

Alaska Retirement Management Board

Agenda
February 25-26, 2010

| Thursday, February 25, 2010 | | | |
|-----------------------------|-------------|---|--|
| 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: December 3-4, 2009 | ARMB December 3-4, 2009 Board Meeting Minutes (draft) |
| VII. | 9:15 | <p>Reports</p> <ol style="list-style-type: none"> 1. Chair Report 2. Committee Reports 3. Director's Report <ol style="list-style-type: none"> A. Membership Statistics/Buck Invoices B. Legislative Update <i>Annette Kreitzer, Commissioner, Dept of Administration</i> 4. Treasury Division Report <i>Patrick Shier, Director, Div of Retirement & Benefits</i> 5. CIO Report, <i>Gary Bader, Chief Investment Officer</i> | <p>DRB Report</p> <p>CIO Report Feb 2010</p> |
| | 9:30-9:50 | <p>6. Fund Financial Report <i>Pamela Leary, State Comptroller, DOR, Treasury</i> <i>Pat Shier, Director, DRB</i></p> | Fund Financial |
| | 9:55-10:25 | <p>7. Buy-Write Strategy Analysis <i>Michael O'Leary, Callan Associates, Inc.</i></p> | Callan Buy-Write |
| | 10:25 | BREAK - 10 Minutes | |
| | 10:35-11:05 | <p>8. Crestline Investors <i>Doug Bratton and Caroline Cooley</i></p> | Crestline Presentation |
| | 11:10-11:40 | <p>9. Mariner Investment Group <i>Dan Sullivan</i></p> | Mariner-Arctic Bear Fund |
| | 11:40-12:00 | <p>10. Investment Actions</p> <ol style="list-style-type: none"> A. Convertible Guidelines Resolution 2010-01 B. Equity Guidelines Revision Resolution 2010-02 <p><i>Gary Bader, Chief Investment Officer</i></p> | Investment Actions |
| | 12:00-1:15 | LUNCH - 12:00 - 1:15 pm | |
| | 1:15-1:45 | <p>11. Update-Earnings Assumption Presentation <i>Dave Slishinsky, Buck Consultants</i></p> | Buck-022510 |
| | 1:45-3:15 | <p>12. Capital Markets Assumptions <i>Michael O'Leary, Callan Associates, Inc.</i></p> | 2010 Capital Markets ARMB |
| | 3:15 | BREAK - 10 Minutes | |
| | 3:25-3:55 | <p>13. Relational Investors <i>David Batchelder, Frank Hurst, Jay Winship and John Sullivan</i></p> | Relational |

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| | 4:00-4:45 | 14. Commodities <i>Michael O'Leary, Callan Associates, Inc.</i> Action: <i>Gary Bader, Chief Investment Officer</i> | Callan commodities Action - Board - Commodities Search |
| | 4:45-5:05 | 15. U.S. Treasuries vs. Broad Domestic Bonds <i>Bob Mitchell, State Investment Officer</i> Action: Resolutions 2010-03 <i>Gary Bader, Chief Investment Officer</i> | The Case for a Treasury Index Action-Res 2010-03 US Treasury Mandate-Guidelines |
| | | <i>End of Meeting Day - Recess</i> | |
| | | Friday, February 26, 2010 | |
| | 9:00 am | Call to Order | |
| | 9:00-9:20 | 16. The Role of International Small Cap <i>Michael O'Leary, Callan Associates, Inc.</i> Action: <i>Gary Bader, Chief Investment Officer</i> | Callan Why Intl Small Cap Action - Int'l Small Cap Search |
| | 9:25-9:55 | 17. Capital Guardian - Emerging Markets <i>Paula Pretlow and Victor Kohn</i> | Cap GuardianPortfolio Review |
| | 10:00-10:10 | <i>BREAK - 10 Minutes</i> | |
| VIII. | 10:10 | Unfinished Business 1. Disclosure Report, <i>Judy Hall, Liaison Officer</i> 2. Meeting Schedule, <i>Judy Hall, Liaison Officer</i> 3. Legal Report, <i>Rob Johnson, Legal Counsel</i> | Disclosures021210 2010 ARMB Meeting Schedule |
| IX. X. XI. XII. XIII. XIV. XV. | | New Business Other Matters to Properly Come Before the Board Public/Member Comments Investment Advisory Council Comments Trustee Comments Future Agenda Items 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 of Meeting
Kenai/Denali Room
Anchorage Marriott Hotel
820 W. 7th Avenue, Anchorage, Alaska

**MINUTES OF
December 3-4, 2009**

Thursday, December 3, 2009

CALL TO ORDER

VICE CHAIR SAM TRIVETTE assumed the role of Chair in the absence of Chair Gail Schubert and called the meeting of the Alaska Retirement Management Board (ARMB) to order at 9:00 a.m.

ROLL CALL

ARMB Board Members Present

Gail Schubert, *Chair* (arrived at 1:23 p.m.)
Sam Trivette, *Vice Chair*
Gayle Harbo, *Secretary*
Kristin Erchinger
Commissioner Annette Kreitzer
Martin Pihl
Tom Richards

ARMB Board Members Absent

Commissioner Patrick Galvin (on vacation)
Mike Williams

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

Investment Advisory Council Members Present

Dr. William Jennings
Dr. Jerrold Mitchell
George Wilson

Consultants Present

Robert Johnson, outside legal counsel
Michael O'Leary, Callan Associates, Inc.

Department of Revenue Staff Present

Jerry Burnett, Deputy Commissioner
Gary M. Bader, Chief Investment Officer
Pamela Green, State Comptroller
Bob Mitchell, Senior Investment Officer
Zachary Hanna, State Investment Officer
Steve Sikes, State Investment Officer
Scott Jones, Assistant State Comptroller
Judy Hall, Liaison Officer

Department of Administration Staff Present

Patrick Shier, Director, Division of Retirement and Benefits

Invited Participants and Others Present

Mike Barnhill, Department of Law
David Slishinsky and Michelle DeLange, Buck Consultants, Inc.
Mike Hayhurst and Corinne Fiedler, KPMG
David Wakefield and Todd Rittenhouse, Mondrian Investment Partners
Janet Becker-Wold and Gary Robertson, Callan Associates, Inc.
Ray Edelman, Todd Hawthorne, and Melody McDonald, RCM
Jeffrey Conrad and Stephen Kenny, Hancock Agricultural Investment Group
James McCandless and Brian Webb, UBS AgriVest, LLC
Chris Ryder and Paula Pretlow, Capital Guardian
Lee Wanie and Marco Merz, BlackRock, Inc.
Jay Dulaney, Retired Public Employees of Alaska (RPEA)
Jeff Pantages, Chris Brechbuhler, and Julie Duhrsen, Alaska Permanent Capital Management
Peggy Wilcox, Alaska Public Employees of Alaska (APEA)

PUBLIC MEETING NOTICE

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

APPROVAL OF AGENDA

MR. BADER changed the firm name on report #13 from Barclay Global Investors to BlackRock, Inc., to reflect the recent name change. He also noted that the Legal Report toward the end of the agenda would include an executive session.

MR. PIHL suggested moving the Election of Officers from the beginning of the meeting to the afternoon of the first day (#13-B) when more board members would be present.

MS. HARBO moved to approve the agenda as amended. MR. RICHARDS seconded. The agenda was approved without objection.

PUBLIC/MEMBER PARTICIPATION, COMMUNICATIONS AND APPEARANCES

There was no one present or on line who wished to speak to the board.

APPROVAL OF MINUTES - October 1-2, 2009

MS. HARBO made a correction to the first line of page 12, where it should have said "...the ARMB Real Estate Committee heard the full presentation..." instead of the Audit Committee.

MS. HARBO moved to approve the minutes of the October 1-2, 2009 meeting as amended. MS. ERCHINGER seconded. The motion passed unanimously.

REPORTS

1. Chair Report

Chair Gail Schubert was absent in the morning and this report was deferred until her arrival.

2. Committee Reports

2(a). Audit Committee

Committee chair MARTIN PIHL reported that the committee met with independent auditor KPMG on September 30 and reviewed the Treasury Division audit. The committee met again on December 2 after KPMG had completed the audits of the Department of Administration and the Treasury Division. KPMG was scheduled to give a report to the Board tomorrow. MR. PIHL complimented KPMG managing partner Mike Hayhurst for a comprehensive discussion of the audit, especially focusing on sensitive areas, and in answering questions. The audit results were clean, and there were no adjustments. Staff of both the Department of Administration and the Treasury Division are to be complimented for the improved work-up they did and for the timely assistance to complete the audit.

MR. PIHL reported on the committee's due diligence visit with the ARMB custodian, State Street Bank, following the board's education conference in October. State Street mentioned that the ARMB committee was probably the first public pension fund group that had visited, which he took as a compliment to Alaska. It was informative to learn the extensive scope of State Street's custodial services. The committee was impressed with the bank's commitment to security and excellence. He thanked state comptroller Pamela Green for coordinating that visit.

3. Retirement & Benefits Division Report

COMMISSIONER KREITZER reported that the governor would be rolling out the fiscal year 2011 budget around December 14-15. She said she enjoyed the education conference in New York City, and several of the sessions were directly on point for her. She felt the interaction between the Alaska Permanent Fund board of trustees, the ARMB trustees, and the University of Alaska representatives was very helpful. She expressed appreciation for the work that went into organizing the conference.

3(a). Membership Statistics

PATRICK SHIER, Director of the Division of Retirement and Benefits (DRB), drew attention to the quarterly and cumulative membership statistics for the Public Employees' Retirement System (PERS) and the Teachers' Retirement System (TRS). *[These reports are on file at the ARMB office.]* He noted the negative numbers on the quarterly TRS report under the "terminated" column and said it is a feature of school districts not renewing teacher contracts in the spring and then deciding that they can afford to hire teachers back.

MR. SHIER reported that DRB has been dispatching people from the benefits unit to hold regular training on behalf of PERS and TRS employers at Anchorage, Fairbanks, Juneau, and remote communities. The training has been very well attended. People are not only happy to have a retirement counselor but also a health plan expert in the room. DRB has been holding benefit fairs on weekends to match the schedule of the membership, and those have been well attended.

MR. SHIER stated that the repricing with State Street Bank, assisted by Great-West (the third party administrator), DRB and the Treasury Division, went off without a hitch and drew few phone inquiries from plan members. *[The Board received a detailed report on a fund manager trading error and a State Street custodial error at the October 1-2, 2009 meeting.]*

MR. SHIER mentioned that DRB continues to monitor the national health care debate, and they have not seen anything yet that would indicate how the legislation would treat retiree health care. They have concerns that it may create a tax burden if the trust funds are considered an employer for the purposes of national health care reform. DRB will continue to monitor that and make recommendations for action as it becomes appropriate.

MR. RICHARDS asked if DRB calculated what the annual premium would be for retired PERS or TRS members. MR. SHIER said DRB calculates that number and uses it as a method of arriving at some of the actuarial predictions for the future, as well as for billing retired individuals who are not eligible for paid health care coverage. But they no longer use it as a method of pulling a per capita figure out of the retirement funds and putting the money in the retiree health fund. Claims are now paid directly out of the 115 health trust. However, if DRB were to use the annual premium number (close to \$12,000), and an individual retiree paid the premium to have themselves covered, the retiree would be in

taxable territory under a proposed provision for national health care reform. Having to calculate that number exactly would create some fiscal complications.

Board legal counsel ROB JOHNSON asked if any organized groups were advocating issues in Washington, D.C. on behalf of public pensions or if public pensions were being ignored in the debate. MR. SHIER said his sense from certain groups and from the state's actuary was that groups were advocating to leave public pensions alone.

COMMISSIONER KREITZER stated that the Department of Administration has been providing information to the Alaska congressional delegation through the governor's D.C. office to ensure that they know what the impact would be should an action like that happen.

MR. SHIER told trustees that DRB representatives have been attending meetings with retiree representative groups, as travel conditions permit. It is a good venue to talk about health plan design and use.

MR. SHIER reported that two days ago DRB completed the end of several hundred extension accounts in the Supplemental Benefit Plan (SBS) and consolidated participants' accounts under different employers. It was considered a misuse for participants to be able to move to a new SBS-participating employer, open a new SBS account, and then withdraw funds from an existing SBS account after the 60-day waiting period. Those funds are for retirement and should remain locked away for that purpose, somewhat like Social Security. A second part is that Great-West is now directly handling the administration of all distributions out of the defined contribution products for people who decide to terminate and take their money. DRB must approve the distributions. This is expected to be the last hurdle in the way of on-line Deferred Compensation Plan enrollment.

MR. SHIER stated that the division hired Theresa Kesey as the new chief financial officer. Ms. Kesey has been with the division for a number of years and was an assistant to Kevin Worley.

4. Treasury Division Report

Department of Revenue Deputy Commissioner JERRY BURNETT said he had nothing to report and would yield his time to the chief investment officer report.

5. Chief Investment Officer Report

MICHAEL O'LEARY of Callan Associates, Inc. introduced JANET BECKER-WOLD, his team mate on the ARMB assignment, who was scheduled to make a presentation on international small cap equities later in the day.

Chief Investment Officer GARY BADER reported on a list of items, as follows:

- The protest of the Board's decision to award a contract for services to conduct an independent audit of state performance consultants and evaluation of investment policies has been appealed. There was also a challenge to Mr. Bader's authority to

write the Decision on Protest, and that is one of the items on appeal. A copy of the Decision on Protest 09-0020 was included in the board packet.

- There were several reports on rebalancing actions that took place within the retirement systems since the last meeting. These were done to stay at the asset allocations for the retirement funds.
- There were also two reports on rebalancing across the pension plans and health plans. The objective was to get at the strategic asset allocation.
- There were four cancellations of directions to real estate fund managers to send the dividends back to the retirement funds, as opposed to reinvesting the dividends. The asset allocation for real estate is slightly below target, so staff believes it is appropriate to rescind the direction to repatriate the dividends.
- Notifications of making \$25 million allocations to Lazard Emerging Markets and Capital Guardian Emerging Markets, with the goal of getting back to the asset allocation in international equities.
- Communication from a Deferred Compensation Plan participant who is unhappy with the menu of investment options in the defined contribution plans. State investment officer Ryan Bigelow's response was also provided, inviting the participant to contact staff again with specific recommendations so those options could be reviewed. Another participant wrote to request safer investment options, illustrating the interest in expanding the menu of investment opportunities available to participants.
- Staff requested that the board remove Brandes international equities and Mariner absolute return from the watch list because they no longer meet the criteria for being on the watch list. Staff also requested removing State Street Global Advisors international equity because the board terminated that mandate at the April meeting.

MS. HARBO moved that the board remove Brandes international equities and Mariner absolute return from the watch list because they no longer meet the criteria for being on the watch list, and remove State Street Global Advisors international equity because they were terminated. MR. RICHARDS seconded.

The motion passed without objection, 6-0.

- State investment officer Ryan Bigelow has been given additional responsibilities and will now be the primary contact for the defined contribution plans and have a role in equity management. This will more evenly divide the responsibilities which were formerly all under state investment officer Zachary Hanna. Also, assistant state investment officer Bree Simpson has resigned and will be returning to school. State investment officer Andy Wink is transferring from the fixed income unit to the real estate unit to work with Mr. Sikes. The Treasury Division is recruiting for an assistant investment officer in the fixed income unit.
- The board's policy for equity investments requires that stocks have to be listed on a recognized stock exchange. Sometimes when a company is dissolved or in a bankruptcy proceeding securities are issued that have little or no value, and the stocks are virtually not going to trade. The retirement fund is in technical violation of the equity

policy by holding these stocks, but staff believes the stocks have some option value even as they are held at zero value in the portfolio. The compliance unit has reported these stocks as a compliance violation. Staff requested that the board exempt these stocks from a violation of the policy until they could present a revised policy at the next board meeting.

MR. PIHL moved that the Alaska Retirement Management Board exempt from the equity investment policy guidelines stocks not listed on a recognized stock exchange that are issued when a company dissolves or as part of a bankruptcy proceeding. MS. HARBO seconded.

The motion passed without objection, 6-0.

MR. BADER reported that he wrote a letter to the international investment managers to ask if they were taking into account the potential for a movement to divest portfolios of companies doing business in Iran. There was no effort to coerce managers to do so; it was just an inquiry to find out if they had considered it. Manager responses so far are that these securities are a small percentage of their portfolios and most of them have considered the potential of divesting these companies.

MS. ERCHINGER inquired if the person who appealed the decision on RFP 09-0020 had done so to the commissioner of the Department of Administration. COMMISSIONER KREITZER said the person appealed to the office of the commissioner of the Department of Administration. She noted that she had asked at the October meeting, when the board authorized staff to publish a Notice of Intent to award the contract, whether the decision could be appealed to the DOA commissioner. She had considered excusing herself from the discussion and vote at that time. When it was clarified later, and an appeal was received, she recused herself and delegated the responsibility for reviewing the appeal to Deputy Commissioner Kevin Brooks. She has taken steps to ensure that she has no knowledge of the appeal and protest at this point.

MS. ERCHINGER referred to the November 4, 2009 letter to State Street and questioned why the rebalancing of the TRS retirement health pool and the TRS pension pool did not balance to zero, as she would expect. MR. BADER replied that he would check on it and respond later.

6. Mondrian Investment Partners - International Fixed Income

DAVID WAKEFIELD, Senior Portfolio Manager, and TODD RITTENHOUSE, Senior Vice President of client services, appeared before the board to give a report on the global fixed income portfolio that Mondrian manages for the Alaska Retirement Management Board. *[A copy of the presentation slides is on file at the ARMB office.]*

MR. RITTENHOUSE spoke briefly on the organization, its investment products, and its client relationships and assets under management. He said Mondrian is debt free and has

not laid off a single person during the market down turn. New business generation has been very solid across the board, and they will be hiring this year. There have been no changes to the global fixed income team.

MR. WAKEFIELD went directly to the performance record for the ARMB portfolio valued at \$205 million. Year to date the fund was up 11.5%, which came from two components. The non-US government bond benchmark itself was up 6.8%, helped by a solid rise in foreign currencies or a fallen US dollar over the past year. Mondrian added 4.3% return year to date on top of the benchmark return. At the height of the global financial crisis, around the fourth quarter of 2008 and the first quarter of 2009, they made a number of changes, including making a modest allocation to corporate bonds. They added to a number of non-core sovereign markets — Italy, Ireland, Australia, Mexico, Poland — where they thought markets sold off indiscriminately because of general attitudes toward risk. If anything, the fundamentals of those markets, and in particular the inflation outlook, improved, so Mondrian saw value. With recovery stories gathering pace and risk aversion largely going away, those non-core markets have performed exceptionally well, which is what lies behind the 4.3% outperformance so far in 2009. Mondrian was able to pick up value in the financial crisis by sticking to their disciplines, which is often the case in times of turmoil. Relative to their peer group, Mondrian's strong performance over the past year has made them top decile over the longer-term periods, and they are top quartile in the current year up to September.

In terms of global inflation trends, MR. WAKEFIELD said there is a lot of polarity in the marketplace between those who think there will be deflation in time and those who think there will be certain inflation with all the quantitative easing and governments priming the economies. Mondrian has a two-year horizon for prospective real yields, and they do not see the developed markets and most emerging markets having an inflation problem over the next two years. They have a quantitative approach to forecasting inflation, and unequivocally the factors that go into the model are pointing to low inflation. Spare capacity is really a feature around the world, and economies have just started to grow again. Mondrian sees that spare capacity remaining potentially for a few years. They are still fairly negative on the outlook for the world economy — not another recession on the back of the one just experienced, but they believe that the recovery will be stop-start and fairly fitful. The key drivers of GDP are consumer spending and investment, making up 80% of GDP in the U.S. and many other countries. Mondrian thinks that the factors driving those are not positive: wages, employment, house prices, and even financial wealth are off their peaks of two years ago. Credit constraints have eased a little bit but are still quite tight by historical standards. There are good reasons to be cautious still about the world economy. If above-trend growth does not happen, that spare capacity will not be used up. So this could be a feature for a good few years yet, and that is very much the story from their economic models.

Looking forward, MR. WAKEFIELD reviewed the prospective real yields by country, saying they want to overweight markets that have a high prospective real yield. He pointed out

that the portfolio has no currency hedges. They see value in Australia where the central bank there has been raising interest rates but Mondrian sees a fairly benign outlook for inflation there. About a third of Australia's economy is very open to international trade (by comparison the U.S. is about 10%). Australia has not had a recession, although growth has been below trend over the last year, and they have spare capacity that will keep inflation down. While not a key point, Australia will benefit from a secular rise in commodity prices seen over the past year and that is expected to continue.

MR. WAKEFIELD stated that Mexico is another market where Mondrian sees value, with a prospective real yield of over 4%, higher than most other countries. Direct trade links with the United States are very pertinent, and Mexico's economy has been in recession. Worker remittances from the U.S., which have a direct impact on the economy, are down over 20%. So a weak outlook for the economy and a benign outlook for inflation. Poland is another country where Mondrian sees value, although they have pared back from an 8% allocation there to a 4% allocation. Poland, like everywhere else, has the situation of spare capacity. However, unique to Poland, about 10% of the labor force had migrated out of Poland to find work, which led to labor shortages and higher wages. With lower job opportunities in the world economy, some Poles have gone back to Poland to work and wages have fallen. Unit labor cost is a key driver of inflation, so that is one specific factor unique to Poland. Mondrian took profits from Poland over the past year, but they still see some value. They redeployed those profits to Sweden. Sweden has a good prospective real yield for a very developed market. Sweden has a very open economy, and the collapse in world trade hit that country hard. Inflation is declining, and Mondrian sees that continuing, supporting the prospective real yield of 2.5%. Although not a key criteria for Mondrian, it is worthy of note that Sweden, Australia, Mexico and Poland all have good debt situations at the moment relative to a number of the other OECD countries, like the U.S. and the U.K.

MR. O'LEARY asked for confirmation that Ireland was the largest debtor nation in Europe, or in some respects the world. MR. WAKEFIELD said Ireland was one of the biggest debtor nations in the Euro zone. That is relevant because Mondrian owns Irish bonds, which have benefited the portfolio despite the rise in debt over the past year. While the debt situation has picked up sharply in Ireland, the risk of a default is still negligible because it started from an extremely low debt situation and has increased only to the Euro zone average.

MR. WAKEFIELD stated that Mondrian sees value in the U.K. The prospective real yield is so-so at around 2%, but they sometimes overlay that with a qualitative judgment or a quantitative underpinning in terms of currency. U.K. sterling has been weak following the global financial crisis and particularly weak versus the euro currency. Part of Mondrian's overweight in the U.K. is ostensibly a currency situation, much like they had a position in Japan a couple of years ago when the prospective real yield was so-so but the yen was extremely undervalued. The Japan position came to fruition, so sometimes if there is a particularly strong signal on the currency Mondrian cannot ignore that.

MR. WAKEFIELD mentioned that Mondrian does not see value in the euro zone and so are underweight there by over 20%. That is partly because of the highly valued euro and partly because of the low prospective real yield. The U.S. has had a very flexible response to the global financial crisis, and unit labor costs are falling at their fastest annual rate ever — not good from a growth perspective but good from an inflation perspective. The euro zone, unfortunately and predictably, has had a fairly sluggish and inflexible response to the global financial crisis. In sharp contrast, unit labor costs in the euro zone — countries like Germany, France, and the key markets — are actually rising, and that is a key driver of inflation. That is depressing the prospective real yield, so on a medium-term perspective Mondrian does not see value in bonds there. Plus, the currency is getting very much on the overvalued side.

JANET BECKER-WOLD asked what Mondrian's outlook was for the yen, given the euro's dramatic move relative to the dollar recently. MR. WAKEFIELD referred to a chart of prospective real yields of bond markets that take into account the exchange rates by relative inflation. He pointed out that although the yen has been a beneficiary of the global financial crisis and has risen, it has actually risen from an undervalued position only now to around fair value. So, surprisingly, it is not overvalued versus the U.S. dollar. The euro is close to being extremely overvalued versus the U.S. dollar. U.K. sterling is fair value versus the U.S. dollar. It might surprise people that given the secular fall in the U.S. dollar almost uninterrupted since February 2002 (barring a minor rally in 2005), the U.S. dollar is still not extremely undervalued against the broad range of currencies. It is fair value versus the yen and fair value versus U.K. sterling, but undervalued versus the euro currency. Mondrian is broadly neutral to the Japanese market — the prospective real yield is about average, and the currency is about fair value. Nevertheless, Japan is still quite a big absolute weight in the portfolio because it is a big weight in the index.

MR. WAKEFIELD drew attention to a list of individual securities in the international fixed income portfolio. He stated that the bonds Mondrian buys for the ARMB portfolio are sovereign bonds or the government equivalent. However, Mondrian still sees value in some corporate bonds, particularly the European banks. In aggregate, corporate bond spreads have now fallen back in line with their long-run averages and are back to fair value from where they were. It would not be a surprise if Mondrian started to pare back those corporate positions in the near future if the recovery stories continue to gather pace. Corporate bonds is an area that has outperformed sovereigns this year and benefited the portfolio, and Mondrian still sees more to play for within corporates to an extent.

MR. O'LEARY asked Mr. Wakefield to address two issues: the long-term outlook for the dollar, and concern about the size and direction of deficits. He mentioned that Mr. Wakefield had indicated that Mondrian was not worried about inflation in the next two years, and he wondered if that was really the correct time frame given the dollar and deficits or if those were not factors to be worried about.

MR. WAKEFIELD stated that Mondrian is not concerned about the long-term outlook for the U.S. dollar. Some of the factors that have driven the U.S. dollar lower, such as the current account and imbalances in the U.S. economy, have gone away. The current account, which is very pertinent for the U.S. dollar, and something that Mondrian had real concerns about, is now very much on a sustainable path. They do not feel that the U.S. dollar will lose its reserve currency status any time soon. The U.S. dollar has been weak this year because of global attitudes to risk, and perhaps more risky currencies elsewhere have benefited, like the Australian dollar. Mondrian does not see a viable alternative to the U.S. dollar as reserve currency. It certainly will not be the Chinese currency: it is not fully tradable, and it is still an emerging market. It will not be the yen: the yen has had decades to prove itself. Mondrian does not believe it will be the euro currency: the euro zone is a very disparate mix of economies, and more economies are going to join and make policy management there even more difficult. The only way the U.S. dollar would lose its luster long term is if it lost that reserve currency status, and Mondrian does not see that.

In terms of the inflation horizon that Mondrian looks at, MR. WAKEFIELD said that if they had a five- or 10-year forecast for inflation he thought it would inevitably become very stylized and not provide a huge amount of information. It is clear that financial market participants have a much shorter view. Mondrian has a very open mind on the outlook for inflation beyond two years. They believe there are fairly equally balanced risks of deflation and a return to a rise in inflation after two years. The slack in economies, which deficits are a part of, could well have a disinflationary force for many, many years to come. But equally, there are up-side risks in terms of the potential output in the U.S. and elsewhere being eroded by the deficits, falling labor supply, higher unemployment, and low investment. That could make economies more inflation prone for a given level of GDP. Also, there could be higher food costs and a secular rise in oil prices. So Mondrian has a very open mind in terms of equally balanced risks beyond the two years. The key thing is not so much what deficits and government pump-priming will mean for GDP: if anything, it will be negative for GDP as governments try to wrestle with how to cut those deficits. Everything being equal, that will tend to sit on inflation.

VICE CHAIR TRIVETTE thanked the Mondrian gentlemen for the presentation and remarked that the material about the outlook for the coming year was very helpful. He said he appreciated Mondrian's work for the ARMB.

7. Fund Financial Presentation and Cash Flow Update

State Comptroller PAM GREEN gave the regular financial report as of September 30, 2009 [*financial statements included in the meeting packet*]. She reviewed the changes in value (all increases) for the invested assets of each retirement plan for the month of September and for the fiscal year to date.

Responding to MR. PIHL, MS. GREEN confirmed that the State of Alaska appropriation came in during the quarter (August). MR. SHIER said the total appropriation was \$282,965,000. MR. PIHL said he wanted the board to realize that without the State

appropriations the outflows from the retirement funds probably exceed the contributions on an annual basis.

MS. GREEN displayed graphs of total invested assets, investment income, and asset allocation in the Public Employees' Retirement Trust Fund over the past 12 months. She pointed out that all the asset allocations were within their target bands at September 30. The fixed income allocation was on the low side. The same comments regarding asset allocation pertained to the PERS Retiree Health Care Trust Fund as well.

MS. GREEN displayed graphs of activity in the Teachers' Retirement Trust Fund over the past 12 months and pointed out that income has been increasing in the fund. The asset allocations were within their target bands at September 30, with fixed income on the low side but within the bands. The Teachers' Retiree Health Care Trust Fund also had all asset allocations within the target bands.

The Judicial Retirement Trust Fund and the Retiree Health Care Trust Fund graphs illustrated total invested assets, cumulative investment income, and the actual asset allocation versus the target allocation. MS. GREEN also showed graphs of the Military Retirement Trust Fund investment asset growth, etc., and noted that asset allocation was well within target bands.

MR. RICHARDS asked that since Ms. Green always provided the percentage change in assets for the month verbally if she could add a percentage column on the Schedule of Investment Income and Changes in Invested Assets by Fund. It would save the trustees having to write the percentages in next to each retirement fund. MS. GREEN said she would do that.

MS. GREEN referred to the reporting of funds by manager included in the meeting packet and said the invested assets reported were for all the non-participant directed plans. The reporting did not include SBS and the Deferred Compensation Plan, or the defined contribution retirement plans. She said that all the asset categories increased except for real estate, which had about 6.7% of losses from the June 30 quarter that were now being reflected in the financial statements.

VICE CHAIR TRIVETTE commented that separating the non-participant directed plans reporting made it a lot easier to keep track of, and he appreciated the asset accounting staff doing that.

MR. O'LEARY mentioned that Callan's performance reporting was using preliminary real estate returns through the end of September.

MR. PIHL observed that the Tishman Speyer Real Estate Venture funds showed large losses, and he asked if staff could explain that. VICE CHAIR TRIVETTE indicated that Mr. Sikes would provide comment on that later.

MR. SHIER presented the ARMB financial report supplement to the Treasury Division report, prepared by the Division of Retirement and Benefits. Page 1 showed the cash flows of the various retirement funds for the first three months of the fiscal year, and page 2 was the same information for the month of September.

VICE CHAIR TRIVETTE called a scheduled break at 10:15 a.m. and reconvened the meeting at 10:30 a.m.

8. International Small Cap Equity Presentation

MR. O'LEARY introduced JANET BECKER-WOLD of Callan Associates, Inc. and briefly reviewed her professional background. He said that he hoped to get Ms. Becker-Wold on the ARMB agenda again over the next 12 months to share her thoughts on currency, which is an area that everyone needs to be more aware of. The topic at today's meeting was international small cap equities as a separate allocation, as requested by Mr. Bader.

[A copy of the Callan slide presentation is on file at the ARMB office.]

MS. BECKER-WOLD stated that the weighted median market capitalization of the EAFE Index, which is the benchmark for the ARMB's four active international equity managers, is \$33.6 billion. The weighted median market cap of the EAFE Small Cap Index is \$1.24 billion, which is vastly different. One question might be whether the ARMB is getting any small or mid cap exposure in the existing international equity structure. If trustees look at the characteristics that Callan provides in the supplemental quarterly reports, the international composite of Brandes, Capital Guardian, Lazard and McKinley is only slightly smaller in market cap than the EAFE Index. Looking at the managers individually, Brandes does dip down into some mid cap, but the other managers not so much. So the ARMB is not getting the international small cap exposure through its existing active managers.

MS. BECKER-WOLD listed reasons why the board might want to consider international small cap as a separate allocation within the international structure: (1) there is some performance potential; (2) this is a good area to deploy active risk; and (3) there are some diversification benefits, both for the international equity structure and for the total equity structure. However, implementation issues can counter-weight some of the potential benefits.

MS. BECKER-WOLD showed graphs of large cap versus small cap equity performance for both U.S. and international equities. She noted that there are similar but not coincident performance cycles within both large and small cap. So an investor can get some diversification if they have exposure to both of these markets.

Displaying a graph of cumulative 10-year performance, MS. BECKER-WOLD stated that there is a small cap premium in international small cap equities, just like there is in U.S. small cap. She also explained a risk/reward scatter chart showing that over 10 years international small cap has added a 4% premium over the EAFE Index per year with an

increase in risk of 9%. By contrast, the U.S. small cap has added an annualized premium of about 4.4% over the Russell 1000 Index with a 25% increase in risk. The international small cap appears to have a good tradeoff.

MS. BECKER-WOLD next explored the question of whether to implement an international small cap portfolio actively or passively. Callan data shows that the median active international small cap manager consistently beats the EAFE Small Cap Index. Active small cap management is successful in adding value because the international small cap stocks are under-researched. Also, there is a lot of intra-stock volatility that allows managers to pick stocks among a universe where they can add value.

VICE CHAIR TRIVETTE asked what premium a top quartile small cap international manager could be expected to provide, if the median manager in Callan's database averaged 1.02% excess return per year. MS. BECKER-WOLD said a reasonable return expectation for active international small cap management would be between 100 and 200 basis points net of fees.

MR. O'LEARY pointed out the incredible spread in manager excess returns on the chart — from 8% over the EAFE Small Cap Index return to 10% under the index return. One of the challenges of realizing the average return is to stick around for it, and on a year-to-year basis a manager can have a huge variation from peers and from a benchmark.

MR. PIHL remarked that what worried him was the dramatic downward trend of returns on the graphs since mid-2007. He asked if that was a flight to quality. MS. BECKER-WOLD explained that the decline in active management alpha is one that Callan has seen across a lot of actively managed asset classes. In the international small cap area, she thought it had a lot to do with Morgan Stanley's huge revamp of the indices. For example, the MSCI EAFE Small Cap Index prior to 2007 had half the number of stocks it has now. The more inclusive index may make it harder for managers to beat it. However, there are some fundamental reasons why active managers should be able to continue to beat the index but maybe not at the same magnitude that they were able to before the benchmark reconstruction.

MS. BECKER-WOLD explained a periodic chart of investment returns for a 10-year period ended September 30, 2009. She noted that emerging markets have been the top performer in five of those years, the Russell 2000 Index was the top performer in two of the years, and the EAFE Small Cap Index was the leader in two of the years. The Russell 1000 Index and the EAFE Index were not a top performer in the 10-year period but did appear in second place. It is another reason to think about the way that international small cap equity could potentially diversify the ARMB portfolio's international structure, which already contains a dedicated exposure to emerging markets.

MS. BECKER-WOLD spent some time describing the correlation of international small cap to the S&P 500 and other indices. She offered the conclusion that emerging markets and

small cap would appear to be not only good diversifiers within an international structure but in an equity structure in general, relative to the S&P 500. She also reviewed how sector exposure differs across indices. International small cap brings a different sector mix than the EAFE index, picking up more consumer discretionary stocks and industrials. International small cap stocks tend to be more heavily geared to the local economies, thus they tend to provide better diversification relative to large cap stocks that are often geared to the global economy.

MS. BECKER-WOLD reviewed how the three commonly used international small cap indices are constructed, and said all the indices have been expanded and improved in the last two years. Most of the small cap managers that Callan talks to are not trying to replicate the benchmarks, but the benchmarks are their starting point. As the indices become more inclusive to represent the actual universe in which managers invest, it becomes more difficult for managers to hold stocks outside the benchmark that can create the value added.

Using an efficient frontier graph, MS. BECKER-WOLD provided a risk/return framework for the board to think about how much international small cap equity to add to the portfolio. She pointed out that going from 100% the EAFE Index to 100% the EAFE Small Cap Index moves the risk up significantly. But there is a place where the [efficient frontier] line is relatively vertical, where small cap equity can be added to potentially improve the return of the total international equity portfolio without necessarily increasing the risk.

DR. JENNINGS noted that small cap indices are constructed to be about 15% of the market cap in each country. He asked if there was a mid cap segment that was not represented, and if 15% was another useful benchmark to bring to the table when looking at how much of the portfolio to invest in international small cap.

MS. BECKER-WOLD said the EAFE Small Cap Index has a mid cap gap. The EAFE managers would be more likely to buy larger mid caps than they would be to ever buy small caps. The MSCI has developed an investable or all-cap index and carved out a mid cap component: the bottom 15% is small, the next 15% is mid cap, and the top 70% is large cap.

DR. JENNINGS said that would suggest that a prospective small cap allocation would be filling in for the roughly 30% that active international managers are not doing. He noted that people tend to think of the international equity allocation as global ex-US, so that would also roll in emerging markets as part of the decision-making. He asked how thinking about emerging markets would interact as part of the developed large cap and international small cap.

MS. BECKER-WOLD responded that emerging markets would have been an interesting element to add to the efficient frontier graph of EAFE and EAFE Small Cap. Emerging markets are clearly much more volatile than small cap companies in developed markets.

These small caps tend to be less volatile, and she guessed they would be a little more highly correlated. So a mix of 10% and 10%, or even 15% and 15% if the board wanted to get more aggressive within a structure.

MR. O'LEARY related that a client has two international small cap managers, one that includes emerging markets and one that does not. The management style also has to be consistent with the marketplace. Callan can provide statistics of the distribution of emerging market securities by capitalization, and a decent portion is small cap. Some managers do not want to take a risk of emerging markets and a risk of small companies, because, given the volatility, there is exponentially a management challenge.

DR. JENNINGS said he was just thinking of all three of those asset classes together and not advocating for emerging markets small cap equity. MS. BECKER-WOLD agreed there was a good case for having exposure to all three if a fund has enough assets to sufficiently diversify them. She has a client that has had dedicated small cap for a very long time. They are looking at what would be the appropriate weights to both small cap and emerging markets within their international structure because they think that both are good places for returns, albeit at higher volatility.

MR. BADER stated that staff would put it on the to-do list to run simulations using the indices of all three asset classes, in order to respond to Dr. Jennings' question at the next meeting.

MS. BECKER-WOLD moved on to review the implementation challenges of international small cap. Callan's database includes 98 international small cap strategies, although if the ARMB were to look at hiring, the number would be substantially smaller. There can be capacity problems because very good managers fill up and close their products. As with some other small cap strategies in the U.S., international small cap managers found themselves with available capacity recently and have re-opened some of their products. It is just a smaller universe than an investor would normally be looking at in the developed markets. Finally, it is difficult for a manager to stay in the top 30th or 40th percentile because their ranking moves around. So international small cap is an area where the board would want to have more than one manager to help dampen some of the manager-specific risk.

DR. MITCHELL inquired if the managers that Callan might recommend in a search would be new names that only manage international small cap equities or if they would be international small cap products of larger firms. MS. BECKER-WOLD said they would be both.

In conclusion, MS. BECKER-WOLD stated that Callan believes it makes sense for plans that have sufficient assets to diversify to pursue international small cap. The ARMB has exposure to U.S. small cap equity with the same return premium. The board could structure the portfolio to take advantage of the diversification benefits of international small

cap without duly increasing the volatility. It is a good area to explore active management in order to capture the higher return potential. The negative aspects are greater liquidity risk, fees tend to be higher, and looked at in isolation small cap stocks can be extremely volatile. However, some of that volatility can be mitigated if the portfolio is structured appropriately.

VICE CHAIR TRIVETTE said he wanted to see a return chart for some of the top international small cap equity managers to see how their returns bounced around in the last few years. He was also curious to see if any of those were managers with whom the ARMB already had a relationship.

9. Buy-Write Strategy - RCM

MR. BADER noted that the education conference had a presentation on this area, and he invited RCM to talk to the board about their strategy that is not identical but has many common elements to what trustees heard about at the conference.

MELODY McDONALD, RAY EDELMAN, and TODD HAWTHORNE of RCM Capital Management joined the meeting to speak on the RCM Redwood product, a strategy of buying stocks and writing in the money calls, commonly referred to as an equity buy-write strategy. *[A copy of the presentation slides is on file at the ARMB office.]* MS. McDONALD mentioned that RCM has been doing a lot of listening over the last year, and one thing they came away with is that clients are looking for more stable performance and more protection on the down side. They have been doing the buy-write strategy for a year with seed money, and they are beginning to talk to some clients about it now.

MR. EDELMAN stated that for nearly 40 years RCM has used their own internal fundamental research effort to generate and exploit what they call an information advantage to drive superior and consistent returns for their clients. They recognized that clients were moving beyond long-only strategies in the last decade, and they wanted to evolve into new products that used their internal research foundation. He said the RCM Redwood product is a team effort headed by Todd Hawthorne and himself.

MR. HAWTHORNE explained that RCM decided to seek the performance with stability that clients were asking for by setting three distinct goals: (1) to deliver an absolute return of between 8% and 12% over a full market cycle; (2) to deliver those returns with significantly lower volatility - half that of the S&P 500 Index; and (3) to deliver a high amount of downside protection so clients can hold onto returns over time. The mechanism RCM chose to achieve those goals was an equity buy-write strategy. Simply, it is buying stocks and selling in-the-money calls against those stocks to create a buy-write. The approach allows RCM to leverage their two core competencies: the dual research platform, and the equity derivatives expertise.

MR. HAWTHORNE stated that academic studies of buy-write strategies say that (1) the returns are equal to, or in many cases better than, the indices upon which they are compared; (2) that those returns are achieved at a lower volatility of returns; and (3) they

provide a small amount of down side protection. RCM improved upon that formula by applying market intelligence from their dual research platform to optimize the risk-adjusted returns. The research platform analyzes the positive and negative stock drivers for each stock, they quantify its current and future valuation, and they define its potential down-side volatility. They then roll that all up into a stock's intrinsic value, or the level at which they believe the stock has a lot of valuation support. They use equity derivatives to customize a payout profile that gives RCM protection down to a stock's intrinsic value level and at the same time gives an adequate or better return for the amount of risk being taken.

MR. HAWTHORNE walked through a simple example of a buy-write transaction, where RCM purchases a stock and sells a one-year call against the stock, essentially buying low and selling high simultaneously. He explained that there is a lot of down-side protection and a high probability of realizing a full return at expiration. He also compared the RCM Redwood strategy to a traditional buy-write strategy and highlighted the major differences [slide 13].

DR. JENNINGS asked if there was a leverage aspect to the RCM approach. MR. HAWTHORNE replied that there is inherent deleveraging in all buy-write strategies, and he explained how that takes place.

MR. O'LEARY remarked that earning 8% to 12% average return says that there is risk. He asked what the risks were that would result in the ARMB not earning 8%-12%. MR. HAWTHORNE responded that the risks are primarily twofold. The first risk has to do with research - picking the wrong stocks can impair the return profile. While they try to correctly identify the potential down-side volatility, if they do that incorrectly, then they have stock risk. In that case, they do a risk assessment to see (1) if there is another buy-write they can put on; (2) if the intrinsic value assessment has changed; (3) if they need to modify that position so that its risk can be appropriately compensated for going forward; or (4) if they have made a mistake and should take that position off. The other major risk is a prolonged period of very low market volatility, where the returns are not good enough for the amount of risk they are taking.

Further responding to MR. O'LEARY about the value of a stock in the holding period, MR. HAWTHORNE conceded that the return numbers he outlined were at expiration of the call. He added that he and Mr. Edelman designed the product in an 18 VIX environment — certainly lower than the current market volatility — and they still had hundreds of potential investments that met their hurdle rate. So they feel confident that the great majority of the time will be a volatility environment where the Redwood strategy will still give adequate returns.

MR. EDELMAN stated that over the long term the broader market (S&P 500) returns have been about 8%. RCM's goal for the Redwood strategy is to be market-like to better, which is where they get the return objective of 8% to 12% over a market cycle. For example, they will not get absolutely 8% if the market is -10%.

MR. O'LEARY remarked that Mr. Edelman's explanation was clear but it begged the question of a reasonable and reliable expectation about the market. He did not disagree with the view that 8% is reasonable, but over the last decade the return on the market has been negative.

MR. EDELMAN said one of the goals is to cut volatility, and over the last year the portfolio had positive absolute returns while the S&P 500 return was negative for much of that time.

At DR. MITCHELL's request, MR. HAWTHORNE described the call market or the other side of the buy-write trade, which he said are listed markets, very active, and highly liquid. Real money is changing hands, and it is driven by people's expectations of where a stock is going to be in the future and the volatility in the marketplace.

MR. O'LEARY mentioned that this period has been highly unusual and the volatility level extraordinary. He commended RCM for looking for ways to improve the clients' lot. He could understand RCM's focus on this strategy as the market began a disastrous decline: they have avoided or reduced the magnitude of the loss in the first part of the period and benefiting from the still-high volatility in the initial market recovery. His question was what the longer-term environment was likely to be, because if this pattern could be counted upon, presumably everybody would want to do it. That would likely change the volatility premium.

MR. HAWTHORNE stated that there is an interesting hedge built into the strategy in that they are not systematically selling calls on a very rote basis. Theirs is a very flexible strategy: they can actually take advantage of changes in the volatility environment because the portfolio is active and they are always putting on brand-new buy-writes. When RCM first began the Redwood fund, the environment was closer to a 20 VIX, but as the world deteriorated the volatility went up and RCM was able to take advantage of that. When the market is trending up and volatility comes in, the returns are definitely going to be less, and the strategy could potentially underperform versus a long index. Presumably, the ARMB's other assets would be doing quite well in that environment.

MR. HAWTHORNE displayed the Redwood fund's performance by month over 2009, noting that the period covered almost every kind of market imaginable and was a good testing ground for the strategy. He specifically drew attention to when the S&P 500 Index was down 23% — the buy-write strategy was actually down a little over 3%. That demonstrates the ability that RCM has to take advantage of a changing volatility environment and to provide the protection when it is needed. He noted that since inception the fund has had well over 30% down side protection in aggregate throughout all the market environments. Also, when the strategy was down to -3%, they still had contained within the portfolio approximately a 15% potential return that they would collect at expiration. He also pointed out on a graph that the volatility of the strategy has remained stable at about half that of the S&P 500 Index.

MR. HAWTHORNE spent a few minutes describing the Redwood buy-write process in more detail, starting with idea generation, through stock selection and portfolio construction, and finally monitoring and risk management.

MR. O'LEARY asked what RCM would do if the screening process was unable to identify opportunities that satisfied the return hurdle rate. MR. HAWTHORNE said that if it was an extremely low volatility environment, they would be on the sidelines and not break the investment process.

Concluding the presentation material, MR. HAWTHORNE stated that buy-writes as an asset class have a value in most asset allocations because they can, and typically do, provide equity like returns at a lower volatility of returns. RCM believes that by applying their version of market intelligence they can improve upon the standard buy-write strategy.

MR. EDELMAN stressed that the ARMB should view the buy-write strategy as a complement to the retirement fund's other strategies.

MR. BADER asked if there were any issues with brokers and custody. MR. HAWTHORNE said there are two approaches. The simplest is to have a prime broker where the longs and the calls are housed at the same place. Another way is where the longs need to be custodied at a custodian bank, a tri-party agreement is created, and the calls stay at the prime broker.

VICE CHAIR TRIVETTE asked what percentage of the RCM Redwood fund had both components at the same location. MR. HAWTHORNE said 100%, and they currently are prime brokered at UBS.

MR. PIHL inquired if RCM was the only firm offering this buy-write approach and what the fee structure was. MR. HAWTHORNE replied that most of what he has seen angle more toward the traditional buy-write fund where there is some kind of indexing, the calls are more systematic in nature, and the calls are slightly out of the money. He could not guarantee that RCM was the only firm that was combining a buy-write strategy with fundamental research, but he had not come across any others. The theoretical fee structure that RCM will offer the fund at is 75 basis points for up to a \$100 million investment.

MS. McDONALD mentioned that one advantage RCM has is that Mr. Hawthorne is part of the organization and communicates with Mr. Edelman constantly. Some firms offering a buy-write option will sub-advise that particular derivatives approach.

VICE CHAIR TRIVETTE thanked RCM for the presentation before calling a lunch recess at 11:54 a.m. When the meeting reconvened at 1:15 p.m., trustees Erchinger, Harbo, Pihl, Richards, and Trivette were present. Chair Gail Schubert arrived at 1:23 p.m.

REPORTS (Continued)

10. Private Equity Evaluation

GARY ROBERTSON of Callan Associates, Inc. conducted an annual review and performance analysis of the ARMB private equity portfolio. *[A copy of the slide presentation is on file at the ARMB office.]* He said that his report last fiscal year was very positive for the private equity portfolio, and he had emphasized then that things would be very different this time around. The past year has been awful for all asset classes except treasuries — especially equities, including private equity. The key theme for the coming year is cautious optimism, recognizing that there is little visibility in the markets right now and that we could bump along the bottom for a while before there is a sustainable recovery.

MR. ROBERTSON stated that the ARMB is invested in a broad market portfolio that covers the full spectrum of corporate finance investments, from small startup companies, through large cash-flowing companies, to companies that have fallen on hard times and need to get restarted. He briefly reviewed how the ARMB invests money with two oversight managers (or "manager of managers"), who invest in private equity partnerships that in turn make commitments to various companies. He noted that these positions are long term and can last from 12 to 15 or more years, so it is important to measure twice and cut once with the asset class because you cannot really trade out of positions if you are not happy.

The ARMB private equity program started 11 years ago with the hiring of Abbott Capital Management, and the board hired Pathway Capital Management eight years ago. Blum Capital was hired in 2005, and that portfolio is getting wound down now. The in-house program was started two years ago. The managers overlap a bit in their investments, providing the ARMB with bigger commitments in what both managers have a high conviction are good investments.

MR. ROBERTSON reported that the ARMB total fund declined about 18% from June 30, 2008 to June 30, 2009. That, coupled with the restructuring of the health care funds this year, resulted in the private equity target declining by \$240 million. The longest tenured gatekeeper, Abbott, has the most assets, followed by Pathway. The in-house program and Blum Capital program are much smaller. The Blum program is largely public stocks and not technically private equity. Private equity as a percentage of the ARMB total fund is 8.7%, well within the asset allocation band.

MR. ROBERTSON showed a graph of private equity market commitments since 1996, noting there has been a fair amount of volatility in the size of the market over time, depending on the economic cycle. When the board hired Abbott in 1998, they invested into a high-priced environment at the top of the tech bubble, and that gave the portfolio a bit of a headwind. Pathway was hired in 2001 in a recession, and they were able to invest a fair amount of money into very low-priced deals at the bottom of the market and ride the next buyout boom up. Pathway has a buyout style, which was very favorable to them. The in-

house portfolio was started a year before the new recession. Today, following the great recession after the fourth quarter of 2008, plan sponsor commitments into the private equity market have come down a lot. That will probably continue into the next year as well.

MR. ROBERTSON stated that corporate earnings and revenues are continuing to suffer. That makes it very hard to value companies and for companies to get loans. When this happens, private equity goes pretty much completely illiquid. The general partners are focusing on triaging the portfolio companies, cutting costs, and renegotiating their debt agreements. Very little deal activity is announced quarter to quarter. Since there is no transaction activity, not much capital is being called, and the ARMB is not getting much back in distributions. Because the general partners know that plan sponsors do not have a lot of capital to commit to private equity now, they are not coming to market for fear that they might not be successful. So things are very static at this point. The market is going to stay frozen until lending returns, because most of the private equity market relies on buyouts which require debt. The mood is cautiously optimistic, and it should be a good time to invest in private equity. But if the economy is foundering for several quarters, private equity returns are not going to pick up.

MR. ROBERTSON said that based on history now should be a good time to invest in private equity. The key factors are low prices, capital structures are conservative because debt is unavailable, the general partners are chastened and have found investment discipline again, and investments made now should eventually take advantage of a sustained upswing in the economy and hopefully a long economic expansion. Callan still believes strongly that over the next market cycle private equity will maintain its return spread, once things pick up again. They believe that the factors that make private equity more profitable than public equity have not gone away. In the short term and until the market does turn up, it will be hard to see the benefits of those characteristics in quarter-to-quarter returns.

MR. ROBERTSON presented private equity industry returns by strategy over one- to 20-year periods. Total private equity returns were -24.4% for the one-year period through March 31, 2009. By comparison, the one-year return in the first quarter of 2008 was 12.9%. He explained that FAS 157 was implemented by the accounting industry in the fourth quarter of 2008. The private equity industry had to move from valuations that were somewhat cost-based to mark-to-market, or largely comparing to public stock valuations. Shifting to this valuation methodology created the perfect storm right when equities had a huge drop, and the down draft for private equity in that quarter was 18%.

MR. ROBERTSON next discussed the state of the ARMB private equity portfolio for the one-year period ended June 30, 2009 and compared it to the numbers one year ago. He highlighted the following points:

- 25 partnerships were added to the portfolio this year, for a total of 214 partnerships.
- Commitments grew by 11% off the base, versus 18% last year. So commitments have slowed, but the ARMB has been disciplined in continuing to put money out.

- Uncalled capital grew 11% this year, up from 9% last year. So general partners are calling dollars much more slowly than the ARMB is committing them.
- Distributions were \$82 million in fiscal year 2009, a big change from the \$225 million in distributions received last year. That translates into a 6% cash yield this year versus a 27% cash yield last year. 2% of the 6% cash yield this year was the liquidation of one of the corporate finance portfolios, so the private equity portfolio really only yielded about 4%.
- The net asset value of the portfolio was down \$213 million, a 17% decline. However, the ARMB put an additional \$101 million in during the year that was absorbed in that loss. So the unrealized depreciation was really about 25% when adding those two together. That compares to a 10% unrealized appreciation last year. Callan does not believe that kind of dramatic change will happen again in the next year, but they also do not expect to see a lot of movement up or down in the portfolio, unless something exogenous happens.

MR. ROBERTSON also presented the 12-month changes for the individual private equity manager portfolios compared to the prior fiscal year. He started by highlighting certain elements in the Abbott portfolio, as follows:

- This portfolio is older and more mature, therefore less volatile.
- Commitments increased by 9% during the fiscal year.
- Uncalled capital increased as capital calls slowed more than commitments.
- Total portfolio is about 72% paid in (mature). It will probably stay at that level going forward.
- Cash yield was 4% on the distributions.
- There was a 25% unrealized depreciation.
- The internal rate of return decreased 4% this year.

Referring to a graph of the Abbott portfolio's internal rate of return compared to the VentureXpert Vintage Year Peer Group Benchmark, DR. MITCHELL asked if the information indicated that Abbott was good or bad. MR. ROBERTSON replied that Abbott has a return multiple of \$1.23, while the median is slightly negative. The upper quartile of the database is 1.32 times, and Abbott is high in the second quartile. The graph shows that in the years that Abbott is in the second quartile they are high in the second quartile, and in the years they are upper quartile they are quite high there. Callan expects that Abbott will approximate the top quartile, although this portfolio had some initial head winds when it started in 1998.

MR. ROBERTSON next drew attention to some of the 12-month changes for the Pathway portfolio, as follows:

- The commitments, portfolio paid in, and uncalled capital all increased between 13% and 16%. These are higher than Abbott's portfolio because Pathway's is a younger portfolio.
- The distribution was a 4% yield versus 23% last year.
- The unrealized depreciation was 25%, similar to Abbott.

- At -18.8%, they had a more dramatic drop in internal rate of return, which has to do with the time frame.
- They have a buyout-oriented portfolio. Pathway very much outperformed on the way up and very much underperformed when the buyout bubble exploded. Abbott has more venture capital in their portfolio, which gives them a little dampening effect.

Looking at the graph of the Pathway portfolio's internal rate of return compared to the VentureXpert Vintage Year Peer Group Benchmark, MR. ROBERTSON said there is a shorter time period to evaluate them, and they are first quartile in every year.

MR. O'LEARY said he believed that the accounting standard FAS 157 may have had more impact on buyouts than on the venture capital strategy. MR. ROBERTSON agreed, especially on the larger buyouts, which tend to be more Pathway's style.

MR. RICHARDS asked if there was a way of looking at the data that would show what year partnerships that are entered into this year would come to fruition. MR. ROBERTSON said there is an average distribution pattern of partnerships, but the actual distribution is very market dependent. Some partnerships can mature very early in a good economic cycle right afterwards, or the partnerships can be very protracted if they have to hold on for a long time.

MR. O'LEARY added that the ARMB staff's modeling process used to develop the annual plan for how much to invest in private equity makes assumptions about the pace at which the money that is committed in the coming year will be drawn down. Staff is also making estimates of the rate at which those investments will mature. It is easy to play with the model to see what would happen if the liquidations of the underlying companies got stretched out or were accelerated so capital was returned very quickly. It is not atypical to see the expected life of a buyout investment in the five-year area. But if a buyout investment were made five years ago, today harvesting that investment is probably being deferred a couple of years because of the severe economic climate. Staff does an excellent job of thoughtfully considering the sensitivity.

MR. ROBERTSON stated that the ARMB private equity portfolio is well diversified from a strategy standpoint, especially for a large public fund. The portfolio has a lot of venture capital, less than 50% buyouts, good exposure to special situations, and some debt-related investments. The portfolio is about 3% over the venture capital target, about 6% over in buyout, and about 10% under in special situations. However, special situations and buyouts are very similar so the portfolio is well positioned for strategy diversification.

Regarding the ARMB in-house portfolio started two years ago, MR. ROBERTSON said there are currently three partnership investments. He reported that ARMB staff and Callan evaluated secondary funds this year, and staff is in the process of closing on a secondary investment. The in-house investments are not seasoned enough to make a meaningful evaluation. The distressed debt fund draws down quickly and is 90% called, and at March

31 valuations updated for June cash flows it was just a bit underwater. That is a good outcome for a fund that started to invest before the fourth quarter of 2008. Callan expects the fund to go up from there. The other two funds in the in-house portfolio combined are less than 23% called.

MR. ROBERTSON stated that the corporate governance portfolio was initiated in May 2005 and largely focused on publicly traded small cap companies. Of the two direct partnership investments, one is an open-end vehicle investing in publicly listed securities, and one is a closed-end vehicle that invests in public companies and can also do some private investments. The public vehicle was completely liquidated this year, and the ARMB is waiting for the other partnership to liquidate. The performance of the liquidated fund was not good but it was not a disaster either, outperforming the S&P 500 Index for the 12-month period. There was just no reason to continue the program.

In summary, MR. ROBERTSON stated that both private equity managers are approximating top quartile performance. The portfolio overall is high in the second quartile of the benchmark database at this point. The portfolio is getting a lot of venture capital exposure from Abbott, and Pathway's buyout-oriented style has stood the ARMB in good stead during the boom and helped the return. The commitment activity was muted this fiscal year, and Callan expects it to be muted next year as well. The Abbott portfolio is 72% paid in, and when Pathway reaches that level in the near future the portfolio will be fairly mature.

Looking forward, MR. ROBERTSON said he was optimistic but there could be a lengthy bumpy period, depending upon when the economy swings up and private equity outperforms again. The good news is that Callan thinks valuations are bottoming and will move up with some volatility — but private equity valuations will not move up and respond as quickly as public markets will. The ARMB portfolio has a moderate backlog of uncalled commitments, so a good amount of capital to go to work in the marketplace when valuations are low.

11. Farmland Update and Review

11(a). Summary of Farmland Portfolio

State Investment Officer STEVE SIKES stated that farmland is part of the real assets portfolio, along with timber, energy, and treasury inflation protected securities. As of June 30, 2009, farmland represented 3.9% of the retirement fund assets. He briefly reviewed the history of the farmland program that was started in June 2004. The board selected two advisors, Hancock Agricultural Investment Group and UBS AgriVest LLC, both of whom would be making presentations later in the afternoon. The total farmland allocation is approximately \$560 million, with \$114 million of that remaining to be invested in future farmland investments. The allocation was briefly suspended last year when the real assets allocation exceeded its target, but that suspension was lifted in July 2009 and both advisors can now

make new farmland investments. With each property averaging \$5 million in size, the investment pace has been relatively slow. Roughly half of the portfolio is made up of a single acquisition of 41 properties that was made in June 2008 for \$215 million.

MR. SIKES said the farmland investment program strategy and structure is similar to the real estate program separate account program. The advisors have complete discretion to make investments within the allocation and investment constraints. Farmland is a lease strategy investment structure, so the advisors buy the farmland and then lease it to farmers to operate. The portfolio crop type target weights are 80% row crops and 20% permanent crops. There are no development properties and no leverage in the portfolio. Each advisor prepares an annual plan that they present to ARMB staff for review. There are annual audits and annual appraisals. Lastly, a registration system ensures that the advisors are not competing for the same farmland asset and bidding up the price.

MR. SIKES stated that the rationale for the farmland investment program at the time the board approved the program was: (1) attractive total return with high cash distributions; (2) low volatility; (3) overall portfolio diversification; and (4) an inflation hedge. In the recent credit crisis and recession, farmland investments maintained positive returns with low volatility throughout the entire period.

MR. SIKES said the foundation of the farmland investment return is an attractive income return that is generated from the rents that farmers pay to operate the land. The total value of the 82 properties in the portfolio is \$480 million. It represents over 150,000 acres in 15 states. The actual crop mix is 82% row crops and 18% permanent crops. The portfolio has grown to be fairly well diversified across crop types and NCREIF farmland regions. Inception to date (4-1/2 years), the ARMB composite net return is 9.37% annualized. A goal when the program started was to produce a 5% net real return, and for this period the actual real return is 6.72%.

MR. SIKES said the only negative is the performance comparison to the benchmark: for the same 4-1/2 year period, the NCREIF custom benchmark returned 16%. The benchmark is customized to reflect the ARMB portfolio's 80%/20% crop type weights. Staff attributes the underperformance to the benchmark to the performance of the permanent crops early on when the ARMB portfolio was not invested in those crops yet. There are also regional differences where the portfolio was underweight over time. It is challenging to produce index returns in the NCREIF world because the constituents of the index are so unique. Now that the portfolio has been built up, staff expects the return to be much closer to the custom benchmark in future years.

Regarding the farmland investment outlook, MR. SIKES said he did not expect the farmland sector to be immune from what is happening in the economy, and he did

not expect 9%-plus returns over the short term. Some crop prices have fallen over the past year, and a driver of rents is how much the farmer expects to sell the crops for. So there may be some constraints on the ability to raise rents. However, very low leverage in the farmland sector overall and ownership primarily in local and private hands make the sector structurally strong. Forced selling as a result of falling values is not expected to be a component of performance. The long-term drivers in terms of alternative energy and demand for protein coming from improving economies should still be in place. At this time, staff does not believe there is any reason to change the farmland strategy, and recommends that the advisors should continue to invest the remaining allocation.

11(b). Timberland Investment Update

MR. SIKES reported that the timberland investment program that began in September 2007 is still ramping up. Timberland Investment Resources made its first investment in December 2008. Hancock Timber Resource Group made its first investment in June 2009. The total allocation to the timberland program is \$240 million, with just over half invested. Although very early in the program, Timberland's performance has been good but much of that is attributed to the attractive purchase price compared to the appraised value. The NCREIF timberland index performance suggests that the sector has been impacted by the economy and the reduced demand for wood products. Staff believes this is still an attractive place to be over the long term. A little less than half the allocation remains to be invested at a time when prices should be declining, while the assets in the portfolio should continue to grow.

11(c). Farmland Investment Policies, Procedures and Guidelines Update

MR. SIKES explained that a December 2008 revision to the farmland investment guidelines inaccurately stated a requirement related to Unrelated Business Tax Income. Staff was bringing the correct language back to the board for approval by resolution.

MS. HARBO moved that the ARM Board adopt Resolution 2009-29 adopting the revised Farmland Investment Policies, Procedures and Guidelines. MR. TRIVETTE seconded.

Referring to page 7 of the guidelines, MR. TRIVETTE said the managers are supposed to investigate whether the ARMB should be entitled to any property tax exemptions. He asked if the managers are supposed to tell staff the results of their inquiry. MR. SIKES said he thought that was understood.

The motion passed unanimously, 7-0. *[Trustees Galvin and Williams were absent]*

11(d). Hancock Agricultural Investment Group

JEFFREY CONRAD, the President of Hancock Agricultural Investment Group, and

STEPHEN KENNY, Senior Investment Analyst, had been invited to review the farmland portfolio the firm manages for the ARMB. *[A copy of the Hancock slide presentation is on file at the ARMB office.]*

MR. CONRAD first presented some information about the Hancock Agricultural Investment Group before talking about the U.S. farm economy outlook. Crop revenue in 2008 was wonderful, and 2009 is still fairly good in the most difficult period since the Great Depression. Net farm income reached a record in 2008, and although it has fallen off some, it is close to a 10-year average for the sector. In the context of the general economy, the farmland sector is still performing relatively well. A lot of people expect the U.S. dollar to continue to be weak, and the farmland sector benefits greatly from that because a lot of agricultural commodities are exported. Another positive fundamental in the agricultural economy is the low debt-to-equity ratios. Lastly, it should give the board comfort that the sector should be able to take an income shock without seeing values hugely decrease.

MR. CONRAD said that clients have been asking why agricultural land values are holding up when they see pressure on commercial real estate and other assets. The answer is that the strong income returns are supporting land values. Hancock represents about 44% of the NCREIF Farmland Index, and they expect 6% to 6.5% income for 2009, even as commodity prices have gone down.

MR. BADER asked Mr. Conrad to comment on the potential for income from other uses of the land, which staff has been hearing about. MR. CONRAD said that beyond agricultural production, there can be hunting rights and leasing for wind electrical production. There generally are higher and better use pressures that Hancock expects will continue to impact the portfolio long term as the population grows, but these demands have diminished somewhat in the short term.

MR. KENNY reviewed the ARMB farmland portfolio, starting with the goals of diversification by geography and crop type, getting the optimum income return, prudent risk levels, and a passive lease structure for the portfolio. The three key portfolio benchmarks are total return over a five-year rolling period, income return for the portfolio and also individual properties, and a minimum going-in yield for individual properties. The portfolio is weighted more in the Pacific West region because of the Sonoma 12 wine grape asset in California.

MR. KENNY reported that at September 30, 2009, Hancock's current allocation was \$205.25 million. Properties owned totaled \$145.5 million and \$23.2 million was for three properties that are either under contract or in a queue. They expect to have the remaining balance of \$36.6 million invested in 2010. The portfolio is structured with six limited liability companies and is made up of 19 farmland assets located in 10 states. The ARMB portfolio's income returns have been consistent for 1-year, 2-year, 3-year, and since inception, and the portfolio has outperformed the

customized NCREIF Farmland Index before and after fees for those time periods.

CHAIR SCHUBERT mentioned having read an article about the benefits of omega-3 oil from certain fish and the concern that at some point the fish stocks could diminish because of the demand for omega-3. The article suggested that soybeans might be genetically altered to create omega-3. She asked if the farming sector was reactive to a report like soybeans possibly being genetically altered to produce omega-3.

MR. CONRAD replied that Hancock does see a lot of research and development reports, and scientists are always looking at tweaking the genes, etc. for different reasons. In a larger context it is sort of noise on the side because they cannot adjust their strategy to capitalize on it, not knowing how viable something will be. However, it is fair to say that in the U.S. there are many genetically modified products out there, and Hancock does keep track of the trends.

MR. KENNY stated that the properties in the ARMB portfolio are cash leased to local operators. For example, the portfolio has a few properties in Illinois, and if an operator wants to grow high oil soybeans it is his prerogative. Hancock does not make the calls on what type of crop the operator is going to grow.

MR. BADER asked if Hancock provided any stewardship of a property so that operators are not continuously growing the same crop and depleted the soil. MR. CONRAD said that is critical from a property management standpoint, and they have that oversight responsibility. They try not to dictate what a tenant can do, but if the operator is not taking care of the asset — such as maintaining the irrigation system, crop rotation, etc. — obviously they would address that. The ultimate redress is to not re-lease the asset.

MR. JOHNSON inquired about the length of the typical farmland lease. MR. KENNY replied that it is usually one to three years for row crop properties. When leases end they go out for bid, and usually it is the same tenant who would get it. Things have changed dramatically in the last few years: a lot of larger farmers have bid aggressively, and Hancock may sign them up for a one- to two-year lease. But if they are happy with the current tenant, and the tenant is happy with the increased cash rent, then Hancock will re-sign with them. MR. CONRAD added that there are other considerations besides getting the highest dollar per acre.

CHAIR SCHUBERT asked if any of the tenants on the ARMB properties had defaulted on their lease obligations in the economic down turn. MR. CONRAD said no, that things were fine at this point. He said that the farm sector has maintained average earnings during the down turn in the general economy, and Hancock is comfortable with the tenant pool.

While waiting for the next presenters to get set up, CHAIR SCHUBERT suggested taking up the election of officers that was deferred from earlier on the agenda.

ELECTION OF OFFICERS

MS. HARBO nominated Gail Schubert for the office of board chair [for one year]. MR. PIHL seconded.

There were no other nominations, and MR. PIHL moved for unanimous consent. The motion passed without objection.

MS. HARBO nominated Sam Trivette for the office of board vice chair [for one year]. MR. PIHL seconded.

There were no other nominations, and the motion carried unanimously.

MR. PIHL nominated Gayle Harbo for the office of board secretary [for one year]. MR. TRIVETTE seconded.

There were no other nominations, and the motion passed without objection.

Ms. Schubert, Mr. Trivette and Ms. Harbo were present and accepted the offices to which they had been elected.

REPORTS (Continued)

11(e). UBS AgriVest LLC

BRIAN WEBB, Managing Director of UBS AgriVest, and JAMES McCANDLESS, Executive Director, addressed the board about the farmland investments the firm manages for the ARMB. *[A copy of the UBS AgriVest slide presentation is on file at the ARMB office.]* MR. WEBB reported one change in their regional offices: George Schwab, who covered the southern region for several years, retired, and Cullum Jeffries was hired to take his spot. Mr. Jeffries has 10 years of experience with GE Capital on the commercial property side, in both asset management and acquisition, as well as an agricultural economics degree from Texas A&M.

MR. WEBB stated that since inception UBS AgriVest in aggregate has been able to provide a 5% real (above inflation) return. They still believe that is an appropriate long-term benchmark for returns on farmland. The aggregate portfolio has underperformed the NCREIF farmland benchmark over the past year. It is difficult to not have some swings in performance over short periods of time. They are pleased with the way the portfolios for ARMB and other clients are positioned, and they feel good about what things look like going forward.

MR. WEBB said some macro forces have been in play for the past few years that have helped farmland generate the overall returns. Those forces include a dwindling amount of farmland and water resources globally, due to urbanization and some soil erosion. Farm commodity inventories have been at historically low levels for the last couple of years. The farm debt-to-equity ratios have been declining and are at historic lows, so there is plenty of capital in the farmland sector, particularly in the U.S.

MR. WEBB said the global demand for farm commodities is on the rise, which is the underlying source for returns from the farmland itself. The demand is coming from improving incomes in developing countries and from biofuels. The global economy has put a little pause on this macro force, and there has been a pause in excess appreciation that farmland has been enjoying for the past few years. But there does not appear to be a point in time where farmland will have to give back some of those returns. Things are at a plateau, and as the economy starts to come back in the U.S. and globally, they think the macro forces will kick back in and be positive for farmland.

MR. WEBB said the increasing supply of farm commodities in response to improving demand can only come at higher commodity prices. It means bringing less fertile soils into play or producing commodities in areas where the transportation costs to get those commodities to market are higher. They believe that higher commodity prices will continue into the future, particularly as the global economy starts to pick up some steam again. Finally, the higher commodity prices certainly support higher farmland rents on properties in the ARMB portfolio and also support higher farmland values.

MR. WEBB showed a graph of farm commodity prices since 1994 and remarked that UBS AgriVest never viewed the very peak of commodity prices in the middle of 2008 as sustainable. Neither did the farmland tenants, and UBS was never able to negotiate rents that reflected those very high commodity prices. Prices have pulled back to sustainable levels at this point, and UBS AgriVest believes the rents and the farmland values are well supported by the current commodity prices.

A graph of U.S. farm income showed an inflationary trend line through the years that has picked up in the past few years. The U.S. Department of Agriculture is forecasting the inflationary trend line to continue at this higher level. UBS AgriVest does not think that the USDA forecast reflects the macro forces described earlier, and they believe there is more room for farm income to grow. The *Wall Street Journal* has reported that farm income is going to be significantly off this year from the past couple of years. But the measure is a very macro measure of farm income that includes cattle operations, hog operations, and dairies — things that UBS AgriVest is not investing in on the ARMB's behalf. It is those areas that have taken the hardest hit. Annual and permanent crop land has actually held up quite well,

even this year, and they think it will bounce back in coming years.

MR. WEBB showed a chart of US farmland annual returns from 1970 to 2008 compared to inflation, the bond market, the stock market, and commercial real estate. He stressed that farmland has been able to cover the 5% real total return goal over long periods and with a strong correlation to inflation. Farmland has also been a good diversifier for overall portfolios because of the negative correlation with the bond market in particular, but even with the stock market. Nevertheless, the returns over the past two or three years have been in excess of what UBS AgriVest believes an investor can expect over the long run.

MR. WEBB reported that over the past three or four years permanent cropland has done very well. The ARMB portfolio underperformed relative to the benchmark, and a large part of that came from under-exposure to permanent crops. As UBS AgriVest built the portfolio they were not finding buying opportunities on the permanent crop side. But the portfolio is very well diversified at this time and has appropriate exposures to both permanent and annual cropland. There is tactical under-exposure to permanent cropland from this point forward because they do not think that permanent cropland can continue to outperform, given where pricing is of the relative two sectors. Since inception in 1991, permanent cropland on an absolute return basis has not been able to keep up with the annual cropland. And on a risk-adjusted basis, the standard deviation of permanent cropland returns is much higher than for annual cropland.

MR. McCANDLESS reviewed specifics of the Midnight Sun (ARMB) portfolio, which at September 30, 2009 held 63 farms in 13 states. The cost basis of those properties was \$302 million, and the market value was \$322 million. The remaining allocation to invest was about \$52.6 million. The highest percentage of investments are in the Pacific West region (California), reflecting the state's larger properties and larger operators that are more attractive as investments.

MR. O'LEARY mentioned the publicity about environmental issues having an impact on water access in California. He asked how UBS AgriVest thinks about that, and if any ARMB investments were impacted in any way.

MR. McCANDLESS replied that the water situation is a primary concern when underwriting an acquisition in any western state that has irrigation. Large areas of California are essentially off limits, as far as UBS AgriVest is concerned, because the long-term outlook for water is so much in question. The areas where the ARMB portfolio holds properties have excellent water and have not been affected by the "political drought," which has probably enhanced the value of those properties quite a bit.

MR. McCANDLESS reviewed the portfolio characteristics compared to the

constraints established in the ARMB farmland investment guidelines. He also explained for CHAIR SCHUBERT that Midnight Sun, Inc. is a title holding entity that is a tax-exempt corporation. There are six Midnight Sun entities that are either regional or by state so that all the properties are not in one basket.

MR. McCANDLESS showed graphs of total return and cash income return for the Midnight Sun portfolio. He said the portfolio does not have quite five years of history yet, but since inception the income return has been 4.37%, beating the expected 4% return over a rolling five-year period. He noted that not all the income was reflected in the September 30 numbers because a lot of the payments are received in December. The permanent crop properties are leased on a participating lease basis where the rent is a percentage of the gross income from the property. That number is not tallied up until about this time of the year. UBS AgriVest expects significantly more income to come in before the end of the year, and they will probably be making two distributions this month.

MR. McCANDLESS reported that UBS AgriVest rented two ARMB properties (6,000 acres) along the Gulf Coast of Texas to Duke Energy for a wind generation project that will consist of about 80 towers. Those properties are still being farmed and will continue to be leased as farms. Duke is in the process of doing meteorological testing and getting permits, etc. The lease is set up to provide fixed payments for the footprint of each tower and roads, etc. and a percentage of the power sales. Those leases have a 25-year term, and the percentages are escalated up every five years. This was not an intended use for these properties, but UBS AgriVest was able to negotiate those leases.

MR. TRIVETTE asked if UBS AgriVest had an estimate of the income the ARMB portfolio would get from power generation. MR. McCANDLESS said the farm rent is about \$160,000, and they expect the percentage of power sales will be \$500,000 to \$600,000.

MR. PIHL asked if the ARMB has approval authority for a long-term lease commitment of the property like that. MR. McCANDLESS said no, that it is part of UBS AgriVest's discretion to manage the portfolio. MR. PIHL responded that an encumbrance of the property outside of growing row crops or permanent crops should come to the attention of the staff and the Real Estate Committee for approval, as a matter of practice.

MR. BADER said that Mr. Pihl had raised a good point. He said this information was not a surprise to staff, who have been well aware of the incremental income coming from the Texas properties. Beyond that, he bore the responsibility regarding the long-term encumbrance of the property being a change in the nature of the underlying asset. He said staff saw it as a tremendous opportunity to add incremental value, however, he should have informed the trustees.

Regarding the title holding companies that the chair asked about earlier, MR. O'LEARY said he understood the logic of it to minimize overall risk because of isolated circumstances on a property. He asked how UBS AgriVest determined what number of holding companies was the right number.

MR. McCANDLESS said they simply approached it by region or by state. The mandate is that the assets in each entity cannot exceed \$50 million, and when the asset value reaches that point UBS AgriVest would structure a new entity to take additional properties. The only exception is the original Midnight Sun portfolio that was already in place and had exceeded \$50 million.

MR. RICHARDS asked if UBS AgriVest felt that the Texas farmland properties would be easier to sell or harder to sell with the windmills on them. MR. McCANDLESS said he thought the properties would be very easy to sell with that kind of income stream.

MR. BADER stated that when the board approved the acquisition of the Winding Brook portfolio there were certain exceptions that had to be made to the ARMB's standard practices. The portfolio was viewed as a single asset at the time, and the understanding was that properties that did not meet the investment guidelines would have to be sold off at some point. He asked if all the properties in that portfolio now meet the individual property criteria laid out in the investment guidelines or if some properties need to be sold.

MR. McCANDLESS said that UBS AgriVest has not identified any properties that need to be sold. However, they do a hold-sell analysis on all the properties at the end of the year. At that time, the team will be able to identify if any Winding Brook properties do not fit the guidelines.

CHAIR SCHUBERT thanked the gentlemen from UBS for their presentation and called a scheduled break from 2:59 p.m. to 3:15 p.m.

12. Capital Guardian - Non-U.S. Equity Review

PAULA PRETLOW with Client Services and CHRIS RYDER, an investment specialist with Capital Guardian, spoke on the Alaska retirement fund's international equity portfolio valued at \$527 million. *[A copy of the Capital Guardian presentation material is on file at the ARMB office.]* She said they would offer periodic comments about the emerging markets equity portfolio as well, although it was not the focus of this presentation.

MS. PRETLOW briefly covered the investment philosophy, business approach, and investment process at Capital Guardian. She said they had layoffs and redundancy reductions across the board because of poor markets. Those are finished, and they have adjusted to a reduced number of overall employees within the Capital Group to serve both

their retail and institutional clients. The multiple portfolio manager system remains the cornerstone of the investment process that is built on research. As Capital encountered performance issues, they made changes to the non-U.S. equity team, the U.S. equity team, and the fixed income team. There have been no changes to the emerging markets equity team. They want their managers and analysts to be able to focus, so now there are fewer managers per mandate. The non-U.S. equity team has seven managers, where last year at this time there were nine managers. Richard Hovis, a global EAFE manager, moved to the mutual fund side of the business. Rudolf Staehelin took the global EAFE slot on the non-U.S. equity team, and Sun Kwat moved off the team to focus exclusively on Japan. The styles of the seven managers currently on the team reflect the core EAFE portfolio.

MR. RYDER mentioned that Capital believes it is very important to cross fertilize the culture between the institutional business and the mutual fund business. Richard Hovis's transition to the mutual fund side occurred at the same time as another senior portfolio manager from the mutual fund side moved to the institutional business (but not part of the international equity portfolio). MS. PRETLOW advised that clients may see more of that cross fertilization between the mutual fund side and the institutional side going forward.

MR. RYDER stated that a key benefit to having a multiple manager team is not relying on any one individual and being able to plan for generational change. One announcement in the last couple of months was that Nilly Sikorksy, who has been with Capital for 42 years, plans to retire at the end of 2010. That is a slow and steady transition that Capital has been anticipating for some time and which they can accommodate while still retaining the core mandate that Alaska hired them for.

Turning to the investment results, MS. PRETLOW said last year was tumultuous but Capital Guardian did protect the international equity portfolio on the down side. Part of their style will also see them trailing in rapidly rising markets, which is what has occurred since the first quarter of 2009. However, on an absolute basis, Capital has participated quite handsomely in that market run-up. She noted that the same general trend was true for the ARMB's emerging markets portfolio as well. MR. RYDER stated that the ARMB's emerging markets portfolio was up over 70% year to date.

[Mr. O'Leary pointed out that the heading on the investment results page was incorrect and should have read "Results as of October 31, 2009."]

MR. RYDER said that while the economic data has not been getting any worse, it is still in the fairly latent period of improvement. The biggest reason behind improvement in market performance globally is that the stimulus packages around the world have been so important in changing investor sentiment towards risk. The monetary growth in China in the first half of this year was in the mid-20%. That is bound to have had an impact on investor perception of the systemic risk that existed at the beginning of March 2009. The EAFE team managers believe that while the good news has mitigated the worst aspects of the

recession, nevertheless there is still an underlying concern that end demand, particularly from the consumer in the developed world, is still somewhat muted. So managers have adopted a fairly cautious view of the world. They think that things like consumer deleveraging in North America will take several years. As a result, the majority of the managers feel that the underlying economic recovery story might be more muted than in past cycles. That plays into their stock selection in the international portfolio.

MR. RYDER stated that the portfolio has performed well in absolute terms but has lagged a bit in relative terms because Capital was positioned more defensively at the end of 2008 and going into the first quarter of 2009. Cash was the largest single detractor from returns as the market was strongly rallying. The second important characteristic was an underweight to financial stocks, something they have continued. Capital also had disappointing stock selection within financials. Progressing through March, they recognized that the systemic risk to the financial system had gone away. However, they are still very concerned that the bank earnings in the coming decade will not be the same as they were in the previous decade. There are still a number of uncertainties out there, particularly related to regulations. That is why Capital has been very selective in the banks and insurance companies they have added to the portfolio. They have cherry-picked what they think are the long-term winners in the industry as opposed to buying the stocks that have risen the most from March to date, which tend to be the banks that were just about to go bust in March and got a bailout. Capital does not believe that is an investment thesis on a three- to five-year time horizon, but nevertheless it has paid off for investors who took that risk in this interim period.

MR. RYDER said the third major factor that detracted from performance was Capital's disappointing stock selection in materials. While Capital was overweight the materials sector, the stock selection was more defensively oriented towards gold as opposed to the industrial commodities that have run the most as people have been taking the prospects of global growth back on board and "re-risking" their portfolios. Gold has traditionally been seen as a hedge against both inflation and systemic risk that the market was experiencing in the first couple of months of 2009. Despite the fact that the price of the commodity has been fairly strong, the gold stocks have been laggards compared to the industrial commodities during this period. Also, Barrick Gold Corp. has a hedge book that it has been unwinding, and that has impacted the performance of that stock. Nevertheless, the comments he made about gold are also true in the ARMB's emerging markets portfolio at Capital, and that portfolio does not have Barrick Gold in it. It has all been about gearing into economic recovery, so the industrial commodities have done well.

MR. RYDER stated that gold is seen as an inflation hedge and a defensive asset and has underperformed. Capital has maintained a sizeable gold exposure in the ARMB's non-U.S. equity and emerging markets portfolios. While that is very much driven on an individual company basis, it perhaps suggests a couple of things. There is still some concern that the global recovery is not going to be the straight line that people have been talking about of late. Secondly, there is still a concern about inflation 18 months to two years out. The

stimulus packages enacted around the world have mitigated the worst of the recession, but nobody has quite figured out how to pay for it all. The prospect of unintended consequences of these stimulus packages could be very significant. So some managers have chosen to hedge themselves to a certain degree by retaining some gold exposure.

MR. RYDER reviewed the 20 largest holdings in the non-U.S. equity portfolio to highlight what Capital has been finding attractive in the world today. There is still a lot of uncertainty about the global economy, and Capital remains a little bit cautious. In the market correction they have focused the portfolio on what they think are very sustainable, high quality business models, and companies with strong balance sheets that can see them through the tough times. They want companies that have a strategic vision of where they want to be, and in particular companies that are able to gain market share from their weaker competitors. Capital is not looking for the stocks that are going to bounce the most in this market rally because they have concerns about the strength of economic growth and the strength of markets over the coming couple of years. The top 20 holdings in the portfolio are the large global players in their industries that are going to gain market share from the weaker players. That is important because if they can sustain growth during a period of generally low economic growth, they are going to attract a premium rating. An example is HSBC, the global bank that has the most exposure to Asia, which Capital believes is a relatively high growth area in the coming years. In fact, the chief executive of HSBC has moved back to Hong Kong from London, because obviously China is a huge growth opportunity for them. There are two truly global commercial banks in the world: HSBC and Citigroup. With the difficulties that Citi is having, the opportunity for HSBC to gain market share is the other part of the investment thesis.

MR. RYDER also talked about the top holdings by sector, pointing out that Capital has moved from 13.5% to 19.5% in financials, although they are still very underweight relative to the index. They have been taking money off the table in the traditionally more defensive parts of the market that held up relatively well in the dislocation at the end of last year — so consumer staples, and second-line companies in energy. However, they have kept a reasonable weighting to emerging market energy companies where the valuations are more attractive than some of the oil majors in the west.

MR. RYDER next addressed diversification by country, making it clear that Capital is very much bottom-up stock pickers. They are underweight Japan: the political and social inertia in Japan continues despite the change in government there, and it is hard to get excited about the prospect for many Japanese companies. The stocks in the portfolio tend to be more the export-oriented companies, like Toyota. Europe can be broken down into core Europe and the periphery of Europe. The periphery is the U.K., Ireland, Spain, and Iceland. These are countries that have similar problems to the U.S. in terms of consumer leverage and a financial system that has been somewhat dysfunctional. Capital believes that the workout for those countries is going to take several years. Conversely, the economic recovery in continental Europe (France, Germany and Italy) is probably going to be more of a normal recovery. Those countries have had less consumer leverage and less exposure

to housing booms and busts.

While companies that are very international may be domiciled in one country or another, Capital nevertheless feels that perhaps continental Europe might see some better growth or a more normal recovery rate than in the periphery of Europe.

MR. RYDER said that what is very different in this market cycle is the relative importance of emerging markets to the developed world. Capital has been very constructive on emerging markets on a secular view for a very long time, and they have been able to participate in this portfolio in a limited way because the ARMB's limit for emerging market exposure is up to 10%. At the beginning of 2009, they added significantly to China, after the Chinese market fell 66% last year. It proved to be very fortuitous and the biggest single contributor to emerging market growth funds. Prospects for China are still very positive on a secular view. Short term there is some concern about signs of bubble activity. After the big election change in India in the early part of the year, Capital continues to remain positive on the secular story, in particular for the development of the financial system in India.

DR. MITCHELL asked if a different benchmark than the MSCI EAFE Index would be fairer, given that Capital can invest up to 10% of the international equity portfolio in emerging markets. MR. RYDER said the All Country World Index ex-US is a greater representation of the emerging markets. He stressed that Capital is not really buying emerging market companies; they are buying large cap, internationally exposed, liquid companies — so a relatively limited list. Splitting the index to reflect 10% emerging markets would be slightly apples-and-oranges in terms of the emerging markets exposure that this portfolio is getting.

13. BlackRock, Inc. – Portfolio Update

MR. BADER introduced LEE WANIE and MARCO MERZ, formerly of Barclays Global Investors, who were now representing BlackRock as a result of that firm recently acquiring BGI. MR. WANIE explained that he has been the client relationship manager on the ARMB account at Barclays for five years, and Mr. Merz has been there for four years as a senior index strategist.

[Mr. Wanie distributed a replacement presentation booklet that reflected the change to BlackRock, which is on file at the ARMB office.]

MR. WANIE said the ARMB had about \$218 million invested with BlackRock at October 31, spread across equity assets and fixed income. BlackRock is recognized as a fixed income expert, and the former Barclays Global Investors was recognized as an equity expert. Pre-merger the talk was that they were complementary businesses with complementary products, and so far the different units of the businesses are fitting together very well. There was a small head count reduction at Barclays pre-merger, and it will be interesting to see how the two businesses come together in mid-2010. As a client, ARMB can expect business as usual. BGI is a very scientifically driven firm, and the leadership traditionally has been comprised of investment people who have gained senior management positions. BlackRock has a more client-focused leadership, and their senior

leaders are often spending time with clients throughout the size and commitment range. So this board could expect to see senior BlackRock personnel sometime soon.

MR. WANIE stated that other benefits of the new larger firm are better pricing for clients, reduced transaction costs, breadth of products, and custom solutions for things like risk management. BlackRock is currently in the process of reviewing the client coverage model. He has spoken to his BlackRock counterpart in Alaska, and they intend to have a team approach in terms of staying in touch with the ARMB.

Drawing attention to an executive summary, MR. WANIE mentioned that the total assets at November 30 were closer to \$227 million as a result of good returns in the equity markets. He noted that the inception dates of all the ARMB strategies with BlackRock were listed as March 31, 2009 because that was when they implemented the retirement system's direction to move away from funds that engaged in securities lending and into the non-lending strategies. It was a complicated process to get the new funds up and running, but it was done on schedule and with a minimum of transaction costs. The equity index fund has been closely tracking the S&P 500 Index. The intermediate government bond fund is down 14 basis points from the index, net of fees, so within expectations. BlackRock has had some trouble sticking to the benchmark in the government/credit bond fund, largely due to unprecedented and massive volatility in credit markets. The bond portfolios are put together using a subset sample of securities and not on a fully replicating basis.

MR. O'LEARY inquired about the size of the government/credit non-lending fund. MR. WANIE said it was several hundred million dollars versus billions of dollars for the lending version of the fund.

MR. MERZ mentioned that the equity index non-lending fund has substantially grown in size over time and is now about \$40 billion. Size matters in indexing. So the fact that this fund is so large is why they were actually able to match the benchmark return with zero basis points deviation.

MR. WANIE stated that as transaction costs have come down in fixed income since the beginning of this year, they expect tracking to pick up and be a lot better in the government/credit fund going forward.

MR. O'LEARY asked if it was accurate to assume that, in general, active fixed income would be managed by the old BlackRock and that passive fixed income would continue with the old Barclays Global Investors, or if there would be some further delineation.

MR. WANIE replied that if there is going to be further delineation, it has not happened yet. Currently, the most senior leadership of the active and passive fixed income funds is staffed with two BlackRock personnel. There are a number of very senior BGI personnel who will continue to lead the quantitative fixed income effort. There was concern about what would happen to the scientific fixed income business, however, BlackRock saw that

BGI was doing some creative things in terms of quantitative fixed income, and that they could add value consistently. Also, BGI's performance throughout the financial crisis going back to the summer of 2007 was much better than BlackRock's, so they have decided for the time being to leave it as is. They have a large customer base that is interested in low-risk active fixed income management and that has seen success with it. That customer base has also grown as other fixed income managers struggled through the mortgage crisis.

MR. O'LEARY said he assumed that for the time being clients would be serviced by the same people that have been doing the job. He asked how Mr. Wanie anticipated that would be handled in the future. MR. WANIE said that impacted his job, and earlier this year he was flying all over the country to meet clients. He thought the first cut would be to look at geographical assignments, but customer relationships are critical and he expected any trims to be more at the margin for the first pass.

MR. O'LEARY asked if Mr. Wanie could guess the timing of when everything would be pretty much in place. MR. WANIE thought things would be 80%-90% of the way done by the end of 2010. Some people were made redundant in the client service area and those clients reassigned, and some client relationships will change if it results in improvements. A refined client assignment list would likely come out in the next few weeks, and then another step would occur probably around mid-2010.

MR. MERZ first spoke about the implications of the merger to the equity indexing business. The leadership team will be intact at the new BlackRock entity, and the portfolio manager will continue to be stationed out of the San Francisco office. There have been no personnel changes on the equity indexing side. Barclay's legacy indexing is about 10 times larger than the business at BlackRock, so they will integrate residual BlackRock business on the equity index side into the San Francisco production facility. The good news for existing clients, such as ARMB, is that there will be no changes to the organizational structure. Beyond that, there will be no changes to the investment philosophy for managing equity index funds. It will continue to be total performance management, focusing on risk/return and costs. The S&P 500 Index fund is currently fully replicating and that will not change. Cost is the biggest hurdle for an indexer to overcome because the benchmark itself assumes zero transaction costs for all changes to the benchmark. Almost \$1 trillion of the \$3 trillion of assets under management are indexed assets. That is the hunting ground to reduce transaction costs through crossing. They cross on average between 40% to 60% annually, so only the residual has to be traded on the open equity market. All equity and fixed income trades are done on a best-execution basis, and that goes for all foreign exchange trades they do on behalf of clients. Because of the firm's footprint, they are able to deliver wafer-thin commissions on behalf of clients.

MR. BADER commented that BlackRock runs both index funds and exchange traded funds (ETFs), and many of them have similar mandates. He asked if institutions are using ETFs. Also whether emerging market index funds, for example, lend securities, and if the ETFs in

those markets lend securities.

MR. MERZ replied that institutions do use iShares or ETFs. Emerging markets is a perfect example: the reason why institutions use ETFs as a tactical investment in emerging markets is that the liquidity is substantially higher in ETFs than in a commingled fund that has to transact the buys and sells on the local market. Both commingled emerging market index funds and ETFs lend securities. On the ETF side they are able to lend the securities within the ETF and then the ETF itself, so it is a two-layered lending process. Historically, BlackRock has seen a substantial increase in lending demand on the ETF side, and therefore substantially higher lending yields on ETFs. That has 7 diminished over time, and from the returns that emerging markets have yielded over the last year it is clear that shorting is not a winning strategy in emerging markets currently. As of right now, the lending yield between an ETF and a CTF is identical.

MR. O'LEARY commented that if there is a lot of demand for ETFs, at some point new shares are issued. He asked Mr. Merz to explain that for the board, which he did.

MR. WANIE stated that the use of ETFs by institutional investors is still largely for marginal exercises, such as short-term exposure or short-term liquidity. For investors of hundreds of millions of dollars, who do not need the liquidity that an emerging market ETF would provide, it makes more sense to be in institutional commingled funds that are much cheaper and typically provide enough liquidity for foreseen future payments.

Returning to the presentation slides, MR. MERZ said that operational risk control is paramount at BlackRock. He briefly reviewed the portfolio management process where there is a clear separation of duties between the portfolio management team and the trading team. Within each team there is a rigorous peer review process for trades, and the larger the trade the more senior the reviewing portfolio manager needs to be.

MR. O'LEARY mentioned the controversy regarding currency transactions and said he gathered that the new BlackRock was not trading currency, as Barclays historically had not. He asked if that would continue. MR. MERZ stated that they do not trade foreign exchange internally and do not make any money off foreign exchange trades.

MR. MERZ spent a couple of minutes talking about trends in indexing. The overarching theme that BlackRock has heard from clients about investing has been broader, more diversified exposure. That is nowhere truer than in international investing. Over the last five years they have seen a steady increase in emerging market investing. Today most of their clients have dedicated emerging market exposure, driven by the fact that emerging markets are too large to ignore and are now over 20% of the international equity markets. A more recent trend is the ACWI ex-US Investable Market Index for the inclusion of small cap international investing. Clients are trying to mimic what they have been doing in the U.S. with the Russell 3000 Index exposure or a dedicated small cap active manager. About 30% of BlackRock's asset base has moved to the Investable Market Index strategies. For

clients that already have large cap exposure internationally, they also offer a dedicated small cap international vehicle to complement the existing holdings. They believe that over the next five years clients will embrace broad cap investing, and the IMI indices will become the gold standard of international investing. BlackRock has seen steady demand for frontier or pre-emerging market countries — especially Eastern Europe, Middle East, and Africa — which complete the international investment set. Clients are seeking the diversification benefits and the low correlation to U.S. and international equities.

14. Investment Actions

14(a). Buy-Write Strategy

[A written staff report was included in the meeting packet.]

MR. BADER commented that plenty of institutional funds are talking about how to reduce risk in their portfolios and safeguard more of their assets but few are doing anything about it. He reminded trustees that at the October 1-2, 2009 meeting they hired Advent Capital Management LLC to manage a convertible bond mandate. The premise behind the decision was to seek equity-like returns from a convertible fund with some of the down-side protection that bonds offer. The board heard a presentation from Eaton Vance Investment Managers at the 2009 education conference about a buy-write strategy. In 2006, Callan did a study on the buy-write strategy and concluded among other things that the buy-write index could get higher returns with lower volatility than the S&P 500 Index and the Russell 2000 Index. Today RCM Capital Management made a presentation on a buy-write strategy. Staff believes there is potential in the buy-write strategy to improve the performance of the retirement funds, and so recommended authorizing a search for one or more buy-write managers. Staff would report back to the board at the next meeting, possibly with a recommendation.

MR. TRIVETTE moved that the Alaska Retirement Management Board direct Callan Associates, Inc. and ARMB staff to initiate a search for one or more buy-write strategy managers. MS. HARBO seconded.

MR. TRIVETTE inquired if the results of Callan's 2006 study had changed in the ensuing period. MR. O'LEARY said he tracked down the author, Jim VanHuet, who did the study for the Chicago Board Options Exchange (CBOE). It was an update of a study that had been done by another consulting firm, Ennis Knupp & Associates. He asked Mr. VanHuet if he thought the study findings were still accurate, and his opinion was that they were still valid.

MR. RICHARDS made the comment that the return statistics he heard from RCM today were not stellar, although he recognized the volatility aspect. He asked if the board would get the opportunity to discuss whether the buy-write strategy was a good investment strategy for the retirement fund.

MR. BADER stated that the return numbers that RCM presented have to be viewed in the context of the market experience over the last two years. Accepting the fact that the retirement fund is invested in equity markets, the board has to accept that at times there will be losses. Staff is trying to minimize those losses and level out the returns with the buy-write strategy. The return numbers presented by Eaton Vance and RCM, as well as in the Callan study, are relatively good returns. The buy-write studies that were referenced in the Callan report go back several years. RCM has back-tested their approach, and it was successful over a long period of time: what they presented today were the real returns from their seed portfolio. Regardless of what candidates come out of the manager search, the return history will be for a limited period of time. He said staff would provide copies of the Callan buy-write study to trustees.

MR. O'LEARY stated that there are two levels of decision. First is to find out what strategies are out there and then decide what strategy or strategies the board is comfortable with. The Eaton Vance buy-write strategy and the RCM buy-write strategy the board heard about so far are very different, and Callan's manager search is likely to turn up strategies that are somewhere in between those two. The board will have to consider the risks inherent in the strategies and who has the most compelling story in terms of product, history and experience, organization, and fees.

COMMISSIONER KREITZER said she planned to vote yes to move the process forward, but she agreed with Mr. Richards that the board would want to scrutinize the actual strategies and determine if they met what the board wants to do. She will be interested in what Callan learns from the search process and what the managers will have to tell the board in their presentations. She expected questions about the buy-write strategies, whether they do what has been set out, and how that approach looks in the world today with the direction that stocks are going. She tries not to have a short-term view, but it is also hard to ignore right now.

MR. ERCHINGER requested that information given to the board go back far enough to provide a sense of how each of the managers would have performed in various market environments. She also wanted the information presented in an apples-to-apples comparison. For example, RCM's return numbers were presented gross of fees, and the rolling numbers looked great but the individual months did not look so great. Some interpretation of that would help trustees understand the impact of the various strategies from each manager.

MR. TRIVETTE asked for a copy of RCM's back-test results, to the extent that they are available.

On an outcry vote, the motion passed unanimously, 7-0. [Mr. Williams and Commissioner Galvin were absent.]

14(b). Convertible Bond Guidelines

[A written staff report was included in the meeting packet.]

MR. BADER reported that the board approved Advent Capital Management as a convertible bond fund manager at the last meeting. The investment guidelines for convertible bond managers did not exist, so staff wrote them and was bringing a recommendation to the board. These policies and guidelines have been reviewed by staff and by Advent and are substantially the practices that Advent uses.

MR. RICHARDS moved that the Alaska Retirement Management Board adopt Resolution 2009-28, adopting the convertible fixed income investment guidelines included in the packet. MS. HARBO seconded.

MR. TRIVETTE inquired how staff created new investment guidelines from scratch, and if they consulted with Callan Associates and the investment advisory council members. MR. BADER responded that he and Bob Mitchell did not consult with Mr. O'Leary or the IAC members because they considered the investment guidelines to be quite benign. A convertible bond can be from investment grade to non-investment grade, and the guidelines place certain limitations on the types of investments that can be held. One requirement is that if the manager converts a bond into a stock, that the stock cannot be held longer than 20 days, etc. — guidelines that ensure the manager maintains the character of a convertible bond fund rather than an equity fund.

MS. HARBO asked if an extension for holding a stock beyond 20 days would be indefinitely. MR. BADER said it would not be indefinitely, but there could be liquidity issues in the market that would make it unreasonable to force the 20-day deadline. He added that it would not be in the chief investment officer's interest to override the guidelines set by the board unless there was a compelling reason.

The motion passed unanimously, 7-0. *[Commissioner Galvin and Mr. Williams were absent.]*

14(c). Cadogan Management Termination

[A written staff report was included in the meeting packet.]

MR. BADER reported that at the last meeting the board granted staff the latitude to terminate Cadogan Management, an absolute return manager for ARMB, based on the news that senior executives had resigned the firm over terms of Fortis repurchasing the firm. The Cadogan management did return and are now in place. Over the ARMB's relationship with Cadogan since 2004 there have been several issues regarding ownership of the firm that have been resolved. However, the unsatisfactory record of performance has been a different issue: since inception, Cadogan has returned 2.8% versus the benchmark at 8.1%. The board recently hired two absolute return managers that hopefully will have a far better record of investment performance. Cadogan has been on the watch list, and staff believes it

is time to terminate this manager.

MR. PIHL moved that the Alaska Retirement Management Board authorize staff to terminate Cadogan Management. MR. TRIVETTE seconded.

MR. TRIVETTE indicated that the Callan performance reports have tracked Cadogan's history, which supported staff's description.

MR. JOHNSON noted that staff's recommendation was to liquidate the Cadogan portfolio and to terminate the contractual relationship with Cadogan when the liquidation was complete. He suggested clarifying if it was meant to be a two-step process, or if a notification of termination would go out even if it was not possible to liquidate all assets in a timely fashion.

MR. BADER stated that the contractual relationship would not end until the Cadogan portfolio was liquidated.

The motion carried unanimously, 7-0. *[Commissioner Galvin and Mr. Williams were absent.]*

14(d). Brandes Defined Contribution Fund

[A written staff report was included in the meeting packet.]

MR. BADER reported that staff was able to negotiate lower investment management fees for the Brandes Institutional International Equity Fund that has been an investment option for the defined contribution plans since October 2001. Staff worked with Brandes to set up a collective investment trust structure where the fees are lower. The annual savings are estimated to be around \$960,000 a year, or roughly \$80,000 a month. The board gave staff the direction to do this quite some time ago, but it was not easy to implement.

RECESS FOR THE DAY

CHAIR SCHUBERT recessed the meeting for the day at 4:35 p.m.

Friday, December 4, 2009

CALL BACK TO ORDER

VICE CHAIR TRIVETTE called the meeting back to order at 9:04 a.m. Trustees Harbo,

Erchinger, Kreitzer, Pihl, Richards, and Trivette were present. Chair Schubert arrived at 9:12 a.m.

REPORTS (Continued)

15. KPMG - Audit Report

MR. PIHL, chair of the Audit Committee, introduced MICHAEL HAYHURST and CORINNE FIEDLER of KPMG to give their fiscal year 2009 audit report to the board. *[A copy of the audit report, the slide presentation, and the minutes of the Audit Committee's December 2, 2009 meeting are on file at the ARMB office.]*

MR. HAYHURST referred to a list of the Treasury Division's and Retirement and Benefits Division's responsibilities. He said essentially it is that management in the divisions are responsible for (1) adopting sound accounting policies, (2) establishing and maintaining internal controls, (3) fairly presenting the financial statements in conformity with generally accepted accounting principles, (4) promoting a culture of integrity and honesty - called "the tone from the top," and (5) establishing controls to prevent, deter and detect fraud.

MR. HAYHURST summarized the list of KPMG's responsibilities as (1) planning, designing and performing an audit of the financial statements of the divisions, and (2) upon completion of that audit, that has been performed in accordance with generally accepted auditing standards, to issue an opinion on the financial statements that they are fairly presented in accordance with generally accepted accounting principles (GAAP).

MR. HAYHURST reported that KPMG had completed the audits on the fiscal year 2009 financial statements of the Treasury Division and the Division of Retirements and Benefits. He provided a list of reports that KPMG issued under those audits. All reports were unqualified opinions, meaning there were no items found and they were clean opinions. KPMG determined that all the financial statements that were being issued over which they had opinions were materially correct in accordance with GAAP.

MR. HAYHURST stated that there was one unadjusted audit difference that represents the time lag between when the market value adjustments get recorded into the financial statements and the fiscal year end. This adjustment occurs every year and, historically as well as this year, is fairly inconsequential relative to the overall value of the financial instruments in the funds.

Addressing procedures around fraud, MR. HAYHURST said that KPMG is responsible for designing tests to identify any material fraud that might exist in the financial statements. KPMG considers various factors when looking at the fraud risk. They go through brainstorming sessions, look at significant estimates and underlying assumptions, and using healthy skepticism consider the potential for misstatement due to fraud. KPMG is required to look at two areas for the risk of fraud because historically these are areas where most of the frauds have occurred. One is in revenue recognition, which does not

apply to the sets of financial statements dealt with here, but KPMG still has to consider it because it is a professional standard.

The other area at high risk for fraud that applies a bit more specifically to these financial statements is the risk of management override of controls — specifically around journal entries and adjustments and around significant accounting estimates, the potential for management to weigh in on some of the assumptions, and looking at any unusual transactions. There were no unusual transactions in the year. KPMG did design controls and tests to look at journal entries and adjustments that were recorded throughout the year. Also to look at the significant accounting estimates, especially within the Retirement and Benefits financial statements around the actuarial present value of the obligations represented in those financial statements. As a result of those tests, nothing was identified from the standpoint of any fraud.

MR. HAYHURST listed the other required communications from KPMG:

- Confirm for the ARM Board that KPMG is independent of the Division of Retirement and Benefits and the Treasury Division.
- There were no disagreements with management during the audit steps.
- KPMG received full cooperation from management and had full access to the books and records in the audits.
- KPMG is not aware of any consultation that management had with other accountants looking for potentially a different opinion on a particular accounting matter.
- KPMG did not discuss any major issues prior to the retention of KPMG by management and the ARMB, as it relates to looking for a different answer from another firm on potential accounting issues before retaining KPMG.
- No difficulties encountered in performing the audits.
- Provided to the Audit Committee the significant written communication between KPMG and management, which was the management representation letter and the management letter that KPMG issued as part of the audit of the financial statements, as well as the opinion.

MR. TRIVETTE asked if KPMG audited any of the ancillary funds, such as the long-term care fund or the dental/audio/vision fund.

MR. HAYHURST stated that KPMG does audit the retiree health care fund. He referred trustees to the complete list of audited funds on slide 6. In conclusion, he thanked management for the cooperation KPMG received throughout the audit.

16. Investment Performance Measurement - 3rd Quarter 2009

MR. O'LEARY of Callan Associates, Inc. notified trustees that the packet of performance information in the meeting binder was a revised preliminary presentation. It did not contain the final real estate return numbers, but he did not expect a material change when the final report was issued. *[A copy of the Callan slide presentation, containing numerous graphs and charts, is on file at the ARMB office.]*

Starting with a market review, MR. O'LEARY said the September quarter was a great quarter for public financial assets, and the retirement fund participated in that market recovery. The private markets lagged significantly, and private equity was the biggest single contributor to below-target performance. Real estate continued to experience write-downs. To keep things in perspective, the stock market has already discounted a significant profit recovery. It is not enough that profits be up; they have to be up enough so as to not disappoint investors from this point forward. Regarding good news reported this morning about a slow-down in the rate of job losses, there is currently a lot of noise in the economic numbers because of the size of governmental programs and their impact on shifting up demand for things like cars and houses.

MR. O'LEARY stated that the Treasury yield curve at September 30 was extraordinarily steep and across the curve was basically lower than it had been at the beginning of the quarter or a year ago. Any news that economic activity seems to be improving is interpreted as interest rates are going to rise, so from day to day or even within the same day there are big changes in sentiment.

A periodic table of investment returns for major asset classes was interesting because it showed the incredible difference between emerging markets and U.S. large cap stocks over the last 10 years. The ARMB has had meaningful participation in emerging markets, which has helped portfolio performance.

Presenting a chart of the bond index returns, MR. O'LEARY pointed out the reversal in the bond market. The median manager in the high yield fixed income style group had a return of 38.36% for three quarters of 2009. Over the trailing year the return is 16.41%. The Barclays Aggregate Index returned 5.72% for the first three quarters of the year, and the trailing 12-month number is 10.56%. The Barclays Government Bond Index for the three quarters was actually -1.21%, a remarkable change. In 2008, particularly in the fourth quarter, the only asset that was up was government bonds. The reversal in the bond markets has been more spectacular than the changes in the stock markets.

MR. O'LEARY explained that the NCREIF Index for real estate is an unlevered and pre-fee return at the property level and is the most widely used measure of institutional real estate returns. Unfortunately, in many respects it is an unrealistic measure because the vast majority of investors in real estate have some leverage, and it is an inherently high-fee asset category (around 1%). Over the trailing four quarters, the NCREIF Index has been down over 22%, the worst that it has been in the index's history. While vacancy rates are up substantially, there have been prior periods where they have been worse. Going into this recession, real estate was not really overbuilt compared to the late 1980s and early 1990s. Accounting standards for real estate have moved toward market valuation of the assets, and the consequences of significant leverage are in action — plus a very steep recession. MR. O'LEARY also explained the NCREIF Open-End Diversified Core (ODCE) Index for open-end real estate funds that was down more than 28% for the nine months, so

worse results than the NCREIF Index. That reflects the higher leverage used in these funds, and the more aggressive valuation because people are trying to withdraw money at those values.

MR. O'LEARY reviewed how anticipated future income from leases plays into the NCREIF values, and said the expectation now is that leases will be signed at lower rates than they were previously. The second factor is that the vacancy expectation is greater today in the valuation of real estate than it was a year or two ago. Also, the capitalization rates are higher than they were. Of note is that the cap rate that is applicable to properties that are actually being bought or sold today is significantly higher than the NCREIF cap rates. Not a lot of transactions are happening so it is difficult to say whether the current cap rates will move higher, or if improved liquidity and economic activity will cause people to think that the current NCREIF cap rates are reasonable. Callan's experience in the real estate business makes them think that cap rates for existing properties will move higher.

When queried for his opinion, MR. WILSON said he agreed with the last statement.

MR. O'LEARY said the bottom line is that it is tough to see significant change in real estate valuations. He shared the view of others that the bottom for real estate will not be apparent for four or five quarters.

CHAIR SCHUBERT mentioned that she had heard there was a second round of loan failures anticipated on commercial properties. MR. O'LEARY said he thought one of the reasons that cap rates for transactions were so high is because of the distress of the equity owner and the legitimate concern about credit availability. That has dissipated a bit because some real estate investment trusts (REITs) were reasonably active in selling new equity during the third quarter. With that equity increase, many owners were able to refinance some of their mortgages, although the situation remains precarious. Maturity schedules of commercial mortgages show a big need for refinancing in calendar 2010 and 2011, hence the general view that the commercial real estate area is not out of the woods yet. What has changed is the expectation about how much that money will cost. With the big improvement in the bond market that occurred, particularly in commercial mortgage-backed securities in the June and September quarters, the environment looks a lot cheerier today than it did just six months ago. Because equity levels in properties are so low, the refinancing rate is critical to the availability of financing.

Addressing private equity, MR. O'LEARY said everyone is aware of the accounting change that forced more market-oriented valuations. Because of the lagged reporting, the December 31, 2008 private equity returns were really based on September 30 valuations. The December 31 valuations showed up during the March quarter and were really negative because they were catching up for what happened in the equity markets in the fourth quarter of 2008. The first quarter of 2009 was a terrible quarter, and that showed up in the second quarter private equity returns. In the third quarter private equity actually posted a slight positive return. That is because the majority of private equity is associated with

buyout investments. The ARMB portfolio has a greater-than-average exposure to venture capital, which is affected by the markets but a lot less affected than buyouts. Buyouts are affected in two ways. They have a significant amount of leverage in the structure, so as interest rates rise, it has a much bigger impact on the valuation of the enterprise. Second, buyouts tend to be larger companies for which there is more of a public market comparable, in terms of price/earnings ratios. Also, the general economy made everybody's equity worth less. The decline in private equity looks fairly comparable to the decline in public equity, but the timing of it is off by three to five months. Valuation increases for the buyout types of firms are already beginning to feed through, hence the slightly positive return in the third quarter. But the big changes in valuation will not be apparent until initial public offering (IPO) activity picks up in a meaningful way. IPO activity in the third quarter was actually up but not great.

MR. O'LEARY stated that inflation in the third quarter was -1.3%, and there was a very large decline in the Producer Price Index year-over-year. But a year ago commodity prices tanked and oil was in the thirties per barrel, so from this point forward the year-over-year comparisons will become more challenging. He did not think that the U.S. has negative inflation. The revised real GDP growth for the third quarter was 2.8%.

Referring to graphs of economic indicators put out by JP Morgan, MR. O'LEARY said the economy is still exceedingly weak, but it looks like the housing starts freefall has ended. Inventories have been declining, but even if there is no growth, inventories have to be replenished. Looking at stock valuation measures, MR. O'LEARY said the price to earnings ratio on the S&P 500 Index was over 26x at September 30. That looks high compared to historical averages, but he thought that was because earnings were depressed, and investors obviously think that profits looking ahead will be significantly better. That supports his belief that investors are already anticipating a significant profit recovery. If that does not materialize, then there is vulnerability in the market. The good news is that profits have been comparatively strong: there have been enough job cuts and write-offs that a small change in volume should result in a big change in profits. So the cost-saving gains have already been achieved, but the change in volume is needed now for profits to grow.

