera, could have a very positive impact on getting the Legislature to move forward and taking a proactive step to address the liability, such as the advocated one-time infusion of money.

INVESTMENT ADVISORY COUNCIL COMMENTS

DR. JENNINGS noted the IAC is meeting next week for their main work session. DR. JENNINGS requested the Board provide any information they want the IAC to particularly review. In the past, many things discussed in this main work session have come before the Board, either as education sessions or as portfolio investments.

DR. MITCHELL shared a few words about stock and bond returns. He stated when the world was in the midst of its financial crisis in 2008, a number of market observers appearing on television and in the papers said that we were now in the new normal, where there was going to be tremendous volatility in the financial markets and we were entering a very low return environment.

DR. MITCHELL explained what really happened, if we look at the Callan periodic table of investment returns and look at the stock market, it was up 26% in 2009, 15% in 2010, 2% in 2011, 16% in 2012, and 19% this year. Mathematically, that was not volatile because it only goes up and it is not a low return environment. Then looking at the bond market, which didn't do as well, but it was up in the same time periods of 5%, 6%, 7%, 4%, and has given back a little this year, but again, not very volatile.

DR. MITCHELL commented his observations of returns in the past five years, combined with MR. O'LEARY's slide on U.S. market valuation leads him to believe we can expect returns like this is go on forever. DR. MITCHELL applauds the efforts of the Board and staff to diversify the portfolio further, so that when the inevitable day comes when the stock market goes down, we are ready for it.

MR. SHAW expressed his thanks to the Board for making him feel so welcome to his first meeting. He appreciated the conversation MR. O'LEARY and MR. BADER had about what to do when interest rates eventually do rise. MR. SHAW noted San Francisco is suffering through the same complicated issue. They are short on duration, but the challenge is finding places to put the money to adjust for the fact they strongly believe rates will rise.

TRUSTEE COMMENTS

MR. TRIVETTE shared his reason for agreeing to back off of the planning meeting next month, which is to spend effort right now working on the legislative issue for the upcoming session. He is willing to put the regular planning meeting on the side until after the next legislative session. He definitely believes a planning meeting is necessary, and if he remembers correctly, there has only been one planning meeting as a board since coming into existence in 2005.

MR. TRIVETTE stated Administration has a number of respected, extremely dedicated and hard-working staff, many of them with longevity, who have been swamped with the workload. He knows the Administration has not given out bad information on purpose and felt horrible when MR. BARNHILL had to provide the new information and did not mean to give him a hard time. MR. TRIVETTE believes there is a strong commitment in the department to do what is best for retirees and has heard many comments and most of those comments are very positive feedback.

MR. TRIVETTE added he is committed to making sure the Legislative Committee meets as often as needed by teleconference to work on the planning process. He and MS. ERCHINGER met with REPRESENTATIVE MUNOZ, at her request, and she indicated a willingness to get meetings set with House Finance. These are the kinds of decisions the Legislative Committee will be working on. MR. TRIVETTE encouraged MR. BRICE and others, who have experience working with the Legislature, to provide their expertise and knowledge. He said it is clear from reading MR. JOHNSON's letter in late July, the Board has an obligation to provide ideas to the Legislature, not only written reports. MR. TRIVETTE expressed his appreciation for everyone's support for heading in the right direction to better communication.

MS. HARBO thanked the Department of Revenue for their great investment team. She thanked the Department of Administration for the health fairs they have given around the state and believes they are beneficial and very well attended. MS. HARBO commented the problem of where to invest, as an alternative to bonds, is a problem faced by every senior and every retiree. She said when her mother was still living, she lived on laddered CDs, which cannot be done anymore.

MS. RYAN expressed her gratitude to everyone for a great year. This is her year anniversary sitting on the Board. She thanked the Board for helping her through possible political problems. She said she is an educator and will try to educate at all costs.

CHAIR SCHUBERT advised she will not attend the education conference because she has an annual meeting on that Saturday and it is requiring more work than anticipated, but she is hoping to tie-in telephonically to some of the presentations. She believes it is an excellent agenda and the trustees will benefit greatly.

MS. HULTBERG noted she will not attend the education conference, but MR. BARNHILL will be in attendance. MS. HULTBERG will be speaking at the Healthcare Conference, which is one of the primary strategic issues in the department.

FUTURE AGENDA ITEMS

None

ADJOURNMENT

There being no objection and no further business to come before the Board, the meeting was adjourned at 11:35 a.m. on September 20, 2013, on a motion made by MS. HARBO and seconded by MR. BRICE.

Chair of the Board of Trustees
Alaska Retirement Management Board

ATTEST:

____
Corporate Secretary

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT:	Retirement System Membership Activity as of September 30, 2013	ACTION:	
DATE:	December 5, 2013	INFORMATION:	**X**

BACKGROUND:

Information related to PERS, TRS, JRS, NGNMRS, SBS and DCP membership activity as requested by the Board.

STATUS:

Membership information as of September 30, 2013.

MEMBERSHIP STATISTICS AS OF SEPTEMBER 30, 2013

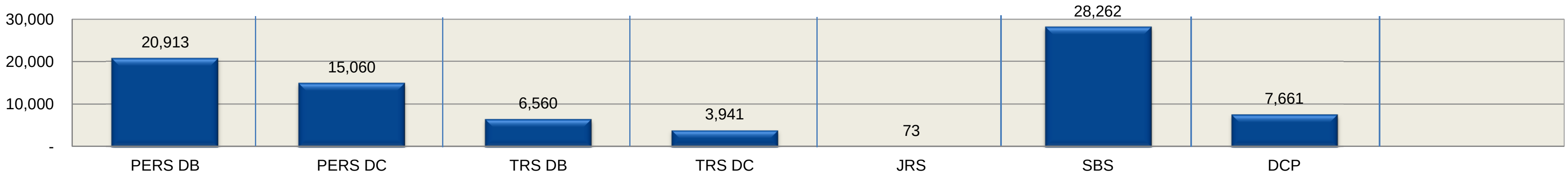
	PERS					TRS				JRS	NG	SBS	DCP
	DB			DC		DB		DC					
	Tier I	Tier II	Tier III	Tier IV	TOTAL	Tier I	Tier II	Tier III	TOTAL				
Active Members	3,121	5,721	12,071	15,060	35,973	1,064	5,496	3,941	10,501	73	n/a	28,262	7,661
Terminated Members	2,353	5,201	11,336	6,945	25,835	474	2,576	1,476	4,526	4	n/a	13,696	2,602
Retirees & Beneficiaries	23,033	5,258	1,678	4	29,973	10,453	1,272	-	11,725	108	639	n/a	n/a
Managed Accounts	n/a	n/a	n/a	6,638	6,638	n/a	n/a	1,763	1,763	n/a	n/a	927	883
Retirements - 1st QTR FY14	237	164	93	n/a	494	194	176	n/a	370	-	50	n/a	n/a
Full Disbursements - 1st QTR FY14	20	71	139	429	659	17	39	108	164	-	n/a	630	143
Partial Disbursements - 1st QTR FY14	n/a	n/a	n/a	23	23	n/a	n/a	13	13	n/a	n/a	437	447

Alaska Division of Retirement and Benefits

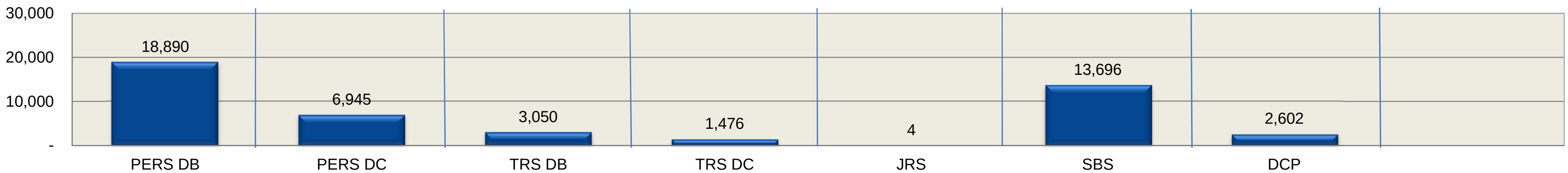
FY 2014 QUARTERLY REPORT OF MEMBERSHIP STATISTICS

as of September 30, 2013

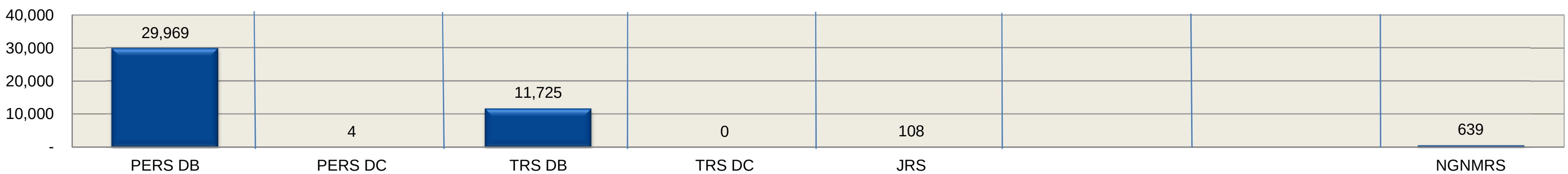
Active Members



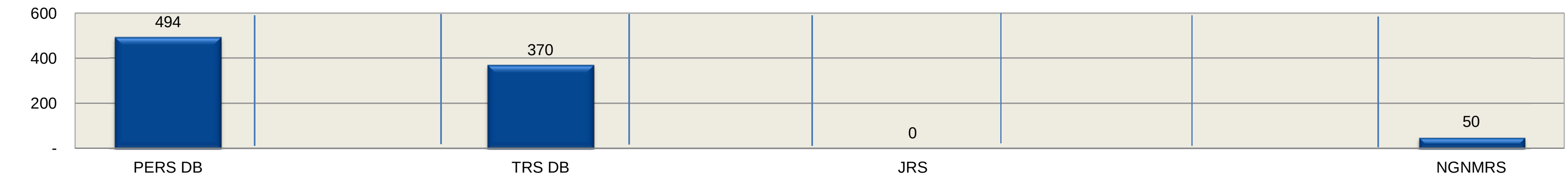
Terminated Members



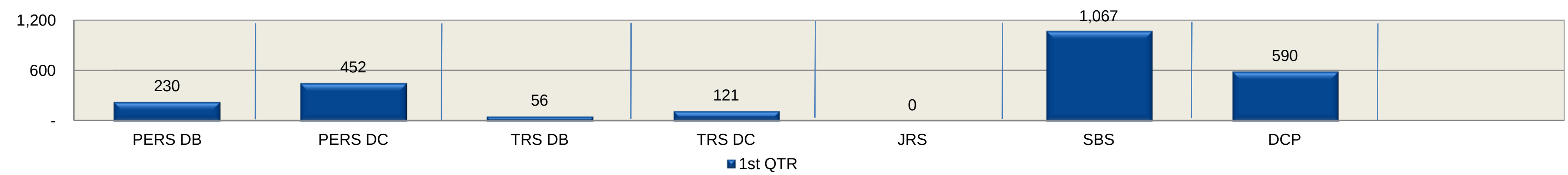
Retirees & Beneficiaries



Retirements



Disbursements



LEGEND

Active Members - All active members at the time of the data pull
Terminated Members - All members who have terminated without refunding their account.
Retirees & Beneficiaries - All members who have retired from the plans, including beneficiaries eligible for benefits.
Managed Accounts - Individuals who have elected to participate in the managed accounts option with Great West.
Retirements - The number of retirement applications processed.
Full Disbursements - All types of disbursements that leave the member balance at zero.
Partial Disbursements - All types of disbursements that leave the member balance above zero. If more than one partial disbursement is completed during the quarter for a member, they are counted only once for statistical purposes.

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT:	Invoices & Summary of Billings - Buck Consultants, a Xerox Company	ACTION:	
DATE:	December 5, 2013	INFORMATION:	X

BACKGROUND:

AS 37.10.220(a)(8) prescribes that the Alaska Retirement Management Board (Board) "coordinate with the retirement system administrator to have an annual actuarial valuation of each retirement system prepared to determine system assets, accrued liabilities, and funding ratios and to certify to the appropriate budgetary authority of each employer in the system".

As part of the oversight process, the Board has requested that the Division of Retirement & Benefits (Division) provide monthly invoices to review billings and services provided.

STATUS:

Attached are the summary totals for the fiscal year ended September 30, 2013.

Buck Consultants
Billing Summary
Through the Three Months Ended September 30, 2013

	PERS	TRS	JRS	NGNMRS	EPORS	AHF	RHF	SBS	DCP	TOTAL
Actuarial Valuations	$ 38,878	27,907	2,948	1,962	1,238	-	3,001	-	-	$ 75,934
Audit Request	3,579	2,985	-	-	-	-	-	-	-	6,564
Allocation of ER contributions between Pension & Healthcare to include salaries by ER	1,106	432	10	-	-	-	-	-	-	1,548
Actuarial cost calculation of the healthcare benefit for member	883	-	-	-	-	-	-	-	-	883
Research & discussions regarding projects results for PERS & TRS	629	629	-	-	-	-	-	-	-	1,258
Research & discussions re: membership statistics as of June 30, 2013 for ARMB meeting	317	124	3	12	-	-	-	143	34	632
Research & review of info re: amortztn method used in actuarial val confirming rolling amortztn is not used	1,085	424	-	-	-	-	-	-	-	1,509
Misc emails and phone calls	3,589	1,383	-	-	-	-	-	-	-	4,972
TOTAL	$ 50,064	33,884	2,961	1,974	1,238	-	3,001	143	34	$ 93,300

Chief Investment Officer Report

1. Rebalance all ARMB portfolios.
2. Funded Municipal Bond managers Western Asset and Guggenheim Partners.
3. Transferred $135,878 to QMA.
4. Received request to divest Corrections Corporation of America.
5. Transferred $6 million from SSGA to Analytic Investors.
6. Follow up to August 8 Work session.
7. Transfer $3,596,126. from Fixed Income to Crestline, an absolute return manager.
8. Transferred $10 million to Guggenheim Partners from Short-Term Fixed Income.
9. Transferred $1,977,822 from Fixed Income to Crestline, an absolute return manager.
10. Correspondence from Pathway Capital Management.
11. ______________
12. ______________
13. ______________

EndDate	Pool	PlanNumber	PlanName	PerfFundGroup	Actual Balance	Actual %	Range	Target %	Target Balance	Actual % - Target %	Buy/Sell	Min	Max
9/18/2013	AY1A	AY21	Public Employers Retirement Trust Fund								619,094.00		
9/18/2013	AY1A	AY22	Teachers Retirement Trust Fund								-43,630.00		
9/18/2013	AY1A	AY23	Judicial Retirement Trust Fund								26,609.00		
9/18/2013	AY1A	AY24	Military Retirement Trust Fund								318,768.00		
9/18/2013	AY1A	AY6G	DCR-ODD PERS								3,607.00		
9/18/2013	AY1A	AY6H	DCR-ODD TERS								-79.00		
9/18/2013	AY1A	AY6I	DCR - ODD P/F								2,995.00		
9/18/2013	AY1A	AYW2	RHC - Section 115 PRS								-655,436.00		
9/18/2013	AY1A	AYW3	RHC - Section 115 TRS								-357,290.00		
9/18/2013	AY1A	AYW4	RHC - Section 115 JRS								1,040.00		
9/18/2013	AY1A	AYX2	DCR-RMP-PERS Section 115 Trust								9,505.00		
9/18/2013	AY1A	AYX3	DCR-RMP-TRS Section 115 Trust								758.00		
9/18/2013	AY1A	AYY2	DCR-HRA-PERS								67,829.00		
9/18/2013	AY1A	AYY3	DCR-HRA-TRS								6,230.00		
9/18/2013	AY52	AY21	Public Employers Retirement Trust Fund								71,746.00		
9/18/2013	AY52	AY22	Teachers Retirement Trust Fund								1,488.00		
9/18/2013	AY52	AY23	Judicial Retirement Trust Fund								2,797.00		
9/18/2013	AY52	AY24	Military Retirement Trust Fund								0.00		
9/18/2013	AY52	AY6G	DCR-ODD PERS								366.00		
9/18/2013	AY52	AY6H	DCR-ODD TERS								-3.00		
9/18/2013	AY52	AY6I	DCR - ODD P/F								298.00		
9/18/2013	AY52	AYW2	RHC - Section 115 PRS								-53,837.00		
9/18/2013	AY52	AYW3	RHC - Section 115 TRS								-31,508.00		
9/18/2013	AY52	AYW4	RHC - Section 115 JRS								139.00		
9/18/2013	AY52	AYX2	DCR-RMP-PERS Section 115 Trust								962.00		
9/18/2013	AY52	AYX3	DCR-RMP-TRS Section 115 Trust								89.00		
9/18/2013	AY52	AYY2	DCR-HRA-PERS								6,797.00		
9/18/2013	AY52	AYY3	DCR-HRA-TRS								666.00		
9/18/2013	AY5M	AY21	Public Employers Retirement Trust Fund								83,341.00		
9/18/2013	AY5M	AY22	Teachers Retirement Trust Fund								2,149.00		
9/18/2013	AY5M	AY23	Judicial Retirement Trust Fund								3,231.00		
9/18/2013	AY5M	AY24	Military Retirement Trust Fund								-2,365.00		
9/18/2013	AY5M	AY6G	DCR-ODD PERS								421.00		
9/18/2013	AY5M	AY6H	DCR-ODD TERS								-3.00		
9/18/2013	AY5M	AY6I	DCR - ODD P/F								343.00		

Projected Asset Allocation at the Close of Day 11/21/2013	Pension				Health Care			DC Medical		DC Health Reimb.		DC OD&D			Blended Non-	Non-Military			Military			Within Alloc.
	PERS AY21	TRS AY22	JRS AY23	MII AY24	PERS AYW2	TRS AYW3	JRS AYW4	PERS AYX2	TRS AYX3	PERS AYY2	TRS AYY3	PERS AY6G	TRS AY6H	P&F AY6I	Mil. Actual As Allocation	Asset Allocation Target	Min.	Max	Asset Allocation Target	Min.	Max	Bands? All Funds
Broad Domestic Equity	29.38%	29.39%	29.38%	29.42%	29.43%	29.45%	29.43%	29.23%	29.21%	29.16%	29.09%	29.24%	29.41%	29.13%	29.40%	26%	20%	32%	29%	23%	35%	In Bands
Large Cap Pool (AYQK)	23.10%	23.11%	23.10%	23.13%	23.14%	23.15%	23.14%	22.98%	22.97%	22.93%	22.87%	22.99%	23.12%	22.90%	23.12%							
Small Cap Pool (AYQC)	6.28%	6.28%	6.28%	6.29%	6.29%	6.29%	6.29%	6.25%	6.24%	6.23%	6.22%	6.25%	6.29%	6.23%	6.28%							
Alternative Equity Strategies	3.56%	3.56%	3.55%	0.00%	3.56%	3.56%	3.56%	3.54%	3.53%	3.53%	3.52%	3.54%	3.56%	3.52%	3.56%	3%	1%	5%				In Bands
Advent Capital Convertible Bond (AYS2)	0.68%	0.68%	0.68%	0.00%	0.68%	0.68%	0.68%	0.67%	0.67%	0.67%	0.67%	0.67%	0.68%	0.67%	0.68%							
Alternative Equity Strategies Pool (AYYK)	2.88%	2.88%	2.88%	0.00%	2.88%	2.89%	2.88%	2.86%	2.86%	2.86%	2.85%	2.87%	2.88%	2.85%	2.88%							
Global Equity Ex-US	23.87%	23.87%	23.87%	20.07%	23.91%	23.92%	23.91%	23.75%	23.73%	23.69%	23.63%	23.75%	23.89%	23.66%	23.89%	25%	21%	29%	20%	16%	24%	In Bands
International Equity Pool (AYRC)	19.50%	19.50%	19.50%	16.39%	19.53%	19.54%	19.53%	19.40%	19.39%	19.35%	19.31%	19.41%	19.52%	19.33%	19.51%							
International Equity - Small Cap Pool (AYRK)	1.49%	1.49%	1.49%	1.25%	1.49%	1.49%	1.49%	1.48%	1.48%	1.48%	1.47%	1.48%	1.49%	1.48%	1.49%							
Emerging Markets Pool (AYSC)	2.88%	2.88%	2.88%	2.42%	2.89%	2.89%	2.89%	2.87%	2.86%	2.86%	2.85%	2.87%	2.88%	2.86%	2.88%							
Private Equity	8.09%	8.09%	8.09%	0.00%	8.10%	8.11%	8.10%	8.05%	8.04%	8.03%	8.01%	8.05%	8.10%	8.02%	8.10%	9%	4%	14%				In Bands
Private Equity Pool (AYSK)	8.09%	8.09%	8.09%	0.00%	8.10%	8.11%	8.10%	8.05%	8.04%	8.03%	8.01%	8.05%	8.10%	8.02%	8.10%							
Real Assets	16.08%	16.09%	16.08%	0.00%	16.13%	16.14%	16.13%	16.02%	16.01%	15.99%	15.94%	16.03%	16.12%	15.97%	16.10%	17%	9%	25%				In Bands
Real Estate Pool (AYVK)	5.20%	5.20%	5.20%	0.00%	7.02%	7.03%	7.02%	6.98%	6.97%	6.96%	6.94%	6.98%	7.02%	6.95%	6.01%							
JP Morgan Real Estate (AY7A)	1.79%	1.79%	1.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%							
REIT Holdings (AY9H)	1.57%	1.57%	1.57%	0.00%	1.57%	1.57%	1.57%	1.56%	1.56%	1.56%	1.56%	1.56%	1.57%	1.56%	1.57%							
Farmland Pool (AYTK)	3.63%	3.63%	3.63%	0.00%	3.64%	3.64%	3.64%	3.61%	3.61%	3.61%	3.60%	3.61%	3.64%	3.60%	3.63%							
Farmland Water Pool (AYUC)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%							
Timber Pool (AYUK)	1.36%	1.36%	1.35%	0.00%	1.36%	1.36%	1.36%	1.35%	1.35%	1.35%	1.34%	1.35%	1.36%	1.34%	1.36%							
Energy Pool (AYVC)	0.51%	0.51%	0.51%	0.00%	0.51%	0.51%	0.51%	0.51%	0.51%	0.50%	0.50%	0.51%	0.51%	0.50%	0.51%							
TIPS Internally Managed (AY6N)	0.17%	0.17%	0.17%	0.00%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%							
MLP Pool (AYWK)	1.86%	1.86%	1.86%	0.00%	1.86%	1.86%	1.86%	1.85%	1.85%	1.84%	1.84%	1.85%	1.86%	1.84%	1.86%							
Absolute Return	3.63%	3.63%	3.63%	0.00%	3.64%	3.64%	3.64%	3.61%	3.61%	3.60%	3.59%	3.61%	3.63%	3.60%	3.63%	5%	1%	9%				In Bands
Absolute Return Pool (AYTC)	3.63%	3.63%	3.63%	0.00%	3.64%	3.64%	3.64%	3.61%	3.61%	3.60%	3.59%	3.61%	3.63%	3.60%	3.63%							
Fixed Income	12.20%	12.20%	12.20%	47.72%	12.22%	12.23%	12.22%	12.14%	12.13%	12.11%	12.08%	12.14%	12.21%	12.09%	12.21%	12%	7%	17%	48%	38%	58%	In Bands
Taxable Municipal Bond Pool (AYZC)	0.68%	0.68%	0.68%	0.68%	0.68%	0.68%	0.68%	0.68%	0.67%	0.67%	0.67%	0.68%	0.68%	0.67%	0.68%							
US Treasury Fixed Income Pool (AY1A)	6.25%	6.25%	6.25%	36.99%	6.26%	6.27%	6.26%	6.22%	6.22%	6.21%	6.19%	6.22%	6.26%	6.20%	6.26%							
Mondrian Inv. Partners Inc (AY63)	1.82%	1.82%	1.82%	4.63%	1.82%	1.82%	1.82%	1.81%	1.81%	1.81%	1.80%	1.81%	1.82%	1.80%	1.82%							
High Yield Pool (AYPK)	2.67%	2.67%	2.67%	4.63%	2.68%	2.68%	2.68%	2.66%	2.66%	2.65%	2.65%	2.66%	2.67%	2.65%	2.67%							
Lazard Emerging Income (AY5M)	0.77%	0.78%	0.77%	0.78%	0.78%	0.78%	0.78%	0.77%	0.77%	0.77%	0.77%	0.77%	0.78%	0.77%	0.78%							
Short-term Fixed Income	3.19%	3.17%	3.21%	2.80%	3.01%	2.95%	3.01%	3.66%	3.73%	3.89%	4.13%	3.64%	3.08%	4.01%	3.11%	3%	0%	4%	3%	0%	4%	Out of Bands
State of AK Short Term Pool (AY70)	3.19%	3.17%	3.21%	2.80%	3.01%	2.95%	3.01%	3.66%	3.73%	3.89%	4.13%	3.64%	3.08%	4.01%	3.11%							
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%							

THE STATE
of ALASKA
GOVERNOR SEAN PARNELL

Department of Revenu

ALASKA RETIREMENT MANAGEMENT BOAR

333 Willoughby Avenue, 11th Flo
PO Box 1104(
Juneau, Alaska 99811-04(
Main: 907.465.37
Fax: 907.465.23

September 19, 2013

Ms. Mary Ellen MacDonald
State Street Corporation
IIS Public Funds
2 Avenue de Lafayette, 6th floor N
Boston, MA 02111-1724

Dear Ms. MacDonald:

The Alaska Retirement Management Board (ARMB) requests to have the following cash transfers made as soon as possible on Tuesday, October 1, 2013:

US Treasury Fixed Income Pool (AY1A)	<$125,000,000>
Guggenheim Partners (AYIE)	$25,000,000
Western Asset Management (AY1D)	$100,000,000

This transaction applies to the ARMB Defined Benefit Pension Plans AY21-AY24; the ARMB Retirement Health Funds AYW2-AYW4; and the ARMB Defined Contribution Plans AY6G-AY6I, AYX2-AYX3, AYY2-AYY3. Please use a pro-rata split based on AY1A ownership in the referenced accounts.

If you have any questions, please do not hesitate to contact me at (907) 465-4399.

Sincerely,

Gary M. Bader

Gary M. Bader
Chief Investment Officer

cc: Gail Schubert, ARMB Chair
Angela Rodell, Deputy Commissioner
Pam Leary, State Comptroller
Scott Jones, Assistant State Comptroller
James McKnight, Senior Investment Compliance Officer
Bob Mitchell, Manager of Fixed Income Investments
Casey Colton, State Investment Officer
Emily Peyton, Assistant State Investment Officer

GMB/jnw

THE STATE of ALASKA
GOVERNOR SEAN PARNELL

Department of Revenue

ALASKA RETIREMENT MANAGEMENT BOARD

333 Willoughby Avenue, 11th Floor
PO Box 110405
Juneau, Alaska 99811-0405
Main: 907.465.3749
Fax: 907.465.2389

October 7, 2013

Mary Ellen MacDonald
State Street Corporation
Lafayette Corporate Center
2 Avenue de Lafayette, LCC 6N
Boston, MA 02111-2900

Re: AY30 Residual Income Transfer

Dear Ms. MacDonald:

The Alaska Retirement Management Board (ARMB) requests the following changes. Please transfer the residual balance of $135,878.61 from the Large Cap Transition account (AY30) to QMA Large Cap (AY4V) on October 8, 2013.

If you have any questions, please do not hesitate to contact me at (907) 465-4399.

Sincerely,

Gary M. Bader
Chief Investment Officer

Cc: Gail Schubert, ARMB Chair
Angela Rodell, Acting Commissioner
Pam Leary, State Comptroller
Scott Jones, Assistant State Comptroller
James McKnight, Senior Investment Compliance Officer
Bob Mitchell, State Investment Officer
Shane Carson, State Investment Officer
Kevin McGrory, QMA

GMB/smh

Bader, Gary M (DOR)

From: Wilcox, Lacy J (DOR)
Sent: Tuesday, October 08, 2013 11:15 AM
To: Bader, Gary M (DOR)
Subject: FW: ATTN: Your investment in private prisons

From: Rashad Robinson [mailto:robinson@colorofchange.org]
Sent: Friday, October 04, 2013 7:18 AM
To: Fonder, Matthew R (DOR)
Subject: ATTN: Your investment in private prisons

Dear Mr. Matthew Fonder,

I write as the Executive Director of ColorOfChange, a civil rights organization with more than 900,000 members nationwide. We work to support the political voice of Black Americans and bring about positive social change for everyone. Recently, we launched a campaign focused on the private prison industry, calling on investors to pull their financial support and board members to resign.[1] We understand that State of Alaska, Department of Revenue is a shareholder in Corrections Corporation of America (CCA). We ask you to consider both the financial risks and moral implications of investing in private prisons.

Rising political risk is creating uncertainty in the prison market as the industry's sole client base – federal agencies and state governments – move away from privatizing facilities. This month, the Kentucky Department of Corrections will begin transferring inmates to publicly run institutions after a 28-year history of contracting with CCA.[2] Idaho, Mississippi, and New Hampshire broke ties with the industry after reports of under-staffing and non-compliance with safety regulations.[3] New York, Illinois, and Louisiana have rejected the privatization of prisons.[4] In Texas, overwhelming public opposition to a GEO Group bid led the McAllen city commission to unanimously reject the company's proposal.[5] In California, a panel of federal judges ordered the state to stop transferring inmates to private prisons, granting more time to work out a long-term solution for the unconstitutional overcrowding of the state's prisons. [6]

Our members and respected business news outlets believe there are certain places privatization should not venture. Outcry over the Immigration and Customs Enforcement's recent requirement to maintain a lock-up quota of 34,000 individuals per year has generated negative press from Bloomberg and other news agencies.[7] Supporters of the campaign agree that if a person is deemed a threat to the public great enough to warrant incarceration, then that individual should be held in an institution that is accountable to the public. Turning the public function of justice into a means of financial return fosters corruption of our government officials, negatively impacts public safety, eliminates incentives for rehabilitation, and contributes to an eroding of our democracy.

Additionally, numerous lawsuits have resulted in heavy state fines and million-dollar settlements. In 2012, the state of Ohio cancelled a CCA contract when audits found medical procedures had not been followed for chronically ill AIDS and diabetes prisoners.[8] In 2011, the ACLU filed suit regarding violent conditions inside the Idaho Corrections Center, known as the "Gladiator School."[9] In 2009, CCA paid a $7 million dollar settlement to employees after allegations of work without compensation, and a

$1.3 million dollar settlement to 21 female employees after allegations of serious sexual harassment.[10]

A growing effort that includes tens of thousands of our members is underway to end for-profit incarceration. As political and legal risk builds, the stability of the private prison market is impacted. When growth is dependent upon securing contracts with a limited number of government customers, negative political publicity and a failure to comply with regulation causes material adverse effects. We ask you to pull your financial support from the industry and implement a screen in your investment process to prevent the future purchase of shares in private prison companies. We will continue to engage our membership and monitor your holdings in both CCA and GEO Group.

I urge you to treat this matter with all due seriousness and respectfully request a phone meeting by Wednesday October 16th regarding your investment in private prisons. A paper copy has also been mailed to you today for your records. You may reach me by telephone 510-663-4809 or email robinson@colorofchange.org.

Regards,

Rashad Robinson

1. "Tell the private prison industry: Black bodies are not for sale." ColorOfChange.org, 09-4-2013.

http://act.colorofchange.org/sign/privateprison_divestment/

2. "Mixed Legacy Reported as Kentucky Ends Ties with Private Prisons." The Crime Report, 09-17-2013.

http://www.thecrimereport.org/news/crime-and-justice-news/2013-09-priv-prisons-in-ky

3. "Three States Dump Major Private Prison Company in One Month." ThinkProgress, 06-21-2013.

http://thinkprogress.org/justice/2013/06/21/2193261/three-states-dump-private-prison-company-in-one-month/

"New Hampshire Rejects All Private Prison Bids." ThinkProgress, 04-05-2013.

http://thinkprogress.org/justice/2013/04/05/1827901/new-hampshire-rejects-all-private-prison-bids/

4. "Kids for Cash Scandal." Mint Press News, 04-18-2012.

http://www.mintpressnews.com/kids-for-cash-scandal-exposes-more-corruption-in-private-prison-system/24112/

"Private Correction Facility Moratorium Act." Illinois General Assembly, 1990.

http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=2007&ChapterID=55

5. "McAllen City Commission rejects sole bid for private jail." The Monitor, 09-23-2013.

http://www.themonitor.com/news/local/article_7f0fcdde-24ca-11e3-b12a-0019bb30f31a.html

6. "California Prisons: Judges give state more time to deal with the inmate release order." Mercury News, 09-25-2013.

http://www.mercurynews.com/crime-courts/ci_24167500/california-prisons-judges-give-state-more-time-deal

7. "The Madness of U.S. Immigration Policy, Continued." Bloomberg, 09-26-2013.

http://www.bloomberg.com/news/2013-09-26/the-madness-of-u-s-immigration-policy-continued.html

"With Immigration Reform Looming, Private Prisons Lobby to Keep Migrants Behind Bars." Huffington Post, 03-05-2013.

http://www.huffingtonpost.com/laura-carlsen/immigration-reform-privation-prisons-lobby_b_2665199.html

8. "The Dirty Thirty: Nothing to Celebrate About 30 Years of Corrections Corporation of America." (.pdf) Grassroots Leadership, 06-01-2013. http://grassrootsleadership.org/cca-dirty-30

9. Please see reference 8.

10. Please see reference 8.

THE STATE
of ALASKA

GOVERNOR SEAN PARNELL

Department of Revenue

ALASKA RETIREMENT MANAGEMENT BOARD

333 Willoughby Avenue, 11th Floor
PO Box 110405
Juneau, Alaska 99811-0405
Main: 907.465.3749
Fax: 907.465.2389

October 10, 2013

Ms. Amanda Polidoro
Morgan Stanley Prime Brokerage
555 California Street, Suite 2200
San Francisco, CA 94104

Dear Ms. Polidoro,

The Alaska Retirement Management Board (ARMB) requests the following changes to be made on Thursday, October 17, 2013. Please process the following cash transfer as early as possible on that day:

State Street Global Advisors (038CDCJN0)	< $6,000,000 >
Analytic Investors (038CDCNT2)	$6,000,000

If you have any questions, please do not hesitate to contact me at (907) 465-4399.

Sincerely,

Gary M. Bader

Gary M. Bader
Chief Investment Officer

Cc: Gail Schubert, ARMB Chair
Angela Rodell, Acting Commissioner
Pam Leary, State Comptroller
Scott Jones, Assistant State Comptroller
James McKnight, Senior Investment Compliance Officer
Bob Mitchell, State Investment Officer
Shane Carson, State Investment Officer

GMB/smh

THE STATE
of ALASKA
GOVERNOR SEAN PARNELL

Department of Revenue

Treasury Division

333 Willoughby Avenue, 11th Floor
PO Box 110405
Juneau, Alaska 99811-0405
Main: 907.465.2300
Fax: 907.465.2454

MEMORANDUM

TO: Alaska Retirement Management Board Trustees

FROM: Gary Bader, Chief Investment Officer Gary

DATE: October 16, 2013

RE: August 8, 2013 Work Session Follow-Up

The meeting summary of the Alaska Retirement Management Board (ARMB) August 8, 2013 Work Session on Unfunded Liability listed seven items for additional research or follow up. The memo provides an update on those items:

Consult with OMB on "target" for annual state assistance payment to the funds. The Office of Management and Budget (OMB) is in the process of deliberating on the Fiscal Year 2015 budget. Any decision about the Governor's proposed spending level for state assistance will be considered within the context of the entire state budget and cannot be made separately from those considerations. The Governor's policy direction has been that Alaska will meet its obligations to our retirees and manage the cost of doing so over time. This approach will balance the obligation to provide essential state government services while also meeting our future obligations.

What is the "right" amount of upfront contribution? The answer is dependent upon the answer to the first question. See Attachment 1 for further explanation.

State assistance under level dollar and level percent of pay. Attachment 2 depicts the comparison of level dollar and level percent of pay annual state assistance payments extended to FY2033.

Impact of internal borrowing on bond rating. The terms and conditions of how such an arrangement would be structured are so varied that staff can only generalize as to the potential impact upon the state's credit rating. Since assets would not actually be appropriated from one fund to another, the net impact of an investment arrangement would be some impact on state liquidity depending on the terms of the loan.

Loan vs. appropriation. A loan from a state fund to the retirement system will not retire the unfunded liability. From a pension fund perspective, a loan from a state account would increase the pension fund assets, but would also require the pension funds to establish an offsetting liability to repay the loan. The net effect of such a transaction would not advantage the pension funds unless they were able to earn a return on the borrowed funds greater than the interest rate the pension funds paid for the use of the funds.

Legislative commitment to ARC. In the opinion of staff there would be no advantage in asking the legislature to enact a statutory requirement to fund the Actuarially Required Contribution (ARC). One legislature cannot bind a future legislature. Although a statutory requirement to fund the ARC may make the annual payment more compelling, there are already such statutes in place.

Clarify amortization timeframe. Rolling Amortization. A rolling or open amortization is one where the amortization period is a fixed number of years with a restart of the amortization period each successive year. Any principal of the liability paid during the year reduces outstanding balance of the liability in the successive year, but the resetting of the amortization back to the original fixed period reduces the amount of the next amortization payment.

As an example in the PERS context, a rolling amortization approach could take the unfunded liability attributable to FY2002, and reset the period to 25 years each year, so that the amortization period would still be 25 years for FY2012. The FY2002 unfunded liability has been amortized over a closed, fixed 25 year period, so it has now been amortized for 10 years, with 15 years remaining of the 25 year term. Under rolling amortization, the resetting process from FY2002 would have stretched out the amortization an additional 10 years. Then in each subsequent year, the amortization term would be reset to 25 years, thus stretching out the amortization indefinitely for as long as the resets occur.

As you can see, a rolling amortization produces a mostly interest-only ARC for an indefinite term. GASB reportedly regards this practice as contrary to the accounting goal of recognizing the pension obligation over the employee service period, and this is apparently one of the reasons that GASB decided to decouple the GASB standards from funding requirements.
Alaska has never adopted a rolling amortization methodology. Instead, the experience of each individual year produces an actuarial loss or gain (change in the unfunded liability), which is amortized over a 25 year period in the case of a loss, or offset against such amortizations in the case of a gain. This also occurs when the actuarial assumptions are changed.

A schedule of each year's amortization is published annually in the actuarial valuations the ARMB approves. The FY2012 PERS amortization schedules are set forth at pp. 19-26. http://doa.alaska.gov/drb/pdf/pers/valuations/rpt063012-PERS_Final.pdf

The FY2012 TRS amortization schedules are set forth at pp. 15-17. http://doa.alaska.gov/drb/pdf/trs/valuations/rpt063012-TRS_Final.pdf

Amortization and costs of the system. The normal cost of a defined benefit system is the amount necessary to contribute in a particular year to pay the annual cost of the accruing benefit for active members of the system if all actuarial assumptions prove 100% correct. This is never the case—each year's experience results in actuarial gains (where the experience proved better than the assumptions) or actuarial losses (where the experience proved worse than the assumptions). If there is a net actuarial loss for the year, that loss is then amortized over the adopted amortization term, in this case 25 years. The annual amortization amount is called "past service cost." Both normal costs and past service costs are converted into percentage rates (normal cost rate and past service cost rate) for purposes of collection. When the rate is applied to an employer's payroll it produces the amount needed to fund the normal and past service costs of the system.

Smoothing. Smoothing is different than amortization. Smoothing is a practice that is intended to dampen the impact of investment return volatility on contribution rate-setting. The ARMB uses a five year smoothing methodology whereby only 20% of each year's investment gains or losses (gain occurs if actual return is over 8%, loss occurs if actual return is less than 8%) are included for purposes of computing actuarial investment return. The remaining amount is deferred, with 20% being included in each of the four subsequent years. Another way of saying it is this: each year's investment return is comprised of 20% of the current year's return, plus 20% of each of the prior four years' investment returns. The 20% gain or loss amounts recognized each year changes the unfunded liability which is then amortized as part of the contribution rate-setting. While commonly used for funding, the GASB 67 and 68 net pension liability methodology used for financial reporting is not based on actuarial smoothing, although this methodology has been retained by GASB for pension expense recognition.

Attachments (2)

Attachment 1

OMB Presentation

Alaska Retirement Management Board

August 8, 2013

Governor Parnell believes that the retirement system unfunded liability is a very serious issue. It is a challenge that this administration, with the support of the legislature and the ARMB, has been addressing head on. To that end, over the past 7 years, the administration, and the legislature have funded almost $3.3 billion in state assistance for public employers. These appropriations have provided municipalities, and school districts – considerable relief to their budgets.

This past session, the governor and the legislature agreed to a 5-year, reduced level of spending with FY2014, the current year, being year one. From FY2013 to FY2014, we reduced the UGF budget over $1 billion – this lower band of spending carried out over the next four years, will help us provide essential services to Alaskans, reduce the draw on reserves, and manage costs while we focus on increasing production and revenue to the state.

The State of Alaska is on strong financial footing as evidenced by our triple A bond rating and significant reserves. However, the actuarial projection for the state assistance payment, which Ms. Erschinger shared with you earlier, raises concerns. The fact that (under a level dollar plan) the state assistance payment is projected to rise to nearly a billion dollars in the next fiscal year, and stay near a billion for the next 10 fiscal years, makes the state assistance payment toward the retirement system unfunded liability one of the biggest immediate obstacles to a sustainable budget.

To help illustrate this point, please refer to the handout I provided – titled Annual State Assistance payment expressed as a percentage of Annual Unrestricted General Fund Revenue FY08 – FY19

The chart on the top of the page illustrates in gray the state assistance payments from FY08 – FY14

The chart highlights the state contribution of almost $3.3 billion in state assistance for public employers from FY2008 to the current year, FY14.

In FY15 – FY19, the blue bars are the estimated payment under the Percent of Pay method and the red bars represent the estimated Level Dollar assistance payment

When we first started making the additional assistance payment in FY2008, the $455 million payment was 4.2% the UGF revenue stream. In FY2014, the $629.3 million payment is 10.2% of the annual projected revenue.

If you look at FY15, and assume we use our current payment methodology known as the Percent of Pay, the assistance payment will total $703 million, almost 12% of the projected UGF Revenue of $5.99 billion.

And, if legislators choose to move to a Level Dollar payment method instead of the Percent of Pay method, the FY15 payment of <u>$976</u> million is over 16% of the UGF Revenue.

We are in the process of developing the FY2015 budget – if we use the current Percent of Pay method, the $629 million assistance payment increases to $703 million – a $74 million increase.

If the State changes to a Level Dollar payment approach in FY2015, the outflow from State general funds jumps from $629 million to $975 million – or a budget increase of $346 million.

Let's talk about that in context of the current year – FY2014 – budget…First, in the context of the current methodology—the Percent of Pay increase I mentioned from 2014 to 2015 (to $703m).

A $74 million increase in GF spending is equivalent to the entire UGF operating budget for the Legislature.

$74 million UGF is larger than (more than double*) the entire UGF budget for the departments of Commerce ($47 M), Environmental Conservation ($23M)*, Labor ($35M)*, Law ($61M), Military ($22M)*, and Revenue ($33M).

Now, let's compare the magnitude of the budget increase proposed if we move to a Level Dollar payment.

The Increase for Level Dollar - $346 million (to $975 million)...

A $346 million increase in a funding payment—just the increased payment from FY 2014 to FY 2015's payment---for Alaska's pension system is larger than the DOTPF UGF budget ($283 M) and the Corrections ($296 M) UGF budget.

A $346 million increase to Level Dollar is almost the size of the University of Alaska UGF budget ($371 million)

Looking at the whole level dollar payment of $975 million...

A single purpose Level Dollar expenditure of that size would make the unfunded liability assistance payment the second largest in the budget – next to K-12 Education's $1.2 billion – and larger than Medicaid UGF match of $670 million –

A $975 million payment would be larger than the UGF capital budget in the current year

$975 million is larger than the permanent fund dividend distribution in EACH of the LAST 5 fiscal years.

The Level Dollar methods now being considered by the Board will get the job done. The current percent of pay method will also get the job done. One simply squeezes the state for cash sooner than the other. The question is whether there might be a better way to meet those pension obligations.

There are several options that will be discussed today. We continue to evaluate these options.

Governor Parnell understands the benefit of a level payment when it comes to paying off a debt or obligation. However, the governor is concerned about current proposals increasing the level dollar payment to almost one billion dollars per year next year as that will eat more significantly into the state's recurring revenue stream and needlessly drive up operating budget spending.

The Level Dollar plan as currently characterized would be like a banker or mortgage company telling an Alaskan, "Here's the deal. You owe us money under your house loan so how about instead of making your $1,400 monthly mortgage payment you now pay us $1,900 monthly?"

Alaskans with some savings in the bank might want to question that banker's logic and explore whether, instead, they can **lower [not increase]** their monthly payment by making a large payment now against the principal amount owing on the house.

So in addition to the options on the table before you, the governor has asked whether there might be another approach to consider. Governor Parnell has asked for an analysis of what level of new cash infusion to the pension systems could be combined with a level dollar payment plan—one with an annual payment lower than current suggestions on the table.

The Governor's policy direction has been that Alaska WILL meet its obligations to our retirees AND manage the cost of doing so over time. This approach will balance the obligation to provide essential state government services while also meeting our future obligations.

Our administration's preferred solution would better address the unfunded liability AND reduce the state's annual operating costs by trimming the state assistance payment.

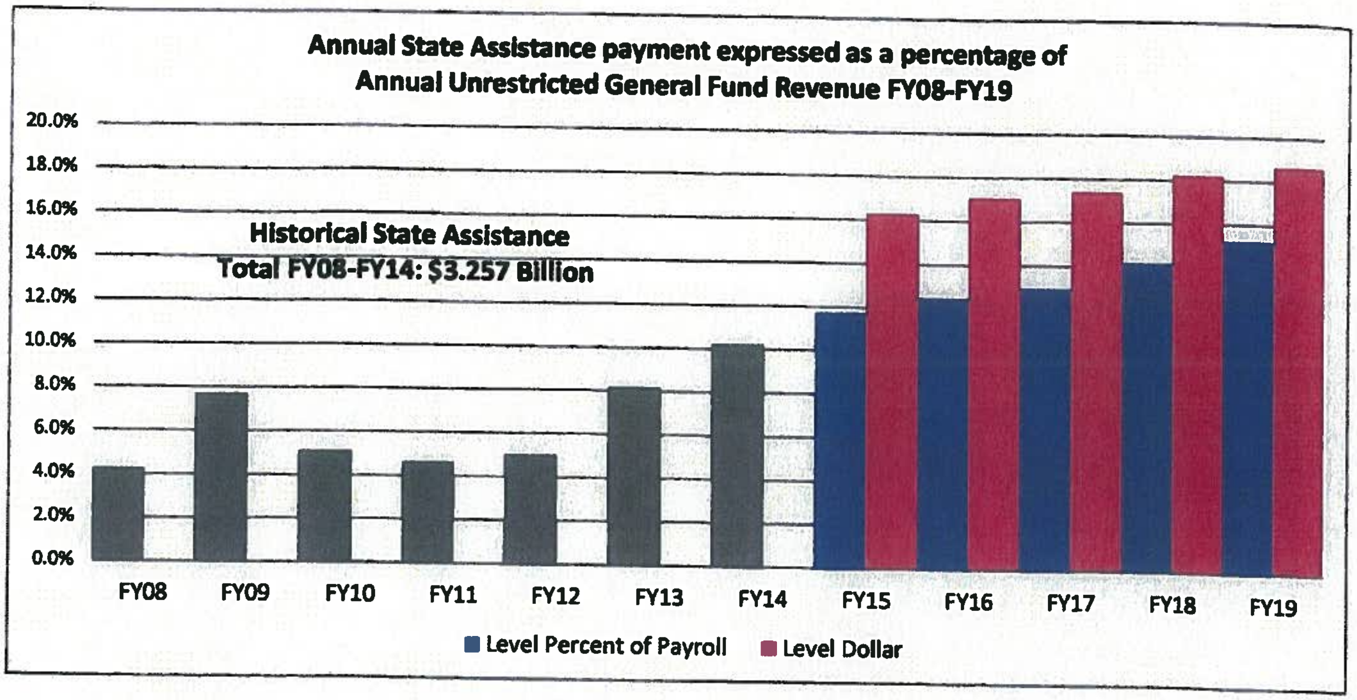
This will benefit ALL Alaskans – and places Alaska in a much stronger, long-term fiscal position.

If we can change the escalating trajectory of these state assistance payments to a Level Dollar payment lower than today's Level Dollar plans, Alaskans' public funds will be on a more sustainable budget path. And, if we can pay more now into the pensions in a lump sum as part of a Level Dollar plan, we not only strengthen the pensions but we give ourselves some annual cash flow relief—much like that homeowner gets monthly cash flow relief who thought her mortgage payment was going to go up significantly by paying off some of the debt early.

We think we need to explore ways to put us on a more sustainable budget path; meet the state's pension obligations, and lower the ongoing operating costs of government.

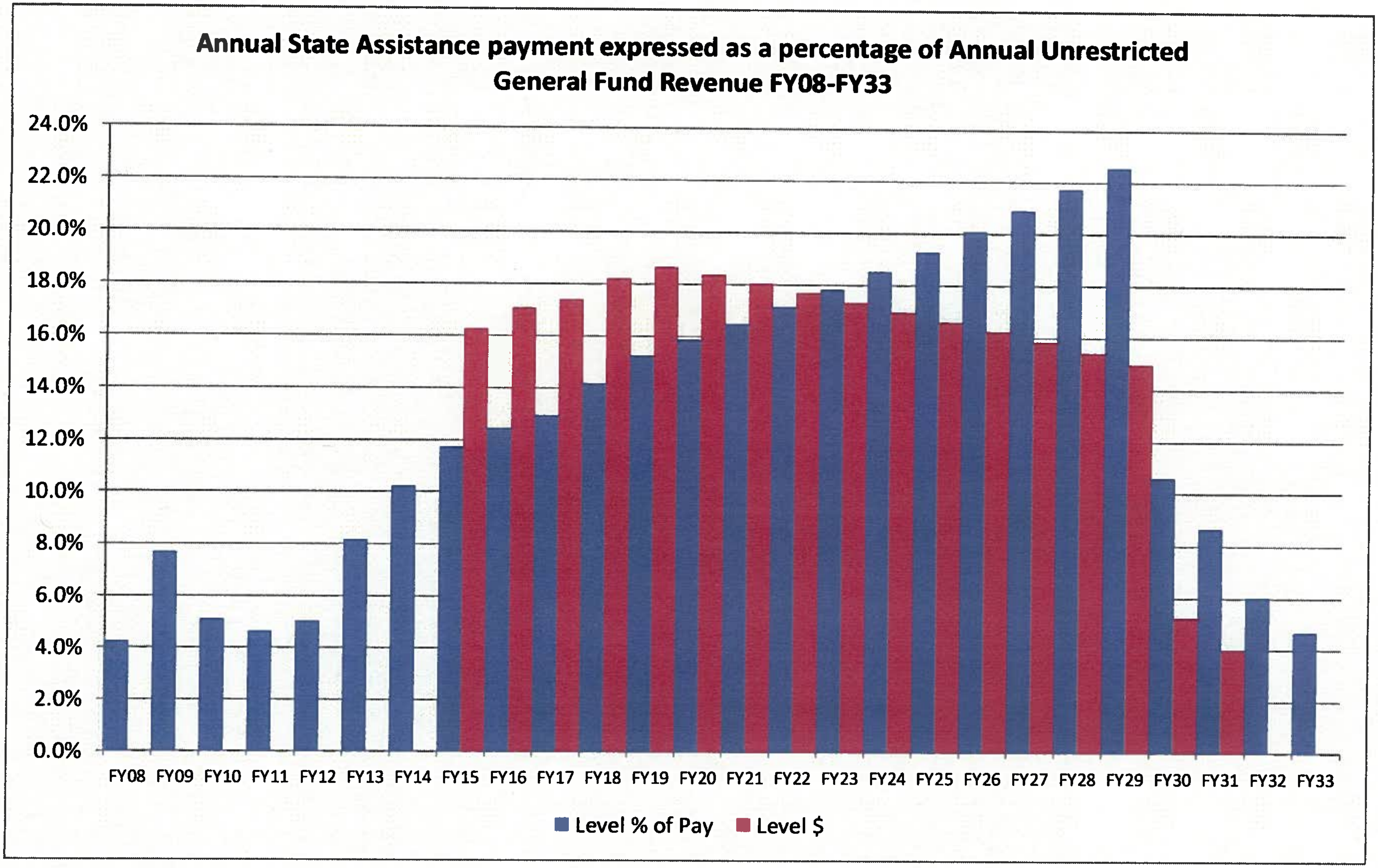
Thank you for the opportunity to be here.

I apologize that I am not able to stay for the entire day. Mr. Boucher will be here as an observer and I look forward to continuing this important discussion.



	Total GF Unrestricted Revenue	State Assistance % of Pay	Percent of GF Revenue	Total State Assistance % of Pay	State Assistance Level$	Percent of GF Revenue	Total State Assistance Level$
FY08	$10,728.2	$455.0	4.2%	$455.0			
FY09	$5,831.2	$447.9	7.7%	$902.9			
FY10	$5,513.3	$281.4	5.1%	$1,184.3			
FY11	$7,692.9	$356.7	4.6%	$1,541.0			
FY12	$9,485.2	$477.1	5.0%	$2,018.1			
FY13	$7,476.4	$610.1	8.2%	$2,628.2			
FY14	$6,162.7	$629.3	10.2%	$3,257.5			
FY15	$5,993.5	$703.2	11.7%	$3,960.7	$975.6	16.3%	$4,233.1
FY16	$6,232.3	$775.9	12.4%	$4,736.6	$1,062.4	17.0%	$5,295.5
FY17	$6,206.5	$804.1	13.0%	$5,540.7	$1,079.2	17.4%	$6,374.7
FY18	$5,864.6	$832.4	14.2%	$6,373.1	$1,067.4	18.2%	$7,442.1
FY19	$5,775.0	$881.6	15.3%	$7,254.7	$1,077.3	18.7%	$8,519.4

Sources: Historical GF unrestricted revenue is from Fall 2012 Revenue Sources Book.
Forecast GF unrestricted revenue is from Spring 2013 Revenue forecast, adjusted by fiscal notes for SB21.
This assumes no additional production.
State assistance history is from OMB budget information.
State assistance projections are from Buck PERS/TRS FY12 valuations.



Attachment 2

	Total GF Unrestricted Revenue **	Level Percent of Pay: State Assistance % of Pay	Level Percent of Pay: Percent of GF Revenue	Level Percent of Pay: Cumulative State Assistance % of Pay	Level Dollar: State Assistance Level $	Level Dollar: Percent of GF Revenue	Level Dollar: Cumulative State Assistance Level $ *
FY08	$ 10,728	$ 455.0	4.2%	$ 455			
FY09	$ 5,831	$ 447.9	7.7%	$ 903			
FY10	$ 5,513	$ 281.4	5.1%	$ 1,184			
FY11	$ 7,693	$ 356.7	4.6%	$ 1,541			
FY12	$ 9,485	$ 477.1	5.0%	$ 2,018			
FY13	$ 7,476	$ 610.1	8.2%	$ 2,628			
FY14	$ 6,163	$ 629.3	10.2%	$ 3,258			
FY15	$ 5,994	$ 703.2	11.7%	$ 3,961	$ 975.6	16.3%	$ 4,233
FY16	$ 6,232	$ 775.9	12.4%	$ 4,737	$ 1,062.4	17.0%	$ 5,296
FY17	$ 6,207	$ 804.1	13.0%	$ 5,541	$ 1,079.2	17.4%	$ 6,375
FY18	$ 5,865	$ 832.4	14.2%	$ 6,373	$ 1,067.4	18.2%	$ 7,442
FY19	$ 5,775	$ 881.6	15.3%	$ 7,255	$ 1,077.3	18.7%	$ 8,519
FY20	$ 5,775	$ 917.0	15.9%	$ 8,172	$ 1,060.6	18.4%	$ 9,580
FY21	$ 5,775	$ 952.0	16.5%	$ 9,124	$ 1,042.0	18.0%	$ 10,622
FY22	$ 5,775	$ 990.0	17.1%	$ 10,114	$ 1,022.0	17.7%	$ 11,644
FY23	$ 5,775	$ 1,029.0	17.8%	$ 11,143	$ 1,001.0	17.3%	$ 12,645
FY24	$ 5,775	$ 1,070.0	18.5%	$ 12,213	$ 980.0	17.0%	$ 13,625
FY25	$ 5,775	$ 1,114.0	19.3%	$ 13,327	$ 958.9	16.6%	$ 14,584
FY26	$ 5,775	$ 1,160.0	20.1%	$ 14,487	$ 938.3	16.2%	$ 15,522
FY27	$ 5,775	$ 1,207.0	20.9%	$ 15,694	$ 915.5	15.9%	$ 16,438
FY28	$ 5,775	$ 1,256.0	21.7%	$ 16,950	$ 891.5	15.4%	$ 17,329
FY29	$ 5,775	$ 1,304.0	22.6%	$ 18,254	$ 866.4	15.0%	$ 18,196
FY30	$ 5,775	$ 613.0	10.6%	$ 18,867	$ 302.7	5.2%	$ 18,498
FY31	$ 5,775	$ 500.0	8.7%	$ 19,367	$ 230.0	4.0%	$ 18,728
FY32	$ 5,775	$ 349.0	6.0%	$ 19,716	$ -	0.0%	$ 18,728
FY33	$ 5,775	$ 271.0	4.7%	$ 19,987	$ -	0.0%	$ 18,728

Observations:

For the 9 years from FY15-FY22, Level % of Pay consumes less as a percent of GF Revenue.

For the 11 years from FY23-FY33, Level Dollar consumes less as a percent of GF Revenue.

Overall, Level Dollar results in State Assistance cost savings of $1.26 Billion over Level % of Pay

Sources: Historical GF unrestricted revenue is from Fall 2012 Revenue Sources Book.

Forecast GF unrestricted revenue is from Spring 2013 Revenue forecast, adjusted by fiscal notes for SB21.

This assumes no additional production.

State assistance history is from OMB budget information

State assistance projections are from Buck PERS/TRS FY12 valuations.

* For comparison purposes, uses State Assistance from Level % of Pay 2008-2014, then Level $ beginning 2015.

** Assumes no change in Total GF Unrestricted Revenue after FY19.

THE STATE
of ALASKA
GOVERNOR SEAN PARNELL

Department of Revenue

ALASKA RETIREMENT MANAGEMENT BOARD

333 Willoughby Avenue, 11th Floor
PO Box 110405
Juneau, Alaska 99811-0405
Main: 907.465.3749
Fax: 907.465.2389

November 8, 2013

Mary Ellen MacDonald
Client Service Officer
Lafayette Corporate Center
2 Avenue de Lafayette
Boston, MA 02111

Dear Mary Ellen:

RE: Capital Contribution Glacier Bear Fund, L.P.

This letter is your authorization to transfer **$3,596,126.00** on **November 8, 2013** from account AY1A to account AY9F using the currently applicable absolute return ratios and then wire transfer the full amount as soon as possible using the following instructions:

Bank Name: The Bank of New York Mellon
ABA Number: 021-000-018
Account Name: Blue Glacier Fund, L.P. (Class B)
Account Number: 890-1180-254
Payment Amount: USD 3,596,126.00
Reference: Investor – Capital Contribution – November 7, 2013

Reference Details: Alaska Retirement Management Board on behalf of the State of Alaska Retirement and Benefits Plans Trust

Sincerely,

Gary M. Bader

Gary M. Bader
Chief Investment Officer

GMB/bm

cc: Zachary Hanna, Investment Officer
Bob Mitchell, Investment Officer
Pam Leary, Comptroller
David Mabry, Crestline Inc.

THE STATE of ALASKA
GOVERNOR SEAN PARNELL

Department of Revenue
ALASKA RETIREMENT MANAGEMENT BOARD
333 Willoughby Avenue, 11th Floor
PO Box 110405
Juneau, Alaska 99811-0405
Main: 907.465.3749
Fax: 907.465.2389

November 8, 2013

Ms. Mary Ellen MacDonald
State Street Corporation
IIS Public Funds
2 Avenue de Lafayette, 6th floor N
Boston, MA 02111-1724

Dear Ms. MacDonald:

The Alaska Retirement Management Board (ARMB) requests to have the following cash transfers made as soon as possible on Tuesday, November 12, 2013:

Short-term Fixed Income (AY70)	<$10,000,000>
Guggenheim Partners (AYIE)	$10,000,000

This transaction applies to the ARMB Defined Benefit Pension Plans AY21-AY24; the ARMB Retirement Health Funds AYW2-AYW4; and the ARMB Defined Contribution Plans AY6G-AY6I, AYX2-AYX3, AYY2-AYY3. Please use a pro-rata split based on Taxable Municipal Bond Pool (AYZC) ownership in the referenced accounts.

If you have any questions, please do not hesitate to contact me at (907) 465-4399.

Sincerely,

Gary M. Bader

Gary M. Bader
Chief Investment Officer

cc: Gail Schubert, ARMB Chair
Angela Rodell, Commissioner
Pam Leary, State Comptroller
Scott Jones, Assistant State Comptroller
James McKnight, Senior Investment Compliance Officer
Kelly Barkov, Accounting Technician
Bob Mitchell, Manager of Fixed Income Investments
Casey Colton, State Investment Officer
Emily Howard, Assistant State Investment Officer

GMB/jnw

THE STATE of ALASKA

GOVERNOR SEAN PARNELL

Department of Revenue

ALASKA RETIREMENT MANAGEMENT BOARD

333 Willoughby Avenue, 11th Floor
PO Box 110405
Juneau, Alaska 99811-0405
Main: 907.465.3749
Fax: 907.465.2389

November 14, 2013

Mary Ellen MacDonald
Client Service Officer
Lafayette Corporate Center
2 Avenue de Lafayette
Boston, MA 02111

Dear Mary Ellen:

RE: Capital Contribution Blue Glacier Fund, L.P.

This letter is your authorization to transfer **$1,997,822.00** on **November 20, 2013** from account AY1A to account AY9F using the currently applicable absolute return ratios and then wire transfer the full amount as soon as possible using the following instructions:

Bank Name: The Bank of New York Mellon
ABA Number: 021-000-018
Account Name: Blue Glacier Fund, L.P. (Class B)
Account Number: 890-1180-254
Reference: Investor – Capital Contribution – November 20, 2013
Reference Details: Alaska Retirement Management Board on behalf of the State of Alaska Retirement and Benefits Plans Trust

This transfer is a new capital contribution under the subscription agreement dated October 22, 2004. Please provide the Fed Confirmation number for this transaction to Scott Markowitz of Bank of New York Mellon via e-mail at Scott.Markowitz@bnymellon.com.

Sincerely,

Gary M. Bader

Gary M. Bader
Chief Investment Officer

GMB/scv NA

cc: Pam Leary, Comptroller
Bob Mitchell, Investment Officer
Zachary Hanna, Investment Officer
Scott Markowitz, Bank of New York Mellon
Travis Keith, Crestline Investors, Inc.

PATHWAY®
CAPITAL MANAGEMENT

November 13, 2013

Sent via overnight courier

Mr. Zachary Hanna
State Investment Officer
Alaska Retirement Management Board
State of Alaska, Dept of Revenue, Treasury Division
333 Willoughby Avenue, 11th Floor
Juneau, AK 99811-0400

Re: Alaska Retirement Management Board
Private Equity Investment Management Agreement

Dear Zach:

We recently initiated the transition of Cheryl Maliwanag, a Director of Pathway, out of Pathway Capital Management, LP and Pathway Capital Management, GP, LLC (the "Pathway Entities"). In connection with her pending transition, Ms. Maliwanag has filed a claim against Pathway regarding certain elements of her contractual departure package.

Ms. Maliwanag was primarily involved in the Marketing group at Pathway. Her duties will be absorbed by the other members of the Marketing group and her departure will not have any negative impact on Pathway or its business.

Sincerely,

James Chambliss
Managing Director
Pathway Capital Management GP, LLC

ALASKA RETIREMENT MANAGEMENT BOARD

FINANCIAL REPORT

As of October 31, 2013

ALASKA RETIREMENT MANAGEMENT BOARD
Schedule of Investment Income and Changes in Invested Assets by Fund
For the Four Months Ending October 31 , 2013

	Beginning Invested Assets	Investment Income (1)	Net Contributions (Withdrawals)	Ending Invested Assets	% Change in Invested Assets	% Change due to Investment Income (2)
Public Employees' Retirement System (PERS)						
Defined Benefit Plans:						
Retirement Trust	$ 6,682,601,125	$ 551,185,222	$ 60,055,190	$ 7,293,841,537	9.15%	8.21%
Retirement Health Care Trust	5,869,023,791	478,119,558	83,192,609	6,430,335,958	9.56%	8.09%
Total Defined Benefit Plans	12,551,624,916	1,029,304,780	143,247,799	13,724,177,495	9.34%	8.15%
Defined Contribution Plans:						
Participant Directed Retirement	344,683,147	36,198,004	22,952,430	403,833,581	17.16%	10.16%
Health Reimbursement Arrangement	107,570,946	8,925,610	7,924,725	124,421,281	15.66%	8.00%
Retiree Medical Plan	20,530,927	1,697,056	1,226,152	23,454,135	14.24%	8.03%
Defined Benefit Occupational Death and Disability:						
Public Employees	8,033,120	659,558	384,035	9,076,713	12.99%	8.02%
Police and Firefighters	3,497,071	292,472	312,284	4,101,827	17.29%	8.01%
Total Defined Contribution Plans	484,315,211	47,772,700	32,799,626	564,887,537	16.64%	9.54%
Total PERS	**13,035,940,127**	**1,077,077,480**	**176,047,425**	**14,289,065,032**	9.61%	8.21%
Teachers' Retirement System (TRS)						
Defined Benefit Plans:						
Retirement Trust	3,279,505,294	274,365,758	86,989,565	3,640,860,617	11.02%	8.26%
Retirement Health Care Trust	1,883,677,379	155,958,761	73,983,010	2,113,619,150	12.21%	8.12%
Total Defined Benefit Plans	5,163,182,673	430,324,519	160,972,575	5,754,479,767	11.45%	8.21%
Defined Contribution Plans:						
Participant Directed Retirement	153,359,455	15,560,040	2,851,261	171,770,756	12.01%	10.05%
Health Reimbursement Arrangement	34,477,528	2,807,498	1,578,784	38,863,810	12.72%	7.96%
Retiree Medical Plan	8,710,401	705,507	227,059	9,642,967	10.71%	8.00%
Defined Benefit Occupational Death and Disability	2,595,310	209,128	9	2,804,447	8.06%	8.06%
Total Defined Contribution Plans	199,142,694	19,282,173	4,657,113	223,081,980	12.02%	9.57%
Total TRS	**5,362,325,367**	**449,606,692**	**165,629,688**	**5,977,561,747**	11.47%	8.26%
Judicial Retirement System (JRS)						
Defined Benefit Plan Retirement Trust	118,593,014	9,827,353	2,390,961	130,811,328	10.30%	8.20%
Defined Benefit Retirement Health Care Trust	22,670,718	1,818,320	(259,231)	24,229,807	6.88%	8.07%
Total JRS	**141,263,732**	**11,645,673**	**2,131,730**	**155,041,135**	9.75%	8.18%
National Guard/Naval Militia Retirement System (MRS)						
Defined Benefit Plan Retirement Trust	34,141,087	2,470,184	(17,308)	36,593,963	7.18%	7.24%
Other Participant Directed Plans						
Supplemental Annuity Plan	2,916,434,215	181,864,443	(2,351,257)	3,095,947,401	6.16%	6.24%
Deferred Compensation Plan	685,406,547	48,078,404	(2,466,599)	731,018,352	6.65%	7.03%
Total All Funds	**22,175,511,075**	**1,770,742,876**	**338,973,679**	**24,285,227,630**		
Total Non-Participant Directed	18,075,627,711	1,489,041,985	317,987,844	19,882,657,540	10.00%	8.17%
Total Participant Directed	4,099,883,364	281,700,891	20,985,835	4,402,570,090	7.38%	6.85%
Total All Funds	**$ 22,175,511,075**	**$ 1,770,742,876**	**$ 338,973,679**	**$ 24,285,227,630**	**9.51%**	**7.92%**

Notes:

(1) Includes interest, dividends, securities lending, expenses, realized and unrealized gains/losses

(2) Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates and can be found at: http://www.revenue.state.ak.us/treasury/programs/programs/other/armb/investmentresults.aspx

ALASKA RETIREMENT MANAGEMENT BOARD
Schedule of Investment Income and Changes in Invested Assets by Fund
For the Month Ended October 31, 2013

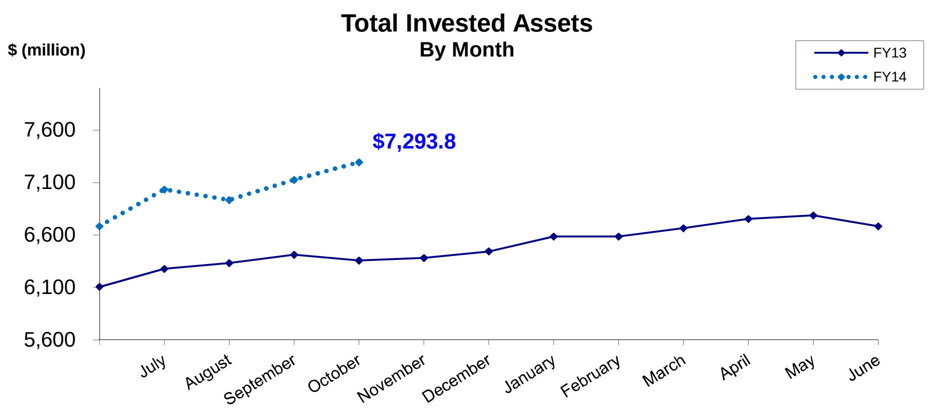
	Beginning Invested Assets	Investment Income (1)	Net Contributions (Withdrawals)	Ending Invested Assets	% Change in Invested Assets	% Change due to Investment Income (2)
Public Employees' Retirement System (PERS)						
Defined Benefit Plans:						
Retirement Trust	$ 7,126,006,478	$ 189,588,496	$ (21,753,437)	$ 7,293,841,537	2.36%	2.66%
Retirement Health Care Trust	6,278,710,311	163,967,007	(12,341,360)	6,430,335,958	2.41%	2.61%
Total Defined Benefit Plans	13,404,716,789	353,555,503	(34,094,797)	13,724,177,495	2.38%	2.64%
Defined Contribution Plans:						
Participant Directed Retirement	382,814,743	13,072,147	7,946,691	403,833,581	5.49%	3.38%
Health Reimbursement Arrangement	118,587,789	3,121,189	2,712,303	124,421,281	4.92%	2.60%
Retiree Medical Plan	22,482,112	590,573	381,450	23,454,135	4.32%	2.60%
Defined Benefit Occupational Death and Disability:						
Public Employees	8,710,796	228,821	137,096	9,076,713	4.20%	2.61%
Police and Firefighters	3,907,374	102,765	91,688	4,101,827	4.98%	2.60%
Total Defined Contribution Plans	536,502,814	17,115,495	11,269,228	564,887,537	5.29%	3.16%
Total PERS	**13,941,219,603**	**370,670,998**	**(22,825,569)**	**14,289,065,032**	2.50%	2.66%
Teachers' Retirement System (TRS)						
Defined Benefit Plans:						
Retirement Trust	3,570,866,764	94,936,312	(24,942,459)	3,640,860,617	1.96%	2.67%
Retirement Health Care Trust	2,067,871,103	53,958,173	(8,210,126)	2,113,619,150	2.21%	2.61%
Total Defined Benefit Plans	5,638,737,867	148,894,485	(33,152,585)	5,754,479,767	2.05%	2.65%
Defined Contribution Plans:						
Participant Directed Retirement	163,132,079	5,517,034	3,121,643	171,770,756	5.30%	3.35%
Health Reimbursement Arrangement	37,113,541	973,290	776,979	38,863,810	4.72%	2.60%
Retiree Medical Plan	9,280,982	243,020	118,965	9,642,967	3.90%	2.60%
Defined Benefit Occupational Death and Disability	2,733,072	71,375		2,804,447	2.61%	2.61%
Total Defined Contribution Plans	212,259,674	6,804,719	4,017,587	223,081,980	5.10%	3.18%
Total TRS	**5,850,997,541**	**155,699,204**	**(29,134,998)**	**5,977,561,747**	2.16%	2.67%
Judicial Retirement System (JRS)						
Defined Benefit Plan Retirement Trust	127,859,514	3,397,908	(446,094)	130,811,328	2.31%	2.66%
Defined Benefit Retirement Health Care Trust	23,774,009	619,612	(163,814)	24,229,807	1.92%	2.62%
Total JRS	**151,633,523**	**4,017,520**	**(609,908)**	**155,041,135**	2.25%	2.65%
National Guard/Naval Militia Retirement System (MRS)						
Defined Benefit Plan Retirement Trust	35,940,270	826,570	(172,877)	36,593,963	1.82%	2.31%
Other Participant Directed Plans						
Supplemental Annuity Plan	3,023,850,177	70,381,372	1,715,852	3,095,947,401	2.38%	2.33%
Deferred Compensation Plan	713,752,119	17,915,528	(649,295)	731,018,352	2.42%	2.51%
Total All Funds	**23,717,393,233**	**619,511,192**	**(51,676,795)**	**24,285,227,630**		
Total Non-Participant Directed	19,433,844,115	512,625,111	(63,811,686)	19,882,657,540	2.31%	2.64%
Total Participant Directed	4,283,549,118	106,886,081	12,134,891	4,402,570,090	2.78%	2.49%
Total All Funds	**$ 23,717,393,233**	**$ 619,511,192**	**$ (51,676,795)**	**$ 24,285,227,630**	**2.39%**	**2.61%**

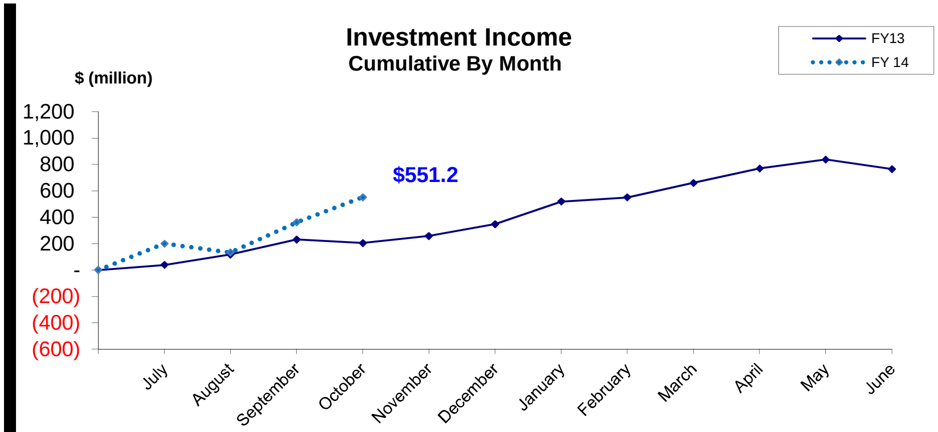
Notes:

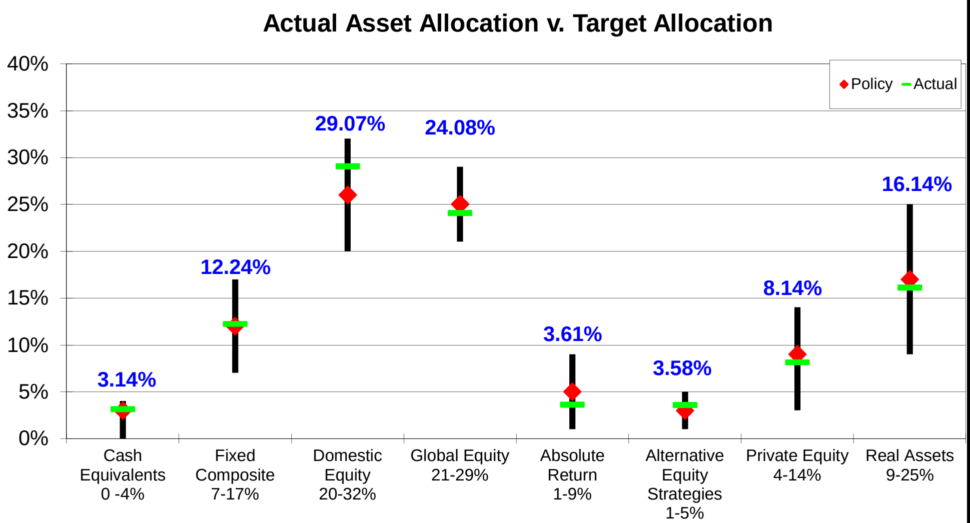
(1) Includes interest, dividends, securities lending, expenses, realized and unrealized gains/losses

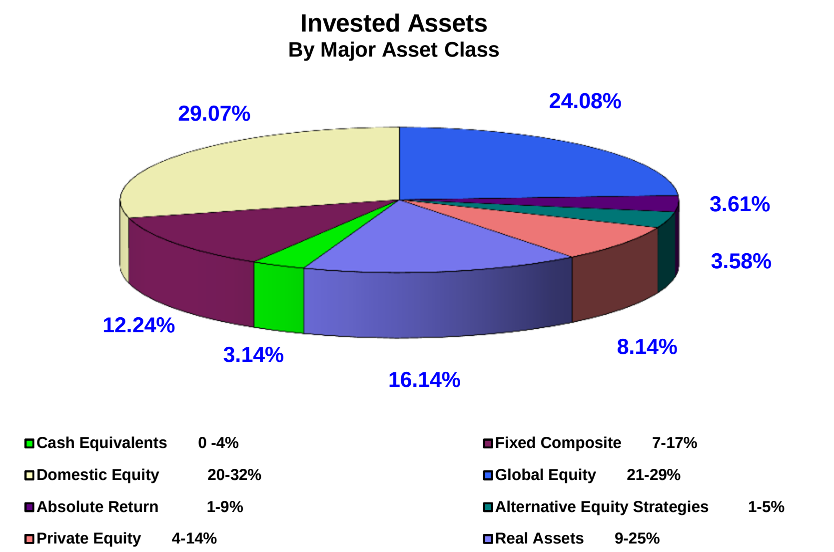
(2) Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates and can be found at: http://www.revenue.state.ak.us/treasury/programs/programs/other/armb/investmentresults.aspx

PUBLIC EMPLOYEES' RETIREMENT TRUST FUND
As of October 31, 2013

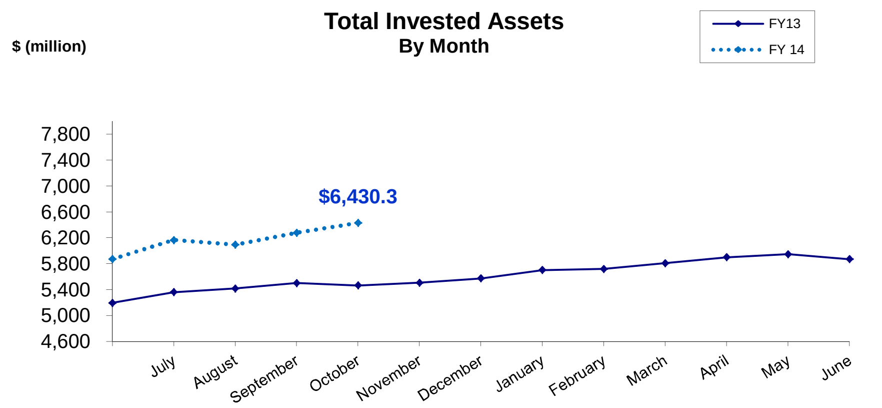


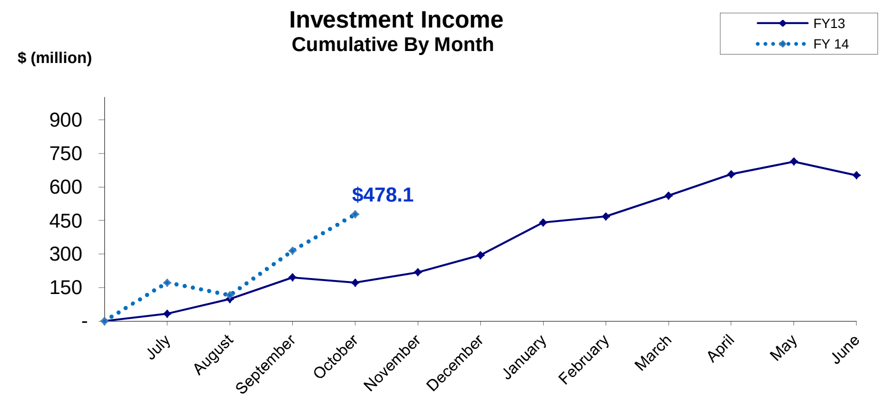


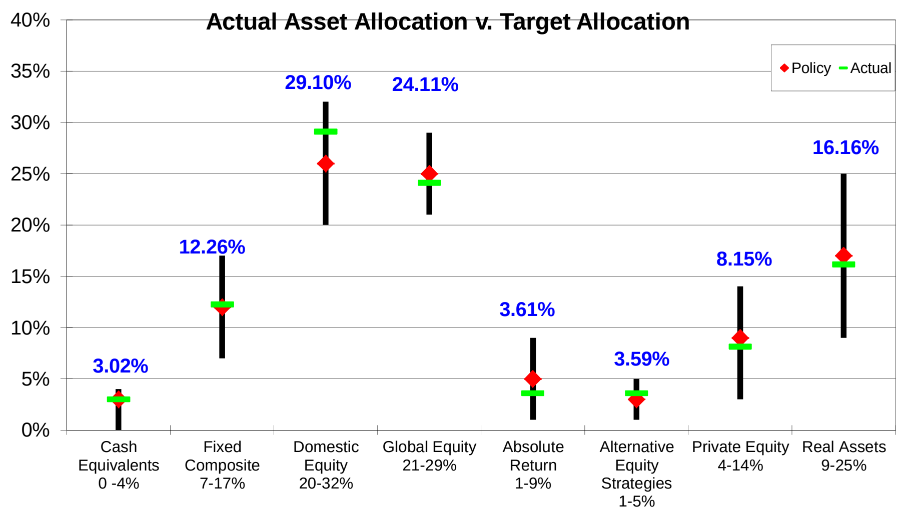


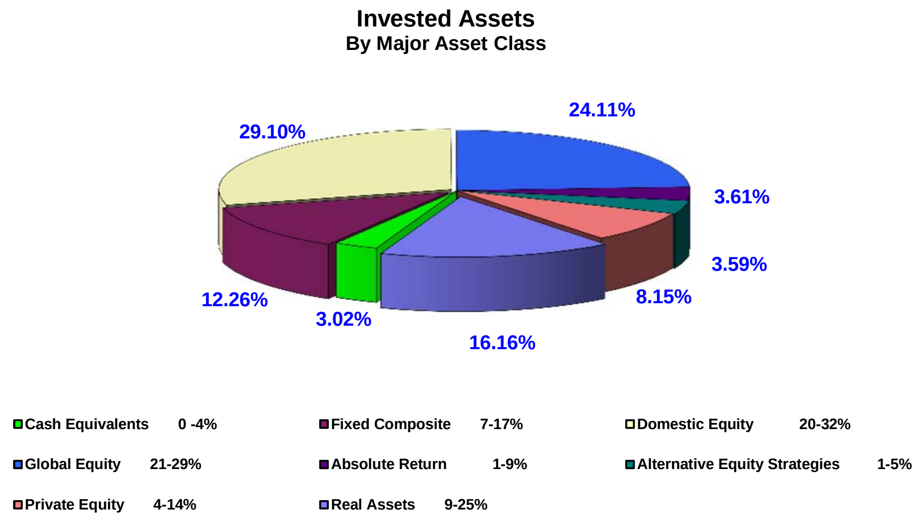


PUBLIC EMPLOYEES' RETIREE HEALTH CARE TRUST FUND
As of October 31, 2013

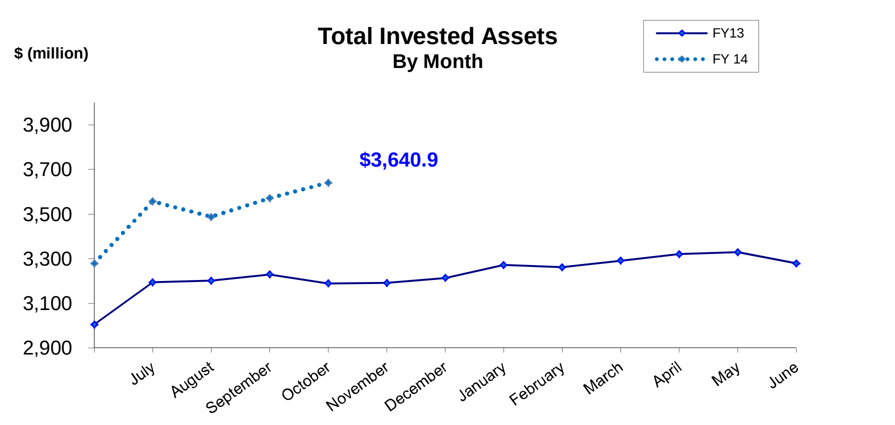


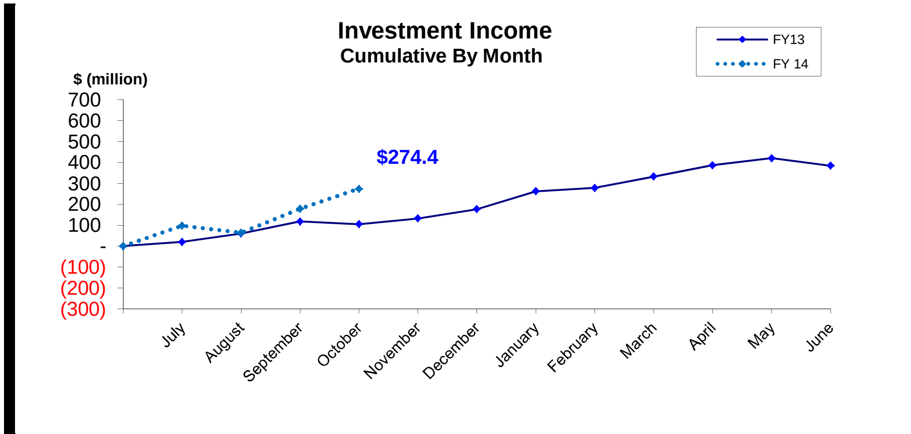


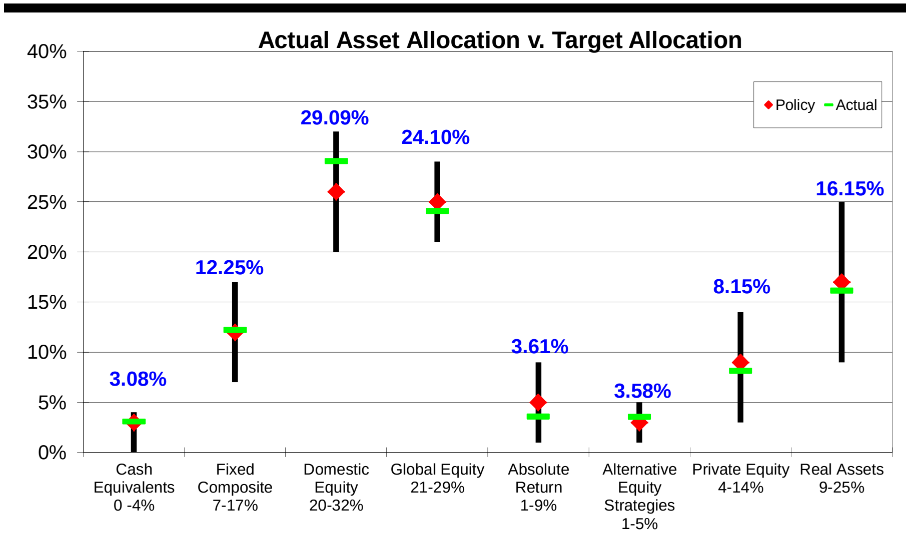


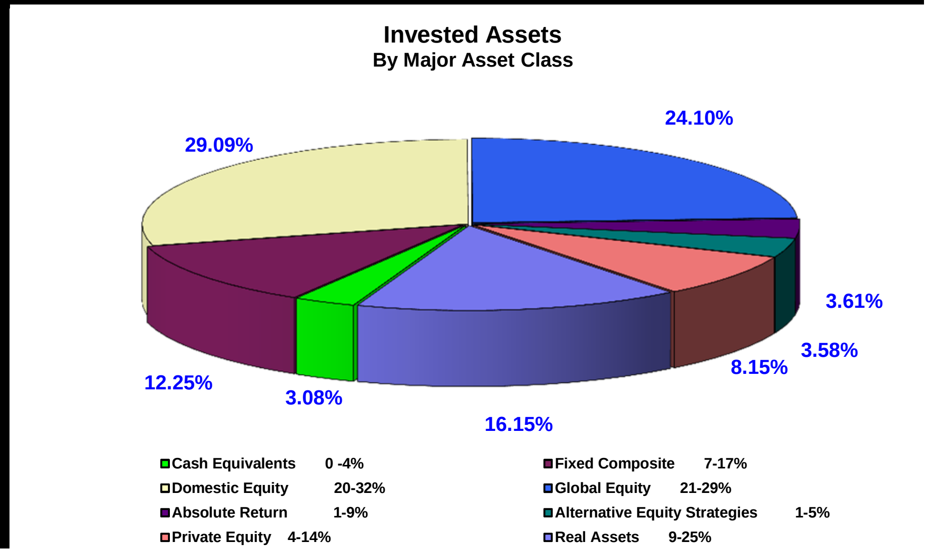


TEACHERS' RETIREMENT TRUST FUND
As of October 31, 2013

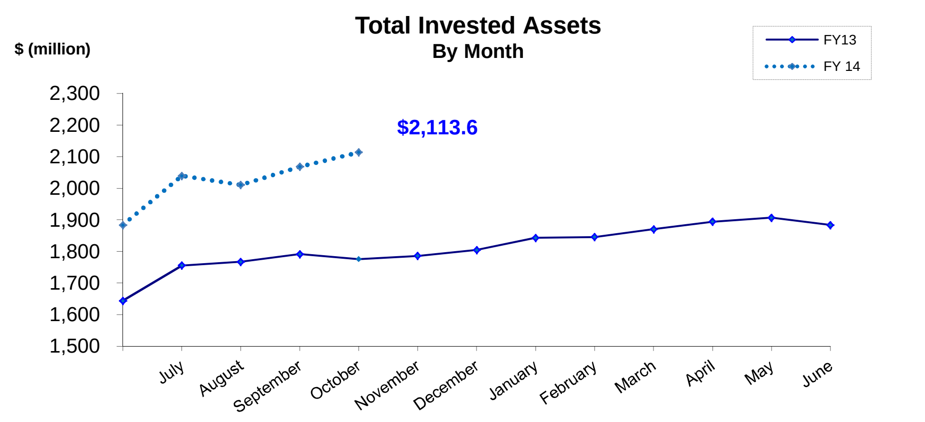


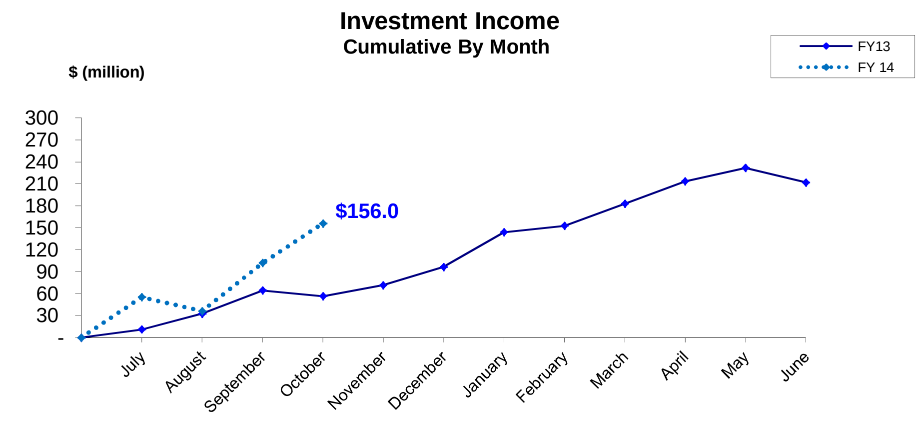


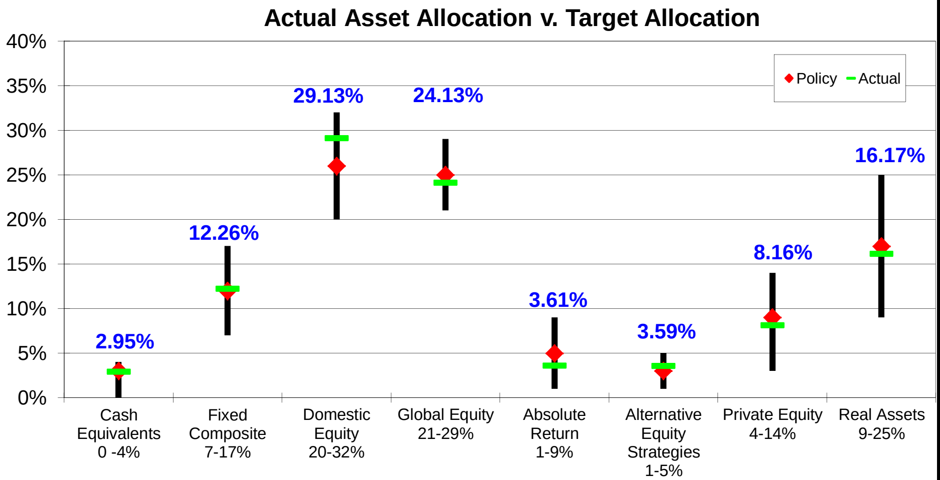


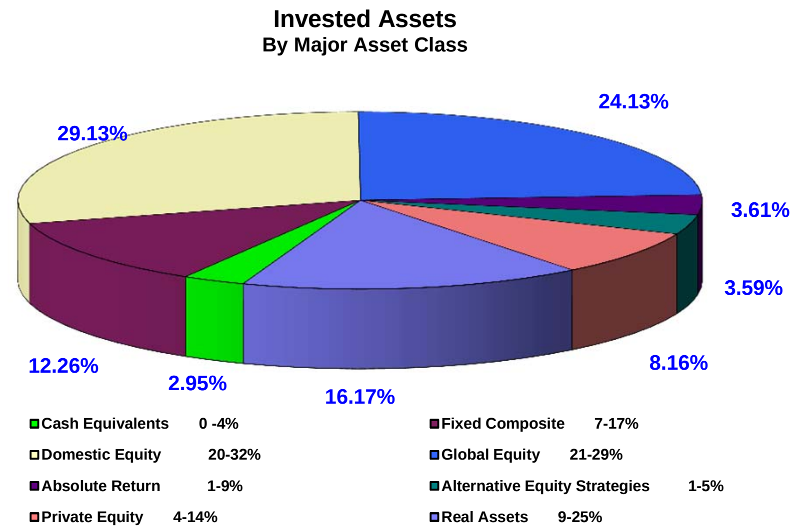


TEACHERS' RETIREE HEALTH CARE TRUST FUND
As of October 31, 2013

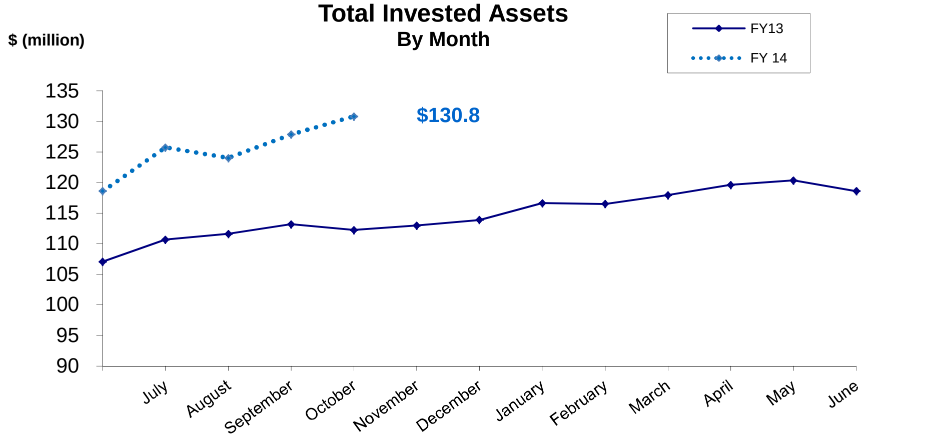


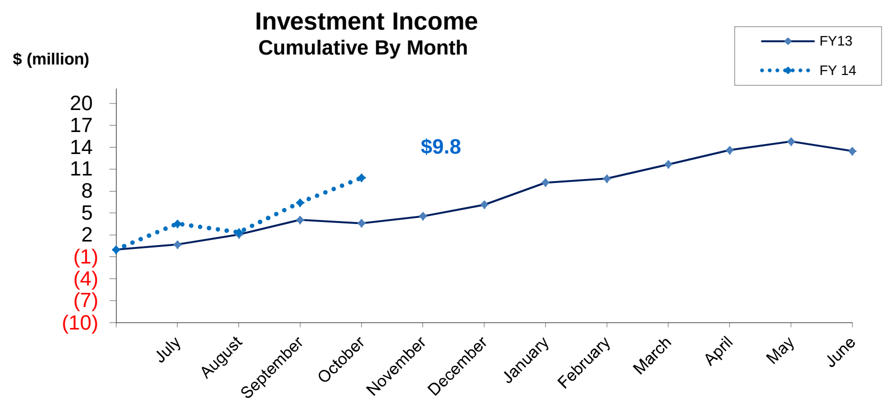


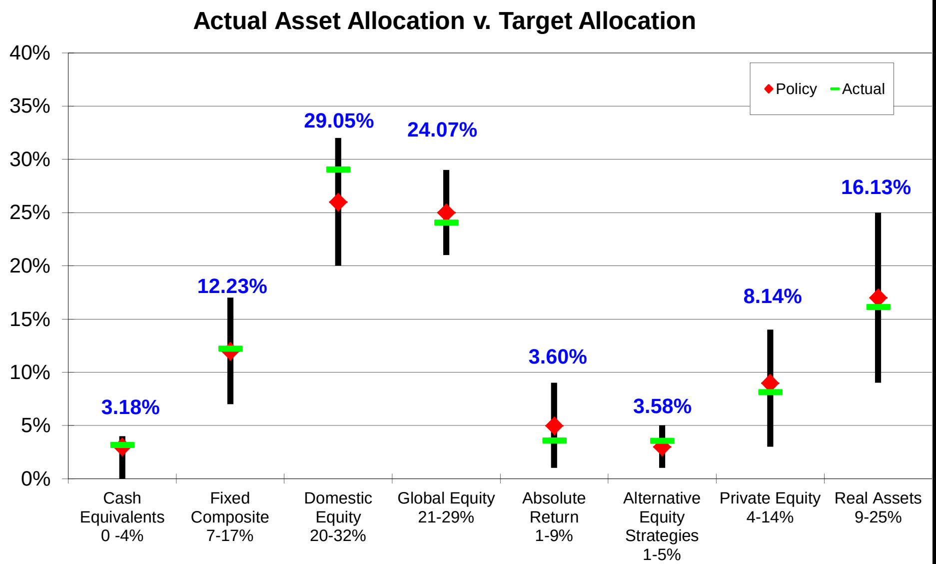


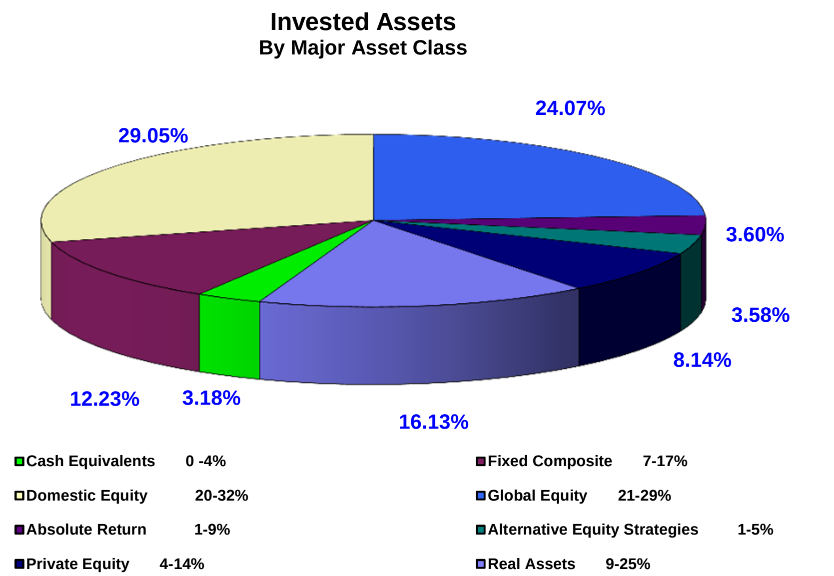


JUDICIAL RETIREMENT TRUST FUND
As of October 31, 2013

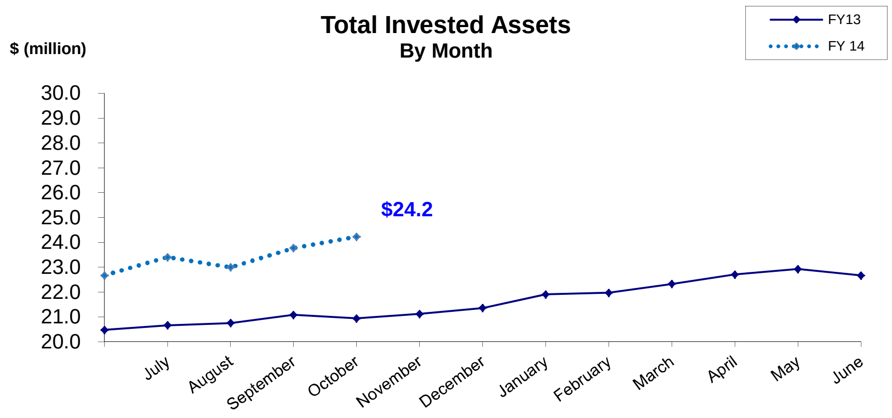


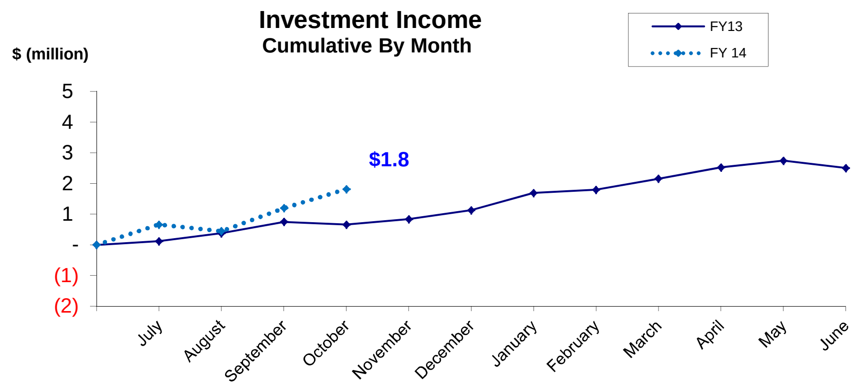


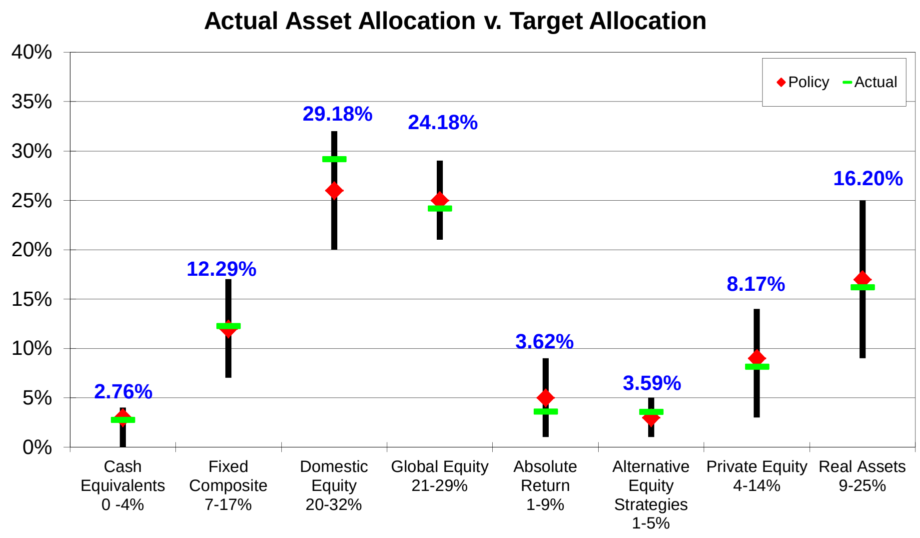


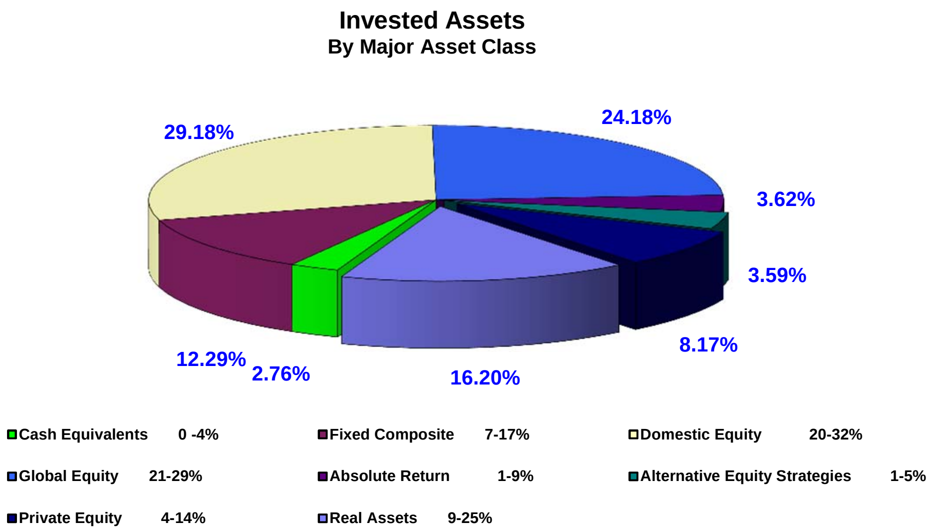


JUDICIAL RETIREE HEALTH CARE TRUST FUND
As of October 31, 2013

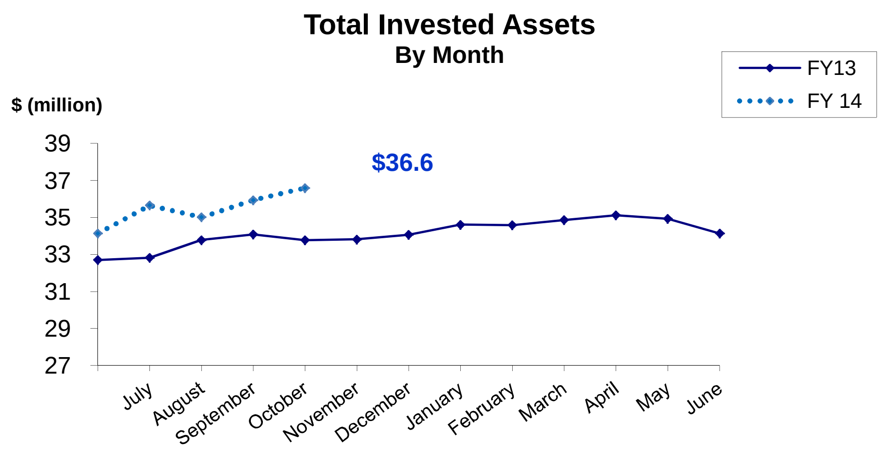


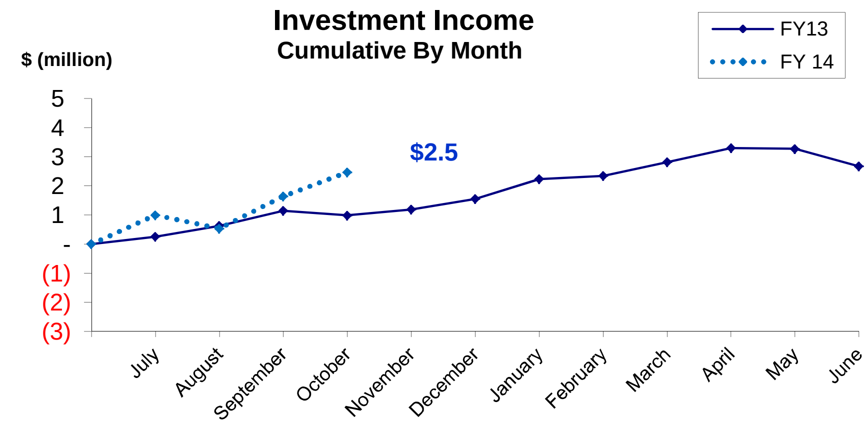


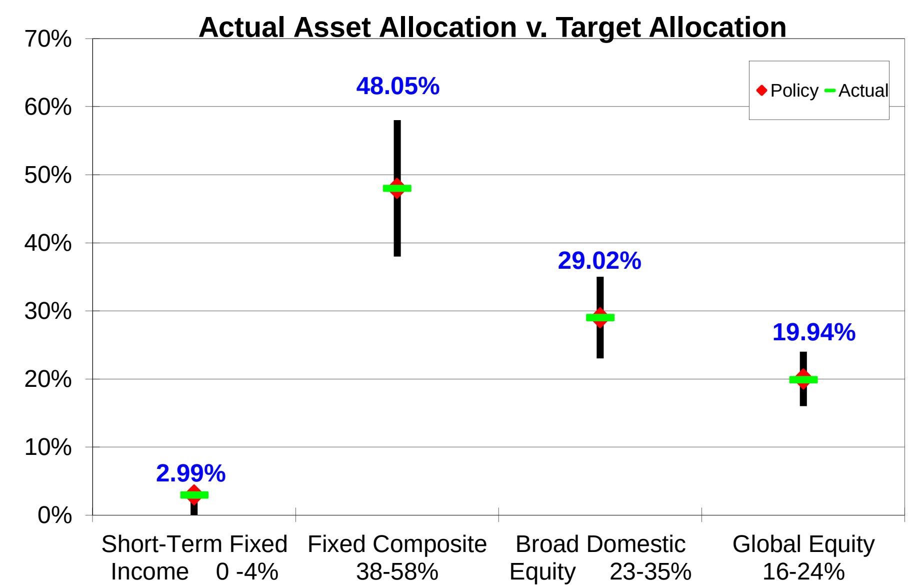


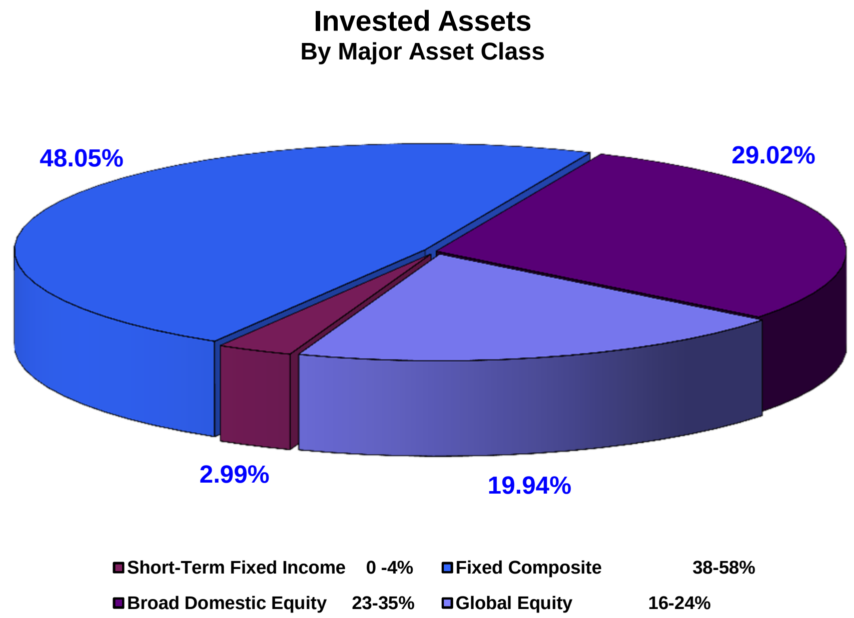


MILITARY RETIREMENT TRUST FUND
As of October 31, 2013









ALASKA RETIREMENT MANAGEMENT BOARD
Reporting of Funds by Manager

All Non-Participant Directed Plans

Alaska Retirement Management Board
All Non-Participant Directed Plans by Manager
Schedule of Investment Income and Changes in Invested Assets
For the Month Ended October 31, 2013

AY		Beginning Invested Assets	Total Investment Income	Net Contributions (Withdrawals) & Transfers In (Out)	Ending Invested Assets	% increase (decrease)
	Cash					
70	**Short-Term Fixed Income Pool**	**$ 565,253,995**	**$ 156,941**	**$ 44,981,409**	**$ 610,392,345**	**7.99%**
	Total Cash	**565,253,995**	**156,941**	**44,981,409**	**610,392,345**	**7.99%**
	Fixed Income					
1A	**US Treasury Fixed Income**	**1,384,345,160**	**5,561,043**	**(125,000,000)**	**1,264,906,203**	**-8.63%**
	International Fixed Income Pool					
63	Mondrian Investment Partners	**364,420,876**	**4,999,814**	**-**	**369,420,690**	**1.37%**
	High Yield Pool					
9P	MacKay Shields, LLC	**521,131,393**	**11,440,351**	**-**	**532,571,744**	**2.20%**
	Emerging Debt Pool					
5M	Lazard Emerging Income	**153,752,610**	**2,357,250**	**-**	**156,109,860**	**1.53%**
	Municipal Bond Pool					
1D	Western Asset Management Co.	**-**	**153,504**	**100,000,000**	**100,153,504**	**100.00%**
1E	Guggenheim Partners, LLC	**-**	**256,159**	**25,000,000**	**25,256,159**	**100.00%**
	Total Municipal Bond Pool	**-**	**409,663**	**125,000,000**	**125,409,663**	
	Total Fixed Income	**2,423,650,039**	**24,768,121**	**-**	**2,448,418,160**	**1.02%**

(cont.)