MR. O'LEARY mentioned that Mariner Investment Group did a great job talking about future inflation at the October education conference. He obtained permission to reproduce their graph of the 95-year inflation history in the U.S. He said inflation is the biggest issue that this board will face over the next five or six years. Callan shares the standard expectation that inflation is not a concern over the next year or two: the question is if inflation is a real risk beyond that. Mariner's graph illustrates that there have been comparatively few episodes of dangerously high inflation, but when they occur they feed on themselves. A tremendous expansion in the federal balance sheet accompanied the financial collapse in 2008-2009, a result of the government's attempt to provide liquidity. The total net borrowing and lending in the credit markets from households and non-financial corporations, etc. has declined sharply. The contraction would have been huge if governments had not stepped in. Manufacturing capacity and employment are incredibly

under-utilized, and hence the optimism about short-run inflation.

MR. O'LEARY commented that nobody knows what the tax bill associated with various government programs will end up being. Interest rates are very low, so it is not costing much for governments to be deeply in debt. The question is what will happen to deficits if interest rates are 2% or 3% or 4% higher. That ultimately is the discipline that gets imposed on the system. If one believes there is any inflation right now, then interest rates are negative. Looking ahead, people will have to be budgeting a lot more in the way of interest expense, and where will the revenue come from to pay that expense. The tightrope that policymakers have to walk, both from a fiscal perspective and from a monetary perspective, is a very challenging type tightrope. If policymakers signal that party time is over, no more negative real interest rates, and short-term rates are going to move up to 2% or 3% (so maybe the rate of inflation), that is a huge change. Depending upon one's political persuasion, you could be optimistic or pessimistic on that.

MR. O'LEARY reviewed the asset allocation of the retirement funds at September 30, using the Public Employees' Retirement System (PERS) as the illustration. Relative to the target, the fund was under allocated to fixed income, primarily because of the strength of the equity market rebound. Staff has subsequently addressed the under allocation.

MR. O'LEARY said the 9.46% September quarter return was attractive in an absolute sense but below the target return. The biggest sector of underperformance was in the private equity arena, where the target is a public market stock index. Private equity was up 3.4% in the quarter. Calendar year to date, the PERS total fund has returned 9.78%, compared to the target return of 16.92%. Again, the underperformance to the target is primarily attributable to private equity. Real assets were also down substantially year to date, but the difference from target was less extreme than for private equity. The trailing 12 months were a different story. Real assets and private equity were equally responsible for the underperformance relative to target. Real assets are comprised of TIPS and farmland that did well and real estate which did poorly. Looking at the longer-term PERS fund performance data, of note was that the return for private equity over seven years was 9.26% annualized and above the target benchmark.

MR. O'LEARY reported that relative to the Callan public fund database, calendar years 2005, 2006 and 2007 were great years for the retirement funds, and in a relative sense 2008 was not a bad year. However, 2009 for three quarters has been an abysmal year in a relative performance sense. That was why he spent time earlier delving into what has been happening in the real estate and private equity asset classes. Private equity made 2008 look better than it really was and is making the 2009 performance look worse than it really is, relative to the public fund database. The PERS fund very long-term return (18 years) is well below the target.

MR. O'LEARY next reviewed the major asset classes in the retirement funds, as follows:

- The total domestic bond pool performance was above the custom index for the last 12

months and was very strong in the September quarter. Although slightly negative last year, the total bond pool did not do poorly compared with other public funds.

- The in-house bond portfolio compared to the Callan core bond style group had an ugly fourth quarter in 2008 but has had three strong quarters of recovery in 2009.
- Large cap equity returned -6.48% for the trailing 12 months, while the Russell 1000 Index was down -6.14% and the S&P 500 Index was -6.91%. A big portion of the retirement portfolio's large cap is passively managed in the S&P 500.
- Small cap equity did a bit better than median in the quarter but did poorly for the trailing 12 months, at -11.23% compared to the index return of -9.55%. The board made significant changes to the structure of the small cap portfolio in 2005. There was market-like performance in 2005, strong relative performance in 2006 but behind the benchmark, and 2007 was a very strong year. Despite being negative, 2008 was strong in a relative sense, and 2009 has been very positive but lagging the index. The managers would say on balance that it is because of the higher quality orientation and less junk exposure.
- For total international equity including emerging markets, performance has been very competitive. The one-year return was 6.26% versus the MSCI ACWI Index at 6.43%, and 22nd percentile when compared with other public funds. Longer-term results are also very good. [Until ARMB increased the allocation to emerging markets, the comparison was focused on the EAFE Index for developed markets.]
- Total international equity excluding the emerging markets has done well compared with a developed market index (EAFE).
- The emerging markets equity pool performance has been competitive as well, 38th percentile over five years and above the benchmark. For the last year, the returns have been better than the median of the Callan emerging markets equity database but a tad below the emerging markets benchmark.
- There is one global equity manager, Lazard, which had a very strong year in a relative performance sense. They have beaten the appropriate benchmark over the long term.
- International bonds (Mondrian) really helped the total portfolio performance with a return of 18.76% over the last 12 months. Part of that was benefiting from the dollar's weakness, and part of it was the government bond benchmark.
- The REIT portfolio, while small now, had a great September quarter, up almost 33% and just slightly behind the NAREIT Equity Index.
- The absolute return composite returned 3.77% for the quarter.
- The high yield bond composite returned 10.18% for the quarter and 14.47% for the trailing 12 months, better than the Barclays Aggregate Index but lower than the high yield index. The high yield managers have more of a quality orientation, so they went down a lot less than the target index in calendar 2008.

MR. O'LEARY brought the performance a few managers to the board's attention, as follows:

- Callan has always compared Cadogan (absolute return) against the long-short hedge fund index, a slightly tougher peer group. But he fully supported the board's decision yesterday to terminate Cadogan.

- Crestline Investors had a decent September quarter relative to the absolute return hedge fund style. However, there was nothing great to say about the 4-3/4 year return of 2.53% annualized.
- Mariner (absolute return) has a fixed-income orientation and has done well compared against the absolute return style group over the last year.

MR. BADER observed that the ARMB's absolute return managers seem to be median managers and yet none of them seemed to be meeting the benchmark of T-bills + 5%. He asked if the benchmark needed to be changed.

MR. O'LEARY replied that from a risk perspective it is reasonable to change the benchmark. He said he and Greg Allen put on a couple of seminar presentations, and his topic was rethinking the policy benchmarks. His thought was why invest in absolute return funds if one do not believe you can attain a T-bills + 5% or LIBOR + 4% return objective. But the challenge is whether it is making life unnecessarily complex by having that as the short-term performance benchmark. There is no asset that produces T-bills + 5% on a consistent year-to-year basis: one has to take risk to do it. If incentive compensation were based on performance against the benchmark and it were paid on an annual basis, you would be livid with T-bills + 5% as the target because there is no way that you could depend on that on a year-to-year basis. If the target were the hedge fund research index or the Callan median for absolute return, that would be a much fairer short-term target. But long term, the ARMB should not be investing in hedge funds unless the asset class is providing the absolute return goal that the board set as the justification for investing in it. The magnitude of the bear market collapse and its focus on fixed income strategies, and the emphasis of being paid for liquidity — or penalized for absence of liquidity, makes this a once-in-a-lifetime type of period to live through. But if three or four years from now, on a cumulative basis, the ARMB has not seen a T-bills + 5% return from the absolute return portfolio's inception, it would be time to question why it was doing this, because the fees are high and the retirement fund was not getting the consistency that the board originally anticipated.

MR. O'LEARY continued highlighting several more managers:

- McKinley Capital is always a volatile manager, and the large cap growth portfolio participated well in the recent quarter relative to other growth managers. Depending on the period, they may look okay or maybe behind. On the international equity side, where McKinley's record is much shorter, staff will have a recommendation to put the firm on the watch list for very poor relative performance.
- Staff will have a recommendation on Turner Investment Partners small cap because of performance.
- Luther King small cap has a growth-at-a-reasonable-price type of strategy. They have done better than the benchmark in the last 12 months but have not participated fully in the market rally because of the quality orientation in their portfolio.
- Lord Abbett's small cap long-term record is very strong, but they have underperformed — again, because of the quality orientation.

- The Jennison Associates small cap has done well.
- Relational large cap has a concentrated portfolio of 10 stocks and has been the problem large cap portfolio for the ARMB. With three stocks representing half the assets in the portfolio, this type of investment approach means that if they get one stock pick right in a big way the picture could change markedly. The concern is when that will happen.
- Emerging markets manager Capital Guardian has done a good job.
- Eaton Vance emerging markets portfolio participated well in the quarter, and it is still early days for this mandate.
- Lazard emerging markets did not do well for the one-year period but beat the index in the September quarter. This mandate has a very limited record.
- The Lazard emerging market debt portfolio had a great quarter, as expected, but also has a very limited record.

MS. ERCHINGER mentioned that at the last meeting the board heard that the in-house bond portfolio is used to provide liquidity to the retirement funds. She asked if Mr. O'Leary had any idea how the performance might have been impacted by that.

MR. O'LEARY stated that the quarter of maximum stress on the in-house bond portfolio was the fourth quarter of 2008 when there was no liquidity anywhere. Yet liquidity was necessary to meet commitments and benefit payments. He recalled staff reporting last year on the extraordinarily wide bid-ask spreads, so that was a negative but he could not say how much of a negative.

MR. BADER said that Treasury Division investment management staff also run an identical mandate for the State of Alaska, which does not have quite the same liquidity requirements as the pension funds. It is an excellent comparison, but he did not know the magnitude of the difference. He planned to report that information to the board on a future agenda, because it is a good comparison of what liquidity costs.

BOB MITCHELL stated that for the fiscal year ended June 30 the difference was about 115 basis points. *[No microphone to pick up this comment, so check accuracy with staff member.]*

MR. O'LEARY commented that some steps have been taken to reduce that risk a little by increasing the fixed income target allocation effective July 1, 2009 and incorporating an explicit cash willingness.

MS. ERCHINGER wondered if it would be appropriate to set aside a portion of the in-house fixed income portfolio for liquidity uses so that the in-house managers are not held accountable against a benchmark for that portion. Her concern was that someone externally looking at the performance numbers might criticize the in-house portfolio for failure to meet its benchmark when in fact the portfolio is not being used the same way that another manager is attempting to meet their benchmark. That should be addressed

somewhere so that people viewing the performance information could make a fair comparison.

MR. O'LEARY offered caution about overreacting to a truly extraordinary market environment last year, but the importance of maintaining liquidity was driven home with great force during that time. There are a number of ways to approach it to make sure it is clear to all, and he agreed it should be addressed.

MR. O'LEARY indicated that concluded his presentation. CHAIR SCHUBERT thanked him and called a scheduled break from 10:22 a.m. to 10:32 a.m.

17. External Manager Review

[A staff report on the annual manager review meeting, as well as the background and staff recommendations on Turner Investment Partners and McKinley Capital were included in the meeting packet. These documents are also on file at the ARMB office.]

MR. BADER reported that each year he directs the board's liaison to send the ARMB's investment managers a questionnaire. He explained the topics covered in the questionnaire and said the responses are provided to the chief investment officer, the general consultant, and members of the Investment Advisory Council. After reviewing the manager responses, they meet to discuss items of particular concern, which took place in September this year. The group agreed to pay close attention to the Turner Investment Partners small cap portfolio, the Capital Guardian large cap equity mandate, and McKinley Capital's domestic large cap and international equity portfolios. As a result of the group's thorough review, they decided to make the following recommendations to the board:

- That the relationship with Turner be terminated and the small cap equity assets invested in index funds for the time being.
- That the Capital Guardian large cap equity portfolio be terminated and the money put into large cap index funds.
- That McKinley Capital's large cap growth mandate and international equity mandate be put on the investment manager watch list. The group closely examined McKinley's returns from inception to date and concluded that McKinley was at what is generally an inflection point in terms of when they could begin to have strong returns. Everyone hopes that McKinley can improve their performance in the coming year so that no additional action is necessary.

MR. BADER asked Dr. Jennings to report on the two topics he brought up during the manager review meeting.

DR. JENNINGS stated that the annual manager review meetings are useful for the IAC members. It allows them to not only look at each manager individually, but the group can consider some more macro issues in an informal setting. He said Mr. Bader had made a presentation to the previous board prior to implementation of Senate Bill 141, and one topic at that time was micro cap as an interesting area of investment. Callan has agreed to

review the suitability of a micro cap allocation for a large institutional fund. Return data about small cap stocks is really related to micro cap stocks, and there might be some thought that there is a potential opportunity for outperformance from active management in the most obscure stocks. The group also discussed international small cap as an area to investigate, and the board heard a presentation on that yesterday. The third area the IAC discussed was broad trends in asset allocation, as well as thoughts on suballocations within the real assets and other areas. This will have an impact on the recommendation for asset allocation a year from now. He said that at these meetings he also likes to bring up a look at manager structure and how managers fit within the overall active/passive allocation, etc.

MR. BADER said the group also talked about enhanced indexing and the concept of using futures to get the beta of the S&P 500 Index. Imbedded in the cost of owning a future is the carrying charge of money, which is generally a short-term interest rate. So in order to make more than the index return when buying a future on the S&P 500 an investor would have to be able to earn an income with the uninvested capital equal to or greater than the rate of return of short-term money. The IAC was supportive of staff going a bit in this direction using fixed income as a way of achieving the higher than short-term rate of return. Staff has reviewed that and is not quite ready to proceed in the current interest rate environment. They will be discussing with the IAC a strategy that staff is more enthusiastic about. The manager review group also discussed using exchange traded funds (ETFs) to try and match emerging market returns. Hence, that was part of the question to the BlackRock representatives yesterday about the use of ETFs versus index funds. This would take additional staff, and all that is under review right now.

MR. BADER said that although the group covered a lot of topics at the meeting, the recommendations came down to the three he listed earlier and for which the background information was contained in the written reports.

17(a). Action: Turner Investment Partners

MR. PIHL moved that the Alaska Retirement Management Board direct staff to terminate Turner Investment Partners, Inc. as a small cap equity manager and invest the assets in index funds pending staff recommendation to the board. MS. HARBO seconded.

The motion passed unanimously, 7-0. *[Commissioner Galvin and Mr. Williams were absent.]*

17(b). Action: Capital Guardian Large Cap

MR. TRIVETTE moved that the Alaska Retirement Management Board direct staff to terminate Capital Guardian Trust Company as a large cap equity manager and invest the assets in index funds. MS. HARBO seconded.

The motion passed unanimously, 7-0. *[Commissioner Galvin and Mr. Williams were*

absent.]

17(c). Action: McKinley Capital - Watch List

COMMISSIONER KREITZER moved that the Alaska Retirement Management Board direct staff to place the domestic large cap growth portfolio and the international equity portfolio managed by McKinley Capital Management on the investment manager watch list. MS. HARBO seconded.

The motion carried unanimously, 7-0. *[Commissioner Galvin and Mr. Williams were absent.]*

MR. BADER stated that following Janet Becker-Wold's presentation yesterday there was a question about how international small cap, emerging markets, and developed international market equities fit together from a portfolio perspective. He said staff intended to present some simulations to help answer that question to the board at the next meeting.

MR. BADER informed the board that he had seen a draft of Callan's review of whether micro cap stocks are a suitable institutional investment, and the final report might be available at the next meeting. He mentioned that Callan had undertaken the study at no cost to the ARMB.

18. Analysis of Investment Returns, Contribution Rates and Earnings Rate Assumption

DAVID SLISHINSKY and MICHELLE DELANGE of Buck Consultants were present to give an economic assumption review in response to the board's invitation at the June meeting. There was discussion at that meeting regarding the impact of the recent negative stock market returns on the actuarial results for the retirement systems.

Overview of Economic Assumptions

MR. SLISHINSKY stated that when setting economic assumptions Buck looks at an inflation rate that is applied consistently across several elements: (1) investment return assumption; (2) salary increases; (3) cost of living adjustments - the post-retirement pension adjustments (PRPA) for the Alaska retirement systems; (4) interest credit rates; and (5) interest on member contributions.

Studies have indicated that the real rate of return should reflect the asset mix because 92% of return is a result of that asset allocation decision.

The assumptions should reflect the benefit payment period. As actuaries, Buck is looking at a longer period of time than typically the investment consultant looks at. For example, a person hired at age 30 may work to the age of 60 and then may receive benefit payments for 25 years in retirement. The assumptions also should consider recent trends, and certainly there have been a lot of changes in the economy over the past couple of years. Finally, assumptions should take into account future expectations.

MR. SLISHINSKY displayed a chart of historical inflation experience by decades from the 1930s. Over a 50-year period, the inflation has been about 4% per year. Inflation was higher in the 1970s and 1980s, and has been lower than 4% over the past 20 years. Buck uses an assumed inflation rate of 3.5% for the long term.

Historical PERS Results

MS. DELANGE referred to a graph of the assets and liabilities of the PERS system from 1989 to 2008. Up through 2001 the market value of assets and the liabilities were following a similar track. Since 2002 liabilities have gone up quite steadily, and assets remained very near flat for a number of years before increasing up through June 30, 2008. So for the last seven years the PERS assets have not been growing at the 8.25% expected return, but the liabilities have been growing at that rate and even higher in some years.

MS. DELANGE next showed a historical summary of the rate of return on the market value of assets for PERS. There have been four years out of the last 21 years where the rate of return was below zero, and 17 years where the rate of return was above zero. The assumed rate of return has been 8.25%. There have been 14 years above an 8.25% return and seven years below 8.25%. Over the 21-year period, the arithmetic mean was 7.7% and the geometric mean was 7.25%. If Buck were to exclude the estimated 2009 return, the arithmetic mean would have been 9.1% and the geometric mean would have been 8.86% — well above the 8.25% expected return. Just the one-year outlier has created a very different scene over the last 21 years.

MR. PIHL asked if the value of assets Buck was using was the real market value or the actuarial recognized market value after spreading (smoothing) gains and losses. MS. DELANGE said the historical summary she just showed was the actual market value based on returns and not the smoothed value.

Developing the Investment Return Assumption

MR. SLISHINSKY stated that recent trends are suggesting a low inflation environment, certainly when compared to the long-term history. Inflation over the past two decades has been low, and the U.S. is currently in a very low inflationary environment. The question looking into the future is to what extent the fiscal stimulus going on right now will creep into increased inflation. The asset-liability study that Callan performed a couple of months ago had an inflation assumption of 2.75% over a 10-year period. That is 75 basis points lower than Buck's long-term inflation assumption of 3.25%.

MR. SLISHINSKY said that interest rates have been low and more stable recently. Equity returns have begun to rebound, which is good news. But some economic models predict that it will be a slow recovery and that equity returns will be lower than historical returns over the next five to ten years. Significant investment losses have occurred over the last two years on the actuarial value. It is important to recognize that, using the asset-smoothing method, Buck is now smoothing large significant losses that were created for

fiscal year ending 2008, and fiscal year ending 2009 yet to be presented. These losses will dampen the returns over the next five years on the actuarial value of assets. PERS would need significant investment returns to offset those losses to get back to the actuarial assumption.

MR. SLISHINSKY displayed a pie chart of the PERS 2010 asset allocation policy: 30% domestic equity, 22% international equity, 7% private equity, 20% fixed income, 16% real assets, and 5% absolute return. He said there is a lot of exposure to equities and real estate, so there is room in the current policy for upside potential on investment returns. Buck considers this in determining the long-term real rate of return on the PERS portfolio.

MR. SLISHINSKY explained how Buck took a stochastic approach to looking at the expected investment rate of return as well as the level of risk inherent in the portfolio. Using the policy allocation targets, they have determined the arithmetic mean of the real return for each asset class and then used a stochastic projection to basically calculate over a 40-year period what the geometric mean of those results would be, as well as the level of risk. The calculated mean return over 40 years is 4.92%, and the standard deviation (level of risk) is 12.7%. The calculations were based on a 3.5% long-term inflation rate. Expenses were estimated at 30 basis points. They recognized that the ARMB's use of active investment management has higher investment expenses. They calculated the geometric mean return as follows:

| | |
|----------------------------|--------|
| Real return..... | 4.92% |
| Inflation..... | +3.50% |
| Expenses | -0.30% |
| Net investment return..... | 8.12% |

Buck defined a reasonable range for investment return of 20% around the geometric mean of 8.12%. The distribution of expected returns was anywhere from 7.61% to 8.62%. So certainly the 8.25% return assumption is within that range but a bit on the high side of the mean return of 8.12%.

Impact of Lowering Economic Assumptions

MS. DELANGE next reviewed the impact of making a change to the inflation rate or the real rate of return.

Lowering the real rate of return assumption would impact the discount rate, which would therefore increase the liabilities. It also affects the amortization rate of the unfunded liability, and by reducing the interest rate will reduce the prior service cost base. Overall, the impact of lowering the real rate of return it to increase the contribution rates.

Lowering the inflation side impacts more things than lowering the real rate of return assumption. It will decrease the discount rate and increase the liabilities. It will decrease the payroll growth assumption because inflation is one of the components of payroll growth. There will be no change to the amortization of the unfunded liability because both

the investment return and the payroll growth will be reduced by the same amount. The salary assumption will be reduced because inflation is part of that assumption. Also, the assumption for PRPAs will be reduced because it is based on inflation. So there will be a reduction in liabilities for both the salary assumption and the PRPA assumption. Lastly, lowering the inflation assumption will decrease the assumed investment return and ultimately increase the contribution rates.

MS. DELANGE said Buck assumed that the health care cost trend table adopted last year would not be impacted by a lower inflation rate assumption.

MS. DELANGE showed the results for PERS on reducing the real rate of return assumption by either 0.25% or 0.50%, and not changing the inflation assumption. With each quarter percent reduction in the return assumption, the liabilities increase by about 3%. Normal cost goes up about 5%. Each 0.25% return reduction makes the contribution rate go up a little over 2%. She showed the same analysis for TRS, where the impacts were approximately the same as for PERS. The contribution rate for TRS increases by 2.41% when the real rate of return is reduced by 0.25%. For a 0.50% return reduction, the contribution rate increases by 4.9%.

MS. DELANGE described the same type of analysis for PERS of lowering the inflation rate by 0.25% or 0.50%, and no change to the real rate of return assumption. This does not have as big an impact as the scenarios where the real rate of return assumption was changed because the inflation rate also reduces liabilities because the salary scale and PRPAs are assumed to be lower. With each quarter percent reduction in the inflation assumption, the liabilities increase by about 2% and normal costs increase by about 3.5%. Ultimately, the change in contribution rate is smaller in these scenarios: a 1.73% increase for the 0.25% lower inflation, and a 3.5% increase for the 0.5% lower inflation. She showed the same analysis for TRS, where the impacts are very similar. For TRS, the contribution rate increases by 1.89% for the 0.25% lower inflation, and increases by 3.88% for the 0.5% lower inflation.

MR. SHIER asked if Buck did not change the health care cost assumptions because those costs move independent of any economic factors. MR. SLISHINSKY said Buck discussed this with their health and productivity consultants, who did not think that the level of adjustments on price inflation have had any impact long term on health care inflation. MS. DELANGE added that they also did an analysis to see how much the health care cost trend table changed. There are several inputs that go into that model adopted last year, and changing the inflation assumption did not have a significant impact. Buck decided that it was best at this point not to change the health care cost trend table that was just adopted last year.

MR. O'LEARY requested comment on industry trends with regard to inflation assumptions. MR. SLISHINSKY said he had not seen much movement recently, but over the past five years there has been a downward trend in the inflation assumption used in actuarial

valuations.

COMMISSIONER KREITZER said Alaska is not the only pension plan asking these questions. She asked for Buck's observations about other states' experiences. She said she appreciated having the topic of the earnings rate assumptions and the contribution rate on the agenda in order to get the question out in the open.

MR. SLISHINSKY stated that about three years ago South Dakota moved from 8.0% to a 7.75% return assumption. He said he has discussed this with Nebraska, which for state and county employees has a cash balance plan and for school, state patrol and judges they use a traditional defined benefit plan. Nebraska's defined benefit plan has an 8.0% earnings assumption. The cash balance plan is relatively new and a little more conservative, so they are using 7.75% there. A lot of discussion took place there about reducing the assumptions, and Nebraska has taken a wait-and-see attitude to see what happens in the next year or two with regards to an economic rebound and a rebound in the markets before they make any decision. Both he and Ms. DeLange worked on an audit this summer for Colorado Public Employees' Retirement Association (PERA), and that was a big issue there. They were at 8.25%. Their actuary had recommended 8.0% or 8.25%. Buck recommended to PERA that they reduce their assumption, and they ended up adopting the 8.0% assumption.

COMMISSIONER KREITZER asked what happened to the unfunded liabilities for the funds that Mr. Slishinsky mentioned. MR. SLISHINSKY said that as those plans go through the same kind of actuarial analysis and decrease the earnings assumptions, they are increasing their unfunded liabilities, decreasing the funded ratios, and increasing the amount of annual contributions needed to meet those increased liabilities.

MR. PIHL inquired about the starting point for this analysis. He said he was concerned about the huge investment return loss that has been deferred and whether that is recognized at all in the analysis presented today. Also, he wondered if the actuarial world was giving any consideration to the wisdom of spreading losses over five years. He thought it ought to be a shorter period of time. To be conservative, it is fine to spread gains over five years, but it seems ridiculous to spread the losses that are the magnitude they are.

MS. DELANGE stated that the numbers presented today included the actuarial value of assets (smoothed value) up to fiscal year 2008. Buck is in the process of completing the 2009 valuation, and the board could expect that the unfunded numbers are going to be bigger because of the asset losses through fiscal year 2009.

MR. SLISHINSKY explained that Buck showed the historical record going back to 1989 primarily because that information is easily accessible. Buck was providing information for the board to see what the actual experience has been over a long period of time. Twenty years of data for Alaska is one piece of the puzzle. The other piece is looking at what recent trends are and what expected future trends are. When Buck starts looking at the

expectations for the future, it has to be a joint effort in having a collective approach to setting those long-term assumptions.

Addressing the second of Mr. Pihl's questions, MR. SLISHINSKY said there is discussion about marking to market value and not smoothing the value of assets at all — thereby recognizing gains and losses immediately. And not only recognizing that on the asset side but also, instead of using the expected long-term rate of return based upon the asset allocation as a discount rate, using something that is more risk-free or tied to a quality bond rate. If that kind of thinking is adopted in the public sector for actuarial valuations, it will be a huge difference in results.

MS. DELANGE stated that most of the systems that Buck sees use some form of smoothing, and five years is the most common with four years as the second most common. So Alaska is in line with all of its peers by smoothing. But with the large losses, the mark to market is a lot to swallow today.

MS. HARBO inquired if Buck has always included the administrative expenses when calculating investment returns, because she did not recall having seen that before. MR. SLISHINSKY said that when they are building the expected rate of return they typically will look at the administrative expenses and a certain element for investment expenses (as if all assets are passively invested, with the assumption that active management pays for itself), or take a more conservative approach and just include all investment expenses, which they did in today's analysis.

MS. HARBO contended that Buck's other presentations used the real return number and the inflation expectation to get the net investment rate of return, but not the administrative expenses as a separate item. MR. SLISHINSKY said they would look back and check.

MS. ERCHINGER asked about what inflation rate assumption other public plans are using. MR. SLISHINSKY stated that generally inflation rates range between 3% and 4%, but there may still be some systems that use rates below 3% or over 4%.

COMMISSIONER KREITZER asked if Buck had any recommendation today for the ARMB. MR. SLISHINSKY said he would give a recommendation if asked. COMMISSIONER KREITZER said she was asking.

MR. SLISHINSKY said he would recommend reducing the investment return assumption. The question is whether it should be reduced to 8.0% or 7.75%, and whether or not the inflation rate should also be reduced. It looks like most of the difference between Buck's assumptions and the expected returns that Callan has are on the inflation side. So it would make sense to reduce to inflation assumption, whether that be to 3.25% or 3.0%, which would then reduce the investment return assumption as well.

MR. BURNETT inquired if there was anything in Buck's analysis that indicated that the

current assumptions are outside the reasonable bounds. Buck has recommended that the assumptions be changed, but they have also shown that the current assumptions are within the reasonable bounds. He asked, based on the ARMB asset allocation, if reasonable people could leave it the same as it is.

MR. SLISHINSKY said the answer is yes, that the result is within the reasonable range. Buck has defined the reasonable range as 20% around the mean return. Others look upon a 50% range around the mean return as being reasonable. Even the 20% reasonable range is still looking at a 1% [return] difference from the low point to the high point of the range. Given that, his perspective is that with the recent market events and because of the economic situation he feels more comfortable being conservative. The question is what the board would want to do.

MS. ERCHINGER commented that the assumption on the rate of return is impacted by the asset allocation, and she asked if the ARMB asset allocation lent itself to using a higher rate of return than what other public funds might be using. MR. SLISHINSKY said yes, that the asset allocation lends itself to a higher expected long-term real rate of return, probably higher than the average retirement system. And the ARMB has had a higher rate of return assumption at 8.25%, where most public systems have been at 8.0%. Some of those systems are now moving from 8.0% down to 7.75% or 7.5%. So because the ARMB is higher does not mean it should not move, but also the analysis results do not indicate that it has to move either.

MR. PIHL stated that this analysis needs to be looked at in tandem with the next valuation report because that will tell the board what the contribution rate has to be to amortize the liability and how much that will increase the state appropriation request.

MS. ERCHINGER said that before making any decision on changing a return assumption she would want to see specifically the wider universe of public pension plans against which the ARMB's asset allocation is compared. It was important to get a better sense of where the ARMB falls on the continuum — conservative or not-so-conservative. That was of more immediate concern to her than the legislative issue. The ARMB has a long-term investment horizon, and it is the board's job to make sure that the retirement plans are fully funded.

CHAIR SCHUBERT thanked the representatives from Buck for the presentation.

UNFINISHED BUSINESS

1. Calendar

MS. HALL indicated that the board-approved 2010 meeting calendar was included in the meeting packet.

2. Disclosure Report

MS. HALL stated that the financial disclosures made since the last meeting were

included in the meeting packet.

3. **Legal Report**

MR. JOHNSON said he has been working with Mr. Hanna and Mr. Sikes on new contracts, as needed, and endeavoring to revise other contracts. He indicated that Mike Barnhill from the Attorney General's Office was on teleconference and wished to give a report in executive session.

MS. ERCHINGER moved that the Board go into executive session for consideration of reports regarding pending litigation and attorney-client privileged communication, and for consideration of amendments to investment management contracts, the disclosure of which could have an adverse effect on the finances of the fund. MR. TRIVETTE seconded.

The motion passed unanimously, 7-0, and the board met in executive session starting at 11:25 a.m. When the meeting reconvened in regular session at 11:38 a.m., the board took the following action.

MS. ERCHINGER moved that the Alaska Retirement Management Board authorize the administration to work with managers to negotiate investment management fees and then forward those proposed amendments to the Department of Revenue commissioner and the board chair for approval. MS. HARBO seconded.

The motion carried unanimously, 7-0. *[Commissioner Galvin and Mr. Williams were absent.]*

NEW BUSINESS - None.

OTHER MATTERS TO PROPERLY COME BEFORE THE BOARD

Staff Response to Question about Tishman Speyer Real Estate Venture Fund

MR. BADER said that Mr. Pihl had inquired about the large write-down in the Tishman Speyer Real Estate Venture VI in the September 30, 2009 financial statements. He said both Tishman and BlackRock heavily solicited staff to participate in a real estate venture called Peter Cooper Village, a large apartment complex in New York City. At the time it was the largest single real estate transaction ever. The ARMB declined to participate in those funds, but other large funds that did invest appear to be looking at half a billion dollars of losses. While the ARMB dodged that bullet in a terrible real estate environment, there have been writedowns in other funds in the real estate portfolio. There was heavy leverage in the Tishman Speyer Real Estate Venture VI, and the decline in the fund's value is a result of that heavy leverage. It is symptomatic of what is happening in a number of closed-end funds in the portfolio. Staff hopes the write-downs are at an end. He offered to come back with more details if trustees wished.

MR. PIHL mentioned that leverage is not permitted on the ARMB's direct real estate holdings. MR. BADER confirmed that the separate account core holdings are all unlevered. The open-end funds do have some leverage but nowhere near the amount that the closed-end funds have that are more speculative in nature. The big hits to the ARMB's real estate portfolio are on the speculative side, but the large portion of core assets continue to provide revenues to the retirement fund.

Response to Question on Rebalancing Memo to State Street

MR. BADER referred to a rebalance memorandum regarding the TRS retirement plan in the CIO report where Ms. Erchinger yesterday pointed out that one of the columns did not balance. He said staff researched that transaction and determined that what was communicated to the custodian bank, State Street, actually did balance and no accounts need to be adjusted. It was a clerical error in transferring the spreadsheet to the memorandum, where a \$3 million high yield line was the difference.

Follow-up to Education Conference

MR. BADER said there was a presentation on commodities at the October education conference. He has asked Mr. O'Leary for a presentation at the next meeting on the suitability of commodities in the portfolio, since there is a lot of speculation about the best way to insulate the retirement fund against possible increased inflation.

PUBLIC/MEMBER COMMENTS - None.

INVESTMENT ADVISORY COUNCIL COMMENTS

DR. JENNINGS said he sensed some trustee concern about the buy-write recommendation yesterday. The closest word he could come up with to characterize his feelings about it was that he was a little more ambivalent about the proposal than Mr. Bader was, and he thought the other IAC members possibly felt the same. He liked it for the reasons put forward, but there are some operational issues. He also wanted to get his brain wrapped around the theory and underlying economic reasons for the specific approach. So he thought it was fair to characterize the IAC as a bit less enthusiastic about the buy-write strategy than staff was. But it was interesting enough to investigate further, even at a cost. He planned to go into the details of any presentations with a fine-toothed comb.

DR. MITCHELL said that he noticed the agenda had presentations about private equity, international bonds, international small cap, buy-write derivatives, and farmland. The rhetorical question has to be why the ARMB is investing in all of these asset classes, subasset classes and sub-subasset classes. The first reason for the diversification is that nobody knows in any given year what asset class will do well the next year. So it stands to reason that the more asset classes the ARMB is invested in, the better chance of at least finding one or two that do perform well in the subsequent year. So performance is one reason. The second is reduction of risk, if risk is measured in terms of volatility (standard

deviation). The more asset classes, the greater chance of reducing the risk — it does not always work, but it usually works. The caveat he wanted to propose is the time period. If the board does not stick with these asset classes for a long enough time period, both of the advantages do not have to work. So when the board is considering domestic micro cap or international small cap or farmland, trustees should bear in mind that if they do not really feel they can take staying in those assets for five or ten years, they better not do them.

MR. WILSON commended the board for continuing to look at managers that are not performing and terminating them, as was done at this meeting. He has been involved on the IAC for a little over three years, and there has been a continuing conversation on active versus passive management. He recalled talking to Dr. Mitchell a few years ago about what he thought the standards should be to hire an active manager, and the response stuck with him. Dr. Mitchell had said you should have a very high conviction that somebody over a reasonable period of time would beat the index. If they do not, then you should move to passive management. He followed in Dr. Mitchell's footsteps at the Boston Foundation and has used those words to evaluate managers: in the last 18 months the foundation has gone from seven managers in domestic equities down to three managers, and from roughly 10% passive to 50% passive. The ARMB is at similar numbers. He was struck by the recent trade press over the last week. Dr. Mitchell is chair of the investment committee at the Massachusetts pension plans, and they have actually gone to 100% passive domestically, which he thought was extraordinary. And they moved to 50% passive internationally, including a fairly significant passive allocation to emerging markets, which is pretty rare. The experience at the Boston Foundation is the active managers in emerging markets have significantly underperformed the benchmarks in an area where you would think that people should have an edge. He encouraged the board to continue thinking long and hard about the passive versus active debate because the return numbers the board saw were before manager fees and before the staff time engaged in managing all those asset managers.

TRUSTEE COMMENTS

MS. HARBO thanked staff for the very informative education conference, which she found quite productive. She also thanked Ms. Hall for making all the arrangements for those who attended.

MR. TRIVETTE stated that he and Ms. Harbo attended a public pension trustee NCTR conference in October. He intended to type up some notes on what he learned about pension trustee governance and investment-related issues, and share those with the other trustees. He suggested that other trustees might want to consider attending the conference, especially if they were interested in governance and some other issues that the board has to deal with.

CHAIR SCHUBERT mentioned that during the past week or so Dubai World announced that they were having financial problems, and the stock market reacted a bit initially but

then basically ignored it. She was not sure what that says about the commercial debt market, whether people are so exhausted dealing with crises that they do not want to face this, or whether the Dubai World situation is the start of another explosive debt problem still to be faced. Or perhaps it was that she worried too much.

COMMISSIONER KREITZER commented that there were others around the table who were worried as well, as she had seen people nodding in agreement at the chair's remarks. She said she appreciated Mr. O'Leary's explanation earlier [about the improved availability of refinancing], but she found there was a great silence on this topic and she shared the chair's concern.

MR. O'LEARY stated that he has wrestled long and hard with the refinancing challenge, and he is still personally concerned about the residential area, where many have pushed it aside. But there are floating rate jumbo mortgages that have yet to refinance. He stressed that his optimism is guarded optimism, and he is optimistic only relative to where he was three or four months ago.

MR. WILSON remarked that this crisis is a fascinating period. Because this debt is public, you can actually see when it matures. So there are lots of charts out there that show a massive amount of refinancing that needs to be done commercially over the next 36 months. From his perspective, the real key will be where interest rates are, because just a modest up tick in interest rates would probably prevent most of those deals from being refinanced. Currently what is going on is "extend and pretend" — lenders are extending the loans and pretending that everything is okay, because the banking system cannot take the shock of actually foreclosing on these loans. His personal outlook is that it will be a very difficult 36 months in the commercial real estate market. But like all opinions, it can be taken with a grain of salt.

FUTURE AGENDA ITEMS

MR. BADER said he looked at the buy-write strategy as a form of insurance — it costs to have insurance, it does not always pay to have it, but it is nice to have when you need it. He noted that three trustees and an IAC member spoke against the buy-write strategy, and he did not sense a lot of enthusiasm for it. He did not see any reason to take the board's time and to spend \$25,000 on a manager search if he was swimming against a strong current. There are plenty of things that will improve the retirement fund, and it was not his position as CIO to twist arms if people are not enthusiastic about the buy-write approach. He recommended amending the motion that was made and taking the buy-write strategy off the agenda.

CHAIR SCHUBERT stated that she did have an interest in it.

COMMISSIONER KREITZER clarified that she voted in favor of the motion to move forward and look into the buy-write strategy. However, she appreciated Mr. Bader's

sensitivity to the board's sentiment.

MR. O'LEARY suggested bifurcating the process and that at the next meeting Callan would make an educational presentation on buy-write. They would survey the market but not present any specific managers. Callan would not charge for that, and if the ARMB decided to proceed with a manager search after getting more information, then Callan's fees would apply.

COMMISSIONER KREITZER indicated she supported Mr. O'Leary's proposal.

CHAIR SCHUBERT ascertained that no one was opposed to the amended course of action on buy-write. With nothing else on the agenda, she wished everyone a Merry Christmas and a good New Year.

ADJOURNMENT

There being no objection and no further business to come before the board, the meeting was adjourned at 11:58 a.m. on December 4, 2009, on a motion made by Ms. Harbo and seconded by Mr. Trivette.

Chair of the Board of Trustees
Alaska Retirement Management Board

ATTEST:

Corporate Secretary

Note: An outside contractor tape-recorded the meeting and prepared the summary minutes. For in-depth discussion and more presentation details, please refer to tapes of the meeting and presentation materials on file at the ARMB office.

Confidential Office Services
Karen Pearce Brown
Juneau, Alaska

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT: PERS / TRS Membership Statistics
CUMULATIVE Information

DATE: February 25, 2010

ACTION: _____

INFORMATION: X

BACKGROUND:

Information related to PERS / TRS membership activity since the introduction of PERS Tier IV / TRS Tier III.

STATUS:

Cumulative membership information from July 1, 2006 through December 31, 2009:

PERS Defined Benefit Plan:

| | <u>Returned</u> | <u>With Indebtedness</u> | <u>Paid on Indebt</u> | <u>Terminated</u> | <u>Retired</u> |
|----------|-----------------|--------------------------|-----------------------|-------------------|----------------|
| Tier I | 1,664 | 1,392 | 458 | 807 | 2,257 |
| Tier II | 1,485 | 882 | 158 | 1,371 | 784 |
| Tier III | 3,319 | 1,087 | 115 | 5,854 | 363 |

TRS Defined Benefit Plan:

| | <u>Returned</u> | <u>With Indebtedness</u> | <u>Paid on Indebt</u> | <u>Terminated</u> | <u>Retired</u> |
|---------|-----------------|--------------------------|-----------------------|-------------------|----------------|
| Tier I | 330 | 120 | 27 | 61 | 856 |
| Tier II | 1,267 | 242 | 21 | 1,029 | 205 |

PERS Defined Contribution Plan:

| <u>Tier IV</u> | <u>Enrolled</u> | <u>Terminated</u> | <u>Refunded</u> | <u>Opted out of Managed Accounts</u> |
|-------------------|-----------------|-------------------|-----------------|--|
| New members | 13,350 | 4,445 | 1,549 | 1,179 |
| Converted members | 44 | 29 | 21 | |

TRS Defined Contribution Plan:

| <u>Tier III</u> | <u>Enrolled</u> | <u>Terminated</u> | <u>Refunded</u> | <u>Opted out of Managed Accounts</u> |
|-------------------|-----------------|-------------------|-----------------|--|
| New members | 3,468 | 812 | 251 | 239 |
| Converted members | 13 | 8 | 4 | |

AS 39.35.940 – Transfer into DCR Plan by nonvested members of DB Plan

Employers participating in the conversion option: 4

The State of Alaska for both PERS and TRS members, effective 7/1/06 through 6/30/07.
 Bering Straits School District for their TRS members, effective 1/1/07 through 12/31/07.
 Kake City School District for their PERS and TRS members, effective 2/1/07 through 1/31/08.
 City of Delta Junction for their PERS members, effective 4/1/07 through 3/31/08.

LEGEND

PERS / TRS DEFINED BENEFIT PLAN

Returned = Number of members returning to the Plan during the timeframe of this report

With Indebtedness = Number of members who returned to the Plan with an indebtedness balance
(Indicates prior PERS or TRS service that was refunded and could be repaid)

Paid on Indebtedness = Number of members who returned to Plan and have paid on their
indebtedness balance

Terminated = Total members who terminated from the Plan during the timeframe of this report

Retired = Total Plan members who retired during the timeframe of this report

PERS / TRS DEFINED CONTRIBUTION PLAN

Enrolled = Number of new members enrolled into Plan during the timeframe of this report

Terminated = Number of members who terminated from Plan during the timeframe of this report

Refunded = Number of members who refunded their contributions from Plan during the timeframe
of this report

Opted out of Managed Accounts = Number of members who opted out of the Managed Accounts
option at Great West and chose an alternate investment option

Converted members = Members who converted from the Defined Benefit Plan to the Defined
Contribution Plan (From PERS Tier III to Tier IV and TRS Tier II to Tier III)

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT: PERS / TRS FY2009 Membership Statistics
QUARTERLY INFORMATION ONLY
DATE: February 25, 2010

ACTION: _____
INFORMATION: X

BACKGROUND:

Information related to PERS / TRS membership activity since the introduction of PERS Tier IV / TRS Tier III.

STATUS:

Quarterly membership information from October 1, 2009 to December 31, 2009:

PERS Defined Benefit Plan:

| | <u>Returned</u> | <u>With Indebtedness</u> | <u>Paid on Indebt</u> | <u>Terminated</u> | <u>Retired</u> |
|----------|-----------------|--------------------------|-----------------------|-------------------|----------------|
| Tier I | 93 | 77 | 85 | 18 | 107 |
| Tier II | 80 | 47 | 30 | 71 | 39 |
| Tier III | 150 | 63 | 19 | 155 | 28 |

TRS Defined Benefit Plan:

| | <u>Returned</u> | <u>With Indebtedness</u> | <u>Paid on Indebt</u> | <u>Terminated</u> | <u>Retired</u> |
|---------|-----------------|--------------------------|-----------------------|-------------------|----------------|
| Tier I | 8 | 5 | 9 | (2) | 10 |
| Tier II | 22 | 5 | 5 | 23 | 3 |

PERS Defined Contribution Plan:

| <u>Tier IV</u> | <u>Enrolled</u> | <u>Terminated</u> | <u>Refunded</u> | <u>Opted out of Managed Accounts</u> |
|-------------------|-----------------|-------------------|-----------------|--|
| New members | 806 | 333 | 196 | (475) |
| Converted members | 0 | 0 | 0 | |

TRS Defined Contribution Plan:

| <u>Tier III</u> | <u>Enrolled</u> | <u>Terminated</u> | <u>Refunded</u> | <u>Opted out of Managed Accounts</u> |
|-------------------|-----------------|-------------------|-----------------|--|
| New members | 126 | 44 | 22 | (105) |
| Converted members | 0 | 0 | 0 | |

AS 39.35.940 – Transfer into DCR Plan by nonvested members of DB Plan

Employers participating in the conversion option: 4

The State of Alaska for both PERS and TRS members, effective 7/1/06 through 6/30/07.
Bering Straits School District for their TRS members, effective 1/1/07 through 12/31/07.
Kake City School District for their PERS and TRS members, effective 2/1/07 through 1/31/08.
City of Delta Junction for their PERS members, effective 4/1/07 through 3/31/08.

LEGEND

PERS / TRS DEFINED BENEFIT PLAN

Returned = Number of members returning to the Plan during the timeframe of this report

With Indebtedness = Number of members who returned to the Plan with an indebtedness balance
(Indicates prior PERS or TRS service that was refunded and could be repaid)

Paid on Indebtedness = Number of members who returned to Plan and have paid on their
indebtedness balance

Terminated = Total members who terminated from the Plan during the timeframe of this report

Retired = Total Plan members who retired during the timeframe of this report

PERS / TRS DEFINED CONTRIBUTION PLAN

Enrolled = Number of new members enrolled into Plan during the timeframe of this report

Terminated = Number of members who terminated from Plan during the timeframe of this report

Refunded = Number of members who refunded their contributions from Plan during the timeframe
of this report

Opted out of Managed Accounts = Number of members who opted out of the Managed Accounts
option at Great West and chose an alternate investment option

Converted members = Members who converted from the Defined Benefit Plan to the Defined
Contribution Plan (From PERS Tier III to Tier IV and TRS Tier II to Tier III)

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT: Invoices & Summary of Billings - ACTION: _____
Buck Consultants, an ACS Company

DATE: February 25, 2010 INFORMATION: X

BACKGROUND:

AS 39.10.220(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 monthly invoices to the Division for Fiscal Year 2010 for the months of July, August, September, October, November and December 2009.

Attached are the summary totals for the three months and six months ended December 31, 2009.

Buck Consultants
Billing Summary
Through the Three Months Ended September 30, 2009

| | <u>PERS</u> | <u>TRS</u> | <u>JRS</u> | <u>NGNMRS</u> | <u>EPORS</u> | <u>RHF</u> | <u>TOTAL</u> |
|------------------------------------|------------------|---------------|--------------|---------------|--------------|--------------|------------------|
| Actuarial Valuations | \$ 4,489 | 3,902 | 30 | - | - | - | \$ 8,421 |
| ARMB Presentations | 1,935 | 1,285 | - | - | - | - | 3,220 |
| State Employer Relief | 6,038 | 4,863 | 2,261 | - | - | - | 13,162 |
| Employer Contribution Graphs | 2,925 | 2,299 | - | - | - | - | 5,224 |
| DCR Payroll Impact on DB Funding | 864 | 658 | - | - | - | - | 1,522 |
| 30 year Projections & DCR Repeat | 16,584 | 13,741 | - | - | - | - | 30,325 |
| Roll Forward Request & Inv. Review | 2,155 | 1,583 | 150 | 3,010 | - | - | 6,898 |
| Other consulting | 2,315 | 2,099 | - | - | - | - | 4,414 |
| Audit Request | 2,228 | 1,908 | 1,365 | 988 | - | 4,828 | 11,317 |
| Roll-Forward methodology request | 1,844 | 1,755 | - | 624 | - | - | 4,223 |
| TOTAL | \$ 41,377 | 34,093 | 3,806 | 4,622 | - | 4,828 | \$ 88,726 |

Buck Consultants
Billing Summary
Through the Three Months Ended December 31, 2009

| | <u>PERS</u> | <u>TRS</u> | <u>JRS</u> | <u>NGNMRS</u> | <u>EPORS</u> | <u>RHF</u> | <u>TOTAL</u> |
|--------------------------------|-------------------|---------------|--------------|---------------|--------------|--------------|-------------------|
| Actuarial Valuations | \$ 112,097 | 90,504 | 5,669 | 3,332 | - | - | \$ 211,602 |
| ARMB Presentations | 3,191 | 1,279 | 29 | 132 | - | - | 4,631 |
| State Employer Relief | 1,469 | 1,155 | - | - | - | - | 2,624 |
| Funding and GASB Disclosure | 148 | 59 | 1 | 6 | - | - | 215 |
| Geographic Difference Study | 2,710 | - | - | - | - | - | 2,710 |
| Funding of Retiree Health Fund | - | - | - | - | - | 2,822 | 2,822 |
| Economic Assumption Review | 6,425 | 6,425 | - | - | - | - | 12,850 |
| TOTAL | \$ 126,040 | 99,422 | 5,700 | 3,470 | - | 2,822 | \$ 237,454 |

Buck Consultants
Billing Summary
Through the Six Months Ended December 31, 2009

| | <u>PERS</u> | <u>TRS</u> | <u>JRS</u> | <u>NGNMRS</u> | <u>EPORS</u> | <u>RHF</u> | <u>TOTAL</u> |
|------------------------------------|-------------------|----------------|--------------|---------------|--------------|--------------|-------------------|
| Actuarial Valuations | \$ 116,586 | 94,406 | 5,699 | 3,332 | - | - | \$ 220,023 |
| ARMB Presentations | 5,126 | 2,564 | 29 | 132 | - | - | 7,851 |
| State Employer Relief | 7,507 | 6,018 | 2,261 | - | - | - | 15,786 |
| Employer Contribution Graphs | 2,925 | 2,299 | - | - | - | - | 5,224 |
| DCR Payroll Impact on DB Funding | 864 | 658 | - | - | - | - | 1,522 |
| 30 year Projections & DCR Repeat | 16,584 | 13,741 | - | - | - | - | 30,325 |
| Roll Forward Request & Inv. Review | 2,155 | 1,583 | 150 | 3,010 | - | - | 6,898 |
| Other consulting | 2,315 | 2,099 | - | - | - | - | 4,414 |
| Audit Request | 2,228 | 1,908 | 1,365 | 988 | - | 4,828 | 11,317 |
| Roll-Forward methodology request | 1,844 | 1,755 | - | 624 | - | - | 4,223 |
| Funding and GASB Disclosure | 148 | 59 | 1 | 6 | - | - | 215 |
| Geographic Difference Study | 2,710 | - | - | - | - | - | 2,710 |
| Funding of Retiree Health Fund | - | - | - | - | - | 2,822 | 2,822 |
| Economic Assumption Review | 6,425 | 6,425 | - | - | - | - | 12,850 |
| TOTAL | \$ 167,417 | 133,515 | 9,506 | 8,092 | - | 7,650 | \$ 326,180 |



REMIT BY CHECK TO:
Buck Consultants, LLC
Dept. CH 14061
Palatine, IL 60055-4061

August 26, 2009

REMIT BY WIRE TO:
Buck Consultants, LLC
The Bank of New York Mellon, NA
ABA # 043000261
DDA # 0038720

Mr. Kevin Worley
Chief Financial Officer
State of Alaska PERS
333 Willoughby
6th Floor, State Office Building
Juneau, AK 99811-0208

EIN: 13-3954297

Terms: Payable upon receipt. Interest accrues after 30 days from the invoice date at 1% per month.

Actuarial Valuation and Consulting Contract
Agency Contract Number 2006-0200-5759

Direct Inquiries to:
Judy Daszkiewicz - Finance Dept.
Email: Judith.Daszkiewicz@acs-hro.com
Phone: (201) 902-2842

Client #: 00019732
Invoice #: 2028155

Services rendered from July 1 through July 31, 2009 (see attached):

\$ 13,947.00

*Approved for
payment
JW
9/8/09*

RECEIVED

AUG 31 2009

DIV of RETIREMENT & BENEFITS

State of Alaska
July 2009 Invoice for Actuarial Services

| | July 2009 | | Fiscal Year to Date July 2009 - July 2010 | |
|---|-----------|----------|--|-----------|
| | Services | Expenses | Services | Expenses |
| Total | | | | |
| Regular Services Under Contract | | | | |
| None | \$ 0 | \$ 0 | \$ 0 | \$ 0 |
| Subtotal | \$ 0 | \$ 0 | \$ 0 | \$ 0 |
| Non-Regular Services | | | | |
| Completion of the allocation of State Employer Relief under HB81, including split of employer payroll, submitted July 30 | \$ 3,523 | \$ 0 | \$ 3,523 ✓ | |
| - PERS | 2,883 | 0 | 2,883 ✓ | |
| - TRS | 998 | 0 | 998 ✓ | |
| - JRS | | | | |
| Completion of projected employer contribution graphs, submitted July 30 | \$ 2,925 | \$ 0 | \$ 2,925 | |
| - PERS | 2,299 | 0 | 2,299 | |
| - TRS | | | | |
| Miscellaneous | \$ 1,319 | \$ 0 | \$ 1,319 ✓ | |
| Subtotal | \$ 13,947 | \$ 0 | \$ 13,947 | \$ 13,947 |
| Grand Total | \$ 13,947 | \$ 0 | \$ 13,947 ✓ | \$ 13,947 |

RECEIVED

AUG 31 2009

DIY OF RETIREMENT & BENEFITS

| Staff Member | July 2009 | Fiscal Year-to-Date |
|----------------------|-----------|--------------------------------|
| | Hours | July 2009 – July 2010 Hours |
| • Chris Hulla | 0.75 | 0.75 |
| • Colin Wein | 11.50 | 11.50 |
| • David Slishinsky | 10.00 | 10.00 |
| • Karen Hancock | 12.50 | 12.50 |
| • Kathy Recchiuti | 2.75 | 2.75 |
| • Kyla O'Rourke | 19.00 | 19.00 |
| • Melissa Bissett | 1.00 | 1.00 |
| • Michelle DeLange | 4.00 | 4.00 |
| • Michelle Pritchard | 21.50 | 21.50 |
| • Tammy Ringel | 0.75 | 0.75 |
| • Total | 83.75 | 83.75 |

RECEIVED
AUG 3 1 2009
 DIV of RETIREMENT & BENEFITS



REMIT BY CHECK TO:
Buck Consultants, LLC
Dept. CH 14061
Palatine, IL 60055-4061

September 22, 2009

REMIT BY WIRE TO:
Buck Consultants, LLC
The Bank of New York Mellon, NA
ABA # 043000261
DDA # 0038720

Mr. Kevin Worley
Chief Financial Officer
State of Alaska PERS
333 Willoughby
6th Floor State Office Building
Juneau, AK 99811-0208

EIN: 13-3954297

Terms: Payable upon receipt. Interest accrues
after 30 days from the invoice date at 1% per
month.

Actuarial Valuation and Consulting Contract
Agency Contract Number 2006-0200-5759

Direct Inquiries to:
Judy Daszkiewicz - Finance Dept.
Email: Judith.Daszkiewicz@acs-hro.com
Phone: (201) 902-2842

Client #: 00019732
Invoice #: 2029838

Services rendered from August 1 through August 31, 2009 (see attached):

\$ 21,509.00

RECEIVED

SEP 28 2009

DIV of RETIREMENT & BENEFITS

*Approved
for print.
JW
10/14/09*

RECEIVED

SEP 2 8 2009

DIV of RETIREMENT & BENEFITS

State of Alaska
August 2009 Invoice for Actuarial Services

| | August 2009 | | Fiscal Year to Date | |
|---|-------------|----------|---------------------|----------|
| | Services | Expenses | Services | Expenses |
| Regular Services Under Contract | | Total | | Total |
| Preparation for 2009 actuarial valuations | | | | |
| - PERS | \$ 1,935 | \$ 0 | | \$ 1,935 |
| - TRS | 1,285 | 0 | | 1,285 |
| Expenses for June ARM Board Meeting | \$ 0 | \$ 1,219 | | \$ 1,219 |
| | \$ 3,220 | \$ 1,219 | \$ 3,220 | \$ 4,439 |
| Non-Regular Services | | | | |
| Work in process of the allocation of State Employer Relief for FY11 | | | | |
| - PERS | \$ 1,725 | \$ 0 | | \$ 1,725 |
| - TRS | 1,432 | 0 | | 1,432 |
| - JRS | 870 | 0 | | 870 |
| Work in process on analysis regarding impact of DCR payroll on future DB funding for September 21 conference call | | | | |
| - PERS | \$ 864 | \$ 0 | | \$ 864 |
| - TRS | 658 | 0 | | 658 |
| Preparation of the actuarial statement letters for the Comprehensive Annual | | | | |

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SEP 28 2009

DIV of RETIREMENT & BENEFITS

| | August 2009 | | Fiscal Year to Date July 2009 - June 2010 | |
|---|-------------|----------|--|-----------|
| | Services | Expenses | Services | Expenses |
| Financial Report, submitted August 12 th | \$ 1,655 | \$ 0 | \$ 1,655 | \$ 0 |
| - PERS | 1,440 | 0 | 1,440 | 0 |
| - TRS | | | | |
| Total | | | 1,655 | 0 |
| Work in process on the October ARM | | | | |
| Board presentation regarding NGNMRS | | | | |
| actuarial results, roll-forward valuation | | | | |
| estimates at June 30, 2009, and | | | | |
| investment review | \$ 1,844 | \$ 0 | \$ 1,844 | \$ 0 |
| - PERS | 1,755 | 0 | 1,755 | 0 |
| - TRS | 624 | 0 | 624 | 0 |
| - NGNMRS | | | | |
| Total | | | 1,844 | 0 |
| Work in process on information | | | | |
| requested by your auditor, KPMG LLC | | | | |
| - PERS | \$ 927 | \$ 0 | \$ 927 | \$ 0 |
| - TRS | 875 | 0 | 875 | 0 |
| - JRS | 630 | 0 | 630 | 0 |
| - NGNMRS | 555 | 0 | 555 | 0 |
| - Healthcare Funds/Trust | 1,216 | 0 | 1,216 | 0 |
| Total | | | 17,070 | 0 |
| Subtotal | \$ 17,070 | \$ 0 | \$ 31,017 | \$ 0 |
| Grand Total | \$ 20,290 | \$ 1,219 | \$ 34,237 | \$ 1,219 |
| | | | | \$ 35,456 |

RECEIVED

SEP 2 8 2009

DIV OF RETIREMENT & BENEFITS

| Staff Member | August 2009 | | Fiscal Year-to-Date July 2009 -- June 2010 | |
|----------------------|-------------|-------|---|-------|
| | Hours | Hours | Hours | Hours |
| • Aaron Jurgaitis | 1.00 | | 1.00 | |
| • Chris Hulla | 0.50 | | 1.25 | |
| • Colin Wein | 26.75 | | 38.25 | |
| • David Slishinsky | 20.00 | | 30.00 | |
| • Karen Hancock | 4.50 | | 17.00 | |
| • Kathy Recchiuti | 2.75 | | 5.50 | |
| • Kyla O'Rourke | 2.00 | | 21.00 | |
| • Melissa Bissett | 0.00 | | 1.00 | |
| • Michelle DeLange | 2.00 | | 6.00 | |
| • Michelle Pritchard | 29.00 | | 50.50 | |
| • Monica DeGraff | 1.25 | | 1.25 | |
| • Tammy Ringel | 0.00 | | 0.75 | |
| • Total | 89.75 | | 173.50 | |



REMIT BY CHECK TO:
Buck Consultants, LLC
Dept. CH 14061
Palatine, IL 60055-4061

October 26, 2009

BY WIRE TO:
Buck Consultants, LLC
The Bank of New York Mellon, NA
ABA # 043000261
DDA # 0038720

Mr. Pat Shier
Director
State of Alaska PERS
333 Willoughby
6th Floor State Office Building
Juneau, AK 99811-0208

EIN: 13-3954297

Terms: Payable upon receipt. Interest accrues
after 30 days from the invoice date at 1% per
month.

Actuarial Valuation and Consulting Contract
Agency Contract Number 2006-0200-5759

Direct Inquiries to:
Judy Daszkiewicz - Finance Dept.
Email: Judy.Daszkiewicz@acs-inc.com
Phone: (201) 902-2842

Client #: 00019732

Invoice #: 2032398

Services rendered from September 1 through September 30, 2009 (see attached): \$ 52,961.00

RECEIVED

NOV 02 2009

DIV of RETIREMENT & BENEFITS

*OK to pay
Christina Maguire
11/20/09*

RECEIVED

NOV 02 2009

DIY OF RETIREMENT & BENEFITS

State of Alaska
September 2009 Invoice for Actuarial Services

Fiscal Year to Date
July 2009 - June 2010
Expenses

| | September 2009 Expenses | Services | Total | Services | Total |
|--|----------------------------|----------|-----------|-----------|-----------|
| Regular Services Under Contract | | | | | |
| Work in process on 2009 actuarial valuations | \$ 3,804 | \$ 0 | \$ 3,804 | | |
| - PERS | 3,243 | 0 | 3,243 | | |
| - TRS | | | | | |
| Printing and postage expenses for 2008 PERS, TRS and JRS actuarial reports | \$ 0 | \$ 155 | \$ 155 | | |
| | \$ 7,047 | \$ 155 | \$ 7,202 | \$ 10,267 | \$ 11,641 |
| Non-Regular Services | | | | | |
| Completion of the allocation of State Employer Relief for FY11, submitted September 9 | | | | | |
| - PERS | \$ 790 | \$ 0 | \$ 790 | | |
| - TRS | 548 | 0 | 548 | | |
| - JRS | 393 | 0 | 393 | | |
| Completion of 30-year projections and analysis regarding impact of DCR payroll on future DB funding, and state assistance requirements under slow, modest and strong recovery scenarios, and DCR repeal for September 21 and September 29 conference calls | | | | | |
| - PERS | \$ 16,584 | \$ 0 | \$ 16,584 | | |
| - TRS | 13,741 | 0 | 13,741 | | |
| Completion of the October ARM Board presentation regarding NGNMRS actuarial results, roll-forward valuation estimates at June 30, 2009, and investment review | | | | | |
| - PERS | \$ 2,155 | \$ 0 | \$ 2,155 | | |
| - TRS | 1,583 | 0 | 1,583 | | |
| - JRS | 150 | 0 | 150 | | |

| | September 2009 | | Total | Fiscal Year to Date July 2009 - June 2010 | |
|--|----------------|----------|-----------|--|-----------|
| | Services | Expenses | | Services | Expenses |
| - NGNMRS | 3,010 | | 3,010 | | |
| Completion of the information requested by your auditor, KPMG LLC | | | | | |
| - PERS | \$ 1,301 | \$ 0 | 1,301 | | |
| - TRS | 1,033 | 0 | 1,033 | | |
| - JRS | 735 | 0 | 735 | | |
| - NGNMRS | 433 | 0 | 433 | | |
| - Healthcare Funds/Trust | 3,612 | 0 | 3,612 | | |
| Subtotal | \$ 45,759 | \$ 0 | \$ 45,759 | \$ 76,776 | \$ 0 |
| Grand Total | \$ 52,806 | \$ 155 | \$ 52,961 | \$ 87,043 | \$ 1,374 |
| | | | | | \$ 76,776 |
| | | | | | \$ 88,417 |

RECEIVED
 NOV 02 2009
 DIV of RETIREMENT & BENEFITS

| Staff Member | September 2009 Hours | Fiscal Year-to-Date July 2009 - June 2010 Hours |
|----------------------|-------------------------|---|
| • Aaron Jurgaitis | 6.00 | 7.00 |
| • Chris Hulla | 0.75 | 2.00 |
| • Colin Wein | 49.75 | 88.00 |
| • David Slishinsky | 36.25 | 66.25 |
| • Jon Slinger | 3.50 | 3.50 |
| • Karen Hancock | 3.25 | 20.25 |
| • Kathy Recchiuti | 0.50 | 6.00 |
| • Kyla O'Rourke | 26.25 | 47.25 |
| • Melissa Bissett | 1.75 | 2.75 |
| • Michelle DeLange | 37.00 | 43.00 |
| • Michelle Pritchard | 39.50 | 90.00 |
| • Monica DeGraff | 1.75 | 3.00 |
| • Tammy Ringel | 0.00 | 0.75 |
| • Total | 206.25 | 379.75 |

RECEIVED

NOV 02 2009

DIV of RETIREMENT & BENEFITS



November 27, 2009

Mr. Pat Shier
Director
State of Alaska PERS
333 Willoughby
6th Floor State Office Building
Juneau, AK 99811-0208

Actuarial Valuation and Consulting Contract
Agency Contract Number 2006-0200-5759

Client #: 00019732
Invoice #: 2034782

REMIT BY CHECK TO:
Buck Consultants, LLC
Dept. CH 14061
Palatine, IL 60055-4061

BY WIRE TO:
Buck Consultants, LLC
The Bank of New York Mellon, NA
ABA # 043000261
DDA # 0038720

EIN: 13-3954297

Terms: Payable upon receipt. Interest accrues
after 30 days from the invoice date at 1% per
month.

Direct Inquiries to:
Judy Daszkiewicz - Finance Dept.
Email: Judith.Daszkiewicz@acs-inc.com
Phone: (201) 902-2842

Services rendered from October 1 through October 31, 2009 (see attached):

\$ 69,682

State of Alaska
October 2009 Invoice for Actuarial Services

| | October 2009 | | Fiscal Year to Date | |
|--|--------------|-----------|---------------------|------------|
| | Services | Expenses | Services | Expenses |
| | | Total | | Total |
| Regular Services Under Contract | | | | |
| Work in process on 2009 actuarial valuations | \$ 30,957 | \$ 0 | | |
| - PERS | 25,345 | 0 | | |
| - TRS | | | | |
| Preparation for and attendance at October 1 st ARM Board meeting | \$ 4,631 | \$ 2,925 | | |
| | \$ 60,933 | \$ 2,925 | \$ 71,200 | \$ 4,299 |
| | | \$ 63,858 | | \$ 75,499 |
| Non-Regular Services | | | | |
| Completion of additional tables and discussions regarding the allocation of State Employer Relief for FY11 | | | | |
| - PERS | \$ 1,469 | \$ 0 | | \$ 1,469 |
| - TRS | 1,155 | 0 | | 1,155 |
| Work in process on Geographic Difference Study for PERS | \$ 1,245 | \$ 0 | | \$ 1,245 |
| Consulting and discussions regarding difference between funding and GASB disclosure | \$ 215 | \$ 0 | | \$ 215 |
| Work in process on economic assumption review for December ARM Board meeting | | | | |
| - PERS | \$ 870 | \$ 0 | | \$ 870 |
| - TRS | 870 | 0 | | 870 |
| Subtotal | \$ 5,824 | \$ 0 | \$ 82,446 | \$ 82,446 |
| Grand Total | \$ 66,757 | \$ 2,925 | \$ 153,646 | \$ 157,945 |

| Staff Member | October 2009 Hours | Fiscal Year-to-Date July 2009 -- June 2010 Hours |
|----------------------|-----------------------|--|
| • Aaron Jurgaitis | 20.00 | 27.00 |
| • Chris Hulla | 1.75 | 3.75 |
| • Colin Wein | 102.50 | 190.50 |
| • David Slishinsky | 22.50 | 88.75 |
| • Jon Slinger | 19.00 | 22.50 |
| • Karen Hancock | 9.00 | 29.25 |
| • Kathy Recchituti | 1.50 | 7.50 |
| • Kyla O'Rourke | 33.75 | 81.00 |
| • Melissa Bissett | 6.50 | 9.25 |
| • Michelle DeLange | 25.00 | 68.00 |
| • Michelle Pritchard | 14.25 | 104.25 |
| • Monica DeGraff | 6.25 | 9.25 |
| • Tammy Ringel | 13.00 | 13.75 |
| • Total | 275.00 | 654.75 |



REMIT BY CHECK TO:
Buck Consultants, LLC
Dept. CH 14061
Palatine, IL 60055-4061

BY WIRE TO:
Buck Consultants, LLC
The Bank of New York Mellon, NA
ABA # 043000261
DDA # 0038720

December 18, 2009

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DEC 24 2009

Mr. Pat Shier
Director
State of Alaska PERS
333 Willoughby
6th Floor State Office Building
Juneau, AK 99811-0208

Div. of Ret. & Benefits

EIN: 13-3954297

Terms: Payable upon receipt. Interest accrues
after 30 days from the invoice date at 1% per
month.

Actuarial Valuation and Consulting Contract
Agency Contract Number 2006-0200-5759

Direct Inquiries to:
Judy Daszkiewicz - Finance Dept.
Email: Judith.Daszkiewicz@acs-inc.com
Phone: (201) 902-2842

Client #: 00019732

Invoice #: 2036124

Services rendered from November 1 through November 30 2009 (see attached):

\$87,598.00

State of Alaska
November 2009 Invoice for Actuarial Services

| | November 2009 | | Total | Fiscal Year to Date July 2009 - June 2010 | |
|--|------------------|---------------|------------------|--|------------------|
| | Services | November 2009 | | Services | Expenses |
| Regular Services Under Contract | | | | | |
| Work in process on 2009 actuarial valuations | | | | | |
| - PERS | \$ 42,597 | \$ 0 | \$ 42,597 | | |
| - TRS | 34,951 | | 34,951 | | |
| Work in process on 2009 roll-forward actuarial valuations | | | | | |
| - JRS | \$ 820 | \$ 0 | \$ 820 | | |
| - NGN/RS | 676 | 0 | 676 | | |
| Subtotal | \$ 79,044 | \$ 0 | \$ 79,044 | \$ 160,244 | \$ 4,299 |
| Non-Regular Services | | | | | |
| Completion of Geographic Difference Study for PERS, submitted November 5th | \$ 1,465 | \$ 0 | \$ 1,465 | | |
| Completion of economic assumption review for December ARM Board meeting | | | | | |
| - PERS | \$ 1,496 | \$ 0 | \$ 1,496 | | y |
| - TRS | 1,496 | 0 | 1,496 | | |
| Work in process on 2009 DCR actuarial valuations | | | | | |
| - PERS | \$ 2,030 | \$ 0 | \$ 2,030 | | |
| - TRS | 2,067 | 0 | 2,067 | | |
| Subtotal | \$ 8,554 | \$ 0 | \$ 8,554 | \$ 91,000 | \$ 0 |
| Grand Total | \$ 87,598 | \$ 0 | \$ 87,598 | \$ 241,244 | \$ 4,299 |
| | | | | | \$ 81,000 |
| | | | | | 245,543 |

| Staff Member | November 2009 | Fiscal Year-to-Dte |
|----------------------|---------------|--------------------------------|
| | Hours | July 2009 - June 2010 Hours |
| - Aaron Jurgaitis | 64.25 | 91.25 |
| - Chris Hulla | 1.75 | 5.50 |
| - Colin Wein | 118.25 | 308.75 |
| - David Silshinsky | 18.00 | 106.75 |
| - Jon Slinger | 0.50 | 23.00 |
| - Karen Hancock | 1.25 | 30.50 |
| - Kathy Recchluti | 0.00 | 7.50 |
| - Kyla O'Rourke | 61.75 | 142.75 |
| - Melissa Bissett | 29.75 | 39.00 |
| - Michelle DeLange | 16.25 | 84.25 |
| - Michelle Pritchard | 12.75 | 117.00 |
| - Monica DeGraff | 0.25 | 9.50 |
| - Tammy Ringel | 9.00 | 22.75 |
| - William Detweiler | 3.25 | 3.25 |
| | 337.00 | 991.75 |



REMIT BY CHECK TO:
Buck Consultants, LLC
Dept. CH 14061
Palatine, IL 60055-4061

BY WIRE TO:
Buck Consultants, LLC
The Bank of New York Mellon, NA
ABA # 043000261
DDA # 0038720

EIN: 13-3954297

Terms: Payable upon receipt. Interest accrues after 30 days from the invoice date at 1% per month.

January 26, 2010

Ms. Teresa Kesey
Chief Financial Officer
State of Alaska PERS
333 Willoughby
6th Floor, State Office Building
Juneau, AK 99811-0208

Actuarial Valuation and Consulting Contract
Agency Contract Number 2006-0200-5759

Client #: 00019732
Invoice #: 2038889

Direct Inquiries to:
Judy Daszkiewicz - Finance Dept.
Email: Judith.Daszkiewicz@acs-inc.com
Phone: (201) 902-2842

Services rendered from December 1 through December 31, 2009 (see attached):

\$80,174.00

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FEB 01 2010

DIV of RETIREMENT & BENEFITS

RECEIVED

FEB 01 2010

DIV of RETIREMENT & BENEFITS

State of Alaska
December 2009 Invoice for Actuarial Services

Fiscal Year to Date
July 2009 - June 2010

| | Services | December 2009 Expenses | Total | Services | Expenses | Total |
|---|-----------|------------------------|-----------|------------|----------|------------|
| Regular Services Under Contract | | | | | | |
| Work in process on 2009 actuarial valuations | | | | | | |
| - PERS | \$ 21,072 | \$ 0 | \$ 21,072 | | | |
| - TRS | 15,897 | 0 | 15,897 | | | |
| Completion of 2009 roll-forward actuarial valuations, submitted December 11th | | | | | | |
| - JRS | 4,831 | 0 | 4,831 | | | |
| - NGNMRS | 2,573 | 0 | 2,573 | | | |
| Subtotal | \$ 44,373 | \$ 0 | \$ 44,373 | \$ 194,617 | \$ 4,299 | \$ 198,916 |
| Non-Regular Services | | | | | | |
| Research and discussions regarding funding vehicle for self paid retirees healthcare group | \$ 2,822 | \$ 0 | \$ 2,822 | | | |
| Work in process on additional information regarding economic assumptions used by other large public pension systems requested at December ARM Board meeting | | | | | | |
| - PERS | 4,059 | 0 | 4,059 | | | |
| - TRS | 4,059 | 0 | 4,059 | | | |
| Work in process on 2009 DCR actuarial valuations | | | | | | |
| - PERS | 13,425 | 0 | 13,425 | | | |
| - TRS | 11,436 | 0 | 11,436 | | | |
| Subtotal | \$ 35,801 | \$ 0 | \$ 35,801 | \$ 126,955 | \$ 0 | \$ 126,955 |
| Grand Total | \$ 80,174 | \$ 0 | \$ 80,174 | \$ 321,572 | \$ 4,299 | \$ 325,871 |

RECEIVED

FEB 01 2010

DIV of RETIREMENT & BENEFITS

| Staff Member | December 2009 | Fiscal Year-to-Date |
|----------------------|---------------|--------------------------------|
| | Hours | July 2009 - June 2010 Hours |
| - Aaron Jurgaitis | 16.75 | 108.00 |
| - Chris Hulla | 5.25 | 10.75 |
| - Colin Wein | 89.50 | 402.75 |
| - David Slisshinsky | 42.00 | 148.75 |
| - Jon Slinger | 0.00 | 23.00 |
| - Karen Hancock | 3.75 | 34.25 |
| - Kathy Recchiuti | 0.00 | 7.50 |
| - Kyla O'Rourke | 36.75 | 179.50 |
| - Leslie Laderman | 0.25 | 0.25 |
| - Melissa Bissett | 13.50 | 52.50 |
| - Michelle DeLange | 35.75 | 120.50 |
| - Michelle Pritchard | 34.00 | 151.00 |
| - Monica DeGraff | 0.00 | 9.50 |
| - Tammy Ringel | 0.00 | 22.75 |
| - William Detweiler | 5.50 | 12.25 |
| | 283.00 | 1,283.25 |

CHIEF INVESTMENT OFFICER REPORT

1. Correspondence from Eric E. Wohlforth, Chair Uni. Alaska Foundation Investment Committee
2. Sold \$65 million Russell 200 to raise cash.
3. Sold \$60 million Russell 2000 value and \$30 million Jennison Small Cap to purchase \$25 million Cap Guardian Emerging Market and \$65 million Fixed Income to rebalance.
4. Invitation to join Carbon Disclosure Project.
5. Begin redemption of Cadogan account by redeeming \$18.5 million.
6. Rebalance asset allocations of various retirement funds.
7. Approval to disclose ARMB is a client.
8. Letter from Capital Guardian relating to investments in Iran.
9. Letter from Brandes relating to investments in Iran.
10. Letter from Eaton Vance relating to investments in Iran.
11. _____
12. _____

RECEIVED

DEC 08 2009

ALASKA DEPARTMENT OF REVENUE
TREASURY DIVISION
N.F.A.

Eric E. Wohlforth

900 West 5th Avenue, Suite 600

Anchorage, Alaska 99501

Telephone: (907) 276-6401 · Facsimile: (907) 276-5093

Email: ewohlforth@akatty.com

December 4, 2009

Gary Bader, CEO
Alaska Retirement Management Board
PO Box 1104005
Juneau, AK 99811-0410

Thanks for an excellent investment conference in New York. The members of the University of Alaska Foundation Investment Committee appreciate your invitation very much and those attending very much benefitted from a very high quality conference. The careful selection of topics and speakers was evident. Thank you very much.

Sincerely,



Eric E. Wohlforth, Chair
University of Alaska Foundation Investment Committee

**Alaska Retirement Management
Board**

P.O. Box 110405
Juneau, Alaska 99811-0405
(907) 465-3749

December 10, 2009

Ms. Jennifer Healy
State Street Corporation
Lafayette Corporate Center
2 Avenue de Lafayette – 2nd Floor
Boston, MA 02111-2900

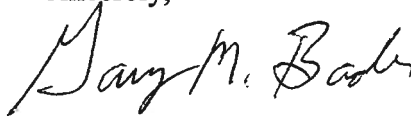
Dear Ms. Healy:

The Alaska Retirement Management Board (ARMB) requests the following changes to be made on Friday, December 18, 2009 for the ARMB Defined Benefit Pension Plans (AY21-AY23 and AY94-AY96) and the ARMB Retirement Health Funds (AYW2-AYW4 and AYW5-AYW7). Please use a pro-rata split between the PERS, TRS and JRS pension plans and the PERS, TRS and JRS health retirement funds.

| | |
|-------------------------------|----------------|
| Russell 200 Index (AY4R) | <\$65,000,000> |
| Short Term Fixe Income (AY70) | 65,000,000 |

If you have any questions please call our office at (907) 465-4399.

Sincerely,



Gary M. Bader
Chief Investment Officer

cc: Gail Schubert, ARMB Chair
Jerry Burnett, Deputy Commissioner
Pam Green, Comptroller
Beth Larson, State Compliance Officer
Zachary Hanna, State Investment Officer
Bob Mitchell, State Investment Officer
Charles Colton, State Investment Officer
Andrew Wink, State Investment Officer

GMB/jmm

**Alaska Retirement Management
Board**

P.O. Box 110405
Juneau, Alaska 99811-0405
(907) 465-3749

December 11, 2009

Ms. Jennifer Healy
State Street Corporation
Lafayette Corporate Center
2 Avenue de Lafayette – 2nd Floor
Boston, MA 02111-2900

Dear Ms. Healy:

The Alaska Retirement Management Board (ARMB) requests the following changes to be made on Friday, December 18, 2009 for the ARMB Defined Benefit Pension Plans (AY21-AY23 and AY94-AY96) and the ARMB Retirement Health Funds (AYW2-AYW4 and AYW5-AYW7). Please use a pro-rata split between the PERS, TRS and JRS pension plans and the PERS, TRS and JRS health retirement funds.

| | |
|--|----------------|
| Russell 2000 Value Index (AY4P) | <\$60,000,000> |
| Jennison Associates Small Cap (AY4G) | <30,000,000> |
| Capital Guardian Emerging Markets (AY62) | 25,000,000 |
| Long Term Fixed Income (AY77) | 65,000,000 |

If you have any questions please call our office at (907) 465-4399.

Sincerely,



Gary M. Bader
Chief Investment Officer

cc: Gail Schubert, ARMB Chair
Jerry Burnett, Deputy Commissioner
Pam Green, Comptroller
Beth Larson, State Compliance Officer
Zachary Hanna, State Investment Officer
Bob Mitchell, State Investment Officer
Charles Colton, State Investment Officer
Andrew Wink, State Investment Officer

GMB/jmm

Bader, Gary M (DOR)

From: Hall, Judith A (DOR)
Sent: Thursday, December 17, 2009 12:55 PM
To: Bader, Gary M (DOR)
Subject: FW: Invitation to become a CDP Signatory

*Judy Hall, Liaison Officer
Alaska Retirement Management Board
PO Box 110405
Juneau, AK 99811
judy.hall2@alaska.gov
907 465-3749*

From: Zoe Riddell [mailto:Zoe.Riddell@cdproject.net]
Sent: Thursday, December 17, 2009 11:30 AM
To: Hall, Judith A (DOR)
Subject: Invitation to become a CDP Signatory

To: Judy Hall
CC:

Dear Ms Hall,

I am writing with a reminder invitation for Alaska State Pension Investment Board to become a signatory to the Carbon Disclosure Project (CDP) 2010.

In 2009, 475 investors with a combined \$55 trillion in assets under management signed the CDP information request and over 2,000 of the world's largest companies responded to their request by providing:

- Comprehensive corporate greenhouse gas emissions data
- Information on emissions reduction targets and energy use
- Information on risks and opportunities companies face from climate change
- Management discussion and analysis on strategies to address climate change – including emissions trading

CDP data is used by Goldman Sachs, CA Cheuvreux, Bank of America Merrill Lynch and many others to inform on climate related portfolio risk and opportunity and to help drive new products and services for their clients. The CDP world-class company reported dataset is unparalleled in its field. Access to the data is free for all signatories.

Please click to view [the CDP 2010 documents](#) and [brochure](#) with further information. If you'd like to sign up and receive access to the data, all we require is an email (either by replying to this message or to sign@cdproject.net) stating:

- 1) **Your company name as it should appear on the CDP Information Request.**
- 2) **An indication of your assets under management.**
- 3) **Whether you would you like your company to be publicly listed as a signatory on the CDP website and reports. This is optional.**
- 4) **A contact name for the CDP Information Request. This is optional.**
- 5) **A contact name and telephone number for any media related enquiries. This is optional.**

To view the list of current CDP signatories, click [here](#) or visit our website www.cdproject.net.

If you have any further questions, please do not hesitate to contact me at your earliest convenience. We look forward to welcoming you as a signatory to CDP.

With kind regards,

Zoe Riddell
Head of Investor CDP
Carbon Disclosure Project
zoe.riddell@cdproject.net
T: +1-212-378-2087
C: +1-646-270-3675

6 West 48th Street, 10th Floor
New York, NY 10036



732-AL-075 P. 1/2

Alaska Retirement Management Board

P.O. Box 110405
Juneau, Alaska 99811-0405
(907) 465-3749

January 29, 2010

Corran Givens
Cadogan Management, LLC
149 Fifth Avenue, Fifteenth Floor
New York, NY 10010

Dear Corran:

RE: Redemption Request from Aurora Borealis Fund, L.P.

On January 29, 2010, please redeem **\$18,542,348.70** and wire transfer the proceeds to the following account at State Street Bank:

State Street Bank
ABA Number: 011-000-028
Account Number: 00132209
Account Name: State of Alaska – AY9E
Attn: Jennifer Healy, 617-664-7858

Sincerely,

for
Gary M. Bader
Chief Investment Officer

Zachary A. Hanna
State Investment Officer

GMB/zah-*m*

cc: *pub*
Pam Green, Comptroller
Bob Mitchell, Investment Officer
Zachary Hanna, Investment Officer
Nancy Fong, Bank of New York
Jennifer Healy, State Street Bank.

Alaska Retirement Management Board

P.O. Box 110405

Juneau, Alaska 99811-0405

(907) 465-3749

February 5, 2010

RECEIVED

Ms. Jennifer Healy
 State Street Corporation
 Lafayette Corporate Center
 2 Avenue de Lafayette – 2nd Floor
 Boston, MA 02111-2900

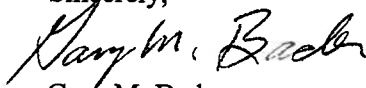
Dear Ms. Healy:

Please make the following pool level transactions on Thursday, February 11, 2009, to bring PERS, TRS pension plans and the DC Plans allocations closer to target.

| | | | | | |
|----------------------------|-----------|----------------------------|-------------|------------------------------|-----------|
| AY6G & AY6W | | AYX2 & AYX4 | | AYY3 & AYY5 | |
| Large Cap Pool | 58,353 | Large Cap Pool | 158,020 | Large Cap Pool | 202,785 |
| Small Cap Pool | 7,239 | Small Cap Pool | 19,293 | Small Cap Pool | 24,657 |
| International Equity Pool | 37,592 | International Equity Pool | 101,643 | International Equity Pool | 130,154 |
| Emerging Markets Equity | 4,440 | Emerging Markets Equity | 14,180 | Emerging Markets Equity | 18,889 |
| Private Equity | 4,453 | Private Equity | 16,317 | Private Equity | 22,221 |
| Domestic Fixed Income | (2,270) | Domestic Fixed Income | 7,171 | Domestic Fixed Income | 13,563 |
| High Yield Pool | (386) | High Yield Pool | 927 | High Yield Pool | 1,879 |
| Emerging Markets Debt Pool | 921 | Emerging Markets Debt Pool | 3,885 | Emerging Markets Debt Pool | 5,435 |
| International Fixed Income | 1,414 | International Fixed Income | 5,001 | International Fixed Income | 6,782 |
| AK TIPS Pool | 701 | AK TIPS Pool | 4,449 | AK TIPS Pool | 6,552 |
| Energy Pool A | 25 | Energy Pool A | 323 | Energy Pool A | 497 |
| Farmland Pool A | 407 | Farmland Pool A | 2,360 | Farmland Pool A | 3,443 |
| REIT Pool A | 156 | REIT Pool A | 653 | REIT Pool A | 940 |
| Timber Pool A | (1,293) | Timber Pool A | (2,029) | Timber Pool A | (2,062) |
| AK Real Estate Pool | 22,721 | AK Real Estate Pool | 60,691 | AK Real Estate Pool | 77,588 |
| Absolute Return | (20,073) | Absolute Return | (40,450) | Absolute Return | (46,196) |
| Cash | (114,400) | Cash | (352,434) | Cash | (467,127) |
| | <u>-</u> | | <u>-</u> | | <u>-</u> |
| AY6H & AY6X | | AYY2 & AYY4 | | AY21 & AY94 | |
| Large Cap Pool | 24,370 | Large Cap Pool | 664,599 | Large Cap Pool | (834,653) |
| Small Cap Pool | 3,033 | Small Cap Pool | 80,225 | Small Cap Pool | (101,290) |
| International Equity Pool | 15,683 | International Equity Pool | 427,077 | International Equity | (536,375) |
| Emerging Markets Equity | 1,784 | Emerging Markets Equity | 66,044 | Emerging Markets Equity Pool | (79,176) |
| Private Equity | 1,702 | Private Equity | 81,299 | Private Equity | (94,562) |
| Domestic Fixed Income | (1,332) | Domestic Fixed Income | 69,821 | Domestic Fixed Income | (64,492) |
| High Yield Pool | (218) | High Yield Pool | 9,767 | High Yield | (8,871) |
| Emerging Markets Debt Pool | 341 | Emerging Markets Debt Pool | 20,470 | Emerging Markets Debt Pool | (23,282) |
| International Fixed Income | 552 | International Fixed Income | 24,516 | International Fixed Income | (28,731) |
| AK TIPS Pool | 215 | AK TIPS Pool | 26,311 | AK TIPS Pool | (28,602) |
| Energy Pool A | 2 | Energy Pool A | 2,115 | Energy Pool A | (2,213) |
| Farmland Pool A | 131 | Farmland Pool A | 13,656 | Farmland Pool A | (14,968) |
| REIT Pool A | 60 | REIT Pool A | 3,429 | REIT Pool A | (3,931) |
| Timber Pool A | (582) | Timber Pool A | (4,144) | Timber Pool A | 7,719 |
| AK Real Estate Pool | 9,512 | AK Real Estate Pool | 252,786 | AK Real Estate Pool | (318,891) |
| Absolute Return | (8,715) | Absolute Return | (128,918) | Absolute Return | 184,931 |
| Cash | (46,538) | Cash | (1,609,053) | Cash | 1,947,387 |
| | <u>-</u> | | <u>-</u> | | <u>-</u> |
| AY6I & AY6Y | | AYX3 & AYX5 | | AY22 & AY95 | |
| Large Cap Pool | 23,928 | Large Cap Pool | 66,642 | Large Cap Pool | (364,044) |
| Small Cap Pool | 2,892 | Small Cap Pool | 8,130 | Small Cap Pool | (44,179) |
| International Equity Pool | 15,374 | International Equity Pool | 42,798 | International Equity | (233,946) |
| Emerging Markets Equity | 2,353 | Emerging Markets Equity | 6,019 | Emerging Markets Equity Pool | (34,533) |
| Private Equity | 2,866 | Private Equity | 6,949 | Private Equity | (41,245) |
| Domestic Fixed Income | 2,363 | Domestic Fixed Income | 3,305 | Domestic Fixed Income | (28,129) |
| High Yield Pool | 327 | High Yield Pool | 444 | High Yield | (3,869) |
| Emerging Markets Debt Pool | 719 | Emerging Markets Debt Pool | 1,666 | Emerging Markets Debt Pool | (10,155) |
| International Fixed Income | 868 | International Fixed Income | 2,130 | International Fixed Income | (12,532) |
| AK TIPS Pool | 918 | AK TIPS Pool | 1,931 | AK TIPS Pool | (12,475) |
| Energy Pool A | 74 | Energy Pool A | 142 | Energy Pool A | (965) |
| Farmland Pool A | 477 | Farmland Pool A | 1,022 | Farmland Pool A | (6,528) |
| REIT Pool A | 121 | REIT Pool A | 287 | REIT Pool A | (1,715) |
| Timber Pool A | (166) | Timber Pool A | (810) | Timber Pool A | 3,367 |
| AK Real Estate Pool | 9,110 | AK Real Estate Pool | 25,572 | AK Real Estate Pool | (139,089) |
| Absolute Return | (4,792) | Absolute Return | (16,447) | Absolute Return | 80,660 |
| Cash | (57,432) | Cash | (149,780) | Cash | 849,377 |
| | <u>-</u> | | <u>-</u> | | <u>-</u> |

If you have any questions please call me (907) 465-4399.

Sincerely,

A handwritten signature in black ink that reads "Gary M. Bader". The signature is written in a cursive style with a large initial "G" and "M".

Gary M. Bader
Chief Investment Officer

cc: Gail Schubert, Chair ARMB
Jerry Burnett, Deputy Commissioner
Bob Mitchell, State Investment Officer
Steve Sikes, State Investment Officer
Andrew Wink, State Investment Officer
Pam Green, Comptroller
Beth Larson, State Compliance Officer

GAM USA Inc.
One Rockefeller Plaza, 21st Floor, New York, NY 10020
T (212) 407-4600 F (212) 407-4684
www.gam.com

7/26/2010 10:11 AM

GAM

February 9, 2010

Mr. Gary Bader
State of Alaska
Department of Revenue
Treasury Division
P.O. Box 110405
Juneau, Alaska 99811-0405

Re: ARMB/GAM USA Investment Management Agreement

Dear Gary,

Pursuant to the Investment Management Agreement dated as of December 28, 2009, by and between the Alaska Retirement Management Board ("ARMB"), on behalf of the State of Alaska Retirement and Benefits Plans Trust, and GAM USA Inc. ("GAM USA"), GAM USA hereby seeks the approval of ARMB to the use by GAM USA of ARMB's name, from time to time, on a list of representative clients that GAM USA may distribute to prospective investors or clients.

If the foregoing is acceptable to you, please so indicate by signing and returning one original copy of this letter to the undersigned.

Hope to see you again soon.

Best regards,

GAM USA INC.

By: 

Name: Joseph Gieger

Title: Managing Director, Americas

Accepted and agreed to as of the date first above written

ALASKA RETIREMENT MANAGEMENT BOARD,
on behalf of the State of Alaska Retirement and Benefits Plans Trust

By: 

Name: GARY M. BADER

Title: CHIEF INVESTMENT OFFICER



Capital GuardianSM

RECEIVED

DEC 08 2009

ALASKA DEPARTMENT OF REVENUE
TREASURY DIVISION
JUNEAU

Paula B. Pretlow
Senior Vice President

Capital Guardian Trust Company
One Market, Steuart Tower, Suite 1800
San Francisco, CA 94105-1409

Phone (415) 393 7129
Fax (415) 263 7927

December 1, 2009

Mr. Gary Bader
Alaska Retirement Management Board
333 Willoughby Avenue
11th Floor
Juneau, AK 99811-0405

Re: Response to Inquiry Regarding Iran

Dear Gary:

I am writing in response to your inquiry of November 14, 2009 regarding companies in your portfolio that conduct business in Iran.

Capital Guardian Trust Company does not track whether or to what extent portfolio companies do business in Iran. All of our portfolios are checked on a monthly basis against OFAC's prohibited list to ensure that the countries and companies on that list are not represented in the portfolio. That list currently includes Iran among other countries.

Several public fund clients have chosen, based on their own research or research they have obtained from third parties specializing in portfolio screening, to divest from companies doing business in or with Iran. The following companies in your portfolio are currently on at least one such list:

Gazprom OAO
JGC Corp
L'Air Liquide
Royal Dutch Shell Plc
Sasol
Total SA

Our investment process is structured to find long-term value for our clients. Part of this process is to evaluate criteria that might impact company's financial success and worth. In researching companies, our analysts look for corporate activities that may expose those companies to financial risk. If they discover facts that they believe may lead to financial exposure, they take those facts into account in making their investment recommendations, and they may also disclose those facts internally for discussion. For example, in the past there were internal discussions about potential liability for energy companies who have lawsuits filed against them claiming that the companies are enablers for regimes that commit human rights atrocities by virtue of their operations in certain countries. Our analysts and portfolio managers discussed the risks of a successful lawsuit and the accompanying financial exposure for these companies. Similarly, potential exposure for companies by virtue of dealings with rogue nations or involvement in terrorism related business may be assessed and discussed by our analysts if the facts warrant.

I hope this addresses your questions. If you would like to discuss this issue further or have any additional questions feel free to call me.

Sincerely,



RECEIVED

DEC 08 2009

ALASKA DEPARTMENT OF REVENUE
TREASURY DIVISION
JUNEAU

December 1, 2009

Mr. Gary Bader
Alaska Retirement Management Board
P.O. Box 110405
Juneau, Alaska 99811-0405

Dear Gary,

In valuing your portfolio's holdings, our analysts have not identified any company conducting business in Iran to an extent that would have materially affected the sock valuation. Also, please note that we monitor and comply with the U.S. Office of Foreign Assets ("OFAC") and UN (through the Ontario Securities Commission) lists of individuals and entities that are known or reasonably suspected of involvement in terrorist activities.

Generally speaking, restrictions can limit our ability to implement our optimal portfolio, thus potentially impacting performance. However, if provided with a list of companies, we can restrict purchases and/or divest securities in the normal course of managing the portfolio or by a target date.

Best regards,

A handwritten signature in black ink, appearing to read "J. Benito", with a stylized flourish extending to the right.

Juan J. Benito, CFA
Institutional Portfolio Manager
teamc@brandes.com

JJB:jr



RECEIVED

DEC 21 2009

ALASKA DEPARTMENT OF REVENUE
TREASURY DIVISION
HEAD

Eaton Vance Management
Two International Place
Boston, MA 02110
(617) 482-8260
www.eatonvance.com

December 14, 2009

Mr. Gary M. Bader
Chief Investment Officer
Alaska Retirement Management Board
PO Box 110405
Juneau, Alaska 99811-0405

Re: Eaton Vance Structured Emerging Markets Equity Fund

Dear Gary,

I am writing to you in response to your letter dated November 13, 2009 relative to the Board's investment in the Eaton Vance Structured Emerging Markets Equity Fund (the "Fund"). In your letter, you asked for a list of companies in the Fund's portfolio that conduct business in Iran. At this time, the Fund does not have an allocation to Iran.

As a general matter, the Fund does not invest in a country if its government has statutes and programs that generally are unfriendly to investors. In evaluating such matters, the Fund's investment sub-adviser, Parametric Portfolio Associates LLC ("Parametric"), typically considers Heritage Foundation freedom statistics. Parametric believes that the correlation between repressive regimes and investor unfriendliness is quite high. The Fund historically has not divested from a country for social or ethical reasons.

Sincerely,


Katharine Kasper

ALASKA RETIREMENT MANAGEMENT BOARD

FINANCIAL REPORT

As of December 31, 2009

ALASKA RETIREMENT MANAGEMENT BOARD
Schedule of Investment Income and Changes in Invested Assets by Fund
For the Six Months Ending December 31, 2009

| | Beginning Invested Assets | Investment Income ⁽¹⁾ | Net Contributions (Withdrawals) | Ending Invested Assets | % Increase (Decrease) in Invested Assets |
|--|---------------------------------|----------------------------------|------------------------------------|---------------------------------|--|
| <u>Public Employees' Retirement System (PERS)</u> | | | | | |
| <u>Defined Benefit Plans:</u> | | | | | |
| Retirement Trust | \$ 5,079,999,093 | \$ 622,209,583 | \$ (86,712,452) | \$ 5,615,496,224 | 10.54% |
| Retirement Health Care Trust | 3,433,336,875 | 447,668,211 | 54,583,334 | 3,935,588,420 | 14.63% |
| Total Defined Benefit Plans | <u>8,513,335,968</u> | <u>1,069,877,794</u> | <u>(32,129,118)</u> | <u>9,551,084,644</u> | |
| <u>Defined Contribution Plans:</u> | | | | | |
| Participant Directed Retirement | 52,395,851 | 10,876,798 | 18,936,575 | 82,209,224 | 56.90% |
| Health Reimbursement Arrangement | 15,672,414 | 2,073,553 | 6,187,559 | 23,933,526 | 52.71% |
| Retiree Medical Plan | 4,428,733 | 586,077 | 1,484,207 | 6,499,017 | 46.75% |
| Defined Benefit Occupational Death and Disability: | | | | | |
| Public Employees | 2,030,225 | 267,558 | 523,472 | 2,821,255 | 38.96% |
| Police and Firefighters | 547,388 | 73,778 | 249,817 | 870,983 | 59.12% |
| Total Defined Contribution Plans | <u>75,074,611</u> | <u>13,877,764</u> | <u>27,381,630</u> | <u>116,334,005</u> | |
| Total PERS | <u>8,588,410,579</u> | <u>1,083,755,558</u> | <u>(4,747,488)</u> | <u>9,667,418,649</u> | |
| <u>Teachers' Retirement System (TRS)</u> | | | | | |
| <u>Defined Benefit Plans:</u> | | | | | |
| Retirement Trust | 2,594,355,309 | 324,072,416 | (40,351,306) | 2,878,076,419 | 10.94% |
| Retirement Health Care Trust | 1,118,017,047 | 150,158,891 | 48,329,281 | 1,316,505,219 | 17.75% |
| Total Defined Benefit Plans | <u>3,712,372,356</u> | <u>474,231,307</u> | <u>7,977,975</u> | <u>4,194,581,638</u> | |
| <u>Defined Contribution Plans:</u> | | | | | |
| Participant Directed Retirement | 25,056,276 | 5,040,639 | 6,140,561 | 36,237,476 | 44.62% |
| Health Reimbursement Arrangement | 5,602,378 | 721,662 | 1,546,068 | 7,870,108 | 40.48% |
| Retiree Medical Plan | 1,938,178 | 249,481 | 498,293 | 2,685,952 | 38.58% |
| Defined Benefit Occupational Death and Disability | 907,561 | 117,329 | 178,252 | 1,203,142 | 32.57% |
| Total Defined Contribution Plans | <u>33,504,393</u> | <u>6,129,111</u> | <u>8,363,174</u> | <u>47,996,678</u> | |
| Total TRS | <u>3,745,876,749</u> | <u>480,360,418</u> | <u>16,341,149</u> | <u>4,242,578,316</u> | |
| <u>Judicial Retirement System (JRS)</u> | | | | | |
| Defined Benefit Plan Retirement Trust | 89,674,358 | 11,285,824 | (1,390,853) | 99,569,329 | 11.03% |
| Defined Benefit Retirement Health Care Trust | 15,313,221 | 2,042,407 | 165,719 | 17,521,347 | 14.42% |
| Total JRS | <u>104,987,579</u> | <u>13,328,231</u> | <u>(1,225,134)</u> | <u>117,090,676</u> | |
| <u>National Guard/Naval Militia Retirement System (MRS)</u> | | | | | |
| Defined Benefit Plan Retirement Trust | 25,507,122 | 3,138,050 | 1,704,833 | 30,350,005 | 18.99% |
| <u>Other Participant Directed Plans</u> | | | | | |
| Supplemental Annuity Plan | 1,960,376,810 | 224,627,120 | 15,076,583 | 2,200,080,513 | 12.23% |
| Deferred Compensation Plan | 454,048,834 | 53,954,077 | 3,107,653 | 511,110,564 | 12.57% |
| Total All Funds | <u>\$ 14,879,207,673</u> | <u>\$ 1,859,163,454</u> | <u>\$ 30,257,596</u> | <u>\$ 16,768,628,723</u> | 12.70% |

Notes:

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

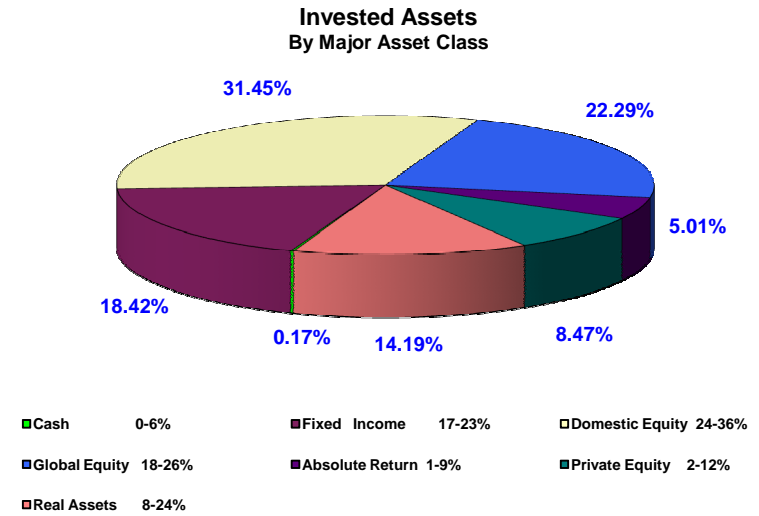
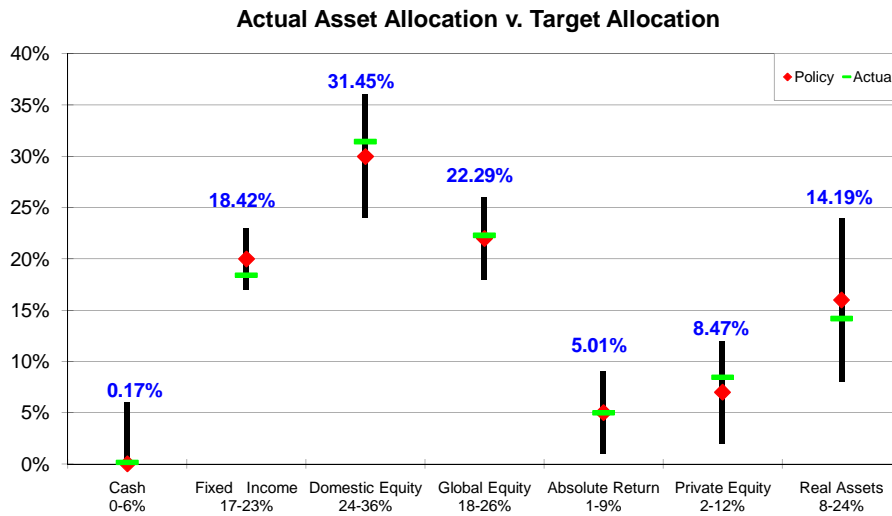
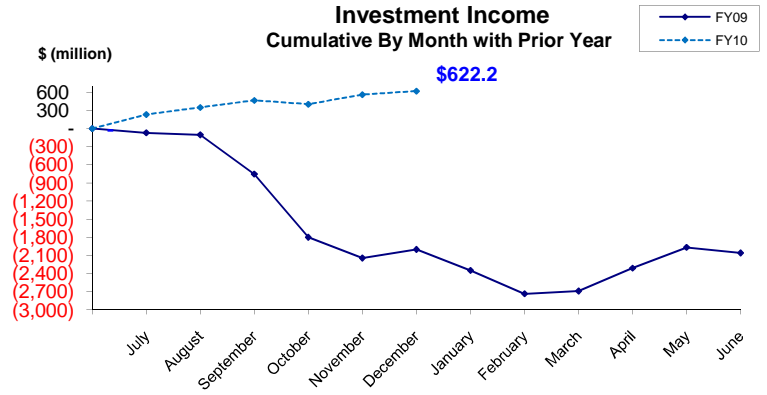
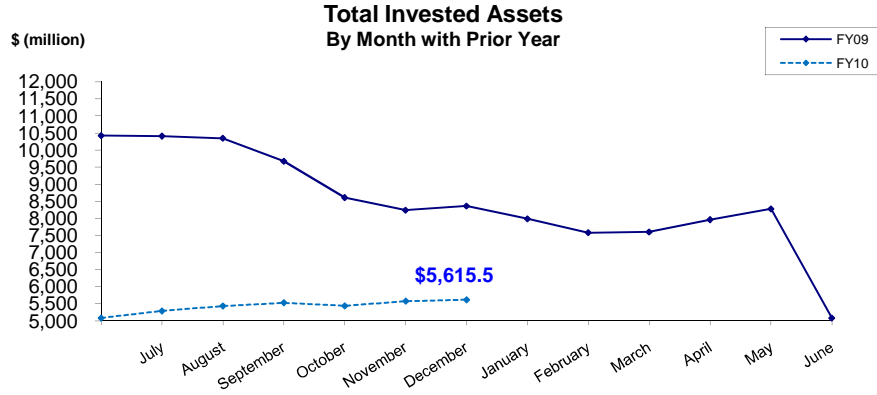
ALASKA RETIREMENT MANAGEMENT BOARD
Schedule of Investment Income and Changes in Invested Assets by Fund
For the Month Ended December 31, 2009

| | Beginning Invested Assets | Investment Income ⁽¹⁾ | Net Contributions (Withdrawals) | Ending Invested Assets | % Increase (Decrease) in Invested Assets |
|--|---------------------------------|----------------------------------|------------------------------------|---------------------------------|--|
| <u>Public Employees' Retirement System (PERS)</u> | | | | | |
| <u>Defined Benefit Plans:</u> | | | | | |
| Retirement Trust | \$ 5,574,768,363 | \$ 58,581,426 | \$ (17,853,565) | \$ 5,615,496,224 | 0.73% |
| Retirement Health Care Trust | 3,899,693,651 | 34,012,177 | 1,882,592 | 3,935,588,420 | 0.91% |
| Total Defined Benefit Plans | <u>9,474,462,014</u> | <u>92,593,603</u> | <u>(15,970,973)</u> | <u>9,551,084,644</u> | |
| <u>Defined Contribution Plans:</u> | | | | | |
| Participant Directed Retirement | 75,910,882 | 1,749,730 | 4,548,612 | 82,209,224 | 7.66% |
| Health Reimbursement Arrangement | 22,387,016 | 110,180 | 1,436,330 | 23,933,526 | 6.46% |
| Retiree Medical Plan | 6,148,059 | 31,147 | 319,811 | 6,499,017 | 5.40% |
| Defined Benefit Occupational Death and Disability: | | | | | |
| Public Employees | 2,703,743 | 14,106 | 103,406 | 2,821,255 | 4.17% |
| Police and Firefighters | 813,351 | 4,035 | 53,597 | 870,983 | 6.62% |
| Total Defined Contribution Plans | <u>107,963,051</u> | <u>1,909,198</u> | <u>6,461,756</u> | <u>116,334,005</u> | |
| Total PERS | <u>9,582,425,065</u> | <u>94,502,801</u> | <u>(9,509,217)</u> | <u>9,667,418,649</u> | |
| <u>Teachers' Retirement System (TRS)</u> | | | | | |
| <u>Defined Benefit Plans:</u> | | | | | |
| Retirement Trust | 2,867,824,133 | 30,982,009 | (20,729,723) | 2,878,076,419 | 0.36% |
| Retirement Health Care Trust | 1,309,282,358 | 11,964,388 | (4,741,527) | 1,316,505,219 | 0.55% |
| Total Defined Benefit Plans | <u>4,177,106,491</u> | <u>42,946,397</u> | <u>(25,471,250)</u> | <u>4,194,581,638</u> | |
| <u>Defined Contribution Plans:</u> | | | | | |
| Participant Directed Retirement | 33,740,253 | 778,637 | 1,718,586 | 36,237,476 | 6.89% |
| Health Reimbursement Arrangement | 7,419,736 | 36,420 | 413,952 | 7,870,108 | 5.72% |
| Retiree Medical Plan | 2,543,741 | 12,645 | 129,566 | 2,685,952 | 5.29% |
| Defined Benefit Occupational Death and Disability | 1,157,058 | 6,003 | 40,081 | 1,203,142 | 3.83% |
| Total Defined Contribution Plans | <u>44,860,788</u> | <u>833,705</u> | <u>2,302,185</u> | <u>47,996,678</u> | |
| Total TRS | <u>4,221,967,279</u> | <u>43,780,102</u> | <u>(23,169,065)</u> | <u>4,242,578,316</u> | |
| <u>Judicial Retirement System (JRS)</u> | | | | | |
| Defined Benefit Plan Retirement Trust | 98,897,262 | 1,012,716 | (340,649) | 99,569,329 | 0.67% |
| Defined Benefit Retirement Health Care Trust | 17,387,446 | 155,713 | (21,812) | 17,521,347 | 0.76% |
| Total JRS | <u>116,284,708</u> | <u>1,168,429</u> | <u>(362,461)</u> | <u>117,090,676</u> | |
| <u>National Guard/Naval Militia Retirement System (MRS)</u> | | | | | |
| Defined Benefit Plan Retirement Trust | 30,456,244 | 23,535 | (129,774) | 30,350,005 | -0.35% |
| <u>Other Participant Directed Plans</u> | | | | | |
| Supplemental Annuity Plan | 2,184,370,144 | 13,215,166 | 2,495,203 | 2,200,080,513 | 0.71% |
| Deferred Compensation Plan | 503,285,816 | 6,193,856 | 1,630,892 | 511,110,564 | 1.53% |
| Total All Funds | <u>\$ 16,638,789,256</u> | <u>\$ 158,883,889</u> | <u>\$ (29,044,422)</u> | <u>\$ 16,768,628,723</u> | 0.77% |

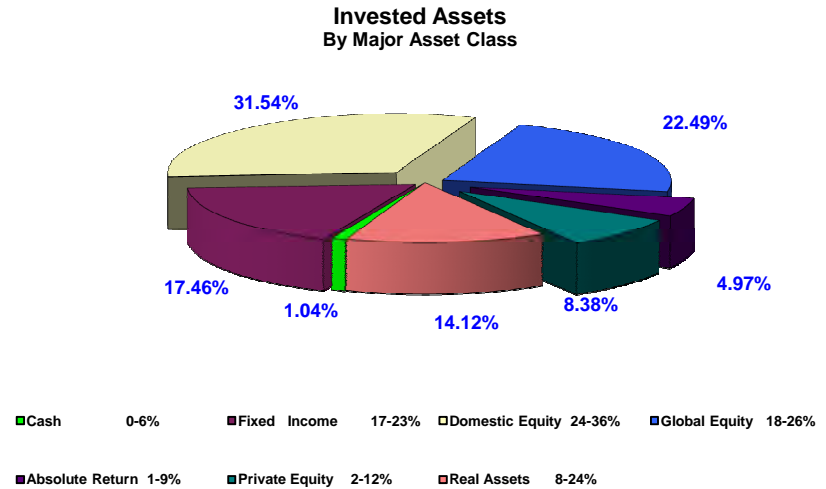
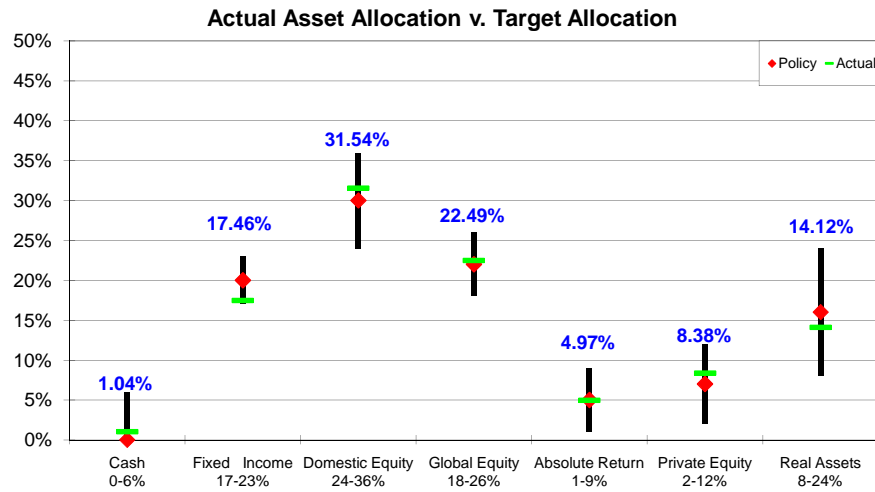
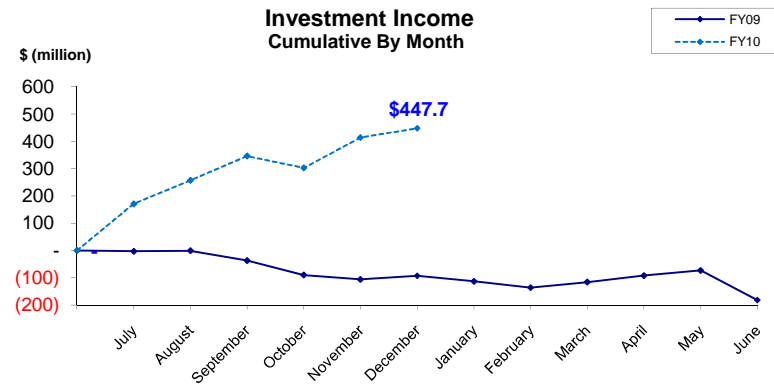
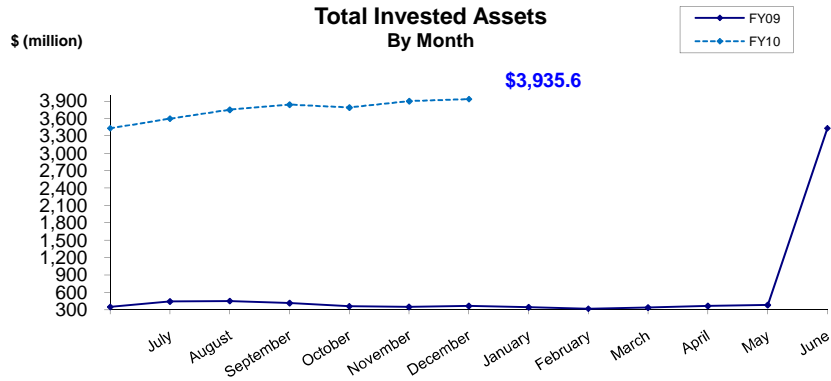
Notes:

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

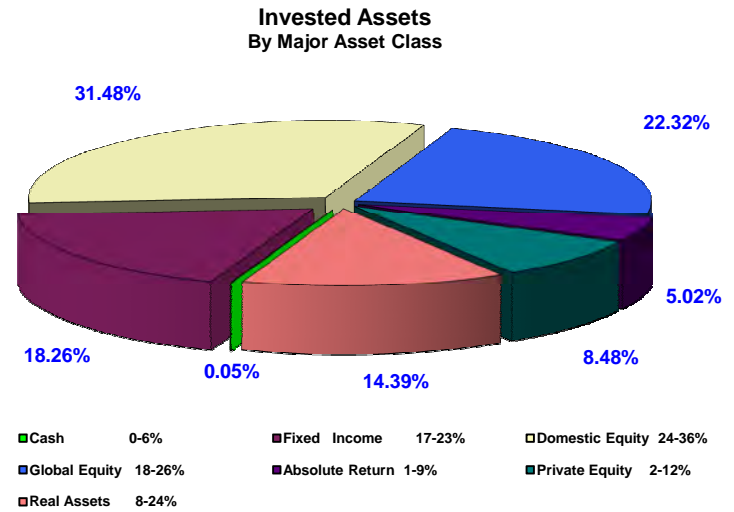
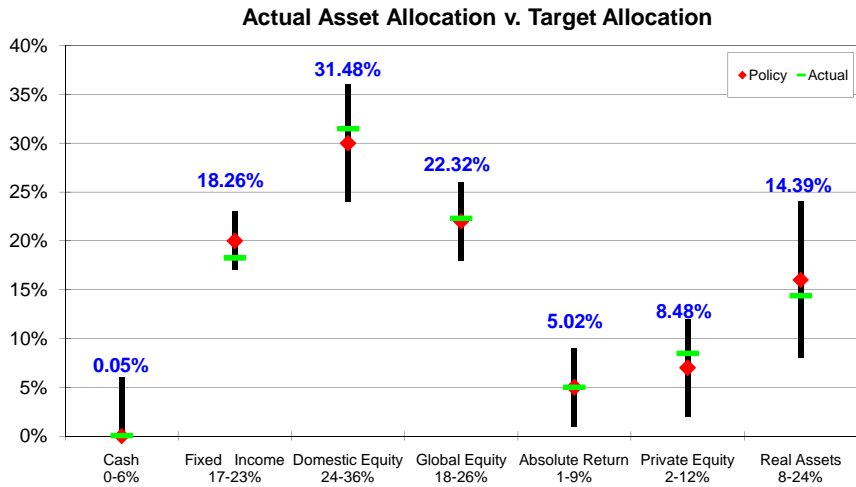
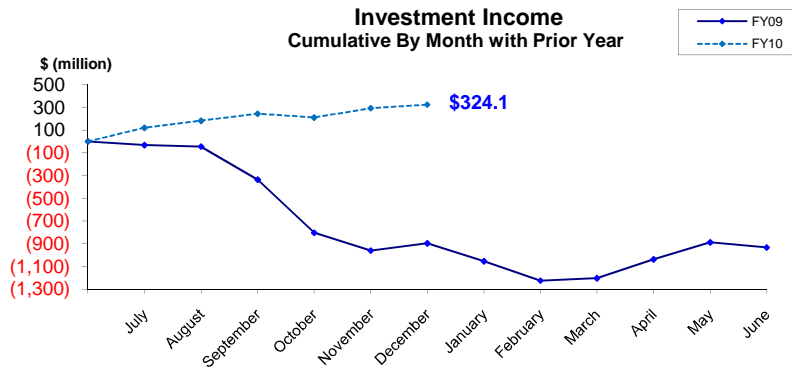
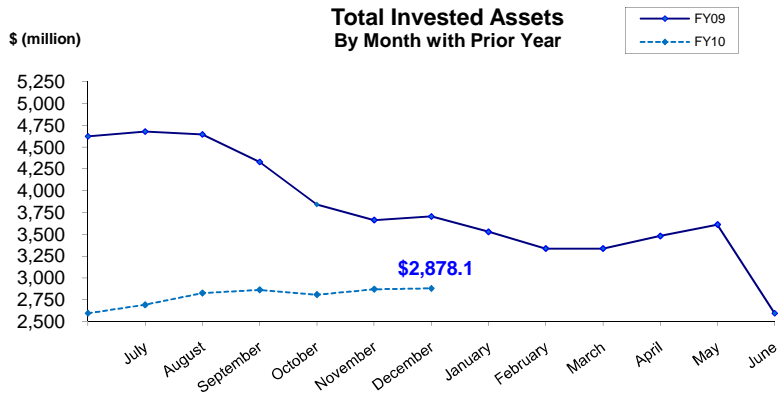
PUBLIC EMPLOYEES' RETIREMENT TRUST FUND As of December 31, 2009



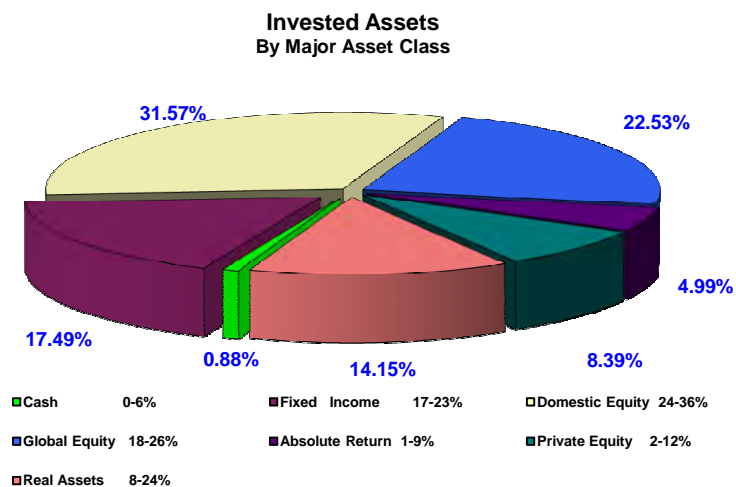
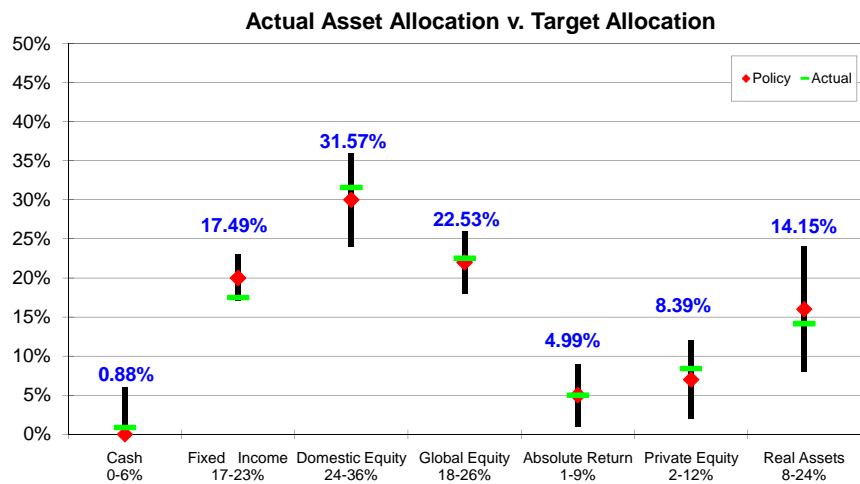
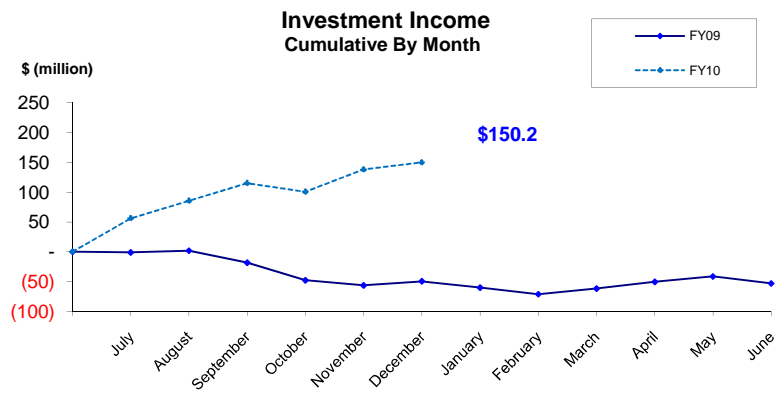
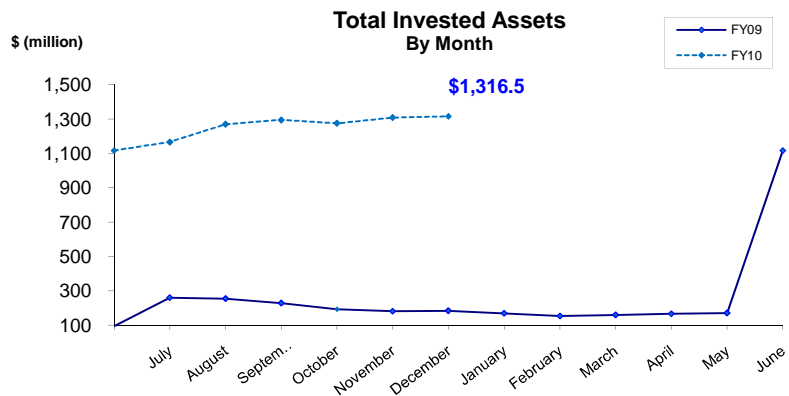
PUBLIC EMPLOYEES' RETIREE HEALTH CARE TRUST FUND As of December 31, 2009



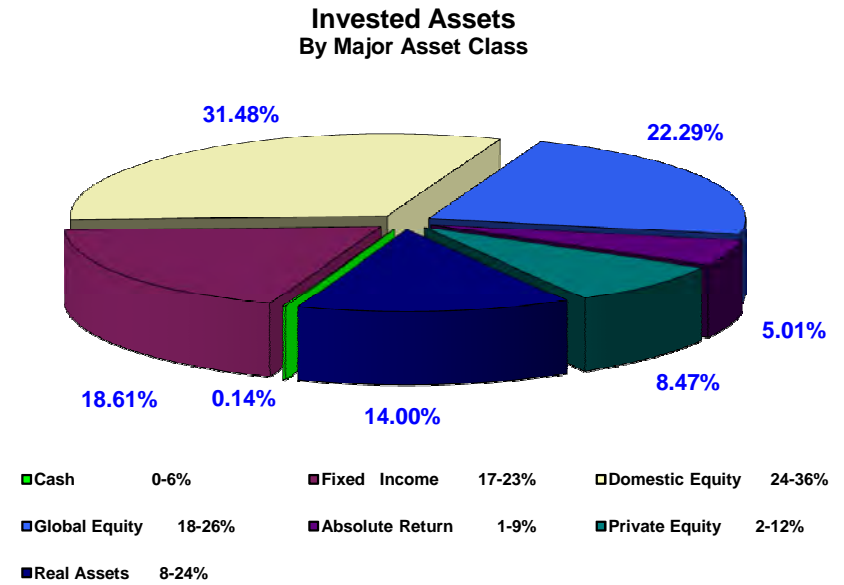
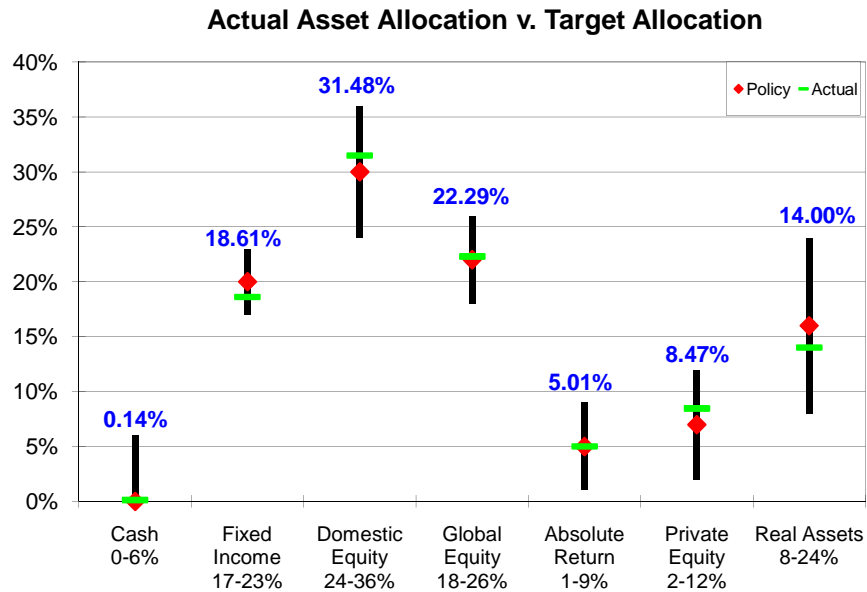
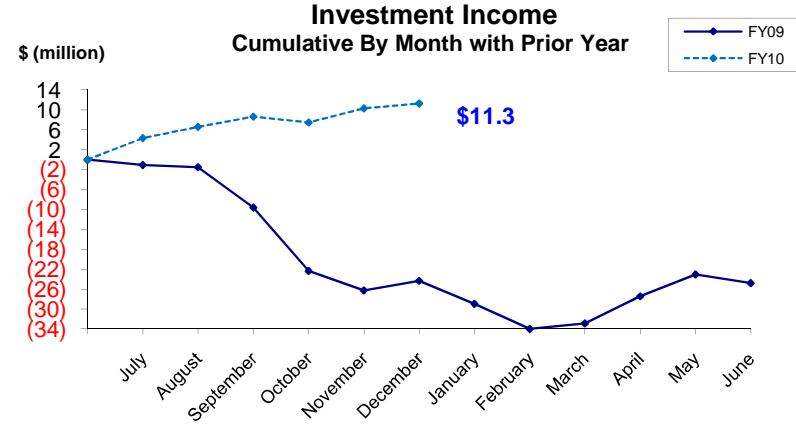
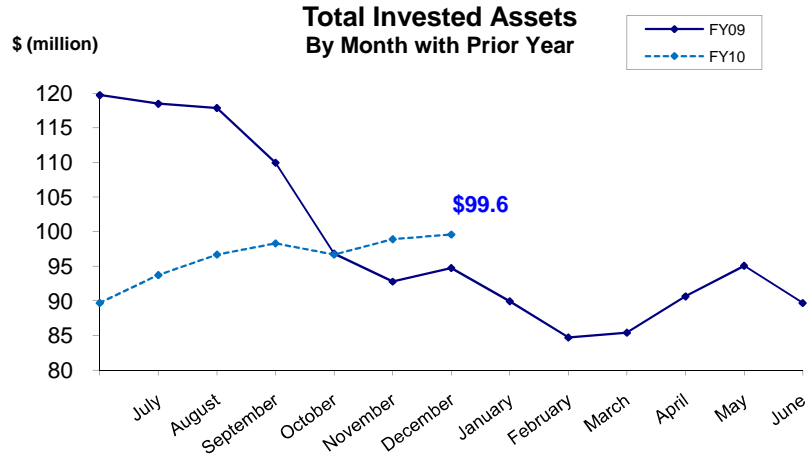
TEACHERS' RETIREMENT TRUST FUND As of December 31, 2009



TEACHERS' RETIREE HEALTH CARE TRUST FUND As of December 31, 2009

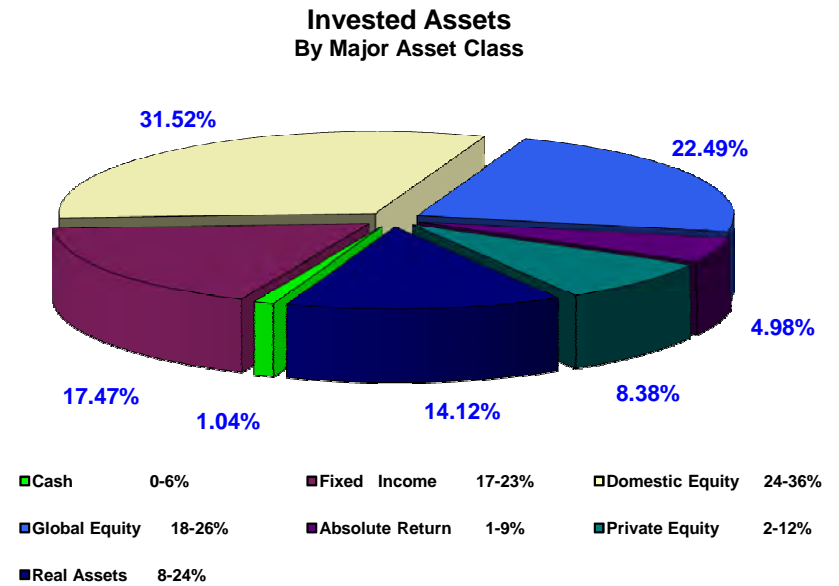
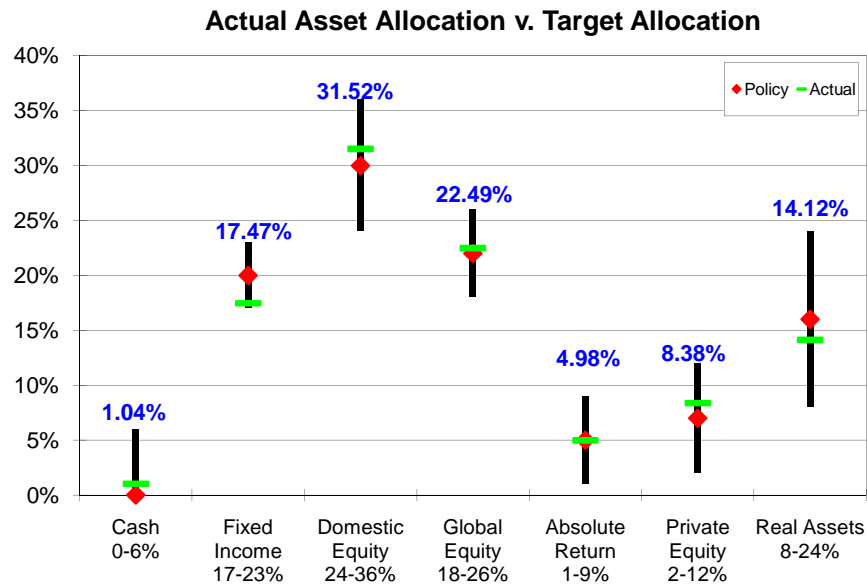
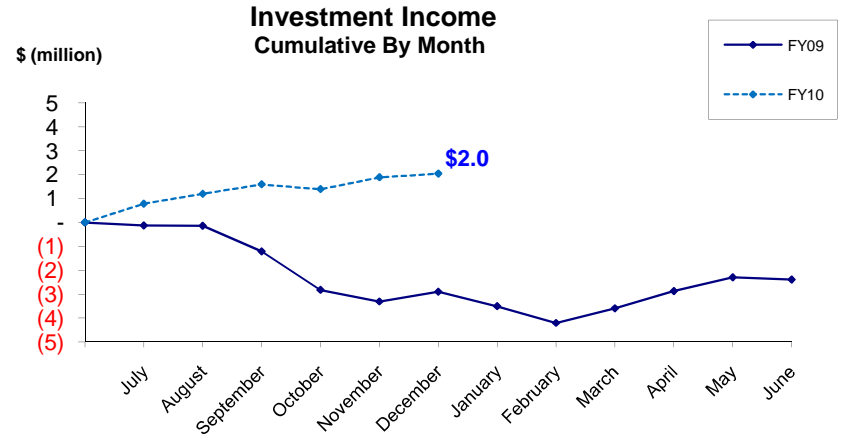
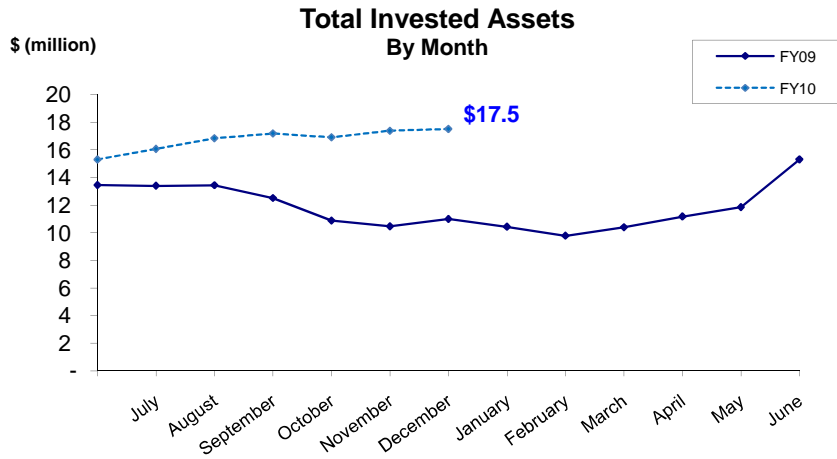


JUDICIAL RETIREMENT TRUST FUND As of December 31, 2009



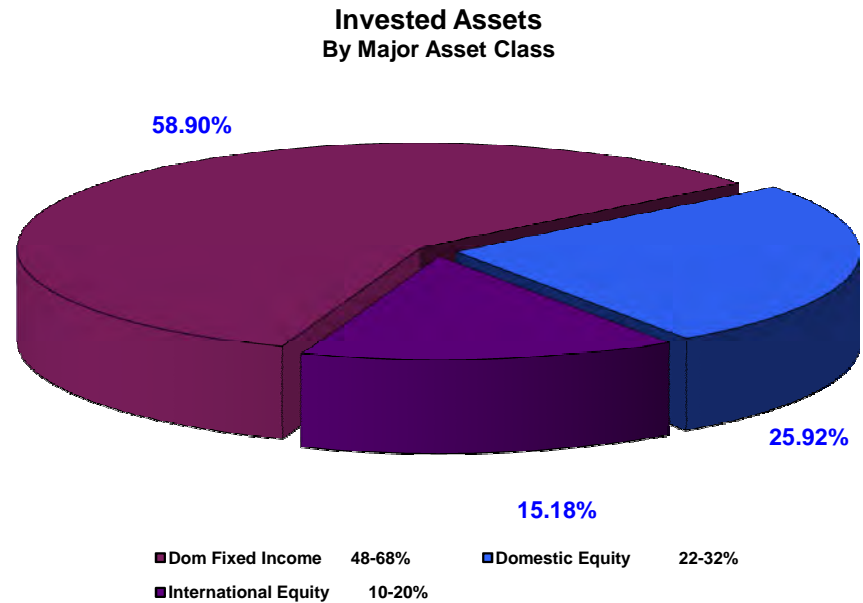
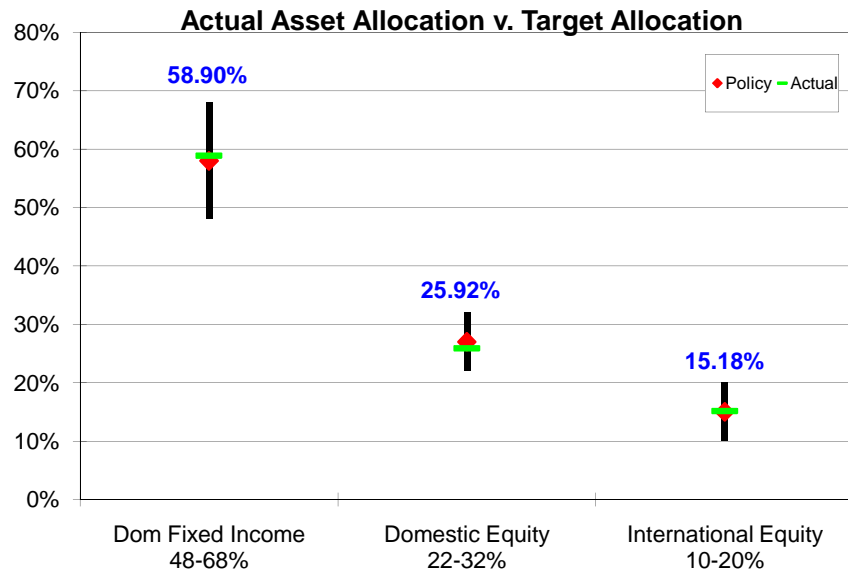
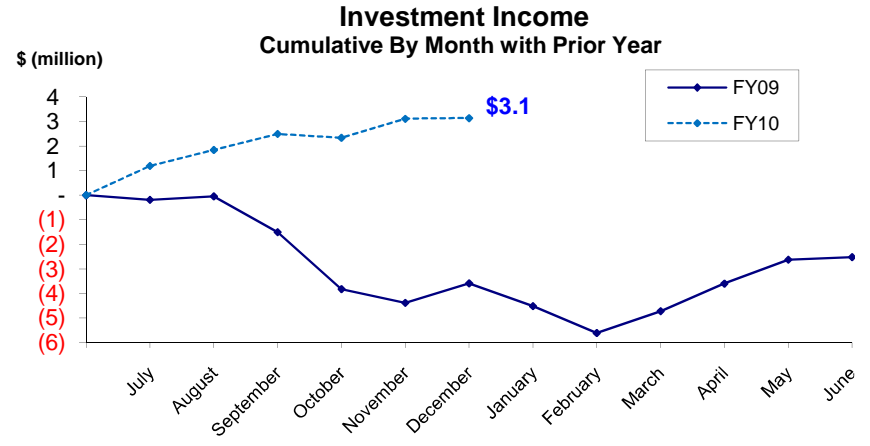
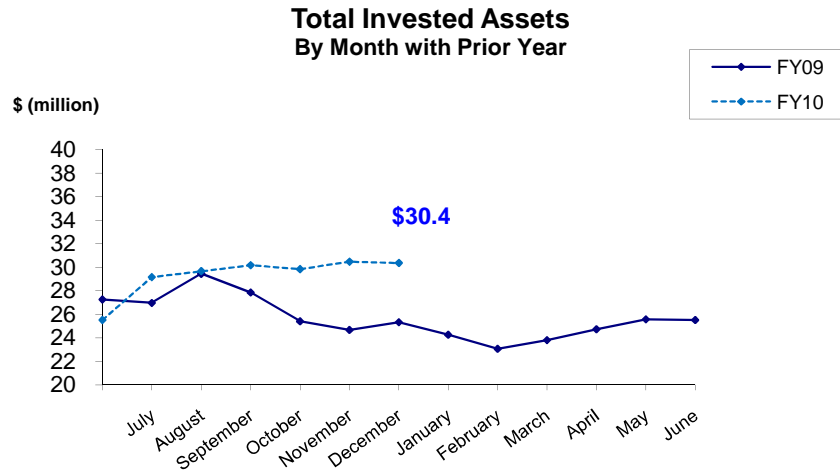
JUDICIAL RETIREE HEALTH CARE TRUST FUND

As of December 31, 2009



MILITARY RETIREMENT TRUST FUND

As of December 31, 2009



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 December 31, 2009

| AY | | Beginning Invested Assets | Total Investment Income | Net Contributions (Withdrawals) & Transfers In (Out) | Ending Invested Assets | Manager % of Total Assets | Manager % increase (decrease) | Pool % increase (decrease) |
|----|--|---------------------------------|-------------------------------|--|------------------------------|---------------------------------|-------------------------------------|----------------------------------|
| | Cash | | | | | | | |
| 70 | Short-Term Fixed Income Pool | \$ 98,042,974 | \$ 79,657 | \$ (34,002,882) | \$ 64,119,749 | 0.47% | -34.60% | |
| | Total Cash | <u>98,042,974</u> | <u>79,657</u> | <u>(34,002,882)</u> | <u>64,119,749</u> | | | -34.60% |
| | Fixed Income | | | | | | | |
| 77 | Internal Fixed Income Investment Pool | <u>1,877,841,259</u> | <u>(30,378,386)</u> | <u>58,864,969</u> | <u>1,906,327,842</u> | 13.68% | 1.52% | 1.52% |
| | International Fixed Income Pool | | | | | | | |
| 63 | Mondrian Investment Partners | <u>213,281,841</u> | <u>(10,728,395)</u> | - | <u>202,553,446</u> | 1.45% | -5.03% | -5.03% |
| | High Yield Pool | | | | | | | |
| 9N | ING Investment Management | 150,268,010 | 3,610,969 | - | 153,878,979 | 1.10% | 2.40% | |
| 9P | MacKay Shields, LLC | <u>158,495,193</u> | <u>2,707,239</u> | - | <u>161,202,432</u> | 1.16% | 1.71% | |
| | Total High Yield | <u>308,763,203</u> | <u>6,318,208</u> | - | <u>315,081,411</u> | | | 2.05% |
| | Emerging Debt Pool | | | | | | | |
| 5M | Lazard Emerging Income | <u>101,085,349</u> | <u>816,055</u> | - | <u>101,901,404</u> | 0.73% | 0.81% | 0.81% |
| | Total Fixed Income (cont.) | <u>2,500,971,652</u> | <u>(33,972,518)</u> | <u>58,864,969</u> | <u>2,525,864,103</u> | | | |

Alaska Retirement Management Board
All Non-Participant Directed Plans by Manager
Schedule of Investment Income and Changes in Invested Assets
For the Month Ended December 31, 2009

| | Beginning Invested Assets | Total Investment Income | Net Contributions (Withdrawals) & Transfers In (Out) | Ending Invested Assets | Manager % of Total Assets | Manager % increase (decrease) | Pool % increase (decrease) |
|--------------------------|------------------------------------|-------------------------------|--|------------------------------|---------------------------------|-------------------------------------|----------------------------------|
| Domestic Equities | | | | | | | |
| Small Cap Managers | | | | | | | |
| Passively Managed | | | | | | | |
| 4N | SSgA Russell 2000 Growth | 6,594,649 | 559,568 | - | 7,154,217 | 0.05% | 8.49% |
| 4P | SSgA Russell 2000 Value | 369,691,673 | 26,054,504 | (60,000,000) | 335,746,177 | 2.41% | -9.18% |
| | Total Passive | 376,286,322 | 26,614,072 | (60,000,000) | 342,900,394 | | |
| Actively Managed | | | | | | | |
| 4D | Turner Investment Partners | 98,766,119 | 6,786,711 | - | 105,552,830 | 0.76% | 6.87% |
| 4F | Luther King Capital Management | 96,908,826 | 7,680,689 | - | 104,589,515 | 0.75% | 7.93% |
| 4G | Jennison Associates, LLC | 152,534,791 | 10,483,903 | (30,000,000) | 133,018,694 | 0.95% | -12.79% |
| 6A | SSgA Futures Small Cap | 2,583,112 | 862,563 | - | 3,445,675 | 0.02% | 33.39% |
| 4H | Lord Abbett & Co. | 152,064,393 | 10,830,150 | - | 162,894,543 | 1.17% | 7.12% |
| | Total Active | 502,857,241 | 36,644,016 | (30,000,000) | 509,501,257 | | |
| | Total Small Cap | 879,143,563 | 63,258,088 | (90,000,000) | 852,401,651 | | -3.04% |
| Large Cap Managers | | | | | | | |
| Passively Managed | | | | | | | |
| 4L | SSgA Russell 1000 Growth | 421,811,393 | 13,014,578 | - | 434,825,971 | 3.12% | 3.09% |
| 4M | SSgA Russell 1000 Value | 619,963,714 | 11,362,711 | - | 631,326,425 | 4.53% | 1.83% |
| 4R | SSgA Russell 200 | 819,667,466 | 9,454,949 | (125,000,000) | 704,122,415 | 5.05% | -14.10% |
| | Total Passive | 1,861,442,573 | 33,832,238 | (125,000,000) | 1,770,274,811 | | |
| Actively Managed | | | | | | | |
| 39 | Cap Guardian Trust Co | 230,353,981 | 8,429,516 | - | 238,783,497 | 1.71% | 3.66% |
| 47 | Lazard Freres | 265,010,452 | 6,948,327 | - | 271,958,779 | 1.95% | 2.62% |
| 48 | McKinley Capital Mgmt. | 323,643,224 | 6,861,505 | - | 330,504,729 | 2.38% | 2.12% |
| 4U | Barrow, Haney, Mewhinney & Strauss | 113,242,240 | 2,310,991 | - | 115,553,231 | 0.83% | 2.04% |
| 4V | Quantitative Management Assoc. | 111,355,558 | 1,726,101 | - | 113,081,659 | 0.81% | 1.55% |
| 38 | RCM | 362,693,583 | 12,961,480 | - | 375,655,063 | 2.69% | 3.57% |
| 6B | SSgA Futures large cap | 4,466,575 | 268,041 | - | 4,734,616 | 0.03% | 6.00% |
| 4J | Relational Investors, LLC | 249,042,896 | 9,328,181 | 3,500,000 | 261,871,077 | 1.88% | 5.15% |
| | Total Active | 1,659,808,509 | 48,834,142 | 3,500,000 | 1,712,142,651 | | |
| | Total Large Cap | 3,521,251,082 | 82,666,380 | (121,500,000) | 3,482,417,462 | | -1.10% |
| Convertible Bond Pool | | | | | | | |
| Actively Managed | | | | | | | |
| 52 | Advent Capital | 50,626,068 | 1,651,973 | - | 52,278,041 | 0.38% | 100.00% |
| | Total Convertible Bond Pool | 50,626,068 | 1,651,973 | - | 52,278,041 | | 100.00% |
| | Total Domestic Equity | 4,451,020,713 | 147,576,441 | (211,500,000) | 4,387,097,154 | | |

(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 December 31, 2009

| | Beginning Invested Assets | Total Investment Income | Net Contributions (Withdrawals) & Transfers In (Out) | Ending Invested Assets | Manager % of Total Assets | Manager % increase (decrease) | Pool % increase (decrease) |
|--|--|-------------------------------|--|------------------------------|---------------------------------|-------------------------------------|----------------------------------|
| Global Equities Ex US | | | | | | | |
| International Equity Pool | | | | | | | |
| 65 | Brandes Investment Partners | 817,293,765 | 7,710,293 | - | 825,004,058 | 5.92% | 0.94% |
| 58 | Lazard Freres | 335,368,269 | 7,307,935 | - | 342,676,204 | 2.46% | 2.18% |
| 67 | Cap Guardian Trust Co | 542,930,422 | 6,982,348 | - | 549,912,770 | 3.95% | 1.29% |
| 68 | State Street Global Advisors | 260,253,366 | 5,595,918 | - | 265,849,284 | 1.91% | 2.15% |
| 6D | SSgA Futures International | 117,840 | 73 | - | 117,913 | 0.00% | 0.06% |
| 69 | McKinley Capital Management | 307,357,310 | 10,334,771 | - | 317,692,081 | 2.28% | 3.36% |
| | Total International Equity | 2,263,320,972 | 37,931,338 | - | 2,301,252,310 | | 1.68% |
| Emerging Markets Equity Pool A ⁽¹⁾ | | | | | | | |
| 6P | Lazard Asset Management | 239,678,193 | 9,246,047 | - | 248,924,240 | 1.79% | 3.86% |
| 6Q | Eaton Vance | 179,475,012 | 4,947,576 | - | 184,422,588 | 1.32% | 2.76% |
| 62 | The Capital Group Inc. | 343,753,521 | 13,478,939 | 25,000,000 | 382,232,460 | | 11.19% |
| | Total Emerging Markets Pool A | 762,906,726 | 27,672,562 | - | 815,579,288 | | |
| | Total Global Equities | 3,026,227,698 | 65,603,900 | 25,000,000 | 3,116,831,598 | | 2.99% |
| Private Equity Pool | | | | | | | |
| 98 | Pathway Capital Management LLC | 509,474,743 | 11,793,204 | 94,130 | 521,362,077 | 3.74% | 2.33% |
| 85 | Abbott Capital | 592,274,001 | 2,191,104 | (7,653,554) | 586,811,551 | 4.21% | -0.92% |
| 8A | Blum Capital Partners-Strategic | 26,281,195 | - | - | 26,281,195 | 0.19% | 0.00% |
| 8B | Blum Capital Partners-Public | - | - | - | - | 0.00% | 0.00% |
| 8Q | Onex Partnership III | 853,462 | (1) | 267,541 | 1,121,002 | | 31.35% |
| 8W | Warburg Pincus X | 9,887,665 | (2) | 448,650 | 10,336,313 | 0.07% | 4.54% |
| 8X | Angelo, Gordon & Co. | 27,017,293 | - | - | 27,017,293 | 0.19% | 0.00% |
| | Total Private Equity | 1,165,788,359 | 13,984,305 | (6,843,233) | 1,172,929,431 | | 0.61% |
| Absolute Return Pool ⁽²⁾ | | | | | | | |
| 8M | Global Asset Management (USA) Inc. | - | - | 75,000,000 | 75,000,000 | 0.54% | 100.00% |
| 8N | Prisma Capital Partners | - | - | 50,000,000 | 50,000,000 | 0.36% | 100.00% |
| 9D | Mariner Investment Group, Inc. | 234,468,084 | 1,643,747 | - | 236,111,831 | 1.69% | 0.70% |
| 9E | Cadogan Management LLC | 114,740,068 | 172,077 | (5,321,000) | 109,591,145 | 0.79% | -4.49% |
| 9F | Crestline Investors, Inc. | 224,688,526 | 266,615 | - | 224,955,141 | 1.61% | 0.12% |
| | Total Absolute Return Investments | 573,896,678 | 2,082,439 | 119,679,000 | 695,658,117 | | 21.22% |

(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 December 31, 2009

| | Beginning Invested Assets | Total Investment Income | Net Contributions (Withdrawals) & Transfers In (Out) | Ending Invested Assets | Manager % of Total Assets | Manager % increase (decrease) | Pool % increase (decrease) |
|--|--|-------------------------------|--|------------------------------|---------------------------------|-------------------------------------|----------------------------------|
| Real Assets | | | | | | | |
| Farmland Pool A | | | | | | | |
| 9B | UBS Agrivest, LLC | 308,051,550 | 6 | (3,938,259) | 304,113,297 | 2.18% | -1.28% |
| 9G | Hancock Agricultural Investment Group | 149,855,466 | (14) | 6,175,000 | 156,030,452 | 1.12% | 4.12% |
| | Total Farmland Pool A | 457,907,016 | (8) | 2,236,741 | 460,143,749 | | 0.49% |
| Farmland Water Pool | | | | | | | |
| 8Y | Hancock Farmland and Water PPTY | 5,723,658 | (85,204) | - | 5,638,454 | 0.04% | -1.49% |
| 8Z | UBS Argivest, LLC | 15,904,823 | (4) | (350,000) | 15,554,819 | 0.11% | -2.20% |
| | Total Farmland Water Pool | 21,628,481 | (85,208) | (350,000) | 21,193,273 | | -2.01% |
| Timber Pool A | | | | | | | |
| 9Q | Timberland INVT Resource LLC | 115,428,026 | 3,965,212 | - | 119,393,238 | 0.86% | 3.44% |
| 9S | Hancock Natural Resource Group | 39,993,142 | (315,917) | 8,000,000 | 47,677,225 | 0.34% | 19.21% |
| | Total Timber Pool A | 155,421,168 | 3,649,295 | 8,000,000 | 167,070,463 | | 7.50% |
| Energy Pool A | | | | | | | |
| 9A | TCW Energy Fund XD | 23,736,542 | 167,182 | - | 23,903,724 | 0.17% | 0.70% |
| 9Z | TCW Energy Fund XIV-A | 61,409,605 | 649,349 | - | 62,058,954 | 0.45% | 1.06% |
| | Total Energy Pool A | 85,146,147 | 816,531 | - | 85,962,678 | | 0.96% |
| REIT Pool | | | | | | | |
| 9H | REIT Holdings | 46,580,312 | 3,196,403 | - | 49,776,715 | 0.36% | 6.86% |
| Treasury Inflation Proof Securities | | | | | | | |
| 6N | TIPS Internally Managed Account (cont.) | 78,019,992 | (1,604,268) | - | 76,415,724 | 0.54% | -2.06% |

Alaska Retirement Management Board
All Non-Participant Directed Plans by Manager
Schedule of Investment Income and Changes in Invested Assets
For the Month Ended December 31, 2009

| | Beginning Invested Assets | Total Investment Income | Net Contributions (Withdrawals) & Transfers In (Out) | Ending Invested Assets | Manager % of Total Assets | Manager % increase (decrease) | Pool % increase (decrease) |
|------------------------------|---|-------------------------------|--|------------------------------|---------------------------------|-------------------------------------|----------------------------------|
| Real Estate | | | | | | | |
| Core Commingled Accounts | | | | | | | |
| 7A | JP Morgan | 147,709,983 | (2,967,831) | - | 144,742,152 | 1.04% | -2.01% |
| 7B | UBS Realty | 66,182,147 | (3,324,133) | - | 62,858,014 | 0.45% | -5.02% |
| | Total Core Commingled | <u>213,892,130</u> | <u>(6,291,964)</u> | <u>-</u> | <u>207,600,166</u> | | |
| Core Separate Accounts | | | | | | | |
| 7D | Cornerstone Real Estate Advisers Inc. | 166,564,545 | (6,537,742) | (1,222,648) | 158,804,155 | 1.14% | -4.66% |
| 7E | LaSalle Investment Management | 170,017,591 | 2,087,060 | (821,217) | 171,283,434 | 1.23% | 0.74% |
| 7F | Sentinel Separate Account | 90,623,188 | (1,178,809) | (492,244) | 88,952,135 | 0.64% | -1.84% |
| 7G | UBS Realty, RESA | 272,135,907 | (14,195,057) | (1,071,585) | 256,869,265 | 1.84% | -5.61% |
| | Total Core Separate | <u>699,341,231</u> | <u>(19,824,548)</u> | <u>(3,607,694)</u> | <u>675,908,989</u> | | |
| Non-Core Commingled Accounts | | | | | | | |
| 7J | Lowe Hospitality Partners | 7,398,200 | (510,356) | - | 6,887,844 | 0.05% | -6.90% |
| 7M | Cornerstone Rotational Fund | 922 | (191) | - | 731 | 0.00% | -20.65% |
| 7N | ING Clarion Development Ventures II | 22,487,906 | (11,698,258) | (41,188) | 10,748,460 | 0.08% | -52.20% |
| 7P | Lehman Brothers Real Estate Partners II | 78,506,350 | (10,058,258) | - | 68,448,092 | 0.49% | -12.81% |
| 7Q | Rothschild Five Arrows Realty Securities IV | 36,823,840 | 732,981 | 561,870 | 38,118,691 | 0.27% | 3.52% |
| 7R | Tishman Speyer Real Estate Venture VI | 30,894,177 | (2,333,167) | - | 28,561,010 | 0.20% | -7.55% |
| 7X | Tishman Speyer Real Estate Venture VII | 1,605,843 | (276,246) | 477,404 | 1,807,001 | 0.01% | 12.53% |
| 7S | Rothschild Five Arrows Realty Securities V | 3,680,675 | 6,661 | 536,222 | 4,223,558 | 0.03% | 14.75% |
| 7V | ING Clarion Development Ventures III | 168,145 | (197,951) | (2,725) | (32,531) | 0.00% | -119.35% |
| 7W | Lehman Brothers Real estate Partners III | 11,634,336 | (938,583) | - | 10,695,753 | 0.08% | -8.07% |
| 8R | BlackRock Diamond Property Fund | 34,403,475 | (10,504,792) | - | 23,898,683 | 0.17% | -30.53% |
| 8S | Colony Investors VIII, L.P. | 12,858,888 | 1,458,419 | 1,553,800 | 15,871,107 | 0.11% | 23.43% |
| 8U | LaSalle Medical Office Fund II | 11,341,115 | 93,606 | - | 11,434,721 | 0.08% | 0.83% |
| 8V | Cornerstone Apartment Venture III | 15,785,850 | (4,037,822) | - | 11,748,028 | 0.08% | -25.58% |
| | Total Non-Core Commingled | <u>267,589,722</u> | <u>(38,263,957)</u> | <u>3,085,383</u> | <u>232,411,148</u> | | |
| | Total Real Estate | <u>1,180,823,083</u> | <u>(64,380,469)</u> | <u>(522,310)</u> | <u>1,115,920,304</u> | | -5.50% |
| 83/84 | Mortgage-related Assets ⁽³⁾ | 7,888 | - | - | 7,888 | 0.00% | 0.00% |
| | Total Real Assets | <u>2,025,534,087</u> | <u>(58,407,724)</u> | <u>9,364,431</u> | <u>1,976,490,794</u> | | |
| | Totals | <u>\$ 13,841,482,161</u> | <u>\$ 136,946,500</u> | <u>\$ (39,437,715)</u> | <u>\$ 13,938,990,946</u> | 100.00% | 0.70% |

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) Mortgage-related assets are managed in-house. These assets are valued at their principal balance (cost) less an allowance for loan loss, the result of which approximates market value.

ALASKA RETIREMENT MANAGEMENT BOARD

Participant Directed Plans

ALASKA RETIREMENT MANAGEMENT BOARD
Supplemental Annuity Plan
Schedule of Investment Income and Changes in Invested Assets
for the Month Ended
December 31, 2009

| | Beginning Invested Assets | Investment Income | Net Contributions (Withdrawals) | Transfers in (out) | Ending Invested Assets |
|--|---------------------------------|----------------------|------------------------------------|-----------------------|------------------------------|
| Interim Transit Account | | | | | |
| Treasury Division ⁽¹⁾ | | | | | |
| Cash and Cash Equivalents | \$ 7,099,033 | \$ 3,508 | \$ 1,048,596 | \$ - | \$ 8,151,137 |
| Participant Options ⁽²⁾ | | | | | |
| T. Rowe Price | | | | | |
| Target 2010 Fund | 32,215,234 | 1,595 | 56,859 | (371,728) | 31,901,960 |
| AK Target Date 2010 Trust | 2,158,408 | 22,196 | 7,963 | 543,725 | 2,732,292 |
| AK Target Date 2015 Trust | 75,389,086 | 701,335 | (181,573) | 1,122,830 | 77,031,678 |
| AK Target Date 2020 Trust | 26,936,767 | 415,278 | (296,232) | (567,583) | 26,488,230 |
| AK Target Date 2025 Trust | 9,967,920 | 198,927 | 97,259 | 72,734 | 10,336,840 |
| AK Target Date 2030 Trust | 708,477 | 13,065 | 48,780 | 141,698 | 912,020 |
| AK Target Date 2035 Trust | 1,049,214 | 20,802 | 62,843 | 492,989 | 1,625,848 |
| AK Target Date 2040 Trust | 943,917 | 21,696 | 84,038 | (25,986) | 1,023,665 |
| AK Target Date 2045 Trust | 152,228 | 4,006 | 72,854 | (2,234) | 226,854 |
| AK Target Date 2050 Trust | 158,304 | 4,031 | 77,339 | 18,429 | 258,103 |
| AK Target Date 2055 Trust | 280,872 | 6,637 | 14,335 | 74,125 | 375,969 |
| Alaska Balanced Fund | 999,780,569 | 182,007 | (1,314,853) | (280,224) | 998,367,499 |
| Long Term Balanced Fund | 206,082,196 | 2,153,609 | 2,365,859 | 240,883 | 210,842,547 |
| Small-Cap Stock Fund | 56,790,642 | 4,216,809 | 439,665 | (3,359,057) | 58,088,059 |
| Stable Value Fund | 262,727,750 | 892,448 | (1,207,409) | 3,314,967 | 265,727,756 |
| | <u>1,675,341,584</u> | <u>8,854,441</u> | <u>327,727</u> | <u>1,415,568</u> | <u>1,685,939,320</u> |
| State Street Global Advisors | | | | | |
| Global Balanced Fund | 49,629,669 | 109,238 | 153,973 | 477,056 | 50,369,936 |
| Long US Treasury Bond Index | 5,294,330 | (302,861) | 24,662 | 113,862 | 5,129,993 |
| Russell 3000 Index | 5,753,912 | 165,909 | 39,087 | 11,714 | 5,970,622 |
| S&P 500 Stock Index Fund Series A | 208,657,893 | 4,043,736 | 204,336 | (511,307) | 212,394,658 |
| State Street Treasury Money Market Fund - Inst. | 11,569,392 | 717 | (79,249) | (266,826) | 11,224,034 |
| US Real Estate Investment Trust Index | 8,976,933 | 650,560 | (50,554) | 3,048,268 | 12,625,207 |
| US Treasury Inflation Protected Securities Index | 12,431,616 | (279,397) | 33,610 | (775,582) | 11,410,247 |
| World Equity Ex-US Index | 13,689,370 | 284,607 | (9,092) | (1,933,477) | 12,031,408 |
| World Government Bond Ex-US Index | 3,137,402 | (169,363) | (9,536) | (478,473) | 2,480,030 |
| Barclays Global Advisors | | | | | |
| Government Bond Fund | 51,212,740 | (913,042) | 41,917 | (2,087,491) | 48,254,124 |
| Intermediate Bond Fund | 14,789,610 | (269,713) | 53,750 | (656,544) | 13,917,103 |
| Brandes Institutional | | | | | |
| International Equity Fund | - | - | - | - | - |
| International Equity Fund Fee | 95,471,878 | 316,697 | 580,872 | (3,044,151) | 93,325,296 |
| Capital Guardian Trust Company | | | | | |
| Global Balanced Fund | - | - | - | - | - |
| RCM | | | | | |
| Sustainable Opportunities Fund | 21,314,782 | 720,129 | 135,104 | 4,687,383 | 26,857,398 |
| Total Externally Managed Funds | <u>2,177,271,111</u> | <u>13,211,658</u> | <u>1,446,607</u> | <u>-</u> | <u>2,191,929,376</u> |
| Total All Funds | <u>\$ 2,184,370,144</u> | <u>\$ 13,215,166</u> | <u>\$ 2,495,203</u> | <u>\$ -</u> | <u>\$ 2,200,080,513</u> |

Notes:

(1) Represents net contributions in transit to/from the record keeper.

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

ALASKA RETIREMENT MANAGEMENT BOARD
Supplemental Annuity Plan
Schedule of Invested Assets with
Schedule of Investment Income and Changes in Invested Assets
By Month Through the Month Ended
December 31, 2009
\$ (Thousands)

| | <u>July</u> | <u>August</u> | <u>September</u> | <u>October</u> | <u>November</u> | <u>December</u> |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| <u>Invested Assets (At Fair Value)</u> | | | | | | |
| Investments with Treasury Division | | | | | | |
| Cash and cash equivalents | \$ 8,108 | \$ 8,099 | \$ 8,313 | \$ 7,865 | \$ 7,099 | \$ 8,151 |
| Investments with T. Rowe Price | | | | | | |
| Target 2010 Fund | 34,531 | 33,831 | 33,217 | 32,700 | 32,215 | 31,902 |
| AK Target Date 2010 Trust | 1,338 | 1,464 | 1,576 | 32,700 | 2,158 | 2,732 |
| AK Target Date 2015 Trust | 70,319 | 71,857 | 74,209 | 73,406 | 75,389 | 77,032 |
| AK Target Date 2020 Trust | 23,853 | 24,849 | 25,409 | 25,474 | 26,937 | 26,488 |
| AK Target Date 2025 Trust | 8,258 | 9,019 | 9,487 | 9,480 | 9,968 | 10,337 |
| AK Target Date 2030 Trust | 151 | 271 | 335 | 559 | 708 | 912 |
| AK Target Date 2035 Trust | 90 | 261 | 826 | 857 | 1,049 | 1,626 |
| AK Target Date 2040 Trust | 585 | 624 | 771 | 831 | 944 | 1,024 |
| AK Target Date 2045 Trust | - | 3 | 38 | 83 | 152 | 227 |
| AK Target Date 2050 Trust | - | 4 | 30 | 85 | 158 | 258 |
| AK Target Date 2055 Trust | - | 2 | 123 | 65 | 281 | 376 |
| Alaska Balanced Fund | 948,420 | 967,339 | 988,950 | 979,185 | 999,781 | 998,368 |
| Long Term Balanced Fund | 197,659 | 205,168 | 209,147 | 200,839 | 206,082 | 210,843 |
| Small-Cap Stock Fund | 43,266 | 48,369 | 55,667 | 54,469 | 56,791 | 58,088 |
| Stable Value Fund | 270,928 | 265,535 | 260,730 | 262,145 | 262,728 | 265,728 |
| Investments with State Street Global Advisors | | | | | | |
| Global Balanced Fund | 48,874 | 50,122 | 49,320 | 48,167 | 49,630 | 50,370 |
| Long US Treasury Bond Index | 5,114 | 5,047 | 5,525 | 5,082 | 5,294 | 5,130 |
| Russell 3000 Index | 3,846 | 4,499 | 4,645 | 4,900 | 5,754 | 5,971 |
| S&P 500 Stock Index Fund Series A | 180,629 | 187,400 | 195,964 | 196,627 | 208,658 | 212,395 |
| State Street Treasury Money Market Fund - Inst. | 11,271 | 11,778 | 11,412 | 11,039 | 11,569 | 11,224 |
| US Real Estate Investment Trust Index | 4,057 | 8,114 | 10,752 | 8,751 | 8,977 | 12,625 |
| US Treasury Inflation Protected Securities Index | 8,325 | 8,643 | 9,172 | 10,342 | 12,432 | 11,410 |
| World Equity Ex-US Index | 9,327 | 9,687 | 11,273 | 12,890 | 13,689 | 12,031 |
| World Govt Bond Ex | 2,007 | 1,992 | 2,597 | 2,589 | 3,137 | 2,480 |
| Investments with Barclays Global Investors | | | | | | |
| Government Bond Fund | 48,802 | 49,143 | 49,079 | 50,865 | 51,213 | 48,254 |
| Intermediate Bond Fund | 15,473 | 14,009 | 13,824 | 13,930 | 14,790 | 13,917 |
| Investments with Brandes Investment Partners | | | | | | |
| International Equity Fund | 79,773 | 86,504 | 93,347 | 90,337 | - | - |
| International Equity Fund Fee | - | - | - | - | 95,472 | 93,325 |
| Investments with Capital Guardian | | | | | | |
| Global Balanced Fund | - | - | - | - | - | - |
| Investments with RCM | | | | | | |
| Sustainable Opportunities Fund | 17,316 | 18,267 | 18,787 | 18,980 | 21,315 | 26,857 |
| Total Invested Assets | \$ 2,042,320 | \$ 2,091,900 | \$ 2,144,525 | \$ 2,124,276 | \$ 2,184,370 | \$ 2,200,081 |
| <u>Change in Invested Assets</u> | | | | | | |
| Beginning Assets | \$ 1,960,377 | \$ 2,042,320 | \$ 2,091,900 | \$ 2,144,525 | \$ 2,124,276 | \$ 2,184,370 |
| Investment Earnings | 81,103 | 44,643 | 49,571 | (21,863) | 57,958 | 13,215 |
| Net Contributions (Withdrawals) | 840 | 4,937 | 3,054 | 1,614 | 2,136 | 2,496 |
| Ending Invested Assets | \$ 2,042,320 | \$ 2,091,900 | \$ 2,144,525 | \$ 2,124,276 | \$ 2,184,370 | \$ 2,200,081 |

ALASKA RETIREMENT MANAGEMENT BOARD

Deferred Compensation Plan

**Schedule of Invested Assets and Changes in Invested Assets
for the Month Ended
December 31, 2009**

| | <u>Beginning Invested Assets</u> | <u>Investment Income</u> | <u>Net Contributions (Withdrawals)</u> | <u>Transfers in (out)</u> | <u>Ending Invested Assets</u> |
|--|--|------------------------------|--|-------------------------------|---------------------------------------|
| Participant Options | | | | | |
| T. Rowe Price | | | | | |
| Interest Income Fund | \$ 153,992,400 | \$ 535,603 | \$ (177,683) | \$ 1,982,310 | \$ 156,332,630 |
| Small Cap Stock Fund | 47,704,077 | 3,568,194 | 146,209 | (511,090) | 50,907,390 |
| Long Term Balanced Fund | 27,613,607 | 290,367 | 260,139 | (86,728) | 28,077,385 |
| Alaska Balanced Trust | 1,556,170 | 313 | 22,100 | (88,402) | 1,490,181 |
| AK Target Date 2010 Trust | 691,904 | 7,188 | 5,535 | 116,856 | 821,483 |
| AK Target Date 2015 Trust | 822,763 | 7,628 | 10,064 | 174,258 | 1,014,713 |
| AK Target Date 2020 Trust | 882,508 | 14,990 | 13,452 | 16,029 | 926,979 |
| AK Target Date 2025 Trust | 209,610 | 4,203 | 6,627 | 7,209 | 227,649 |
| AK Target Date 2030 Trust | 222,396 | 4,118 | 8,816 | (24,099) | 211,231 |
| AK Target Date 2035 Trust | 128,219 | 2,387 | 2,947 | 147,035 | 280,588 |
| AK Target Date 2040 Trust | 78,099 | 1,774 | 1,143 | (293) | 80,723 |
| AK Target Date 2045 Trust | 492 | 11 | 32 | - | 535 |
| AK Target Date 2050 Trust | 729 | (234) | 72 | 29,678 | 30,245 |
| AK Target Date 2055 Trust | 1,117 | 25 | 10 | - | 1,152 |
| Total Investments with T. Rowe Price | <u>233,904,091</u> | <u>4,436,567</u> | <u>299,463</u> | <u>1,762,763</u> | <u>240,402,884</u> |
| Barclays Global Investors | | | | | |
| Intermediate Bond Fund | 17,460,034 | (321,771) | 50,131 | (281,817) | 16,906,577 |
| Government/Credit Bond Fund | 31,355,579 | (563,226) | 57,662 | (235,233) | 30,614,782 |
| S&P 500 Index Fund | 107,341,034 | 2,083,329 | 452,654 | (825,252) | 109,051,765 |
| Total Investments with Barclays Global Investors | <u>156,156,647</u> | <u>1,198,332</u> | <u>560,447</u> | <u>(1,342,302)</u> | <u>156,573,124</u> |
| Capital Guardian Trust Company | | | | | |
| Global Balanced Fund | - | - | - | - | - |
| Brandes Institutional | | | | | |
| International Equity Fund | - | - | - | - | - |
| International Equity Fund Fee | 47,389,808 | 148,942 | 267,636 | (1,019,883) | 46,786,503 |
| RCM | | | | | |
| Sustainable Core Opportunities Fund | 7,290,035 | 241,406 | 61,901 | 438,320 | 8,031,662 |
| State Street Global Advisors | | | | | |
| Global Balanced Fund | 35,228,985 | 79,580 | 244,971 | (347,026) | 35,206,510 |
| Long US Treasury Bond Index | 865,915 | (54,512) | 12,177 | 270,943 | 1,094,523 |
| Russell 3000 Index | 1,943,636 | 57,605 | 31,872 | 208,034 | 2,241,147 |
| State Street Treasury Money Market Fund - Inst. | 5,173,919 | 329 | 37,105 | (125,020) | 5,086,333 |
| US Real Estate Investment Trust Index | 3,163,462 | 213,679 | 12,306 | 781,622 | 4,171,069 |
| US Treasury Inflation Protected Securities Index | 6,217,480 | (139,777) | 43,612 | (334,426) | 5,786,889 |
| World Equity Ex-US Index | 4,421,944 | 95,287 | 53,424 | (88,338) | 4,482,317 |
| World Government Bond Ex-US Index | 1,529,894 | (83,582) | 5,978 | (204,687) | 1,247,603 |
| Total All Funds | \$ <u><u>503,285,816</u></u> | \$ <u><u>6,193,856</u></u> | \$ <u><u>1,630,892</u></u> | \$ <u><u>-</u></u> | \$ <u><u>511,110,564</u></u> |

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

ALASKA RETIREMENT MANAGEMENT BOARD
Deferred Compensation Plan
Schedule of Invested Assets with
Schedule of Investment Income and Changes in Invested Assets
By Month Through the Month Ended
December 31, 2009
\$ (Thousands)

| | <u>July</u> | <u>August</u> | <u>September</u> | <u>October</u> | <u>November</u> | <u>December</u> |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| <u>Invested Assets (at fair value)</u> | | | | | | |
| Investments with T. Rowe Price | | | | | | |
| Interest Income Fund | | | | | | |
| Cash and cash equivalents | \$ 4,602 | \$ 3,642 | \$ 2,754 | \$ 5,849 | \$ 6,458 | \$ 7,970 |
| Synthetic Investment Contracts | 153,442 | 152,777 | 151,288 | 147,311 | 147,534 | 148,363 |
| Small Cap Stock Fund | 43,386 | 45,323 | 49,154 | 46,222 | 47,704 | 50,907 |
| Long Term Balanced Fund | 23,812 | 25,299 | 26,405 | 26,338 | 27,614 | 28,077 |
| Alaska Balanced Trust | 503 | 940 | 1,257 | 1,396 | 1,556 | 1,490 |
| AK Target Date 2010 Trust | 479 | 564 | 926 | 871 | 692 | 821 |
| AK Target Date 2015 Trust | 480 | 530 | 665 | 671 | 823 | 1,015 |
| AK Target Date 2020 Trust | 174 | 367 | 540 | 801 | 883 | 927 |
| AK Target Date 2025 Trust | 132 | 101 | 112 | 466 | 210 | 228 |
| AK Target Date 2030 Trust | 28 | 133 | 114 | 260 | 222 | 211 |
| AK Target Date 2035 Trust | 1 | 9 | 95 | 99 | 128 | 281 |
| AK Target Date 2040 Trust | 197 | 188 | 75 | 74 | 78 | 81 |
| AK Target Date 2045 Trust | - | - | - | 30 | 1 | 1 |
| AK Target Date 2050 Trust | - | - | - | 1 | 1 | 30 |
| AK Target Date 2055 Trust | - | 1 | 1 | 1 | 1 | 1 |
| Investments with Barclays Global Investors | | | | | | |
| Intermediate Bond Fund | 17,874 | 17,479 | 17,362 | 16,879 | 17,460 | 16,907 |
| Government/Credit Bond Fund | 30,728 | 30,748 | 30,734 | 30,955 | 31,355 | 30,615 |
| S&P 500 Index Fund | 96,901 | 99,881 | 103,991 | 102,061 | 107,341 | 109,052 |
| Investments with Capital Guardian Trust Company | | | | | | |
| Global Balanced Fund | - | - | - | - | - | - |
| Investments with Brandes Institutional | | | | | | |
| International Equity Fund | 44,278 | 47,099 | 48,630 | 45,952 | - | - |
| International Equity Fund Fee | - | - | - | - | 47,390 | 46,786 |
| Investments with RCM | | | | | | |
| Sustainable Opportunities Fund | 6,245 | 6,506 | 6,713 | 6,665 | 7,290 | 8,032 |
| State Street Global Advisors | | | | | | |
| Global Balanced Fund | 32,388 | 33,283 | 34,245 | 34,024 | 35,229 | 35,206 |
| Long US Treasury Bond Index | 1,149 | 1,091 | 1,181 | 911 | 866 | 1,095 |
| Russell 3000 Index | 1,603 | 1,816 | 1,890 | 1,790 | 1,944 | 2,241 |
| State Street Treasury Money Market Fund - Inst. | 4,306 | 4,453 | 4,497 | 4,930 | 5,174 | 5,086 |
| US Real Estate Investment Trust Index | 1,617 | 2,510 | 3,962 | 3,151 | 3,163 | 4,171 |
| US Treasury Inflation Protected Securities Index | 4,118 | 4,368 | 4,608 | 5,167 | 6,217 | 5,787 |
| World Equity Ex-US Index | 2,982 | 3,162 | 3,618 | 4,049 | 4,422 | 4,482 |
| World Government Bond Ex-US Index | 732 | 847 | 1,094 | 1,287 | 1,530 | 1,248 |
| Total Invested Assets | \$ 472,157 | \$ 483,116 | \$ 495,911 | \$ 488,211 | \$ 503,286 | \$ 511,111 |
| <u>Change in Invested Assets</u> | | | | | | |
| Beginning Assets | \$ 454,049 | \$ 472,157 | \$ 483,116 | \$ 495,911 | \$ 488,211 | \$ 503,286 |
| Investment Earnings | 19,092 | 10,641 | 11,844 | (7,577) | 13,760 | 6,194 |
| Net Contributions (Withdrawals) | (984) | 318 | 951 | (123) | 1,315 | 1,631 |
| Ending Invested Assets | \$ 472,157 | \$ 483,116 | \$ 495,911 | \$ 488,211 | \$ 503,286 | \$ 511,111 |

ALASKA RETIREMENT MANAGEMENT BOARD
Defined Contribution Retirement - Participant Directed PERS
Schedule of Investment Income and Changes in Invested Assets
for the Month Ended
December 31, 2009

| | Beginning Invested Assets | Investment Income | Net Contributions (Withdrawals) | Transfers in (out) | Ending Invested Assets |
|---|---------------------------------|----------------------|------------------------------------|-----------------------|------------------------------|
| Interim Transit Account | | | | | |
| Treasury Division ⁽¹⁾ | | | | | |
| Cash and Cash Equivalents | \$ 508,103 | \$ 542 | \$ 986,887 | \$ - | \$ 1,495,532 |
| Participant Options ⁽²⁾ | | | | | |
| T. Rowe Price | | | | | |
| AK Target Date 2010 Trust | 22,761 | 243 | 7,892 | - | 30,896 |
| AK Target Date 2015 Trust | 90,415 | 927 | 32,277 | 2,249 | 125,868 |
| AK Target Date 2020 Trust | 128,652 | 2,260 | 52,198 | - | 183,110 |
| AK Target Date 2025 Trust | 211,228 | 4,716 | 72,570 | (2,418) | 286,096 |
| AK Target Date 2030 Trust | 184,578 | 4,720 | 71,231 | 9,227 | 269,756 |
| AK Target Date 2035 Trust | 156,924 | 4,059 | 80,457 | 245 | 241,685 |
| AK Target Date 2040 Trust | 510,635 | 12,396 | 136,722 | 22,470 | 682,223 |
| AK Target Date 2045 Trust | 208,076 | 5,417 | 104,819 | (789) | 317,523 |
| AK Target Date 2050 Trust | 218,510 | 5,689 | 125,727 | - | 349,926 |
| AK Target Date 2055 Trust | 49,538 | 1,245 | 24,628 | - | 75,411 |
| Alaska Balanced Fund | 80,509 | 11 | 5,859 | (707) | 85,672 |
| Long Term Balanced Fund | 9,685,261 | 103,288 | 344,591 | (1,207,644) | 8,925,496 |
| Small-Cap Stock Fund | 16,233,609 | 1,171,943 | 579,980 | (5,573,237) | 12,412,295 |
| Alaska Money Market | 1,230,906 | 319 | 69,599 | 534,289 | 1,835,113 |
| | <u>29,011,602</u> | <u>1,317,233</u> | <u>1,708,550</u> | <u>(6,216,315)</u> | <u>25,821,070</u> |
| State Street Global Advisors | | | | | |
| S&P 500 Stock Index Fund Series A | 20,706,634 | 405,569 | 774,579 | (1,099,630) | 20,787,152 |
| Long US Treasury Bond Index | 48,229 | (3,009) | 2,054 | 10,846 | 58,120 |
| Russell 3000 Index | 79,528 | 2,289 | 3,840 | 13,716 | 99,373 |
| US Real Estate Investment Trust Index | 80,838 | 5,461 | 4,174 | 32,910 | 123,383 |
| US Treasury Inflation Protected Sec Index | 111,042 | (2,375) | 3,212 | (19,195) | 92,684 |
| World Government Bond Ex-US Index | 37,775 | (2,710) | 1,605 | 15,719 | 52,389 |
| Global Balanced Fund | 404,853 | 998 | 20,255 | 794,753 | 1,220,859 |
| World Equity Ex-US Index | 98,505 | 2,503 | 4,246 | 14,741 | 119,995 |
| Money Market | 126,012 | 6 | (699) | (28,773) | 96,546 |
| | <u>21,693,416</u> | <u>408,732</u> | <u>813,266</u> | <u>(264,913)</u> | <u>22,650,501</u> |
| Barclays | | | | | |
| Government Bond Fund | 3,300,311 | (58,780) | 113,372 | (246,647) | 3,108,256 |
| Intermediate Bond Fund | 106,544 | (1,988) | 2,589 | - | 107,145 |
| Brandes Institutional | | | | | |
| International Equity Fund | - | - | - | - | - |
| International Equity Fund Fee | 20,891,586 | 55,723 | 831,518 | 592,811 | 22,371,638 |
| RCM | | | | | |
| Sustainable Opportunities Fund | 399,320 | 28,268 | 92,430 | 6,135,064 | 6,655,082 |
| Total Externally Managed Funds | <u>75,402,779</u> | <u>1,749,188</u> | <u>3,561,725</u> | <u>-</u> | <u>80,713,692</u> |
| Total All Funds | <u>\$ 75,910,882</u> | <u>\$ 1,749,730</u> | <u>\$ 4,548,612</u> | <u>\$ -</u> | <u>\$ 82,209,224</u> |

Notes:

(1) Represents net contributions in transit to/from the record keeper.

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

ALASKA RETIREMENT MANAGEMENT BOARD
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
December 31, 2009
\$ (Thousands)

| <u>Invested Assets (At Fair Value)</u> | <u>July</u> | <u>August</u> | <u>September</u> | <u>October</u> | <u>November</u> | <u>December</u> |
|---|------------------|------------------|------------------|------------------|------------------|------------------|
| Investments with Treasury Division | | | | | | |
| Cash and cash equivalents | \$ 616 | \$ 1,400 | \$ 1,430 | \$ 710 | \$ 508 | \$ 1,496 |
| Investments with T. Rowe Price | | | | | | |
| AK Target Date 2010 Trust | 3 | 5 | 9 | 14 | 23 | 31 |
| AK Target Date 2015 Trust | 17 | 28 | 46 | 60 | 90 | 126 |
| AK Target Date 2020 Trust | 8 | 23 | 58 | 81 | 129 | 183 |
| AK Target Date 2025 Trust | 58 | 79 | 118 | 150 | 211 | 286 |
| AK Target Date 2030 Trust | 27 | 43 | 105 | 114 | 185 | 270 |
| AK Target Date 2035 Trust | 7 | 22 | 57 | 87 | 157 | 242 |
| AK Target Date 2040 Trust | 94 | 181 | 299 | 366 | 511 | 682 |
| AK Target Date 2045 Trust | - | 19 | 71 | 111 | 208 | 318 |
| AK Target Date 2050 Trust | - | 20 | 68 | 112 | 218 | 350 |
| AK Target Date 2055 Trust | - | 4 | 13 | 26 | 49 | 75 |
| Alaska Balanced Fund | 60 | 66 | 73 | 74 | 80 | 86 |
| Long Term Balanced Fund | 1,796 | 3,559 | 6,040 | 8,115 | 9,685 | 8,925 |
| Small-Cap Stock Fund | 10,212 | 12,248 | 14,884 | 15,099 | 16,234 | 12,412 |
| Alaska Money Market | 748 | 840 | 967 | 1,080 | 1,231 | 1,835 |
| Investments with State Street Global Advisors | | | | | | |
| S&P 500 Stock Index Fund Series A | 21,605 | 21,629 | 21,359 | 19,579 | 20,707 | 20,787 |
| Long US Treasury Bond Index | 41 | 37 | 41 | 43 | 48 | 58 |
| Russell 3000 Index | 52 | 65 | 74 | 74 | 80 | 99 |
| US Real Estate Investment Trust Index | 44 | 68 | 85 | 57 | 81 | 123 |
| US Treasury Inflation Protected Sec Index | 58 | 62 | 69 | 83 | 111 | 93 |
| World Government Bond Ex-US Index | 30 | 27 | 29 | 32 | 38 | 52 |
| Global Balanced Fund | 3,379 | 2,383 | 1,305 | 398 | 405 | 1,221 |
| World Equity Ex-US Index | 72 | 75 | 86 | 127 | 98 | 120 |
| Money Market | 75 | 79 | 112 | 135 | 126 | 97 |
| Investments with Barclays | | | | | | |
| Government Bond Fund | 1,925 | 2,302 | 2,600 | 2,901 | 3,300 | 3,108 |
| Intermediate Bond Fund | 89 | 82 | 89 | 100 | 107 | 107 |
| Investments with Brandes Investment Partners | | | | | | |
| International Equity Fund | 16,973 | 18,673 | 20,069 | 19,589 | - | - |
| International Equity Fund Fee | - | - | - | - | 20,892 | 22,372 |
| Investments with RCM | | | | | | |
| Sustainable Opportunities Fund | 322 | 348 | 364 | 370 | 399 | 6,655 |
| Total Invested Assets | \$ 58,311 | \$ 64,368 | \$ 70,520 | \$ 69,687 | \$ 75,911 | \$ 82,209 |
| Change in Invested Assets | | | | | | |
| Beginning Assets | \$ 52,396 | \$ 58,311 | \$ 64,368 | \$ 70,520 | \$ 69,687 | \$ 75,911 |
| Investment Earnings | 4,022 | 2,243 | 2,493 | (2,415) | 2,785 | 1,750 |
| Net Contributions (Withdrawals) | 1,893 | 3,814 | 3,659 | 1,582 | 3,439 | 4,548 |
| Ending Invested Assets | \$ 58,311 | \$ 64,368 | \$ 70,520 | \$ 69,687 | \$ 75,911 | \$ 82,209 |

ALASKA RETIREMENT MANAGEMENT BOARD
Defined Contribution Retirement - Participant Directed TRS
Schedule of Investment Income and Changes in Invested Assets
for the Month Ended
December 31, 2009

| | Beginning Invested Assets | Investment Income | Net Contributions (Withdrawals) | Transfers in (out) | Ending Invested Assets |
|---|---------------------------------|----------------------|------------------------------------|-----------------------|------------------------------|
| Interim Transit Account | | | | | |
| Treasury Division ⁽¹⁾ | | | | | |
| Cash and Cash Equivalents | \$ 116,569 | \$ 86 | \$ (11,487) | \$ - | \$ 105,168 |
| Participant Options ⁽²⁾ | | | | | |
| T. Rowe Price | | | | | |
| AK Target Date 2010 Trust | 16,408 | 168 | 5,218 | - | 21,794 |
| AK Target Date 2015 Trust | 71,070 | 690 | 28,893 | - | 100,653 |
| AK Target Date 2020 Trust | 66,534 | 1,150 | 30,661 | (649) | 97,696 |
| AK Target Date 2025 Trust | 77,863 | 1,685 | 34,794 | - | 114,342 |
| AK Target Date 2030 Trust | 91,802 | 2,047 | 41,575 | - | 135,424 |
| AK Target Date 2035 Trust | 152,390 | 3,609 | 70,023 | - | 226,022 |
| AK Target Date 2040 Trust | 187,893 | 4,432 | 81,896 | - | 274,221 |
| AK Target Date 2045 Trust | 264,521 | 6,323 | 130,474 | - | 401,318 |
| AK Target Date 2050 Trust | 307,103 | 7,373 | 154,935 | - | 469,411 |
| AK Target Date 2055 Trust | 6,750 | 153 | 2,860 | - | 9,763 |
| Alaska Balanced Fund | 44,825 | 4 | 2,726 | (4,131) | 43,424 |
| Long Term Balanced Fund | 4,176,125 | 44,003 | 137,845 | (442,161) | 3,915,812 |
| Small-Cap Stock Fund | 7,183,894 | 514,992 | 225,211 | (2,496,430) | 5,427,667 |
| Alaska Money Market | 526,026 | 131 | 15,458 | 229,502 | 771,117 |
| | <u>13,173,204</u> | <u>586,760</u> | <u>962,569</u> | <u>(2,713,869)</u> | <u>12,008,664</u> |
| State Street Global Advisors | | | | | |
| S&P 500 Stock Index Fund Series A | 9,214,317 | 178,851 | 316,854 | (582,224) | 9,127,798 |
| Long US Treasury Bond Index | 5,543 | (316) | 288 | - | 5,515 |
| Russell 3000 Index | 15,478 | 479 | 930 | 2,400 | 19,287 |
| US Real Estate Investment Trust Index | 2,479 | 290 | 284 | 7,420 | 10,473 |
| US Treasury Inflation Protected Sec Index | 29,148 | (647) | 1,858 | - | 30,359 |
| World Government Bond Ex-US Index | 1,569 | (221) | 116 | 3,970 | 5,434 |
| Global Balanced Fund | 166,805 | 325 | 2,862 | 345,889 | 515,881 |
| World Equity Ex-US Index | 7,281 | 133 | 433 | 2,913 | 10,760 |
| Money Market | - | - | - | - | - |
| | <u>9,442,620</u> | <u>178,894</u> | <u>323,625</u> | <u>(219,632)</u> | <u>9,725,507</u> |
| Barclays | | | | | |
| Intermediate Bond Fund | 27,232 | (468) | 1,264 | (4,371) | 23,657 |
| Government Bond Fund | 1,436,645 | (25,817) | 51,221 | (45,104) | 1,416,945 |
| | <u>1,463,877</u> | <u>(26,285)</u> | <u>52,485</u> | <u>(49,475)</u> | <u>1,440,602</u> |
| Brandes Institutional | | | | | |
| International Equity Fund | - | - | - | - | - |
| International Equity Fund Fee | 9,324,946 | 25,965 | 342,272 | 221,444 | 9,914,627 |
| RCM | | | | | |
| Sustainable Opportunities Fund | 219,037 | 13,217 | 49,122 | 2,761,532 | 3,042,908 |
| Total Externally Managed Funds | <u>33,623,684</u> | <u>778,551</u> | <u>1,730,073</u> | <u>-</u> | <u>36,132,308</u> |
| Total All Funds | \$ 33,740,253 | \$ 778,637 | \$ 1,718,586 | \$ - | \$ 36,237,476 |

Notes:

(1) Represents net contributions in transit to/from the record keeper.

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

ALASKA RETIREMENT MANAGEMENT BOARD
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
December 31, 2009
\$ (Thousands)

| | <u>July</u> | <u>August</u> | <u>September</u> | <u>October</u> | <u>November</u> | <u>December</u> |
|---|------------------|------------------|------------------|------------------|------------------|------------------|
| <u>Invested Assets (At Fair Value)</u> | | | | | | |
| Investments with Treasury Division | | | | | | |
| Cash and cash equivalents | \$ 119 | \$ 121 | \$ 111 | \$ 270 | \$ 117 | \$ 105 |
| Investments with T. Rowe Price | | | | | | |
| AK Target Date 2010 Trust | 1 | 1 | 3 | 11 | 16 | 22 |
| AK Target Date 2015 Trust | - | 2 | 22 | 49 | 71 | 101 |
| AK Target Date 2020 Trust | - | 3 | 17 | 40 | 67 | 98 |
| AK Target Date 2025 Trust | 4 | 4 | 19 | 45 | 78 | 114 |
| AK Target Date 2030 Trust | 2 | 3 | 22 | 57 | 92 | 135 |
| AK Target Date 2035 Trust | 5 | 9 | 40 | 89 | 152 | 226 |
| AK Target Date 2040 Trust | 21 | 22 | 56 | 113 | 188 | 274 |
| AK Target Date 2045 Trust | - | - | 49 | 143 | 264 | 401 |
| AK Target Date 2050 Trust | - | 1 | 50 | 166 | 307 | 469 |
| AK Target Date 2055 Trust | - | - | 2 | 4 | 7 | 10 |
| Alaska Balanced Fund | 33 | 36 | 38 | 36 | 45 | 43 |
| Long Term Balanced Fund | 901 | 1,652 | 2,708 | 3,508 | 4,176 | 3,916 |
| Small-Cap Stock Fund | 4,900 | 5,561 | 6,530 | 6,690 | 7,184 | 5,428 |
| Alaska Money Market | 421 | 440 | 445 | 495 | 526 | 771 |
| Investments with State Street Global Advisors | | | | | | |
| S&P 500 Stock Index Fund Series A | 10,354 | 9,853 | 9,311 | 8,736 | 9,214 | 9,128 |
| Long US Treasury Bond Index | 4 | 4 | 4 | 5 | 6 | 6 |
| Russell 3000 Index | 10 | 11 | 12 | 12 | 15 | 19 |
| US Real Estate Investment Trust Index | 6 | 7 | 7 | 2 | 2 | 10 |
| US Treasury Inflation Protected Sec Index | 16 | 16 | 16 | 17 | 29 | 30 |
| World Government Bond Ex-US Index | 1 | 1 | 1 | 3 | 2 | 5 |
| Global Balanced Fund | 1,626 | 1,119 | 574 | 176 | 167 | 516 |
| World Equity Ex-US Index | 2 | 2 | 2 | 4 | 7 | 11 |
| Money Market | 7 | 7 | 7 | - | - | - |
| Investments with Barclays | | | | | | |
| Intermediate Bond Fund | 24 | 25 | 26 | 28 | 27 | 24 |
| Government Bond Fund | 1,020 | 1,079 | 1,157 | 1,267 | 1,437 | 1,417 |
| Investments with Brandes Investment Partners | | | | | | |
| International Equity Fund | 8,189 | 8,565 | 8,865 | 8,772 | - | - |
| International Equity Fund Fee | - | - | - | - | 9,325 | 9,915 |
| Investments with RCM | | | | | | |
| Sustainable Opportunities Fund | 192 | 199 | 207 | 203 | 219 | 3,043 |
| Total Invested Assets | \$ 27,858 | \$ 28,743 | \$ 30,301 | \$ 30,941 | \$ 33,740 | \$ 36,237 |
| <u>Change in Invested Assets</u> | | | | | | |
| Beginning Assets | \$ 25,056 | \$ 27,858 | \$ 28,743 | \$ 30,301 | \$ 30,941 | \$ 33,740 |
| Investment Earnings | 1,942 | 1,056 | 1,104 | (1,079) | 1,239 | 779 |
| Net Contributions (Withdrawals) | 860 | (171) | 454 | 1,719 | 1,560 | 1,718 |
| Ending Invested Assets | \$ 27,858 | \$ 28,743 | \$ 30,301 | \$ 30,941 | \$ 33,740 | \$ 36,237 |

ALASKA RETIREMENT MANAGEMENT BOARD

FINANCIAL REPORT

(Supplement to the Treasury Division Report)

As of December 31, 2009

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 Six Months Ending December 31, 2009

| | Contributions | | | Total Contributions | Expenditures | | | Total Expenditures | Transfers In / (Out) | Net Contributions/ (Withdrawals) |
|--|----------------------------|--------------------|---------------|------------------------|----------------------|---------------------|---------------------|-----------------------|-------------------------|--|
| | Contributions EE and ER | State of Alaska | Other | | Benefits | Refunds | Admin- istrative | | | |
| Public Employees' Retirement System (PERS) | | | | | | | | | | |
| <u>Defined Benefit Plans:</u> | | | | | | | | | | |
| Retirement Trust | 133,903,835 | 44,460,249 | 20,627 | 178,384,711 | (248,995,775) | (2,854,817) | (13,246,570) | (265,097,162) | - | (86,712,451) |
| Retirement Health Care Trust | 123,668,380 | 63,492,751 | - | 187,161,131 | (126,459,791) | - | (6,118,008) | (132,577,799) | - | 54,583,332 |
| Total Defined Benefit Plans | 257,572,215 | 107,953,000 | 20,627 | 365,545,842 | (375,455,566) | (2,854,817) | (19,364,578) | (397,674,961) | - | (32,129,119) |
| <u>Defined Contribution Plans:</u> | | | | | | | | | | |
| Participant Directed Retirement | 21,877,608 | - | - | 21,877,608 | - | (2,342,798) | (598,233) | (2,941,031) | - | 18,936,577 |
| (a) Health Reimbursement Arrangement | 6,187,558 | - | - | 6,187,558 | - | - | - | - | - | 6,187,558 |
| (a) Retiree Medical Plan | 1,484,206 | - | - | 1,484,206 | - | - | - | - | - | 1,484,206 |
| (a) Occupational Death and Disability: | | | | | | | | | | |
| Public Employees | 523,471 | - | - | 523,471 | - | - | - | - | - | 523,471 |
| Police and Firefighters | 249,817 | - | - | 249,817 | - | - | - | - | - | 249,817 |
| Total Defined Contribution Plans | 30,322,660 | - | - | 30,322,660 | - | (2,342,798) | (598,233) | (2,941,031) | - | 27,381,629 |
| Total PERS | 287,894,875 | 107,953,000 | 20,627 | 395,868,502 | (375,455,566) | (5,197,615) | (19,962,811) | (400,615,992) | - | (4,747,490) |
| Teachers' Retirement System (TRS) | | | | | | | | | | |
| <u>Defined Benefit Plans:</u> | | | | | | | | | | |
| Retirement Trust | 33,208,087 | 100,474,879 | 1,957 | 133,684,923 | (168,446,728) | (539,750) | (5,049,751) | (174,036,229) | - | (40,351,306) |
| Retirement Health Care Trust | 23,014,804 | 72,987,121 | - | 96,001,925 | (45,212,523) | - | (2,460,121) | (47,672,644) | - | 48,329,281 |
| Total Defined Benefit Plans | 56,222,891 | 173,462,000 | 1,957 | 229,686,848 | (213,659,251) | (539,750) | (7,509,872) | (221,708,873) | - | 7,977,975 |
| <u>Defined Contribution Plans:</u> | | | | | | | | | | |
| Participant Directed Retirement | 7,276,410 | - | - | 7,276,410 | - | (936,007) | (199,840) | (1,135,847) | - | 6,140,563 |
| (a) Health Reimbursement Arrangement | 1,546,067 | - | - | 1,546,067 | - | - | - | - | - | 1,546,067 |
| (a) Retiree Medical Plan | 498,291 | - | - | 498,291 | - | - | - | - | - | 498,291 |
| (a) Occupational Death and Disability: | | | | | | | | | | |
| Public Employees | 178,252 | - | - | 178,252 | - | - | - | - | - | 178,252 |
| Total Defined Contribution Plans | 9,499,020 | - | - | 9,499,020 | - | (936,007) | (199,840) | (1,135,847) | - | 8,363,173 |
| Total TRS | 65,721,911 | 173,462,000 | 1,957 | 239,185,868 | (213,659,251) | (1,475,757) | (7,709,712) | (222,844,720) | - | 16,341,148 |
| Judicial Retirement System (JRS) | | | | | | | | | | |
| <u>Defined Benefit Plan Retirement Trust</u> | 1,649,243 | 1,144,424 | - | 2,793,667 | (4,073,394) | - | (111,126) | (4,184,520) | - | (1,390,853) |
| <u>Defined Benefit Retirement Health Care Trust</u> | 238,291 | 405,576 | - | 643,867 | (469,291) | - | (8,857) | (478,148) | - | 165,719 |
| Total JRS | 1,887,534 | 1,550,000 | - | 3,437,534 | (4,542,685) | - | (119,983) | (4,662,668) | - | (1,225,134) |
| National Guard/Naval Militia Retirement System (NGNMRS) | | | | | | | | | | |
| (a) Defined Benefit Plan Retirement Trust | 2,603,300 | - | - | 2,603,300 | (700,854) | (141,374) | (56,239) | (898,467) | - | 1,704,833 |
| Other Participant Directed Plans | | | | | | | | | | |
| Supplemental Annuity Plan | 65,910,169 | - | - | 65,910,169 | - | (49,028,161) | (1,805,423) | (50,833,584) | - | 15,076,585 |
| Deferred Compensation Plan | 16,707,340 | - | - | 16,707,340 | - | (13,173,928) | (425,758) | (13,599,686) | - | 3,107,654 |
| Total All Funds | 440,725,129 | 282,965,000 | 22,584 | 723,712,713 | (594,358,356) | (69,016,835) | (30,079,926) | (693,455,117) | - | 30,257,596 |

(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 December 31, 2009

| | Contributions | | | Total Contributions | Expenditures | | | Transfers In / (Out) | Net Contributions/ (Withdrawals) | | |
|---|--|-------------------|----------|------------------------|-------------------|----------------------|---------------------|-------------------------|--|-----------------------|---------------------|
| | Contributions | State of Alaska | Other | | Benefits | Refunds | Admin- istrative | | | Total Expenditures | |
| | EE and ER | | | | | | | | | | |
| Public Employees' Retirement System (PERS) | | | | | | | | | | | |
| <u>Defined Benefit Plans:</u> | | | | | | | | | | | |
| | Retirement Trust | 28,153,878 | - | 450 | 28,154,328 | (41,515,589) | (892,233) | (3,600,071) | (46,007,893) | - | (17,853,565) |
| | Retirement Health Care Trust | 25,600,677 | - | - | 25,600,677 | (23,117,917) | - | (600,168) | (23,718,085) | - | 1,882,592 |
| | Total Defined Benefit Plans | 53,754,555 | - | 450 | 53,755,005 | (64,633,506) | (892,233) | (4,200,239) | (69,725,978) | - | (15,970,973) |
| <u>Defined Contribution Plans:</u> | | | | | | | | | | | |
| | Participant Directed Retirement | 5,077,819 | - | - | 5,077,819 | - | (420,002) | (109,205) | (529,207) | - | 4,548,612 |
| (a) | Health Reimbursement Arrangement | 1,436,330 | - | - | 1,436,330 | - | - | - | - | - | 1,436,330 |
| (a) | Retiree Medical Plan | 319,811 | - | - | 319,811 | - | - | - | - | - | 319,811 |
| (a) | Occupational Death and Disability: | | | | | | | | | | |
| | Public Employees | 103,406 | - | - | 103,406 | - | - | - | - | - | 103,406 |
| | Police and Firefighters | 53,597 | - | - | 53,597 | - | - | - | - | - | 53,597 |
| | Total Defined Contribution Plans | 6,990,963 | - | - | 6,990,963 | - | (420,002) | (109,205) | (529,207) | - | 6,461,756 |
| | Total PERS | 60,745,518 | - | 450 | 60,745,968 | (64,633,506) | (1,312,235) | (4,309,444) | (70,255,185) | - | (9,509,217) |
| Teachers' Retirement System (TRS) | | | | | | | | | | | |
| <u>Defined Benefit Plans:</u> | | | | | | | | | | | |
| | Retirement Trust | 8,542,556 | - | 125 | 8,542,681 | (27,929,153) | (136,223) | (1,207,028) | (29,272,404) | - | (20,729,723) |
| | Retirement Health Care Trust | 4,513,942 | - | - | 4,513,942 | (9,019,960) | - | (235,509) | (9,255,469) | - | (4,741,527) |
| | Total Defined Benefit Plans | 13,056,498 | - | 125 | 13,056,623 | (36,949,113) | (136,223) | (1,442,537) | (38,527,873) | - | (25,471,250) |
| <u>Defined Contribution Plans:</u> | | | | | | | | | | | |
| | Participant Directed Retirement | 1,886,514 | - | - | 1,886,514 | - | (119,843) | (48,085) | (167,928) | - | 1,718,586 |
| (a) | Health Reimbursement Arrangement | 413,952 | - | - | 413,952 | - | - | - | - | - | 413,952 |
| (a) | Retiree Medical Plan | 129,566 | - | - | 129,566 | - | - | - | - | - | 129,566 |
| (a) | Occupational Death and Disability: | | | | | | | | | | |
| | Public Employees | 40,081 | - | - | 40,081 | - | - | - | - | - | 40,081 |
| | Total Defined Contribution Plans | 2,470,113 | - | - | 2,470,113 | - | (119,843) | (48,085) | (167,928) | - | 2,302,185 |
| | Total TRS | 15,526,611 | - | 125 | 15,526,736 | (36,949,113) | (256,066) | (1,490,622) | (38,695,801) | - | (23,169,065) |
| Judicial Retirement System (JRS) | | | | | | | | | | | |
| | Defined Benefit Plan Retirement Trust | 382,982 | - | - | 382,982 | (690,461) | - | (33,170) | (723,631) | - | (340,649) |
| | Defined Benefit Retirement Health Care Trust | 50,791 | - | - | 50,791 | (70,823) | - | (1,780) | (72,603) | - | (21,812) |
| | Total JRS | 433,773 | - | - | 433,773 | (761,284) | - | (34,950) | (796,234) | - | (362,461) |
| National Guard/Naval Militia Retirement System (NGMRS) | | | | | | | | | | | |
| (a) | Defined Benefit Plan Retirement Trust | - | - | - | - | (115,253) | - | (14,521) | (129,774) | - | (129,774) |
| Other Participant Directed Plans | | | | | | | | | | | |
| | Supplemental Annuity Plan | 12,512,236 | - | - | 12,512,236 | - | (9,638,167) | (378,866) | (10,017,033) | - | 2,495,203 |
| | Deferred Compensation Plan | 3,511,904 | - | - | 3,511,904 | - | (1,881,012) | - | (1,881,012) | - | 1,630,892 |
| | Total All Funds | 92,730,042 | - | 575 | 92,730,617 | (102,459,156) | (13,087,480) | (6,228,403) | (121,775,039) | - | (29,044,422) |
| (a) | Employer only contributions. | | | | | | | | | | |



Covered Call Background Information

Prepared January 2010

Michael J. O'Leary CFA
Executive Vice President
Callan Associates Inc.



Overview

- At the last Board meeting, staff recommended and the Board voted to proceed with a search for a covered call equity investment manager.
- Prior to proceeding with a search, all agreed that it would be worthwhile to review the rationale and investment characteristics of the possible approach envisioned.
- Callan has updated the statistics that have been commonly used to model the hypothetical performance of a “covered call” buy/write management approach. That information is the primary focus of this presentation.



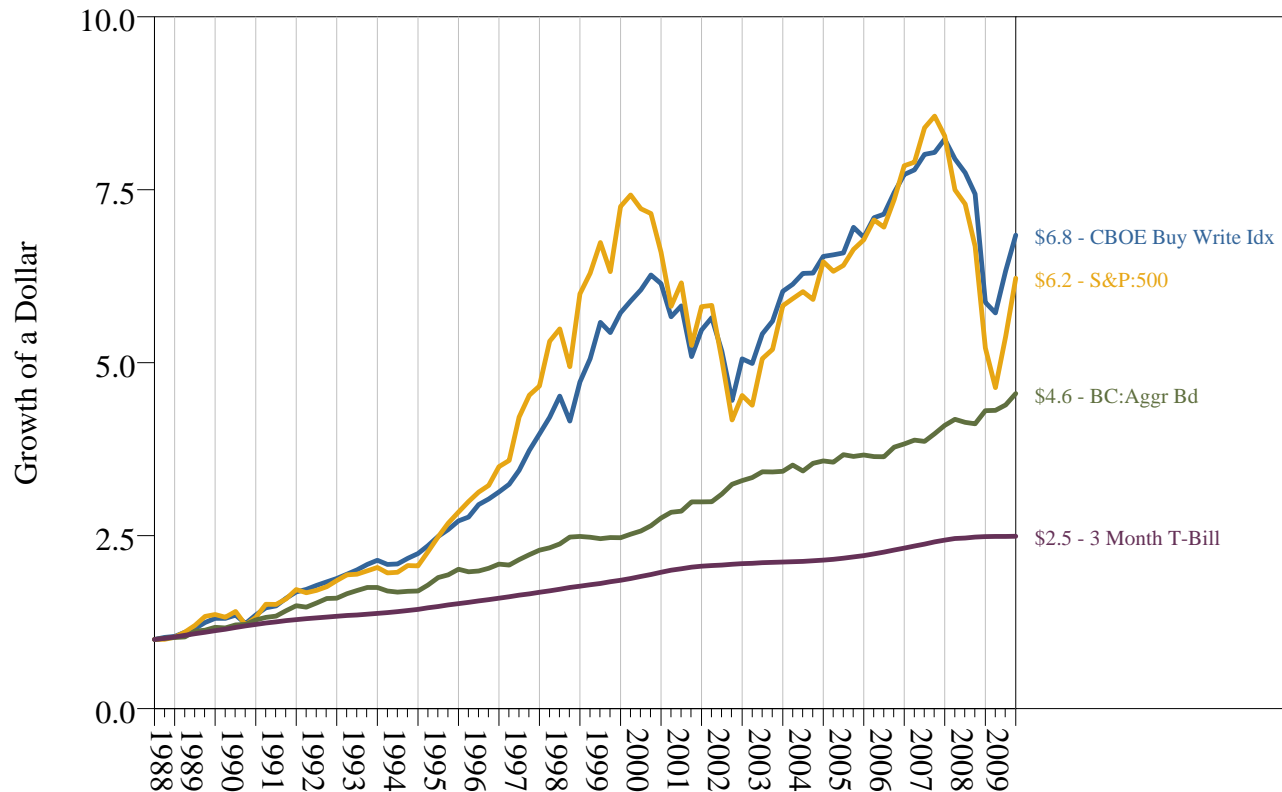
Overview Explanation & Issues

- We analyzed the long-term performance record and concluded that a Buy-Write Strategy hypothetically has delivered equity-like total returns at lower volatility.
- As should be expected, results over intermediate-term spans are highly time period sensitive. During periods of generally rising prices, the buy-write approach tends to lag a passive equity index. Conversely, during periods of flat or declining prices, the buy-write strategy tends to outperform.
- The graphs that follow illustrate and quantify both the long-term record and intermediate term results. We caution that ARMB should only proceed if the Board can withstand 3-year or longer periods of marked underperformance.



Long-Term Return Comparison

Growth of a Dollar
for 21 1/4 Years Ended September 30, 2009

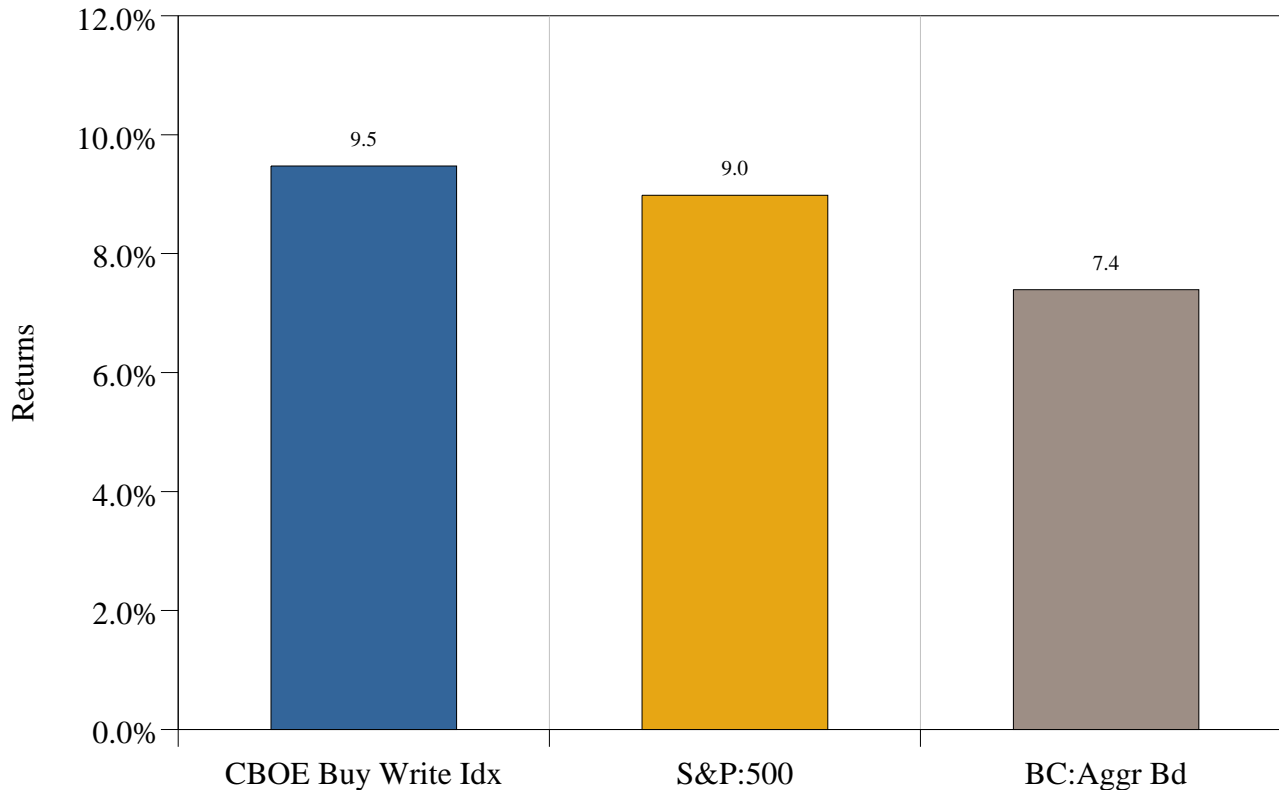


This cumulative return graph illustrates that the Buy-Write Strategy has delivered equity-like long-term returns.



Cumulative Returns

Returns
for 21 1/4 Years Ended September 30, 2009

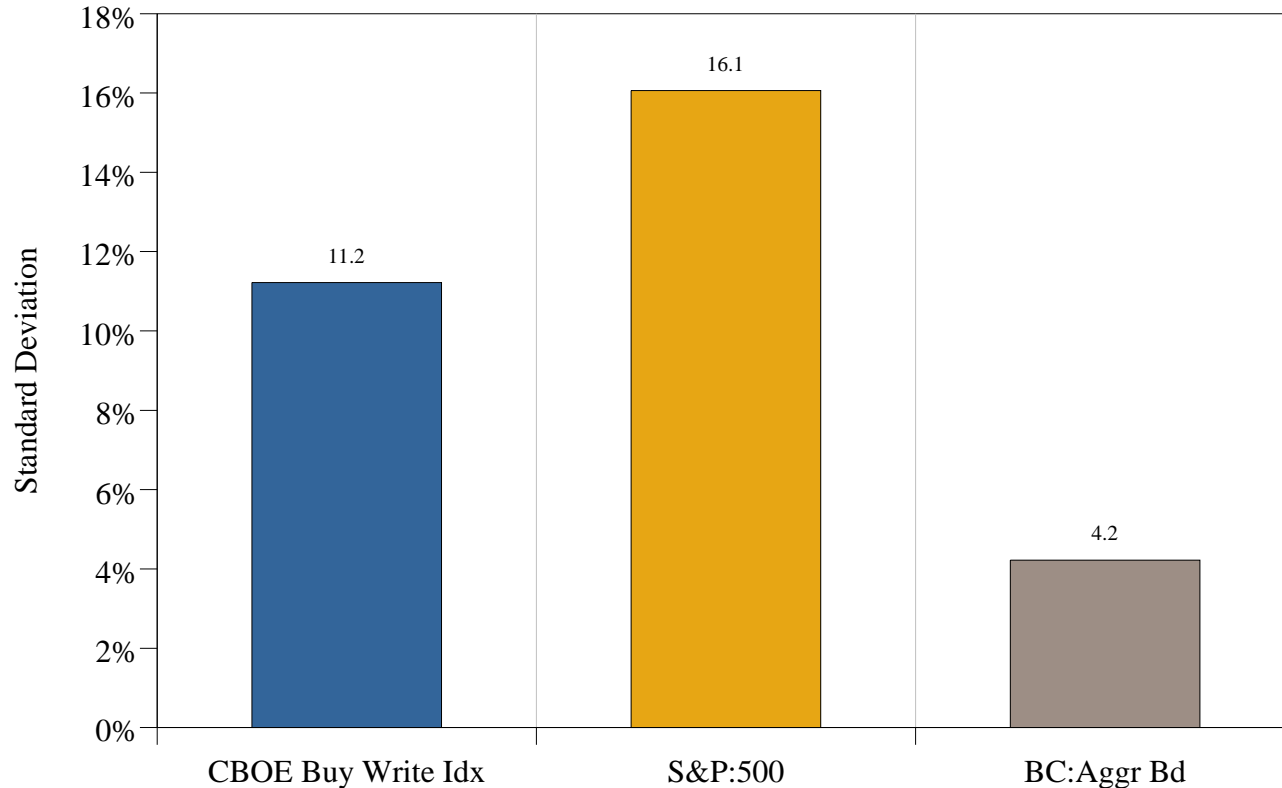


Over the longest period available the annualized return for the Buy-Write Strategy actually exceeded the S&P 500 return and both exceeded the bond market return.



Long-Term Risk (Standard Deviation)

Standard Deviation
for 21 1/4 Years Ended September 30, 2009

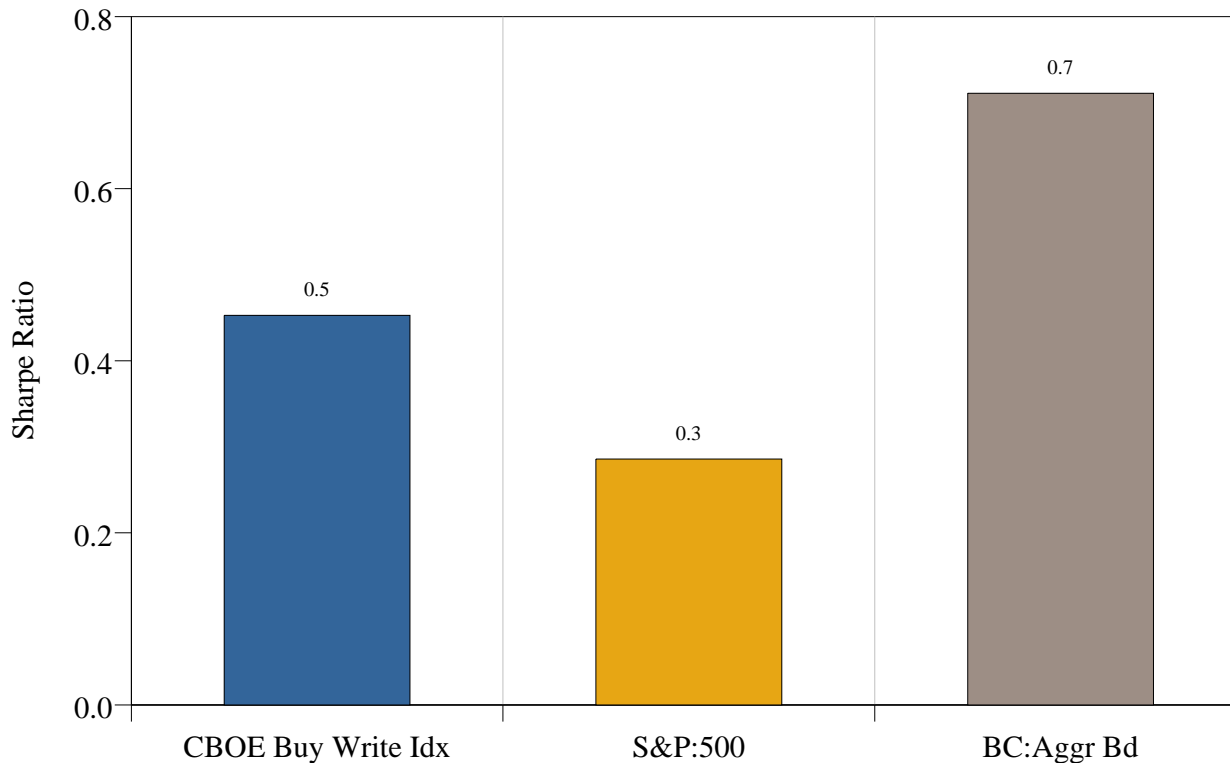


The annualized standard deviation of returns for the Buy-Write Strategy was substantially lower than that for the S&P 500.



Risk Adjusted Returns Sharpe Ratios

Sharpe Ratio
for 21 1/4 Years Ended September 30, 2009

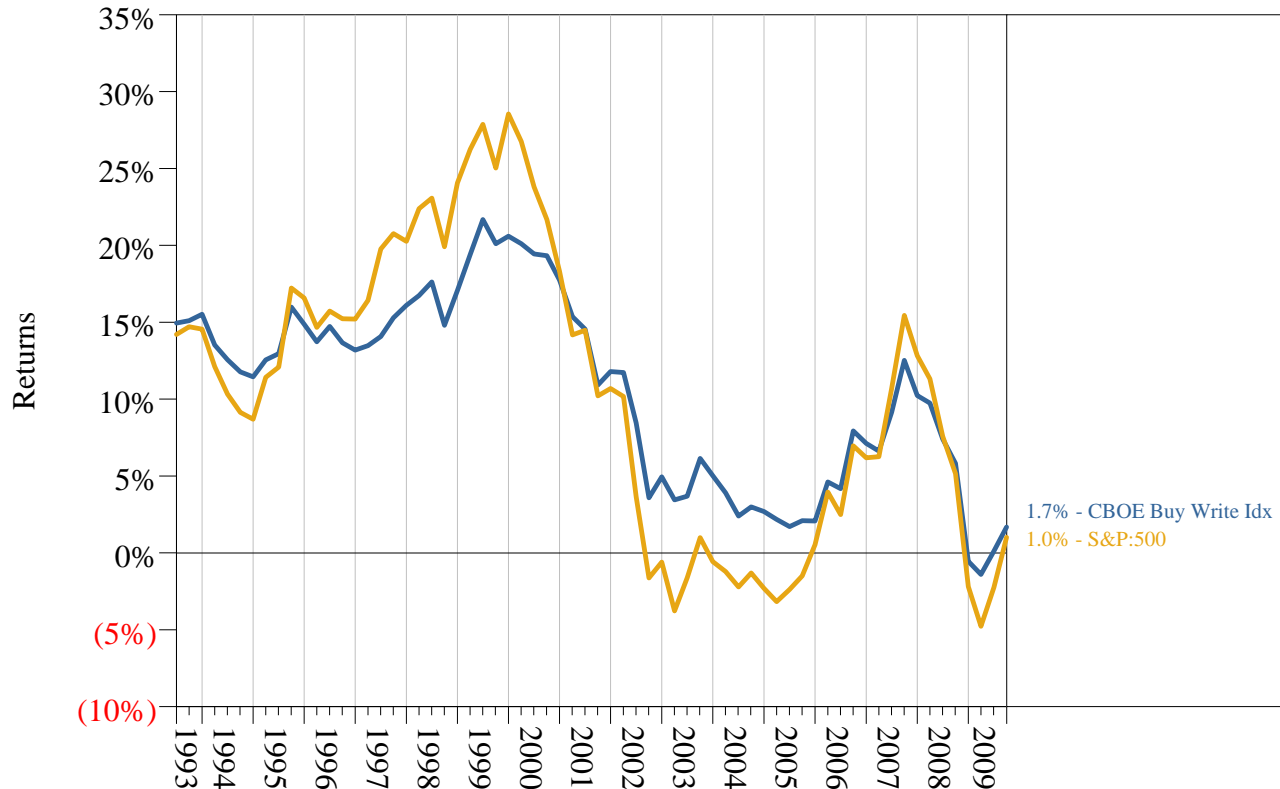


The Sharpe ratio (a risk adjusted measure of return) was superior for the Buy-Write Strategy when compared to the S&P 500.



Rolling 5-Year Returns

Rolling 20 Quarter Returns
for 16 1/4 Years Ended September 30, 2009

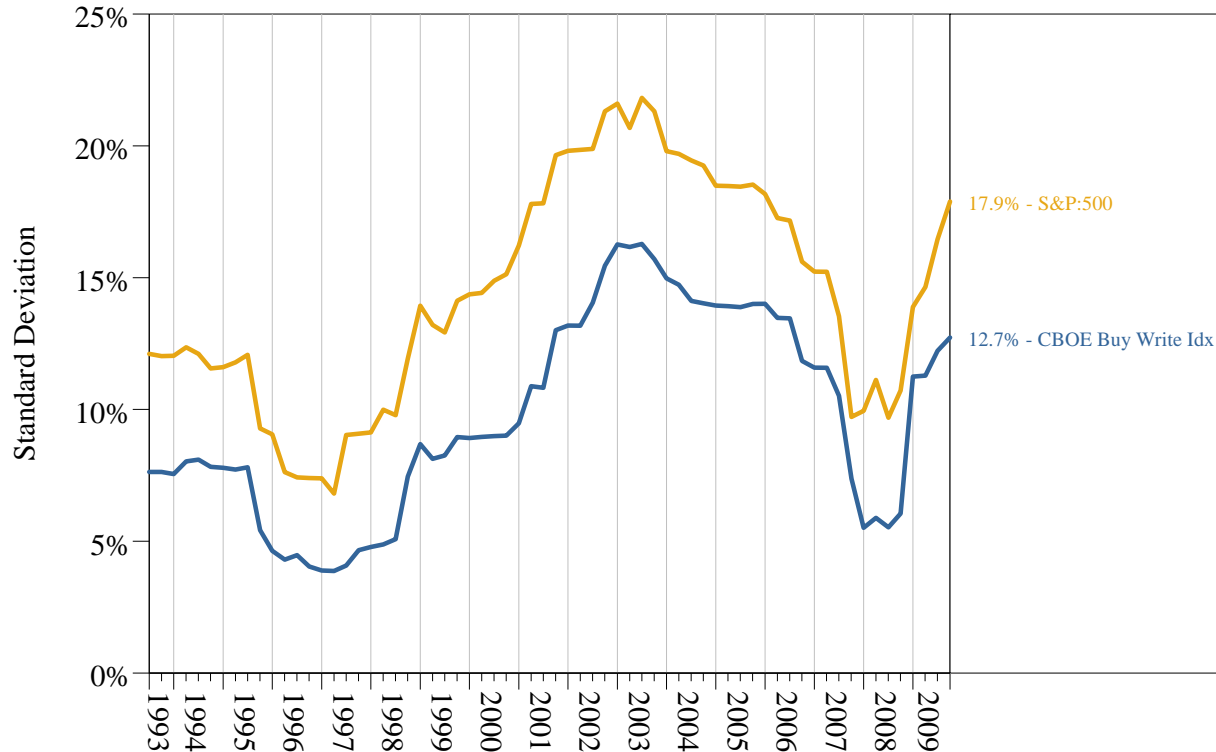


This graph plots rolling 5-year annualized returns. It visually demonstrates that the Buy-Write Strategy has tended to have a less extreme performance pattern than S&P 500.



5-Year Rolling Standard Deviation

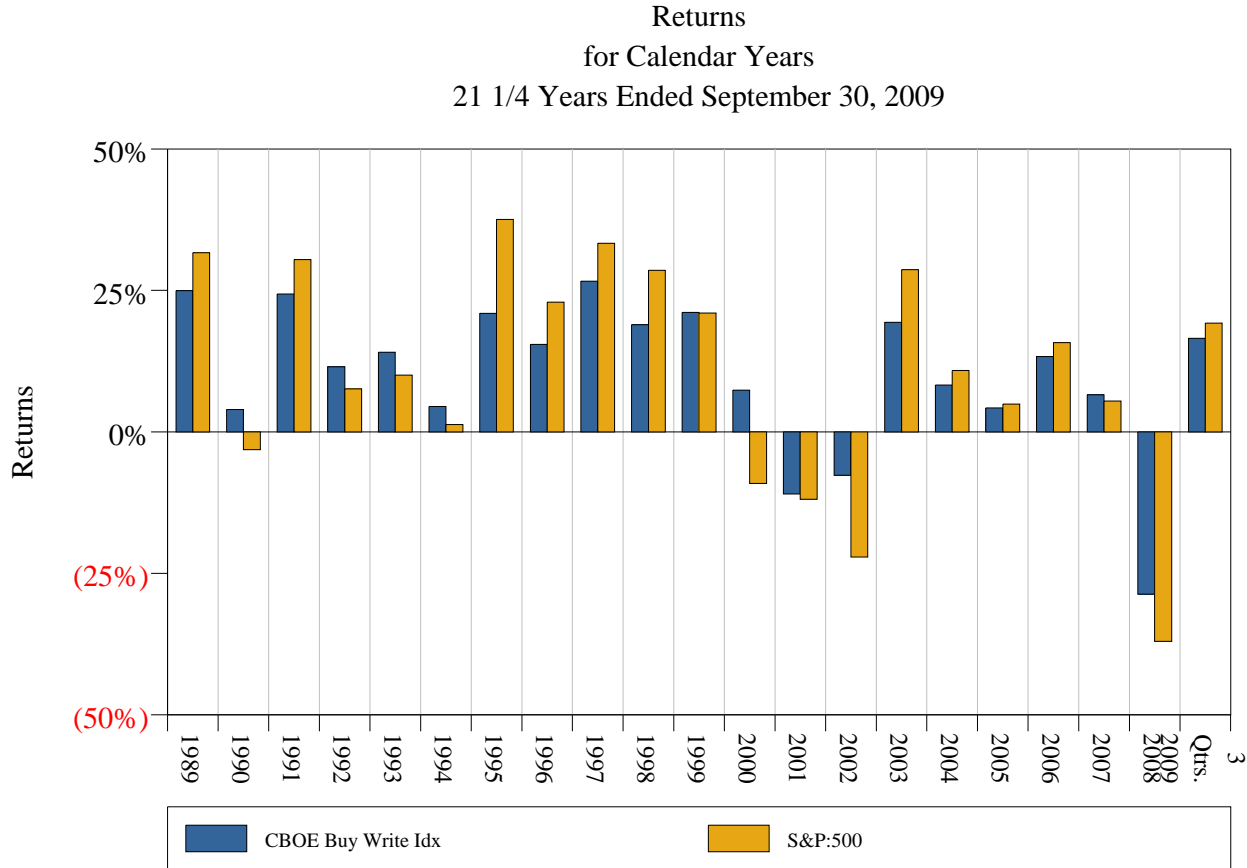
Rolling 20 Quarter Standard Deviation
for 16 1/4 Years Ended September 30, 2009



This graph demonstrates that, over rolling 5-year periods, the Buy-Write Strategy has experienced consistently lower annualized standard deviation of returns.



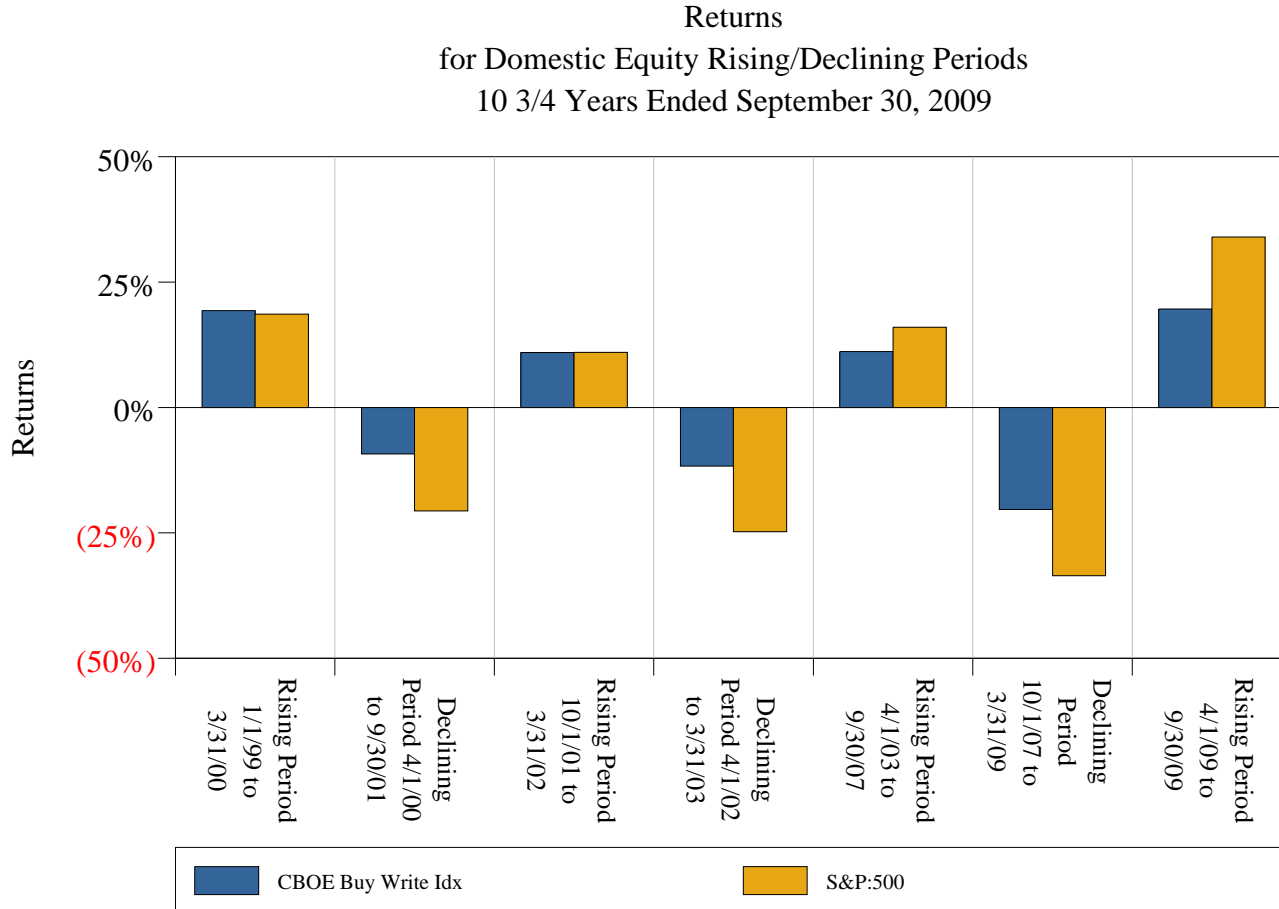
Calendar Period Returns



An analysis of discrete calendar year period returns shows that the Buy-Write Strategy consistently has outperformed during periods of negative S&P returns & has trailed the S&P during strongly rising markets



Rising & Declining Market Returns

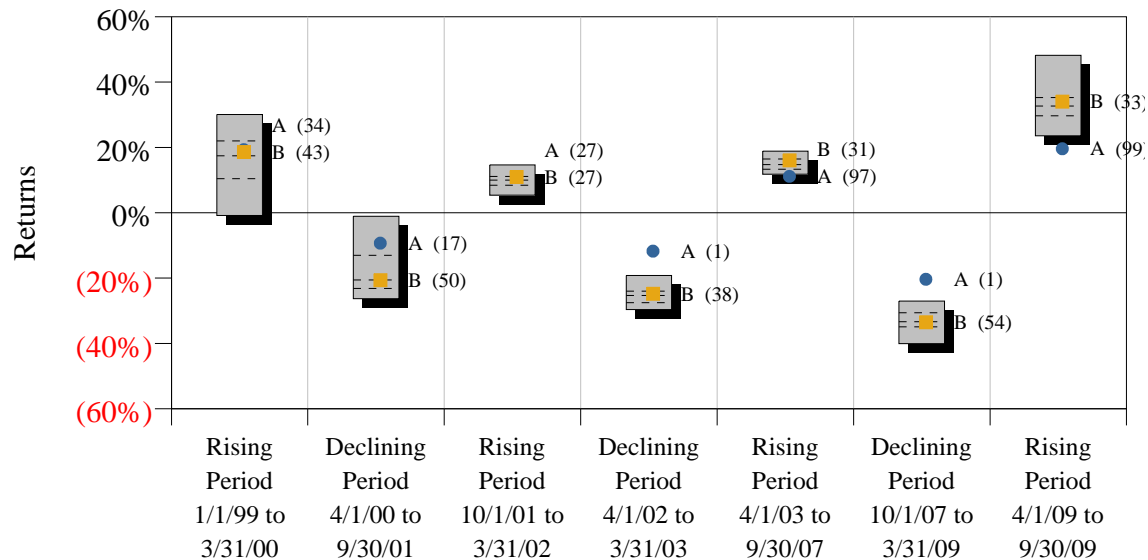


This graph uses quarterly data and illustrates relative performance During periods of rising or declining markets.



Rising & Declining Periods Peer Performance

Returns
for Domestic Equity Rising/Declining Periods
10 3/4 Years Ended September 30, 2009
Group: CAI MF - Core Equity Style



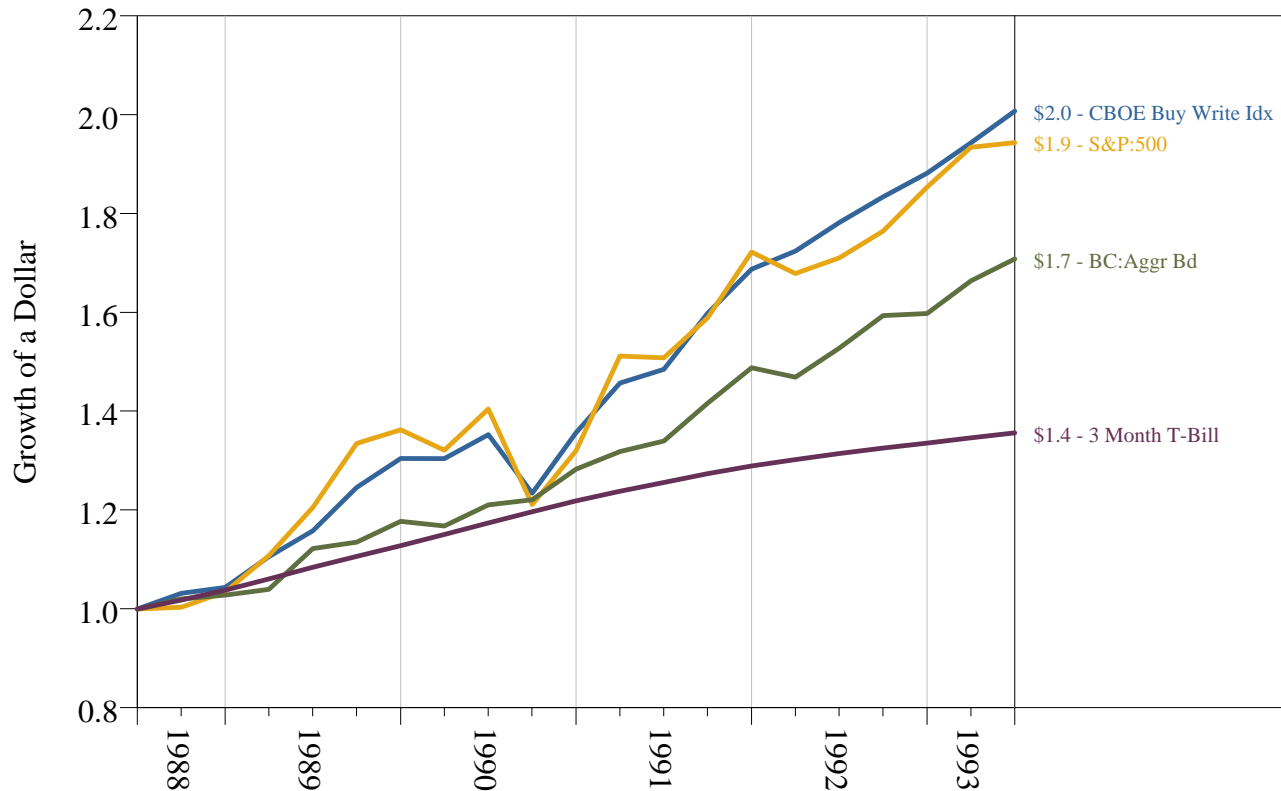
| | | | | | | | | |
|--------------------|-----|-------|---------|-------|---------|-------|---------|-------|
| CBOE Buy Write Idx | ● A | 19.35 | (9.26) | 10.98 | (11.67) | 11.17 | (20.30) | 19.66 |
| S&P:500 | ■ B | 18.64 | (20.61) | 10.99 | (24.76) | 16.04 | (33.53) | 34.02 |

This is an important graph. It illustrates the performance during the same rising & declining periods but adds a comparison to a core mutual fund style group.



Shorter Term Periods 5-Years Ended 6/30/93

Growth of a Dollar
for 5 Years Ended June 30, 1993

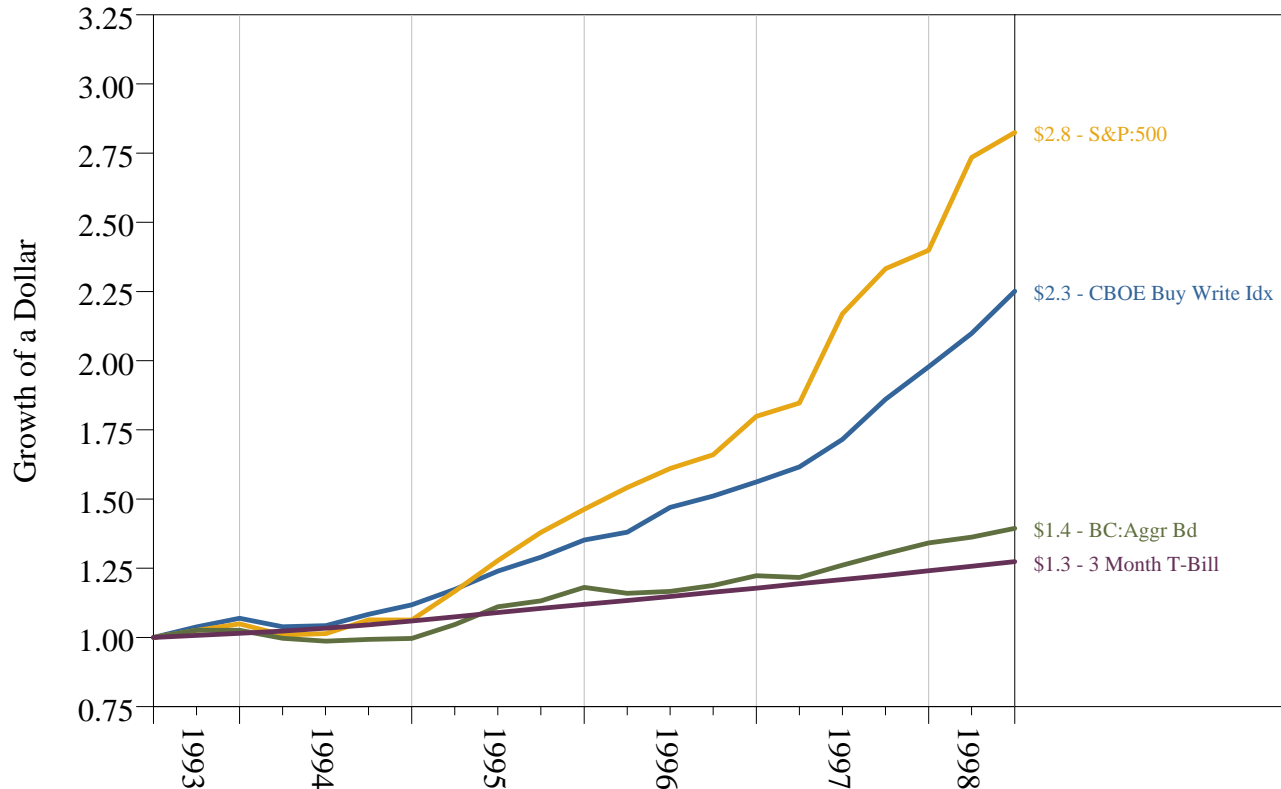


This graph and those that follow illustrate comparative returns over discrete sub periods.



5-Years Ended 6/30/98

Growth of a Dollar
for 5 Years Ended June 30, 1998

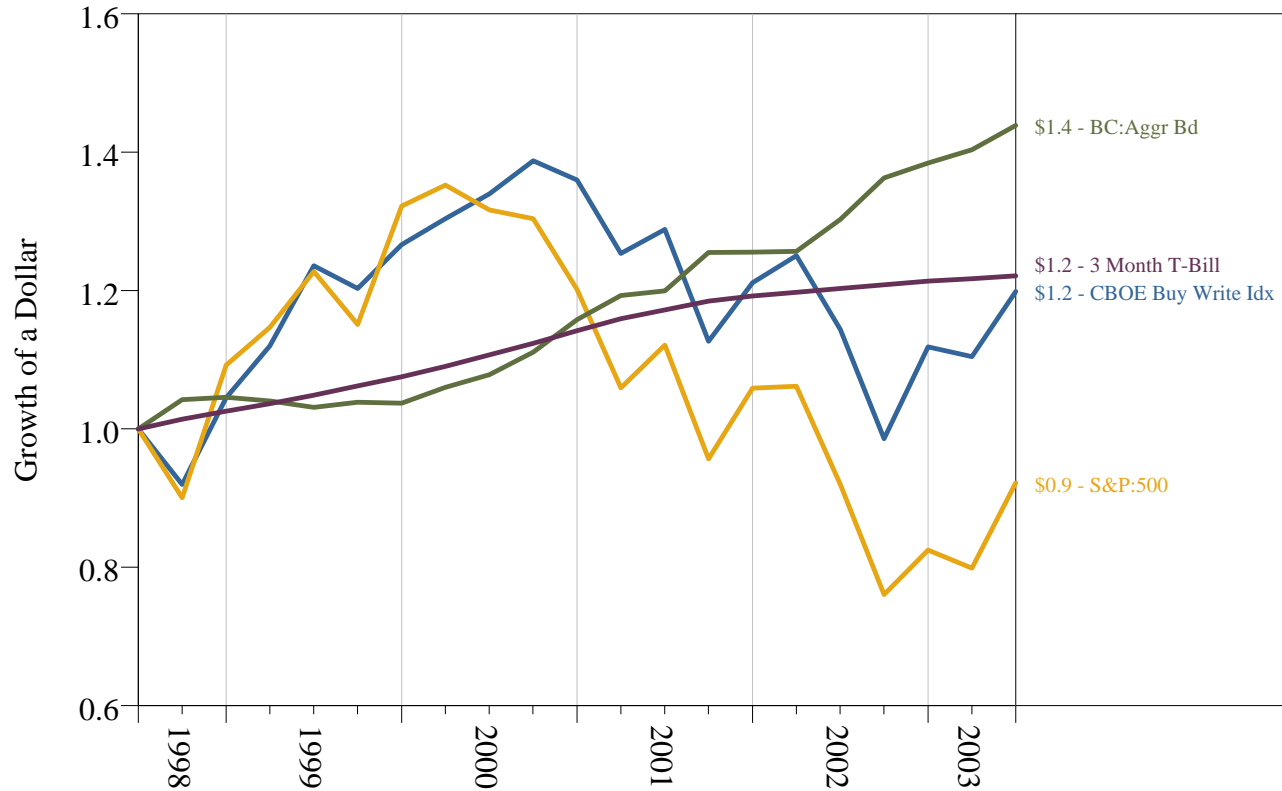


During this particular 5-year span, the Buy-Write Strategy return lagged the S&P 500 by an appreciable amount.



5-Years Ended 6/30/03

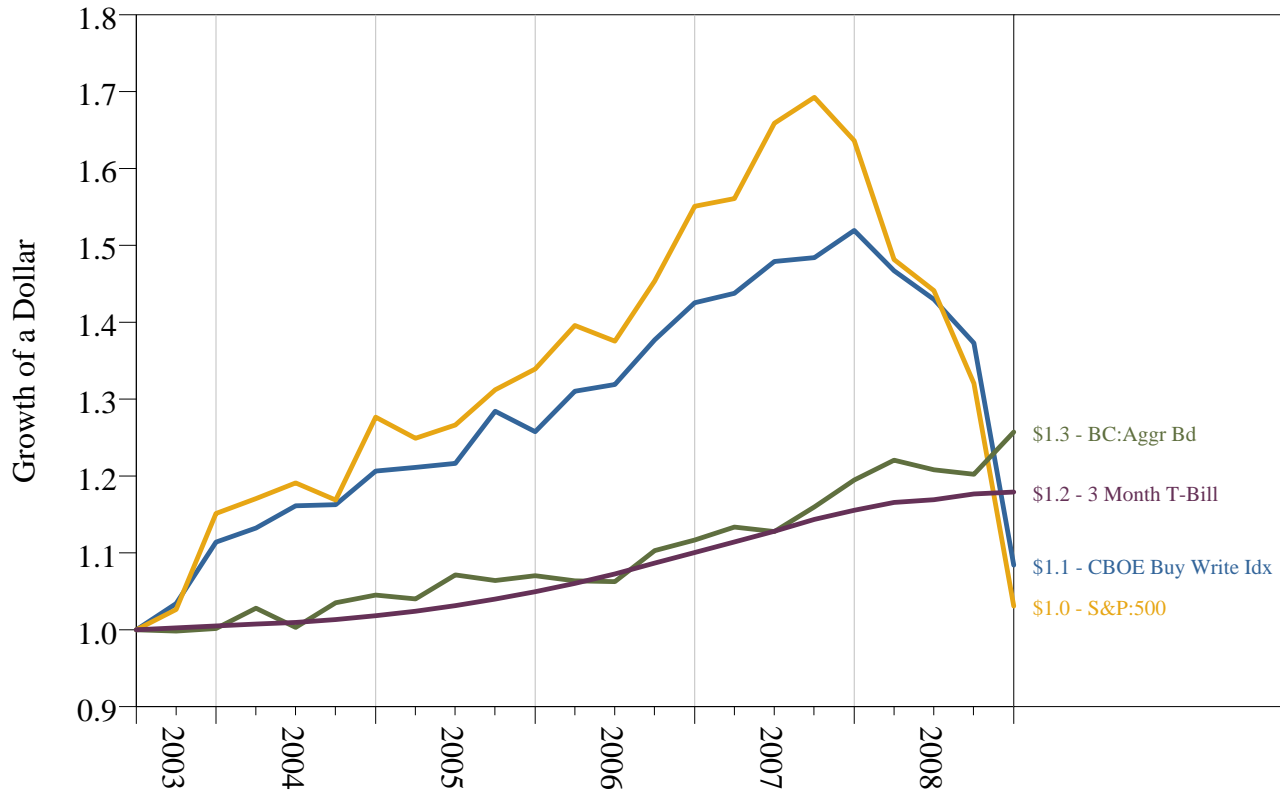
Growth of a Dollar
for 5 Years Ended June 30, 2003





5.5 Years Ended 12/31/08

Growth of a Dollar
for 5 1/2 Years Ended December 31, 2008

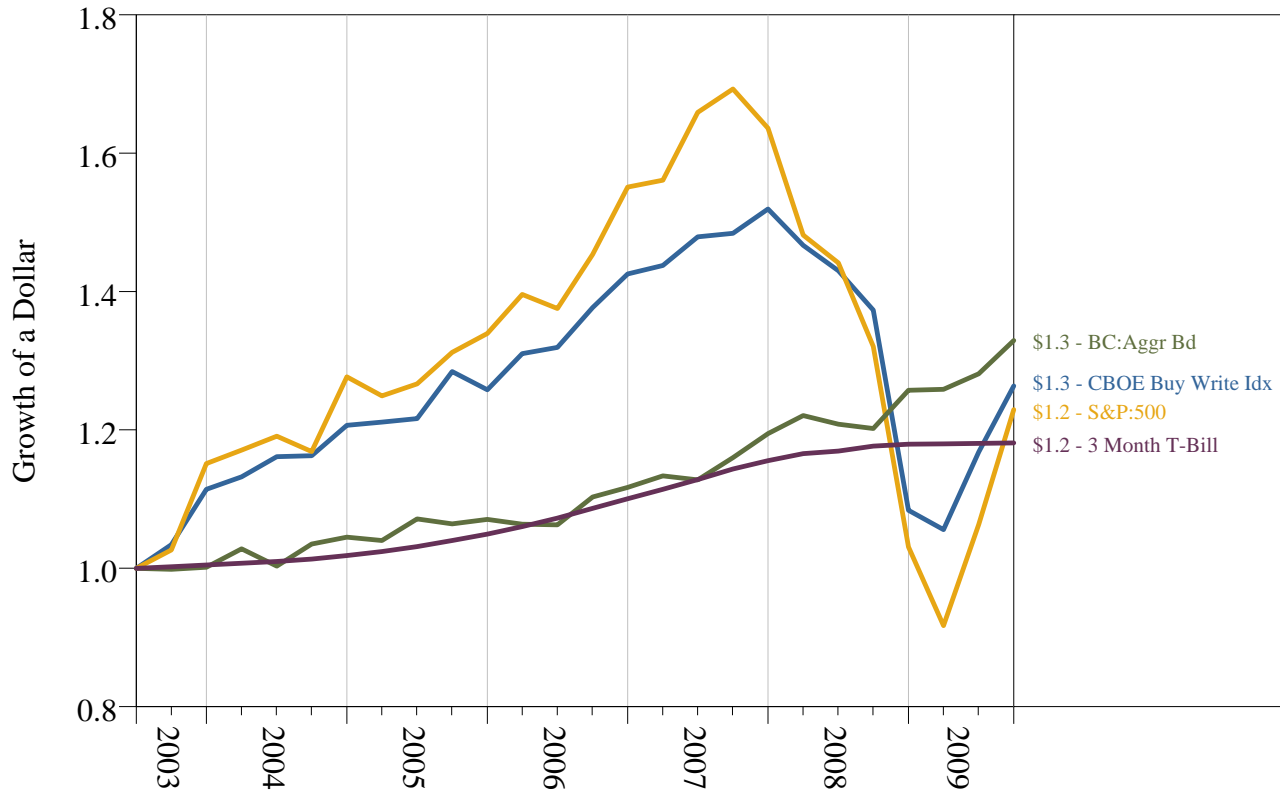


This period was interesting in that the strategy trailed for 4-years and then, by declining less in 2008, ended up cumulatively outperforming.



6 1/4 Years Ended 9/30/09

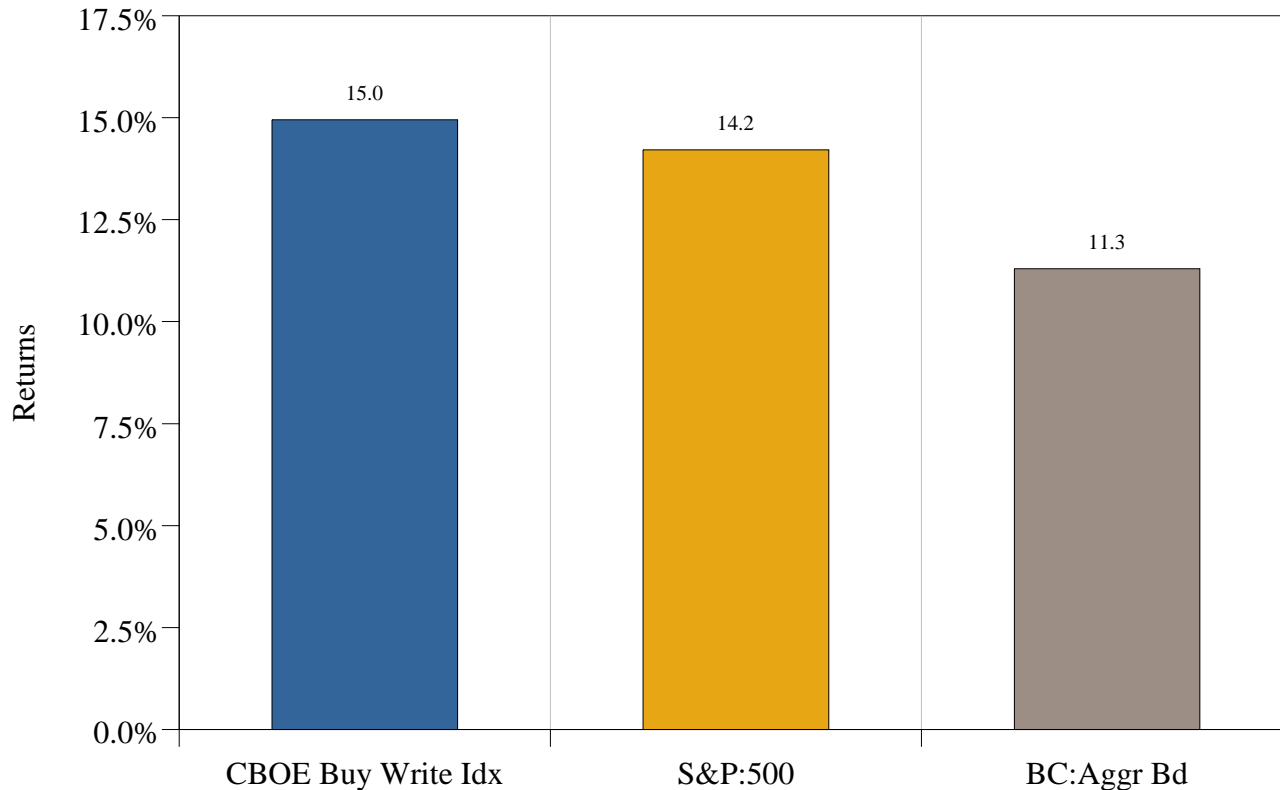
Growth of a Dollar
for 6 1/4 Years Ended September 30, 2009





5-Years Ended 6/30/93

Returns
for 5 Years Ended June 30, 1993

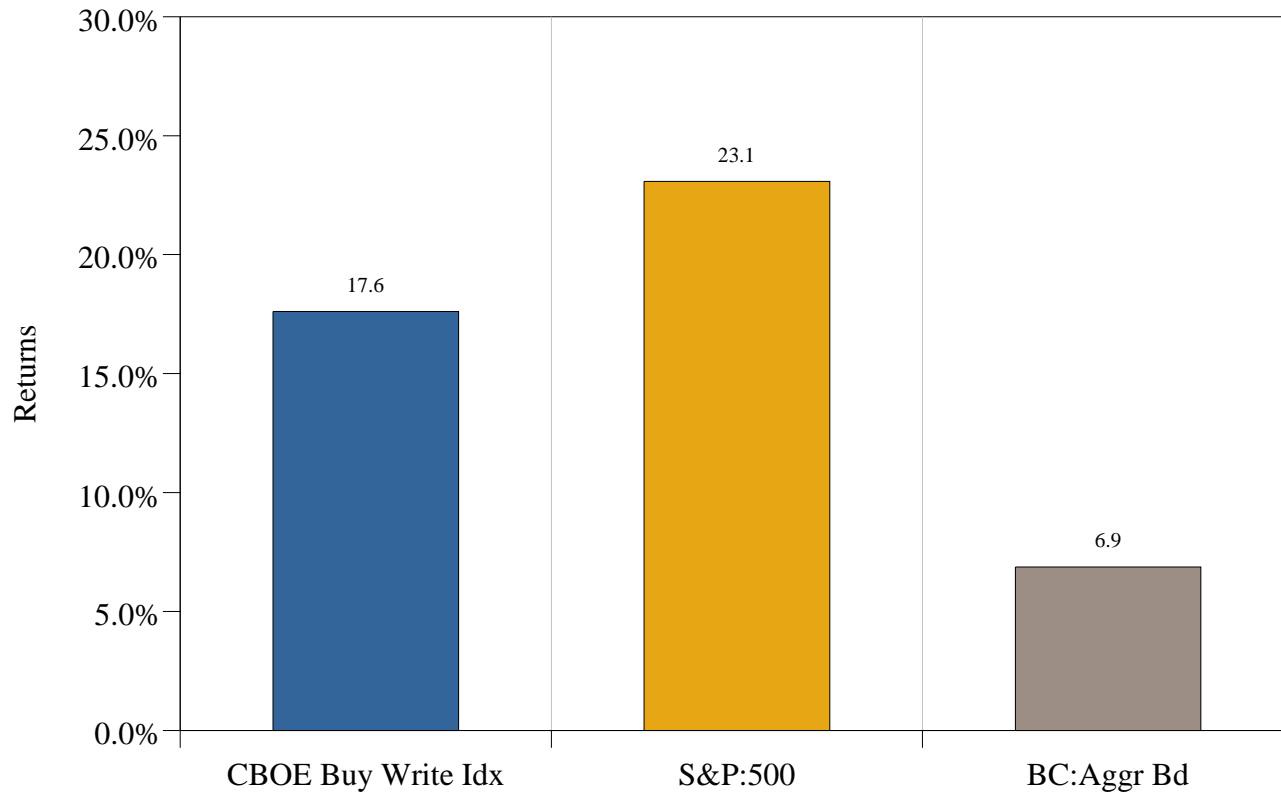


The graphs that follow illustrate returns, standard deviation statistics and Sharpe ratios for each of the sub-periods.



5-Years Ended 6/30/98

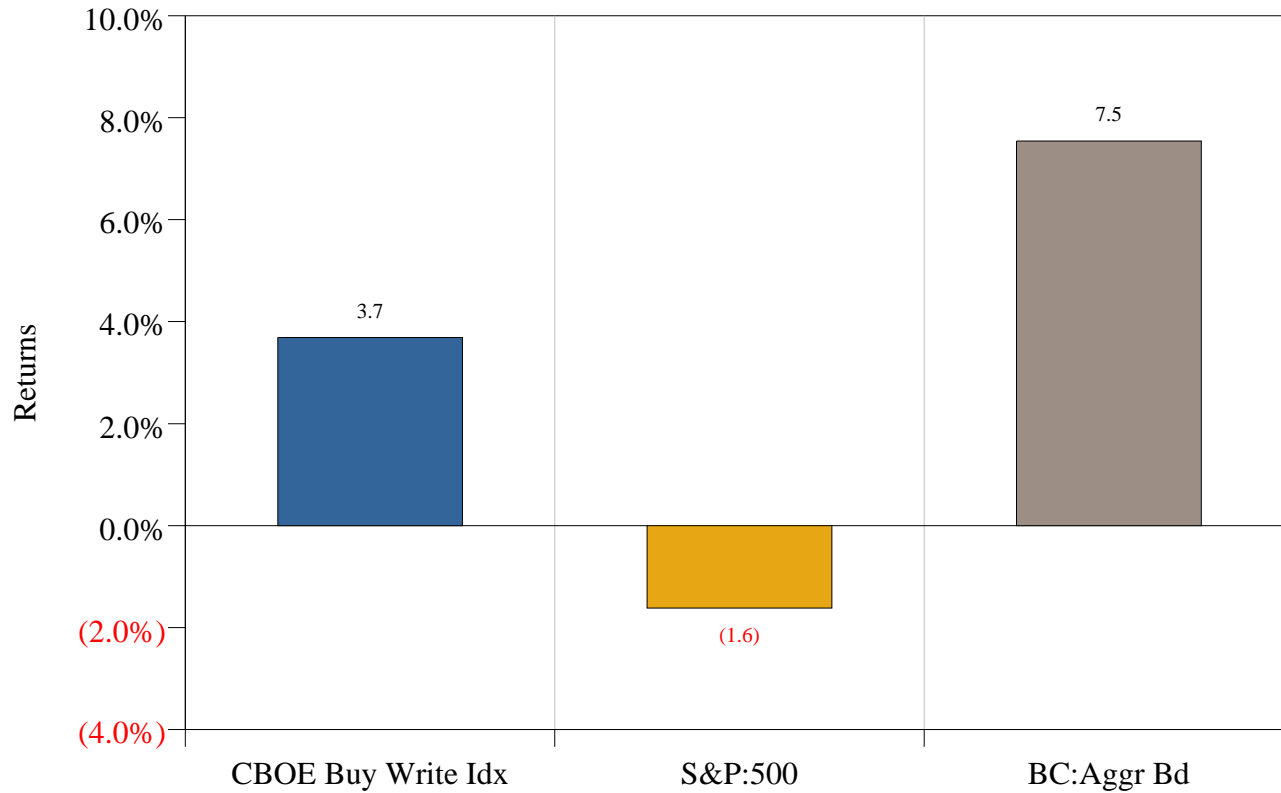
Returns
for 5 Years Ended June 30, 1998





5-Years Ended 6/30/03

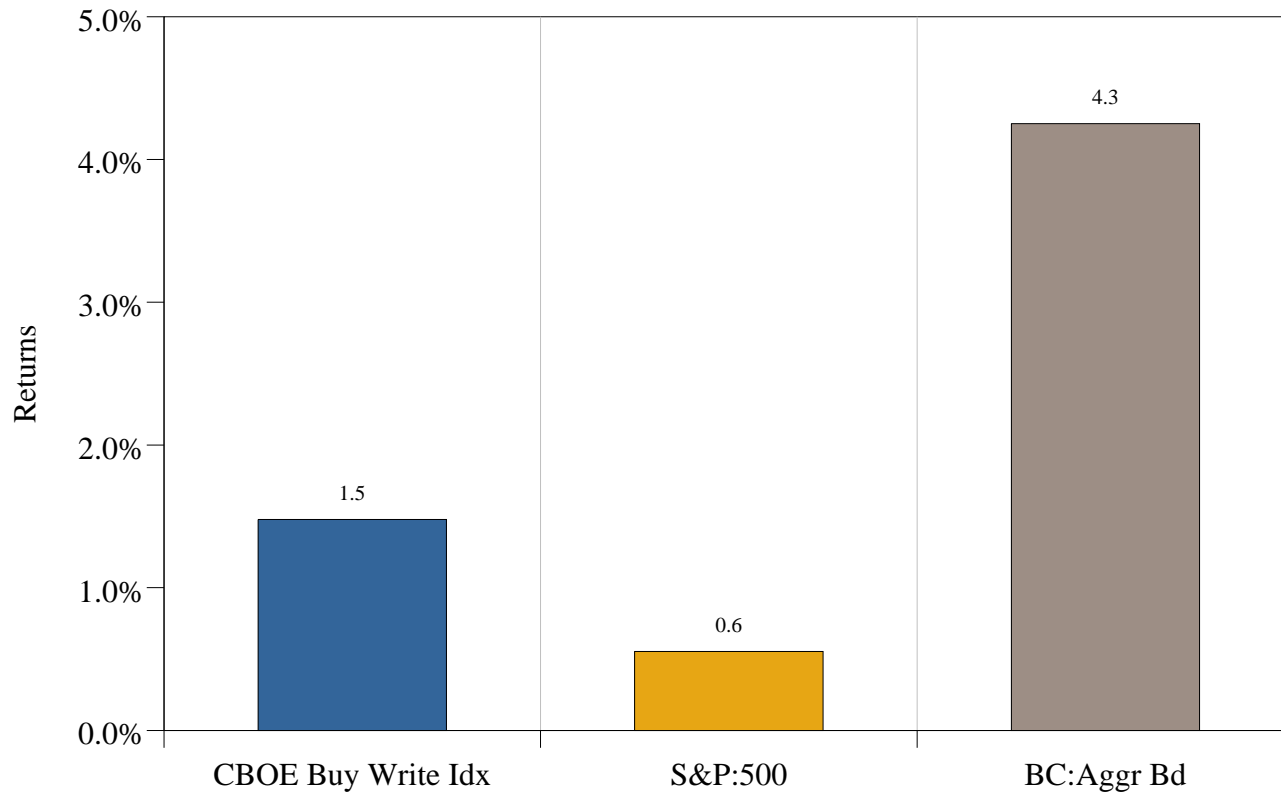
Returns
for 5 Years Ended June 30, 2003





5.5 Years Ended 12/31/08

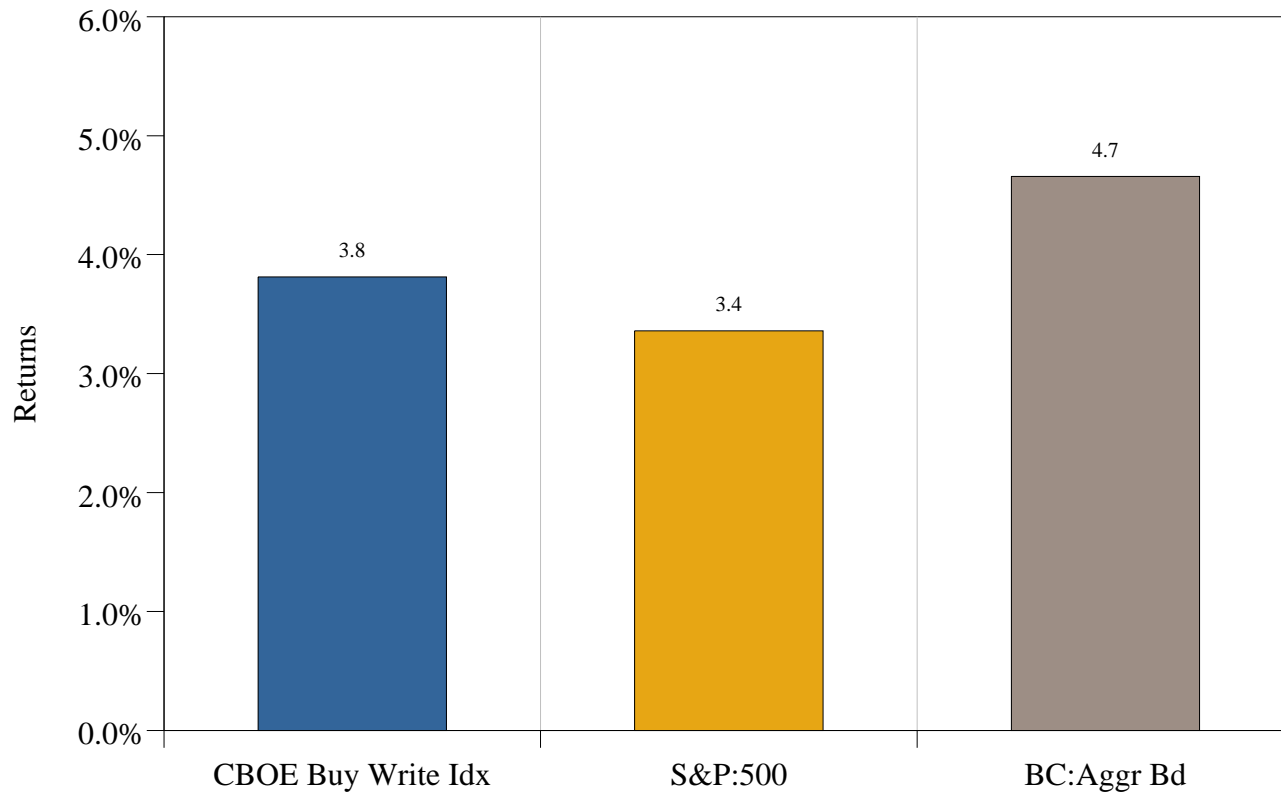
Returns
for 5 1/2 Years Ended December 31, 2008





6 1/4 Years Ended 9/30/09

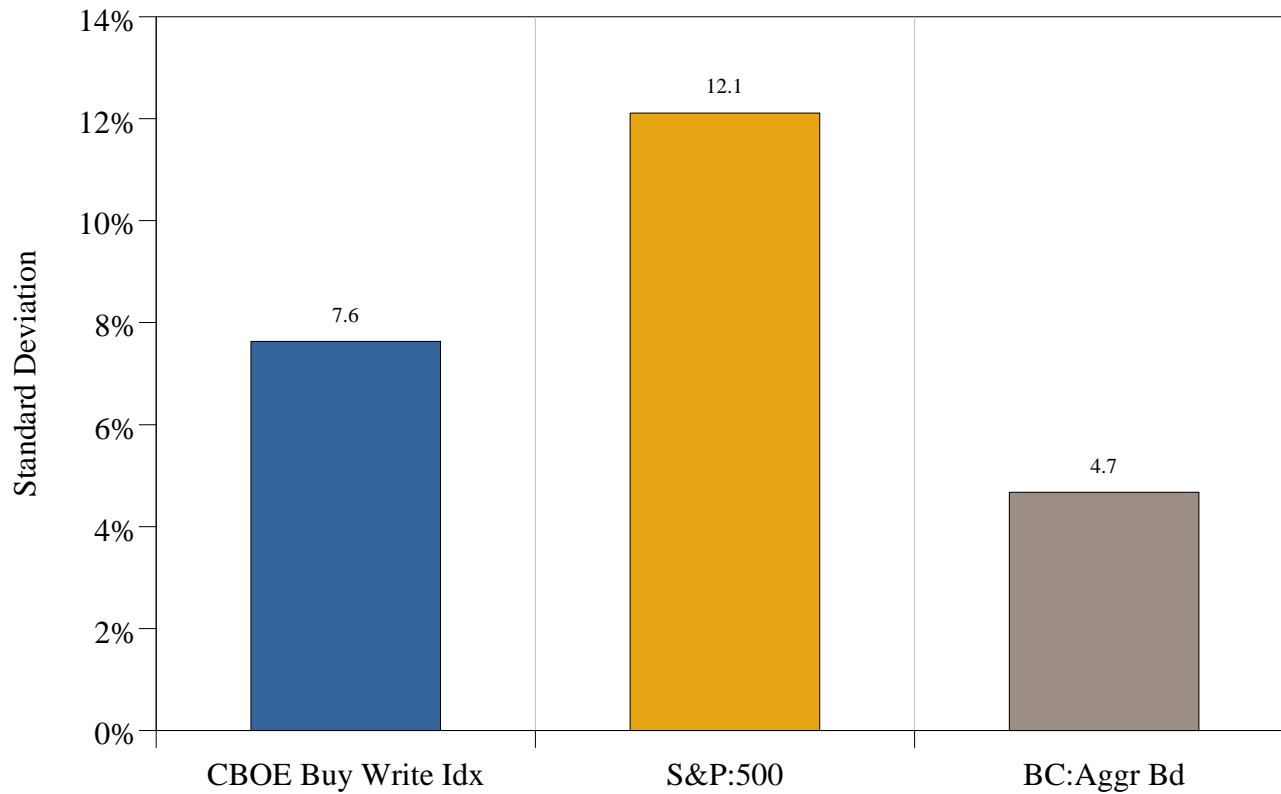
Returns
for 6 1/4 Years Ended September 30, 2009





Risk 5-Years Ended 6/30/93

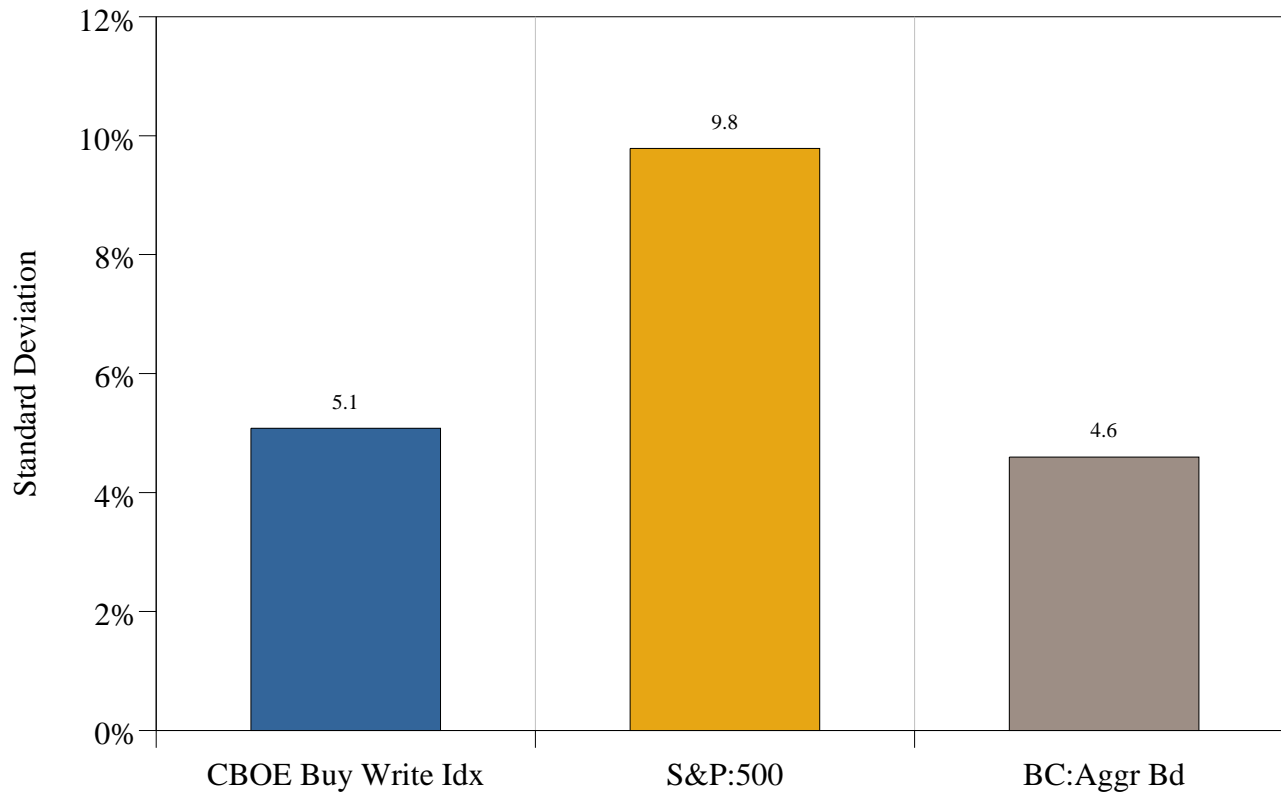
Standard Deviation
for 5 Years Ended June 30, 1993





Risk 5-Years Ended 6/30/98

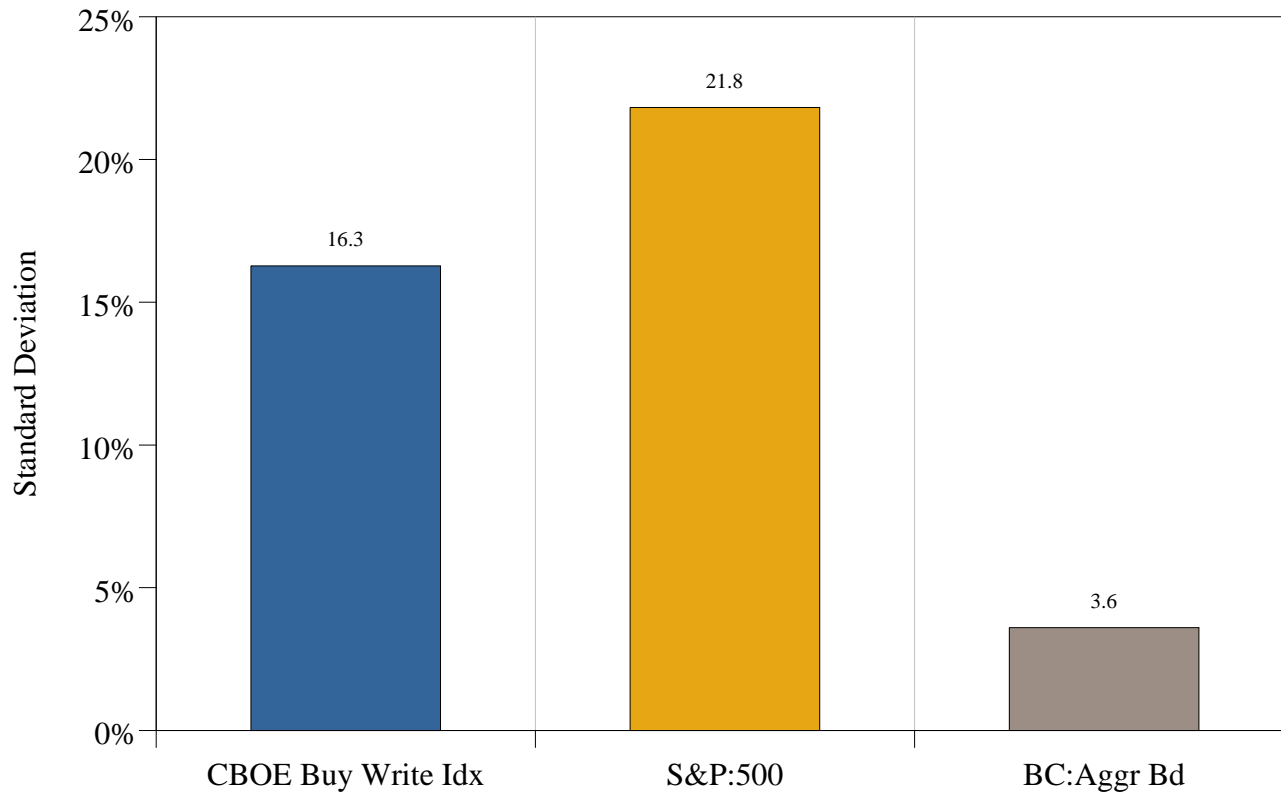
Standard Deviation
for 5 Years Ended June 30, 1998





Risk 5-Years Ended 6/30/03

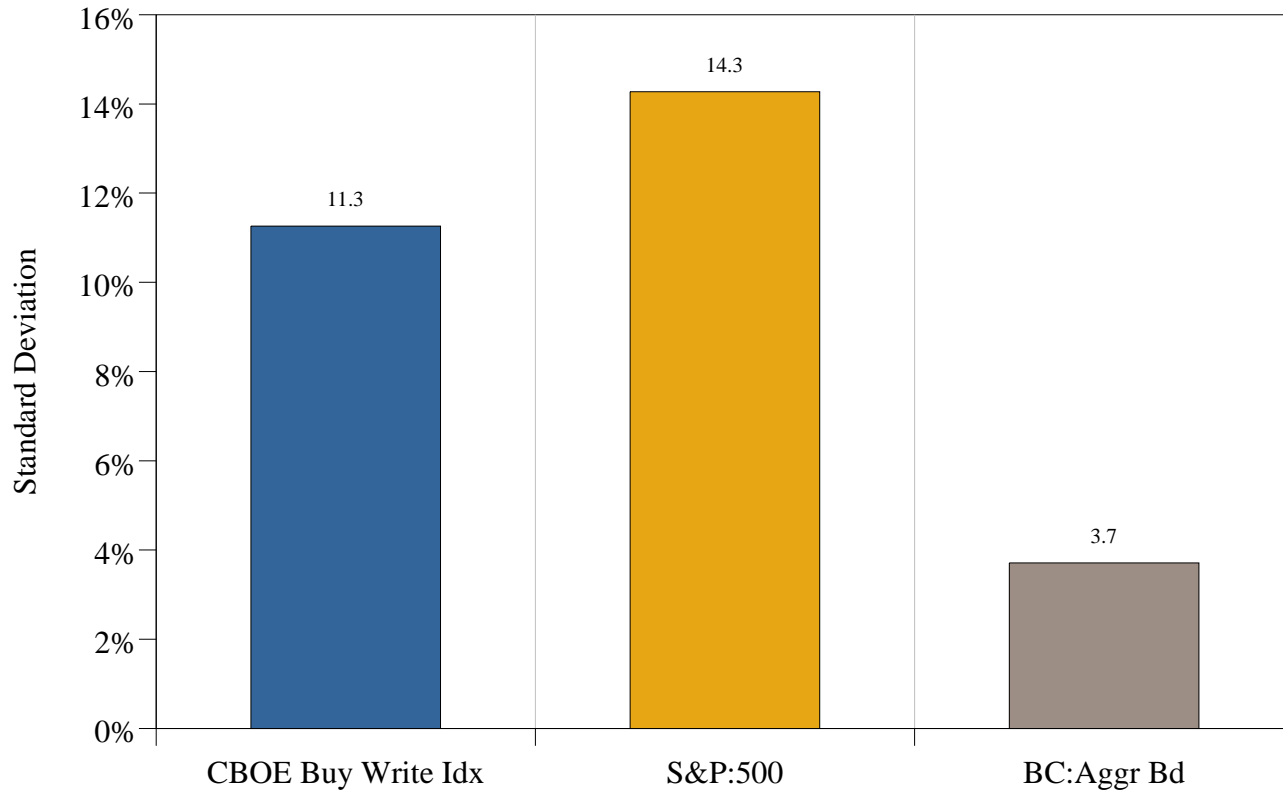
Standard Deviation
for 5 Years Ended June 30, 2003





Risk 5.5 Years Ended 12/31/08

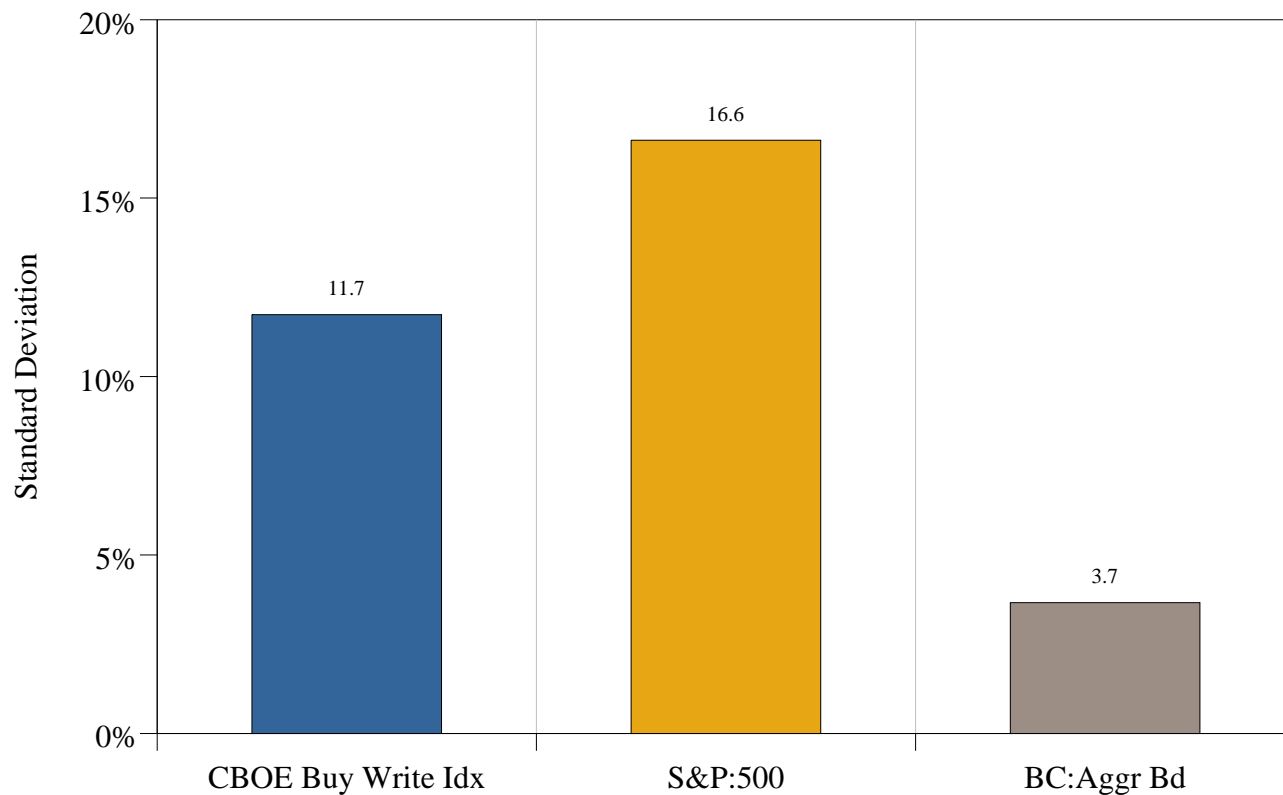
Standard Deviation
for 5 1/2 Years Ended December 31, 2008





Risk 6 1/4 Years Ended 9/30/09

Standard Deviation
for 6 1/4 Years Ended September 30, 2009

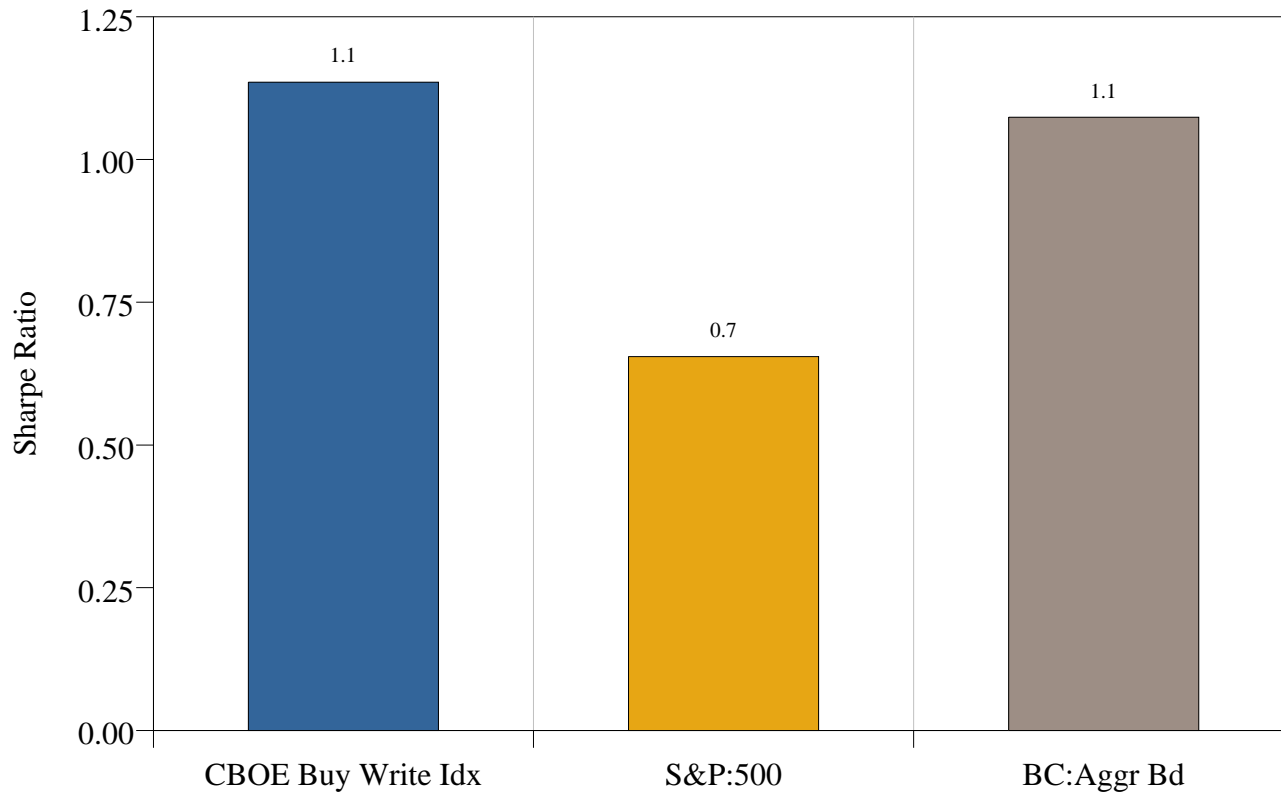




Sharpe Ratio

5-Years Ended 6/30/93

Sharpe Ratio
for 5 Years Ended June 30, 1993

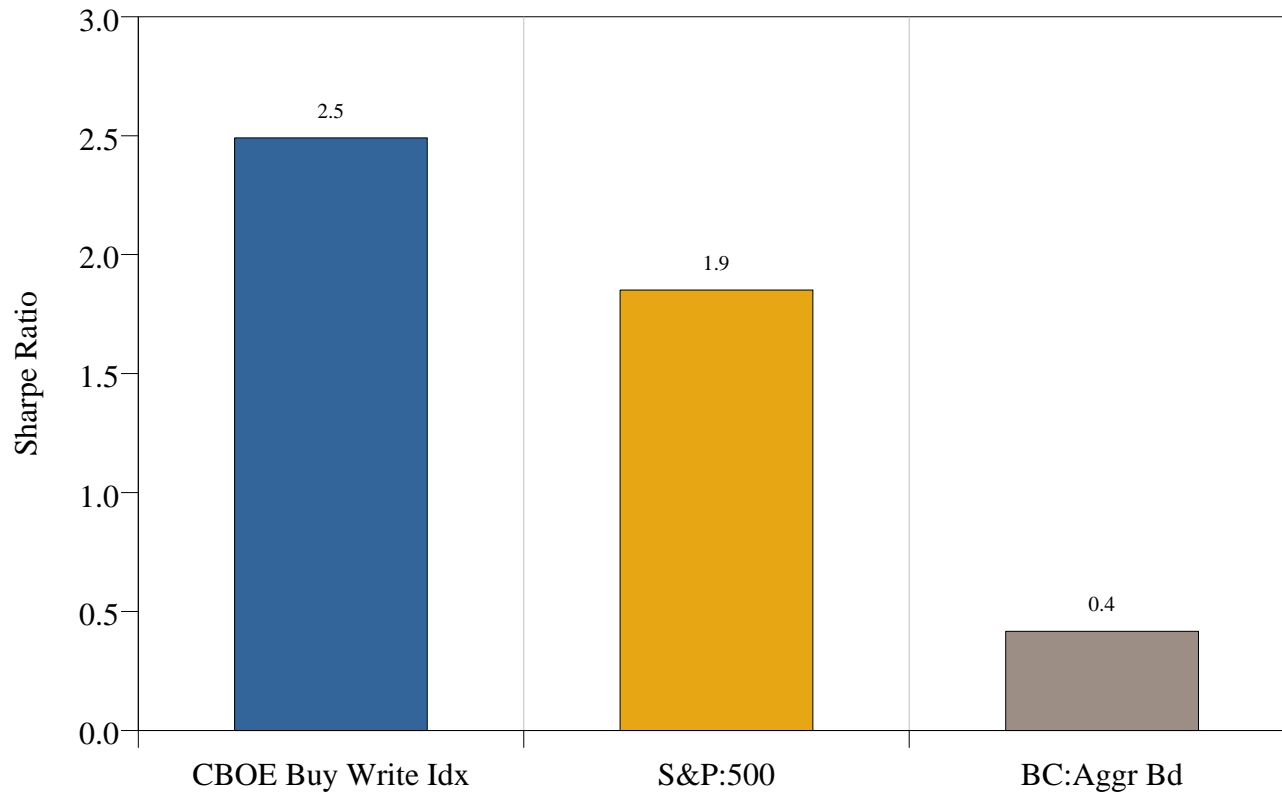




Sharpe Ratio

5-Years Ended 6/30/98

Sharpe Ratio
for 5 Years Ended June 30, 1998

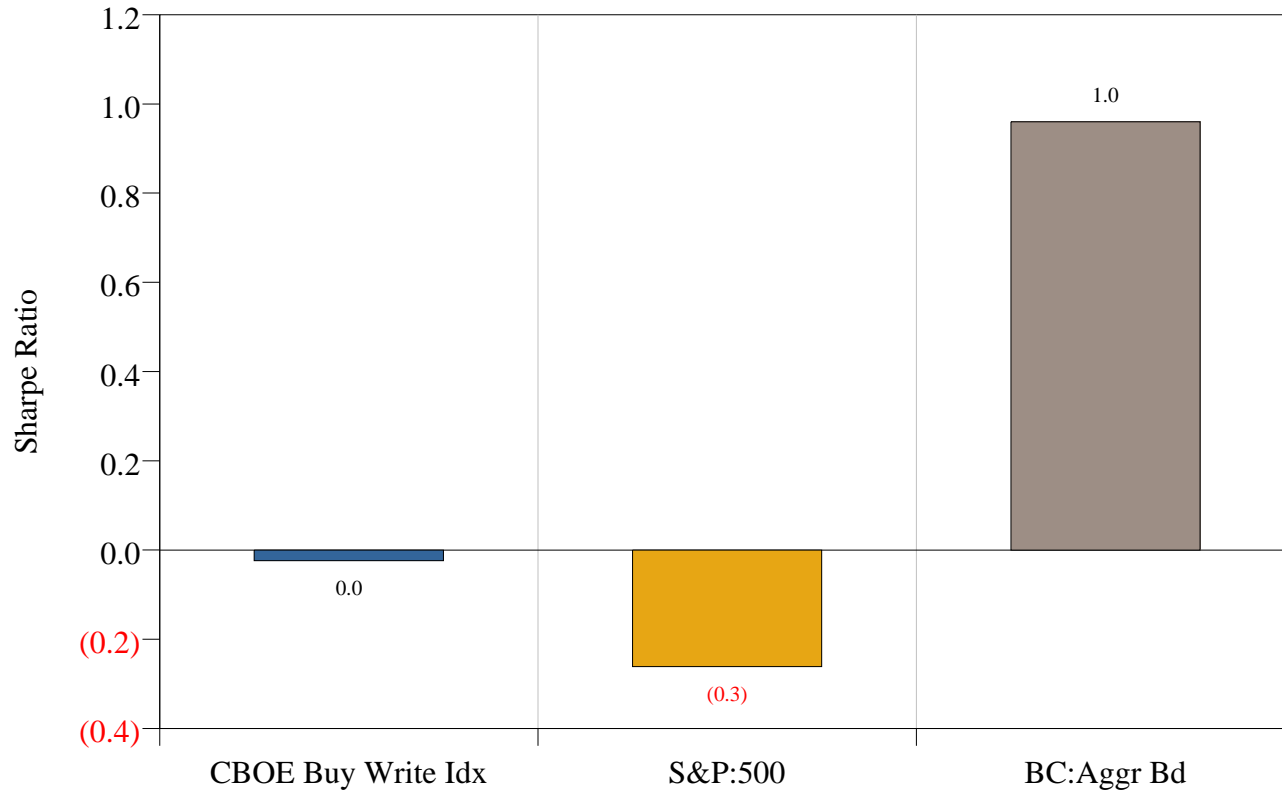




Sharpe Ratio

5-Years Ended 6/30/03

Sharpe Ratio
for 5 Years Ended June 30, 2003

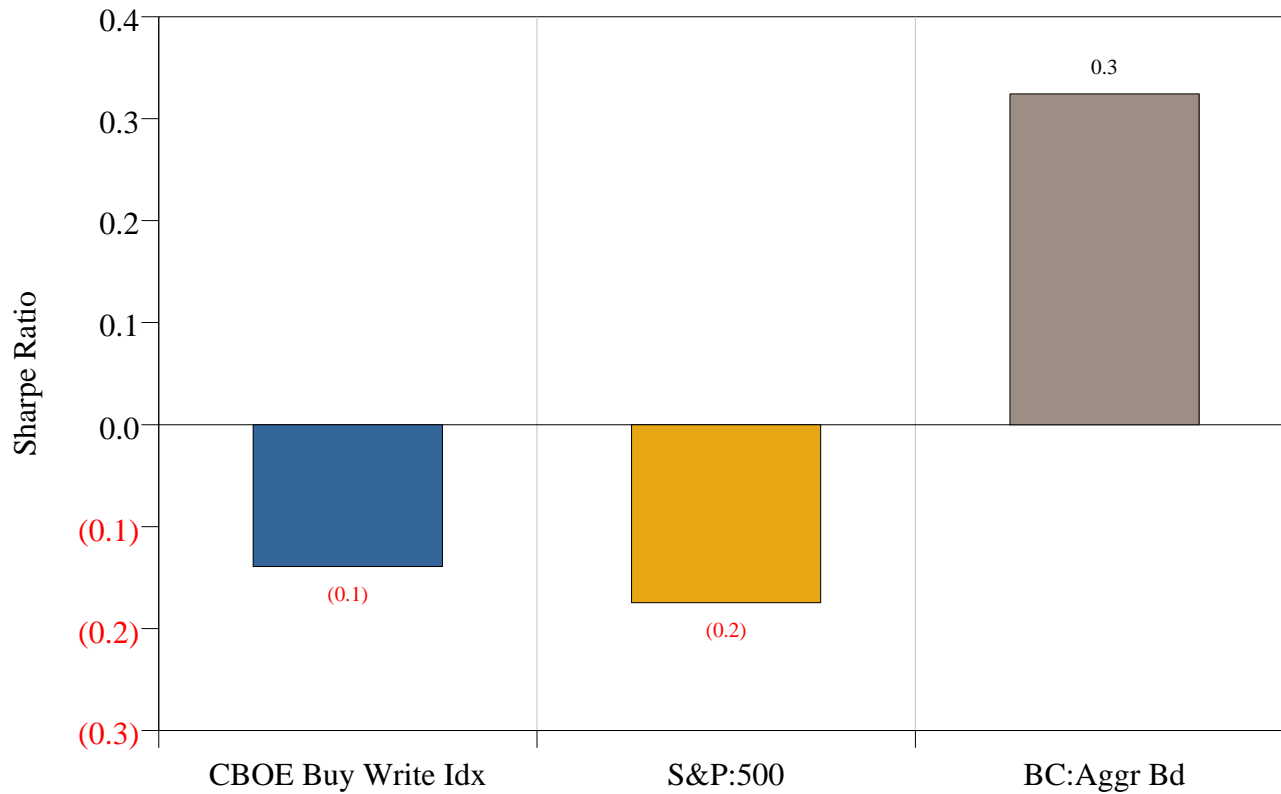




Sharpe Ratio

5.5 Years Ended 12/31/08

Sharpe Ratio
for 5 1/2 Years Ended December 31, 2008

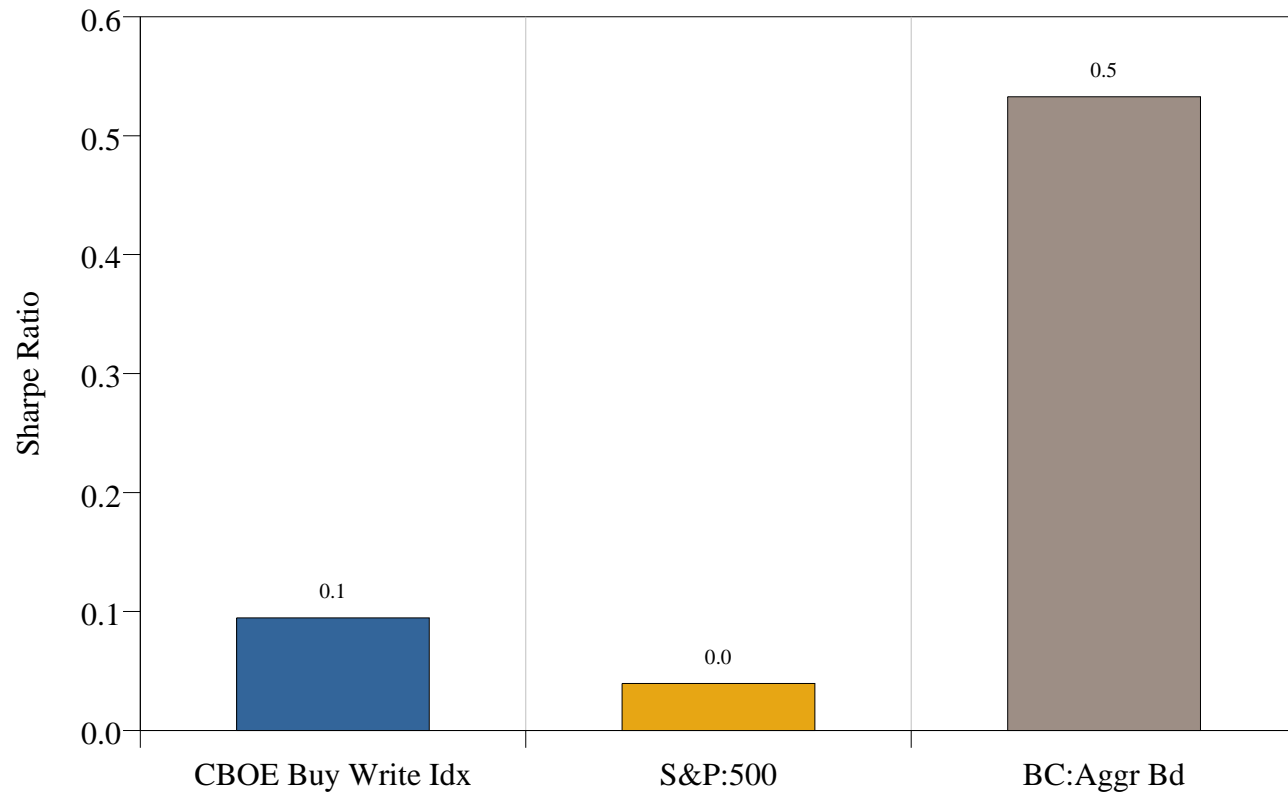




Sharpe Ratio

6 1/4 Years Ended 9/30/09

Sharpe Ratio
for 6 1/4 Years Ended September 30, 2009





Other issues

- In our opinion, the use of exchange traded options (both index options and individual security options) has increased significantly.
- Very complex strategies are commonly employed by hedge fund managers and other investors striving to achieve particular performance patterns.
- Some active managers (for example a large cap growth manager) use options in attempts to “transport” their stock selection skill to another asset category. This study update does not express any opinion on such strategies.
- Should the Board decide to proceed, we can identify a reasonable number of potential candidates to consider when searching for managers who would employ a consistent buy-write strategy to provide core equity exposure.

Alaska Retirement Management Board

*Blue Glacier Fund, L.P.
Portfolio Review and Update
February 25, 2010*

Crestline Investors, Inc.

Crestline Investors, Inc. · 201 Main Street, Suite 1900 · Fort Worth, Texas 76102 · (817) 339-7600

Crestline Research Associates, Inc. · 375 Park Avenue, Suite 2505 · New York, New York 10152 · (212) 584-4140

Crestline Canada, Inc. · 200 Wellington Street West, Suite 305 · Toronto, Ontario M5V 3C7 · Canada · (416) 644-8750

Confidential and Proprietary

Topics to be addressed...

Crestline Firm Overview

Portfolio Update

Current Environment

Crestline Firm Overview

Organization Highlights

Experienced Investment Team

- Three partners have total of 73 years industry experience in trading, management and due diligence of hedge fund strategies
- Nine senior investment professionals have an average of 14 years investment experience

Top Down Active Management

- Portfolio managers supplement trading experience with capital market information to actively manage funds
- We are forward-looking

Rigorous Risk Management

- Extensive risk management gained by managing through crisis markets
- Use both qualitative and quantitative tools to manage risk

Strong Institutional Focus and Client Base

- Developed infrastructure designed to meet needs of institutional clients
- Provide high-quality client servicing with open book policy and knowledge transfer
- Investor base is 92% institutional

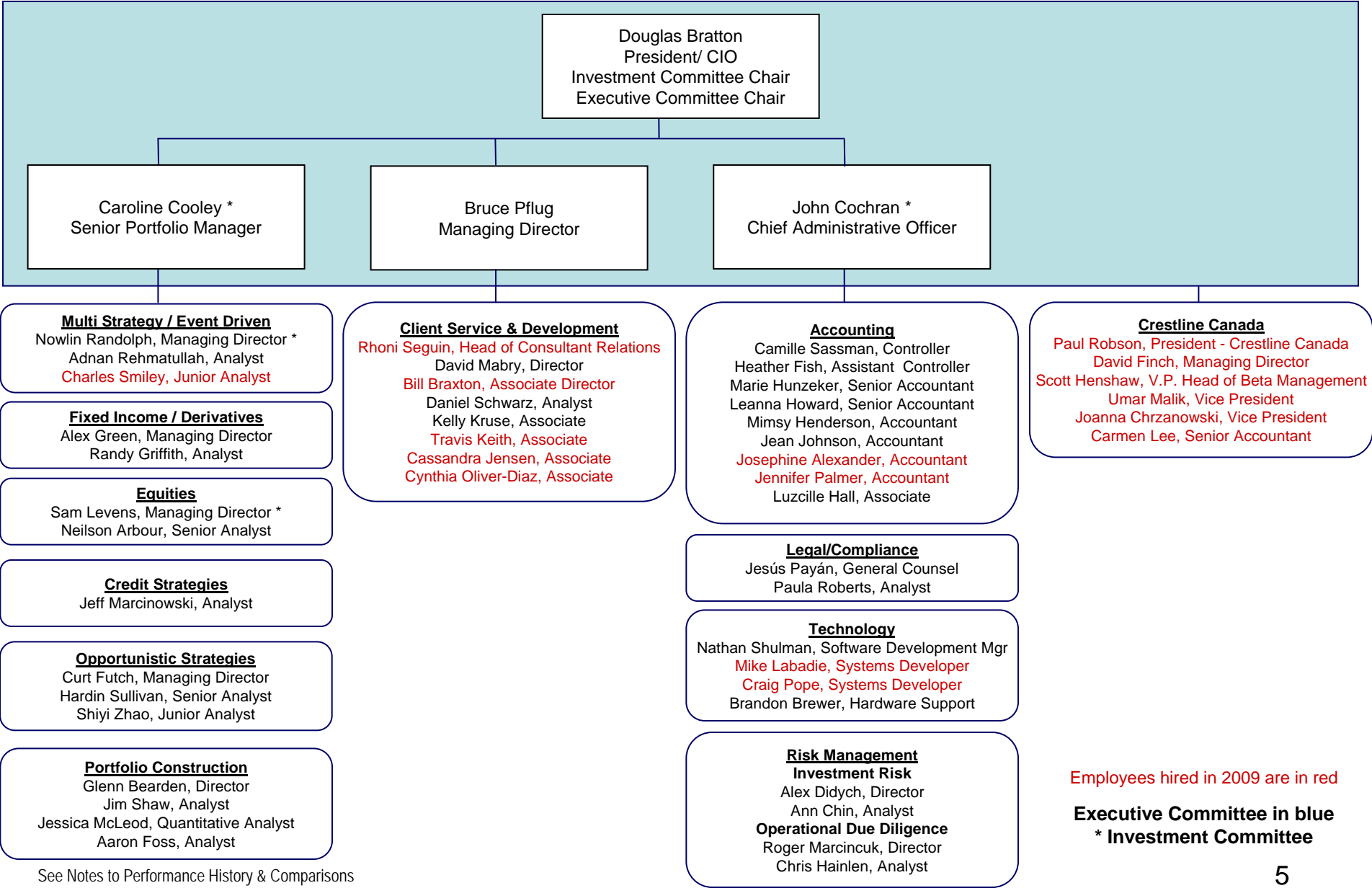
Stable Organization

- Managing fund of fund investments for 12 years
- Manage approximately \$5.2 billion* in AUM
- Registered as investment adviser with SEC since 2002 and are an ERISA Fiduciary
- Employee owned firm with low employee turnover

* AUM includes Nov and Dec 2009 estimated returns, subsequent investor activity through 1/1/2010 and committed but unfunded capital. Includes notional amount associated with beta overlay. See Notes to Performance History & Comparisons

Organization

26 Investment Professionals
58 Employees



See Notes to Performance History & Comparisons

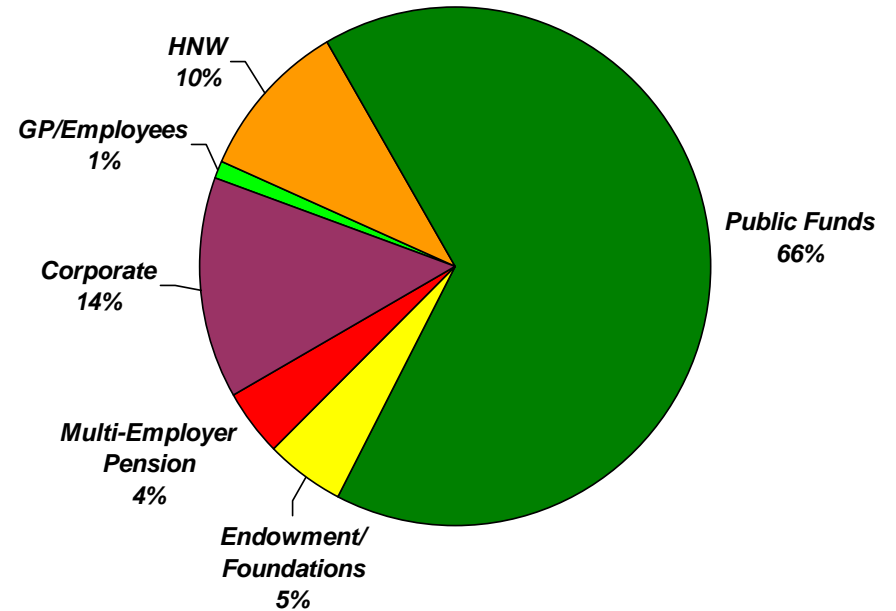
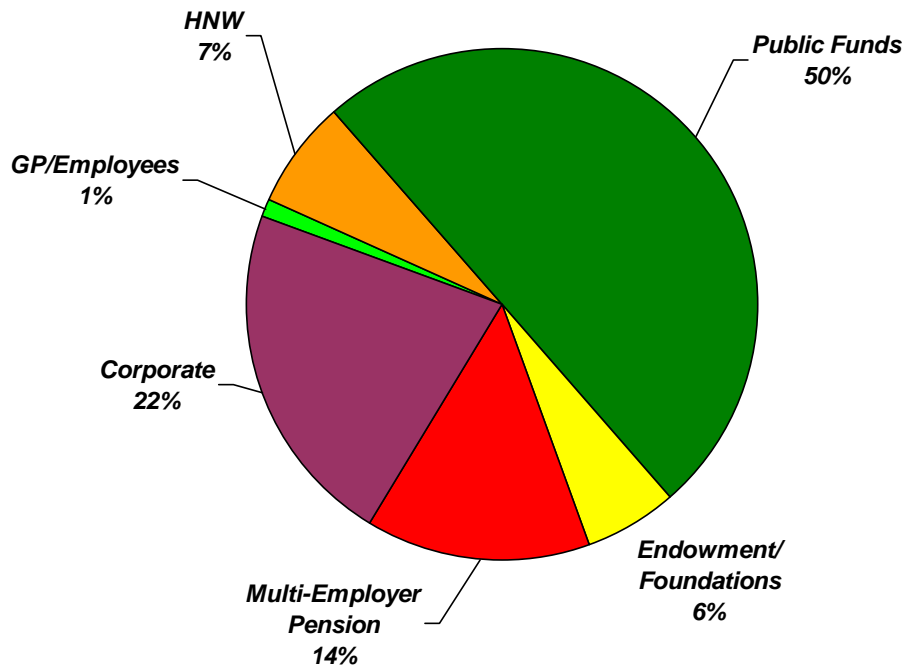
Senior Investment Professionals

| | <u>Years Experience</u> |
|--|-------------------------|
| Doug Bratton, Managing Principal & President/CIO <ul style="list-style-type: none"> • 26 years of experience in alternative asset strategies • Expertise in Hedge Funds, Private Equity, Venture Capital and Structured Products | 26 |
| Caroline Cooley, Principal & Senior Portfolio Manager <ul style="list-style-type: none"> • Expertise in Risk Management • Expertise in Trading Equity Derivatives and Fixed Income Arbitrage | 25 |
| John Cochran, Principal & Chief Financial Officer <ul style="list-style-type: none"> • 10 Years with KPMG LLP / Certified Public Accountant • Expertise with Back Office Due Diligence on Hedge Funds, Venture Capital & Private Equity | 22 |
| Glenn Bearden, Director <ul style="list-style-type: none"> • 10 Years with the Bass Group • Expertise in settlement of complex derivatives & fixed income arbitrage products | 19 |
| Nowlin Randolph, Managing Director <ul style="list-style-type: none"> • Expertise with fundamental analysis & management of long/short equity portfolios • Chartered Financial Analyst, Chartered Alternative Investment Analyst | 12 |
| Alexander Green, Managing Director <ul style="list-style-type: none"> • Previous experience as a fixed income portfolio manager for Freddie Mac • Expertise in Mortgage securities, Asset-backed and other fixed income products | 12 |
| Sam Levens, Managing Director <ul style="list-style-type: none"> • Previous experience as a long/short equity portfolio manager • Chartered Financial Analyst | 11 |
| Curt Futch, Managing Director <ul style="list-style-type: none"> • 13 years hedge fund /private equity/ investment banking experience evaluating and executing private transactions • Expertise in leveraged lending, buyouts, strategic acquisitions and recapitalizations | 14 |
| Roger Marcincuk, Jr., Director of Operational Due Diligence <ul style="list-style-type: none"> • Expertise in investigative financial due diligence since 1993 • Previous experience includes consulting on over 100 M&A transactions | 17 |

Crestline Investors' Client Base

\$5.2 billion of Firm Assets Under Management

\$3.7 billion of Hedge Fund of Fund Assets



92% of Crestline's assets are from institutional investors

89% of Crestline's hedge fund of fund assets are from institutional investors

Data represents 11/30/2009 final assets under management and subsequent investor activity through 2/1/2010. AUM includes Dec 2009 and Jan 2010 estimated returns and committed but unfunded capital. Firm AUM includes notional amount associated with beta overlay. See Notes to Performance History & Comparisons

- **Crestline purchased the on-going fund of hedge fund and derivative businesses from Northwater Capital Management Inc. on October 1, 2009**
- **6 employees from Northwater have moved to Crestline Canada including:**
 - Paul Robson, President
 - David Finch, Managing Director
 - Scott Henshaw, Vice President, Head of Beta Portfolio Management
 - Umar Malik, Vice President
- **This group is responsible for the beta overlay and portfolio hedging capabilities for Crestline and the transition of the fund of fund portfolios to the Crestline team**
- **Three of the senior executives that have moved to Crestline from Northwater represent the successive leadership of the beta overlay implementation capabilities since 1998**
 - Paul Robson from 1998 to 2003, David Finch from 2003 to 2007 and Scott Henshaw from 2007 to present
- **Integration is substantially complete**
 - Client, counterparty, and service provider consents were obtained prior to closing the transactions

Update on Integration

| Consents | Status | Comments |
|--|---|--|
| Clients |  | All consents received in September as condition of closing effective October 1. Clients and their advisors performed on-site due diligence prior to consenting. Since closing, three additional Northwater clients have been added. |
| Counterparties |  | |
| Directors |  | |
| Trustees, Custodians & Administrators |  | |
| Operations | | |
| Establish corporate entity |  | Crestline Canada, Inc. has been established with six employees. Employment agreements have been executed. Existing service providers have been retained on the accounts and have officially accepted the assignments. Including RBC Dexia, PWC and Fortis. |
| Employment agreements |  | |
| Accounting & Audit |  | Hedge fund reporting has been incorporated into Crestline's system. All Beta reporting is done by Crestline Canada. |
| Reporting |  | |
| Infrastructure | | |
| Office space |  | Moved into new office on November 9 th – 200 Wellington Street West. |
| Systems and communications |  | Each Crestline Canada employee has been set-up and is currently working in the Crestline Environment. |
| Risk Management | | |
| Dual controls |  | For all Beta accounts, policies and procedures have been established and adopted based on the experience at Northwater. Oversight and back-up to be provided by dedicated personnel at Crestline in Fort Worth. |
| Oversight |  | |
| Paralleling |  | Each Beta portfolio was run in parallel for a month on Northwater systems and Crestline systems. |
| Compliance |  | |
| Hedge Fund Portfolio Management | | |
| Re-underwrite Northwater managers |  | Files for Northwater managers have been moved to Crestline. Each hedge fund manager has been notified of the change to Crestline. Managers in Northwater's model portfolio have been re-underwritten. |
| Portfolio Transition Plan |  | |
| | | Long-term portfolio transition plans have been developed and communicated to clients. |
| | | Assignment of responsibility for manager research and monitoring has been completed. |

Crestline's Beta Overlay Services Provide Flexibility to Clients

- **Crestline's Beta Overlay services allow clients to:**
 - Tactically Adjust Asset Mix or Rebalance the portfolio
 - Hedge Unwanted Exposures
 - Reduce Pension Plan Surplus Volatility
 - Implement Return Enhancing Strategies (Portable Alpha)
- **Current Mandates are primarily Return Enhancing (Portable Alpha) Strategies:**
 - \$1.6 billion of beta exposure
 - S&P 500 exposure
 - Long duration fixed income exposure
 - 7 separate mandates

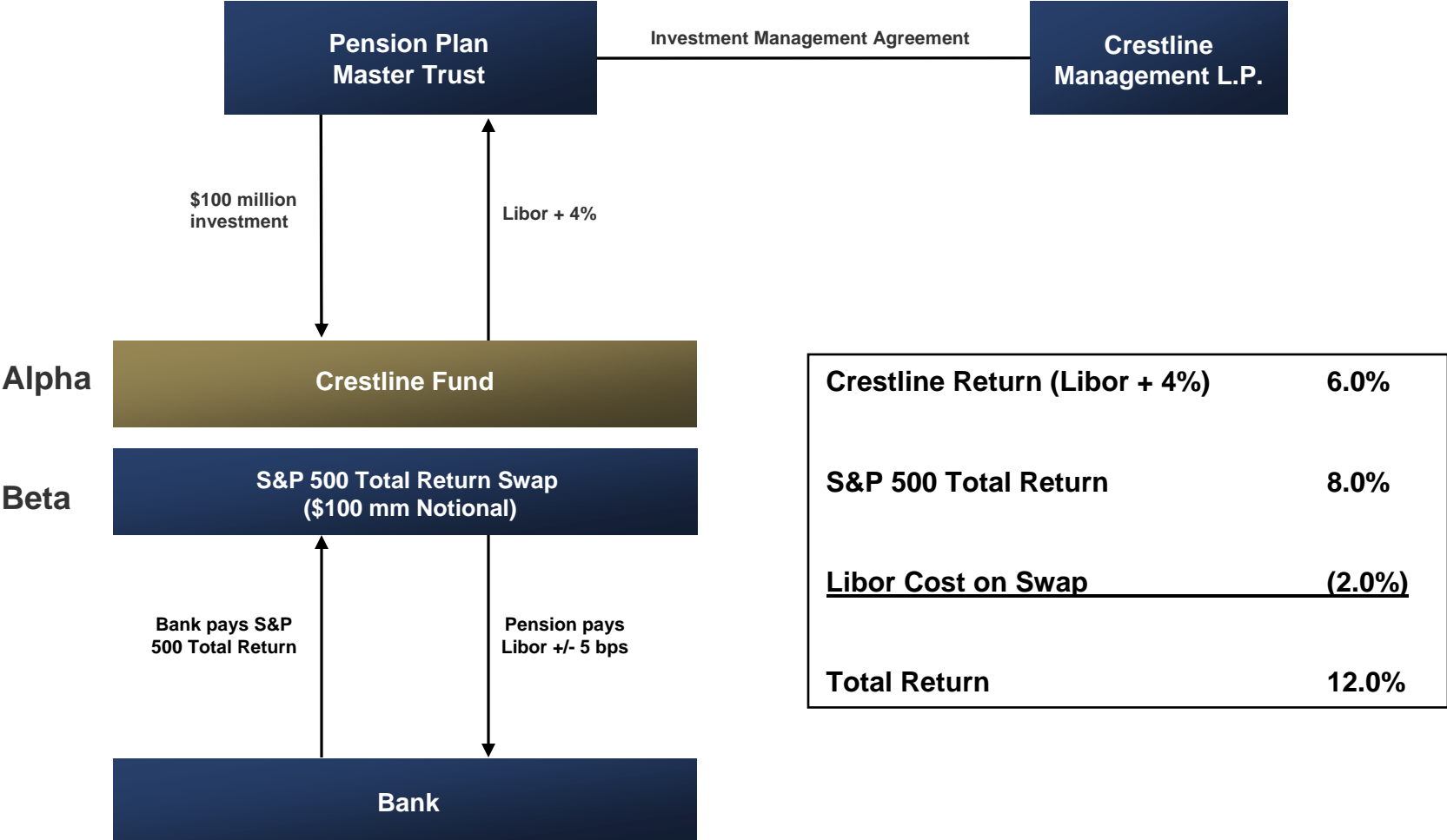
Portable Alpha Example



Portable Alpha Benefits

- Separation of alpha and beta decisions
 - Alpha source not restricted by policy asset mix
- Active risk easily adjusted to be consistent with risk budget
 - Preserve information ratio and market exposure
- Mandate can be structured to be consistent with client's choice of market exposure(s) and alpha source(s) and also address liquidity management, credit, risk management and reporting/administration

Portable Alpha Example – Detail



See Notes to Performance History & Comparisons

Portfolio Update

Performance Summary

Blue Glacier Fund, L.P. January 2010

Blue Glacier Fund, L.P.

Inception Date:

November 2004

Estimated January 2010 Market Value:

\$228,356,028¹

| | <u>Blue Glacier Fund, L.P.</u> | <u>HFRI FOF Conservative Index</u> | <u>3 Mo. T-Bills + 500 bps</u> | <u>S&P 500</u> |
|--------------------------------------|--|--|--|--------------------|
| 2009 YTD | 11.41% | 9.57% | 5.21% | 26.46% |
| Q4 2009 | 1.92% | 1.02% | 1.28% | 6.04% |
| January 2010 ¹ | 0.77% | 0.12% | 0.41% | -3.59% |
| BGF Inception to Date ^{1,2} | 3.39% | 2.14% | 7.95% | 1.10% |
| Standard Deviation ^{1,2} | 5.43% | | | |

Crestline returns are net of all fees & expenses

¹ Based on estimated January 2010 return

² Annualized for the period November 2004 to January 2010

See Notes to Performance History & Comparisons

Historical Betas

- Blue Glacier Fund, L.P. return stream has shown low exposure to the capital markets

Blue Glacier Fund, L.P. Betas:

| Equity | | Fixed Income | | Commodity | |
|-----------------|------|----------------------------|-------|-----------|------|
| S&P 500 | 0.19 | Barclays Capital Aggregate | -0.09 | DJ-AIG | 0.16 |
| Wilshire 5000 | 0.19 | ML High Yield | 0.25 | NAREIT | 0.05 |
| Nasdaq | 0.15 | Citi U.S. Inflation-Linked | 0.15 | | |
| MSCI EAFE | 0.18 | | | | |
| MSCI Emerg. Mkt | 0.13 | | | | |

Statistics calculated for the period Nov 2004 – Jan 2010
 January 2010 return is estimated
 See Notes to Performance History & Comparisons

Transparency

| Transparency Evolution | | | | |
|--|------|---------------------------|--------------------------|-----------------------------|
| | 2008 | 12/31/2009 ^{2,3} | 1/31/2010 ^{2,3} | 2010 Projected ³ |
| Position Level Transparency ¹ | 73% | 92% | 97% | 100% |
| Position Level Transparent Funds | 36 | 42 | 42 | 44 |
| Non-Position Level Transparent Funds | 17 | 3 | 2 | 0 |

¹ Asset weighted calculation

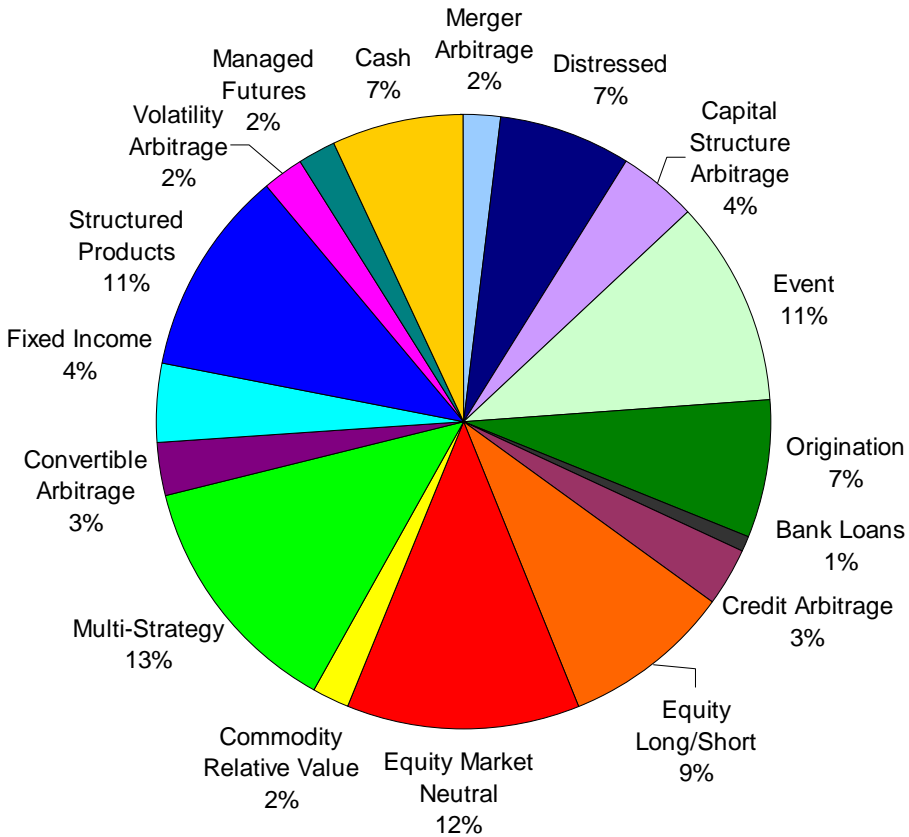
² Redemptions were placed for any funds not providing position level transparency

³ Excludes funds with less than 0.3% of NAV or more than 95% side pocketed

See Notes to Performance History & Comparisons

Portfolio Construction

Blue Glacier Fund, L.P. Current Portfolio Statistics



| | | |
|---------------------------------|---|-----------------|
| Target Return: | 3-Month T-Bill + 500 bp | |
| Target Risk: | < 4% standard deviation | |
| Geographic Distribution: | North America | 68% |
| | Europe | 22% |
| | Asia | 4% |
| | Global | 6% |
| Diversification: | Strategies: | 16 |
| | Managers: | 41 ¹ |
| | Funds: | 44 ¹ |
| | 29 Funds represent 80% of the portfolio | |
| Fund Size: | < \$500 million | 23% |
| | \$500mm - \$2.5 billion | 41% |
| | \$2.5 - < \$5 billion | 19% |
| | > \$5 billion | 17% |
| Manager Size: | < \$500 million | 14% |
| | \$500mm - \$2.5 billion | 25% |
| | \$2.5 - < \$5 billion | 11% |
| | > \$5 billion | 50% |

Data: Blue Glacier Fund, L.P.

As of: January 2010

¹Excludes funds with less than 0.3% of NAV or more than 95% side pocketed

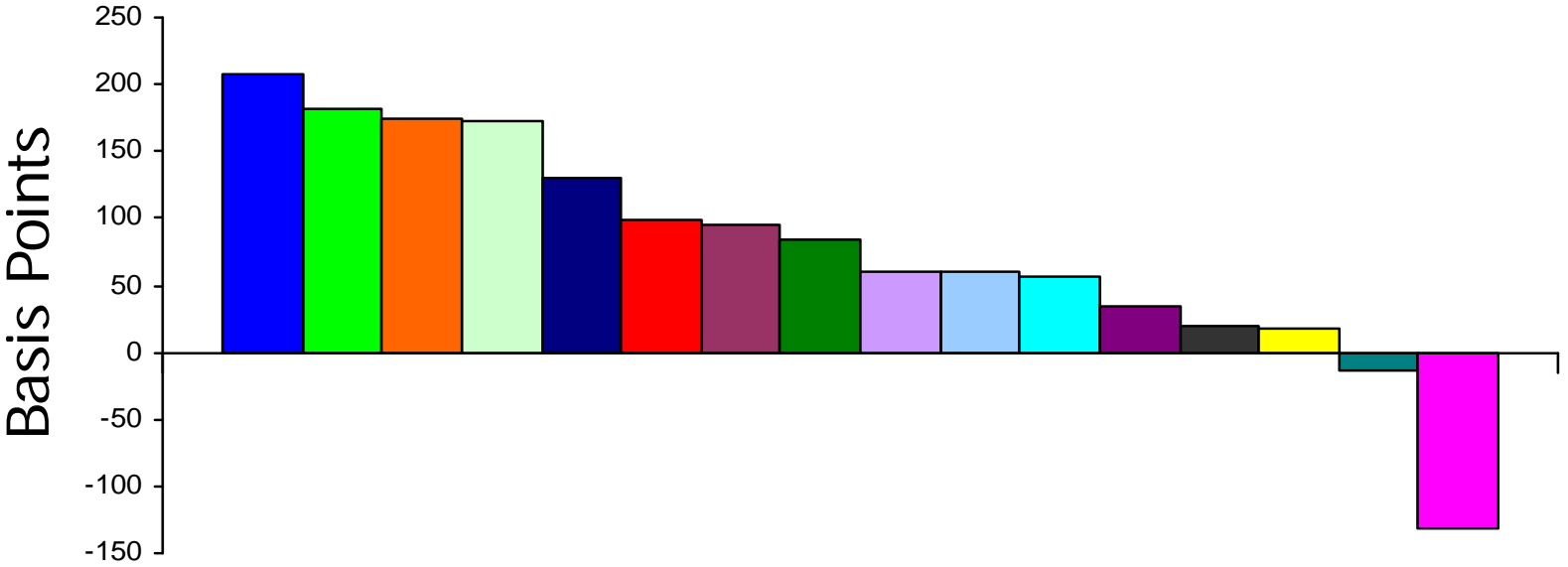
See Notes to Performance History & Comparisons

Attribution Analysis

Blue Glacier Fund, L.P.

Attribution Analysis

January – December 2009



| | | | |
|-----------------------------|--------------------------|-------------------|-----------------------|
| Structured Products | Multi Strategy | Equity Long/Short | Event |
| Distressed | Equity Market Neutral | Credit Arbitrage | Origination |
| Capital Structure Arbitrage | Merger Arbitrage | Fixed Income | Convertible Arbitrage |
| Bank Loan | Commodity Relative Value | Managed Futures | Volatility Arbitrage |

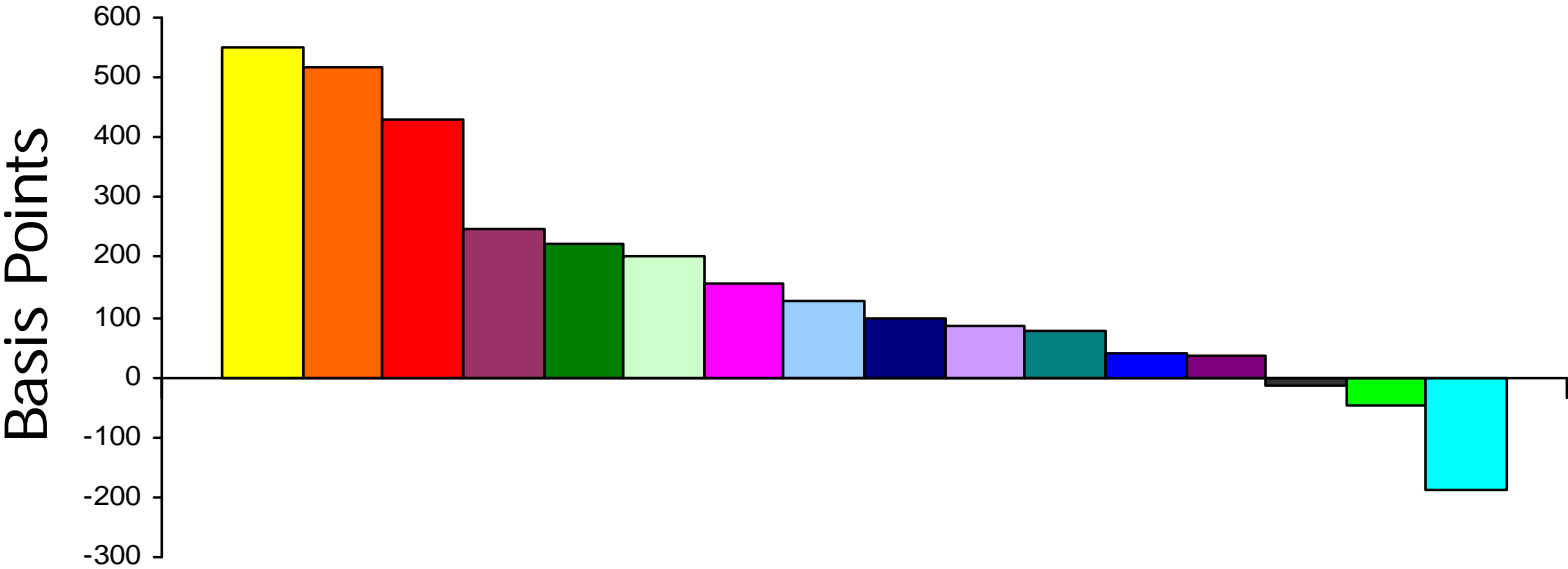
Returns and attribution data presented in this section are shown gross of management fees and expenses.
See Notes to Performance History & Comparisons

Attribution Analysis

Blue Glacier Fund, L.P.

Attribution Analysis

November 2004 – January 2010



| | | | |
|--------------------------|-----------------------------|-----------------------|---------------------|
| Commodity Relative Value | Equity Long/Short | Equity Market Neutral | Credit Arbitrage |
| Origination | Event | Volatility Arbitrage | Merger Arbitrage |
| Distressed | Capital Structure Arbitrage | Managed Futures | Structured Products |
| Convertible Arbitrage | Bank Loan | Multi Strategy | Fixed Income |

Returns and attribution data presented in this section are shown gross of management fees and expenses.
See Notes to Performance History & Comparisons

Current Environment

White Paper Predictions
(November 2008)

| Projection | Current Expectation |
|---|--|
| <ul style="list-style-type: none"> • Competitive Environment: 25% - 50% fewer hedge funds by the end of 2009 | <p>Better than expected</p> |
| <ul style="list-style-type: none"> • Leverage: Leverage in the new environment will be unavailable or very costly | <p>Leverage available at higher cost</p> |
| <ul style="list-style-type: none"> • Hedge Fund Business Model: Model will change due to systemic mis-match of assets and liabilities in illiquid markets. Gates, longer lock-ups and liquidating trusts will become more common | <p>These liquidity restrictions were imposed at 12/31. Several models are developing to deal with the liquidity issue going forward.</p> |
| <ul style="list-style-type: none"> • Institutionalization: Both the multi-strategy and single strategy fund models will need to be more institutional | <p>Institutional pressure has already resulted in greater transparency, better reporting and modification of terms</p> |
| <ul style="list-style-type: none"> • Investor Leverage: Negotiating power has shifted back to the investor for a time. Transparency, term modification and portfolio management restrictions will become more common. Funds will trade lower fees for longer lock-ups | <p>Investors continue to have leverage although it is limited with top performing funds</p> |
| <ul style="list-style-type: none"> • Regulation: Regulation and government oversight will increase | <p>Hedge Fund managers will be required to register with the SEC. G 20 and other organizations focused on reducing systemic risk</p> |

Strategy Outlook

• Crestline’s focus is on low volatility or less correlated strategies

| Absolute Return | Relative Value Arbitrage | Event Driven |
|---|--|---|
| Loan Origination Commodity Finance Other Niche Strategies | Convertible Arbitrage Fixed Income Arbitrage Equity Market Neutral Commodity Relative Value Credit Arbitrage | Merger Arbitrage Distressed (ABS & Corp.) Capital Structure Arbitrage Special Situations |
| Managed Futures / CTA's | Macro | Equity Long / Short |
| Discretionary Long-Term Trend Short-Term Trading | Global Trading – All Global Equities Country Rotational Sector Rotational | Long-biased Short-Term Trading Short-Biased |

These strategies were most impacted in the 2008 crisis:

- Relative Value Relationships
- Liquidity
- Leverage

We expect these strategies to continue to remain attractive:

- Positive Market Factors
- Reduced Hedge Fund and Prop Desk Competition
- Reduced Leverage available

Shaded area represents majority of strategy allocation
 See Notes to Performance History & Comparisons

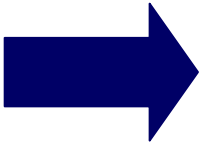
Strategy Outlook

Relevant market factors

- Transitional macro environment
- Volatility (VIX) within historical bands
- CMBS remains at dislocated levels; ABX close to fair
- Compression in credit spreads
- Implementation of government financing programs (PPIP managers investing)
- Capital returning to hedge funds
- Steep yield curve
- Equity market stretched
- Correlation is high across asset classes

Relevant strategy factors

- Strong hedge funds reaching capacity limits
- Wall St. prop-desk capital still constrained
- Supply favors distressed, both corporate and structured products
- Increased corporate actions
- New issues in converts, HY, IG debt and sovereign debt



Portfolio Direction:

Increase:

- Equity Market Neutral
- Distressed Corporate
- Capital Structure Arbitrage
- Merger Arbitrage
- Fixed Income Arbitrage

Neutral:

- Convertible Arbitrage
- Distressed Structured Products
- Volatility Arbitrage
- Multi-Strategy
- Commodity Relative Value
- Event
- L/S Equity
- CTA's

Decrease:

- Fixed Income – Munis
- Origination
- Cash

Performance Notes

1. Past performance is not a guaranty of future results. Current and prospective investors should not assume that the future performance of any Crestline fund will equal its prior performance results, and investors risk loss of their entire investment. Each fund's performance results portrayed reflect the deduction of that fund's advisory fees, brokerage commissions and other expenses. The performance results also include the reinvestment of income and dividends. For each Crestline fund, an individual investor's returns will vary from the historical performance due to participation in new issues and due to the timing of subscriptions, withdrawals, and redemptions.
2. Correlations to the performance of the indices presented in this report (including, but not limited to the Barclays Capital Aggregate Index, S&P 500 Index, and HFR Fund of Fund Conservative Index) are shown for comparison purposes only. The securities included in those indices are not necessarily included in the portfolios of the investment funds in which Crestline funds invest and criteria for inclusion in those indices are different and not limited to particular investment strategies. In addition, investors may not invest directly in an index. Therefore, the returns of Crestline funds and the returns of such indices may not be comparable.
3. Principal executive officers of Crestline are also associated with Bratton Capital Management, LP ("BCM") a firm that acts as the investment adviser and general partner to single family-office-related investments. Crestline and BCM are under common control.
4. This report may not be reproduced, distributed or transmitted in whole or in part in any media.
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8. The estimated return presented herein for the relevant month is calculated using performance information supplied by the underlying investment funds included in the portfolio as of the 5th business day following month end. For any investment fund not supplying performance information by the 5th business day following month end a return of 0.00% is assumed until performance information on such fund is actually received. This is only an estimate and the actual performance results will vary from this estimate. Past performance is not a guaranty of future results. The performance results portrayed reflect the deduction of that fund's advisory fees, brokerage commissions and other expenses. The performance results also include the reinvestment of income and dividends.
9. General Risks of Investing in the Crestline Funds
An investment in the Funds is speculative and involves a high degree of risk. Crestline Management, L.P., the investment manager of the Funds ("Crestline"), has sole trading authority over the Funds. The Funds utilize a fund of funds investment approach whereby Fund assets are allocated among portfolio managers. As a result, the success of the Funds is dependent on the portfolio managers' ability to develop and implement investment strategies that achieve the Funds' investment strategies. The Funds are not subject to regulatory restrictions or oversight. The principals of Crestline Investors, Inc. are Douglas K. Bratton, John Cochran and Caroline Cooley (the "Principals"). The success of the Funds' investment program will also depend on the expertise of the Principals in choosing portfolio managers. If the Principals were to cease to be associated with the Funds it is likely that the success of their investment program would be adversely affected. The Funds, particularly Crestline Plus (onshore & offshore), employ leverage, which among other investment techniques, can make their investment performance volatile. Opportunities for redemptions and transferability of interests in the Funds are restricted so investors may not have access to their capital if and when it is needed. There is no secondary market for an investor's interest in the Funds and none is expected to develop. The Funds' management fees and, in the case of Crestline Event Arbitrage (onshore & offshore), incentive fees/allocations, and expenses, may offset their trading profits. An investor should not invest in the Funds unless it is prepared to lose all or a substantial portion of its investment.