Alaska Retirement Management Board
All Non-Participant Directed Plans by Manager
Schedule of Investment Income and Changes in Invested Assets
For the Month Ended October 31, 2013

		Beginning Invested Assets	Total Investment Income	Net Contributions (Withdrawals) & Transfers In (Out)	Ending Invested Assets	% increase (decrease)
	Domestic Equities					
	Small Cap Pool					
	Passively Managed					
4N	SSgA Russell 2000 Growth	**15,953,400**	**324,486**	**-**	**16,277,886**	**2.03%**
4P	SSgA Russell 2000 Value	**56,931,325**	**1,852,728**	**-**	**58,784,053**	**3.25%**
	Total Passive	**72,884,725**	**2,177,214**	**-**	**75,061,939**	**2.99%**
	Actively Managed					
43	Transition Account	**-**	**-**	**-**	**-**	
4E	DePrince, Race & Zollo Inc.- Micro Cap	**93,065,508**	**3,306,858**	**-**	**96,372,366**	**3.55%**
4F	Luther King Capital Management	**169,567,938**	**3,528,351**	**-**	**173,096,289**	**2.08%**
4G	Jennison Associates, LLC	**176,797,363**	**5,531,404**	**-**	**182,328,767**	**3.13%**
5F	Lord Abbet Small Cap Growth Fund	**148,184,303**	**1,316,720**	**-**	**149,501,023**	**0.89%**
5G	Frontier Capital Mgmt Co.	**162,964,369**	**6,493,538**	**-**	**169,457,907**	**3.98%**
5H	Victory Capital Management	**94,378,812**	**3,534,442**	**-**	**97,913,254**	**3.74%**
6A	SSgA Futures Small Cap	**9,922,753**	**276,759**	**-**	**10,199,512**	**2.79%**
4H	Lord Abbett & Co.	**(117,657)**	**5**	**-**	**(117,652)**	**0.00%**
4Q	Barrow, Haney, Mewhinney & Strauss	**167,163,138**	**7,175,864**	**-**	**174,339,002**	**4.29%**
4Z	Lord Abbett & Co.- Micro Cap	**116,692,727**	**(308,721)**	**-**	**116,384,006**	**-0.26%**
	Total Active	**1,138,619,254**	**30,855,220**	**-**	**1,169,474,474**	**2.71%**
	Total Small Cap	**1,211,503,979**	**33,032,434**	**-**	**1,244,536,413**	**2.73%**
	Large Cap Pool					
	Passively Managed					
4L	SSgA Russell 1000 Growth	**1,139,864,916**	**50,431,646**	**-**	**1,190,296,562**	**4.42%**
4M	SSgA Russell 1000 Value	**1,153,453,851**	**50,599,315**	**-**	**1,204,053,166**	**4.39%**
4R	SSgA Russell 200	**496,453,984**	**23,758,649**	**-**	**520,212,633**	**4.79%**
	Total Passive	**2,789,772,751**	**124,789,610**	**-**	**2,914,562,361**	**4.47%**
	Actively Managed					
	Larg Cap Transition Fund	**135,881**	**5**	**(135,879)**	**7**	**-100.00%**
47	Lazard Freres	**388,214,602**	**15,897,933**	**-**	**404,112,535**	**4.10%**
48	McKinley Capital Mgmt.	**293,046,222**	**13,427,822**	**-**	**306,474,044**	**4.58%**
4U	Barrow, Haney, Mewhinney & Strauss	**288,514,666**	**9,922,021**	**-**	**298,436,687**	**3.44%**
4V	Quantitative Management Assoc.	**281,232,693**	**11,986,678**	**135,879**	**293,355,250**	**4.31%**
38	Allianz Global Investors	**297,578,537**	**13,523,938**	**-**	**311,102,475**	**4.54%**
6B	SSgA Futures large cap	**11,468,834**	**501,117**	**-**	**11,969,951**	**4.37%**
	Total Active	**1,560,191,435**	**65,259,514**	**-**	**1,625,450,949**	**4.18%**
	Total Large Cap	**4,349,964,186**	**190,049,124**	**-**	**4,540,013,310**	**4.37%**
	Total Domestic Equity	**5,561,468,165**	**223,081,558**	**-**	**5,784,549,723**	**4.01%**

(cont.)

Alaska Retirement Management Board
All Non-Participant Directed Plans by Manager
Schedule of Investment Income and Changes in Invested Assets
For the Month Ended October 31, 2013

		Beginning Invested Assets	Total Investment Income	Net Contributions (Withdrawals) & Transfers In (Out)	Ending Invested Assets	% increase (decrease)
	Alternative Equity Strategies					
	Alternative Equity Strategy Pool					
4J	Relational Investors, LLC	**279,586,010**	**14,606,977**	**(46,188,440)**	**248,004,547**	**-11.30%**
4W/4X	Analytic Buy Write Account	**121,091,967**	**4,299,352**	**-**	**125,391,319**	**3.55%**
4Y	Allianz Global Investors Buy-Write Account	**82,658,155**	**124,941**	**-**	**82,783,096**	**0.15%**
5E	ARMB Equity Yield Strategy	**114,368,727**	**5,583,144**	**-**	**119,951,871**	**4.88%**
	Total Alternative Equity Strategy Pool	**597,704,859**	**24,614,414**	**(46,188,440)**	**576,130,833**	**-3.61%**
	Convertible Bond Pool					
52	Advent Capital	**133,022,955**	**1,912,989**	**-**	**134,935,944**	**1.44%**
	Total Alternative Equity Strategies	**730,727,814**	**26,527,403**	**(46,188,440)**	**711,066,777**	**-2.69%**
	Global Equities Ex US					
	Small Cap Pool					
5B	Mondrian Investment Partners	**146,069,861**	**2,625,654**	**-**	**148,695,515**	**1.80%**
5D	Schroder Investment Management	**143,642,357**	**5,849,690**	**-**	**149,492,047**	**4.07%**
	Total Small Cap	**289,712,218**	**8,475,344**	**-**	**298,187,562**	**2.93%**
	Large Cap Pool					
65	Brandes Investment Partners	**976,729,196**	**42,806,771**	**-**	**1,019,535,967**	**4.38%**
58	Lazard Freres	**461,878,333**	**21,046,848**	**-**	**482,925,181**	**4.56%**
67	Cap Guardian Trust Co	**762,419,373**	**23,813,771**	**-**	**786,233,144**	**3.12%**
68	State Street Global Advisors	**606,866,621**	**21,774,369**	**-**	**628,640,990**	**3.59%**
69	McKinley Capital Management	**339,351,440**	**16,414,576**	**-**	**355,766,016**	**4.84%**
6U	Blackrock ACWI Ex-US IMI	**607,626,471**	**21,901,103**	**-**	**629,527,574**	**3.60%**
	Total Large Cap	**3,754,871,434**	**147,757,438**	**-**	**3,902,628,872**	**3.94%**
	Emerging Markets Equity Pool A (1)					
6P	Lazard Asset Management	**346,416,361**	**19,093,815**	**-**	**365,510,176**	**5.51%**
6Q	Eaton Vance	**214,532,353**	**9,321,162**	**-**	**223,853,515**	**4.34%**
	Total Emerging Markets Pool A	**560,948,714**	**28,414,977**	**-**	**589,363,691**	**5.07%**
	Total Global Equities	**4,605,532,366**	**184,647,759**	**-**	**4,790,180,125**	**4.01%**
	Private Equity Pool					
7Y	Warburg Pincus Prvt Eqty XI	**6,282,186**	**2**	**210,000**	**6,492,188**	**3.34%**
7Z	Merit Capital Partners	**11,494,993**	**1**	**(155,424)**	**11,339,570**	**-1.35%**
98	Pathway Capital Management LLC	**766,679,262**	**5,295,059**	**(1,593,903)**	**770,380,418**	**0.48%**
85	Abbott Capital	**710,589,475**	**12,444,814**	**(7,671,326)**	**715,362,963**	**0.67%**
8A	Blum Capital Partners-Strategic	**10,019,649**	**(7)**	**(718,479)**	**9,301,163**	**-7.17%**
8P	Lexington Partners	**47,645,513**	**(15)**	**(1,106,719)**	**46,538,779**	**-2.32%**
8Q	Onex Partnership III	**21,218,137**	**-**	**-**	**21,218,137**	**0.00%**
8W	Warburg Pincus X	**24,913,574**	**(1,179)**	**(44,849)**	**24,867,546**	**-0.18%**
8X	Angelo, Gordon & Co.	**12,279,566**	**-**	**(568,980)**	**11,710,586**	**-4.63%**
	Total Private Equity	**1,611,122,355**	**17,738,675**	**(11,649,680)**	**1,617,211,350**	**0.38%**

(cont.)

Alaska Retirement Management Board
All Non-Participant Directed Plans by Manager
Schedule of Investment Income and Changes in Invested Assets
For the Month Ended October 31, 2013

		Beginning Invested Assets	Total Investment Income	Net Contributions (Withdrawals) & Transfers In (Out)	Ending Invested Assets	% increase (decrease)
	Absolute Return Pool (2)					
8M	Global Asset Management (USA) Inc.	**257,456,092**	**188,033**	**-**	**257,644,125**	**0.07%**
8N	Prisma Capital Partners	**262,090,404**	**2,620,389**	**-**	**264,710,793**	**1.00%**
9D	Mariner Investment Group, Inc.	**836,928**	**(51,384)**	**(393,089)**	**392,455**	**-53.11%**
9F	Crestline Investors, Inc.	**224,098,273**	**1,176,886**	**(32,000,000)**	**193,275,159**	**-13.75%**
	Total Absolute Return Investments	**744,481,697**	**3,933,924**	**(32,393,089)**	**716,022,532**	**-3.82%**
	Real Assets					
	Farmland Pool A					
9B	UBS Agrivest, LLC	**457,856,431**	**86**	**250,000**	**458,106,517**	**0.05%**
9G	Hancock Agricultural Investment Group	**264,972,121**	**-**	**-**	**264,972,121**	**0.00%**
	Total Farmland Pool A	**722,828,552**	**86**	**250,000**	**723,078,638**	**0.03%**
	Timber Pool A					
9Q	Timberland INVT Resource LLC	**181,118,880**	**1,693,842**	**-**	**182,812,722**	**0.94%**
9S	Hancock Natural Resourse Group	**86,394,701**	**174,803**	**-**	**86,569,504**	**0.20%**
	Total Timber Pool A	**267,513,581**	**1,868,645**	**-**	**269,382,226**	**0.70%**
	Energy Pool A					
5Y	EIG Energy Fund XV	**42,441,018**	**244,591**	**(7,000,000)**	**35,685,609**	**-15.92%**
9A	EIG Energy Fund XD	**7,786,536**	**(73,766)**	**-**	**7,712,770**	**-0.95%**
9Z	EIG Energy Fund XIV-A	**51,794,349**	**(510,505)**	**-**	**51,283,844**	**-0.99%**
5J	EIG Energy Fund XVI	**-**	**-**	**7,000,000**	**7,000,000**	
	Total Energy Pool A	**102,021,903**	**(339,680)**	**-**	**101,682,223**	**-0.33%**
	REIT Pool					
9H	REIT Holdings	**313,646,092**	**13,151,755**	**-**	**326,797,847**	**4.19%**
	Treasury Inflation Proof Securities					
6N	TIPS Internally Managed Account	**33,751,309**	**202,966**	**-**	**33,954,275**	**0.60%**
	Master Limited Partnerships					
1P	FAMCO	**177,233,281**	**3,316,719**	**-**	**180,550,000**	**1.87%**
1Q	Tortoise Capital Advisors	**186,066,476**	**4,975,737**	**-**	**191,042,213**	**2.67%**
	Total Master Limited Partnerships	**363,299,757**	**8,292,456**	**-**	**371,592,213**	**2.28%**

(cont.)

Alaska Retirement Management Board
All Non-Participant Directed Plans by Manager
Schedule of Investment Income and Changes in Invested Assets
For the Month Ended October 31, 2013

		Beginning Invested Assets	Total Investment Income	Net Contributions (Withdrawals) & Transfers In (Out)	Ending Invested Assets	% increase (decrease)
	Real Estate					
	Core Commingled Accounts					
7A	JP Morgan	**196,444,975**	**5,002,701**	**(2,320,152)**	**199,127,524**	**1.37%**
7B	UBS Trumbull Property Fund	**79,754,315**	**2,199,337**	**(581,439)**	**81,372,213**	**2.03%**
	Total Core Commingled	**276,199,290**	**7,202,038**	**(2,901,591)**	**280,499,737**	**1.56%**
	Core Separate Accounts					
7D	Cornerstone Real Estate Advisers Inc.	**142,558,019**	**18**	**(285,491)**	**142,272,546**	**-0.20%**
7E	LaSalle Investment Management	**194,634,976**	**32**	**902,899**	**195,537,907**	**0.46%**
7F	Sentinel Separate Account	**149,886,632**	**(3)**	**(586,531)**	**149,300,098**	**-0.39%**
7G	UBS Realty	**277,824,626**	**45**	**(1,317,508)**	**276,507,163**	**-0.47%**
	Total Core Separate	**764,904,253**	**92**	**(1,286,631)**	**763,617,714**	**-0.17%**
	Non-Core Commingled Accounts					
7H	Coventry	**14,027,535**	**-**	**-**	**14,027,535**	**0.00%**
7J	Lowe Hospitality Partners	**2,751,177**	**-**	**-**	**2,751,177**	**0.00%**
7N	ING Clarion Development Ventures II	**5,082,467**	**(89,713)**	**-**	**4,992,754**	**-1.77%**
7P	Silverpeak Legacy Pension Partners II, L.P. (3)	**71,704,851**	**-**	**-**	**71,704,851**	**0.00%**
7Q	Almanac Realty Securities IV (5)	**19,735,140**	**(4)**	**(671,258)**	**19,063,878**	**-3.40%**
7R	Tishman Speyer Real Estate Venture VI	**62,887,535**	**-**	**-**	**62,887,535**	**0.00%**
7X	Tishman Speyer Real Estate Venture VII	**17,935,544**	**-**	**-**	**17,935,544**	**0.00%**
7S	Almanac Realty Securities V (6)	**30,114,207**	**7**	**(435,348)**	**29,678,866**	**-1.45%**
7V	ING Clarion Development Ventures III	**25,869,809**	**485,880**	**-**	**26,355,689**	**1.88%**
7W	Silverpeak Legacy Pension Partners III, L.P. (4)	**8,797,376**	**-**	**-**	**8,797,376**	**0.00%**
8R	BlackRock Diamond Property Fund	**26,795,854**	**996,198**	**(3,623)**	**27,788,429**	**3.70%**
8S	Colony Investors VIII, L.P.	**20,172,366**	**-**	**-**	**20,172,366**	**0.00%**
8U	LaSalle Medical Office Fund II	**20,035,399**	**4**	**(13,513,435)**	**6,521,968**	**-67.45%**
8V	Cornerstone Apartment Venture III	**21,533,687**	**-**	**-**	**21,533,687**	**0.00%**
	Total Non-Core Commingled	**347,442,947**	**1,392,372**	**(14,623,664)**	**334,211,655**	**-3.81%**
	Total Real Estate	**1,388,546,490**	**8,594,502**	**(18,811,886)**	**1,378,329,106**	**-0.74%**
	Total Real Assets	**3,191,607,684**	**31,770,730**	**(18,561,886)**	**3,204,816,528**	**0.41%**
	Totals	**$ 19,433,844,115**	**$ 512,625,111**	**$ (63,811,686)**	**$ 19,882,657,540**	**2.31%**

Notes

(1) Investment is represented by shares in (or as a percentage of) commingled equity investments which, at any given time, may be a combination of securities and cash.
(2) Investment is represented by shares in various hedge funds.
(3) Previously titled Lehman Brothers Real Estate Partners II
(4) Previously titled Lehman Brothers Real Estate Partners III
(5) Previously titled Rothschild Five Arrows Reality Securities IV
(6) Previously titled Rothschild Five Arrows Reality Securities V

ALASKA RETIREMENT MANAGEMENT BOARD

Participant Directed Plans

Supplemental Annuity Plan
Schedule of Investment Income and Changes in Invested Assets
for the Month Ended
October 31, 2013

Interim Transit Account	Beginning Invested Assets	Investment Income	Net Contributions (Withdrawals)	Transfers In (Out)	Ending Invested Assets	% Change in Invested Assets	% Change due to Investment Income (3)
Treasury Division (1)							
Cash and Cash Equivalents	$ 7,774,119	$ 952	$ (6,636,767)	$ -	$ 1,138,304	-85.36%	0.02%
Participant Options							
T. Rowe Price							
Stable Value Fund	353,860,118	643,224	(290,251)	(5,110,764)	349,102,327	-1.34%	0.18%
Small Cap Stock Fund	123,647,179	3,845,555	299,344	3,287,263	131,079,340	6.01%	3.07%
Alaska Balanced Trust	1,142,412,246	21,756,834	940,401	(312,556)	1,164,796,924	1.96%	1.90%
Long Term Balanced Fund	458,146,138	12,457,064	2,573,061	(385,957)	472,790,306	3.20%	2.71%
AK Target Date 2010 Trust	7,114,057	186,341	34,171	1,098,230	8,432,800	18.54%	2.43%
AK Target Date 2015 Trust	97,850,640	2,570,736	391,562	585,349	101,398,288	3.63%	2.61%
AK Target Date 2020 Trust	50,536,950	1,482,234	473,626	936,019	53,428,828	5.72%	2.89%
AK Target Date 2025 Trust	29,865,834	931,958	432,104	(357,110)	30,872,786	3.37%	3.12%
AK Target Date 2030 Trust	17,134,611	602,625	550,709	933,855	19,221,801	12.18%	3.37%
AK Target Date 2035 Trust	15,285,765	551,653	437,980	196,302	16,471,701	7.76%	3.54%
AK Target Date 2040 Trust	16,623,497	599,945	483,876	(471,060)	17,236,259	3.69%	3.61%
AK Target Date 2045 Trust	17,313,693	644,342	721,188	38,430	18,717,653	8.11%	3.64%
AK Target Date 2050 Trust	17,653,596	655,756	787,174	339,295	19,435,820	10.10%	3.60%
AK Target Date 2055 Trust	10,309,995	387,255	527,982	(145,057)	11,080,175	7.47%	3.69%
Total Investments with T. Rowe Price	2,357,754,320	47,315,522	8,362,927	632,238	2,414,065,007		
State Street Global Advisors							
State Street Treasury Money Market Fund - Inst.	38,459,965	1	(389,049)	(91,549)	37,979,368	-1.25%	0.00%
S&P 500 Stock Index Fund Series A	279,251,100	12,713,889	(356,303)	(67,145)	291,541,541	4.40%	4.56%
Russell 3000 Index	35,472,197	1,529,143	189,976	2,773,454	39,964,770	12.67%	4.14%
US Real Estate Investment Trust Index	27,299,582	1,000,814	123,217	(1,312,962)	27,110,652	-0.69%	3.75%
World Equity Ex-US Index	25,952,491	958,159	147,366	439,240	27,497,256	5.95%	3.65%
Long US Treasury Bond Index	8,999,075	114,653	51,490	(1,219,744)	7,945,474	-11.71%	1.36%
US Treasury Inflation Protected Securities Index	17,410,724	94,282	13,757	(557,578)	16,961,185	-2.58%	0.55%
World Government Bond Ex-US Index	7,828,837	91,534	(29,896)	420,133	8,310,609	6.15%	1.14%
Global Balanced Fund	54,953,664	1,506,202	(148,579)	(1,060,864)	55,250,424	0.54%	2.77%
Total Investments with SSGA	495,627,635	18,008,677	(398,021)	(677,014)	512,561,278		
BlackRock							
Government/Credit Bond Fund	44,995,164	401,011	(142,729)	(1,200,284)	44,053,161	-2.09%	0.90%
Intermediate Bond Fund	13,996,073	49,024	65,719	(164,577)	13,946,239	-0.36%	0.35%
Total Investments with Barclays Global Investors	58,991,237	450,034	(77,010)	(1,364,862)	57,999,400		
Brandes Institutional							
International Equity Fund Fee	70,085,777	3,086,133	302,037	1,305,269	74,779,216	6.70%	4.35%
RCM							
Sustainable Core Opportunities Fund	33,617,090	1,520,054	162,685	104,369	35,404,197	5.32%	4.50%
Total All Funds	$ 3,023,850,178	$ 70,381,372	$ 1,715,852	$ -	$ 3,095,947,402	2.38%	2.33%

Notes: (1) Represents net contributions in transit to/from the record keeper. (2) Source data provided by the record keeper, Great West Life.
(3) Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates.

Supplemental Annuity Plan
Schedule of Invested Assets with
Schedule of Investment Income and Changes in Invested Assets
By Month Through the Month Ended
October 31, 2013
$ (Thousands)

Invested Assets (at fair value)	**July**	**August**	**September**	**October**
Investments with Treasury Division				
Cash and cash equivalents	$ 6,963	$ 8,002	$ 7,774	$ 1,138
Investments with T. Rowe Price				
Stable Value Fund	342,163	341,965	353,860	349,102
Small Cap Stock Fund	119,871	119,590	123,647	131,079
Alaska Balanced Trust	1,145,537	1,125,332	1,142,412	1,164,797
Long Term Balanced Fund	447,174	442,185	458,146	472,790
AK Target Date 2010 Trust	7,235	7,455	7,114	8,433
AK Target Date 2015 Trust	97,964	96,565	97,851	101,398
AK Target Date 2020 Trust	48,561	47,667	50,537	53,429
AK Target Date 2025 Trust	30,232	29,289	29,866	30,873
AK Target Date 2030 Trust	14,847	15,993	17,135	19,222
AK Target Date 2035 Trust	14,419	14,608	15,286	16,472
AK Target Date 2040 Trust	15,673	15,644	16,623	17,236
AK Target Date 2045 Trust	16,055	16,241	17,314	18,718
AK Target Date 2050 Trust	16,248	16,509	17,654	19,436
AK Target Date 2055 Trust	9,471	9,697	10,310	11,080
State Street Global Advisors				
State Street Treasury Money Market Fund - Inst.	36,430	37,668	38,460	37,979
S&P 500 Stock Index Fund Series A	284,037	275,135	279,251	291,542
Russell 3000 Index	33,378	33,573	35,472	39,965
US Real Estate Investment Trust Index	34,248	29,016	27,300	27,111
World Equity Ex-US Index	23,860	23,712	25,952	27,497
Long US Treasury Bond Index	9,537	8,831	8,999	7,945
US Treasury Inflation Protected Securities Index	17,978	17,536	17,411	16,961
World Government Bond Ex-US Index	7,183	7,527	7,829	8,311
Global Balanced Fund	54,784	53,706	54,954	55,250
Investments with BlackRock				
Government/Credit Bond Fund	45,356	44,798	44,995	44,053
Intermediate Bond Fund	15,160	14,182	13,996	13,946
Investments with Brandes Institutional				
International Equity Fund Fee	64,109	64,506	70,086	74,779
Investments with RCM				
Sustainable Core Opportunities Fund	33,172	32,118	33,617	35,404
Total Invested Assets	**$ 2,991,647**	**$ 2,949,049**	**$ 3,023,850**	**$ 3,095,947**

Change in Invested Assets				
Beginning Assets	$ 2,916,434	$ 2,991,647	$ 2,949,049	$ 3,023,850
Investment Earnings	77,620	(44,221)	78,084	70,381
Net Contributions (Withdrawals)	(2,408)	1,623	(3,283)	1,716
Ending Invested Assets	**$ 2,991,647**	**$ 2,949,049**	**$ 3,023,850**	**$ 3,095,947**

Source data provided by the record keeper, Great West Life.

Deferred Compensation Plan
Schedule of Invested Assets and Changes in Invested Assets
for the Month Ended
October 31, 2013

Participant Options	**Beginning Invested Assets**	**Investment Income**	**Net Contributions (Withdrawals)**	**Transfers In (Out)**	**Ending Invested Assets**	**% Change in Invested Assets**	**% Change due to Investment Income (3)**
T. Rowe Price							
Interest Income Fund	$ 183,571,128	$ 379,430	$ (346,469)	$ (1,546,703)	$ 182,057,386	-0.82%	0.21%
Small Cap Stock Fund	91,092,813	2,870,434	(308,430)	1,500,498	95,155,315	4.46%	3.13%
Long Term Balanced Fund	44,301,994	1,203,768	128,818	(36,924)	45,597,656	2.92%	2.71%
Alaska Balanced Trust	12,404,968	241,913	137,568	185,218	12,969,667	4.55%	1.93%
AK Target Date 2010 Trust	2,234,672	59,099	10,894	486,245	2,790,910	24.89%	2.38%
AK Target Date 2015 Trust	7,232,561	184,409	97,957	(142,573)	7,372,354	1.93%	2.56%
AK Target Date 2020 Trust	10,104,816	298,975	208,776	67,985	10,680,552	5.70%	2.92%
AK Target Date 2025 Trust	4,409,235	140,836	131,895	12,052	4,694,018	6.46%	3.14%
AK Target Date 2030 Trust	3,227,785	110,534	74,410	(82,458)	3,330,271	3.18%	3.43%
AK Target Date 2035 Trust	2,026,106	73,349	52,749	143,887	2,296,091	13.33%	3.45%
AK Target Date 2040 Trust	2,014,794	69,104	71,078	(151,815)	2,003,161	-0.58%	3.50%
AK Target Date 2045 Trust	1,234,499	45,412	52,093	(11,024)	1,320,980	7.01%	3.62%
AK Target Date 2050 Trust	805,712	29,616	25,969	199,092	1,060,389	31.61%	3.23%
AK Target Date 2055 Trust	1,301,080	44,441	18,251	(130,525)	1,233,247	-5.21%	3.57%
Total Investments with T. Rowe Price	365,962,163	5,751,320	355,559	492,955	372,561,997		
State Street Global Advisors							
State Street Treasury Money Market Fund - Inst.	12,367,928	1	(517,620)	(159,291)	11,691,018	-5.47%	0.00%
Russell 3000 Index	12,587,524	530,507	140,747	232,266	13,491,044	7.18%	4.15%
US Real Estate Investment Trust Index	9,444,815	354,047	8,843	(411,556)	9,396,149	-0.52%	3.83%
World Equity Ex-US Index	8,809,908	323,147	90,401	92,486	9,315,942	5.74%	3.63%
Long US Treasury Bond Index	2,597,385	33,728	(27,142)	(144,245)	2,459,726	-5.30%	1.34%
US Treasury Inflation Protected Securities Index	7,771,376	41,188	10,848	(313,621)	7,509,791	-3.37%	0.54%
World Government Bond Ex-US Index	2,779,377	33,181	(33,374)	137,074	2,916,258	4.92%	1.17%
Global Balanced Fund	38,757,187	1,065,973	11,102	(367,806)	39,466,456	1.83%	2.76%
Total Investments with SSGA	95,115,500	2,381,772	(316,195)	(934,693)	96,246,384		
BlackRock							
S&P 500 Index Fund	151,689,990	6,922,056	(451,345)	793,893	158,954,594	4.79%	4.56%
Government/Credit Bond Fund	28,732,614	252,496	(270,096)	(499,096)	28,215,918	-1.80%	0.89%
Intermediate Bond Fund	14,961,039	52,731	11,705	(109,470)	14,916,005	-0.30%	0.35%
Total Investments with Barclays Global Investors	195,383,643	7,227,283	(709,736)	185,327	202,086,517		
Brandes Institutional							
International Equity Fund Fee	43,336,160	1,925,174	(46,496)	299,339	45,514,177	5.03%	4.43%
RCM							
Sustainable Core Opportunities Fund	13,954,654	629,977	67,574	(42,928)	14,609,277	4.69%	4.51%
Total All Funds	$ 713,752,120	$ 17,915,526	$ (649,294)	$ -	$ 731,018,352	2.42%	2.51%

Notes: (1) Represents net contributions in transit to/from the record keeper. (2) Source data provided by the record keeper, Great West Life.
(3) Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates.

Deferred Compensation Plan
Schedule of Invested Assets with
Schedule of Investment Income and Changes in Invested Assets
By Month Through the Month Ended
October 31, 2013
$ (Thousands)

Invested Assets (at fair value)	**July**	**August**	**September**	**October**
Investments with T. Rowe Price				
Interest Income Fund				
Cash and cash equivalents	$ 11,345	$ 11,415	$ 12,731	$ 10,816
Synthetic Investment Contracts	169,734	170,359	170,840	171,241
Small Cap Stock Fund	89,670	88,064	91,093	95,155
Long Term Balanced Fund	43,536	42,879	44,302	45,598
Alaska Balanced Trust	11,946	11,996	12,405	12,970
AK Target Date 2010 Trust	2,227	2,246	2,235	2,791
AK Target Date 2015 Trust	6,914	6,888	7,233	7,372
AK Target Date 2020 Trust	9,552	9,463	10,105	10,681
AK Target Date 2025 Trust	4,235	4,116	4,409	4,694
AK Target Date 2030 Trust	2,861	2,787	3,228	3,330
AK Target Date 2035 Trust	1,917	1,909	2,026	2,296
AK Target Date 2040 Trust	1,847	1,848	2,015	2,003
AK Target Date 2045 Trust	1,167	1,168	1,234	1,321
AK Target Date 2050 Trust	696	693	806	1,060
AK Target Date 2055 Trust	957	1,004	1,301	1,233
State Street Global Advisors				
State Street Treasury Money Market Fund - Inst.	11,018	11,623	12,368	11,691
Russell 3000 Index	11,623	11,547	12,588	13,491
US Real Estate Investment Trust Index	11,916	9,673	9,445	9,396
World Equity Ex-US Index	7,974	8,051	8,810	9,316
Long US Treasury Bond Index	2,779	2,580	2,597	2,460
US Treasury Inflation Protected Securities Index	8,247	8,054	7,771	7,510
World Government Bond Ex-US Index	2,651	2,697	2,779	2,916
Global Balanced Fund	38,863	37,889	38,757	39,466
Investments with BlackRock				
S&P 500 Index Fund	153,030	148,443	151,690	158,955
Government/Credit Bond Fund	29,734	28,505	28,733	28,216
Intermediate Bond Fund	15,521	14,923	14,961	14,916
Investments with Brandes Institutional				
International Equity Fund Fee	40,205	40,140	43,336	45,514
Investments with RCM				
Sustainable Opportunities Fund	13,672	13,217	13,955	14,609
Total Invested Assets	**$ 705,837**	**$ 694,176**	**$ 713,752**	**$ 731,018**
Change in Invested Assets				
Beginning Assets	$ 685,407	$ 705,837	$ 694,176	$ 713,752
Investment Earnings	20,753	(10,607)	20,016	17,916
Net Contributions (Withdrawals)	(323)	(1,055)	(440)	(649)
Ending Invested Assets	**$ 705,837**	**$ 694,176**	**$ 713,752**	**$ 731,018**

Source data provided by the record keeper, Great West Life.

Defined Contribution Retirement - Participant Directed PERS
Schedule of Investment Income and Changes in Invested Assets
for the Month Ended
October 31, 2013

Interim Transit Account	Beginning Invested Assets	Investment Income	Net Contributions (Withdrawals)	Transfers In (Out)	Ending Invested Assets	% Change in Invested Assets	% Change due to Investment Income (3)
Treasury Division [1]							
Cash and Cash Equivalents	$ 6,428,950	$ 1,750	$ (183,979)	$ -	$ 6,246,722	-2.83%	0.03%
Participant Options							
T. Rowe Price							
Alaska Money Market	3,683,259	43	27,877	(80,469)	3,630,710	-1.43%	0.00%
Small Cap Stock Fund	44,173,538	1,401,896	484,718	(1,184,113)	44,876,039	1.59%	3.20%
Alaska Balanced Trust	1,271,915	24,967	40,429	25,181	1,362,493	7.12%	1.91%
Long Term Balanced Fund	10,155,578	288,341	73,420	1,068,227	11,585,566	14.08%	2.69%
AK Target Date 2010 Trust	1,230,922	27,982	44,824	21	1,303,747	5.92%	2.23%
AK Target Date 2015 Trust	4,779,743	126,282	199,228	19,073	5,124,326	7.21%	2.58%
AK Target Date 2020 Trust	9,574,415	282,453	374,738	(3,173)	10,228,433	6.83%	2.89%
AK Target Date 2025 Trust	13,764,825	442,116	517,227	(61,053)	14,663,114	6.53%	3.16%
AK Target Date 2030 Trust	13,761,478	476,260	574,398	(59,514)	14,752,622	7.20%	3.40%
AK Target Date 2035 Trust	15,365,070	556,089	533,230	(10,729)	16,443,660	7.02%	3.56%
AK Target Date 2040 Trust	20,205,386	751,976	696,555	(8,562)	21,645,355	7.13%	3.66%
AK Target Date 2045 Trust	24,125,887	896,573	976,692	(115,100)	25,884,052	7.29%	3.65%
AK Target Date 2050 Trust	27,042,384	1,009,258	1,196,644	(45,791)	29,202,496	7.99%	3.65%
AK Target Date 2055 Trust	11,794,142	442,396	628,432	19,396	12,884,366	9.24%	3.65%
Total Investments with T. Rowe Price	200,928,542	6,726,632	6,368,410	(436,606)	213,586,978		
State Street Global Advisors							
Money Market	1,186,407	0	(46,426)	54,018	1,193,999	0.64%	0.00%
S&P 500 Stock Index Fund Series A	42,527,286	1,967,963	518,646	95,422	45,109,316	6.07%	4.59%
Russell 3000 Index	16,960,092	745,117	179,979	1,046,342	18,931,530	11.62%	4.24%
US Real Estate Investment Trust Index	5,717,765	231,635	83,657	99,176	6,132,232	7.25%	3.99%
World Equity Ex-US Index	33,351,918	1,241,872	347,800	1,345,092	36,286,682	8.80%	3.63%
Long US Treasury Bond Index	396,945	5,260	11,586	1,158	414,950	4.54%	1.30%
US Treasury Inflation Protected Securities Index	2,204,695	12,168	15,385	76,722	2,308,970	4.73%	0.54%
World Government Bond Ex-US Index	4,166,074	47,509	12,848	93,284	4,319,713	3.69%	1.13%
Global Balanced Fund	10,043,354	275,478	76,231	(181,031)	10,214,032	1.70%	2.76%
Total Investments with SSGA	116,554,537	4,526,999	1,199,706	2,630,182	124,911,424		
BlackRock							
Government/Credit Bond Fund	21,064,115	193,800	98,762	1,429,924	22,786,600	8.18%	0.89%
Intermediate Bond Fund	339,180	1,211	8,242	313	348,946	2.88%	0.35%
Total Investments with Barclays Global Investors	21,403,295	195,011	107,004	1,430,236	23,135,546		
Brandes Institutional							
International Equity Fund Fee	30,056,690	1,277,528	341,035	(3,693,284)	27,981,969	-6.90%	4.50%
RCM							
Sustainable Core Opportunities Fund	7,442,729	344,227	114,514	69,472	7,970,941	7.10%	4.57%
Total All Funds	$ 382,814,743	$ 13,072,147	$ 7,946,691	$ -	$ 403,833,581	5.49%	3.38%

Notes: (1) Represents net contributions in transit to/from the record keeper. (2) Source data provided by the record keeper, Great West Life.
(3) Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates.

Defined Contribution Retirement - Participant Directed PERS
Schedule of Invested Assets with
Schedule of Investment Income and Changes in Invested Assets
By Month Through the Month Ended
October 31, 2013
$ (Thousands)

Invested Assets (at fair value)	**July**	**August**	**September**	**October**
Investments with Treasury Division				
Cash and cash equivalents	$ 6,509	$ 8,935	$ 6,429	$ 6,247
Investments with T. Rowe Price				
Alaska Money Market	3,807	3,622	3,683	3,631
Small Cap Stock Fund	43,786	42,489	44,174	44,876
Alaska Balanced Trust	1,204	1,197	1,272	1,362
Long Term Balanced Fund	9,576	9,141	10,156	11,586
AK Target Date 2010 Trust	1,154	1,170	1,231	1,304
AK Target Date 2015 Trust	4,535	4,491	4,780	5,124
AK Target Date 2020 Trust	9,108	9,013	9,574	10,228
AK Target Date 2025 Trust	12,873	12,843	13,765	14,663
AK Target Date 2030 Trust	13,000	12,924	13,761	14,753
AK Target Date 2035 Trust	14,480	14,367	15,365	16,444
AK Target Date 2040 Trust	19,069	18,789	20,205	21,645
AK Target Date 2045 Trust	22,509	22,380	24,126	25,884
AK Target Date 2050 Trust	25,255	25,187	27,042	29,202
AK Target Date 2055 Trust	10,748	10,816	11,794	12,884
State Street Global Advisors				
Money Market	1,123	1,216	1,186	1,194
S&P 500 Stock Index Fund Series A	40,640	40,683	42,527	45,109
Russell 3000 Index	16,521	15,746	16,960	18,932
US Real Estate Investment Trust Index	5,659	5,440	5,718	6,132
World Equity Ex-US Index	30,062	30,157	33,352	36,287
Long US Treasury Bond Index	489	526	397	415
US Treasury Inflation Protected Securities Index	2,051	2,062	2,205	2,309
World Government Bond Ex-US Index	3,826	3,837	4,166	4,320
Global Balanced Fund	10,105	9,716	10,043	10,214
Investments with BlackRock				
Government/Credit Bond Fund	18,735	19,304	21,064	22,787
Intermediate Bond Fund	358	329	339	349
Investments with Brandes Institutional				
International Equity Fund Fee	31,724	30,379	30,057	27,982
Investments with RCM				
Sustainable Opportunities Fund	6,369	6,847	7,443	7,971
Total Invested Assets	**$ 365,275**	**$ 363,606**	**$ 382,815**	**$ 403,834**

Change in Invested Assets				
Beginning Assets	$ 344,683	$ 365,275	$ 363,606	$ 382,815
Investment Earnings	14,896	(7,398)	15,627	13,072
Net Contributions (Withdrawals)	5,696	5,728	3,581	7,947
Ending Invested Assets	**$ 365,275**	**$ 363,606**	**$ 382,815**	**$ 403,834**

Source data provided by the record keeper, Great West Life.

Defined Contribution Retirement - Participant Directed TRS
Schedule of Investment Income and Changes in Invested Assets
for the Month Ended
October 31, 2013

Interim Transit Account	**Beginning Invested Assets**	**Investment Income**	**Net Contributions (Withdrawals)**	**Transfers In (Out)**	**Ending Invested Assets**	**% Change in Invested Assets**	**% Change due to Investment Income (3)**
Treasury Division (1)							
Cash and Cash Equivalents	$ 2,193,651	$ 602	$ 179,488	$ -	$ 2,373,741	8.21%	0.03%
Participant Options							
T. Rowe Price							
Alaska Money Market	1,471,394	17	28,904	20,566	1,520,881	3.36%	0.00%
Small Cap Stock Fund	17,498,635	551,230	140,231	(714,905)	17,475,191	-0.13%	3.20%
Alaska Balanced Trust	202,914	3,905	(474)	312	206,656	1.84%	1.93%
Long Term Balanced Fund	5,660,968	161,791	33,205	625,746	6,481,709	14.50%	2.70%
AK Target Date 2010 Trust	335,793	7,590	(5,068)	17,979	356,293	6.10%	2.22%
AK Target Date 2015 Trust	1,541,229	40,485	1,939	(17,979)	1,565,673	1.59%	2.64%
AK Target Date 2020 Trust	3,246,185	96,128	116,650	-	3,458,963	6.55%	2.91%
AK Target Date 2025 Trust	4,194,943	135,434	168,764	(2,203)	4,496,937	7.20%	3.17%
AK Target Date 2030 Trust	4,523,216	156,750	187,859	(47,160)	4,820,664	6.58%	3.41%
AK Target Date 2035 Trust	7,110,745	257,738	285,933	(496)	7,653,920	7.64%	3.55%
AK Target Date 2040 Trust	7,730,421	287,355	244,632	(18,585)	8,243,822	6.64%	3.66%
AK Target Date 2045 Trust	14,006,350	519,854	386,027	(1,396)	14,910,836	6.46%	3.66%
AK Target Date 2050 Trust	18,272,339	678,240	540,392	-	19,490,971	6.67%	3.66%
AK Target Date 2055 Trust	2,480,201	94,939	208,144	-	2,783,283	12.22%	3.67%
Total Investments with T. Rowe Price	88,275,332	2,991,455	2,337,136	(138,122)	93,465,801		
State Street Global Advisors							
Money Market	105,834	-	882	1,991	108,708	2.72%	0.00%
S&P 500 Stock Index Fund Series A	15,799,846	720,361	149,400	(381,865)	16,287,742	3.09%	4.59%
Russell 3000 Index	8,134,439	368,061	78,971	1,016,308	9,597,778	17.99%	4.24%
US Real Estate Investment Trust Index	2,058,536	83,106	21,393	44,222	2,207,256	7.22%	3.97%
World Equity Ex-US Index	14,160,392	522,779	122,026	369,439	15,174,636	7.16%	3.63%
Long US Treasury Bond Index	89,845	1,202	2,292	(766)	92,573	3.04%	1.33%
US Treasury Inflation Protected Securities Index	940,487	5,146	7,533	8,098	961,264	2.21%	0.54%
World Government Bond Ex-US Index	2,017,375	23,296	9,524	33,306	2,083,502	3.28%	1.14%
Global Balanced Fund	6,787,383	185,731	41,973	(114,578)	6,900,509	1.67%	2.75%
Total Investments with SSGA	50,094,136	1,909,681	433,996	976,154	53,413,967		
BlackRock							
Government/Credit Bond Fund	10,309,497	95,996	70,828	834,437	11,310,757	9.71%	0.89%
Intermediate Bond Fund	97,533	346	1,814	827	100,519	3.06%	0.35%
Total Investments with Barclays Global Investors	10,407,030	96,341	72,642	835,264	11,411,277		
Brandes Institutional							
International Equity Fund Fee	10,097,920	426,619	86,124	(1,528,755)	9,081,908	-10.06%	4.55%
RCM							
Sustainable Core Opportunities Fund	2,064,010	92,337	12,257	(144,542)	2,024,062	-1.94%	4.62%
Total All Funds	$ 163,132,079	$ 5,517,034	$ 3,121,643	$ -	$ 171,770,756	5.30%	3.35%

Notes: (1) Represents net contributions in transit to/from the record keeper. (2) Source data provided by the record keeper, Great West Life.
(3) Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates.

Defined Contribution Retirement - Participant Directed TRS
Schedule of Invested Assets with
Schedule of Investment Income and Changes in Invested Assets
By Month Through the Month Ended
October 31, 2013
$ (Thousands)

Invested Assets (at fair value)	**July**	**August**	**September**	**October**
Investments with Treasury Division				
Cash and cash equivalents	$ 2,282	$ 2,189	$ 2,194	$ 2,374
Investments with T. Rowe Price				
Alaska Money Market	1,707	1,500	1,471	1,521
Small Cap Stock Fund	17,849	17,254	17,499	17,475
Alaska Balanced Trust	206	197	203	207
Long Term Balanced Fund	5,396	5,033	5,661	6,482
AK Target Date 2010 Trust	5,396	337	336	356
AK Target Date 2015 Trust	1,492	1,471	1,541	1,566
AK Target Date 2020 Trust	3,088	3,091	3,246	3,459
AK Target Date 2025 Trust	4,133	3,975	4,195	4,497
AK Target Date 2030 Trust	4,416	4,308	4,523	4,821
AK Target Date 2035 Trust	7,017	6,854	7,111	7,654
AK Target Date 2040 Trust	7,583	7,367	7,730	8,244
AK Target Date 2045 Trust	13,699	13,325	14,006	14,911
AK Target Date 2050 Trust	18,269	17,567	18,272	19,491
AK Target Date 2055 Trust	2,383	2,321	2,480	2,783
State Street Global Advisors				
Money Market	107	107	106	109
S&P 500 Stock Index Fund Series A	15,919	15,668	15,800	16,288
Russell 3000 Index	7,067	7,115	8,134	9,598
US Real Estate Investment Trust Index	2,063	1,978	2,059	2,207
World Equity Ex-US Index	13,165	13,039	14,160	15,175
Long US Treasury Bond Index	93	89	90	93
US Treasury Inflation Protected Securities Index	868	887	940	961
World Government Bond Ex-US Index	1,902	1,903	2,017	2,084
Global Balanced Fund	6,849	6,621	6,787	6,901
Investments with BlackRock				
Government/Credit Bond Fund	9,117	9,415	10,309	11,311
Intermediate Bond Fund	105	99	98	101
Investments with Brandes Institutional				
International Equity Fund Fee	11,308	10,681	10,098	9,082
Investments with RCM				
Sustainable Opportunities Fund	2,034	2,069	2,064	2,024
Total Invested Assets	**$ 160,486**	**$ 156,462**	**$ 163,132**	**$ 171,771**
Change in Invested Assets				
Beginning Assets	$ 153,359	$ 160,486	$ 156,462	$ 163,132
Investment Earnings	6,614	(3,226)	6,654	5,517
Net Contributions (Withdrawals)	513	(799)	16	3,122
Ending Invested Assets	**$ 160,486**	**$ 156,462**	**$ 163,132**	**$ 171,771**

Source data provided by the record keeper, Great West Life.

ALASKA RETIREMENT MANAGEMENT BOARD

FINANCIAL REPORT
(Supplement to the Treasury Division Report)

As of October 31, 2013

Prepared by the Division of Retirement & Benefits

ALASKA RETIREMENT MANAGEMENT BOARD
SCHEDULE OF NON-INVESTMENT CHANGES BY FUND
(Supplement to the Treasury Division Report)
For the Four Months Ending October 31, 2013

		Contributions				**Expenditures**				**Net**
		Contributions EE and ER	State of Alaska	Other	Total Contributions	Benefits	Refunds	Admin-istrative	Total Expenditures	**Contributions/ (Withdrawals)**
Public Employees' Retirement System (PERS)										
Defined Benefit Plans:										
Retirement Trust		$ 109,016,499	$ 176,793,907	$ 3,981	$ 285,814,387	$ (211,378,258)	$ (3,807,233)	$ (10,573,707)	$ (225,759,198)	$ 60,055,190
Retirement Health Care Trust		70,781,365	135,679,045	579,561	207,039,971	(120,760,334)	-	(3,087,029)	(123,847,363)	83,192,609
Total Defined Benefit Plans		179,797,864	312,472,952	583,542	492,854,358	(332,138,592)	(3,807,233)	(13,660,736)	(349,606,561)	143,247,799
Defined Contribution Plans:										
Participant Directed Retirement		32,528,694	-	-	32,528,694	-	(9,276,972)	(299,292)	(9,576,264)	22,952,430
Health Reimbursement Arrangement	(a)	7,933,652	-	-	7,933,652	-	-	(8,927)	(8,927)	7,924,725
Retiree Medical Plan	(a)	1,235,079	-	-	1,235,079	-	-	(8,927)	(8,927)	1,226,152
Occupational Death and Disability:	(a)									
Public Employees		405,371	-	-	405,371	(21,337)	-	-	(21,337)	384,035
Police and Firefighters		328,071	-	-	328,071	(15,785)	-	-	(15,785)	312,284
Total Defined Contribution Plans		42,430,867	-	-	42,430,867	(37,122)	(9,276,972)	(317,146)	(9,631,240)	32,799,626
Total PERS		**222,228,731**	**312,472,952**	**583,542**	**535,285,225**	**(332,175,714)**	**(13,084,205)**	**(13,977,882)**	**(359,237,801)**	**176,047,425**
Teachers' Retirement System (TRS)										
Defined Benefit Plans:										
Retirement Trust		13,238,814	208,890,798	18,407	222,148,019	(130,178,135)	(980,049)	(4,000,270)	(135,158,454)	86,989,565
Retirement Health Care Trust		5,642,552	107,956,493	226,536	113,825,581	(38,696,417)	-	(1,146,153)	(39,842,570)	73,983,010
Total Defined Benefit Plans		18,881,366	316,847,291	244,943	335,973,600	(168,874,552)	(980,049)	(5,146,423)	(175,001,024)	160,972,575
Defined Contribution Plans:										
Participant Directed Retirement		7,021,207	-	-	7,021,207	(636,296)	(3,488,436)	(45,214)	(4,169,946)	2,851,261
Health Reimbursement Arrangement	(a)	1,581,859	-	-	1,581,859	-	-	(3,075)	(3,075)	1,578,784
Retiree Medical Plan	(a)	230,135	-	-	230,135	-	-	(3,075)	(3,075)	227,059
Occupational Death and Disability:	(a)	9	-	-	9	-	-	-	-	9
Total Defined Contribution Plans		8,833,210	-	-	8,833,210	(636,296)	(3,488,436)	(51,364)	(4,176,096)	4,657,113
Total TRS		**27,714,576**	**316,847,291**	**244,943**	**344,806,810**	**(169,510,848)**	**(4,468,485)**	**(5,197,787)**	**(179,177,120)**	**165,629,688**
Judicial Retirement System (JRS)										
Defined Benefit Plan Retirement Trust		1,751,845	4,282,876	-	6,034,721	(3,532,494)	-	(111,266)	(3,643,760)	2,390,961
Defined Benefit Retirement Health Care Trust		234,217	177,445	1,621	413,283	(662,630)	-	(9,884)	(672,514)	(259,231)
Total JRS		**1,986,062**	**4,460,321**	**1,621**	**6,448,004**	**(4,195,124)**	**-**	**(121,150)**	**(4,316,274)**	**2,131,730**
National Guard/Naval Militia Retirement System (NGNMRS)										
Defined Benefit Plan Retirement Trust	(a)	740,100	-	-	740,100	(675,222)	-	(82,186)	(757,408)	(17,308)
Other Participant Directed Plans										
Supplemental Annuity Plan		57,817,067	-	-	57,817,067	-	(58,665,074)	(1,503,250)	(60,168,324)	(2,351,257)
Deferred Compensation Plan		15,438,476	-	-	15,438,476	-	(17,543,306)	(361,769)	(17,905,075)	(2,466,599)
Total All Funds		**325,925,012**	**633,780,564**	**830,106**	**960,535,682**	**(506,556,908)**	**(93,761,070)**	**(21,244,024)**	**(621,562,002)**	**338,973,679**
Total Non-Participant Directed		213,119,568	633,780,564	830,106	847,730,238	(505,920,612)	(4,787,282)	(19,034,499)	(529,742,393)	317,987,844
Total Participant Directed		112,805,444	-	-	112,805,444	(636,296)	(88,973,788)	(2,209,525)	(91,819,609)	20,985,835
Total All Funds		**$ 325,925,012**	**$ 633,780,564**	**$ 830,106**	**$ 960,535,682**	**$ (506,556,908)**	**$ (93,761,070)**	**$ (21,244,024)**	**$ (621,562,002)**	**$ 338,973,679**

(a) Employer only contributions.

ALASKA RETIREMENT MANAGEMENT BOARD
SCHEDULE OF NON-INVESTMENT CHANGES BY FUND
(Supplement to the Treasury Division Report)
For the Month Ended October 31, 2013

		Contributions				Expenditures				Net
		Contributions EE and ER	State of Alaska	Other	Total Contributions	Benefits	Refunds	Admin-istrative	Total Expenditures	**Contributions/ (Withdrawals)**
Public Employees' Retirement System (PERS)										
Defined Benefit Plans:										
Retirement Trust		$ 34,137,843	$ -	$ 1,720	$ 34,139,563	$ (53,079,854)	$ (944,690)	$ (1,868,456)	$ (55,893,000)	$ (21,753,437)
Retirement Health Care Trust		21,546,672	-	193,200	21,739,872	(33,144,641)	-	(936,591)	(34,081,232)	(12,341,360)
Total Defined Benefit Plans		55,684,515	-	194,920	55,879,435	(86,224,495)	(944,690)	(2,805,047)	(89,974,232)	(34,094,797)
Defined Contribution Plans:										
Participant Directed Retirement		10,371,369	-	-	10,371,369	-	(2,300,493)	(124,185)	(2,424,678)	7,946,691
Health Reimbursement Arrangement	(a)	2,712,303	-	-	2,712,303	-	-	-	-	2,712,303
Retiree Medical Plan	(a)	381,450	-	-	381,450	-	-	-	-	381,450
Occupational Death and Disability:	(a)									
Public Employees		142,430	-	-	142,430	(5,334)	-	-	(5,334)	137,096
Police and Firefighters		95,635	-	-	95,635	(3,947)	-	-	(3,947)	91,688
Total Defined Contribution Plans		13,703,187	-	-	13,703,187	(9,281)	(2,300,493)	(124,185)	(2,433,959)	11,269,228
Total PERS		**69,387,702**	**-**	**194,920**	**69,582,622**	**(86,233,776)**	**(3,245,183)**	**(2,929,232)**	**(92,408,191)**	**(22,825,569)**
Teachers' Retirement System (TRS)										
Defined Benefit Plans:										
Retirement Trust		9,113,398	-	208	9,113,606	(33,343,820)	(72,017)	(640,228)	(34,056,065)	(24,942,459)
Retirement Health Care Trust		3,303,930	-	75,524	3,379,454	(11,241,081)	-	(348,499)	(11,589,580)	(8,210,126)
Total Defined Benefit Plans		12,417,328	-	75,732	12,493,060	(44,584,901)	(72,017)	(988,727)	(45,645,645)	(33,152,585)
Defined Contribution Plans:										
Participant Directed Retirement		3,764,556	-	-	3,764,556	(636,296)	-	(6,617)	(642,913)	3,121,643
Health Reimbursement Arrangement	(a)	776,979	-	-	776,979	-	-	-	-	776,979
Retiree Medical Plan	(a)	118,965	-	-	118,965	-	-	-	-	118,965
Occupational Death and Disability:	(a)	-	-	-	-	-	-	-	-	-
Total Defined Contribution Plans		4,660,500	-	-	4,660,500	(636,296)	-	(6,617)	(642,913)	4,017,587
Total TRS		**17,077,828**	**-**	**75,732**	**17,153,560**	**(45,221,197)**	**(72,017)**	**(995,344)**	**(46,288,558)**	**(29,134,998)**
Judicial Retirement System (JRS)										
Defined Benefit Plan Retirement Trust		440,477	-	-	440,477	(875,900)	-	(10,671)	(886,571)	(446,094)
Defined Benefit Retirement Health Care Trust		54,577	-	541	55,118	(215,871)	-	(3,061)	(218,932)	(163,814)
Total JRS		**495,054**	**-**	**541**	**495,595**	**(1,091,771)**	**-**	**(13,732)**	**(1,105,503)**	**(609,908)**
National Guard/Naval Militia Retirement System (NGNMRS)										
Defined Benefit Plan Retirement Trust	(a)	-	-	-	-	(151,369)	-	(21,508)	(172,877)	(172,877)
Other Participant Directed Plans										
Supplemental Annuity Plan		13,428,059	-		13,428,059	-	(11,161,242)	(550,965)	(11,712,207)	1,715,852
Deferred Compensation Plan		4,916,636	-	-	4,916,636	-	(5,465,029)	(100,902)	(5,565,931)	(649,295)
Total All Funds		**105,305,279**	**-**	**271,193**	**105,576,472**	**(132,698,113)**	**(19,943,471)**	**(4,611,683)**	**(157,253,267)**	**(51,676,795)**
Total Non-Participant Directed		72,824,659	-	271,193	73,095,852	(132,061,817)	(1,016,707)	(3,829,014)	(136,907,538)	(63,811,686)
Total Participant Directed		32,480,620	-	-	32,480,620	(636,296)	(18,926,764)	(782,669)	(20,345,729)	12,134,891
Total All Funds		**$ 105,305,279**	**$ -**	**$ 271,193**	**$ 105,576,472**	**$ (132,698,113)**	**$ (19,943,471)**	**$ (4,611,683)**	**$ (157,253,267)**	**$ (51,676,795)**

(a) Employer only contributions.

KPMG

cutting through complexity™

State of Alaska
Division of Retirement
Audit Results
June 30, 2013

This presentation to the Board of Trustees is intended solely for the information and use of the Board of Trustees and management and is not intended to be and should not be used by anyone other than these specified parties. This presentation is not intended for general use, circulation or publication and should not be published, circulated, reproduced or used for any purpose without our prior written permission in each specific instance.

December 5, 2013

Agenda

Audit Status

Areas of Interest

Regulatory and Accounting Update

Appendix

Audit Status

Audit Status

Unqualified opinion on the financial statements for:

- Invested Assets of the Retirement Systems
- Treasury Division Invested Assets Under the Investment Authority of the Commissioner of Revenue

Unqualified opinion on the financial statements and supplement schedules for:

- Public Employees’ Retirement System
- Teachers’ Retirement System
- Judicial Retirement System
- National Guard and Naval Militia Retirement System
- Supplemental Benefits System
- Deferred Compensation Plan

Significant Changes to our Audit Plan

There were no significant changes to our audit plan

Audit Status

Corrected Misstatements

None identified during our audit

Uncorrected Misstatements

Difference in valuation of alternative investments between year end and lag period used to record investments

Internal Control Deficiencies

None identified during our audit

Other Matters

Going Concern	None noted
Related Party Transactions	None noted
Litigations, Claims, and Assessments	None noted
Illegal Acts or Fraud	None noted
Non-compliance with Laws and Regulations	None noted
Other Information in Documents Containing Audited Financial Statements	KPMG will review the draft CAFR when it is provided to us
Significant Difficulties Encountered During the Audit	No matters to report
Disagreements with Management	No matters to report
Management's Consultation with Other Accountants	No matters to report
Significant Issues Discussed, or Subject to Correspondence, with Management	No matters to report
Alternative Accounting Treatments Discussed with Management	No matters to report
Other Findings or Issues Relevant Regarding Oversight of the Financial Reporting Process	No matters to report
Communications with the Firm's National Office	No matters to report

Audit Team

Total of approximately 1,700 hours performed by the following levels across the firm.

Core Audit Team:

Michael Hayhurst, Engagement Audit Partner, Anchorage Managing Partner

David Hill, Engagement Quality Concurring Review Partner, Billings Managing Partner

Melissa Beedle, Audit Senior Manager, Juneau

3 Audit Senior Associates

6 Audit Associates

1 Audit Intern

Specialists:

Nick Katsanos, Financial Risk Management Specialist, New York

Jon Keithley, IT Attestation Advisory Manager, Portland

Dennis Polisner, KPMG Employee Benefit Plan Actuary, Chicago

Terri Stecher, Director, Washington National Tax, Washington DC

KPMG National Pricing Desk, Boston

Areas of Interest

Areas of Interest – Summary of Risks

Accuracy of Contributions

-Verified accuracy of employee data including eligibility

-Recalculated a selection of contributions

-Reviewed reconciliation between AKSAS and CRS

Valuation of Alternative Investments

-Confirmed investments

-Performed Benchmark analysis

-Verified reliability of valuation estimates

-Performed a lag analysis

Valuation of Benefit Plan Obligations including IBNR

-Obtain Actuarial determined liabilities

-Tested completeness and accuracy of data sent to actuary

- Consulted with KPMG actuary on reasonableness of assumptions and calculations

Regulatory and Accounting Update

Regulatory and Accounting Update

New or Proposed Pronouncement	Comments
GASB 67 – Financial Reporting for Pension Plans – applies to financial reporting by pension plans	Effective for fiscal years beginning after June 15, 2013 (Year ended June 30, 2014)
GASB 68 – Accounting and Financial Reporting for Pensions – applies to financial reporting by most Governments that provide their employees with pension benefits	Effective for fiscal years beginning after June 15, 2014 (Year ended June 30, 2015)

KPMG Government Institute Webcast: GASB Pension Standards and Financial Reporting Part 1

http://www.kpmginstitutes.com/government-institute/events/pension-accounting-and-financial-reporting.aspx

KPMG Government Institute Webcast: GASB Pension Standards and Financial Reporting Part 2: Potential Issues

http://www.kpmginstitutes.com/government-institute/events/pensions-accounting-and-reporting-part-ii.aspx

KPMG Government Institute Webcast: GASB Activities Update

http://www.kpmginstitutes.com/government-institute/events/gasb-activities-update.aspx

GASB Pension Fact Sheets

http://www.gasb.org/cs/ContentServer?site=GASB&c=Page&pagename=GASB%2FPage%2FGASBSectionPage&cid=1176160426013

Appendix

- Responsibilities
- Audit Committee Institute

Responsibilities

Management is responsible for:

- Adopting sound accounting policies
- Fairly presenting the financial statements in conformity with generally accepted accounting principles
- Establishing and maintaining effective ICFR
- Identifying and confirming that the System complies with laws and regulations applicable to its activities
- Making all financial records and related information available to the auditor
- Providing the auditor with a letter confirming certain representations made during the audit that includes, but are not limited to management's:
  - disclosure of all significant deficiencies, including material weaknesses, in the design or operation of internal controls that could adversely affect the System's ability to record, process, summarize, and report financial data; and
  - acknowledgement of their responsibility for the design and implementation of programs and controls to prevent and detect fraud

Responsibilities (continued)

The Audit Committee is responsible for:

- Oversight of the financial reporting process and ICFR

Management and the Audit Committee are responsible for:

- Establishing and maintaining internal controls to prevent, deter, and detect fraud
- Setting the proper tone and creating and maintaining a culture of honesty and high ethical standards

The audit of the financial statements does not relieve management or the Audit Committee of their responsibilities.

Responsibilities (continued)

KPMG is responsible for:

- Forming and expressing an opinion about whether the financial statements that have been prepared by management with the oversight of the Audit Committee are presented fairly, in all material respects, in conformity with generally accepted accounting principles
- Planning and performing the audit to obtain reasonable – not absolute – assurance about whether the financial statements are free of material misstatement, whether caused by fraud or error. Because of the nature of audit evidence and the characteristics of fraud, we are able to obtain reasonable, but not absolute, assurance that material misstatements will be detected.
- Evaluating:

  (a) whether the System's controls sufficiently address identified risks of material misstatement due to fraud; and

  (b) controls intended to address the risk of management override of other controls
- Communicating to you in writing all significant deficiencies and material weaknesses in internal control identified in the audit and reporting to management all deficiencies noted during our audit that are of sufficient importance to merit management's attention
- Conducting our audit in accordance with professional standards
- Complying with the rules and regulations of the Code of Professional Conduct of the American Institute of Certified Public Accountants, and the ethical standards of relevant CPA societies and relevant state boards of accountancy
- Planning and performing our audit with an attitude of professional skepticism
- Communicating all required information, including significant matters, to management and the Audit Committee

Responsibilities (continued)

Other Information in Documents Containing Audited Financial Statements

- The auditors' report on the financial statements does not extend to other information in documents containing audited financial statements, excluding required supplementary information.
- We are required to read the other information to identify material inconsistencies or misstatement of facts, if any, with the audited financial statements and make appropriate arrangements with management or the Audit Committee to obtain the other information prior to the date of the auditors' report.
- Any material inconsistencies or misstatement of facts that are not resolved prior to the report release date, and that require revision of the other information, may result in a modification or withdrawal of the auditors' report.

KPMG's Audit Committee Institute (ACI)
Communicating with Audit Committees Since 1999

Resources

- *Audit Committee Insights – U.S. and International editions (biweekly electronic publications)*: www.kpmginsights.com
- ACI Website: www.auditcommitteeinstitute.com
- ACI mailbox: auditcommittee@kpmg.com
- ACI hotline: 1-877-KPMG-ACI

KPMG

cutting through complexity™

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT:	Public Infrastructure Search	ACTION:	X
DATE:	December 5, 2013	INFORMATION:	

BACKGROUND:

Infrastructure investments can be characterized by high barriers to entry with inelastic demand as a result of natural monopolies, government regulation and/or contractual protections. Infrastructure investments tend to be long-term with low correlation to traditional investment asset classes, have a lower exposure to business cycles and a predictable cash yield. Combined, this makes infrastructure a potential inflation hedge and facilitates long-term pension liability matching. Some categorical examples of infrastructure investments include transport, utilities, communication, and conventional and renewable energy.

In February 2013, the Alaska Retirement Management Board (ARMB) directed staff to engage Callan Associates to conduct a search for one or more infrastructure investment manager(s) considering both private and public investment strategies.

STATUS:

At its September 2013 board meeting, ARMB selected two private investment infrastructure managers, JPMorgan and Industry Funds Management, to invest up to $300 million in total. This action item relates to hiring investment managers in the public stock infrastructure arena.

Callan Associates conducted a search for public infrastructure managers and selected six semi-finalist candidates for further consideration. Staff evaluated the candidates' investment process, track record, fee structure, asset capacity, client service, and other attributes to further focus the search process. Staff selected three investment managers for additional on-site due diligence: Lazard Asset Management, Brookfield Investment Management, Inc., and RARE Infrastructure. Staff met with investment professionals and other key staff members at each of the firms. All three candidates have a track record of successfully managing infrastructure investments and have sufficient organizational depth to manage the ARMB's assets. Staff recommends that the ARMB consider hiring Lazard Asset Management and Brookfield Investment Management, Inc. to manage its public infrastructure investments.

RECOMMENDATION:

The Alaska Retirement Management Board direct staff to hire Lazard Asset Management and Brookfield Investment Management, Inc. to manage up to $75 million each in infrastructure investments, subject to successful contract and fee negotiations.

LAZARD
ASSET MANAGEMENT

Alaska Retirement Management Board
Lazard Global Listed Infrastructure

December 5, 2013

Matt Landy
Senior Vice President, Portfolio Manager/Analyst

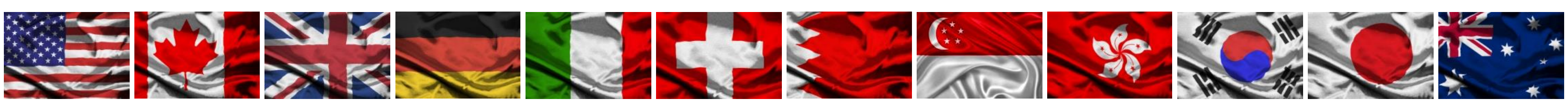
Tony Dote
Managing Director

Lazard Asset Management

Company history dating back to 1848

- $159.3 billion in assets under management[1]
- Over 650 employees worldwide, including more than 290 investment personnel

Lazard's global perspective: offices spanning the world and a history of investing prudently wherever the firm finds value.



Boston Chicago New York San Francisco	Montreal Toronto	London	Frankfurt Hamburg	Milan	Zurich	Bahrain	Singapore	Hong Kong	Seoul	Tokyo	Sydney

As of 30 September 2013.

1 Assets under management include those of Lazard Asset Management LLC (New York) and its affiliates, but do not include those of Lazard Frères Gestion (Paris) or other asset management businesses of Lazard Ltd.

Lazard's Investment Organization

Ashish Bhutani
Chief Executive Officer, LAM LLC

Charles Carroll
Deputy Chairman
Global Marketing

Andrew Lacey
Deputy Chairman
U.S./Global Strategies

John Reinsberg
Deputy Chairman
International/Global Strategies

Oversight Committee

Management body for the investment platform that provides:

- Oversight for investment processes and products
- Reporting line for investment professionals

Investment Council

Discussion forum for matters related to:

- Research analyst and portfolio management team interaction
- Resource allocation and staffing

Lazard Global Listed Infrastructure

Strategy Objective	Seek long-term, defensive, low-volatility returns that exceed inflation by investing in a range of global companies that are considered to be “preferred infrastructure”.
Performance Objective	▪ Inflation +5% p.a. over rolling 5-year periods *(Long-term risk/reward profile between equities and fixed income)* ▪ Shorter term performance reference: UBS Global 50/50 Infrastructure & Utilities Index (Local Currency)
Investment Universe	“Preferred Infrastructure”
Investment Style	Value, benchmark agnostic
Investment Basis	Long-only
Number of Stocks	25-50
Currency Management	Passive hedge to investor’s currency
Inception	October 2005
AUM[1]	$3.8 billion

Lazard was one of the first managers to launch a diversified global listed infrastructure strategy

1 As of 30 September 2013

Global Listed Infrastructure Resources

Global Listed Infrastructure Team

John Mulquiney
PM/Analyst
Sydney
20 stocks
Joined 2005

Warryn Robertson
PM/Analyst
Sydney
14 stocks
Joined 2001

Bertrand Cliquet
PM/Analyst
London
20 stocks
Joined 2004

Matthew Landy
PM/Analyst
New York
23 stocks
Joined 2005

Anthony Rohrlach
Analyst
Sydney
22 stocks
Joined 2007

Edward Keating
Client Portfolio Manager
New York
Joined 2001

Currency Hedging

Team based In New York:
- Yvette Klevan
  PM/Analyst, Fixed Income
- Jared Daniels
  PM/Analyst/Trader, Fixed Income

Global Research Resources

- New York
- Frankfurt
- London
- Seoul
- Tokyo
- Sydney

Marketing & Client Service

Professionals based in:
London, New York, Chicago, San Francisco, Sydney, Toronto, Montreal, Tokyo, Hong Kong, Bahrain and Frankfurt

Melanie McQuire
Product Manager, Sydney

Global Trading

Sydney New York London

Legal/Compliance

- Pre-trade compliance
- International compliance skills
- Established domestic compliance program

Requirements - Global portfolio management skills; Global Equity management skills; Infrastructure stock analysis skills; Disciplined investment process

Investment Team Experience – Over 60 combined years of investment experience; Over 40 years of infrastructure-specific analysis and investing

Stocks covered as at 30 September 2013
Team membership is current as of the date of this document. Personnel data are calculated as of year-end 2012. YTD 2013 experience is not reflected.

Preferred Infrastructure

"Preferred Infrastructure" is a subset of the infrastructure market that we believe has higher revenue, profit certainty and lower volatility.

Not all infrastructure assets will deliver these investment characteristics. To identify the ones which we call "Preferred Infrastructure" we focus on the following factors:

Infrastructure assets *can* have attractive investment characteristics, including:	
Long-life assets Inflation-linked returns	Lower risk of capital loss Low correlations (portfolio diversifier)

What parameters to focus on…	
a) Revenue Certainty	▪ Stable demand ▪ Monopoly-like characteristics ▪ Price regulated and inflation-linked ▪ Long term
b) Profitability	▪ High operating margins ▪ Sustainable leverage ▪ Appropriate cost structure
c) Longevity	▪ Developed economy and legal system

Not All Infrastructure is Created Equal…

We believe a strict adherence to our Preferred Infrastructure investment philosophy is critical to delivering on the attractive characteristics of infrastructure.

Preferred	Non-Preferred
Regulated Utility (e.g., Southern Company)	**Merchant Electricity Generator (e.g., E.On; Exelon)**
✓ Monopoly-like assets	✗ Competitive markets
✓ Regulated return	✗ Commodity price volatility
✓ Explicit/implicit inflation pass through	✗ High fixed cost structure
= Stable, consistent pattern of return	= Volatile, uncertain pattern of return

Other examples…

Preferred	Non-Preferred
✓ Toll roads	✗ Construction companies, road services
✓ Airports	✗ Airlines, baggage handling
✓ Broadcast towers	✗ Telecommunication service companies
✓ OECD countries	✗ Emerging/Developing countries

The securities identified are not necessarily held by Lazard and should not be considered a recommendation or solicitation to purchase or sell these securities.

Investment Process Overview

Lazard Global Listed Infrastructure

Stage 1	Stage 2	Stage 3	Stage 4
Initial Filtering	**Qualitative Risk Ranking**	**Fundamental Analysis and Value Ranking**	**Portfolio Construction**
▪ Stock identification ▪ Primary filtering	▪ Qualitative risk review	▪ Stock appraisal ▪ Currency impact	▪ Portfolio rules ▪ Trading skills
~400	**150**	**95**	**25 - 50**

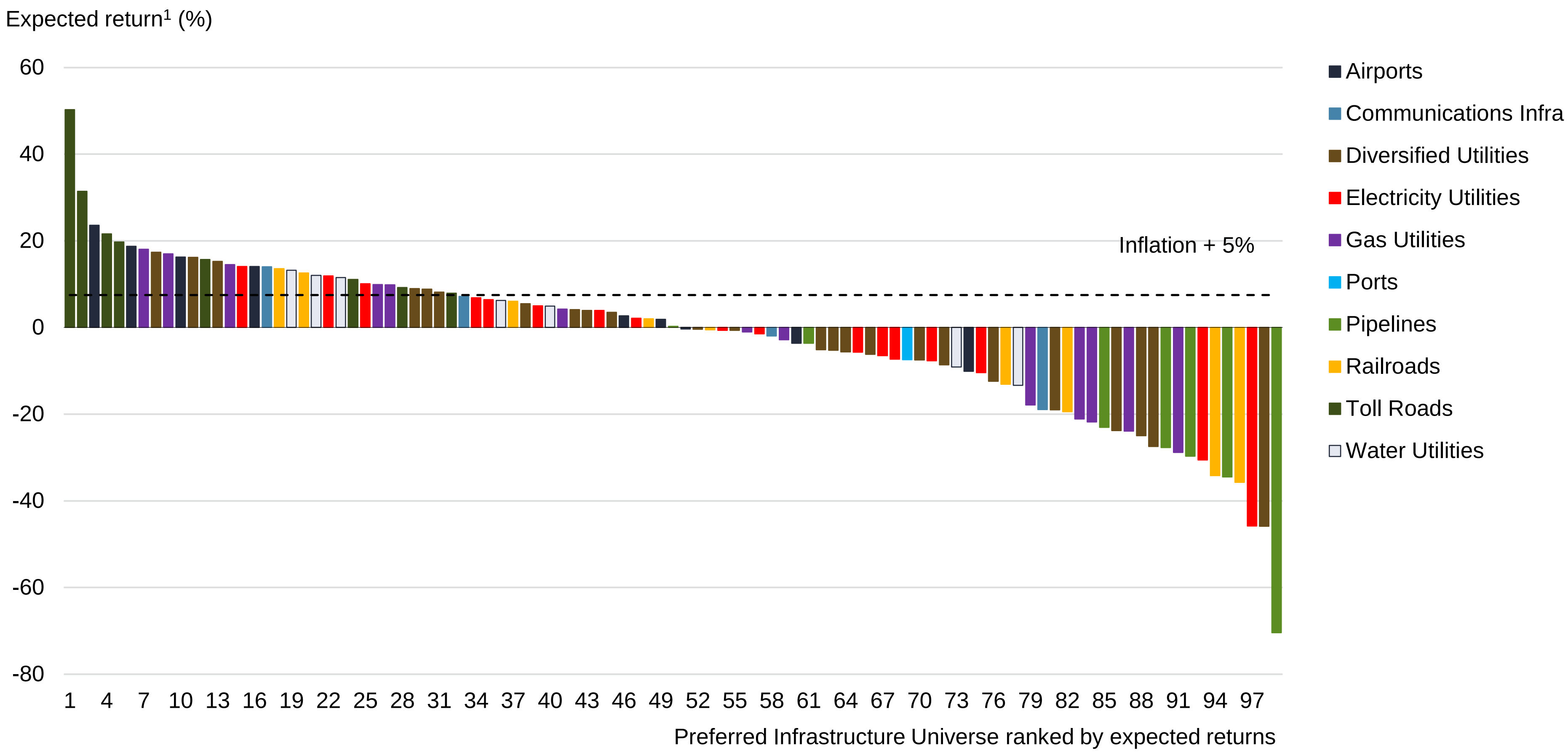
Number of stocks

Lazard's investment process is neither sequential nor static, but ongoing

Note: the number of stocks in each stage may vary with time and the evolution of the infrastructure sector and the investment process.

Lazard Preferred Infrastructure Universe
Value Rank by Sector

Stage 1	Stage 2	Stage 3	Stage 4
Initial Filtering	Qualitative Risk Ranking	Fundamental Analysis and Value Ranking	Portfolio Construction



The "Value Rank" illustrates the expected returns of each stock within the Preferred Infrastructure universe.

As of 30 September 2013

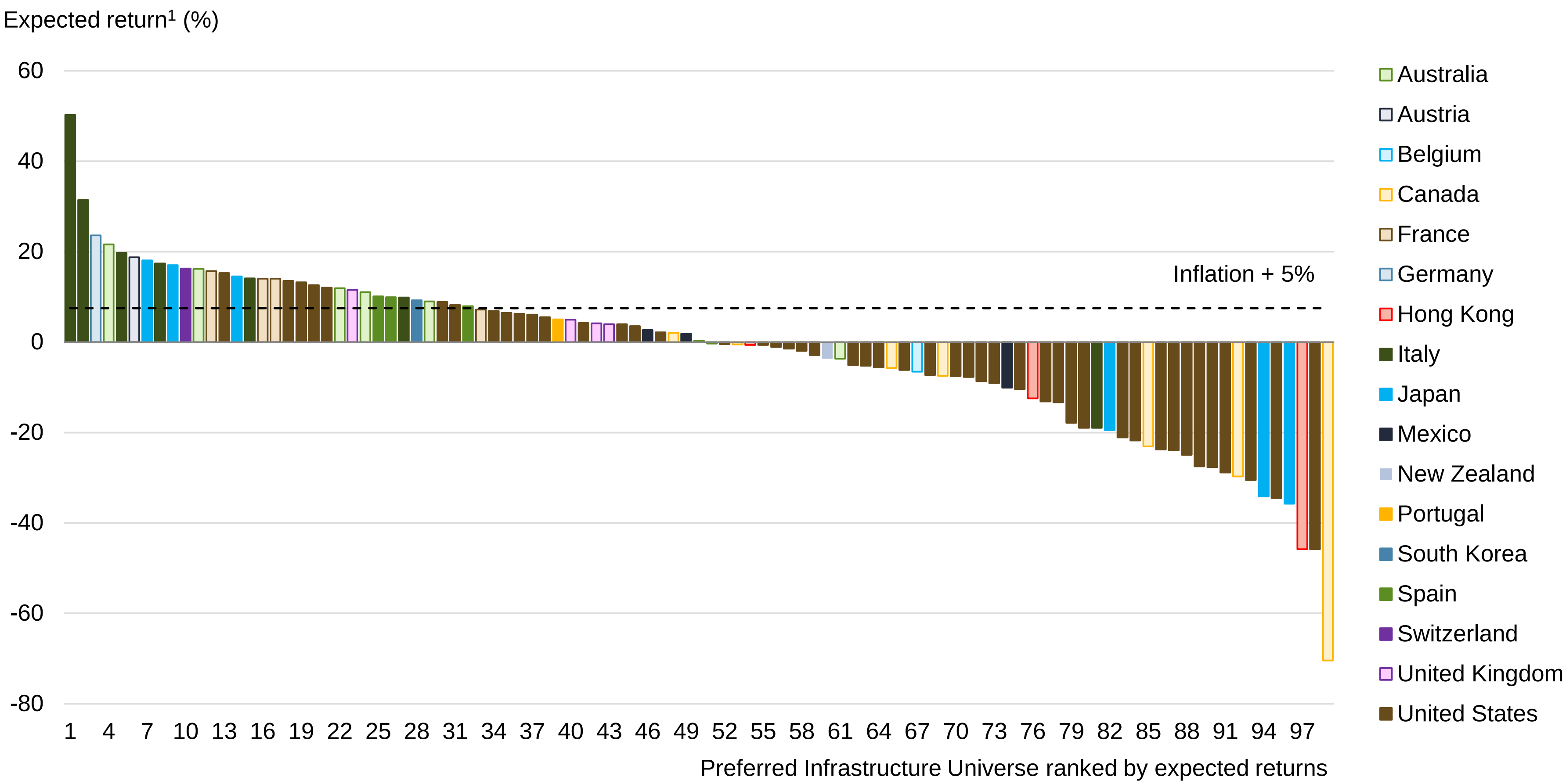
1 Over 3 years, assuming all the stocks trade at our valuation in 3 years time.

The opinions and estimates contained in this graph are based on current information and are subject to change. It should not be assumed that any investment was, or will be profitable. Expected returns do not represent a promise or guarantee of future results and are subject to change.

Shown for illustrative purposes only.

Each bar represents an individual stock's expected return per annum for the next three years. This is based on a comparison of Lazard's Global Listed Infrastructure team's intrinsic valuation of the stock three years out, the market price of the stock today and the interim forecast dividends.

Lazard Preferred Infrastructure Universe
Value Rank by Country



The "Value Rank" illustrates the expected returns of each stock within the Preferred Infrastructure universe.

As of 30 September 2013

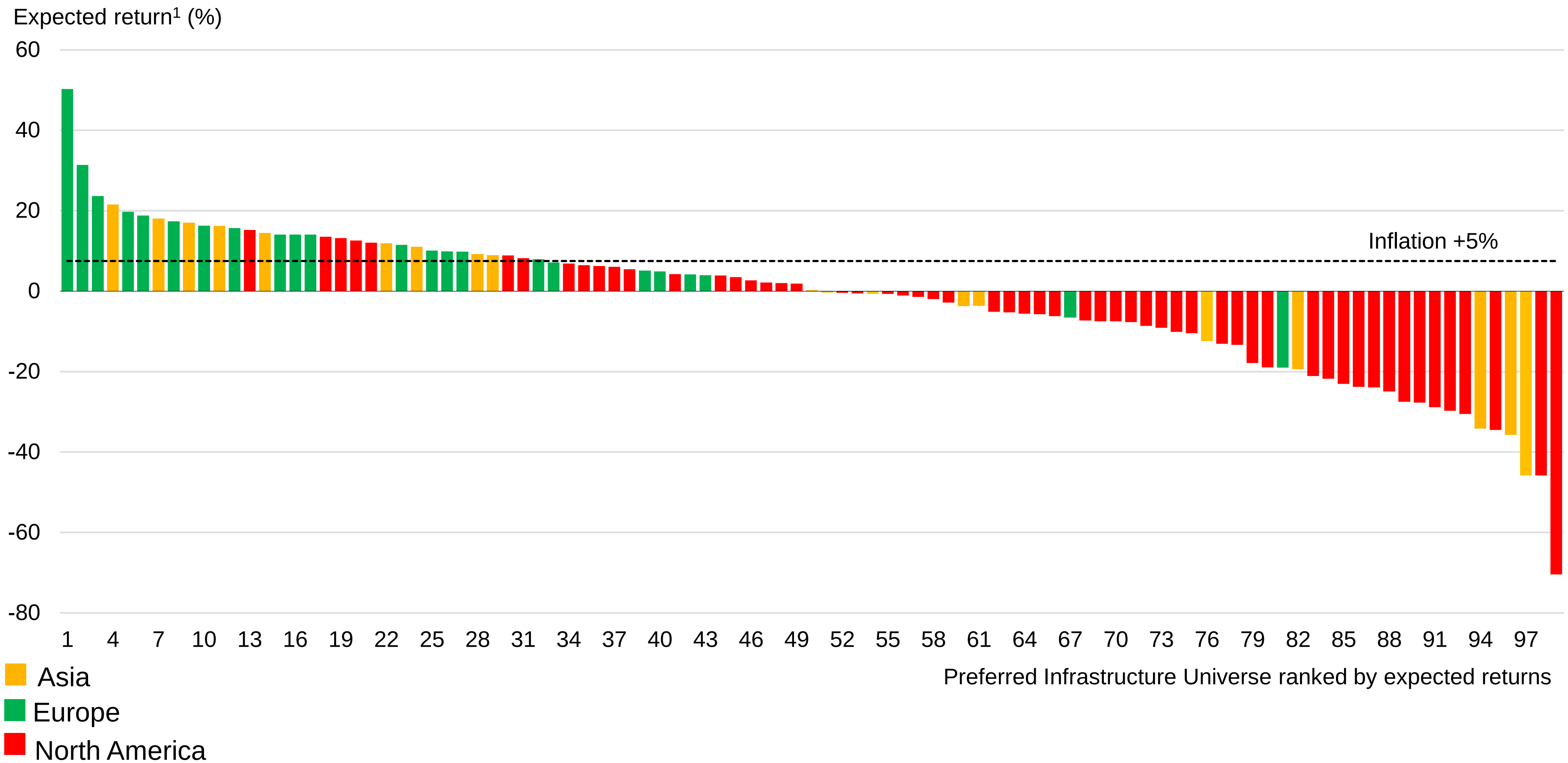
1 Over 3 years, assuming all the stocks trade at our valuation in 3 years time.

The opinions and estimates contained in this graph are based on current information and are subject to change. It should not be assumed that any investment was, or will be profitable. Expected returns do not represent a promise or guarantee of future results and are subject to change.

Shown for illustrative purposes only.

Each bar represents an individual stock's expected return per annum for the next three years. This is based on a comparison of Lazard's Global Listed Infrastructure team's intrinsic valuation of the stock three years out, the market price of the stock today and the interim forecast dividends.

Lazard Preferred Infrastructure Universe
Value Rank by Region



The "Value Rank" illustrates the expected returns of each stock within the Preferred Infrastructure universe.

As of 30 September 2013

1 Over 3 years, assuming all stocks trade at our valuation in 3 years' time.

The opinions and estimates contained in this graph are based on current information and are subject to change. It should not be assumed that any investment was, or will be profitable. Expected returns do not represent a promise or guarantee of future results and are subject to change.

Shown for illustrative purposes only.

Each bar represents an individual stock's expected return per annum for the next three years. This is based on a comparison of Lazard's Global Listed Infrastructure team's intrinsic valuation of the stock three years out, the market price of the stock today and the interim forecast dividends.

Portfolio Construction: Diversification is Key

Stage 1	Stage 2	Stage 3	Stage 4
Initial Filtering	Qualitative Risk Ranking	Fundamental Analysis and Value Ranking	Portfolio Construction

- A portfolio of 25–50 stocks is developed from the most attractive stocks on the value rank.
- Portfolio weightings to an individual stock: generally 1%–8%.
- Maximum company holding: 10% of the company's market capitalization.
- Full diversification is maintained across geographies and sectors.

Country Parameters (%)

United States	0 – 50	Italy	0 – 30	Mexico	0 – 15
Australia	0 – 30	Japan	0 – 30	New Zealand	0 – 15
Britain	0 – 30	Spain	0 – 30	Portugal	0 – 15
Canada	0 – 30	Austria	0 – 15	South Korea	0 – 15
France	0 – 30	Belgium	0 – 15	Switzerland	0 – 15
Germany	0 – 30			All other OECD[1]	0 – 15

North America	0 – 80
Europe	0 – 80
Asia	0 – 30
Australasia	0 – 30

Sector Parameters (%)

Diversified Utilities	0 – 50	Water Utilities	0 – 40	Communications Infrastructure	0 – 30
Marine Ports	0 – 40	Gas Utilities	0 – 40	Railways	0 – 30
Airports	0 – 40	Electricity Utilities	0 – 40	Oil & Gas Pipelines	0 – 30
Tollroads	0 – 40				

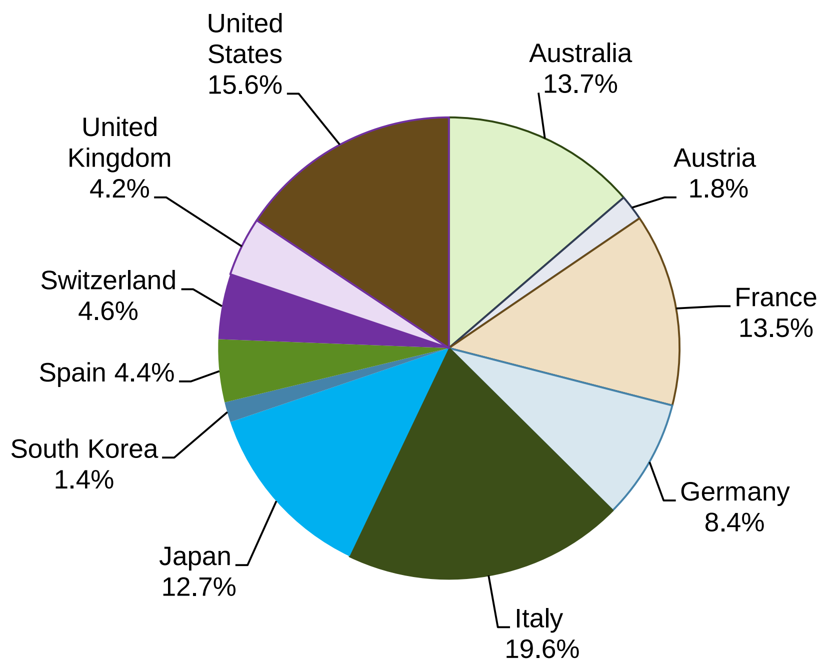
1 The limit to "All other OECD countries" is not an aggregate
Note: These weightings apply upon acquisition of investments – price movements may result in these limits being exceeded.
Lazard's investment process is neither sequential nor static, but ongoing.
Allocations and security selection are subject to change.