M A R I N E R

Alaska Retirement Management Board Arctic Bear Fund, L.P.

February 25, 2010

Daniel Sullivan
Partner

500 Mamaroneck Avenue, 4th Floor • Harrison, NY 10528
Main: (914) 670 4300 • Fax: (914) 670 4320 • email: mariner@marinercapital.com

Mariner Investment Group Business Principles

Our business principles guide us in everything we do. Our commitment to our principles is unflinching.

1. Integrity, honesty, and fairness are at the center of our professional and personal lives. We expect the same attributes in the individuals with whom and companies with which we engage in business.
2. Our primary focus shall always be our clients' best interests. We work to build enduring relationships with our clients by helping them meet their investment objectives, and by exceeding their service expectations.
3. Our people are the greatest determinant of our success. We reflect this in the thought and energy we invest in recruiting each person, and in our commitment to helping our colleagues reach their full potential. We treat one another with dignity and respect, acting always with humility.
4. We are committed to excellence. We know that if we focus on excellence in every task we perform and each product we generate, we will deliver the best outcomes for our clients and our Firm.
5. We emphasize teamwork across our business, confident that working together results in superior outcomes for our clients. While encouraging individual initiative, we believe the greatest achievements flow from our collective efforts and we celebrate the accomplishments of our team. Room does not exist for individuals who would place their personal interests ahead of the interests of our clients or our Firm.
6. We are committed to complying with the letter and spirit of the laws governing us in each of our jurisdictions. Our clients entrust us with their confidential financial information, which we in turn treat with the utmost care. To inappropriately use a client's information, or to disclose it intentionally or carelessly, would be unconscionable.
7. We treat our reputation with the greatest of care. The effort involved in building a good reputation, the speed with which it erodes if mistreated, and the resulting difficulty in restoring it are not to be underestimated.
8. Our industry is highly competitive, and we work aggressively to expand our client base. As we do so, we must avoid denigrating other firms.
9. As our Firm grows, we will focus unrelentingly on maintaining a close-knit, collegial, and uplifting workplace setting.
10. We view Mariner Investment Group as having an unlimited life. During our tenure at the Firm, we will act in a way that reflects good stewardship, ensuring that future generations receive the Firm in the best possible condition. Good stewardship is a principle we observe equally in the communities outside the Firm in which we are members. While long-term and short-term benefits are not mutually exclusive, when forced to choose between the two we will always prefer outcomes providing long-term benefits to our clients, our Firm, and our employees.

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- II. Arctic Bear Fund Portfolio Update**
- III. Hedge Fund and Market Review and Outlook**

I. Mariner Investment Group, LLC

Mariner Investment Group, LLC

Company Overview

- SEC Registered Investment Adviser founded in 1992 by William J. Michaelcheck
- Investment process draws upon extensive Wall Street proprietary trading and risk management experience
- Focused on superior risk adjusted returns, low volatility, and low correlation to stock and bond markets
- Seek consistent alpha generation while preserving capital
- Mariner and its Associated Advisers aggregated assets under management are approximately \$11.0 billion¹ with \$2.1 billion in Hedge Fund of Funds assets.
- 11 senior investment professionals² dedicated to our Core Fund of Funds business with an average of 28 years proprietary trading and hedge fund experience

1. As of January 1, 2010, Mariner's total assets under management were approximately \$6.0 billion ("Mariner AUM"). In addition, Mariner is associated with certain investment advisers (e.g., pursuant to an ongoing agreement in which Mariner provides certain substantive support services to those firms in exchange for a percentage share of that adviser's revenues) who are separately registered with the SEC (the "Associated Advisers") and have collective assets under management of approximately \$5.0 billion (the "Associated Advisers' AUM"). In total, Mariner's AUM in conjunction with the Associated Advisers' AUM is approximately \$11.0 billion. Assets under management figures are estimated and unaudited.

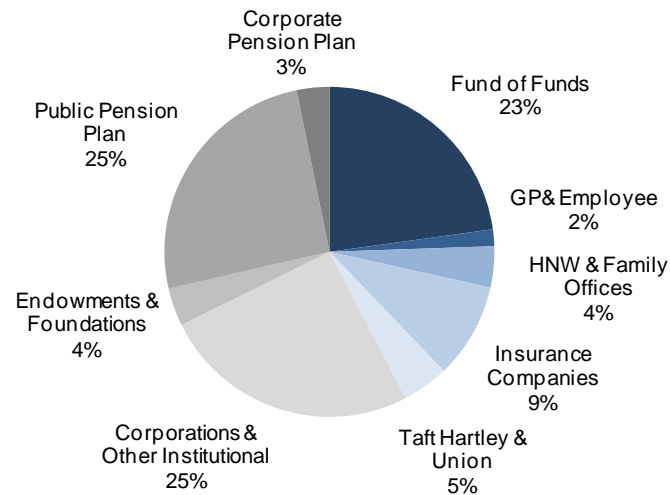
2. This number includes the 9 senior professionals that are members of the Investment Committee. It also includes Steven Ezzes and Brendan Minogue. Please note that Investment Committee members support and supervision is not limited exclusively to Mariner's Fund of Funds business and generally applies across Mariner's investment platform.

Mariner Investment Group, LLC

Representative Client List¹

| Public & Corporate Plans | Taft-Hartley | Endowments/Foundations |
|---|---|---|
| <ul style="list-style-type: none"> ■ Alaska Retirement Management Board ■ Alaska Permanent Fund Corporation ■ Anne Arundel County Retirement & Pension System ■ Public School Retirement System of St. Louis ■ New York State Common Retirement Fund | <ul style="list-style-type: none"> ■ Bakery and Confectionary Union and Industry ■ Communication Workers of America ■ Service Employees International Union (SEIU) ■ United Food and Commercial Workers | <ul style="list-style-type: none"> ■ New Mexico State Investment Council ■ Ohio University Foundation ■ The Culver Educational Foundation ■ University of Alaska Foundation ■ William H. Pitt Foundation |
| | Banks/Other | |
| | <ul style="list-style-type: none"> ■ Merrill Lynch | |

MIG Global Hedge Fund & Fund of Funds Investor Base²



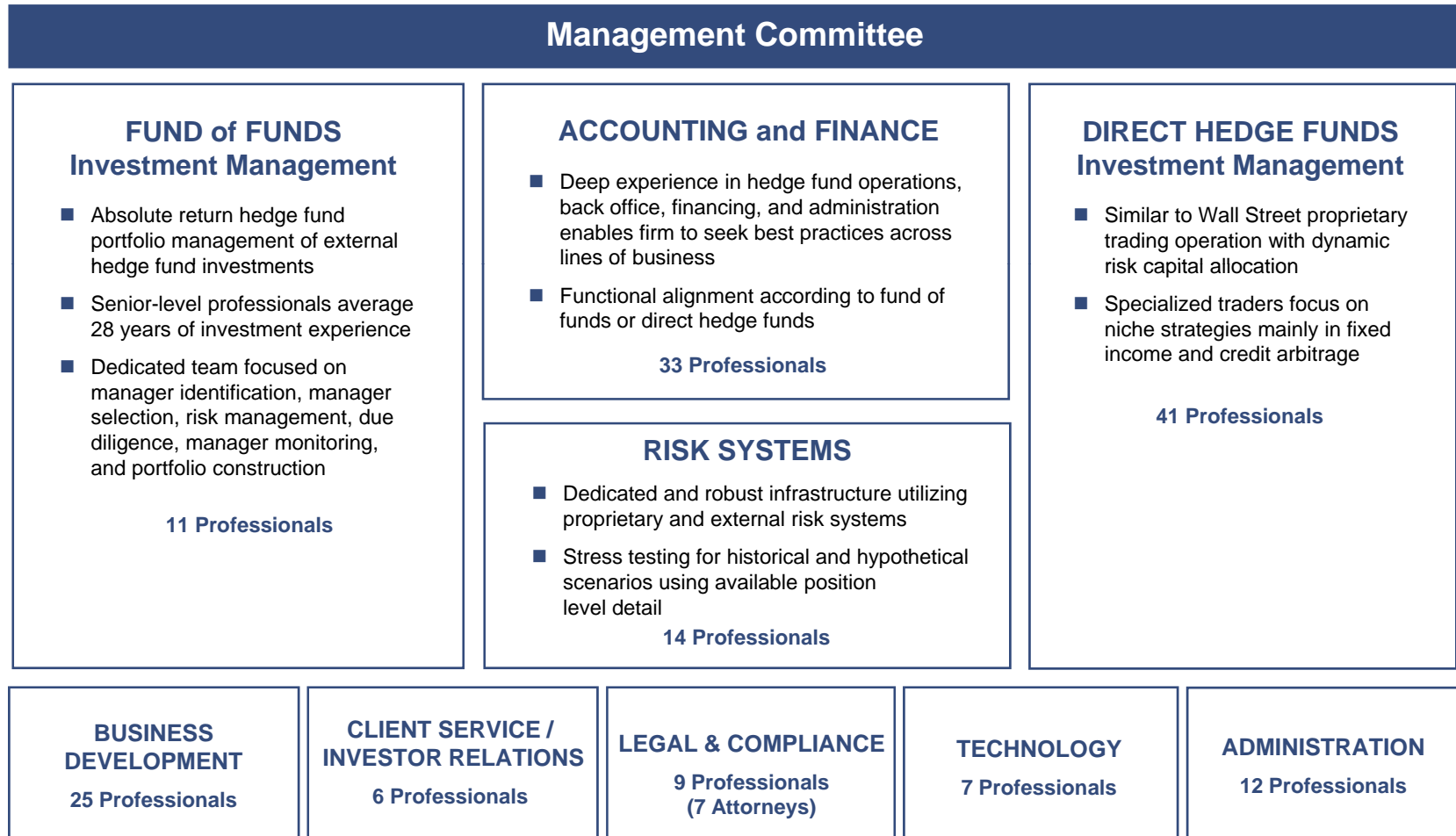
1. Clients listed are for Mariner and Mariner affiliated hedge funds. The list of representative clients was not selected based upon the performance of their respective investment accounts and it is not known whether the listed clients approve or disapprove of the services provided by Mariner Investment Group, LLC

2. Data as of September 30, 2009.

Mariner Investment Group, LLC

Mariner Organization

158 Professionals in Harrison (NY), New York, Boston, London, and Tokyo



Information as of January 1, 2010

Mariner Core Fund of Funds Investment Team

Mariner’s senior investment professionals average 29 years of trading and investment experience.

| Investment Committee | | |
|---|----------------------------|------------------------------|
| William Michaelcheck (37 years), CIO and Chairman | Ellen Rachlin (27 years) | William Turchyn (37 years) |
| Charles Howe (26 years) | William Shaw (37 years) | Dennis Winter (30 years) |
| Peter O’Rourke (17 years) | Daniel Sullivan (27 years) | Bracebridge Young (27 years) |

| Investment Sub-Committee | |
|----------------------------|--|
| William Michaelcheck (CIO) | Steven Ezzes Charles Howe Brendan Minogue Ellen Rachlin William Shaw Daniel Sullivan Dennis Winter (Chief Risk Officer) |

| Asset Allocation and Risk Management Team ¹ | |
|--|---|
| William Michaelcheck | Brendan Minogue Ellen Rachlin (Lead PM) Dennis Winter |



1. The Asset Allocation and Risk Management Team members serve as co-portfolio managers with Ellen Rachlin, the Lead Portfolio Manager for all core fund of funds products.
 Note: Numbers in parentheses indicate years of experience

Mariner's Fund of Funds Approach

Key Distinguishing Characteristics

- Investment process draws upon extensive proprietary trading desk and risk management experience
- Mariner leverages internal proprietary hedge fund experience and market intelligence
- Emphasis on fixed income and credit related investing
- Strong culture dedicated to risk management and loss mitigation
- Extensive experience managing dedicated, single client, fund of funds mandates
- Some form of position level transparency is an invaluable element of our investment process
- Mariner's underlying fund selection targets single strategy fund allocations
- Mariner provides custom solutions to client needs

II. Arctic Bear Fund Portfolio Update

Arctic Bear Fund, L.P.¹

As of Date: January 31, 2010

| | |
|-------------------------------------|-------------------|
| November 1, 2004 Initial Investment | \$82.3mm |
| Beginning of Year Capital: | |
| 2005 | \$91.3mm |
| 2006 | \$110.1mm |
| 2007 | \$145.4mm |
| 2008 | \$235.7mm |
| 2009 | \$213.4 mm |
| January 31, 2010 Ending Balance | E \$238,314,498 |

Track Record¹

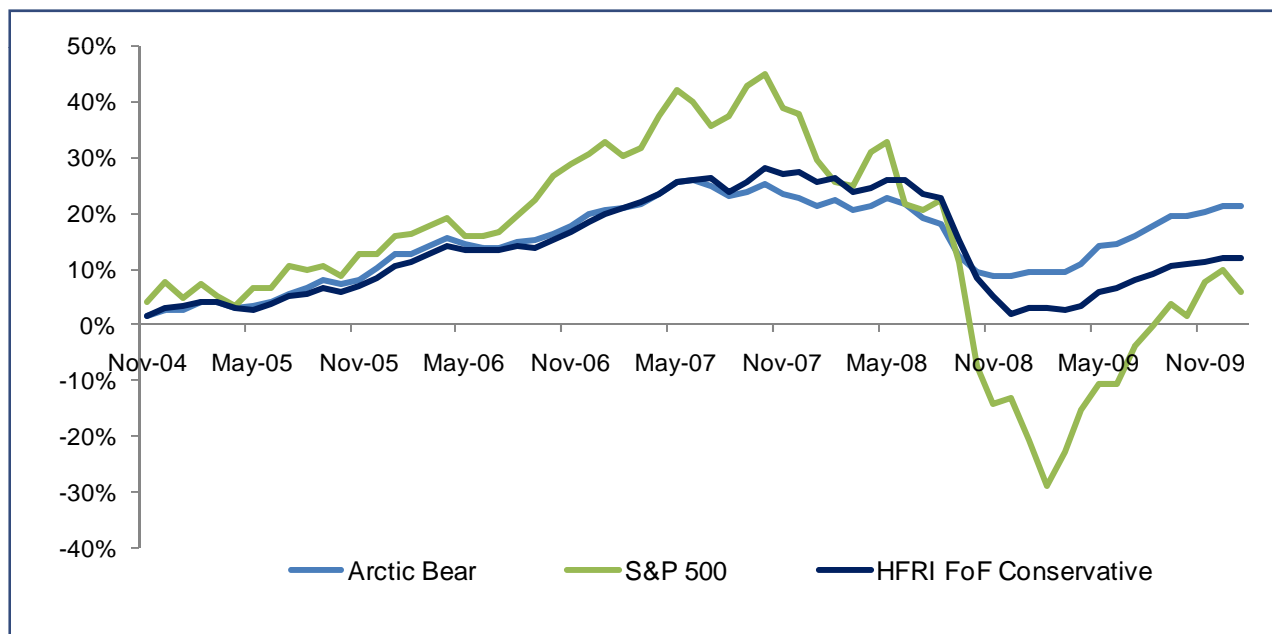
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD ² |
|-------------|--------|--------|---------|---------|--------|--------|--------|--------|--------|---------|--------|--------|------------------|
| 2004 | | | | | | | | | | | 1.77 % | 0.89 % | 2.67 % |
| 2005 | 0.17 % | 1.40 % | (0.27)% | (0.75)% | 0.11 % | 0.61 % | 1.56 % | 1.10 % | 1.18 % | (0.47)% | 0.67 | 1.72 | 7.20 |
| 2006 | 2.44 | (0.02) | 1.27 | 1.09 | (0.89) | (0.46) | 0.00 | 0.83 | 0.45 | 0.90 | 1.28 | 1.58 | 8.75 |
| 2007 | 0.76 | 0.38 | 0.38 | 1.64 | 1.51 | 0.33 | (0.88) | (1.41) | 0.56 | 1.29 | (1.46) | (0.65) | 2.42 |
| 2008 | (1.02) | 0.79 | (1.51) | 0.70 | 1.01 | (0.73) | (2.20) | (0.61) | (5.00) | (2.66) | (0.45) | (0.15) | (11.37) |
| 2009 | 0.62 | (0.02) | 0.06 | 1.24 | 3.04 | 0.28 | 1.30 | 1.41 | 1.66 | (0.11) | 0.70 | 0.93 | 11.66 |
| 2010 | 0.00 E | | | | | | | | | | | | 0.00 E |

1. Past performance is not a guide to or otherwise indicative of future results. All returns are net of applicable fees and expenses and reflect the reinvestment of dividends and other earnings for the relevant period and are unaudited (the "Net Returns"). The letter "E" denotes estimated returns. Please see "Important Considerations and Assumptions" at the end of this presentation.
2. Cumulative YTD.

Arctic Bear Fund, L.P.

Portfolio Return and Volatility Benchmark Comparison¹

| | | 1 Year | 3 Year | 5 Year | Life |
|--------------------------------------|------------------------|--------|--------|--------|-------|
| Annualized Rate of Return | Arctic Bear Fund, L.P. | 10.92 | 0.18 | 3.35 | 3.74 |
| | HFRI FoF Conservative | 8.35 | -2.29 | 1.60 | 2.14 |
| | S&P 500 | 33.14 | -7.23 | 0.18 | 1.10 |
| Annualized Standard Deviation | Arctic Bear Fund, L.P. | 3.23 | 5.08 | 4.47 | 4.42 |
| | HFRI FoF Conservative | 2.63 | 6.63 | 5.57 | 5.50 |
| | S&P 500 | 20.16 | 19.95 | 16.08 | 15.88 |



1. Past performance is not a guide to or otherwise indicative of future results. All returns are net of applicable fees and expenses and reflect the reinvestment of dividends and other earnings for the relevant period and are unaudited (the "Net Returns"). Please see "Important Considerations and Assumptions" at the end of this presentation.

Arctic Bear Fund, L.P.

2009 Performance Attribution¹

as a Marginal ROR
Contribution to
Arctic Bear's Investments
2009:



Strategy Leaders:

Distressed Securities
Emerging Markets
Capital Structure Arbitrage

The distressed securities, emerging markets, and capital structure arbitrage strategies provided the most significant positive contributions to the Fund's performance during 2009.

The **distressed securities** strategy's underlying funds contributed to performance throughout the year. Company specific long exposure to the auto, chemical, media, consumer and technology sectors all added to the strategy's performance. Positions in ABS, RMBS, financial and airline debt also contributed meaningfully to the strategy's positive results.

The **emerging markets** strategy's strong performance in 2009 was primarily attributable to the underlying funds' exposure to Chinese property and financial stocks, Russian natural resource companies, and Brazilian consumer related issuers. Indian and Taiwan technology stocks were profitable. Additional gains were made in Korean auto companies, Indian agriculture, and Chinese telecommunications longs.

The **capital structure arbitrage** strategy was another positive contributor. The strategy's debt exposure to retail, food, homebuilding, insurance, airline and gaming companies as well as exposure to European preferred shares led the strategy's performance. Further profits were generated in auto manufacturer and auto parts trades.

Market neutral equity was the only strategy which marginally detracted from the Fund's performance for the full year.

The **market neutral equity** underlying fund's long exposure to European defensive equities and short exposure to European cyclical detracted from performance. The underlying fund suffered notable losses on stock specific events which drove down the share prices of its long positions in a Dutch bank and a Swiss healthcare technology company. Short exposure to the commodities and industrial cyclical sectors hurt performance in the fourth quarter.

as a Marginal ROR
Contribution to
Arctic Bear's Investments
2009:



Strategy Laggards:

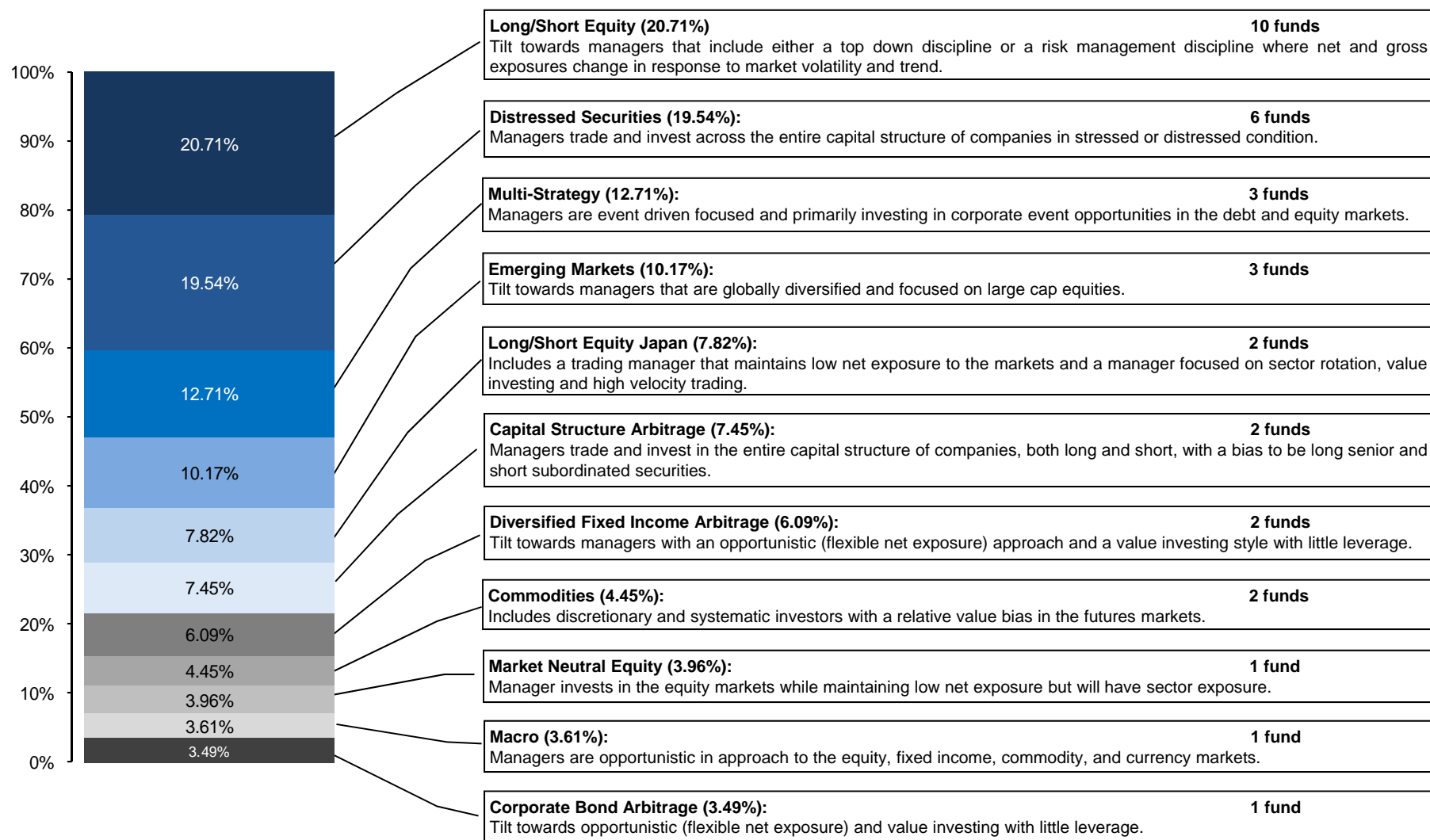
Market Neutral Equity

1. Please note the information provided has been derived from third party fund managers. Past performance is not a guide to or otherwise indicative of future results. All returns are net of the underlying managers fees and expenses and reflect the reinvestment of dividends and earnings and are unaudited. Please see the "Important Considerations and Assumptions" at the end of this presentation.

Arctic Bear Fund, L.P. Portfolio Composition

Strategy Description and Percentage Allocation as of January 1, 2010¹

- Diversification achieved through exposure from 11 strategies and 33 underlying funds.



1. The information in this chart is indicative of the portfolio composition as of the applicable dates and no assurance can be given that the chart reflects current portfolio composition. Please see "Portfolio Disclaimer" at the end of this report.

2010 Investment Themes and Strategy Outlook¹

Key Themes:

- Gradual economic improvement is expected despite global trade imbalances and continued deleveraging
- Significant debt restructuring should accelerate over the next two to three years
- Possibility of a significant “tail risk” event still exists
- Event driven strategies in both debt and equity markets offer significant opportunity

Equity Market Outlook:

- Equity markets will likely remain in a wide trading band, with less persistent directional trends
- Relative value investing and low net exposures are expected to generate superior risk adjusted returns
- Companies with strong balance sheets and solid fundamentals should be best positioned to capitalize in this environment

Fixed Income and Credit Market Outlook:

- Credit market opportunities are significant, numerous, and will likely persist as global debt restructuring continues for several years
- Relative value credit investing, including long/short credit strategies which capitalize on increased volatility, may generate the strongest risk adjusted returns
- While credit markets may continue to improve, tightening credit spreads will likely be a less significant component of credit investing returns
- Mortgage and asset-backed securities are currently fairly priced, though selective opportunities will exist

Global Commodities Outlook:

- Volatility should persist due to the uncertainty caused by the conflicting trends of reduced growth in developed nations versus increasing demand in emerging markets

1. Please note that the investment outlook and opportunities noted above are prospective and based upon the opinion of Mariner. There is no guarantee we will be successful in our efforts to implement investment strategies that take advantage of such perceived opportunities.

III. Hedge Fund and Market Review and Outlook

Dispersion of Hedge Fund Annual Returns As of December 31, 2009

| 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|-------------------------|-------------------------|-------------------------|-------------------------|------|-------------------------|-------------------------|------------------------|------------------------|-------------------------|------------------------|------------------------|-------------------------|-------------------------|--------------------------|
| | | 37.1% Global Macro | | | | | | | | | | 20.2% Emerging Mkts | | |
| | 34.5% Emerging Mkts | 26.6% Emerging Mkts | | | 25.6% Convert Arb | | | | 28.7% Emerging Mkts | 15.6% Distressed | 20.5% Emerging Mkts | 17.4% Global Macro | | |
| | 25.6% Global Macro | 25.9% CS/T HFI | | | 47.2% L/S Equity | 15.77% Ded. Short | 20.0% Distressed | | 25.1% Distressed | 14.5% Event Driven | 15.7% Event Driven | 13.7% L/S Equity | | 47.4% Convert Arb |
| 30.7% Global Macro | 25.5% Distressed | 21.5% L/S Equity | | | 44.8% Emerging Mkts | 15.0% Eq Mkt Neutral | 18.4% Global Macro | 18.3% Mgd Futures | 20.0% Event Driven | 12.5% Emerging Mkts | 16.99% Ded. Short | 15.6% Distressed | 13.2% Event Driven | 30.0% Emerging Mkts |
| 26.1% Distressed | 23.0% Event Driven | 20.7% Distressed | | | 23.4% CS/T HFI | 14.7% Risk Arb | 14.6% Convert Arb | 18.15% Ded. Short | 18.0% Global Macro | 11.6% L/S Equity | 11.7% Distressed | 14.5% Multi-Strategy | 12.6% CS/T HFI | 27.4% Fixed Inc Arb |
| 23.0% L/S Equity | 22.2% CS/T HFI | 20.0% Event Driven | | | 22.3% Event Driven | 11.7% Global Macro | 11.5% Event Driven | 14.7% Global Macro | 17.3% L/S Equity | 9.6% CS/T HFI | 9.7% L/S Equity | 14.4% L/S Equity | 10.1% Multi-Strategy | 24.6% Multi-Strategy |
| 21.7% CS/T HFI | 17.9% Convert Arb | 18.3% Multi-Strategy | | | 22.2% Distressed | 11.2% Multi-Strategy | 9.3% Eq Mkt Neutral | 7.4% Eq Mkt Neutral | 15.5% CS/T HFI | 8.5% Global Macro | 9.2% Global Macro | 14.3% Convert Arb | 9.3% Eq Mkt Neutral | 21.0% Distressed |
| 18.4% Event Driven | 17.1% L/S Equity | 14.8% Eq Mkt Neutral | | | 16.0% Convert Arb | 7.2% Event Driven | 8.0% Fixed Inc Arb | 7.4% Emerging Mkts | 15.0% Multi-Strategy | 7.5% Multi-Strategy | 8.9% Event Driven | 13.9% CS/T HFI | 8.8% Risk Arb | 20.4% Event Driven |
| 16.6% Convert Arb | 16.6% Eq Mkt Neutral | 14.5% Convert Arb | 20.7% Mgd Futures | | 15.3% Eq Mkt Neutral | 6.3% Fixed Inc Arb | 5.8% Emerging Mkts | 6.3% Multi-Strategy | 14.2% Mgd Futures | 6.8% Fixed Inc Arb | 7.6% CS/T HFI | 13.5% Global Macro | 8.4% Distressed | 19.5% L/S Equity |
| 12.5% Fixed Inc Arb | 15.9% Fixed Inc Arb | 9.8% Risk Arb | 17.2% L/S Equity | | 13.2% Risk Arb | 4.8% CS/T HFI | 5.7% Risk Arb | 5.7% Fixed Inc Arb | 12.9% Convert Arb | 6.5% Eq Mkt Neutral | 7.5% Multi-Strategy | 11.2% Eq Mkt Neutral | 6.02% Ded. Short | 18.6% CS/T HFI |
| 11.9% Risk Arb | 14.0% Multi-Strategy | 9.4% Fixed Inc Arb | 13.3% Eq Mkt Neutral | | 12.1% Fixed Inc Arb | 4.3% Mgd Futures | 5.5% Multi-Strategy | 4.0% Convert Arb | 9.0% Risk Arb | 6.0% Mgd Futures | 6.1% Eq Mkt Neutral | 8.7% Fixed Inc Arb | 6.0% Mgd Futures | 12.0% Risk Arb |
| 11.9% Multi-Strategy | 13.8% Risk Arb | 3.1% Mgd Futures | 7.7% Multi-Strategy | | 9.4% Multi-Strategy | 2.1% L/S Equity | 4.4% CS/T HFI | 3.0% CS/T HFI | 8.0% Fixed Inc Arb | 5.5% Risk Arb | 3.1% Risk Arb | 8.1% Risk Arb | 5.2% Convert Arb | 11.6% Global Macro |
| 11.0% Eq Mkt Neutral | 12.0% Mgd Futures | 0.43% Ded. Short | 5.6% Risk Arb | | 5.8% Global Macro | 1.9% Distressed | 1.9% Mgd Futures | 0.2% Event Driven | 7.1% Eq Mkt Neutral | 2.0% Convert Arb | 0.6% Fixed Inc Arb | 8.1% Mgd Futures | 3.8% Fixed Inc Arb | 4.1% Eq Mkt Neutral |
| -7.1% Mgd Futures | -5.48% Ded. Short | | -0.4% CS/T HFI | | -4.7% Mgd Futures | -5.5% Emerging Mkts | -3.58% Ded. Short | -0.7% Distressed | -32.60% Ded. Short | -7.71% Ded. Short | -0.1% Mgd Futures | -6.62% Ded. Short | | -6.6% Mgd Futures |
| -7.37% Ded. Short | | | -1.7% Distressed | | -14.22% Ded. Short | | -3.7% L/S Equity | -1.6% L/S Equity | | | -2.5% Convert Arb | | | -25.03% Ded. Short |
| -16.9% Emerging Mkts | | | -3.6% Global Macro | | | | | -3.5% Risk Arb | | | | | | -17.7% Event Driven |
| | | | -4.4% Convert Arb | | | | | | | | | | | -19.1% CS/T HFI |
| | | | -4.9% Event Driven | | | | | | | | | | | -19.8% L/S Equity |
| | | | -5.99% Ded. Short | | | | | | | | | | | -20.5% Distressed |
| | | | -8.2% Fixed Inc Arb | | | | | | | | | | | -23.6% Multi-Strategy |
| | | | -37.7% Emerging Mkts | | | | | | | | | | | -28.8% Fixed Inc Arb |
| | | | | | | | | | | | | | | -30.4% Emerging Mkts |
| | | | | | | | | | | | | | | -31.6% Convert Arb |
| | | | | | | | | | | | | | | -40.3% Eq Mkt Neutral |

Strategies Include:

| | |
|----------------|--|
| CS/T HFI | Credit Suisse/Tremont Hedge Fund Index |
| Convert Arb | Credit Suisse/Tremont Hedge Fund Index Convertible Arbitrage |
| Ded. Short | Credit Suisse/Tremont Hedge Fund Index Dedicated Short Bias |
| Emerging Mkts | Credit Suisse/Tremont Hedge Fund Index Emerging Markets |
| Eq Mkt Neutral | Credit Suisse/Tremont Hedge Fund Index Equity Market Neutral |
| Event Driven | Credit Suisse/Tremont Hedge Fund Index Event Driven |

| | |
|----------------|---|
| Distressed | Credit Suisse/Tremont Hedge Fund Index Distressed |
| Risk Arb | Credit Suisse/Tremont Hedge Fund Index Risk Arbitrage |
| Fixed Inc Arb | Credit Suisse/Tremont Hedge Fund Index Fixed Income Arbitrage |
| Global Macro | Credit Suisse/Tremont Hedge Fund Index Global Macro |
| L/S Equity | Credit Suisse/Tremont Hedge Fund Index Long/Short Equity |
| Mgd Futures | Credit Suisse/Tremont Hedge Fund Index Managed Futures |
| Multi-Strategy | Credit Suisse/Tremont Hedge Fund Index Multi-Strategy |

Sources: Bloomberg, MSCI Barra, Merrill Lynch

Dispersion of Market Sector Annual Returns

As of December 31, 2009

| 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|---------------------|--------------------|--------------------|-------------------|--------------------|--------------------|---------------------|--------------------|
| 39.9% Nasdaq | 28.9% DJIA | | | | | | | 54.6% MSCI EM | 31.7% DJ Energy | 34.7% DJ Energy | 31.2% MSCI EM | | | |
| 37.6% S&P 500 | 24.7% DJ Energy | 33.4% S&P 500 | | 85.6% Nasdaq | | | | 50.0% Nasdaq | 24.7% MSCI EM | 33.4% MSCI EM | 25.8% MSCI EAFE | | | 74.5% MSCI EM |
| 36.9% DJIA | 23.0% S&P 500 | 32.3% S&P Midcap | 39.6% Nasdaq | 63.7% MSCI EM | | | | 47.6% Russell 2000 | 20.8% MSCI EAFE | 24.3% MSCI Japan | 20.1% DJ Energy | 37.7% DJ Energy | | 57.5% ML HY Index |
| 31.0% S&P Midcap | 22.7% Nasdaq | 24.9% DJIA | 28.6% S&P 500 | 60.9% MSCI Japan | | | | 39.3% MSCI EAFE | 18.1% Russell 2000 | 14.1% MSCI EAFE | 18.9% DJIA | 36.5% MSCI EM | | 45.1% Nasdaq |
| 27.4% Russell 2000 | 19.2% S&P Midcap | 22.2% Russell 2000 | 19.1% S&P Midcap | 27.2% DJIA | | | | 38.7% MSCI Japan | 16.1% S&P Midcap | 12.9% S&P Midcap | 18.3% Russell 2000 | 9.8% Nasdaq | | 36.9% S&P Midcap |
| 25.5% DJ Energy | 16.6% Russell 2000 | 21.6% Nasdaq | 18.2% MSCI EAFE | 25.3% MSCI EAFE | | | | 35.6% S&P Midcap | 13.7% MSCI Japan | 4.8% S&P 500 | 15.9% S&P 500 | 9.8% US 10 yr TSY | | 34.5% Russell 2000 |
| 23.6% US 10 yr TSY | 11.3% ML HY Index | 19.7% DJ Energy | 18.1% DJIA | 22.5% ML HY Index | | | | 28.7% S&P 500 | 10.9% ML HY Index | 4.5% Russell 2000 | 11.8% ML HY Index | 9.7% DJIA | | 27.8% MSCI EAFE |
| 20.5% ML HY Index | 4.4% MSCI EAFE | 13.3% ML HY Index | 12.8% US 10 yr TSY | 21.4% Russell 2000 | 24.2% DJ Energy | 8.4% Lehman Agg | | 28.3% DJIA | 10.7% S&P 500 | 2.7% ML HY Index | 10.0% S&P Midcap | 8.6% S&P Midcap | | 25.9% S&P 500 |
| 18.5% Lehman Agg | 3.9% MSCI EM | 11.2% US 10 yr TSY | 8.7% Lehman Agg | 21.0% S&P 500 | 17.5% S&P Midcap | 4.5% ML HY Index | | 28.2% ML HY Index | 8.6% Nasdaq | 2.4% Lehman Agg | 9.5% Nasdaq | 8.6% MSCI EAFE | | 22.0% DJIA |
| 9.4% MSCI EAFE | 3.6% Lehman Agg | 9.7% Lehman Agg | 3.9% MSCI Japan | 18.0% DJ Energy | 14.9% US 10 yr TSY | 4.3% US 10 yr TSY | 14.6% US 10 yr TSY | 22.9% DJ Energy | 5.3% DJIA | 2.0% US 10 yr TSY | 5.9% MSCI Japan | 7.0% Lehman Agg | | 19.1% DJ Energy |
| 3.4% MSCI Japan | 0.0% US 10 yr TSY | 0.2% MSCI EAFE | 3.0% ML HY Index | 14.7% S&P Midcap | 11.6% Lehman Agg | 2.6% Russell 2000 | 10.3% Lehman Agg | 4.1% Lehman Agg | 4.8% US 10 yr TSY | 1.6% DJIA | 4.3% Lehman Agg | 5.5% S&P 500 | 20.1% US 10 yr TSY | 5.9% Lehman Agg |
| -7.2% MSCI EM | -5.5% MSCI Japan | -13.4% MSCI EM | -2.2% Russell 2000 | -0.8% Lehman Agg | -2.9% Russell 2000 | -0.6% S&P Midcap | -1.9% ML HY Index | 1.3% US 10 yr TSY | 4.3% Lehman Agg | 1.4% Nasdaq | 1.4% US 10 yr TSY | 2.2% ML HY Index | 5.2% Lehman Agg | 4.4% MSCI Japan |
| | | -24.4% MSCI Japan | -7.3% DJ Energy | -8.3% US 10 yr TSY | -4.7% DJIA | -4.9% MSCI EM | -5.0% MSCI EM | | | | | -1.5% Russell 2000 | -26.4% ML HY Index | -9.7% US 10 yr TSY |
| | | | -27.5% MSCI EM | | -5.1% ML HY Index | -5.4% DJIA | -9.9% MSCI Japan | | | | | -6.8% MSCI Japan | -30.5% MSCI Japan | |
| | | | | | -9.1% S&P 500 | -11.9% S&P 500 | -14.5% S&P Midcap | | | | | | -31.4% DJIA | |
| | | | | | -15.2% MSCI EAFE | -13.3% DJ Energy | -14.8% MSCI EAFE | | | | | | -33.5% Russell 2000 | |
| | | | | | -30.0% MSCI Japan | -21.0% Nasdaq | -15.0% DJIA | | | | | | -35.9% S&P Midcap | |
| | | | | | -31.8% MSCI EM | -22.6% MSCI EAFE | -15.4% DJ Energy | | | | | | -36.5% S&P 500 | |
| | | | | | -39.3% Nasdaq | -29.1% MSCI Japan | -20.4% Russell 2000 | | | | | | -37.0% DJ Energy | |
| | | | | | | | | | | | | | -39.8% Nasdaq | |
| | | | | | | | | | | | | | -45.1% MSCI EAFE | |
| | | | | | | | | | | | | | -54.5% MSCI EM | |

Asset Classes Included:

US Equities

| |
|--------------|
| S&P Midcap |
| Nasdaq |
| S&P 500 |
| DJIA |
| Russell 2000 |
| DJ Energy |

International Equities

| |
|------------|
| MSCI EAFE |
| MSCI Japan |
| MSCI EM |

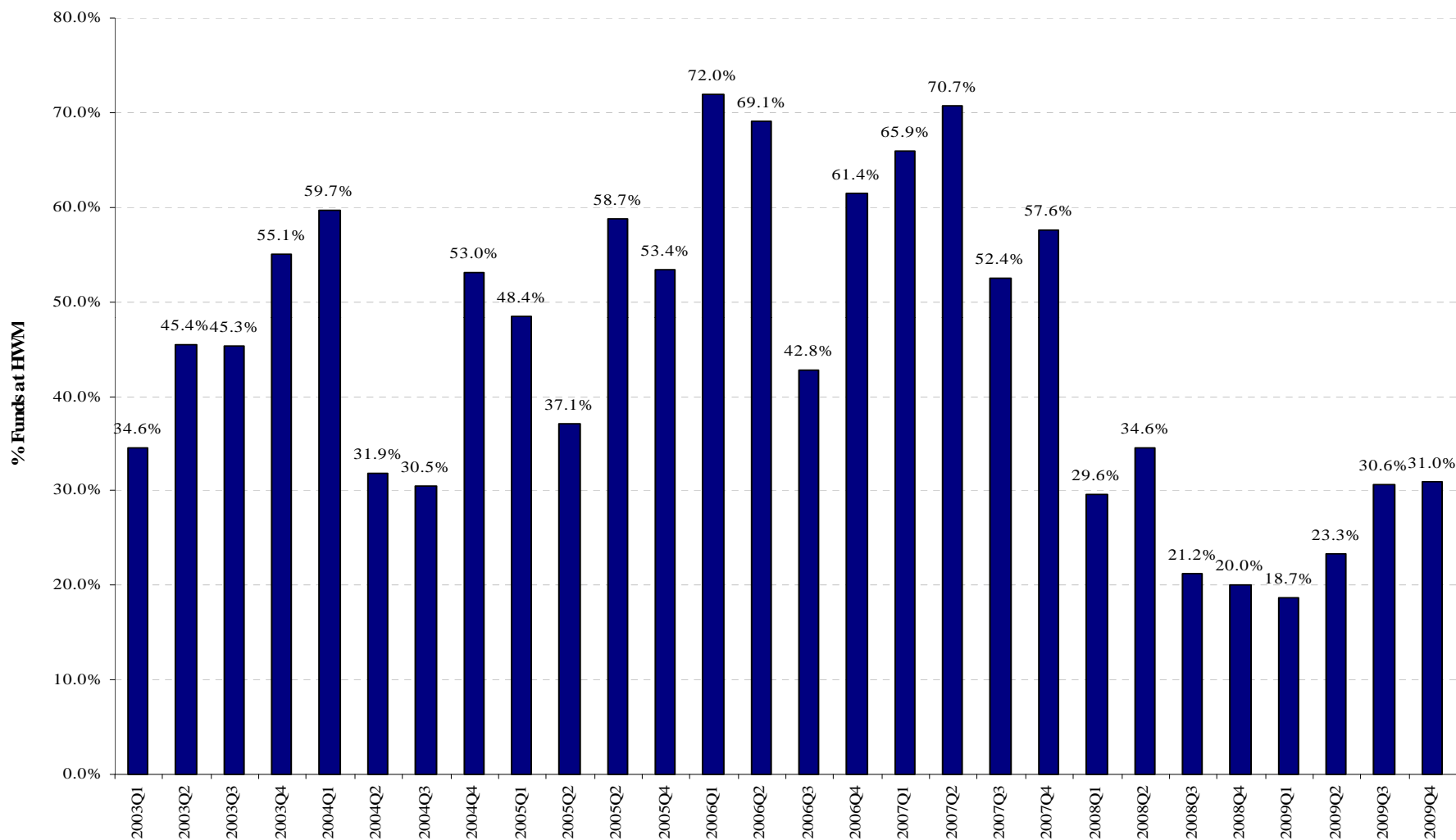
US Fixed Income

| |
|--------------|
| ML HY Index |
| Lehman Agg |
| US 10 yr TSY |

Sources: Bloomberg, MSCI Barra, Merrill Lynch

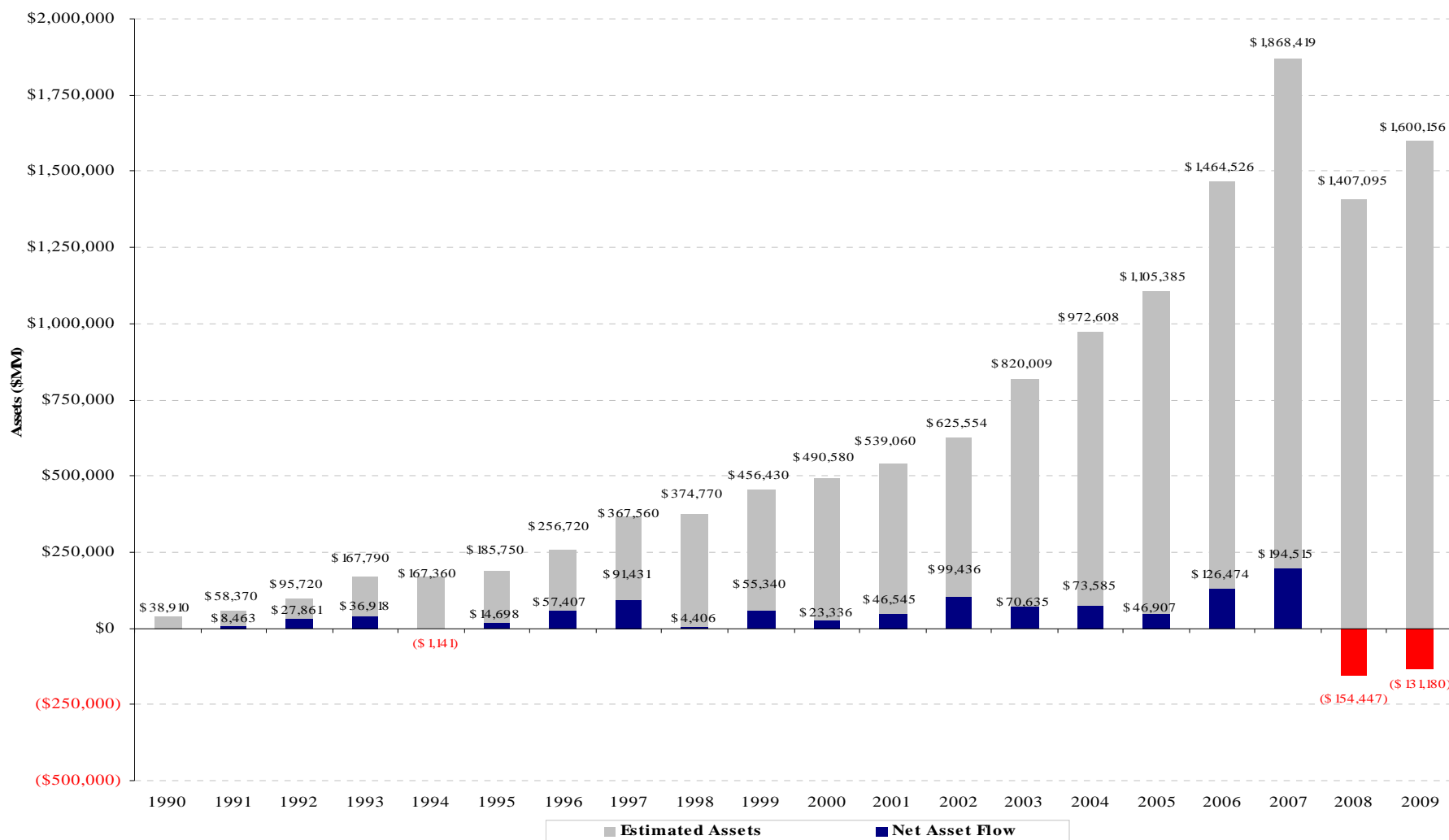
HFRI Fund Weighted Composite Index

Percentage of Constituent Funds at High Watermark Q1 2003 – Q4 2009



Source: HFR Global Hedge Fund Industry Report – Year End 2009

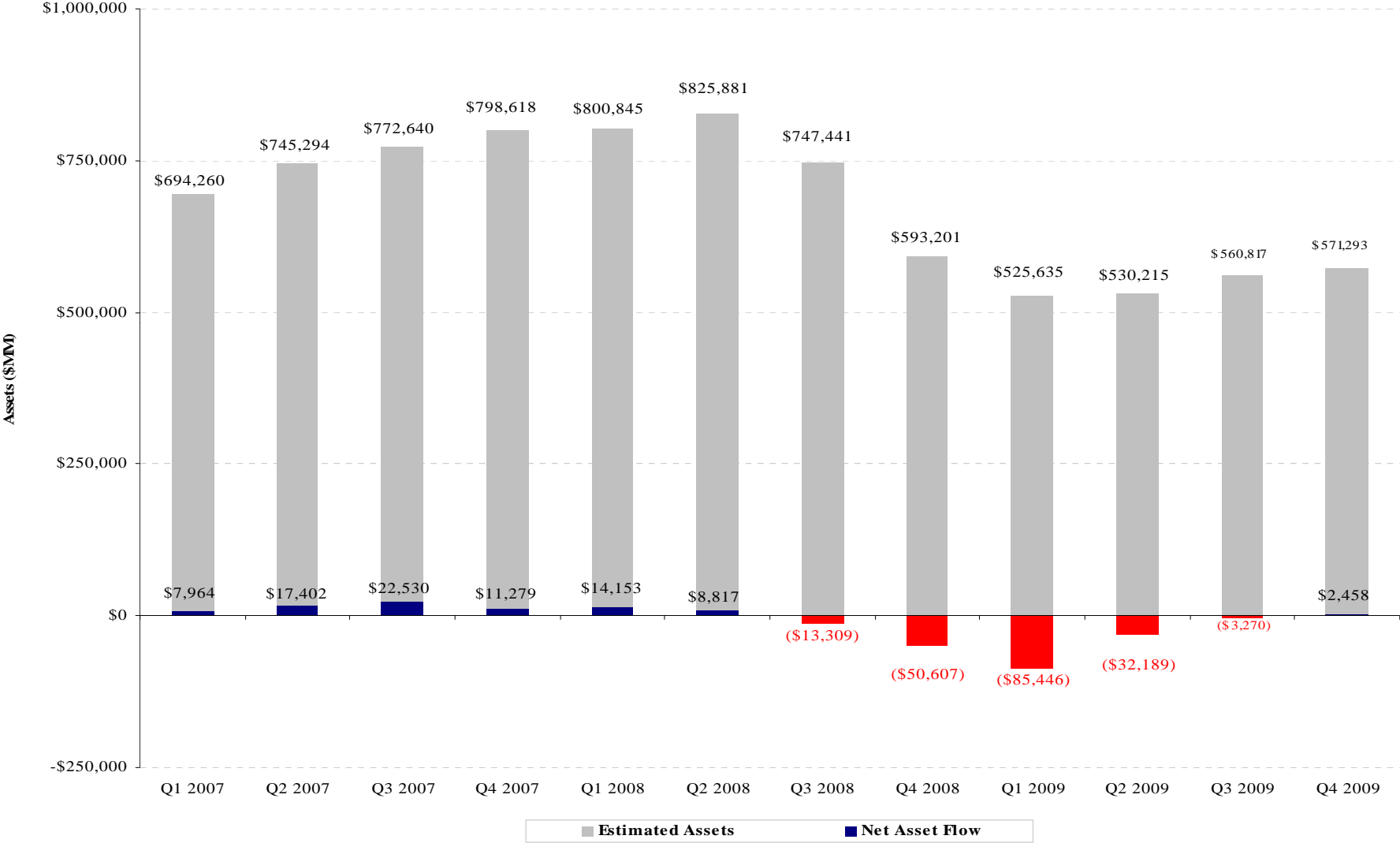
Estimated Growth of Assets / Net Asset Flow Hedge Fund Industry 1990 – 2009



Source: HFR Global Hedge Fund Industry Report – Year End 2009

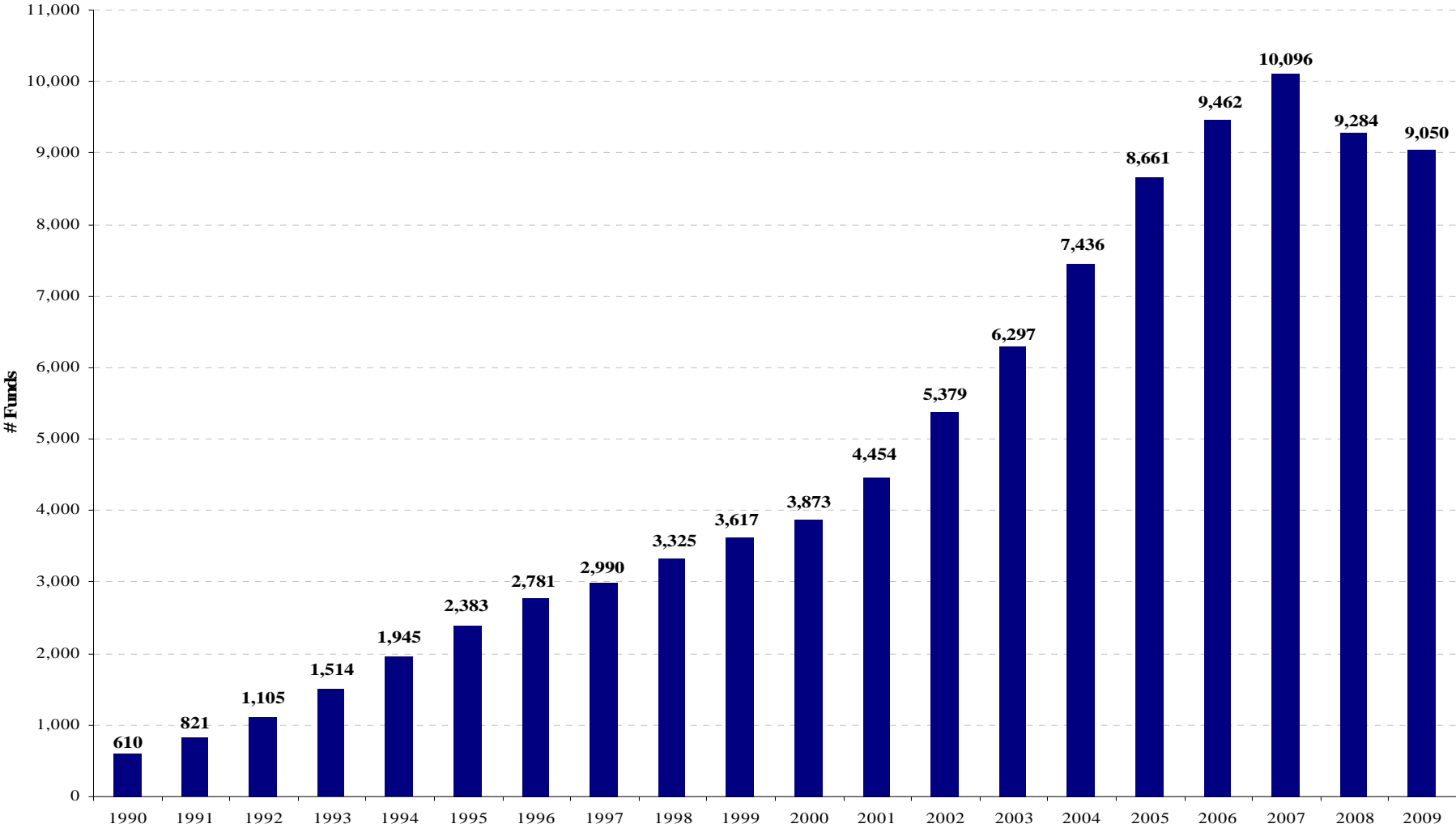
Estimated Growth of Assets / Net Asset Flow

Fund of Funds Q1 2007 – Q4 2009



Source: HFR Global Hedge Fund Industry Report – Year End 2009

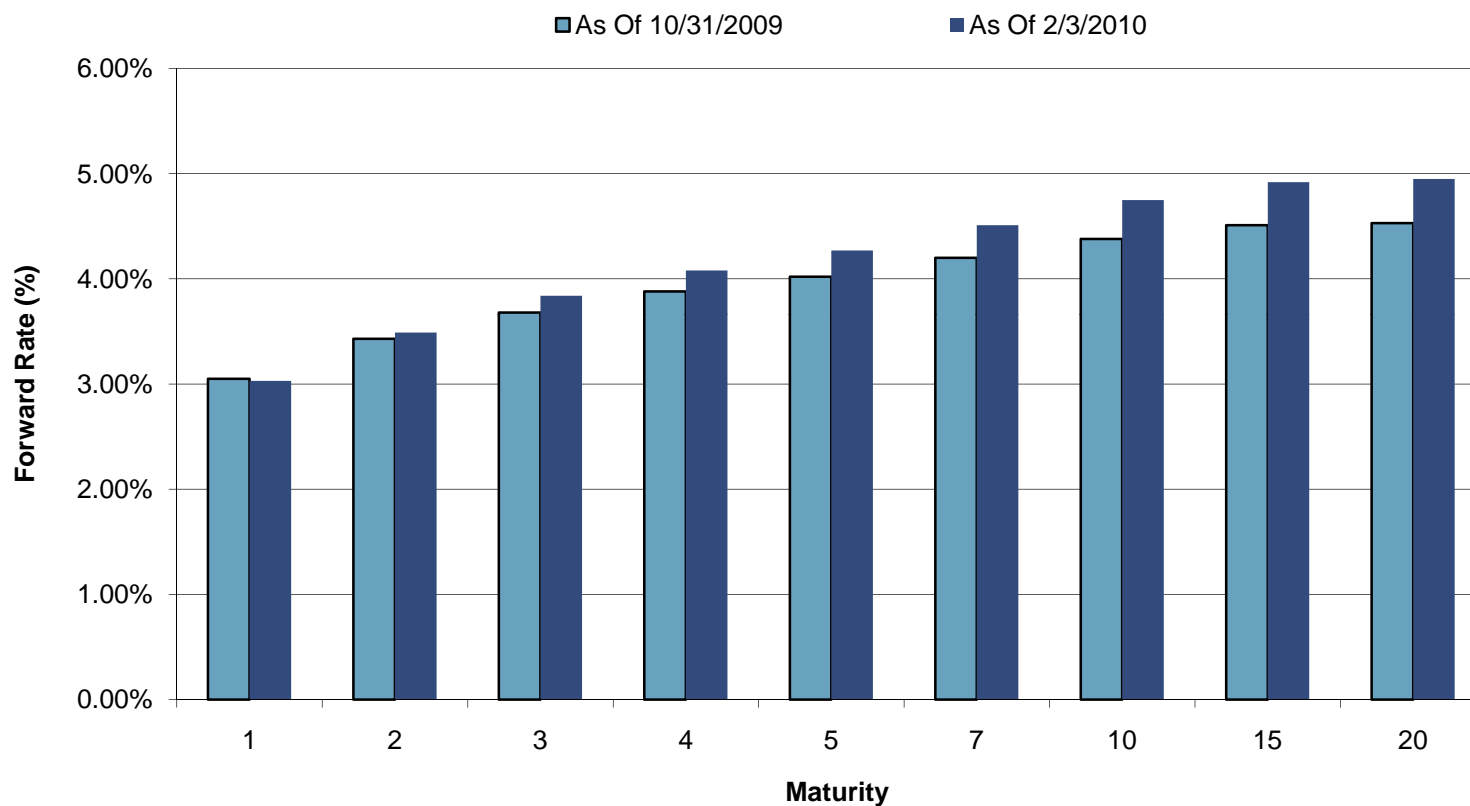
Estimated Total Number of Hedge Funds and Fund of Funds 1990 – 2009



Source: HFR Global Hedge Fund Industry Report – Year End 2009

2 Year Forward Yield Curves

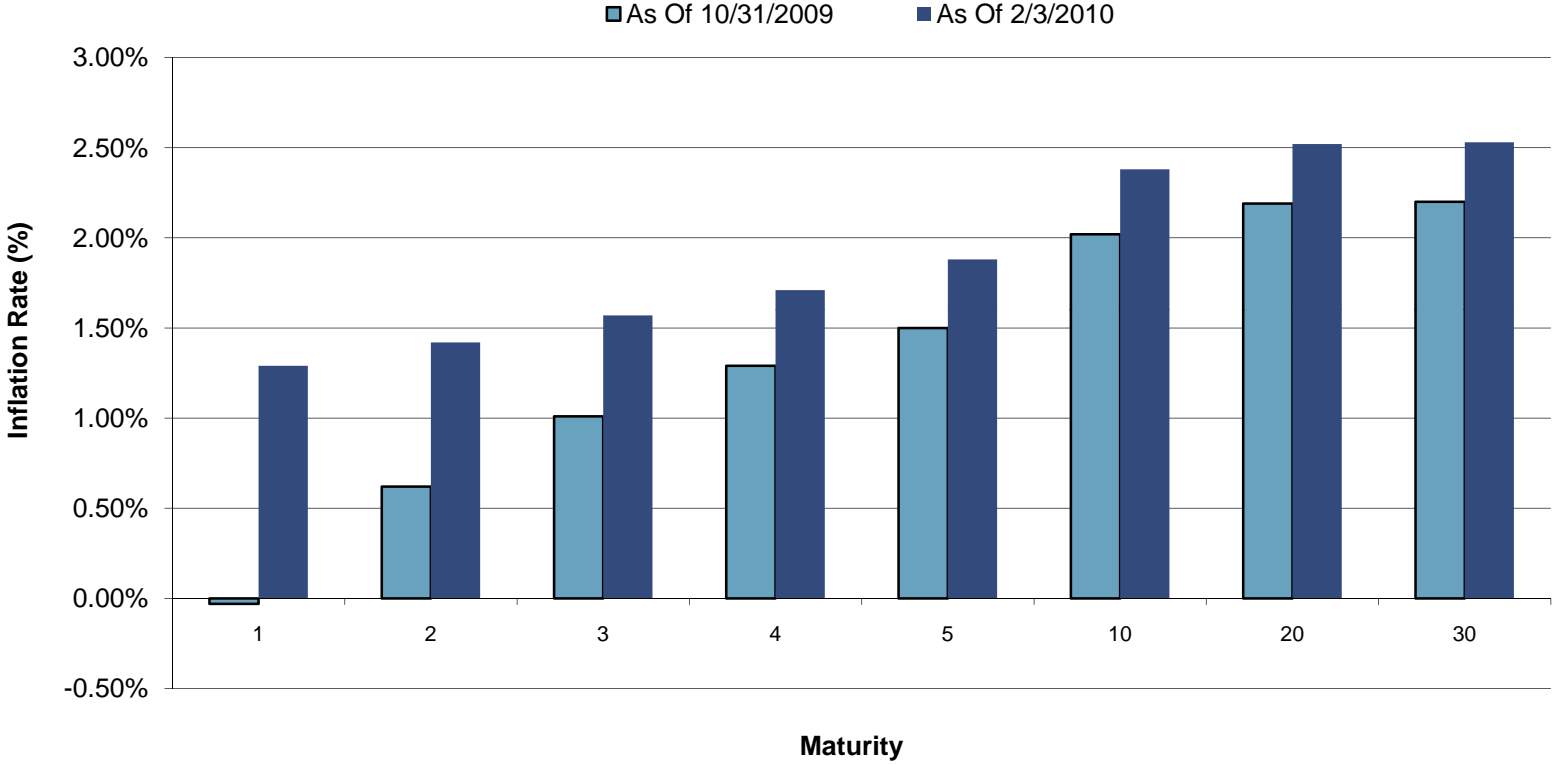
October 2009 - February 2010



Source: Bloomberg

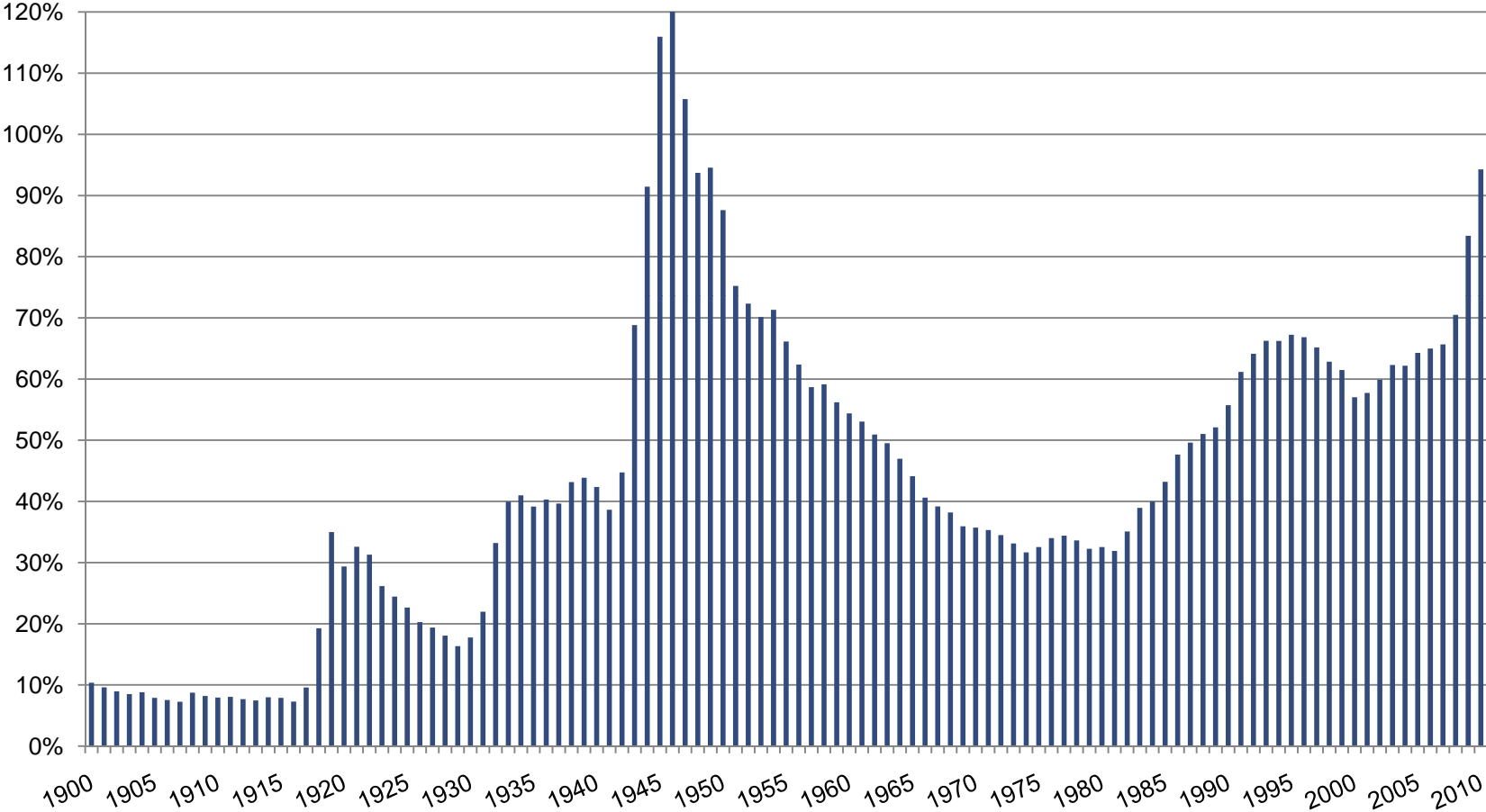
Breakeven Inflation Rates

October 2009 - February 2010



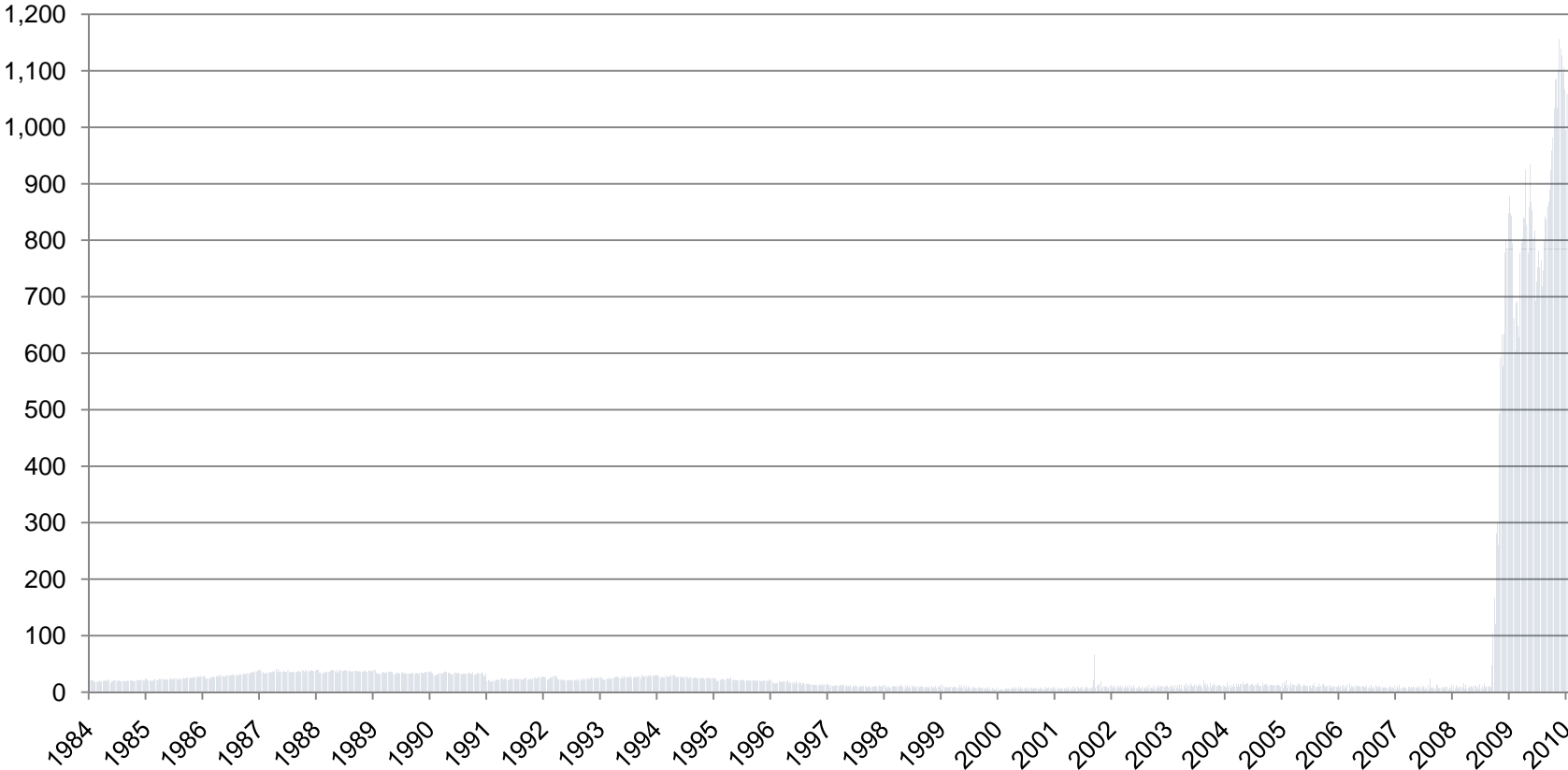
Source: Bloomberg

U.S. Federal Debt As Percent Of GDP 1900 - 2010



Source: Bloomberg

Reserve Balances with Federal Reserve Banks (in Billions)



Source: Board of Governors of the Federal Reserve System

Important Considerations and Assumptions

General Considerations

This presentation has been prepared solely for informational purposes and may not be relied on in any manner as legal, tax or investment advice or as an offer to sell or the solicitation of an offer to buy an interest in any fund which can only be made by a private placement memorandum that contains important information about each fund's risks, fees and expenses (the "Supplemental Disclosure Documents"). **Past performance is not a guide to or otherwise indicative of future results.** The U.S. Dollar is the currency used to express performance. This presentation should be considered confidential and may not be reproduced in whole or in part, and may not be circulated or redelivered to any person without the prior written consent of Mariner Investment Group, LLC ("MIG") or its affiliated limited purpose broker-dealer Mariner Group Capital Markets, Inc. ("MGCM"). The funds discussed in this presentation (the "Funds") are advised or otherwise managed by MIG and/or certain of its affiliates (e.g., the General Partner and certain of its partners, officers, directors and employees) and accordingly are under the common control with MGCM. MGCM and its registered representatives, who are also employees of MIG, have a financial interest in the distribution of the securities offered for sale by the Funds and all remuneration to MGCM shall be paid by MIG and not the Funds' investors. Strategies in which the Funds invest may involve investments in less liquid securities as well as leverage. Products managed by MIG are intended for sophisticated investors and the information in these materials is intended solely for "Accredited Investors" within the meaning of Rule 501 of Regulation D under the U.S. Securities Act of 1933, as amended and "Qualified Purchasers" within the meaning of Section 2(a)(51) of the Investment Company Act of 1940 (or investors qualifying under equivalent standards under the laws of the jurisdictions of their residence). Any products or service referred to herein may not be suitable for any or all persons.

Certain information contained here in constitutes "forward-looking statements", which can be identified by the use of forward-looking terminology such as "may", "will", "should", "expect", "anticipate", "project", "estimate", "intend", "continue" or "believe" or the negatives thereof or other variations thereon or comparable terminology. Due to various risks and uncertainties, actual events or results or the actual performance of any fund may differ materially from those reflected or contemplated in such forward-looking statements.

This presentation contains only summary information about the Funds, its sponsor and the investment opportunity presented and is qualified in its entirety and should be read in conjunction with the Supplemental Disclosure Documents. Material aspects of the descriptions contained herein may change at any time. This presentation is being provided to you on a confidential basis at your request and you should read the Supplemental Disclosure Documents carefully, including the risk factors and potential conflicts of interest specifically described in the private placement memorandum before investing in the Funds. Some information in this presentation reflects proprietary research based upon various data sources. In addition, some information cited in this presentation has been taken from third-party sources that are believed to be reliable but which have not been verified for accuracy or completeness. No person has been authorized to make any statement concerning the Funds, Mariner, MGCM, or any of their affiliates, other than as will be set forth in the Supplemental Disclosure Documents, and any such statements, if made, may not be relied upon. In the event of any conflict between the Supplemental Disclosure Documents and the information provided herein, the Supplemental Disclosure Document will control.

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None of the information contained herein shall constitute, or be construed as constituting or be deemed to constitute "investment advice" as defined under the U.S. Employee Retirement Income Security Act of 1974 ("ERISA"), as amended, or the U.S. Internal Revenue Code of 1986. If you are subject to ERISA, this presentation is being furnished to you on the condition that it will not form a primary basis for any investment decision. The Funds and securities discussed in these Materials have not been registered or qualified with, nor approved or disapproved by, the U.S. Securities and Exchange Commission, or any other regulatory authority, nor has any regulatory authority passed upon the accuracy or adequacy of any information that has been or will be provided. Notwithstanding anything to the contrary herein, each investor (and each employee, representative, or other agent of such investor) may disclose to any and all persons, without limitation of any kind, the tax treatment and tax structure of (i) the Funds (ii) any of their transactions, and all materials of any kind (including opinions or other tax analyses) that are provided to the investor relating to such tax treatment and tax structure.

Important Considerations and Assumptions

Disclosure of Risk Factors

An investment in a hedge fund is speculative and involves a significant degree of risk, which each prospective investor must carefully consider. Returns generated from an investment in a hedge fund may not adequately compensate investors for the business and financial risks assumed. An investor in hedge funds could lose all or a substantial amount of his or her investment. While hedge funds are subject to those market risks common to other types of investments, including market volatility, hedge funds employ certain trading techniques, such as, the use of leverage, and other speculative investment practices that may increase the risk of investment loss. Other risks associated with hedge funds include, but are not limited to, high illiquidity and fees (and the higher fees may offset the fund's trading profits), complex tax structures that may delay the distribution of important tax information, no requirement that periodic pricing or valuation reports be provided to investors, lack of the regulatory requirements applied to mutual funds, limited operating history, lack of a secondary market for an investor's interest in the fund and none may be expected to develop, performance that is volatile, restrictions on transferring interests in the fund, and hedge funds may effect a substantial portion of their trades in foreign markets or exchanges. In addition, a hedge fund may have a fund manager who has total trading authority over the fund and the use of advisers applying generally similar trading programs could mean a lack of diversification, and consequentially, higher risk.

The foregoing is only a summary of certain risks associated with an investment in the Funds. Before making an investment in the Funds, prospective investors are advised to thoroughly and carefully review the Supplemental Disclosure Documents with their financial, legal and tax advisors to determine whether an investment is suitable for them.

Additional Performance Disclosure

This information must be read in conjunction with the prior performance information.

Benchmarks are provided for illustrative purposes only. There are no known published comparable benchmarks or indices for the investment strategies of the Funds. Comparisons to benchmarks have limitations because benchmarks have volatility and other material characteristics that may differ from the Funds. Because of these differences, benchmarks should not be relied upon as an accurate measure of comparison. The following benchmarks may be used:

The Lehman Brothers U.S. Aggregate Bond Index covers the USD-denominated, investment-grade, fixed-rate, taxable bond market of SEC-registered securities. The index includes bonds from the Treasury, Government-Related, Corporate, MBS (agency fixed-rate and hybrid ARM passthroughs), ABS, and CMBS sectors. U.S. Agency Hybrid Adjustable Rate Mortgage (ARM) securities were added to the U.S. Aggregate Index on April 1, 2007, but are not eligible for the Global Aggregate Index. The U.S. Aggregate Index is a component of the U.S. Universal Index in its entirety.

The S&P 500 Index is weighted by market capitalization and focuses on the large cap segment of the market, with approximately 75% coverage of U.S. equities. The S&P 500 index was created in 1957, although it has been extrapolated backwards to several decades earlier for performance comparison purposes. The index is maintained by the S&P Index Committee that follows a set of published guidelines for maintaining the index. Criteria for index additions include: U.S. Company, Market Capitalization, Public Float, Financial Viability, Adequate Liquidity and Reasonable Price, Sector Representation, and Company Type. The S&P 500 Index is part of a series of S&P U.S. indices.

The Credit Suisse/Tremont Hedge Fund Index is an asset-weighted hedge fund index. The Index uses a rules-based construction methodology, identifies its constituent funds, and minimizes subjectivity in the Index member selection process. It aims at a maximum representation of the Index Universe. The Credit Suisse/Tremont database, which tracks more than 4500 funds, is used to determine the Index Universe. This selection universe is defined as only the funds with a minimum of US \$50 million under management, a minimum one-year track record, and current audited financial statements. Currently, there are more than 900 funds in the Index Universe. Funds are separated into ten primary subcategories based on their investment style. The Index in all cases represents at least 85% of the AUM in each respective category of the Index Universe. Credit Suisse/Tremont analyzes the percentage of assets invested in each subcategory and selects funds for the Index based on those percentages, matching the shape of the Index to the shape of the universe. The Index is calculated and rebalanced monthly. Funds are reselected on a quarterly basis as necessary. To minimize survivorship bias, funds are not removed from the Index until they are fully liquidated or fail to meet the financial reporting requirements.

Important Considerations and Assumptions

Additional Performance Disclosure (Cont.)

The HFRI Monthly Indices ("HFRI") are a series of benchmarks designed to reflect hedge fund industry performance by constructing equally weighted (fund-weighted) composites of constituent funds, as reported by the hedge fund managers listed within HFR Database. The HFRI range in breadth from the industry-level view of the HFRI Fund Weighted Composite Index, which encompasses over 2000 funds, to the increasingly specific-level of the sub-strategy classifications. In order to be considered for inclusion in the HFRI, a hedge fund manager must submit a complete set of information to HFR Database. Funds are eligible for inclusion in the HFRI the month after their addition to HFR Database. Additionally, all HFRI constituents are required to report monthly, net of all fees performance and assets under management U.S. dollars. Constituent funds must have either (a) \$50 million under management or (b) a track record of greater than twelve (12) months.

The Bear Stearns High Yield Index presently comprises 1,752 securities across a wide spectrum of industries with at least one year to maturity. All fixed-income, non-convertible, dollar-denominated securities rated both BB+ and Ba1 or lower (i.e. split-rated crossover issues are specifically not included) with outstanding par value of at least \$100 million are included. The only general exceptions are for medium-term notes, asset-backed securities, and other types of secured paper.

The CISDM Fund of Funds Index currently consisting of 341 funds of funds. The CISDM hedge fund medians are calculated on a monthly basis for nine strategies which are further divided into sub-strategies. All hedge funds and fund of funds in the database are used in constructing the medians. Hedge funds are not restricted by size or length of track record to report to the database. The methodology used to create hedge fund medians is different from the methodology used to create CTA and CPO indices. The CTA and CPO indices are asset weighted except for two indices, which are equal weighted.

These benchmarks are broad-based indices which are used for comparative purposes only and have been selected as they are well known and are easily recognizable by investors. However, the investment activities and performance of the Funds discussed herein may be considerably more volatile than the performance of any of the referenced indices. Unlike these benchmarks, the portfolios of each of the Funds portrayed herein are actively managed. Furthermore, each of the Funds invests in substantially fewer securities than the number of securities comprising each of these benchmarks. There is no guarantee that any of the securities invested in by any of the Funds comprise these benchmarks.

Portfolio Disclaimer

The percentages set forth above are estimates and actual percentages may vary from time-to-time. Please see the Funds' private placement memorandum for a description of the investment sectors (or capital allocations) set forth above, as well as the risks associated therewith. Please note that the Funds may elect to invest assets in investment sectors that are different than those depicted above which may entail additional and/or different risks. Although we have attempted to fairly categorize each security holding by major industry type, please note that: 1) every security beneficially owned by the Funds does not necessarily lend itself to strict classification; and 2) certain information included in this presentation has been provided by third parties and although we believe it is reliable, may not have been independently verified for accuracy or completeness. Accordingly, this data is being provided to you for informational purposes only (e.g., should not be relied upon for any official purpose). Performance of the Funds will depend in large part on the investment manager's ability to identify and access superior investments and investment professionals to successfully effectuate investment ideas and balance assets to maximize return to the Funds while minimizing its risk. The actual investments or capital allocations in the Funds may or may not be the same or in the same proportion as those shown above.

M A R I N E R

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State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD

Relating to Convertible Fixed Income Investment Guidelines
Resolution 2010-01

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 the funds of the Public Employees' Retirement System, Teachers' Retirement System, Judicial Retirement System, and Alaska National Guard and Naval Militia Retirement System; 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 convertible fixed income securities; and

WHEREAS, the Board will establish and from time to time as necessary modify guidelines for convertible fixed income securities.

NOW THEREFORE BE IT RESOLVED, THAT THE ALASKA RETIREMENT MANAGEMENT BOARD adopts the Convertible Fixed Income Investment Guidelines attached hereto and made a part hereof, regarding investment in convertible fixed income securities. This resolution repeals and replaces Resolution 2009-28.

DATED at Juneau, Alaska this _____ day of February, 2010.

Chair

ATTEST:

Secretary

ALASKA RETIREMENT MANAGEMENT BOARD

CONVERTIBLE FIXED INCOME AND PREFERRED STOCK INVESTMENT PORTFOLIO GUIDELINES

Investment Objectives

The investment objective is to capture most of the performance of equities during rising markets, while outperforming equities in flat or down markets by investing in convertible securities. The Manager is expected to add value versus the Merrill Lynch Yield Alternative Index (VYLD) (“Benchmark”) by investing in U.S. and non-U.S. convertible securities.

The manager may also hold cash. The manager may add value versus the Benchmark by 1) selecting convertible securities considered to be undervalued because of better-than-expected corporate fundamentals or other features of the particular issue; 2) over or under-weighting sectors relative to that of the Benchmark weights; 3) investing in privately placed convertible debt; 4) investing in non-U.S. convertible issues. The Manager is expected to maximize returns within reasonable and prudent levels of risk versus that of the Benchmark and to control costs of administering and managing the portfolio.

Securities Guidelines and Restrictions

- The Manager is responsible for implementing and adhering to risk control processes as stated in its investment contract.
- The Manager may invest in investment or non-investment grade rated convertible securities, which include 1) convertible bonds; 2) convertible preferred stock; 3) bonds or preferred stock with warrants; and 4) zero- and low-coupon convertibles. The ratings for investment and non-investment grade credit ratings are as defined below:

| | Investment Grade | Non-Investment Grade |
|-------------------------|------------------|----------------------|
| Standard & Poors' (S&P) | BBB- or higher | BB+ or lower |
| Moody Investor Services | Baa3 or higher | Ba1 or lower |
| Fitch | BBB- or higher | BB+ or lower |

In the case of a split rating by two or more of the rating agencies, the lower rating shall be utilized.

- Non-rated convertible securities are permitted provided that the Manager is able to assign an appropriate credit rating consistent with the criteria used by the agencies stated above. Non-rated securities are limited to 35% of the total market value of the portfolio. Non-rated securities to which the Manager assigns a non-investment grade rating are subject to the below investment grade limitation.
- The weighted-average rating of the portfolio shall not fall below the S&P rating equivalent of B. The Manager shall not purchase any security with a credit rating at or below CCC- by S&P and C3 by Moody's. However, the Manager may continue to hold securities downgraded below CCC- by S&P and C3 by Moody's if, in the opinion of the Manager, such an investment is considered appropriate given the ARMB's investment objective.
- Common shares obtained as a result of conversion must be liquidated within 20 trading days after conversion. This period may be extended upon approval by the Chief Investment Officer.
- The Manager shall not purchase any security, which would cause more than 5% of the portfolio assets at market at the time of purchase to be invested in the securities of any one issuer.
- The Manager shall not purchase any security, which would cause more than 25% of the invested assets at market to be invested in securities of issuers primarily engaged in any one industry.
- The Manager shall not purchase the securities of a company for the purpose of acquiring control or management thereof.
- The Manager shall not purchase shares of mutual funds or commingled vehicles.
- The Manager shall not make short sales of securities or maintain a short position, nor purchase securities on margin.
- The Manager is not permitted to lend or pledge securities in the account.
- Non-US securities are permitted provided that the security is dollar denominated. These securities are limited to 25% of the portfolio at

market. Issuers included in the Merrill Lynch US All Convertible Index (VXA0) will be considered domestic/US for purposes of the account restrictions.

- The use of derivative securities including (but not limited to), futures, options, & swaps is prohibited.

Any changes deemed necessary by the Chief Investment Officer or Manager will be fully discussed and agreed upon by both before taking effect. Any such changes will then be incorporated in writing into the Guidelines.

ALASKA RETIREMENT MANAGEMENT BOARD

CONVERTIBLE FIXED INCOME AND PREFERRED STOCK INVESTMENT PORTFOLIO GUIDELINES

Investment Objectives

The investment objective is to capture most of the performance of equities during rising markets, while outperforming equities in flat or down markets by investing in convertible securities. The Manager is expected to add value versus the Merrill Lynch Yield Alternative Index (VYLD) (“Benchmark”) by investing in U.S. and non-U.S. convertible securities. The manager may also hold cash. The manager may add value versus the Benchmark by 1) selecting convertible securities considered to be undervalued because of better-than-expected corporate fundamentals or other features of the particular issue; 2) over or under-weighting sectors relative to that of the Benchmark weights; 3) investing in privately placed convertible debt; 4) investing in non-U.S. convertible issues. The Manager is expected to maximize returns within reasonable and prudent levels of risk versus that of the Benchmark and to control costs of administering and managing the portfolio.

Securities Guidelines and Restrictions

- The Manager is responsible for implementing and adhering to risk control processes as stated in its investment contract.
- The Manager may invest in investment or non-investment grade rated convertible securities, which include 1) convertible bonds; 2) convertible preferred stock; 3) bonds or preferred stock with warrants; and 4) zero- and low-coupon convertibles. The ratings for investment and non-investment grade credit ratings are as defined below:

| | Investment Grade | Non-Investment Grade |
|-------------------------|------------------|----------------------|
| Standard & Poors’ (S&P) | BBB- or higher | BB+ or lower |
| Moody Investor Services | Baa3 or higher | Ba1 or lower |
| Fitch | BBB- or higher | BB+ or lower |

In the case of a split rating by two or more of the rating agencies, the lower rating shall be utilized.

- Non-rated convertible securities are permitted provided that the Manager is able to assign an appropriate credit rating consistent with the criteria used by the agencies stated above. Non-rated securities are limited to 35% of the total market value of the portfolio. Non-rated securities to which the Manager assigns a non-investment grade rating are subject to the below investment grade limitation.
- The weighted-average rating of the portfolio shall not fall below the S&P rating equivalent of B. The Manager shall not purchase any security with a credit rating at or below CCC- by S&P and C3 by Moody's. However, the Manager may continue to hold securities downgraded below CCC- by S&P and C3 by Moody's if, in the opinion of the Manager, such an investment is considered appropriate given the ARMB's investment objective.
- Common shares obtained as a result of conversion must be liquidated within 20 trading days after conversion. This period may be extended upon approval by the Chief Investment Officer.
- The Manager shall not purchase any security, which would cause more than 5% of the portfolio assets at market at the time of purchase to be invested in the securities of any one issuer.
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- The Manager shall not purchase the securities of a company for the purpose of acquiring control or management thereof.
- The Manager shall not purchase shares of mutual funds or commingled vehicles.
- The Manager shall not make short sales of securities or maintain a short position, nor purchase securities on margin.
- The Manager is not permitted to lend or pledge securities in the account.
- Non-US securities are permitted provided that the security is dollar denominated. These securities are limited to 25% of the portfolio at

market. Issuers included in the Merrill Lynch US All Convertible Index (VXA0) will be considered domestic/US for purposes of the account restrictions.

- The use of derivative securities including (but not limited to), futures, options, & swaps is prohibited.

Any changes deemed necessary by the Chief Investment Officer or Manager will be fully discussed and agreed upon by both before taking effect. Any such changes will then be incorporated in writing into the Guidelines.

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT: Delisted and/or Deregistered Securities
Resolution 2010-02
DATE: February 25, 2010

ACTION: X
INFORMATION:

BACKGROUND:

The “Investment Guidelines for Domestic and International Equities” were most recently revised and approved by the Alaska Retirement Management Board (ARMB) in June 2009.

STATUS:

The investment guidelines set forth permissible equity investments; including equity and equity-related securities listed on recognized exchanges. Occasionally, a portfolio may acquire ownership of a delisted and/or deregistered security through a conversion, spin-off, bankruptcy, or other corporate action. These securities typically have little liquidity and relatively high costs associated with their disposal. As such, the portfolio manager may prefer to hold the security if it is believed to have potential value or until liquidity has improved and a sale is deemed beneficial or cost effective to the portfolio.

Staff is recommending that delisted and/or deregistered securities be included as permissible equity investments in the Investment Guidelines for Domestic and International Equities.

RECOMMENDATION:

That the Alaska Retirement Management Board adopt Resolution 2010-02 approving the revised Investment Guidelines for Domestic and International Equities to include the ownership of delisted and/or deregistered securities not acquired via direct purchase.

Attachment: Revised Investment Guidelines for Domestic and International Equities

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to Investment Guidelines for
Domestic and International Equities

Resolution 2010-02

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 the funds of the Public Employees' Retirement System, Teachers' Retirement System, Judicial Retirement System, and Alaska National Guard and Naval Militia Retirement System; 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 domestic and international equities; and

WHEREAS, the Board will establish and from time to time as necessary modify guidelines for domestic and international equities.

NOW THEREFORE BE IT RESOLVED THAT THE ALASKA RETIREMENT MANAGEMENT BOARD adopt the Investment Guidelines for Domestic and International Equities, attached hereto and made a part hereof, regarding investment in domestic and international equities.

This resolution repeals and replaces Resolution 2009-20.

DATED at Juneau, Alaska this ____ day of February, 2010.

Chair

ATTEST:

Secretary

ALASKA RETIREMENT MANAGEMENT BOARD (ARMB)

INVESTMENT GUIDELINES FOR DOMESTIC AND INTERNATIONAL EQUITIES

A. Purpose. The portfolio will have a primary emphasis on diversification to minimize risk.

B. Investment Structure. Permissible equity investments include:

1. Common and preferred stock of corporations incorporated in the United States that are listed on the New York or American exchanges or are NASDAQ listed;
2. International equity and equity related securities listed on recognized stock exchanges, or securities of closed-end funds listed on other recognized stock exchanges and whose primary purpose is to invest in securities listed on recognized stock exchanges and where recognized stock exchanges are those acknowledged by a manager as a source of prudent investments for the fund;
3. American Depository Receipts, American Depository Securities and Global Depository Securities; and
4. Convertible Debentures; and
5. Publicly traded partnerships listed on recognized stock exchanges, where recognized stock exchanges are those acknowledged by a manager as a source of prudent investments for the fund; **and**
6. **Securities delisted and/or deregistered, owned as a result of a corporate action and not a direct purchase, and held at a value deemed to be de minimis.**

C. External Equity Management. The manager must represent and warrant:

1. that it is an "investment advisor" or "bank" as defined in the Investment Advisors Act of 1940 as amended; and
2. that it has completed, obtained and performed all registrations, filings, approvals, authorizations, consents or examinations required by any government or governmental authority for acts contemplated by this contract;
3. that it is a "Fiduciary", as that term is defined in Section 3(21)(a)(ii) of ERISA with respect to the securities, and that it will discharge its duties with respect to the securities solely in the interest of the ARMB and the beneficiaries of the funds administered by the ARMB; and
4. that it has and will maintain all forms of insurance and other prerequisites required by the ARMB.

D. Investment Management Service to be Performed. From time to time, equity managers shall invest and reinvest the cash and securities allocated to it and deposited in their account, without distinction between principal and income, in a portfolio consisting of stocks or other securities when market conditions warrant alternatives to stock. These securities will be selected and retained by the manager solely on the basis of their independent judgment relating to economic conditions, financial conditions, market timing, or market analysis, and will not be subject to direction from the ARMB; provided, however, that in the event the aggregate total of any security held by the ARMB exceeds five percent (5%) of total shares outstanding, the ARMB may direct portfolio managers to sell securities to the extent the aggregate is below five percent (5%). Other securities shall be limited to:

1. obligations of the United States government;
2. obligations of United States government agencies;
3. certificates of deposit;
4. corporate debt obligations;
5. commercial paper;
6. warrants;
7. bankers acceptances; and
8. repurchase agreements.

E. Managers will be Authorized. Managers are authorized to invest or reinvest or dispose of any cash or securities held in their account or invest the proceeds of any disposition, provided that:

1. no more than ten percent of the voting stock of any corporation is acquired or held;
2. certificates of deposit have been issued by domestic United States banks or trust companies which are members of the Federal Deposit Insurance Corporation, and are readily saleable in a recognized secondary market for such instruments;
3. corporate debt obligations are rated A or better by Moody's, Standard & Poor's or Fitch rating services (Note: This rating restriction does not apply to convertible debentures);
4. commercial paper bears the highest rating assigned by Moody's Standard & Poor's Fitch rating services;

5. bankers' acceptances must have been drawn on and accepted by United States banks which have capital and surplus of at least \$200 million each;
6. repurchase agreements must be secured by the debt obligations set forth in 2 through 5 above;
7. future contracts for sale of investments or for the sale of currencies may be entered into only for the purpose of hedging an existing ownership in these investments;
8. futures and options will be authorized for the purposes of implementing a portfolio reallocation to gain immediate exposure to the appropriate country weighting:
 - a. contracts are traded on recognized exchanges, or that OTC instruments are traded with AA rated or equivalent counterparts and no contracts exceed a period of twelve months;
 - b. futures and options are not used to leverage the portfolio; and
 - c. all futures and options positions must be reported to the client each month. The report must show both the nominal position and the "economic impact" of all derivative positions;
9. purchases in commodities or the commodities of futures market of any kind are specifically prohibited.

F. Cash Held in Portfolio. Managers are expected to maintain fully invested equity portfolios. The ARMB considers a portfolio to be fully invested as long as cash levels are below a maximum of 5 percent for small capitalization and international equity managers and 3 percent for all other equity managers, calculated using a 10-day moving average. In implementing this portion of the equity guidelines, the Chief Investment Officer will consider any cash in an individual equity account in excess of the maximum to be available for use as a funding source for other ARMB needs. Any manager that expects to exceed the maximum cash level in the short-term as the result of a specific strategy must notify ARMB in writing in advance. Such notice will temporarily exempt the manager from the maximum cash rebalancing threshold. Staff shall regularly report all equity manager net cash holdings.

G. Performance Standards. Managers are expected to have returns, over time, in excess of the appropriate benchmark, net of fees.

H. Brokerage and Commissions. In carrying out its functions, a manager will use its best efforts to obtain prompt execution of orders at the most favorable prices reasonably obtainable, and in doing so, will consider a number of factors, including, without

limitation, the overall direct net economic result to the ARMB (including commissions, which may not be the lowest available but which ordinarily will not be higher than the generally prevailing competitive range), the financial strength and stability of the broker, the efficiency with which the transaction is effected, the ability to effect the transaction at all where a large block is involved, the availability of the broker to stand ready to execute possible difficult transactions in the future and other matters involved in the receipt of “brokerage and research services” as defined in and in compliance with Section 28(e) of the Securities Exchange Act of 1934, as amended, and regulations thereunder.

Provided that, in the judgment of the manager, purchase or sale execution and transactions are competitive, approximately 30% of all listed large capitalization domestic equity trades will be executed with a brokerage firm participating in a commission recapture program with the ARMB.

The Chief Investment Officer will evaluate and report the commission recapture program to the ARMB that will include:

1. total commission dollars recaptured;
2. actual percentage of commissions recaptured; and
3. a full analysis of the commission recapture program with recommendations for expanding the program.

I. Voting and Other Action. The managers shall vote any or all of the securities held by or for the account of the ARMB, unless written instructions to the contrary have been proved by ARMB. In voting securities of the ARMB, the managers shall act prudently in the interest and for the benefit of the ARMB and the beneficiaries of the funds administered by the ARMB. The manager is to furnish, on an annual basis, copies of the contractor’s policy and voting records in regards to voting proxies.

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State of Alaska Retirement Systems

*Economic Assumption Review
Additional Information
February 25, 2010*

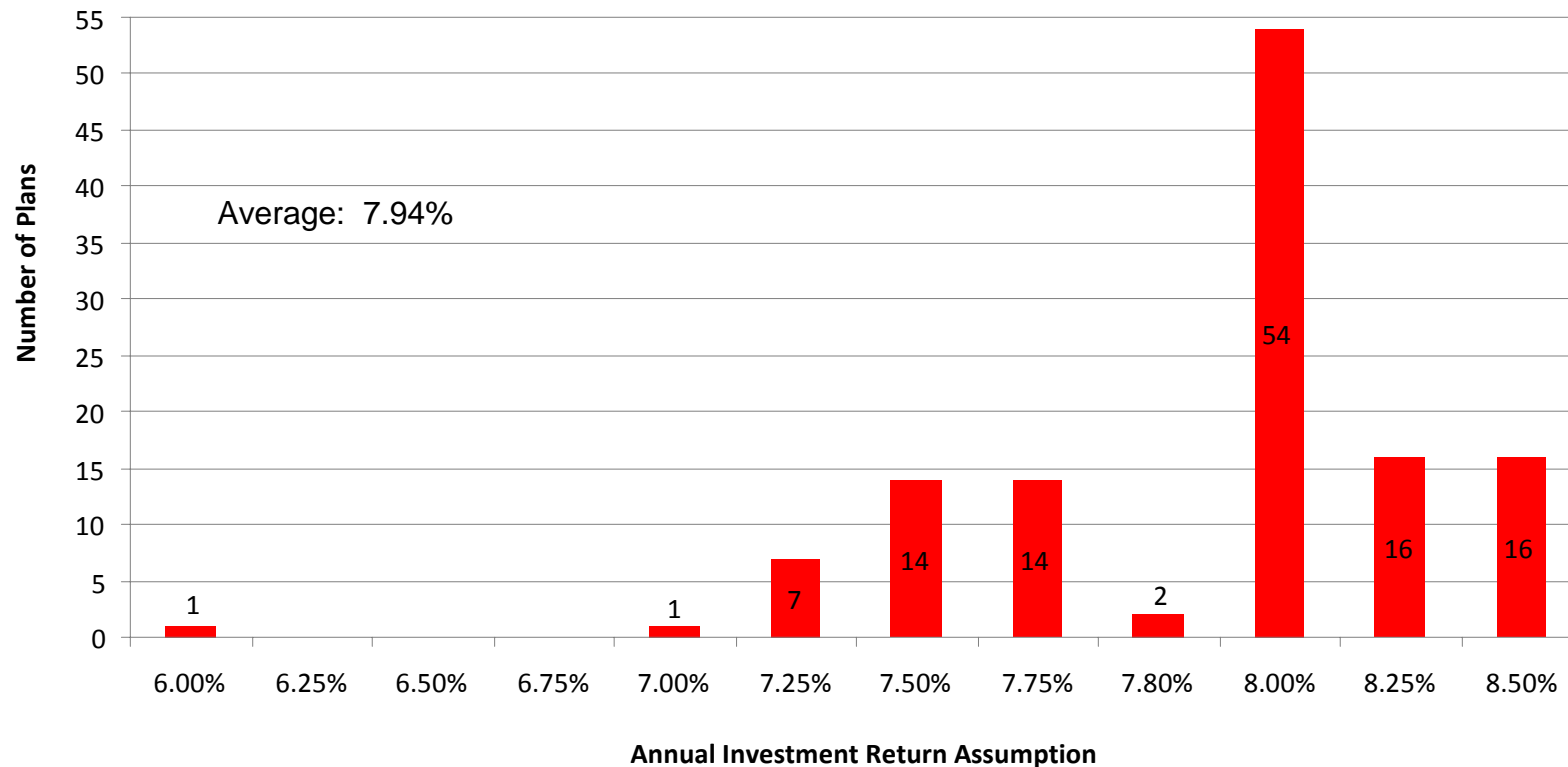
Agenda

- Investment return assumption
- Inflation assumption
- Changes in investment return and/or inflation assumption
- Real Rate of Return assumption
- Comparison between standard deviation (risk) of asset allocation and real rate of return assumption

Process

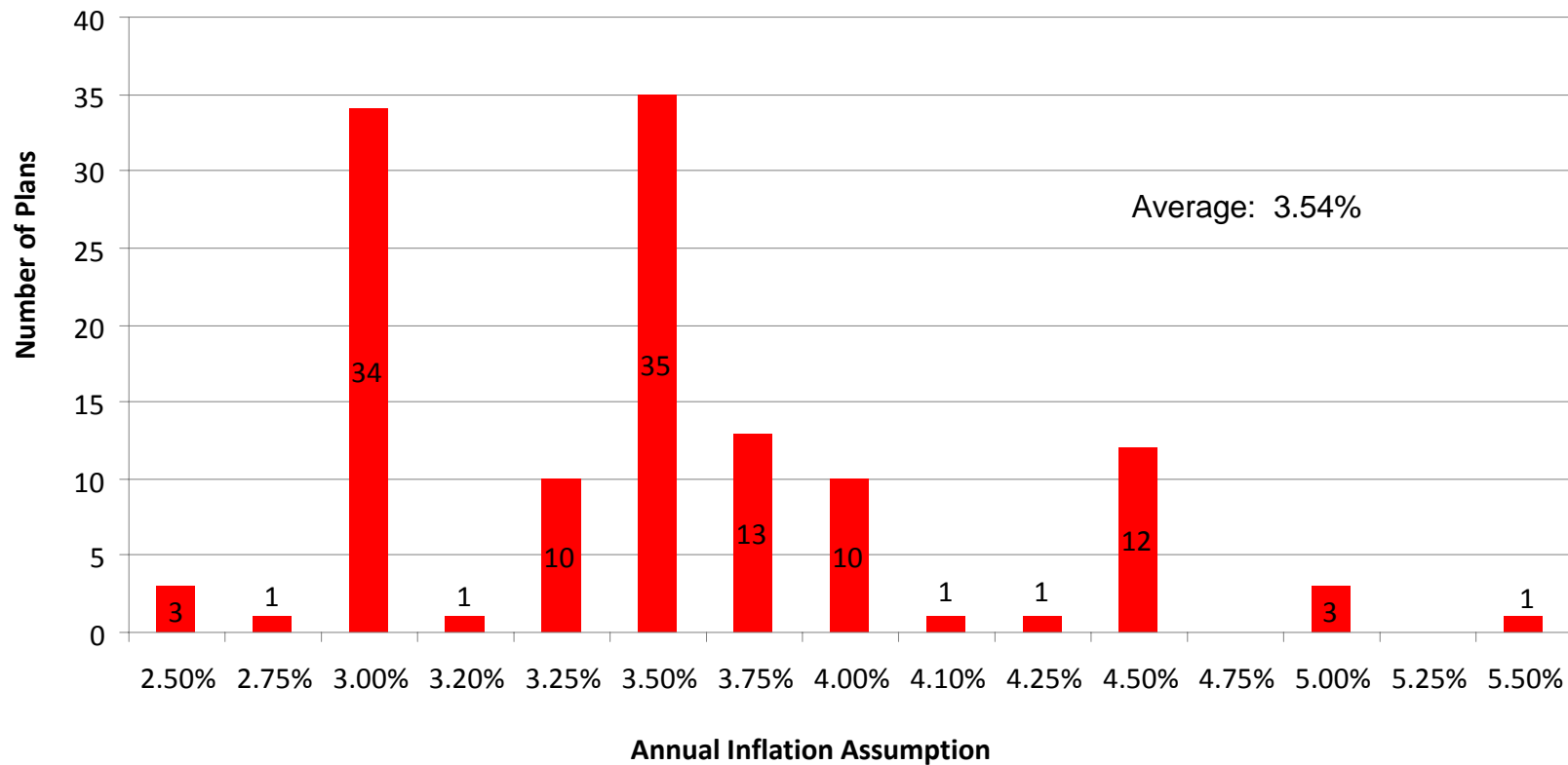
- Provided the ARM Board with the impact of changing investment return and inflation assumptions at the December meeting. Further information was requested
- Compared Alaska PERS/TRS economic assumptions with other large public pension systems
- Data based on NASRA Public Fund Survey of 125 large public pension plans
- 2009 survey data covers actuarial valuation information through 2008
- Assumption changes based on comparison between 2006 and 2009 surveys
- Risk calculated using Buck assumptions for asset class standard deviations and NASRA asset allocation survey data

Investment Return Assumption Based on 125 Plans Surveyed



- PERS and TRS are among surveyed plans (8.25%).
- 43% of plans surveyed use 8% investment return rate.
- 69% of plans surveyed use an investment return rate between 7.75% and 8.25%.
- 13% of plans surveyed use a higher investment return assumption than PERS and TRS.
- 74% of plans surveyed use a lower investment return assumption.

Inflation Assumption Based on 125 Plans Surveyed

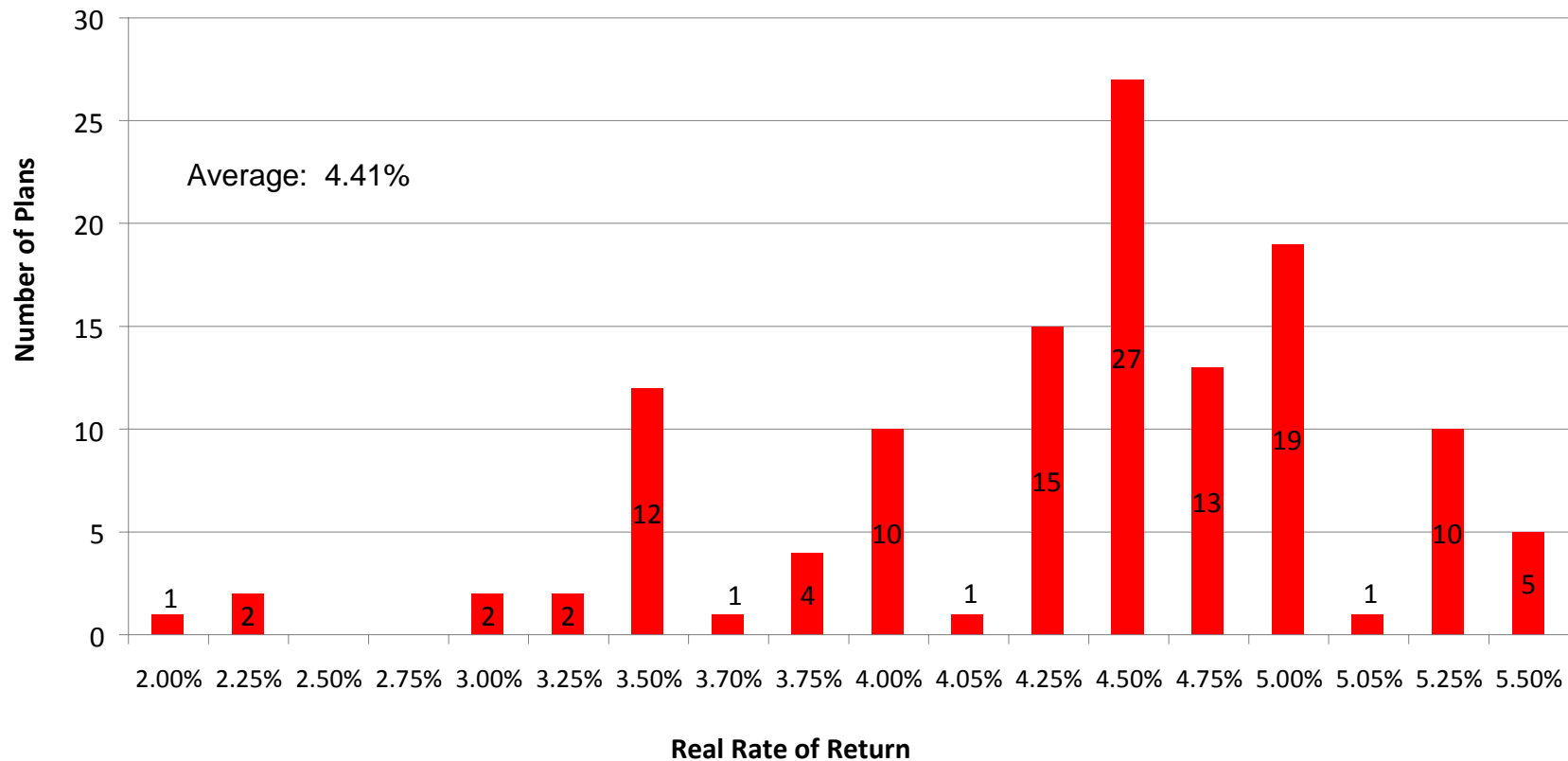


- PERS and TRS among surveyed plans (3.50%).
- 82% of plans surveyed use an inflation rate assumption between 3.0% and 4.0%, inclusive.
- 39% of plans surveyed have a lower inflation assumption.
- 33% of plans surveyed have a higher inflation assumption.

Trends in Changing Investment Return or Inflation Assumptions

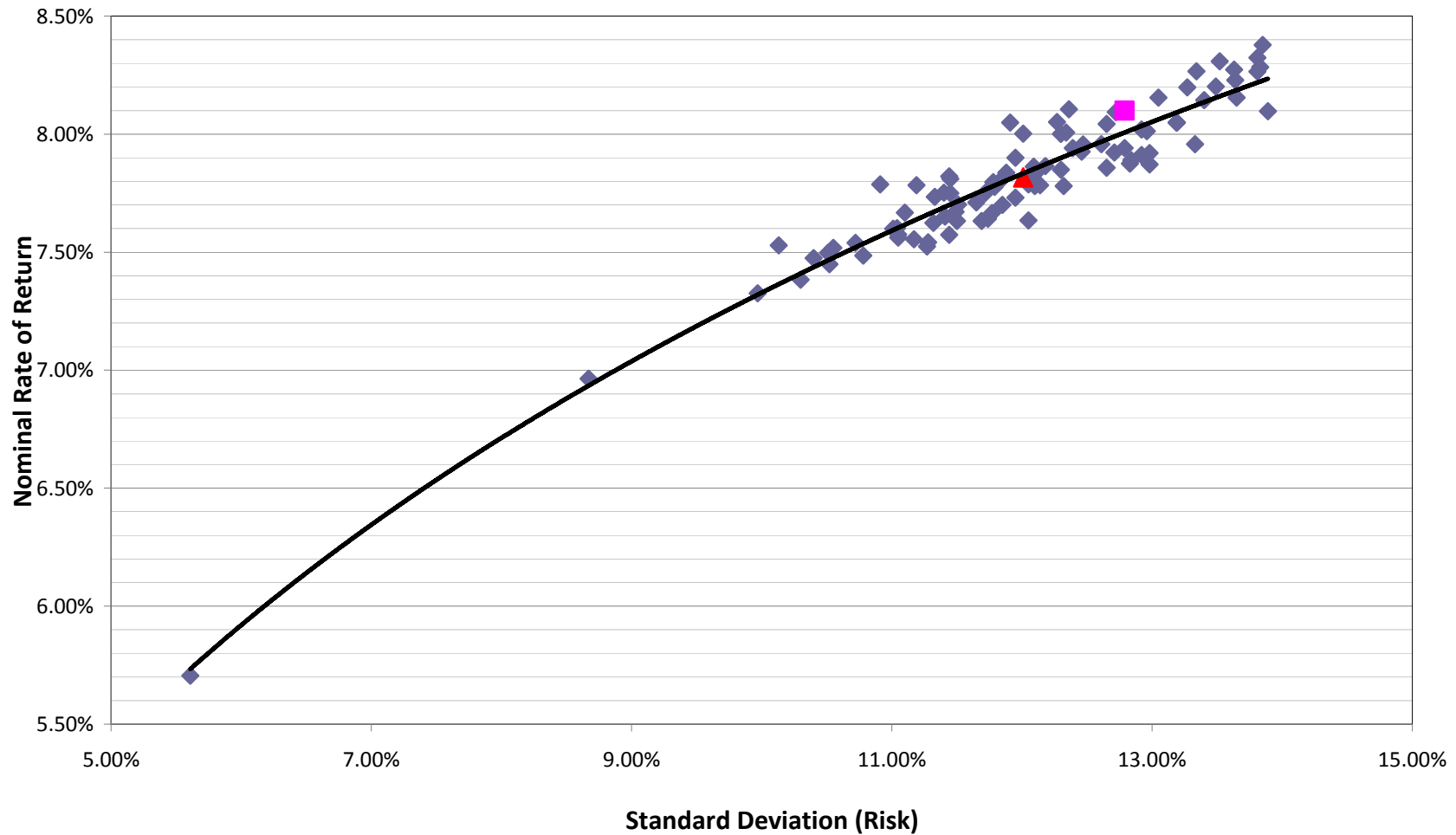
- Since 2006 Survey
 - 12 plans changed the investment return assumption
 - 10 plans decreased on average 0.39%
 - 2 plans increased by 0.25%
 - 31 plans changed the inflation assumption
 - 27 plans decreased on average 0.54%
 - 4 plans increased on average 0.43%

Real Rate of Return Assumption Based on 125 Plans Surveyed



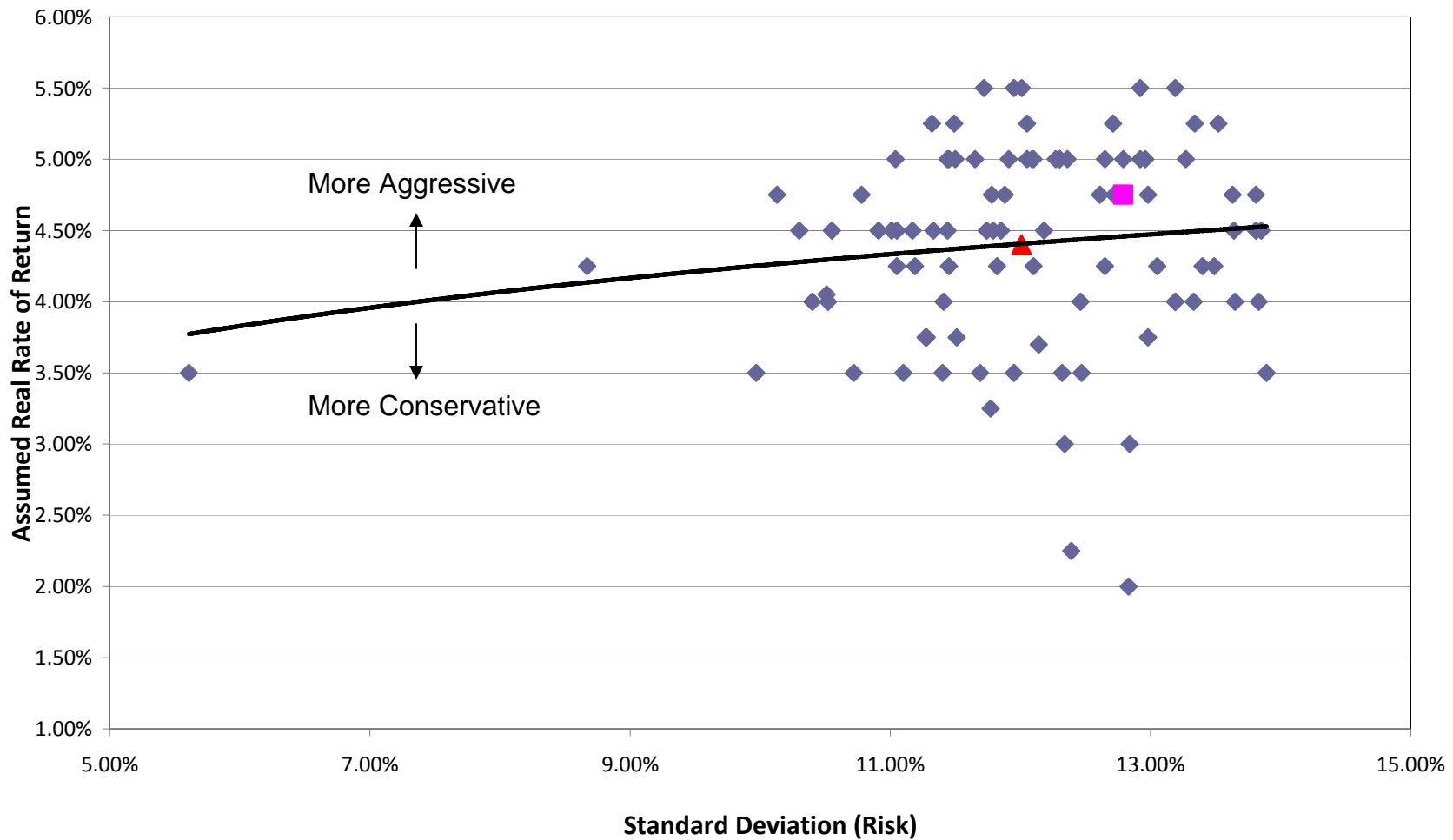
- PERS and TRS among surveyed plans (4.75%).
- 68% of plans have a real rate of return assumption between 4.0% and 5.0%.
- 28% of plans surveyed have a higher real rate of return assumption.
- 62% of plans surveyed have a lower real rate of return assumption.

Risk vs. Expected Nominal Rate of Return Based on 125 Plans Surveyed



◆ 50th Percentile Nominal ROR ■ Alaska PERS/TRS ▲ Average — Regression Line

Risk vs. Assumed Real Rate of Return Based on 125 Plans Surveyed



Questions?

BUCK



ARMB Preliminary Capital Market Projections Outlook for Major Asset Classes Unconstrained Optimization

February 2010

Michael J. O'Leary CFA

Executive Vice President

Callan Associates Inc.



Overview

- **Review Capital Market Projection Process**
 - Long-term orientation
 - Arithmetic vs. Compound Return Projections
- **Discuss current economic & capital setting**
 - Recovery?
 - Inflation risks
 - Major asset classes – starting points
 - “This time it’s different” – It always is
- **Building blocks**
 - Inflation
 - Interest rates
 - Bond Market total returns
 - Taxes
 - Profits
- **Unconstrained Projections**
 - Implications
 - Lower expected returns from here
- **Next steps**
 - Key decisions
 - Reach for return
 - Focus on expected volatility



Why Make Capital Market Projections?

Guiding Objectives

- **Cornerstones of strategic planning – expectations and time horizon.**
- **Projections represent our best thinking regarding the long-term (5- to 10-year) outlook, recognizing our median projections represent the midpoint of a range, rather than a specific number.**
- **Develop results that are readily defensible both for individual asset classes and for total portfolios.**
- **Be conscious of the level of change suggested in strategic allocations for long-term investors**
- **Reflect common sense and recent market developments.**
- **Balance conflicting goals and conflicting opinions.**



Callan's Capital Market Projection Process

Economic outlook drives our projections.

- **Evaluate the current environment and economic outlook for the U.S. and other major industrial countries:**
 - Business cycles, relative growth, inflation.

- **Examine the relationships between the economy and asset class performance patterns.**

- **Examine recent and long-run trends in asset class performance.**

- **Apply market insight:**
 - Consultant experience - Plan Sponsor, Manager Search, Specialty
 - Industry consensus
 - Client Policy Review Committee

- **Test the projections for reasonable results.**



Bigger Than the Average Bear

- **An incredible run from 1982 to 2000.**
- **The secular bear began in 2000.**
- **Two largest bear markets since the depression.**
- **Earnings were negative in Q4 2008 for first time in history.**
- **With the benefit of hindsight, stocks were overpriced.**
- **The market has improved sharply since March, but...**
- **The pace may exceed the economic realities.**
- **The world stock markets have become synchronized and this has important implications for portfolio policies.**
- **Did we use all our dry powder in 2009?**



The Capital Markets

What a Difference One Year Can Make

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | Average Annual Return | | | | | |
|---------------------------------------|-------|-------|-------|-------|--------|-------|-----------------------|-----------------------|----------------------|------------------------|--------------------------|----------------------------|
| | | | | | | | Five Years 2004-08 | Five Years 2005-09 | Ten Years 1999-08 | Ten Years 2000-2009 | Fifteen Years 1994-08 | Fifteen Years 1995-2009 |
| <u>Broad U.S. Stock Market</u> | | | | | | | | | | | | |
| Russell 3000 | 11.95 | 6.12 | 15.72 | 5.14 | -37.31 | 28.34 | -1.95 | 0.76 | -0.80 | -0.20 | 6.36 | 8.13 |
| S&P Super Composite 1500 | 11.78 | 5.66 | 15.34 | 5.47 | -36.72 | 27.25 | -1.89 | 0.69 | -0.76 | -0.20 | 6.59 | 8.29 |
| <u>Large Cap U.S. Stocks</u> | | | | | | | | | | | | |
| Russell 1000 | 11.40 | 6.27 | 15.46 | 5.77 | -37.60 | 28.43 | -2.04 | 0.79 | -1.09 | -0.49 | 6.47 | 8.23 |
| S&P 500 | 10.88 | 4.91 | 15.79 | 5.49 | -37.00 | 26.47 | -2.19 | 0.42 | -1.38 | -0.95 | 6.46 | 8.04 |
| <u>Small Cap U.S. Stocks</u> | | | | | | | | | | | | |
| Russell 2000 | 18.33 | 4.55 | 18.37 | -1.57 | -33.79 | 27.17 | -0.93 | 0.51 | 3.02 | 3.51 | 5.89 | 7.73 |
| S&P 600 Small Cap | 22.65 | 7.68 | 15.11 | -0.30 | -31.07 | 25.57 | 0.88 | 1.36 | 5.18 | 6.35 | 7.80 | 9.80 |
| <u>Non-U.S. Stock Markets</u> | | | | | | | | | | | | |
| EAFE (\$US) | 20.25 | 13.54 | 26.34 | 11.17 | -43.38 | 31.78 | 1.66 | 3.54 | 0.80 | 1.17 | 3.52 | 4.92 |
| MSCI Emerging Markets | 25.95 | 34.54 | 32.59 | 39.78 | -53.18 | 79.02 | 8.02 | 15.88 | 9.31 | 10.11 | 2.73 | 7.34 |
| <u>Fixed Income Markets</u> | | | | | | | | | | | | |
| BC Aggregate | 4.33 | 2.43 | 4.33 | 6.97 | 5.24 | 5.93 | 4.65 | 4.97 | 5.63 | 6.33 | 6.18 | 6.79 |
| Citi Non-US Bonds | 12.14 | -9.21 | 6.95 | 11.45 | 10.11 | 4.38 | 5.97 | 4.46 | 5.59 | 6.60 | 6.47 | 6.37 |
| <u>Cash Market</u> | | | | | | | | | | | | |
| 90-day T-bill | 1.33 | 3.07 | 4.85 | 5.00 | 2.06 | 0.21 | 3.25 | 3.02 | 3.45 | 2.99 | 4.02 | 3.74 |
| <u>Inflation</u> | | | | | | | | | | | | |
| CPI-U* | 3.26 | 3.42 | 2.54 | 4.08 | 0.09 | 2.72 | 2.67 | 2.56 | 2.51 | 2.52 | 2.47 | 2.47 |

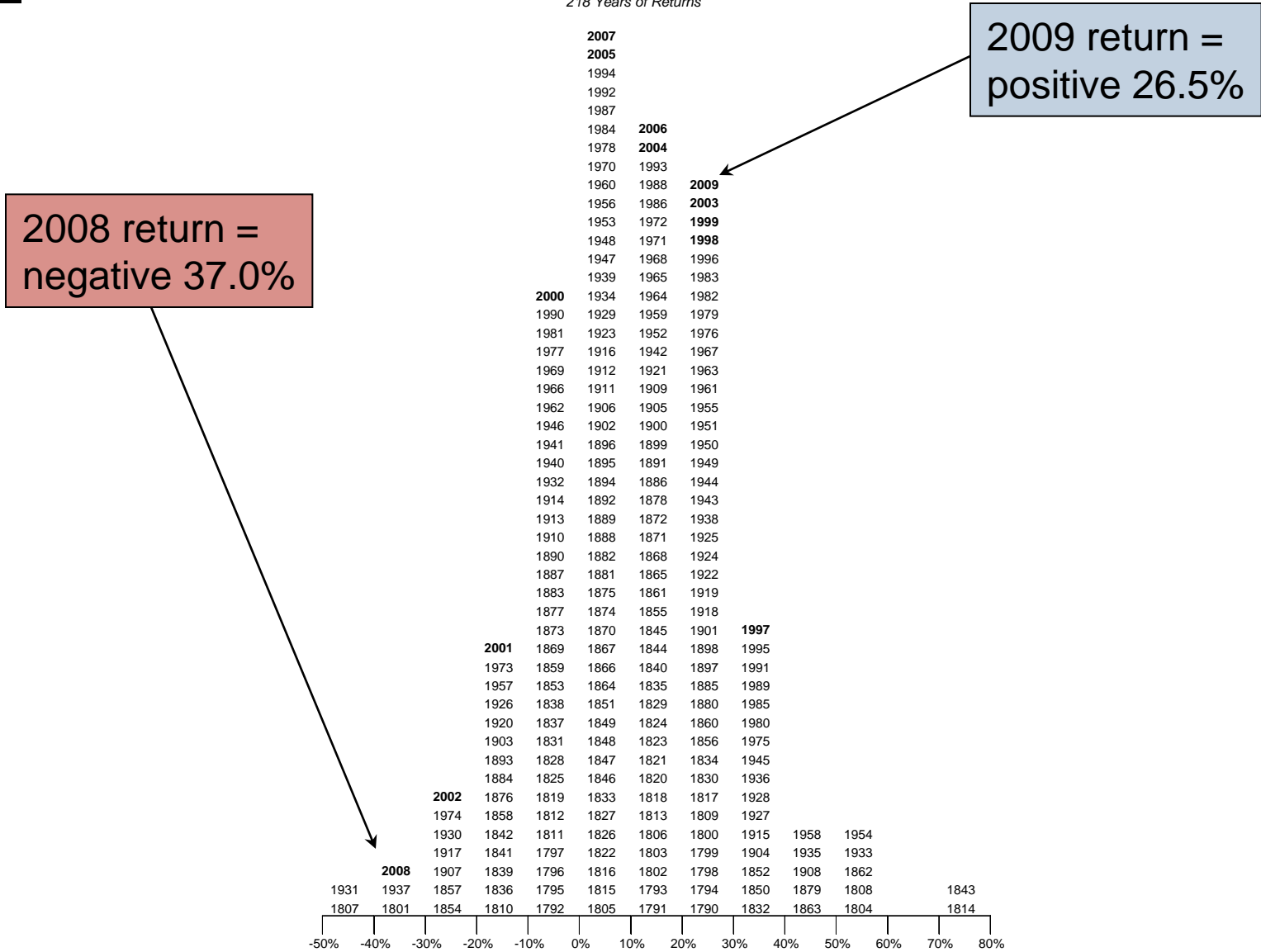
* CPI-U data are measured as year-over-year change.

- Results for 2009 show an incredible rebound in all equity segments.
- Five-year returns through 2008 turned negative for equity, now they are positive. Ten-year results are weak as the tech bubble years continue to roll out of the calculations. Fifteen-year results are still below long-run averages, but are now higher than those of fixed income.



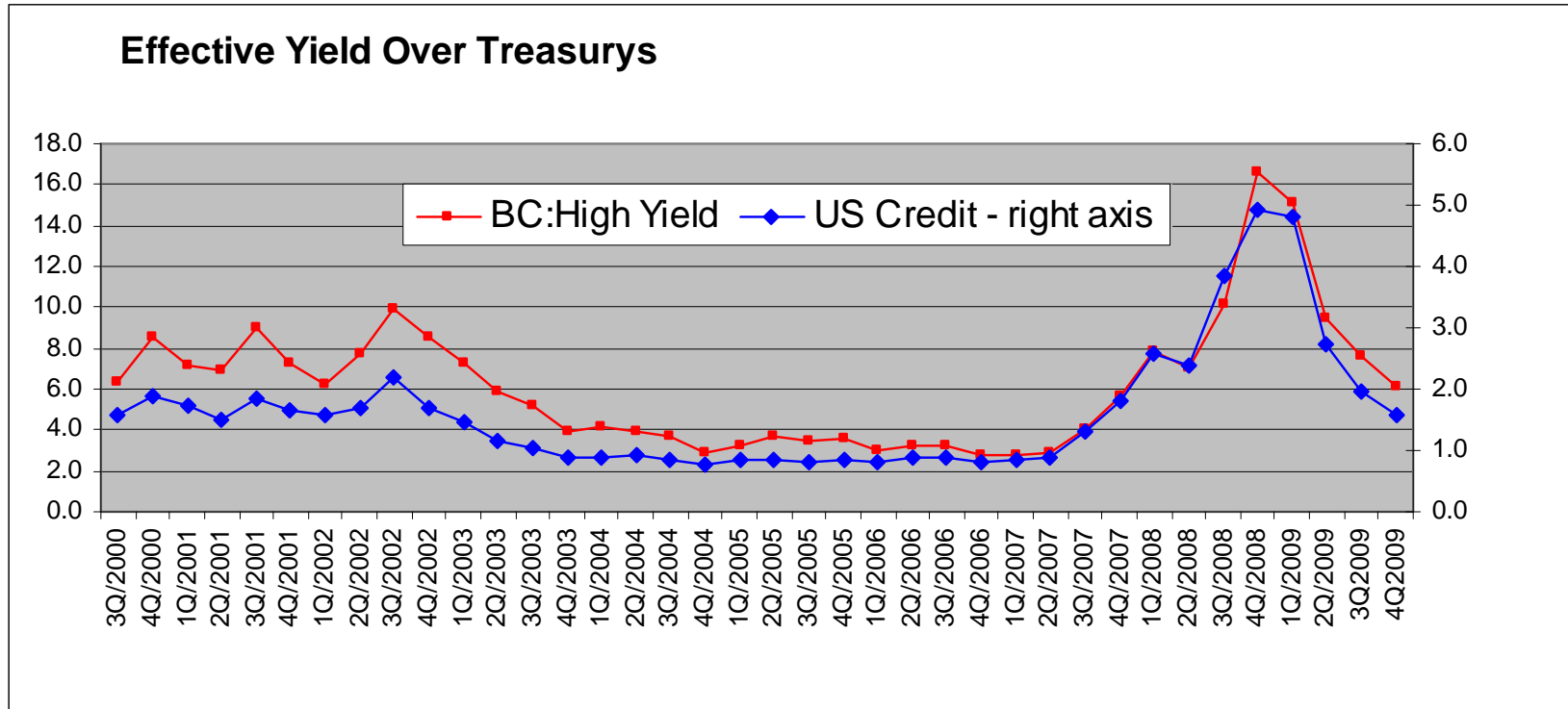
Stock Market Returns by Calendar Year

2008 Performance in Perspective - History of the U.S. Stock Market
218 Years of Returns





Credit Spreads Widened From Record Lows to Record Highs



- Option adjusted spreads based on Barclays Capital Indexes
- U.S. Credit = Investment Grade
- High Yield Index yields on left axis.



The Current Economic Environment

Worst Recession in the Post-War Era

- **Largest global housing and credit bubbles in history have burst.**
- **Households, businesses and governments face tight (or no access to) credit and massive wealth destruction.**
- **The U.S. economy entered recession in December 2007.**
 - Better than expected growth in the first half of 2008 was an illusion conjured by trade and the stimulus package.
- **Housing recession is entering its fourth year.**
 - Housing market woes subtracted at least a percentage point from GDP in each of the last three years.
- **Consumer confidence is deep in recession territory.**
 - Job market is the worst in a generation, piling on to the woes from the housing and stock markets.
- **Rest of the world fell into severe recession, undermining exports.**



The Current Economic Environment

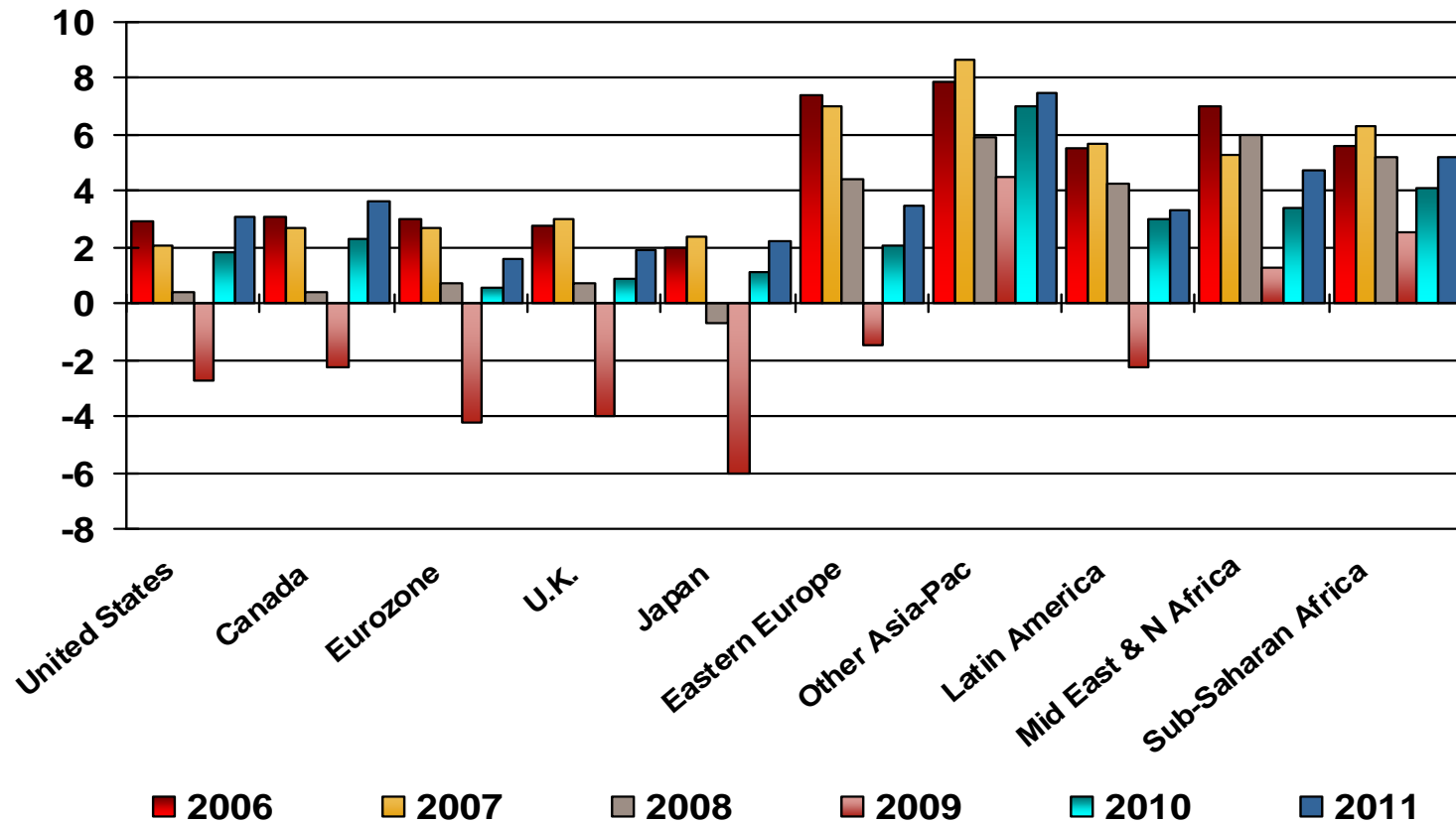
Recovery Under Way, But How Strong?

- **Growth has returned in the second half of 2009, but employment won't revive until the second half of 2010.**
 - Inventory cycle
 - Fiscal and monetary stimulus.
- **Steep recoveries usually follow steep recessions.**
- **However, recoveries after financial crises are usually slow.**
 - Financial stress has been greatly reduced...
 - ...but private credit is still contracting – banks reluctant to lend, households and businesses reluctant to borrow
- **Expect a subdued recovery.**
 - Concerns about whether it will be sustained once the stimulus fades and the inventory cycle is complete.
- **Lower oil prices offer some cushion.**
- **Fed has been doing all it can; major fiscal stimulus is (still) coming.**



Synchronized Sinking of the World's Economies Emerging and Frontier Markets Suffered Less

(Real GDP, percent change)



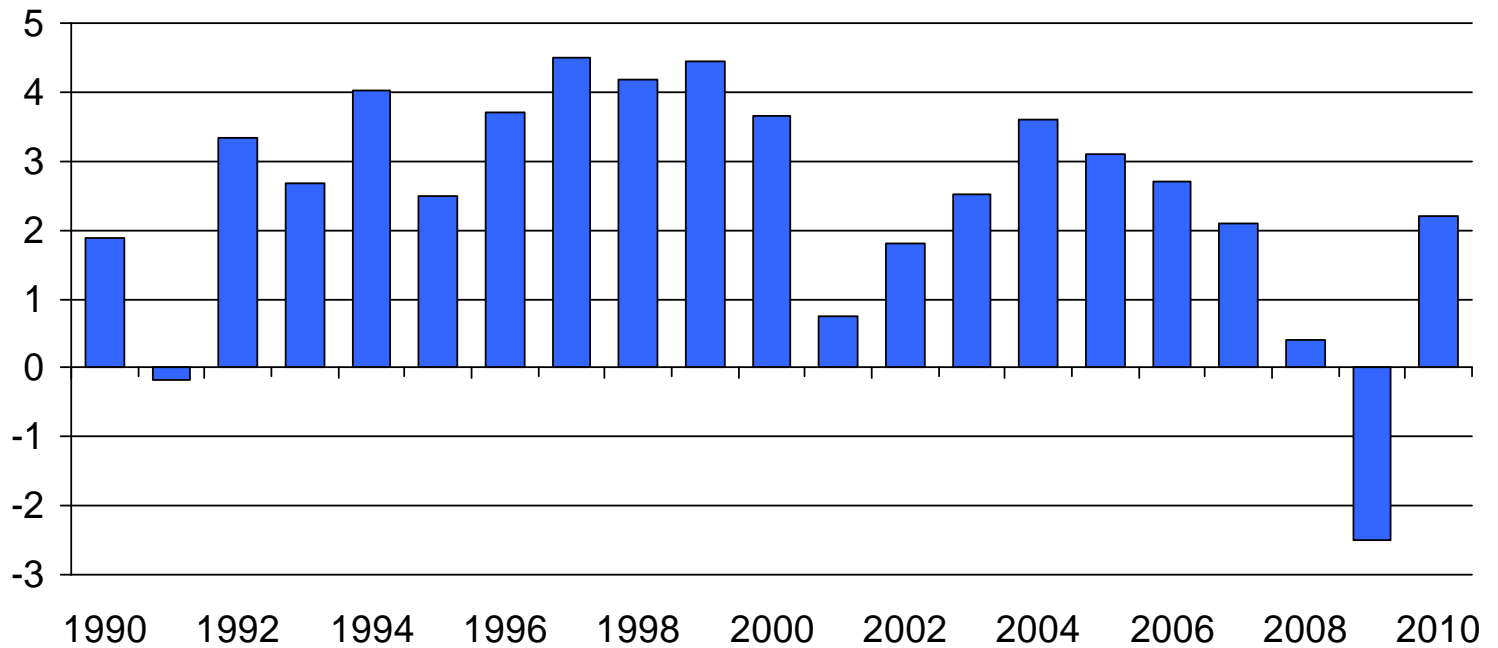
Source: Global Insight and Standard & Poor's



Hard Landing for the U.S. Economy

(Real GDP - annual percent change)

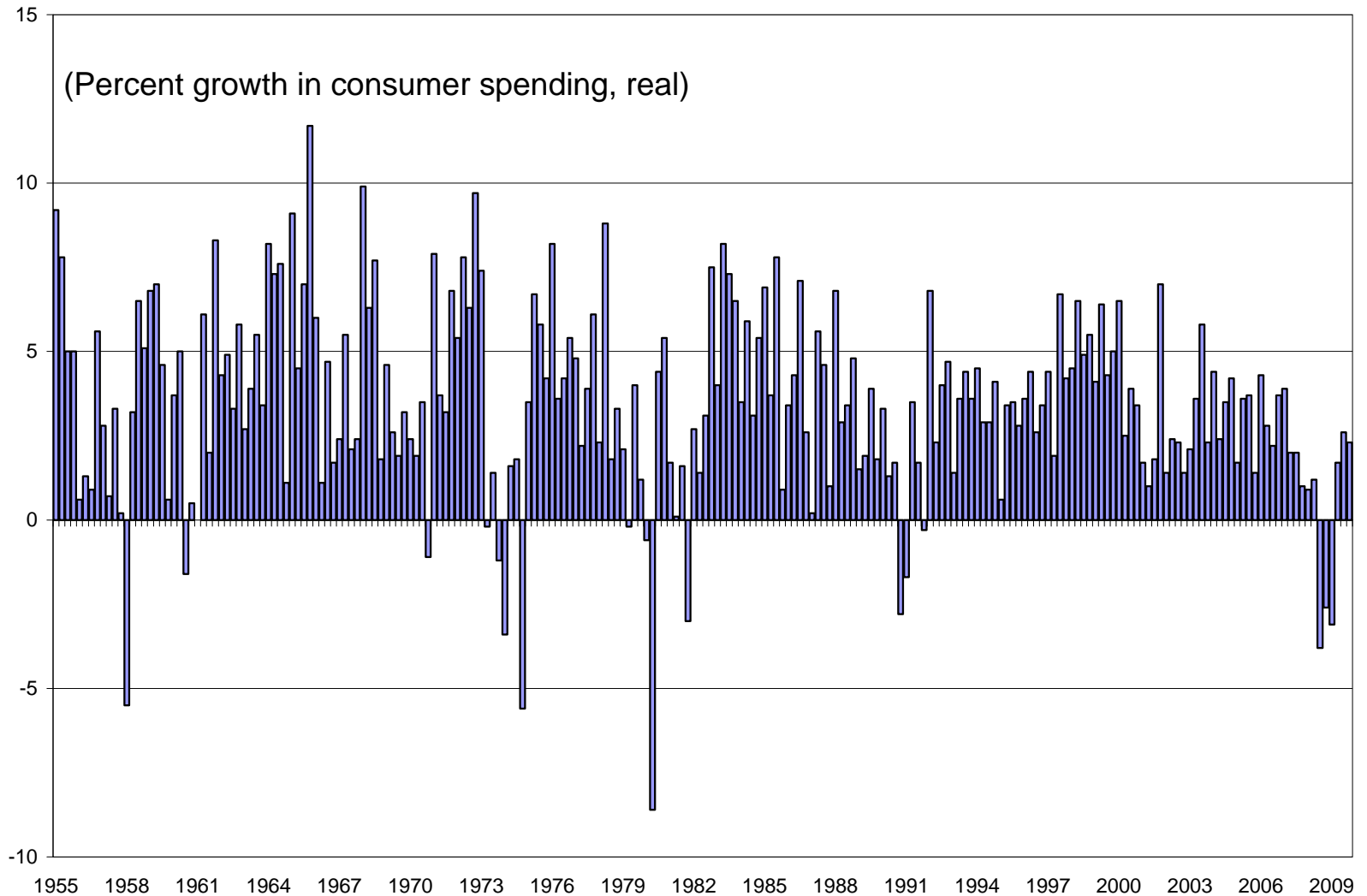
***2010 estimate - Global Insight**



Source: Global Insight



The Worst Period for Consumer Spending Since the Early 1980s



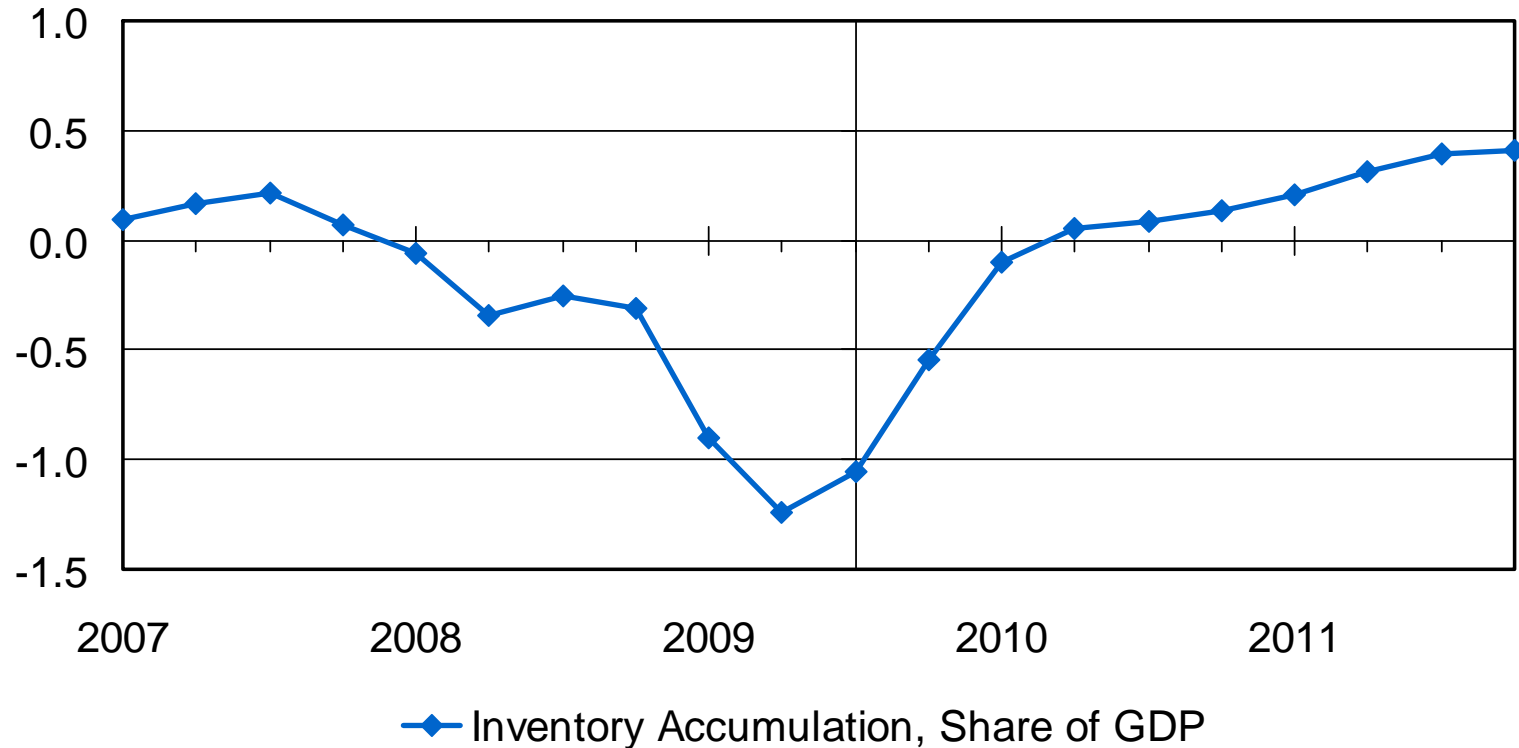
Source: Bureau of Economic Analysis, Callan Associates, Inc., and Global Insight



Inventory Cycle Has Been a Drag On Growth; Will Now Be A Big Plus

(Percent of GDP)

***2010 estimate - Global Insight**

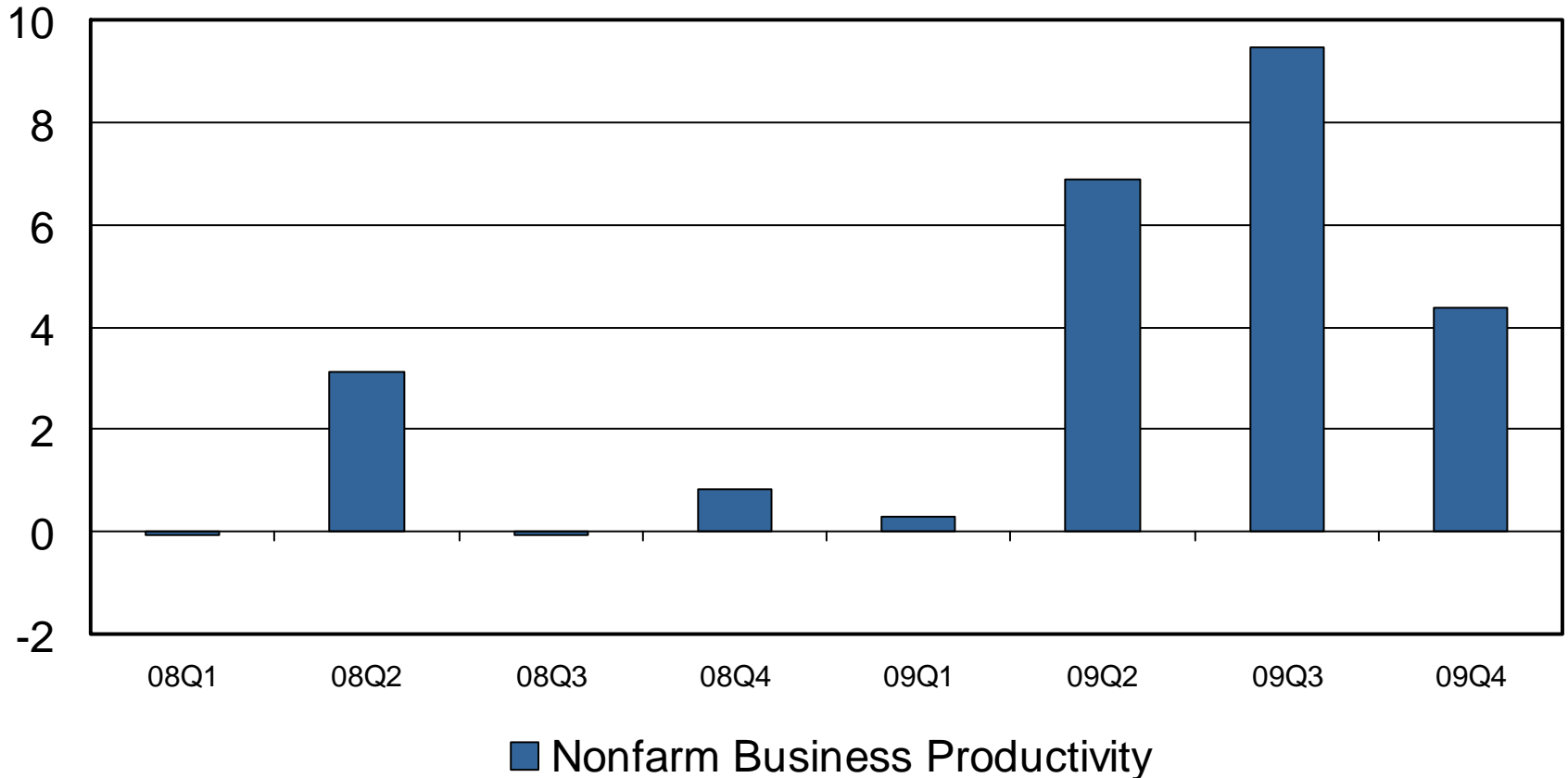


Source: Global Insight



Aggressive Cost-Cutting Has Sent Productivity Soaring: How Far Can It Go?

(Annualized growth rates, percent)



Source: Global Insight

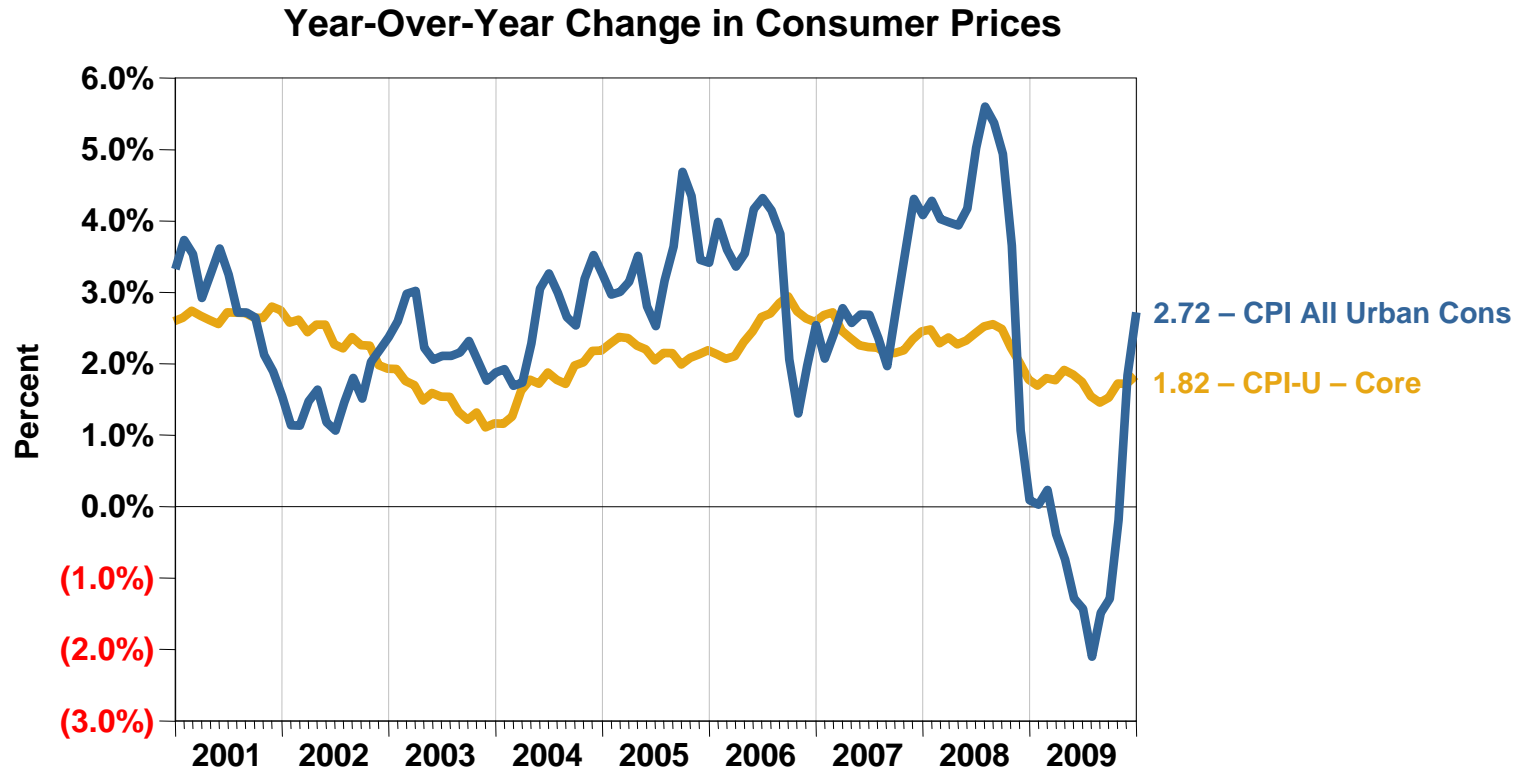


Inflation Concerns Evaporated as the Capital Markets Seize Up

- Soaring energy and commodity prices finally drove inflation above 5% in the second quarter of 2008. Both inflation expectations and actual inflation then reversed sharply as the capital markets shuddered and the global recession became apparent.
- As the credit crisis worsened, the Fed slashed interest rates to 0.25%, a level never seen in the modern U.S. history.
- Deflation occurred, led by the sharp drop in commodity prices and asset price declines.
- Stretched U.S. capacity has eased, and large amounts of spare capacity exist in other parts of the world. China and other Asian countries continue to export deflation.
- Over the longer term – several years out – do we face potential severe inflation stimulus from the Fed policies in response to credit markets (low interest rates and a flood of liquidity) and massive federal spending to stimulate the economy?
- What's missing? Aggregate demand.



Is Rising Inflation an Emerging Threat?



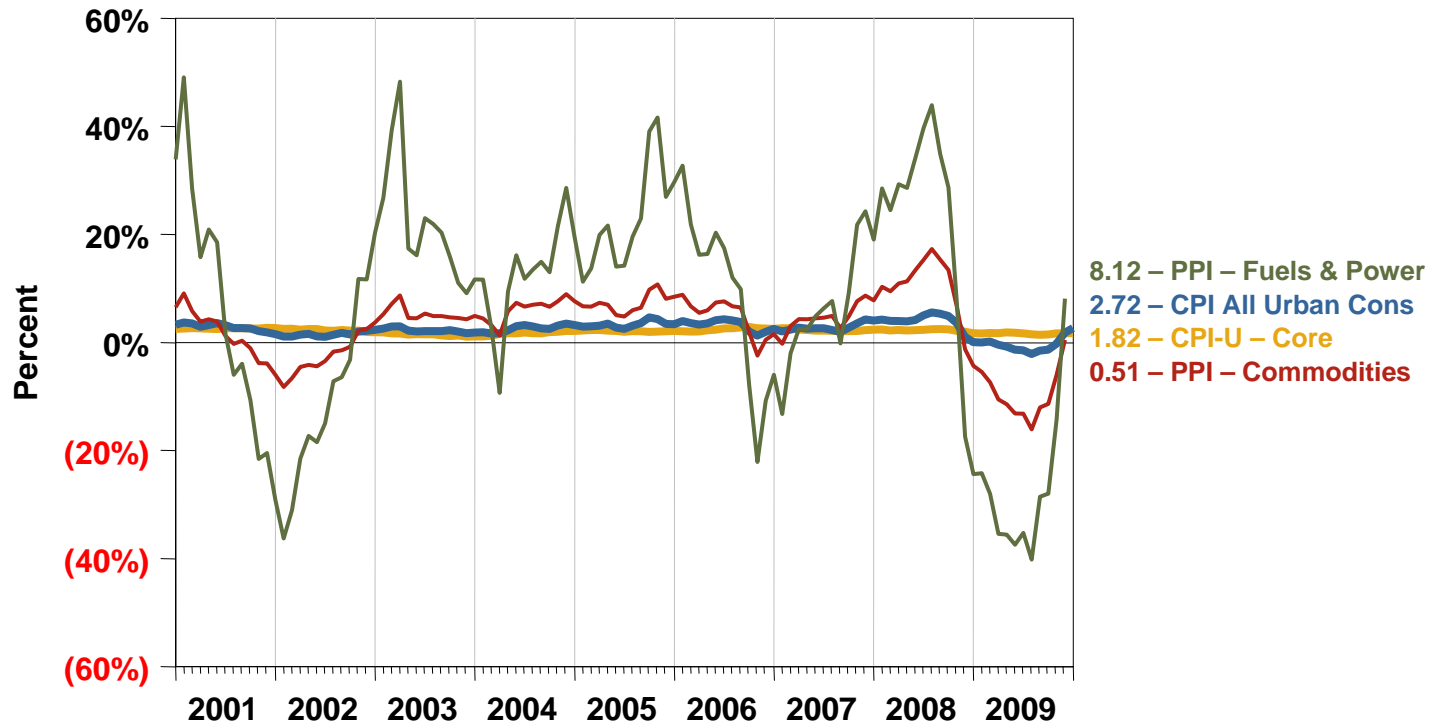
Source: U.S. Department of Labor

- **Current headline inflation was negative until recently, core inflation still quiescent.**
- **Aren't we barely recovering from the worst recession in modern history?**



Is Rising Inflation an Emerging Threat?

Year-Over-Year Change in Consumer Prices



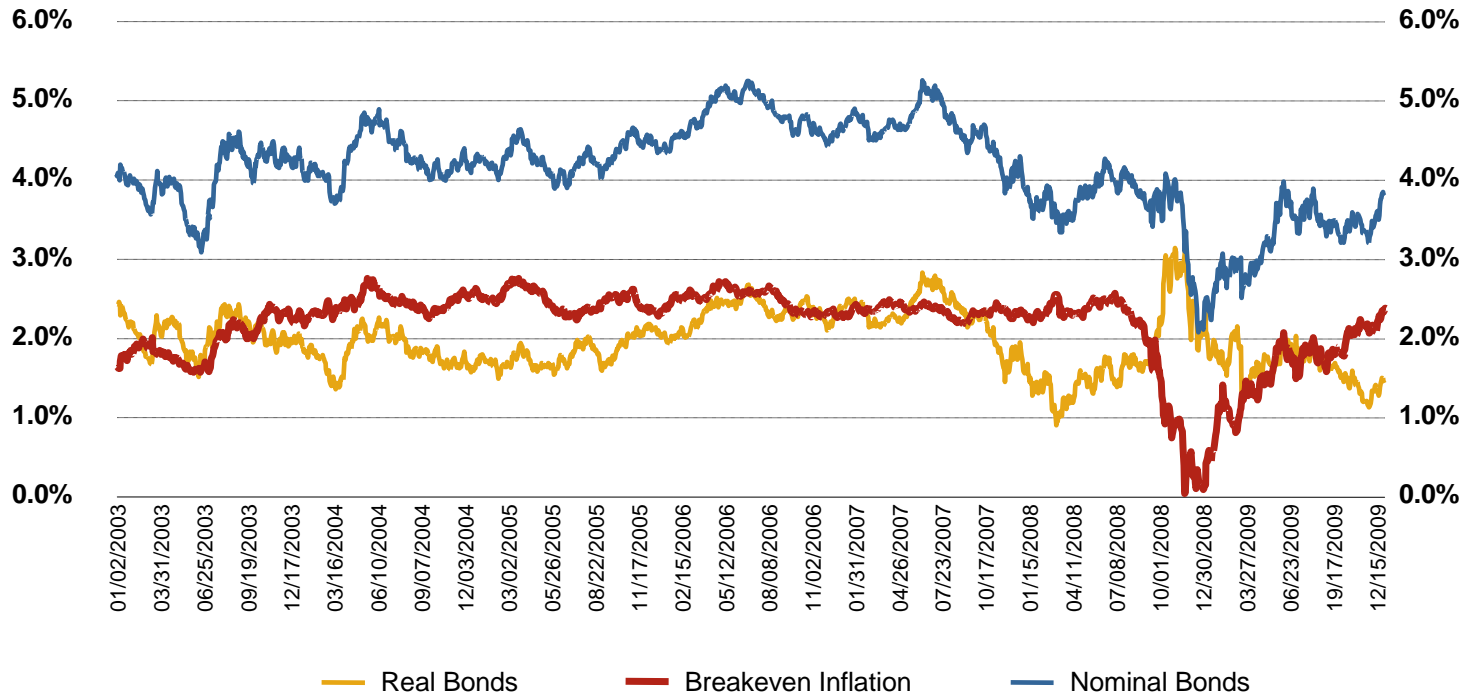
Source: U.S. Department of Labor

- **“Radical” short-term volatility in recent inflation expectations.**
- **Heads have been turned by producer prices, commodities and particularly energy, but overall CPI and core inflation much more benign.**



Ten-Year Real vs. Nominal Yields

The Breakeven Rate of Inflation



Returns for Periods ended December 31, 2009

| | Quarter Ending 12/31/09 | Year Ending 12/31/09 | 2 Years Ending 12/31/09 | 3 Years Ending 12/31/09 | 5 Years Ending 12/31/09 |
|-------------------|----------------------------|-------------------------|----------------------------|----------------------------|----------------------------|
| BC:US TIPS Index | 1.76 | 11.41 | 4.30 | 6.69 | 4.63 |
| BC:Treasury Index | (1.30) | (3.57) | 4.73 | 6.14 | 4.84 |

Source: Barclays Capital



So Is Rising Inflation an Emerging Threat?

■ **Economic theory says inflation HAS to take off:**

- Unprecedented, synchronized global monetary stimulus.
 - The ultimate in accommodative monetary policy.
 - Interest rates at historic lows. Another asset bubble waiting to happen?
- Unprecedented fiscal stimulus.
 - Corresponding unprecedented federal budget deficit.
 - Inflation beneficial to debtors—moral hazard?
- Commodity prices itching to rise at the first sign of growth.
- Dollar must weaken, furthering pressure on inflation.

■ **Practical reality:**

- The U.S. and the rest of the world face very slow recoveries:
 - Fiscal and monetary stimulus kept us out of a longer, deeper recession, but
 - Aggregate demand is weak, no post-recession surge as fiscal stimulus fades.
 - Capacity utilization has plummeted in the U.S.; we are awash in new capacity overseas, and still importing deflationary pressure.
 - Weak job market, no wage pressures.
- Interest rates may rise sharply without a surge in inflation.
- Inflation a very real threat, but it may be up to five years off.
- Commodity prices represent a wildcard threat in the shorter term, particularly a supply-side disruption, perhaps war, in the Middle East.



Inflation: Expected Case and the Risks

- **Expected case: Inflation pressures remain modest**
 - Weaker than usual recovery, absence of aggregate demand.
 - Deficit will dictate spending cuts, tax increases and/or higher interest rates, all of which restrain growth.
 - Commodity prices rise, but are restrained by weak global recovery.
 - Consensus forecast of U.S. inflation clusters around 2% over next five years.
- **Inflationary scenario—What kind of inflation could we see?**
 - Recovery gets back on track sooner than expected, aggregate demand revives.
 - Stronger recovery leading to tighter labor markets, potential wage pressures.
 - Economic growth loosens credit markets; low interest rates spur consumption, investment, the next asset bubble?
 - Commodity prices take off, spurring global competition for resources.
 - Non-U.S. investors lessen willingness to fund U.S. deficit, driving down the U.S. dollar.
 - Can policy response come fast enough to head this scenario off?
- **Deflation still a risk?**
 - Deleveraging takes much longer to work through—still more disasters to emerge.
 - Private sector unable to sustain the expansion after fiscal stimulus fades.
 - Credit remains constricted, consumer and business spending contracts, and the housing market spirals ever downward. Protracted recession.
 - Commodity prices stall.
 - Deflation in the short term, but Fed response could increase likelihood of sharp inflation in out years.
- **Fed knows how to fight inflation, but has yet to test whether it can fight deflation!**



The Current Economic Environment

Slow Going For Some Time

- **Optimistic outlook:** government intervention has stabilized credit markets, access to credit opens up, fiscal stimulus kick-starts rapid upswing. Beware of inflation lurking in the wings.
- **Pessimistic scenario:** vicious downward spiral between the economy and credit markets worsens. Specter of deflation looms.
- **Most likely scenario:** severest declines in GDP were recorded in fourth quarter of 2008 and first quarter of 2009. GDP resumed modest growth in the second half of 2009, which will continue as credit markets slowly thaw and confidence returns.
- **Impact of policy will take time.**
 - Monetary policy impact is famously “long and variable”.
 - Substantial fiscal policy has prospects for quicker success, but infrastructure spending will take years, not months, to show up.
- **Policy is not cheap:** fiscal 2008 deficit beat the 2004 record; 2009 deficit will more than double.
- **Economy will feel like it is in recession well into 2010, when unemployment will peak.**
- **Equity markets began recovering before recession ended. Did we already use up the expected bounce in the markets, dooming us to sluggish stock markets for the next several years?**



Bottom Line: The Recovery Has Begun

The Challenge is to Maintain It Post-Stimulus

- **The recession will turn out to be the longest and deepest since the 1930s.**
- **Growth began in the second half of 2009, driven by the inventory cycle. Next steps: housing, equipment, exports.**
- **Fiscal stimulus has supported the recovery, particularly state and local government spending.**
- **But recovery is likely to be slow because of financial markets and switch to higher savings.**
- **Prolonged U-shaped recovery after the second-half 2009 bounce; robust consumer demand is the missing link preventing a V-shaped recovery.**
- **Inflation will likely stay low, so the Fed does not need to rush to tighten, but the Fed and the federal government need an “exit strategy”.**
- **If financial markets lock up again,**
- **Home prices continue to fall,**
- **And oil prices continue to rise,**
- **The recession could be longer and deeper,**
- **With the risk of a “lost decade” similar to Japan in the 1990s.**



The Economy and the Capital Markets

- **The Fed cut rates 500 basis points in response to the financial turmoil that began unfolding in 2007.**
 - The Federal Funds Rate is now down to 0.25%.
 - The Fed focused on stabilizing the financial system and kick-starting the economy. Deflation is a real problem once again; future inflationary pressures of Fed and Treasury actions is less of a concern.

- **Callan's outlook:**
 - Inflation will be contained and low interest rates will persist.
 - Historic nominal return averages may be hard to achieve over the long run, and...
 - Stocks have already lead the economic recovery, generating above-trend results since March. What's left in the tank?
 - Solvency rather than liquidity remains the real problem that must be worked through in the capital markets – liquidity is emotion, solvency is hard numbers. Bankruptcies and foreclosures have yet to peak.
 - The dollar could face substantial downward pressure as a result of U.S. policy focused on fighting the recession. A falling dollar will test offshore investors' resolve to keep buying Treasuries. The problem, of course, is what other currency can take the dollar's place?



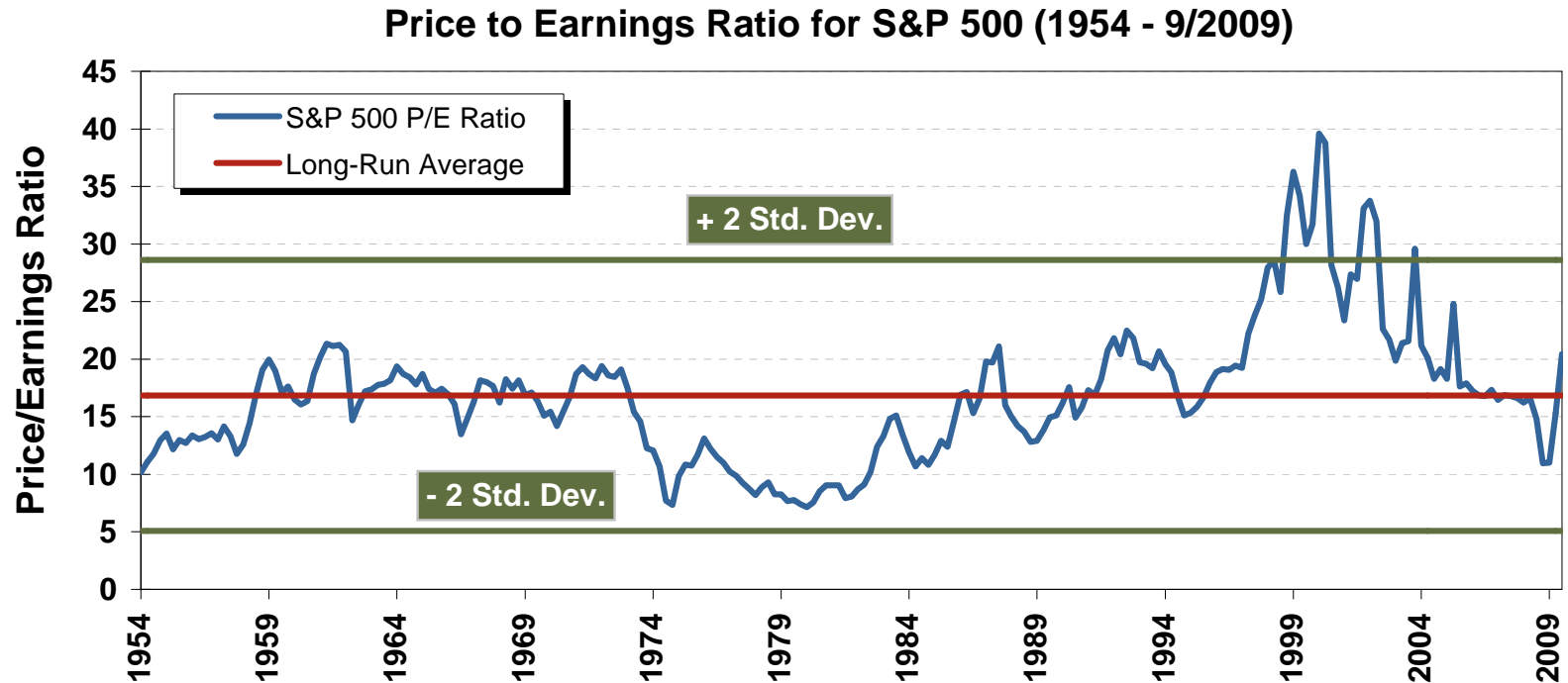
Themes to Explore in Setting the 2010 Expectations

- **Inflation**
 - No longer negative in 2010.
 - How large is the risk? How far out? What to do about it?
- **Did equity already use up its bounce?**
- **Treasury yields are low, low, low. Spreads have come back in substantially.**
 - Bifurcated market – crap (opportunity!) and non-crap (those yields!).
- **Expectations for alternatives in the face of very challenging current results.**
- **Long term, strategic vision vs. short term (1-3 years) reality.**



Equity Is More Reasonably Priced

Trailing P/E Jumped Back Up Above Its Long Run Average in 2009



Trailing earnings as reported for the fiscal year; includes negative earnings from 1998 onward.
Source: Standard & Poor's and Callan Associates



Building US Equity Expectations

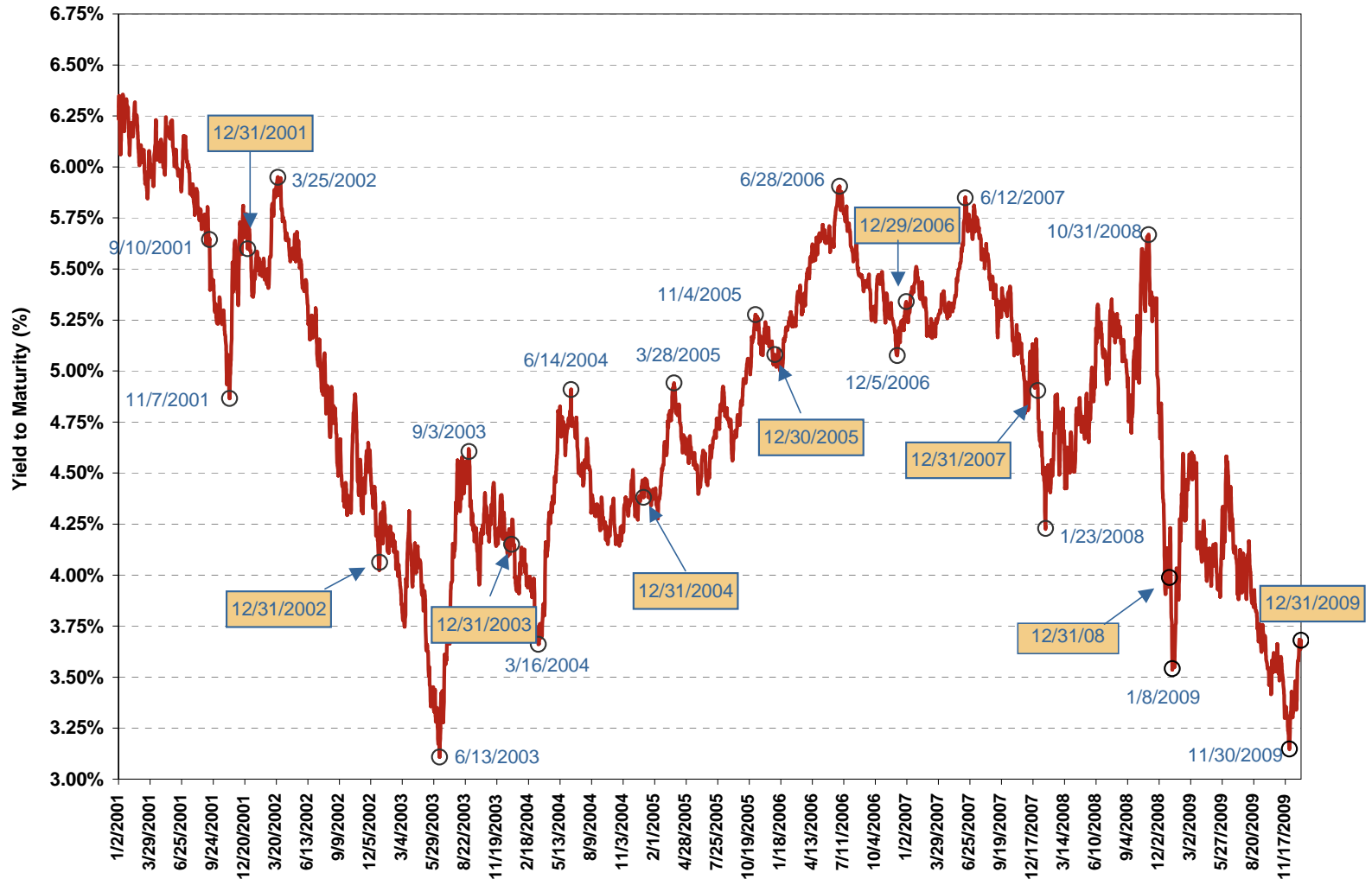
- **Dividend Yields Likely to Stay Low.**
 - Financing uncertainty continues so cash unlikely to be returned to investors.
 - Fixed income yields expected to remain low.
- **Valuations Currently Moderate After Market Rally.**
- **Corporate Profits Near Long-Term Growth Rate.**
- **Recent Returns Imply Forecast of Above Trend Profit Growth.**
- **Consumption Still Dominates Economic Growth.**
 - Unemployment high,
 - Wealth depleted,
 - Savings required.
- **Exports Helped by Falling Dollar but Impact Muted by Size of Economy.**
- **Large Cash Holdings a Drag on ROE.**



Current Yield is Exceptionally Low

Aggregate Masks Substantial Divergence in Sector Yields

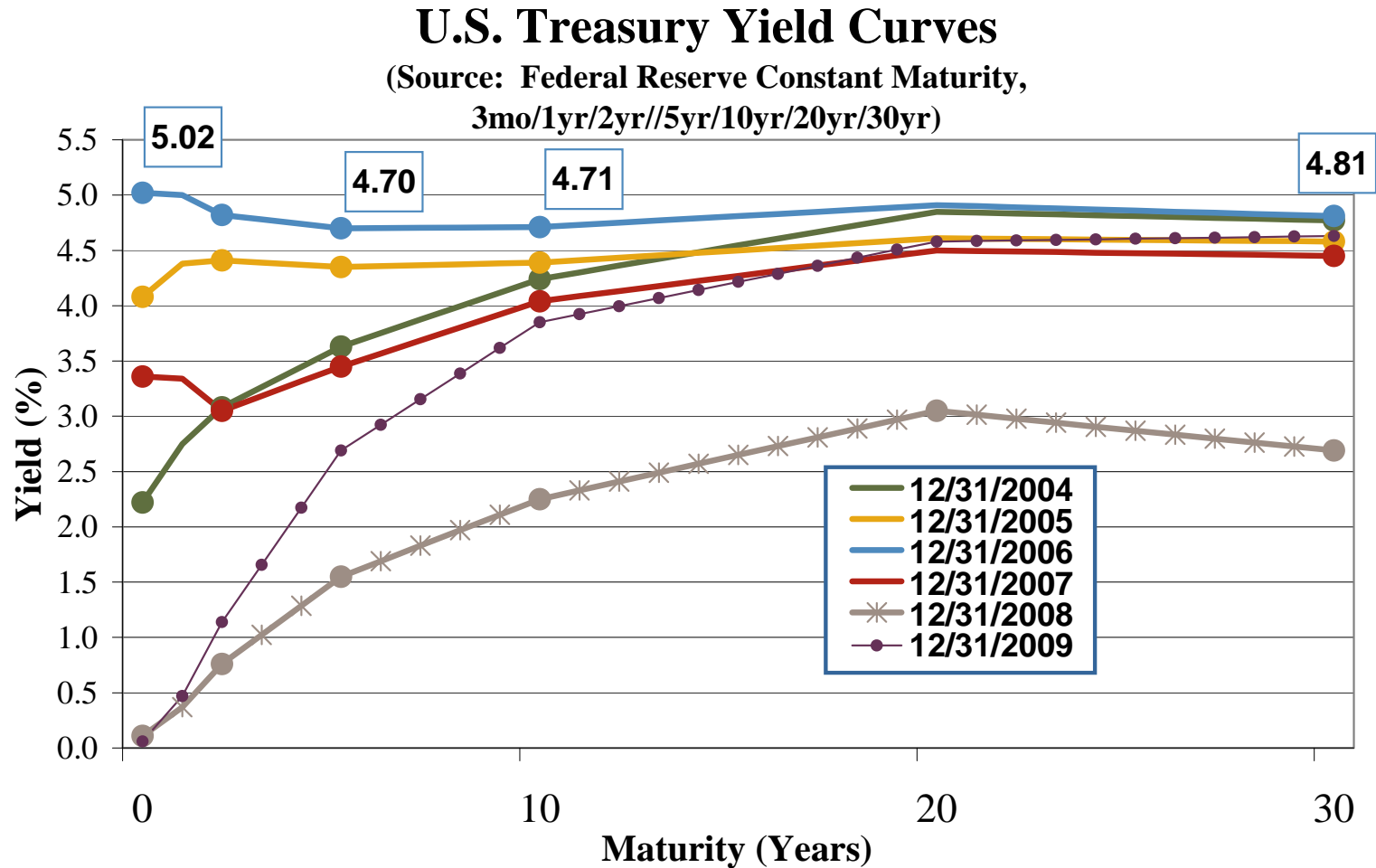
BC Aggregate Index - Daily Yield to Worst from 1/1/01 to 12/31/09



Source: Barclays Capital



Does the Treasury Yield Curve Even Relate to Broad Market Opportunities?

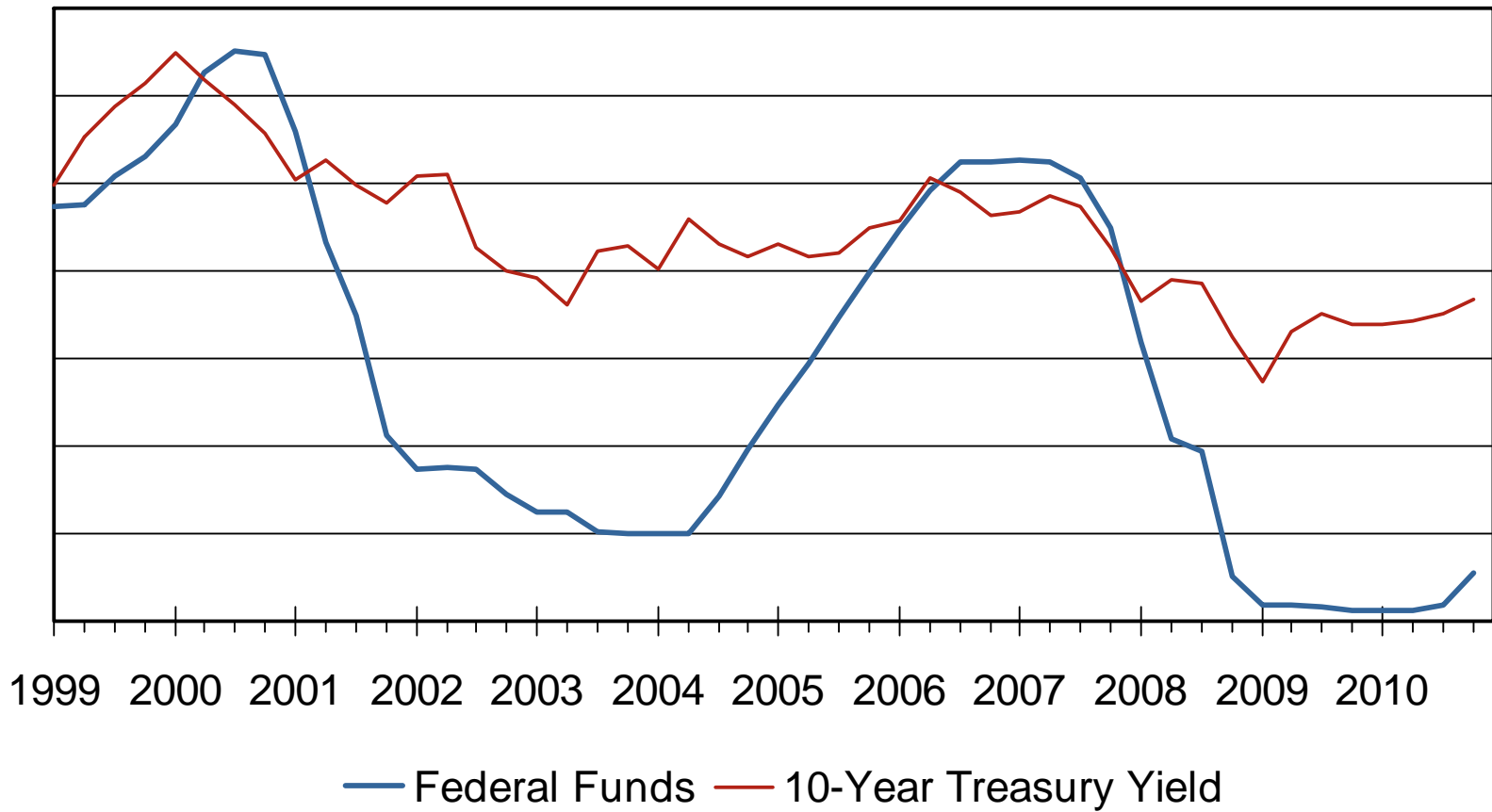




Federal Funds Rate Will Stay Near Zero Into 2010

(Percent)

***2010 estimate - Global Insight**



Source: Global Insight



Building Fixed Income Expectations

- **The path matters:**
 - Inflation
 - Composition of the market
 - Expected spreads and risk premiums
 - Current yields.
- **Hard to be enthusiastic about fixed income returns given current environment and likely economic path to growth.**



2010 Capital Market Expectations

- **Did we go through a “game-changing” experience, or was it a somewhat extreme but within-the-bounds-of-expected bump in the long-term capital markets road?**
- **All asset classes repriced in the recent market dislocation. Value opportunities emerged throughout the capital markets. General theme: this revaluation suggests better potential returns going forward, and a steeper capital market line. The key question is whether or not the 2009 market recovery has already discounted the likely fundamental improvement.**
- **We held our inflation expectation at 2.75%. Inflation topped 5% in mid-2008 yet finished the year with a decline. A recession solved our inflation problem over the short term, and the reversal in oil prices played a large role. Inflation could easily resume, especially given the massive monetary and fiscal stimulus in the pipeline.**
- **Cash is projected to generate a slight positive real return (3.0%). We do not expect the current negative real rate to persist over a five- to ten-year time horizon.**



2010 Capital Market Expectations

- **Bond returns reduced to 4.5%. Current measures of the broad market are very unusual. We expect Treasury rates to rise, but spreads will continue to narrow in the non-Treasury portion of the market.**
- **Project an upward sloping yield curve, with a slim risk premium for bonds over cash (1.5%).**
- **Building equity returns from long-term fundamentals got us to around 9% a year ago: 3-4% real GDP growth, which meant 5.75%-6.75% nominal earnings growth, 2% dividend yield, 0.5%-1.0% “buyback yield”. Shorter term, these fundamentals may look weaker, and equity no longer looks cheap relative to longer-term valuations. Equity markets perform well after substantial declines, and lead the economy out of recession, but the sharp rebound in 2009 takes away from returns in the coming years. Broad U.S. equity expectations are reduced 90 bps, from 9.4% to 8.5%. Broad non-U.S. equity returns are decreased by a similar amount.**
- **Real estate return reduced to 6.8%; returns may not recover as quickly as liquid equity markets.**
- **Private equity return reduced to 9.65%, narrowing its premium over public equity markets.**



2010 Capital Market Expectations

Return and Risk

| Asset Class | Index | Projected Return | | | Projected Risk | | | |
|-------------------------|----------------------|--------------------------|---------------------|-------|--------------------|-----------------|--------|-------|
| | | Single-Period Arithmetic | 10-year Geometric * | Real | Standard Deviation | Projected Yield | 2009 | |
| Equities | | | | | | | | |
| Broad Domestic Equity | Russell 3000 | 9.70% | 8.50% | 5.75% | 17.30 | 2.00 | 9.40% | 16.90 |
| Large Cap | S&P 500 | 9.30% | 8.30% | 5.55% | 16.00 | 2.20 | 9.10% | 15.25 |
| Small/Mid Cap | Russell 2500 | 11.20% | 9.00% | 6.25% | 23.00 | 1.20 | 9.80% | 22.70 |
| International Equity | MSCI EAFE | 9.85% | 8.30% | 5.55% | 19.30 | 2.00 | 9.10% | 19.30 |
| Emerging Markets Equity | MSCI EMF | 12.05% | 8.80% | 6.05% | 27.00 | 0.00 | 9.80% | 27.00 |
| Global ex-US Equity | MSCI ACWI ex-US | 10.30% | 8.70% | 5.95% | 19.75 | 1.70 | 9.10% | 18.90 |
| Fixed Income | | | | | | | | |
| Domestic Fixed | BC Aggregate | 4.50% | 4.50% | 1.75% | 4.50 | 4.50 | 5.25% | 5.00 |
| Long Duration | BC Long Gov't/Credit | 5.40% | 5.00% | 2.25% | 9.90 | 5.40 | 5.75% | 9.30 |
| Defensive | BC Gov't 1-3 Year | 3.75% | 3.75% | 1.00% | 3.00 | 4.00 | 4.00% | 2.30 |
| TIPS | BC TIPS | 4.30% | 4.20% | 1.45% | 6.00 | 4.30 | 4.90% | 6.00 |
| High Yield | CSFB High Yield | 6.60% | 6.10% | 3.35% | 11.25 | 7.45 | 7.00% | 11.50 |
| Non-US\$ Fixed | Citi Non-US Gov't | 4.40% | 4.00% | 1.25% | 9.60 | 4.40 | 5.15% | 9.60 |
| Other | | | | | | | | |
| Real Estate | Callan Real Estate | 7.90% | 6.80% | 4.05% | 16.10 | 6.00 | 7.50% | 16.10 |
| Private Equity | VE Post Venture Cap | 16.40% | 9.65% | 6.90% | 38.00 | 0.00 | 10.60% | 38.00 |
| Absolute Return | Callan Hedge FoF | 6.45% | 6.10% | 3.35% | 10.00 | 0.00 | 6.95% | 10.00 |
| Commodities | GSCI | 6.80% | 4.40% | 1.65% | 22.50 | 4.00 | 5.15% | 22.50 |
| Cash Equivalents | 90-Day T-Bill | 3.00% | 3.00% | 0.25% | 0.80 | 3.00 | 3.00% | 0.80 |
| Inflation | CPI-U | 2.75% | 2.75% | | 1.40 | | 2.75% | 1.40 |

* Geometric returns are derived from arithmetic returns and the associated risk (standard deviation).

Source: Callan Associates Inc.



2010 Capital Market Expectations

Correlation Coefficient Matrix

Key to Constructing Efficient Portfolios

| Correlation | Broad | Lg Cap | Small/Mid | Int'l Eq | Emerg | Glob ex-US | Dom Fix | Long Dur | Defensive | TIPS | Hi Yield | NUS Fix | Real Est | Pvt Equity | Abs Ret | Comm | T-Bill |
|-----------------|-------|--------|-----------|----------|-------|------------|---------|----------|-----------|-------|----------|---------|----------|------------|---------|------|--------|
| Broad Dom Eq | 1.00 | | | | | | | | | | | | | | | | |
| Large Cap | 0.98 | 1.00 | | | | | | | | | | | | | | | |
| Small/Mid Cap | 0.94 | 0.92 | 1.00 | | | | | | | | | | | | | | |
| Int'l Equity | 0.72 | 0.72 | 0.67 | 1.00 | | | | | | | | | | | | | |
| Emerging Mkts | 0.83 | 0.82 | 0.77 | 0.74 | 1.00 | | | | | | | | | | | | |
| Global ex-US Eq | 0.78 | 0.78 | 0.73 | 0.98 | 0.85 | 1.00 | | | | | | | | | | | |
| Domestic Fixed | 0.13 | 0.15 | 0.12 | 0.14 | 0.07 | 0.13 | 1.00 | | | | | | | | | | |
| Long Duration | 0.30 | 0.32 | 0.28 | 0.26 | 0.20 | 0.26 | 0.90 | 1.00 | | | | | | | | | |
| Defensive | 0.00 | 0.00 | 0.00 | 0.00 | -0.10 | -0.05 | 0.85 | 0.70 | 1.00 | | | | | | | | |
| TIPS | 0.03 | 0.05 | -0.02 | -0.01 | -0.05 | -0.02 | 0.60 | 0.40 | 0.50 | 1.00 | | | | | | | |
| High Yield | 0.60 | 0.60 | 0.56 | 0.47 | 0.51 | 0.50 | 0.25 | 0.20 | 0.05 | 0.15 | 1.00 | | | | | | |
| Non-US\$ Fixed | -0.03 | -0.01 | -0.07 | 0.15 | -0.07 | 0.09 | 0.38 | 0.40 | 0.30 | 0.30 | 0.09 | 1.00 | | | | | |
| Real Estate | 0.60 | 0.60 | 0.55 | 0.54 | 0.52 | 0.56 | 0.15 | 0.20 | 0.00 | 0.05 | 0.50 | 0.01 | 1.00 | | | | |
| Private Equity | 0.90 | 0.89 | 0.87 | 0.84 | 0.84 | 0.88 | 0.04 | 0.15 | 0.00 | -0.05 | 0.52 | -0.01 | 0.60 | 1.00 | | | |
| Absolute Return | 0.63 | 0.62 | 0.56 | 0.53 | 0.52 | 0.55 | 0.33 | 0.30 | 0.15 | 0.20 | 0.44 | 0.11 | 0.43 | 0.55 | 1.00 | | |
| Commodities | 0.18 | 0.20 | 0.16 | 0.23 | 0.20 | 0.23 | 0.04 | 0.00 | 0.00 | 0.25 | 0.10 | 0.10 | 0.15 | 0.15 | 0.20 | 1.00 | |
| T-Bills | -0.12 | -0.10 | -0.15 | -0.20 | -0.15 | -0.20 | 0.30 | 0.20 | 0.40 | 0.20 | 0.07 | 0.10 | -0.06 | -0.10 | 0.15 | 0.15 | 1.00 |

Source: Callan Associates Inc.



Unconstrained Optimization Major asset categories

- **The table below details the projections used in the major asset class optimization presented on the following page.**
- **There were only modest changes in volatility estimates but meaningful reductions in projected returns reflecting a significant 2009 market recovery.**

For example, domestic equity arithmetic return reduced by 0.68% resulting in a 0.86% reduction in 10-year compound return.

| AssetClass | Projected Arithmetic Return | Projected Sharpe Ratio | Projected Standard Deviation | 5 Yr. Geometric Mean Return | 10 Yr. Geometric Mean Return |
|-----------------------|-----------------------------|------------------------|------------------------------|-----------------------------|------------------------------|
| Broad Domestic Equity | 9.70% | 0.39% | 17.29% | 8.56% | 8.52% |
| Global (ex-US) Equity | 10.29% | 0.37% | 19.77% | 8.73% | 8.68% |
| Private Equity | 16.40% | 0.35% | 38.00% | 9.86% | 9.66% |
| Domestic Fixed | 4.50% | 0.33% | 4.50% | 4.48% | 4.48% |
| Non US Fixed | 4.40% | 0.15% | 9.60% | 4.03% | 4.01% |
| High Yield | 6.60% | 0.32% | 11.25% | 6.14% | 6.13% |
| TIPS | 4.30% | 0.22% | 6.00% | 4.20% | 4.19% |
| Real Estate | 7.90% | 0.30% | 16.10% | 6.85% | 6.82% |
| Absolute Return | 6.45% | 0.35% | 10.00% | 6.12% | 6.10% |
| Cash Equivalents | 3.00% | 0.00% | 0.80% | 3.03% | 3.03% |



Efficient Mixes - Unconstrained

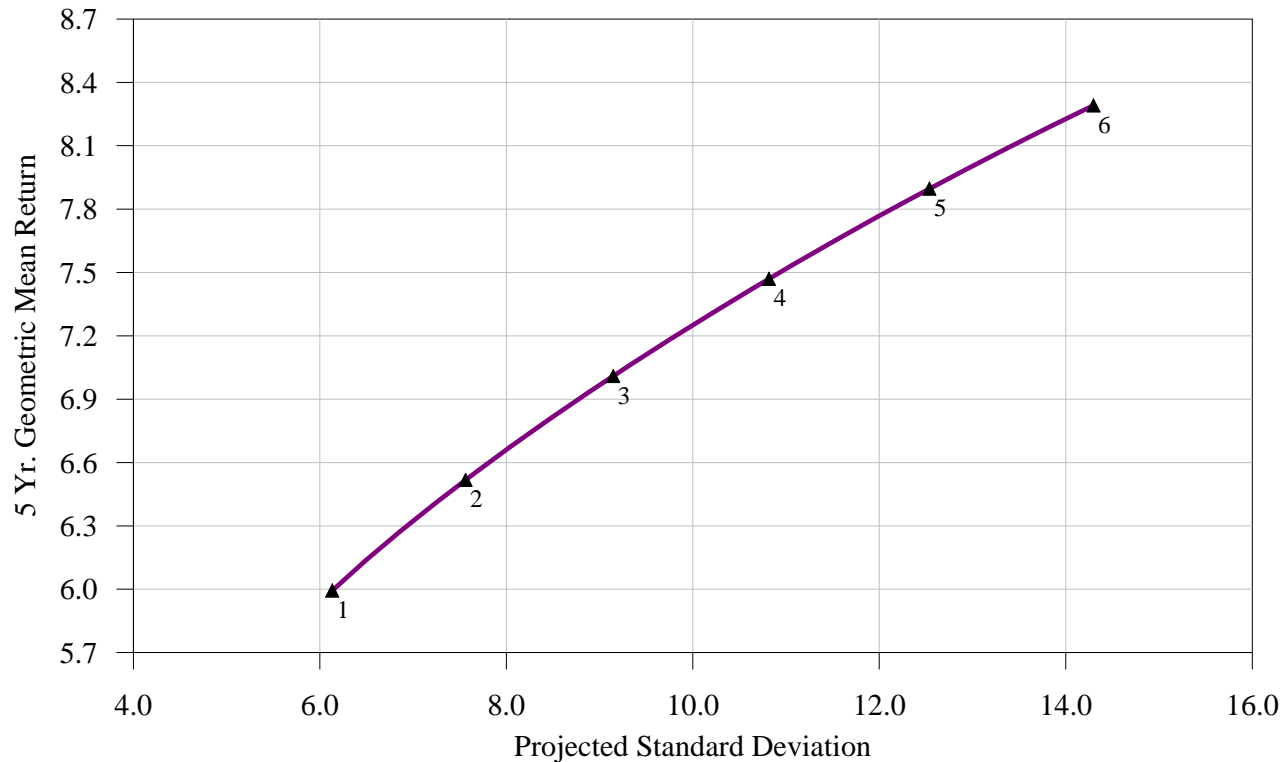
Asset Mix Alternatives
Optimization Set: 2010 prelim
Unconstrained

| Portfolio Component | Min | Max | Mix 1 | Mix 2 | Mix 3 | Mix 4 | Mix 5 | Mix 6 |
|------------------------------|-----|------|-------|-------|--------|--------|--------|--------|
| Broad Domestic Equity | 0% | 100% | 18% | 20% | 22% | 24% | 26% | 28% |
| Global (ex-US) Equity | 0% | 100% | 12% | 14% | 16% | 17% | 19% | 20% |
| Private Equity | 0% | 100% | 4% | 5% | 7% | 8% | 9% | 11% |
| Domestic Fixed | 0% | 100% | 40% | 35% | 30% | 25% | 21% | 15% |
| Non US Fixed | 0% | 100% | 3% | 3% | 3% | 3% | 3% | 2% |
| High Yield | 0% | 100% | 5% | 6% | 6% | 6% | 7% | 7% |
| TIPS | 0% | 100% | 7% | 5% | 3% | 2% | 0% | 0% |
| Real Estate | 0% | 100% | 5% | 6% | 6% | 7% | 7% | 8% |
| Absolute Return | 0% | 100% | 6% | 6% | 7% | 8% | 8% | 9% |
| Cash Equivalents | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% |
| Totals | | | 100% | 100% | 100% | 100% | 100% | 100% |
| Projected Arithmetic Return | | | 6.98% | 7.39% | 7.79% | 8.19% | 8.60% | 9.00% |
| Projected Standard Deviation | | | 8.49% | 9.60% | 10.74% | 11.91% | 13.09% | 14.28% |
| 5 Yr. Geometric Mean Return | | | 6.82% | 7.14% | 7.45% | 7.75% | 8.03% | 8.29% |
| 10 Yr. Geometric Mean Return | | | 6.81% | 7.13% | 7.44% | 7.73% | 8.01% | 8.27% |



Unconstrained Efficient Frontier

Efficient Frontier
5-Year Geometric Returns
Projected Standard Deviation



- Current ARMB Policy is slightly right of Mix 5. Using 2009 projections expected 5-year return was 9.04% with a projected standard deviation of 12.85%.
- ARMB's existing policy with 2010 projections would have a 5-year projected geometric return of approximately 8.15% but with a projected standard deviation of near 13.5%



Next steps

- **We will develop custom projections for current ARMB asset categories**
 - Real assets – comprised of real estate, timber, farmland, energy & TIPS
 - Fixed – comprised of investment grade credit, high yield, Non-US dollar bonds & Government bonds
- **We will work with staff & advisors to evaluate changes in allocations within “Real” & “Fixed”**
- **Evaluate wisdom of maintaining existing limits on constrained asset classes & relative bias toward international**
 - Private Equity at 7%
 - Absolute Return at 5%
 - Predisposed toward maintaining them
- **Address any issues that you wish to see researched**
- **Develop specific alternatives for your future consideration**



Appendix

Note – slides use data available during
January 2010



U.S. Economic Growth by Sector

(Annual percent change)

| | 12/31/2006 Share of GDP | 12/31/2009 Share of GDP | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|------------------------|----------------------------|----------------------------|------|------|------|------|------|-------|-------|-------|------|
| Real GDP | 100% | 100% | 1.8 | 2.5 | 3.6 | 3.1 | 2.7 | 2.1 | 0.4 | -2.5 | 2.2 |
| Consumption | 70.3% | 70.7% | 2.7 | 2.8 | 3.5 | 3.4 | 2.9 | 2.6 | -0.2 | -0.6 | 1.8 |
| Residential Investment | 5.1% | 2.8% | 5.3 | 8.2 | 9.8 | 6.2 | -7.3 | -18.5 | -22.9 | -20.0 | 7.5 |
| Bus. Fixed Investment | 11.3% | 9.9% | -7.9 | 0.9 | 6.0 | 6.7 | 7.9 | 6.2 | 1.6 | -17.9 | -1.4 |
| Federal Government | 6.9% | 7.9% | 7.3 | 6.6 | 4.1 | 1.3 | 2.1 | 1.3 | 7.7 | 5.3 | 4.0 |
| State & Local Govt. | 11.6% | 11.8% | 3.3 | -0.1 | -0.2 | -0.2 | 0.9 | 2.0 | 0.5 | 0.0 | -0.2 |
| Exports | 11.3% | 11.5% | -2.0 | 1.6 | 9.5 | 6.7 | 9.0 | 8.7 | 5.4 | -10.4 | 7.9 |
| Imports | 16.6% | 14.5% | 3.4 | 4.4 | 11.0 | 6.1 | 6.1 | 2.0 | -3.2 | -14.0 | 8.8 |

- **GDP hit bottom in Q2 2009, rebound began in second half of the year.**
- **Note: Imports are a negative number in the calculation of GDP.**

Source: Global Insight



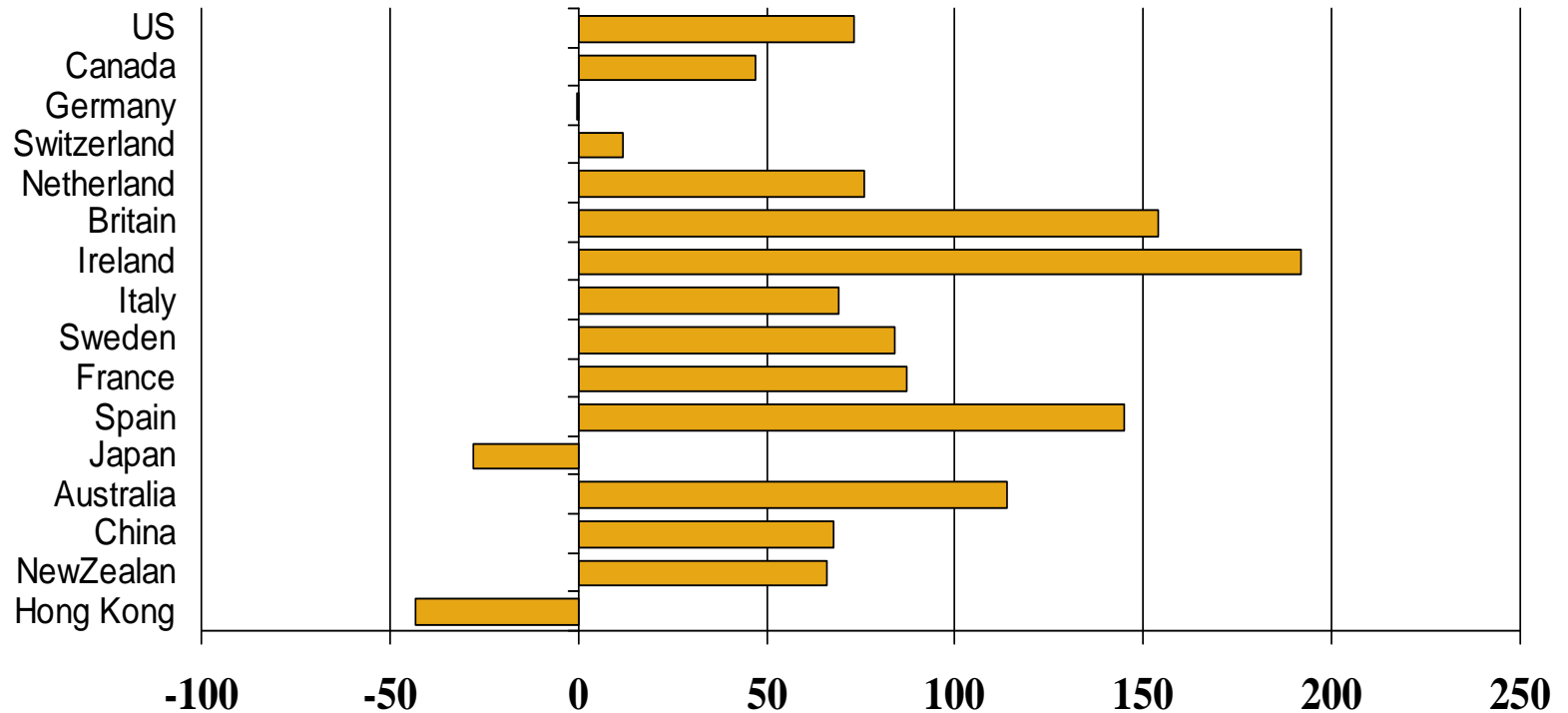
The Housing Bubble

- **Housing was too affordable, thanks to low mortgage rates.**
- **But what happened when rates went up?**
- **Ratio of home price to income hit a record high in 2006,**
- **Which could not be maintained at higher interest rates.**
- **We built too many houses at too high prices.**
- **Starts and sales have dropped sharply.**
- **Defaults have soared, cutting back on willingness to lend.**
- **Prices are down more than 35% from their peak.**
- **And the ratio of home price to income is below its historical average.**
- **We believe starts are near their bottom.**
- **But prices probably won't hit bottom until sometime in 2010.**



Bubbles Were Almost Everywhere

(Percent increase in home prices, 1997-2005)

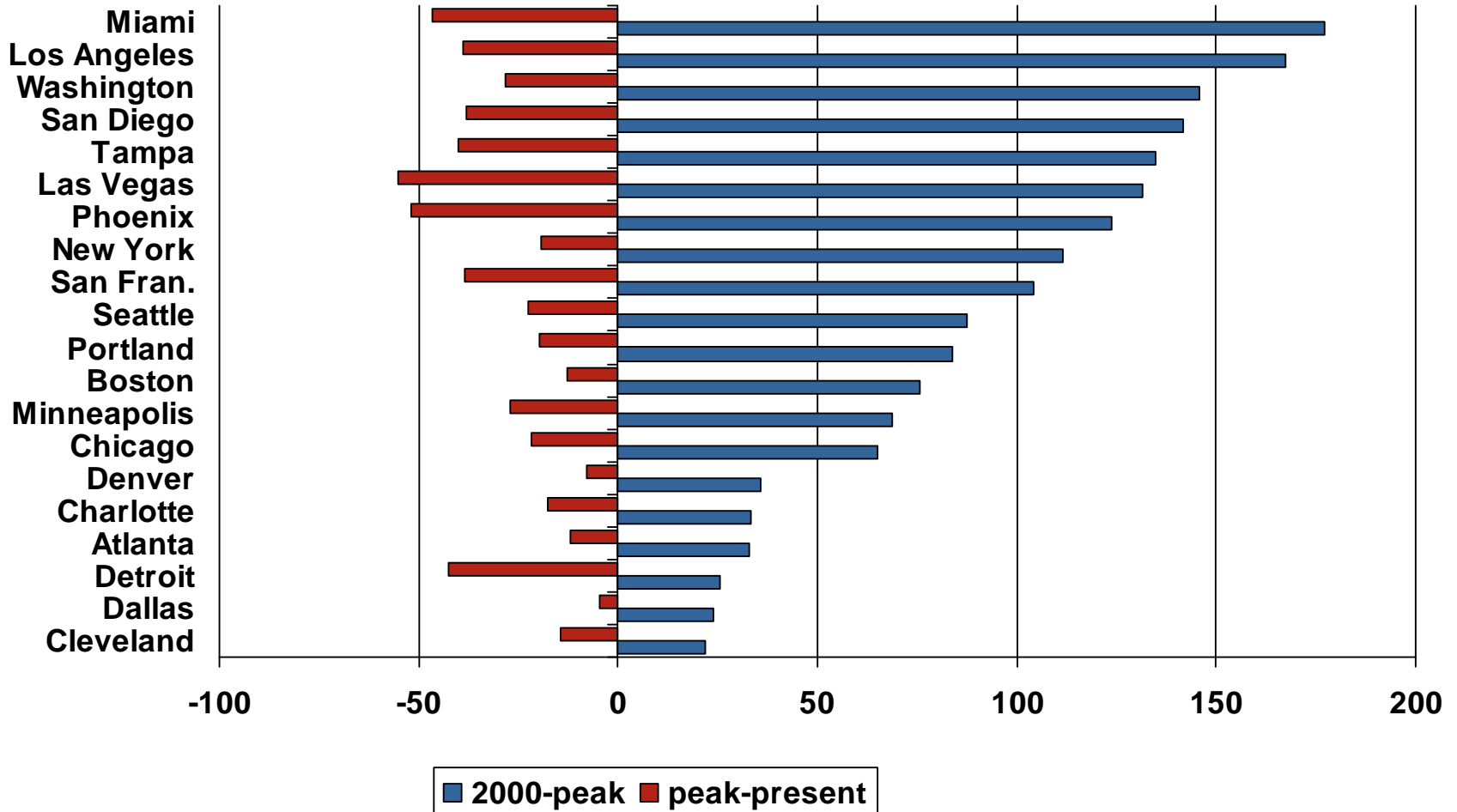


Source: Mortgage Bankers' Association and Standard & Poor's



Those Who Bubbled Highest Burst Loudest

(Percent increase in S&P/Case-Shiller home price index, September 2009)

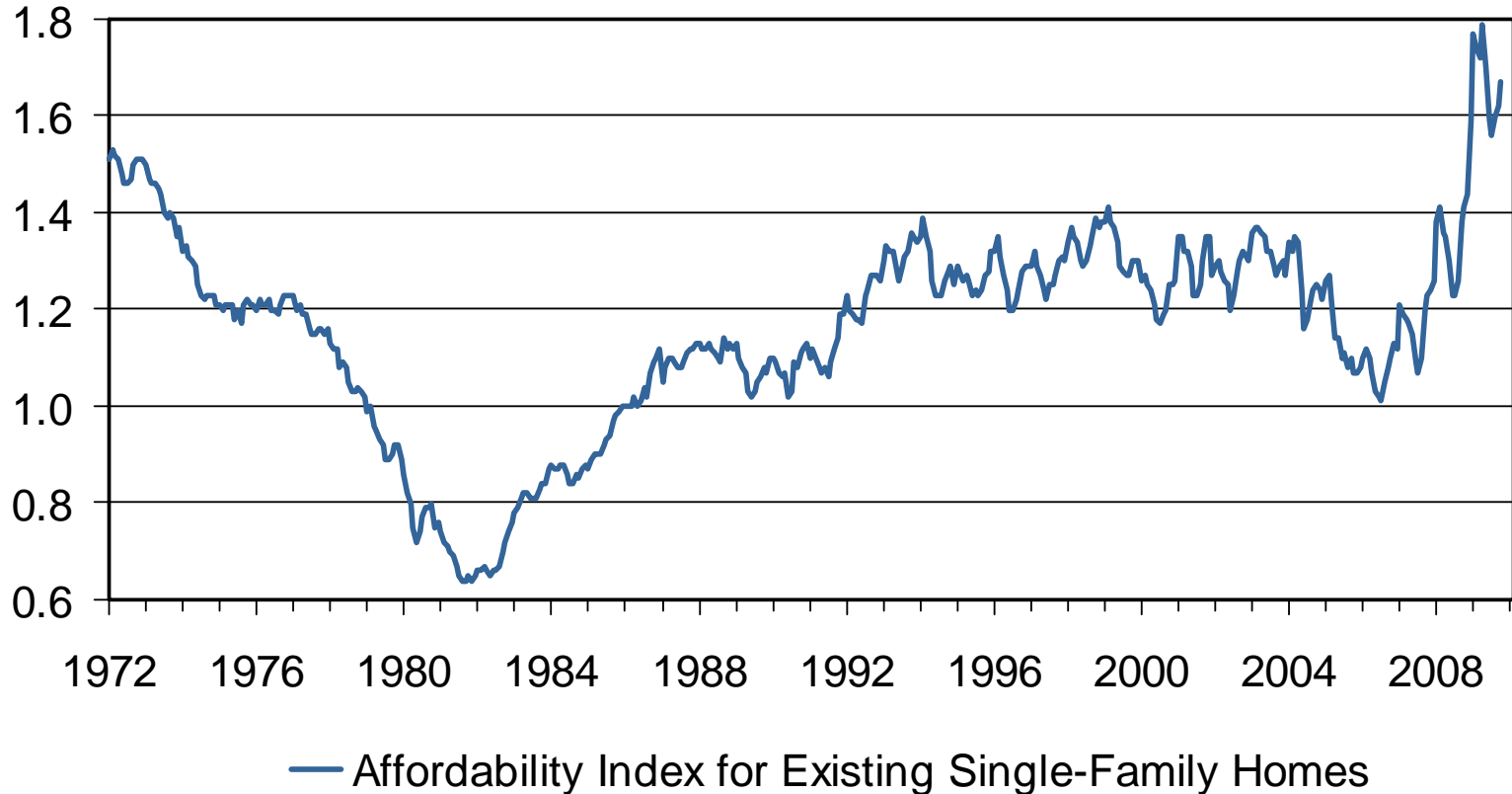


Source: Standard & Poor's



Housing Affordability At A Record High

(A higher index means homes are more affordable.)

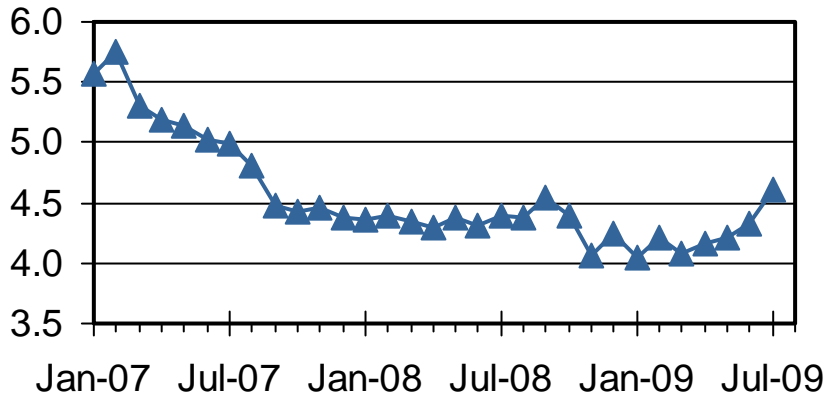


Source: National Association of Realtors

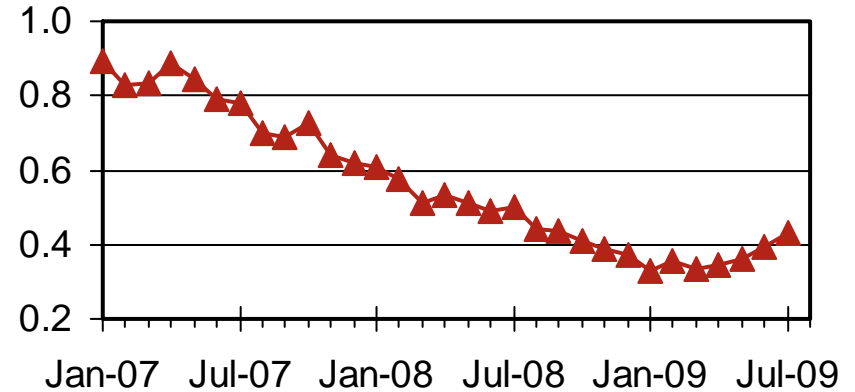


Key Single-Family Housing Indicators

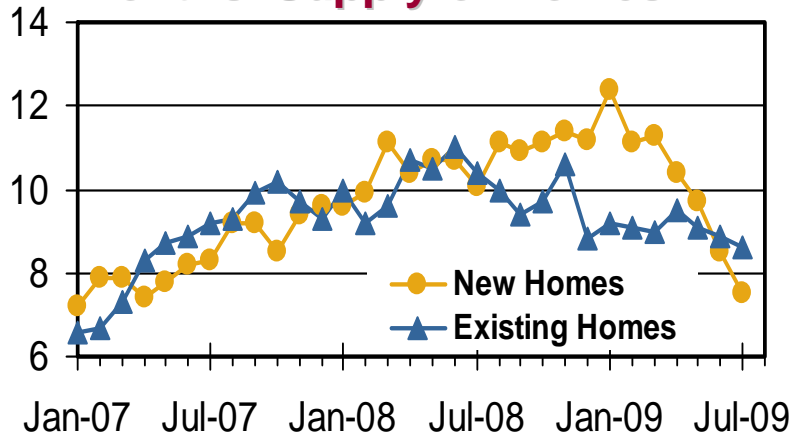
Existing Home Sales*



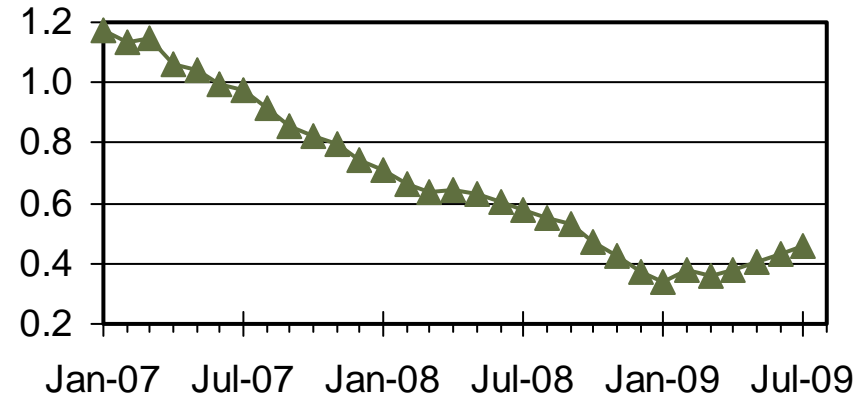
New Home Sales*



Months' Supply of Homes**



Housing Permits*

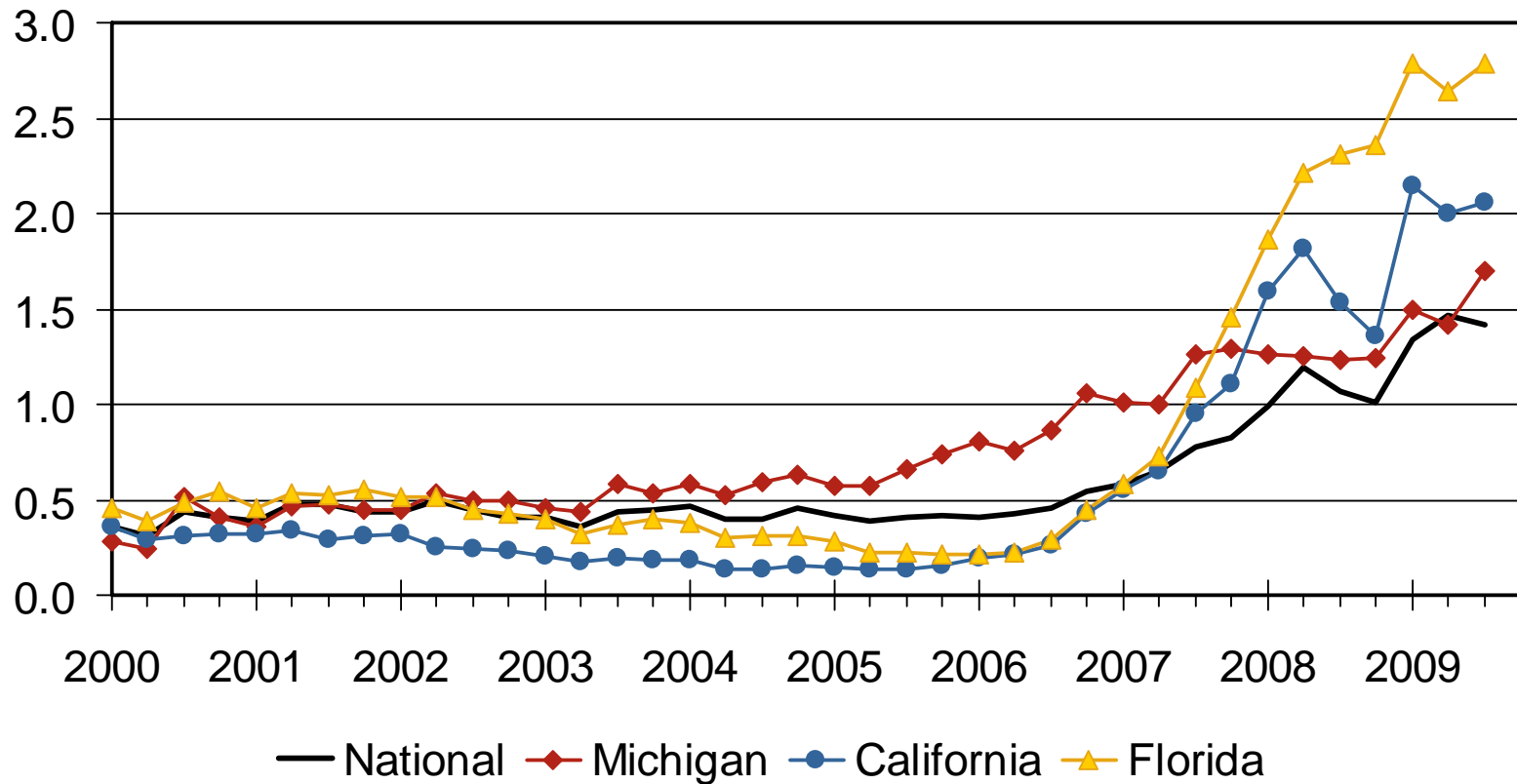


*Millions, SA; **Single-Family Homes for sale divided by monthly selling rate.