Portfolio by Country and Sector
Lazard Global Listed Infrastructure (USD Hedge)

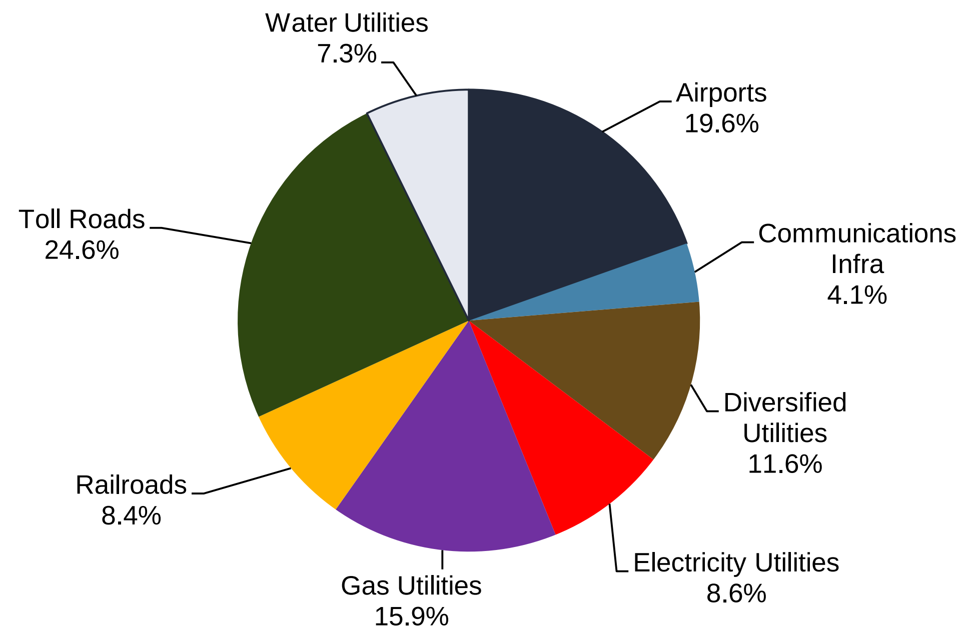
Stage 1	Stage 2	Stage 3	Stage 4
Initial Filtering	Qualitative Risk Ranking	Fundamental Analysis and Value Ranking	Portfolio Construction

Broken Down by Company Domicile

Portfolio by Country



Portfolio by Sector



Portfolio Summary:

- 29 Companies — 9 Infrastructure Sectors
- 23 Countries — 240+ Assets

Global Asset Diversification (Toll Roads)

- 120+ toll road concessions
- 18,000+ kms of toll roads
- 14 countries

As of 30 September 2013
Weights are calculated ex-cash. Cash is not viewed as a strategic asset.
The allocations mentioned are based upon a portfolio that represents the proposed investment for a fully discretionary account. Allocations are subject to change.
Portfolio summary is based on underlying company assets

Top 10 Holdings
Lazard Global Listed Infrastructure (USD Hedge)

Stage 1	Stage 2	Stage 3	Stage 4
Initial Filtering	Qualitative Risk Ranking	Fundamental Analysis and Value Ranking	Portfolio Construction

Company	Country	Sector	% Equity
Atlantia	Italy	Tollroads	8.5
Fraport	Germany	Airports	8.4
Duet Group	Australia	Diversified Utilities	4.9
Tokyo Gas	Japan	Gas Utilities	4.8
Aeroports de Paris Promesses	France	Airports	4.8
Osaka Gas	Japan	Gas Utilities	4.7
Vinci	France	Tollroads	4.6
Flughafen Zuerich	Switzerland	Airports	4.6
Norfolk Southern	United States	Railroads	4.3
Pennon Group	United Kingdom	Water Utilities	4.2

As of 30 September 2013

The allocations and specific securities mentioned are based upon a portfolio that represents the proposed investment for a fully discretionary account. Allocations and security selection are subject to change.

The securities mentioned are not necessarily held by Lazard for all client portfolios, and their mention should not be considered a recommendation or solicitation to purchase or sell these securities. It should not be assumed that any investment in these securities was, or will prove to be, profitable. The securities mentioned may not represent the entire portfolio.

Holdings by Infrastructure - Sector
Lazard Global Listed Infrastructure

Holdings	% of Portfolio
Airports	**19.0**
Aeroports de Paris Promesses	
Flughafen Wien AG	
Flughafen Zuerich AG	
Fraport AG	
Communications Infrastructure	**4.0**
SES	
Diversifed Utilities	**11.3**
DUET	
Hera	
PG&E	
SP Ausnet	
Electricity Utilities	**8.4**
Red Electrica	
Spark Infrastructure Group	
Terna	
Gas Utilities	**15.5**
Osaka Gas	
Tokyo Gas	
Toho Gas	
Enagas	
SNAM	

Holdings	% of Portfolio
Railroads	**8.2**
CSX	
Norfolk Southern	
Union Pacific	
Toll Roads	**23.9**
Abertis	
ASTM	
Atlantia	
Macquarie Atlas Roads	
Macquarie Korea Infrastructure Fund	
Societa Iniziative Autostradali e Servizi (SIAS)	
Transurban	
Vinci	
Water Utilities	**7.1**
California Water Service Group	
SJW Corp.	
Pennon	

Cash & Equivalents	**2.4**
Total Portfolio	**100**

As of 30 September 2013

The allocations and specific securities mentioned are based upon a portfolio that represents the proposed investment for a fully discretionary account. Allocations and security selection are subject to change.

The securities mentioned are not necessarily held by Lazard for all client portfolios, and their mention should not be considered a recommendation or solicitation to purchase or sell these securities. It should not be assumed that any investment in these securities was, or will prove to be, profitable.

Please note that cash is not viewed as a strategic asset.

Holdings by Infrastructure - Region

Lazard Global Listed Infrastructure

Holdings	% of Portfolio
United States	**15.2**
California Water Service Group	
CSX	
Norfolk Southern	
PG & E	
SJW	
Union Pacific	
Austria	**1.8**
Flughafen Wien	
France	**13.2**
Aeroports de Paris	
SES	
Vinci	
Germany	**8.2**
Fraport	
Italy	**24.3**
ASTM	
Atlantia	
Hera	
Snam	
Societa Iniziative Auto e Servizi	
Terna	

Holdings	% of Portfolio
Spain	**4.3**
Abertis	
Red Electrica	
Enagas	
Switzerland	**4.4**
Flughafen Zuerich	
Japan	**12.4**
Osaka Gas	
Tokyo Gas	
Toho Gas	
Australia	**13.3**
Duet Group	
Macquarie Atlas Roads Group	
SP Ausnet	
Spark Infrastructure Group	
Transurban Group	
South Korea	**1.4**
Macquarie Korea Infrastructure Fund	
United Kingdom	**4.0**
Pennon	

Cash & Equivalents	**2.4**
Total Portfolio	**100**

As of 30 September 2013

The allocations and specific securities mentioned are based upon a portfolio that represents the proposed investment for a fully discretionary account. Allocations and security selection are subject to change.

The securities mentioned are not necessarily held by Lazard for all client portfolios, and their mention should not be considered a recommendation or solicitation to purchase or sell these securities. It should not be assumed that any investment in these securities was, or will prove to be, profitable.

Please note that cash is not viewed as a strategic asset.

Lazard Global Listed Infrastructure (USD Hedge)

Composite Performance Summary

				Annualized		
	2013Q3	2013YTD	1 Year	3 Years	5 Years	Since Inception 01 Sep 2006
Lazard Global Listed Infrastructure (USD Hedge)	**6.52**	**21.0**	**25.51**	**13.84**	**11.52**	**6.80**

Broad Market Reference Indices

				Annualized		
	2013Q3	2013YTD	1 Year	3 Years	5 Years	Since Inception 01 Sep 2006
UBS Global 50/50 Infrastructure & Utilities Index (Hedged USD)	4.46	15.4	19.14	10.02	5.79	3.23
MSCI World Index (Local)	6.40	18.9	22.34	12.07	7.36	3.28
Citigroup World Government Bond Index All Maturities (Local)	0.73	0.1	0.88	2.61	4.09	3.89

As of 30 September 2013.

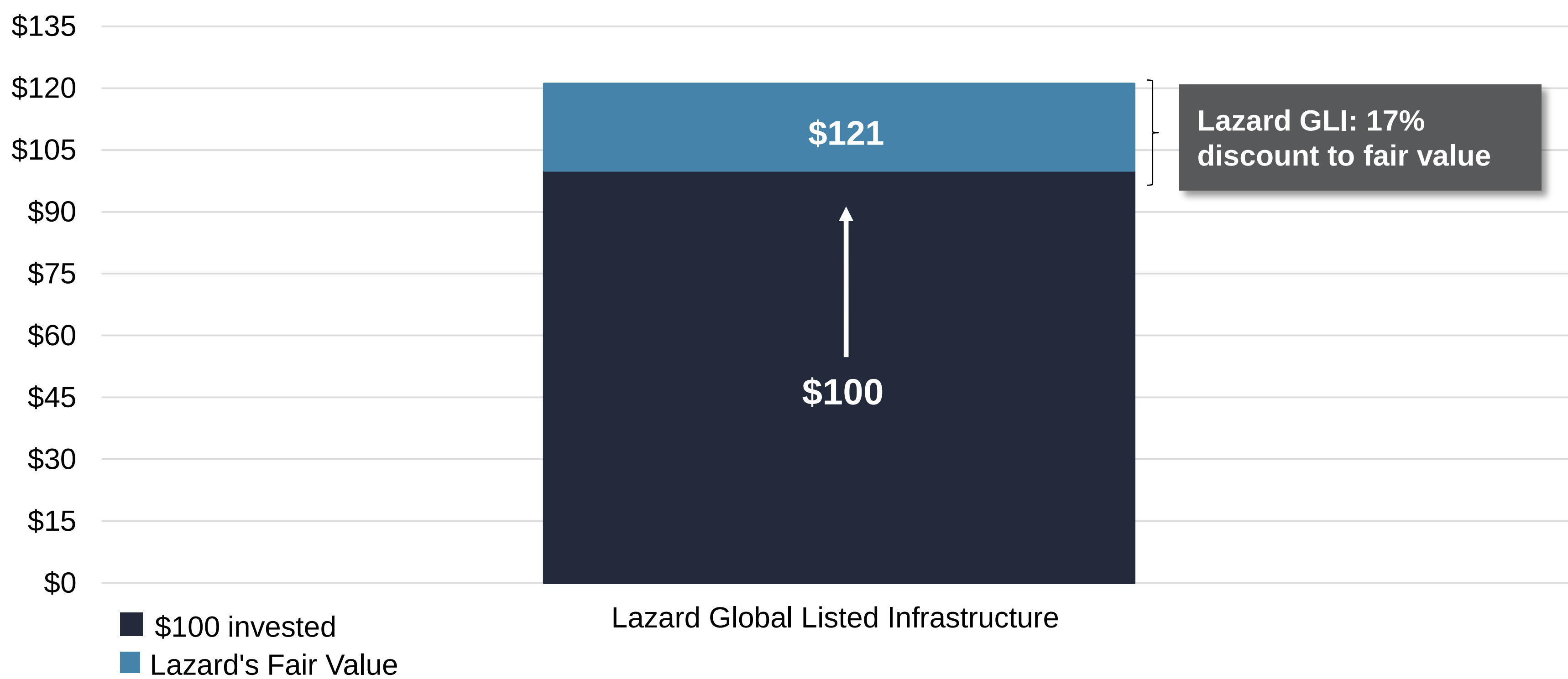
All data in USD

The investment objective is investor inflation (Consumer Price Index) plus 5%, over a 5-year period.

Performance is preliminary and presented gross of fees. Please refer to the attached disclosures for performance presented on a net of fee basis and for a description of this composite. The performance quoted represents past performance. Past performance is not a reliable indicator of future results. Index performance is shown for illustrative purposes only. Lazard Global Listed Infrastructure is not measured versus the performance of any benchmark.

Holdings are Undervalued
Lazard Global Listed Infrastructure

Fair Value Assessment



The fair value of a $100 investment into Lazard Global Listed Infrastructure is worth approximately $121.

Which means, on 30 September 2013, our strategy was trading at approximately a 17% discount to fair value.

Fair value of stocks held as of 30 September 2013 in USD.

The information presented is theoretical and is shown for information purposes only. It is based on Lazard's assumptions underlying the calculation of fair value as at 31 March 2012 and is subject to change should our assumptions change. The information does not represent a promise or guarantee that the stocks will achieve fair value.

Source: Lazard Asset Management Pacific.

Outlook

We believe:

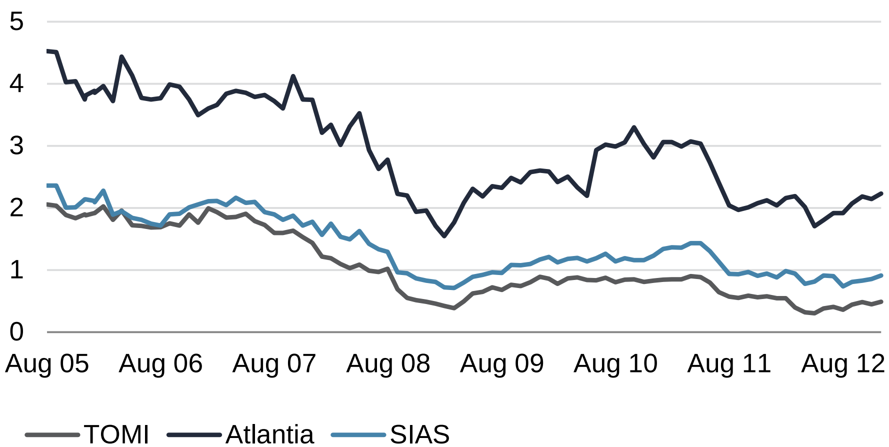
- GDP growth in the developed world will be subdued in the medium term
- Despite the European debt crisis, we believe European infrastructure stocks are trading at compelling valuations and we have a substantial exposure
- Record low bond yields in the US and Canada have produced a minor bubble in utility and pipeline companies, hence the portfolio holds few North American names
- Our performance has been strong over the past twelve months. Our portfolio is more concentrated than in recent years, yet is still trading around the average discount to 'fair value' our strategy has shown since inception.
- Cash flow certainty in listed infrastructure means it is an attractive investment for uncertain times

TAB

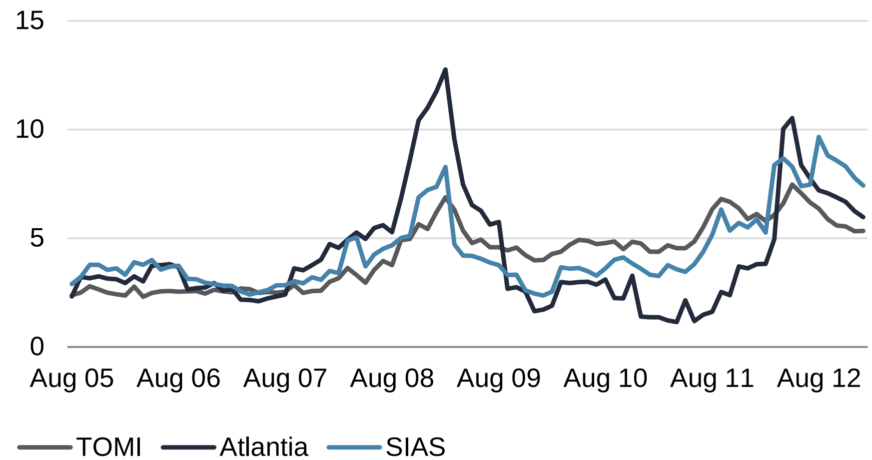
In Depth Stock Analysis Can Allow us to Buy Cheap

Italian Toll Roads are very, very Cheap

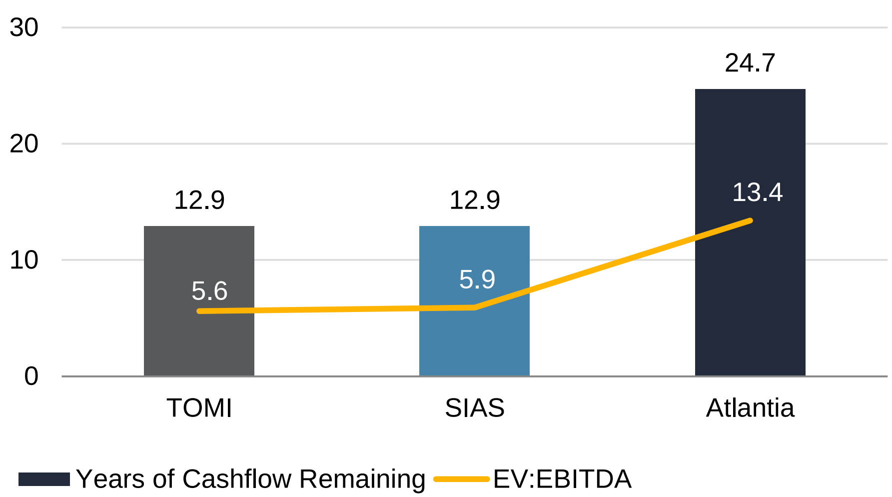
Price to Book



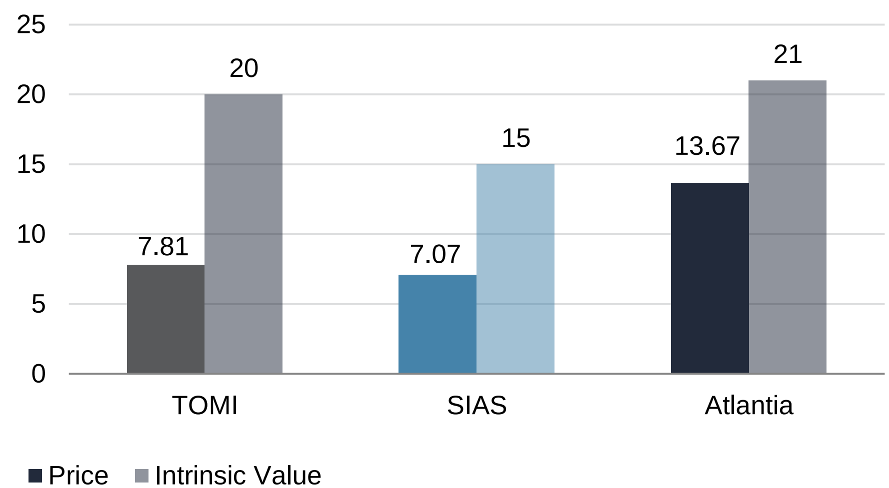
Dividend Yields



EV:EBITDA vs. Average Remaining Concession Life (Years)



Price vs. Intrinsic Value (EUR per Share)



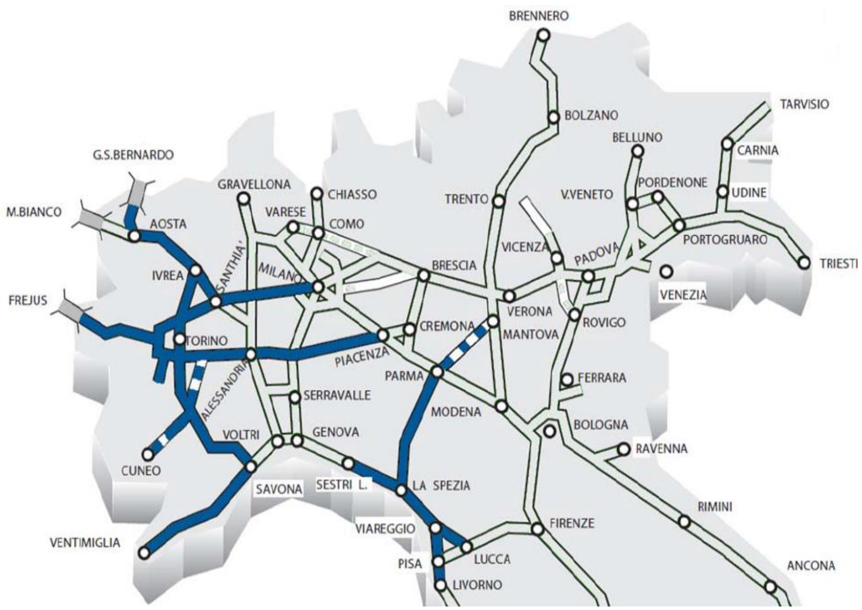
As at 31 December 2012

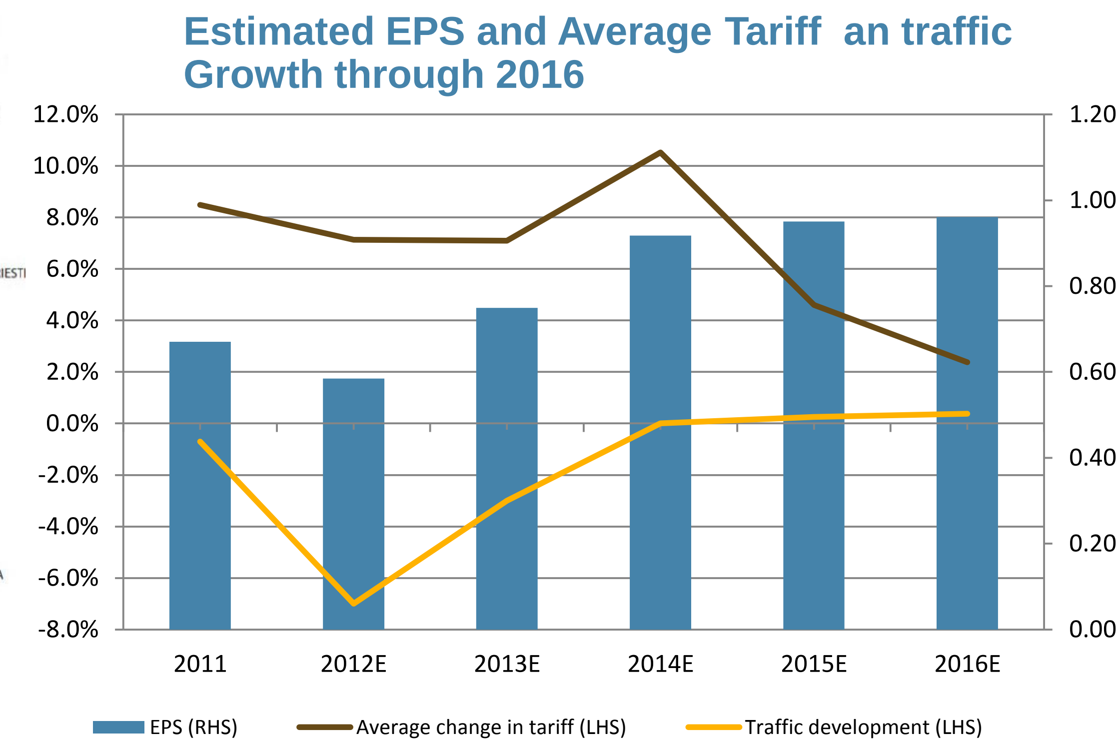
The securities identified above are not necessarily held by Lazard for all client portfolios, and should not be considered a recommendation or solicitation to purchase or sell this security. It should not be assumed that any investment in this security was, or will be profitable. The opinions and estimates contained in this graph are based on current information and are subject to change. Expected information does not represent a promise or guarantee of future results and are subject to change. This is based on a comparison of Lazard's Global Listed Infrastructure team's intrinsic valuation of the stock based on the discounted forecasted cash flows and the market price of the stock today.

Source: Lazard, Autostrada Torino-Milano (TOMI), Societa Iniziative Autostradali e Servizi (SIAS), Atlantia, Factset

In Depth Stock Analysis Can Allow Us to Buy Cheap

Società Iniziative Autostradali e Servizi (SIAS)





Group EPS to increase over 40% 2011 to 2016 despite depressed traffic, thanks to investment-induced tariff increases.

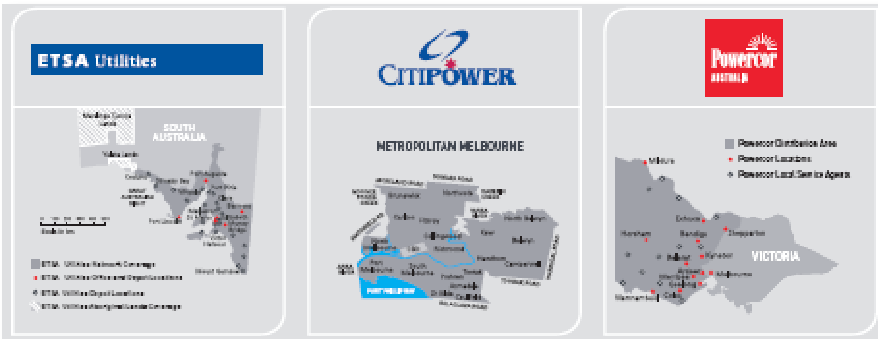
- Financial leverage well below sector average and fully pre-financed through 2017
- Disposal of Chilean business highlights 50% of market cap – Completed June 2012

As at 30 September 2013
The security identified above is not necessarily held by LAM for all client portfolios, and should not be considered a recommendation or solicitation to purchase or sell this security.
It should not be assumed that any investment in this security was, or will be profitable.
The figures above represent expected information. Expected information does not represent a promise or guarantee of future results and are subject to change.
Source: Lazard, Autocamionale della Cisa Spa

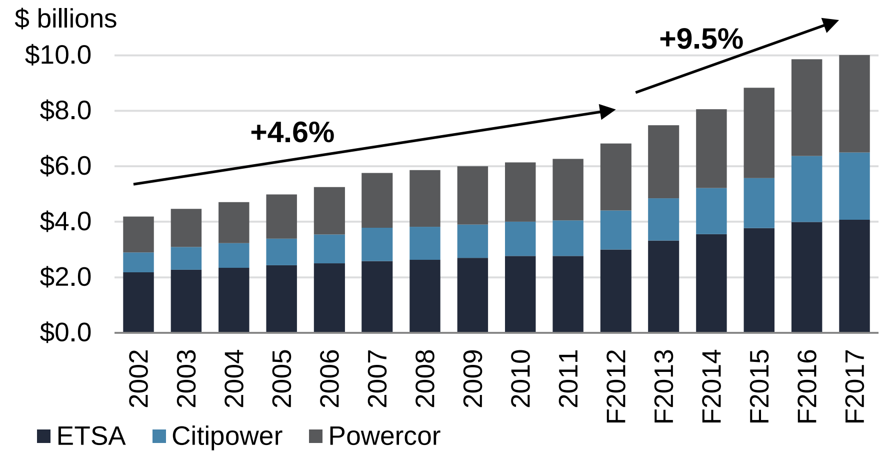
Wondering Why your Electricity Bill is Increasing?

It's Not Just the Carbon tax, but the Investment in Poles and Wires

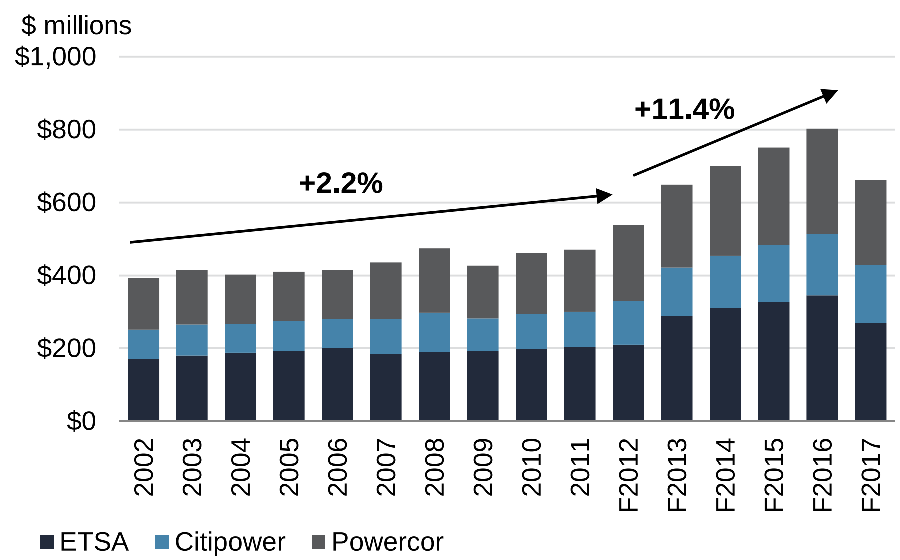
Spark Infrastructure (SKI)



Regulated Asset Base (RAB)



Regulated Return

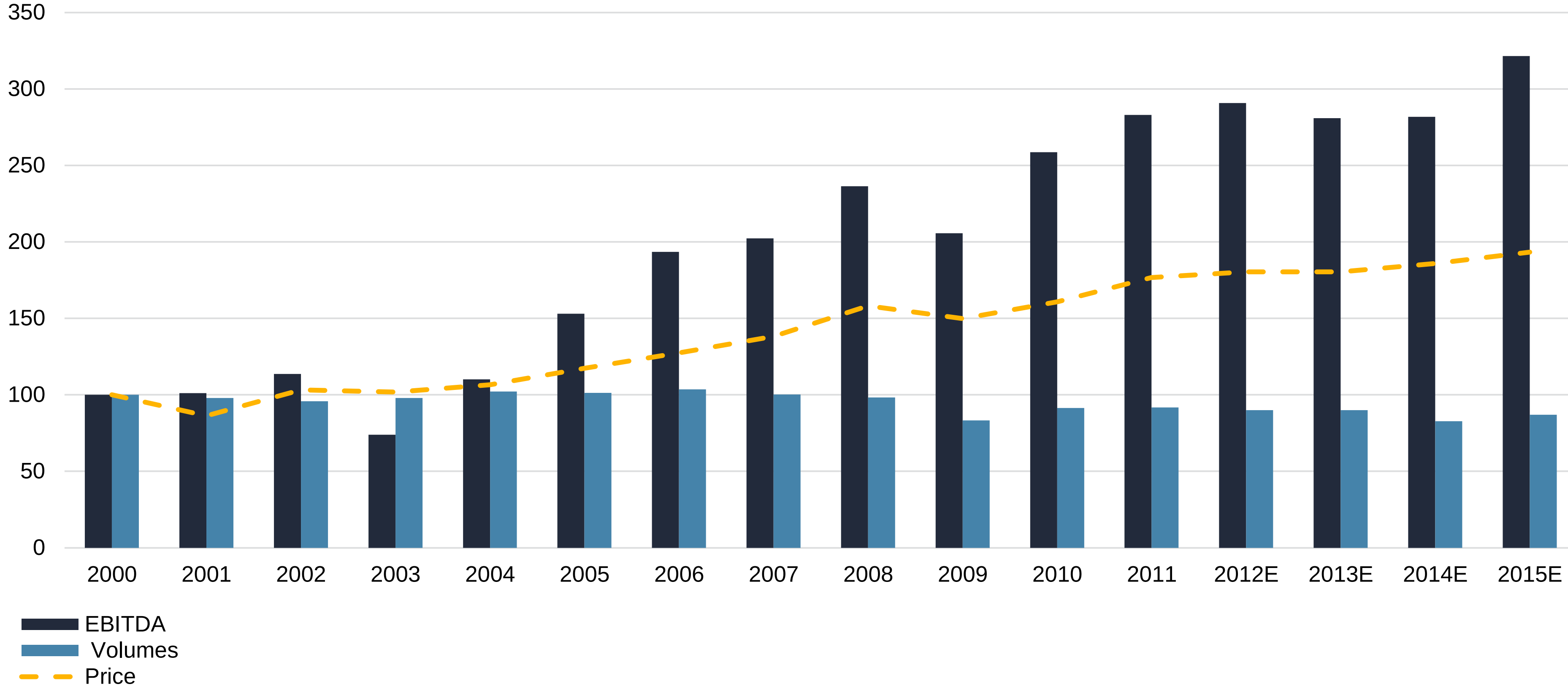


As of 30 June 2012

Source: Lazard forecasts based on Spark Infrastructure Fact Book and AER regulatory determinations

CSX

CSX Ltd - Volume, Price and EBITDA Indexed to 2000



Despite Declining Volumes, US Rails Have Exhibited Pricing Power Leading to Strong EBITDA Increases

As of 30 September 2013

The securities mentioned are not necessarily held by Lazard for all client portfolios, and their mention should not be considered a recommendation or solicitation to purchase or sell these securities. It should not be assumed that any investment in these securities was, or will prove to be, profitable, or that the investment decisions we make in the future will be profitable or equal to the investment performance of securities referenced herein. There is no assurance that any securities referenced herein are currently held in the portfolio or that securities sold have not been repurchased.

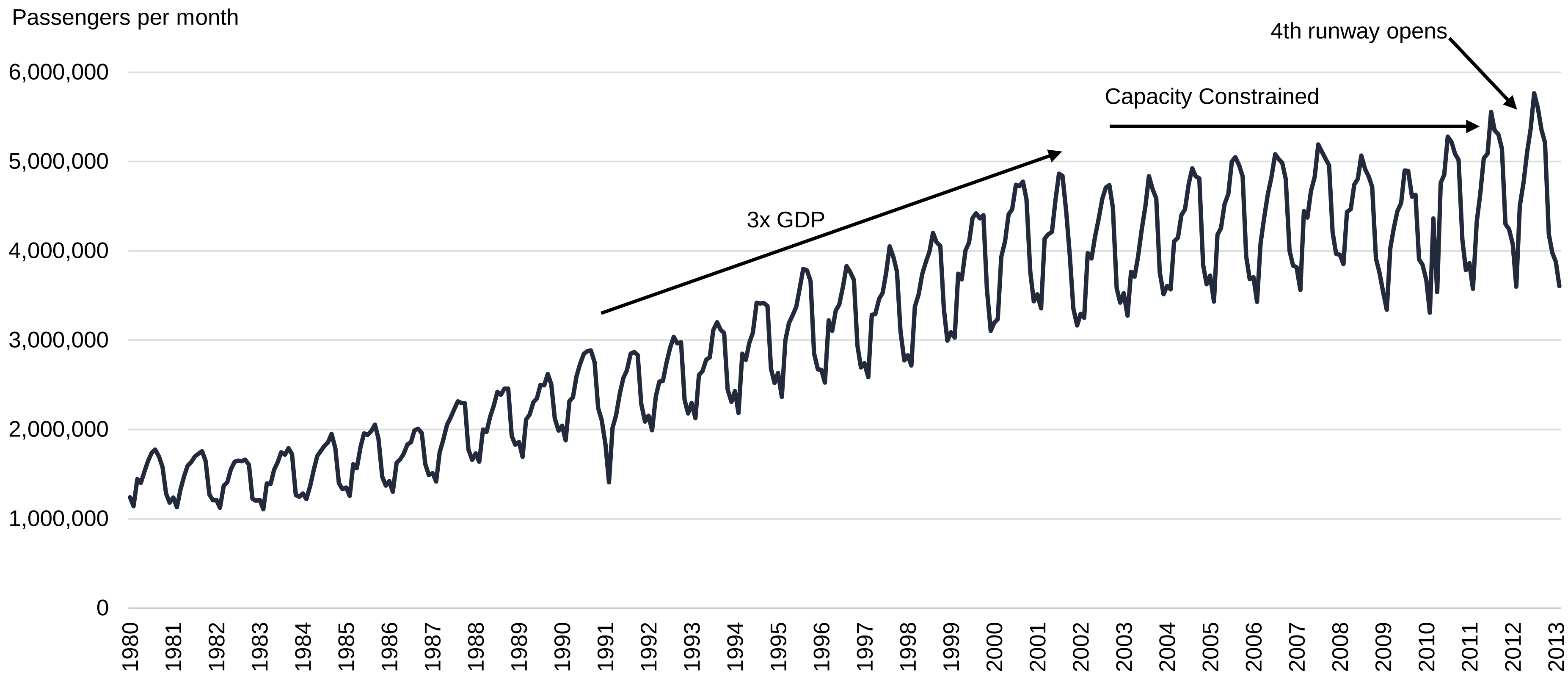
Forecasted data is not a guarantee of actual results and is subject to change.

Source: CSX Ltd.

Fraport Traffic

Fraport Traffic

Short-term passenger fluctuation being given greater emphasis in the market and ignores long-term reality



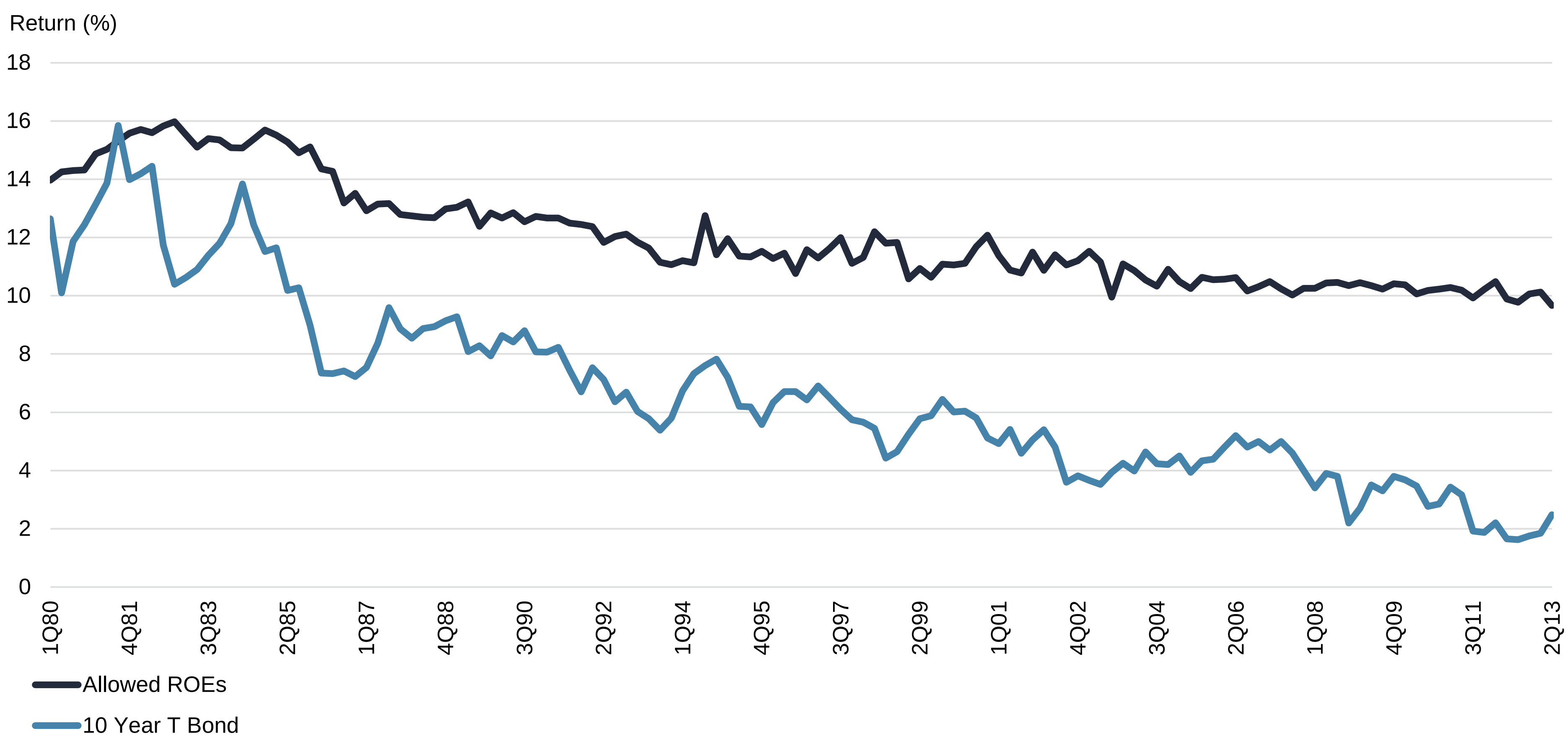
Airport (and European) hubs still capacity constrained. Value is in non-aviation. Deferred Terminal 3 expansion.

As of 30 June 2013

Source: Fraport, Lazard

US Regulated Utilities

US Utilities Allowed ROE vs. 10-year Treasury Yield

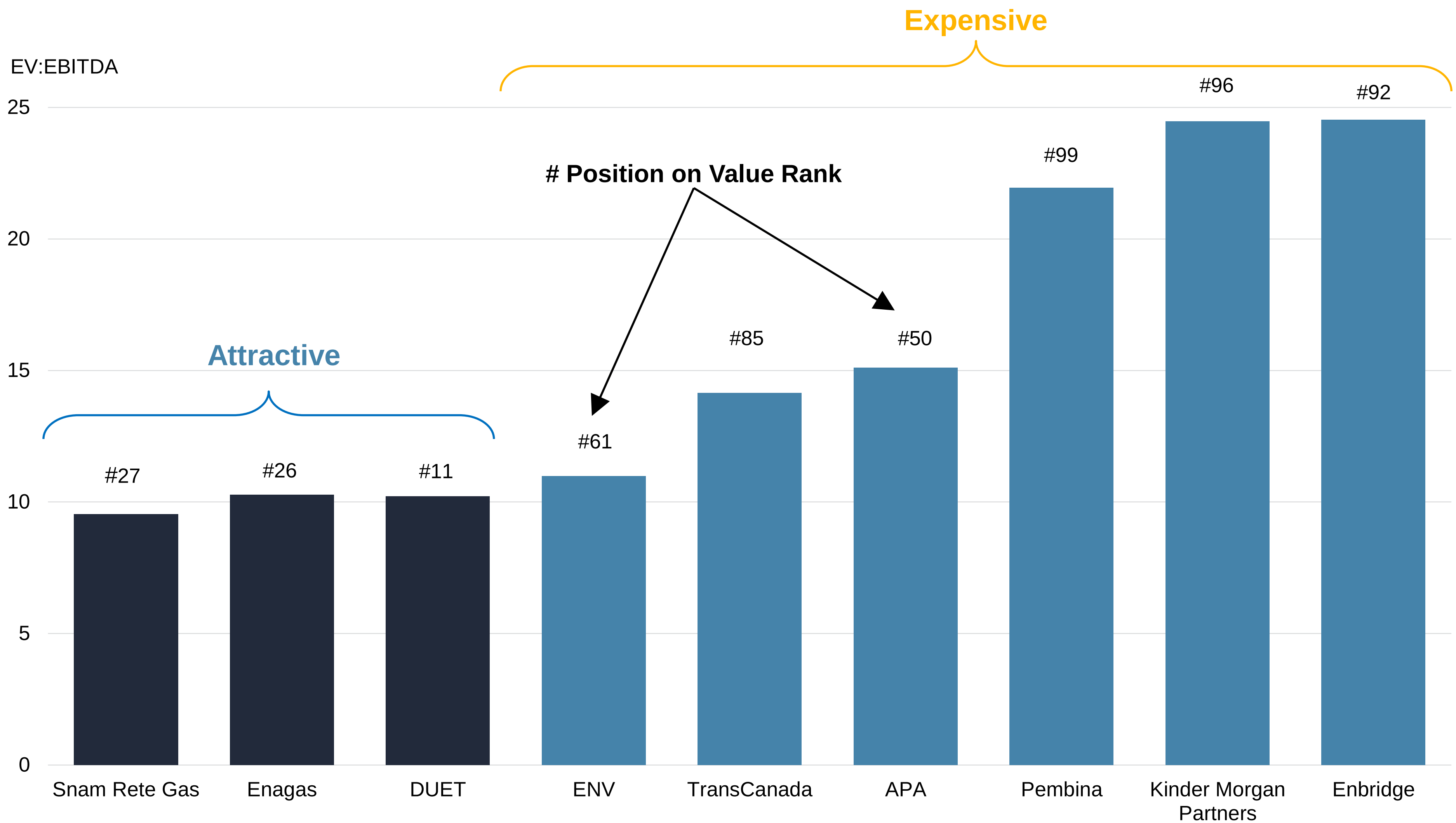


US utilities have enjoyed a widening spread over the cost of capital since the early 1980's, as allowed returns fell more slowly than bond yields.
Our projections assume a lower cost of capital spread, and hence lower valuations than recent history.

As of 30 September 2013
Past performance is not a reliable indicator of future results.
Source: RRA, Lazard

Pipelines – EV: EBITDA Valuations

We Own Pipelines that Are Trading at Attractive Valuations

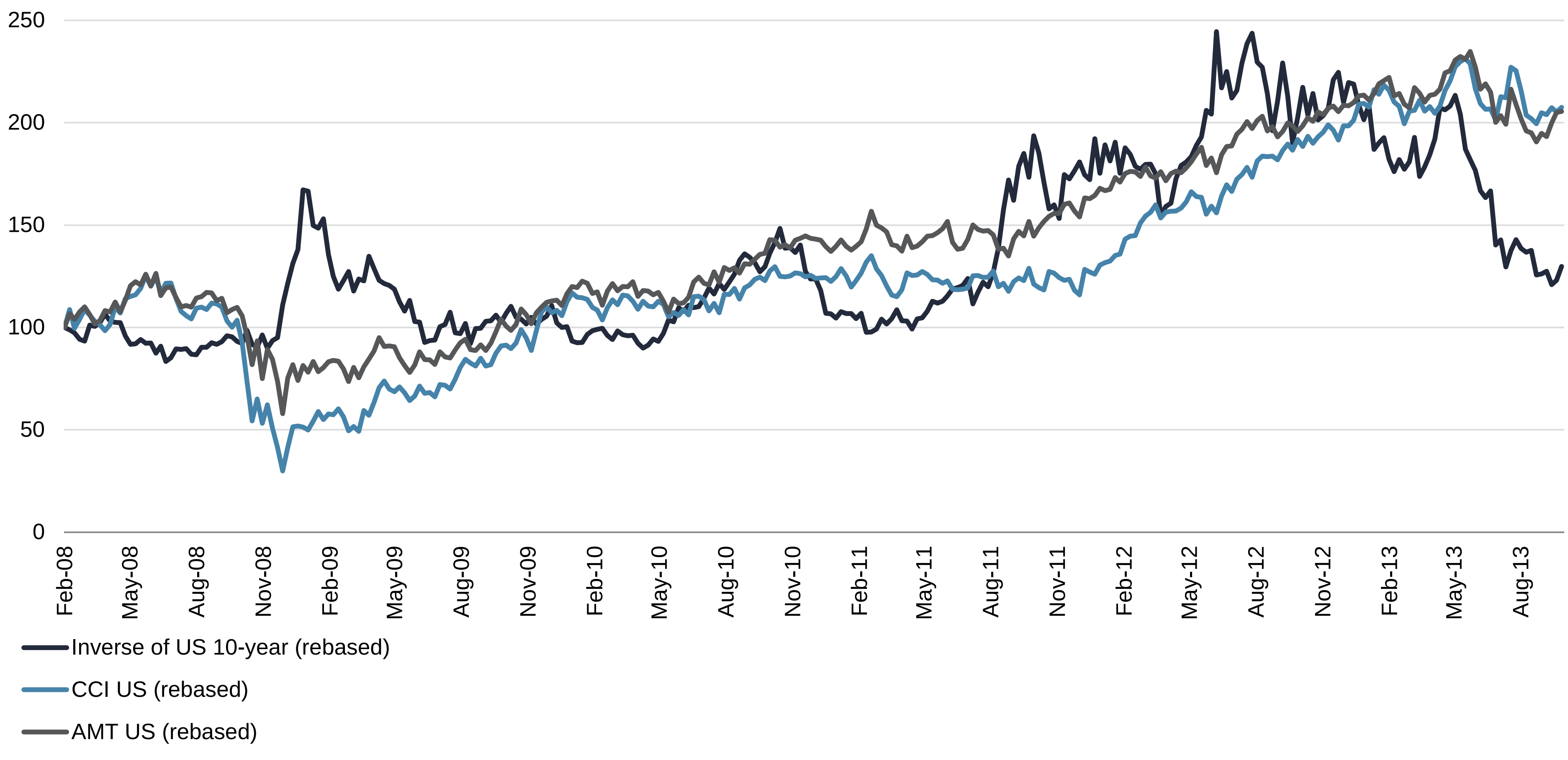


As of 30 September 2013

The securities mentioned are not necessarily held by Lazard for all client portfolios, and their mention should not be considered a recommendation or solicitation to purchase or sell these securities. It should not be assumed that any investment in these securities was, or will prove to be, profitable. All estimates are based on current information and are subject to change

Source: Lazard, Factset

US Telco Towers vs. US 10 Year Bond Yield



US Telecom towers are expensive vs. our fair value. Thanks to stable cash flows in real terms, they have re-rated with US treasuries.

As of 30 September 2013.

Graph prepared by Lazard with data from Bloomberg. For illustrative purposes only. Past performance is not a reliable indicator of future results.

The securities mentioned are not necessarily held by Lazard for all client portfolios, and their mention should not be considered a recommendation or solicitation to purchase or sell these securities. It should not be assumed that any investment in these securities was, or will prove to be, profitable.

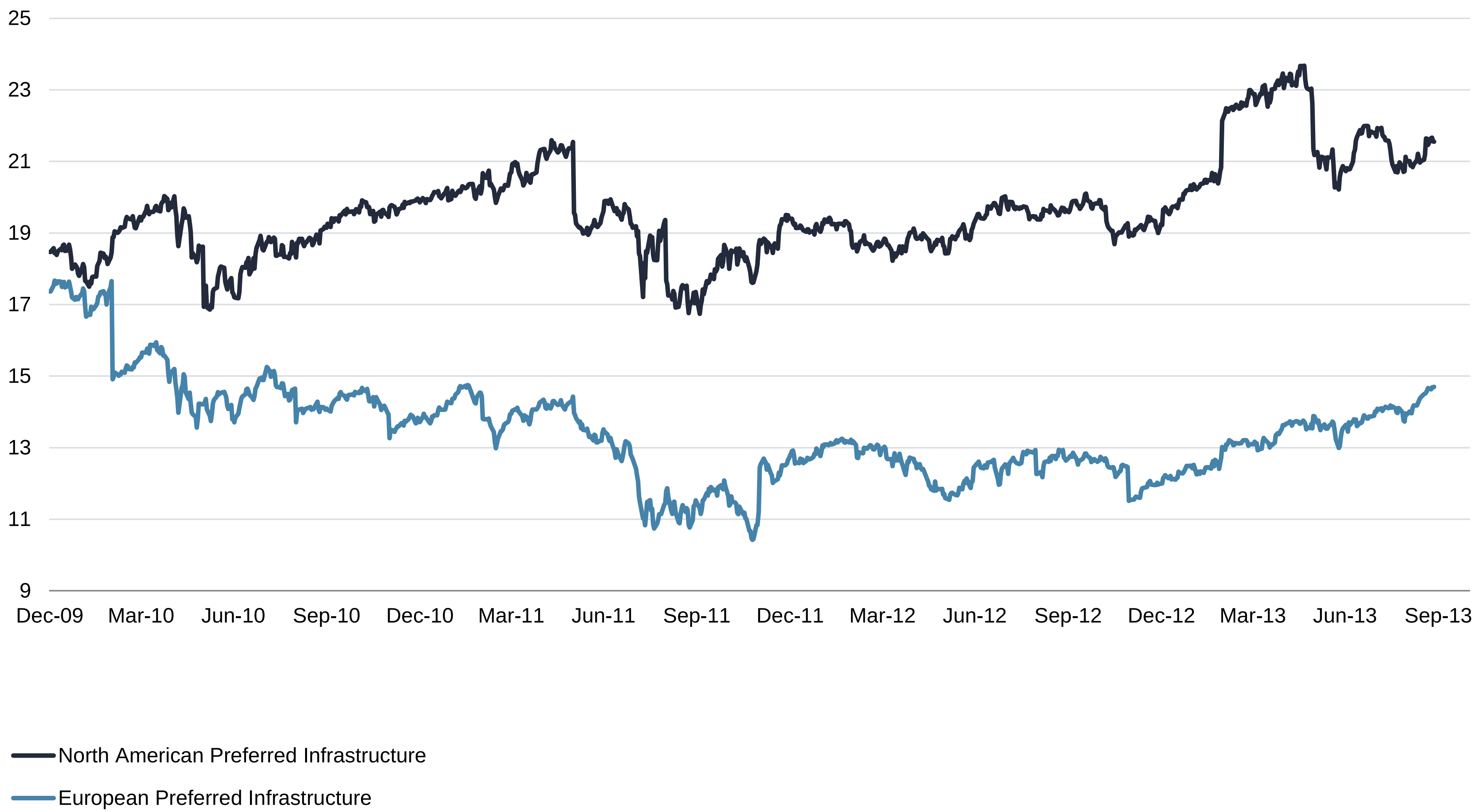
Source: Bloomberg, Lazard.

Preferred Infrastructure

North American vs. European

Stage 1	Stage 2	Stage 3	Stage 4
Initial Filtering	Qualitative Risk Ranking	Fundamental Analysis and Value Ranking	Portfolio Construction

Price to Earnings Ratios



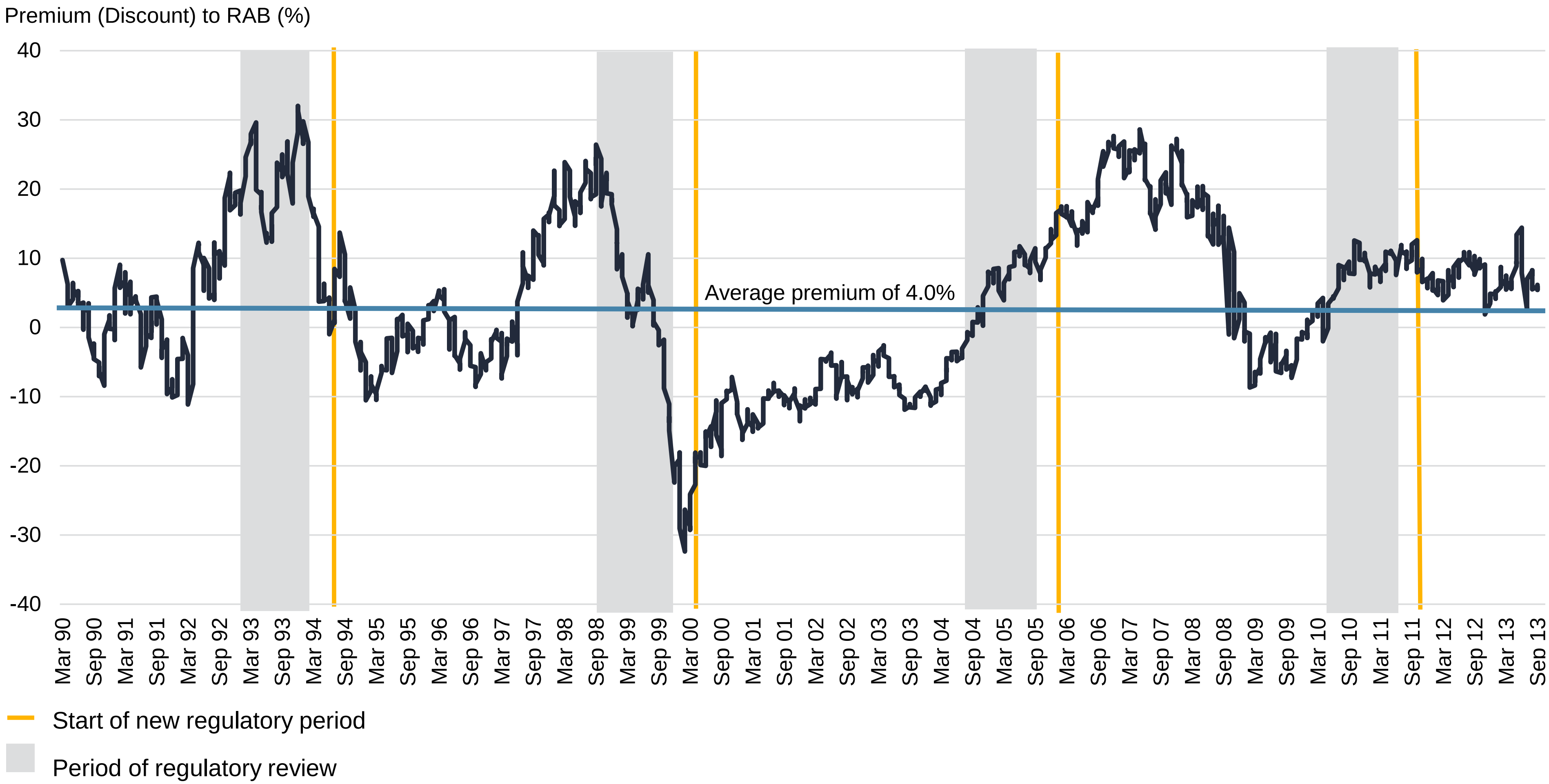
As of 30 September 2013.

Trailing P/E ratio for Global Listed Infrastructure Fund preferred infrastructure stocks in North America & Continental Europe, excluding AWK; CCI & AMT, where data is not meaningful.

The securities mentioned are not necessarily held by Lazard for all client portfolios, and their mention should not be considered a recommendation or solicitation to purchase or sell these securities. It should not be assumed that any investment in these securities was, or will prove to be, profitable.

Source: Factset, Lazard.

UK Water Companies

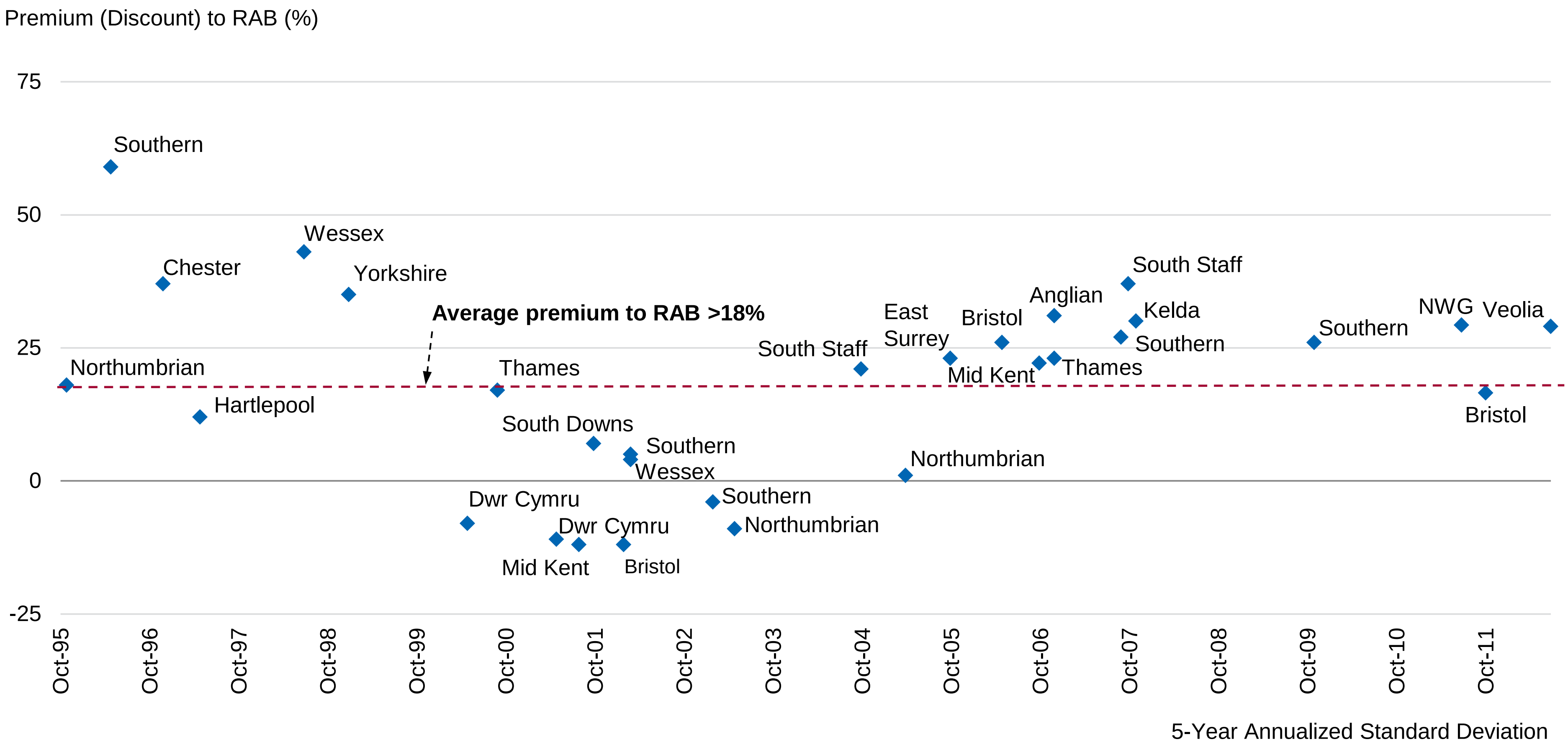


Historically, listed UK water companies have on average traded on a 4.0% premium to RAB (Regulated Asset Base). At 10% discount to RAB we have initiated small positions in the strategy.

As of 30 September 2013
Past performance is not a reliable indicator of future results.
Source: Bloomberg, Ofwat and Lazard.

UK Water Companies

Expensive Transactions by Private Equity Investors

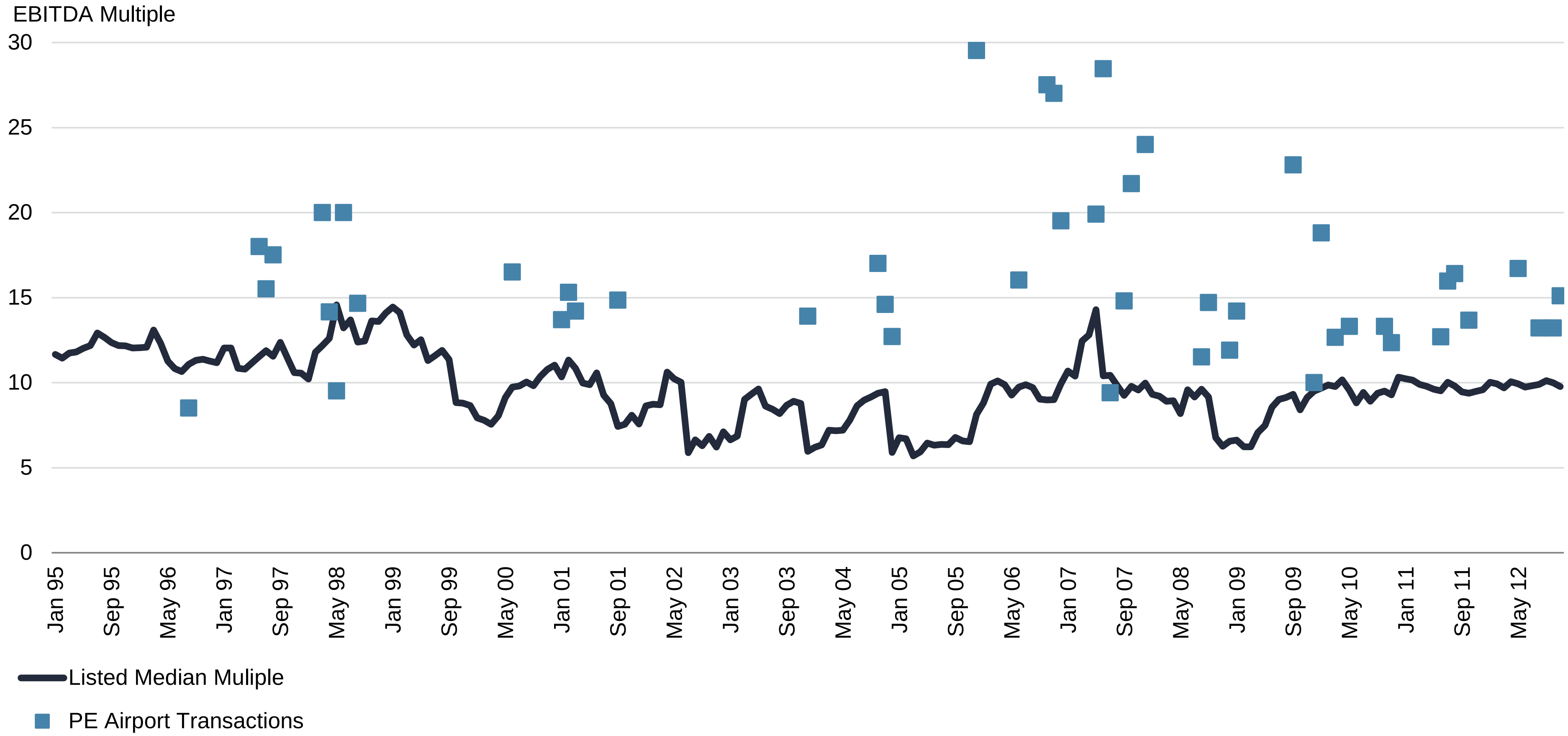


Private equity funds have paid, on average, an 18% premium to RAB (Regulated Asset Base) to acquire UK water assets. The Lazard Global Listed Infrastructure strategy recently invested in three UK water companies at an average discount of 10% to RAB.

As of 30 September 2013
Past performance is not a reliable indicator of future results.
The securities identified are not necessarily held by Lazard and should not be considered a recommendation or solicitation to purchase or sell these securities.
It should not be assumed that any of the referenced securities were or will prove to be profitable. The securities discussed may not represent the account's entire portfolio.
Source: Ofwat, Lazard

Airports

Expensive Transactions by Private Equity Investors



Private equity funds have paid, on average, 17x EBITDA to acquire airports. By comparison, airports listed in publicly traded markets in OECD countries have historically traded below 10x EBITDA.

As of 30 September 2012

Past performance is not a reliable indicator of future results.

The securities identified are not necessarily held by Lazard and should not be considered a recommendation or solicitation to purchase or sell these securities. It should not be assumed that any of the referenced securities were or will prove to be profitable. The securities discussed may not represent the account's entire portfolio.

Source: Macquarie, Factset, Lazard

TAB

Financial Statistics
Lazard Global Listed Infrastructure

Ratios	Lazard Global Listed Infrastructure	UBS Global 50/50 Infrastructure & Utilities Index	MSCI World Index
Earnings Yield (%)	8.6	5.8	6.3
Dividend Yield (%)	4.0	3.6	2.5
EV:EBITDA Multiple (x)	7.7	9.3	9.0
EBITDA Margin (%)	31.7	22.3	17.6
EBITDA Interest Cover (x)	4.7	5.2	5.6
Price/Book (x)	1.6	1.8	2.0
Debt to EV (%)	44.1	42.9	19.4
Turnover[1] (%)	51.8	N/A	N/A
Beta (3 years)	NA	0.77	062

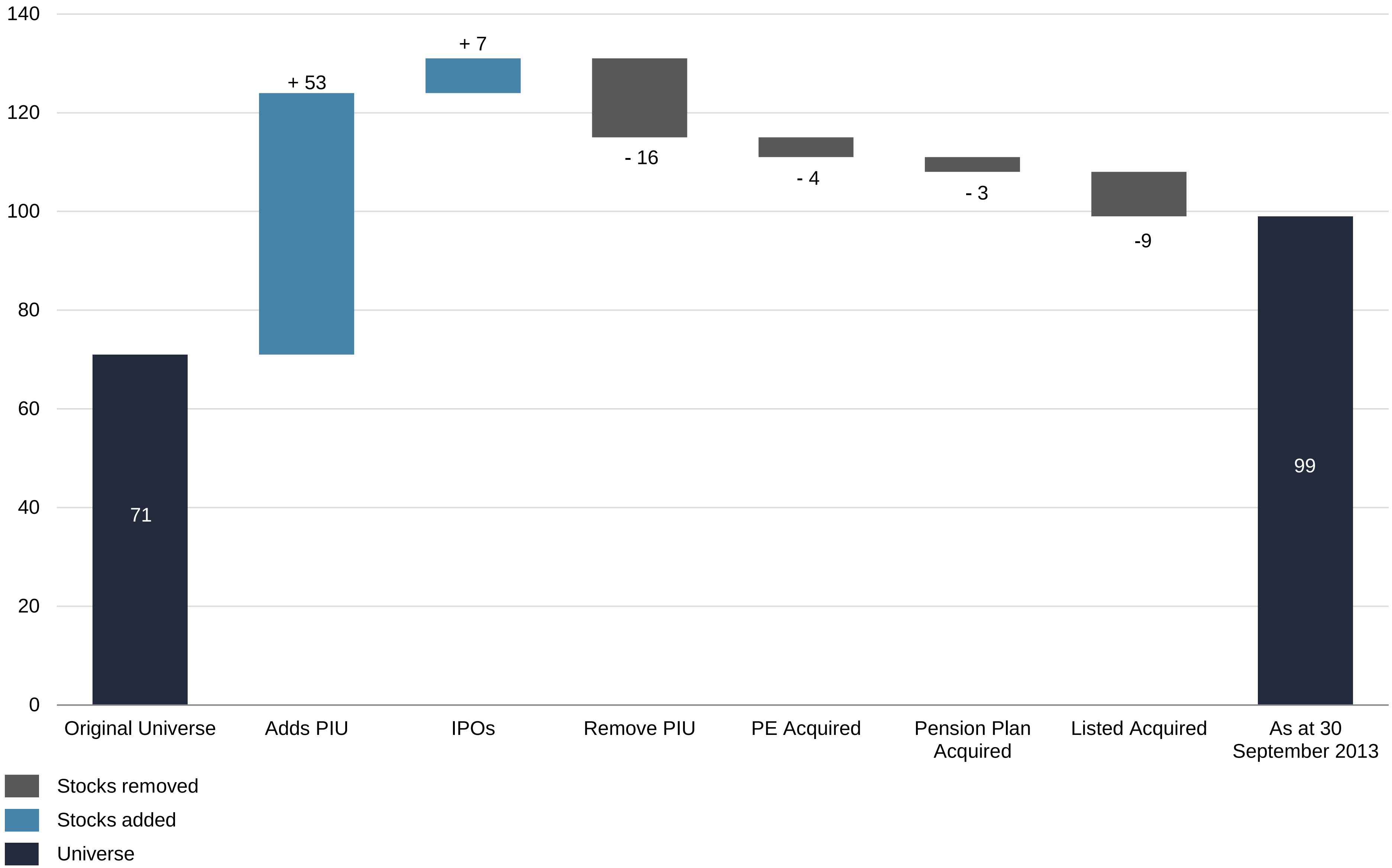
As of 30 September 2013

1 Lesser of purchase or sales; annualised since inception. Inception date of strategy was 5 October 2005.

Source: JPMorgan and Lazard estimates based on historical financial accounts of companies held in the Lazard Global Listed Infrastructure strategy. All estimates are based on current information and are subject to change.

Evolution of the Preferred Infrastructure Universe

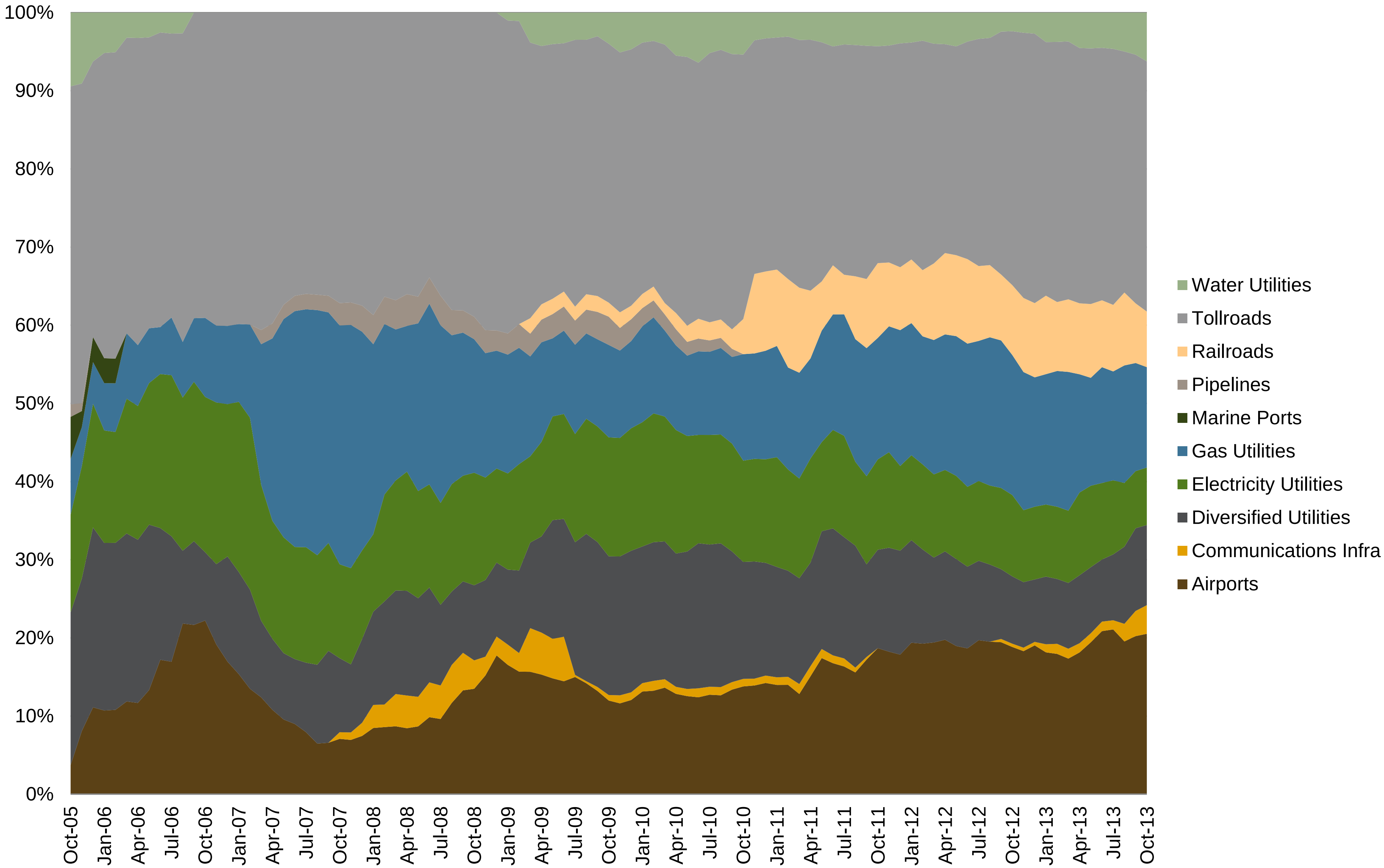
Lazard Global Listed Infrastructure



As at 30 September 2013
Universe start date October, 2005

Historical Sector Weights

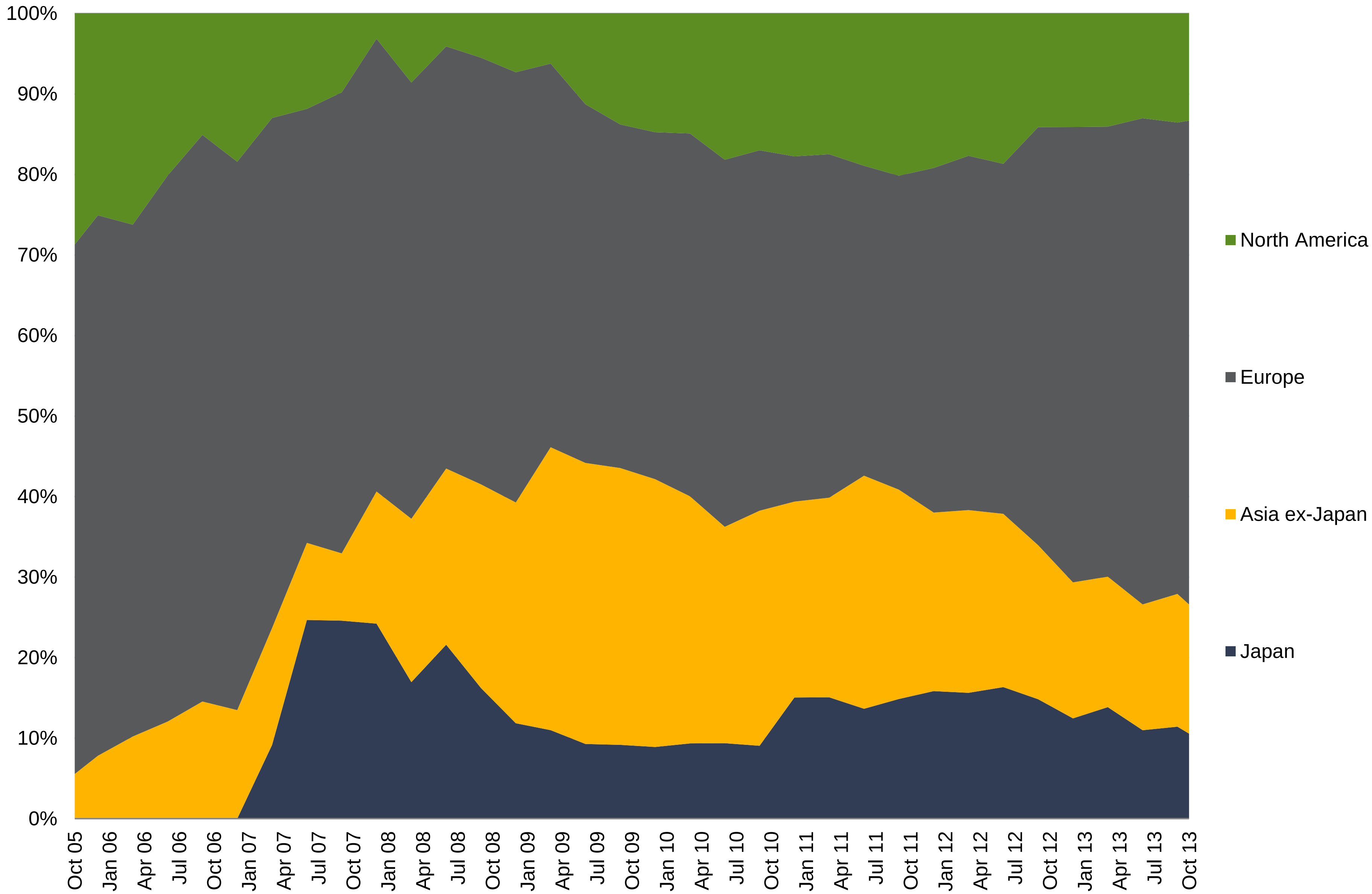
Lazard Global Listed Infrastructure



As of 31 October 2013

The allocations illustrated are based upon a portfolio that represents the proposed investment for a fully discretionary account. Allocations and security selection are subject to change.

Historical Regional Weights
Lazard Global Listed Infrastructure



As of 31 October 2013

The allocations illustrated are based upon a portfolio that represents the proposed investment for a fully discretionary account. Allocations and security selection are subject to change.

TAB

Lazard Global Listed Infrastructure (USD Hedge)

Composite Disclosure Notes

Reporting Date: 30 September 2013
Composite Inception Date: 01 September 2006
Reporting Currency: U.S. Dollar

Composite Description
The composite returns represent the total returns of all fully discretionary, fee-paying, portfolios with a Global Listed Infrastructure (USD Hedge) investment mandate and a minimum of $5 million in assets under management.

Calculation of Performance Returns
Lazard's account inclusion policy is the first full month or the end of the month in which the account is fully invested. Lazard Global Listed Infrastructure (USD Hedge) has foreign currency exposure substantially hedged back to the US dollar. Therefore, the composite returns provided are in hedged US dollar terms only. The returns of the individual portfolios within the composite are time-weighted, based upon monthly portfolio valuations, and include the reinvestment of all earnings as of the payment date. The composite returns are asset-weighted based upon beginning period market values. Additional information regarding policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request. The percentage of composite non fee paying accounts for each annual period end are as follows: 2012, 18.0%; 2011, 19.1%; 2010, 19.3%, 2009, 20.3%; 2008, 18.1%; 2007, 34.9%. In the current period, 10.3% of this composite comprises non fee paying accounts. For these accounts, net of fee performance has been calculated using the standard fee schedule for the Global Listed Infrastructure (USD Hedge) strategy. Composite returns are shown before taxes and the deduction of custody fees (except for mutual funds, which includes all fees). The composite returns are reported net of foreign withholding taxes on dividends, interest and capital gains. The composite returns presented represent past performance and is not a reliable indicator of future results, which may vary.

Fee Schedule
Lazard's standard fee schedule for Global Listed Infrastructure (USD Hedge) accounts is 0.90% of the first $10 million of assets, 0.75% on the next $25 million, 0.70% on the next $40 million, 0.65% on the next $75 million, 0.60% on the next $150 million and 0.55% on assets above $300 million. Actual account fees, inclusive of performance-based fees (if applicable) are used in the construction of composite net of fee performance unless otherwise noted. A complete list and description of all Lazard composites is available upon request.

Benchmark Information
The Lazard Global Listed Infrastructure (USD Hedge) Composite has no benchmark, as an appropriate index does not exist.

GIPS Compliance and Verification Status
Lazard Asset Management claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Lazard Asset Management has been independently verified for the period of January 1, 1993 through December 31, 2012. The verification reports are available upon request. 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. Lazard Asset Management is the "Firm" to which the GIPS Standards apply (Frankfurt office included in Firm definition as of January 1, 2003). GIPS is a registered trademark of CFA Institute. CFA Institute has not been involved in the preparation or review of this presentation. The composite creation date is October 2006.

	Calendar									Annualized			
	QTD	YTD	2012	2011	2010	2009	2008	2007	Sep 06 - Dec 06	1 YR	3 YR	5 YR	Since Inception
Lazard Rate of Return (%; Gross of Fees)	6.52	21.03	18.78	-0.85	10.77	22.16	-31.02	5.42	13.62	25.51	13.84	11.52	6.80
Lazard Rate of Return (%; Net of Fees)	6.29	20.30	17.81	-1.70	9.78	21.37	-31.46	4.92	13.47	24.50	12.90	10.63	6.04
Composite Standard Deviation (3-yr. Ann.)		8.95	9.75	13.47	17.84	17.30	N/A	N/A	N/A				
# of Portfolios		4	4	4	4	3	3	3	1				
Composite Dispersion (Asset Wtd. Std. Dev.)		0.03	0.21	0.32	0.64	0.31	0.16	N/A	N/A				
Composite Assets (USD Millions)		826.8	342.3	286.0	294.5	237.6	249.4	246.5	29.7				
Total Firm Assets (USD Billions)		153.8	148.3	124.4	140.6	116.5	79.8	126.9	97.7				

Biographies
Global Listed Infrastructure Management Team

John Mulquiney, CFA
Senior Vice President, Portfolio Manager/Analyst
Lazard Asset Management Pacific Co. (Sydney)

John is a portfolio manager/analyst with Lazard Asset Management Pacific in Sydney, Australia and has been working in the investment field since 1997. Prior to joining Lazard in August 2005, John worked at Tyndall Australia and in the Asset and Infrastructure Group at Macquarie Bank, where he undertook transactions and developed valuation models for airports, electricity generators, rail projects and health infrastructure. Most recently John spent four years at Nanyang Ventures, an early expansion venture capital fund. John holds a PhD from the Australian National University, and a BA (Hons) from Sydney University. He is a Chartered Financial Analyst.

Warryn Robertson
Senior Vice President, Portfolio Manager/Analyst
Lazard Asset Management Pacific Co. (Sydney)

Warryn is a Portfolio Manager/Analyst with Lazard Asset Management Pacific in Sydney, Australia and has been working in the investment field since 1992. Prior to joining Lazard in April 2001, Warryn was an Associate Director at Capital Partners. Previously, Warryn worked at PriceWaterhouseCoopers Corporate Finance. Warryn holds an MBA from the Melbourne Business School (Melbourne University) and a B.Comm, University of Canberra.

Bertrand Cliquet, CFA
Senior Vice President, Portfolio Manager/Analyst
Lazard Asset Management Limited (London)

Bertrand Cliquet is a Portfolio Manager/Analyst with Lazard Asset Management Limited in London. Before joining the Firm in 2004, Bertrand worked for Goldman Sachs International as a Research Analyst. Earlier, he worked in the Mergers and Acquisitions group at Deutsche Bank, focusing on the utility and retail sectors. He also did an internship at Enskilda Securities in Paris, where he worked as an analyst covering the retail sector. Bertrand has been working in the investment field since 1999. He attained a business degree from HEC in Paris, with a major in Finance. Bertrand is fluent in both French and German.

Biographies
Global Listed Infrastructure Management Team

Matthew Landy
Senior Vice President, Portfolio Manager/Analyst
Lazard Asset Management LLC (New York)

Matthew Landy is a Portfolio Manager/Analyst with the Global Listed Infrastructure Team. He began working in the investment field in 1995. Prior to joining Lazard in 2005, Matt worked in the private equity industry where he was involved in early stage venture capital in Europe and management buy-out investing in Australia. Previously he was an Equity Analyst with Tyndall Investment Management. Matt has a B. Comm. and a BA from Monash University in Melbourne, Australia.

Anthony Rohrlach, CFA
Vice President, Research Analyst
Lazard Asset Management Pacific Co. (Sydney)

Anthony is a Research Analyst on the Lazard Global Listed Infrastructure team. He has been working in the investment field since 1999. Prior to joining Lazard in 2007, Anthony spent over eight years as a research analyst with UBS, the last three years of which he covered infrastructure and utilities companies. Anthony holds an Honours degree in Finance from the Australian National University.

Edward P. Keating
Senior Vice President, Client Portfolio Manager
Lazard Asset Management LLC (New York)

Edward Keating is a Senior Vice President and a Client Portfolio Manager for Lazard. He began working in the investment field in 2001, upon joining Lazard. He has a BA from Iona College.

Important Information

Certain information included herein is derived by Lazard in part from an MSCI index or indices (the "Index Data"). However, MSCI has not reviewed this product or report, and does not endorse or express any opinion regarding this product or report or any analysis or other information contained herein or the author or source of any such information or analysis. MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any Index Data or data derived there from. The MSCI Index Data may not be further redistributed or used as a basis for other indices or any securities or financial products.

Brookfield

Brookfield Global Infrastructure Securities (Ex-MLPs) Strategy

Alaska Retirement Management Board | December 5, 2013

Brookfield Investment Management Inc.

A Global Investment Manager: Focused on specialized equity and fixed income securities

- Specialist manager; niche asset class
  - Portfolio managers with direct infrastructure investment and operating experience
  - Deep and experienced investment team
  - $3.6 billion in long-only global infrastructure securities assets under management*
  - Brookfield owner/operator infrastructure platform
- True active management
  - Focus on excess returns
  - Exploit market inefficiencies and temporary dislocations
  - Best ideas globally
- Pure play infrastructure definition
  - Focus on asset owners
  - Visible long term cash flows
  - Compelling risk-adjusted return profile

*As of September 30, 2013

- History and Experience:
  - 30-year history of active investment in public securities markets*
  - Yield-oriented product offerings, reflecting core competencies and investment expertise
- Investment Style:
  - Focused investment strategies supported by Real Assets
  - Globally integrated value approach
  - Differentiation through operating experience and global platform
  - Partnership-based approach, investing alongside our clients

Brookfield Investment Management – A Registered Investment Advisor^

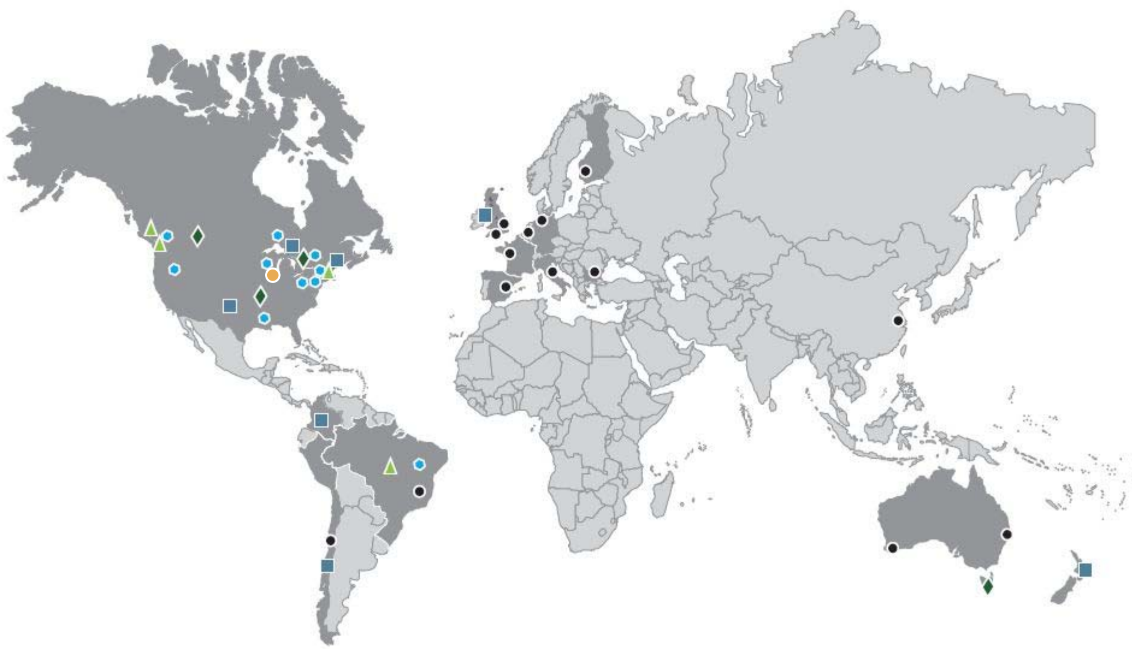
Property	Infrastructure	Corporate Debt	Fixed Income
Global REIT Strategies U.S. REIT Strategies Long/Short Strategies	Global Infrastructure Securities Long/Short Strategies	Global High Yield North American High Yield European High Yield	Insurance Asset Management Structured Products Long/Short Strategies

*Refers to Brookfield Asset Management Inc. and its affiliates
^Brookfield Investment Management Inc. is a U.S.-based SEC-registered investment advisor. Together with its subsidiaries and affiliates, Brookfield Investment Management also maintains licensed operations in the U.K. and Canada and is registered to provide investment services throughout Europe, the Middle East and Australia.

Global Infrastructure Operations with Local Presence

Over **100** professionals | **6,000** employees | **$47B** in AUM

NORTH AMERICA	SOUTH AMERICA	EUROPE	AUSTRALASIA
$27B AUM	**$11B AUM**	**$3B AUM**	**$6B AUM**
85 Professionals	19 Professionals	10 Professionals	23 Professionals



Transportation
30 ports, 3,200 km of toll roads and 5,100 km of rail operations in Europe, South America and Australia

Renewable Power
A leading producer of renewable power with 193 hydroelectric power plants and 11 wind farms with ~5,900 MW of installed capacity

Utilities
Portfolio of utility assets in North and South America, Europe and Australasia with 9,900 km of transmission lines

Energy
District energy business in North America and portfolio of natural gas pipelines and gas storage systems in the U.S. and Australasia

Timberlands & Agrilands
Over 3 million acres of high quality timberlands and agrilands in North and South America

Infrastructure Securities
Global infrastructure securities strategies offered by Brookfield Investment Management

Leading Operating Platforms With Scale on Four Continents

As of June 30, 2013; Assets under management for Brookfield Asset Management Inc. includes its affiliates

- Employ true active management
  - Focus on excess returns
  - Exploit market inefficiencies and temporary dislocations
  - Best ideas globally
- Utilize fundamental, bottom-up approach
- Invest where we possess competitive advantages
- Recognize that superior returns often require contrarian thinking
- Expect to meaningfully outperform the global infrastructure securities market over a cycle

	Sector Coverage	Regional Coverage	Years of Experience
Craig Noble, CFA	CEO, Co-Chief Investment Officer; Portfolio Manager	Global	15
Sam Arnold, CFA	Portfolio Manager	Global	15
Larry Antonatos	Product Manager	Global	20
Andrew Alexander	Transportation; Energy Infrastructure	Europe	9
Karim Benjelloun	Transportation; Energy Infrastructure	Asia Pacific	9
Stavros Koutsantonis, CFA	Transportation; Energy Infrastructure	North America; Latin America	9
Richard Wernick, CFA	Oil & Gas Pipelines; MLPs	North America	5
Thomas Miller	Investment analyst; Oil & Gas Pipelines	North America	3
Tyler Strong	Investment analyst; Oil & Gas Pipelines	North America	1
Steve Stubitz, CFA	Water; Local Gas Distribution Companies; Communications	North America; Europe	5
Oliver Chamberlain	Trader	Europe; MENA	13
Rob Kosar	Trader	Americas; Asia	17

Includes Brookfield Investment Management Inc.'s subsidiaries and affiliates.

Investment Universe

Quantitative Screening

Proprietary Analytical Framework (“Skyway”)

Key Screening Factors

- Asset level analysis
- Company level analysis
- Valuation analysis

Fundamental Analysis

- Desktop analysis
  - Cash flow projections
  - Balance sheet assessment
  - Valuation
- On-site due diligence
  - Asset visits
  - Management meetings
  - Regulatory due diligence
- Broader Brookfield platform
  - Leverage investment team experience and expertise

Investment Themes

- Economic outlook
- Industry fundamentals
- Geographic fundamentals
- Thematic views
- Investment themes and outlook integrated into bottom-up fundamental analysis

Portfolio Construction

- Ensure investment themes and relative valuation opportunities appropriately expressed in portfolio
  - Economic exposures
  - Industry exposures
  - Geographic exposures
  - Currency exposures
  - Diversification effects

Current Thoughts on Global Markets

- Macroeconomic environment generally positive
  - North America – continued macroeconomic improvement with political and monetary policy headwinds
  - Europe – region appears to be bottoming but maintain caution on the periphery
  - Asia Pacific – Japan poised for growth; decelerating growth outlook in China
- Investors seeking income through both real assets and equities
  - Expect interest rates to rise gradually over time
  - Real assets can provide inflation protection
  - Equities can provide attractive and growing income
- Global infrastructure poised for growth
  - Government budget constraints will continue to drive privatization of infrastructure assets
  - Energy and construction conglomerates will continue to spin off infrastructure assets to realize value
  - Capital flows into asset class indicate growing investor demand

Current Thoughts on Regional Markets

- North America
  - Oil and gas production will continue to grow, driving demand for new energy infrastructure
  - Changing flows of oil and gas will determine winners and losers among energy infrastructure companies
  - Communications towers will continue to benefit as smart phones and tablets proliferate
  - Monitoring Canadian housing situation, which could drive weakness in other areas of the Canadian economy
- Asia Pacific
  - Australia – resource based economy and related infrastructure will benefit as global growth accelerates
  - China and Japan – natural gas usage will increase, a positive for pipeline and local gas distribution companies
- Europe
  - Airport, seaport, and toll road traffic have bottomed
  - Favor infrastructure companies operating at “arms length” from governments
  - Valuations higher in UK relative to Continental Europe
- Latin America
  - Brazil – government implementing mixed regulations; favor infrastructure companies with most transparent regulatory impacts
  - Mexico – government supportive of private market participation in energy infrastructure ownership

As of September 30, 2013 and subject to change without notice. See Appendix for additional disclosures.

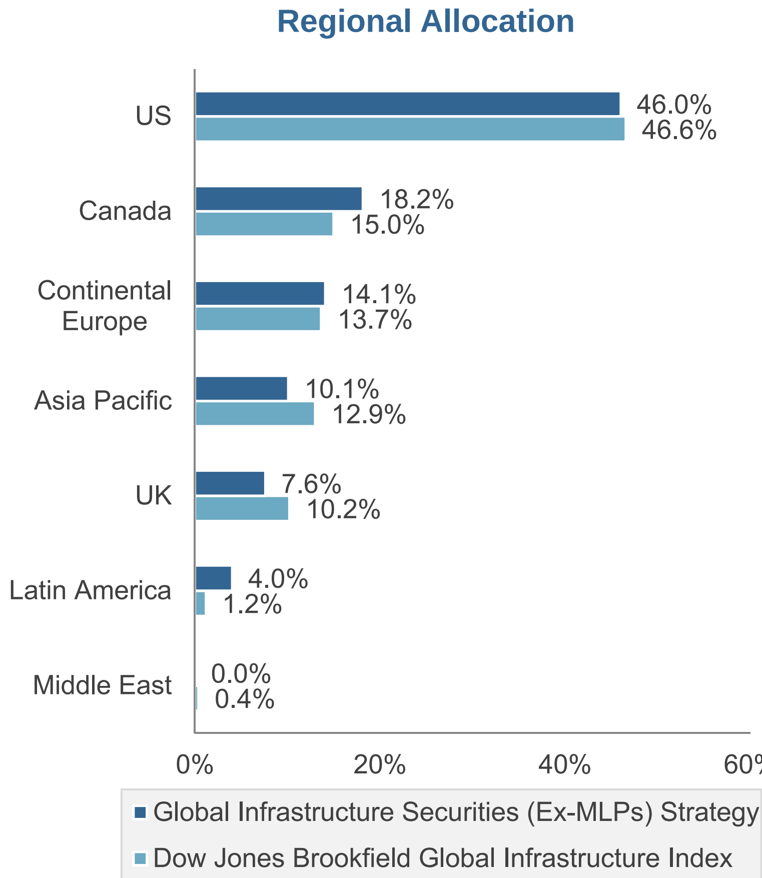
- Concentration in names and themes
  - Generally 30 to 50 securities
  - Top 10 holdings represent approximately 50% to 60% of total portfolio
- Individual holdings
  - High conviction/large cap 5% to 10%
  - Other 2% to 5%
- Active weights
  - Limited underweight positions
  - Typical overweight per position 1.0% to 3.0%
  - Total portfolio active weight generally approximately 100%

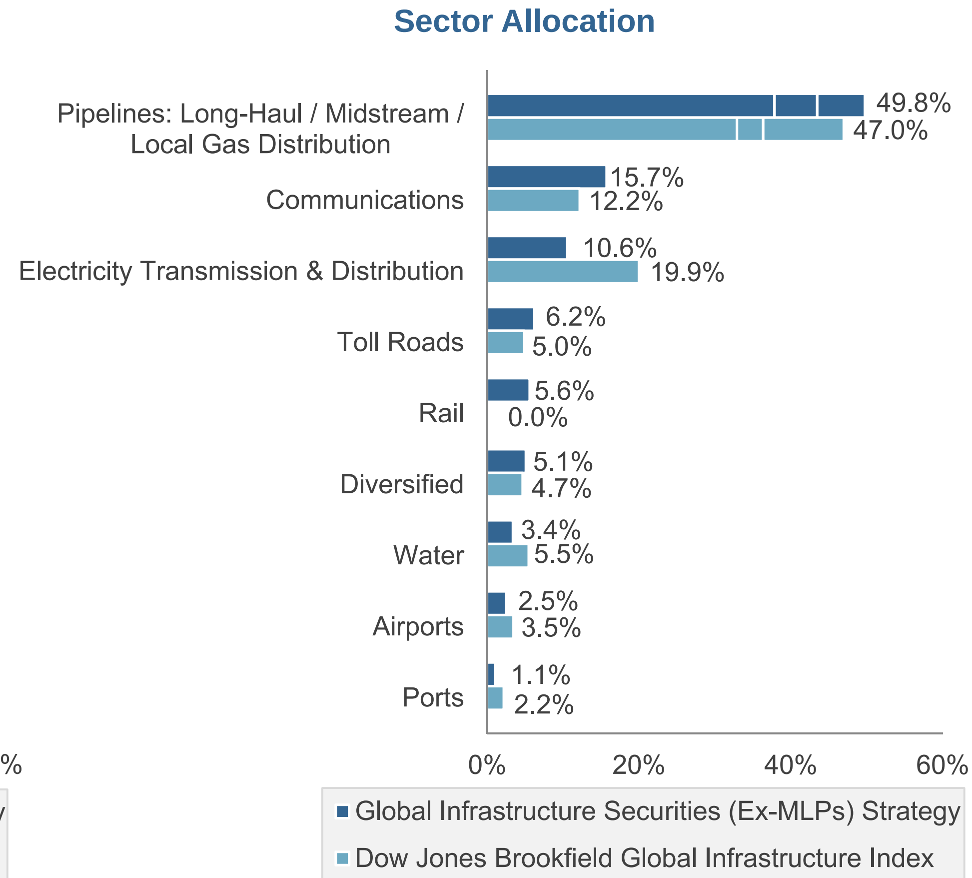
Portfolio Characteristics

	Current	Dow Jones Brookfield Global Infrastructure Index	Guideline
Assets in Strategy*/ Total Market Cap	$3.6 Billion	$785 Billion	N/A
Weighted Average Dividend Yield	3.5%	4.0%	N/A
Weighted Average Market Cap	$20.6 Billion	$17.4 Billion	N/A
Number of Holdings	44	94	30 to 50
Top 10 Holdings	50.4%	41.6%	N/A
Largest Holding	6.4%	6.7%	≤10%
Non-Benchmark	12.5%	N/A	≤30%

As of September 30, 2013. * Includes approximately $2.3 billion in the Brookfield Global Infrastructure Securities Strategy (includes MLPs). Subject to change without notice. Portfolio characteristics and performance information constitute supplemental information for purposes of GIPS. See Appendix for additional disclosures.

Global Infrastructure Securities (Ex-MLPs) Portfolio Characteristics





As of September 30, 2013

Sector and regional weights constitute supplemental information for purposes of GIPS. Weights and portfolio holdings are subject to change. See Appendix for additional disclosures.

Global Infrastructure Securities (Ex-MLPs) Key Holdings

Top Ten Holdings

Company	Sector	Region	Market Capitalization (USD Billion)	Infrastructure Strategy	Active Weight*
Enbridge Inc	Pipelines - Long-Haul	North America	$33.3	6.4%	1.0%
American Tower Corp	Communications	North America	$29.3	6.3%	1.7%
TransCanada Corp	Pipelines - Long-Haul	North America	$31.0	6.2%	1.4%
Spectra Energy Corp	Pipelines - Long-Haul	North America	$22.3	6.0%	2.4%
National Grid PLC	Electricity Transmission & Distribution	Europe	$43.0	5.1%	1.5%
Crown Castle International Corp	Communications	North America	$21.4	4.5%	1.2%
The Williams Companies, Inc.	Pipelines - Long-Haul	North America	$22.8	4.5%	0.6%
Sempra Energy	Pipelines - Long-Haul	North America	$20.7	4.4%	1.4%
Snam Rete Gas SpA	Pipelines - Long-Haul	Europe	$18.1	3.6%	2.0%
Northeast Utilities	Electricity Transmission & Distribution	North America	$12.9	3.5%	1.5%
Total				**50.4%**	

Top Five Overweight Positions

Company	Sector	Region	Market Capitalization (USD Billions)	Infrastructure Strategy	Active Weight*
Union Pacific Corp	Rail	North America	$73.6	3.0%	3.0%
Spectra Energy Corp	Pipelines - Long-Haul	North America	$22.3	6.0%	2.4%
Canadian National Railway Co	Rail	North America	$43.9	2.0%	2.0%
Snam Rete Gas SpA	Pipelines - Long-Haul	Europe	$18.1	3.6%	2.0%
CCR SA	Toll Roads	Latin America	$13.8	2.0%	2.0%
Total				**16.5%**	

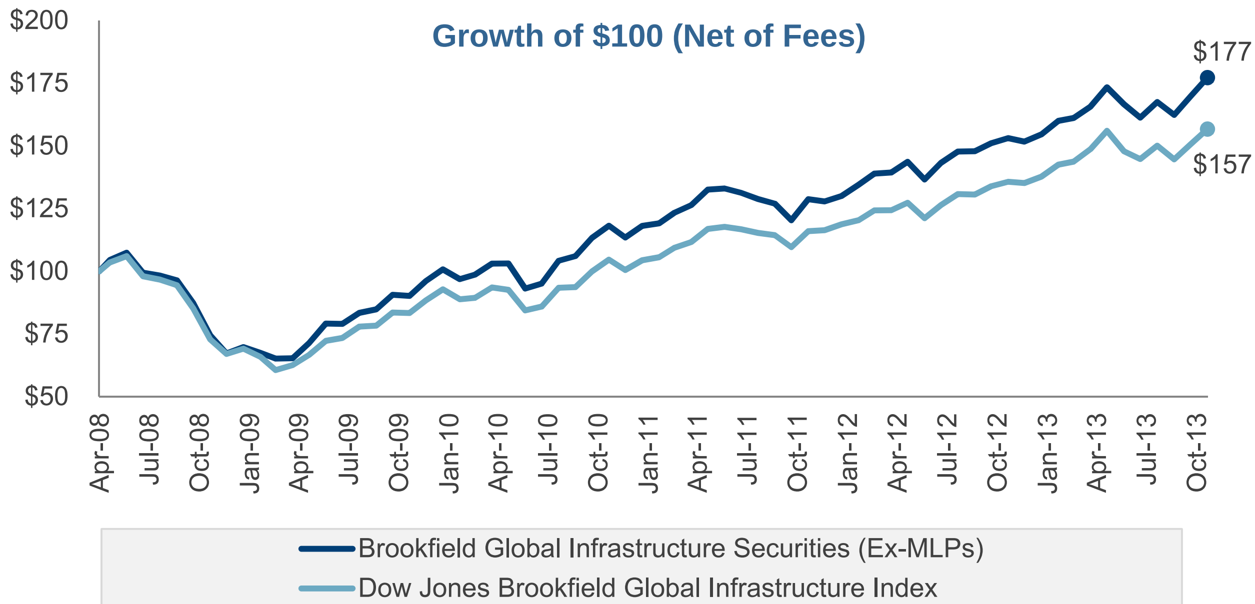
As of September 30, 2013. *Relative to the Dow Jones Brookfield Global Infrastructure Index. 10 largest holdings and 5 largest overweight positions constitute supplemental information for purposes of GIPS. Weights and portfolio holdings are subject to change. The mention of specific securities is not a recommendation or solicitation for any person to buy, sell or hold any particular security. The securities identified and described do not represent all of the securities purchased, sold or recommended for client accounts. The reader should not assume that an investment in the securities identified was or will be profitable. See Appendix for additional disclosures.

- Client-oriented culture
  - Key principals have long history as fiduciaries
  - Internal controls and technology aid compliance and operations
  - Global compliance and corporate governance framework and experience
- Disciplined oversight process
  - Formal quarterly Investment Committee meeting
  - Formal monthly review of investment strategy, performance, legal and compliance
  - Ongoing detailed review of performance attribution with standard weekly process
  - Daily compliance monitoring
- Portfolio level controls
  - Mandate and product specifications
  - Risk analysis and performance evaluation
  - Portfolio construction and benchmark considerations
  - Trade allocation systems

- Key Risk Management Tools
  - Proprietary Screening Tools
  - Global Equity Attribution
  - Return Contribution Model
  - Risk Metrics Tracker
  - Currency Hedging Monitor
  - Portfolio / Index Simulation
- External Sources
  - FactSet
  - Bloomberg
  - Advent APX
  - Risk API

Supplemental Performance Summary (Gross and Net of Fees)

Supplemental Performance	Year to Date	1 Year	3 Year	5 Year	Since Inception (Apr-2008)
Brookfield Global Infrastructure (Ex-MLPs) Strategy (Gross of Fees)	15.14%	16.33%	15.07%	19.57%	11.46%
Brookfield Global Infrastructure (Ex-MLPs) Strategy (Net of Fees)	14.69%	15.74%	14.47%	18.91%	10.85%
Dow Jones Brookfield Global Infrastructure Index	13.77%	15.50%	14.42%	16.56%	8.42%
Relative Performance (Gross of Fees)	**1.37%**	**0.83%**	**0.65%**	**3.01%**	**3.04%**



As of October 31, 2013. Refers to the Global Infrastructure Securities (Ex-MLPs) Composite.

Performance information shown constitutes supplemental information for purposes of the Global Investment Performance Standards (GIPS®) and is supplemental to the GIPS®-compliant presentation included in the Appendix and may only be used in conjunction with the included GIPS®-compliant presentation. Gross performance results for the universe do not reflect the deduction of advisory fees, brokerage or other commissions and other expenses a client would have paid and returns will be reduced accordingly. The net of fees returns reflect the deduction of actual fees as determined by the fee schedule for the individual strategy. Actual fees will vary depending on, among other things, the applicable fee schedule and account size. Performance data quoted represents past performance, which does not guarantee future results. See Appendix for additional disclosures.

Global Infrastructure Securities (Ex-MLPs) Fee Schedule

- Minimum investment for separate accounts: $25 million

- Fee Schedule:
  - First $25 million: 75 basis points
  - Next $25 million: 70 basis points
  - Next $50 million: 65 basis points
  - Thereafter: 60 basis points

Global Infrastructure Securities – An Essential Asset Class

- Global infrastructure securities – a unique equity market opportunity
  - Access to hard assets that provide the potential for cash flow stability + predictable growth
  - Meaningful current income
  - Attractive relative returns and capital appreciation
  - Potential for inflation protection

- Young asset class – poised for growth
  - Inefficiency and complexity create opportunity
  - Potential for outsized returns before asset class matures
  - Few dedicated infrastructure managers

- Brookfield[1] – a leader in infrastructure investment
  - 100+ years of experience owning and operating infrastructure assets
  - Specialist manager; niche asset class
  - True active management
  - Pure play infrastructure definition

[1] Refers to Brookfield Asset Management's affiliates and subsidiaries.

Brookfield

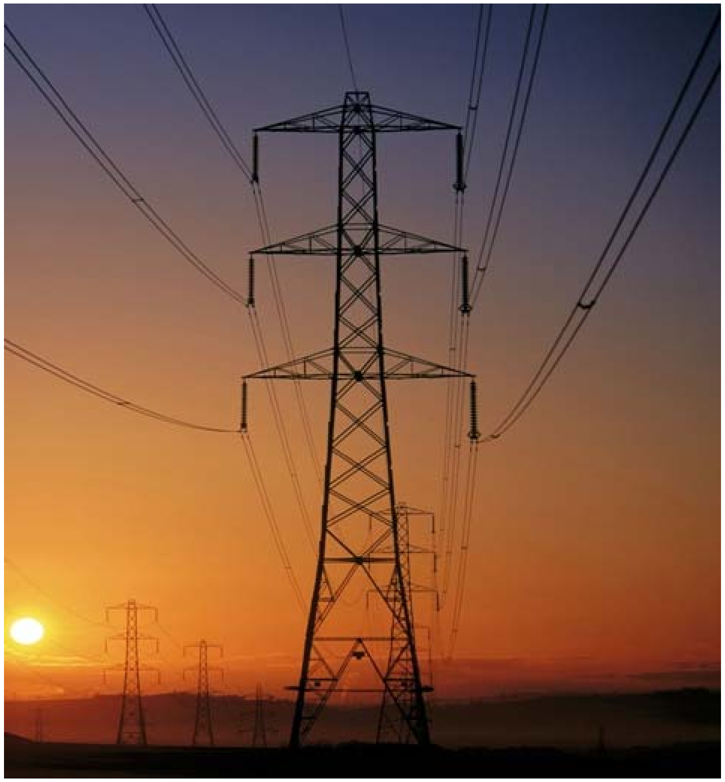
Appendix




- Global infrastructure securities – a unique equity market opportunity
  - Access to hard assets that provide the potential for cash flow stability + predictable growth
  - Meaningful current income
  - Attractive relative returns and capital appreciation
  - Potential for inflation protection

- Young asset class – poised for growth
  - Inefficiency and complexity create opportunity
  - Potential for outsized returns before asset class matures
  - Few dedicated infrastructure managers

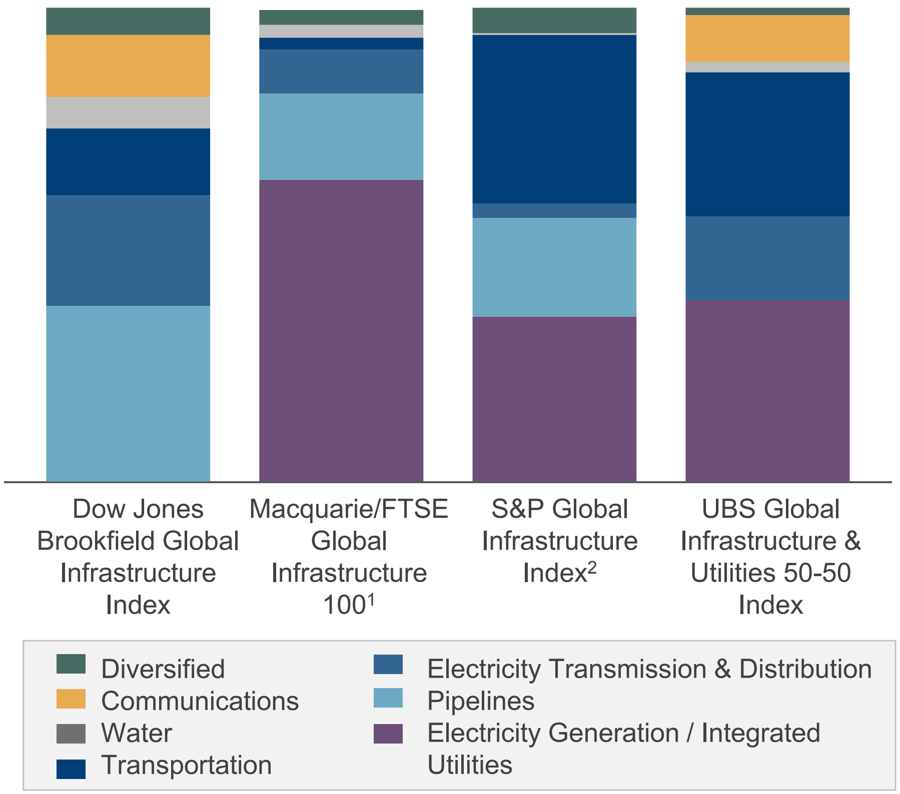
- Critical backbone to the global economy
- Assets that provide essential products or services
  - Relatively inelastic demand
  - Powerful combination of cash flow stability with growth
- Inflation-linked revenues
- High barriers to entry and often limited or no competition
- Growing infrastructure spending gap requiring private investment



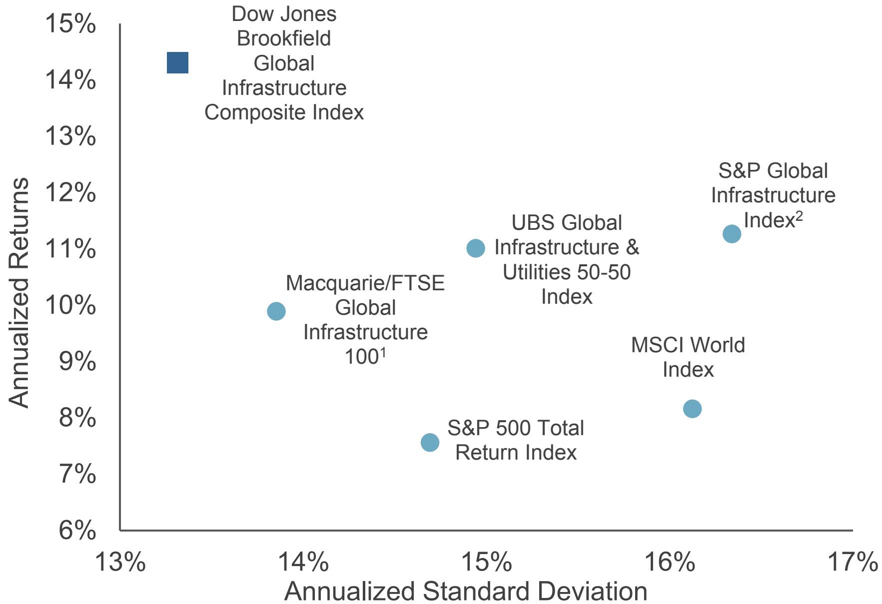
Pure-Play Infrastructure Companies versus Infrastructure Service Companies

	Pure-Play Infrastructure Companies	Infrastructure Service Companies
Our Focus	**Yes**	**No**
Definition	Owners of long-life infrastructure assets	Service companies relating to infrastructure assets
Typical Cash Flow Profile	– Predictable for multiple decades – High free cash flow yield – Stable long term growth	– Volatile – Thin profit margins and free cash flow yield – Minimal visibility beyond 2 to 3 years
Examples	✓ Toll roads ✓ Airports ✓ Sea ports ✓ Oil and gas pipelines ✓ Electricity transmission lines ✓ Water pipelines and treatment plants ✓ Communication towers	✗ Construction companies ✗ Cement manufacturers ✗ Machinery manufacturers ✗ Energy service companies ✗ Mining companies ✗ Telecom services ✗ Airlines and shipping

Infrastructure Indices by Sector



10-Year Risk Reward Analysis



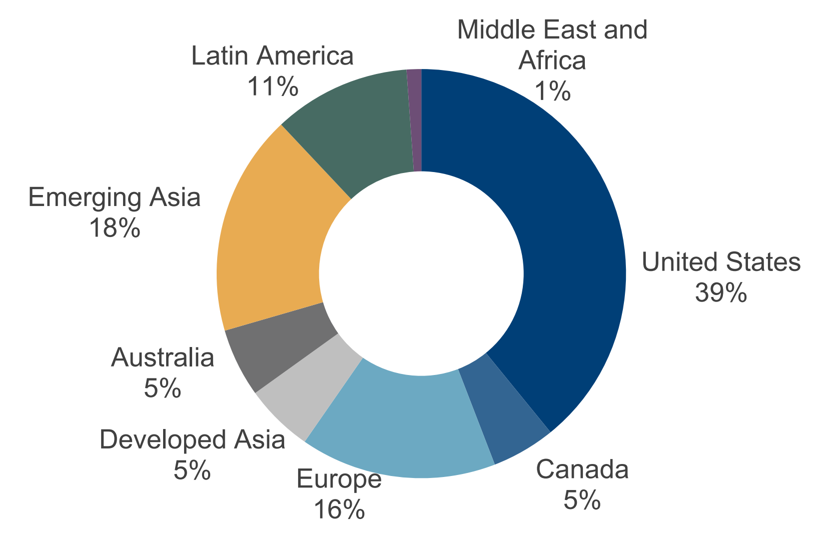
As of September 30, 2013 and represents rolling 10 year performance metrics. Information is shown for illustrative purposes only. Source: Brookfield Investment Management research; Bloomberg; FactSet; UBS.

1. Refers to the iShares II Plc - iShares FTSE Macquarie Global Infrastructure 100, an Exchange Traded Fund ("ETF") that aims to track the performance of the Macquarie Global Infrastructure 100 Index as closely as possible.
2. Refers to the iShares S&P Global Infrastructure Index Fund (IGF), an ETF that seeks investment results corresponding generally to the price and yield performance, before fees and expenses, of the S&P Global Infrastructure Index.

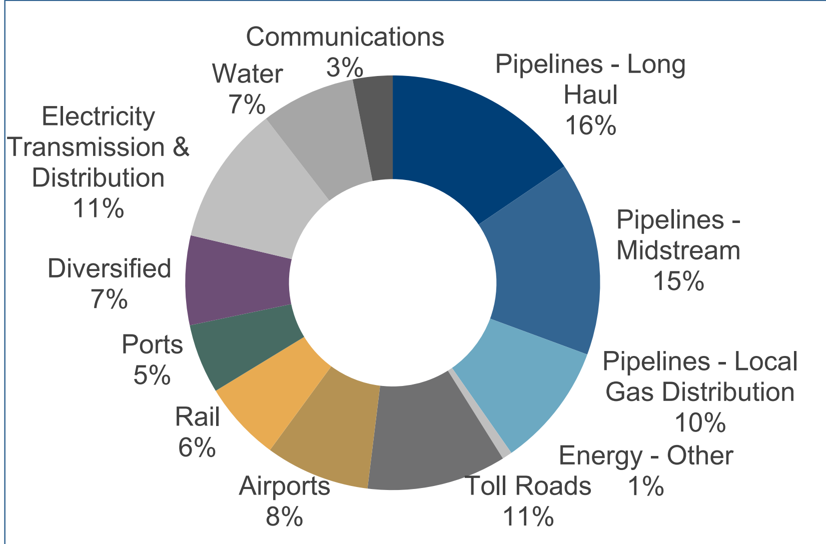
Brookfield Investment Management cannot warrant that returns or risk levels will meet historical percentages shown above. Any comparisons, assertions and conclusions regarding the performance of the Dow Jones Brookfield Global Infrastructure Composite Index during the time period prior to its initial calculation on July 14, 2008 is based on back-testing (i.e., calculations of how the index might have performed during that time period if the index had existed). Back-tested performance information is hypothetical and based on index methodology applied and calculated by S&P Dow Jones Indices and is provided solely for information purposes. See Appendix for additional disclosures.

- Diversification across geographies and infrastructure sectors
  - Total market capitalization of approximately $1.6 trillion
  - Approximately 260 companies
  - Approximately 30% in emerging markets

Global Infrastructure Securities by Region



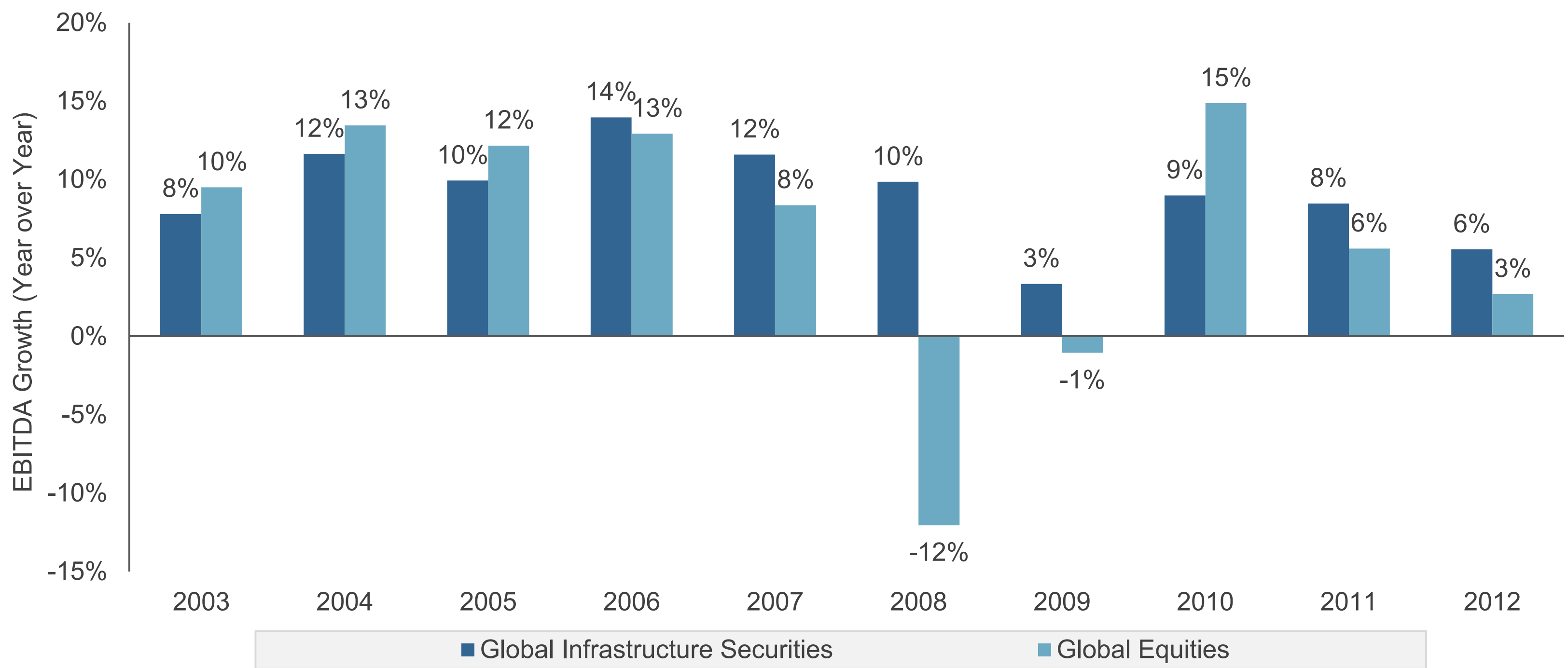
Global Infrastructure Securities by Sector



As of September 30, 2013. Region and sector weights are based on equal weighted allocations by company in the investment universe. The universe is defined by Brookfield Investment Management as including companies classified as one of the infrastructure related sectors listed above. The universe is shown for illustrative purposes only and is subject to change. Source: Brookfield Investment Management research

- Potential for cash flow stability + predictable growth, frequently linked to inflation
- Attractive current income
- Strong relative and risk-adjusted performance
- Low correlations to other asset classes
- Hard asset investing with daily liquidity and pricing
- Active portfolio management by experienced investment manager to exploit inefficiencies

- Annual cash flow growth of 3% to 14% over the past 10 years
- Historical dividend growth of 6.0% per annum over the past 10 years



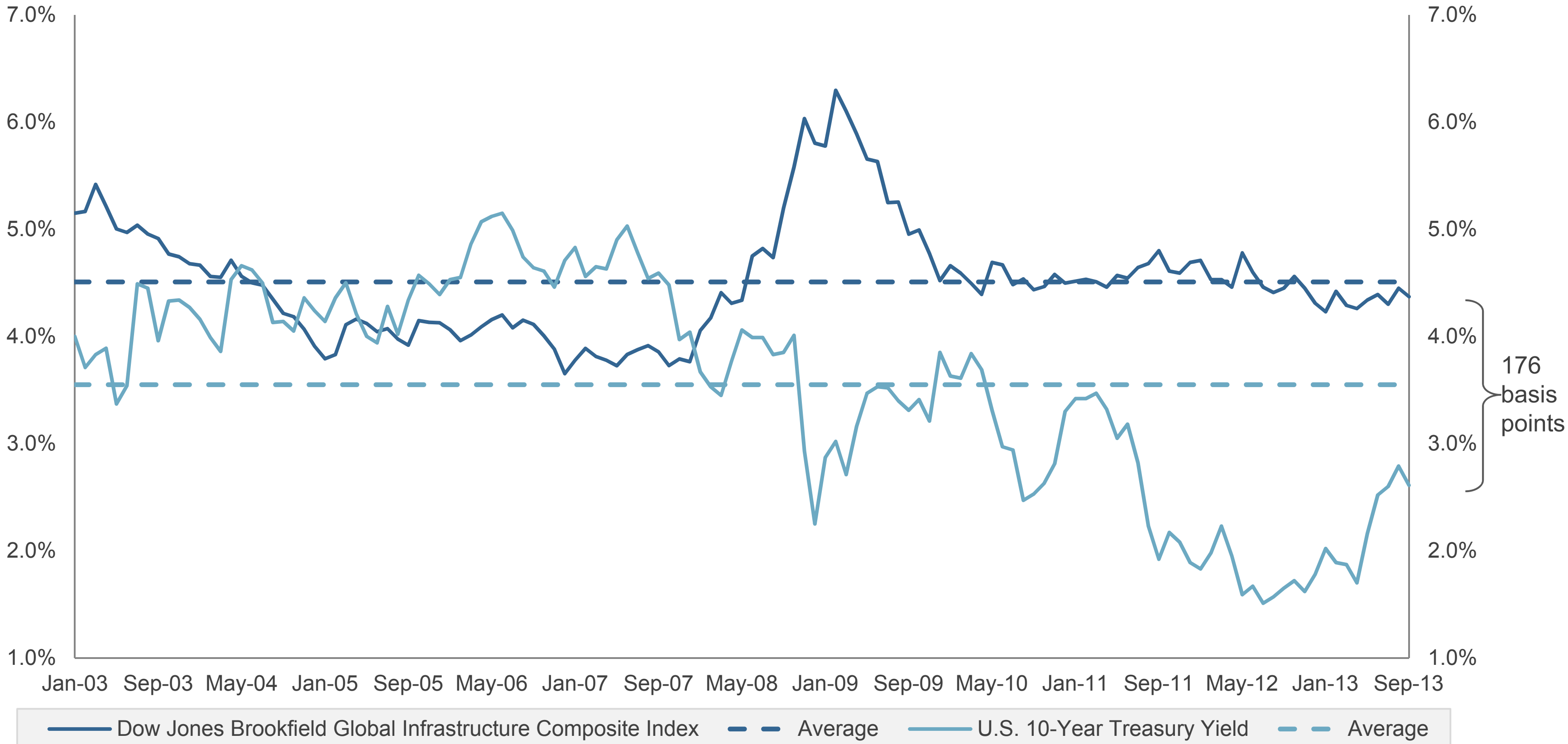
As of December 31, 2012 and represents rolling 10 year metrics. Global Infrastructure and Global Equities represent the Dow Jones Brookfield Global Infrastructure Composite Index and MSCI World Index, respectively. Global Infrastructure EBITDA growth is derived using the constituents of the Dow Jones Brookfield Global Infrastructure Composite Index.

Brookfield Investment Management cannot warrant that cash flow levels will meet historical percentages shown above. Any comparisons, assertions and conclusions regarding the performance of the Dow Jones Brookfield Global Infrastructure Composite Index during the time period prior to its initial calculation on July 14, 2008 is based on back-testing (i.e., calculations of how the index might have performed during that time period if the index had existed). Back-tested performance information is hypothetical and based on index methodology applied and calculated by S&P Dow Jones Indices and is provided solely for information purposes. See Appendix for additional disclosures.

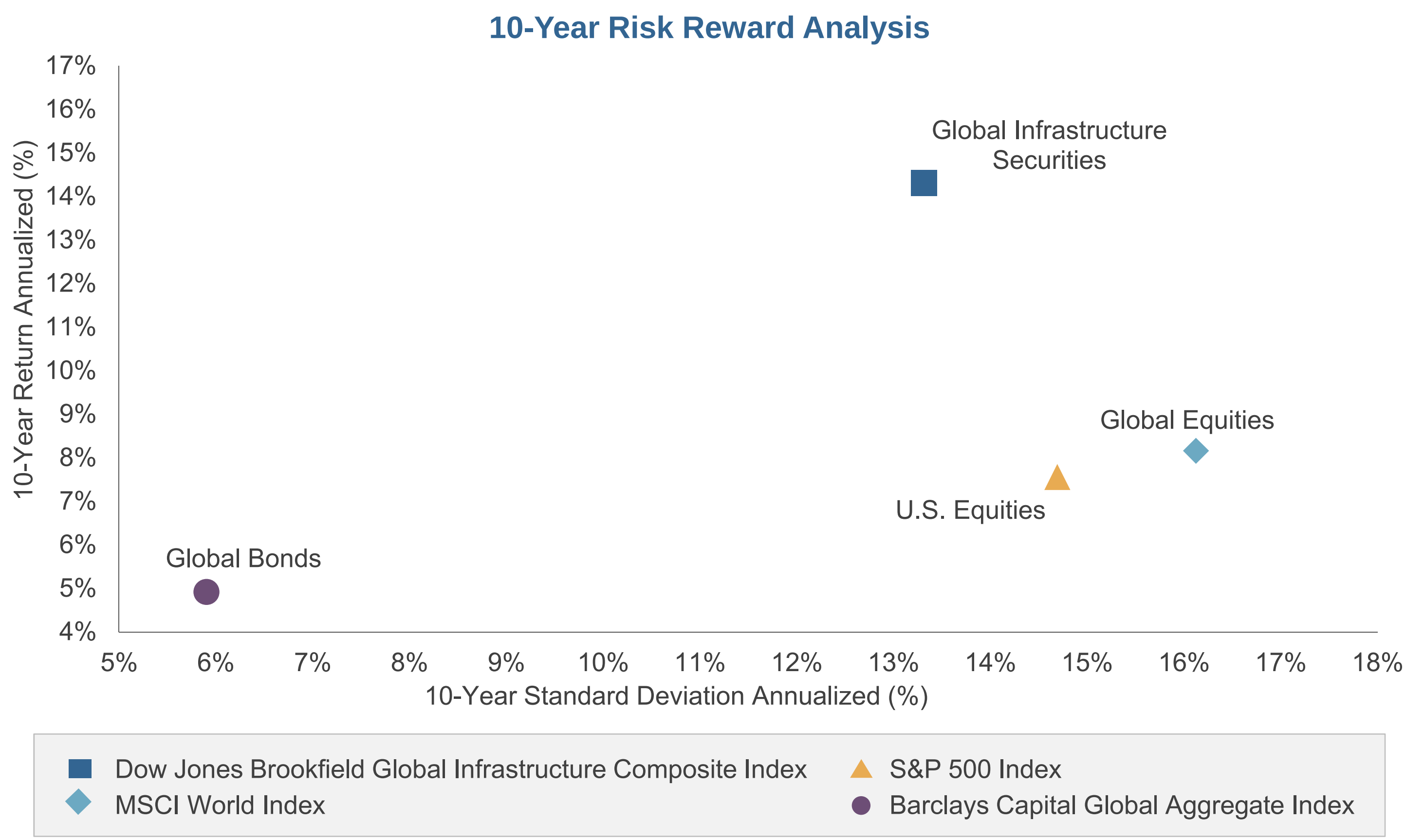
Note: Median EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization).

Source: Brookfield Investment Management research and estimates; FactSet; S&P Dow Jones Indices; Merrill Lynch Global Quantitative Strategy; MSCI; IBES; Worldscope.

Historical Global Infrastructure Securities Yields versus U.S. Treasury Notes

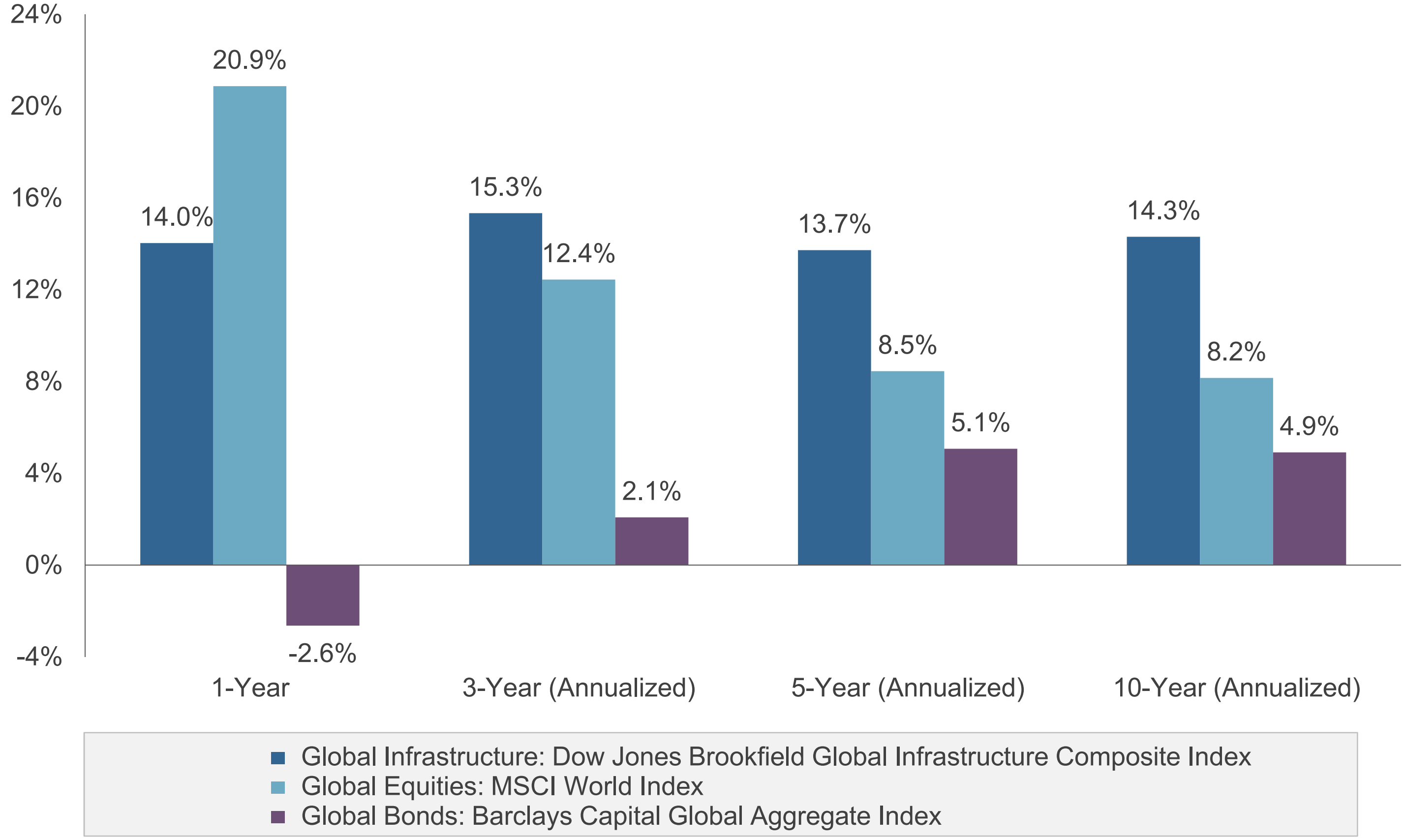


As of September 30, 2013. Source: Bloomberg; S&P Dow Jones Indices. Time period reflects longest available dataset of the Dow Jones Brookfield Global Infrastructure Composite Index. Brookfield Investment Management cannot warrant that dividend yield levels will meet historical percentages shown above. Any comparisons, assertions and conclusions regarding the performance of the Dow Jones Brookfield Global Infrastructure Composite Index during the time period prior to its initial calculation on July 14, 2008 is based on back-testing (i.e., calculations of how the index might have performed during that time period if the index had existed). Back-tested performance information is hypothetical and based on index methodology applied and calculated by S&P Dow Jones Indices and is provided solely for information purposes. See Appendix for additional disclosures.



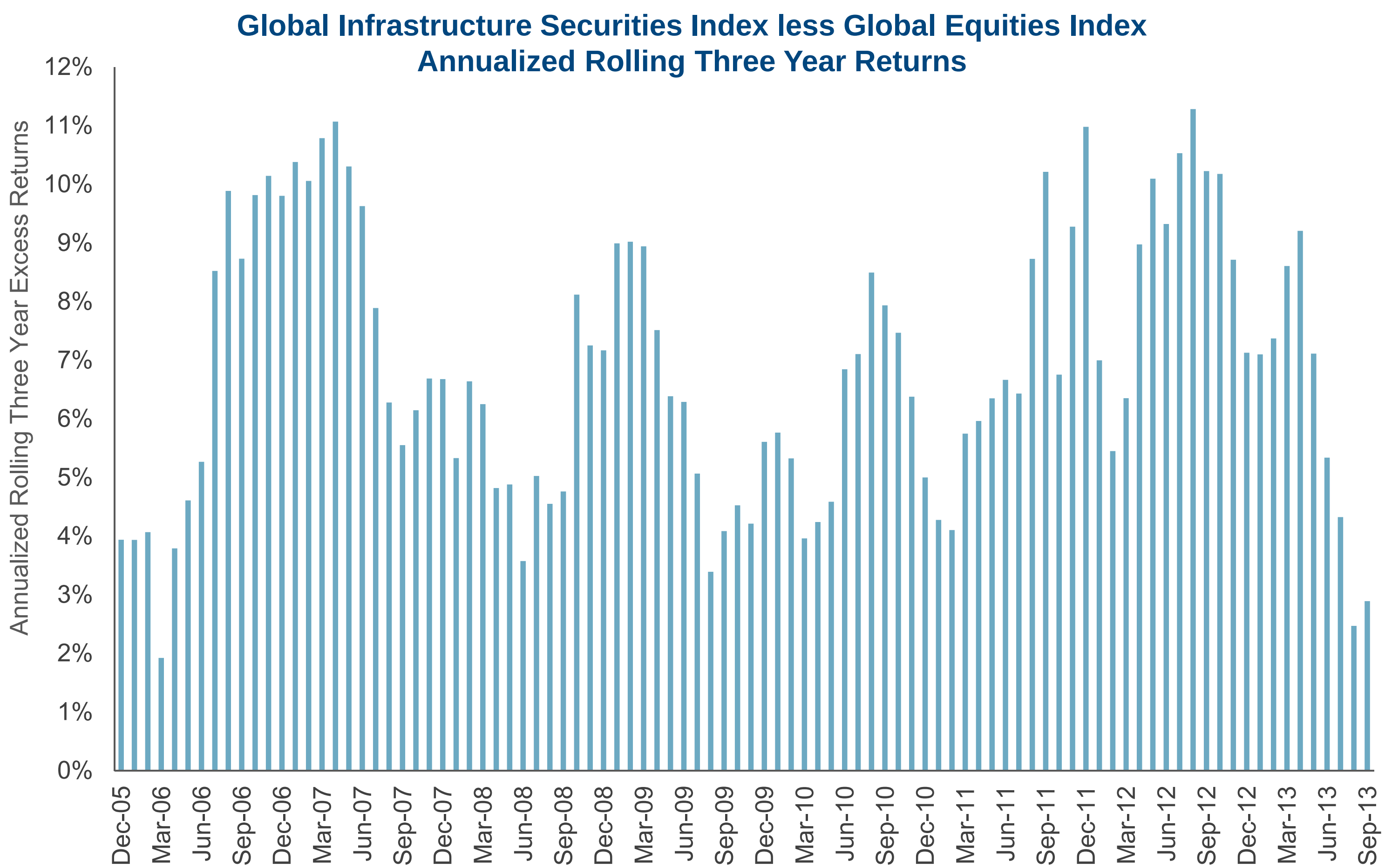
As of September 30, 2013 and represents rolling 10 year performance metrics. Source: Barclays Capital Inc.; Bloomberg; S&P Dow Jones Indices. Shown in US Dollars.
Brookfield Investment Management cannot warrant that returns or risk levels will meet historical percentages shown above. Any comparisons, assertions and conclusions regarding the performance of the Dow Jones Brookfield Global Infrastructure Composite Index during the time period prior to its initial calculation on July 14, 2008 is based on back-testing (i.e., calculations of how the index might have performed during that time period if the index had existed). Back-tested performance information is hypothetical and based on index methodology applied and calculated by S&P Dow Jones Indices and is provided solely for information purposes. Past performance is not indicative of future performance and the value of investments and the income derived from those investments can fluctuate. Future returns are not guaranteed and a loss of principal may occur. See Appendix for additional disclosures.

Historical Total Return of Indexes



As of September 30, 2013 and shown in US dollars. Represents rolling performance metrics. Source: Barclays Capital Inc., Bloomberg; S&P Dow Jones Indices. Brookfield Investment Management cannot warrant that returns will meet historical percentages shown above. Any comparisons, assertions and conclusions regarding the performance of the Dow Jones Brookfield Global Infrastructure Composite Index during the time period prior to its initial calculation on July 14, 2008 is based on back-testing (i.e., calculations of how the index might have performed during that time period if the index had existed). Back-tested performance information is hypothetical and based on index methodology applied and calculated by S&P Dow Jones Indices and is provided solely for information purposes. Past performance is not indicative of future performance and the value of investments and the income derived from those investments can fluctuate. Future returns are not guaranteed and a loss of principal may occur. See Appendix for additional disclosures.

A History of Outperformance over Global Equities



As of September 30, 2013. Global Infrastructure and Global Equities represent the Dow Jones Brookfield Global Infrastructure Composite Index and MSCI World Index, respectively. Time period reflects longest available dataset of the Dow Jones Brookfield Global Infrastructure Composite Index. Source: Bloomberg; S&P Dow Jones Indices. Shown in US Dollars.
Brookfield Investment Management cannot warrant that returns will meet historical percentages shown above. Any comparisons, assertions and conclusions regarding the performance of the Dow Jones Brookfield Global Infrastructure Composite Index during the time period prior to its initial calculation on July 14, 2008 is based on back-testing (i.e., calculations of how the index might have performed during that time period if the index had existed). Back-tested performance information is hypothetical and based on index methodology applied and calculated by S&P Dow Jones Indices and is provided solely for information purposes. Past performance is not indicative of future performance and the value of investments and the income derived from those investments can fluctuate. Future returns are not guaranteed and a loss of principal may occur. See Appendix for additional disclosures.

Senior Management

Craig Noble, CFA – CEO, Co-Chief Investment Officer and Portfolio Manager

Mr. Noble is CEO and Co-Chief Investment Officer of Brookfield Investment Management as well as Portfolio Manager for Brookfield's global infrastructure securities business. Based in Chicago, Mr. Noble oversees all aspects of portfolio management and business development related to the firm's public equity and credit securities investment strategies. Additionally, Mr. Noble is a portfolio manager for the firm's global infrastructure securities platform, which he has led since its inception in 2008. Mr. Noble has over 15 years of investment experience and has held multiple positions within Brookfield over the last 9 years, including significant roles within capital markets activities and infrastructure investment. Prior to this, Mr. Noble spent five years with the Bank of Montreal, focused on credit analysis, corporate lending and corporate finance. Mr. Noble holds the Chartered Financial Analyst designation and has a Masters degree from York University's Schulich School of Business and a Commerce degree from Mount Allison University.

Kim G. Redding

Mr. Redding is Chief Investment Strategist of Brookfield Asset Management and Co-Chief Investment Officer of Brookfield Investment Management. In this capacity, Mr. Redding advises on global investment strategy across Brookfield's portfolio of assets under management, including the firm's capital markets investment activities. Additionally, Mr. Redding is responsible for Brookfield's thought leadership initiatives related to Real Assets. Mr. Redding previously led Brookfield's public securities investment platform and has over 30 years of Real Asset investment experience. Since 1986, he has founded or co-founded three investment advisory firms specializing in the management of institutional accounts, with a particular focus on real estate and infrastructure. Mr. Redding has a Bachelor of Arts degree in Finance with an emphasis in Real Estate from California State University, Fullerton. Mr. Redding is a member of the Dean's Advisory Board for the College of Business & Economics at California State University, Fullerton.

Jon Tyras – Managing Director, Chief Financial Officer and General Counsel

Mr. Tyras is the Chief Financial Officer and General Counsel overseeing Brookfield's public equity and credit securities investment platform. Mr. Tyras maintains responsibility for the Legal and Compliance, Human Resources, Finance & Accounting and Operations teams and is significantly involved in all aspects of business development and administration. Additionally, Mr. Tyras contributes to the establishment and implementation of corporate strategy and growth initiatives. Prior to joining Brookfield, Mr. Tyras spent eight years as a capital markets attorney with Paul Hastings LLP after beginning his career with Ernst & Young LLP. Mr. Tyras earned Bachelor of Science in Business Administration degrees in finance and accounting from Georgetown University and a Juris Doctorate from the University of Pennsylvania Law School.

Kevin T. English – Chief Operating Officer

Mr. English is the Chief Operating Officer based in Chicago. He oversees the portfolio operations across Brookfield Investment Management's public equities and fixed income securities platform. Mr. English has over 14 years of operations experience including 12 years at J.P. Morgan in both New York and London. Mr. English holds a Bachelors of Arts in Economics from the College of the Holy Cross and an MBA from the Graduate School of Business at Columbia University.

Global Infrastructure Securities

Craig Noble, CFA – CEO, Co-Chief Investment Officer and Portfolio Manager

Mr. Noble is CEO and Co-Chief Investment Officer of Brookfield Investment Management as well as Portfolio Manager for Brookfield's global infrastructure securities business. Based in Chicago, Mr. Noble oversees all aspects of portfolio management and business development related to the firm's public equity and credit securities investment strategies. Additionally, Mr. Noble is a portfolio manager for the firm's global infrastructure securities platform, which he has led since its inception in 2008. Mr. Noble has over 15 years of investment experience and has held multiple positions within Brookfield over the last 9 years, including significant roles within capital markets activities and infrastructure investment. Prior to this, Mr. Noble spent five years with the Bank of Montreal, focused on credit analysis, corporate lending and corporate finance. Mr. Noble holds the Chartered Financial Analyst designation and has a Masters degree from York University's Schulich School of Business and a Commerce degree from Mount Allison University.

Sam Arnold, CFA – Director and Portfolio Manager

Mr. Arnold is a Portfolio Manager for Brookfield's global infrastructure securities business. Mr. Arnold is responsible for coverage of the North American infrastructure market as well as the development and growth of Brookfield's listed infrastructure strategies. Mr. Arnold has 15 years of infrastructure investment experience, including sell-side research and analysis in the U.S. pipeline sector at Credit Suisse. Additionally, Mr. Arnold was previously an analyst for a long/short energy infrastructure fund at a Chicago-based multi-strategy hedge fund. Trained as an engineer, Mr. Arnold began his career with Exxon USA, where he spent six years focusing on the design, construction, and operation of energy infrastructure assets. Mr. Arnold holds the Chartered Financial Analyst designation and has an MBA from Tulane University and a BS with honors in Civil Engineering from the University of Illinois.

Andrew Alexander – Vice President

Mr. Alexander undertakes fundamental research focusing on European infrastructure companies. He joined the firm in October 2008 and is based in Chicago. Mr. Alexander was previously with SNL Financial, specializing in the energy sector, encompassing power, natural gas and coal and he also launched full analysis of Master Limited Partnerships. Mr. Alexander has a Masters degree in Corporate Finance from the SDA Bocconi School of Management in Milan, Italy as well as a Bachelor of Arts degree from the University of Virginia.

Karim Benjelloun – Vice President

Mr. Benjelloun is a Vice President for the firm's global infrastructure securities strategies and is based in Chicago. Mr. Benjelloun has over nine years of professional experience, including as a long/short equity analyst at Soros Fund Management, Trivium Capital Management, and Lehman Brothers. Mr. Benjelloun earned a BS in Electrical Engineering from the University of Illinois at Urbana-Champaign and an MBA with concentrations in Analytic Finance, Economics, and International Business from the University of Chicago Booth School of Business.

Global Infrastructure Securities

Stavros Koutsantonis, CFA – Vice President

Mr. Koutsantonis has nine years of professional investing experience across a number of infrastructure and industrial sectors globally. Mr. Koutsantonis is based in Chicago and his research coverage includes Latin American infrastructure, US utilities and diversified industrial and infrastructure companies. He was previously with OmniVista Capital Management (a Millennium Fund) and prior to that at Fidelity Management Research Company for three years. While at Fidelity, in addition to research analysis, Mr. Koutsantonis was a Portfolio Manager for the firm's Select Environmental Fund. Prior to Fidelity, he spent three years covering Industrials at Banc of America Securities. Mr. Koutsantonis has a BA from Yale, an MBA from Wharton and holds the CFA designation.

Richard Wernick, CFA – Vice President

Mr. Wernick is an equities analyst for the firm's global infrastructure team and is responsible for covering North American infrastructure securities. Prior to joining Brookfield Investment Management, he was an attorney at Cahill Gordon & Reindel in New York where he focused on securities offerings. His experience included analyzing covenant structures, reviewing merger documentation, and monitoring regulatory activity and litigation. Prior to attending law school Mr. Wernick was an energy equity analyst at Friedman Billings Ramsey where he focused on exploration and production companies and pipelines. Mr. Wernick earned a BS in Business Administration with honors and distinction (Finance Concentration) from the Kenan Flagler Business School at the University of North Carolina and a J.D. from New York University School of Law. He also holds the Chartered Financial Analyst designation.

Thomas Miller – Associate

Mr. Miller, an Associate, joined the firm in 2013 with three years of experience and is a member of the infrastructure investment team based in Chicago. Mr. Miller's responsibilities will be primarily covering U.S. Energy Infrastructure securities, along with supporting the general operations of the team. He started his career at FactSet. Mr. Miller graduated from Indiana University with a Bachelor of Science degree in Finance.

Tyler Strong – Associate

Mr. Strong, an Associate, joined the firm in 2012 as a member of the infrastructure investment team and is based in Chicago. As an investment analyst, his responsibilities include supporting the general operations of the team. Mr. Strong graduated from the University of Wisconsin-Madison with a Bachelor of Business Administration degree focusing on Finance, Investment & Banking and Accounting.

Steve Stubitz, CFA – Associate

Mr. Stubitz is an Associate responsible for assisting with coverage of North American infrastructure companies and supporting the general operations of the team. Mr. Stubitz is based in Chicago. Mr. Stubitz holds a bachelor of Business Administration degree from the University of Wisconsin-Madison and the Chartered Financial Analyst designation.

Product Management

Larry Antonatos – Director and Product Manager, Global Equities

Mr. Antonatos is Director and Product Manager of the firm's equity business. Working in partnership with the global portfolio management teams, Mr. Antonatos is responsible for the development and growth of Brookfield's equity investment strategies. In this capacity, Mr. Antonatos is involved in the marketing and positioning of the firm's equity products to the global investment community. Prior to joining Brookfield, Mr. Antonatos was a portfolio manager for a US REIT strategy for 10 years, managing $6 billion in assets. With more than 20 years of experience in investment management and business development, Mr. Antonatos began his career as a civil engineer, designing transportation infrastructure. Mr. Antonatos has a Master of Business Administration from the Wharton School and a Bachelor of Engineering from Vanderbilt University.

Trading

Oliver Chamberlain – Director

Mr. Chamberlain is a Director and trader across several of the firm's investment strategies. Mr. Chamberlain is the Head of Trading on the European High Yield team. Additionally, he is responsible for trading the firm's Global REIT and Global Infrastructure equities. Mr. Chamberlain has 13 years of investment experience. Prior to joining Brookfield, he was with Pall Mall Investment Management Limited since 1999. Mr. Chamberlain is fluent in English and Italian.

Robert Kosar – Vice President

Mr. Kosar is a trader responsible for trading U.S. and Asian equities across the Brookfield Investment Management platform. Mr. Kosar has over 17 years of experience, of which seven have been at Brookfield. Prior to joining Brookfield Investment Management, he was a trader at Citadel, LLC in Chicago where he worked with the long/short and quantitative long/short desk. Prior to joining Citadel, Mr. Kosar was an option trader on the floor of the CBOE. Mr. Kosar earned a BA in Economics from the University of Chicago.

Marketing and Client Service

Richard P. Torykian, Jr. – Managing Director

Mr. Torykian is responsible for business development and client service within the U.S. and global institutional consultant, public and corporate plan sponsor, endowment and foundation, as well as sub-advisory marketplaces. He has over 18 years of experience in the industry and received a Bachelor of Arts degree in History from Yale University and a Masters in Business Administration from The Anderson School at the University of California, Los Angeles.

Global Infrastructure (Ex-MLPs) Composite Disclosures

Year	Composite Gross	Composite Net	3-Yr Composite Standard Deviation	Dow Jones Brookfield Global Infrastructure Index	3-Yr Benchmark Standard Deviation	Number of Accounts	Composite Dispersion	Composite AUM ($ millions)	Total Firm AUM ($ millions)
2012	19.50%	18.88%	13.14%	16.01%	12.20%	8	0.1%	877	16,623
2011	10.68%	10.06%	15.64%	13.75%	15.09%	6	0.2%	307	20,980
2010	17.90%	17.22%	N/A	12.46%	N/A	< 5	N/A	26	22,112
2009	45.29%	44.43%	N/A	34.24%	N/A	< 5	N/A	22	24,054
2008*	-29.94%	-30.23%	N/A	-30.86%	N/A	< 5	N/A	13	16,636

Compliance Statement
Brookfield 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. Brookfield Investment Management Inc. has been independently verified for the periods July 1, 2000 through December 31, 2012. The verification report is available upon request. 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.

Definition of the Firm
Brookfield Investment Management Inc. is a wholly owned subsidiary of Brookfield Asset Management. On October 1, 2009, Brookfield Redding LLC was integrated into Hyperion Brookfield Asset Management, Inc. to form a unified investment management platform known as Brookfield Investment Management Inc. ("BIM"). Following the formation of BIM, an Australian investment advisor evenly owned by BIM and AMP Capital AB Holdings Pty Ltd., AMP Capital Redding Investors Limited was renamed AMP Capital Brookfield Pty Limited. On March 21, 2011, BIM formed Brookfield Investment Management (UK) Limited and acquired a European high yield business. On June 1, 2011, AMP Capital Brookfield Pty Limited and Brookfield Investment Management (UK) Limited were included within the firm definition. Effective March 1, 2012, BIM, as a result of internalizing its operations and management of its equity platform and integrating its opportunistic platform, has redefined the firm by removing AMP Capital Brookfield Pty Limited from its definition and including Brookfield Investment Management (Canada) Inc. Brookfield Investment Management Inc. is headquartered in New York and has investment teams in Boston, Chicago, London, and Toronto. The firm provides clients investment management across core fixed income, high yield, structured investment products (Commercial MBS, Residential MBS and ABS) as well as global REITs and listed infrastructure securities.

Policies
Policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.

Composite Description
The Global Infrastructure Securities (Ex-MLPs) Composite contains fully discretionary Global Infrastructure Securities (Ex-MLPs) accounts with holdings concentrated in undervalued securities of publicly traded infrastructure companies. This composite was created on April 11, 2008.

Prior to October 1, 2009, the portfolio managers were affiliated with Brookfield Redding LLC, which was integrated into Hyperion Brookfield Asset Management, Inc. to form a unified investment management platform known as Brookfield Investment Management Inc. While these assets and individuals were part of the integration, the performance of Brookfield Redding LLC should not be interpreted as the actual historical performance of Brookfield Investment Management Inc. A complete list of composite descriptions is available upon request.

Prior to December 31, 2011 the Global Infrastructure Securities (Ex-MLPs) Composite was called the Global Infrastructure Composite.

Benchmark
The Dow Jones Brookfield Global Infrastructure Index is calculated and maintained by Dow Jones Indexes and comprises infrastructure companies with at least 70% of its annual cash flows derived from owning and operating infrastructure assets.

* Partial year performance beginning April 11, 2008.

Reporting Currency
Valuations are computed and performance is reported in U.S. dollars.

Fees
The composite gross-of fees returns include the reinvestment of income and the impact of transaction costs, but do not include the deduction of investment advisory fees or any other account expenses, such as custodial fees. The composite performance is presented gross of foreign withholding taxes. Net returns are net of transaction expenses, actual management fees, and actual performance based fees. The standard fee schedule for the Global Infrastructure Securities (Ex-MLPs) Composite is 75 basis points on the first $25 million, 70 basis points on the next $25 million, 65 basis points on the next $50 million and 60 basis points thereafter.

Internal Dispersion
Internal dispersion is calculated using the asset-weighted standard deviation of annual gross-of-fees returns for the accounts in the composite the entire year.

Derivatives
Leverage, derivatives and short positions are not used in the Global Infrastructure Securities (Ex-MLPs) Composite.

Brookfield Investment Management Inc. is a wholly owned subsidiary of Brookfield Asset Management. On October 1, 2009, Brookfield Redding LLC was integrated into Hyperion Brookfield Asset Management, Inc. to form a unified investment management platform known as Brookfield Investment Management Inc. (“BIM”). Following the formation of BIM, an Australian investment advisor evenly owned by BIM and AMP Capital AB Holdings Pty Ltd., AMP Capital Redding Investors Limited was renamed AMP Capital Brookfield Pty Limited. On March 21, 2011, BIM formed Brookfield Investment Management (UK) Limited and acquired a European high yield business. On June 1, 2011, AMP Capital Brookfield Pty Limited and Brookfield Investment Management (UK) Limited were included within the firm definition. Effective March 1, 2012, BIM, as a result of internalizing its operations and management of its equity platform and integrating its opportunistic platform, has redefined the firm by removing AMP Capital Brookfield Pty Limited from its definition and including Brookfield Investment Management (Canada) Inc. Brookfield Investment Management Inc. is headquartered in New York and has investment teams in Boston, Chicago, London, and Toronto. The firm provides clients investment management across; core fixed income, high yield, structured investment products (Commercial MBS, Residential MBS and ABS) as well as global REITs and listed infrastructure securities. BIM claims compliance with the Global Investment Performance Standards (GIPS®).

Opinions expressed herein are current opinions of Brookfield Investment Management Inc., including its subsidiaries and affiliates, and are subject to change without notice. Brookfield Investment Management Inc., including its subsidiaries and affiliates, assume no responsibility to update such information or to notify client of any changes. Any outlooks, forecasts or portfolio weightings presented herein are as of the date appearing on this material only and are also subject to change without notice.

Past performance is not indicative of future performance and the value of investments and the income derived from those investments can fluctuate. Future returns are not guaranteed and a loss of principal may occur.

All rates of return are annualized unless marked otherwise. Performance figures shown are net of fees. Index returns do not reflect any management fees, transaction costs or expenses. Investment results shown reflect realized and unrealized gains and losses and income. Returns are time-weighted on a daily basis using the Modified Dietz formula in order to minimize the impact of any intra-period cash flows, and are calculated and compounded monthly. Please refer to Part II of Brookfield Investment Management Inc.’s Form ADV for additional information on advisory fees.

While Brookfield Investment Management Inc. seeks to design a portfolio that will reflect appropriate risk and return features such as sector weights, credit quality and duration, the Client understands that such characteristics of its portfolio, as well as its volatility, may deviate to varying degrees from those of the benchmark.

The information shown is derived from representative accounts deemed to appropriately represent the management styles herein. Each investor's portfolio is individually managed and may vary from the information shown. The specific securities identified are not representative of all of the securities purchased, sold or recommended for advisory clients. It should not be assumed that an investment in the securities identified will be profitable. Actual holdings will vary for each client and there is no guarantee that a particular client's account will hold any or all of the securities listed. The quoted benchmarks within this presentation do not reflect deductions for fees, expenses or taxes. These benchmarks are unmanaged and cannot be purchased directly by investors. Benchmark performance is shown for illustrative purposes only and does not predict or depict the performance of any investment.

Brookfield Investment Management Inc. may have potential conflicts in connection with the allocation of investments or transaction decisions for client accounts. Brookfield Investment Management Inc., its Affiliates or personnel of Affiliates (“Personnel”) may have interests in the investment being allocated and situations in which an Affiliate Account may have interests in the investment being allocated and situations in which an Affiliate Account may receive a certain percentage of the investments being allocated. Brookfield Investment Management Inc. seeks to manage Client Accounts and Affiliate Accounts according to each Account’s investment objectives and applicable guidelines and applicable legal and regulatory requirements.

Forward-Looking Statements

Information herein contains, includes or is based upon forward-looking statements within the meaning of the federal securities laws, specifically Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements include all statements, other than statements of historical fact, that address future activities, events, or developments, including without limitation, business or investment strategy or measures to implement strategy, competitive strengths, goals, expansion and growth of our business, plans, prospects and references to future our success. You can identify these statements by the fact that they do not relate strictly to historical or current facts. Words such as “anticipate,” “estimate,” “expect,” “project,” “intend,” “plan,” “believe,” and other similar words are intended to identify these forward-looking statements. Forward-looking statements can be affected by inaccurate assumptions or by known or unknown risks and uncertainties. Many such factors will be important in determining our actual future results or outcomes. Consequently, no forward-looking statement can be guaranteed. Our actual results or outcomes may vary materially. Given these uncertainties, you should not place undue reliance on these forward-looking statements.

THE INFORMATION PROVIDED HEREIN IS CONFIDENTIAL AND IS PROVIDED FOR A ONE-ON-ONE PRESENTATION FOR INSTITUTIONAL USE ONLY.

Disclosures

The Barclays Global Aggregate Index is a market capitalization-weighted index, comprising globally traded investment grade bonds. The index includes government securities, mortgage-backed securities, asset-backed securities and corporate securities to simulate the universe of bonds in the market. The maturities of the bonds in the index are more than one year.

The Dow Jones Brookfield Global Infrastructure Composite Index is calculated and maintained by S&P Dow Jones Indices and comprises infrastructure companies with at least 70% of its annual cash flows derived from owning and operating infrastructure assets, including Master Limited Partnerships ("MLPs").

The Dow Jones Brookfield Global Infrastructure Index is calculated and maintained by S&P Dow Jones Indices and comprises infrastructure companies with at least 70% of its annual cash flows derived from owning and operating infrastructure assets.

The Macquarie Global Infrastructure 100 Index is calculated by FTSE and designed to reflect the stock performance of companies within the infrastructure industry, principally those engaged in management, ownership and operation of infrastructure and utility assets.

The MSCI World Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets.

The S&P Global Infrastructure Index provides liquid and tradable exposure to 75 companies from around the world that represent the listed infrastructure universe with weights across three infrastructure clusters: Utilities, Transportation, and Energy.

The S&P 500 Total Return Index is the total return version of S&P 500 Index. Dividends are reinvested on a daily basis and the base date for the index is January 1, 1988. All regular cash dividends are assumed reinvested in the S&P 500 Index on the ex-date. Special cash dividends trigger a price adjustment in the price return index.

The UBS Developed Infrastructure & Utilities Index is a free float-adjusted, market capitalization-weighted index designed to track the performance of globally listed infrastructure.

The above-mentioned indexes do not reflect deductions for fees, expenses or taxes. The indexes are unmanaged and cannot be purchased directly by investors. Index performance is shown for illustrative purposes only and does not predict or depict the performance of any investment.

Sharpe Ratio is a measure of the excess return (or risk premium) per unit of risk (measured by standard deviation) in an investment asset or a trading strategy.

Standard Deviation measures the degree to which an investment's return varies from its mean return.

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT: Infrastructure Policy ACTION: X

DATE: December 5, 2013 INFORMATION:

BACKGROUND:

In February 2013 the Alaska Retirement Management Board (ARMB) directed staff to engage Callan Associates to conduct a search for one or more infrastructure investment manager(s) considering both private and public investment strategies.

Callan conducted a search process and presented staff with qualified private and public infrastructure managers. ARMB hired two private investment managers at the September 2013 board meeting and is considering two public investment managers at the December 2013 board meeting.

STATUS:

Investment Guidelines

Similar to the real estate, farmland, and timberland investment programs, staff has developed infrastructure investment guidelines (attached) to establish objectives and operating principles for the infrastructure investment program.

Benchmarks

Clear industry preferred infrastructure indices have not yet emerged in the infrastructure asset class. While several public stock indices exist, no private investment indices exist. Staff has reviewed the alternatives and proposes the following benchmark structure for the infrastructure asset class:

Investment Level/Category	Benchmark	Purpose
Total Portfolio (public + private investments)	S&P Global Infrastructure Index	Total Program Evaluation. Plan level performance attribution.
Investment Manager – Public	Manager Preferred Benchmark	Manager Performance Evaluation
Investment Manager – Private	No benchmark. Managers' targeted returns (both income and total return targets) will be used to evaluate performance.	Manager Performance Evaluation

Real Assets Target Return

Infrastructure will be part of the Real Assets asset class. In order to evaluate asset class level performance a blended benchmark has been developed. Staff has reviewed the current blend and recommends the following modification to the blended Real Assets benchmark to accommodate the addition of infrastructure investments. To allow time for contract negotiation and funding, the effective date of this change should be April 1, 2014 (quarter ending June 30, 2014).

Benchmark Component	Current Real Assets Benchmark	Proposed New Real Assets Benchmark	Change
NCREIF Property Index	55%	50%	-5%
Barclays US TIPS Index	20%	15%	-5%
NCREIF Farmland Index	10%	10%	
NCREIF Timberland Index	10%	10%	
FTSE NAREIT Equity Index	5%	5%	
S&P Global Infrastructure		10%	+10%

RECOMMENDATION:

The ARMB approve the infrastructure benchmarks and revised Real Assets benchmark, as presented in the Infrastructure Policy action item, and approve Resolution 2013-18 which adopts the Infrastructure Guidelines.

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to Infrastructure Guidelines

Resolution 2013-18

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee to the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, the Board contracts an independent consultant to provide experience and expertise in asset allocation and other investment matters to come before the Board; and

WHEREAS, the Board has established an asset allocation for the funds that considers earnings and liabilities on a current as well as a future basis; and

WHEREAS, the Board has authorized investment in real estate assets for the Public Employees' Retirement System, Teachers' Retirement System, and Judicial Retirement System, including investments for those systems in the State of Alaska Retirement and Benefit Plans Trust; and

WHEREAS, the Board establishes and from time to time as necessary, modifies investment policies, procedures, and guidelines for real estate;

NOW THEREFORE, BE IT RESOLVED THAT THE ALASKA RETIREMENT MANAGEMENT BOARD adopts the **Infrastructure Guidelines**, attached hereto and made a part hereof.

DATED at Anchorage, Alaska this _____ day of December, 2013

____
Chair

ATTEST:

____
Secretary

Infrastructure

ARMB Investment Guidelines

In addition to the Infrastructure Guidelines, public infrastructure investments shall comply with ARMB's Investment Guidelines for Domestic and International Equities.

Section 1. Investment Objective

To develop a diversified portfolio of infrastructure investments with a focus on total return which will seek to produce a minimum 5% net real total rate of return over rolling five-year periods. Portfolio risk shall reflect the lowest expected risk profile required to achieve the return objectives. Each ARMB infrastructure advisor will place an emphasis on the preservation of capital and diversify the infrastructure investments to minimize risk. To the extent return objectives can be met, current income shall be given preference over appreciation.

Section 2. ARMB Infrastructure Advisor Selection

ARMB will select qualified investment managers who have the discretion to invest in infrastructure. In order for entities to be considered, the entity must demonstrate that it is able to add value through its infrastructure knowledge, experience and strategy; evaluate the risks of each infrastructure investment which is contemplated; and comply with these ARMB Infrastructure Investment Guidelines.

ARMB will implement an investment process for infrastructure which will, over time, include a minimum of two private investment and two public investment qualified investment advisors who have been selected on a competitive basis. Each ARMB infrastructure investment advisor will provide services according to an agreed upon investment management agreement (contract) and the ARMB Investment Guidelines. ARMB will endeavor to allocate specific funds to each ARMB infrastructure investment advisor. ARMB infrastructure advisors will invest funds on a discretionary basis in infrastructure investment opportunities to the extent of its specific allocation.

Compensation for investment management services will be done on a fee basis that is competitive. The preferred method of calculating ARMB infrastructure investment advisor fees will be based upon a formula, which considers 1) the cost basis of assets under management and 2) market value of the assets under management.

Section 3. Allocation

ARMB's allocation to infrastructure investments shall be determined by the Board of Trustees and reviewed annually.

The CIO may also exercise the following discretion pertaining to private infrastructure investments:

(a) Commit to investments up to $100 million with existing managers, and former managers in good standing;

(b) Commit to investments related to co-investment opportunities, up to $100 million, with existing managers; and,

(c) Commit to investments with new managers up to $75 million, with the concurrence of ARMB's investment consultant.

The CIO will provide prior notification to the chairs of the ARMB and Real Assets Committee seven days before committing to any infrastructure investments under this authority.

Section 4. Performance Benchmark

The benchmark for the total infrastructure portfolio will be the S&P Global Infrastructure Index. Investment managers for public stock portfolios will be allowed to use their preferred infrastructure benchmark. Private investment advisors will be evaluated based on the income and total return objectives of their strategies.

Section 5. Investment Constraints

(a) Private infrastructure investment strategies shall be constrained by the partnership agreements and other agreements establishing the contractual arrangement with ARMB's infrastructure investment advisors.

(b) Location: No more than 10% of ARMB's infrastructure investments shall be located in emerging markets.

(c) Strategy: No more than 10% of ARMB's infrastructure investments shall be focused on development of infrastructure assets.

(d) Diversification and Concentration: Each ARMB infrastructure advisor shall ensure that the infrastructure investments under its control are adequately diversified in the context of its investment strategy.

(e) Leverage: The total amount of leverage utilized by private infrastructure managers shall not exceed 75% of the value of the asset as measured at the time the leverage is placed on the asset. Public infrastructure investment managers shall not use leverage.

Section 6. Ownership Structure

Private infrastructure investments will be owned in a structure designed to limit ARMB's liability to the amount of its investment and, where feasible, to recognize and preserve tax-exempt status.

Section 7. Reporting System

Staff will develop and implement a comprehensive and responsive reporting and monitoring system for each ARMB infrastructure advisor.

Section 8. Lines of Responsibility

The infrastructure investment program will be implemented and monitored through the coordinated efforts of the ARMB, staff, and the ARMB infrastructure advisors. A description of the program participants and their general responsibilities are as follows:

ARMB – The statutorily created board which is the fiduciary for the retirement trust funds, comprised of trustees appointed by the Governor to represent the beneficiaries' interest. ARMB hires qualified infrastructure investment advisors and consultants, approves the ARMB Investment Guidelines and revisions to them, and approves the Annual Investment Plan prepared by staff.

Staff **-** Investment professionals on staff at the Department of Revenue assigned to ARMB infrastructure investments, which will assist in the program's design, policy implementation, and administration. Staff will recommend revisions to the Infrastructure Investment Guidelines as may be necessary from time to time to ARMB.

Annually, staff will prepare an Annual Investment Plan. This document will recommend, as appropriate, revisions to the overall infrastructure investment strategy, revisions to the Infrastructure Investment Guidelines, and make recommendations for additional allocations as may be desirable.

ARMB Infrastructure Advisors – Qualified entities selected by ARMB that provide institutional infrastructure investment management services to ARMB. ARMB Infrastructure Advisors will invest and manage the portfolios in accordance with their contracts.

Section 9. Confidentiality

Pursuant to 15 AAC 112.770, ARMB shall withhold from other persons all information furnished to it by ARMB Infrastructure Advisor(s) or consultant(s) which is reasonably designated by ARMB Infrastructure Advisor(s) or consultant(s) as being confidential or proprietary, within the meaning of Alaska Statutes regarding rights to public information, except to the extent that the information is needed by ARMB in order to adequately report on the status and performance of the portfolio, or to comply with a court subpoena or with an official criminal investigation.

Those portions of reports provided pursuant to the Agreement with ARMB Infrastructure Advisor(s) shall be considered confidential pursuant to 15 AAC 112.770 to the extent that information is reasonably designated by ARMB Infrastructure Advisor(s) as being confidential or proprietary, or to the extent the disclosure of which would unfairly prejudice the ability of ARMB Infrastructure Advisor(s) or ARMB to manage, lease, market or sell such property or assets.

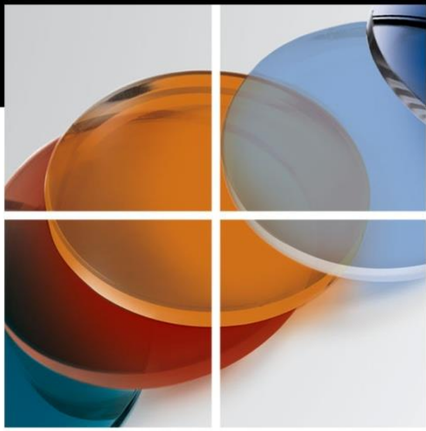
Section 10. Revisions

The ARMB Investment Guidelines are to be reviewed no less than annually and revised as appropriate.

Section 11. ARMB Infrastructure Advisors

The following entities have been selected and appointed as ARMB Infrastructure Advisors to acquire infrastructure investments on a discretionary basis for the Alaska Retirement Management Board:

[completed once manager contracts have been executed]	



Goldman Sachs Asset Management

Goldman Sachs Collective Trust Retirement Portfolio Completion Fund

For Alaska Retirement Management Board

December 2013

Please refer to the offering documentation and Fund documents for further important information.

The collective trust funds are established and maintained by The Goldman Sachs Trust Company, N.A. (the “Trust Company”), a national bank limited to fiduciary activities subject to regulation by the Office of the Comptroller of the Currency. The Trust Company has appointed GSAM to assist it in the management of the assets of the Collective Trust, subject to the supervision and control of the Trust Company as trustee. The Trust Company is responsible for the management and administration of the Collective Trust.

The plan participant’s interest in a collective trust fund is reflected in “Units”. The Units and the Trusts are not savings accounts, deposits or obligations of the Trust Company or any bank or non-bank subsidiary or affiliate of Goldman, Sachs & Co. and are not insured or guaranteed by the Federal Deposit Insurance Corporation or any other governmental agency or instrumentality.

NEITHER THE UNITS, THE COLLECTIVE TRUST NOR THE FUNDS HAVE BEEN REGISTERED WITH, AND THE MERITS OF THIS OFFERING HAVE NOT BEEN PASSED UPON BY, THE SECURITIES AND EXCHANGE COMMISSION OR ANY OTHER FEDERAL OR STATE REGULATORY AGENCY IN RELIANCE ON EXEMPTIONS FROM REGISTRATION UNDER FEDERAL AND STATE SECURITIES LAWS.

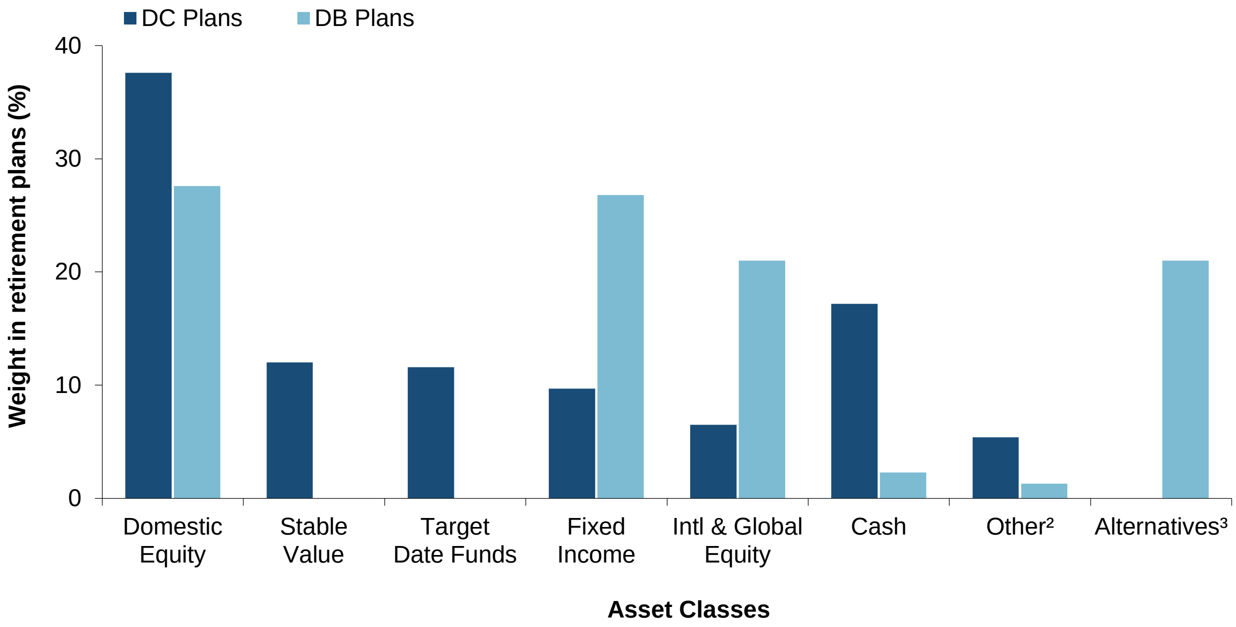
PURSUANT TO AN EXEMPTION FROM THE COMMODITY FUTURES TRADING COMMISSION IN CONNECTION WITH ACCOUNTS OF QUALIFIED ELIGIBLE PERSONS, THIS BROCHURE OR ACCOUNT DOCUMENT IS NOT REQUIRED TO BE, AND HAS NOT BEEN, FILED WITH THE COMMISSION. THE COMMODITY FUTURES TRADING COMMISSION DOES NOT PASS UPON THE MERITS OF PARTICIPATING IN A TRADING PROGRAM OR UPON THE ADEQUACY OR ACCURACY OF COMMODITY TRADING ADVISOR DISCLOSURE. CONSEQUENTLY, THE COMMODITY FUTURES TRADING COMMISSION HAS NOT REVIEWED OR APPROVED THIS TRADING PROGRAM OR THIS BROCHURE OR ACCOUNT DOCUMENT.

FOR ALASKA RETIREMENT SERVICES USE.

Agenda

The Asset Allocation Challenge in DC Plans

Average asset mix of the top 200 corporate plans, as of September 2012[1]



- DC plans are typically less diversified than DB plans
- DB plans outperformed DC plans on average by 1.9%* annually between 2006 and 2012, according to Callan[4]
- Incremental outperformance can impact retirement portfolios positively over time

Defined Contribution plan participants may benefit from access to non-traditional asset classes

* *The DB figures are gross of fees, while those of DC plans are net.*
1 Pensions & Investments, GSAM Analysis. February 4, 2013. Aggregate Asset Mixes of the Top 200 Plans Represents asset allocations as of September 30, 2012.
2 Other includes derivatives, insurance contracts and other investments that may vary widely between assets invested in by plan sponsors.
3 Alternative investments include private equity (venture capital and buyout funds only), real estate, hedge funds, and real assets.
4 Callan, *The Callan DC Index*. http://www.callan.com/research/dcindex/, January 2006 through June 2012.

Goldman Sachs Collective Trust Retirement Portfolio Completion Fund

Alternative Exposure Through a Single Approach

The Goldman Sachs Collective Trust Retirement Portfolio Completion Fund ("RPC") seeks to provide investors a broad range of non-traditional investments in a single, risk-managed solution with daily liquidity and holdings transparency.

Multiple Objectives

Diversification

- Low correlation to core asset classes
- Help stabilize a portfolio in down markets

Inflation sensitivity

- Exposure to real assets may decrease the impact of inflation

New sources of growth

- Complement traditional portfolio
- Potentially higher risk-adjusted returns

RPC

Single portfolio providing exposure to a broad array of alternative and diversifying asset classes

Appropriate Structure

Single Portfolio

- Combined portfolio may have less volatility than any single asset class

"Passive" implementation[1]

- Low transaction costs
- Low management fee
- Mitigate active manager selection risk

DC Compatible

- Daily liquidity
- Transparency of holdings
- Use as core option or within QDIA

1 With the exception of the Hedge Fund Index Replication asset class, RPC employs a "passive" investment approach with respect to achieving exposure to its underlying asset classes. GSAM determines the allocations to each asset class. It then employs a "passive" investment approach with respect to achieving exposure to those asset classes (other than Hedge Fund Index Replication). That is, GSAM utilizes an index as a reference for making investments in the asset classes (other than Hedge Fund Index Replication) and does not attempt to exceed the performance of these indices.

There is no assurance that the objectives stated above will be met. The descriptions set forth above are a summary of certain terms and are not intended to be complete. Please refer to the offering documents for a complete description of all information regarding The Goldman Sachs Collective Trust Retirement Portfolio Completion Fund, copies of which are available upon request.

RPC Underlying Asset Classes

	Asset Class	Representative Index
Real Return	Treasury Inflation Protected Securities (“TIPS”)	Barclays Capital U.S. Inflation Linked Bonds Index
	Global REITS	Dow Jones Global Select Real Estate Securities Index
	Commodities	Dow Jones-UBS Roll Select Commodity Index
Non-Traditional Growth & Income	Emerging Markets Equity	Dow Jones Emerging Markets Total Stock Market Index
	Emerging Markets Sovereign Credit	Markit CDX Emerging Markets Total Return Index
	North American High Yield Corporate Credit	Markit CDX North American High Yield Total Return Index
Absolute Return	Hedge Fund Index Replication	Goldman Sachs Absolute Return Tracker Index

For illustrative purposes only. The fund has been developed to address the needs of defined contribution plan sponsors and participants. It has not been previously offered by Trust Company or managed by GSAM and has no independent track record. Please see additional disclosures at the end of this presentation.

RPC Underlying Asset Class Characteristics
October 2003 – October 2013

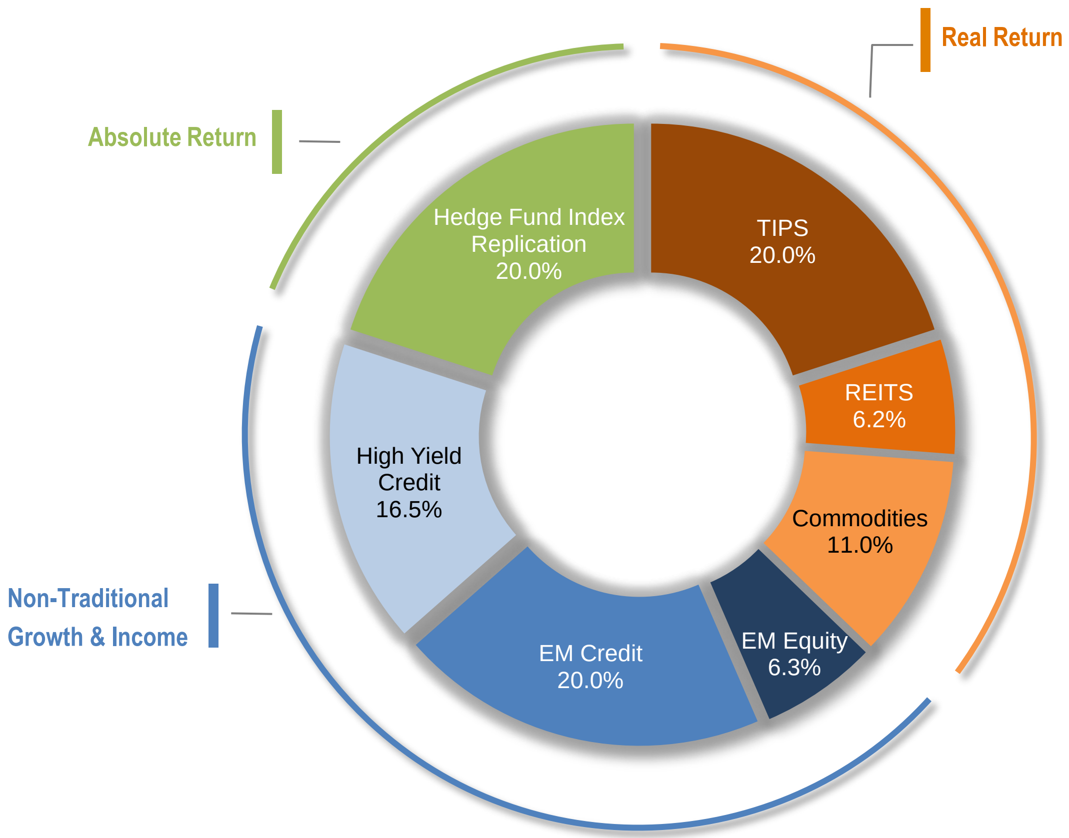
- Over the long-term, RPC's underlying asset classes can potentially exhibit attractive risk and return characteristics

Asset Class	Annualized Return	Annualized Volatility	Sharpe Ratio	Correlation to the S&P 500 Index	Beta to the S&P 500 Index	Correlation to U.S. Treasuries	Beta to U.S. Treasuries
Global REITS	9.2%	22.3%	0.34	0.80	0.87	-0.24	-0.79
Emerging Markets Sovereign Credit	3.8%	6.5%	0.34	0.60	0.19	-0.31	-0.29
Hedge Fund Index Replication[1]	-0.1%	7.2%	-0.05	0.68	0.20	-0.43	-0.40
Commodities	8.1%	17.3%	0.37	0.33	0.28	-0.20	-0.50
North American High Yield Corporate Credit	6.8%	8.5%	0.61	0.69	0.29	-0.32	-0.39
Emerging Markets Equity	12.3%	21.2%	0.50	0.53	0.55	-0.26	-0.82
Treasury Inflation Protected Securities	5.3%	6.6%	0.55	-0.21	-0.07	0.78	0.75

Source: GSAM,
[1] Returns for Hedge Fund Index Replication represent net returns of the GS Absolute Return Tracker Fund. The inception date of the GS Absolute Return Tracker Fund is May 30, 2008. **For discussion purposes only.** GSAM began managing the Retirement Completion Portfolio as a standalone strategy on September 28, 2012. Allocations and asset classes shown may not be representative of future investments. **Past performance does not guarantee future results, which may vary.** For additional information on the representative constituents, please see page 15**.**

Portfolio Construction Methodology

- Risk managed approach
  - Allocations to asset classes based on risk (subject to maximum 100% overall weighting, and for each individual asset class, a 5% minimum and 20% maximum bound)
  - Historically low overall volatility
- Stable, rules-based allocations with small expected changes over time
- Rebalance semi-annually in March and September

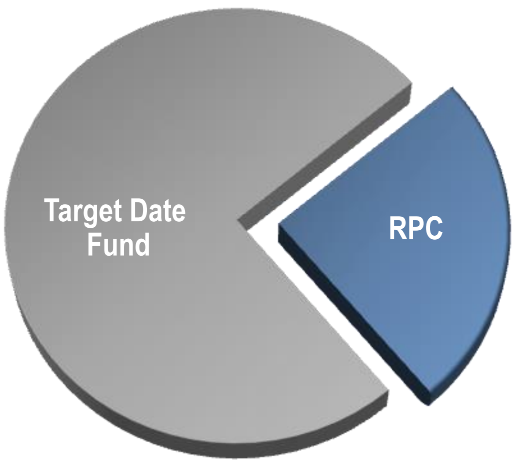


Allocations are as of September 2013. The investment manager is expected to change the allocations and possibly the asset classes over time. The allocations noted should not be deemed representative of allocations in the future. **For discussion purposes only. Allocations and asset classes shown may not be representative of future investments.** Please refer to page 15 for additional details on the asset classes and pages 35 and 36 for details on the portfolio construction methodology and calculations.

RPC Applications

RPC can be used in a variety of ways, but most investors may find it to be appealing as a complement to an existing target date fund or as a stand-alone option on the core menu.

Application 1: Target Date Completion



Application 2: Core Menu Completion

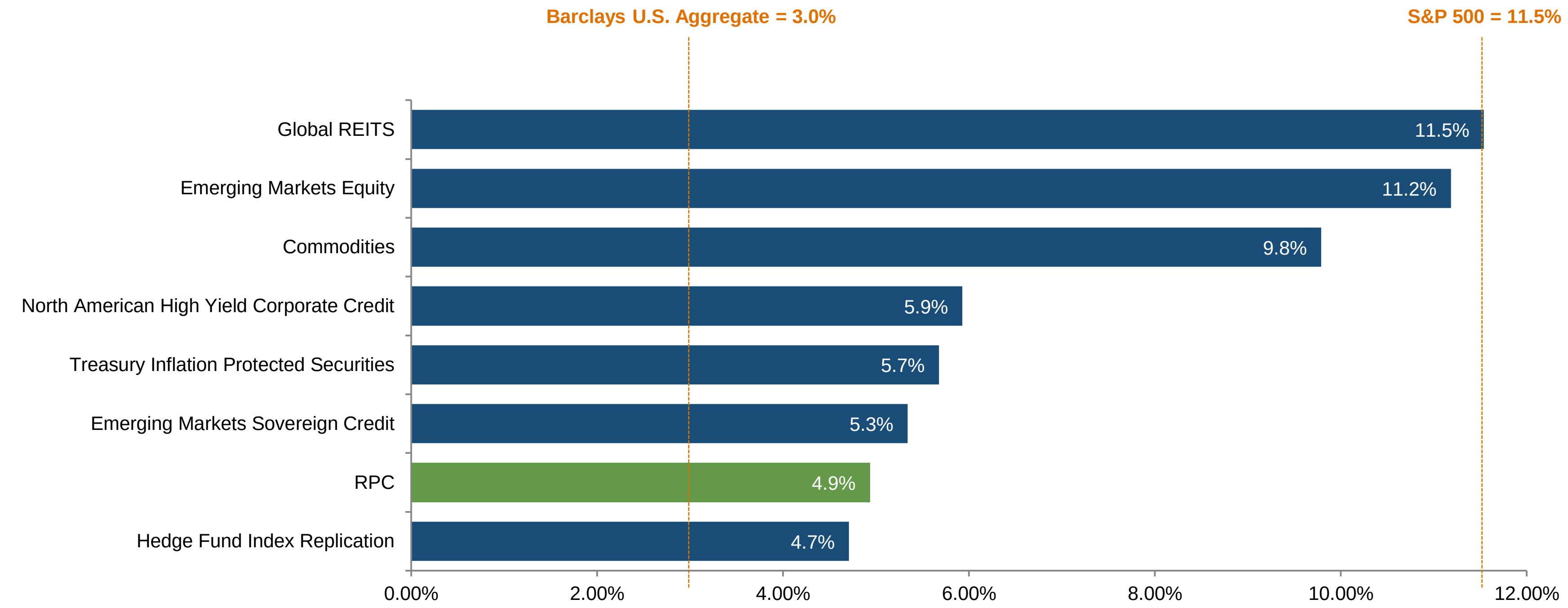
Stable Value	Stable Value
Domestic High Quality Bonds	Domestic High Quality Bonds
Domestic Equity	Domestic Equity
International Equity	International Equity
TIPS	→ RPC
Global REITS	
Commodities	
Emerging Markets Equity	
Emerging Markets Credit	
N. American High Yield Credit	
Hedge Fund Index Replication	

For illustrative purposes only.

RPC Results

RPC Realized Volatility Versus Individual Asset Classes
Supplemental Information

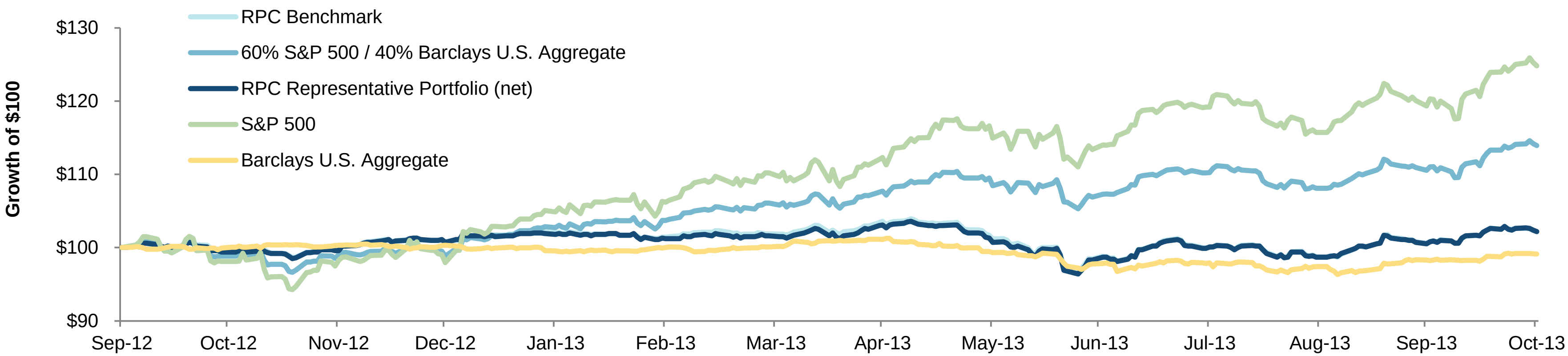
Annualized Volatility, September 2012 – October 2013



Source: GSAM, Bloomberg.
RPC is reweighted semi-annually. **For discussion purposes only.** GSAM began managing the Retirement Completion Portfolio as a standalone strategy on September 28, 2012. Allocations and asset classes shown may not be representative of future investments. The data shown is of a representative account, is for informational purposes only and is not indicative of future portfolio characteristics/returns. Actual results may vary for each client due to specific client guidelines and other factors. The composite information presented are part of the fully GIPS® composite presentation included in the Appendix on pages 40 and 41. **Past performance does not guarantee future results, which may vary.**

RPC Realized Performance Since Inception

Growth of $100, September 2012 – October 2013



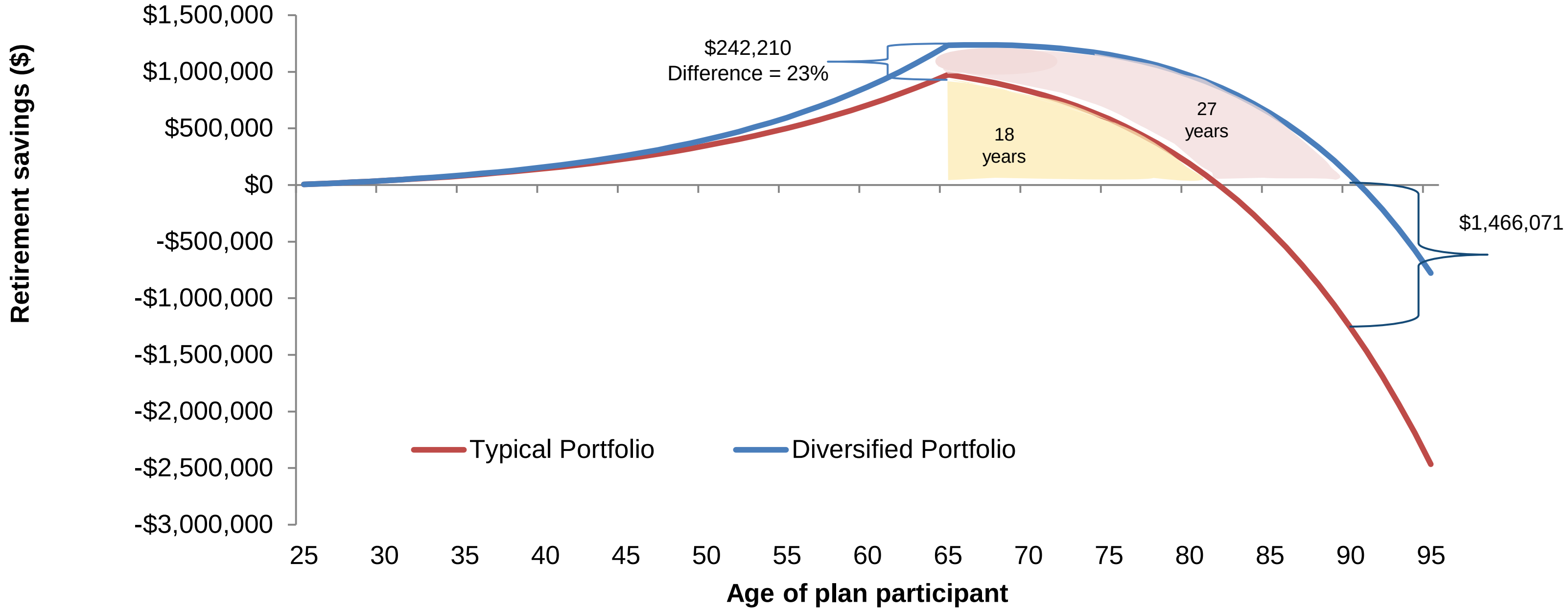
Portfolio Characteristics, September 2012 – October 2013

	Annualized Returns	Annualized Volatility	Sharpe Ratio
RPC Representative Portfolio (net)	1.94%	4.93%	0.37
RPC Benchmark	1.88%	4.57%	0.38
60% S&P 500 / 40% Barclays U.S. Aggregate	12.23%	6.86%	1.76
S&P 500	21.18%	11.46%	1.84
Barclays U.S. Aggregate	-0.77%	3.04%	-0.30

Source: GSAM, Bloomberg. The returns of the Retirement Portfolio Completion Strategy are net returns and reflect the deduction of trustee and investment advisory fees or transaction costs, which would reduce an investor's return. Data is denominated in USD. The allocations to the underlying asset classes in RPC are reweighted semi-annually. GROWTH OF $100: A graphical measurement of a portfolio's gross return that simulates the performance of an initial investment of $100 over the given time period. **For discussion purposes only.** GSAM began managing the Retirement Completion Portfolio as a standalone strategy on September 28, 2012. Allocations and asset classes shown may not be representative of future investments. The data shown is of a representative account, is for informational purposes only and is not indicative of future portfolio characteristics/returns. Actual results may vary for each client due to specific client guidelines and other factors. **Past performance does not guarantee future results, which may vary.**

Potential Impact of a More Diversified Retirement Portfolio

We believe a small allocation to diversifying asset classes could enhance risk-adjusted returns. The cumulative impact of a minor improvement (e.g. a 1% increase in annualized returns as shown below) can be quite large in terms of retirement outcomes.



Source: GSAM
The assumption taken in this example are:
Starting salary: $50000; Growth of Salary: 2.5%; End employment: 65 years; Personal contribution: 5%; Company matching contribution: 50%; Company max contribution: 5%; Spending percentage of final salary: 50%; Inflation rate of spending: 3%; Typical annualized portfolio: 5%; Diversified portfolio returns: 6%. For illustrative purposes only. These examples are for illustrative purposes only and are not actual results. If any assumptions used do not prove to be true, results may vary substantially. **Past performance does not guarantee future results, which may vary.**

Appendix

Retirement Portfolio Completion (RPC) Asset Class Overview

- Each asset class within RPC was selected to serve a specific purpose
- Review of each asset class we will focus on:
  - Why it is included
  - How it is implemented
    - Rationale for index selection
    - Implementation method
    - Unique asset class or instrument features, if applicable
- Below is a summary of the asset classes, indices, and implementation instruments

Asset Class	Representative Index/Fund	Implementation Instruments
Global REITS	Dow Jones Global Select Real Estate Securities	Physical Stocks
Treasury Inflation Protected Securities	Barclays Capital U.S. Inflation Linked Bond Index	Physical Bonds
Emerging Markets Equity	Dow Jones Emerging Markets Total Stock Market	ETF
Commodities	Dow Jones-UBS Roll Select Commodity Index	Total Return Swap
North American High Yield Corporate Credit	Markit CDX North American High Yield 5-year	Indexed Credit Default Swap
Emerging Markets Sovereign Credit	Markit CDX Emerging Markets 5-year	Indexed Credit Default Swap
Hedge Fund Industry Beta	Goldman Sachs Absolute Return Tracker Fund	Pooled vehicle (Mg't Fee is rebated)

As of October 31, 2013. For discussion purposes only

RPC Benchmark

Non-traditional investments, especially when packaged together, can be challenging to benchmark. In response to this, we have partnered with Standard and Poor's (S&P) on the RPC Benchmark ("RPCB"). We believe that the RPCB can provide retirement plan-sponsors with a useful tool to potentially mitigate one of the challenges associated with passively managed non-traditional asset-classes.

- The RPCB is owned by GSAM but is independently calculated by S&P
- The RPCB is calculated on every RPCB Business Day. An RPCB Business Day is defined as any day that the New York Stock Exchange is open. GSAM has no input over the daily calculation
- The RPCB inception date was 9/28/2012, the same day that the RPC strategy was launched
- The RPC strategy's primary benchmark is a 60/40 (60% allocation to S&P 500, 40% allocation to U.S. Barclay's Aggregate), the secondary benchmark is RPCB
- The RPC strategy aims to have a small amount of tracking error to RPCB. Transaction costs, execution slippage, fund expenses, and drag from flows are among the biggest drivers of tracking error
- RPCB is always fully invested in the 7 "RPCB Sub-indices" just as the RPC strategy aims to be
- RPCB is currently available through standard reporting for the RPC Strategy. GSAM is exploring the possibility of making RPCB available more broadly
- We expect changes to the RPC strategy to be very infrequent. The RPCB and RPC strategy will employ any changes at the same time

As of October 31, 2013. For discussion purposes only.

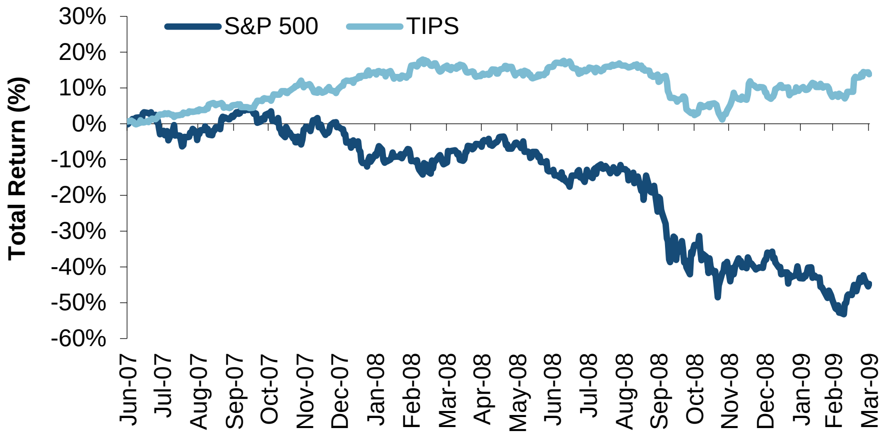
RPC Portfolio Implementation

Asset Class	Representative Index/Fund	Physicals	Derivatives
Global REITS	Dow Jones Global Select Real Estate Securities Index	✓	
Treasury Inflation Protected Securities	Barclays Capital U.S. Inflation Linked Bond Index	✓	
Emerging Markets Equity	Dow Jones Emerging Markets Total Stock Market Index	✓	
Commodities	Dow Jones-UBS Roll Select Commodity Index	✓	✓
North American High Yield Corporate Credit	Markit CDX North American High Yield 5-Yyear Index		✓
Emerging Markets Sovereign Credit	Markit CDX Emerging Markets 5-Year Index		✓
Hedge Fund Index Replication	Goldman Sachs Absolute Return Tracker Fund	✓	✓

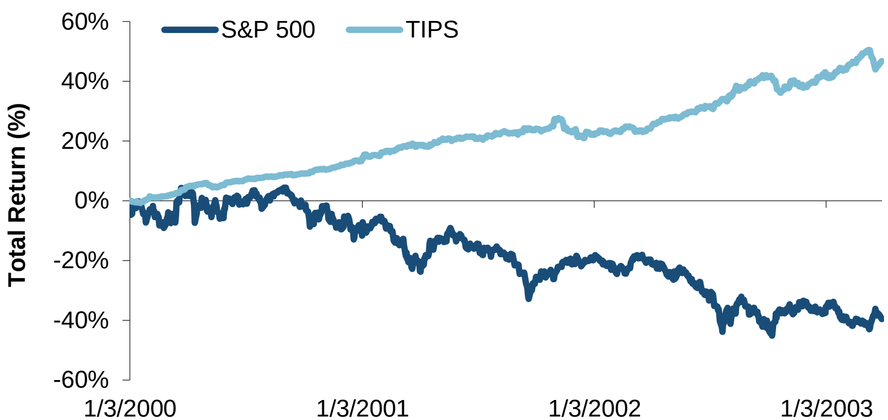
As of October 31, 2013. For discussion purposes only.