Foreclosure Rate Still Rising

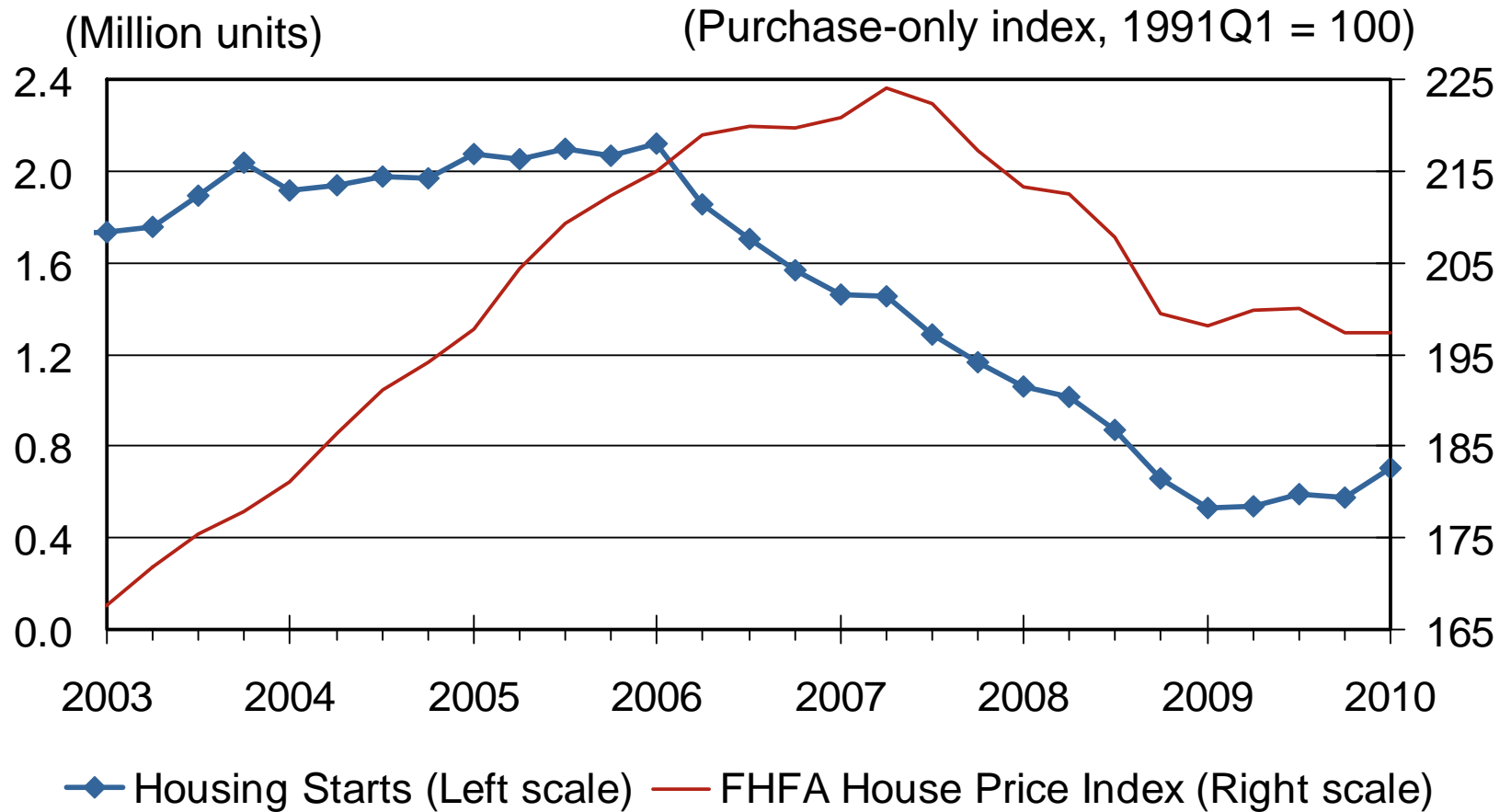
(Percent of all home mortgage loans entering foreclosure.)



Source: Mortgage Bankers Association



Housing Starts Have Hit Bottom; Prices Not Quite There Yet



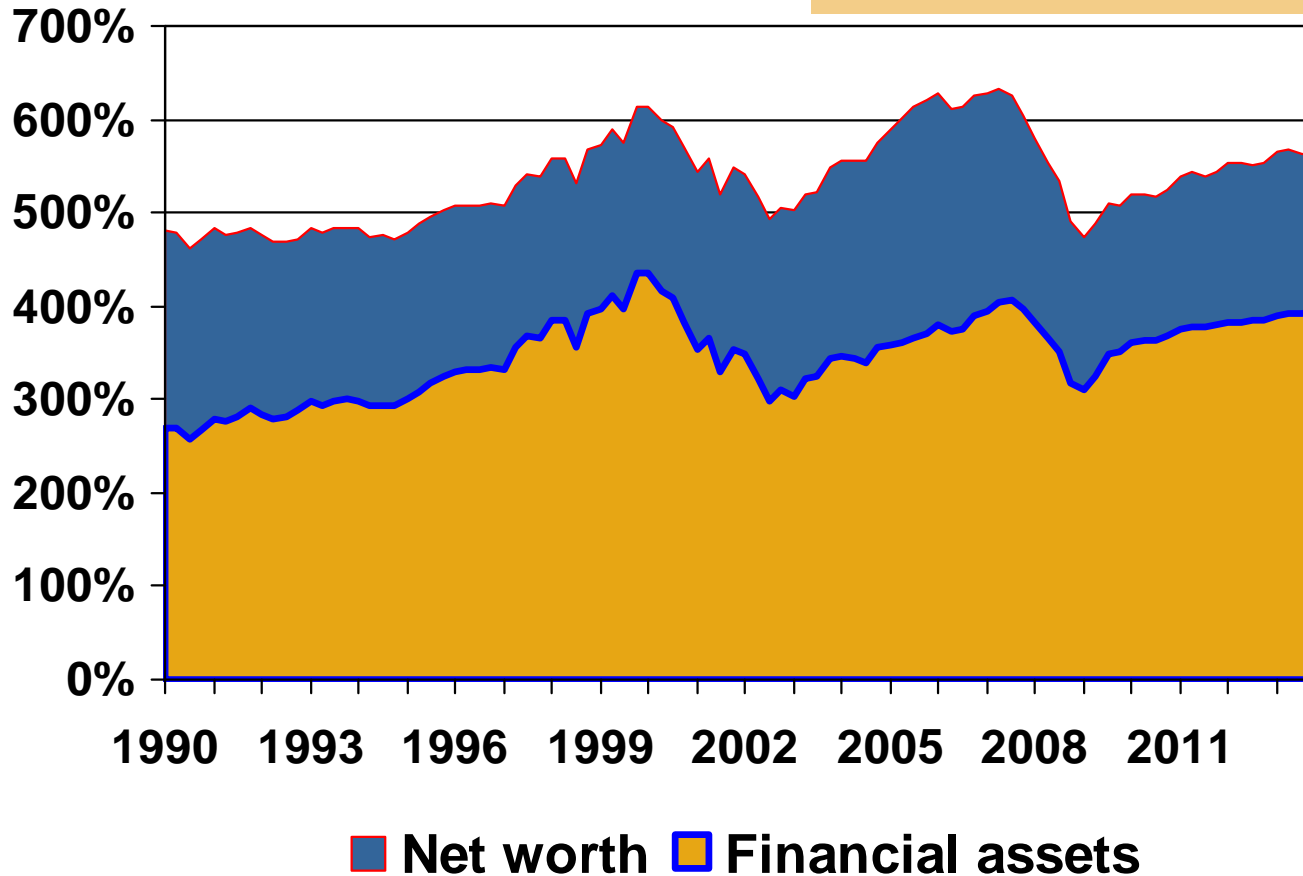
Source: Global Insight



Wealth Slides With Home and Stock Prices

(Percent of after-tax income)

***2010+ estimate - Global Insight**

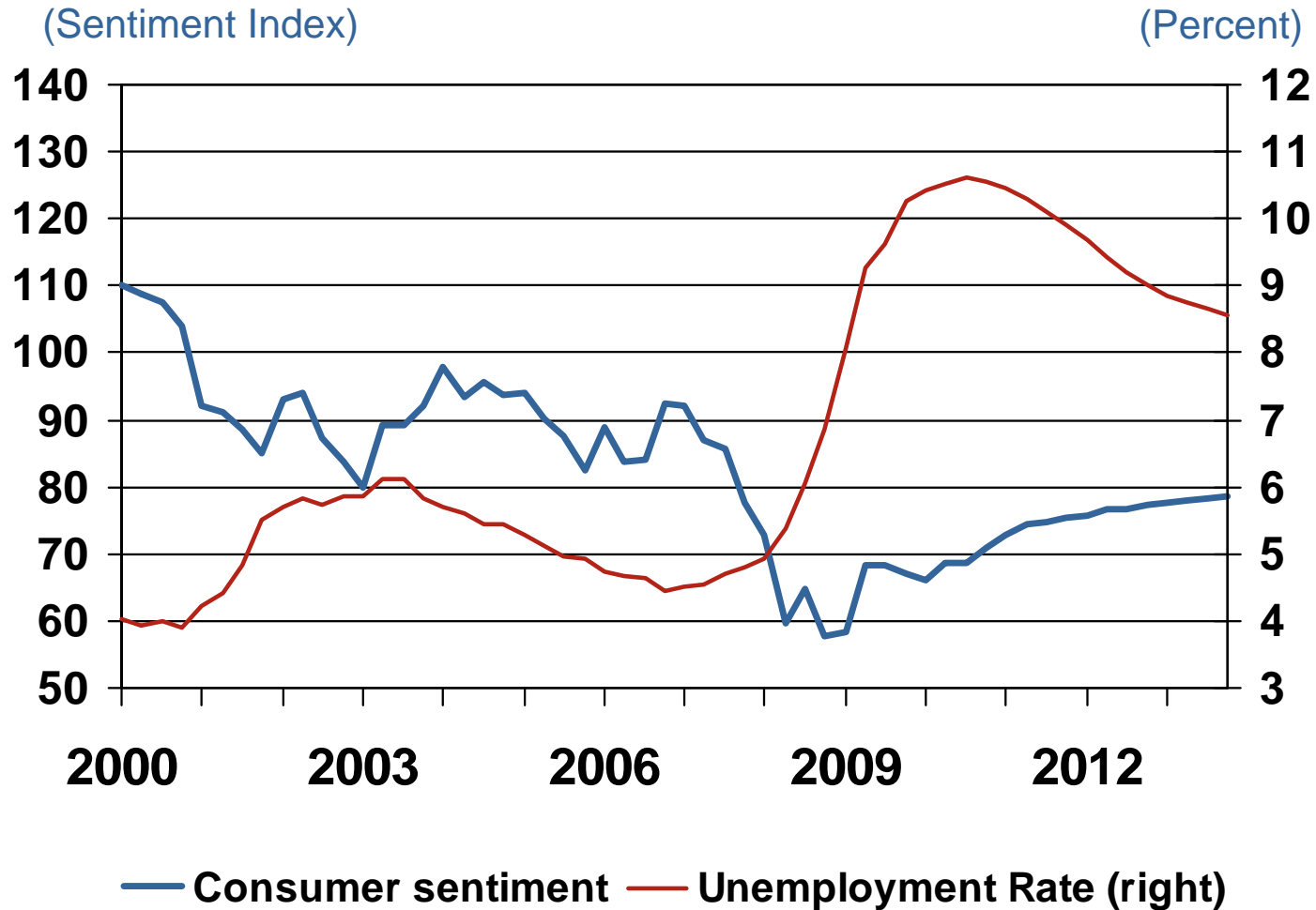


Source: Federal Reserve



High Unemployment Scares Consumers

***2010 estimate - Global Insight**



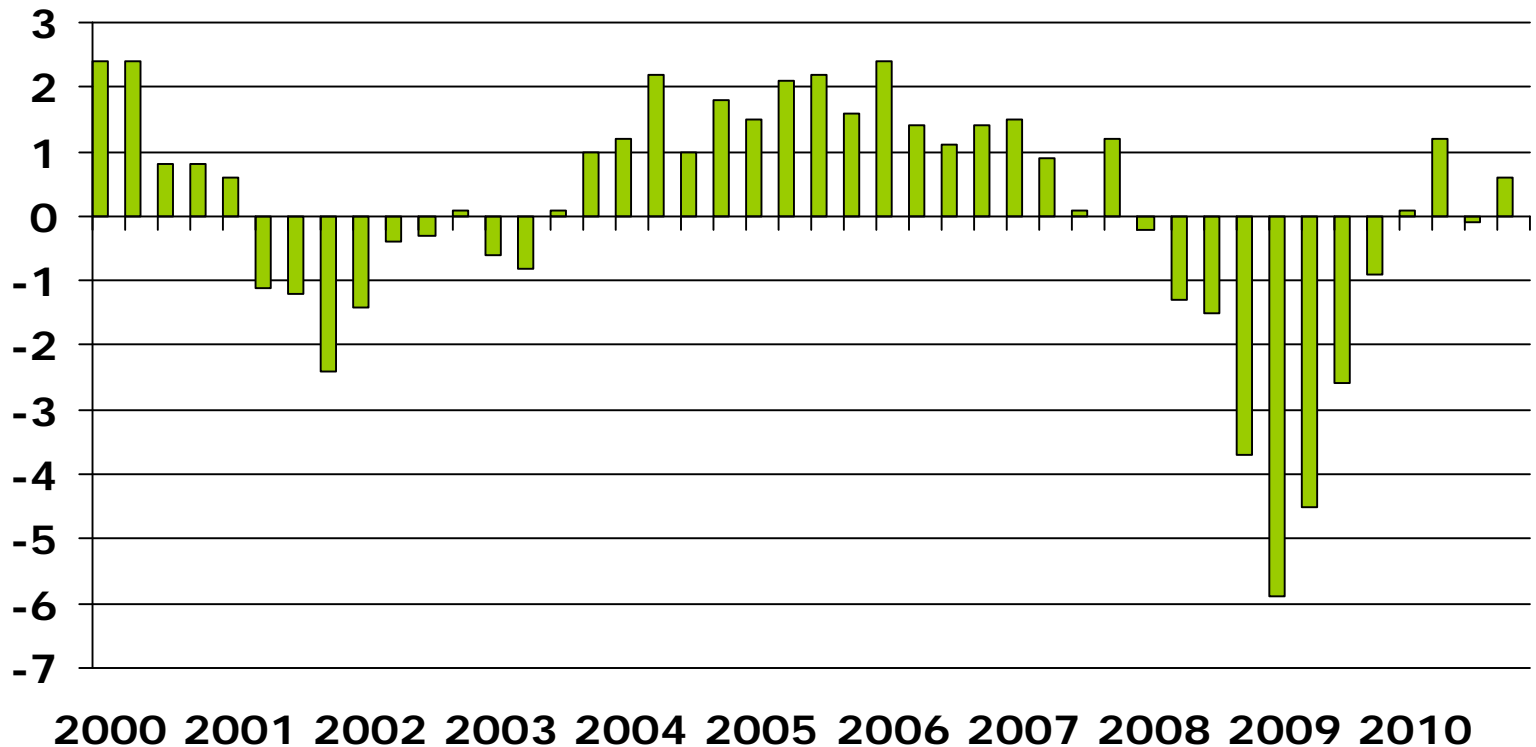
Source: Bureau of Labor Statistics, University of Michigan Survey Research Center, and Global Insight



Job Market Contracted Sharply in 2008, Pain Expected Through 2010

(Employment – percent change, annual rate)

***2010 estimate - Global Insight**

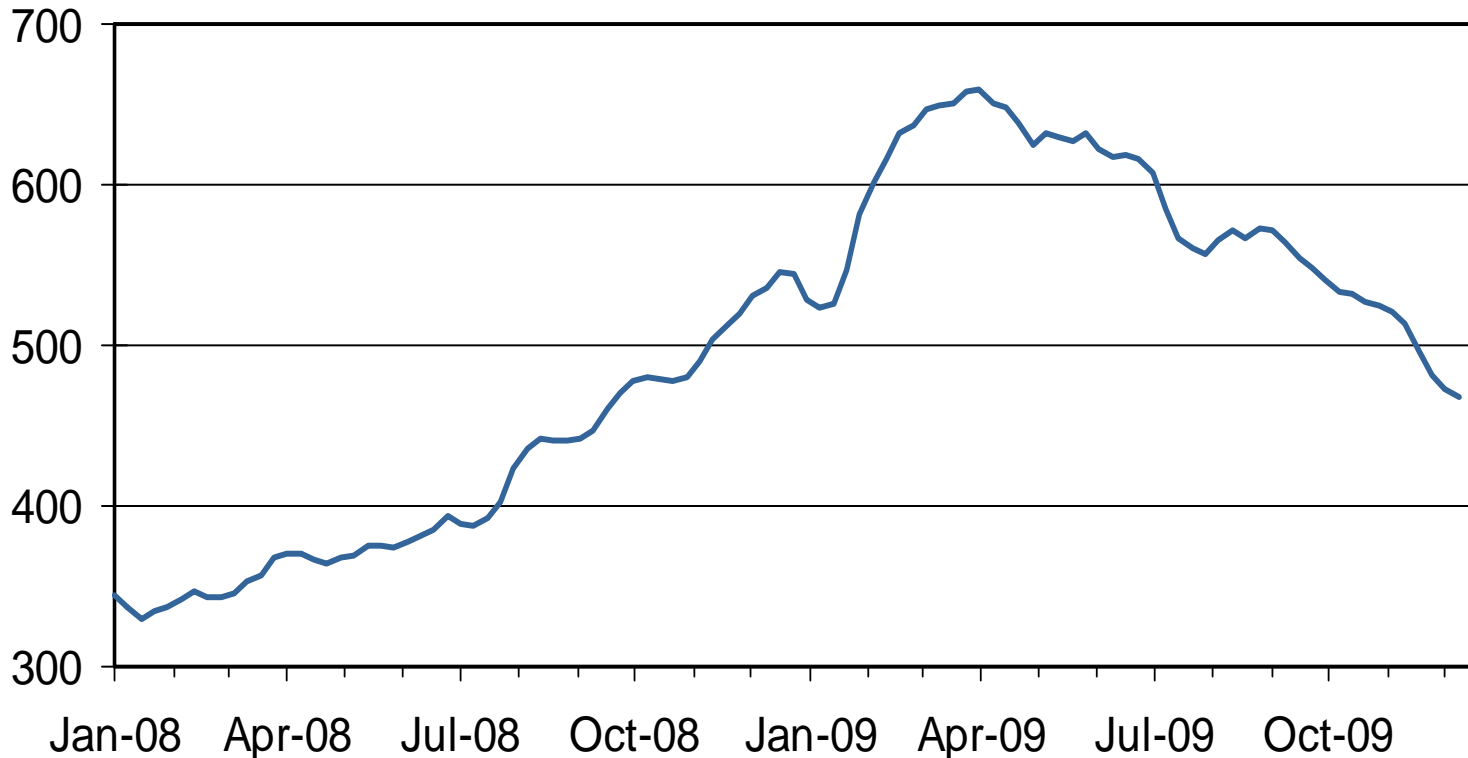


Source: Global Insight



Initial Unemployment Insurance Claims Need to Drop to 400K rate for Employment to Stabilize

(Initial unemployment insurance claims, 4-week moving average, thousands)

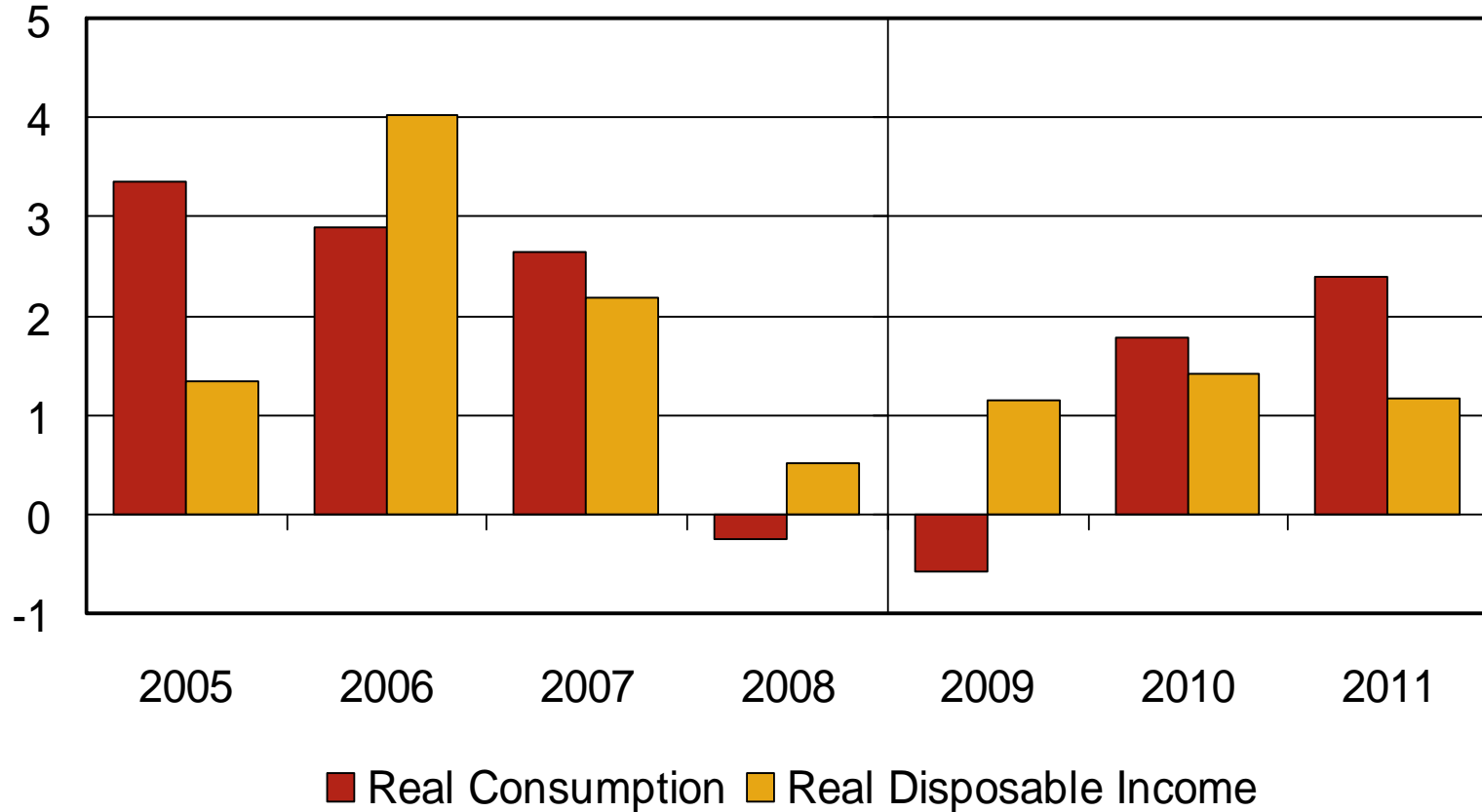




Consumption Fell Two Consecutive Years

(Percent growth, real)

***2010 estimate - Global Insight**



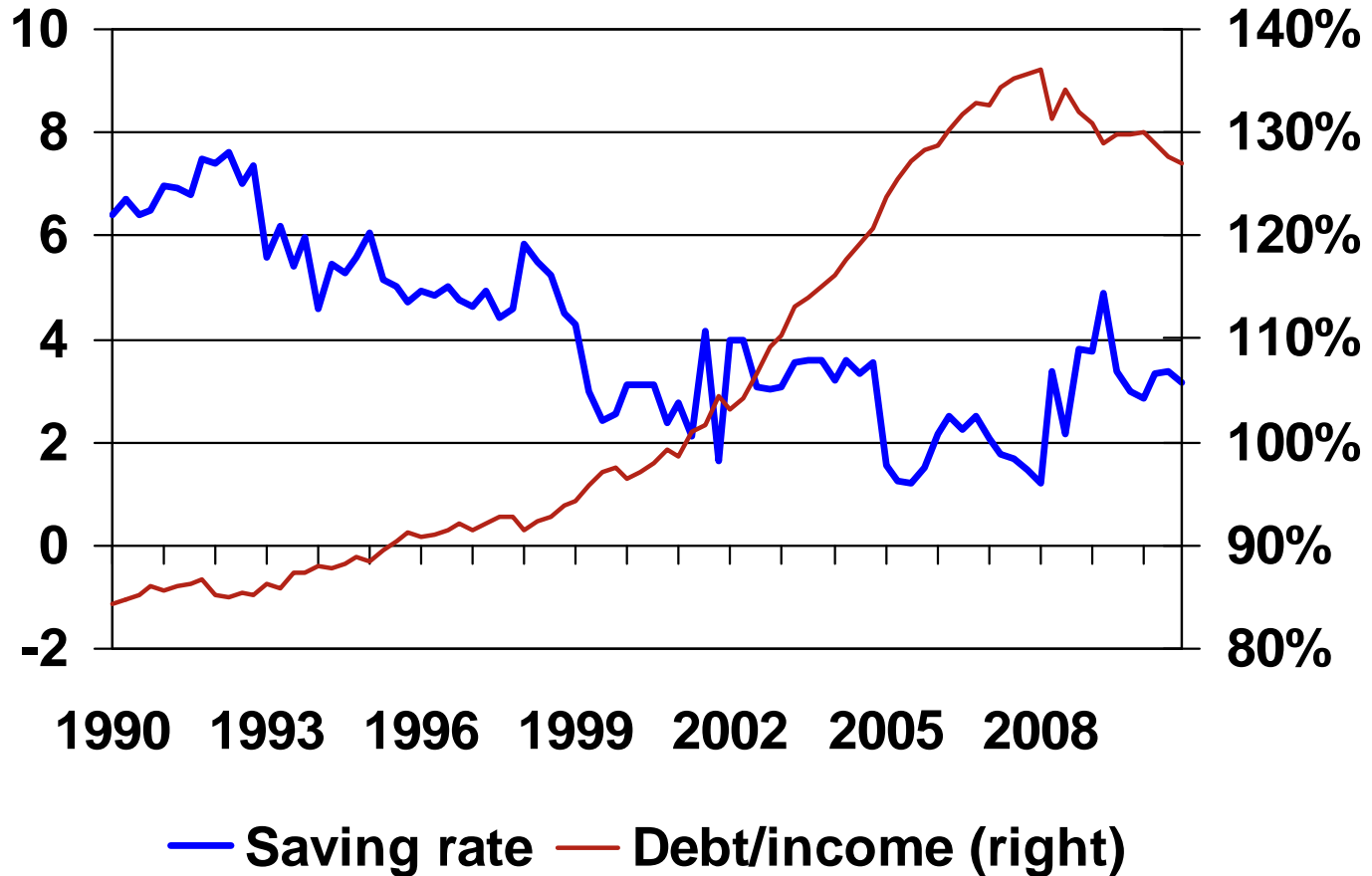
Source: Global Insight



No Savings, Lots of Debt

(Percent of after-tax income)

***2010 estimate - Global Insight**



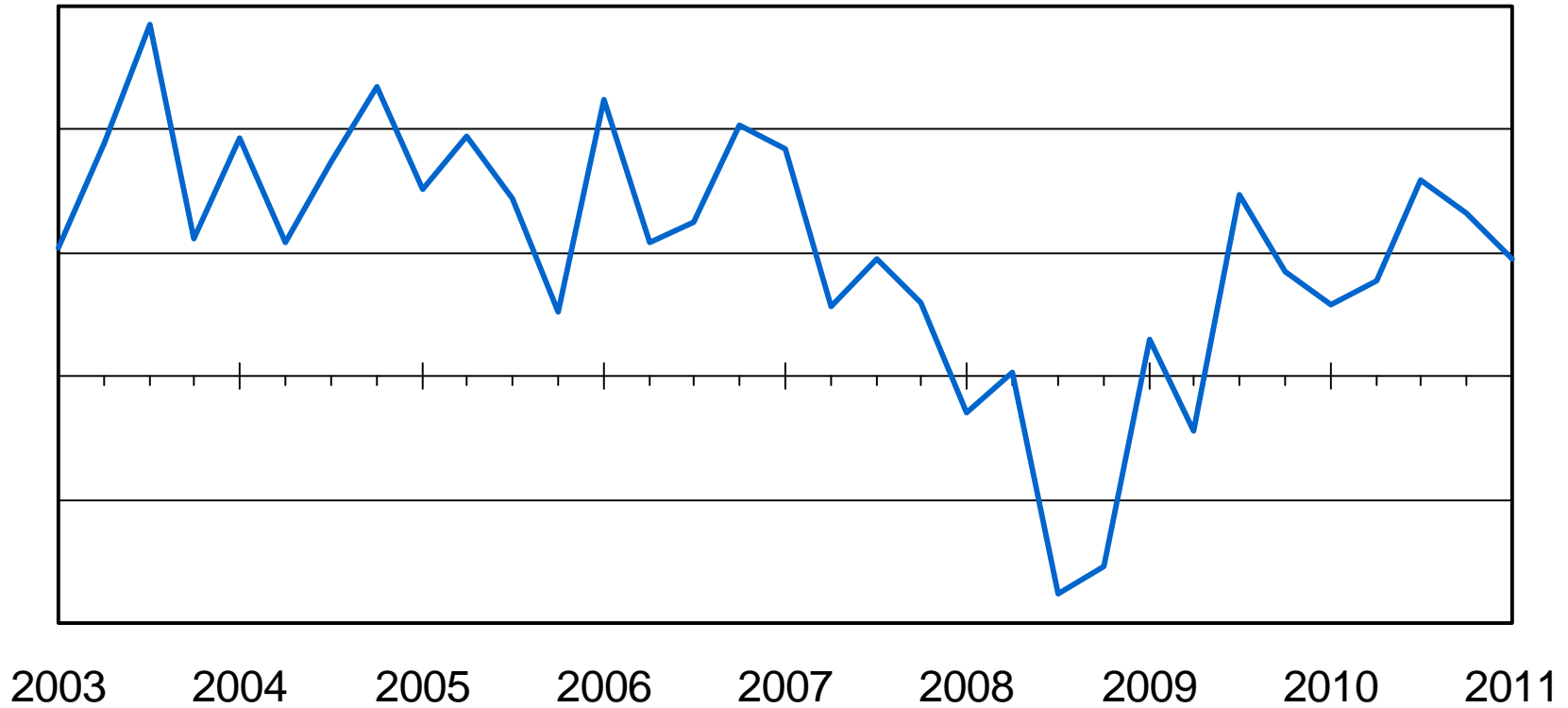
Source: Bureau of Economic Analysis, Federal Reserve and Global Insight



Consumer Spending Stabilizing, But Not a Strong Driver of Recovery

(Annualize rate of growth)

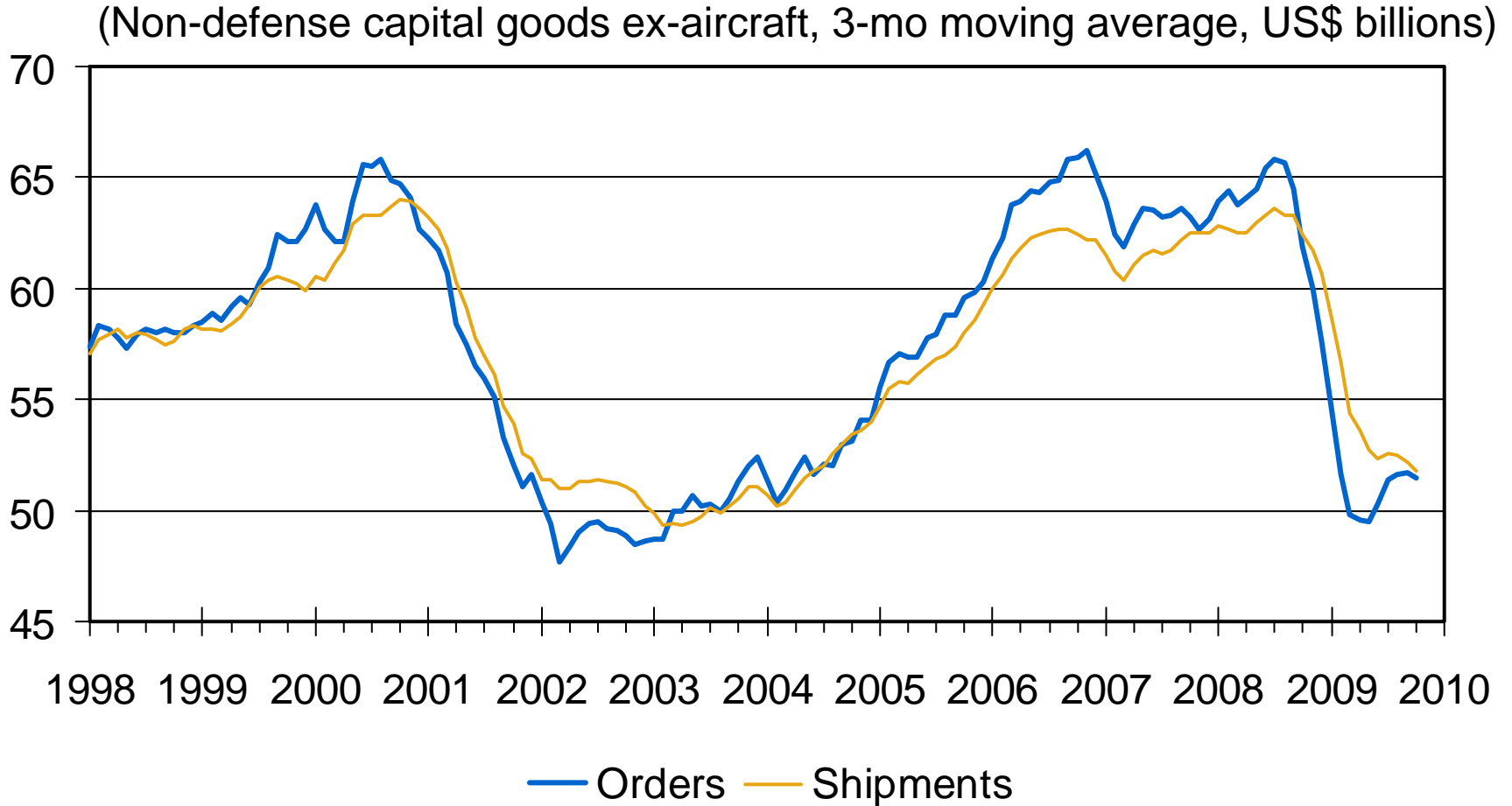
***2010 estimate - Global Insight**



Source: Global Insight



Business Equipment Demand Beginning to Stabilize



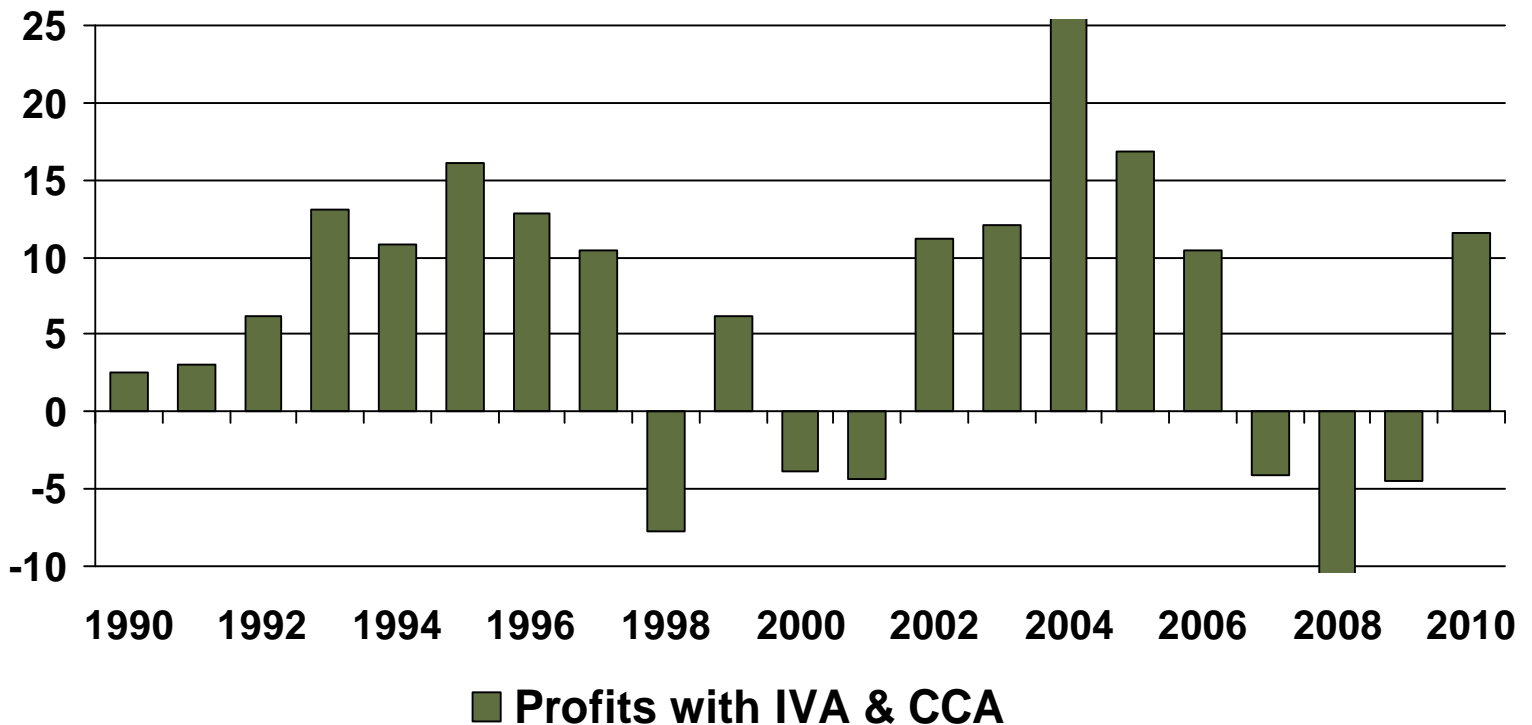
Source: Global Insight



Corporate Profits Reverse After Strong Five-year Run – Ready for Rebound?

(Percent change)

***2010 estimate - Global Insight**

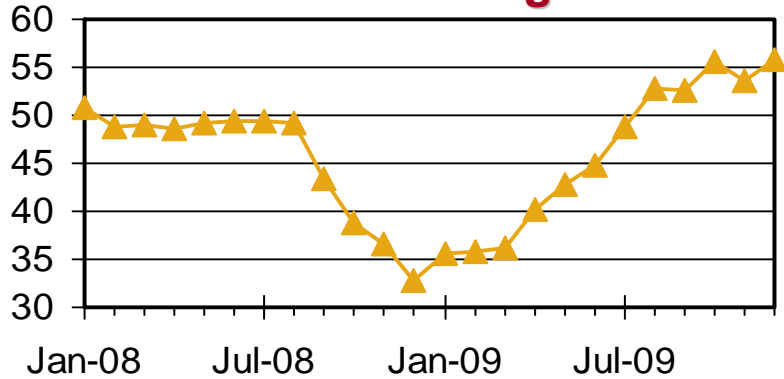


Source: Global Insight

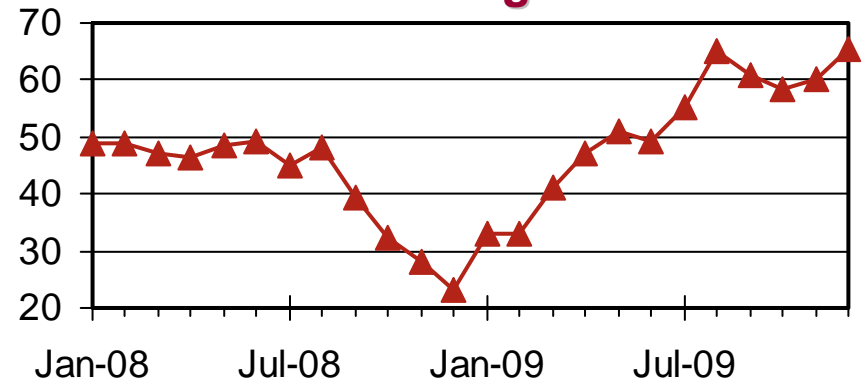


Key Manufacturing Indexes Show Recovery (50 = dividing line between expansion and contraction)

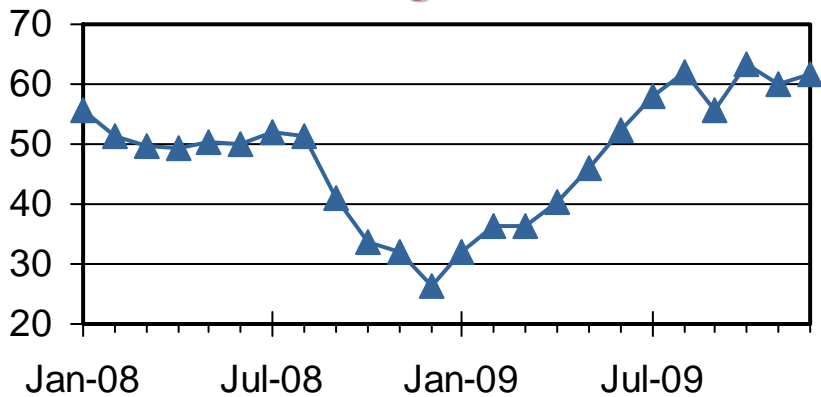
ISM Manufacturing Index



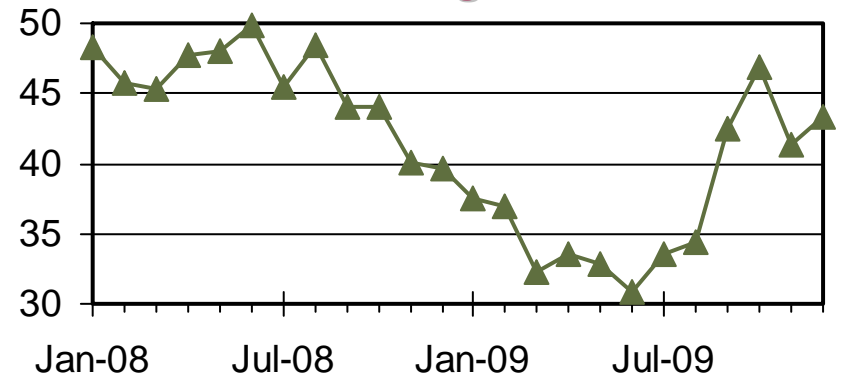
ISM Manufacturing Orders Index



ISM Manufacturing Production Index



ISM Manufacturing Inventories Index



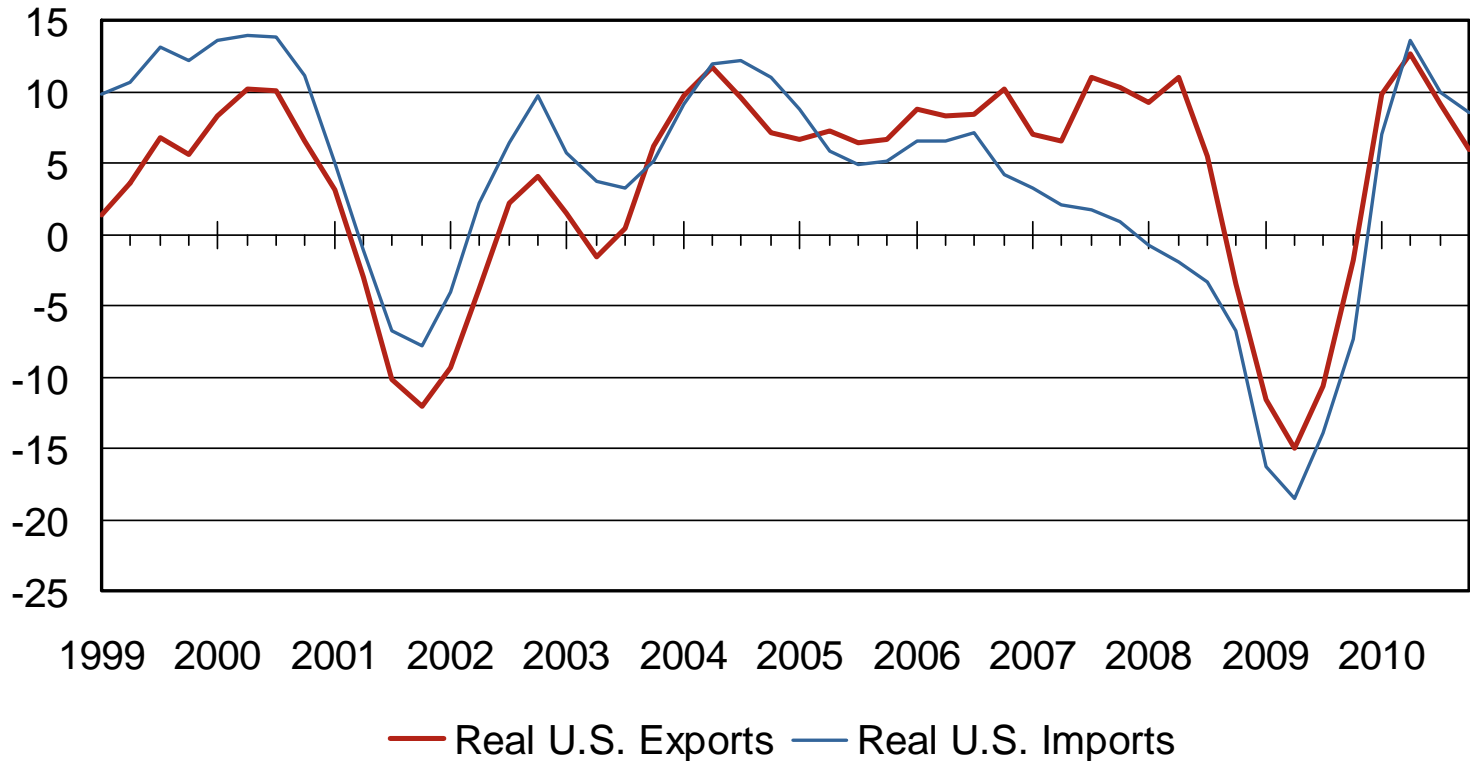
Source: Institute for Supply Management's Report on Business



Exports and Imports Fell - Steeply

***2010 estimate - Global Insight**

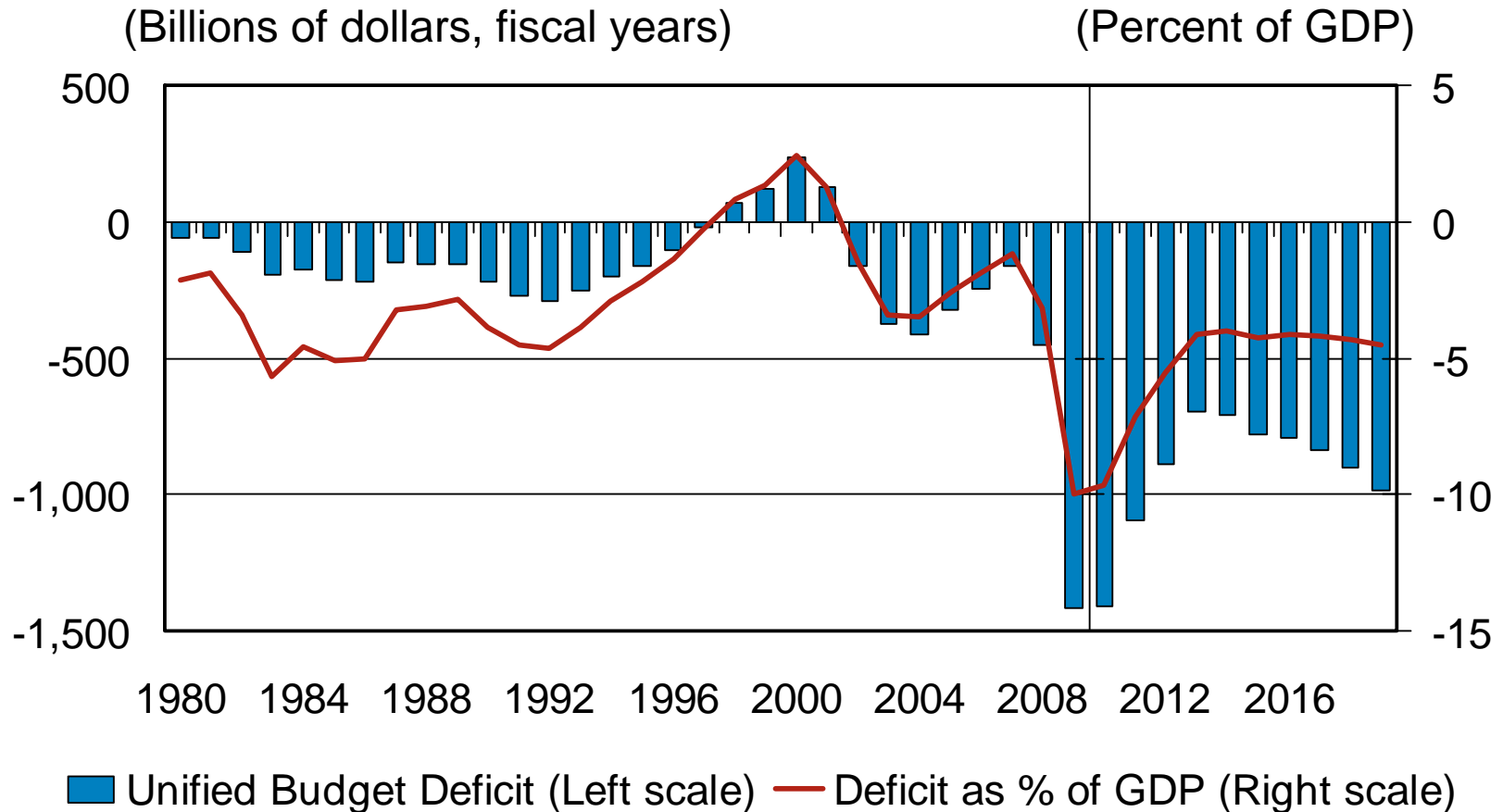
(Percent change from a year earlier, volumes)





A Record U.S. Federal Budget Deficit in Fiscal 2009

***2010 estimate - Global Insight**



Source: Global Insight



Relational Investors LLC

Portfolio Review With The

Alaska Retirement Management Board

February 25, 2010

Agenda

- I. Relational Investors LLC
 - II. Performance Review
 - III. The Relational Effect
 - IV. Market Environment
 - V. Portfolio Positioning
 - VI. Portfolio Review
 - VII. Appendix
-

Relational Investors LLC

- ▶ Registered Investment Adviser; Founded in 1996
- ▶ Independent employee ownership
- ▶ 50 Employees, 22 Investment Professionals
- ▶ \$6.1B under management as of 12/31/09
- ▶ Since 1996, 78 projects total in Large-Cap¹ and Mid-Cap funds and held Board positions in 11 companies
- ▶ Since inception the Fund has outperformed the S&P 500 Total Return Index² by 4.00%³ annually

¹ From 1996 until July 2008 the Relational Investors Fund (the "Fund") invested in both mid-cap and large-cap companies. As the Fund grew its assets under management the average market capitalization of companies the Fund invested in increased and the Fund now primarily invests in large-cap companies. Performance figures contained herein include all investments.

² S&P 500 Total Return Index ("SPTR" or "S&P 500 Index") is an unmanaged capitalization-weighted index comprised of 500 companies traded in the U.S. markets and is intended to reflect general stock market performance rather than the particular strategy employed by Relational.

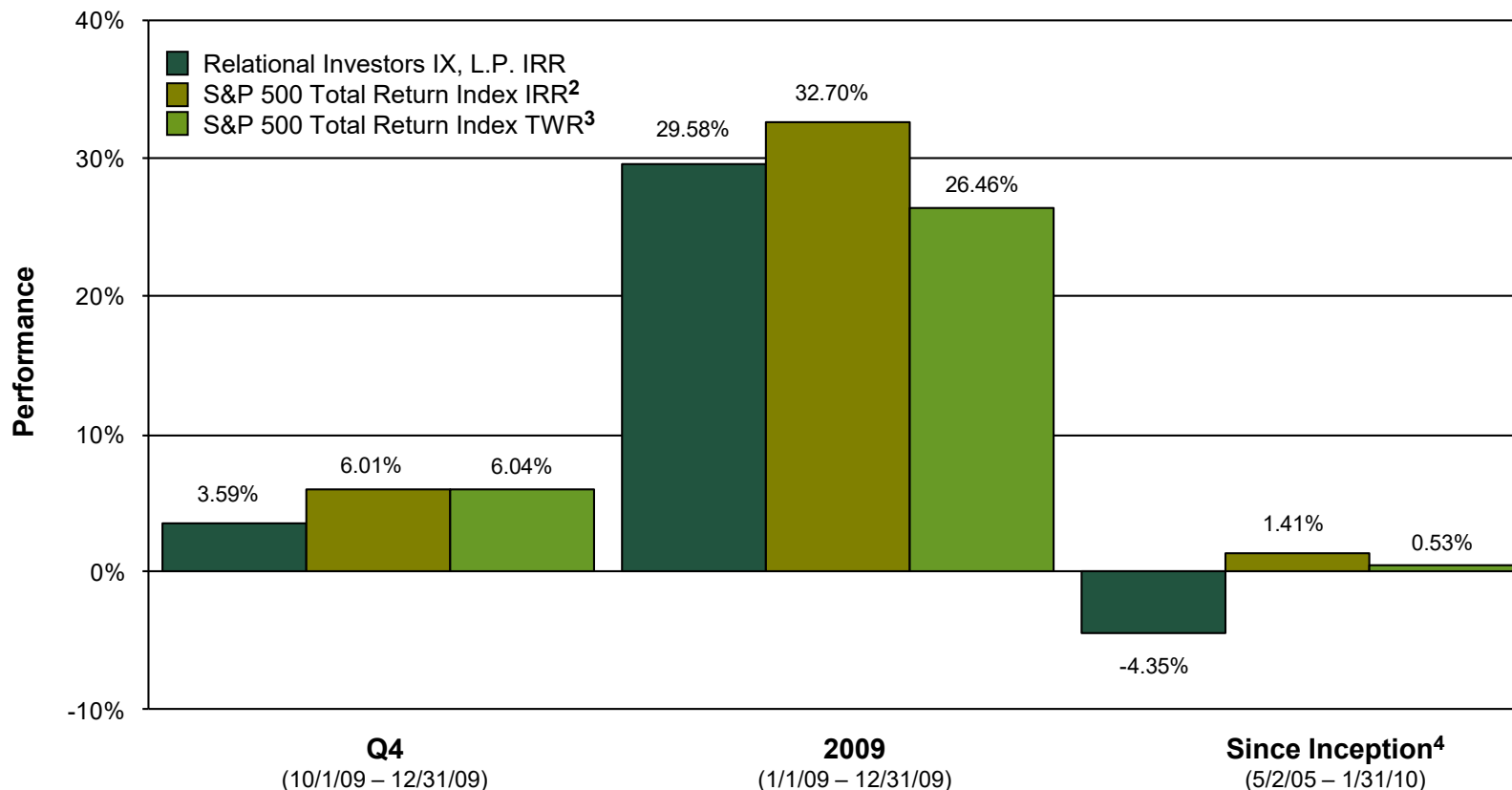
³ The Relational Investors Composite ("Composite") time-weighted returns net of current management fees, performance fees (after recoupment of management fees), and expenses with the SPTR Incentive Benchmark. Please see GIPS compliant presentation in the Appendix. Results will vary based on actual fee structure and timing of investment. Past performance is no guarantee of future returns and investments in securities involve the risk of loss. There is no guarantee that potential investors will achieve comparable results or its stated objectives, nor is there any assurance that investors will receive any return on or of their capital.

Realized and Unrealized Performance History

Relational Investors IX, L.P.

Through January 31, 2010

IRR¹ (Net of Fees and Expenses, Fees on Accrual Basis)



¹ Relational Investors IX, L.P. ("RI-9") internal rate of return ("IRR"), net of management fee, performance fee (after recoupment of fees and expenses), and expenses. The IRRs have been calculated based on the cash flows of RI-9's account. The return for each period is calculated separately based on the fund's value at the beginning of the period and by assuming that the net capital invested in the fund (cumulative capital contributions minus cumulative distributions) as of each day has that day's return. Capital contributions and distributions are assumed to be made at the beginning of the day; contributions receive that day's return and distributions do not.

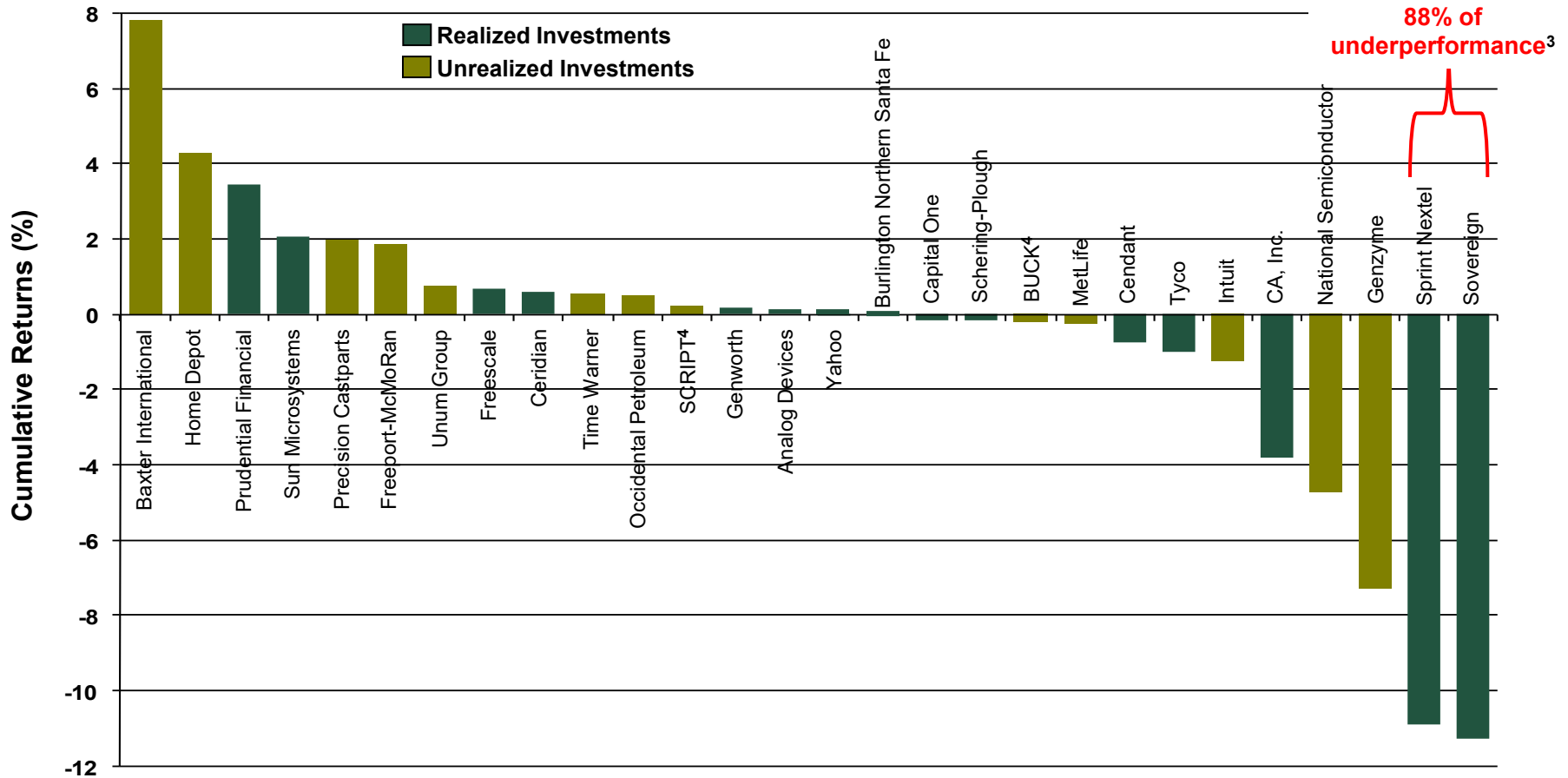
² SPTR is an unmanaged capitalization-weighted index comprised of 500 companies traded in the U.S. markets and is intended to reflect general stock market performance rather than the particular strategy employed by Relational. The SPTR IRR has been calculated based on the cash flows of the RI-9 account. Please refer to footnote 1 for how the IRR is calculated for each period. **Source: IDC.**

³ SPTR time-weighted return, net of management fee, performance fee (after recoupment of fees and expenses), and expenses. **Source: IDC.**

⁴ Returns are annualized.

Relative Stock Contribution¹: Since Inception

Relational Investors IX, L.P.
 (Relative to the SPTR², Gross of Fees and Expenses)
 From May 2, 2005 through January 31, 2010



¹ RI-9 gross of fees and expenses.

² The SPTR is an unmanaged capitalization-weighted index comprised of 500 companies traded in the U.S. markets and is intended to reflect general stock market performance rather than the particular strategy employed by Relational.

³ These two securities account for 97% of the portfolio's underperformance since inception.

⁴ Code name. Investment is not publicly disclosed.

Source: Results generated by Relational Investors utilizing FactSet

The Relational Effect

- ◆ On average, companies engaged¹ by Relational outperform the S&P 500 Index² over the long term
- ◆ The Fund has held securities in 74 companies from inception³ through 12/31/09
- ◆ Relational has engaged 49³ companies (“Engaged Companies”) since inception, not including current holdings

¹ Engagement is defined as any communication, whether by telephone, in person, or in writing, with members of the board of directors or management of a portfolio company.

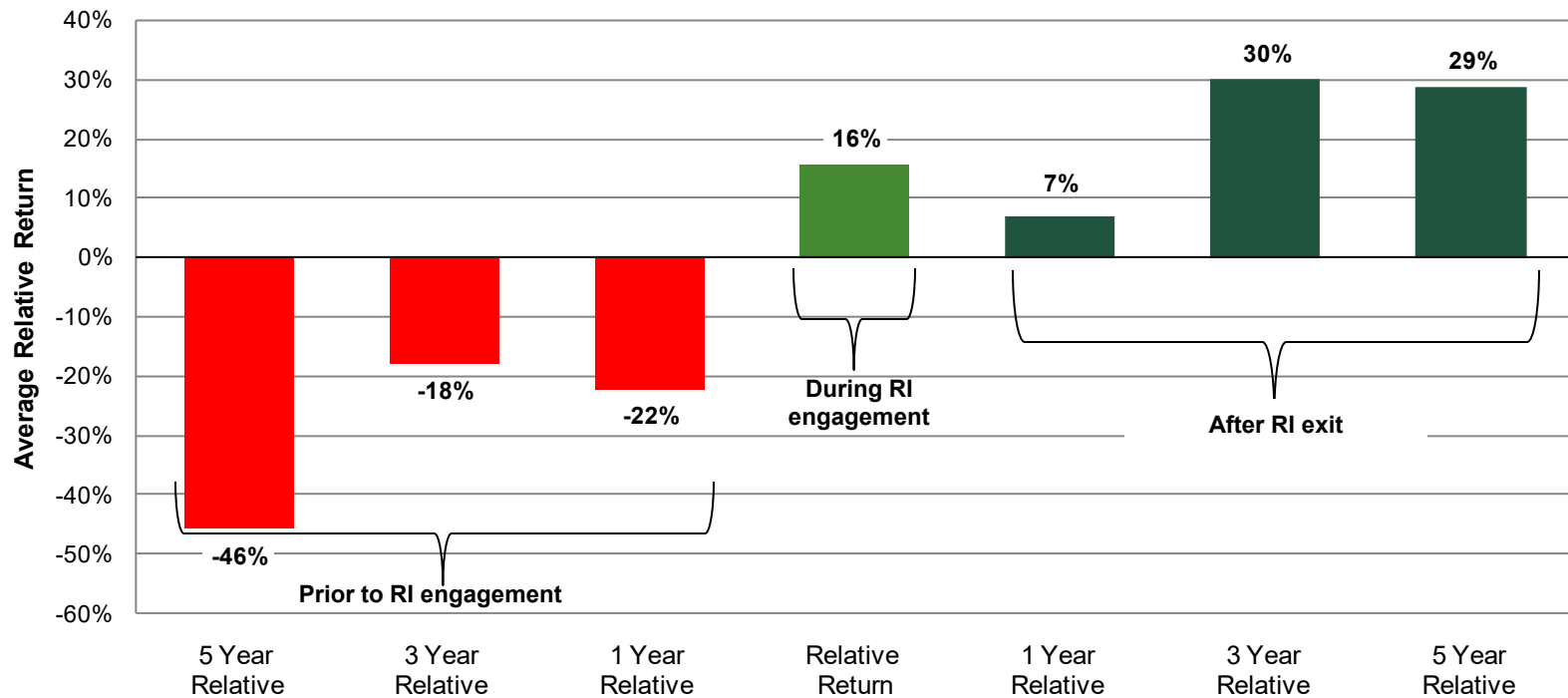
² S&P 500 is an unmanaged capitalization-weighted index comprised of 500 companies traded in the U.S. markets and is intended to reflect general stock market performance rather than the particular strategy employed by Relational. **Source:** IDC.

³ From 1996 until July 2008 the Fund invested in both mid-cap and large-cap companies. As the Fund grew its assets under management the average market capitalization of companies the Fund invested in increased and the Fund now primarily invests in large-cap companies. In August 2008 Relational launched a separate Mid-Cap Fund. The 49 companies does not include Mid-Cap Fund investments

Average Cumulative Relative Return of Engaged Companies

Relational, on average, improves stock performance of underperforming companies through active engagement.

Average Cumulative Relative Return¹ vs. the S&P 500²



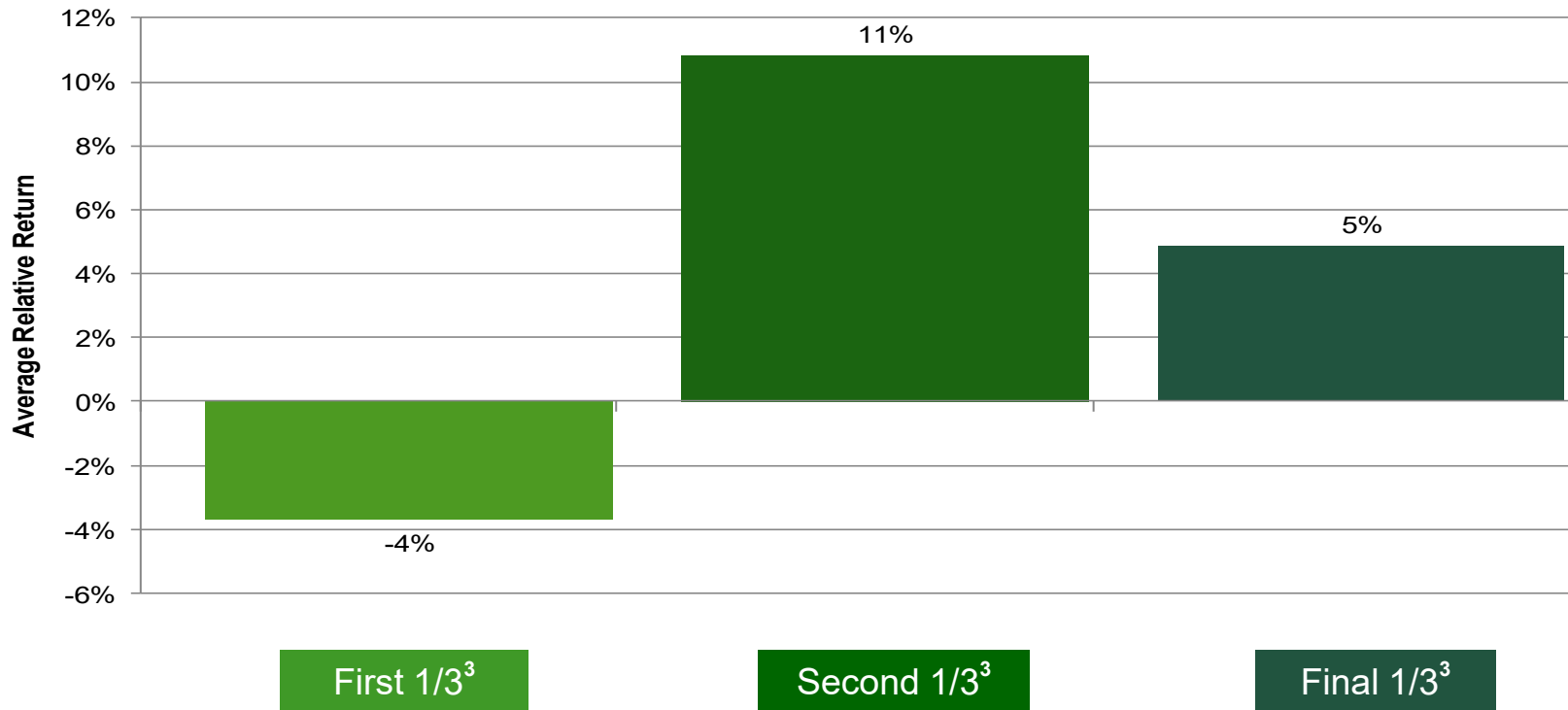
¹ Average cumulative relative return of the Engaged Companies gross of fees and expenses (Total return of each Engaged Company minus the S&P 500 Index benchmark return for the same period)/number of Engaged Companies for the same period. The average relative returns do not reflect any actual or model performance results for any portfolio managed by Relational. Additionally, past performance is not a guarantee of future returns. **Source:** FactSet

² SPTR is an unmanaged capitalization-weighted index comprised of 500 companies traded in the U.S. markets and is intended to reflect general stock market performance rather than the particular strategy employed by Relational. **Source:** IDC.

Average Cumulative Relative Return of Engaged Companies

Higher relative return occurs, on average, during second and final periods of engagement.

Average Cumulative Relative Return¹ vs. the S&P 500²



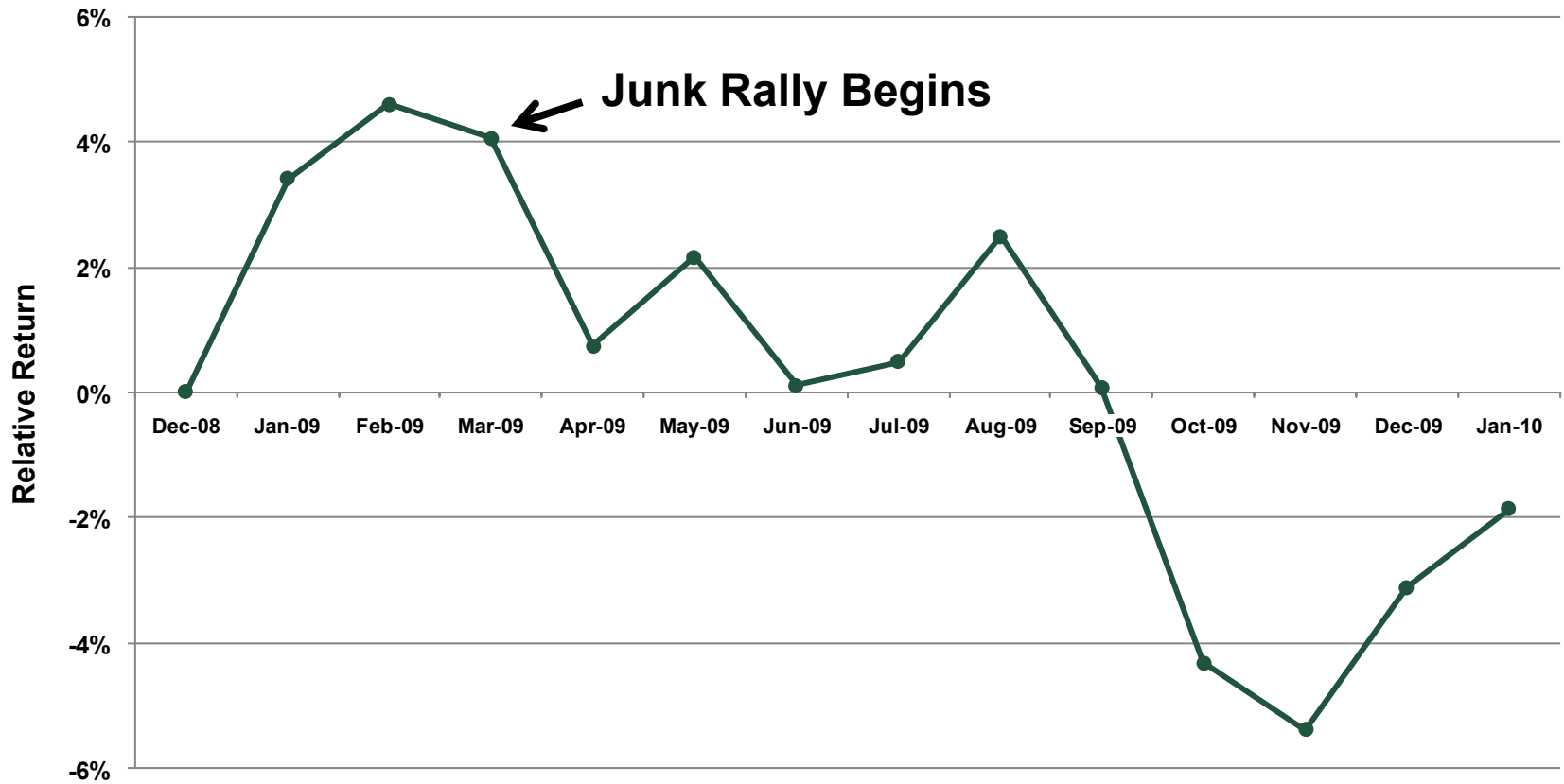
¹ Average cumulative relative return of the Engaged Companies gross of fees and expenses (Total return of each Engaged Company minus the S&P 500 Index benchmark return for the same period)/number of Engaged Companies for the same period. **Source: FactSet**

² SPTR is an unmanaged capitalization-weighted index comprised of 500 companies traded in the U.S. markets and is intended to reflect general stock market performance rather than the particular strategy employed by Relational. **Source: IDC.**

³ Each time frame is one third of the investment period (purchase date through the sell date) for each Engaged Company's security.

2009 Market Environment

Relational Investors IX, L.P.¹ Relative Net IRR Performance versus S&P 500 Total Return Index²
(Net of Fees and Expenses, Fees on an Accrual Basis)
December 31, 2008 through January 31, 2010



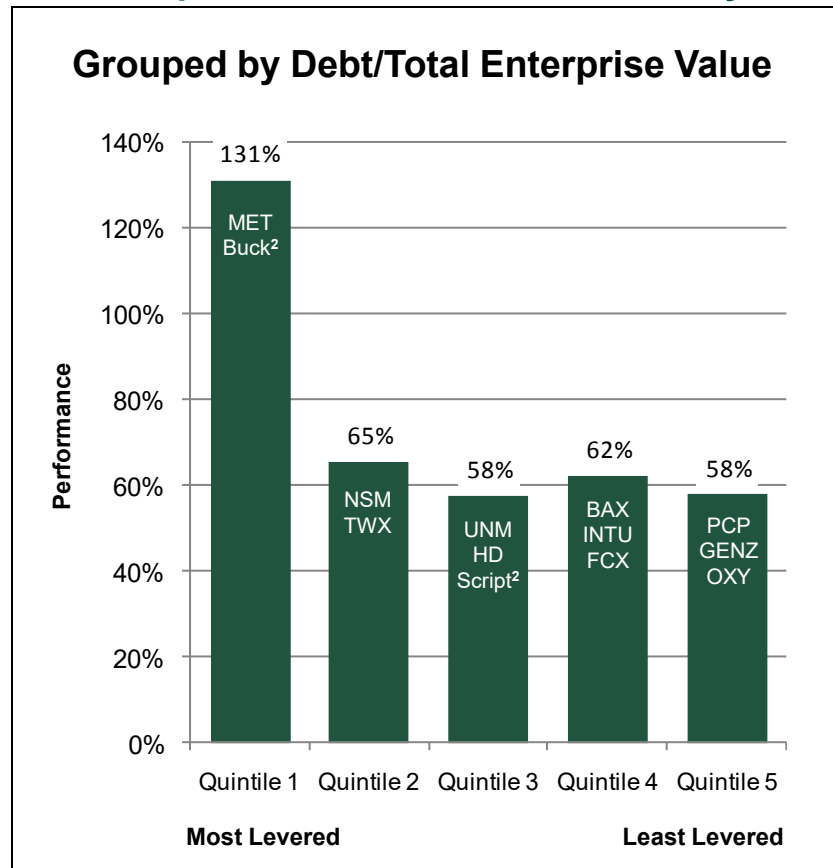
¹ RI-9 IRR net of management fee, performance fee (after recoupment of fees and expenses) and expenses. All IRRs have been calculated based on the cash flows of the RI-9 account. The return for each period is calculated separately based on the fund's value at the beginning of the period and by assuming that the net capital invested in the fund (cumulative capital contributions minus cumulative distributions) as of each day has that day's return. Capital contributions and distributions are assumed to be made at the beginning of the day; contributions receive that day's return and distributions do not.

² SPTR is an unmanaged capitalization-weighted index comprised of 500 companies traded in the U.S. markets and is intended to reflect general stock market performance rather than the particular strategy employed by Relational. **Source for index value: IDC.**

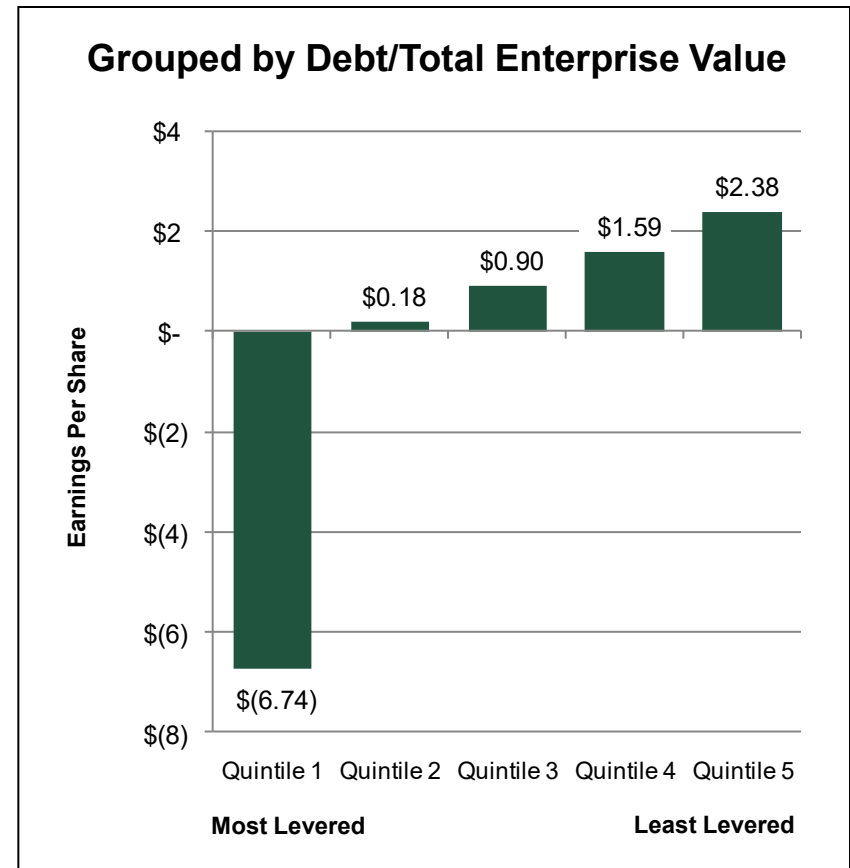
S&P 500 Rally Characteristics

S&P 500 Debt/Total Enterprise Value¹ Quintiles – March 9, 2009 through December 31, 2009
Total Return/Trailing 12 Month EPS

Most Highly Leveraged Stocks have Outperformed in Stock Market Rally



Most Highly Leveraged Stocks have Negative 12 Month Trailing EPS



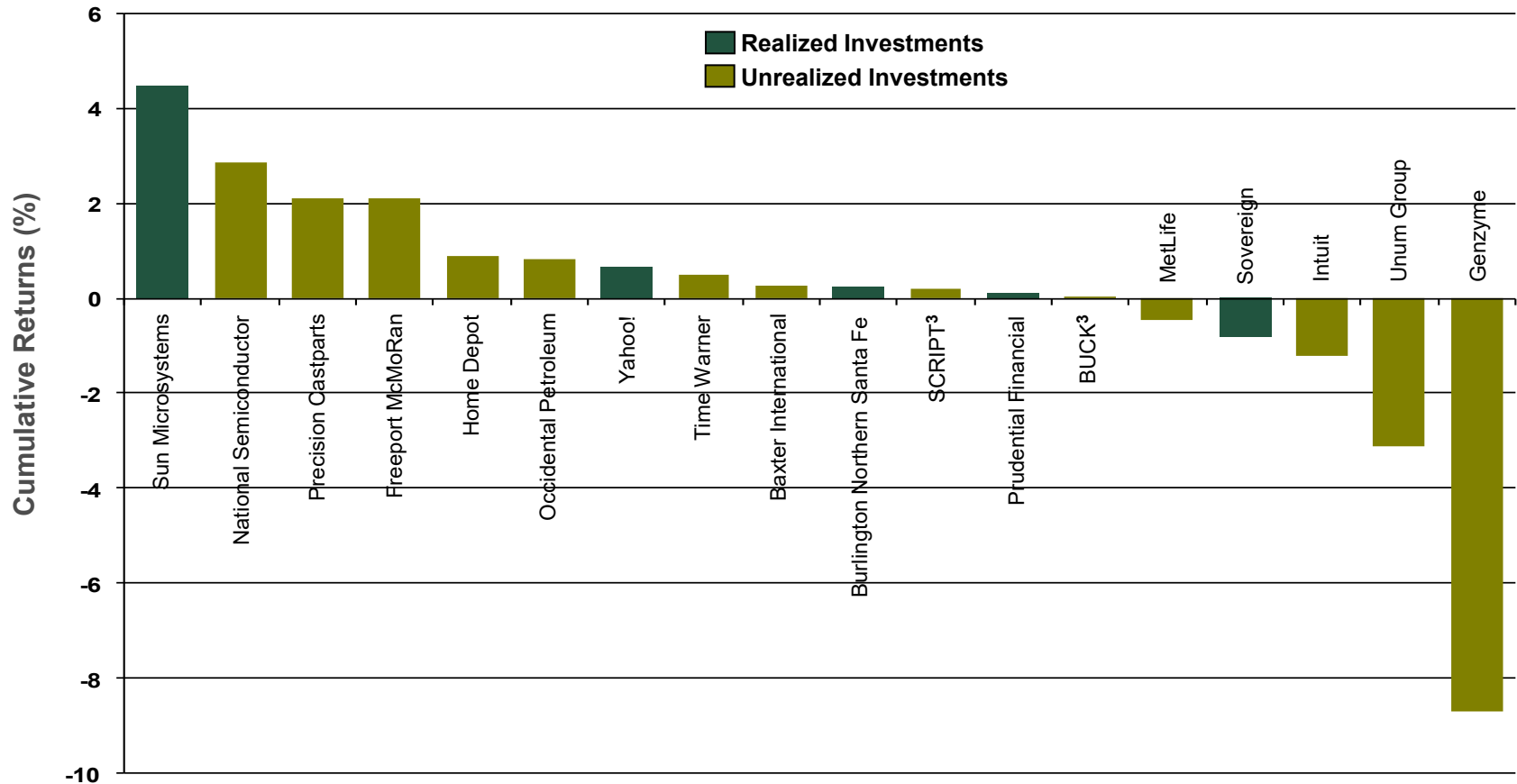
¹ Enterprise Value equals equity market capitalization plus debt, minority interest and preferred shares, minus cash and cash equivalents.

² Code name. Investment not publicly disclosed.

Relative Stock Contribution¹: 2009

Relational Investors IX, L.P.

(Relative to the SPTR², Gross of Fees and Expenses)
From January 1, 2009 through December 31, 2009



¹ RI-9 gross of fees and expenses.

² The SPTR is an unmanaged capitalization-weighted index comprised of 500 companies traded in the U.S. markets and is intended to reflect general stock market performance rather than the particular strategy employed by Relational.

³ Code name. Investment is not publicly disclosed.

Source: Results generated by Relational Investors utilizing FactSet

Portfolio Positioning

Strategy

- ▶ Portfolio is moderately tilted to defend against
 - Market volatility
 - Disruptions in credit markets
 - Disappointing economic conditions
- ▶ Portfolio companies have moderate to low financial leverage
- ▶ Portfolio companies have strong defendable cash flows

Portfolio Positioning

Risk Management

- ▶ Enhanced screens and sensitivity analysis for leverage, liquidity, and financial requirements
- ▶ Formalization of macro risk overlay
- ▶ Successful implementation of investment team structure
- ▶ Increased speed and effectiveness of company engagement which minimizes risk of stalled or failed engagement projects

Portfolio Positioning

Diversification

- ▶ Portfolio is not balanced to broad market sector weights
- ▶ Portfolio is diversified among several, though not all, sectors
- ▶ Portfolio is diversified with respect to broad macro factors
- ▶ Portfolio is diversified by stage of project

Large Cap Portfolio – Investment Stages

| Early Stage | Mid Stage | Late Stage |
|---|--|---------------|
| <p>BUCK¹</p> <p>SCRIPT¹</p> <p>Occidental Petroleum</p> <p>Intuit</p> <p>Freeport-McMoRan</p> <p>MetLife</p> <p>Precision Cast Parts</p> <p>Genzyme</p> | <p>Time Warner</p> <p>The Home Depot</p> <p>Unum Group</p> <p>National Semiconductor</p> | <p>Baxter</p> |

¹ Code name. Investment not publicly disclosed.

Holdings

Relational Investors IX, L.P. January 31, 2010

| Security | Initial Purchase | Quantity | Unit Cost (\$) | Total Cost (\$) | Current Price (\$) | Market Value (\$) | % of Portfolio | Gain/Loss (%) | RILLC % of Ownership |
|-------------------------------------|------------------|-----------|----------------|-----------------------|--------------------|-----------------------|----------------|---------------|----------------------|
| COMMON STOCK | | | | | | | | | |
| Baxter International Inc. | 05/12/05 | 641,836 | 47.12 | 30,246,497.84 | 57.59 | 36,963,335.24 | 14.27 | 22.2 | 1.98 |
| National Semiconductor Corporation | 06/24/05 | 1,394,459 | 27.14 | 37,849,225.65 | 13.26 | 18,490,526.34 | 7.14 | -51.1 | 9.25 |
| Unum Group | 02/01/06 | 818,990 | 21.09 | 17,269,901.89 | 19.57 | 16,027,634.30 | 6.19 | -7.2 | 4.90 |
| The Home Depot, Inc. | 12/04/06 | 1,212,405 | 38.09 | 46,178,739.28 | 28.01 | 33,959,464.05 | 13.11 | -26.5 | 1.48 |
| Genzyme Corporation | 09/15/08 | 569,503 | 65.18 | 37,120,894.04 | 54.26 | 30,901,232.78 | 11.93 | -16.8 | 3.85 |
| Time Warner Inc. | 01/27/09 | 253,969 | 17.75 | 4,506,781.28 | 27.45 | 6,971,449.05 | 2.69 | 54.7 | 0.32 |
| Intuit Inc. | 01/27/09 | 788,079 | 26.21 | 20,656,348.48 | 29.61 | 23,335,019.19 | 9.01 | 13.0 | 3.97 |
| Precision Castparts Corp. | 01/28/09 | 199,568 | 75.15 | 14,997,258.09 | 105.25 | 21,004,532.00 | 8.11 | 40.1 | 2.37 |
| Occidental Petroleum Corporation | 02/09/09 | 398,208 | 57.67 | 22,966,252.59 | 78.34 | 31,195,614.72 | 12.05 | 35.8 | 0.80 |
| MetLife, Inc. | 05/05/09 | 538,070 | 34.02 | 18,303,457.22 | 35.32 | 19,004,632.40 | 7.34 | 3.8 | 1.18 |
| Freeport-McMoRan Copper & Gold Inc. | 07/07/09 | 73,235 | 45.62 | 3,340,764.33 | 66.69 | 4,884,042.15 | 1.89 | 46.2 | 0.29 |
| SCRIPT ¹ | 11/06/09 | 309,534 | 30.12 | 9,321,777.93 | 32.37 | 10,019,615.58 | 3.87 | 7.5 | 0.47 |
| BUCK ¹ | 11/24/09 | 124,342 | 54.33 | 6,756,106.74 | 49.95 | 6,210,882.90 | 2.40 | -8.1 | 0.65 |
| | | | | <u>269,514,005.36</u> | | <u>258,967,980.70</u> | 100.00 | <u>-3.9</u> | |
| CASH AND EQUIVALENTS | | | | 336,313.61 | | 336,313.61 | | | |
| TOTAL PORTFOLIO | | | | <u>269,850,318.97</u> | | <u>259,304,294.31</u> | | <u>-3.9</u> | |

¹ Code name. Investment not publicly disclosed.

Unaudited and Unreconciled

APPENDIX

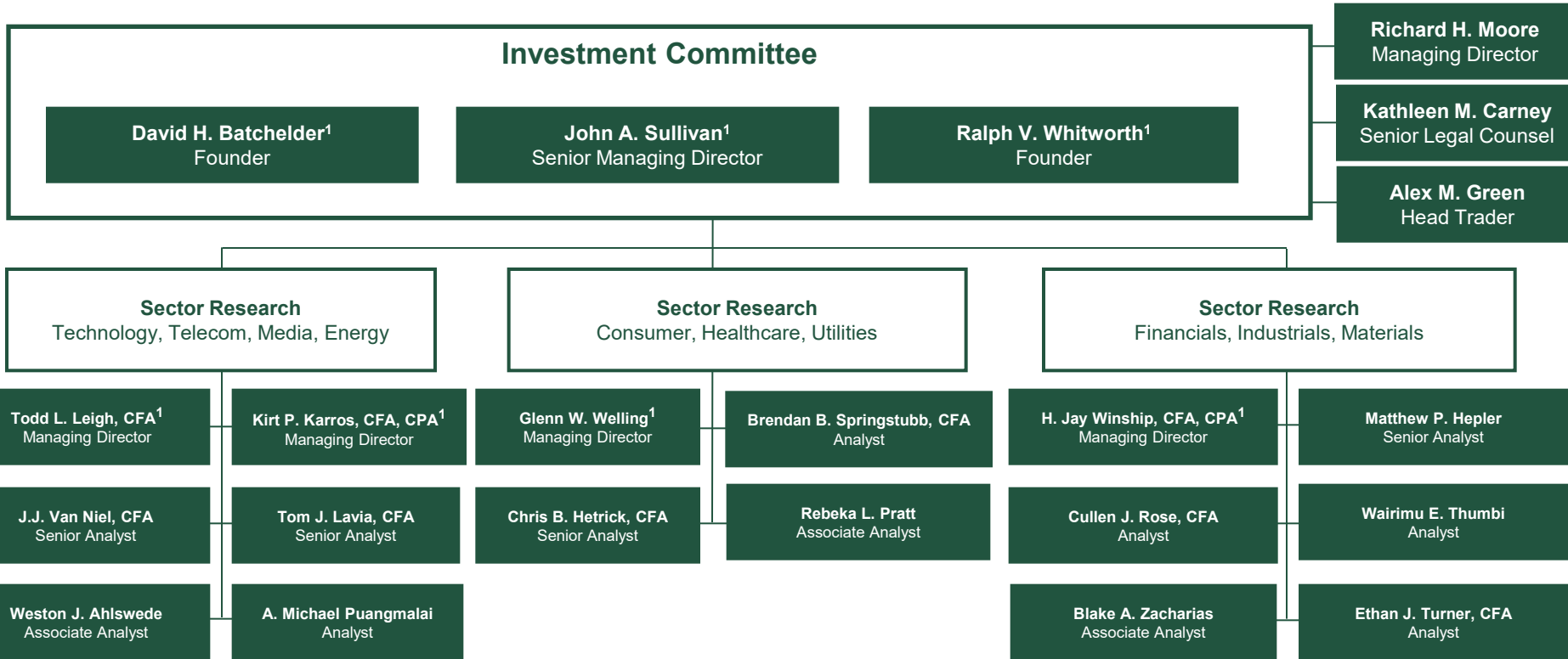
Macro Risk Overlay

- Low Risk
- Medium Risk
- High Risk

| Ticker | Economic (I/S) | Political/Regulatory | Credit (Balance Sheet) | Consumer | Currency | Interest Rate | Energy Costs | Commodity | Real Estate |
|---------------------|----------------|----------------------|------------------------|-------------|-------------|---------------|--------------|-----------|-------------|
| HD | High Risk | Medium Risk | Medium Risk | High Risk | Low Risk | High Risk | Low Risk | Low Risk | High Risk |
| MET | Medium Risk | High Risk | High Risk | Medium Risk | Medium Risk | High Risk | Low Risk | Low Risk | Low Risk |
| FCX | Medium Risk | Medium Risk | Medium Risk | Low Risk | Medium Risk | Medium Risk | Medium Risk | High Risk | Low Risk |
| OXY | Medium Risk | Medium Risk | Low Risk | Medium Risk | Low Risk | Low Risk | High Risk | High Risk | Low Risk |
| UNM | Medium Risk | Medium Risk | High Risk | Low Risk | Medium Risk | Medium Risk | Low Risk | Low Risk | Low Risk |
| NSM | High Risk | Low Risk | Medium Risk | High Risk | Low Risk | Low Risk | Low Risk | Low Risk | Low Risk |
| PCP | Medium Risk | Medium Risk | Low Risk | Low Risk | Medium Risk | Low Risk | Medium Risk | Low Risk | Low Risk |
| TWX | Medium Risk | Medium Risk | Medium Risk | Medium Risk | Low Risk | Low Risk | Low Risk | Low Risk | Low Risk |
| INTU | Medium Risk | Medium Risk | Low Risk | Medium Risk | Low Risk | Low Risk | Low Risk | Low Risk | Low Risk |
| GENZ | Low Risk | Medium Risk | Low Risk | Low Risk | Medium Risk | Low Risk | Low Risk | Low Risk | Low Risk |
| BAX | Low Risk | Medium Risk | Low Risk | Low Risk | Medium Risk | Low Risk | Low Risk | Low Risk | Low Risk |
| BUCK ¹ | Medium Risk | Medium Risk | Medium Risk | Low Risk | High Risk | High Risk | Medium Risk | High Risk | Low Risk |
| SCRIPT ¹ | Low Risk | Medium Risk | Medium Risk | Medium Risk | Low Risk | Low Risk | Low Risk | Low Risk | Medium Risk |

¹ Code name. Investment has not been publicly disclosed.

Investment Team



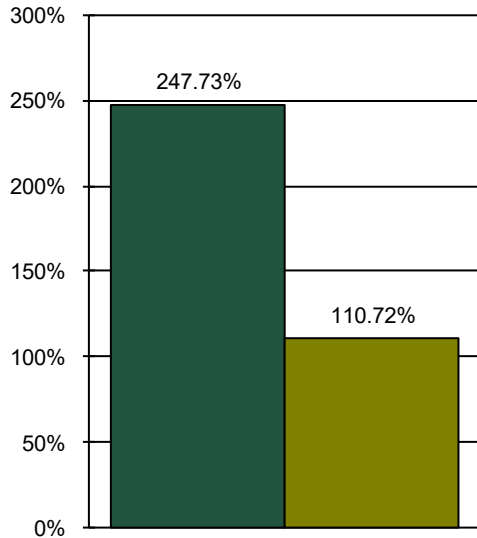
Relational Investors Composite¹: Performance and Excess Return

From July 1, 1996 (inception) through December 31, 2009

■ Relational Investors Composite Net
■ S&P 500 Total Return Index²

Cumulative Return

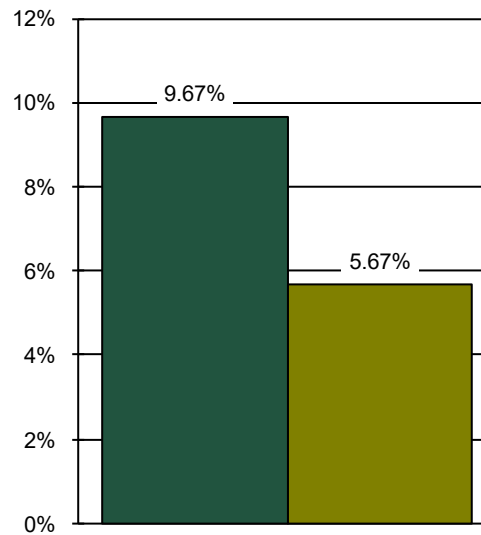
Net of Fees



ITD

Annualized Return

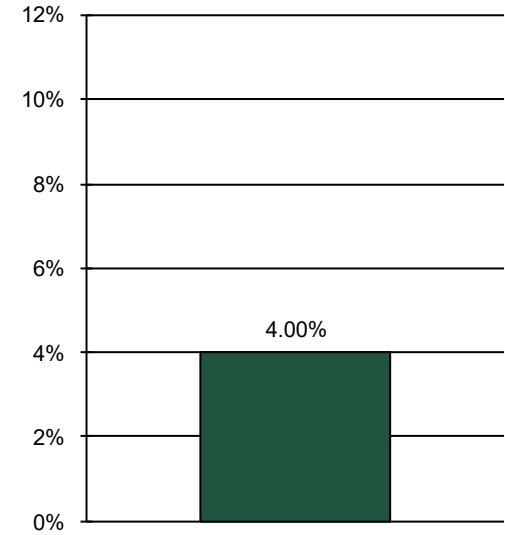
Net of Fees



ITD

Annualized Excess³ Return

Net of Fees



ITD

¹ The Composite time-weighted returns net of current management fees, performance fees (after recoupment of management fees), and expenses with the SPTR Incentive Benchmark. Please see GIPS compliant presentation in the Appendix. Results will vary based on actual fee structure and timing of investment. Past performance is no guarantee of future returns and investments in securities involve the risk of loss. There is no guarantee that potential investors will achieve comparable results or its stated objectives, nor is there any assurance that investors will receive any return on or of their capital. From 1996 until July 2008 the Fund invested in both mid-cap and large-cap companies. As the Fund grew its assets under management the average market capitalization of companies the Fund invested in increased and the Fund now primarily invests in large-cap companies. Performance figures contained herein include all investments.

² The SPTR is an unmanaged, capitalization-weighted index comprised of 500 companies traded in the U.S. markets and is intended to reflect general stock market performance rather than the particular strategy employed by Relational. **Source:** IDC.

³ "Excess" is defined as the difference between the annualized returns of the Composite and the SPTR.

Presenters

David H. Batchelder – Principal and Investment Committee Member

Mr. Batchelder is a Founder, Principal, and member of Relational Investors' Investment Committee. He has over 25 years of financial management, mergers, and acquisitions experience. Mr. Batchelder has served as chairman of one public company, Mac Frugal's Bargains•Close-Outs Inc., and as a director of ten others: Allwaste, Inc., Apria Healthcare Group Inc., ConAgra Foods, Inc., The Home Depot, Inc., ICN Pharmaceuticals, Inc., Intuit Inc., Mesa, Inc., Nuevo Energy Company, Santa Fe Pacific Gold Corporation, and Washington Group International, Inc. Five of these public companies were in the *Fortune 500* during his service. He remains a director of The Home Depot, Inc. and Intuit Inc.



Mr. Batchelder's experience as a board member of several public and private companies provided him a direct insight into corporate management and board dynamics. His perspective proves extremely valuable to Relational's strategy of assisting portfolio companies' managements improve performance and unlock value.

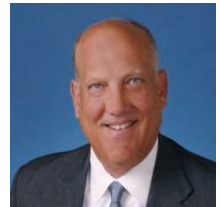
From 1988 to 2005, Mr. Batchelder was also a Principal of Relational Advisors LLC, a financial advisory and investment banking firm, which he founded. He built the firm into a nationally recognized source of expertise for mergers, acquisitions, private financings, and shareholder matters.

Prior to founding Relational Advisors and Relational Investors, Mr. Batchelder held various executive positions with Mesa Petroleum Co. from 1978 to 1988, and in 1986 he was named President and Chief Operating Officer. He also served on Mesa's board of directors from 1984 to 1987. During his affiliation with Mesa, Mr. Batchelder led the team responsible for Mesa's investments, acquisitions, and financing activities. Prior to his affiliation with Mesa Petroleum Co., Mr. Batchelder was an Audit Manager with Deloitte & Touche LLP.

A 1971 graduate of Oklahoma State University, Mr. Batchelder holds a bachelor's degree in accounting.

John A. Sullivan – Principal and Investment Committee Member

Mr. Sullivan is a Principal and Senior Managing Director of Investments for Relational. He is also a member of the Investment Committee. Since joining the Firm in 1998, he has been integrally involved in Relational Investors' Investment Committee's decision Process, communications with portfolio companies, and strategy development and implementation for each portfolio company. Prior to joining Relational Investors he was an investment banker for 12 years, most recently as an Associate at Relational Advisors, preceded by experience as a Senior Vice President at The Seidler Companies Inc., and served as an Associate at Kidder, Peabody & Co., Inc. He was a generalist across a broad range of industries and originated and executed numerous transactions including IPOs, secondary offerings, restructurings, mergers, acquisitions, and refinancings totaling over \$2 billion.



Mr. Sullivan served on the board of directors of the FARR Company and American Coin Merchandising, Inc. He was appointed chairman of American Coin to lead the company in a crisis and turnaround situation culminating in a successful sale of the company.

Mr. Sullivan holds a master's degree in management from the Massachusetts Institute of Technology and a bachelor's degree in engineering from Loyola Marymount University.

Presenters (continued)

Frank P. Hurst – Principal and Senior Managing Director



Mr. Hurst joined Relational Investors in October 2007 as a principal and senior managing director responsible for client services, marketing, and strategic planning. Over his 31-year business career he has spent the last 24 years in various executive, marketing, product development, and administrative positions in the investment management industry.

Prior to Relational, Mr. Hurst was president of Berkeley Capital Management LLC, a \$5 billion multiple equity strategy investment manager responsible for marketing, product development, and corporate acquisitions.

Mr. Hurst spent 15 years with Duncan-Hurst Capital Management as co-founder, president, director of marketing and client services, and chief administrative officer. During his tenure with Duncan-Hurst he was instrumental in growing the firm from a start-up single equity product firm to a multiple equity products firm with over \$7 billion of domestic and international equity assets under management. Duncan-Hurst's clients included public, corporate and Taft-Hartley retirement plans, endowments and foundations, family offices, mutual funds, onshore and offshore partnerships, sub-advisory relationships with insurance companies, investment banks, and high net worth individuals.

Additional experience includes senior sales and marketing positions with Scudder, Stevens and Clark, a global asset manager and Pacific Century Advisors, an investment management subsidiary of Security Pacific Corporation.

Mr. Hurst is a graduate of San Diego State University with a bachelor's degree in economics.

Performance History (Large-Cap)

Relational Investors Composite (“RI”) July 1, 1996 (inception) through December 31, 2009 – Unaudited

| Timeframe | Gross of Fees (in %) | Net of Actual Fees (in %) | Net of Current Fees with S&P Incentive Benchmark (in %) | S&P 500 Total Return Index (not examined) (in %) | Net of Current Fees with RI Custom Incentive Benchmark (in %) | RI Custom Index (in %) | Dispersion | Composite Market Value at Year-end (in millions) | Market Value of Firm Assets at Year-end (in millions) | Percentage of Composite Assets to Total Firm Assets at Year-end | Number of Accounts at Year-end |
|-----------------------------------|----------------------|---------------------------|---|--|---|------------------------|-------------|--|---|---|--------------------------------|
| 1996 | 56.76 | 43.03 | 37.77 | 11.68 | 39.80 | 21.84 | ≤5 accounts | \$19.6 | \$19.6 | 100.00% | 1 |
| 1997 | 34.76 | 28.87 | 26.40 | 33.36 | 25.88 | 23.79 | ≤5 accounts | \$274.4 | \$286.2 | 95.90% | 5 |
| 1998 | -31.59 | -33.63 | -34.61 | 28.58 | -34.61 | 18.30 | 8.59% | \$221.8 | \$221.8 | 100.00% | 8 |
| 1999 | 44.92 | 42.99 | 41.08 | 21.04 | 41.08 | 19.94 | 17.30% | \$578.0 | \$578.0 | 100.00% | 8 |
| 2000 | 73.76 | 66.16 | 67.02 | -9.10 | 67.17 | 9.58 | 12.54% | \$613.6 | \$628.3 | 97.70% | 9 |
| 2001 | 10.06 | 5.55 | 3.80 | -11.89 | 4.76 | -7.07 | 7.57% | \$814.3 | \$890.0 | 91.50% | 10 |
| 2002 | -1.16 | -7.02 | -7.26 | -22.10 | -6.81 | -19.84 | 5.61% | \$1,065.9 | \$1,172.2 | 90.90% | 13 |
| 2003 | 53.97 | 48.27 | 46.28 | 28.68 | 46.68 | 30.68 | 6.03% | \$1,620.4 | \$1,973.3 | 82.10% | 17 |
| 2004 | 20.30 | 17.66 | 16.61 | 10.88 | 16.46 | 10.14 | 2.28% | \$3,222.1 | \$3,656.2 | 88.13% | 20 |
| 2005 | 11.90 | 9.73 | 8.95 | 4.91 | 8.76 | 3.91 | 1.09% | \$5,615.4 | \$6,242.2 | 89.96% | 22 |
| 2006 | 12.06 | 10.58 | 9.90 | 15.80 | 9.90 | 12.97 | 1.45% | \$6,434.4 | \$6,816.8 | 94.40% | 21 |
| 2007 | -8.83 | -9.60 | -10.19 | 5.49 | -10.19 | -5.02 | 2.13% | \$6,189.1 | \$6,663.3 | 92.88% | 22 |
| 2008 | -40.64 | -41.33 | -41.93 | -37.00 | -41.93 | -41.99 | 2.20% | \$3,062.4 | \$3,853.1 | 79.48% | 22 |
| 2009 | 28.99 | 27.35 | 26.38 | 26.46 | 26.38 | 27.24 | 1.95% | \$4,662.7 | \$5,993.5 | 77.80% | 19 |
| Cumulative since inception | 541.85 | 307.79 | 247.73 | 110.72 | 256.59 | 106.94 | | | | | |
| Cumulative annualized | 14.76 | 10.97 | 9.67 | 5.67 | 9.88 | 5.53 | | | | | |

Relational Investors LLC

Notes to Schedules of Investment Performance Statistics

July 1, 1996 (inception) through December 31, 2009
(Unaudited)

1. Compliance Statement

Relational Investors LLC (the Firm) is an investment advisory firm registered with the Securities and Exchange Commission and was founded in 1996. The accompanying Schedules of Investment Performance Statistics of the Relational Investors Composite, gross and net of management and performance fees, managed by the Firm from July 1, 1996 (inception) through December 31, 2009, are prepared and presented in compliance with the Global Investment Performance Standards (GIPS®). The Firm has been verified for the periods July 1, 1996 through March 31, 2009 by Ernst & Young LLP. In addition, Ernst & Young LLP has performed a performance examination of the Composite for the periods July 1, 1996 through March 31, 2009. The CFA Institute (formerly known as the Association for Investment Management and Research (AIMR ®)) has not been involved with the preparation or review of this report. A copy of the verification and examination report is available upon request. Additional information regarding the Firm's policies and procedures for calculating and reporting performance results is available upon request.

2. Composite

The Firm utilizes a value-based investment strategy that emphasizes fundamental company-specific analysis. In the Relational Investors Composite, the Firm seeks to maintain investments in a concentrated portfolio of U.S. or Canadian securities with large-cap equity market capitalizations. With each investment, the Firm may seek to acquire a significant percentage of the subject company's shares outstanding. The Firm then initiates a program of communication with management, the board of directors and other shareholders designed to increase shareholder returns.

The Firm's advisory agreements with clients are generally structured on either capital call/distribution basis or fully funded basis. The capital call/distribution accounts call for or disburse cash as portfolio investments are made or disposed, thus generally maintaining minimal cash balances within the accounts. The fully funded accounts require contribution of the entire capital commitment into the account, reinvest sales proceeds and investment income, and typically restricts cash not utilized in the investment strategy to S&P index tracking instruments ("Spyders") or other highly liquid short-term investments, thus generally maintaining minimal cash balances within the accounts.

The Relational Investors Composite presented consists of all actual, fully discretionary large-cap accounts with a capital call/distribution structure and a carve-out of all actual, fully discretionary, actively managed portions (account assets excluding Spyders and short-term investment vehicles) of the fully funded large-cap accounts that were managed by the Firm from July 1, 1996 through December 31, 2009. The returns from the actively managed portions (accounts excluding Spyders and short-term investment vehicles) of the fully funded large-cap accounts have been carved-out as representative of the returns that would have been achieved in an account managed on a capital call/distribution basis. The Relational Investors Composite was created in August 2003.

For a complete list and description of the Firm's composites, please contact Relational Investors LLC at (858) 704-3333.

The Composite includes leveraged accounts, which utilize the same investment strategy as the non leveraged accounts in the Composite, but gives the Firm the ability to purchase securities on margin. The extent of leveraging is dictated by terms of the individual investment management agreements and ranges from 20% to 50%.

The S&P 500 Total Return Index is used as the benchmark of the Relational Investors Composite. The Index is an unmanaged and generally considered representative of the U.S. stock market. The index returns do not reflect fees, commissions or other expenses of investing. Investors may not make direct investments into any index.

In December 2007, the Firm created the RI Custom Index for the Relational Investors Composite and has presented the Custom Index returns since its inception. The Custom Index is comprised of the respective Composite's individual portfolio securities weightings multiplied by the related S&P 500 GICS Sector indices' returns and aggregated on a monthly basis. Beginning January 1, 2008, the Custom Index removes individual securities held in the Composite from the respective S&P GICS Sector indices' returns in calculating the Custom Index returns. The Custom Index is rebalanced at each month-end based on beginning-of-period securities weightings. The Custom Index is an unmanaged index and the index returns do not reflect fees, commissions or other expenses of investing. Investors may not make direct investments into any index.

At December 31, 1997 and 2005, the Relational Investors Composite included one non-fee paying account comprising 1.2% and 0.0% of the composite's assets, respectively. At December 31, 1998, 1999, 2000, 2001, 2002, and 2004, the Relational Investors Composite included two non-fee paying accounts comprising 0.8%, 0.6%, 0.8%, 0.6%, 0.5%, and 0.3%, respectively, of the composite's assets. At December 31, 2003, the Relational Investors Composite included three non-fee paying accounts comprising 0.5% of the composite's assets.

3. Management Fee, Performance Fee, and Expense Reimbursements

The actual historical annual management fee schedule for the Relational Investors Composite is up to 1.50% of capital commitment amounts or net asset value. Management fees are generally payable quarterly in advance based on one-fourth of annual rates.

Depending on the specific terms of the investment agreements, accounts are subject to one of the following two types of performance fee charges:

(continued)

Relational Investors LLC

Notes to Schedules of Investment Performance Statistics

3. Management Fee, Performance Fee, and Expense Reimbursements (continued)

1. Up to 20% of net realized profits for each investment, as profits are realized. All performance fee calculations for each account are cumulative from the date of the initial capital contribution to the account and are net of any unrealized losses.

2. Up to 25% of the net change in the account value relative to the applicable benchmark as defined in the Investor's agreement, at the end of each fiscal year, subject to loss carryforward from prior periods.

Prior to 2002, performance fees were accounted for on a cash basis. Beginning March 31, 2002, performance fees were accrued on a quarterly basis and beginning September 30, 2003, performance fees were accrued on a monthly basis.

Depending on the specific terms of the investment agreements, accounts generally reimburse the Firm on a quarterly basis for expenses paid by the Firm on behalf of the accounts. The expense reimbursements are reflected in the net-of-fee returns, but are not included in the gross-of-fee returns.

Special circumstances may cause fees to vary from this schedule and the Firm reserves the right to negotiate fees with clients.

4. Calculation of Investment Performance Statistics

Returns are calculated on an asset-weighted, time-weighted, geometrically linked, total rate of return basis, including all dividends and interest, realized gains and losses, and net of trading expenses and without provision for income taxes. Investment security transactions are accounted for on the trade date. Prior to June 30, 2003, dividends were accounted for on a cash basis. On June 30, 2003, the Firm elected early adoption of the accrual accounting requirement for dividends. Other items of income are accounted for on an accrual basis. The accounts in the Composite are valued daily subsequent to December 31, 2003. Prior to that, the accounts were valued at least monthly and at various times throughout the month as significant cash flows or market action occur. The U.S. dollar is the currency used to calculate performance.

New accounts are added to the Composite in the first complete measurement period after the account has come under management. Terminated accounts are included in the Composite through the last full measurement period they are invested. Measurement periods are defined as calendar quarters prior to December 31, 2003 and calendar months thereafter.

The quarterly returns for the Composite is calculated by asset weighting the quarterly returns of the accounts in the Composite. The yearly returns of the Composite is computed by geometrically linking the returns of each quarter within the calendar year. The

cumulative return of the Composite at the end of each calendar year is computed by geometrically linking the current year's return to the prior year's cumulative return. The annualized return of the Composite at the end of each calendar year is computed by taking the n th root of the year-end cumulative return, with n representing the number of years from the beginning of the Composite. This computation produces a constant rate of annual return for the applicable period.

Past performance may not be indicative of future results; other performance calculation methods may produce different results, and the performance results may vary for individual accounts and for different periods.

Prior to 2007, composite dispersion was calculated as the asset-weighted standard deviation of net portfolio returns represented within the composite for the full year. Beginning in December 2007, the Firm retroactively presented composite dispersion calculated using gross portfolio returns. The Firm believes using gross portfolio returns will eliminate the effect of the varying fee schedules on the composite dispersions presented. Composite dispersion has not been calculated for any presented year containing five or fewer accounts that were managed for that whole year.



Case Study

genzyme

February 2010

Relational does not seek to obtain material non-public information from our communications with the company. Representatives of the company are obligated to comply with Regulation FD and, in the event material non-public information is disclosed to us, the company shall make the necessary disclosures and filings.