The Case for TIPS

Financial Crisis, Jun 2007 to Feb 2009

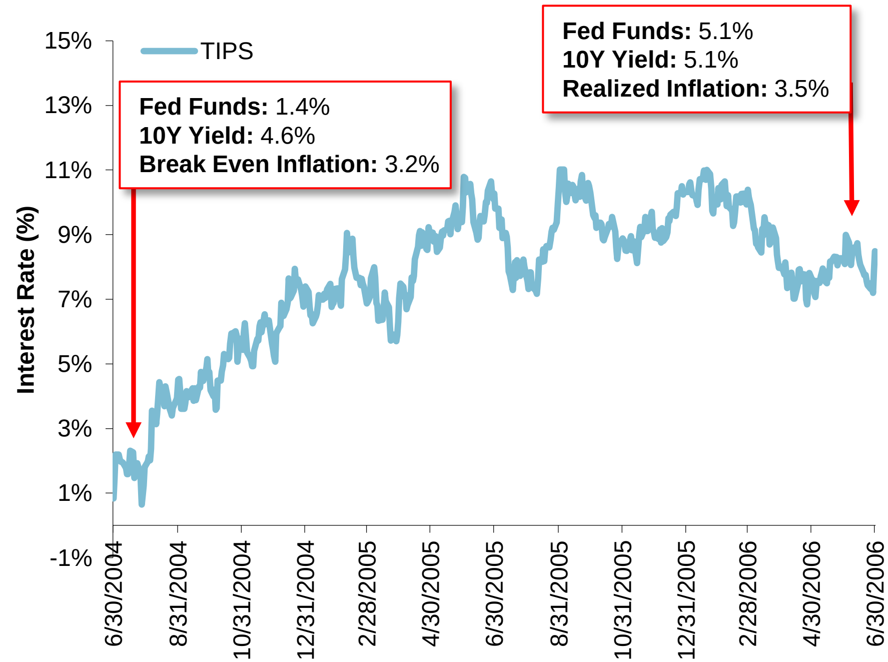


Tech Bubble, Jan 2000 to Jan 2003



- Good diversifiers, typically negatively correlated to equity markets
- Effective performance during recent market drawdowns
- Explicit hedge against unexpected inflation
- May offer protection in a time of rising interest rates and inflation

Last rising interest rate environment, Jan 2000 to Jan 2003



Source: Bloomberg; GSAM, Barclays. As of October 31, 2013. This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. Please see additional disclosures. **Past performance does not guarantee future results, which may vary.**

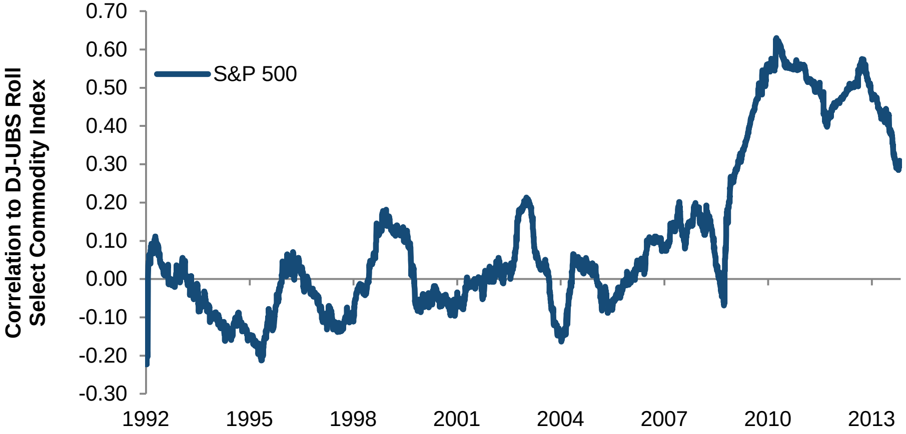
TIPS Implementation

- U.S. Inflation-Linked Government Bonds – U.S. Treasury bonds with principal and interest payments that explicitly adjust to track inflation
- Provide explicit inflation protection:
  - Principal adjusts to changes in CPI-All Urban Consumers index
  - Fixed coupon rate applied to adjusted principal
- Barclays U.S. Government Inflation-Linked Bond Total Return Index is the most popular institutional TIPS-related index:
  - At least 1 year remaining to maturity
  - Issue size greater than $500m
  - Index has 33 bonds
- In implementing TIPS, we are able to hold all the bonds in the index
  - Relatively low number of extremely liquid bonds
  - All currently trading with very tight spreads

Source: Bloomberg; GSAM, Barclays. As of October 31, 2013**.**This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. Please see additional disclosures. **Past performance does not guarantee future results, which may vary.**

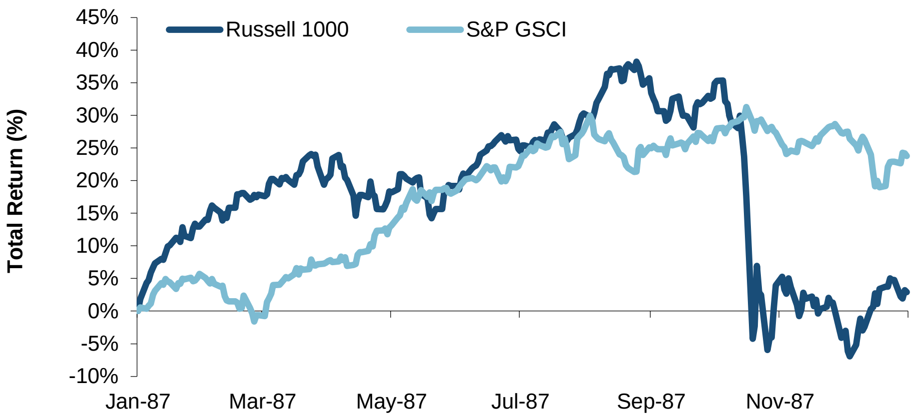
The Case for Commodities

Rolling 1-year correlation, 1-Jan-92 to 31-Oct-13

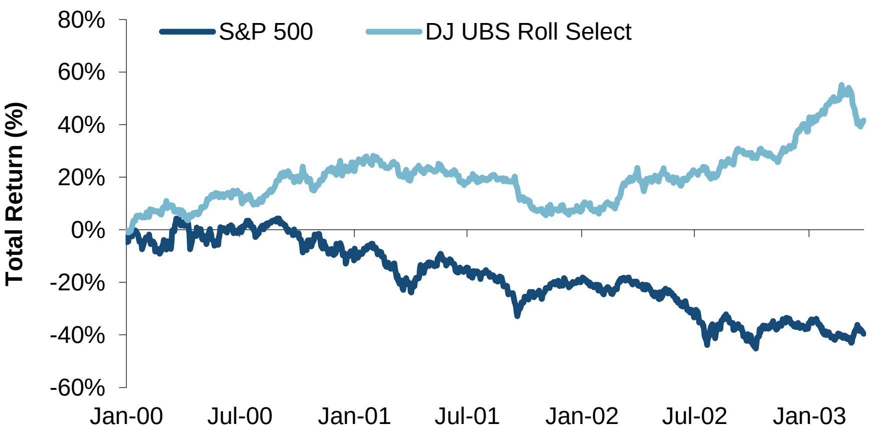


- Low correlation to equities
- Negative correlation to bonds over long-term
- Not highly correlated to inflation
- Can be extremely valuable in certain types of inflationary environments (detailed in the real return section)
- Performed very well in other recent equity drawdowns, although poorly during the recent global financial crisis

Index Total Returns, 1-Jan-87 to Dec 1987[1]



Index Total Returns, 1-Jan-00 to 31-Jan-03



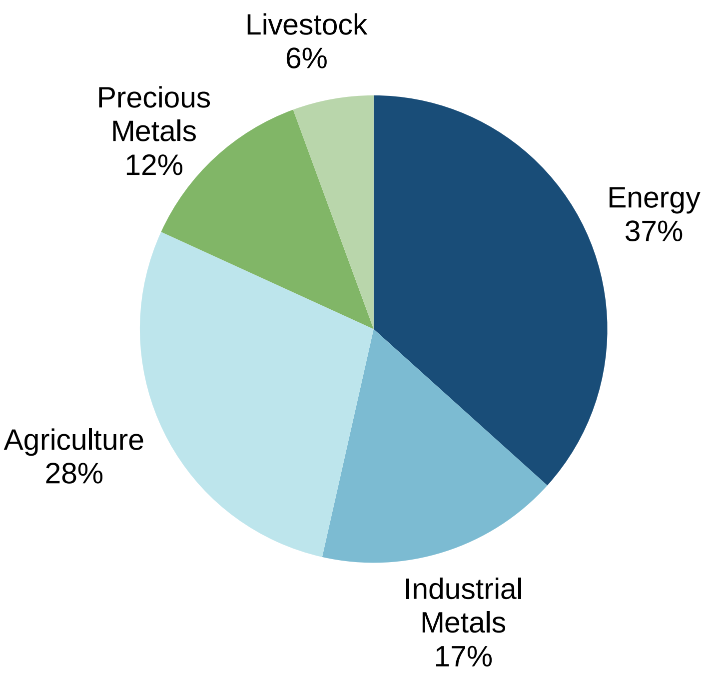
[1] Russell 1000 and S&P GSCI Indices used due to lack of data availability.

Source: Dow Jones-UBS, Bloomberg. **Past performance does not guarantee future results, which may vary.** This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. Please see additional disclosures.

Commodities Implementation

- Dow Jones-UBS is the most popular commodities index for institutional investors:
  - Composed of 19 major commodity futures contracts
  - Less concentrated in energy compared to GSCI/S&P
  - Sector weights account for economic significance & market liquidity;
  - No sector may constitute more than 33% of the index at each rebalancing date
  - Weights may drift between rebalances
- RPC uses a total return swap on the index to get exposure
  - Liquid, low cost to trade
  - Any excess capital is invested in short-term U.S. treasuries

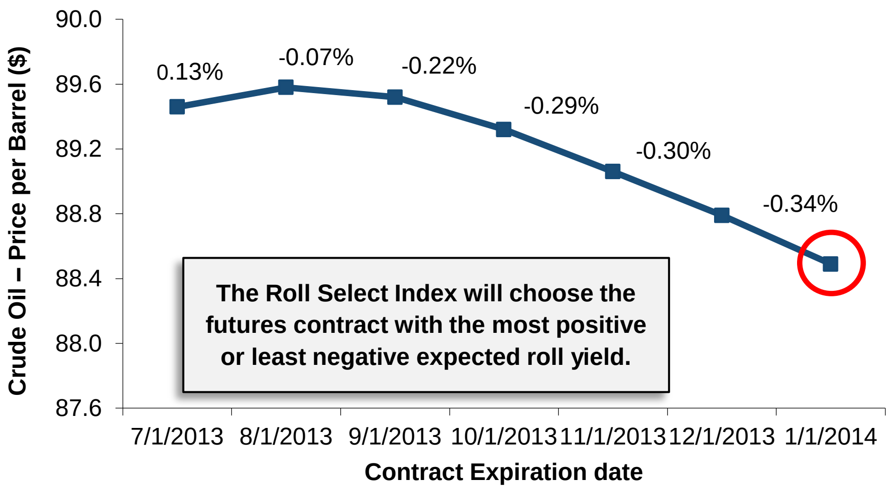
Dow Jones-UBS Roll Select Commodity Index as of 31-Oct-13



Source: Dow Jones-UBS, Bloomberg. This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. Please see additional disclosures.

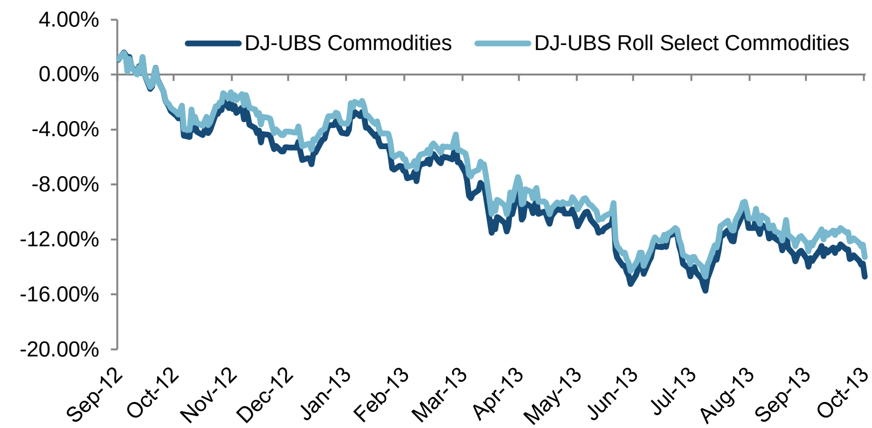
Commodities Implementation

Roll Select Index Methodology Illustration, as of 23-Apr-13



- Roll Select version of the index (Bloomberg ticker: DJUBSRST) may help mitigate a negative roll yield
  - Picks "cheapest" futures contract rather than hold the "1st Nearby"
- Very strong historical track record; maintaining all of the asset class's correlation benefits
- Roll Select has outperformed slightly since the inception of RPC

Index Total Returns, 28-Sep-12 to 31-Oct-13



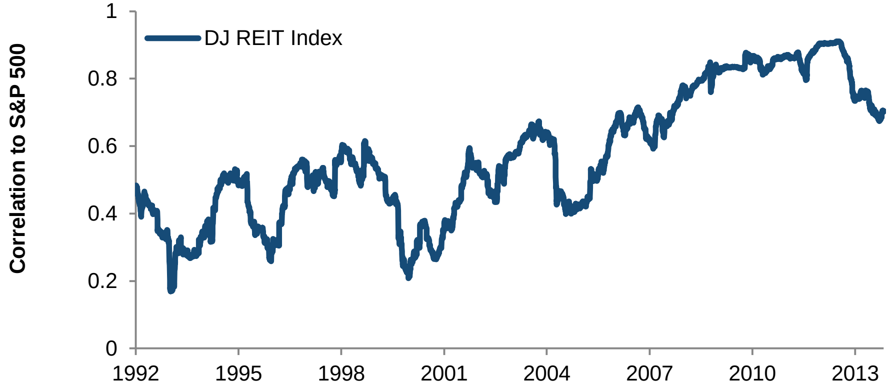
Comparative Statistics, 1-Jan91 to 31-Oct-13

January 1991 to March 2013	DJ-UBS Commodities	DJ-UBS Roll Select Commodities
Return (ann.)	3.99%	7.82%
Volatility (ann.)	14.78%	13.49%
Sharpe ratio	0.27	0.58
Correlation to S&P 500	0.18	0.19
Correlation to Barclays U.S. Aggregate	-0.11	-0.11

Source: Dow Jones-UBS, Bloomberg. **Past performance does not guarantee future results, which may vary.** These examples are for illustrative purposes only and are not actual results. If any assumptions used do not prove to be true, results may vary substantially. This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. Please see additional disclosures.

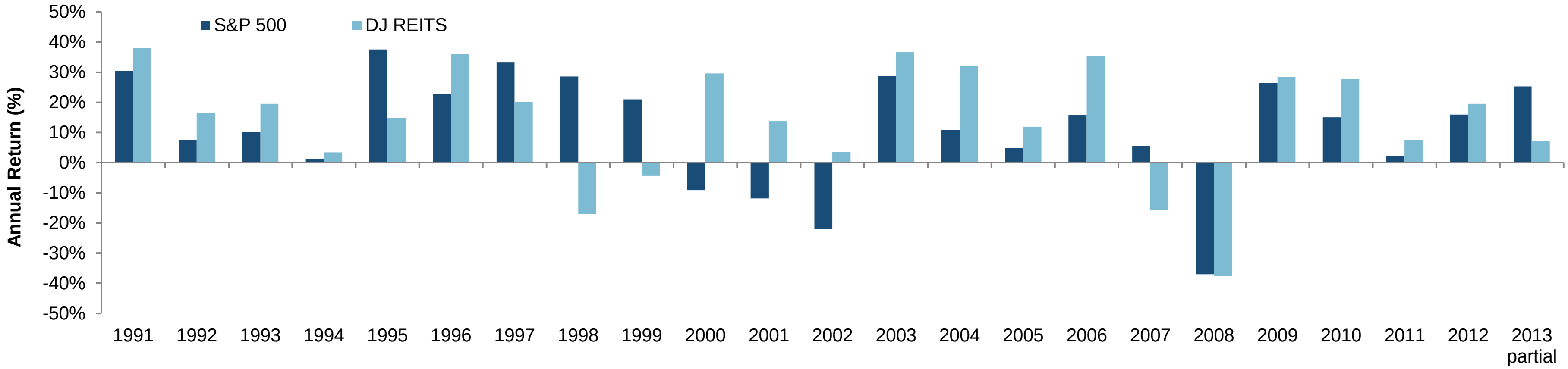
The Case for Global REITS

Rolling 1-year correlation of DJ REIT Index and S&P 500 Index, 1-Jan-92 to 31-Oct-13



- Offers diversification through:
  - Exposure to commercial rental income
  - Global footprint
- Substantial rise in correlation to the S&P 500 in recent years; has declined in the recent past
- Average returns have been quite different, reflecting the unique drivers of REITS performance

Annual Returns, 1-Jan-91 to 31-Oct-13



Source: GSAM, Bloomberg; CME Group Index Services LLC. **Past performance does not guarantee future results, which may vary.** This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. Please see additional disclosures.

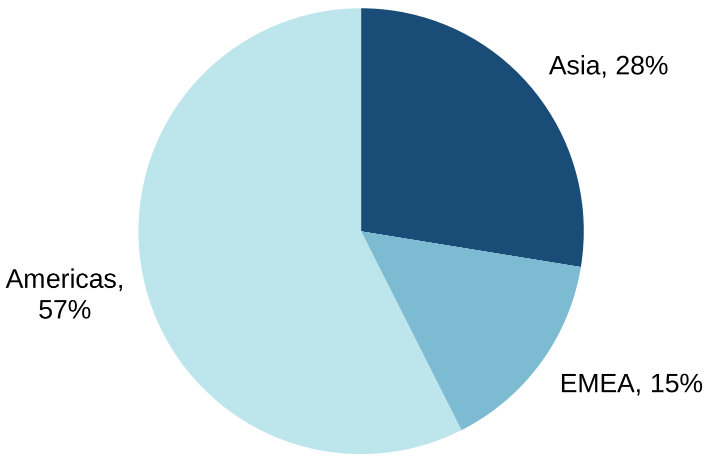
Global REITS – Implementation

- Dow Jones Global Select Real Estate Securities Index is composed of real estate investment trusts (REITS) and globally traded real estate operating companies in the following countries:

Australia	Germany	New Zealand	Switzerland
Austria	Hong Kong	Philippines	Thailand
Belgium	Italy	Poland	Turkey
Brazil	Japan	Singapore	United Kingdom
Canada	Malaysia	South Africa	United States
France	Netherlands	Sweden	

- Benchmark exclusions include mortgage REITS and companies with more than 25% of assets in direct mortgage investments:
  - Index largely provides exposure to REITS with income from commercial property rental charges
  - May benefit from rising commercial real estate rents, which are typically linked to inflation
- Physical stocks to replicate
  - Excludes a small number of slightly less liquid names
  - Predicted annualized tracking error is between 25 to 50 bps

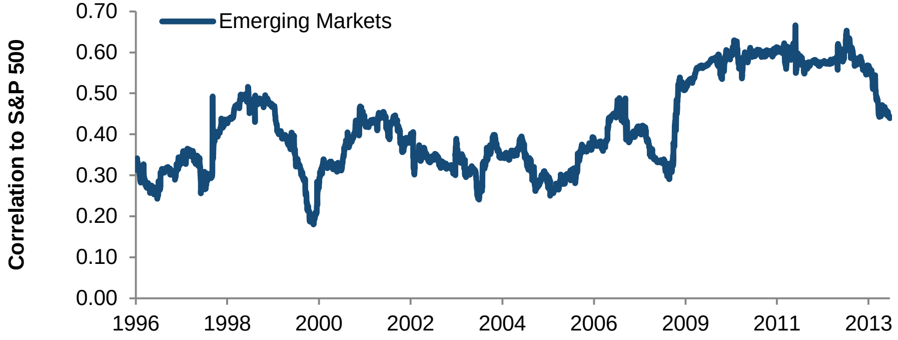
Dow Jones Global REIT Index, as of 31-Oct-13



Source: GSAM, Bloomberg; CME Group Index Services LLC. **Past performance does not guarantee future results, which may vary.** This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. Please see additional disclosures.

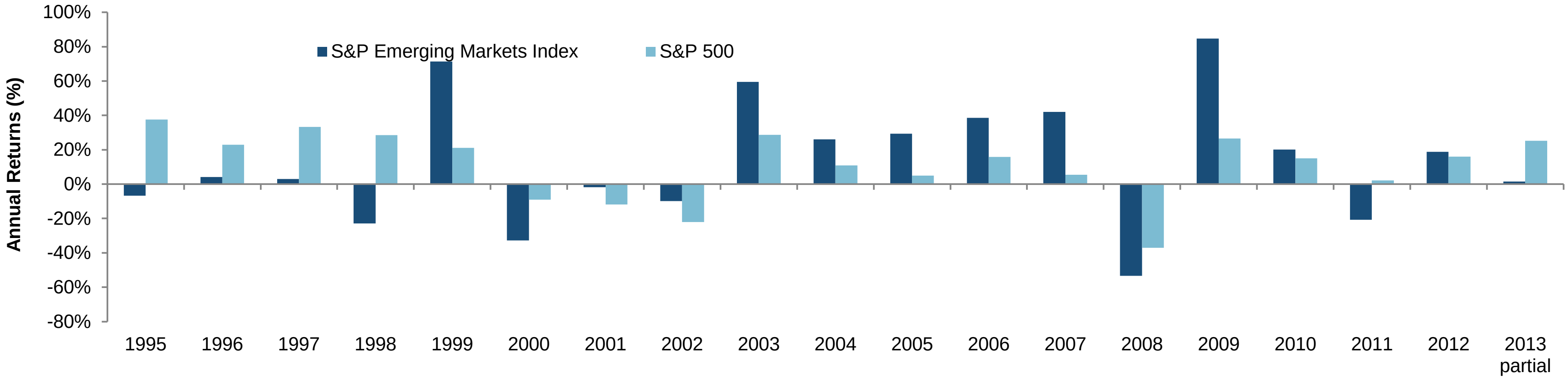
The Case for Emerging Market Equities

Rolling 1-year correlation of S&P Emerging Markets Index and S&P 500 Index, 1-Jan-96 to 31-Oct-13



- Equity indices based on market capitalization may not adequately represent the importance of emerging markets
- Long-term correlation to the S&P 500 is fairly low, although it has increased in recent years
- Emerging market equities may offer unique risk premium beyond traditional developed market equity

Annual Returns, 1-Jan-95 to 31-Oct-13



Source: Bloomberg. Data as of October 31, 2013. Time period selected due to data availability. **Past performance does not guarantee future results, which may vary.** This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. Please see additional disclosures.

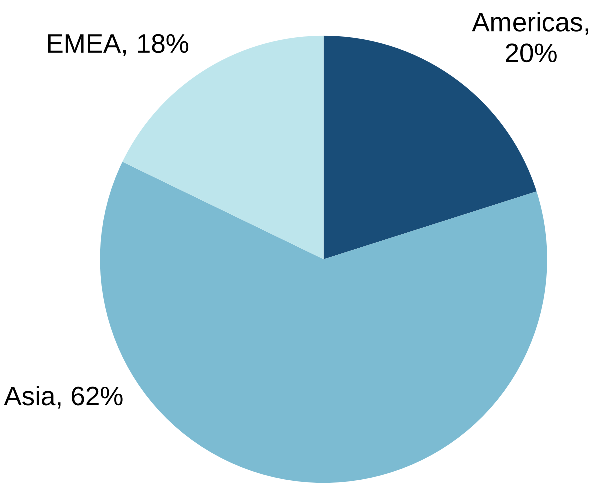
Emerging Market Equities – Implementation

- There are a variety of ways to access emerging markets
- The Dow Jones Emerging Markets Index provides market capitalization-weighted exposure to the following 21 countries:

Brazil	Hungary	Mexico	Russia
Chile	India	Morocco	South Africa
China	Indonesia	Peru	Taiwan
Colombia	Korea	Philippines	Thailand
Czech Republic	Malaysia	Poland	Turkey
Egypt			

- RPC gains exposure to emerging market equities through an ETF

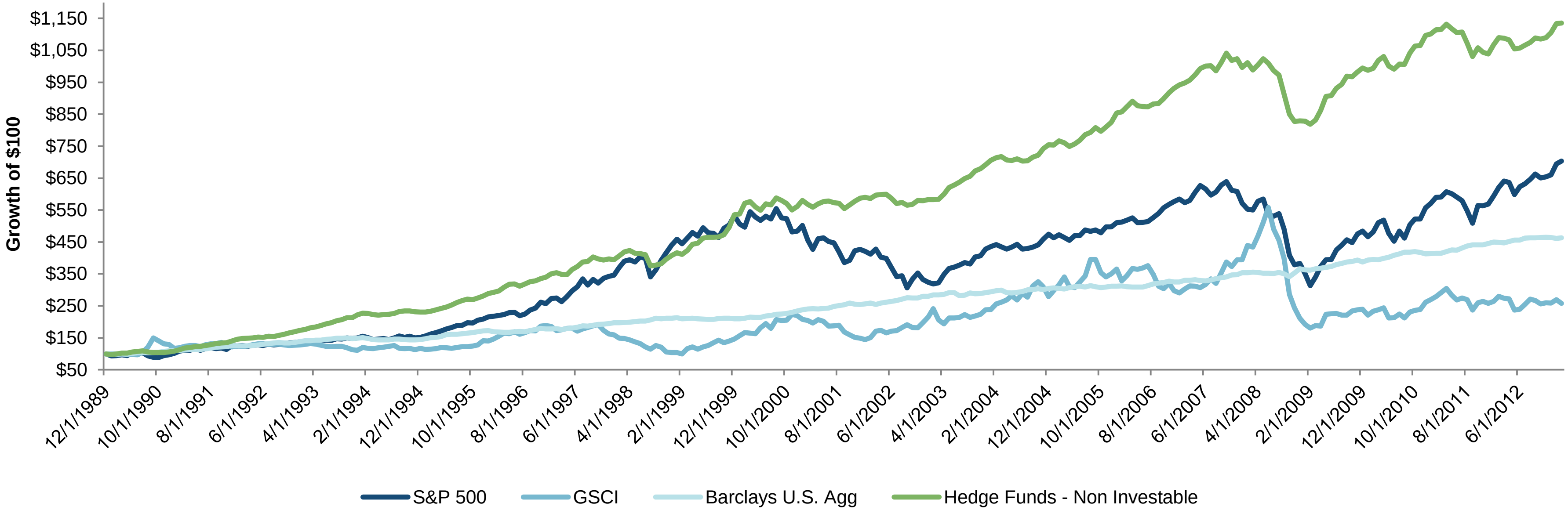
MSCI Emerging Markets Index, as of 31-Oct-13



Source: GSAM, Bloomberg. Data as of October 31, 2013. **Past performance does not guarantee future results, which may vary.** This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. Please see additional disclosures.

The Case for Hedge Fund Index Replication

- Hedge funds have delivered strong risk adjusted returns
- Often receive large allocations in institutional portfolios
- May be certain challenges using hedge funds in retirement portfolios:
  - Fees and minimums
  - Lack of daily valuation and daily liquidity
  - Manager specific risk
  - Strategies that are difficult to understand



Source: Bloomberg. Please see additional disclosures. **Past performance does not guarantee future results, which may vary.** HFRI Fund Weighted Composite Index, HFRX Index and the HFRI Fund of Fund Index are the trademarks and service marks of Hedge Fund Research, Inc. ("HFR") and are used under license from HFR. HFR has not participated in the formation of the Retirement Portfolio Completion Strategy. HFR does not endorse or approve the product or make any recommendation with respect to investing in it. GROWTH OF $100: A graphical measurement of a portfolio's gross return that simulates the performance of an initial investment of $X over the given time period. The example provided does not reflect the deduction of investment advisory fees which would reduce an investor's return. Please be advised that since this example is calculated gross of fees the compounding effect of an investment manager's fees are not taken into consideration and the deduction of such fees would have a significant impact on the returns the greater the time period and as such the value of the $100, if calculated on a net basis, would be significantly lower than shown in this example.

Hedge Fund Index Replication – Implementation

- GS Absolute Return Tracker (ART) Fund seeks to deliver long-term total return consistent with investment results that approximate the return and risk patterns of a diversified universe of hedge funds

- Offers investors hedge fund returns in a useful structure
  - Daily liquidity
  - 40-act compliant mutual fund
  - Invests in exclusively highly liquid and highly standardized instruments
  - Quarterly published holdings
  - Reasonable management fee and no performance fee
  - Transparent process

- RPC invests in the ART fund with 100% of the management fee rebated back to RPC investors

- Other ART Fund details:
  - Launched in May 2008
  - $1.6 billion in AUM[1]
  - Large effort in GSAM supporting hedge fund replication and systematic risk premia offerings
  - Distributed mostly to U.S. retail investors currently, scope should likely expand in the near future
  - Managed by the same team within GSAM that manages RPC
  - Formally benchmarked to the HFRX

Source: GSAM.

[1] As of October 31, 2013. This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. Please see additional disclosures. **Past performance does not guarantee future results, which may vary.** HFRI Fund Weighted Composite Index, HFRX Index and the HFRI Fund of Fund Index are the trademarks and service marks of Hedge Fund Research, Inc. ("HFR") and are used under license from HFR. HFR has not participated in the formation of the Retirement Portfolio Completion Strategy. HFR does not endorse or approve the product or make any recommendation with respect to investing in it. An affiliate of GSAM is the sponsor of the GS-ART Index. In addition, the Quantitative Investment Strategies team, which has conceived the strategy, also manages the algorithm used by the GS-ART Index.

Hedge Fund Index Replication – Implementation

ART Fund Investment Process

STEP 1

Hedge Fund Universe Selection

Returns of a diverse pool of hedge funds are reviewed and filtered to include:

- Funds with a minimum number of assets under management
- No Fund of Funds
- Funds with a minimum track record

STEP 2

Factor Analysis

- Consistent monitoring of market factors[1] across Equities, Fixed Income, Credit, Volatility and Commodities
- Annual process of selecting factors with historically proven explanatory power to replicate the returns of a diversified basket of hedge funds

STEP 3

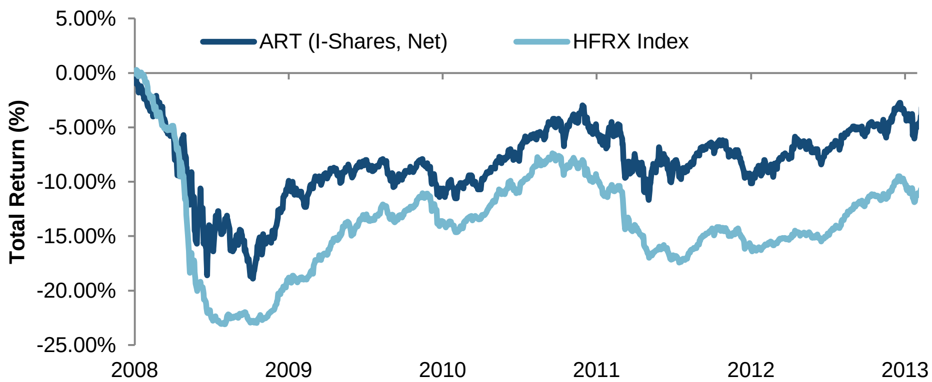
Rebalancing

- Monthly rebalancing to new weights, using the most recent available performance data from the Fund Universe
- Seeks volatility similar to the long-term average of the hedge fund universe

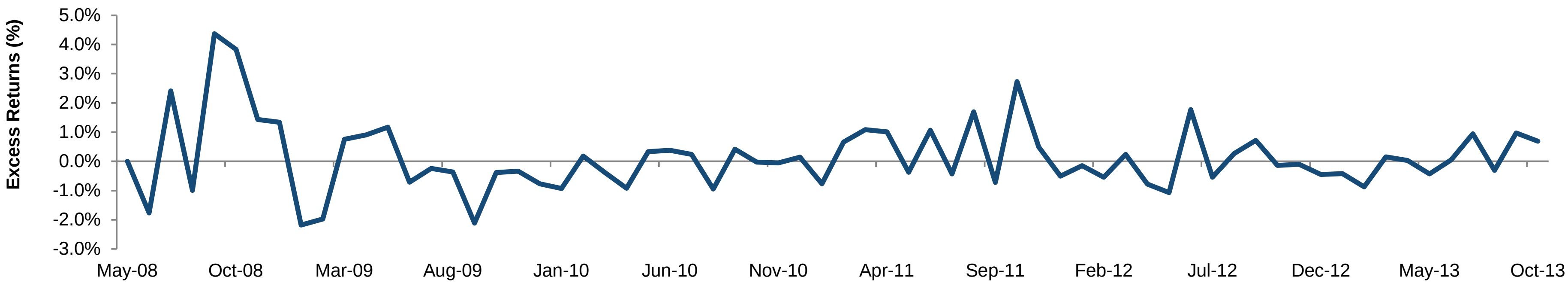
[1] A market factor is anything that contributes to the movement or performance of the broad market – in this case, the hedge fund market specifically.

Hedge Fund Index Replication – Implementation

ART Fund vs. HFRX Index total returns, 30-May-08 to 31-Oct-13



ART Fund excess returns (I-shares, net), 30-Jun-08 to 31-Oct-13



- Since inception, the ART Fund has exhibited low tracking error to its primary benchmark
- Has provided a small amount of excess return
- Since inception annualized tracking error of 4.2%

Source: Bloomberg. The inception date for the GS ART Fund is May 30, 2008. **The returns represent past performance. Past performance does not guarantee future results. The Fund's investment return and principal value will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance above. Please visit our Web site at: www.goldmansachsfunds.com to obtain the most recent month-end returns.**
This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. Please see additional disclosures. **Past performance does not guarantee future results, which may vary.** HFRI Fund Weighted Composite Index, HFRX Index and the HFRI Fund of Fund Index are the trademarks and service marks of Hedge Fund Research, Inc. ("HFR") and are used under license from HFR. HFR has not participated in the formation of the Retirement Portfolio Completion Strategy. HFR does not endorse or approve the product or make any recommendation with respect to investing in it. The returns are gross and do not reflect the deduction of investment advisory fees, which will reduce returns. Our investment advisory fees are described in Part 2 of our Form ADV. See additional disclosures.

Goldman Sachs ART Fund Performance (as of 31-Oct-13)

	Goldman Sachs ART Fund A Share	Goldman Sachs ART Fund I Share	HFRX Global Index[1]
Annualized Return Since Inception of ART Fund *(30-May-08 to 31-Oct-13)*	-0.50%	-0.11%	-1.80%
Annualized Standard Deviation Since Inception of ART Fund *(30-May-08 to 31-Oct-13)*	5.79%	5.80%	6.79%

Standardized Total Returns and Expense Ratios

	1 Year	5 Year	Since Inception	Expenses (Net)	Expenses (Gross)
Goldman Sachs ART Fund A Share (as of 30-Sep-13)	-1.63%	-0.46%	-1.91%	1.55%	1.59%
Goldman Sachs ART Fund I Share (as of 30-Sep-13)	4.54%	1.09%	-0.46%	1.15%	1.19%

The returns represent past performance. Past performance does not guarantee future results. The Fund's investment return and principal value will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance quoted above. Please visit our Web site at: www.goldmansachsfunds.com to obtain the most recent month-end returns.

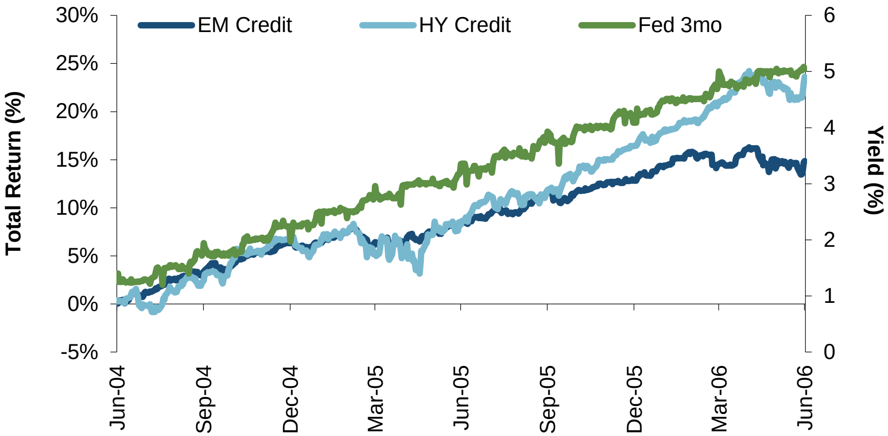
The expense ratios of the Fund, both current (net of any fee waivers or expense limitations) and before waivers (gross of any fee waivers or expense limitations) are as set forth above. The Fund's waivers and/or expense limitations will remain in place through at least April 30, 2014, and prior to such date the investment adviser may not terminate the arrangements without the approval of the Fund's Board of Trustees.

The Standardized Total Returns are average annual total returns or cumulative total returns (only if the performance period is one year or less) as of the most recent calendar quarter-end. They assume reinvestment of all distributions at net asset value. These returns reflect the maximum initial sales charge of 5.5% for Class A Shares. Because Institutional Shares do not involve a sales charge, such a charge is not applied to their Standardized Total Returns. Performance reflects cumulative total returns for periods of less than one year and average annual total returns for periods of greater than one year. Since inception returns for periods of less than one year are cumulative. All Fund performance data reflect the reinvestment of distributions. **Effective October 1, 2010, the redemption fee for the Goldman Sachs Absolute Return Tracker Fund was eliminated.**

[1]The HFRX Global Hedge Fund Index is a trademark of Hedge Fund Research, Inc. ("HFR"). HFR has not participated in the formation of the Fund. HFR does not endorse or approve the Fund or make any recommendation with respect to investing in the Fund.

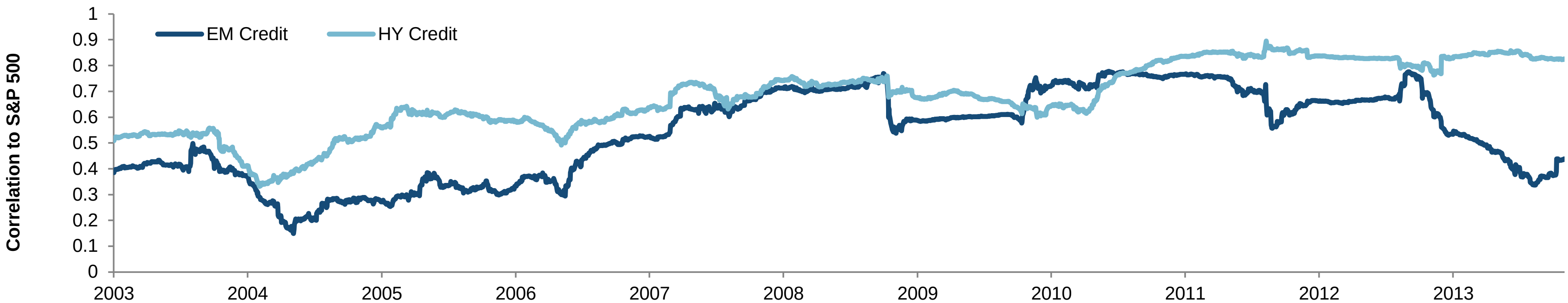
The Case for High Yield and Emerging Market Credit

Credit Returns During Recent Spike in Interest Rates, 1-Jun-04 to 30-Jun-06



- Credit delivers income and potential for price appreciation without interest rate risk; useful for investors with inflation sensitivity
- 10-year USD bonds typically have durations of 7 – 8 years, which implies that a substantial increase in rates can cause material price depreciation
- Credit is a unique risk premium driven by different fundamentals than equities, interest rates, or commodities
- HY and EM credit have been highly correlated to the S&P 500 over the last few years but over longer histories have had fairly low correlations

Credit Indices Rolling 1-Year Correlation to S&P 500 Index, 1-Jan-03 to 31-Oct-13



Source: P&I, Barclays Capital, GSAM analysis. This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. Please see additional disclosures. **Past performance is not indicative of future results, which may vary**

High Yield and Emerging Market Credit - Implementation

- Indexed Credit Default Swaps (CDX) allow investors to access the credit risk premium without needing to hold physical bonds
- As an implementation instrument, CDX offers several attractive characteristics
  - Liquidity has historically been quite strong, often better than equivalent physical bonds
  - Pure credit exposure, no dynamic hedging needed
  - Trade over exchanges with standardized settlement price
  - Limited counterparty credit risk
- Markit Total Return Indices
  - Increasingly popular for passive credit exposure
  - Index is always fully invested in CDX and short-term U.S. treasuries
  - Similar to a bond index, reinvests coupon payments periodically
  - Straightforward to replicate

High Yield and Emerging Market Credit – Index

- The HY index[1] is equally weighted across 100 credits with ratings below BB
- The EM index[1] is weighted according to liquidity and economic importance
- Constituents are rebalanced every 6 months for both Emerging Market and HY

EM Credit	Weight
Argentina	6.0%
Venezuela	8.0%
Brazil	13.0%
Malaysia	4.0%
Colombia	8.0%
Indonesia	5.0%
Panama	3.0%
Peru	5.0%
South Africa	4.0%
Philippines	6.0%
Turkey	12.0%
Russia	13.0%
Ukraine	4.0%
Mexico	9.0%
Total	**100.0%**

HY Credit	Weight
Basic Materials	5.0%
Communications	16.0%
Consumer, Cyclical	26.0%
Consumer, Non-cyclical	18.0%
Energy	5.0%
Financial	10.0%
Industrial	9.0%
Technology	7.0%
Utilities	4.0%
Total	**100.0%**

Source: GSAM.

[1] Please see slide 15 for a description of indices. This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice.

Please see additional disclosures. **Past performance does not guarantee future results, which may vary.**

Disciplined Asset Selection Process

Selection Criteria	Implementation Requirement
Alternative asset class	Under-representation in an investor's overall asset allocation
Low correlation to core portfolio	Low to moderate correlation with developed market equities & U.S. bonds
Potential for strong returns	Potentially consistent and attractive historical risk premia
Daily liquidity	High trading volumes of the asset class and the instrument
Efficient implementation	"Passive" implementation of asset class exposure[1]
Potential inflation hedge	Potentially less susceptible to inflationary environment
Tax sensitive	May be appropriate within a tax deferred account

1 With the exception of the Hedge Fund Index Replication asset class, RPC employs a "passive" investment approach with respect to achieving exposure to its underlying asset classes. GSAM determines the allocations to each asset class. It then employs a "passive" investment approach with respect to achieving exposure to those asset classes (other than Hedge Fund Index Replication). That is, GSAM utilizes an index as a reference for making investments in the asset classes (other than Hedge Fund Index Replication) and does not attempt to exceed the performance of these indices.

For discussion purposes only. Goldman Sachs does not provide accounting, tax or legal advice. Please see additional disclosures at the end of this presentation.

Other Asset Classes Examined

- We have examined many asset classes while developing the RPC Strategy and provide our analysis of a sub-set below

Asset class	Key reasons for initial portfolio exclusion
Master Limited Partnerships	■ Correlation with traditional U.S. equities ■ Inappropriate in non-taxable account
Infrastructure stocks	■ Correlation with traditional U.S. equities ■ Narrow sector of equity market
International small cap	■ Correlation to international equities ■ Inefficient, costly replication
Catastrophe bonds	■ Illiquid ■ Inefficient, costly replication
Natural Resources stocks	■ Correlation with traditional U.S. equities ■ Narrow sector of equity market
Bank Loan credit	■ Illiquid ■ Costly to trade
Alternative risk-premia strategies	■ Challenging for plan participants to understand

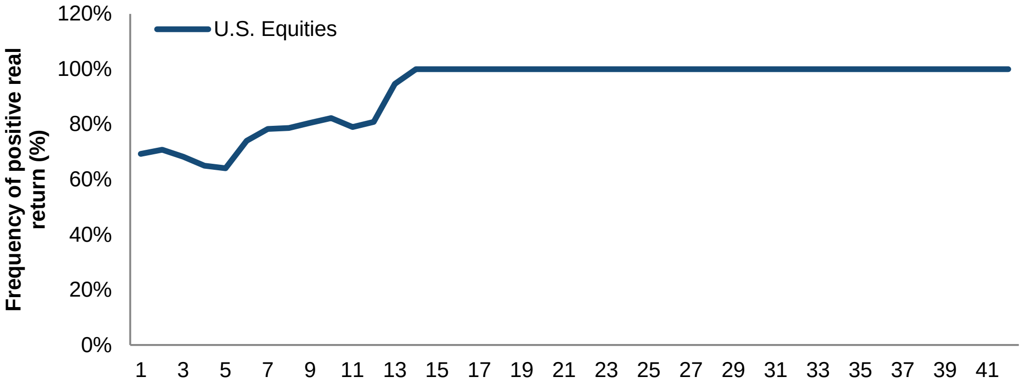
For discussion purposes only. This is not intended to be a full or complete list.

RPC’s Inflation Properties

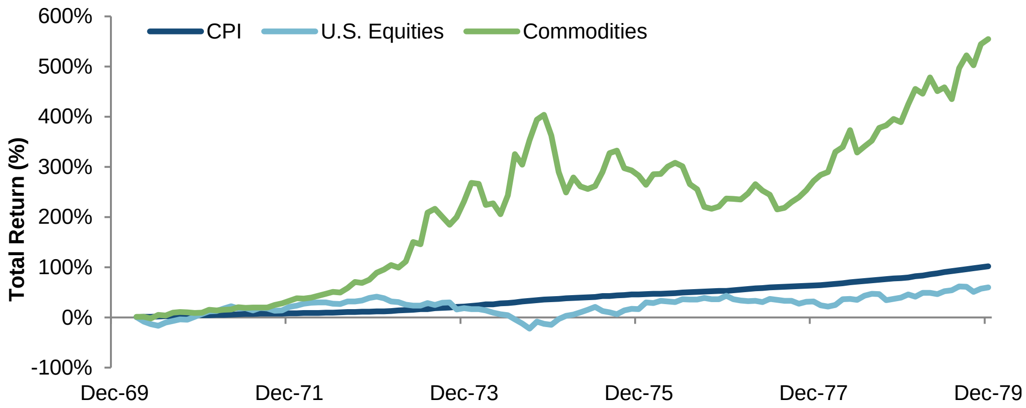
- As a completion vehicle, one of RPC’s main objectives is to provide investors with exposure to a mix of asset classes that we believe can add value in all types of inflationary environments
- While we do not believe any single inflation-aware approach works for all investors, RPC offers some appealing characteristics that may make it a good substitute or complement to conventional “real return” vehicles
  - Exposure to typical real return asset classes
  - Portfolio has a limited amount of USD interest rate risk
  - Exposure to a diversified set of risk premia with strong long-term inflation characteristics
  - Risk-managed approach that is designed to deliver the desired inflation protection without increasing the overall risk-level of the portfolio

Long-term Real Return Generation

Frequency of beating inflation over rolling periods, 1-Mar-70 to 31-Dec-12



Monthly total returns 31-Dec-69 to 31-Dec-79



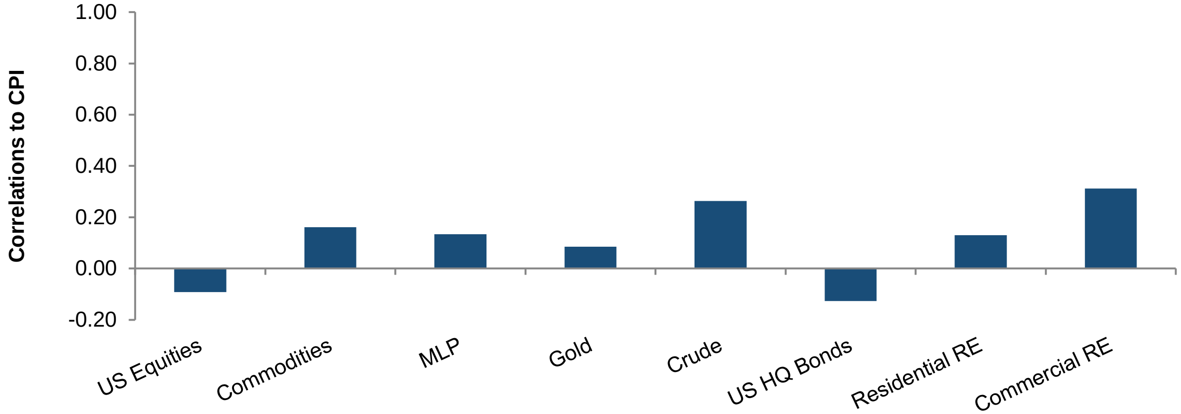
- While we believe investors differ in their inflation time-horizon, aversion to risk, preference for liquidity and other key variables, nearly all investors are focused on their portfolio's returns exceeding the inflation rate
- Equity markets have historically been extraordinarily reliable at generating positive real returns over the long-term, but have also had challenging time-periods as well
- There are certain macro-economic environments, that can persist for extended periods, in which "real" assets can be a large value-add for a portfolio

Source: GSAM, Bloomberg as of October 31, 2013.
This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. Please see additional disclosures. **Past performance does not guarantee future results, which may vary.** For illustrative purposes only.

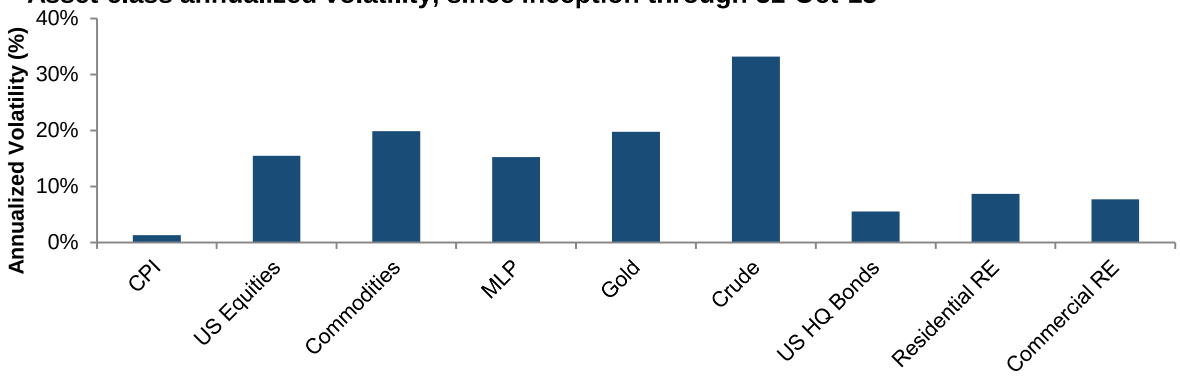
Real Return Asset Classes

Asset class correlations and volatilities, since inception through 31-Oct-13

Asset class correlations to CPI, since inception through 31-Oct-13



Asset class annualized volatility, since inception through 31-Oct-13



- We believe that many real return asset classes warrant a long-term strategic allocation in portfolios
- However the actual behavior of these asset classes with respect to inflation may not be what many investors expect

Source: GSAM, as of October 31, 2013.

Past performance does not guarantee future results, which may vary. For illustrative purposes only. No representation is made that a client will achieve results similar to those shown. Please see additional disclosures

Retirement Portfolio Completion (Institutional)

	Returns						Risk Metrics					Portfolio Metrics		Assets	
As of: October 31, 2013	Gross Rate of Return (%)	Net Rate of Return (%) [2]	60% S&P 500 and 40% Barclays U.S. Aggregate Benchmark (%) [5]	Gross Excess Return (bps)	Retirement Portfolio Completion Benchmark (%) [6]	Gross Excess Return (bps)	Standard Deviation - Composite (%) [7]	Standard Deviation - 60% S&P 500 and 40% Barclays U.S. Aggregate Benchmark (%) [7]	Tracking Error Relative to 60% S&P 500 and 40% Barclays U.S. Aggregate Benchmark (bps) [8]	Standard Deviation - Retirement Portfolio Completion Benchmark (%) [7]	Tracking Error Relative to Retirement Portfolio Completion Benchmark (bps) [8]	Dispersion (%) [3]	No. of Portfolios	End of Period Assets (MM)	Percent of Firm Assets [4]
Annualized Since Inception [1]	2.29	1.84	12.82	(1,053)	1.96	33	N/A	N/A	N/A	N/A	N/A				
Years 10/2012-12/2012	1.29	1.18	(0.14)	143	0.85	44	N/A	N/A	N/A	N/A	N/A	N/A	5	3	< 0.01
10/2013 YTD	1.18	0.80	14.14	(1,296)	1.27	(9)	N/A	N/A	N/A	N/A	N/A	N/A	6	40	N/A

[1] Composite inception date: 10/01/2012. Returns for periods of less than one year cannot be annualized. Where applicable, annual performance for up to 10 years is presented. Additional performance information is available upon request. Currency used to express end of period assets and composite and benchmark performance: USD.

[2] The composite net of fee returns are calculated by adjusting each monthly gross of fee composite return by the highest applicable fee rate listed in the Form ADV, Part II schedule or internal product fee schedule applicable to the prospective investor type. Actual fees and expenses may differ from those reflected in this composite presentation which would cause performance to differ. Where performance fees exist, the calculation was based on assumptions as to how the rate was applied which could differ from how it was actually charged. The net performance may not reflect the deduction of custody, administrative and other fees and expenses or fund sales loads, if applicable.

[3] Dispersion represents an asset weighted standard deviation of annual portfolio returns. Dispersion is not considered meaningful where less than five portfolios have been in the composite for the entire year and therefore has not been presented in years where an N/A appears.

[4] Percentage of Firm assets are presented on an annual basis. Additional Firm asset and % of Firm asset information is available upon request.

[5] Benchmark Source: Custom benchmark calculated by GSAM; Component returns are sourced from index providers. This index is a custom blend of 60% S&P 500 Index & 40% Barclays U.S. Aggregate Index. S&P 500 is a market value-weighted index comprised of 500 stocks selected for market size, liquidity, and industry group representation. Barclays U.S. Aggregate Bond Index represents securities that are U.S. domestic, taxable, and dollar denominated and includes only those securities with greater than one year remaining maturity and fixed coupon. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities. These major sectors are subdivided into more specific indices that are calculated and reported on a regular basis. The index results do not include fees or expenses. All Lehman Brothers indices have been rebranded to Barclays Capital indices with effect from November 3, 2008. This custom index has a monthly reset, is unhedged, and is expressed in USD.

[6] Benchmark Source 2: S&P. The Retirement Portfolio Completion Benchmark employs a rules-based quantitative methodology in determining the weightings of the component indices within the Benchmark, similar to that used by the Investment Adviser in managing the Retirement Portfolio Completion Fund. This index is composed of indices representative of the Retirement Portfolio Completion Fund's underlying asset classes. It is in total return, unhedged, and expressed in USD.

[7] For annual and YTD periods, the three year annualized ex-post standard deviation is presented as of the date shown. For each period for which an annualized return is presented, the corresponding annualized ex-post standard deviation of the composite and benchmark is also provided. N/A is shown for periods where historical monthly returns are not available for 36 months or the full time period presented as standard deviation is not considered meaningful in these cases.

[8] It has been determined that ex-post standard deviation is not an appropriate measure of risk for this strategy as portfolios may utilize derivatives to gain benchmark exposure and target a specific tracking error. Therefore, for annual and YTD periods, the three year annualized ex-post tracking error is presented as of the date shown. For each period for which an annualized return is presented, the corresponding annualized ex-post tracking error of the composite and benchmark is also provided. N/A is shown for periods where historical monthly returns are not available for 36 months or the full time period presented as tracking error is not considered meaningful in these cases.

Continued on next page

Retirement Portfolio Completion (Institutional) (Continued)

GSAM claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. GSAM has been independently verified for the periods July 1, 2000 through June 30, 2006 by Deloitte & Touche, LLP and for the periods July 1, 2006 through December 31, 2012 by Ernst & Young LLP. The verification reports are available upon request.

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.

Goldman Sachs Asset Management (excluding the following two business units (i) Goldman Sachs Hedge Fund Strategies LLC and (ii) the Private Equity Group), is referred to herein as the 'Firm' or 'GSAM'. Established in 1988, GSAM provides advisory services globally to both individual and institutional clients and is defined as the 'Firm' for purposes of complying with the Global Investment Performance Standards (GIPS®). GSAM acquired Macquarie-IMM Investment Management Co. (Macquarie-IMM) in September 2007. In July 2011, GSAM acquired Goldman Sachs & Partners, an affiliated Australian investment adviser and Benchmark Asset Management Company, an Indian investment adviser and ETF provider.

Effective October 2012, the Energy and Infrastructure team within Private Wealth Management (PWM), an affiliated investment adviser, moved to GSAM. In all instances, GSAM retained substantially all of the assets, historical performance results and key investment team members. In May 2012, GSAM acquired Dwight Asset Management Company LLC and retained substantially all the stable value strategies and associated investment team members.

The Retirement Portfolio Completion composite consists of portfolios that seek to provide exposure to certain asset classes that are typically underrepresented in retirement savings portfolios including, but not limited to, the following underlying asset classes: U.S. Inflation Linked Government Bonds, Global Real Estate Investment Trusts, Commodities, Emerging Markets Equity and Sovereign Credit, North American High Yield Corporate Credit and Hedge Fund Industry Beta. Portfolios utilize a proprietary rules-based, quantitative methodology in an attempt to approximate the investment characteristics and performance of each underlying asset class. Portfolios also seek to target approximately equal risk contributions from each underlying asset class. Portfolios are included in the composite with no restrictions on asset size. Portfolios may include institutional accounts, pooled vehicles or private wealth accounts.

These total return figures represent past performance and are not indicative of future returns which may vary. Performance results are calculated utilizing a time-weighted rate of return methodology and include the reinvestment of earnings. Effective April 2010, institutional and private wealth account returns are calculated by applying the true time-weighted return calculation methodology. Previously account returns were calculated applying the Modified BAI calculation methodology based on a monthly valuation and daily weighted cash flows. Accounts are valued pursuant to GSAM's Valuation Procedures and reflect GSAM's good faith estimate of fair market levels for all positions, which may not be realized upon liquidation. The circumstances of the transaction and transaction size will affect the price received upon liquidation.

GSAM's valuation policies are available upon request. Gross performance results are presented before management and custodial fees but after all trading commissions and transaction costs. Net performance results are net of transaction costs and investment management fees as described in Note 2 above. Where composites include mutual fund portfolios, the mutual fund performance is calculated gross of management and other fund fees for all share classes. Gross mutual fund performance is derived from net fund performance, applying the funds' total expense ratio. All relevant funds' share class assets are reflected in the composite and total GSAM assets figures. Each share class is treated as one account.

Account and mutual fund valuation sources and timing may sometimes differ causing dispersion within the composite. The composite may include portfolios of different base currencies which have been redenominated to a common currency using monthly exchange rates obtained from WM Reuters and Financial Times (FT). Composite monthly returns are the size-weighted averages of the portfolios' monthly returns. Composite monthly returns are geometrically linked to calculate composite annual returns. GSAM's policies for calculating performance and preparing compliant presentations are available upon request. Segments of multiple asset class portfolios which have been managed as stand alone portfolios with separately managed cash may be included in the composite. A complete list and description of GSAM's composites is available upon request.

The maximum standard fee schedule applied for this product reflects 45 bps.

Effective January 1, 2012, GSAM changed its methodology for applying model fees changes for calculation of composite net returns on a prospective basis. When a fee increase occurs mid month, the highest applicable fee rate is applied effective the 1st of that month. When a fee decrease occurs mid month, the lowered fee rate is applied effective the 1st of the following month. Between July 1, 2005 and December 31, 2011, the methodology reflected the application of the highest model fee based on the applicable fee schedule in effect for that calendar year. Prior to July 1, 2005, the current highest fee in the Form ADV, Part II was applied retroactively across all periods. As a result, net returns presented through June 30, 2005 reflect the fees in effect on June 30, 2005.

For the performance period presented, investment professionals may have changed or departed, none of which in the Firm's view have altered the composite's strategy.

Accounts within this composite are leveraged through the use of derivatives to implement their portfolio strategy. Exchange traded futures, FX forwards, options and swaps are used to gain exposure to specific markets and to generate excess return while targeting a defined tracking error. The risk gained through the use of the derivatives is best indicated by historical tracking errors.

Goldman Sachs ART Fund Risk Disclosures

The Goldman Sachs Absolute Return Tracker Fund seeks to deliver long-term total return consistent with investment results that approximate the return and risk patterns of a diversified universe of hedge funds. The Investment Adviser selects the Fund's investments using a quantitative algorithm (or methodology) that attempts to approximate the beta component of hedge fund returns (the portion of returns derived from exposure to sources of market risk).

The Fund intends to invest in securities and other financial instruments that provide short or long exposure to the market factors that represent these sources of **market risk** and returns. From time to time, regulatory constraints or other considerations may prevent the Fund from replicating the returns of the market factors. **The Fund does not intend to outperform market returns, even during periods of sustained increases in the prices of stocks and bonds. Derivative instruments** may involve a high degree of financial risk. These risks include the risk that a small movement in the price of the underlying security or benchmark may result in a disproportionately large movement, unfavorable or favorable, in the price of the derivative instrument; the risk of default by a counterparty; and liquidity risk. **Over-the-counter transactions** are subject to less government regulation and supervision. The Fund may also hold significant amounts of U.S. Treasury or short-term instruments. The Fund is subject to the risk that exposure to the **commodities markets** may subject the Fund to greater volatility than investments in traditional securities. **Foreign and emerging markets investments** may be more volatile and less liquid than U.S. securities and are subject to the risks of currency fluctuations and adverse economic or political developments. At times, the Fund may be unable to sell certain of its **illiquid investments** without a substantial drop in price, if at all. The Fund is subject to the risks associated with **short selling** of securities, which involves **leverage** of the Fund's assets and presents various other risks. The Fund may be obligated to cover its short position at a higher price than the short price, resulting in a loss. Losses on short sales are potentially unlimited as a loss occurs when the value of a security sold short increases. The Fund is not appropriate for all investors. The Investment Adviser's **use of quantitative models** to execute the Fund's investment strategy may fail to produce the intended result. **Different investment styles** (e.g., "quantitative") tend to shift in and out of favor, and at times the Fund may underperform other funds that invest in similar asset classes.

Additional notes

This material is provided at your request for informational purposes only. It is not an offer or solicitation to buy or sell any securities.

THIS MATERIAL DOES NOT CONSTITUTE AN OFFER OR SOLICITATION IN ANY JURISDICTION WHERE OR TO ANY PERSON TO WHOM IT WOULD BE UNAUTHORIZED OR UNLAWFUL TO DO SO.

The portfolio risk management process includes an effort to monitor and manage risk, but does not imply low risk.

Opinions expressed are current opinions as of the date appearing in this material only. The strategy may include the use of derivatives. Derivatives often involve a high degree of financial risk because a relatively small movement in the price of the underlying security or benchmark may result in a disproportionately large movement in the price of the derivative and are not suitable for all investors. No representation regarding the suitability of these instruments and strategies for a particular investor is made.

Although certain information has been obtained from sources believed to be reliable, we do not guarantee its accuracy, completeness or fairness. We have relied upon and assumed without independent verification, the accuracy and completeness of all information available from public sources.

An investment in real estate securities is subject to greater price volatility and the special risks associated with direct ownership of real estate.

High-yield, lower-rated securities involve greater price volatility and present greater credit risks than higher-rated fixed income securities.

Foreign securities may be more volatile than investments in U.S. securities and will be subject to a number of additional risks, including but not limited to currency fluctuations and political developments.

Emerging markets securities may be less liquid and more volatile and are subject to a number of additional risks, including but not limited to currency fluctuations and political instability.

This material is provided for informational purposes only and should not be construed as investment advice or an offer or solicitation to buy or sell securities. This material is not intended to be used as a general guide to investing, or as a source of any specific investment recommendations, and makes no implied or express recommendations concerning the manner in which any client's account should or would be handled, as appropriate investment strategies depend upon the client's investment objectives.

References to indices, benchmarks or other measures of relative market performance over a specified period of time are provided for your information only and do not imply that the portfolio will achieve similar results. The index composition may not reflect the manner in which a portfolio is constructed. While an adviser seeks to design a portfolio which reflects appropriate risk and return features, portfolio characteristics may deviate from those of the benchmark.

No representation regarding the suitability of these instruments and strategies for a particular investor is made. These strategies may be offered by GSAM and the Trust Company, through other vehicles. Separately managed account and bank collective fund guidelines and strategies may differ. Please contact your representative for more information. Eligible plans should consider whether an investment in one or more of the collective trust funds satisfies the diversification requirements and prudence requirements of ERISA and/or other applicable law and regulations thereunder applied to the plans' own circumstances and should inform themselves as to any other applicable legal requirements, and taxation and exchange control regulations in the countries of their sponsors' or participants' citizenship, residence or domicile which might be relevant.

Goldman Sachs does not provide accounting, tax, or legal advice. Notwithstanding anything in this document to the contrary, and except as required to enable compliance with applicable securities law, you may disclose to any person the U.S. federal and state income tax treatment and tax structure of the transaction and all materials of any kind (including tax opinions and other tax analyses) that are provided to you relating to such tax treatment and tax structure, without Goldman Sachs imposing any limitation of any kind. Investors should be aware that a determination of the tax consequences to them should take into account their specific circumstances and that the tax law is subject to change in the future or retroactively and investors are strongly urged to consult with their own tax advisor regarding any potential strategy, investment or transaction.

Additional notes

Although the Goldman Sachs Retirement Portfolio Completion Strategy is not an investment in a hedge fund, the Hedge Fund Index Replication allocation relies on performance data from alternative investments such as hedge funds. Alternative Investments by their nature, involve a substantial degree of risk, including the risk of total loss of an investor's capital. Fund performance can be volatile.

The following table provides a simplified example of the effect of management fees on portfolio returns. Assume a portfolio has a steady investment return, gross of fees, of 0.5% per month and total management fees of 0.05% per month of the market value of the portfolio on the last day of the month. Management fees are deducted from the market value of the portfolio on that day. There are no cash flows during the period. The table shows that, assuming all other factors remain constant, the difference increases due to the compounding effect over time. Of course, the magnitude of the difference between gross-of-fee and net-of-fee returns will depend on a variety of factors, and this example is purposely simplified.

Period	Gross Return	Net Return	Differential
1 year	6.17%	5.54%	0.63%
2 years	12.72	11.38	1.34
10 years	81.94	71.39	10.55

Past performance does not guarantee future results, which may vary. The value of investments and the income derived from investments will fluctuate and can go down as well as up. A loss of principal may occur.

This material is provided for informational purposes only and should not be construed as investment advice or an offer or solicitation to buy or sell securities. This material is not intended to be used as a general guide to investing, or as a source of any specific investment recommendations, and makes no implied or express recommendations concerning the manner in which any client's account should or would be handled, as appropriate investment strategies depend upon the client's investment objectives.

This material has been prepared by GSAM and is not a product of Goldman Sachs Global Investment Research. The views and opinions expressed may differ from those of Goldman Sachs Global Investment Research or other departments or divisions of Goldman Sachs and its affiliates. Investors are urged to consult with their financial advisors before buying or selling any securities. This information may not be current and GSAM has no obligation to provide any updates or changes.

Index Benchmarks

Indices are unmanaged. The figures for the index reflect the reinvestment of all income or dividends, as applicable, but do not reflect the deduction of any fees or expenses which would reduce returns. Investors cannot invest directly in indices.

The indices referenced herein have been selected because they are well known, easily recognized by investors, and reflect those indices that the Investment Manager believes, in part based on industry practice, provide a suitable benchmark against which to evaluate the investment or broader market described herein. The exclusion of "failed" or closed hedge funds may mean that each index overstates the performance of hedge funds generally.

Confidentiality

No part of this material may, without GSAM's prior written consent, be (i) copied, photocopied or duplicated in any form, by any means, or (ii) distributed to any person that is not an employee, officer, director, or authorized agent of the recipient.

 Date of First Use: November 25, 2013 Compliance Code:115356.CT.MF.OTU

T. Rowe Price

Relevant Mandates: **U.S. Equity Market Trust** | **Hired:** **2008**

Firm Information	Investment Approach	Total ARMB Mandate
T. Rowe Price Group, Inc. is an independent, publicly traded company with significant employee ownership. T. Rowe Price Group, Inc.'s shares are traded on the NASDAQ Stock Market (symbol: TROW), and are included in the S&P 500 Stock Index. T. Rowe Price Group, Inc. is the direct or indirect owner of multiple subsidiaries. As of 9/30/13, the firm's total assets under management were $647 billion. **Key Executives:** **Charles Shriver**, *Vice President, Portfolio Manager* **Robert A. Birch**, *Vice President, Director: U.S. Institutional Client Service*	• Seeks to match the performance of the U.S. equity market, as represented by the Russell 3000 Index. • Index reflects the performance of the largest 3,000 U.S. companies; large-cap stocks represent the majority of the index's market cap weighted value • Attempts to accomplish its objective by investing in a sample of stocks that are representative of the index. *In 2008, the T. Rowe Large Cap and Small Cap Trusts were consolidated into the U.S. Equity Trust which is currently one of four building blocks used as components in participant directed investment options. Summaries for the Money Market Trust, Aggregate Bond Trust, and International Equity Trust are available upon request. **Benchmark:** Russell 3000 Index	**Assets Under Management:** 9/30/13 $899,297,648

Concerns: None

9/30/2013 Performance

	Last Quarter	1 Year	3 Years Annualized	5 Years Annualized
U.S. Equity Trust (net)	6.32%	21.91%	16.76%	-
Russell 3000 Index	6.35%	21.60%	16.76%	-

Alaska Retirement Management Board
Proposed Portfolio Enhancements

December 5, 2013

T.RowePrice
INVEST WITH CONFIDENCE

T. Rowe Price — Presenters

Institutional Sales

Christopher W. Dyer
Vice President — Institutional Sales Executive
- 29 years of experience in institutional investment management sales;
- 25 years with T. Rowe Price.

Institutional Client Service

Robert A. Birch
Director: U.S. Institutional Client Service
- 26 years of institutional investment and consulting experience;
- 12 years with T. Rowe Price.

Portfolio Management

Charles M. Shriver, CFA
Vice President — Portfolio Manager
- 14 years of investment experience;
- 21 years with T. Rowe Price.

Portfolio Management

Robert M. Larkins, CFA
Vice President — Portfolio Manager
- 10 years of investment experience;
- 10 years with T. Rowe Price.

Table of Contents

Account Management

Alaska Retirement Management Board

Overall Account Management

PRIMARY RELATIONSHIP MANAGER

Christopher W. Dyer	1-410-345-6688

Responsible for plan promotion and oversight.

Investment Management

PRIMARY INVESTMENT MANAGERS

Charles M. Shriver	1-410-345-2210
Richard T. Whitney	1-410-345-7638
Toby M. Thompson	1-410-345-7863

ADDITIONAL INVESTMENT MANAGERS

Fixed Income	Equity
Tony Luna	Neil Smith
Joe Lynagh	Fred Bair
Robert Larkins	Paul Wojcik
	Greg McCrickard

Responsible for investment management for all State of Alaska assets at T. Rowe Price.

Client Service and Investment Reviews

CLIENT SERVICE

John Plowright	1-415-772-1117
Robert A. Birch	1-410-345-4788

Responsible for coordination of client information, investment reviews, and coordination of the relationship with Great West.

Alaska Retirement Portfolios

Development of Investment Options

Working Together to Improve Investment Options

1992	Alaska Balanced Fund
1996	Alaska Target Date Funds - 2000/2005/ 2010/2015
2000	Alaska Target Date 2020
2001	Alaska Long-Term Balanced Fund to complement more conservative Balanced Fund Small-Cap Stock Trust offered as stand-alone investment option
2004	Stable Value Fund offered as stand-alone investment option for the Alaska SBS plan
2005	Alaska Target 2025 with Glide Path designed to flow into Alaska Balanced Fund
2006	Alaska Balanced Trust, Long-Term Balanced Trust, 2025 Trust and Money Market Master Trust established to facilitate creation of diversified investment options for PERS/TRS defined contribution plans

2008	Consolidation of GNMA and Govt/Corp into Aggregate Bond Trust and Large-Cap and Small-Cap into U.S. Equity Market Trust
2009	New Target Date Retirement Glide Path extends through retirement
2009	Balanced Trust and Target Date Retirement Trusts offered consistently across SBS, PERS, and TRS plans
2009	Target Date Retirement Trusts become default allocations for SBS, PERS, and TRS
2009	New Alaska Target Date Retirement Trusts (2030-2055) added to plan option lineup
2013/2014	Portfolio Enhancements to Alaska Bond and International Trusts

Key Attributes of the Alaska Retirement Plans

- **Custom suite of portfolios designed specifically for Alaska featuring on-going enhancements**
  - Balanced portfolio offered in 1992 tailored to custom, conservative growth risk profile
  - Target Date portfolios introduced in 1996
- **Breadth of investment offerings**
  - **Target Date** Retirement Trusts from 2010-2055 in five year intervals as default investment option
  - Balanced and Long-Term Balanced Trusts for investors seeking **target risk** profiles
- **Intelligently designed**
  - Target Date Retirement Trusts built on principles and rigor of T. Rowe Price's Retirement Glide Path
  - Balanced Trust has offered conservative growth through volatile markets since 1992
  - Balanced Trust captured 85% of the S&P 500 Index return since 1992 with 40% of the volatility
- **Broad diversification**
  - Core U.S. stocks and investment grade bonds with diversification in small-cap and non-US stocks
- **Risk aware**
  - Investment management and reporting consistent with Alaska's specific risk parameters
- **Cost competitive**
  - Weighted average investment management fee of 10 basis points

Objective

- Reduce the sensitivity of the Trusts to rising interest rates
- Increase the inflation sensitivity of the Trusts
- More fully benefit from global investment opportunities

Proposed Portfolio Enhancements for Alaska Bond Trust

Fixed Income Proposed Changes:

- **Reduce the Aggregate Bond Trust's interest rate sensitivity**
  - The Aggregate Bond Trust will migrate from an Aggregate to an Intermediate Aggregate duration profile
- **Include sub-asset classes that offer protection from rising interest rates and inflation**
  - Strategic allocation of 15% to floating rate note securities (FRN)
  - Strategic allocation of 10% to short-term treasury inflation protection securities (TIPS)
  - Strategic allocation of 5% to long-term treasury securities
- **The changes will impact the Alaska Balanced, Long-Term Balanced and Target Date Trusts**

Proposed Portfolio Enhancements for Alaska International Trust

International Equity Proposed Changes:

- **Increase the international equity allocation**
  - Increase the neutral allocation to international equities from 20% to 30% of total equities
  - The increase will be made consistently across the Alaska Balanced, Long-term Balanced and Target Date Trusts
- **Adjust the International Trust's profile to include both international developed and emerging markets equities**
  - Change the benchmark from the MSCI EAFE Index, a fully developed market index, to the MSCI ACWI ex-U.S. Index, which includes both developed and emerging markets. (Emerging markets exposure is currently 21% of the index.)
- **The changes will impact the Alaska Balanced, Long-Term Balanced and Target Date Trusts**

Current vs. Proposed Portfolios

Sector Diversification Among Underlying Portfolios

- **Stocks**
  - U.S. Equity Market Trust
    - Large-Cap
    - Mid-Cap
    - Small-Cap
  - International Trust
    - Emerging Markets
    - Developed International Stocks
- **Bonds**
  - Bond Trust[1]
    - Government
      - Nominal Treasuries
      - Short-Term TIPS
      - Floating Rate Notes
      - Long-Term Treasuries
    - Corporate
    - Mortgages
    - Asset-Backed Securities
    - Commercial Mortgage-Backed Securities
- **Money Market Trust**
  - U.S. and International Money Market Securities

[1] Proposed name change to "Alaska Bond Trust" from "Alaska Aggregate Bond Trust".
Highlighted sectors reflect proposed changes to Trusts.

Structure of Investment Options

Investment Options (Trusts and Daily Valued Separate Accounts)

- Alaska Balanced Trust
- Alaska Long Term Balanced Trust

- Alaska Target Date Retirement Trusts 2010, 2015, 2020, 2025, 2030, 2035, 2040, 2045, 2050, 2055

- Alaska Money Market Master Trust
- Alaska Stable Value
- Alaska Small-Cap Stock Trust
- Alaska Interest Income

Building Block Level: Common Trust Funds

- Alaska Money Market Trust
- Alaska Bond Trust[1]
- Alaska U.S. Equity Market Trust
- Alaska International Trust

Building Block Level — Common Trust Funds

SBS, PERS, TRS, and Deferred Compensation Plan (Common Trust Funds)

SBS Only (Separate Account)

PERS/TRS Only (Common Trust Fund)

Deferred Compensation Plan Only (Separate Account)

[1] Proposed name change to "Alaska Bond Trust" from "Alaska Aggregate Bond Trust".

Orange outline denotes where proposed changes will occur.

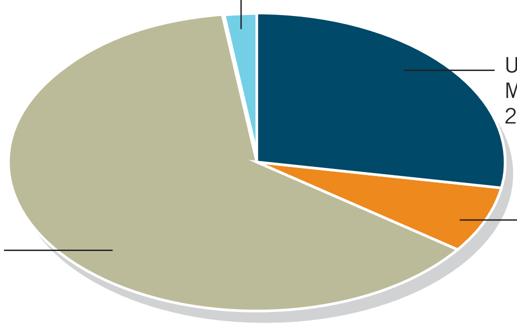
The Alaska Balanced Trust, Alaska Long-Term Balanced Trust, Alaska Money Market Master Trust, Alaska Target Retirement 2010-2055 Trusts,

The Alaska Small-Cap Stock Trust, Alaska Money Market Trust, Alaska Aggregate Bond Trust, Alaska U.S. Equity Market Trust, and the Alaska International Trust are not mutual funds. They are common trust funds established by T. Rowe Price Trust Company under Maryland banking law, and their units are exempt from registration under the Securities Act of 1933. Investments in the trusts are not deposits or obligations of, or guaranteed by, the U.S. government or its agencies or T. Rowe Price Trust Company and are subject to investment risks, including possible loss of principal.

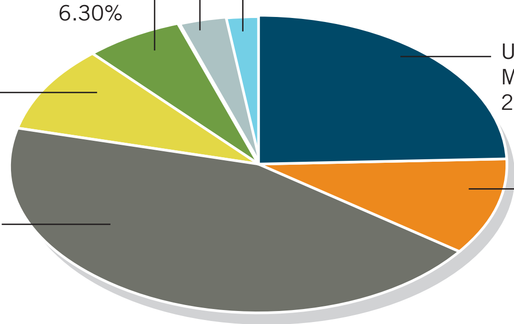
Balanced Trust Asset Allocation with Proposed Changes

Balanced Trust
As of October 31, 2013

Current:



Proposed:



	Stocks	Bonds
Target Weight	37.0%	63.0%
Neutral Weight	35.0	65.0
Difference	2.0	-2.0

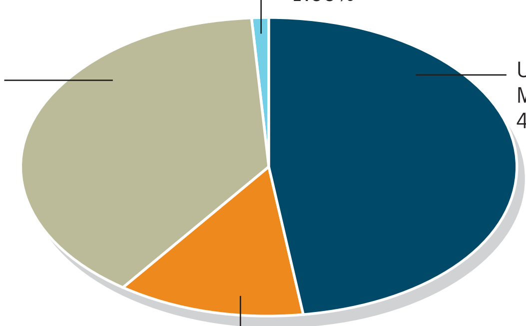
	Stocks	Bonds
Target Weight	37.0%	63.0%
Neutral Weight	35.0	65.0
Difference	2.0	-2.0

[1] U.S. Treasury Long, Short-Term TIPS, Floating Rate Notes, and Intermediate Aggregate Bond will all be underlying sectors of the proposed Bond Trust.

Long-Term Balanced Trust Asset Allocation with Proposed Changes

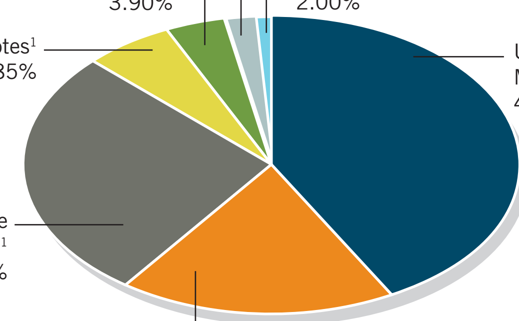
Long-Term Balanced Trust
As of October 31, 2013

Current:



	Stocks	Bonds
Target Weight	62.0%	38.0%
Neutral Weight	60.0	40.0
Difference	2.0	-2.0

Proposed:

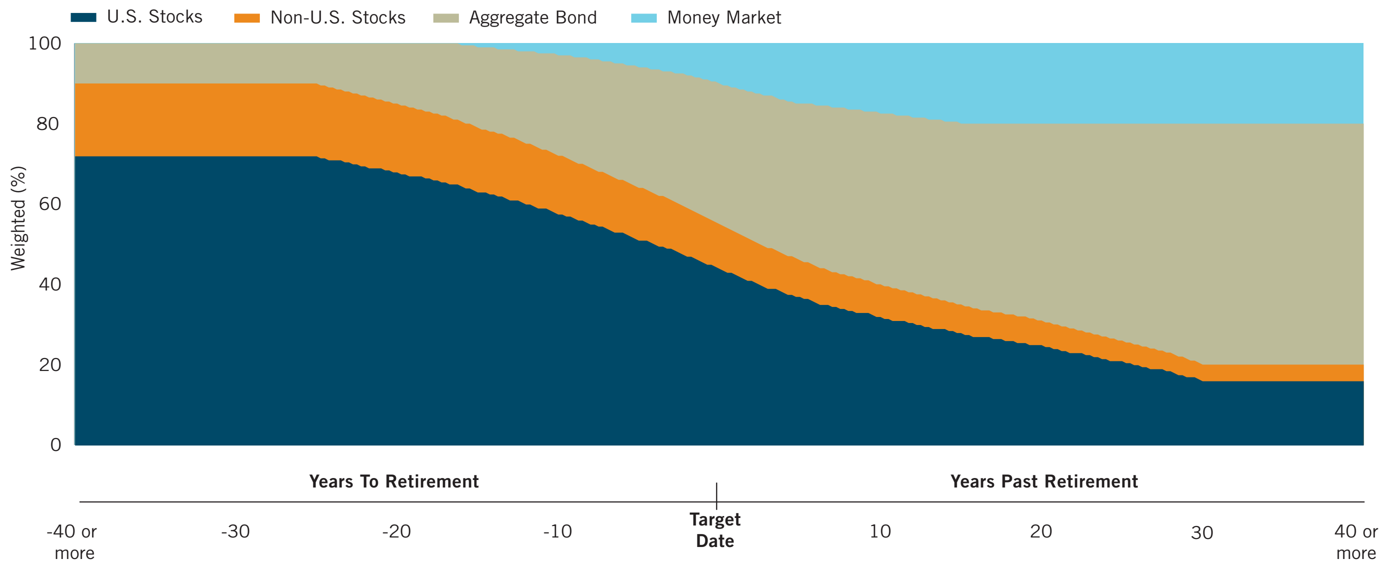


	Stocks	Bonds
Target Weight	62.0%	38.0%
Neutral Weight	60.0	40.0
Difference	2.0	-2.0

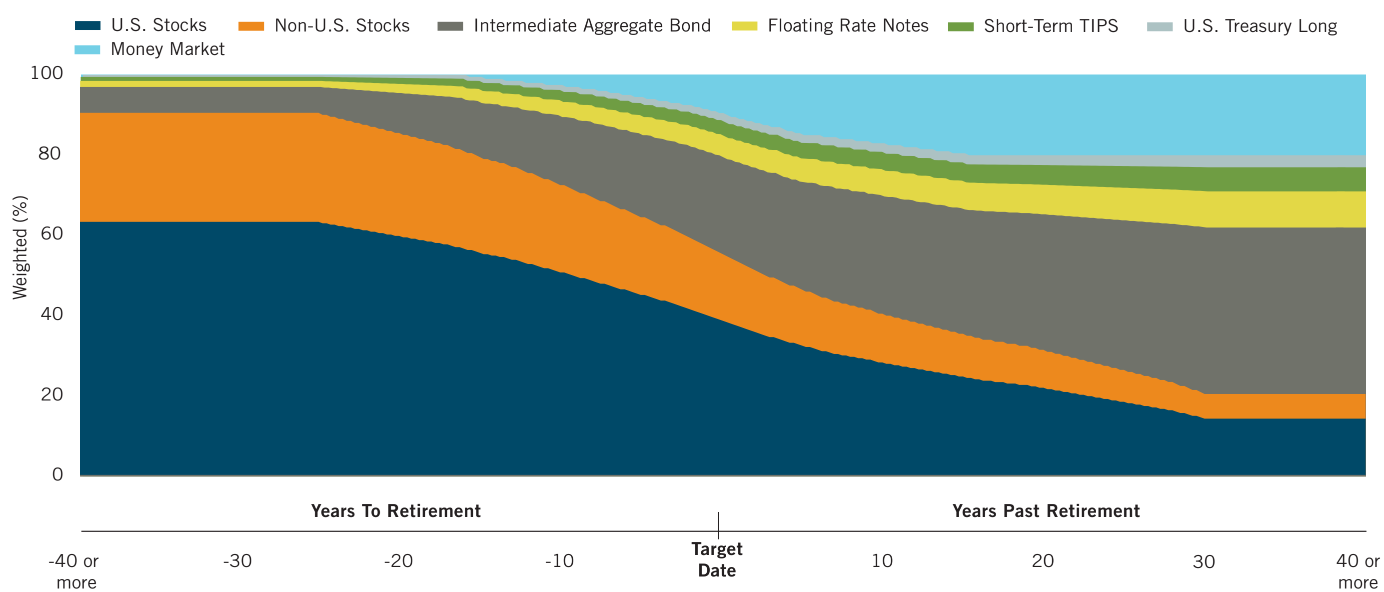
[1] U.S. Treasury Long, Short-Term TIPS, Floating Rate Notes, and Intermediate Aggregate Bond will all be underlying sectors of the proposed Bond Trust.
Numbers may not total due to rounding.

Glide Path Through Retirement

Current:



Proposed:



Fixed Income Proposed Portfolio Enhancements

Alaska Bond Trust Proposed Enhancements

Alaska Bond Trust
Current versus Proposed Profile

	Current Profile	Proposed Profile
Barclays U.S. Aggregate Bond Index	100%	
Barclays U.S. Intermediate Aggregate Index		70%
Barclays U.S. Floating Rate Notes Index		15
Barclays U.S. Treasury TIPS 1-5 Year Index		10
Barclays U.S. Long Treasury Index		5

- Adjust the profile of the current Aggregate Bond Trust to shorten its duration exposure.
  - This is done primarily by switching from the Barclays U.S. Aggregate Bond Index with a duration of 5.5 years to the Barclays U.S. Intermediate Aggregate Index with a duration of 4.3 years.
- Include a **15% allocation to floating rate note securities (FRN)** to provide protection from rising interest rates.
  - FRN securities earn a short term interest rate (LIBOR) plus a spread – the spread being related to the credit risk of the security.
  - As short rates go up, LIBOR will rise as well which will benefit FRNs as they will earn a higher rate.
  - The Barclays FRN Index has a duration of 0.3 years.
- Include a **10% allocation to short-term treasury inflation protection securities (TIPS)** to protect against rising inflation.
  - Short-term TIPS allocation will have a comparable profile to the Barclays 1-5 Year TIPS Index, with a current duration of 2.7 years.
- Include a **5% allocation to long-term treasury securities** (greater than 10 year maturities).
  - The exposure to long-term treasuries will benefit the portfolio in a "bear-flattening" yield curve scenario, which is when short-term rates increase more than long-term rates.
  - Long-term treasuries also have a yield advantage that will benefit the portfolio in steep yield curve environments.
  - Additionally, long treasuries are a good hedge to equity volatility and also would perform well in a recessionary scare environment.

Reduce sensitivity to rising rates and increase sensitivity to inflation.

Portfolio Comparison

As of October 31, 2013

	Proposed Portfolio[1]	U.S. Intermediate Aggregate Index	U.S. Aggregate Index
Portfolio Characteristics:			
Option-Adjusted Duration	4.15 Years	4.31 Years	5.49 Years
Option-Adjusted Spread	38 bps	43 bps	52 bps
Yield-to-Worst	1.70%	1.94%	2.26%
Quality Breakdown:			
AAA	71.5%	77.4%	72.6%
AA	7.2%	4.6%	5.0%
A	13.9%	9.1%	11.0%
BBB	7.4%	8.9%	11.5%
Sector Breakdown:			
Treasuries	40.4%	36.3%	35.9%
Govt Related	9.2%	9.3%	10.3%
Corporate	25.2%	18.2%	22.0%
MBS	23.6%	33.8%	29.7%
ABS	0.3%	0.5%	0.4%
CMBS	1.4%	1.9%	1.7%

Proposed portfolio maintains similar quality and sector characteristics with slightly lower yield.[2]

[1] Proposed portfolio consist of 70% Barclays U.S. Intermediate Aggregate Index, 15% Barclays U.S. Floating Rate Notes Index, 10% Barclays U.S. Treasury TIPS 1-5 Year Index, and 5% Barclays U.S. Long Treasury Index.

[2] Yield on the proposed portfolio does not include inflation accrual associated with TIPS.

Source: Barclays.

Portfolio Comparison – Parallel Shifts In Yield Curve

Change in Rates
As of October 31, 2013

Returns[1]	Proposed Portfolio[1]	U.S. Intermediate Aggregate Index	U.S. Aggregate Index
-100 bps Parallel Shift	3.54%	3.65%	4.90%
+100 bps Parallel Shift	-4.16	-4.34	-5.52
+200 bps Parallel Shift	-8.32	-8.68	-11.04

Shaded areas denote outperformance vs. Agg. Shaded areas denote underperformance vs. Agg.

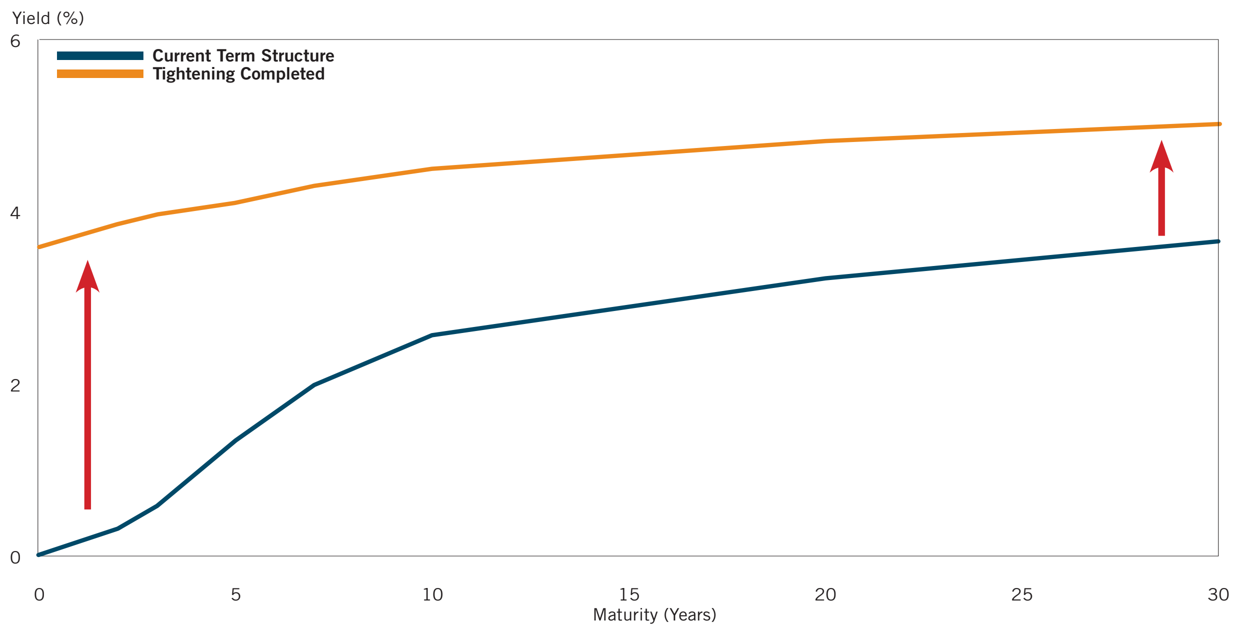
[1] A T. Rowe Price proprietary fixed income model was used to evaluate each portfolio models' sensitivity across various rate environments. The T. Rowe Price model allows for the adjustments of multiple key rates across the yield curve. The model only captures the impact of the changes in rates and not the impact of additional market factors. The analysis provides returns data to assess the impact of instantaneous changes ("shocks") in rates.

Portfolio Comparison – Bear Flattening Yield Curve

Change in Yield Curve Slope – Bear Flattening
As of October 31, 2013

Returns[1]	Proposed Portfolio[1]	U.S. Intermediate Aggregate Index	U.S. Aggregate Index
Scenario 1 (2yr +100, 10yr +50)	-3.04%	-3.61%	-3.61%
Scenario 2 (2yr +200, 10yr +100)	-6.08	-7.23	-7.22
Scenario 3 (2yr +200, 10yr +50)	-4.78	-5.97	-5.31
Scenario 4 (2yr +250, 10yr +150)	-8.24	-9.67	-9.98
Scenario 5 (2yr +300, 10yr +200)	-10.41	-12.10	-12.74
Scenario 6 (2yr +350, 10yr +200)	-11.28	-13.28	-13.59

Shaded areas denote outperformance vs. Agg.
Shaded areas denote in-line performance vs. Agg.
Shaded areas denote underperformance vs. Agg.



[1] A T. Rowe Price proprietary fixed income model was used to evaluate each portfolio models' sensitivity across various rate environments. The T. Rowe Price model allows for the adjustments of multiple key rates across the yield curve. The model only captures the impact of the changes in rates and not the impact of additional market factors. The analysis provides returns data to assess the impact of instantaneous changes ("shocks") in rates.

Alaska Bond Trust – Benchmark and Operating Ranges

Alaska Bond Trust's Benchmark:

Current: Barclays Aggregate Index

Proposed: 70% Barclays Intermediate Aggregate Index, 15% Barclays U.S. Floating Rate Notes Index, 10% Barclays U.S. Treasury TIPS 1-5 Year Index, and 5% Barclays U.S. Long Treasury Index

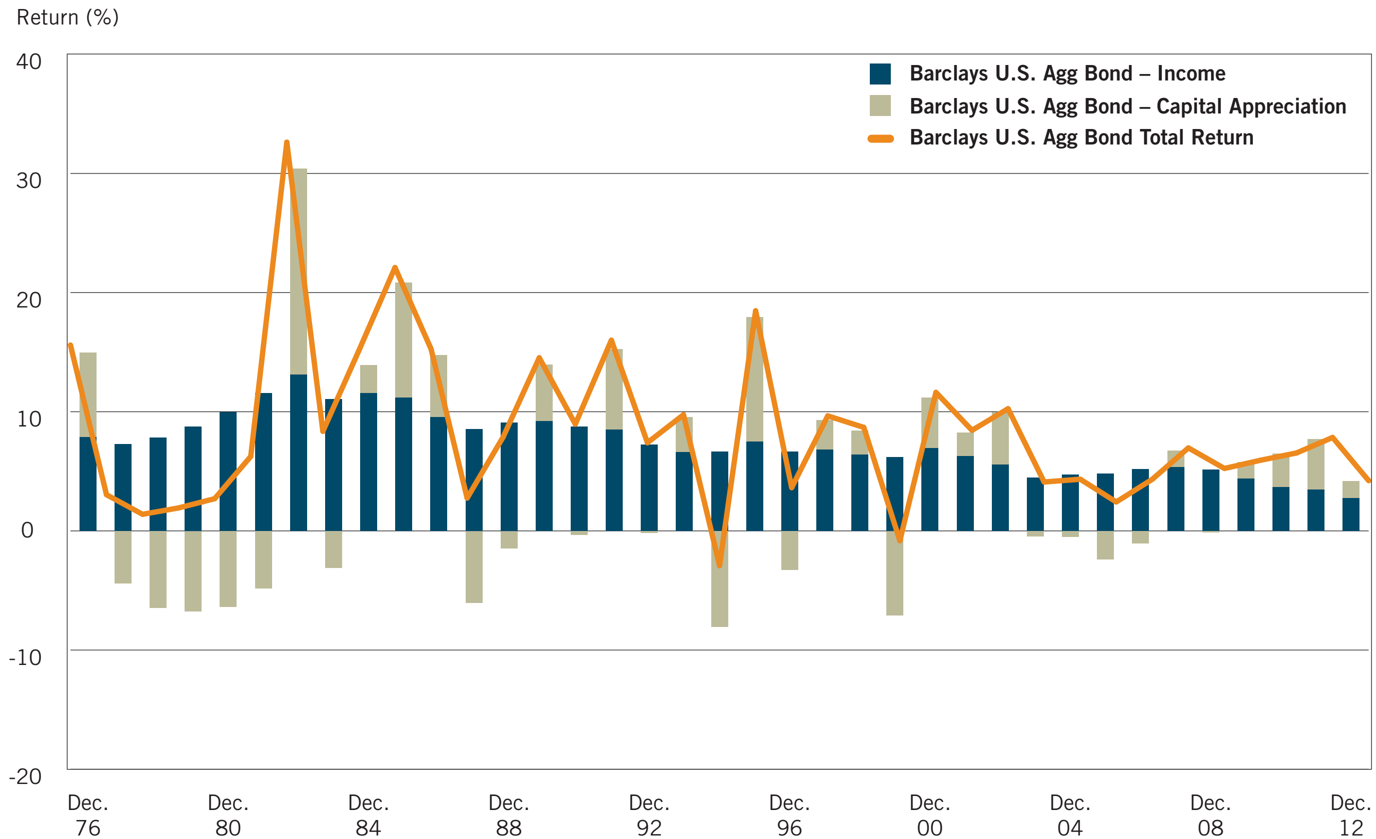
Alaska Aggregate Bond Trust Strategic Operating Ranges

Core Sectors	Operating Range vs. Blended Benchmark	Blended Benchmark Weights
Treasuries	+/- 10%	40.6%
Government Related	+/- 5	9.1
Corporate	+/- 5	25.2
Mortgage Backed Securities (MBS)	+/- 5	23.4
Asset Backed Securities (ABS)	+/- 5	0.4
Commercial Mortgage Backed Securities (CMBS)	+/- 5	1.4
	Total:	**100.0**

Diversifying Sectors	Operating Range vs. Neutral Weights	Neutral Weights
Short-term TIPS	+/- 5%	10%
Long-term Treasuries	+/- 3	5
Floating Rate Notes	5 to 20 range[1]	15

[1]FRN neutral allocation is 15%. FRN securities overlap other sector categories and may be substituted for shorter fixed rate corporates.

Barclays U.S. Aggregate Bond Index – Return Contribution Breakdown



Source: Ibbotson.

Proposed Portfolio and Indexes – Historical Returns

Periods Ended October 31, 2013

	One Year	Annualized Three Years	Annualized Five Years	Annualized Ten Years	Annualized Fifteen Years	Annualized Twenty Years
Barclays U.S. Aggregate Bond Index	-1.08%	3.02%	6.09%	4.78%	5.36%	5.77%
Proposed Portfolio[1]	-0.46	2.51	5.12	4.24	–	–
Barclays U.S. Aggregate Intermediate Index	-0.12	2.57	5.46	4.50	5.18	5.57
Barclays U.S. FRN Index	1.30	1.50	3.01	2.34	–	–
Barclays U.S. Treasury Long Index	-9.28	5.28	7.50	6.59	6.48	7.03
Barclays U.S. Treasury TIPS 1-5 Year Index[2]	-1.07	1.90	4.27	3.75	4.68	4.66

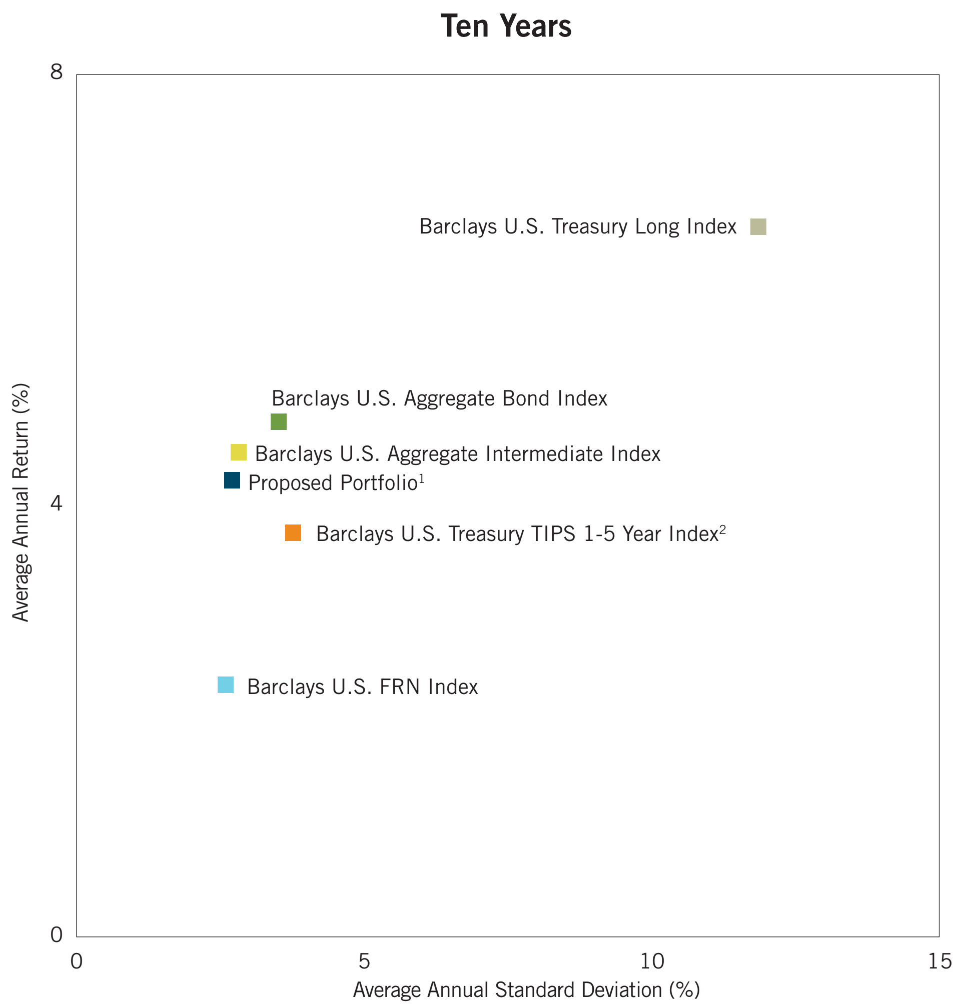
[1] Proposed portfolio consist of 70% Barclays U.S. Intermediate Aggregate Index, 15% Barclays U.S. Floating Rate Notes Index, 10% Barclays U.S. Treasury TIPS 1-5 Year Index, and 5% Barclays U.S. Long Treasury Index.

[2] Effective January 1, 2005, the T. Rowe Price U.S. Short Term TIPS model was replaced by the Barclays U.S. Treasury TIPS 1-5 Year Index. Returns for the index are linked as of the effective date.

Source: Morningstar EnCorr Analyzer.

Risk/Return Characteristics

Periods Ended October 31, 2013



[1] Proposed portfolio consist of 70% Barclays U.S. Intermediate Aggregate Index, 15% Barclays U.S. Floating Rate Notes Index, 10% Barclays U.S. Treasury TIPS 1-5 Year Index, and 5% Barclays U.S. Long Treasury Index.

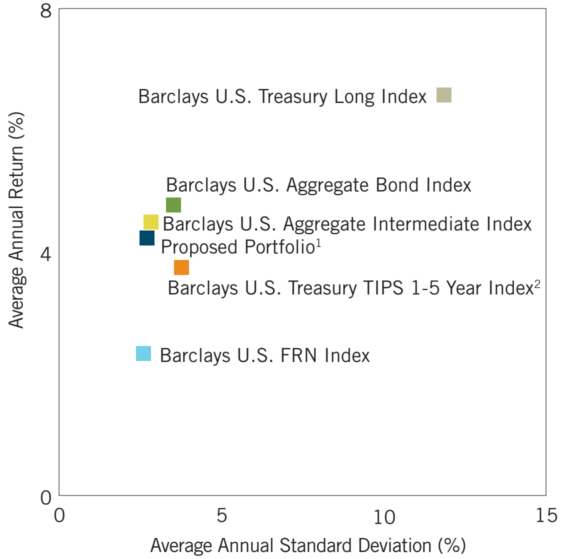
[2] Effective January 1, 2005, the T. Rowe Price U.S. Short Term TIPS model was replaced by the Barclays U.S. Treasury TIPS 1-5 Year Index. Returns for the index are linked as of the effective date.

Source: Morningstar EnCorr Analyzer.

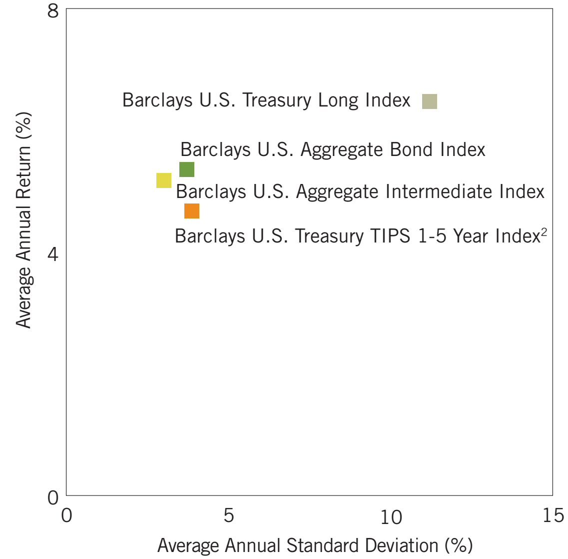
Risk/Return Characteristics

Periods Ended October 31, 2013

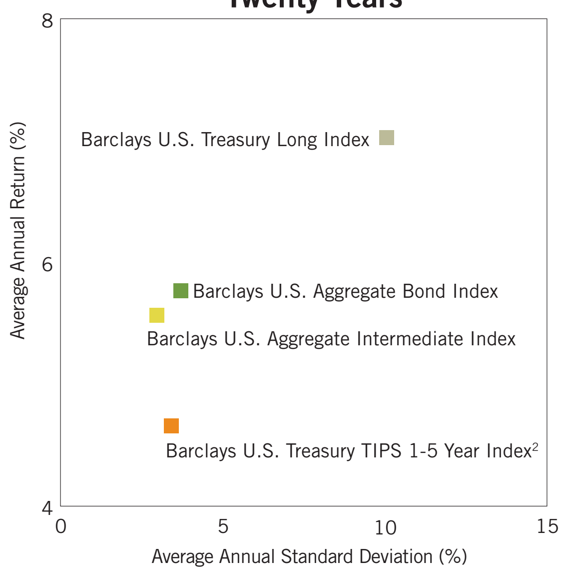
Ten Years



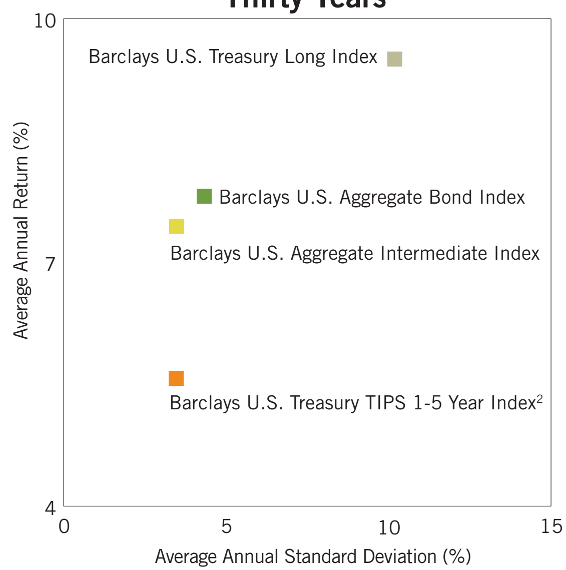
Fifteen Years



Twenty Years



Thirty Years



[1] Proposed portfolio consist of 70% Barclays U.S. Intermediate Aggregate Index, 15% Barclays U.S. Floating Rate Notes Index, 10% Barclays U.S. Treasury TIPS 1-5 Year Index, and 5% Barclays U.S. Long Treasury Index.

[2] Effective January 1, 2005, the T. Rowe Price U.S. Short Term TIPS model was replaced by the Barclays U.S. Treasury TIPS 1-5 Year Index. Returns for the index are linked as of the effective date.

Source: Morningstar EnCorr Analyzer.

T.RowePrice
INVEST WITH CONFIDENCE

Proposed Portfolio Comparison – Historical Rising Rate Periods

Change in Rates

	Twelve-Months Ending:						
	September 1987	October 1994	January 2000	May 2004	June 2006	December 2009	August 2013
Ten-Yield Treasury Yield Change	**217 bps**	**238 bps**	**201 bps**	**130 bps**	**120 bps**	**178 bps**	**124 bps**
Barclays U.S. Aggregate Bond Index	0.27%	-3.67%	-1.85%	-0.44%	-0.81%	5.93%	-2.47%
Proposed Portfolio[1]	–	–	–	–	0.59	6.29	-1.57
Barclays U.S. Aggregate Intermediate Index	1.90	-1.71	-0.22	0.35	0.02	6.46	-1.46
Barclays U.S. Treasury Long Index	-7.88	-11.61	-8.27	-6.28	-6.31	-12.92	-12.65
Barclays U.S. FRN Index	–	–	–	–	4.64	8.79	1.81
Barclays U.S. Treasury TIPS 1-5 Year Index[2]	8.58	-0.38	2.98	3.02	2.05	11.48	-1.68

Shaded areas denote outperformance vs. Agg.

Shaded areas denote underperformance vs. Agg.

[1] Proposed portfolio consist of 70% Barclays U.S. Intermediate Aggregate Index, 15% Barclays U.S. Floating Rate Notes Index, 10% Barclays U.S. Treasury TIPS 1-5 Year Index, and 5% Barclays U.S. Long Treasury Index.

[2] Effective January 1, 2005, the T. Rowe Price U.S. Short Term TIPS model was replaced by the Barclays U.S. Treasury TIPS 1-5 Year Index. Returns for the index are linked as of the effective date.

Source: Morningstar EnCorr Analyzer.

Proposed Portfolio Comparison – Historical Rising Inflation Periods

Change in Inflation

Twelve-Months Ending:

	December 1974	January 1980	May 1984	December 1987	August 1990	May 2006	June 2008	Average: May 2006-July 2013
Ten-Yield Treasury Yield Change	**1,214 bps**	**1,392 bps**	**424 bps**	**441 bps**	**562 bps**	**417 bps**	**502 bps**	**460 bps**
Barclays U.S. Aggregate Bond Index	–	-2.99%	0.37%	2.76%	7.23%	-0.48%	7.12%	3.32%
Proposed Portfolio[1]	–	–	–	–	–	0.76	7.21	3.99
Barclays U.S. Aggregate Intermediate Index	–	1.64	2.62	3.87	8.62	0.26	7.17	3.72
Barclays U.S. FRN Index	–	–	–	–	–	4.52	1.93	3.23
Barclays U.S. Treasury Long Index	5.02	-9.09	-7.66	-2.67	1.63	-5.63	12.65	3.51
Barclays U.S. Treasury TIPS 1-5 Year Index[2]	–	16.33	2.63	7.52	6.08	1.91	12.92	7.41

Shaded areas denote outperformance vs. Agg. Shaded areas denote underperformance vs. Agg.

[1] Proposed portfolio consist of 70% Barclays U.S. Intermediate Aggregate Index, 15% Barclays U.S. Floating Rate Notes Index, 10% Barclays U.S. Treasury TIPS 1-5 Year Index, and 5% Barclays U.S. Long Treasury Index.

[2] Effective January 1, 2005, the T. Rowe Price U.S. Short Term TIPS model was replaced by the Barclays U.S. Treasury TIPS 1-5 Year Index. Returns for the index are linked as of the effective date.

Source: Morningstar EnCorr Analyzer.

Proposed Portfolio Comparison – Factor-Based Analysis

Stressed Markets
As of October 31, 2013

Returns[1]	Proposed Portfolio[2]	U.S. Intermediate Aggregate Index	U.S. Aggregate Index
1987 Market Crash	-0.56%	-0.37%	-0.81%
1994 Peso Crisis	2.32	2.48	2.88
1997 Asian Financial Crisis	2.95	3.20	3.91
1998 Russian Crisis	1.79	2.07	2.09
LTCM Collapse	0.63	0.54	0.43
Dot-Com Slowdown	12.70	14.16	15.00
Sep. 11, 2001	0.87	1.15	0.55
2007-2008 Oil Price Run-Up	4.06	4.65	4.14
2007-2009 Credit Crisis	6.51	7.77	4.91
Sept. - Oct. 2008	-2.25	-2.02	-6.54

Shaded areas denote outperformance vs. Agg.   Shaded areas denote underperformance vs. Agg.

[1] Barclays POINT fixed income model was similarly used to evaluate each model portfolio. POINT does not allow for each key rate across the yields curve to be adjusted. The model only allows for the specification of broad non-parallel changes between rates (e.g. 2 to 10 years yield change of 100bps). POINT does capture the impact of additional market factors resulting in the change in interest rates by means of a covariance matrix. The analysis provides returns data to assess the impact of instantaneous changes ("shocks") in rates.

[2] Proposed portfolio consist of 70% Barclays U.S. Intermediate Aggregate Index, 15% Barclays U.S. Floating Rate Notes Index, 10% Barclays U.S. Treasury TIPS 1-5 Year Index, and 5% Barclays U.S. Long Treasury Index.

Source: Barclays POINT.

International Equity Proposed Portfolio Enhancements

Alaska International Trust Proposed Enhancements

- **Increase international equity from 20% to 30% of equities**

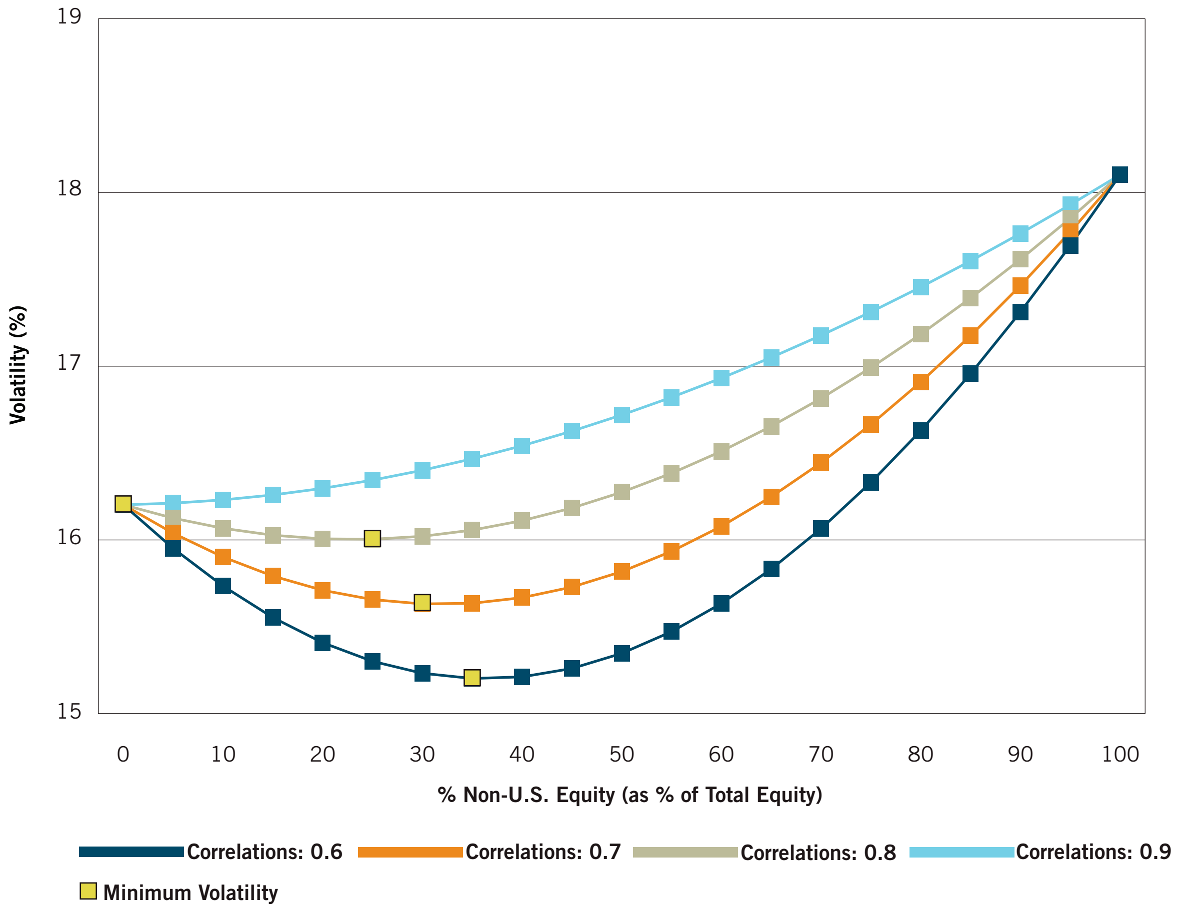
- **Rationale:**
  - To more fully represent the expanded investment opportunity set
  - Developed and emerging international equity markets have increased their share of the total global equity market in recent years
    - International equity markets represent over 52% of the world equity market's capitalization today
    - The role of international markets has also increased in terms of its contribution to global GDP and earnings growth:
      - International contribution to global GDP is 77%

- **Introduce Emerging Markets within the Alaska International Trust by changing from the MSCI EAFE Index, a fully developed market index, to the MSCI ACWI ex-U.S. Index, which includes both developed and emreging markets.**

- **Rationale:**
  - Emerging Markets represents 40% of global GDP and 11% of global market capitalization
  - Emerging Markets offer diversification and access to higher growth markets

Volatility Frontier — U.S. and International Equity

Equity Only Portfolio



International equity exposure ranging between 25%-30% reduces overall portfolio volatility of a global equity portfolio.

See page 32 for volatility assumptions.

Long-Term Market Assumptions

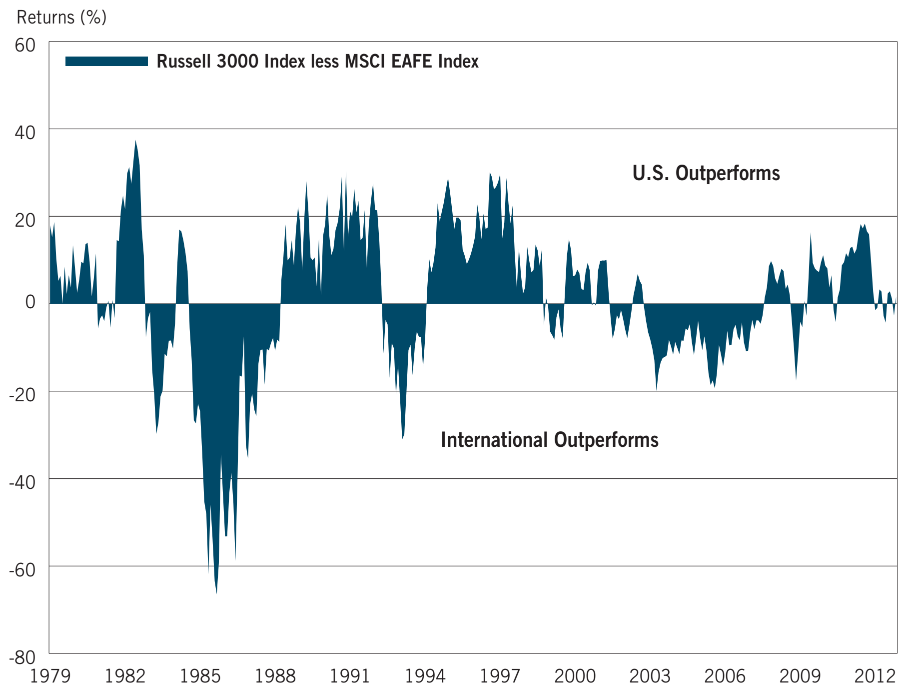
	Annualized Volatility Assumptions
U.S. Stocks	16.20
International Developed/Emerging Markets	18.12
International Developed	18.27
International Emerging Markets	22.55

- **Asset class volatility and correlations with other asset classes are based on our long-term assumptions.**
- **Some asset classes have relatively short histories. Actual results for each class will likely differ from our assumptions — with those for classes with limited histories diverging more.**
- **Market crises can cause asset classes to perform similarly, lowering the accuracy of the assumed portfolio volatility and returns. Correlation assumptions are less reliable for short periods.**
- **The analysis does not use all asset classes. Other asset classes not considered may be similar or superior to those used.**
- **The annualized volatility assumptions represent T. Rowe Price's long term views based on various quantitative and qualitative factors.**

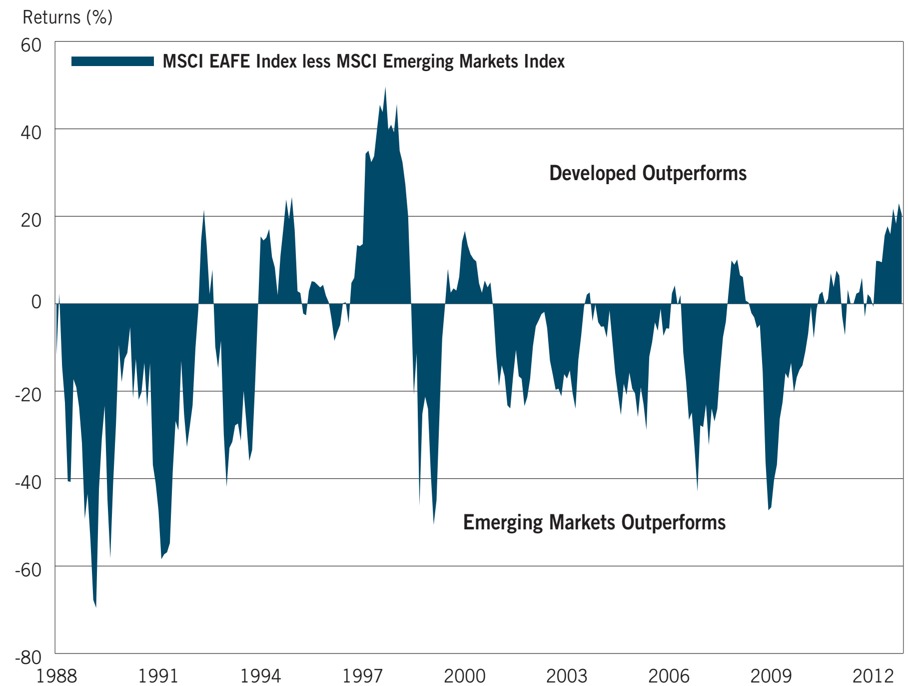
This example is hypothetical in nature, does not reflect actual investment results and is not a guarantee of future results. The results are based on assumptions. There can be no assurance that the results will be achieved or sustained. The charts present only a range of possible outcomes. Actual results will vary, and may be better or worse than the simulated scenarios. Clients should be aware that the potential for loss (or gain) may be greater than demonstrated in the simulations.

Global Market Cycles

U.S. vs. Developed International Markets



Developed International vs. Emerging Markets



U.S. and international equities have distinct, and at times, wide-ranging cycles of relative performance.

Performance Comparison of Underlying Benchmarks

Periods Ended October 31, 2013

				Annualized				
	Three Months	Year-to-Date	One Year	Three Years	Five Years	Ten Years	Fifteen Years	Twenty Years
MSCI All-Country World Index ex-U.S.[1]	9.41%	14.53%	20.80%	6.52%	12.99%	8.95%	6.36%	6.26%
MSCI EAFE Index[1]	9.57	20.51	27.40	8.88	12.52	8.20	5.43	5.84
Difference	-0.16	-5.98	-6.60	-2.36	0.47	0.75	0.93	0.42
MSCI Emerging Markets Index[1]	9.85	0.62	6.90	0.63	15.76	12.77	11.92	6.90
MSCI EAFE Index[1]	9.57	20.51	27.40	8.88	12.52	8.20	5.43	5.84
Difference	0.28	-19.89	-20.50	-8.25	3.24	4.57	6.49	1.06

Developed international markets outperformed in recent periods as emerging markets have faced headwinds of slowing global growth, declining commodity prices and rising rates.

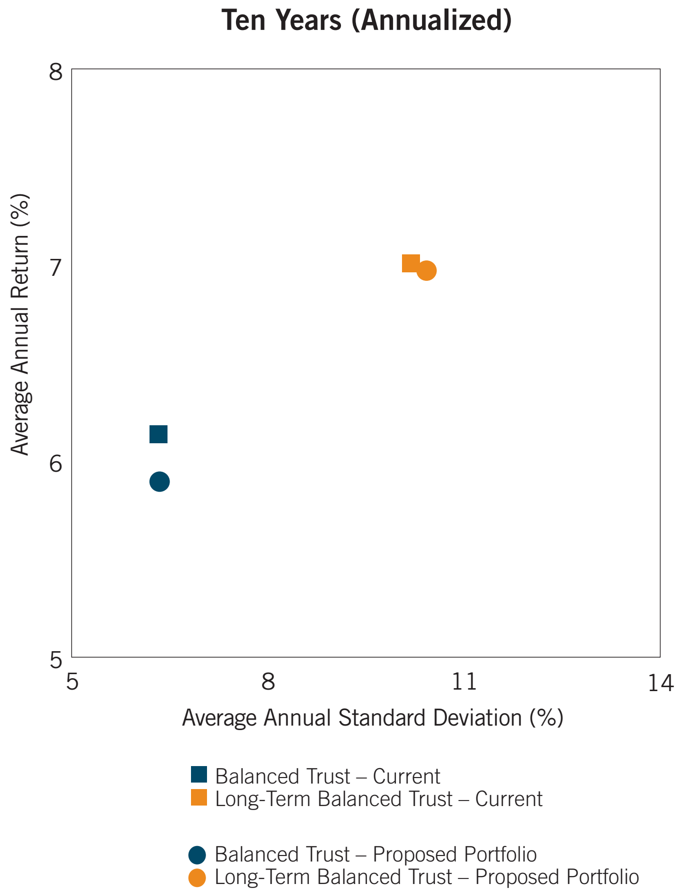
[1] Returns shown with gross dividends reinvested.

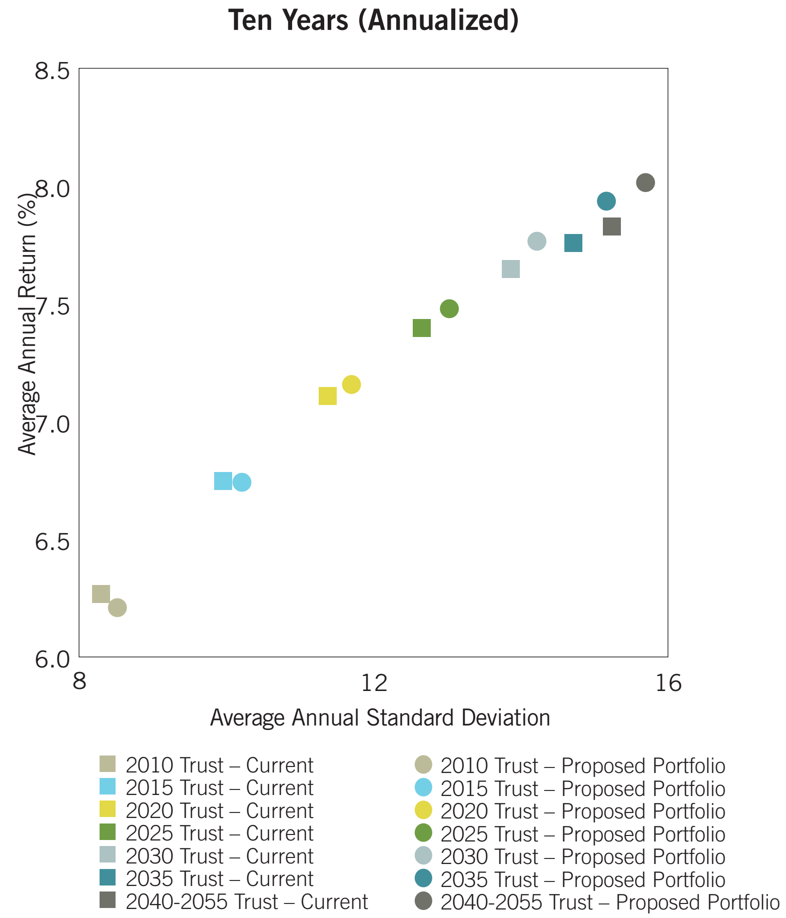
Past performance cannot guarantee future results.

Risk/Return Profile

Proposed Portfolio Comparison

Risk/Return Characteristics
Periods Ended October 31, 2013





Model portfolios are using static allocations based on October 1, 2013 portfolio neutral allocations.

Proposed Portfolio Comparison – Total Returns

Total Returns – Proposed:
As of October 31, 2013

	One Year	Three Years	Five Years	Ten Years	Fifteen Years
		Annualized			
Balanced Trust	8.41%	6.52%	8.81%	5.90%	–
Long-Term Balanced Trust	15.12	9.37	11.39	6.97	–
2010 Trust	12.20	7.82	9.65	6.21	–
2015 Trust	14.89	9.07	10.91	6.74	–
2020 Trust	17.23	10.11	11.92	7.16	–
2025 Trust	19.32	11.00	12.77	7.49	–
2030 Trust	21.31	11.82	13.53	7.78	–
2035 Trust	22.75	12.37	13.99	7.94	–
2040-2055 Trusts	23.63	12.69	14.26	8.03	–

Total Returns – Current:
As of October 31, 2013

	One Year	Three Years	Five Years	Ten Years	Fifteen Years
		Annualized			
Balanced Trust	8.65%	7.36%	9.50%	6.14%	5.78%
Long-Term Balanced Trust	16.04	10.48	11.89	7.01	5.93
2010 Trust	12.88	8.73	10.11	6.27	5.51
2015 Trust	15.83	10.11	11.34	6.75	5.70
2020 Trust	18.39	11.28	12.33	7.11	5.82
2025 Trust	20.70	12.27	13.14	7.40	5.88
2030 Trust	22.88	13.17	13.87	7.65	5.92
2035 Trust	24.49	13.77	14.28	7.76	5.89
2040-2055 Trusts	25.46	14.13	14.53	7.83	5.87

Sources: Ibbotson, T. Rowe Price.

Proposed Portfolio Comparison – Relative Returns

Total Returns – Proposed Less Current:
As of October 31, 2013

	One Year	Annualized Three Years	Five Years	Ten Years
Balanced Trust	-0.24%	-0.84%	-0.69%	-0.24%
Long-Term Balanced Trust	-0.92	-1.11	-0.50	-0.04
2010 Trust	-0.68	-0.91	-0.46	-0.06
2015 Trust	-0.94	-1.04	-0.43	-0.01
2020 Trust	-1.16	-1.17	-0.41	0.05
2025 Trust	-1.38	-1.27	-0.37	0.09
2030 Trust	-1.57	-1.35	-0.34	0.13
2035 Trust	-1.74	-1.40	-0.29	0.18
2040-2055 Trusts	-1.83	-1.44	-0.27	0.20

Sources: Ibbotson, T. Rowe Price.

Proposed Portfolio Enhancements Adhere to Key Attributes

- **Intelligently Designed Custom Portfolios**
  - Glide path and asset class profile is consistent with T. Rowe Price Retirement Funds

- **Broad Diversification and Risk Awareness**
  - Additional sub-asset classes provide increased diversification
  - More fully benefiting from international opportunities
  - More broadly diversified investment opportunities to offset risk of rising inflation and interest rates

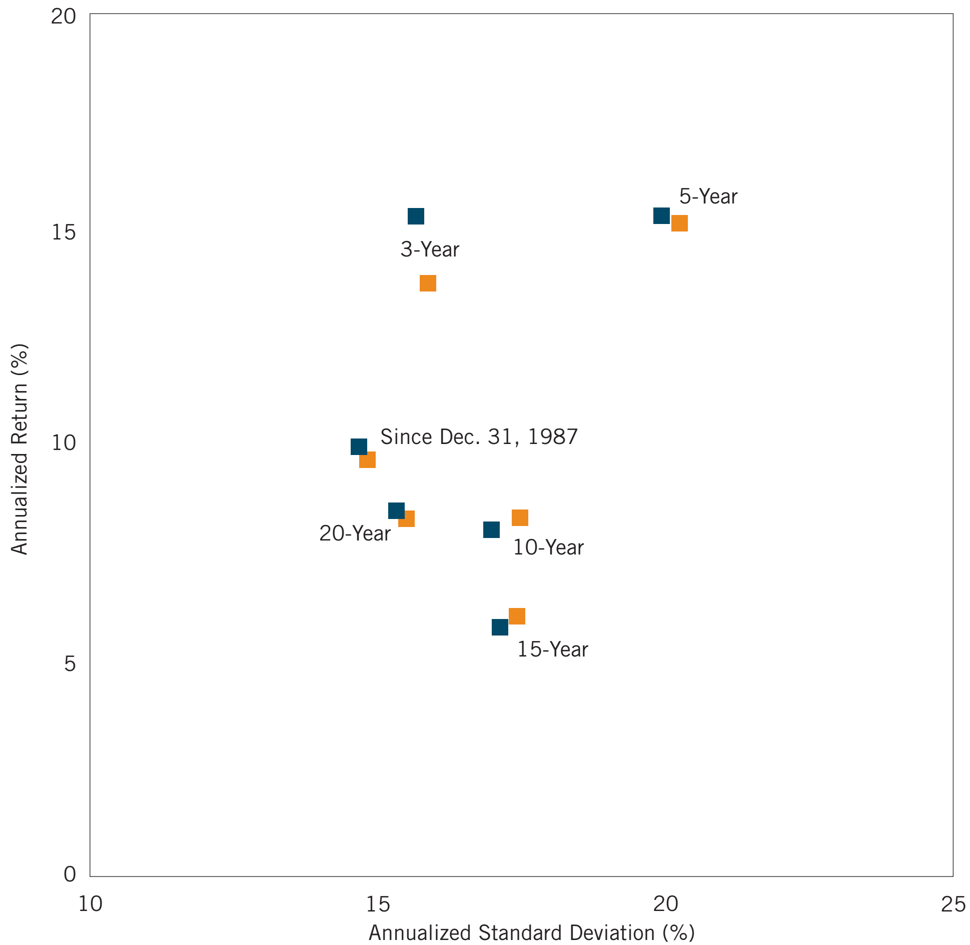
- **Proposed enhancements seek to improve return profile under various risk scenarios**
  - Reduced duration exposure decreases interest rate sensitivity
  - Addition of TIPS and Floating Rate Notes provides protection from rising inflation and interest rates
  - Increased international exposure provides protection from falling U.S. dollar

- **Competitive Cost and Customized Structure**
  - Balance benefits of diversification, custom portfolio management and cost considerations

Appendix

Historical Risk/Return – U.S./International Hypothetical Portfolios

Periods Ended October 31, 2013



Current: ■ **20% Non-U.S. Equity: Weighted benchmark comprised of 80% Russell 3000 Index/20% MSCI EAFE Index**

Proposed: ■ **30% Non-U.S. Equity: Weighted benchmark comprised of 70% Russell 3000 Index/30% MSCI AC World Ex-U.S. Index**

Portfolio allocations are assumed to be fixed, rebalanced monthly.
Sources: Morningstar/Ibbotson, T. Rowe Price.

Proposal to Change the Benchmark for International Equities

Comparison of International Benchmarks

MSCI EAFE

- **Represents securities of developed international equity markets**
- **Countries: 21 developed**

MSCI Emerging Markets Index

- **Represents securities of emerging market equity countries**
- **Countries: 21 emerging**

MSCI All-Country World Index ex-U.S.

- **Represents securities of international developed and emerging markets**
- **Countries: 43 (22 developed and 21 emerging)**

- **Proposal: Change the international equity component of the weighted benchmark from the MSCI EAFE Index to the MSCI All-Country World Index ex-U.S.**
  – The MSCI EAFE Index represents international equity securities in developed U.S. markets, while the MSCI All-Country World Index ex-U.S. expands the opportunity set to incorporate the additional segment representing emerging market equities.

Proposed Portfolio Comparison – Standard Deviations

Standard Deviations – Proposed:
As of October 31, 2013

		Annualized			
	One Year	Three Years	Five Years	Ten Years	Fifteen Years
Balanced Trust	4.34%	5.17%	6.77%	6.35%	–
Long-Term Balanced Trust	6.64	9.04	11.64	10.44	–
2010 Trust	5.39	7.27	9.36	8.49	–
2015 Trust	6.43	8.87	11.39	10.21	–
2020 Trust	7.35	10.26	13.16	11.69	–
2025 Trust	8.18	11.51	14.75	13.01	–
2030 Trust	8.97	12.71	16.27	14.25	–
2035 Trust	9.54	13.57	17.35	15.14	–
2040-2055 Trusts	9.88	14.09	18.01	15.67	–

Standard Deviations – Current:
As of October 31, 2013

		Annualized			
	One Year	Three Years	Five Years	Ten Years	Fifteen Years
Balanced Trust	4.71%	5.01%	6.76%	6.32%	6.23%
Long-Term Balanced Trust	6.86	8.77	11.45	10.18	10.19
2010 Trust	5.59	7.04	9.21	8.29	8.30
2015 Trust	6.62	8.62	11.21	9.95	9.98
2020 Trust	7.53	10.00	12.94	11.37	11.44
2025 Trust	8.36	11.26	14.51	12.65	12.73
2030 Trust	9.16	12.46	16.00	13.86	13.95
2035 Trust	9.72	13.33	17.08	14.71	14.82
2040-2055 Trusts	10.06	13.86	17.72	15.23	15.35

Sources: Ibbotson, T. Rowe Price.

Fee Schedules Comparison

Current Fee Schedules:

Fixed Income Fee Schedule	
First $50MM	20 bps
Next $50MM	12
Next $150MM	8
Above $250MM	6

Equity Fee Schedule	
First $100MM	20 bps
Next $400MM	15
Above $500MM	10

Proposed Fee Schedules:

No change to Fixed Income Fee Schedule.

Fixed Income Fee Schedule	
First $50MM	20 bps
Next $50MM	12
Next $150MM	8
Above $250MM	6

Proposed Equity Fee Schedule	
First $100MM	20.5 bps
Next $400MM	16
Above $500MM	11

As of September 30, 2013

Alaska International Trust

Total Net Assets: $235,216,858

Investment Approach

- Seeks to match the performance of the MSCI EAFE Index, an equity market index based on 85% of the free-float adjusted market capitalization in 22 developed market countries excluding the U.S. and Canada.
- Attempts to accomplish its objective by investing in stocks that are representative of the index

Portfolio Construction

- 900-1,300 stock portfolio
- Issuer concentration generally +/- 1.00% relative to the benchmark weight
- Sector weight generally +/- 2.00% relative to the benchmark weight
- Country weight generally +/- 2.00% relative to the benchmark weight
- Expected tracking error 90-225 basis points

Benchmark

- MSCI EAFE Index

Portfolio Management Team

E. Frederick Bair, CFA, CPA
17 years of investment experience;
14 years with T. Rowe Price.
- BS, Pennsylvania State University

Neil Smith, CFA
19 years of investment experience;
19 years with T. Rowe Price.
- B.Sc, University of Essex
- MBA, University of London

T.RowePrice®
INVEST WITH CONFIDENCE

As of September 30, 2013

Proposed Alaska International Trust

Investment Approach

- Seeks to match the performance of the MSCI AC World ex US index, an equity market index based on the free float adjusted market capitalization in about 45 developed and emerging market countries excluding the U.S.

Portfolio Construction

- 1,100-1,400 stock portfolio
- Issuer concentration generally +/- 1.00% relative to the benchmark weight
- Sector weight generally +/- 2.00% relative to the benchmark weight
- Country weight generally +/- 2.00% relative to the benchmark weight
- Expected tracking error 90-250 basis points

Benchmark

- MSCI All Country World Index ex-U.S.

Portfolio Management Team[1]

E. Frederick Bair, CFA, CPA
17 years of investment experience;
14 years with T. Rowe Price.
- BS, Pennsylvania State University

Neil Smith, CFA
19 years of investment experience;
19 years with T. Rowe Price.
- B.Sc, University of Essex
- MBA, University of London

[1] For a complete list of the members of the fund's Investment Advisory Committee, please refer to the fund's prospectus.

T.RowePrice®
INVEST WITH CONFIDENCE

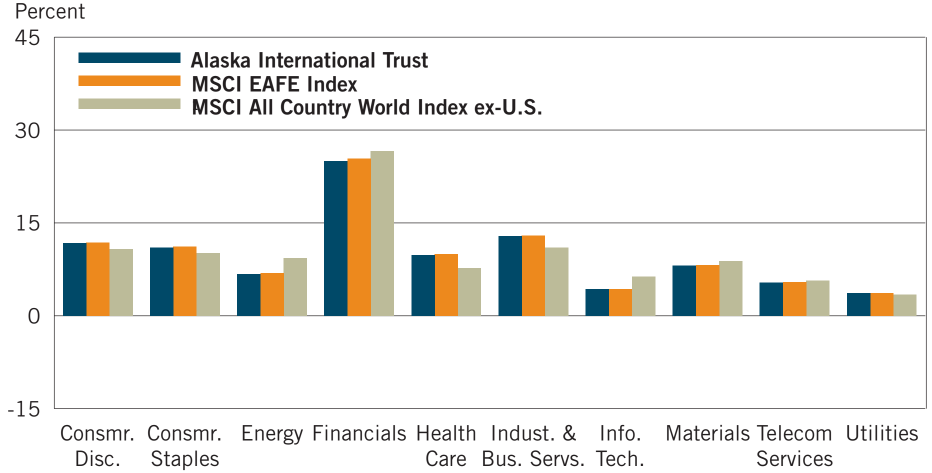
Alaska International Trust

As of September 30, 2013

Top 10 Holdings

Company	Trust
Nestle	1.8%
Royal Dutch Shell	1.7
HSBC Holdings	1.6
Roche Holding	1.5
Novartis	1.4
Toyota Motor	1.4
Vodafone Group	1.3
BP	1.0
GlaxoSmithKline	1.0
Total	1.0
Total	13.6%

Sector Diversification



Portfolio Characteristics

	Alaska International Trust	MSCI EAFE Index	MSCI All Country World Index ex-U.S.
Projected Earnings Growth Rate[1,2]	8.3%	8.3%	9.1%
Price to Earnings (Current Fiscal Year)[1,2]	14.3X	14.3X	13.9X
Price to Earnings (Next Fiscal Year)[1,2]	13.3X	13.3X	12.8X
Return on Equity (Current Fiscal Year)[2]	12.7%	12.7%	13.4%
Price to Book	1.9X	1.9X	1.9X
Unweighted Median Market Capitalization (Millions)	$8,431	$8,604	$7,047
Investment Weighted Median Market Capitalization (Millions)	$39,817	$40,121	$33,860
Investment Weighted Average Market Capitalization (Millions)	$64,268	$64,574	$58,693
Number of Holdings	897	898	1,793

[1] Source: IBES.

[2] These statistics are based on the companies in the fund's portfolio and are not a projection of future fund performance.

Statistics are investment-weighted median unless otherwise noted.

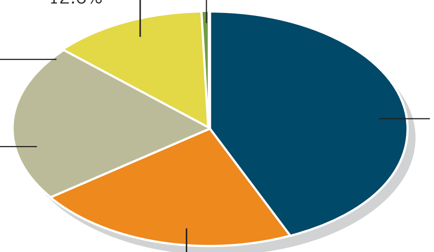
T. Rowe Price uses the MSCI/S&P Global Industry Classification Standard (GICS) for sector and industry reporting. Each year, MSCI and S&P review the GICS structure. The last change occurred on 1 July 2010. T. Rowe Price will adhere to all future updates to GICS for prospective reporting.

The information shown does not reflect any ETFs that may be held in the portfolio.

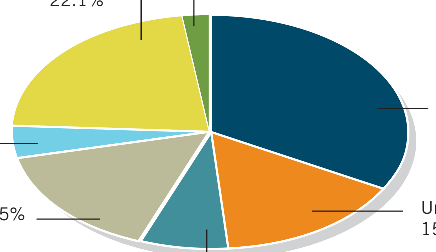
Numbers may not total due to rounding.

Alaska International Trust

Region Exposure – MSCI EAFE Index



Region Exposure – MSCI All-Country World Index ex-U.S.



Top 20 Country Holdings

Country	% of Trust	% of MSCI EAFE Index	% of MSCI All Country World Index ex-U.S.
United Kingdom	21.4%	21.7%	15.6%
Japan	21.3	21.6	15.5
France	9.6	9.7	7.0
Switzerland	8.9	9.1	6.5
Germany	8.6	8.7	6.3
Australia	7.9	8.0	5.7
Sweden	3.2	3.3	2.3
Spain	3.1	3.2	2.3
Hong Kong	2.9	3.0	2.1
Netherlands	2.6	2.6	1.9
Italy	2.0	2.0	1.5
Singapore	1.5	1.5	1.1
Belgium	1.2	1.2	0.8
Denmark	1.1	1.1	0.8
Finland	0.9	0.9	0.6
Norway	0.9	0.8	0.6
Israel	0.5	0.4	0.3
Ireland	0.3	0.3	0.2
Austria	0.3	0.3	0.2
Portugal	0.2	0.2	0.1
Total	98.3%	99.5%	71.4%

Numbers may not total due to rounding.

Alaska International Trust

Performance

			Annualized		
	Three Months	One Year	Three Years	Five Years	Ten Years
Alaska International Trust[1]	11.19%	23.69%	8.75%	5.70%	7.90%
MSCI EAFE Index	11.61	24.29	8.97	6.85	8.50
MSCI All Country World Index ex-U.S.	10.17	16.98	6.43	6.74	9.24

[1] Performance figures reflect the deduction of a 30 basis point annual trustee fee, which is used primarily to pay normal operating expenses of the trust, including custodial, accounting, and investment management fees.

Current performance may be lower or higher than the quoted past performance, which cannot guarantee future results.
Unit price, principal value, and return will vary, and you may have a gain or loss when you sell your Units.

As of September 30, 2013

Alaska Aggregate Bond Trust

Total Net Assets: $992,441,031

Investment Approach

- Primarily focus on investment-grade U.S. fixed income securities represented in the Barclays U.S. Aggregate Index.
- Integrate proprietary credit and capital market research to identify market inefficiencies.
- Seek to add value at the margin by coupling limited active management techniques with the risk-controlled aspects of passive management.
- Emphasize individual security selection and modest strategic and tactical deviations versus the benchmark.

Portfolio Construction

- Major spread sector weights will vary +/- 3% relative to the Barclays U.S. Aggregate Index
- Average credit quality of the portfolio will range from AA to AAA
- Duration is generally managed within +/- 0.20 years of the benchmark
- Issuer concentration is generally +/- 0.20% relative to the benchmark weight
- Target tracking error of less than 30 basis points

Benchmark

- Barclays U.S. Aggregate Index

Portfolio Management Team

Robert M. Larkins, CFA
10 years of investment experience;
10 years with T. Rowe Price.
- BS, Brigham Young University
- MBA, University of Pennsylvania

T.RowePrice®
INVEST WITH CONFIDENCE

Proposed Alaska Bond Trust

Investment Approach

- Primarily focus on investment-grade U.S. fixed income securities represented in the Barclays U.S. Intermediate Aggregate Index, Barclays U.S. Dollar Floating Rate Note Index, Barclays U.S. Long Treasury Index, and Barclays U.S. Treasury TIPS 1-5 Year Index.
- Integrate proprietary credit and capital market research to identify market inefficiencies.
- Seek to add value at the margin by coupling limited active management techniques with the risk-controlled aspects of passive management.
- Emphasize individual security selection and modest strategic and tactical deviations versus the benchmark.

Portfolio Construction

- Major spread sector weights will vary +/- 5% relative to the Barclays U.S. Aggregate Index
- Duration is generally managed within +/- 0.25 years of the benchmark
- Issuer concentration is generally +/- 0.25% relative to the benchmark weight

Benchmark

- 70% Barclays U.S. Intermediate Aggregate Index
- 15% Barclays U.S. Dollar Floating Rate Note Index
- 10% Barclays U.S. Treasury TIPS 1-5 Year Index
- 5% Barclays U.S. Long Treasury Index

Portfolio Management Team

Robert M. Larkins, CFA
10 years of investment experience;
10 years with T. Rowe Price.

- BS, Brigham Young University
- MBA, University of Pennsylvania

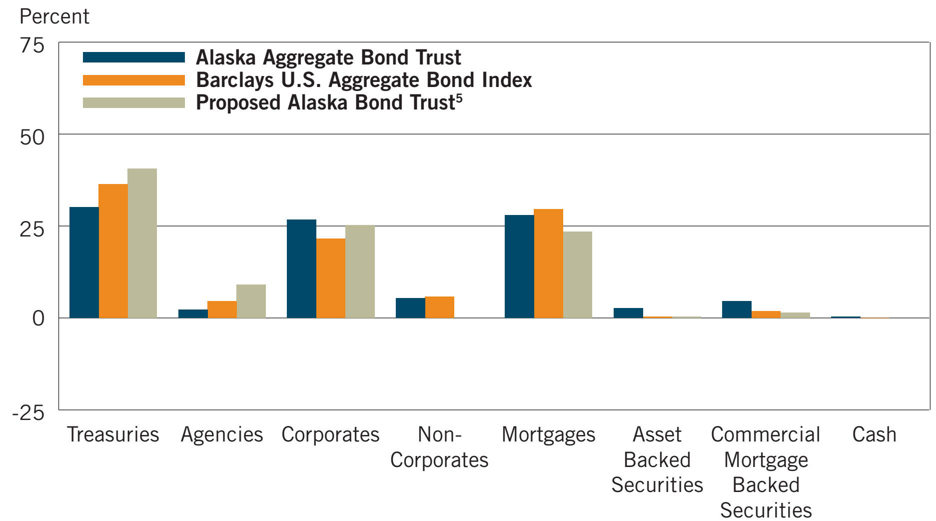
Alaska Aggregate Bond Trust

As of September 30, 2013

Top 15 Issuers[4]

Company	% of Trust
GE	0.8%
JPMorgan Chase	0.7
Bank of America	0.7
Morgan Stanley	0.7
Goldman Sachs	0.6
Berkshire Hathaway	0.5
Citigroup	0.4
AT&T	0.4
Wells Fargo	0.4
Comcast Corporation	0.3
HSBC	0.3
Westpac Banking	0.2
Spectra Entergy	0.2
Verizon	0.2
Southern	0.2
Total	6.5%

Sector Diversification



Portfolio Characteristics

	Alaska Aggregate Bond Trust	Barclays U.S. Aggregate Bond Index	Proposed Alaska Bond Trust[5]
Weighted Average Maturity[1,2]	7.17 Years	7.35 Years	5.51 Years
Effective Duration[1,2]	5.38 Years	5.52 Years[3]	4.19 Years
Yield to Maturity	2.30%	2.32%	1.77%
Average Quality	AA1	AA1	AA1/AA2
Number of Issues	824	8,518	7,207
Average Coupon	3.36%	3.35%	2.61%

[1] Source: IBES.

[2] These statistics are based on the companies in the fund's portfolio and are not a projection of future fund performance.
Statistics are investment-weighted median unless otherwise noted.
T. Rowe Price uses the MSCI/S&P Global Industry Classification Standard (GICS) for sector and industry reporting. Each year, MSCI and S&P review the GICS structure. The last change occurred on 1 July 2010. T. Rowe Price will adhere to all future updates to GICS for prospective reporting.
The information shown does not reflect any ETFs that may be held in the portfolio.
Numbers may not total due to rounding.

[3] Statistics Universe.

[4] Top 15 Issuers holdings excludes U.S. Treasuries, Securitized Products, and TRP Institutional Funds.

[5] Proposed Alaska Bond Trust consists of 70% Barclays U.S. Intermediate Aggregate Index, 15% Barclays U.S. Floating Rate Notes Index, 10% Barclays U.S. Treasury TIPS 1-5 Year Index, and 5% Barclays U.S. Long Treasury Index.

Alaska Aggregate Bond Trust

Performance

			Annualized	
	Three Months	One Year	Three Years	Since Inception 10/29/08
Alaska Aggregate Bond Trust[1]	0.53%	-1.83%	2.90%	6.11%
Barclays U.S. Aggregate Index	0.57	-1.68	2.86	5.96
Proposed Alaska Bond Trust – Combined Benchmark[2]	0.54	-0.94	2.47	5.09[3]

[1] Performance figures reflect the deduction of a 8 basis point annual trustee fee, which is used primarily to pay normal operating expenses of the trust, including custodial, accounting, and investment management fees.

[2] Proposed Alaska Bond Trust consists of 70% Barclays U.S. Intermediate Aggregate Index, 15% Barclays U.S. Floating Rate Notes Index, 10% Barclays U.S. Treasury TIPS 1-5 Year Index, and 5% Barclays U.S. Long Treasury Index.

[3] Since October 31, 2008.

Current performance may be lower or higher than the quoted past performance, which cannot guarantee future results.
Unit price, principal value, and return will vary, and you may have a gain or loss when you sell your Units.

Alaska U.S. Equity Market Trust

Total Net Assets: $899,297,648

Investment Approach

- Seeks to match the performance of the U.S. equity market, as represented by the Russell 3000 Index.
- Index reflects the performance of the largest 3,000 U.S. companies; large-cap stocks represent the majority of the index's market cap weighted value
- Attempts to accomplish its objective by investing in a sample of stocks that are representative of the index.

Portfolio Construction

- 900-1000 stock portfolio
- Issuer concentration generally +/- 0.40% relative to the benchmark weight
- Sector weight generally +/- 1.00% relative to the benchmark weight
- Expected tracking error 25-50 basis points

Benchmark

- Russell 3000 Index

Portfolio Management Team

E. Frederick Bair, CFA, CPA
17 years of investment experience;
14 years with T. Rowe Price.
- BS, Pennsylvania State University

Ken D. Uematsu, CFA
15 years of investment experience;
15 years with T. Rowe Price.
- BS, University of Maryland, College Park
- MBA, University of Maryland, College Park

T.RowePrice®
INVEST WITH CONFIDENCE

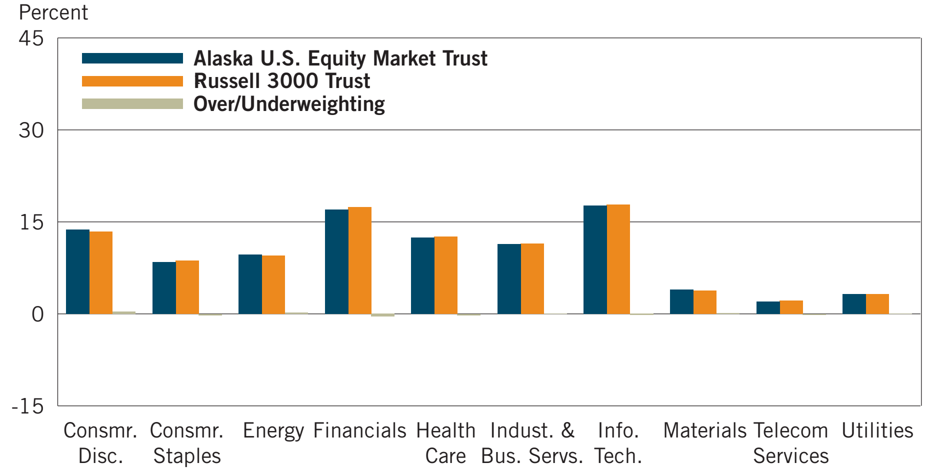
Alaska U.S. Equity Market Trust

As of September 30, 2013

Top 10 Holdings

Company	% of Trust
Apple	2.4%
ExxonMobil	2.0
Microsoft	1.4
Google	1.3
GE	1.3
Johnson & Johnson	1.2
Chevron	1.2
Procter & Gamble	1.2
JPMorgan Chase	1.1
Berkshire Hathaway	1.1
Total	14.2%

Sector Diversification



Portfolio Characteristics

	Alaska U.S. Equity Market Trust	Russell 3000 Index
Projected Earnings Growth Rate[1,2]	10.8%	10.7%
Price to Earnings (12 Months Forward)[1,2]	15.7X	15.7X
Return on Equity (Last 12 Months)	16.4%	16.5%
Price to Book	3.1X	3.1X
Unweighted Median Market Capitalization (Millions)	$6,031	$1,357
Investment Weighted Median Market Capitalization (Millions)	$40,541	$40,541
Investment Weighted Average Market Capitalization (Millions)	$87,504	$87,565
Number of Holdings	993	3,000

[1] Source: IBES.

[2] These statistics are based on the companies in the fund's portfolio and are not a projection of future fund performance.

Statistics are investment-weighted median unless otherwise noted.

T. Rowe Price uses the MSCI/S&P Global Industry Classification Standard (GICS) for sector and industry reporting. Each year, MSCI and S&P review the GICS structure. The last change occurred on 1 July 2010. T. Rowe Price will adhere to all future updates to GICS for prospective reporting.

The information shown does not reflect any ETFs that may be held in the portfolio.

Numbers may not total due to rounding.

Alaska U.S. Equity Market Trust

Performance

			Annualized	
	Three Months	One Year	Three Years	Since Inception 10/29/08
Alaska U.S. Equity Market Trust[1]	6.32%	21.91%	16.76%	16.31%
Russell 3000 Index	6.35	21.60	16.76	16.35
Difference	-0.03	0.31	0.00	-0.04

[1] Performance figures reflect the deduction of a 14 basis point annual trustee fee, which is used primarily to pay normal operating expenses of the trust, including custodial, accounting, and investment management fees.

Current performance may be lower or higher than the quoted past performance, which cannot guarantee future results.
Unit price, principal value, and return will vary, and you may have a gain or loss when you sell your Units.

As of September 30, 2013

Alaska Money Market Trust

Total Net Assets: $85,043,343

Investment Approach

- Seeks to preserve capital, liquidity and, consistent with these goals, the highest possible current income yield. The portfolio is managed to maintain a stable unit price of $1.00.[1]
- Investment decisions are based on the objectives of quality, liquidity, diversification and yield. Minimal price volatility is sought through maturity management and security selection.
- Managed to the same industry standards as the T. Rowe Price money market mutual funds.
- Invests in high-quality, U.S. dollar-denominated securities that have been determined to present minimal credit risk.

Portfolio Construction

- Diversified portfolio with 50-100 securities
- Maximum 5% per issuer, subject to the following internal credit evaluation:
  - T. Rowe Price Short-Term Rating of 1: 0%-5% for an issuer
  - T. Rowe Price Short-Term Rating of 2: 0%-3.75% for an issuer
  - T. Rowe Price Short-Term Rating of 3+: 0%-2% for an issuer
- Weighted average maturity will generally not exceed 60 days
- Invests in securities with maturities of less than one year

Benchmark

- Citigroup 3-Month Treasury Bill Index

[1] An investment in money market trusts is not insured or guaranteed by the FDIC or any other government agency. Although the trust seeks to preserve the value of your investment at $1.00 per unit, it is possible to lose money by investing in the trust.

Portfolio Management Team

Joseph K. Lynagh, CFA
19 years of investment experience;
23 years with T. Rowe Price.
- BS, Loyola University
- MSF, Loyola University

T.Rowe Price®
INVEST WITH CONFIDENCE

Alaska Money Market Trust

As of September 30, 2013

Top 10 Holdings

Company	% of Trust	S&P Rating
US Treasury N/B	2.5%	AA+
SO Ute Indian T	1.9	A-1+
US Treasury N/B	1.4	AA+
US Treasury N/B	1.2	AA+
NYC Txbl Fiscal	1.2	AA
CA Stwide Kaise	1.1	A-1
Chicago Sr 02B	1.1	NR
Dallas Tx Wtrwk	1.1	A-1
DE St Hlth Chri	1.1	A-1+
Fairfax Co VA E	1.1	A-1+
Total	13.9%	

Maturity and Credit Quality Ranges

Maturity	% of Trust	% of Index	Difference
0 - 30 days	57.2%	0.0%	57.2%
31 - 60 days	10.3	0.0	10.3
61 - 90 days	6.8	100.0	-93.2
91 - 120 days	9.1	0.0	9.1
120 - 180 days	9.5	0.0	9.5
181 - 365 days	7.1	0.0	7.1
Credit Quality			
A-1	83.7%	100.0%	-16.3%
AA	13.8	0.0	13.8
A	2.5	0.0	2.5
BAA	0.0	0.0	0.0

Portfolio Characteristics

	Alaska Money Market Trust	Citigroup 3-Month Treasury Bill Index	Peer Group	Difference[1]
Weighted Average Maturity (Days)	53.51	90.00	38.71[2]	-36.49
Weighted Average Effective Duration (Years)	0.15	–	–	–
Weighted Average Quality	AAA	AAA	–	–
Current Yield	0.13%	N/A	–	–

[1] Weighted Average Maturity difference is between the Portfolio and its Peer Group.
[2] As of June 30, 2013.
Numbers may not total due to rounding.

Alaska Money Market Trust

Performance

			Annualized		
	Three Months	One Year	Three Years	Five Years	Ten Years
Alaska Money Market Trust[1]	0.00%	0.05%	0.12%	0.36%	1.88%
Citigroup 3-Month Treasury Bill Index	0.01	0.07	0.08	0.15	1.61
Difference	-0.01	-0.02	0.04	0.21	0.27

[1] Performance figures reflect the deduction of a 14 basis point annual trustee fee, which is used primarily to pay normal operating expenses of the trust, including custodial, accounting, and investment management fees.

Current performance may be lower or higher than the quoted past performance, which cannot guarantee future results.
Unit price, principal value, and return will vary, and you may have a gain or loss when you sell your Units.

Fixed Income Benchmark Definitions

- **Barclays U.S. Dollar Floating Rate Note (FRN) Index** provides a measure of the U.S. dollar denominated floating rate note market. The index measures the performance of floating rate notes across sector, credit quality, maturity, and asset class sectors.
- The index includes both corporate and non-corporate sectors. The corporate sectors are Industrial, Utility, and Financial Institutions. The Financial Institution sectors are Banking, Brokerage, Finance Companies, Insurance, and REITs. Non-corporates include sovereigns (such as Mexico and Chile). All securities must be investment grade credits.

Barclays Long U.S. Treasury Index is the long component of the broad U.S. Treasury index, representing public obligations of the U.S. Treasury, and includes maturities of ten-years or more.

- **Barclays U.S. Treasury Inflation Protection Securities (TIPS) 1-5 Year Index** consists of Inflation-Protection securities issued by the U.S. Treasury with maturities between one and five-years.

T. Rowe Price — Presenters

Charles M. Shriver, CFA

Charles M. Shriver is a portfolio manager for several asset allocation portfolios within the Asset Allocation Group. He is the lead portfolio manager for the Balanced and Target Risk Strategies. Mr. Shriver is a vice president of T. Rowe Price Group, Inc.

Mr. Shriver has 14 years of investment experience, all of which have been with T. Rowe Price. He has been with the firm since 1991.

Mr. Shriver earned a B.A. in economics and rhetoric/communications studies from the University of Virginia, an M.S.F. in finance from Loyola University Maryland, and a graduate diploma in public economics from Stockholm University. He is also a Series 6, 7, and 63 registered representative and has earned the Chartered Financial Analyst designation.

Robert M. Larkins, CFA

Robert Larkins is a vice president of T. Rowe Price Group, Inc., T. Rowe Price Associates, Inc., and a portfolio manager in the Fixed Income Division. He currently manages the firm's enhanced index portfolios and several trust funds. Mr. Larkins is chairman, portfolio manager, and member of several Investment Advisory Committees.

Mr. Larkins has 10 years of investment experience, all of which have been with T. Rowe Price. Prior to joining the firm in 2003, he worked for Dow Chemical Company for four years as a research engineer.

Mr. Larkins earned a B.S. in chemical engineering from Brigham Young University and an M.B.A. in finance from The Wharton School, University of Pennsylvania. He has also earned the Chartered Financial Analyst designation.

T. Rowe Price — Presenters

Robert A. Birch

Bob Birch is the director of U.S. Institutional Client Services for the Global Investment Services division of T. Rowe Price. He is a vice president of T. Rowe Price Group, Inc., and T. Rowe Price Associates.

Mr. Birch has over 26 years of investment experience, 12 of which have been at T. Rowe Price. Prior to joining the firm in 2001, he was a principal and senior consultant with William M. Mercer Investment Consulting, Inc. He also previously served as the investment officer for a $4.5 billion multi-employer pension plan.

Mr. Birch earned a B.S. in management from the University of Utah and an M.B.A. in finance and investments from the George Washington University.

Christopher W. Dyer

Chris Dyer is a senior institutional sales executive for the Global Investment Services (GIS) division of T. Rowe Price, the organization responsible for the firm's institutional business worldwide. Mr. Dyer has been responsible for institutional sales with a specific focus on large corporate, public, and endowment and foundation fund sponsors since 1994. Mr. Dyer is a vice president of T. Rowe Price Group and of T. Rowe Price Associates.

Prior to his current position, Mr. Dyer was responsible for defined contribution plan sales and client service for public and nonprofit organizations for T. Rowe Price Retirement Plan Services, the firm's defined contribution plan subsidiary. He has 29 years of investment experience in institutional investment management sales, 25 of which have been with T. Rowe Price. Prior to joining the firm in 1987, he was a pension supervisor with The Calvert Group.

Mr. Dyer earned a B.A. in political science from the University of Maryland. He holds a Series 7, 63, and 65 with FINRA.

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT:	Goldman Sachs Retirement Portfolio Completion Strategy	ACTION:	X
DATE:	December 5, 2013	INFORMATION:	

BACKGROUND:

Goldman Sachs presented their Retirement Portfolio Completion (RPC) strategy to the Alaska Retirement Management Board (ARMB) at the 2012 ARMB Education Conference. At the December 2012 board meeting, ARMB instructed Callan to perform a due diligence review of the Goldman Sachs RPC strategy for possible inclusion in the Deferred Compensation, Supplemental Annuity, Public Employee's and Teacher's participant directed retirement plans. Goldman Sachs subsequently presented to the ARMB DC Committee at the June 2013 meeting. Following this presentation, the DC Committee authorized staff to continue dialogue with Goldman Sachs.

STATUS:

As a result of their due diligence review, Callan made the following conclusion:

> In our opinion, the research and "back testing" utilized to develop a simulated track record combined with detailed information describing the rationale for the inclusion of the asset categories identified are reasonable and fairly represented. We believe that the approach has been actually implemented in a manner consistent with the simulation and that the firm's expectations regarding return and risk characteristics are defensible. Goldman has indicated that the vehicle may be used either as a component of a broader diversified portfolio (i.e. in addition to traditional asset classes) or as a standalone "core" investment offering available to participants. ARMB has consciously attempted to provide a broad array of standalone investment options for program participants and we believe that the RPC alternative is suitable for either role.

The RPC portfolio is made up of three buckets: Real Return (TIPS, Global REITs, Commodities), Non-Traditional Growth & Income (Emerging Markets Equity, Emerging Markets Sovereign Credit, North American High Yield Corporate Credit), and Absolute Return (Hedge Fund Index Replication).

The addition of this option as a component of a participant's overall allocation would likely increase diversification and decrease the impact of inflation due to the introduction of assets which have historically been less volatile and more correlated with inflation than traditional asset classes.

RECOMMENDATION:

The Alaska Retirement Management Board authorize staff to contract with Goldman Sachs to manage a portfolio completion strategy for the State of Alaska's participant directed plans subject to successful contract and fee negotiations.

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT:	T. Rowe Price Building Block Enhancements	ACTION:	X
DATE:	December 5, 2013	INFORMATION:	

BACKGROUND:

T. Rowe Price currently manages Stable Value, Interest Income, Money Market, Small Cap, Balanced, Long Term Balanced, and Target Date investment options for the Alaska Retirement Management Board's (ARMB) participant directed plans. Currently, the Target Date investment options are the default options for new participants. The characteristics of the Balanced, Long Term Balanced, and Target Date options are determined by an allocation to underlying building blocks. These building blocks include: US Equity, International Equity, US Aggregate Bond, and Money Market.

STATUS:

Staff has worked with T. Rowe to develop several enhancements to the current building blocks. These enhancements include the following: (1) Changing the International Equity benchmark from the MSCI EAFE to the MSCI ACWI Ex-US which will add exposure to emerging markets. (2) Increase international equities as a percent of traditional equities from 20% to 30%. (3) Change the primary fixed income benchmark from the Barclays Aggregate to the Barclays Intermediate Aggregate Bond Index. (4) Allow T. Rowe to opportunistically invest in TIPS and floating rate debt within the fixed income building block. The above enhancements will result in a change to the equity fee structure increasing the total estimated fees by 0.5 basis points (0.005%). There is no change to the fixed income fee structure.

RECOMMENDATION:

The Alaska Retirement Management Board approve staff's recommendation to implement the T. Rowe Price enhancements within the current building blocks for the State of Alaska's participant directed plans.

Callan

ARMB Board Meeting

Investment Performance
Periods Ended 9/30/13

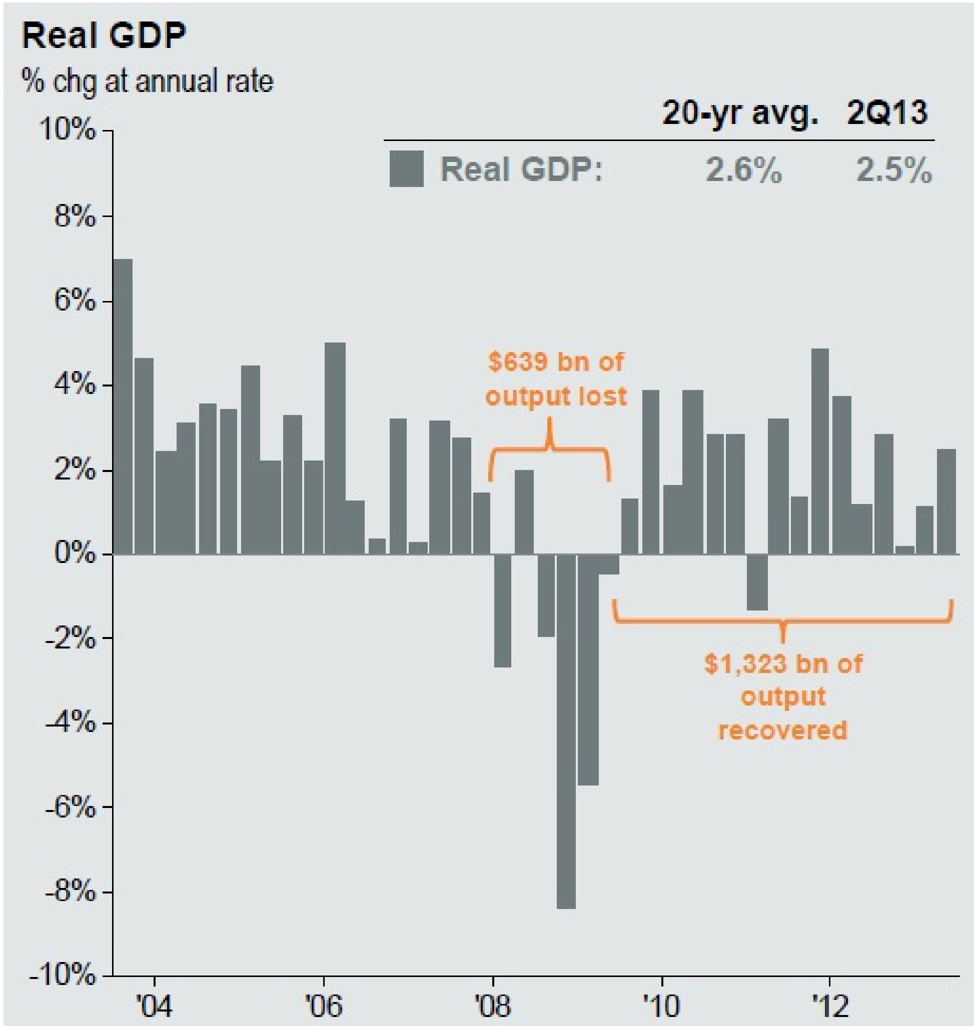
Michael J. O'Leary, CFA
Executive Vice President

Paul Erlendson
Senior Vice President

Agenda

- Market and Economic Environment
- Total Fund Performance
  - Major Asset Classes
  - Alternative Equity Strategies
- Review of Major Activities

Economic Growth – A Longer-Term Perspective



Source: BEA, FactSet, J.P. Morgan Asset Management.

GDP values shown in legend are % change vs. prior quarter annualized and reflect 2Q13 GDP.

"Guide to the Markets – U.S."

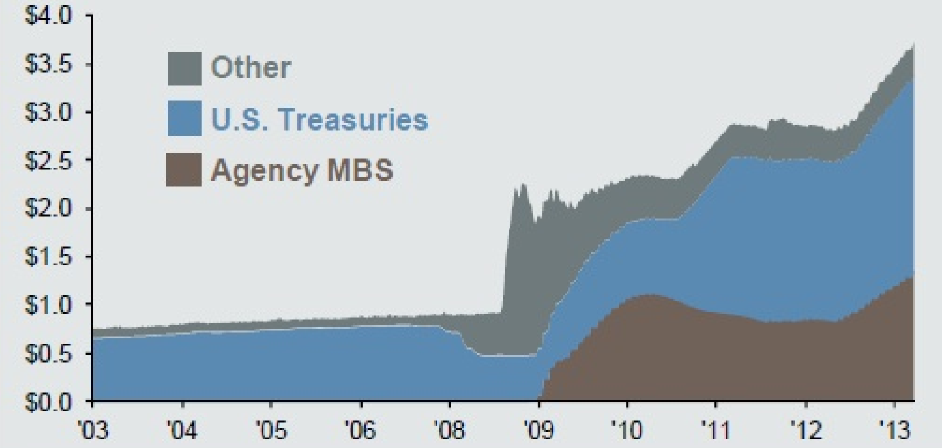
Data are as of 9/30/13.

Source: JP Morgan

Fed Plans Continue to Dominate Markets in 3rd Quarter

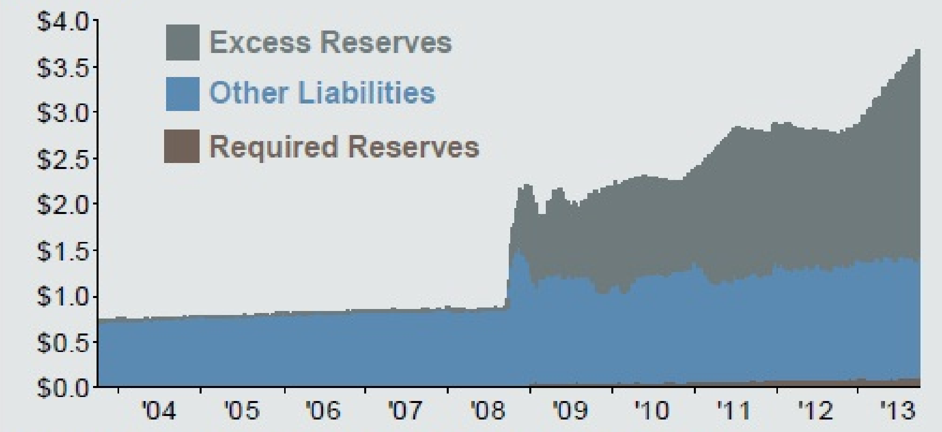
Taper or Not

Fed's Balance Sheet: Assets
$ trillions

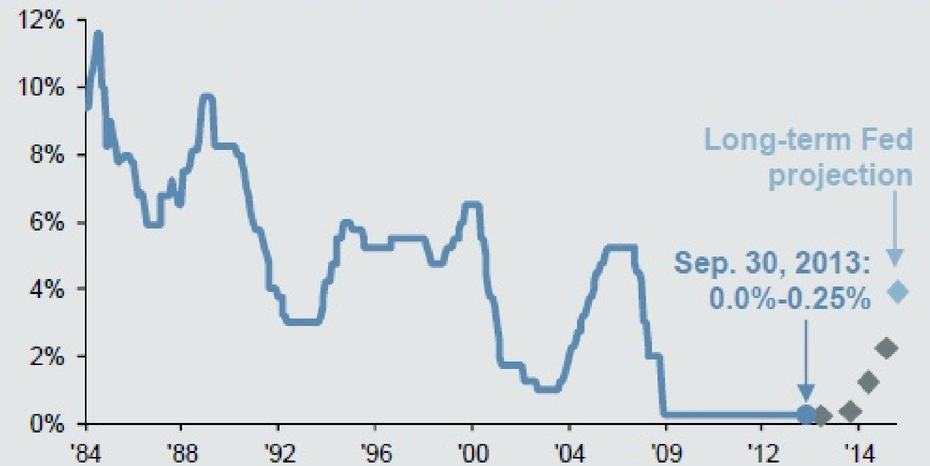


Money Multiplier
M2 / Monetary Base

Fed's Balance Sheet: Liabilities
$ trillions



Federal Funds Rate & FOMC Interest Rate Projections

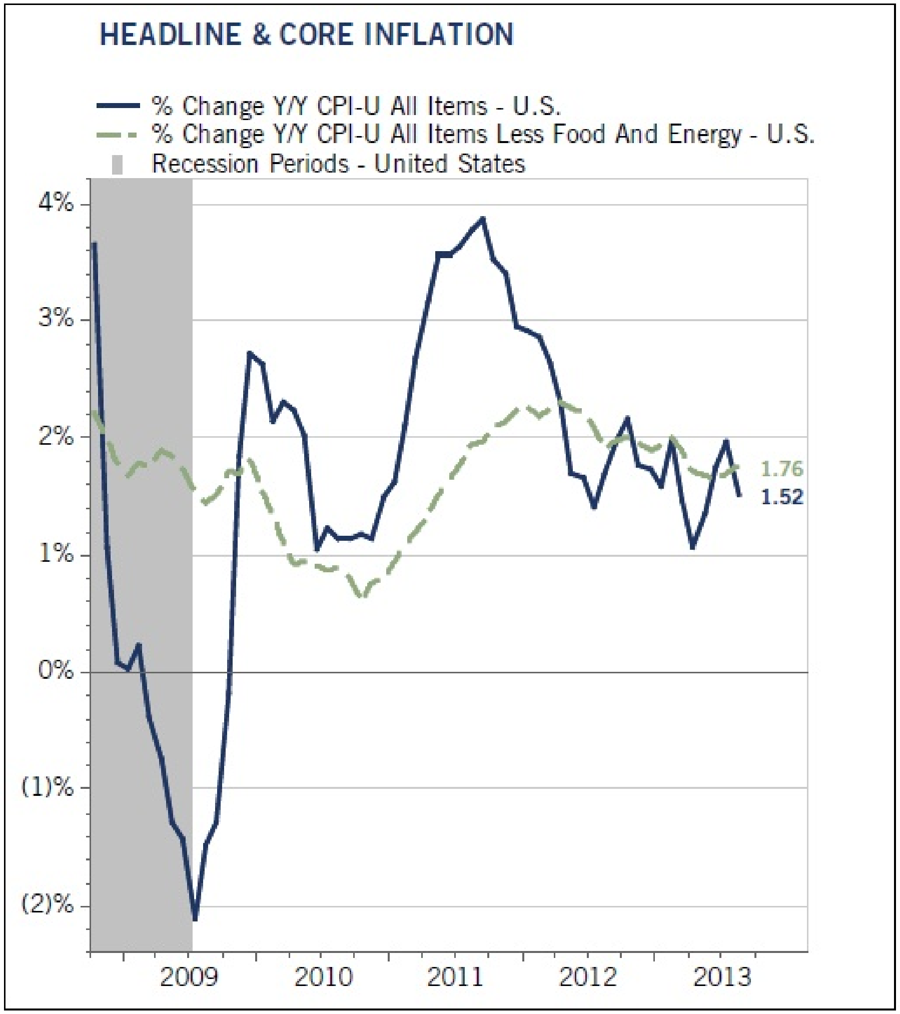


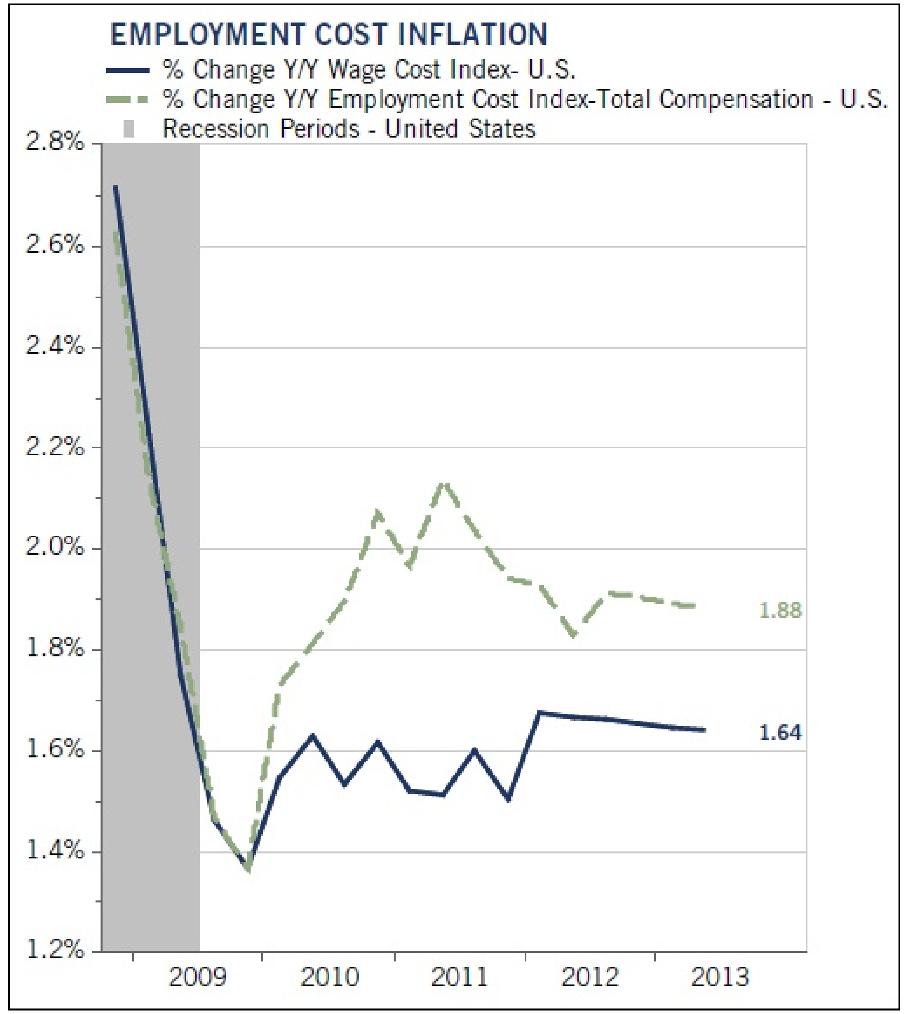
Source: Federal Reserve, FactSet, J.P. Morgan Asset Management.

Source: JP Morgan

Inflation Remains Low

Broad inflation measures remain subdued. Headline and core inflation are running below 2% and wage prices are contained amid continued slack in the labor market.



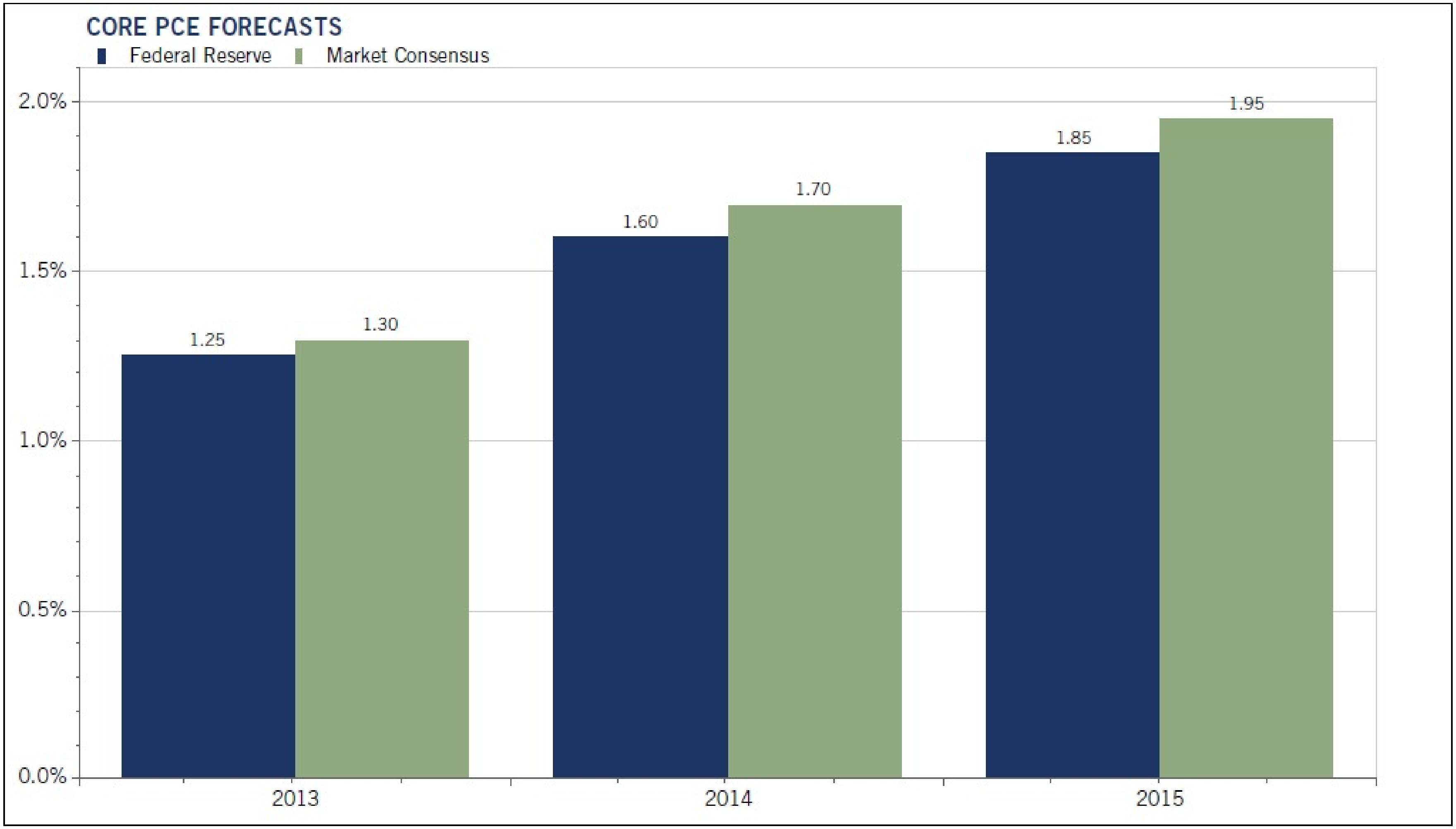


Source: FactSet and Babson Capital as of October 11, 2013.

Source: Babson Capital

Most, Including the Fed, Expect Inflation to Remain Low

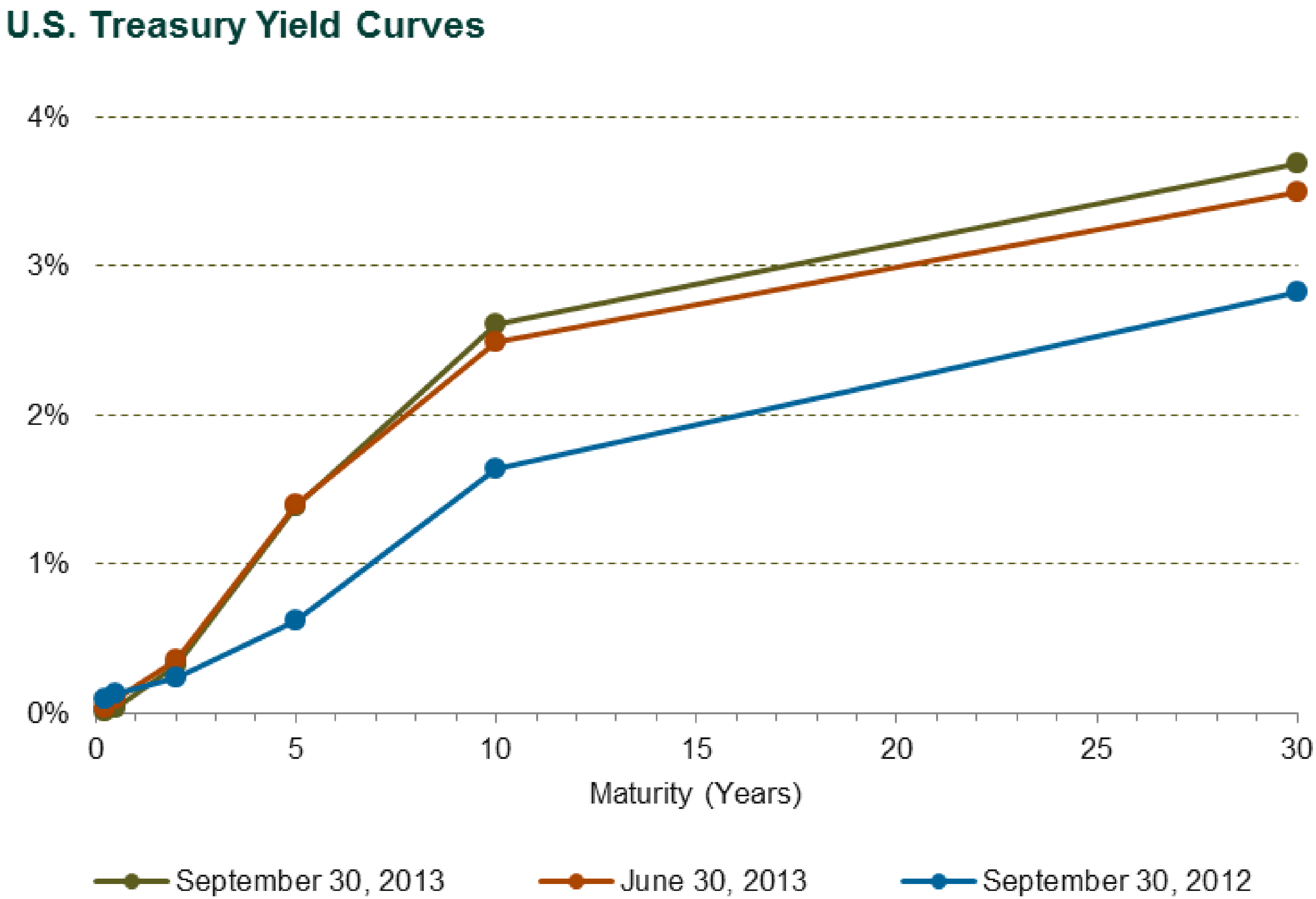
Core personal consumption expenditure inflation forecasts of both the market and Federal Reserve are expected to remain below the Fed's 2% target level into 2015.



Source : FactSet, Federal Reserve, Bloomberg and Babson Capital as of October 11, 2013.

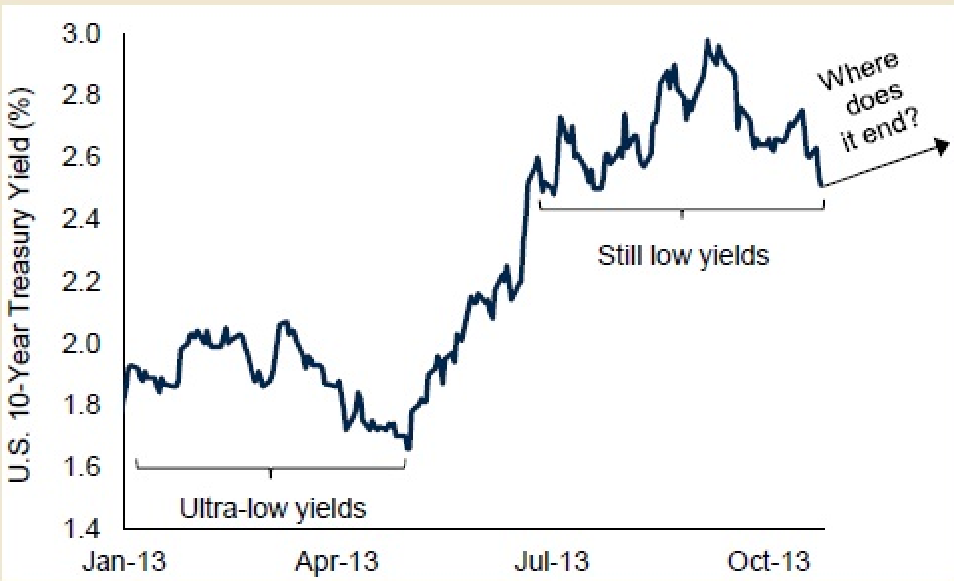
Source: Babson Capital

U.S. Treasury Curves



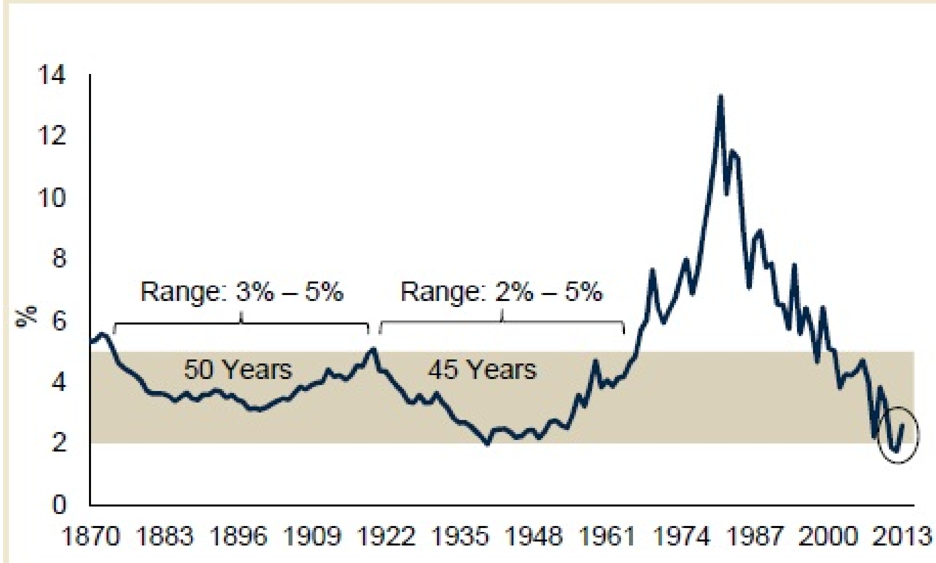
Yields Remain Extremely Low; Starting to Normalize?

Exhibit 1: Bond yields start normalizing



Source: Federal Reserve Board, Haver Analytics, RBC GAM

Exhibit 4: Historical U.S. 10-year Treasury yields

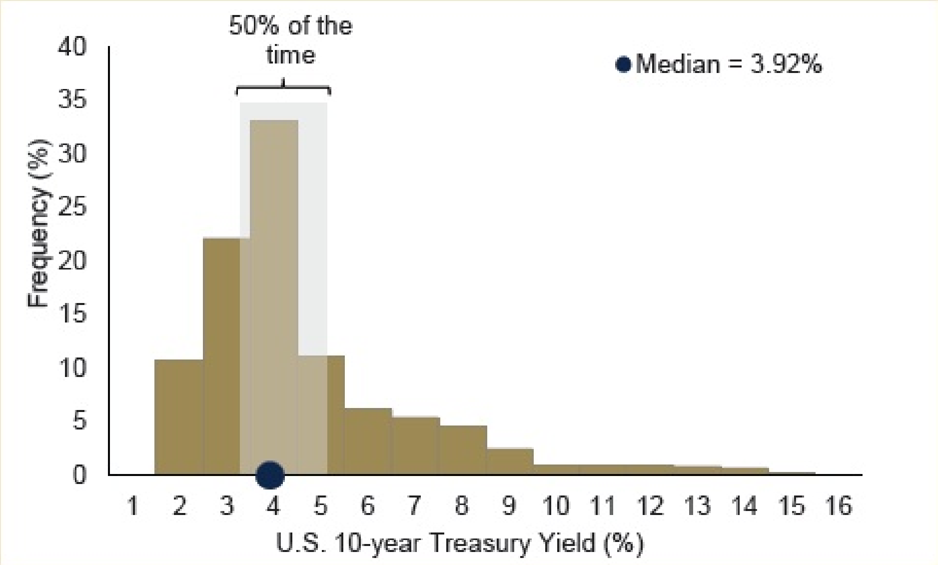


Source: RBC GAM, RBC CM

Source: RBC

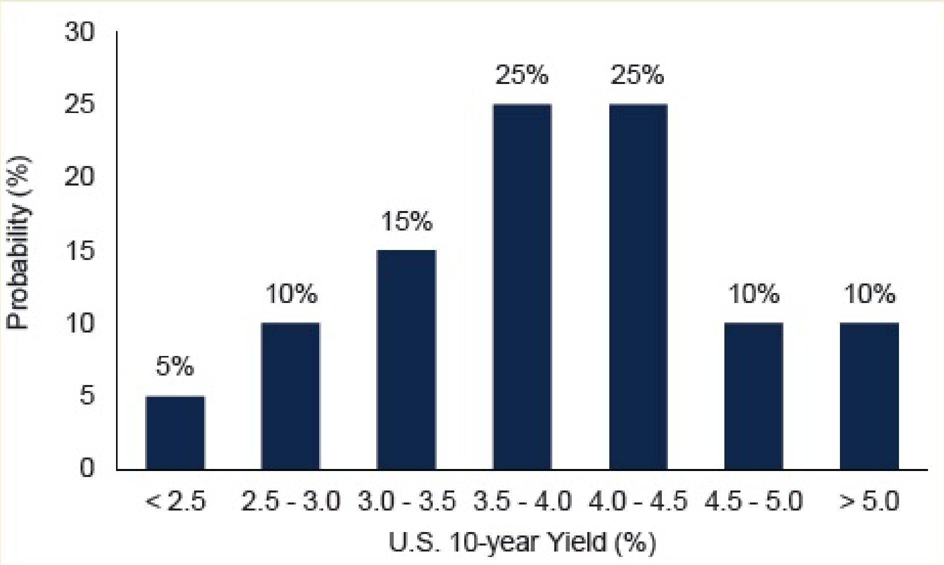
Historical Perspective & Consensus Expectations

Exhibit 14: Bond yields spend most of their time around 4%



Note: Distribution of monthly U.S. 10-year yield back to 1870.
Source: Federal Reserve, RBC CM, RBC GAM

Exhibit 15: Where will the "normal" 10-year yield settle?



Note: Normal defined as long-term median 10-year yield. Source: RBC GAM

Source: RBC

U.S. Equity Returns

Style Median and Index Returns* for Periods ended September 30, 2013

Large Cap Equity	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years
Large Cap Core Style	6.25	21.52	21.37	16.82	10.23	8.32	6.48
Large Cap Growth Style	9.59	21.91	20.88	16.65	11.31	8.46	5.99
Large Cap Value Style	4.84	21.73	24.08	16.74	9.63	8.67	7.80
Aggressive Growth Style	11.82	28.82	26.71	16.38	13.11	9.75	8.29
Contrarian Style	4.93	21.71	25.40	16.37	10.48	8.85	8.64
Yield-Oriented Style	4.56	19.73	19.40	15.78	10.03	9.18	7.90
Russell 3000	6.35	21.30	21.60	16.76	10.58	8.11	6.01
Russell 1000	6.02	20.76	20.91	16.64	10.53	7.98	5.78
Russell 1000 Growth	8.11	20.87	19.27	16.94	12.07	7.82	4.28
Russell 1000 Value	3.94	20.47	22.30	16.25	8.86	7.99	6.64
S&P 1500	5.63	20.20	20.24	16.47	10.32	7.95	5.93
S&P 500	5.24	19.79	19.34	16.27	10.02	7.57	5.33
NYSE	6.23	16.83	20.38	15.68	9.63	9.01	6.92
Dow Jones Industrials	2.12	17.64	15.59	14.94	9.93	7.74	6.92
Mid Cap Equity							
Mid Cap Core Style	8.04	24.24	28.57	18.94	13.83	11.11	10.92
Mid Cap Growth Style	11.18	25.64	26.84	17.62	13.50	11.00	10.97
Mid Cap Value Style	6.89	23.55	28.41	17.36	12.84	11.32	11.70
Russell Midcap	7.70	24.34	27.91	17.53	12.97	10.78	9.86
S&P MidCap 400	7.54	23.23	27.68	17.45	13.08	10.84	11.21
Small Cap Equity							
Small Cap Core Style	10.12	27.86	31.42	20.04	12.84	10.98	11.89
Small Cap Growth Style	13.62	33.69	33.46	21.01	14.28	10.99	10.69
Small Cap Value Style	8.52	26.69	30.52	19.26	12.71	11.27	12.12
Russell 2000	10.21	27.69	30.06	18.29	11.15	9.64	8.91
S&P SmallCap 600	10.73	28.66	31.51	20.68	12.40	11.14	10.83
NASDAQ	11.19	26.11	22.98	18.28	13.84	8.78	6.27

Study of the data helps illustrate the range of returns attributable to both capitalization size and style orientation.

For example, contrast the small cap core style median with the small cap indices and the large cap core style median with the large cap market indices.

*Returns less than one year are not annualized.
Sources: Callan, Dow Jones & Company, Russell Investment Group, Standard & Poor's, The NASDAQ Stock Market

Global & International Equity Index Returns

Style Median and Index Returns* for Periods ended September 30, 2013

Non-U.S. Equity	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years
Non-U.S. Equity Style	10.70	15.56	22.69	9.34	7.61	9.14	7.75
MSCI EAFE	11.56	16.14	23.77	8.47	6.35	8.01	5.46
MSCI EAFE (local)	7.50	19.34	28.31	9.11	5.54	6.27	3.99
MSCI EAFE Growth	10.50	16.54	23.27	8.88	6.79	8.00	4.23
MSCI EAFE Value	12.63	15.71	24.27	7.99	5.86	7.94	6.53
MSCI ACWI ex USA	10.17	10.47	16.98	6.43	6.74	9.24	6.81
Global Equity							
Global Equity Style	8.66	18.35	22.30	12.50	8.95	8.91	7.32
MSCI World	8.18	17.29	20.21	11.82	7.84	7.58	5.13
MSCI World (local)	6.40	18.85	22.34	12.07	7.36	6.66	4.42
MSCI ACWI	8.02	14.92	18.37	10.81	8.30	8.41	5.94
Regional Equity							
MSCI Europe	13.61	16.09	24.23	8.73	6.03	8.47	5.20
MSCI Europe (local)	8.12	14.72	20.62	8.07	6.37	7.06	4.39
MSCI Japan	6.66	24.31	31.50	8.91	5.16	4.84	4.28
MSCI Japan (local)	5.36	41.08	65.85	14.91	3.51	3.49	2.03
MSCI Pacific ex Japan	10.33	5.20	11.57	7.37	11.60	12.62	11.71
MSCI Pacific ex Japan (local)	8.62	12.77	19.67	7.74	8.68	9.75	8.97
Emerging/Frontier Markets							
Emerging Markets Style	5.30	-3.23	3.04	-0.31	6.68	12.90	12.76
MSCI Emerging Markets	5.90	-4.05	1.33	0.00	7.56	13.16	12.32
MSCI Emerging Markets (local)	5.76	0.78	6.19	3.08	8.52	12.85	13.18
MSCI Frontier Markets	6.30	18.15	21.75	4.12	-2.88	7.24	--
International Small Cap Equity							
International Small Cap Style	13.02	22.11	29.42	13.64	12.35	12.12	11.89
MSCI EAFE Small Cap	15.52	22.09	29.43	11.25	11.43	10.29	--
MSCI ACWI ex USA Small Cap	12.38	14.43	20.04	7.27	11.38	11.13	9.50

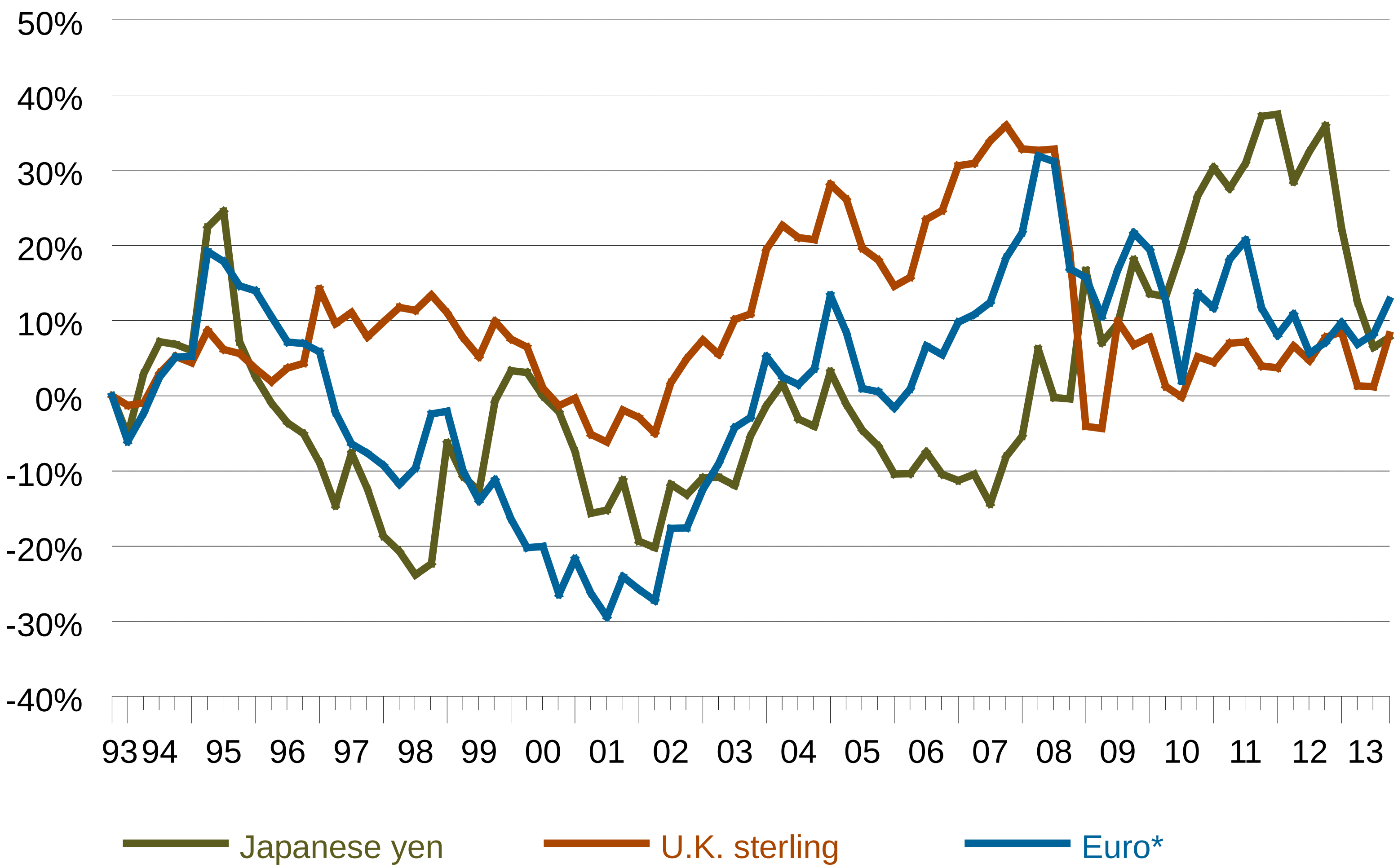
Huge differences between local & unhedged returns

e.g. EAFE $ versus Local etc.

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

Dollar Strength

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



- Yen reacting to changed policy toward greater monetary ease this year

*Euro returns from 1Q99. German mark prior to 1Q99.
Source: MSCI

Hedge Fund Perspective

Style Median and Index Returns* for Periods ended September 30, 2013

Diversified Hedge Fund Strategy	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years
Hedge Fund-of-Funds Database	2.03	7.45	9.26	4.92	4.67	5.08	7.27
CS Hedge Fund	1.61	5.35	7.41	5.00	5.49	6.40	7.24
CS Investable Blue Chip	0.95	2.22	3.73	3.02	3.96	3.33	--
Credit Suisse Subindices							
Equity Market Neutral	1.17	3.93	4.79	3.12	-7.88	-0.58	3.33
Convertible Arb	0.87	4.72	6.66	5.62	9.65	4.69	7.41
Fixed Income Arb	1.10	2.47	4.56	6.87	6.57	4.15	5.02
Multi-Strategy	2.68	6.62	9.54	7.90	7.52	6.70	7.17
Distressed	2.21	10.36	13.92	7.25	6.59	7.84	9.64
Risk Arb	1.82	3.82	5.68	2.15	4.13	4.67	5.88
Event-Driven Multi	3.29	10.11	13.66	4.57	6.31	7.78	9.15
Long/Short Equity	3.48	10.73	13.07	5.58	6.05	7.04	8.67
Short Bias	-10.92	-21.92	-24.60	-16.99	-16.17	-8.79	-8.16
Global Macro	0.17	1.51	2.78	5.45	6.85	8.24	9.02
Managed Futures	-3.95	-7.39	-10.22	-3.17	0.03	3.30	4.03

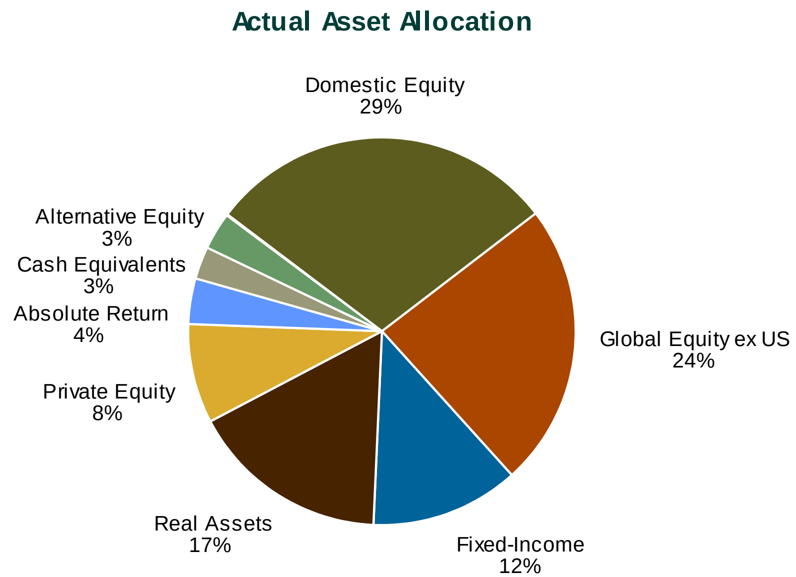
*Returns less than one year are not annualized.
Sources: Callan, Credit Suisse Hedge Index LLC

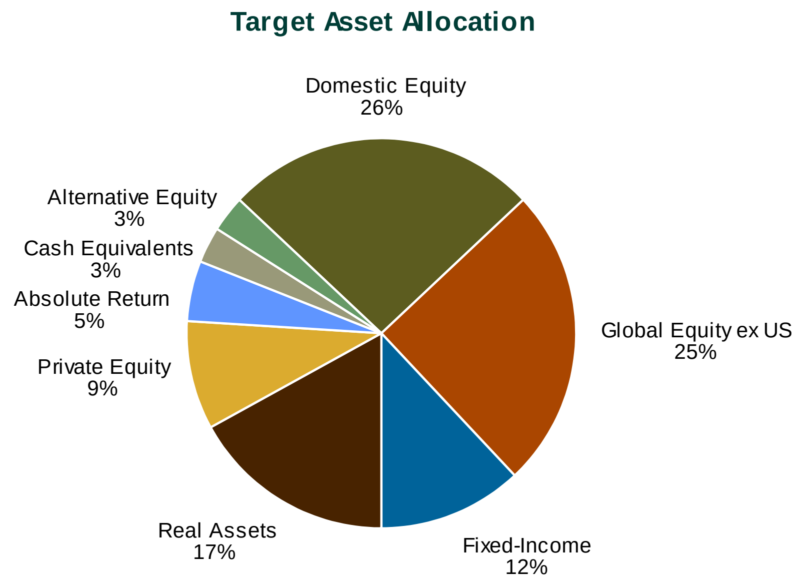
Real Estate Returns

Periodic Table of Investment Returns

2004	2005	2006	2007	2008	2009	2010	2011	2012	3 Qtrs. 2013
EPRA/NAREIT Dev ex-US **42.42%**	NCREIF ODCE Value Wtd (Net) **20.15%**	EPRA/NAREIT Dev ex-US **46.67%**	NCREIF Property Index **15.85%**	NCREIF Property Index **-6.46%**	EPRA/NAREIT Dev ex-US **44.56%**	NAREIT Equity Index **27.96%**	NCREIF ODCE Equal Wtd (Net) **14.99%**	EPRA/NAREIT Dev ex-US **38.57%**	NCREIF ODCE Value Wtd (Net) **9.95%**
EPRA/NAREIT Global Developed **37.96%**	NCREIF Property Index **20.06%**	UBS Real Estate Investor **42.71%**	NCREIF ODCE Equal Wtd (Net) **14.99%**	NCREIF ODCE Value Wtd (Net) **-10.70%**	EPRA/NAREIT Global Developed **38.26%**	UBS Real Estate Investor **23.51%**	NCREIF ODCE Value Wtd (Net) **14.97%**	EPRA/NAREIT Global Developed **28.65%**	NCREIF ODCE Equal Wtd (Net) **9.45%**
UBS Real Estate Investor **37.78%**	NCREIF ODCE Equal Wtd (Net) **19.04%**	EPRA/NAREIT Global Developed **42.35%**	NCREIF ODCE Value Wtd (Net) **14.84%**	NCREIF ODCE Equal Wtd (Net) **-11.09%**	UBS Real Estate Investor **35.70%**	EPRA/NAREIT Global Developed **20.40%**	NCREIF Property Index **14.26%**	UBS Real Estate Investor **24.93%**	NCREIF Property Index **8.24%**
NAREIT Equity Index **31.58%**	EPRA/NAREIT Dev ex-US **18.25%**	NAREIT Equity Index **35.06%**	EPRA/NAREIT Dev ex-US **-0.88%**	NAREIT Equity Index **-37.72%**	NAREIT Equity Index **27.99%**	EPRA/NAREIT Dev ex-US **16.01%**	NAREIT Equity Index **8.29%**	NAREIT Equity Index **18.06%**	EPRA/NAREIT Dev ex-US **6.48%**
NCREIF Property Index **14.48%**	EPRA/NAREIT Global Developed **15.35%**	NCREIF Property Index **16.59%**	EPRA/NAREIT Global Developed **-6.96%**	UBS Real Estate Investor **-45.87%**	NCREIF Property Index **-16.86%**	NCREIF ODCE Value Wtd (Net) **15.25%**	UBS Real Estate Investor **-0.03%**	NCREIF Property Index **10.54%**	EPRA/NAREIT Global Developed **4.90%**
NCREIF ODCE Value Wtd (Net) **12.00%**	NAREIT Equity Index **12.15%**	NCREIF ODCE Value Wtd (Net) **15.27%**	UBS Real Estate Investor **-13.53%**	EPRA/NAREIT Global Developed **-47.72%**	NCREIF ODCE Value Wtd (Net) **-30.40%**	NCREIF ODCE Equal Wtd (Net) **15.13%**	EPRA/NAREIT Global Developed **-5.82%**	NCREIF ODCE Equal Wtd (Net) **9.92%**	UBS Real Estate Investor **3.78%**
NCREIF ODCE Equal Wtd (Net) **11.51%**	UBS Real Estate Investor **11.81%**	NCREIF ODCE Equal Wtd (Net) **15.10%**	NAREIT Equity Index **-15.69%**	EPRA/NAREIT Dev ex-US **-52.00%**	NCREIF ODCE Equal Wtd (Net) **-31.30%**	NCREIF Property Index **13.11%**	EPRA/NAREIT Dev ex-US **-15.35%**	NCREIF ODCE Value Wtd (Net) **9.79%**	NAREIT Equity Index **3.20%**

Asset Allocation – Employees' Retirement Plan





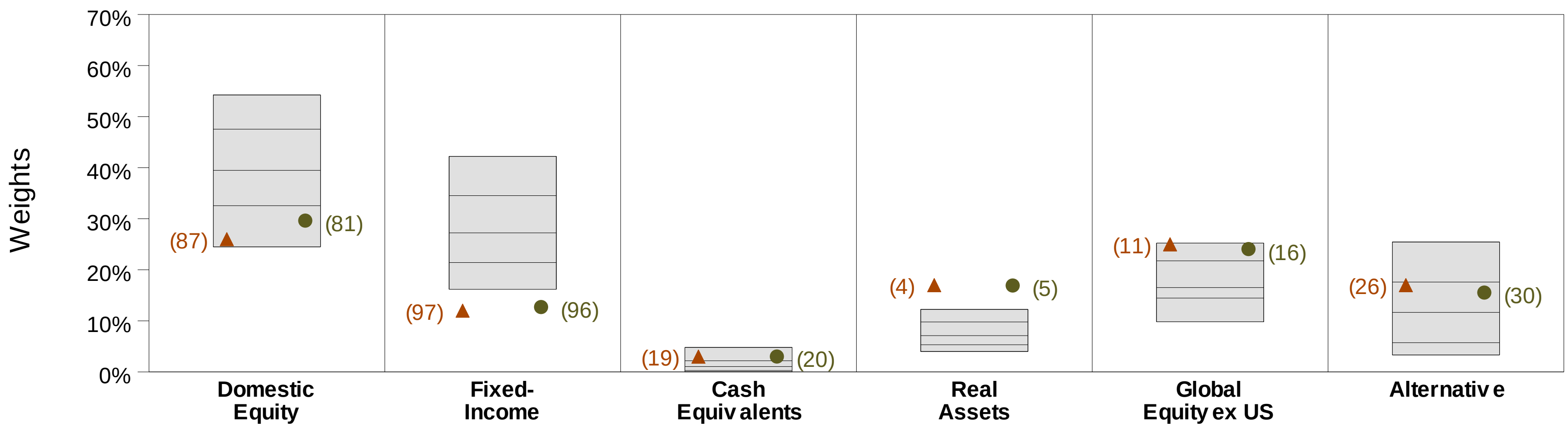
Asset Class	$000s Actual	Percent Actual	Percent Target	Percent Difference	$000s Difference
Domestic Equity	2,092,034	29.3%	26.0%	3.3%	236,401
Global Equity ex US	1,692,390	23.7%	25.0%	(1.3%)	(91,873)
Fixed-Income	885,624	12.4%	12.0%	0.4%	29,178
Real Assets	1,185,798	16.6%	17.0%	(0.4%)	(27,501)
Private Equity	592,970	8.3%	9.0%	(0.7%)	(49,365)
Absolute Return	274,005	3.8%	5.0%	(1.2%)	(82,848)
Cash Equivalents	194,248	2.7%	3.0%	(0.3%)	(19,864)
Alternative Equity	219,984	3.1%	3.0%	0.1%	5,872
Total	7,137,053	100.0%	100.0%		

- ERP is used as illustrative throughout the presentation. The other plans exhibit similar modest and understandable variations from strategic target allocations.

Asset Allocation vs. Public Funds (ERP)

Callan Public Fund Database

Asset Class Weights vs Public Fund Sponsor Database



	Domestic Equity	Fixed-Income	Cash Equivalents	Real Assets	Global Equity ex US	Alternative
10th Percentile	54.25	42.23	4.81	12.26	25.25	25.45
25th Percentile	47.53	34.53	2.18	9.78	21.77	17.59
Median	39.47	27.24	1.06	7.10	16.53	11.68
75th Percentile	32.57	21.42	0.29	5.33	14.46	5.74
90th Percentile	24.49	16.19	0.03	4.00	9.84	3.34
Fund ●	29.31	12.41	2.72	16.61	23.71	15.23
Target ▲	26.00	12.00	3.00	17.00	25.00	17.00

- Total domestic equity is above target while international equity is slightly below target.
- Real assets and alternatives are high when compared to other public funds. Policy is “growth” oriented as opposed to “income” oriented.

*Note that “Alternative” includes private equity and absolute return

PERS Performance – 3rd Quarter 2013 & Trailing 12 Months

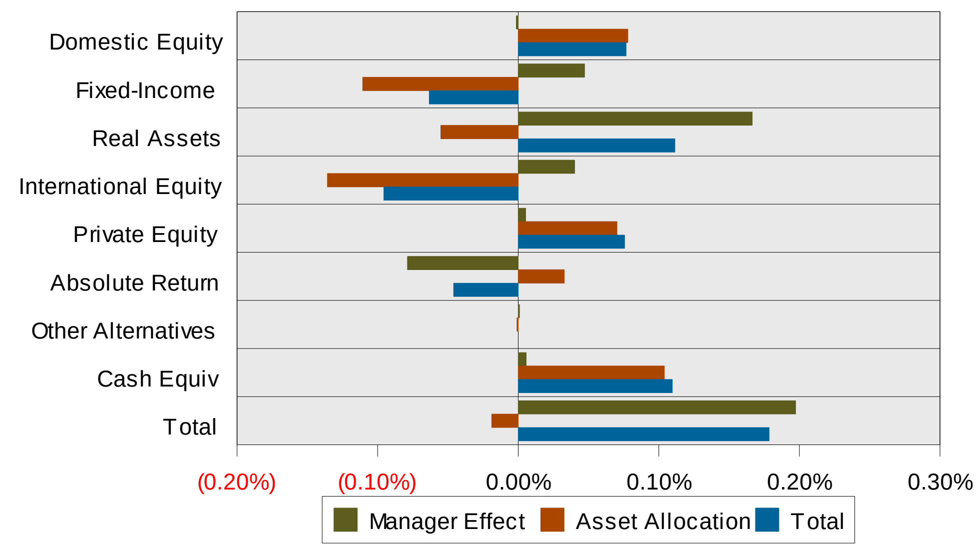
Relative Attribution Effects for Quarter ended September 30, 2013

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	29%	26%	7.44%	6.35%	0.32%	0.03%	0.35%
Fixed-Income	13%	12%	1.07%	0.87%	0.03%	(0.04%)	(0.02%)
Real Assets	17%	17%	1.04%	1.82%	(0.13%)	(0.01%)	(0.15%)
Global Equity ex US	22%	25%	10.41%	10.17%	0.05%	(0.12%)	(0.06%)
Private Equity	8%	9%	4.86%	9.01%	(0.35%)	(0.02%)	(0.37%)
Absolute Return	4%	5%	(0.55%)	1.24%	(0.08%)	0.03%	(0.05%)
Alternative Equity	3%	3%	3.43%	3.35%	0.00%	(0.00%)	0.00%
Cash Equivalents	2%	3%	0.09%	0.02%	0.00%	0.05%	0.06%
Total			**5.35% =**	**5.58% +**	**(0.16%) +**	**(0.07%)**	**(0.23%)**

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	30%	27%	23.20%	21.60%	0.45%	0.28%	0.73%
Fixed-Income	15%	13%	(0.29%)	(0.51%)	0.04%	(0.24%)	(0.20%)
Real Assets	17%	16%	10.05%	8.06%	0.37%	(0.04%)	0.33%
Global Equity ex US	22%	23%	18.88%	16.98%	0.42%	(0.22%)	0.19%
Private Equity	9%	8%	16.60%	24.47%	(0.66%)	0.05%	(0.61%)
Absolute Return	4%	6%	6.09%	5.10%	0.02%	0.13%	0.15%
Other Alternatives	1%	1%	-	-	0.00%	(0.00%)	0.00%
Cash Equiv	3%	5%	0.21%	0.10%	0.00%	0.28%	0.29%
Total			**14.31% =**	**13.43% +**	**0.64% +**	**0.24%**	**0.88%**

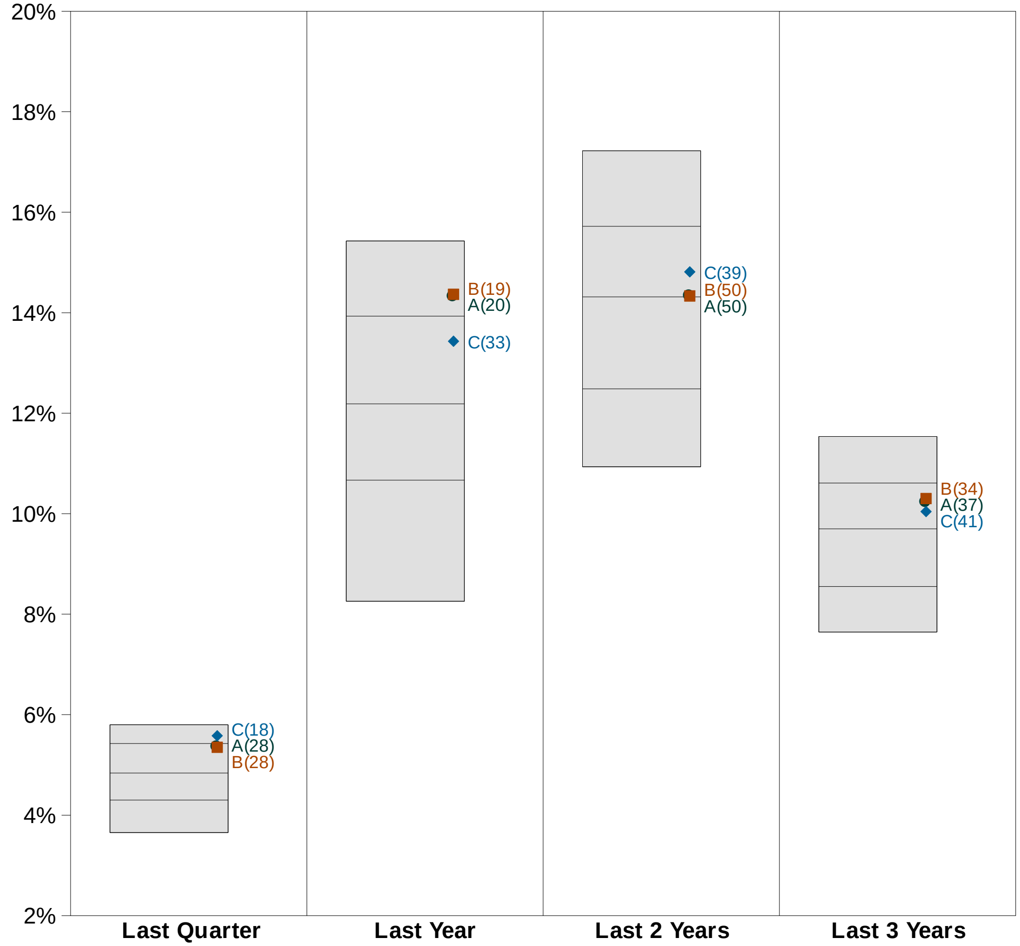
PERS Intermediate-Term Performance



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	30%	27%	16.72%	16.76%	(0.00%)	0.08%	0.08%
Fixed-Income	16%	16%	2.77%	2.43%	0.05%	(0.11%)	(0.06%)
Real Assets	16%	16%	11.53%	10.40%	0.17%	(0.05%)	0.11%
International Equity	22%	23%	6.60%	6.43%	0.04%	(0.14%)	(0.10%)
Private Equity	9%	8%	15.14%	14.42%	0.01%	0.07%	0.08%
Absolute Return	4%	6%	3.73%	5.10%	(0.08%)	0.03%	(0.05%)
Other Alternatives	0%	0%	-	-	0.00%	(0.00%)	0.00%
Cash Equiv	2%	3%	0.37%	0.10%	0.01%	0.10%	0.11%
Total			**10.22% =**	**10.04% +**	**0.20% +**	**(0.02%)**	**0.18%**

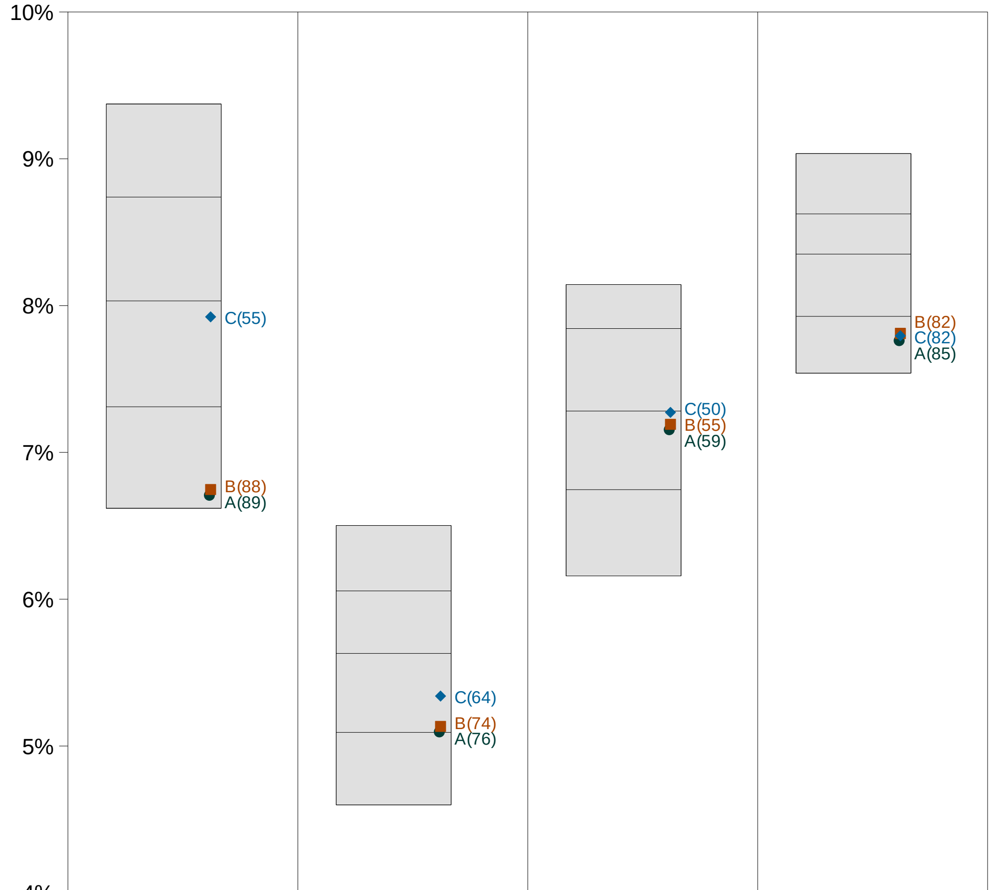
Cumulative Total Fund Returns



	Last Quarter	Last Year	Last 2 Years	Last 3 Years
10th Percentile	5.80	15.43	17.22	11.54
25th Percentile	5.43	13.93	15.72	10.61
Median	4.84	12.19	14.32	9.70
75th Percentile	4.30	10.67	12.48	8.55
90th Percentile	3.65	8.26	10.93	7.64
PERS Total Plan ● A	5.35	14.31	14.33	10.22
TRS Total Plan ■ B	5.35	14.37	14.33	10.30
Target Index ◆ C	5.58	13.43	14.81	10.04

- Last quarter, very strong absolute return
- Very attractive returns for all periods out to 3 years

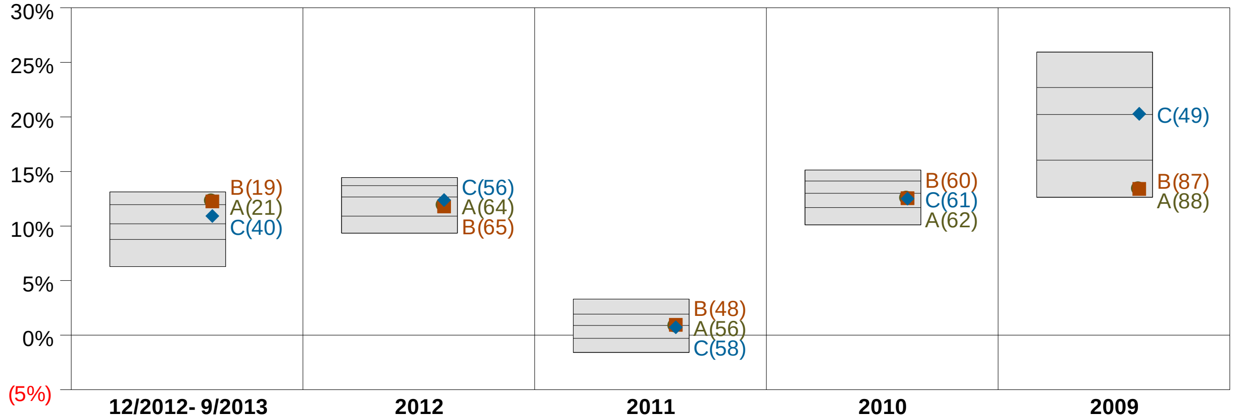
Longer-Term Returns



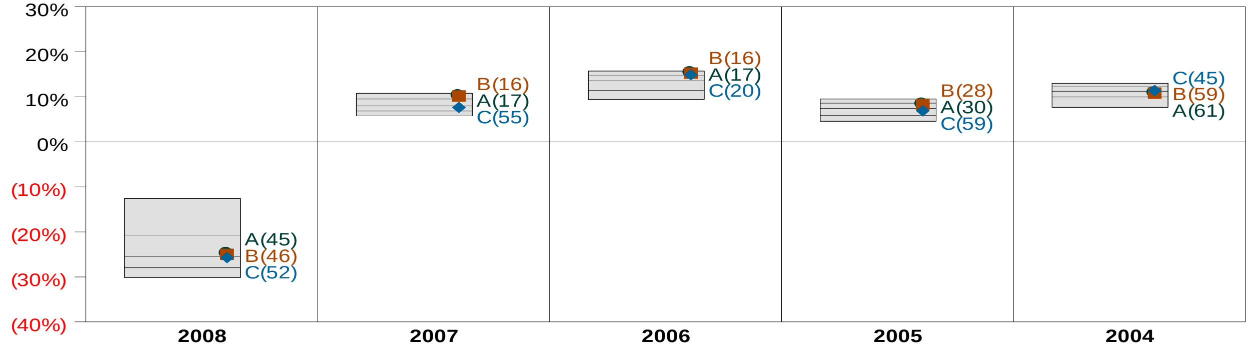
	Last 5 Years	Last 7 Years	Last 10 Years	Last 22 Years
10th Percentile	9.37	6.50	8.14	9.04
25th Percentile	8.74	6.06	7.84	8.62
Median	8.03	5.63	7.28	8.35
75th Percentile	7.31	5.09	6.75	7.93
90th Percentile	6.62	4.60	6.16	7.54
PERS Total Plan ● A	6.70	5.09	7.15	7.75
TRS Total Plan ■ B	6.75	5.13	7.19	7.81
Target Index ◆ C	7.92	5.34	7.27	7.79

- 5-year performance still affected by 2009 timing related issue (valuation timing for RE & PE)
- 10 year results essentially at Target close to median (see preceding page for recent periods) & 10 year return shown here.

Calendar Period Performance

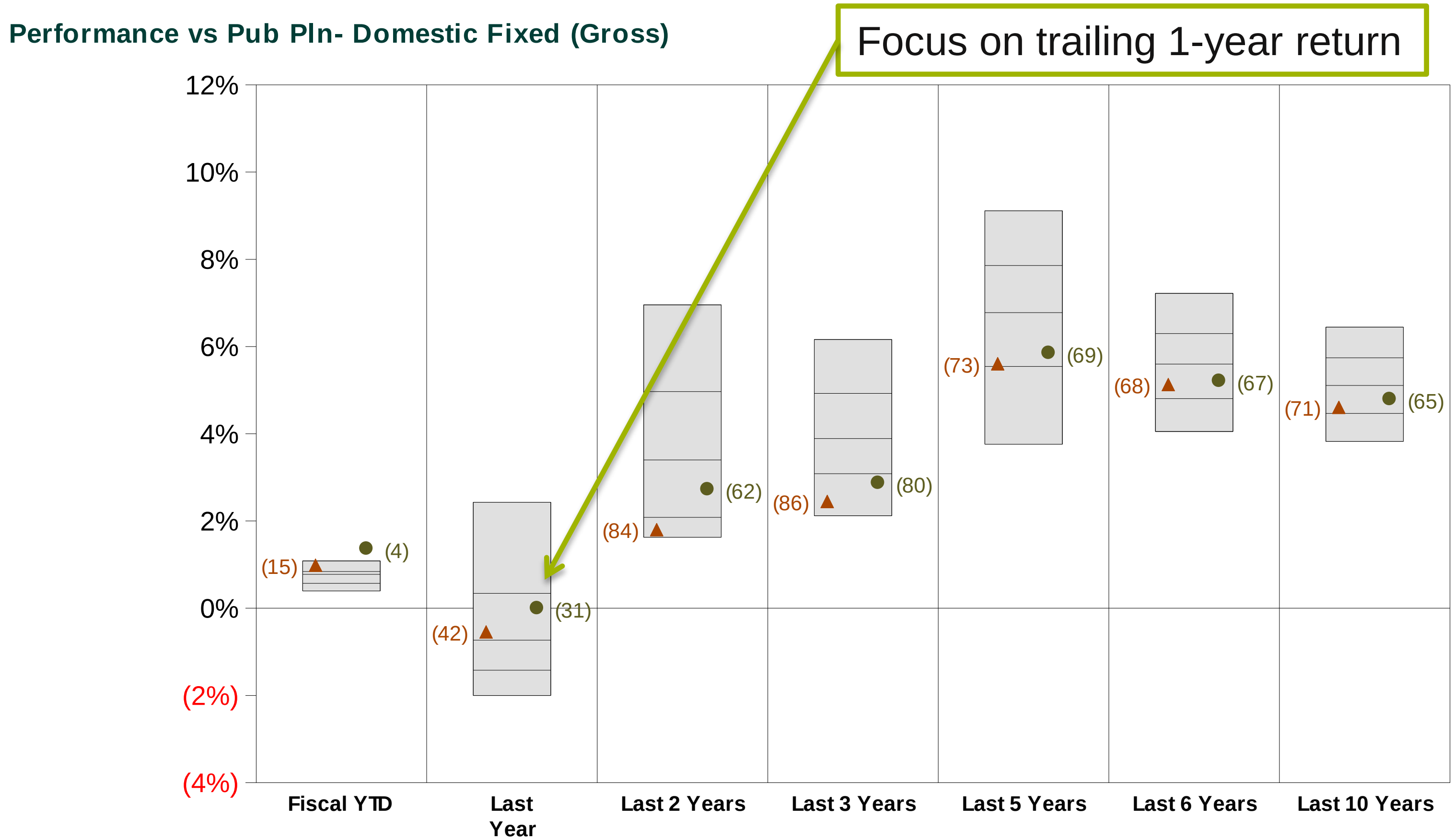


	12/2012- 9/2013	2012	2011	2010	2009
10th Percentile	13.12	14.45	3.31	15.14	25.93
25th Percentile	11.96	13.70	1.92	14.13	22.70
Median	10.21	12.66	0.89	13.00	20.23
75th Percentile	8.77	10.91	(0.29)	11.69	16.03
90th Percentile	6.28	9.34	(1.58)	10.10	12.63
PERS Total Plan ● A	12.22	11.81	0.77	12.45	13.31
TRS Total Plan ■ B	12.26	11.79	0.95	12.55	13.40
Target Index ◆ C	10.92	12.38	0.72	12.51	20.28



	2008	2007	2006	2005	2004
10th Percentile	(12.58)	10.77	15.73	9.53	13.01
25th Percentile	(20.71)	9.53	14.67	8.58	12.22
Median	(25.44)	7.97	13.54	7.40	11.22
75th Percentile	(27.97)	6.85	11.42	5.85	9.96
90th Percentile	(30.14)	5.75	9.41	4.59	7.68
PERS Total Plan ● A	(24.91)	10.17	15.24	8.31	10.79
TRS Total Plan ■ B	(24.98)	10.20	15.26	8.38	10.83
Target Index ◆ C	(25.71)	7.64	14.91	6.89	11.40

Total Bond

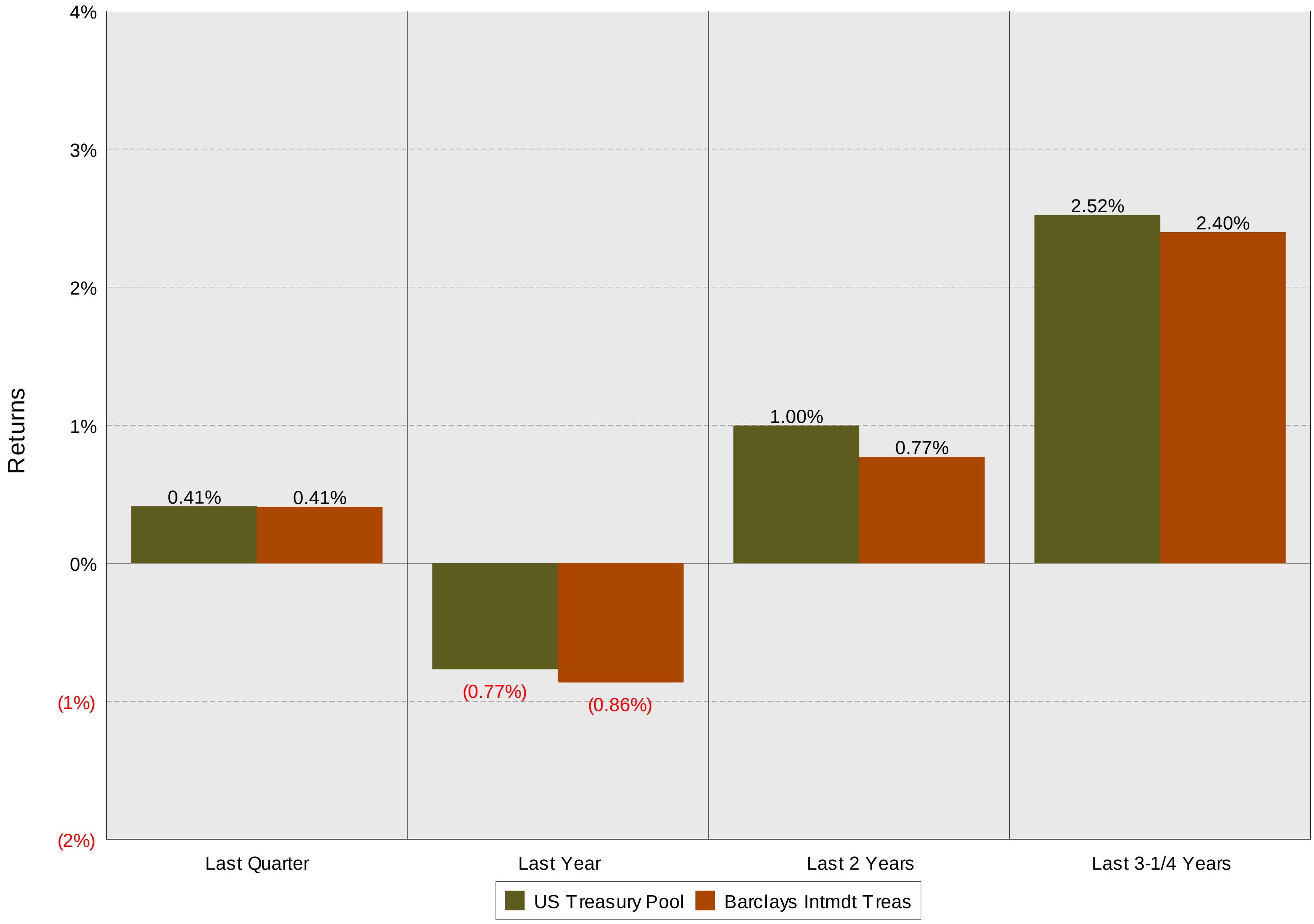


	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 6 Years	Last 10 Years
10th Percentile	1.09	2.43	6.96	6.16	9.11	7.22	6.45
25th Percentile	0.84	0.34	4.97	4.92	7.86	6.30	5.74
Median	0.78	(0.73)	3.40	3.89	6.78	5.60	5.11
75th Percentile	0.57	(1.42)	2.08	3.08	5.54	4.80	4.47
90th Percentile	0.40	(2.00)	1.63	2.12	3.76	4.05	3.82
Total Fixed-Income Pool ●	1.34	(0.02)	2.71	2.86	5.83	5.19	4.77
Total Fixed-Income Target ▲	0.99	(0.54)	1.80	2.45	5.61	5.13	4.61

- Includes In-House and External Portfolios

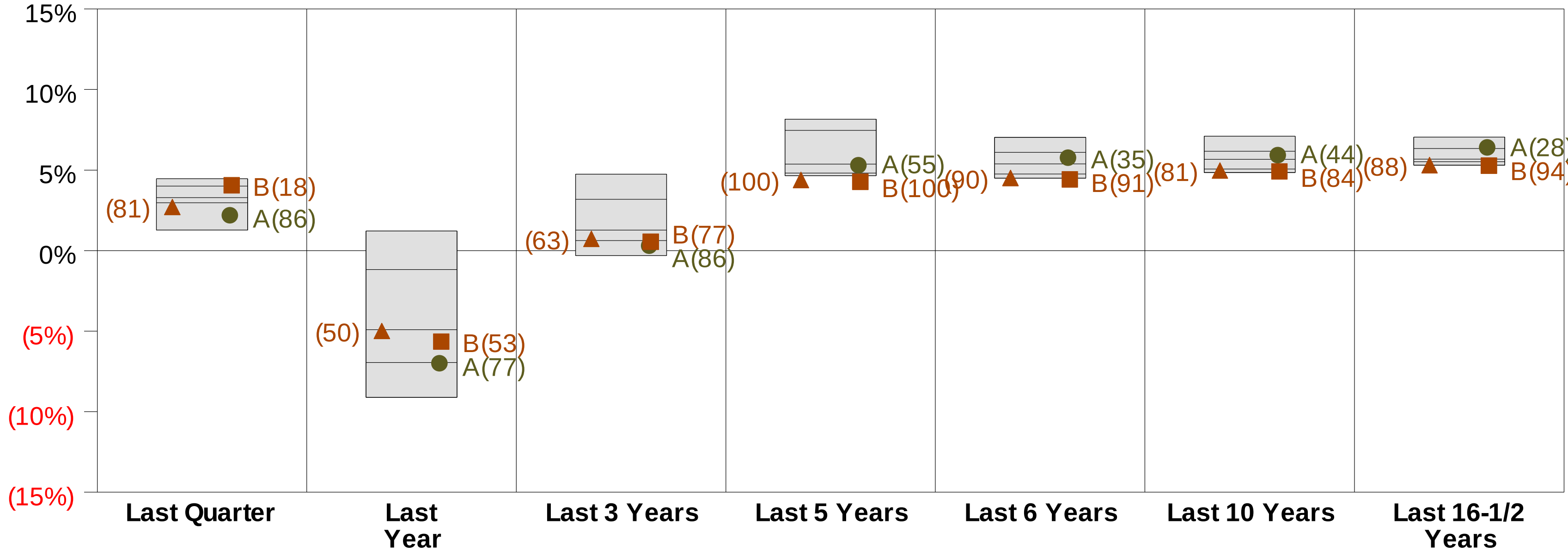
In-House Portfolio

Compared to BC Intermediate Treasury Index



Non-U.S. Fixed Income - Mondrian

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

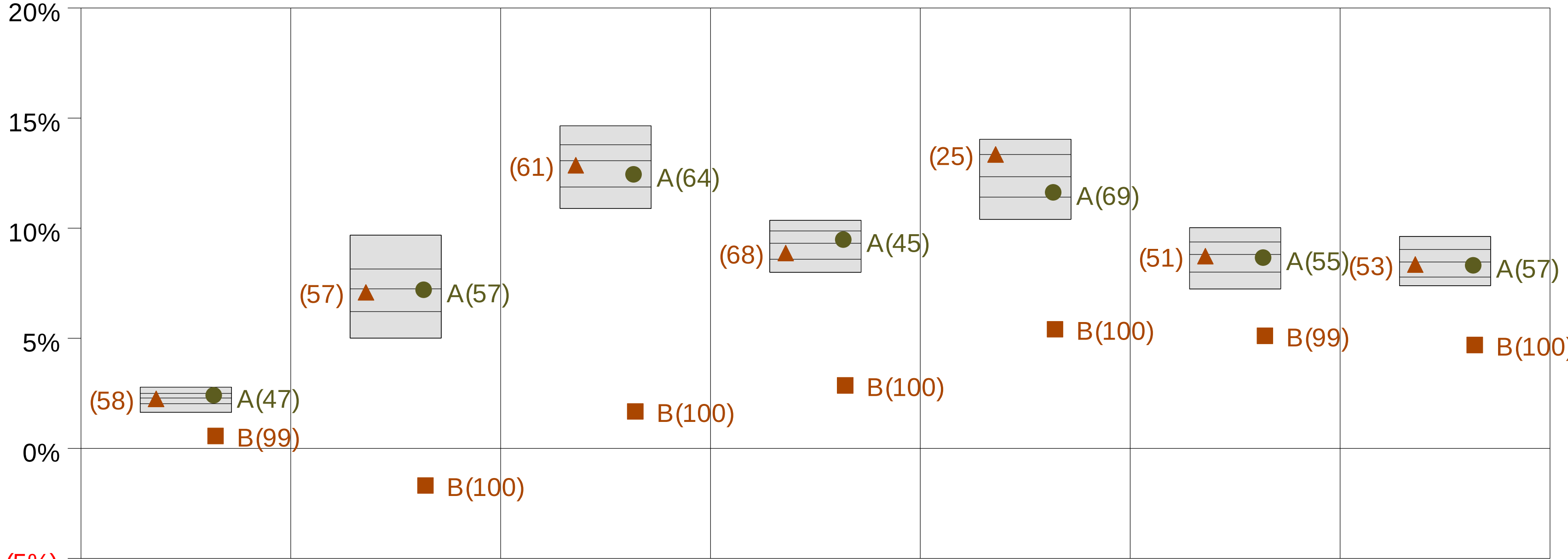


		Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 6 Years	Last 10 Years	Last 16-1/2 Years
10th Percentile		4.46	1.22	4.75	8.16	7.04	7.10	7.04
25th Percentile		4.00	(1.18)	3.19	7.46	6.09	6.16	6.34
Median		3.29	(4.91)	1.27	5.37	5.38	5.66	5.68
75th Percentile		2.97	(6.95)	0.63	4.82	4.76	5.07	5.52
90th Percentile		1.27	(9.11)	(0.31)	4.65	4.49	4.85	5.30
Mondrian Investment Partners	● A	2.09	(7.10)	0.20	5.19	5.66	5.81	6.30
Citi WGBI Non-US Idx	■ B	4.06	(5.65)	0.55	4.27	4.42	4.91	5.28
Mondrian Benchmark	▲	2.71	(4.99)	0.73	4.39	4.51	4.97	5.31

- Despite weak recent returns, stronger than benchmark for longer term periods

High Yield Bonds – MacKay Shields

Performance vs CAI High Yield Fixed-Inc Style (Gross)

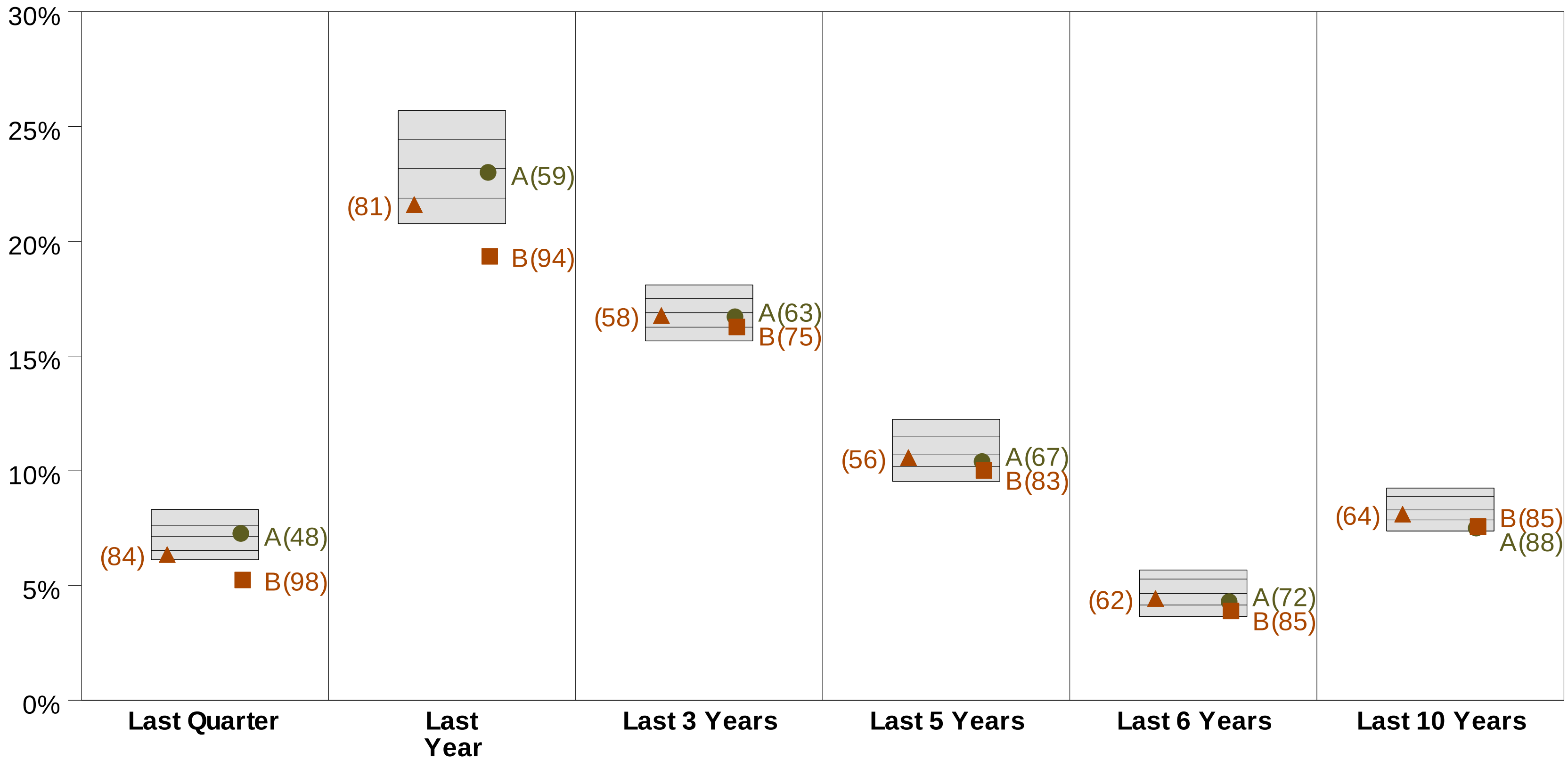


	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 6 Years	Last 8-1/4 Years
10th Percentile	2.78	9.69	14.65	10.36	14.04	10.02	9.62
25th Percentile	2.50	8.15	13.79	9.88	13.35	9.38	9.04
Median	2.29	7.25	13.06	9.32	12.34	8.81	8.46
75th Percentile	2.03	6.22	11.87	8.59	11.42	8.01	7.79
90th Percentile	1.64	5.01	10.89	8.00	10.40	7.24	7.39
MacKay Shields ● A	2.32	7.12	12.37	9.40	11.54	8.57	8.23
BC Aggregate ■ B	0.57	(1.68)	1.68	2.86	5.41	5.12	4.70
High Yield Target ▲	2.25	7.09	12.86	8.87	13.35	8.74	8.35

- Strong absolute returns and better than benchmark results over 1 and 3
- Market like long run returns

Total Domestic Equity

Performance vs Pub Pln- Domestic Equity (Gross)



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 6 Years	Last 10 Years
10th Percentile	8.31	25.69	18.10	12.25	5.68	9.25
25th Percentile	7.63	24.44	17.50	11.48	5.29	8.89
Median	7.14	23.18	16.89	10.70	4.66	8.29
75th Percentile	6.53	21.88	16.26	10.19	4.16	7.86
90th Percentile	6.12	20.76	15.66	9.54	3.64	7.38
Domestic Equity Pool ● A	7.20	22.92	16.64	10.32	4.22	7.42
Standard & Poor's 500 ■ B	5.24	19.34	16.27	10.02	3.89	7.57
Russell 3000 Index ▲	6.35	21.60	16.76	10.58	4.43	8.11

Domestic Equity Component Returns

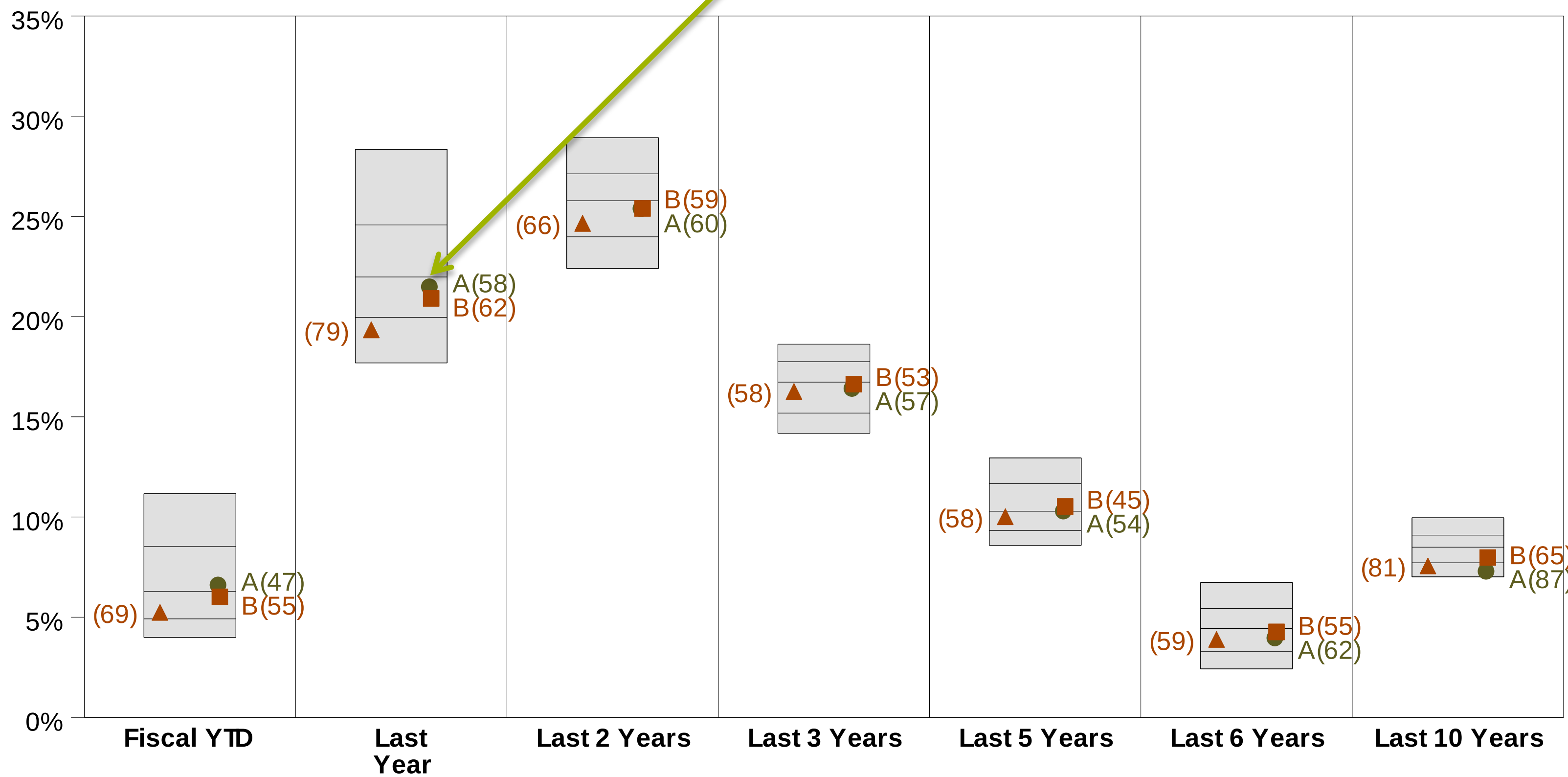
	Last Quarter	Last 3/4 Year	Last Year	Last 3 Years	Last 5 Years
Total Dom Equity Pool	7.20%	22.29%	22.92%	16.64%	10.32%
Russell 3000 Index	6.35%	21.30%	21.60%	16.76%	10.58%
Large Cap Managers	6.54%	21.47%	21.42%	16.33%	10.20%
Large Cap Active	7.79%	23.18%	23.02%	16.20%	10.57%
Large Cap Passive	5.85%	20.52%	20.54%	16.44%	9.92%
Russell 1000 Index	6.02%	20.76%	20.91%	16.64%	10.53%
Small Cap Managers	11.31%	30.62%	34.34%	19.55%	11.26%
Small Cap Active	11.48%	30.98%	34.75%	20.88%	12.31%
Small Cap Passive	8.70%	25.20%	27.55%	16.42%	9.13%
Russell 2000 Index	10.21%	27.69%	30.06%	18.29%	11.15%
Alternative Equity	4.72%	9.80%	10.47%	9.22%	-

- Newly adopted policy (effective 7-1-13) will alter cosmetics of “true” traditional active & passive returns
  - “Alternative Equity” category includes defensive equity oriented portfolios
  - Now includes the relational portfolio & in-house equity yield portfolio

Large Cap Domestic Equity Pool

Early, but nice to see recent better than benchmark despite large passive allocation

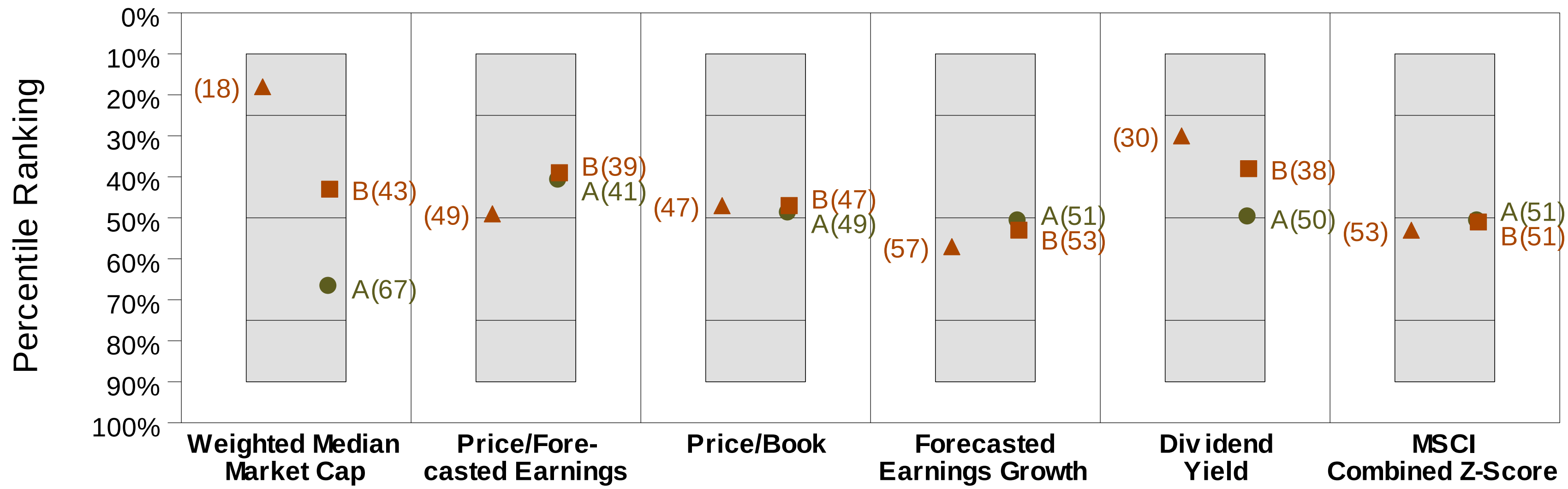
Performance vs CAI Large Capitalization Style (Gross)



		Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 6 Years	Last 10 Years
10th Percentile		11.17	28.35	28.93	18.62	12.95	6.73	9.97
25th Percentile		8.53	24.58	27.12	17.76	11.66	5.44	9.09
Median		6.29	21.98	25.78	16.73	10.29	4.44	8.50
75th Percentile		4.92	19.97	23.99	15.19	9.33	3.28	7.72
90th Percentile		4.00	17.70	22.40	14.18	8.59	2.43	7.02
Large Cap Pool	● A	6.52	21.40	25.30	16.32	10.20	3.87	7.20
Russell 1000	■ B	6.02	20.91	25.40	16.64	10.53	4.27	7.98
S&P 500 Index	▲	5.24	19.34	24.65	16.27	10.02	3.89	7.57

Large Cap Total Equity Characteristics

Portfolio Characteristics Percentile Rankings
Rankings Against CAI Large Capitalization Style
as of September 30, 2013

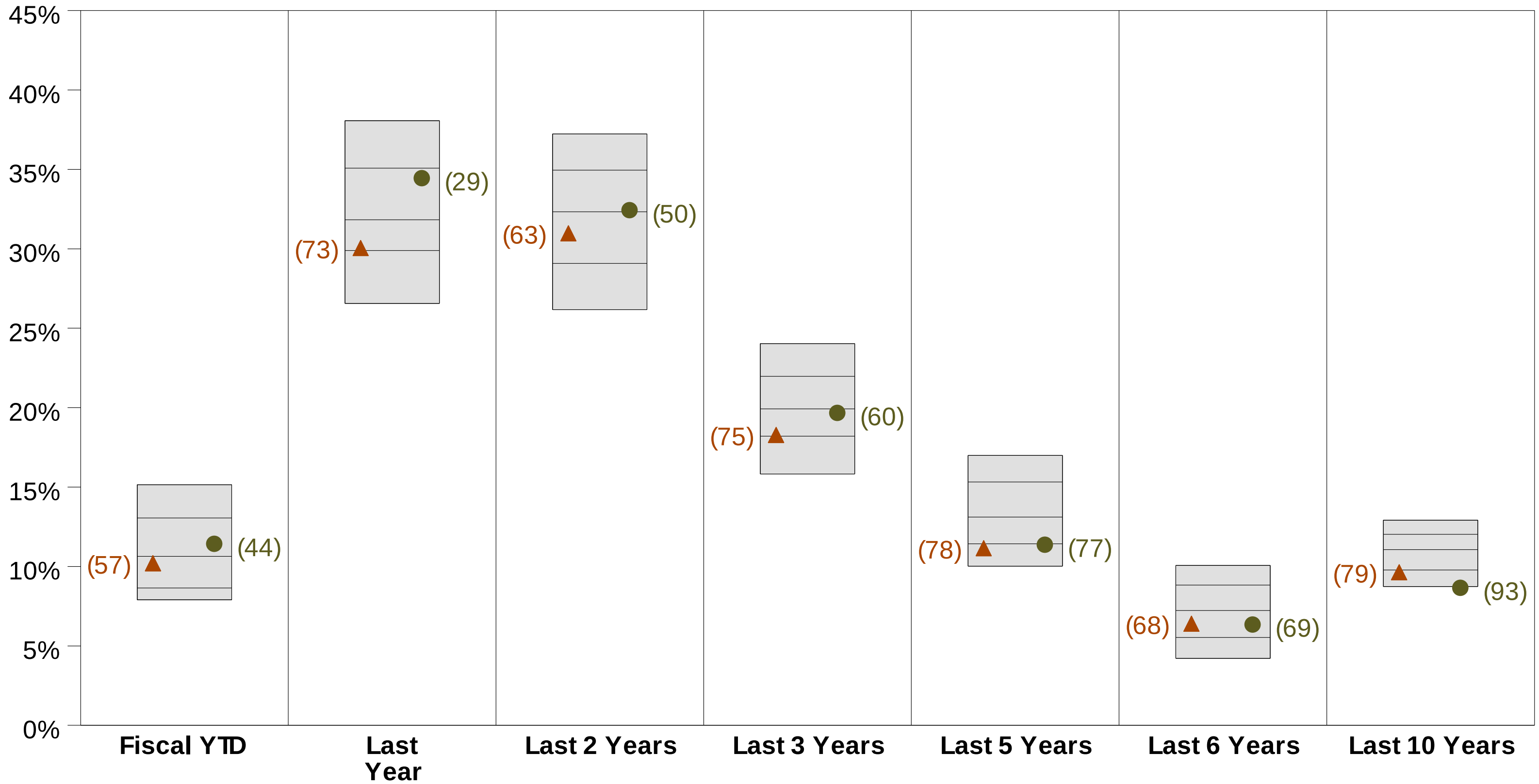


	Weighted Median Market Cap	Price/Fore-casted Earnings	Price/Book	Forecasted Earnings Growth	Dividend Yield	MSCI Combined Z-Score
10th Percentile	68.91	19.79	4.57	17.85	2.53	1.45
25th Percentile	56.61	16.80	3.71	15.57	2.17	0.95
Median	49.05	13.96	2.35	12.01	1.84	0.03
75th Percentile	35.64	12.42	1.84	9.80	1.24	(0.52)
90th Percentile	25.41	11.88	1.68	8.68	0.77	(0.74)
Large Cap Pool ● A	38.85	14.53	2.38	11.95	1.83	0.01
Russell 1000 ■ B	50.75	14.66	2.43	11.60	2.03	0.00
S&P 500 Index ▲	61.66	14.20	2.41	11.16	2.13	(0.05)

- Very similar to Russell 1000
- No apparent style bias

Small Cap Pool

Performance vs CAI Small Capitalization Style (Gross)

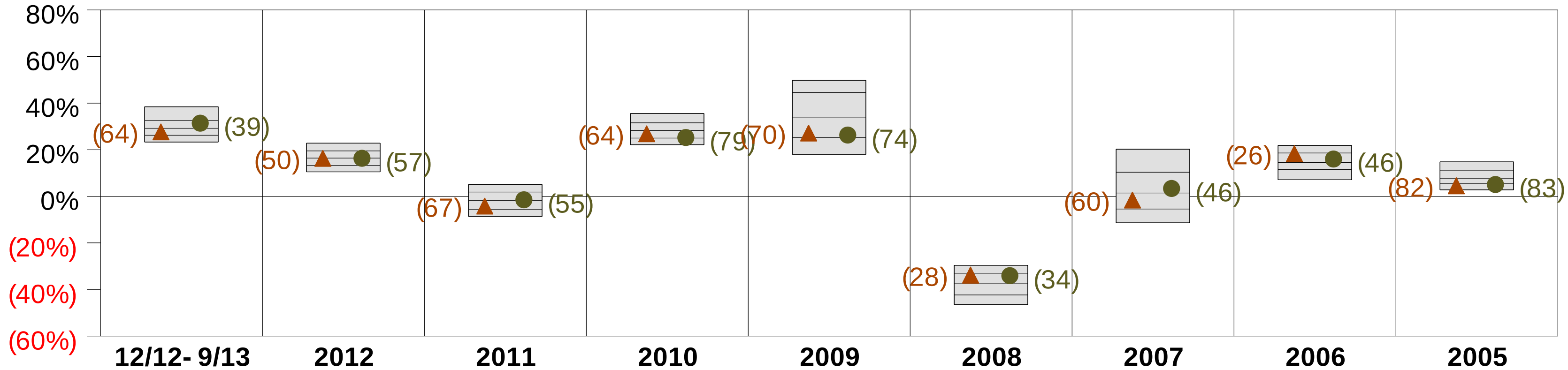


	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 6 Years	Last 10 Years
10th Percentile	15.15	38.07	37.24	24.04	16.99	10.07	12.92
25th Percentile	13.06	35.08	34.95	21.97	15.32	8.83	12.03
Median	10.64	31.82	32.33	19.92	13.11	7.23	11.07
75th Percentile	8.65	29.89	29.08	18.20	11.43	5.54	9.78
90th Percentile	7.91	26.56	26.18	15.83	10.02	4.22	8.73
Small Cap Pool ●	11.31	34.34	32.31	19.55	11.26	6.23	8.55
Russell 2000 Index ▲	10.21	30.06	30.98	18.29	11.15	6.40	9.64

- Quarter, 1,2 and 3-year results better than benchmark

Small Cap Pool – Calendar Periods

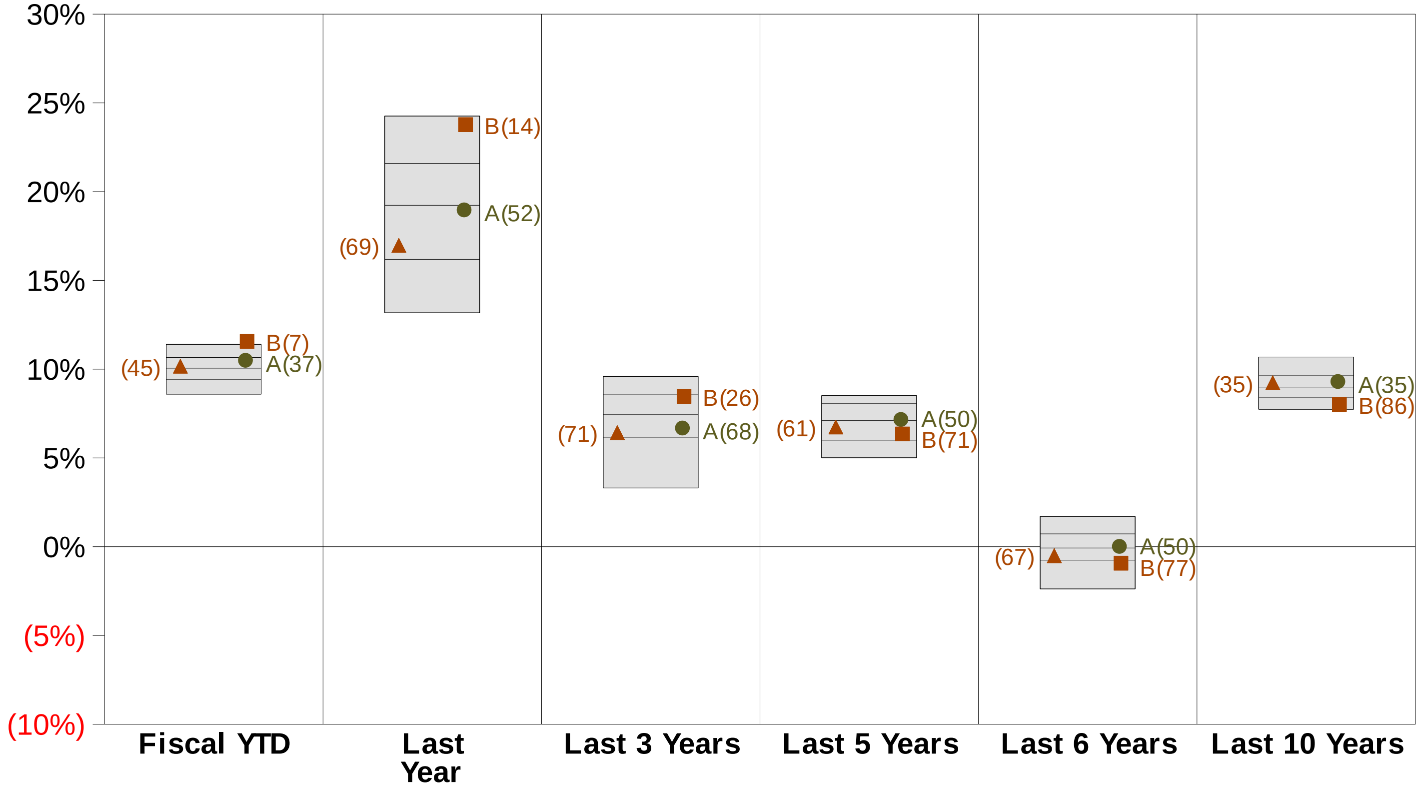
Performance vs CAI Small Capitalization Style (Gross)



	12/12- 9/13	2012	2011	2010	2009	2008	2007	2006	2005
10th Percentile	38.42	22.78	5.11	35.54	49.83	(29.58)	20.21	21.82	14.79
25th Percentile	32.56	19.50	1.84	31.53	44.57	(33.03)	10.32	18.62	10.97
Median	29.19	16.38	(1.76)	28.25	33.98	(37.57)	1.39	14.59	7.55
75th Percentile	26.23	13.24	(5.72)	24.99	25.24	(42.30)	(5.47)	11.44	5.55
90th Percentile	23.31	10.51	(8.64)	22.16	18.02	(46.48)	(11.41)	7.07	2.77
Small Cap Pool ●	30.62	15.41	(2.33)	24.35	25.40	(34.97)	2.53	15.24	4.28
Russell 2000 Index ▲	27.69	16.35	(4.18)	26.85	27.17	(33.79)	(1.57)	18.37	4.55

International Equity

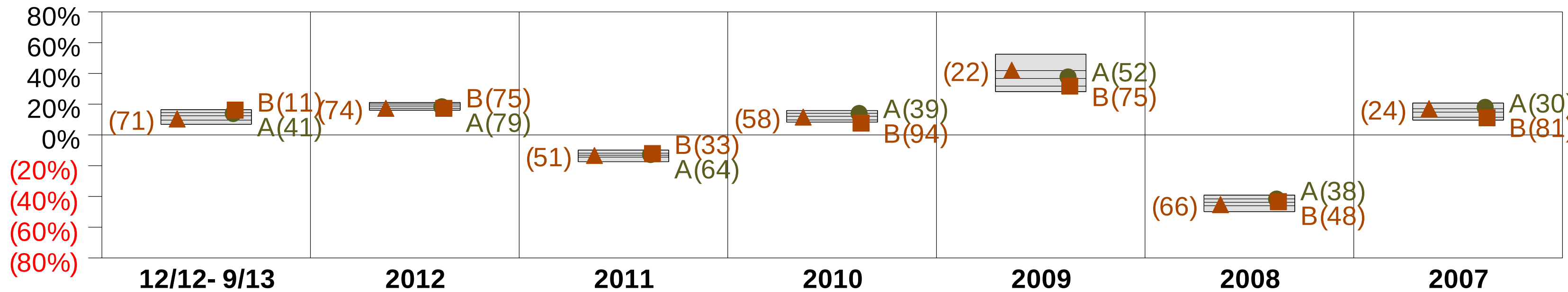
Performance vs Pub Pln- International Equity (Gross)



	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 6 Years	Last 10 Years
10th Percentile	11.40	24.26	9.59	8.51	1.70	10.68
25th Percentile	10.66	21.59	8.56	8.05	0.73	9.64
Median	10.05	19.23	7.44	7.10	(0.07)	8.94
75th Percentile	9.41	16.18	6.17	6.00	(0.75)	8.39
90th Percentile	8.59	13.18	3.31	5.01	(2.37)	7.74
Employees' Total Int'l Equity ● A	10.41	18.88	6.60	7.07	(0.08)	9.22
MSCI EAFE Index ■ B	11.56	23.77	8.47	6.35	(0.93)	8.01
MSCI ACWI ex US Index ▲	10.17	16.98	6.43	6.74	(0.50)	9.24

International Equity – Calendar Periods

Performance vs Pub Pln- International Equity (Gross)



		12/12- 9/13	2012	2011	2010	2009	2008	2007
10th Percentile		16.47	21.19	(9.81)	15.98	52.55	(39.13)	20.77
25th Percentile		14.45	20.11	(11.81)	14.10	41.83	(41.56)	17.05
Median		12.47	18.78	(13.16)	12.17	36.65	(43.77)	14.82
75th Percentile		9.66	17.29	(14.45)	9.76	31.74	(46.03)	11.57
90th Percentile		6.94	16.10	(17.36)	8.25	28.17	(49.82)	9.68
Total International Equity	● A	12.75	17.09	(13.95)	12.70	36.35	(43.03)	16.61
MSCI EAFE Index	■ B	16.14	17.32	(12.14)	7.75	31.78	(43.38)	11.17
MSCI ACWI ex US Index	▲	10.47	17.39	(13.33)	11.60	42.14	(45.24)	17.12

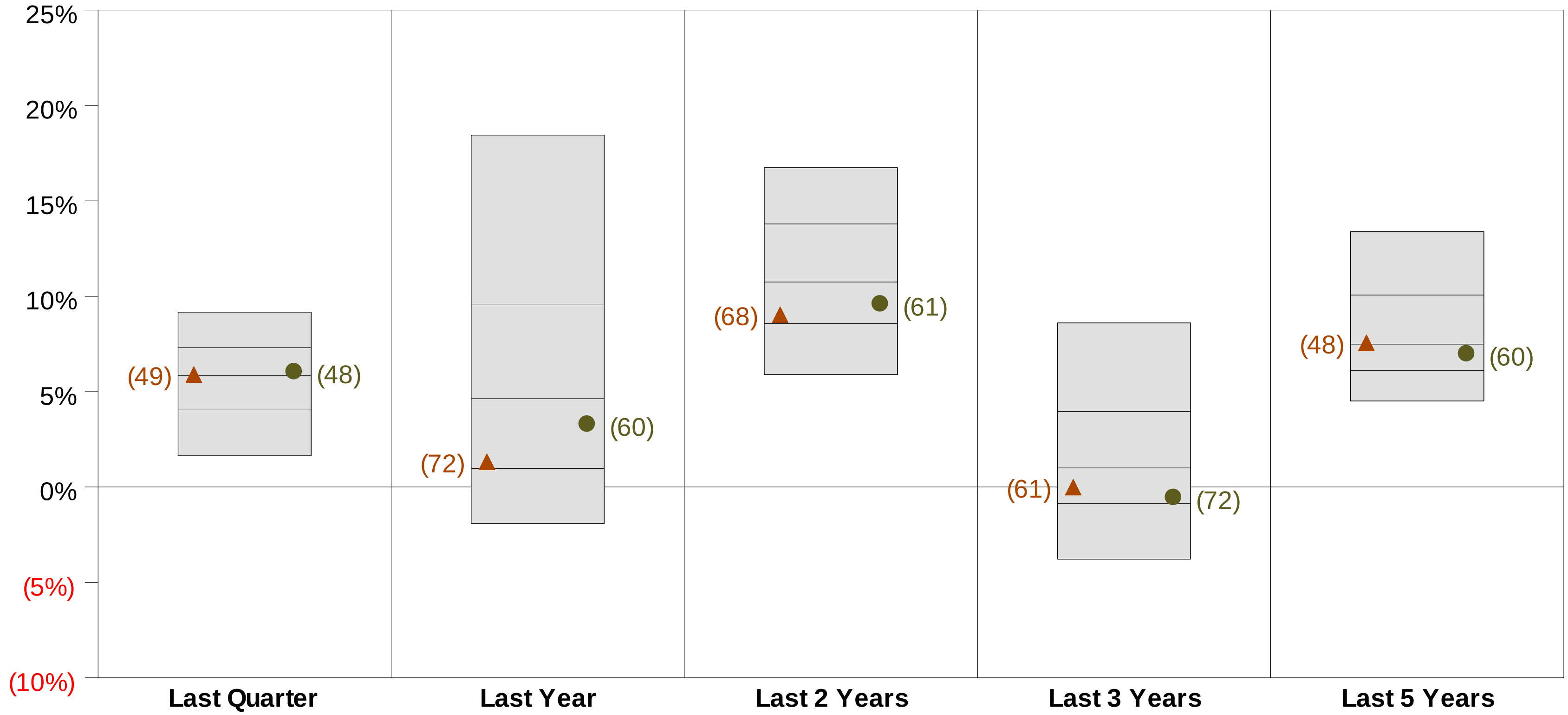
International Equity ex Emerging Markets

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

	Last Quarter	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 6 Years	Last 10 Years
10th Percentile	12.38	27.47	22.72	12.02	10.54	3.32	11.44
25th Percentile	11.50	25.42	21.36	10.35	9.16	2.18	10.30
Median	10.70	22.69	19.52	9.34	7.61	0.41	9.14
75th Percentile	9.73	19.05	17.46	8.09	6.28	(0.93)	8.37
90th Percentile	7.64	15.91	15.76	5.91	5.27	(2.08)	7.74
Int'l Equity Pool (ex Emerging. Mkt) ●	10.94	21.36	17.82	8.03	6.56	(0.46)	8.46
MSCI EAFE Index ▲	11.56	23.77	18.66	8.47	6.35	(0.93)	8.01

Emerging Markets Pool

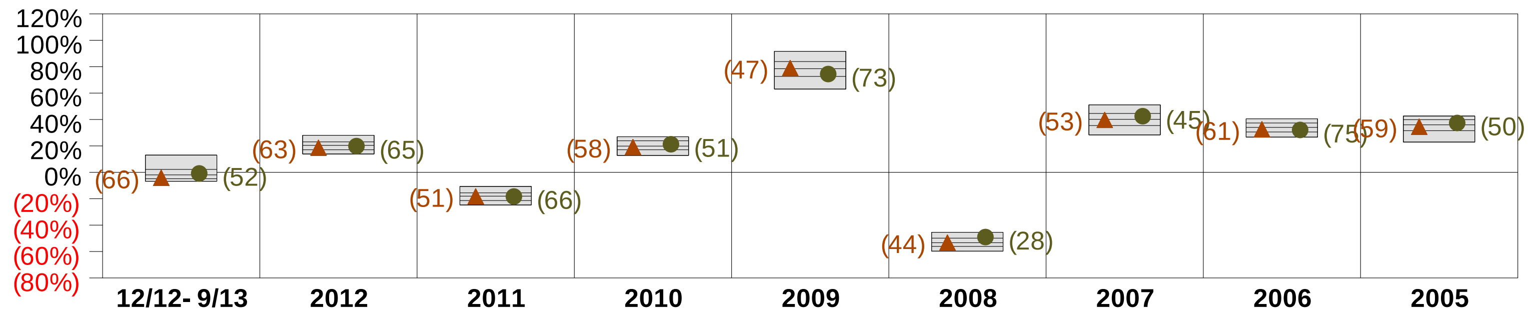
Performance vs CAI Emerging Markets Equity DB (Gross)



	Last Quarter	Last Year	Last 2 Years	Last 3 Years	Last 5 Years
10th Percentile	9.17	18.45	16.74	8.60	13.38
25th Percentile	7.30	9.54	13.79	3.96	10.06
Median	5.84	4.64	10.75	1.00	7.49
75th Percentile	4.09	0.97	8.57	(0.86)	6.11
90th Percentile	1.64	(1.92)	5.89	(3.78)	4.51
Emerging Markets Pool ●	5.99	3.23	9.54	(0.61)	6.92
MSCI Emerging Mkts Idx ▲	5.90	1.33	9.03	(0.00)	7.56

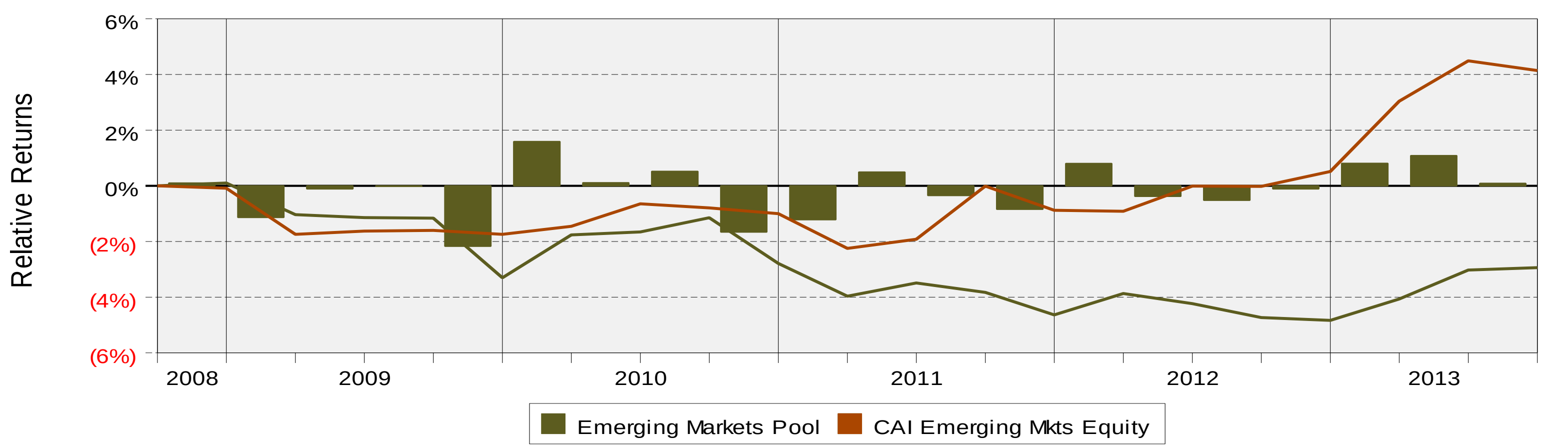
Emerging Markets Pool – Calendar Periods

Performance vs CAI Emerging Markets Equity DB (Gross)



	12/12- 9/13	2012	2011	2010	2009	2008	2007	2006	2005
10th Percentile	13.15	28.02	(10.72)	26.97	91.66	(45.44)	51.08	40.64	42.73
25th Percentile	2.20	23.07	(15.55)	23.87	83.93	(49.86)	44.61	37.35	39.86
Median	(1.95)	20.50	(18.01)	19.85	78.52	(53.33)	40.18	34.00	36.06
75th Percentile	(4.86)	17.06	(21.38)	17.13	72.63	(56.14)	35.42	30.61	31.56
90th Percentile	(6.71)	13.92	(24.70)	12.74	63.04	(59.71)	28.34	26.70	22.90
Emerging Markets Pool ●	(2.14)	18.38	(19.73)	19.83	72.93	(50.49)	40.99	30.55	36.04
MSCI Emerging Mkts Idx ▲	(4.05)	18.63	(18.17)	19.20	79.02	(53.18)	39.78	32.59	34.54

Cumulative and Quarterly Relative Return vs MSCI Emerging Mkts Idx



Global Equity - Lazard

Performance vs CAI Global Equity Broad Style (Gross)

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 6 Years	Last 10 Years	Last 20-1/4 Years
10th Percentile	11.09	30.74	14.69	11.81	4.72	11.38	10.76
25th Percentile	9.86	25.49	13.70	10.30	3.32	10.33	9.84
Median	8.66	22.30	12.50	8.95	1.88	8.91	9.10
75th Percentile	7.66	19.84	10.55	7.95	0.88	7.86	8.32
90th Percentile	6.46	15.89	9.29	6.74	(0.64)	6.95	7.70
Lazard Global ●	8.64	19.39	11.95	9.03	2.98	8.44	8.11
MSCI ACWI Idx ▲	8.02	18.37	10.81	8.30	1.53	8.41	7.38

- Strong relative performance for all periods

Real Assets

	Last Quarter	Last Year	Last 3 Years	Last 5 Years
Real Assets(Prelim)	**0.95%**	**9.75%**	**11.39%**	**2.44%**
Real Assets Target (1)	2.08%	8.29%	10.48%	4.70%
Real Estate Pool	1.87%	8.81%	12.04%	(1.08%)
Real Estate Target (2)	2.07%	10.55%	12.79%	4.13%
Private Real Estate	2.84%	9.61%	12.08%	(1.38%)
NCREIF Total Index	2.59%	10.99%	12.67%	3.35%
REIT Internal Portfolio	(2.44%)	5.86%	12.63%	4.94%
NAREIT Equity Index	(2.61%)	6.23%	12.78%	6.00%
Total Farmland	1.50%	16.55%	13.78%	10.45%
UBS Agrivest	1.96%	20.49%	15.74%	11.07%
Hancock Agricultural	0.69%	10.21%	10.60%	9.61%
ARMB Farmland Target (3)	1.94%	17.79%	15.55%	12.41%
Total Timber	0.53%	6.98%	5.74%	-
Timberland Investment Resources	0.97%	5.64%	4.47%	-
Hancock Timber	(0.36%)	9.90%	7.76%	-
NCREIF Timberland Index	0.93%	9.55%	3.95%	2.04%
TIPS Internal Portfolio	0.59%	(6.09%)	4.37%	5.53%
BC US TIPS Index	0.70%	(6.10%)	4.02%	5.31%
Total Energy Funds *	(1.52%)	2.93%	5.19%	4.14%
CPI + 5%	1.45%	6.03%	7.47%	6.42%
MLP Composite	0.10%	-	-	-
Alerian MLP Index	(0.73%)	17.05%	16.48%	22.55%

RE trailed target

Timber leading target

TIPS better than target

*Please note that real estate returns are provided by ARMB's real estate consultant

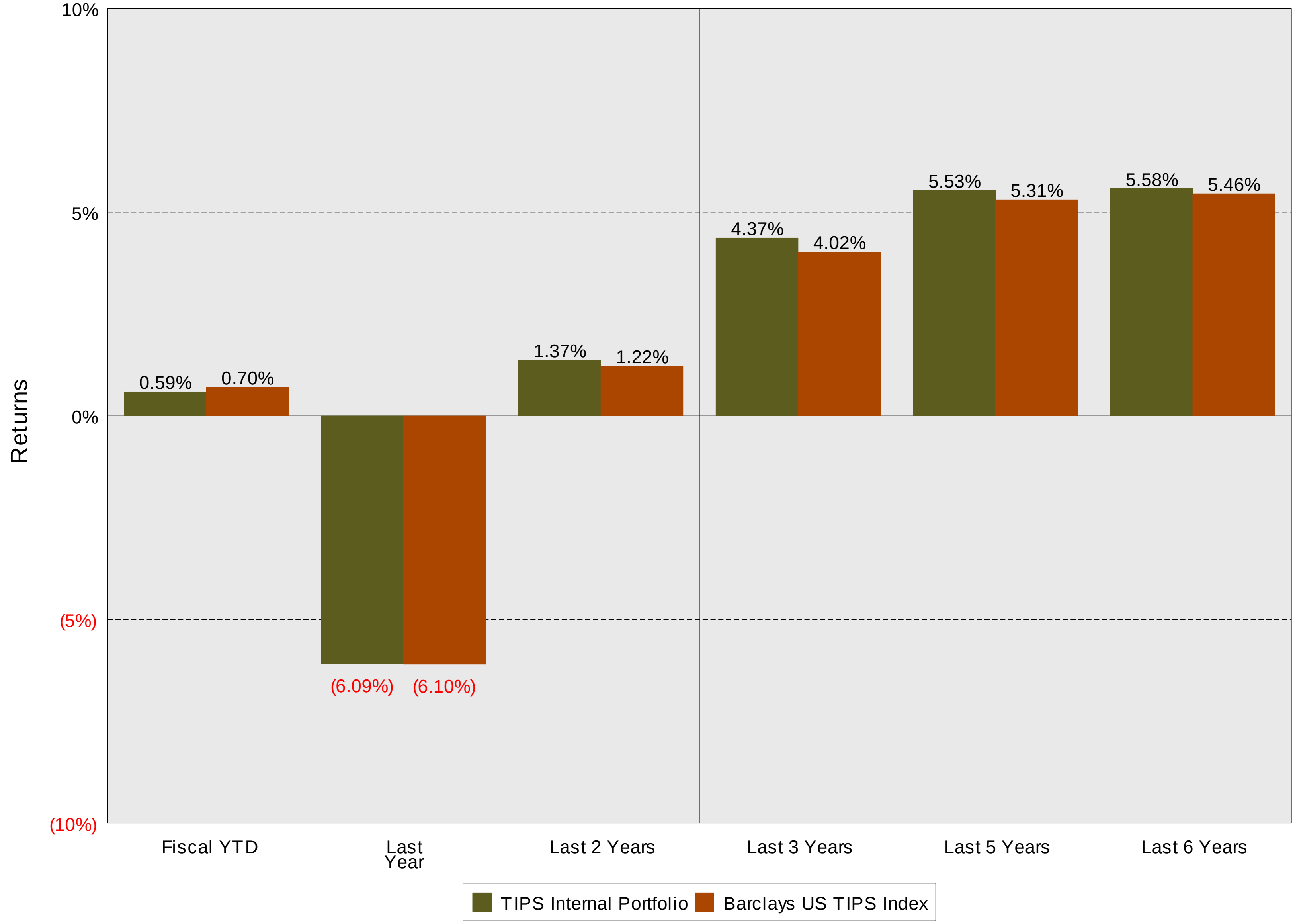
REIT Portfolio

Performance vs CAI Real Estate-REIT DB (Gross)

	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 6 Years	Last 8-3/4 Years
10th Percentile	(1.48)	7.65	21.09	14.16	8.98	5.56	8.95
25th Percentile	(2.08)	6.40	19.35	13.46	8.09	4.45	7.89
Median	(2.55)	5.64	18.53	12.91	6.88	3.74	7.37
75th Percentile	(2.90)	4.67	17.92	12.13	6.07	2.96	6.66
90th Percentile	(3.20)	3.55	17.27	11.48	5.26	1.31	5.91
REIT Holdings ●	(2.44)	5.86	18.79	12.63	4.94	1.71	5.10
NAREIT All Equity Index ▲	(2.61)	6.23	19.22	12.78	6.00	2.93	6.53

- Index like performance over the last 1, 2 and 3-year periods

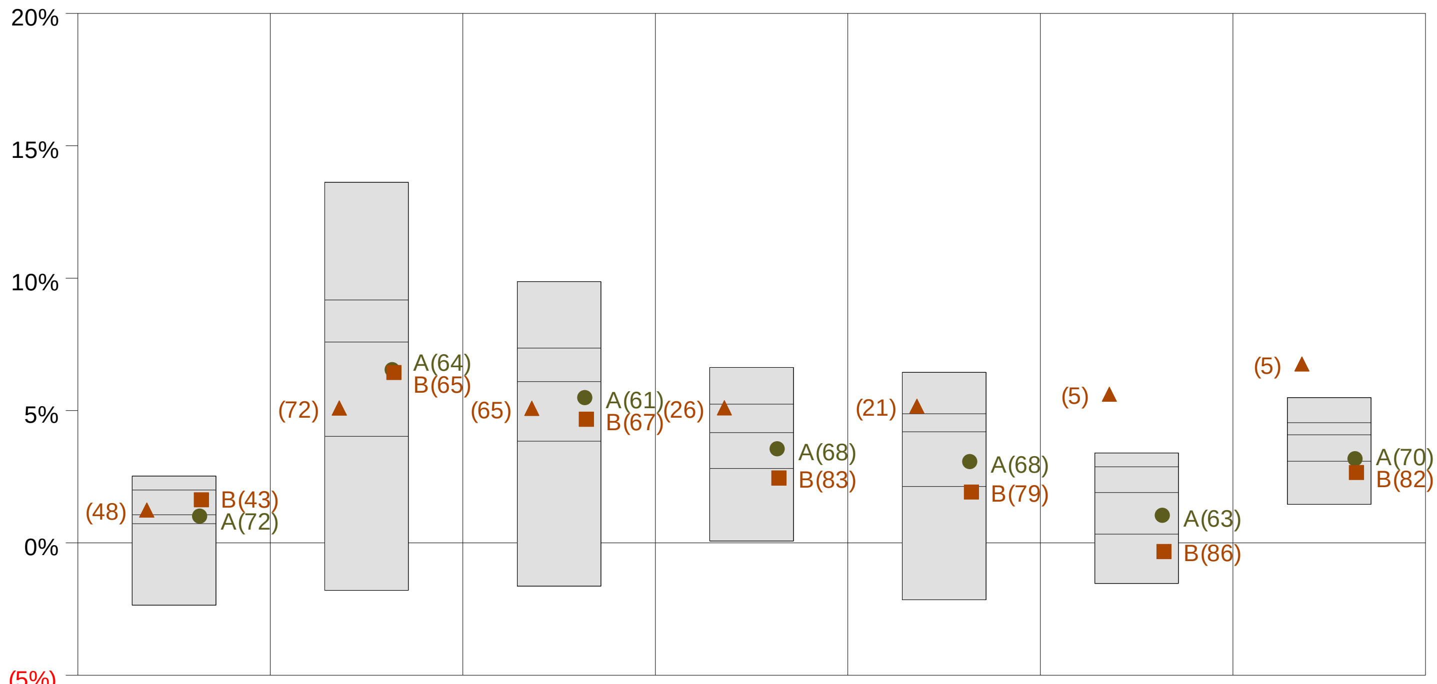
Internally Managed TIPS Portfolio



- Index+ performance over longer-term periods at minimal cost

Absolute Return Composite

Performance vs Absolute Return Hedge FoFs Style (Net)

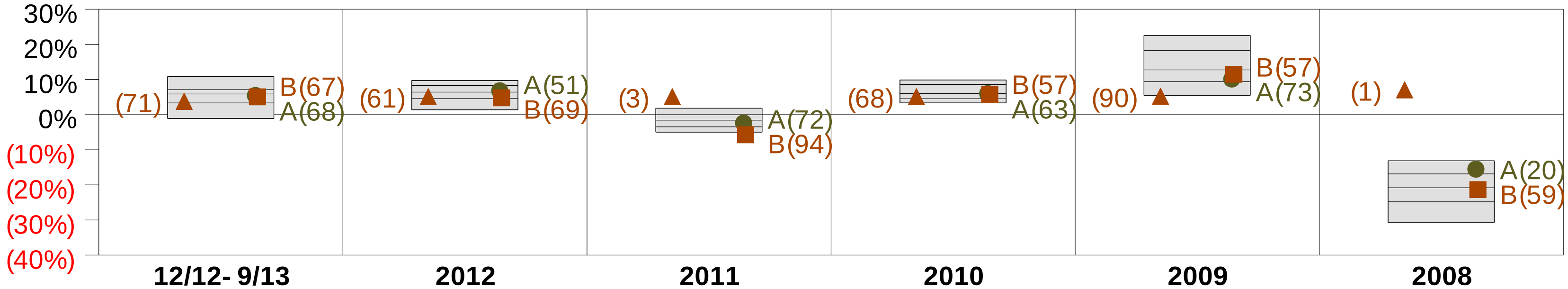


	Last Quarter	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 6 Years	Last 8-3/4 Years
10th Percentile	2.53	13.62	9.87	6.63	6.44	3.40	5.49
25th Percentile	2.00	9.18	7.36	5.24	4.88	2.88	4.54
Median	1.06	7.59	6.09	4.17	4.20	1.90	4.08
75th Percentile	0.73	4.03	3.84	2.81	2.13	0.33	3.08
90th Percentile	(2.35)	(1.79)	(1.63)	0.07	(2.15)	(1.53)	1.46
Absolute Return Composite ● A	0.95	6.48	5.43	3.49	3.01	0.99	3.13
HFRI Fund of Funds Compos ■ B	1.63	6.44	4.67	2.45	1.92	(0.33)	2.66
T-Bills + 5% ▲	1.24	5.10	5.08	5.10	5.17	5.62	6.76

- Reflects September 30 values, while SS data used to calculate total fund is lagged 1-month. Plan returns & accounting use SS numbers.

Absolute Return Composite – Calendar Periods

Performance vs Absolute Return Hedge FoFs Style (Net)



		12/12- 9/13	2012	2011	2010	2009	2008
10th Percentile		10.84	9.70	1.82	9.85	22.57	(13.13)
25th Percentile		7.13	8.27	(0.04)	8.57	18.25	(16.88)
Median		5.87	6.42	(1.57)	5.98	12.75	(20.84)
75th Percentile		3.32	4.58	(3.49)	4.53	9.36	(24.82)
90th Percentile		(1.08)	1.40	(4.99)	3.33	5.48	(30.63)
Absolute Return Composite	● A	4.90	6.23	(2.93)	5.43	9.55	(16.10)
HFRI Fund of Funds Compos	■ B	5.05	4.79	(5.72)	5.70	11.47	(21.37)
T-Bills + 5%	▲	3.78	5.11	5.10	5.13	5.21	7.06

Individual Account Option Performance

Balanced & Target Date Funds

Investment Manager	Market Value ($mm)	Last Quarter Return	Last Year Return	3 Year Return	5 Year Return	7 Year Return	5 Year Risk	5 Year Risk Quadrant	5 Year Excess Rtn Ratio	3 Year Tracking Error	5 Year Sharpe Ratio
Balanced & Target Date Funds											
Alaska Balanced Fund CAI Mt Fd: Dom Bal Style	$1,159	**3.0** 87	**6.7** 93	**7.5** 95	**7.5** 65	**5.7** 24	**7.6** 99		**0.3** 6	**0.5** 100	**1.0** 1
Passive Target		2.9 88	6.3 94	7.2 96	7.3 73	5.6 26	7.1 99				1.0 1
Long Term Balanced Fund CAI Mt Fd: Dom Bal Style	$519	**4.7** 43	**12.7** 44	**10.6** 50	**8.7** 38	**5.8** 24	**13.1** 85		**0.3** 25	**0.4** 100	**0.6** 23
Passive Target		4.7 44	12.2 52	10.4 56	8.5 42	5.7 24	12.7 93				0.7 22
Target 2010 Trust CAI Tgt Date 2010	$11	**3.8** 29	**10.1** 9	**9.1** 8						**0.2** 99	
Custom Index		3.9 27	10.0 10	9.0 8							
Target 2015 Trust CAI Tgt Date 2015	$111	**4.6** 18	**12.4** 8	**10.3** 6	**9.1** 2	**6.8** 1	**11.0** 88		**0.4** 1	**0.2** 99	**0.8** 5
Custom Index		4.6 18	12.4 8	10.3 6	8.9 3	6.5 1	11.1 88				0.8 5
Target 2020 Trust CAI Tgt Date 2020	$73	**5.1** 20	**14.4** 7	**11.4** 5	**8.5** 18	**5.5** 10	**15.3** 48		**0.1** 31	**0.3** 99	**0.5** 37
Custom Index		5.2 16	14.3 7	11.4 5	8.5 19	5.4 15	15.3 47				0.5 38
Target 2025 Trust CAI Tgt Date 2025	$52	**5.6** 31	**16.3** 11	**12.4** 6	**8.5** 33	**4.9** 41	**18.1** 33		**0.0** 50	**0.3** 99	**0.5** 62
Custom Index		5.7 30	16.2 12	12.4 6	8.5 34	4.9 42	18.2 32				0.5 67
Target 2030 Trust CAI Tgt Date 2030	$39	**6.1** 30	**17.8** 9	**13.2** 4						**0.3** 99	
Custom Index		6.2 29	17.7 9	13.2 4							
Target 2035 Trust CAI Tgt Date 2035	$40	**6.4** 53	**19.1** 9	**13.8** 2						**0.3** 100	
Custom Index		6.5 46	19.0 11	13.8 2							
Target 2040 Trust CAI Tgt Date 2040	$47	**6.6** 53	**19.7** 10	**14.0** 3						**0.3** 99	
Custom Index		6.7 48	19.6 10	14.0 3							
Target 2045 Trust CAI Tgt Date 2040	$57	**6.6** 51	**19.8** 9	**14.0** 3						**0.3** 99	
Custom Index		6.7 48	19.6 10	14.0 3							
Target 2050 Trust CAI Tgt Date 2050	$64	**6.6** 65	**19.8** 14	**14.0** 1						**0.3** 99	
Custom Index		6.7 57	19.6 16	14.0 1							
Target 2055 Trust CAI Tgt Date 2055	$26	**6.6** 73	**19.7** 20	**14.0** 5						**0.3** 100	
Custom Index		6.7 72	19.6 21	14.0 5							

Returns:
- above median
- third quartile
- fourth quartile

Risk:
- below median
- second quartile
- first quartile

Risk Quadrant:

Excess Return Ratio:
- above median
- third quartile
- fourth quartile

Tracking Error:
- below median
- second quartile
- first quartile

Sharpe Ratio:
- above median
- third quartile
- fourth quartile

Other Options

Active Equity, Stable Value, and Interest Income

Investment Manager	Market Value ($mm)	Last Quarter Return	Last Year Return	3 Year Return	5 Year Return	7 Year Return	5 Year Risk	5 Year Risk Quadrant	5 Year Excess Rtn Ratio	3 Year Tracking Error	5 Year Sharpe Ratio
Active and Other Funds											
Brandes Int'l Fund	$70	**12.8** 13	**26.1** 12	**7.8** 53						**3.2** 71	
CAI Non-U.S. Equity MF											
MSCI EAFE Index		11.6 27	23.8 25	8.5 42	6.4 56	2.4 62	24.4 64				0.3 53
RCM Soc Resp	$34	**5.6** 68	**21.6** 31	**13.7** 71	**12.6** 1		**19.2** 91		**0.3** 1	**4.1** 47	**0.7** 1
CAI Core Equity Mut Fds											
KLD 400 Social Idx		4.8 87	23.6 14	16.1 29	10.5 20	6.0 25	20.7 71				0.5 19
T. Rowe Price Small Cap	$124	**10.0** 52	**30.4** 48	**21.4** 15	**16.4** 11	**10.2** 9	**25.6** 60		**1.9** 1	**1.3** 99	**0.6** 9
CAI Sm Cap Broad Mut Fds											
Russell 2000 Index		10.2 50	30.1 50	18.3 45	11.2 64	7.2 55	26.3 49				0.4 62
T. Rowe Price Stable Value Fd	$354	**0.6** 22	**2.6** 15	**3.1** 14	**3.4** 18	**3.8** 20	**0.3** 77		**3.6** 17	**0.1** 70	**11.8** 8
CAI Stable Value DB											
5 Yr US Treas Rolling		0.4 56	1.7 57	2.3 47	2.9 44	3.1 60	0.4 29				6.8 51
Def Comp Interest Income Fund	$184	**1.6** 1	**4.2** 1	**3.4** 2						**2.2** 1	
CAI Stable Value DB											
5 Yr US Treas Rolling		0.4 56	1.7 57	2.3 47	2.9 44	3.1 60	0.4 29				6.8 51

Returns:
- above median
- third quartile
- fourth quartile

Risk:
- below median
- second quartile
- first quartile

Risk Quadrant:

Excess Return Ratio:
- above median
- third quartile
- fourth quartile

Tracking Error:
- below median
- second quartile
- first quartile

Sharpe Ratio:
- above median
- third quartile
- fourth quartile

Passive Options

Investment Manager	Market Value ($mm)	Last Quarter Return	Last Year Return	3 Year Return	5 Year Return	7 Year Return	5 Year Risk	5 Year Risk Quadrant	5 Year Excess Rtn Ratio	3 Year Tracking Error	5 Year Sharpe Ratio
Index Funds											
State Street S&P Index Fund (i) CAI Large Cap Core Style	$279	**5.2** 85	**19.3** 75	**16.3** 63	**10.1** 56	**5.7** 81	**20.9** 62		**0.6** 14	**0.0** 99	**0.5** 52
S&P 500 Index		5.2 85	19.3 75	16.3 63	10.0 59	5.6 81	21.0 58				0.5 55
BlackRock S&P 500 Index Fund (i) CAI Large Cap Core Style	$152	**5.3** 84	**19.4** 75	**16.3** 63	**10.1** 54	**5.7** 81	**20.9** 61		**1.2** 1	**0.0** 99	**0.5** 51
S&P 500 Index		5.2 85	19.3 75	16.3 63	10.0 59	5.6 81	21.0 58				0.5 55
Russell 3000 Index (i) CAI Large Cap Style	$35	**6.3** 49	**21.6** 56	**16.8** 49	**10.7** 44		**21.8** 45		**0.7** 3	**0.1** 100	**0.5** 45
Russell 3000 Index		6.3 49	21.6 56	16.8 49	10.6 44	6.1 53	21.8 45				0.5 46
World Eq Ex-US Index (i) CAI Non-U.S. Equity Style	$26	**10.1** 63	**16.6** 86	**6.0** 90	**6.7** 68		**24.6** 34		**0.3** 49	**1.2** 100	**0.3** 70
MSCI ACWI x US (Net)		10.1 64	16.5 88	5.9 90	6.3 76	3.0 67	25.0 24				0.2 80
SSgA Global Balanced (i) CAI Mt Fd: Gl Bal Style	$55	**5.4** 28	**9.6** 46	**7.7** 35						**0.4** 100	
Global Balanced Custom Benchmark		5.3 29	9.2 48	7.4 37							
Long US Treasury Bond Index (i) CAI Extended Mat FI Style	$9	**-2.3** 94	**-10.7** 94	**3.6** 94	**6.3** 92		**17.1** 7		**-0.2** 100	**0.1** 98	**0.4** 94
BC Long Treas		-2.2 94	-10.6 94	3.6 94	6.5 91	6.8 92	17.5 6				0.4 94
US Treasry Infl Prtcd SEC (i) CAI Real Return	$17	**0.7** 83	**-6.2** 90	**3.9** 70	**5.2** 70		**5.7** 22		**-2.9** 100	**0.0** 96	**0.9** 77
BC US TIPS Index		0.7 80	-6.1 83	4.0 55	5.3 65	5.4 65	5.7 21				0.9 74
World Gov't Bond Ex-US Indx (i) CAI Non-U.S. F-I Style	$8	**4.1** 16	**-5.6** 53	**0.5** 77	**4.0** 100		**8.3** 86		**-0.3** 100	**0.1** 98	**0.5** 98
Citi WGBI Non-US Idx		4.1 18	-5.6 53	0.6 77	4.3 100	5.1 88	8.8 67				0.5 98
US Real Estate Invmnt Trust (i) CAI Real Estate-REIT DB	$27	**-3.2** 89	**4.4** 83	**11.8** 83	**5.3** 86		**34.8** 18		**0.0** 86	**0.1** 100	**0.1** 88
US Select REIT Index		-3.1 89	4.7 74	12.1 77	5.3 87	2.4 87	35.4 13				0.1 90
Investment Manager	**Market Value ($mm)**	**Last Quarter Return**	**Last Year Return**	**3 Year Return**	**5 Year Return**	**7 Year Return**	**5 Year Risk**	**5 Year Risk Quadrant**	**5 Year Excess Rtn Ratio**	**3 Year Tracking Error**	**5 Year Sharpe Ratio**
BlackRock Govt/Credit Bond Fund (i) CAI Core Bond Mut Fds	$45	**0.3** 77	**-2.1** 78	**2.8** 73	**5.4** 73	**5.0** 52	**4.7** 26		**-1.7** 97	**0.0** 99	**1.1** 80
Barclays Govt/Credit Bd		0.4 70	-2.0 71	2.9 65	5.7 65	5.1 50	4.6 26				1.2 72
Intermediate Bond Fund (i) CAI Intermediate F-I Mut	$14	**0.4** 65	**-1.0** 47	**1.6** 63	**3.4** 72	**4.4** 55	**3.8** 22		**-1.0** 97	**0.0** 99	**0.8** 91
Barclays Gov Inter		0.4 64	-0.8 41	1.8 57	3.5 68	4.4 47	3.7 26				0.9 89
State Street Inst Trsry MM (i) Money Market Funds	$38	**0.0** 99	**0.0** 100	**0.0** 100	**0.0** 100		**0.0** 99		**-1.7** 100	**0.0** 81	**-4.5** 100
3-Month T-Bills		0.0 99	0.1 100	0.1 100	0.1 100	1.2 100	0.1 85				-0.2 100

Returns: above median; third quartile; fourth quartile

Risk: below median; second quartile; first quartile

Risk Quadrant:

Excess Return Ratio: above median; third quartile; fourth quartile

Tracking Error: below median; second quartile; first quartile

Sharpe Ratio: above median; third quartile; fourth quartile

(i) – Indexed scoring method used. Green: manager & index differ by less than +/- 10 percentiles; Yellow: manager and index differ by +/- 20 percentiles; Red: manager & index differ by more than 20 percentiles.

Planning for Increasing Benefits

Growth of Benefits
PERS/TRS

Fiscal Year Ending	PERS/TRS Estimated Benefits
2013	$1,499,626
2014	$1,613,372
2015	$1,727,481
2016	$1,844,295
2017	$1,953,707
2018	$2,056,645
2019	$2,161,620
2020	$2,277,447
2021	$2,392,711
2022	$2,498,580

PERS Cash Flows

(Level Dollar)

Fiscal Year End	Total Contributions	Benefit Payments	Additional Cash Requirement	Ending Actuarial Assets	Yield Requirement
2015	$1,053,691	$1,140,515	$86,824	$13,937,354	0.62%
2019	$1,081,766	$1,456,528	$374,762	$17,557,839	2.13%
2020	$1,064,076	$1,537,884	$473,808	$18,464,937	2.57%
2025	$961,213	$1,924,239	$963,026	$22,496,208	4.28%
2030	$568,516	$2,226,897	$1,658,381	$25,448,654	6.52%
2040	$5,095	$2,423,877	$2,418,782	$19,967,534	12.11%
2070	$0	$240,382	$240,382	$8,280,335	2.90%

PERS Cash Flows

(Level Percent of Pay)

Fiscal Year End	Total Contributions	Benefit Payments	Cash Requirement	Actuarial Assets	Yield Requirement
2015	883,701	1,140,515	$256,814	13,760,696	1.87%
2019	958,460	1,456,528	$498,068	16,579,076	3.00%
2020	973,317	1,537,884	$564,567	17,313,553	3.26%
2021	989,044	1,621,417	$632,373	18,036,044	3.51%
2025	1,059,565	1,924,239	$864,674	20,886,872	4.14%
2030	767,828	2,226,897	$1,459,069	24,316,069	6.00%
2040	5,095	2,423,877	$2,418,782	19,958,816	12.12%
2070	0	240,382	$240,382	8,192,617	2.93%

2013 Capital Market Expectations

Return and Risk

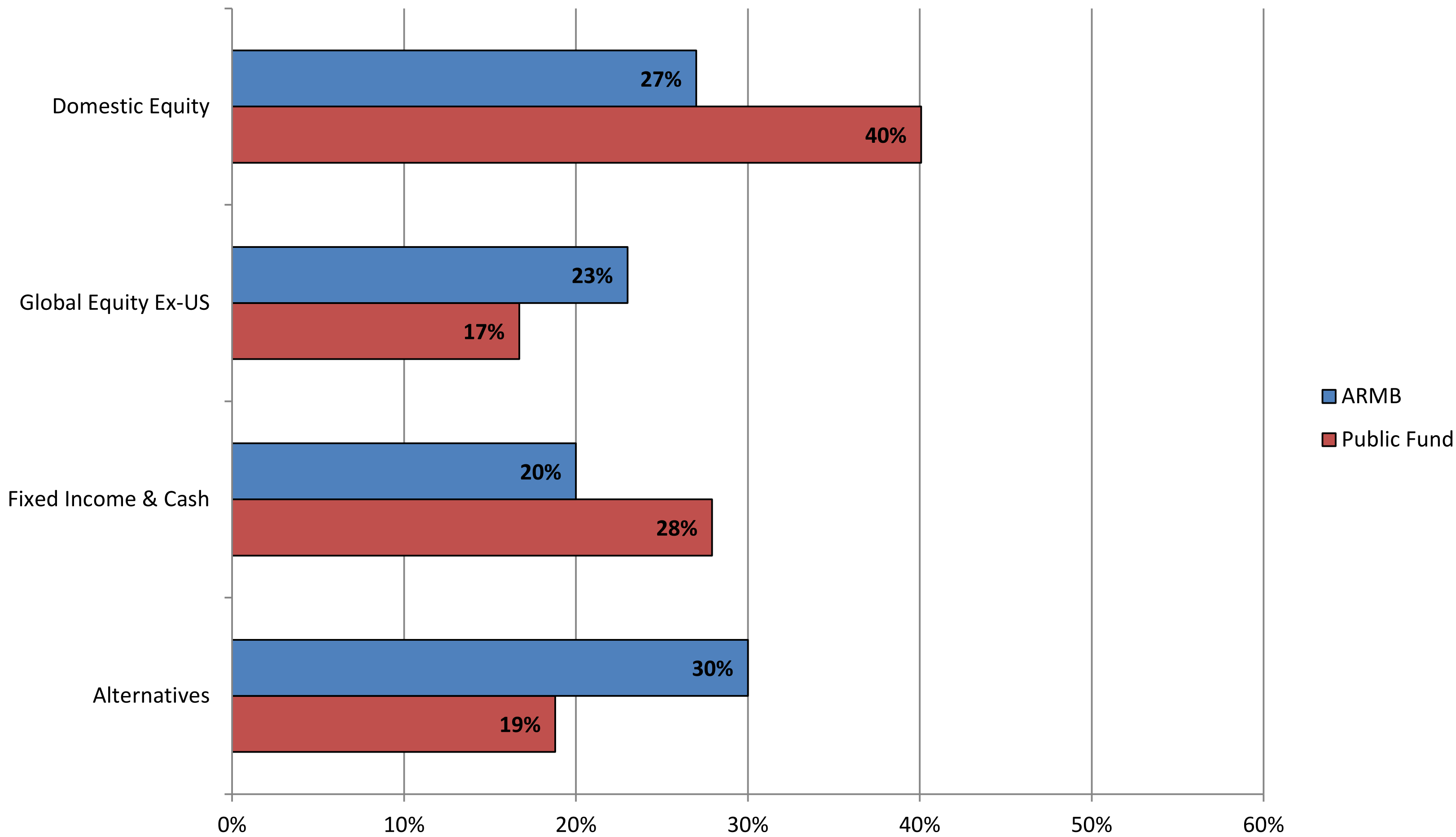
Summary of Callan's Long-Term Capital Market Projections (2013 - 2022)

		PROJECTED RETURN			PROJECTED RISK		2012 - 2021	
Asset Class	Index	1-Year Arithmetic	10-Year Geometric*	Real	Standard Deviation	Projected Yield	10-Year Geometric*	Standard Deviation
Equities								
Broad Domestic Equity	Russell 3000	9.15%	7.65%	5.15%	18.95%	2.00%	7.75%	18.70%
Large Cap	S&P 500	8.90%	7.55%	5.05%	18.30%	2.20%	7.60%	18.00%
Small/Mid Cap	Russell 2500	10.15%	7.85%	5.35%	22.90%	1.20%	7.90%	23.00%
International Equity	MSCI EAFE	9.25%	7.50%	5.00%	20.10%	2.00%	7.60%	20.00%
Emerging Markets Equity	MSCI EMF	11.45%	7.95%	5.45%	27.75%	0.00%	8.00%	27.75%
Global ex-US Equity	MSCI ACWI ex-US	9.80%	7.85%	5.35%	21.25%	1.50%	7.90%	21.15%
Fixed Income								
Defensive	BC Govt 1-3	2.25%	2.25%	-0.25%	2.40%	2.25%	3.00%	2.50%
Domestic Fixed	BC Aggregate	2.55%	2.50%	0.00%	3.75%	2.55%	3.25%	4.25%
TIPS	BC TIPS	2.40%	2.30%	-0.20%	5.00%	2.40%	3.00%	5.60%
Long Duration	BC Long Govt/Credit	3.40%	2.70%	0.20%	12.00%	3.40%	3.45%	11.80%
High Yield	BC High Yield	5.70%	5.00%	2.50%	12.60%	5.70%	5.35%	12.50%
Non-US Fixed	Citi Non-US Govt	2.65%	2.25%	-0.25%	9.40%	2.65%	2.85%	9.50%
Emerging Markets Debt	JPM EMBI Global Div	4.75%	4.25%	1.75%	10.60%	4.75%	4.80%	10.75%
Other								
Real Estate	Callan Real Estate	7.55%	6.20%	3.70%	17.50%	5.00%	6.40%	16.95%
Private Equity	VE Post Venture Cap	13.00%	8.65%	6.15%	30.90%	0.00%	8.80%	30.60%
Hedge Funds	Callan Hedge FoF	5.50%	5.10%	2.60%	10.20%	0.00%	5.55%	10.00%
Commodities	DJ-UBS Commodity	4.75%	3.25%	0.75%	17.90%	2.75%	3.25%	17.90%
Cash Equivalents	90-Day T-Bill	2.00%	2.00%	-0.50%	0.90%	2.00%	2.75%	0.90%
Inflation	CPI-U	2.50%	2.50%		1.50%		2.50%	1.40%

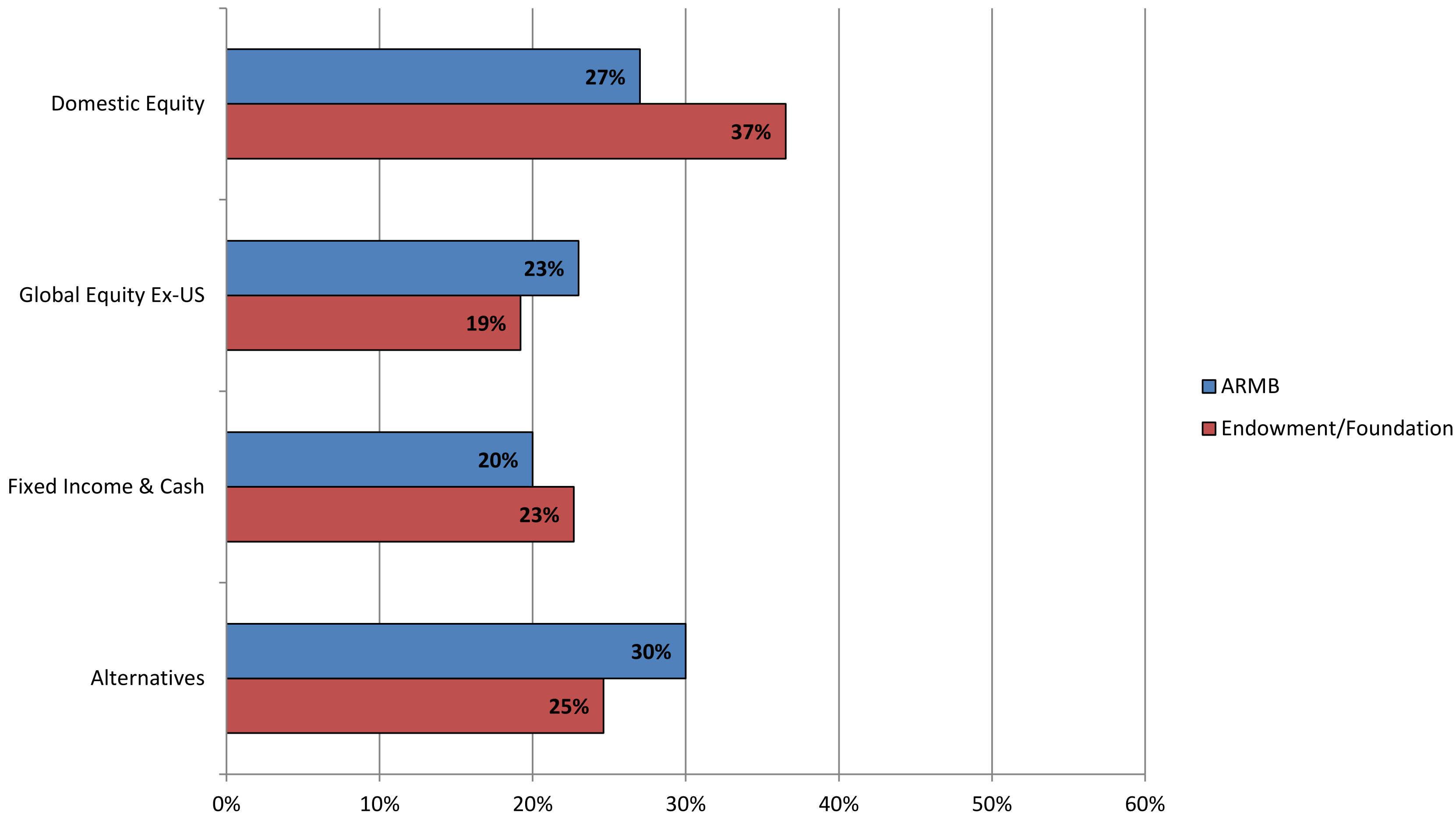
** Geometric returns are derived from arithmetic returns and the associated risk (standard deviation).*

Source: Callan

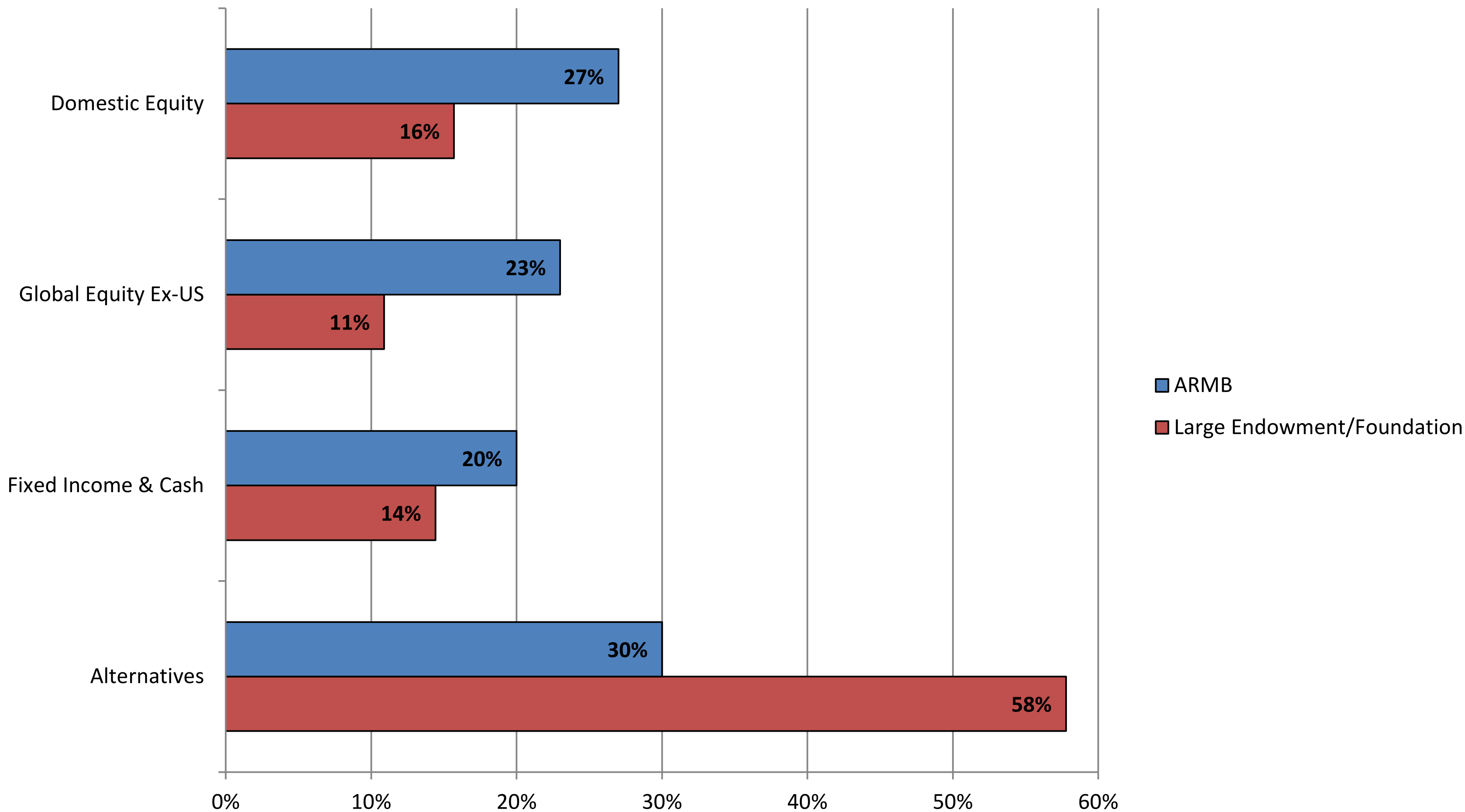
Comparison of ARMB Target Asset Allocation to Median Public Fund



Comparison of ARMB Target Asset Allocation to Median Endowment/Foundation



Comparison of ARMB Target Asset Allocation to Median Large Endowment/Foundation (>1B)



Ten Year Returns by Asset Class

PERS

Private Equity	13.35%
International Equity	9.02%
Real Assets	8.10%
Domestic Equity	7.08%
Fixed Income	4.55%
Absolute Return	2.89%

ARMB Target Return & Risk
FY2011 – FY2014

	Return	Risk
FY11	8.07%	13.46%
FY12	7.45%	13.82%
FY13	7.11%	14.20%
FY14	7.16%	14.81%

Total Liquidity Portfolio (Callan Assumptions)

	Constraints		Asset Mix Alternatives									
Asset Classes	Min	Max	1	2	3	4	5	6	7	8	9	10
Broad Domestic Equity	0%	94%	53.8%	55.2%	56.5%	58.1%	59.5%	49.3%	33.6%	20.9%	9.9%	-
Global ex-US Equity	0%	100%	36.2%	37.1%	37.9%	38.6%	39.5%	50.7%	66.4%	79.1%	90.1%	100.0%
International Equity	0%	0%	-	-	-	-	-	-	-	-	-	-
ARMB Fixed Composite	0%	0%	-	-	-	-	-	-	-	-	-	-
Domestic Fixed	0%	100%	10.0%	7.8%	5.5%	3.3%	1.1%	-	-	-	-	-
High Yield	0%	0%	-	-	-	-	-	-	-	-	-	-
Intermediate Treasury	0%	0%	-	-	-	-	-	-	-	-	-	-
TIPS	0%	0%	-	-	-	-	-	-	-	-	-	-
Government 1-3	0%	0%	-	-	-	-	-	-	-	-	-	-
Non-US Fixed	0%	0%	-	-	-	-	-	-	-	-	-	-
Private Equity	0%	0%	-	-	-	-	-	-	-	-	-	-
Hedge Funds	0%	0%	-	-	-	-	-	-	-	-	-	-
ARMB Real Assets	0%	0%	-	-	-	-	-	-	-	-	-	-
Real Estate	0%	0%	-	-	-	-	-	-	-	-	-	-
Cash Equivalents	0%	0%	-	-	-	-	-	-	-	-	-	-
Alternative Equity Strategies	0%	0%	-	-	-	-	-	-	-	-	-	-
Total			100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

	1	2	3	4	5	6	7	8	9	10
Arithmetic Return	8.7%	8.9%	9.0%	9.2%	9.3%	9.5%	9.6%	9.7%	9.7%	9.8%
Projected 10 Year Return	**7.50%**	**7.59%**	**7.67%**	**7.75%**	**7.83%**	**7.90%**	**7.92%**	**7.92%**	**7.91%**	**7.90%**
Expected Risk (Standard Deviation)	17.30%	17.74%	18.18%	18.62%	19.06%	19.49%	19.93%	20.37%	20.81%	21.25%
Sharpe Ratio	0.32	0.31	0.31	0.31	0.31	0.30	0.30	0.29	0.28	0.28
Projected 10 Year Real Return	5.00%	5.09%	5.17%	5.25%	5.33%	5.40%	5.42%	5.42%	5.41%	5.40%
Projected Income/Yield	1.87%	1.86%	1.84%	1.82%	1.81%	1.75%	1.67%	1.60%	1.55%	1.50%
Projected Capital Gain	5.63%	5.73%	5.83%	5.93%	6.02%	6.15%	6.25%	6.32%	6.36%	6.40%
Probability of Loss - 1 Year	33.2%	33.4%	33.7%	33.9%	34.1%	34.3%	34.6%	34.9%	35.2%	35.5%
Probability of Loss - 5 Year	16.6%	16.9%	17.3%	17.6%	17.9%	18.3%	18.7%	19.2%	19.8%	20.3%

Total Liquidity Portfolio (JP Morgan Assumptions)

	Constraints		Asset Mix Alternatives									
Asset Classes	Min	Max	1	2	3	4	5	6	7	8	9	10
Broad Domestic Equity	0%	0%	-	-	-	-	-	-	-	-	-	-
Global Equity	0%	100%	82.1%	84.2%	86.4%	88.5%	90.6%	92.7%	94.9%	97.0%	99.1%	100.0%
International Equity	0%	0%	-	-	-	-	-	-	-	-	-	-
ARMB Fixed Composite	0%	0%	-	-	-	-	-	-	-	-	-	-
Domestic Fixed	0%	100%	17.9%	15.8%	13.6%	11.5%	9.4%	7.3%	5.1%	3.0%	0.9%	-
High Yield	0%	0%	-	-	-	-	-	-	-	-	-	-
Intermediate Treasury	0%	0%	-	-	-	-	-	-	-	-	-	-
TIPS	0%	0%	-	-	-	-	-	-	-	-	-	-
Government 1-3	0%	0%	-	-	-	-	-	-	-	-	-	-
Non-US Fixed	0%	0%	-	-	-	-	-	-	-	-	-	-
Private Equity	0%	0%	-	-	-	-	-	-	-	-	-	-
Hedge Funds	0%	0%	-	-	-	-	-	-	-	-	-	-
ARMB Real Assets	0%	0%	-	-	-	-	-	-	-	-	-	-
Real Estate	0%	0%	-	-	-	-	-	-	-	-	-	-
Cash Equivalents	0%	0%	-	-	-	-	-	-	-	-	-	-
Alternative Equity Strategies	0%	0%	-	-	-	-	-	-	-	-	-	-
Total			100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Arithmetic Return			8.4%	8.5%	8.7%	8.8%	8.9%	9.0%	9.2%	9.3%	9.4%	9.5%
Projected 10 Year Return			**7.19%**	**7.25%**	**7.30%**	**7.36%**	**7.41%**	**7.46%**	**7.50%**	**7.55%**	**7.59%**	**7.61%**
Expected Risk (Standard Deviation)			17.30%	17.74%	18.18%	18.62%	19.06%	19.49%	19.93%	20.37%	20.81%	21.00%
Sharpe Ratio			0.31	0.31	0.31	0.30	0.30	0.29	0.29	0.28	0.28	0.28
Projected 10 Year Real Return			4.69%	4.75%	4.80%	4.86%	4.91%	4.96%	5.00%	5.05%	5.09%	5.11%
Projected Income/Yield			1.69%	1.67%	1.64%	1.62%	1.60%	1.58%	1.55%	1.53%	1.51%	1.50%
Projected Capital Gain			5.50%	5.58%	5.66%	5.73%	5.81%	5.88%	5.95%	6.02%	6.08%	6.11%
Probability of Loss - 1 Year			33.9%	34.1%	34.4%	34.6%	34.9%	35.1%	35.3%	35.6%	35.8%	35.9%
Probability of Loss - 5 Year			17.6%	18.0%	18.5%	18.8%	19.2%	19.6%	20.0%	20.4%	20.7%	20.9%

Addressing Cash Flow Needs

- Investigate Total Return Swaps
- Establish an internally managed liquidity fund of the most liquid large company stocks and bonds.
- Seek out additional real asset and private equity investments that feature high yield as substantial part of the anticipated returns.
- Increase allocation to higher return asset classes.

Callan

December 5, 2013

ARMB Private Equity Portfolio Review and Performance Analysis

Gary Robertson
Senior Vice President

Private Equity Discussion Topics

- ARMB Private Equity Program Overview
- Market Conditions
- ARMB Private Equity Performance
  - Portfolio and Manager Performance
  - Vintage Year Benchmarking
  - Strategy Diversification
- Corporate Governance Portfolio
- Summary

Appendix: How Private Equity Works (Cash Flows)

ARMB Private Equity Program Overview

Timeline

- 1998 - ARMB initiates a 3% allocation 13 years ago and hires Abbott to invest in partnerships
- 2001 - ARMB raises the allocation to 6%
- 2001 - Hires Pathway to develop a second partnerships portfolio
  - Managers have 29% of partnership investments in common (33% of total dollar commitments)
- 2005 - ARMB hires Blum Capital for direct Corporate Governance
  - Two products: listed and hybrid, neither are “private equity”
- 2006 - Private equity allocation raised to 7%
- 2007- ARMB Initiates In-House private equity portfolio
- 2009 - ARMB liquidates Corporate Governance listed product
- 2011 - Private equity allocation raised to 8%
- 2013 – Private equity allocation raised to 9% (effective July 1, 2013)

ARMB Private Equity Program Overview

Funding – ARMB's total assets increased $1.8 billion (11%) during the 12-month period, which increased the private equity target by $147 million. Total private equity NAV increased $4.6 million (0.3%), so ARMB's over funding to the 8% private equity target decreased by 1.0%. Effective July 1, 2013, the private equity target was increased to 9% and the portfolio is at that level

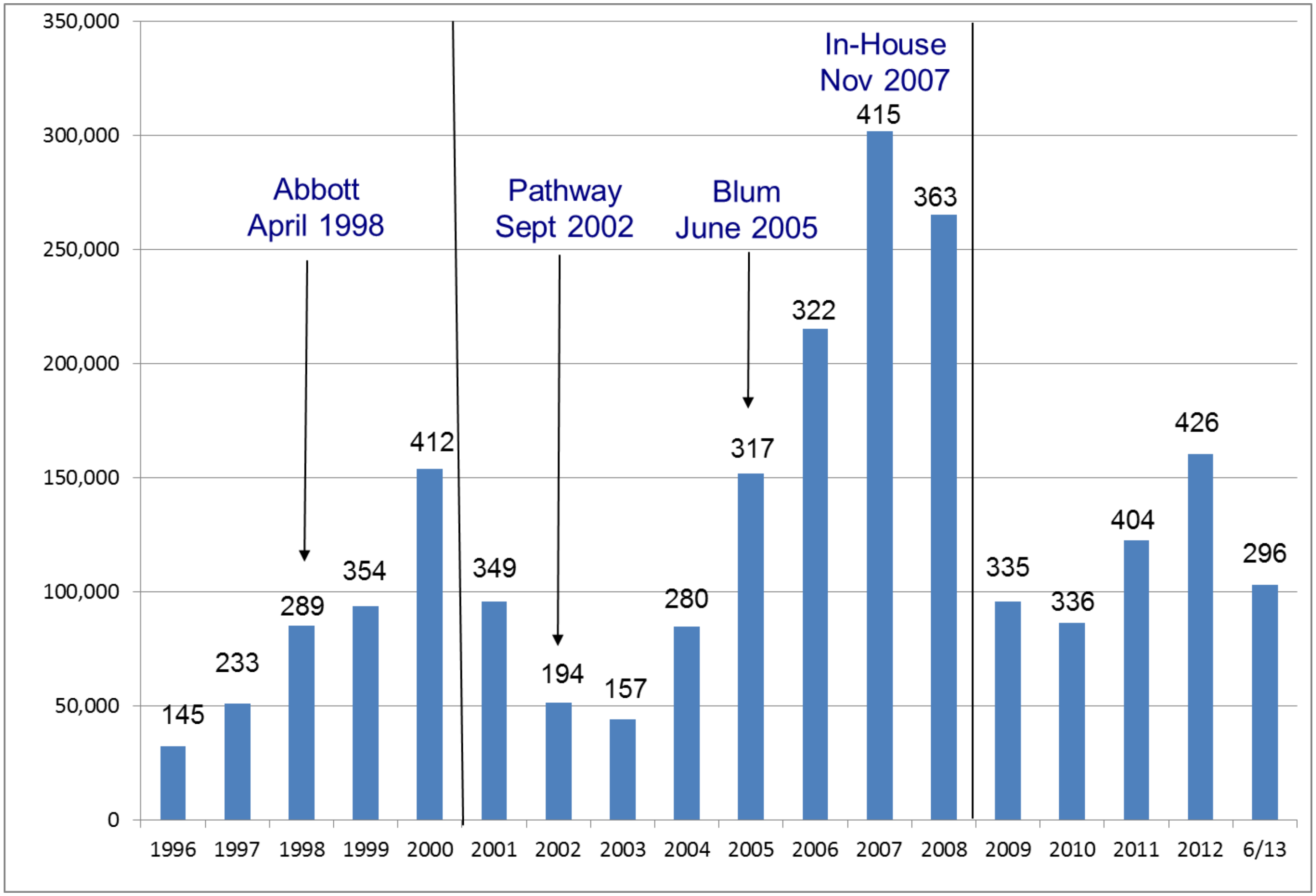
		As of June 30, 2013
Total Assets	16,242,119,030	**18,075,627,711**
PE % Target	8.0%	**8.0%**
PE $ Target	1,299,369,522	**1,446,050,217**
Abbott	735,952,298	**726,918,089**
Pathway	745,877,853	**748,410,834**
In-House	108,408,467	**125,916,294**
Blum	15,823,907	**9,718,454**
Total Private Equity	1,606,062,525	**1,610,963,671**
% PE	9.9%	**8.9%**
Difference from Target	306,693,003	**164,913,454**

- Uncalled capital is less than NAV (33% and 67%, respectively, of the combined total "economic exposure"), so the growth of the private equity NAV should continue to be moderate

Private Equity Market Conditions

Industry Commitments To Partnerships

($ Millions, # Funds Formed)



Source: *Private Equity Analyst*

ARMB has been through about two market cycles, with the recent cycle being low growth

Private Equity Market Conditions

Mid-Expansion Phase? – Moderate Recovery

- Last year we discussed how volatile the equity markets had been (3Q11), but this fiscal year the Russell 3000 had four consecutive quarters of positive returns and was up 21.5% for the period
- Good balance between commitments, investments, and distributions, but new company investments have been slightly slower paced than normal
- Slow general partner industry shake-out continues, but larger funds are starting to be raised
- Since 2009, commitments to new partnerships have been below $200 billion per year
  - Viewed as a sustainable (not overheated) level, with 2012 fundraising totaling $160 billion
  - 2Q13 fundraising is $103 million, which may indicate overheating
- Purchase prices have been rising with public equities, and are relatively high, although average pricing remains below 2007 bubble levels.
- Credit is easy to obtain and plentiful, but equity contributions remain meaningful
- While prices should be attractive to sellers and debt availability is good, general partners appear cautious after the last recession (and focused on exits).
- Exits and distributions have been very strong for investors with mature portfolios
  - General partners are focused on selling companies after the slow exit environment following the financial crisis

Private Equity Market Conditions

Private Equity Industry Returns
IRRs through March 31, 2013

Strategy	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years
All Venture	5.0%	4.3%	0.6%	4.7%	9.3%	16.0%
Buyouts	15.4%	11.1%	3.9%	11.2%	8.7%	10.4%
Mezzanine	-3.6%	5.9%	2.5%	6.8%	6,3%	7.5%
All Private Equity	**12.7%**	**9.6%**	**3.7%**	**9.7%**	**8.9%**	**11.3%**
S&P 500	14.0%	12.7%	5.8%	8.5%	4.3%	8.5%

Source: Thomson ONE

- All Private Equity has provided the expected return premium over longer time periods
- All Private Equity lags the public market over horizons of five-years and less due to its appraisal valuation methodology, which reduces both gain and loss volatility
- The All Private Equity database is up almost 10% for the trailing 12 months (the trailing four quarter returns starting in 2Q13 were: 3.4%, 4.9%, 3.3% and 3.8%)
- ACM's 15 year IRR of 8.9% is competitive with the database and compares well to public equities, and PCM's 11 year IRR of 12.7% is performing well relative to the database 10-year figure

ARMB Private Equity Performance

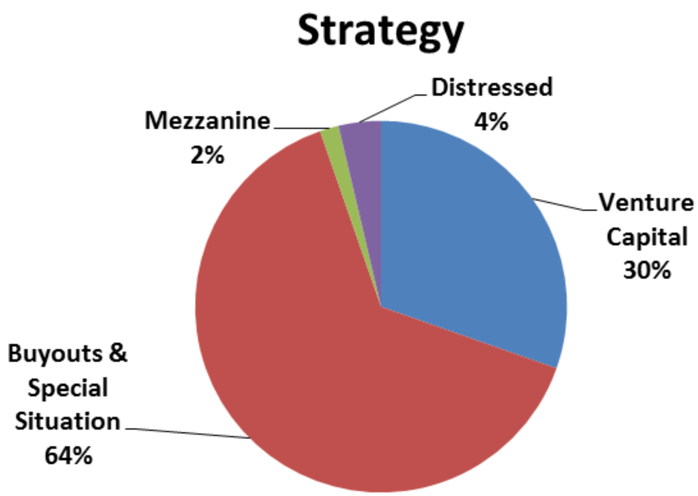
Total Portfolio: 12-Month Changes, June 30, 2013 ($000)

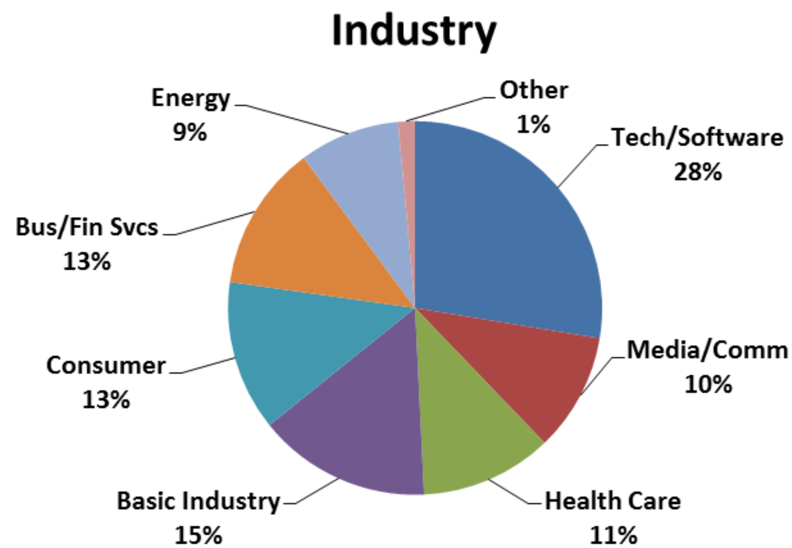
Year	Committed	Paid-In	Uncalled	Distributed	NAV	DPI	RVPI	TVPI
2012	3,376,366	2,546,467	830,317	1,859,734	1,604,129	0.73	0.63	1.36
2013	3,536,444	2,812,066	803,896	2,332,346	1,610,963	0.83	0.57	1.40
Change	**160,078**	**265,599**	**(26,421)**	**472,612**	**6,834**	**0.10**	**(0.06)**	**0.04**

ACM and PCM private equity holdings are March 31 values updated for June 30 cash flows, In-House and Blum are June 30 actual
DPI = Distributions as a ratio of (divided by) Paid-In capital
RVPI = Residual Value (Net Asset Value) as a ratio of (divided by) Paid-In Capital
TVPI = Total Value (Distributions + NAV) as a ratio of (divided by) Paid-In Capital

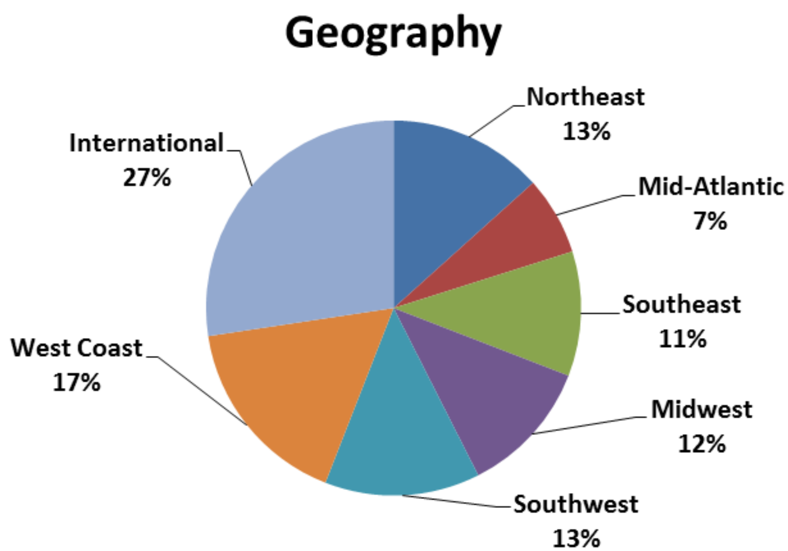
1. Total of 269 partnerships, up 14 from last year (compared to an increase of 21 funds last year)
2. Commitments increased by 5%, versus 8% the prior year
3. Paid-in capital increased 10%, versus 11% last year
4. The dollar amount of paid-in capital of $266 million was an increase from $261 last year
5. Uncalled capital decreased 3%, the same amount as last year
6. The portfolio is 80% paid-in (mature) up from 75%, with Abbott 80% and Pathway 79%
7. The portfolio distributed $473 million, a 36% cash return (distributions divided by beginning NAV), up from $294 million (20%) last year. Net cash flow to ARMB was $207 million.
8. Portfolio appreciation was $214 million (13%), compared to $140 million (9%) last year. NAV increased by $6.8 million or 0.4%.
9. Performance ratios DPI and TVPI increased, and RVPI decreased
10. The TVPI of 1.40x is second quartile versus the Thomson ONE All Region upper quartile of 1.45x and a median of 1.07x

ARMB Portfolio Diversification June 30, 2013 ($000)





International = Europe 20%, Asia 3%, and Rest-of-World 4%



Note: Strategy allocations based on partnership NAV and includes ACM, PCM and In-House.
Industry and Geography allocations based underlying portfolio companies and include ACM and PCM.

Abbott Capital Management Profile

- Founded in 1986. The firm is an independent registered investment advisor and is 100% employee-owned. ACM has 11 senior professionals, eight junior professionals and a total staff of 48 employees
- ACM has had a stable team with little senior professional turnover
- The firm is headquartered in New York and has an additional office in London
- The firm has $7.6 billion in AUM (Uncalled + NAV), in both fund-of-funds and separate accounts, and has a large established client base
- ACM's ARMB investment program started in mid-1998 and represents 45% of the ARMB's private equity portfolio NAV
- ACM invests in key private equity strategies, except distressed debt, in a diversified manner. The firm has strong relationships in venture capital and an expertise in non-US investing.
- Callan would characterize ACM as a conservative global boutique, with a strong historical experience with venture capital and European private equity investing. The firm also has long-standing with highly-developed corporate finance funds

ARMB Private Equity Performance

Abbott Portfolio: 12-Month Changes, June 30, 2013 ($000)

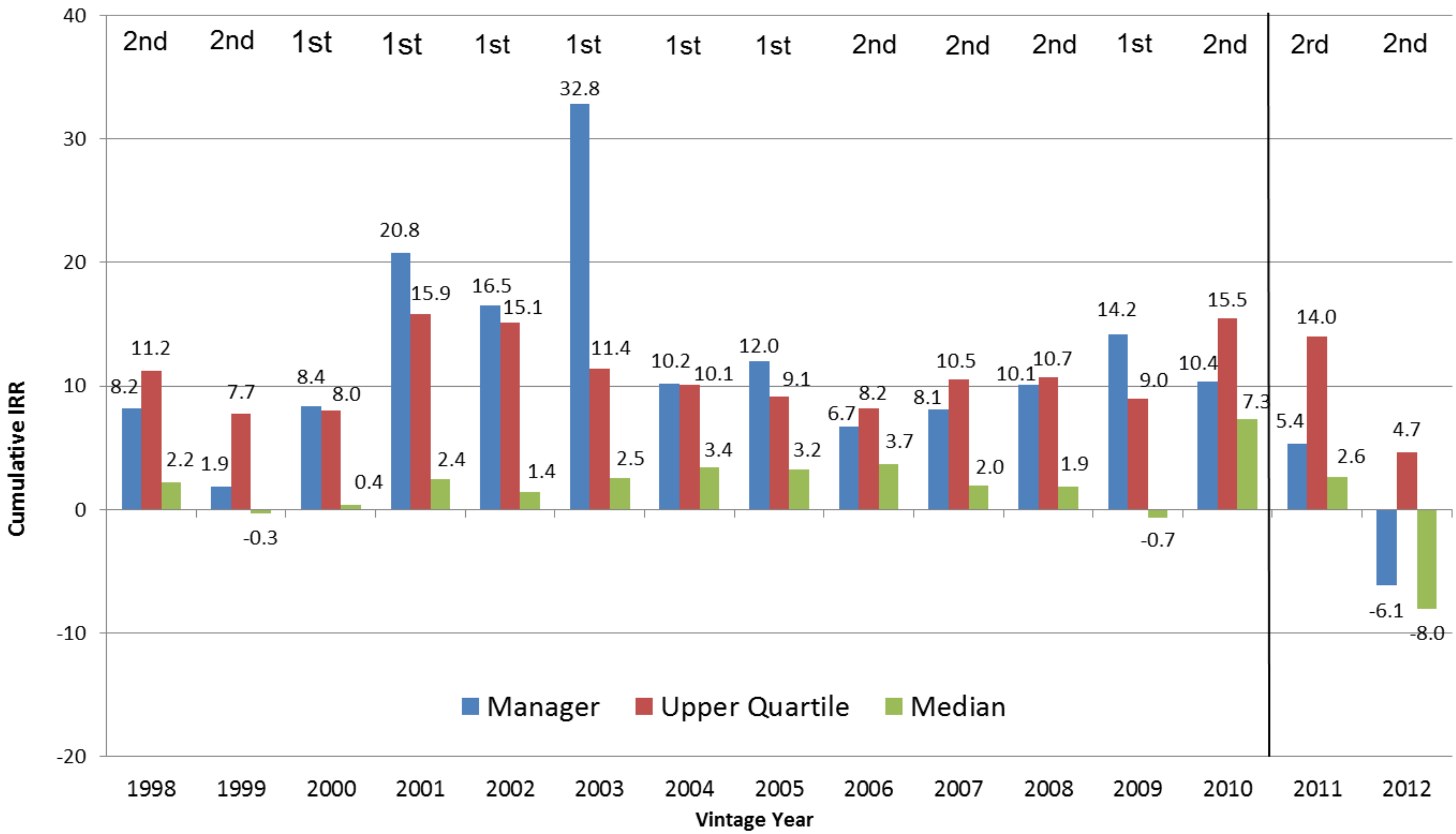
Year	Committed	Paid-In	Uncalled	Distributed	NAV	DPI	RVPI	TVPI	IRR
2012	1,767,592	1,345,991	421,601	1,159,104	736,267	0.86	0.55	1.41	8.9%
2013	1,809,447	1,443,039	366,408	1,329,220	726,918	0.92	0.50	1.42	8.9%
Change	**41,855**	**97,048**	**(55,193)**	**170,116**	**(9,349)**	**0.06**	**(0.04)**	**0.02**	**0.0%**

DPI = Distributions as a ratio of (divided by) Paid-In capital
RVPI = Residual Value (Net Asset Value) as a ratio of (divided by) Paid-In Capital
TVPI = Total Value (Distributions + NAV) as a ratio of (divided by) Paid-In Capital
Benchmarks are Thomson ONE All Regions 3/31/13

1. Initiated in 1998 (15 years), invested in 154 partnerships (+5). 45% of NAV
2. Commitments increased $42 million (2%), down from $152 million (9%) last year
3. Paid-in increased $97 million (7%), down from $108 million (9%) last year
4. The portfolio is 80% paid-in (mature) and DPI should turn positive within three years
5. Uncalled capital decreased 13% (vs. 12% last year) as more capital was paid-in than committed
6. The portfolio distributed $170 million (23% cash yield), up from $145 million (21%)
7. Portfolio net cash flow was a positive $73 million as more capital was distributed than paid-in, up from a positive $37 million in the prior year
8. Portfolio appreciation was $64 million (10%), down from $85 million (12%) last year. NAV fell $9 million (-10%), compared with year's increase of $48 million (+7%)
9. Abbott's IRR of 8.9% is high in the second quartile versus the Thomson ONE All Region composite since 1998, which has a top quartile of 10.3% and a median of 1.6%
10. The TVPI of 1.42x is also high in the second quartile versus a top quartile of 1.45x and a median of 1.07x

Abbott: Thomson ONE Vintage Year Peer Group Benchmark

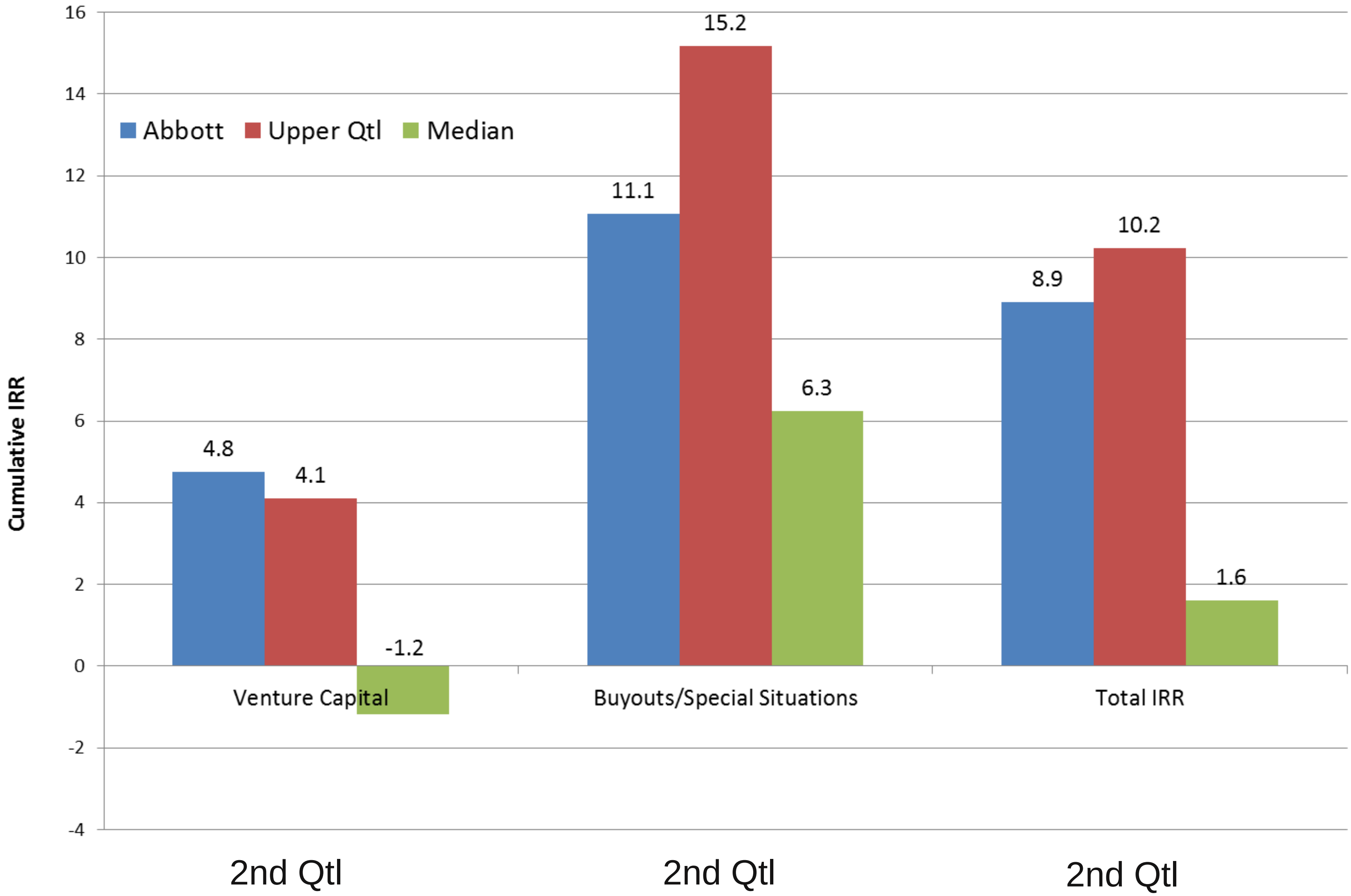
IRRs and All Region Benchmarks as of March 31, 2013



1st Quartile: 7 years   2nd Quartile: 8 years   Below Median: 0 years

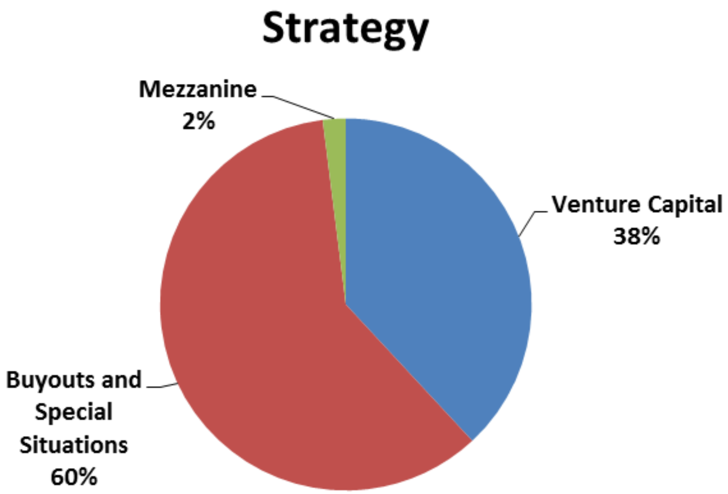
Abbott: Thomson ONE Strategy Peer Group Benchmark

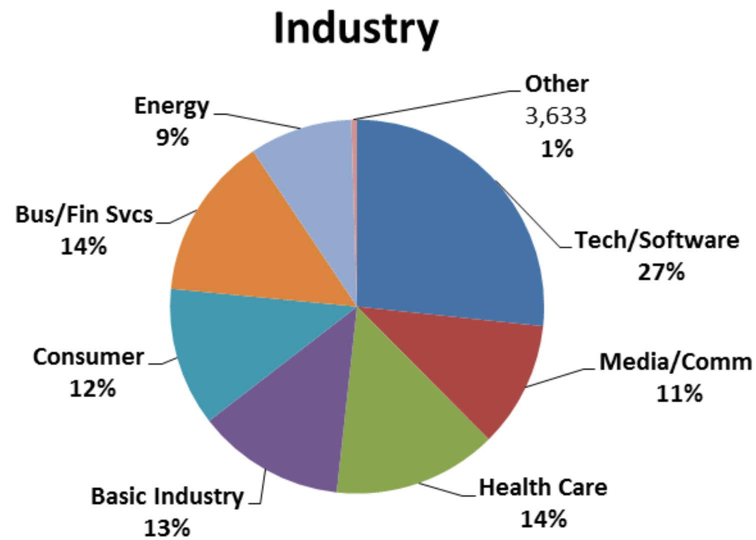
Cumulative Composite Benchmarks Inception through 3/31/2013



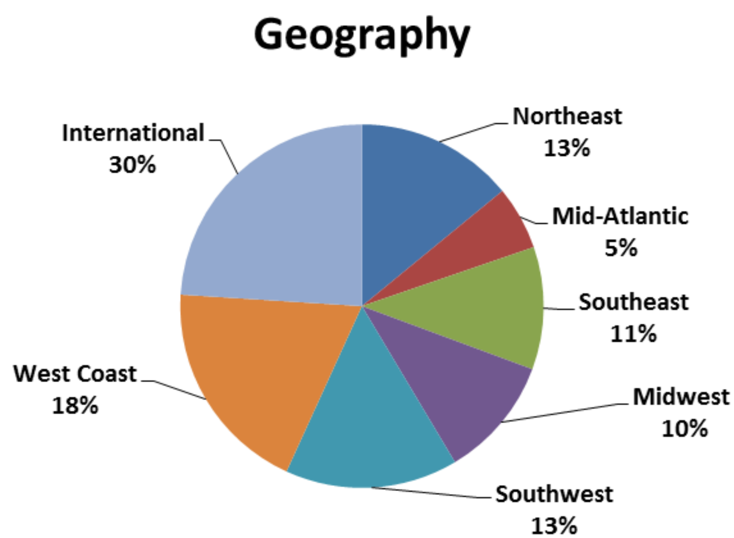
All Composites: VY 1998 – 2012

ACM Portfolio Diversification June 30, 2013 ($000)





International = Europe 23%, Asia 3%, and Rest-of-World 6%



Note: Strategy allocations are based on partnership NAV, Industry and Geography allocations are based on underlying portfolio company valuations

Pathway Capital Management Profile

- Founded in 1993. The firm is an independent registered investment advisor and is wholly owned by its twelve principals. PCM has 17 senior professionals and 22 junior professionals, with 112 total employees
- PCM has had a generally stable team. There have been two recent senior departures, one of the three founding partners departed in early-2012, and a director in 2013, but the firm has a deep staff.
- The firm is headquartered in Irvine, CA and has additional offices located in London and Rhode Island and Hong Kong. The firm also has a Pacific Basin strategic alliance with its client Tokyo Marine
- Total AUM is $25.9 billion (NAV plus uncalled), with a large established client base
- Pathway's portfolio initiated in mid-2002 and represents 46% of the ARMB's private equity portfolio NAV
- Pathway states that they use a market weighting investment strategy and do not tend to overweight particular investment strategies. The investment approach is conservative, investing with highly developed general partners with proven track records and experience investing through market cycles, primarily in developed markets
- Callan would characterize PCM as a conservative global boutique core manager that invests in key private equity strategies, except mezzanine and has an expertise in non-US investing. The firm's corporate finance investments have a mid- to large-buyouts orientation

ARMB Private Equity Performance

Pathway Portfolio: 12-Month Changes, June 30, 2013 ($000)

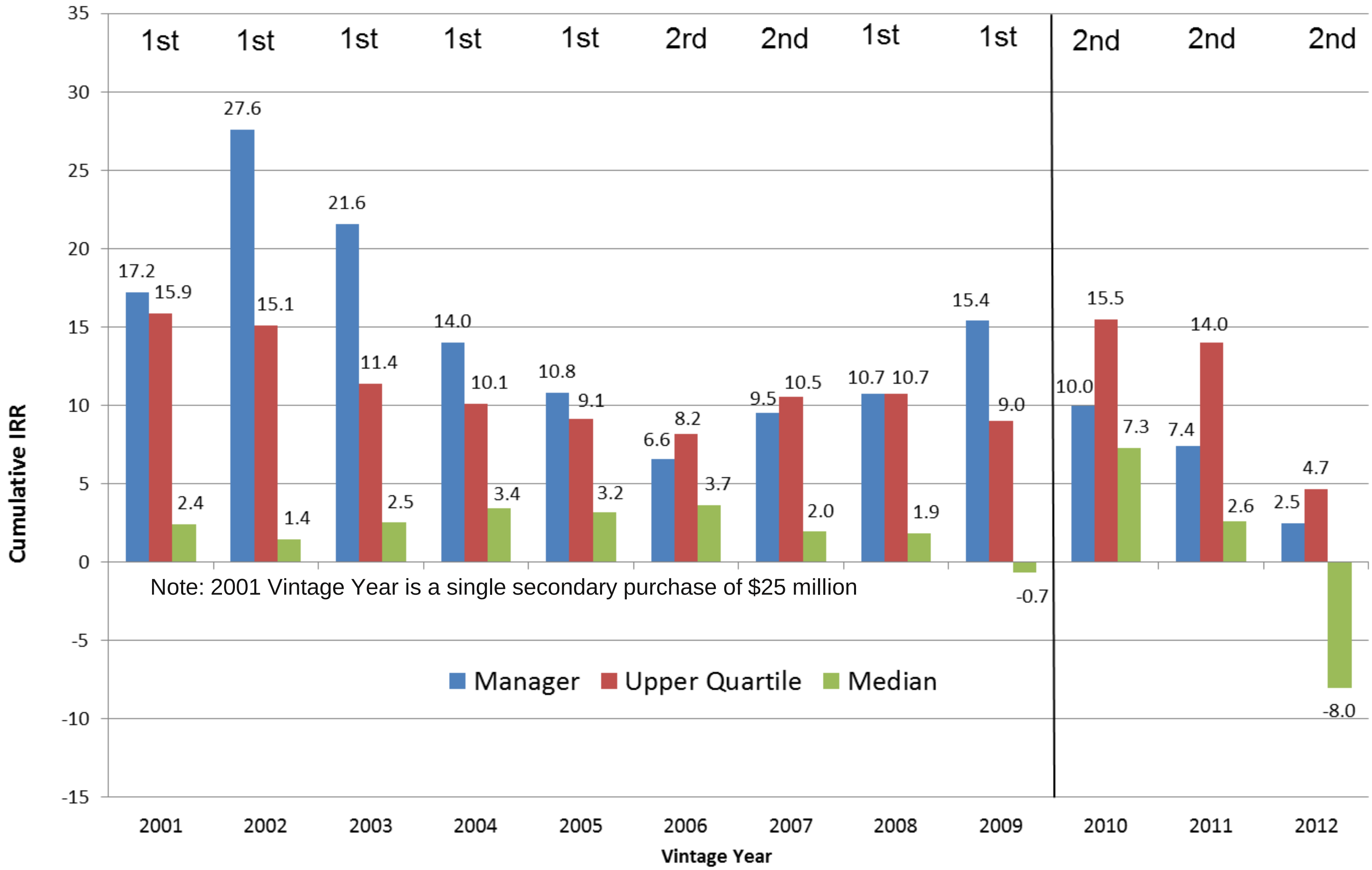
Year	Committed	Paid-In	Uncalled	Distributed	NAV	DPI	RVPI	TVPI	IRR
2012	1,328,774	990,649	338,125	619,314	746,100	0.63	0.75	1.38	12.8%
2013	1,416,997	1,120,755	377,543	884,565	748,411	0.79	0.67	1.46	12.7%
Change	**88,223**	**130,106**	**39,418**	**265,251**	**2,311**	**0.16**	**(0.09)**	**0.08**	**-0.1%**

DPI = Distributions as a ratio of (divided by) Paid-In capital
RVPI = Residual Value (Net Asset Value) as a ratio of (divided by) Paid-In Capital
TVPI = Total Value (Distributions + NAV) as a ratio of (divided by) Paid-In Capital
Benchmarks are Thomson ONE All Regions 3/31/12

1. Initiated in mid-2002 (11 years), invested in 108 partnerships (+8), 46% of NAV
2. Commitments increased by 7%, similar to the $87 million (7%) last year
3. Paid-in increased 13%, the same as last year. The portfolio is 79% paid-in (mature)
4. Uncalled capital increased 12%, versus a 9% decrease last year
5. Distributions were $265 million (36% cash yield), up from $133 million (19% cash)
6. Portfolio net cash flow was $135 million or 18% of initial NAV (distributions exceeded paid-in), compared to $13 million or 2% of initial NAV last year
7. Portfolio appreciation was $138 million (18%), up from $62 million (+9%) last year.
8. NAV increased $2.3 million (0.3%), versus $48 million (+7) last year
9. Pathway’s IRR of 12.7% is first quartile versus the Thomson ONE All Region composite since 2002, which has a top quartile of 10.3% and a median of 2.4%
10. The 1.46x TVPI is also first quartile versus the top quartile and median of 1.36x and 1.07x

Pathway: Thomson ONE Vintage Year Peer Group Benchmark

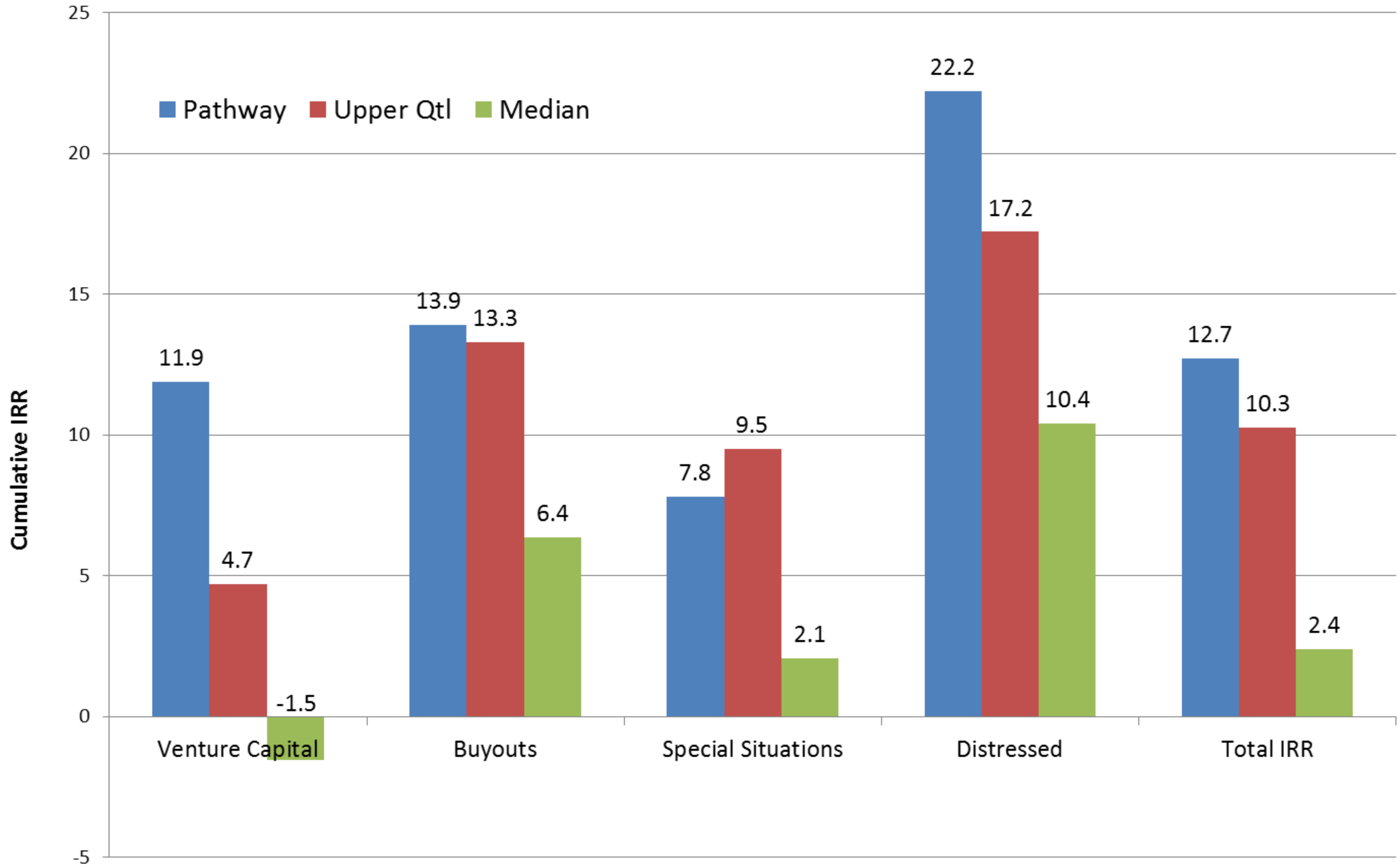
IRRs and All Region Benchmarks as of March 31, 2013



1st Quartile: 7 years   2nd Quartile: 5 years   Below Median: 0 years

Pathway: Thomson ONE Strategy Peer Group Benchmark

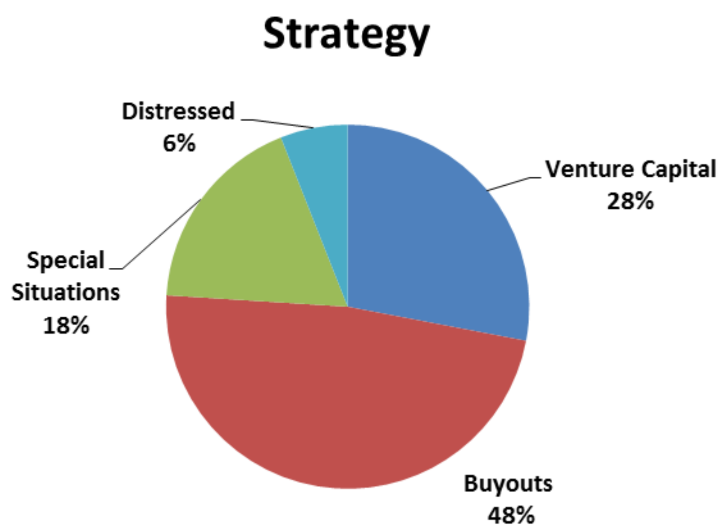
Cumulative Composite Benchmarks Inception through 3/31/2013

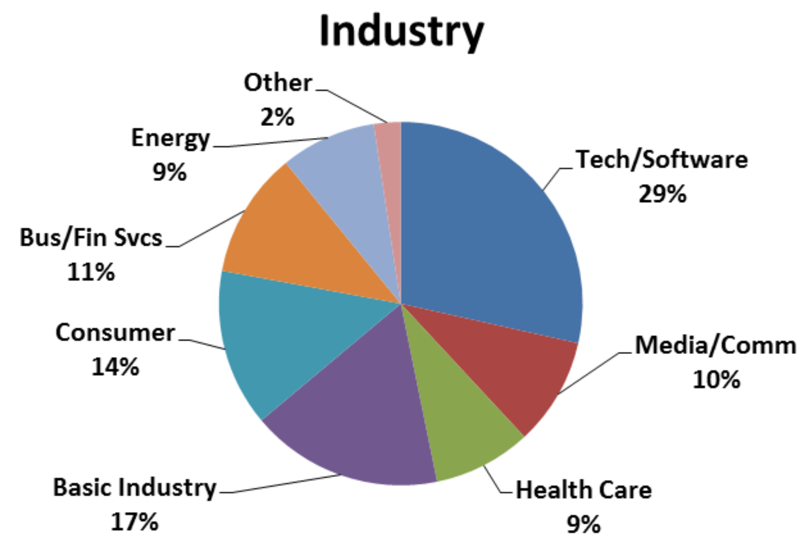


1st Qtl | 1st Qtl | 2nd Qtl | 1st Qtl | 1st Qtl

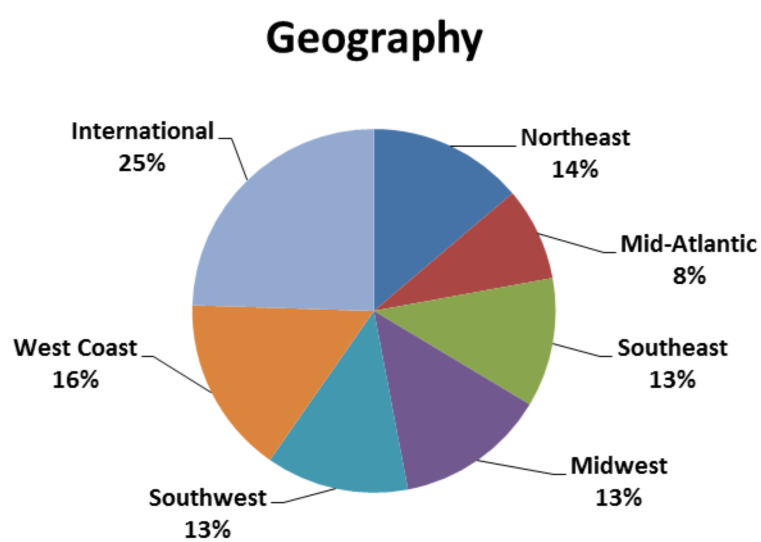
All Composites: VY 2002 – 2012

PCM Portfolio Diversification June 30, 2013 ($000)



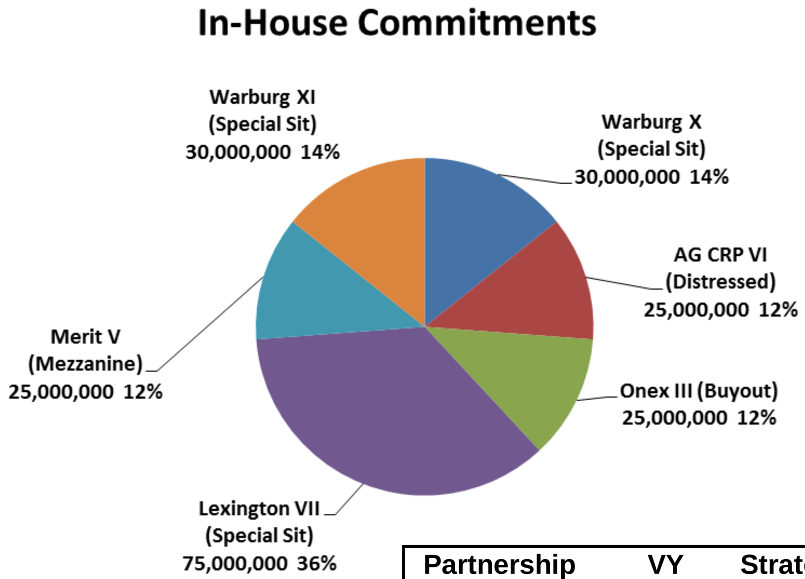


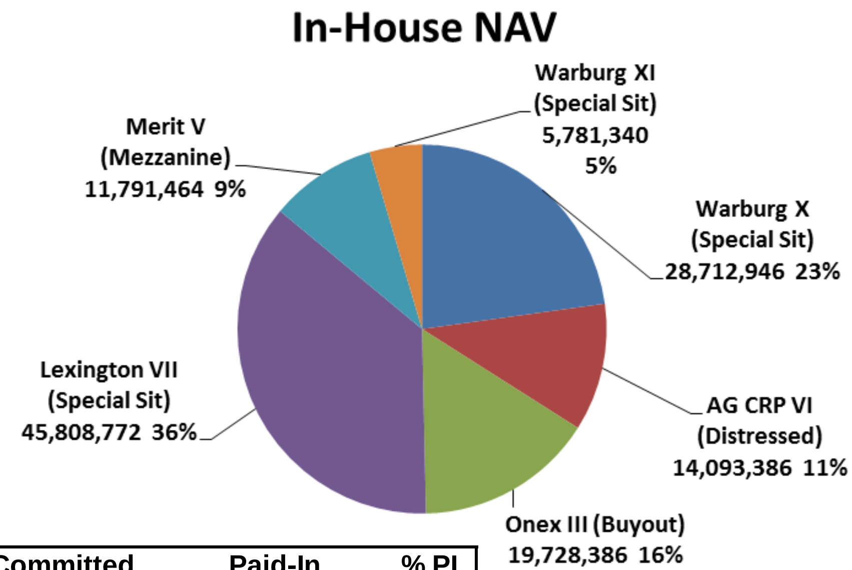
International = Europe 18%, Asia 3%, and Rest-of-World 4%



Note: Strategy allocations are based on partnership NAV, Industry and Geography allocations are based on underlying portfolio company valuations

In-House Portfolio Overview June 30, 2013 ($000)





Partnership	VY	Strategy	Overlap	Committed	Paid-In	% PI
Warburg X	2007	Special Sit	Abbott	30,000,000	29,775,000	99%
AG CRP VI	2008	Distressed	None	25,000,000	25,000,000	100%
Onex III	2008	Buyout	Pathway	25,000,000	22,934,928	92%
Lexington VII	2010	Special Sit	None	75,000,000	51,931,371	69%
Merit V	2010	Mezzanine	None	25,000,000	13,244,898	53%
Warburg XI	2013	Special Sit	Abbott	30,000,000	7,482,507	25%
Total				**210,000,000**	**150,368,704**	**72%**

- Commitments have slowed due to the overfunded status of the overall private equity portfolio
- Warburg X and AG VI were caught in the downdraft but are recovering well, and Onex had been relatively slow to invest
- The portfolio represents all key strategies except venture capital (although some VC exposure will be provided by Warburg)
- The newer investments, Lexington and Merit, should benefit from good timing, and Warburg XI is off to a fast start
- The portfolio has cumulatively distributed $54 million (up from $18 million last year), and has a NAV of $125 million (up from $108 million last year), for a gain of $29 million (up from $15 million last year)

ARMB Private Equity Performance

In-House Portfolio: 12-Month Changes, June 30, 2013 ($000)

Year	Committed	Paid-In	Uncalled	Distributed	NAV	DPI	RVPI	TVPI	IRR
2012	180,000	111,924	70,277	17,874	108,409	0.16	0.97	1.13	6.1%
2013	210,000	150,369	59,631	53,651	125,916	0.36	0.84	1.19	8.8%
Change	**30,000**	**38,445**	**(10,646)**	**35,777**	**17,507**	**0.20**	**(0.13)**	**0.07**	**2.7%**

1. Initiated November 2007, 6 partnerships: VYs: 1-2007, 2-2008, 2-2010, 1-2013, 8% of NAV
2. Warburg XI received a new $30 million commitment in 2013 (+17% total commitments)
3. Diversified by strategy: Special Situation, Distressed, Buyout, Secondary, Mezzanine. Venture capital is not a priority given its general risk profile
4. Portfolio is 72% paid-in, up from 61% last year. The last three partnerships are 69%, 53% and 25% paid-in at June 30, 2013
5. Uncalled capital declined 13% as paid-in exceeded new commitments
6. Distributions were $36 million (33% of NAV), up from $16 million last year (18%)
7. Net cash flow was -$2.7 million as paid-in exceeded distributions, a reduced amount from -$18 million last year
8. Portfolio appreciation was $14.8 million (14%), up from $3.2 million (4%). NAV increased $18 million (16%), down from $21 million (+24%) last year
9. The portfolio was initiated just before the bubble peaked, has weathered the downturn
10. While still early for benchmarking, the 8.8% IRR is second quartile versus a Thomson upper quartile of 11.7% and median of 2.2%. The 1.19x TVPI is also second quartile versus an upper quartile of 1.32x and median of 1.08x

ARMB Private Equity Performance

Blum Strategic Partners III: 12-Month Changes, June 30, 2013 ($000)

Year	Committed	Paid-In	Uncalled	Distributed	NAV	DPI	RVPI	TVPI	IRR	TWR	S&P 500
2012	50,000	47,903	314	28,694	13,353	0.60	0.28	0.88	-3.6%	-4.6%	4.2%
2013	50,000	47,903	314	30,162	10,020	0.63	0.21	0.84	-4.5%	-4.6%	6.1%
Change	**-**	**-**	**-**	**1,468**	**(3,333)**	**0.03**	**(0.07)**	**(0.04)**	**-0.9%**	**0.0%**	**1.9%**

Figures are June 30 actual (not March 31 values updated for June 30 cash flows as used on Slide 4)
TWR = Time-Weighted Return (period-linked return calculation normally used for public stock portfolios)

1. Two $50 million commitments initiated in May 2005 focusing on activist investments in under-performing publicly-traded small- and mid-cap companies
2. Public-only vehicle was fully redeemed in 2009 with a $15 million loss
3. Strategic III is 0.6% of the portfolio's NAV
4. The portfolio distributed $1.5 million (11% yield), with no additional contributions
5. NAV decreased by $3.3 million compared to a $10 million increase last year
6. Strategic III has 5 public positions and 1 private investments, unchanged from last year. Three public companies account for 88% of the value
7. The portfolio has had challenges with Financials, Digital Media, and Education sector companies
8. Performance has reflected a concentrated, small company public stock portfolio

ARMB Summary

Observations

- ARMB's private equity portfolio is mature, has provided good performance, and is well-diversified
  - Had to overcome initial timing issue and target increases
  - The portfolio should take about three to four years to be "fully mature" defined as being cumulatively cash positive (currently 83 cents on the dollar has been received, up from 73 cents last year)
  - Performance is high in the second quartile versus the Thomson ONE private equity database
  - Both managers are performing well relative to benchmarks and their strategies are complementary
    - *Abbott provides more to hard-to-access venture capital, and mezzanine debt*
    - *Pathway is more buyout-oriented and does distressed debt*
  - The In-House portfolio had strong cash inflows and outflows this year and appreciated 14%
    - *The new commitment pace has been slow due to market conditions and ARMB's overfunding*
  - Blum investments are not private equity, and have been challenged
  - The portfolio is composed of tenured, high-quality general partners
  - ARMB has an attractive strategy mix for a large fund, and is well-diversified by other measures

ARMB Summary

Observations

- ARMB's private equity portfolio had a good year
  - Private equity industry liquidity increased significantly from the prior 12-months, primarily due to steadily appreciating equity markets and easy credit
  - With the increase in the ARMB's total value and the change to a 9% private equity target, the allocation is no longer overfunded
  - The portfolio produced a 36% cash return, 9% appreciation, and provided positive net cash flow of $207 million to ARMB
- Looking forward
  - Uncalled commitments are only 50% of NAV, so we expect the portfolio NAV growth to be moderate
  - After July 2013, private equity is market continued to show strong liquidity although the company investment pace remains slow
  - The private equity market is showing some signs of froth, so Fiscal 2014 activity (including commitments, investment pace, and distributions) will depend on how overall capital markets hold up
  - ARMB's portfolio is becoming mature and year-over-year performance changes are going to become smaller although we expect the portfolio's performance to increase over time, moving in concert with economic conditions
  - General partners are keenly focused on portfolio exits, so we expect that distributions will continue to be as strong a practicable

Appendix

How Private Equity Works

ARMB invests in all major private corporate finance strategies ("private equity"):

- **Venture Capital**
  - Smaller technology/medical companies
- **Buyouts and Special Situations**
  - Larger company equity, traditional industries
- **Subordinated Debt (Mezzanine)**
  - Private high yield, senior to equity, junior to bank debt, equity-linked
- **Distressed Debt**
  - Larger company restructuring, restarting good businesses

* ARMB's strategy targets are governed by the Investment Policy Guidelines and the Annual Tactical Plan

* For distressed debt and mezzanine, the tactical plan takes into account other ARMB investment activity in this strategy

How Private Equity Works

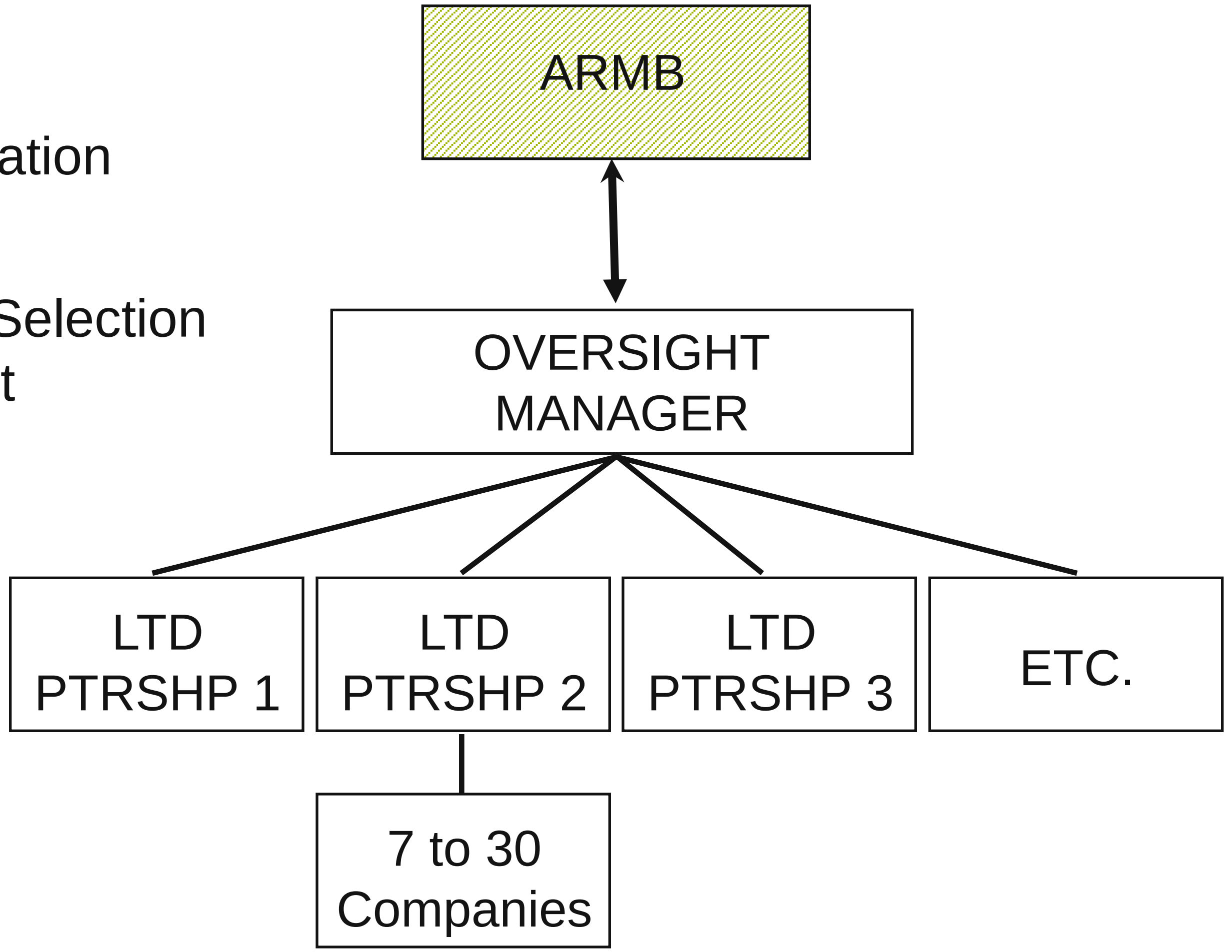
Private Equity Partnerships Program Structure

Policy
Strategic Planning
Performance Evaluation

Proactive Security Selection
Active Management
Reporting

Mini-Conglomerate
(Security)

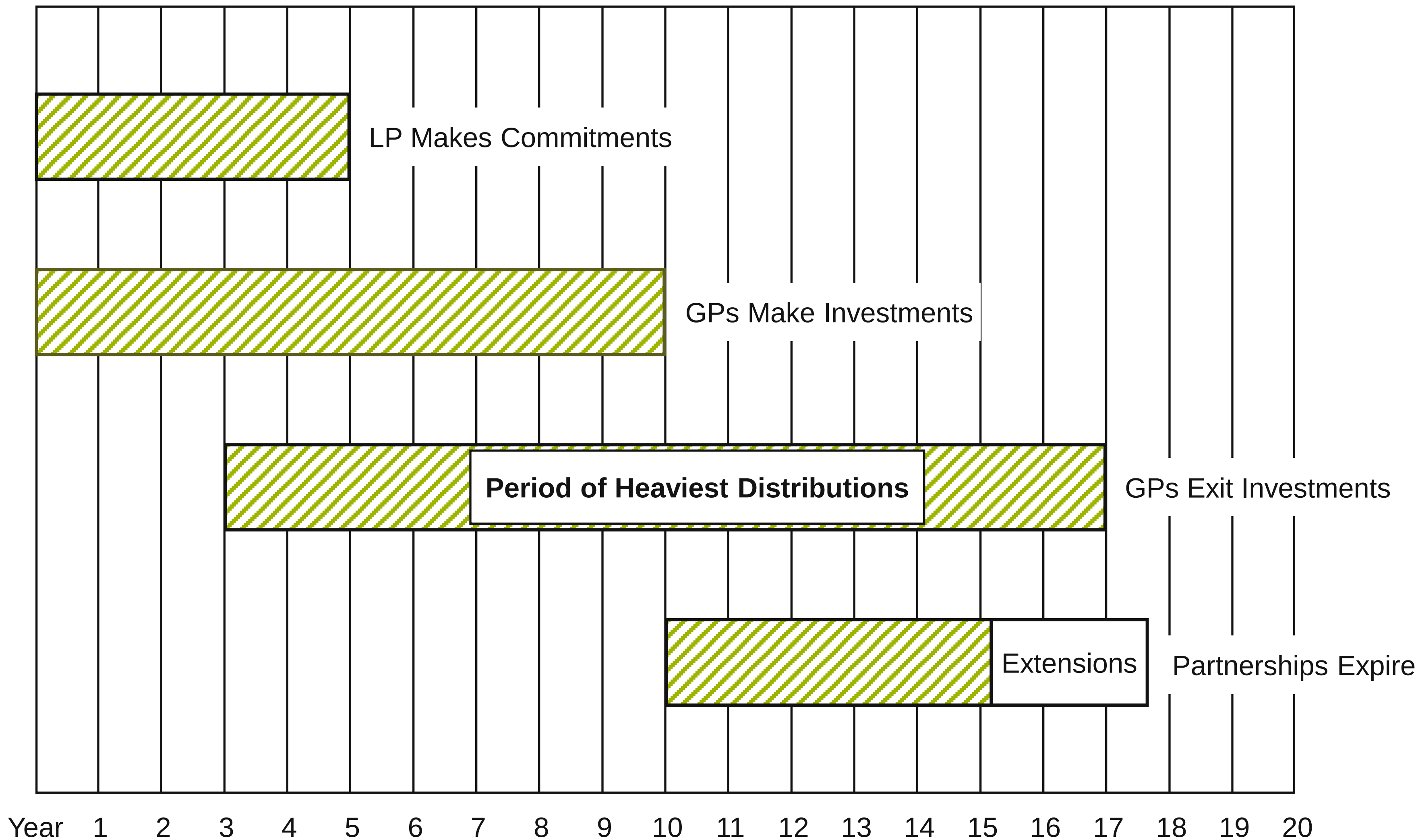
Divisions



How Private Equity Works

A Private Equity Investment Program Requires a Long-Term Horizon

Source: *The Private Equity Analyst*



Nobel & Ignoble Finance

Disclosure/Disclaimer

Dr. Jennings is Presenting in an
Exclusively Private Capacity

Nobel Prize

- Established by will in 1895
- Physics, chemistry, medicine, literature, peace (& economic sciences)
- Nobel Week

2013 Economics Prize

- Eugene Fama
- Lars Hansen
- Robert Shiller

- Efficient Markets
- GMM econometrics
- Inefficient Markets

This year's results are often framed as...

Photo from Commonfund

Instead, we'll focus on

- 2 of the 3 winners
- Some of their OTHER contributions
- Some lessons from the Nobel Foundation

Photo from Commonfund

Eugene Fama

- Key Chicago advocate for market efficiency
- Dimensional Fund Advisors
- Doktorgrossvater

Factor Investing

- Fama-French 3-factor model
  - Market effect
  - Small-cap effect
  - Value effect
- Discerning if alpha is truly alpha
- An approach to investing

Robert Shiller

- Yale professor argues prices are far too volatile for efficiency
- “Irrational exuberance”
- Case-Shiller housing indices
- CAPE

Case-Shiller Index

- Monthly price index for housing
- Repeat-sales index

CAPE

- Cyclically-adjusted price earnings ratio
- Today’s price to 10-year earnings

Lessons from Foundation Finance

- Beware “safe investments”
- Watch your expenses…lower expenses are the purest & best alpha available
- Liability-driven investing, systems thinking, & double hedging

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT:	Frontier Markets Manager Due Diligence Everest Capital	ACTION:	X
DATE:	December 6, 2013	INFORMATION:	

BACKGROUND

During the 2013 Alaska Retirement Management Board (ARMB) Education Conference, the Board was presented an Overview of Frontier Markets by Marko Dimitrijević, Founder and CIO of Everest Capital LLC (Everest). Mr. Dimitrijević indicated that frontier markets present an opportunity in global investing very similar to conditions in emerging markets twenty years ago. Several key attributes of frontier markets are high growth prospects, strong fundamentals, favorable demographics, an opportunity for diversification, and the view that frontier markets are underrepresented in institutional investing. Mr. Dimitrijević's presentation was followed by a joint question and answer session between Mr. Dimitrijević and Stephen Hadley of RiceHadleyGates. RiceHadleyGates consults with businesses to aid them in the public policy challenges as they look to expand internationally.

STATUS:

Everest was founded in 1990 by Marko Dimitrijević. Everest currently has offices in Miami, Florida and Singapore managing $1.8 billion for institutional and individual investors globally. Everest employs 57 people including 26 investment, research, risk management and trading professionals. The investment team members average 19 years of industry experience and more than 11 years with Everest.

Everest's investment process combines top-down thematic and bottom-up fundamental inputs. Top-down factors include both macro as well as regional economic, political, and social factors. Bottom-up fundamental research includes analyzing industries, companies, and commodities.

Everest employs a traditional (long only) Frontier Market Equity strategy and The Frontier Market strategy which is long/short (long bias) with flexibility to utilize leverage to invest opportunistically in currencies, commodities, and fixed income.

RECOMMENDATION:

The Alaska Retirement Management Board authorize Callan to conduct due diligence on Everest Capital LLC.

Alaska Retirement Management Board
2014 Meeting Calendar

February 5 – Wednesday	Committee Meetings: Audit Legislative
February 6-7 Thursday-Friday Juneau	*Review Capital Market Assumptions *Manager Presentations
April 23 – Wednesday	Committee Meetings: Legislative
April 24-25 Thursday-Friday Anchorage	*Adopt Asset Allocation *Performance Measurement – 4th Quarter *Buck Consulting Actuary Report *GRS Actuary Certification *Review Private Equity Annual Plan *Manager Presentations
June 25 – Wednesday	Committee Meetings: Audit
June 26-27 Thursday-Friday Anchorage	*Final Actuary Report/Adopt Valuation/Contribution Rates *Performance Measurement – 1st Quarter *Manager Presentations
September 17 – Wednesday	Committee Meetings: Audit Budget Legislative Real Assets Salary Review
September 18-19 Thursday-Friday Fairbanks	*Audit Results/Assets – KPMG *Approve Budget *Performance Measurement – 2nd Quarter *Real Estate Annual Plan *Real Estate Evaluation – Townsend Group *Manager Presentations
October ___	Education Conference
October ___	Audit Committee
December 3 – Wednesday	Committee Meetings: Audit Legislative
December 4-5 Thursday-Friday Anchorage	Audit Report - KPMG Performance Measurement – 3rd Quarter Manager Review (Questionnaire) Private Equity Review *Manager Presentations

ALASKA RETIREMENT MANAGEMENT BOARD
M E M O R A N D U M

To: ARMB Trustees
From: Judy Hall
Date: November 25, 2013
Subject: Financial Disclosures

As required by AS 37.10.230 and Alaska Retirement Management Board policy relating to investment conduct and reporting, trustees and staff must disclose certain financial interests. We are hereby submitting to you a list of disclosures for individual transactions made by trustees and staff.

Name	Position Title	Disclosure Type	Disclosure Date
Victor Djajalie	Investment Officer	Equities	11/5/13
Bob Mitchell	Investment Officer	Equities	10/18/13