Investment Rationale

- Strong defensible core franchise in Genetic Disease business
- Strong balance sheet and excess financial capacity
- Large and increasing projected cash flows
- Opportunity to implement more disciplined capital allocation to build shareholder value



Relational Engagement Objectives

- Develop a disciplined capital allocation framework and rationalize capital structure.
- Return focus to core orphan disease business--includes acquisitions
- Improve investor communications and disclosure--incorporate return on capital targets into long-term guidance
- Improve incentive compensation plans -- include return metrics
- Improve Board composition
- Strengthen risk management and organizational structure



Timeline and Progress

Relational Engagement



Five Meetings with Management

- Accounting/Reporting
- Performance Targets
- Capital Allocation



Four Meetings and Calls with the Board

- Incentive Compensation
- Board Composition
- Capital Allocation

Sep „08

Dec

Mar

Jun

Sep

Dec „09

Genzyme Response

genzyme

May Investor Day:

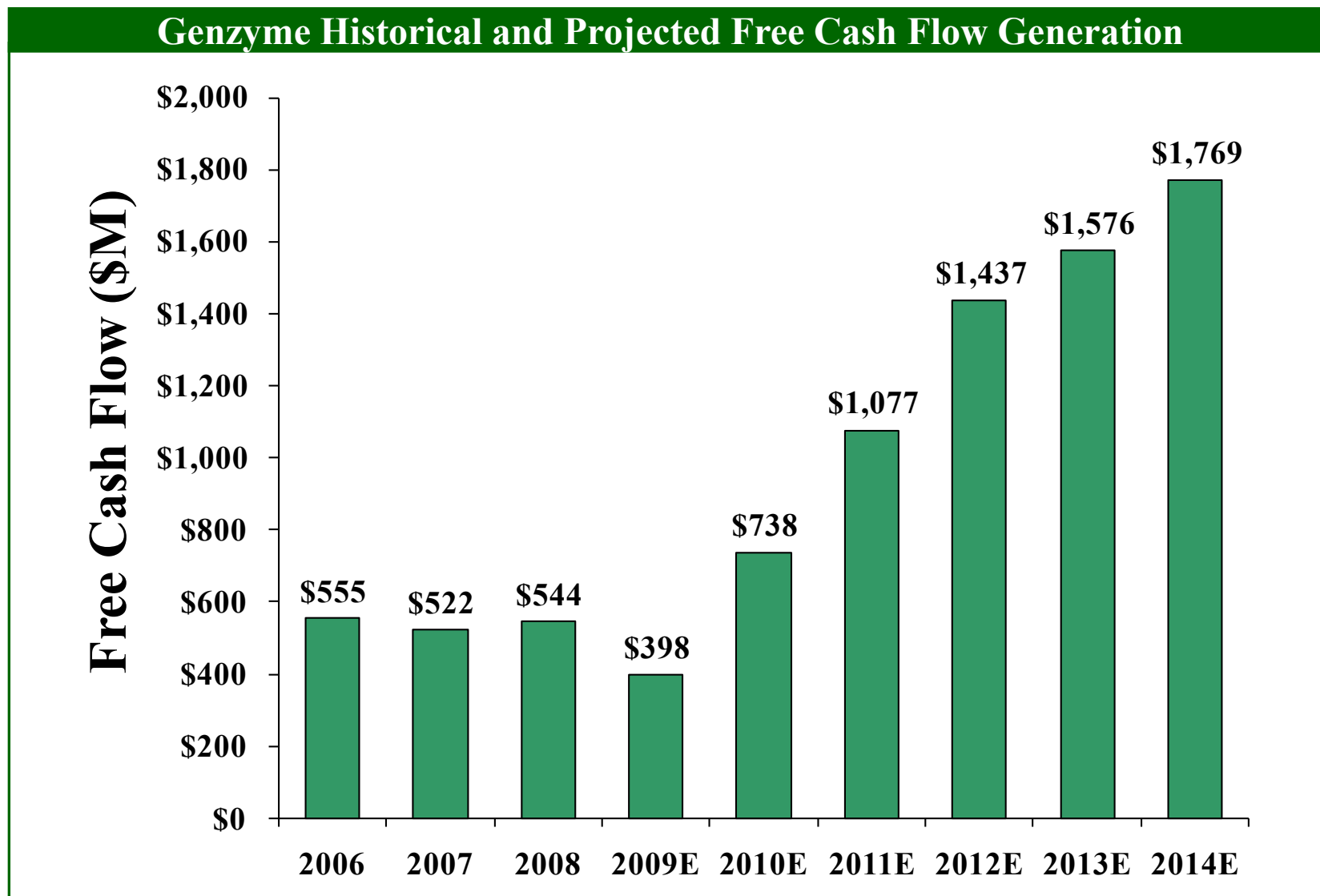
- Revises Non-GAAP accounting
- Adds Return Targets to Guidance

genzyme

- Bob Bertollini, former SGP CFO, added to Board
- RI / Genzyme cooperation agreement reached
- Adopts new incentive compensation plan
- Strengthens role of lead independent director

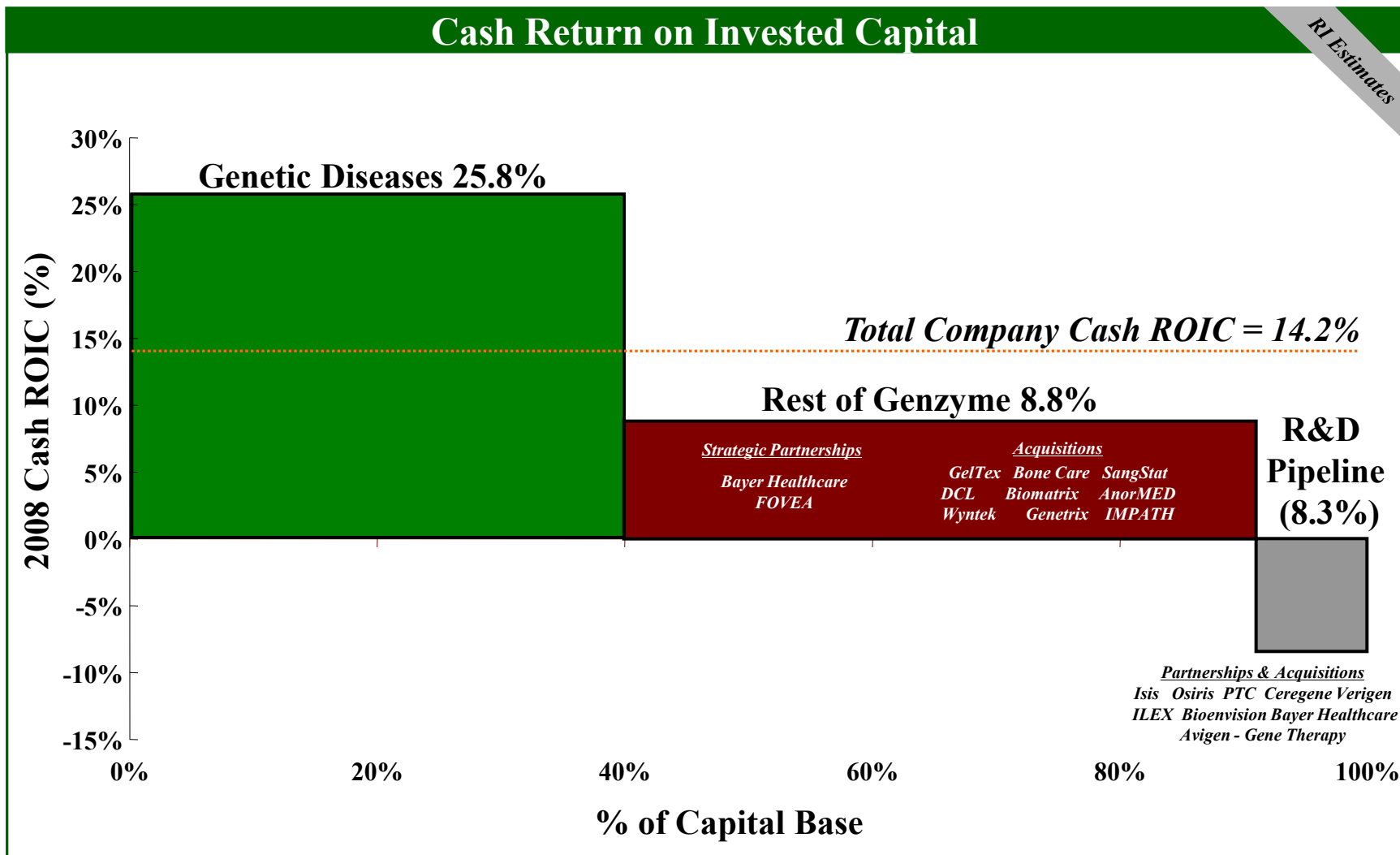


Genzyme is About to Generate Significant Cash Flow





Questionable Investment Outside of Core

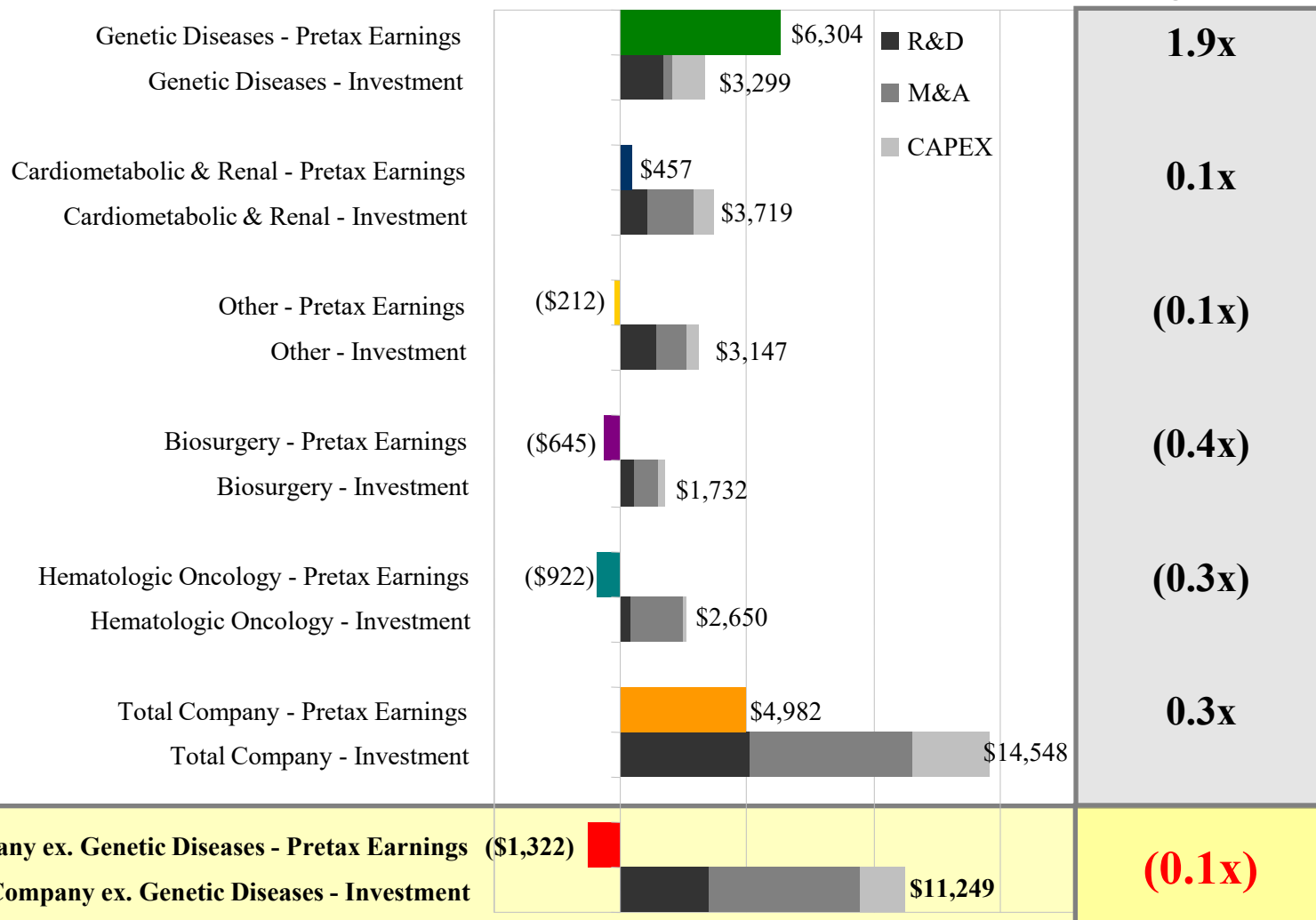




25 Years and Over \$10B of Non-Core Investment has Yet to Create Value*

Cumulative Economic Pretax Earnings*/Investment Since Inception (1983-2008)

Pretax Earnings / Investment

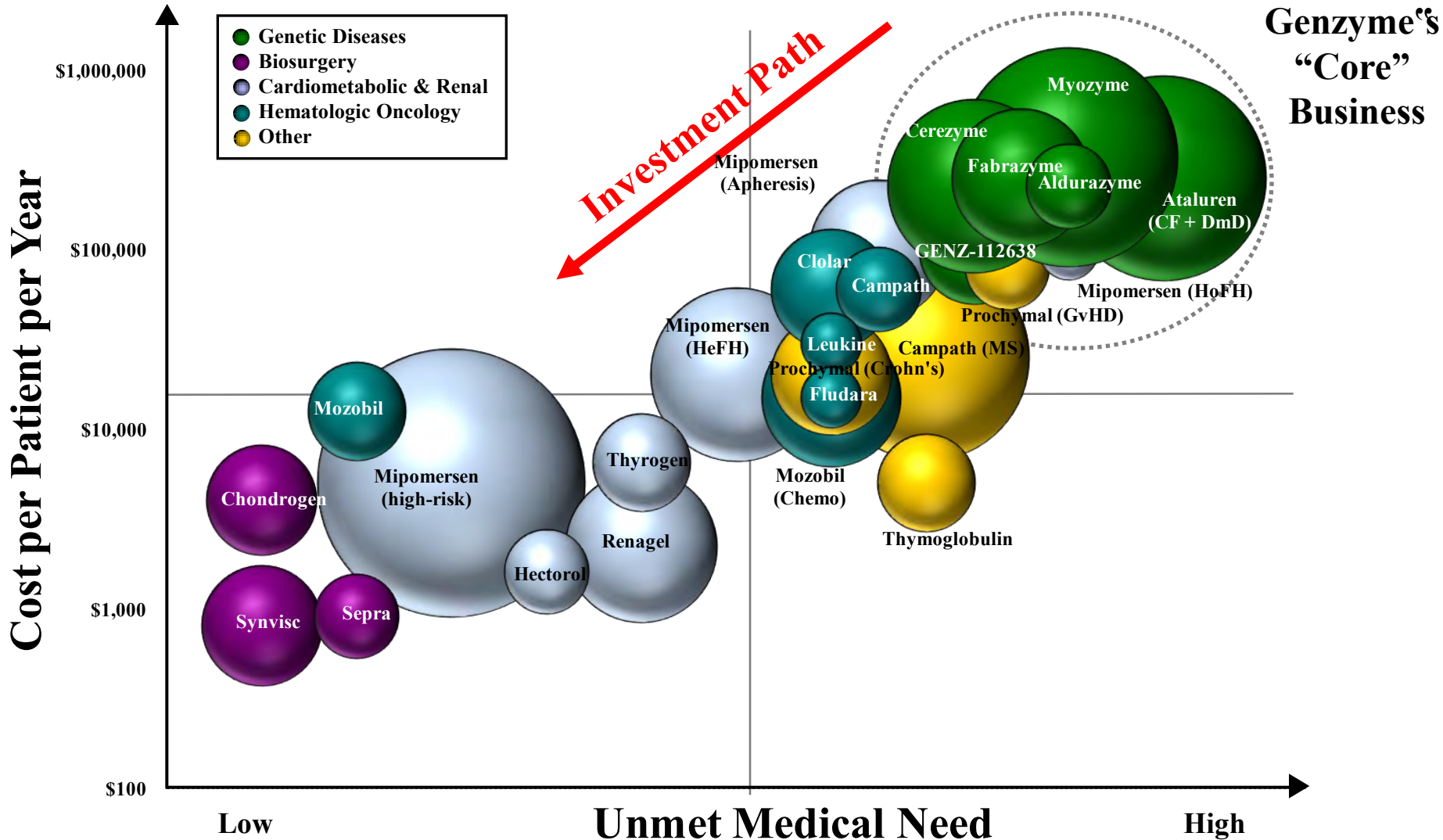


* Economic Earnings = Pretax Earnings (excluding R&D and D&A expense) – Capital Charge (cumulative investment x 9% discount rate).
Source: RI estimates based on publicly available information, "Genzyme Corporation: A Financing History", Harvard Business School July 20th, 1993; and Genzyme public documents, including Annual Reports



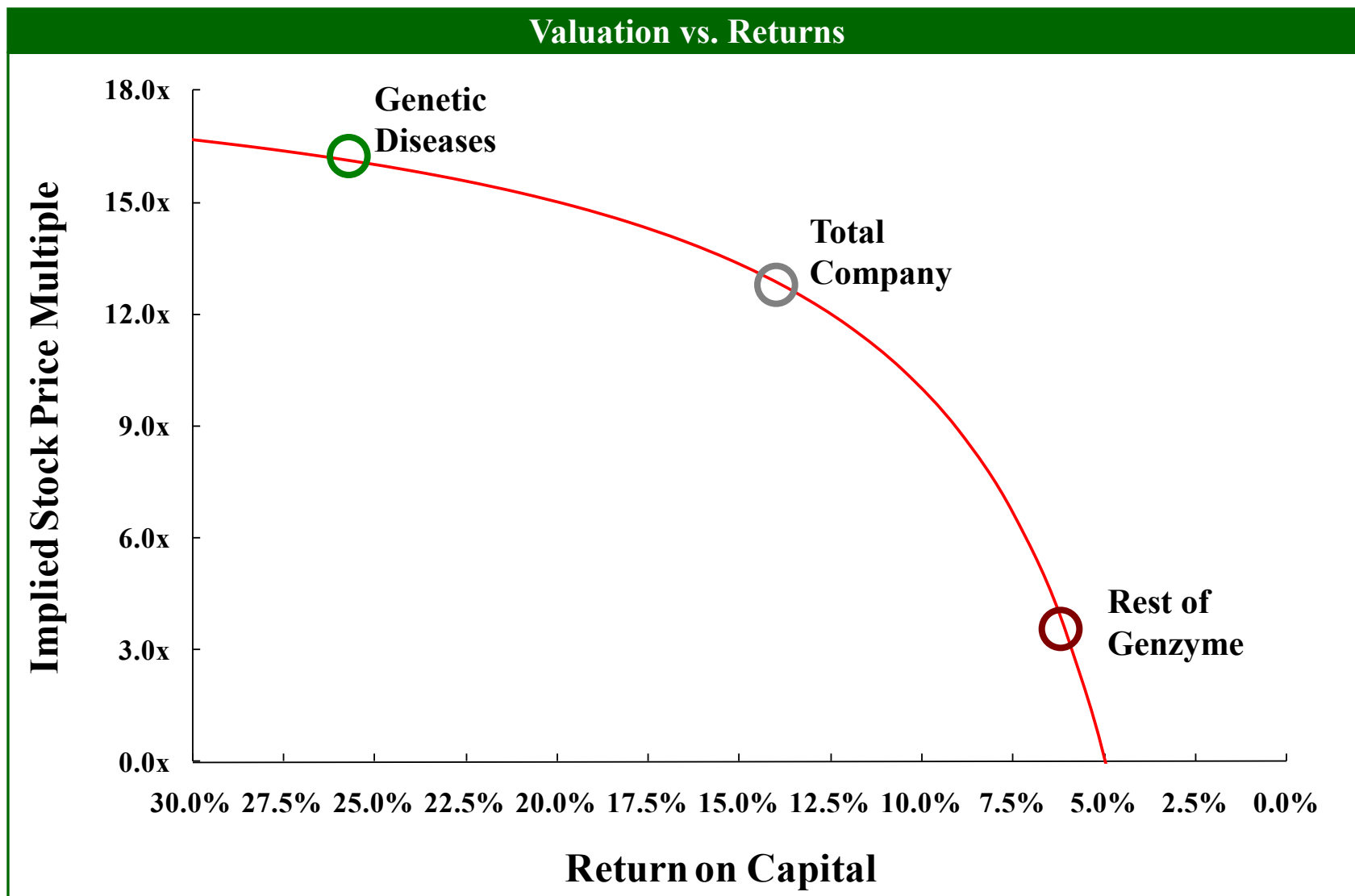
Strategy Drift Dilutes Value of Core Franchise

Marketed & Pipeline Products: *Unmet Need (X) vs. Patient Cost (Y) vs. Peak Revenue (Bubble Size)*





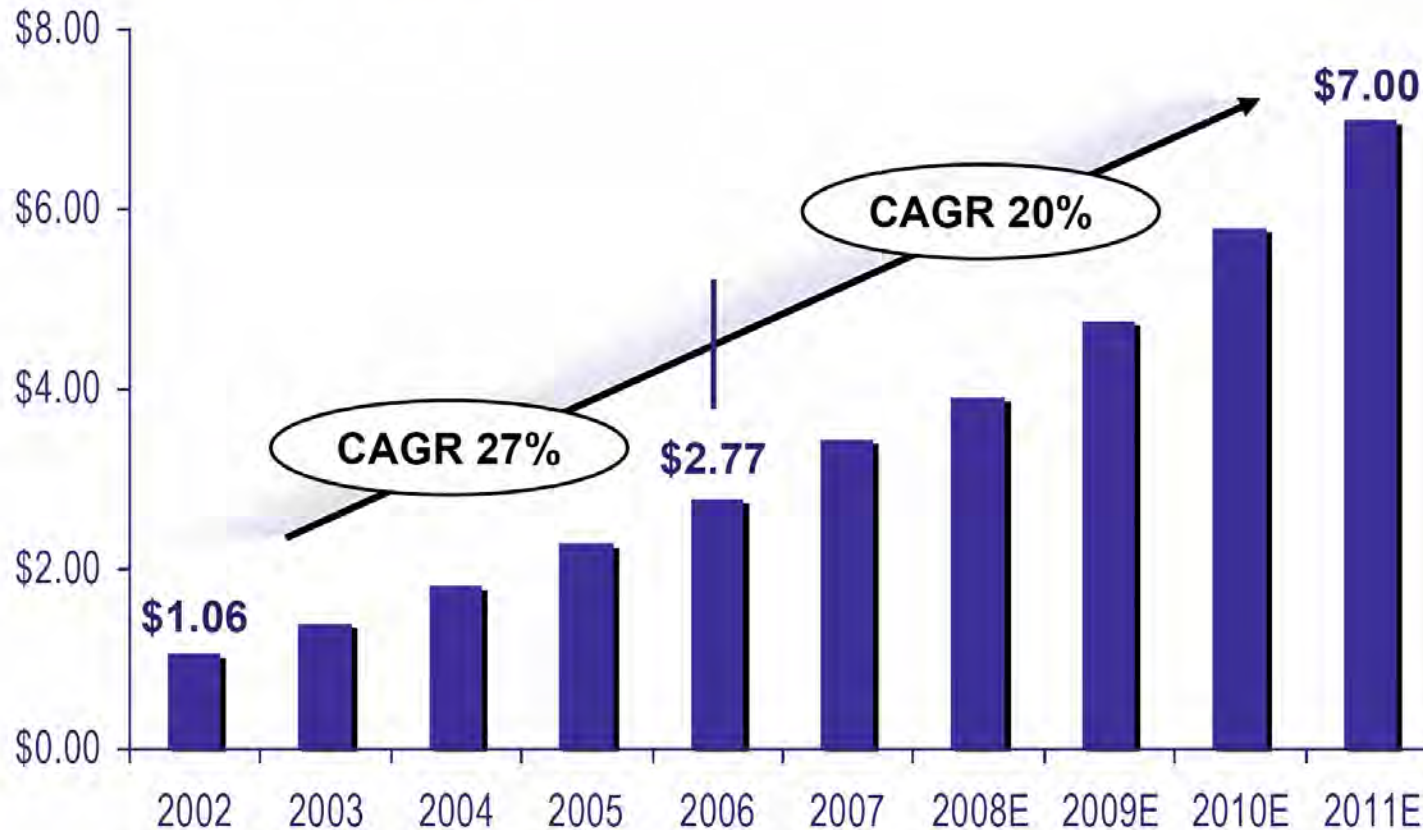
Growth at Lower Returns Destroys Value





Company Guidance was Focused on Earnings Without Regard for the Balance Sheet

Actual / Forecast Non-GAAP EPS



Results are prior to "one-time" events and amortization.

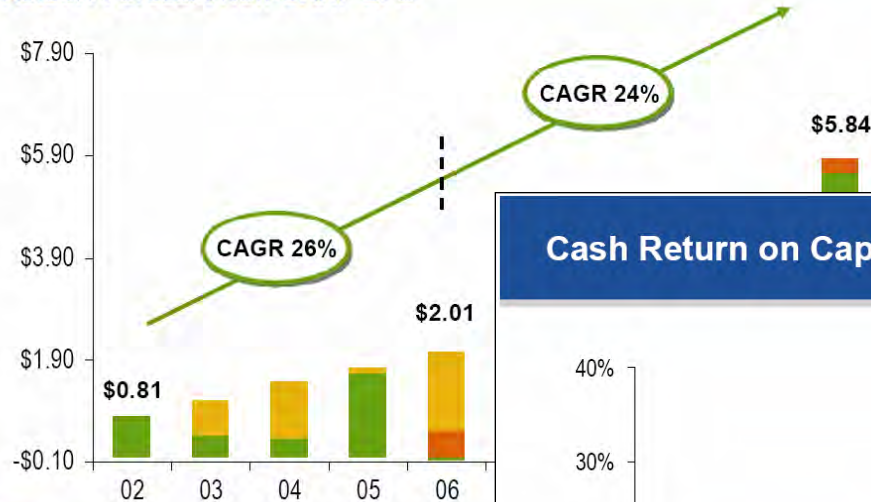




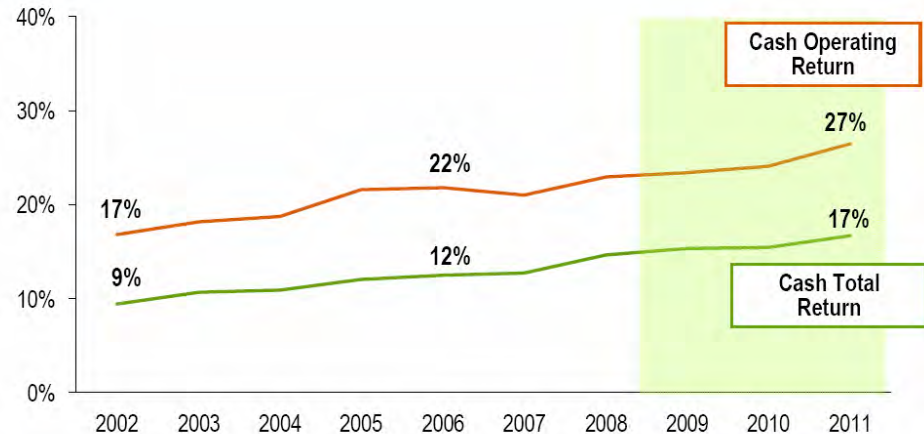
After Our Urging, The Company Revised Their Targets to Include Return Metrics

Revised Non-GAAP EPS Growth

Actual / Forecast Non-GAAP EPS*



Cash Return on Capital



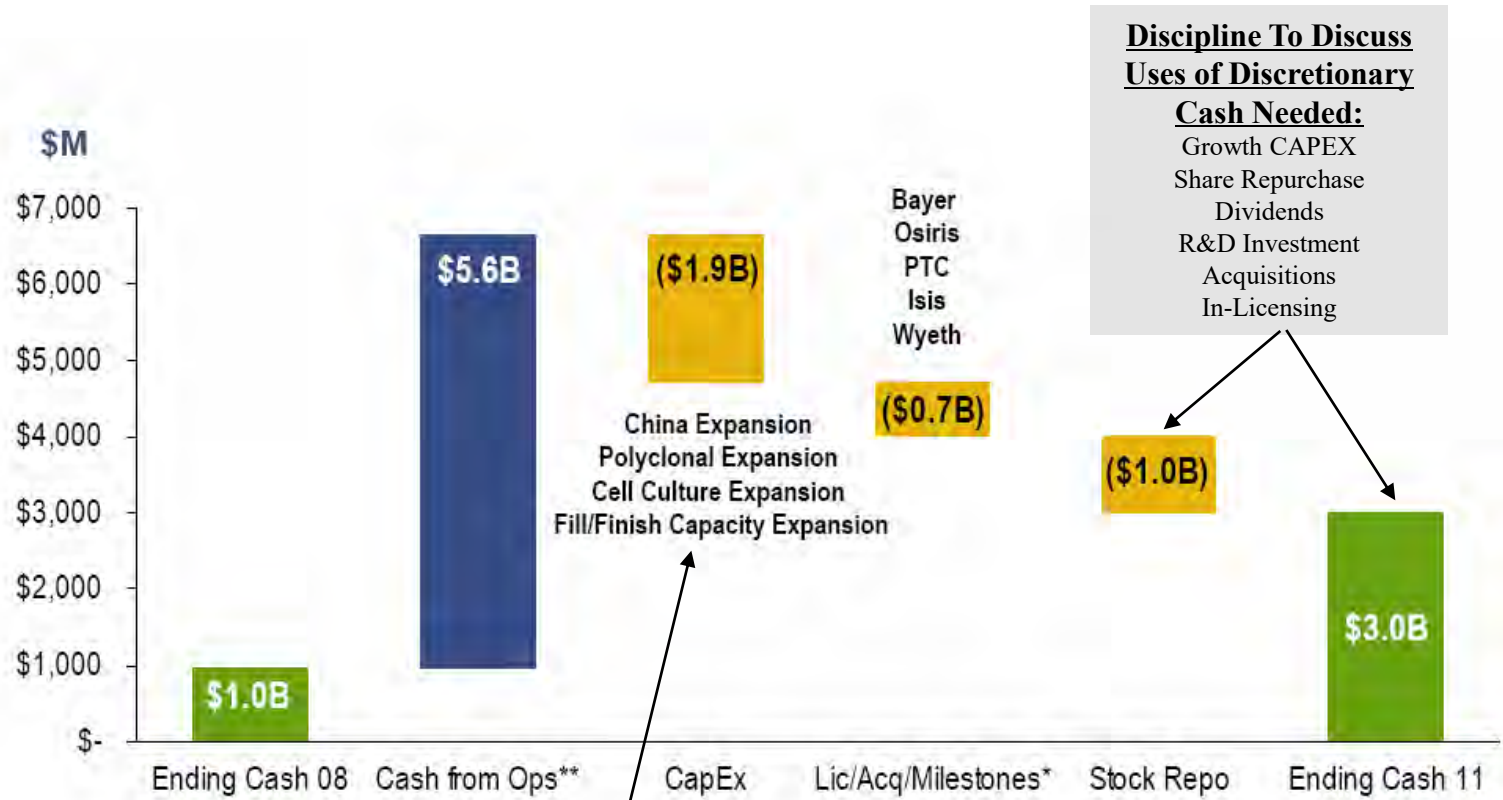
— Cash Return on Tangible Invested Capital
Cash Operating Return = Cash Profit / Avg. Tangible Invested Capital

— Cash Return on Invested Capital (incl all cash)
Cash Total Return = Cash Profit / Avg. Invested Capital + All Cash



Capital Allocation Discipline Remains Undefined

Genzyme 2009-2011 Cash Flow Estimates (With Relational Comments)



Discipline To Discuss
Uses of Discretionary
Cash Needed:
 Growth CAPEX
 Share Repurchase
 Dividends
 R&D Investment
 Acquisitions
 In-Licensing

**CapEx should ONLY contain
 Committed and Maintenance
 CapEx**

*Only includes current transaction obligations

**Cash from ops also includes "all other" (ESPP & Options, Capital Lease obligations, etc.)

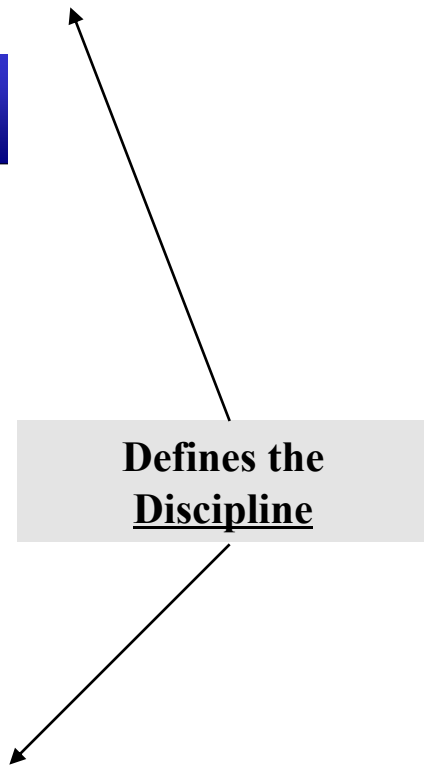
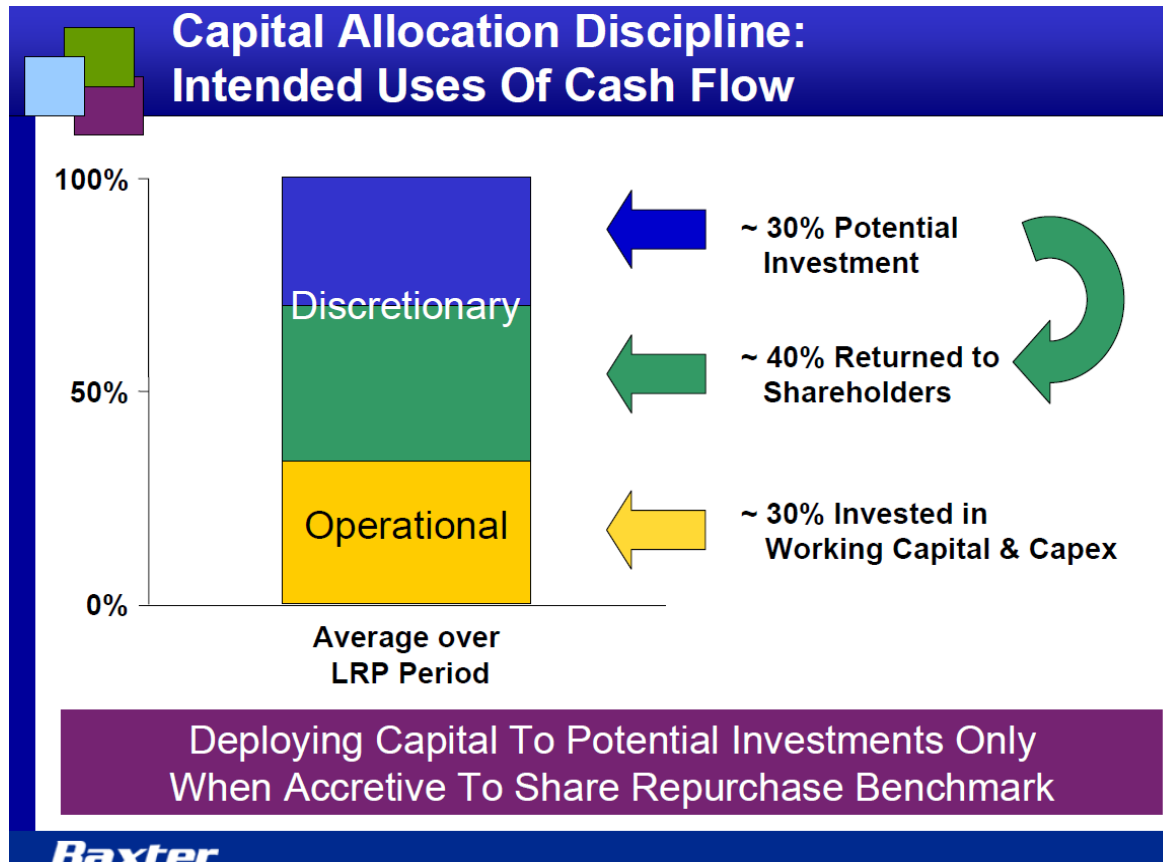




We Shared Model for Best Practices in Capital Allocation Discipline and Communication

Baxter International – 2007 Investor Day

Finally, we are very confident we will be able to identify bolt-on acquisitions and other business development opportunities that are returning greater than the hurdles set by investments in our own stock. To the extent we don't however, we will return value to shareholders in an amount and timing that doesn't erode our earnings per share.” Rob Davis, CFO





Executive Compensation Disclosure Compares Unfavorably

| Company | Annual Cash Incentive | | | | Long Term Compensation | | |
|-------------|------------------------------|---------------------------------|---|---------------------------------------|--------------------------|--------------------------------|---|
| | Performance Measures Defined | Performance Target(s) Specified | Balance Sheet or Return Metric Included | CEO Individual Component ≤ Other NEOs | Payout Performance Based | Performance Target(s) Provided | Balance Sheet or Return Metric Included |
| AMGN | ● | ● | ● | ● | ● | ● | ● |
| GILD | ● | ● | ● | ● | ● | ● | ● |
| BIIB | ● | ● | ● | ● | ● | ● | ● |
| CELG | ● | ● | ● | ● | ● | ● | ● |
| DNA | ● | ● | ● | ● | ● | ● | ● |
| AGN | ● | ● | ● | ● | ● | ● | ● |
| CEPH | ● | ● | ● | ● | ● | ● | ● |
| GENZ | ● | ● | ● | ● | ● | ● | ● |



Genzyme's Compensation Structure

Compensation Structure

RI Observations

Short-Term Compensation:

- Base Salary
 - Highest in industry
- Annual Cash Bonus
 - Paid off an “operating income” target
 - “No bonus if actual operating income is less than 86% of target”
 - No regard for capital invested
 - “Operating income” is undefined
 - 80% of the bonus is essentially guaranteed – no meaningful incentive

Long-Term Compensation:

- Equity grants made at the discretion of the Compensation Committee: 50% stock options and 50% RSUs
 - Not performance based
 - No regard for capital invested
 - Not tied to a long-term business plan



Careful Analysis Reveals That “Bonus” Cut-in Targets Are Too Low

Table of Contents

Process and Philosophy for Setting Executive Compensation. We look to our named executive officer group to focus on building and creating the future of the company and expect them to make strategic decisions that continue to move the company successfully forward. We apply deliberate, thoughtful processes throughout the year to discuss and correlate executive compensation levels with performance. The committee reviews and sets cash compensation for all of our executives for the coming year in December. In February, the committee reviews

“If the operating income goal is exceeded, for every 1% above the goal, 2.5% is added to the annual cash incentive payment.. If the operating income goal is not met, for every 1% below the goal, 1.5% is deducted from the annual cash incentive payment.

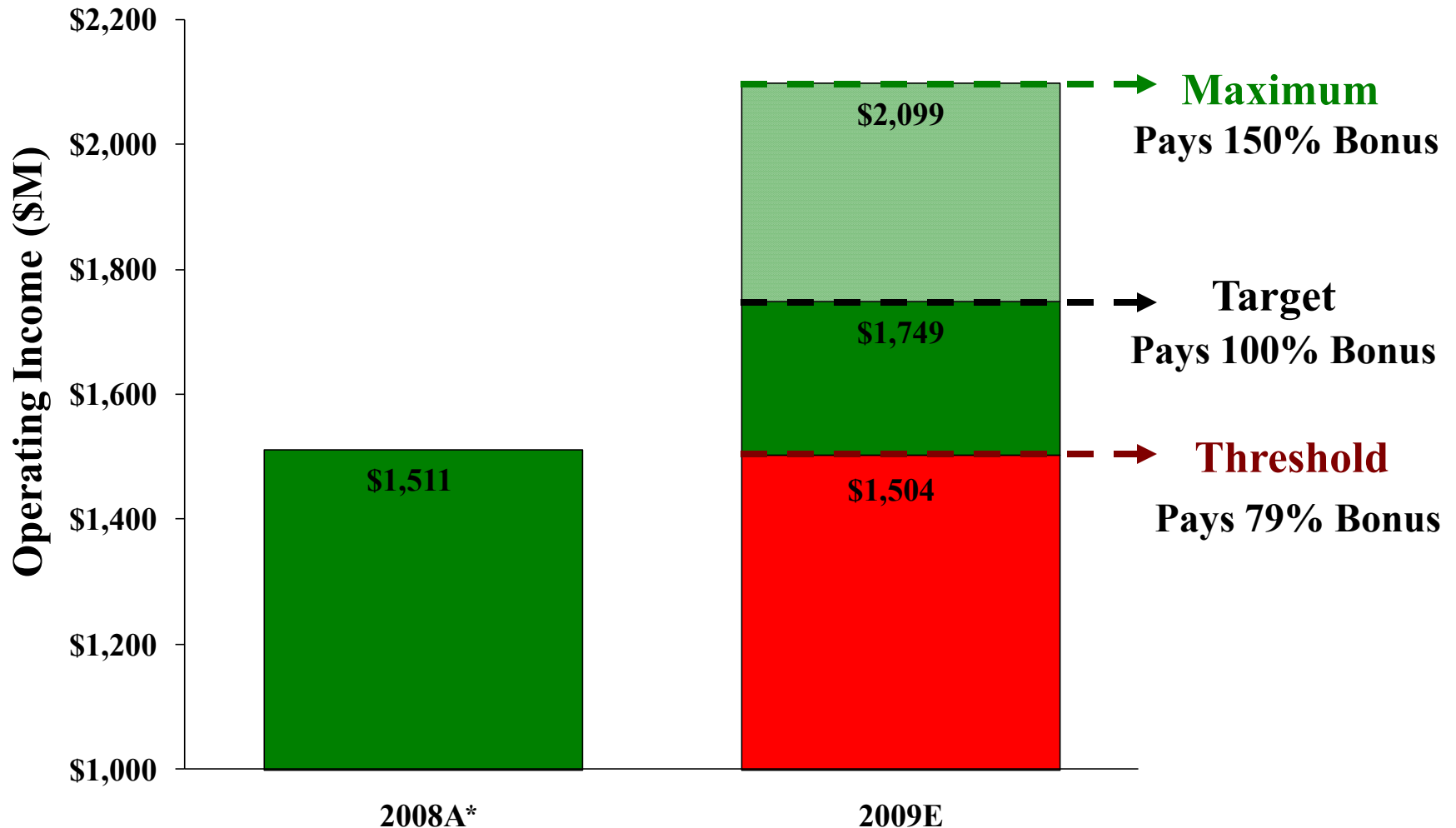
No corporate annual cash incentive is paid if less than 86% of the operating income goal is met. The individual component of the bonus is paid at the discretion of the committee.”

<http://access.edgar-online.com>

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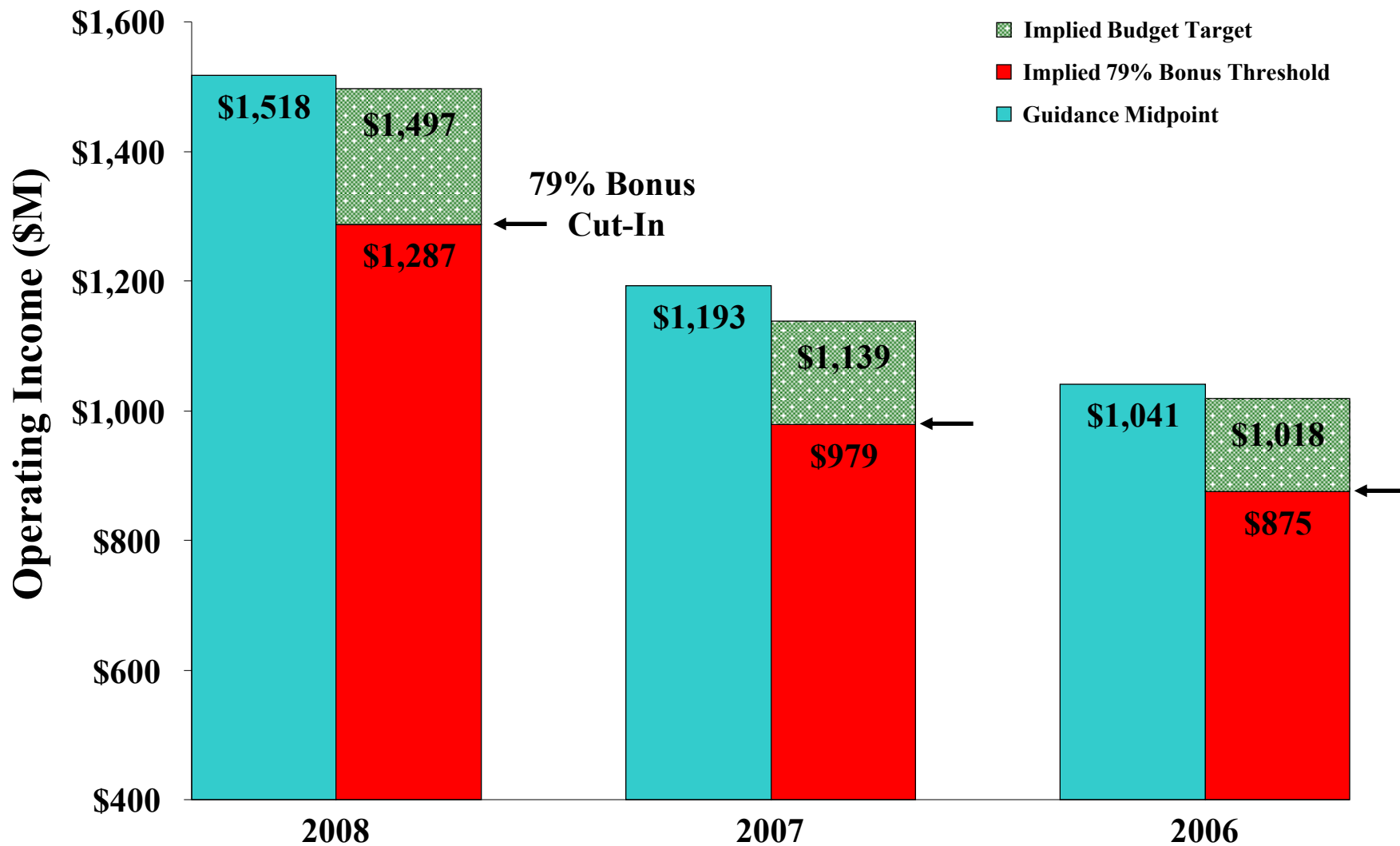


80% of Management's Annual "Bonus" is Earned Even With A Year Over Year Earnings Decline



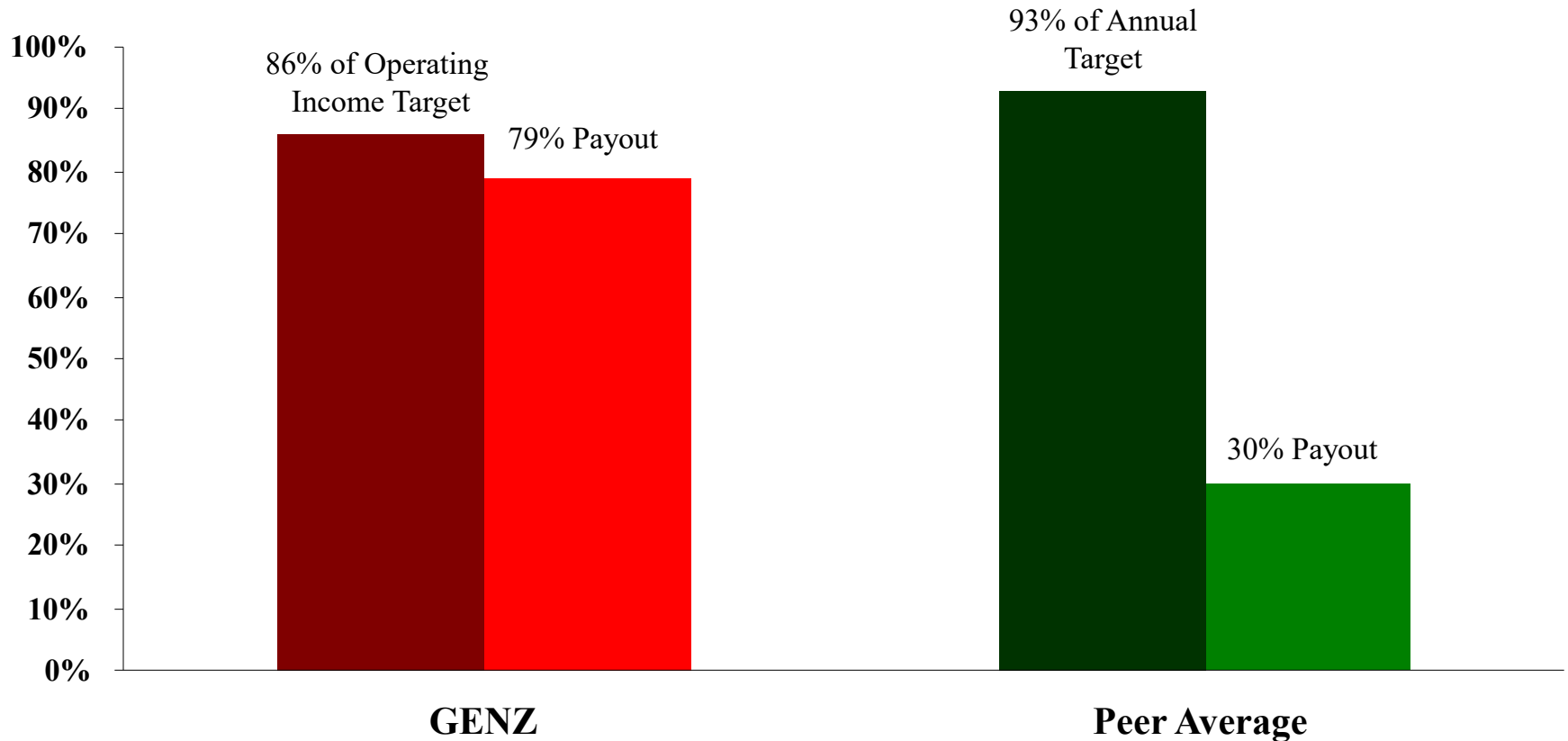


Additionally, Annual Incentive Targets Have Consistently Been Set Below Guidance





These Features Make Genzyme's Annual Bonus Structure an Outlier Compared to Peers



Achieving 86% of the Operating Income Target results in a 79% Payout

Achieving 93% of the Annual Performance Target results in a 30% Payout



RI Compensation Recommendations

Structure

Targets

Short-Term Compensation:

- Base Salary
 - Target midpoint of peer group
- Annual Cash Bonus
 - 80% financial targets
 - 1/3 on revenue growth
 - 2/3 on return on capital
 - Payout at midpoint of peer group
 - 20% non-financial
 - Based on improving risk profile, operations, communications, etc.

Long-Term Compensation:

- Stock options and RSUs
 - 1/2 on total shareholder return
- Performance vested based on long-term plan
 - 1/2 on return on capital
 - Payout at 75th percentile of peers



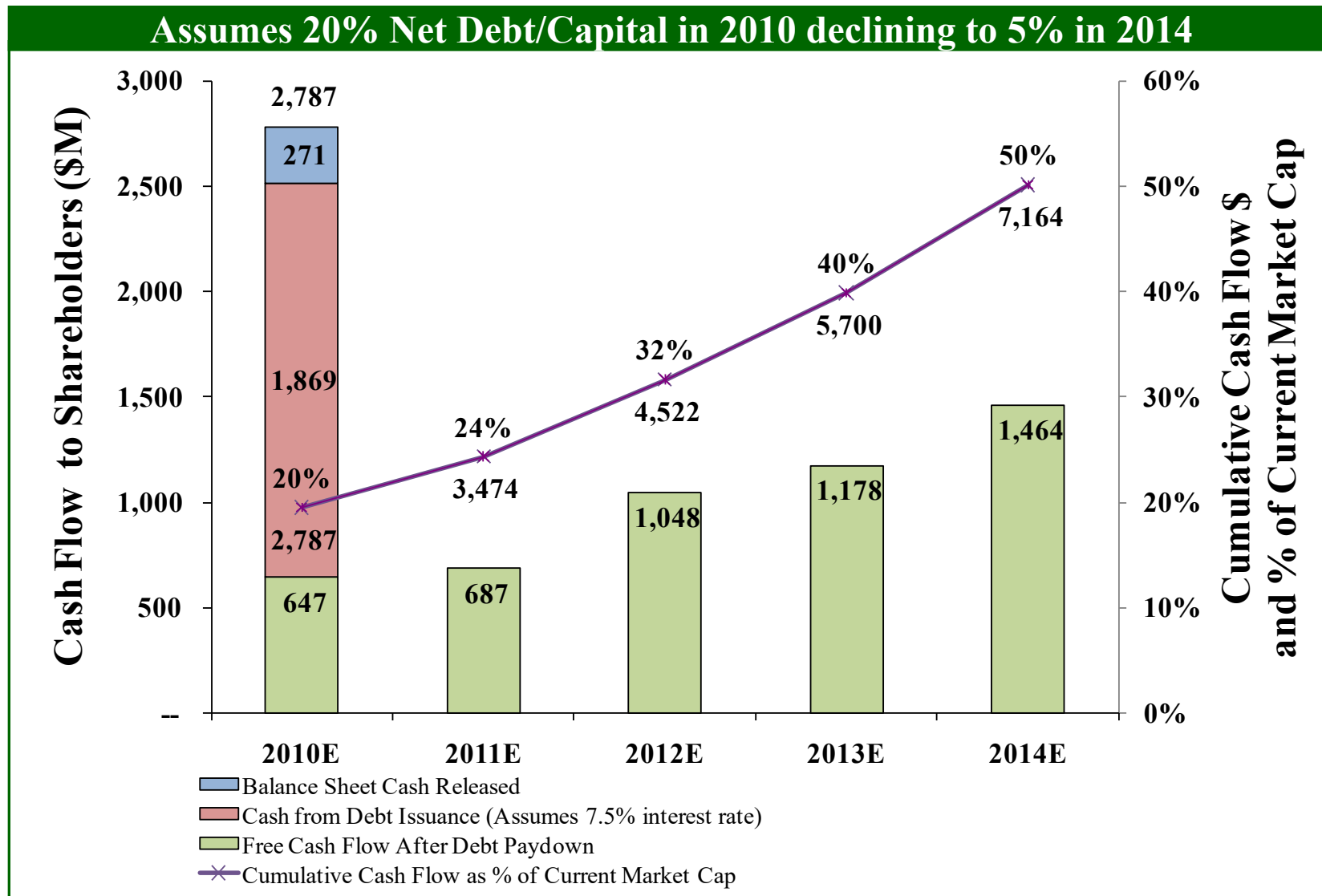
Share Repurchase Scenario

Illustration



Over Next Five Years Genzyme Can Return 50% of Current Market Cap to Shareholders

Illustration

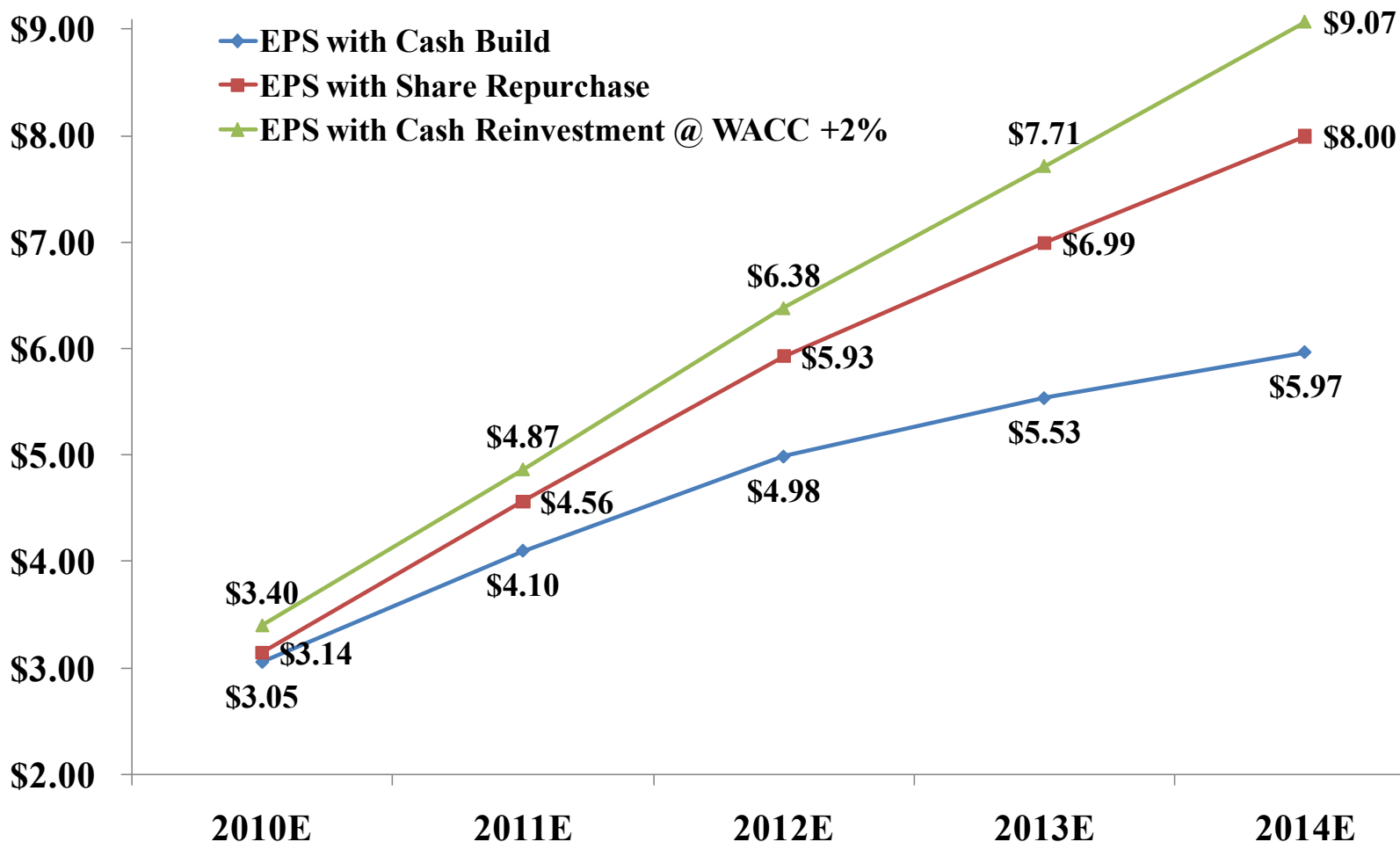




Capital Allocation Decisions Must be Benchmarked Against Share Repurchases

Illustration

Genzyme Projected Non-GAAP EPS



• Share Repurchase assumes 20% Net Debt / Capital in 2010, declining to 5% Net Debt / Capital by 2014. Cash reinvestment assumes WACC = 10%



Share Repurchase Scenario – Low Leverage

Illustration

Key Financial Metrics

| | 2010 | 2011 | 2012 | 2013 | 2014 |
|---------------------------------------|---------------|---------------|---------------|---------------|---------------|
| REVENUE | | | | | |
| Genetic Diseases | 2,056 | 2,535 | 2,751 | 2,909 | 3,084 |
| All Other Revenue | 3,230 | 3,509 | 3,811 | 4,151 | 4,400 |
| Pipeline Revenue | 0 | 0 | 0 | 0 | 0 |
| Total Revenue | 5,286 | 6,044 | 6,563 | 7,060 | 7,483 |
| ADJUSTED OPERATING COSTS | | | | | |
| COGS | 1,402 | 1,488 | 1,575 | 1,684 | 1,773 |
| SG&A | 1,454 | 1,632 | 1,739 | 1,871 | 1,983 |
| R&D | 925 | 997 | 1,050 | 1,130 | 1,197 |
| EBIT | 1,505 | 1,927 | 2,199 | 2,375 | 2,530 |
| OTHER EXPENSES | | | | | |
| Intangible Amortization | (320) | (320) | (225) | (162) | (120) |
| Investment Income | 7 | 6 | 6 | 6 | 6 |
| Interest Expense and Other | (132) | (130) | (108) | (85) | (67) |
| Taxes | 306 | 428 | 541 | 617 | 679 |
| NET INCOME | 753 | 1,055 | 1,332 | 1,518 | 1,670 |
| Cash Flow from Operations | 1,372 | 1,605 | 1,947 | 2,091 | 2,286 |
| Beginning of Period Cash | 771 | 500 | 500 | 500 | 500 |
| Cash From Financing Activities | 1,869 | (293) | (299) | (313) | (222) |
| Capital Expenditures | (725) | (625) | (600) | (600) | (600) |
| End of Period Cash | 3,287 | 1,187 | 1,548 | 1,678 | 1,964 |
| Operating Cash Reserve | (500) | (500) | (500) | (500) | (500) |
| Cash Available for Repurchases | 2,787 | 687 | 1,048 | 1,178 | 1,464 |
| Shares Repurchased | (46) | (8) | (11) | (11) | (12) |
| Stock Option Issuance | 4 | 3 | 3 | 3 | 3 |
| Average Diluted Shares | 240 | 231 | 225 | 217 | 209 |
| Non-GAAP EPS | \$3.14 | \$4.56 | \$5.93 | \$6.99 | \$8.00 |



Credit Metrics and Key Assumptions

Illustration

Credit Metrics

| | 2010 | 2011 | 2012 | 2013 | 2014 |
|---------------------------|--------------|--------------|--------------|--------------|-------------|
| Net Debt / Capital | 20% | 16% | 12% | 8% | 5% |
| Net Debt / Equity | 27% | 20% | 15% | 9% | 6% |
| Net Debt / EBITDA | 0.9x | 0.5x | 0.4x | 0.2x | 0.1x |
| Total Debt | 1,996 | 1,703 | 1,403 | 1,090 | 868 |

Key Assumptions

- Cerezyme and Fabrazyme market shares decline to 65% by 2014
- 4000L Myozyme approved Q4:10
- No pipeline revenue
- Minimal operating leverage: EBIT margins only recover to 2007 levels by 2012, despite >\$2.5B in additional revenue
- Genzyme maintains a \$500M operating cash reserve
- R&D spend of 16% of sales
- 7.5% interest rate on debt
- Shares repurchased at 18x forward earnings in 2010, 16x in 2011, and 15x thereafter



Share Repurchase Creates High Investment Benchmark

Illustration

End of Year Valuation – Share Repurchase Scenario

| | | 2010 | 2011 | 2012 | 2013 |
|----------------------|-------|------|------|-------|-------|
| Forward P/E Multiple | 12.0x | \$55 | \$71 | \$84 | \$96 |
| | 13.0x | \$59 | \$77 | \$91 | \$104 |
| | 14.0x | \$64 | \$83 | \$98 | \$112 |
| | 15.0x | \$68 | \$89 | \$105 | \$120 |
| | 16.0x | \$73 | \$95 | \$112 | \$128 |



Next Steps

- Encourage organizational changes that prioritize operations, risk management, and communications
- Maintain pressure to implement revised incentive plans and targets for 2010
- Push for disciplined capital allocation benchmarked against share repurchases



January 28, 2010

Genzyme Adopts New Incentive Compensation Plans for Senior Executives

CAMBRIDGE, Mass.--(BUSINESS WIRE)--[Genzyme Corporation](#) (NASDAQ: GENZ) announced today that it has adopted new annual and long-term incentive plans for senior executives that will be utilized beginning in 2010. The plans are designed to align incentive compensation with a broader set of measures of company performance. The new incentive compensation program for senior executives is the culmination of a review process first announced last spring.

“These incentive plans were carefully developed following a long and thorough review”

“These incentive plans were carefully developed following a long and thorough review,” said Genzyme board member and Compensation Committee chair Charles Cooney, Ph.D., a member of the Massachusetts Institute of Technology faculty, and faculty director of MIT’s Deshpande Center for Technological Innovation. “The plans provide shareholders with more transparency into executive compensation decisions, and will encourage senior executives to make decisions that drive growth and shareholder value.”

The company’s senior executive annual incentive plan awards bonuses based on corporate and individual performance. The prior annual incentive plan used one metric - operating income - to measure corporate performance. The new plan includes two corporate financial performance measures: revenue and cash flow return on invested capital. It also includes key business objectives that center on three areas, organization renewal; pipeline advancements; and the recovery of the Personalized Genetic Health business.

An additional business metric, divisional operating income, is applied to leaders of the company’s business units. Together, these corporate performance metrics will determine 80 percent of any award under the plan, and individual performance will determine 20 percent for senior executives.

The new long-term incentive plan is also a performance-based plan with approximately half of the award consisting of a stock and cash grant vesting after three years, but only if the company meets pre-approved financial metrics. For the 2010-2012 performance period, the performance metrics are relative total shareholder return measured against the performance of twenty-eight companies in the S&P 500 Health Care index, and cash flow return on invested capital.

The remainder of an award under the new long-term incentive plan will be comprised of stock options. The prior long-term incentive plan included equity grants that were solely time-vesting and did not include performance metrics.

The company’s new incentive plans are further described in an exhibit to the Form 8-K that the company filed today with the Securities and Exchange Commission.

About Genzyme

One of the world’s leading biotechnology companies, Genzyme is dedicated to making a major positive impact on the lives of people with serious diseases. Since 1981, the company has grown from a small start-up to a diversified enterprise with more than 12,000 employees in locations spanning the globe and 2008 revenues of \$4.6 billion.

With many established products and services helping patients in approximately 100 countries, Genzyme is a leader in the effort to develop and apply the most advanced technologies in the life sciences. The company's products and services are focused on rare inherited disorders, kidney disease, orthopaedics, cancer, transplant and immune disease, and diagnostic testing. Genzyme's commitment to innovation continues today with a substantial development program focused on these fields, as well as cardiovascular disease, neurodegenerative diseases, and other areas of unmet medical need.

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Genzyme's press releases and other company information are available at www.genzyme.com and by calling Genzyme's investor information line at 1-800-905-4369 within the United States or 1-678-999-4572 outside the United States.

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For Immediate Release:

January 7, 2010

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Genzyme and Relational Investors Enter Into Mutual Cooperation Agreement

CAMBRIDGE, Mass.-- Genzyme Corporation (NASDAQ: GENZ) and San-Diego based institutional investor Relational Investors LLC announced today that they have entered into a mutual cooperation agreement. Relational, a \$6 billion private investment fund, began investing in Genzyme shares in late 2008 and currently owns approximately 4 percent of the company's common stock.

Over the past several months, Genzyme and Relational have been engaged in constructive discussions related to various aspects of Genzyme's business. In mid-December, Relational requested representation on Genzyme's board of directors. With the current progress the company has made in overcoming manufacturing challenges, strengthening its operating structure, and enhancing its board composition, Relational agreed to defer its request and support the board's nominees and proposals in 2010. Genzyme, as part of the agreement, will appoint Ralph Whitworth, principal and co-founder of Relational, to the company's board if Relational requests representation in November 2010.

"While these are difficult and challenging times for Genzyme, we are confident its management is making significant improvements to drive short- and long-term value for shareholders," said Ralph Whitworth, principal and co-founder of Relational. "The management and board remain open to ideas and are materially improving their manufacturing operation, compensation program, capital allocation discipline, and board composition."

"This agreement is a strong vote of confidence from one of our largest shareholders in the company's progress and future direction," said Henri A. Termeer, Genzyme's chairman and chief executive officer. "We are gratified that Relational recognizes the board's and management's aggressive actions to strengthen the company overall and return Genzyme to its historical path of sustainable growth and shareholder value creation."

In December, Genzyme issued a letter to shareholders outlining the meaningful progress the company has made in making organizational changes and operational improvements that significantly reduce risk in manufacturing operations. These and other initiatives detailed in the letter are expected to allow Genzyme to emerge a stronger company.

"As active, long-term shareholders we are committed to ensuring that this progress continues," said Whitworth. "Our mutual cooperation agreement allows us to give management and the board the support they need to address near term challenges,

while providing us the opportunity for future board representation if circumstances warrant that level of involvement."

The agreement is detailed in an exhibit to the Form 8-K that the company filed today with the Securities and Exchange Commission.

About Genzyme

One of the world's leading biotechnology companies, Genzyme is dedicated to making a major positive impact on the lives of people with serious diseases. Since 1981, the company has grown from a small start-up to a diversified enterprise with more than 11,000 employees in locations spanning the globe and 2008 revenues of \$4.6 billion.

With many established products and services helping patients in approximately 100 countries, Genzyme is a leader in the effort to develop and apply the most advanced technologies in the life sciences. The company's products and services are focused on rare inherited disorders, kidney disease, orthopaedics, cancer, transplant and immune disease, and diagnostic testing. Genzyme's commitment to innovation continues today with a substantial development program focused on these fields, as well as cardiovascular disease, neurodegenerative diseases, and other areas of unmet medical need.

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Commodities - Long-Term Strategic Asset Allocation Policy

Michael J. O'Leary CFA
Executive Vice President

February 2010



Overview

- **ARMB has a significant “real return” allocation that includes:**
 - Commercial real estate
 - Farmland
 - Timber
 - Energy (TCW)
 - TIPS
- **This presentation will focus on commodities as a possible additional sub-category.**
- **The first part of the presentation uses a “clean sheet” approach.**
- **The second pertains to implementation issues.**
- **Conclusions**



Why a Real Return Portfolio

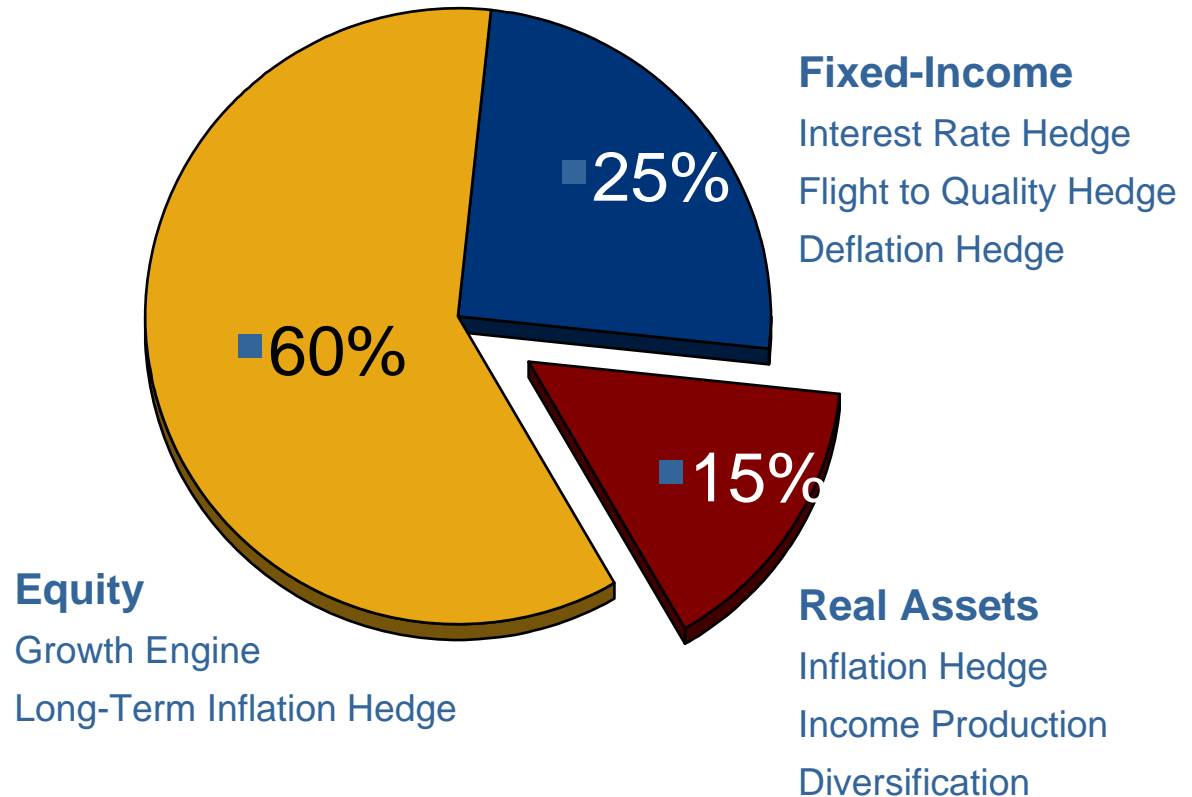
- **Provides a partial hedge for inflation-driven liabilities.**
 - Endowments, foundations.
 - Defined Benefit Plans (active liabilities, COLA's).
 - Health care liabilities.
 - Defined contribution investors (target date funds).
- **Provides hedge against losses in rising or high inflation scenarios.**
 - Sharply rising inflation will cause short-run to intermediate-run under-performance in equities and bonds (potentially severe).
- **Provides diversification benefits in low-inflation environments.**
- **Creates additional potential for alpha-generation by active managers.**



Asset Allocation and a Real Return Portfolio

- Asset classes increasingly defined by their reactions to specific capital market influences.
- Real return assets can be grouped together or separated into other asset classes.

■ Illustrative Target Asset Allocation

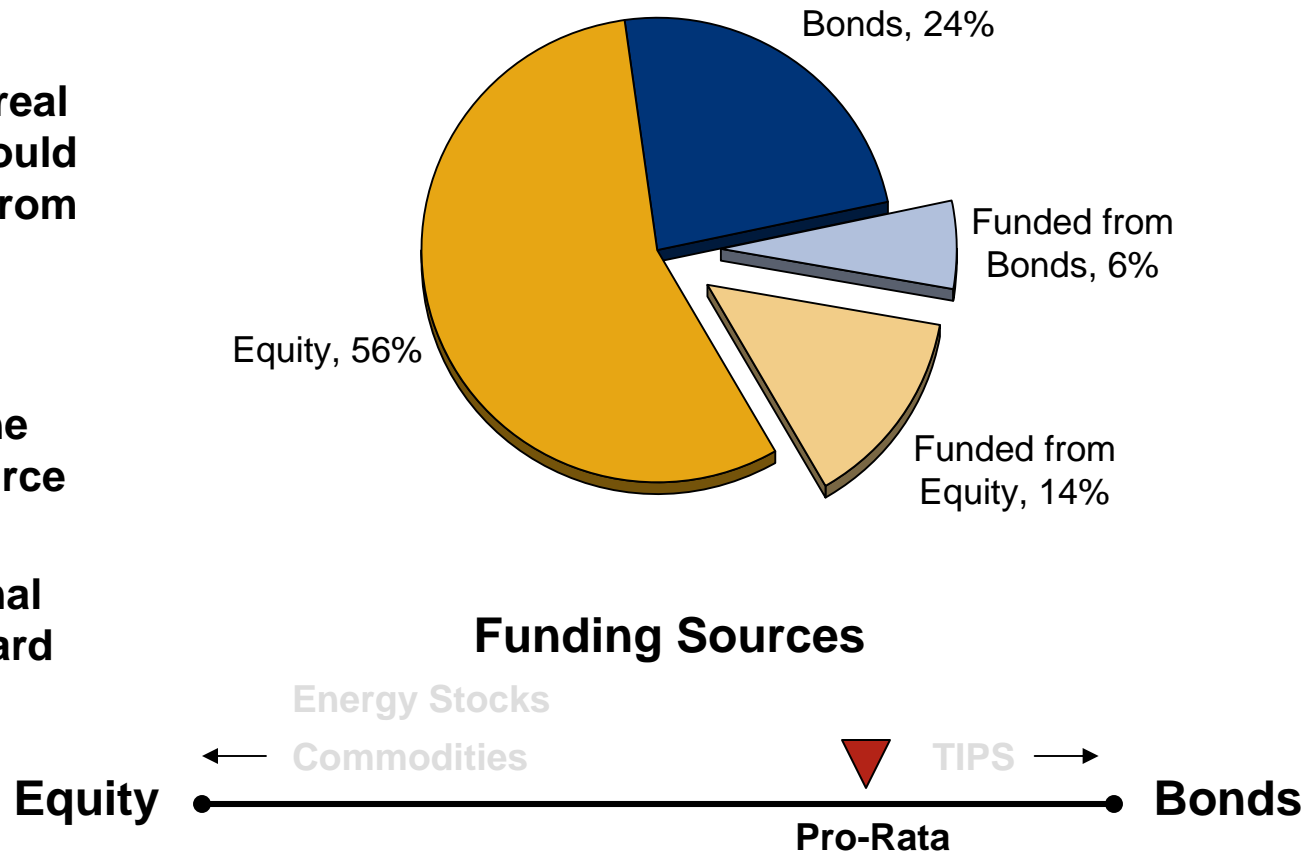




Funding Sources for a Real Return Portfolio

- The funding source is, in part, dependent on the composition of the real return portfolio.
- As a rule of thumb, real return portfolios should be funded pro-rata from equities and fixed-income.
- Energy Stocks or Commodities pull the optimal funding source towards equities.
- TIPS push the optimal funding source toward fixed-income.

Pro-Rata Allocation to Real Return
(70/30 Policy Portfolio)

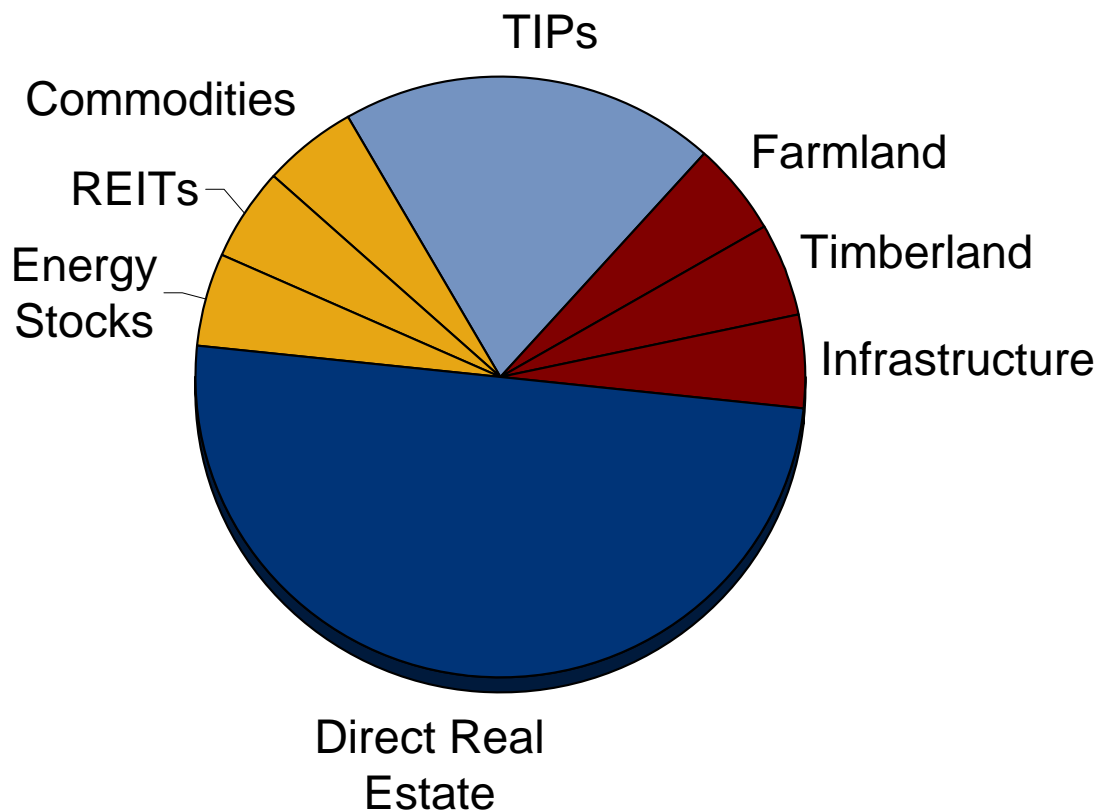




Clean Sheet Real Return Asset Classes

- **Wide variety of asset classes being used in real return portfolios.**
- **All have different reactions to long-term and short-term inflation.**
- **Liquidity is an important factor.**
- **Liquid categories primarily used in mutual funds.**

Real Return Asset Classes

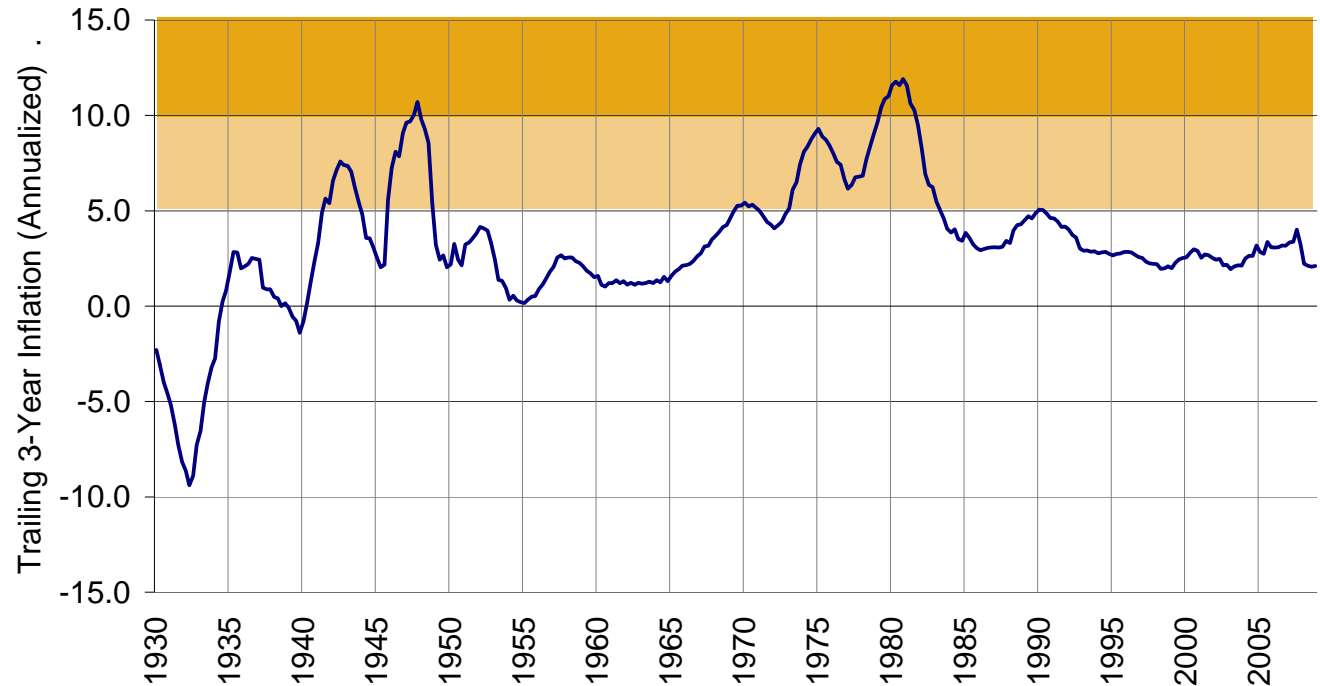




Data Availability – Inflation and Asset Returns

- Data on high inflation periods in the US is scarce and, for the most part, dated.
- Most institutional asset classes have very different characteristics than their counterparts from the 70's and early 80's.
- Correlation with inflation is driven by the level and direction of inflation.

Annualized Trailing 3-Year Inflation Rate (1929-2009) Source: Ibbotson Associates



**Data
Inception**

US Large Cap Stocks
US Small Cap Stocks
Long Term Corporate Bonds
T-Bills
Intermediate Term Treasuries
(Ibbotson)

Direct Real Estate (NCREIF)
US TIPS (Lehman)
Non-US Equity (EAFE)
REITs (NAREIT)
Commodities (Goldman)
Synthetic TIPS (JP Morgan)



Measures of Effectiveness

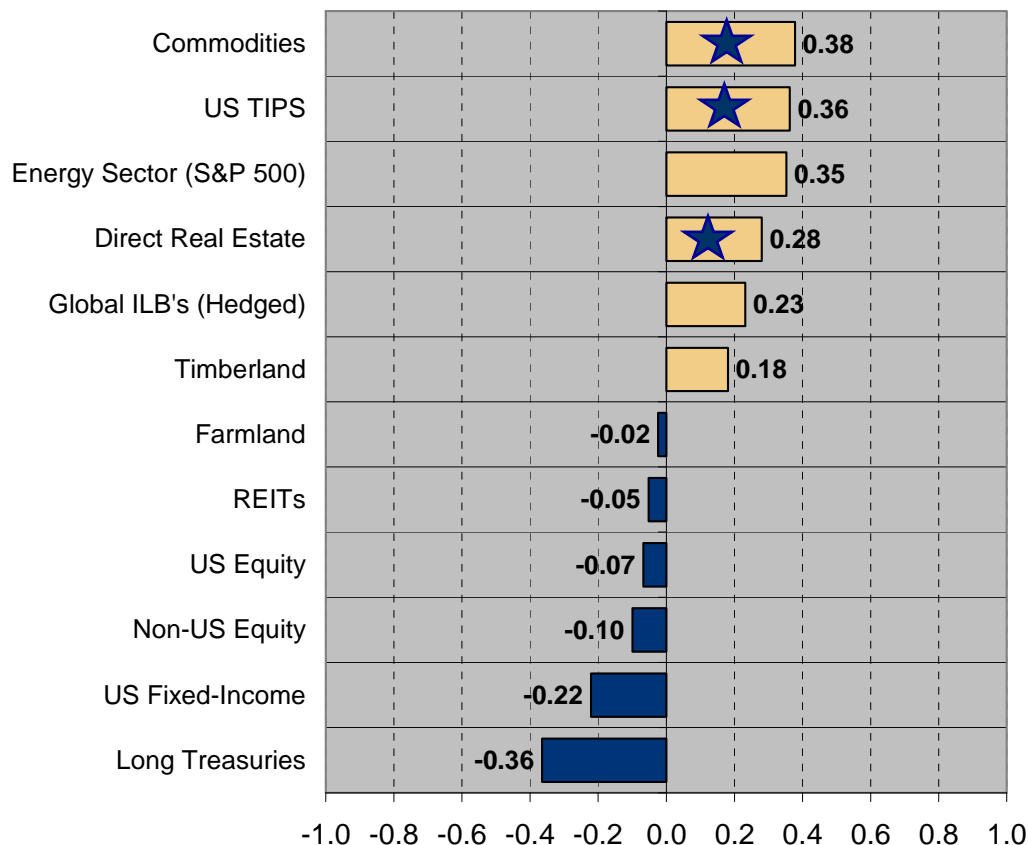
- **Short Term – Correlation with CPI**
 - Measures immediate reaction to changes in inflation.
 - May understate linkage due to markets pricing expected inflation.
 - May have little to do with movements in inflation-linked liabilities.
- **Intermediate Term – Percent of rolling periods with positive real return**
 - Rolling periods gives a balanced perspective over time.
 - Coincides with measurement time-frame of long-term investors.
 - Better linkage to liabilities which may lead or lag CPI.
 - Better measure of the protection of purchasing power over time.
 - Favors higher returning asset classes.



Correlation with CPI – Short Term Hedge

Expected Correlation with Inflation

- Correlations have to be calculated over different time-periods due to variances in data.
- Commodities TIPS and Direct Real Estate appear to provide the most effective short-term hedges among institutional asset classes.
- Long Treasuries are clearly a poor hedge.



Expectations are developed by Callan's Capital Markets Group. They correspond closely with historical experience, but take into account the fact that robust long-term historical data is not available for all asset classes.

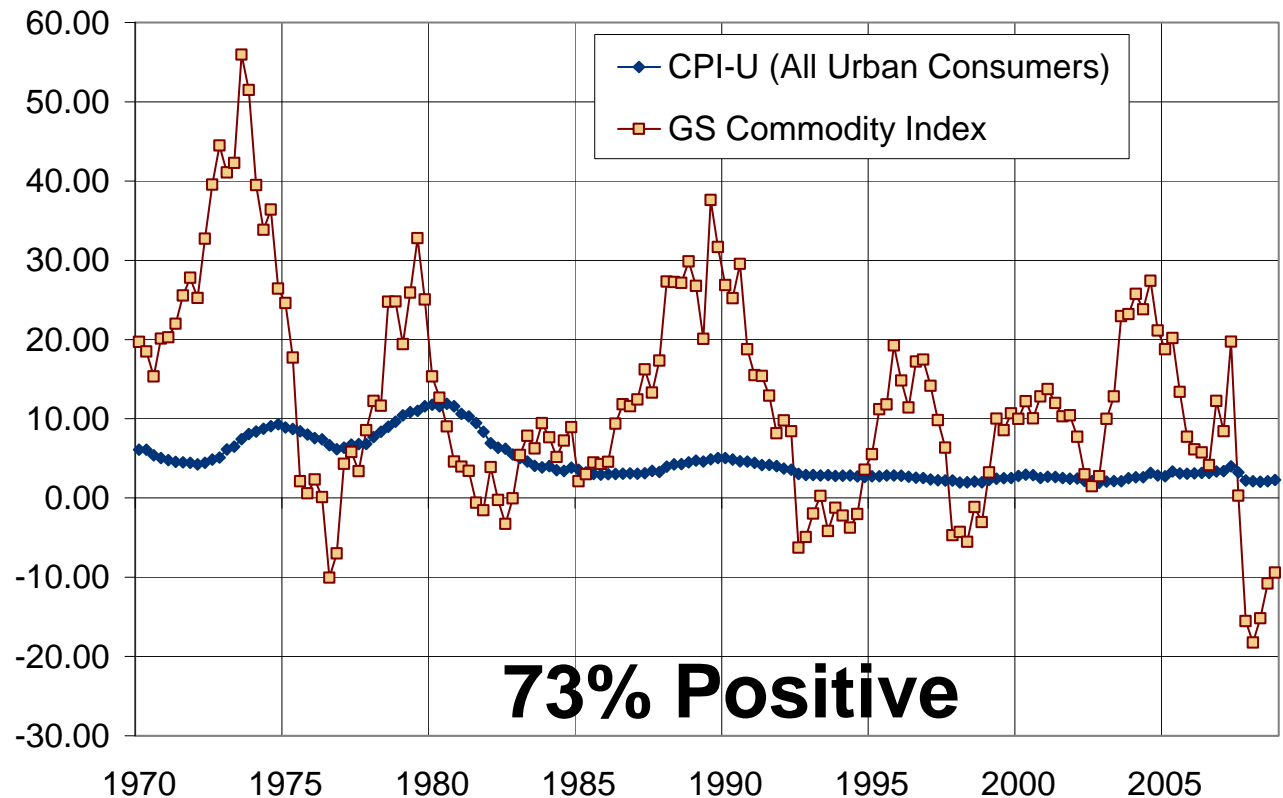


Commodities versus Inflation

- **Commodities are extremely volatile.**
- **They did a good job of anticipating inflation episodes.**
- **Declined significantly as inflation abated.**
- **Positive real return in 73% of periods.**

Commodities versus Inflation

Rolling 3-Year Returns



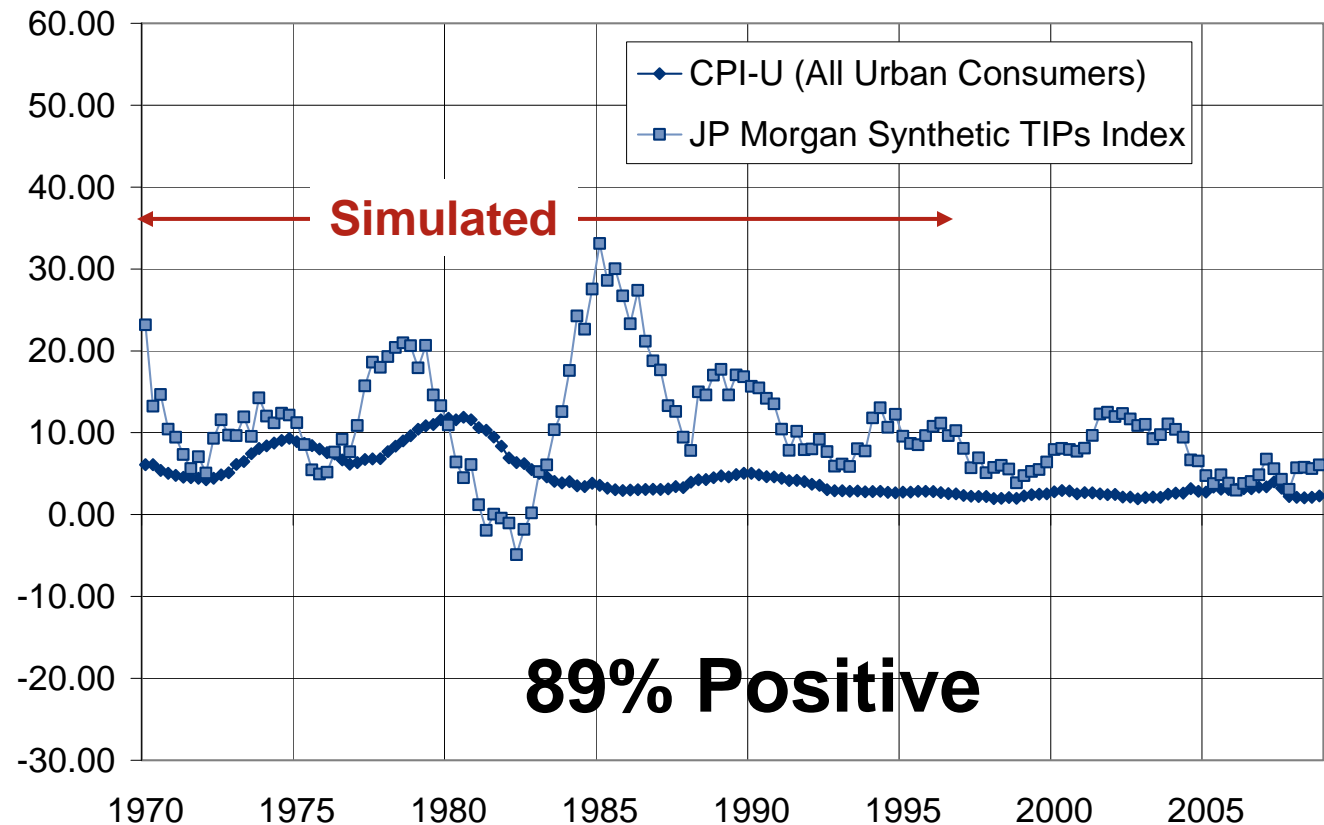


TIPS versus Inflation

- **TIPS are less volatile.**
- **They also did a good job of anticipating inflation episodes.**
- **Declined significantly as inflation abated.**
- **Positive real return in 89% of periods.**

US TIPS versus Inflation

Rolling Three-Year Returns



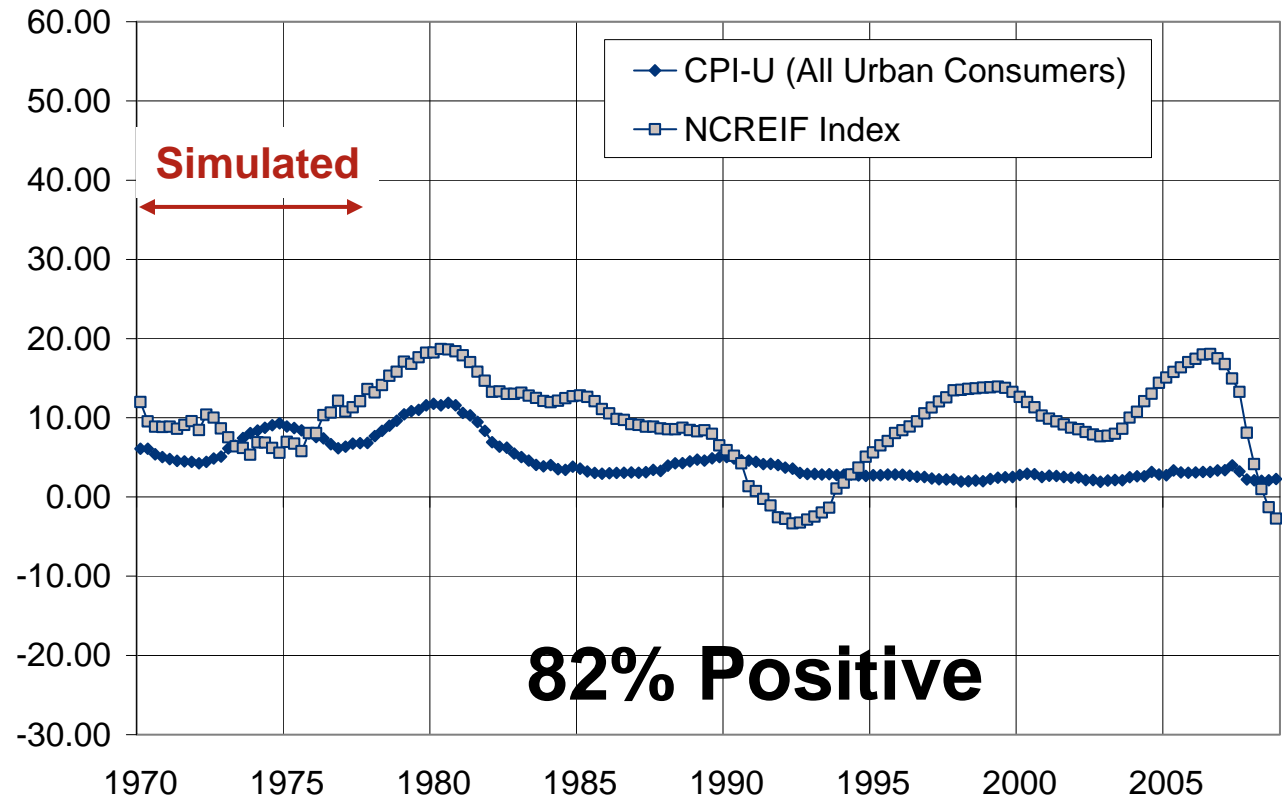
Return series prior to 1997 is “simulated”. Strength of conviction in conclusions should be adjusted accordingly



Real Estate versus Inflation

US Real Estate versus Inflation
Rolling Three-Year Returns

- **Observed volatility very low.**
- **Significant declines in early '90s and last year not related to inflation.**
- **Negative real return in '70s inferred from performance of REITs.**
- **Positive real return in 82% of periods.**



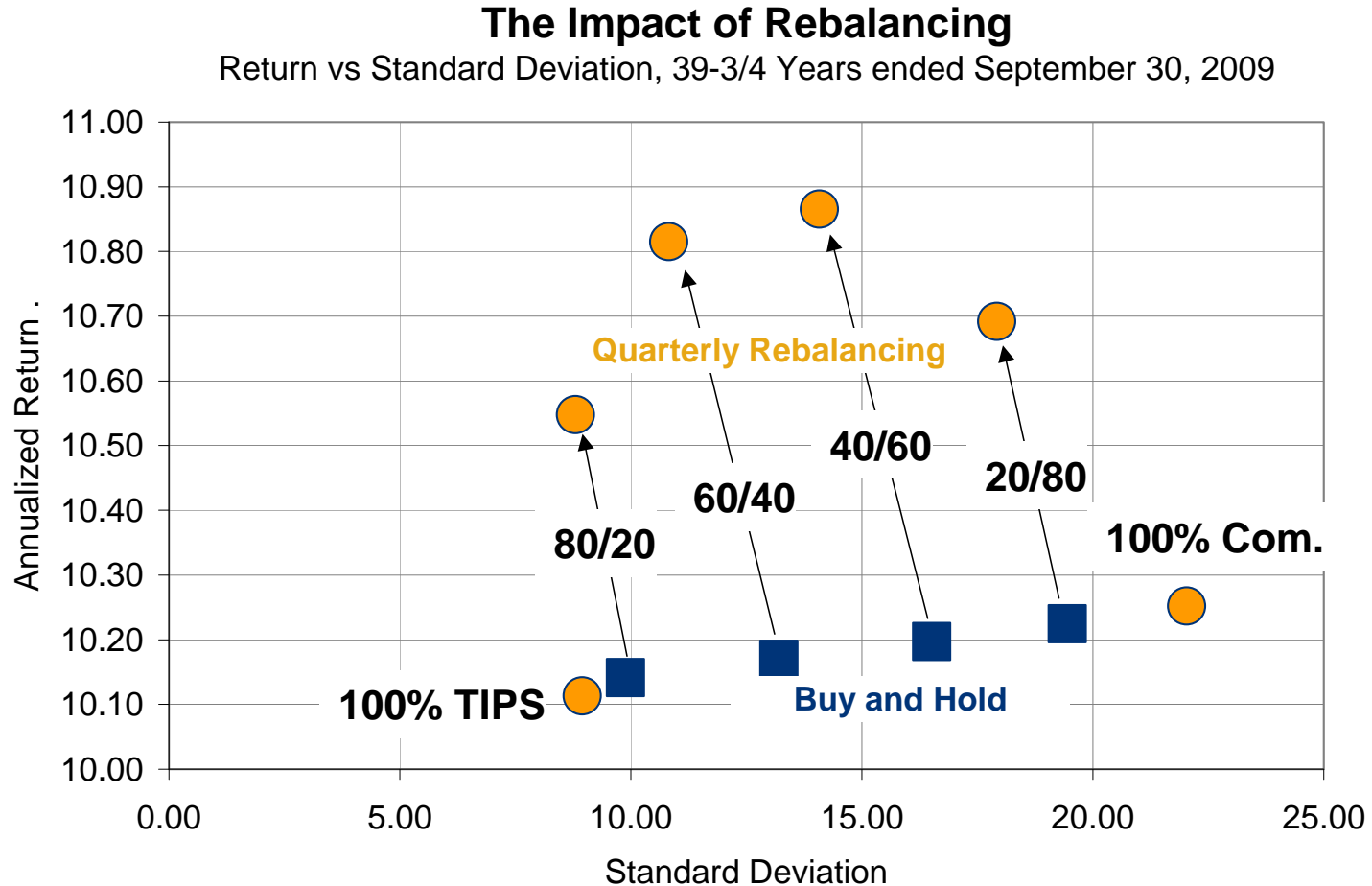
Return series prior to 1978 is “simulated”. Strength of conviction in conclusions should be adjusted accordingly



The Importance of Rebalancing

TIPS and Commodities

- Rebalancing is essential to realizing the potential of low-correlation, high-volatility assets.
- An 80/20 mix of TIPS and commodities would have outperformed both TIPS and commodities by over 40 bps with less risk than either.

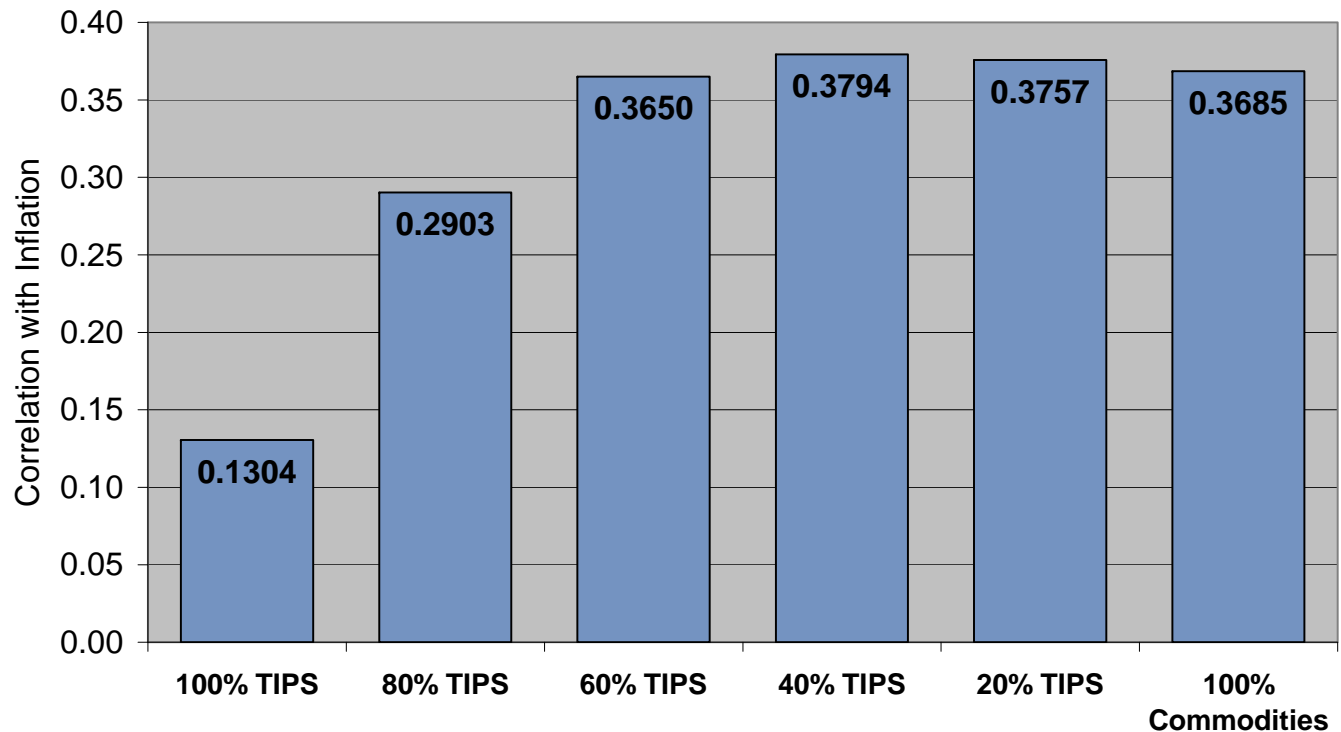




TIPS, Commodities, and Correlation with CPI

- A blend of TIPS and commodities had a higher correlation with CPI than either of the two components.
- Adding just 20% commodities to a TIPS portfolio significantly increases its correlation with inflation.

Correlation with CPI - U (Quarterly Series)
39-3/4 Years ended September 30, 2009

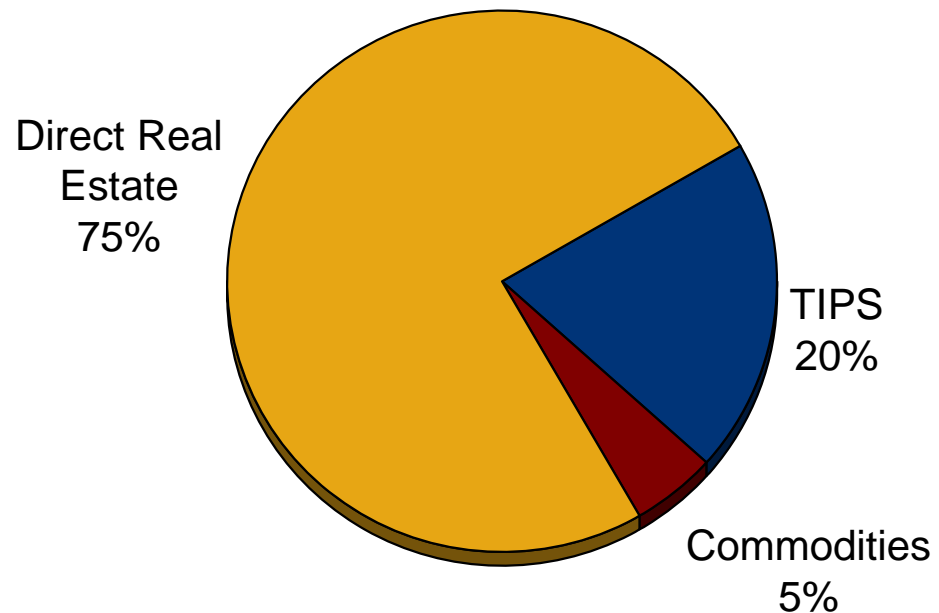




Simple Real Return Portfolio Structure

- **Direct real estate represents core of portfolio representing 65%-75% of total.**
- **TIPS and commodities should be held together and actively rebalanced to capture premium.**
- **To the extent rebalancing within the total portfolio is required, TIPS and commodities can provide the liquidity to accomplish it.**

Real Return Portfolio Structure (Simple)

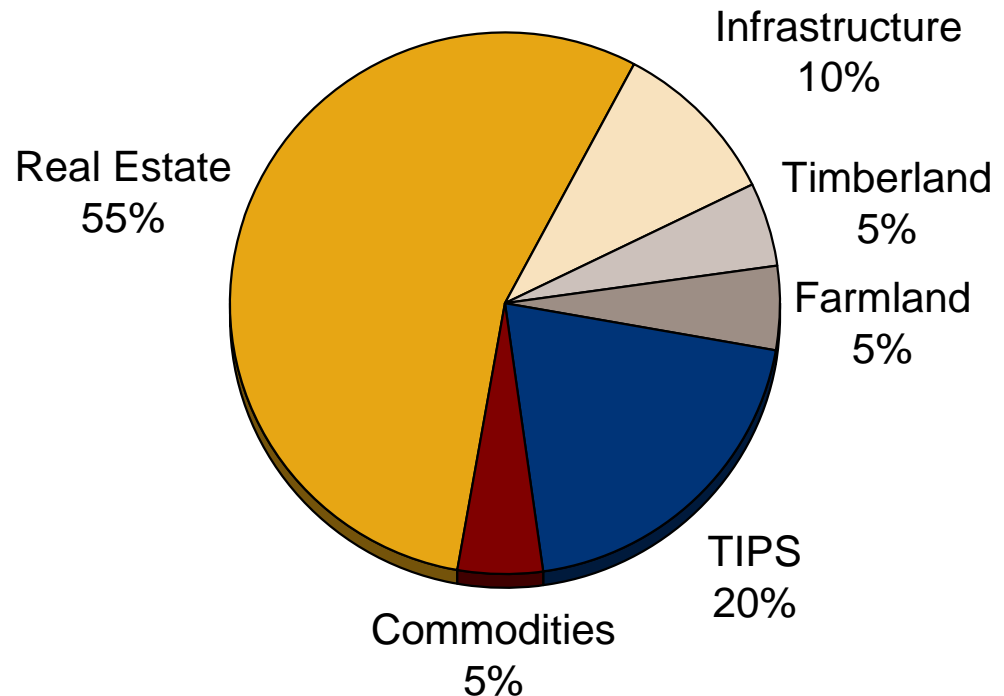




Complex Real Return Portfolio Structure

- This structure requires scale and commitment of resources and time.
- Greater diversification, larger potential opportunity set.
- Additional monitoring and cash-flow challenges.
- Similar to simple portfolio in terms of liquidity, income, and capital appreciation potential.

Real Return Portfolio Structure (Complex)





Conclusions

- **There are a wide variety of investments that are being represented as inflation hedges.**
- **Perfect inflation-hedging assets do not exist.**
- **Liabilities are typically uncorrelated with inflation on a short-term basis.**
- **The addition of TIPS and commodities to a well diversified portfolio can provide protection during sharply rising inflation periods.**
- **A strict rebalancing policy should be considered when a commodities portfolio is employed.**
- **At 15-20% of assets, the best constructed real return portfolio is likely to only have a marginal impact on total portfolio return in the event of sharply rising inflation.**



Implementation Issues

- **Commodity Index Choices**
- **Major Implementation Strategies**
 1. Natural resource stock portfolios
 2. Passive Index approaches
 3. Long-only commodity strategies
 4. Commodity trading strategies
 - Leverage
 - Long & Short
- **Callan position**
 - Callan has recommended #1-3 above particularly 2 & 3 as preferred approaches
 - As noted in part 1, we believe that rebalancing commitment is essential to successful implementation.



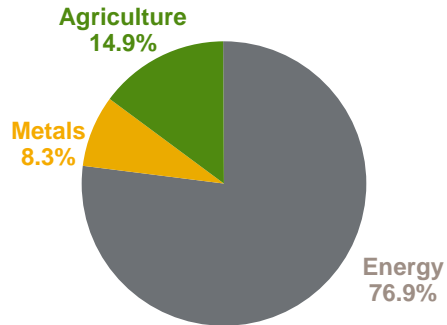
Commodities Strategies

| | Stock Strategy | Index Strategy | Long Only Strategy | Trading Strategy |
|-------------------|---|--|---|--|
| Assets | Equities | Index Futures Index Total Return Swaps Bonds / Money Market Instruments | Futures Commodity Swaps Equities, T-bills | Futures |
| Style | Mutual Fund or Separate Account | Indexed | Unconstrained Active Asset Allocation Long-Only & Unleveraged | Hedge Fund (Long / Short, Leveraged) |
| Risk | Stock Market Over- concentrated (Minimal Agriculture) | Over- concentrated Credit, Front Month Risk | Diversified | Variable |
| Volatility | High | High | High | Variable (Mgr Specific) |
| Liquidity | Good | Good | Good | Depends |

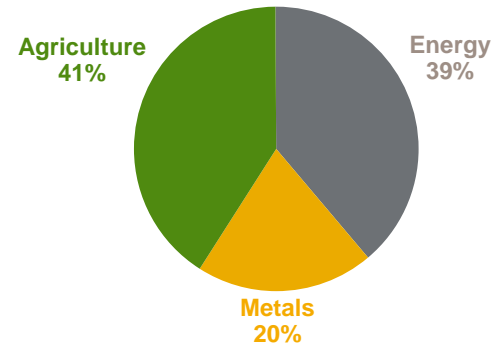


Major commodity indexes

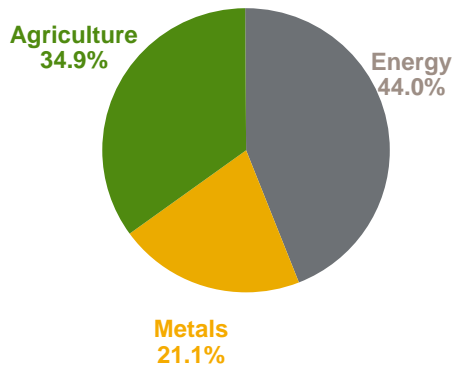
S&P GSCI¹



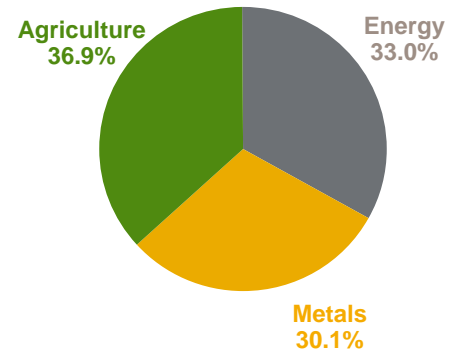
RJ CRB²



Rogers Int. Commodity TR Index³



DJ UBS⁴



Any sectors mentioned are for illustrative purposes only and should not be viewed as a recommendation to buy/sell.

¹Source: S&P Goldman Sachs; Bloomberg – October 31, 2008

²Source: Lyxor Asset Management – October 31, 2008

³Source: Rogers International Commodity Index – October 31, 2008

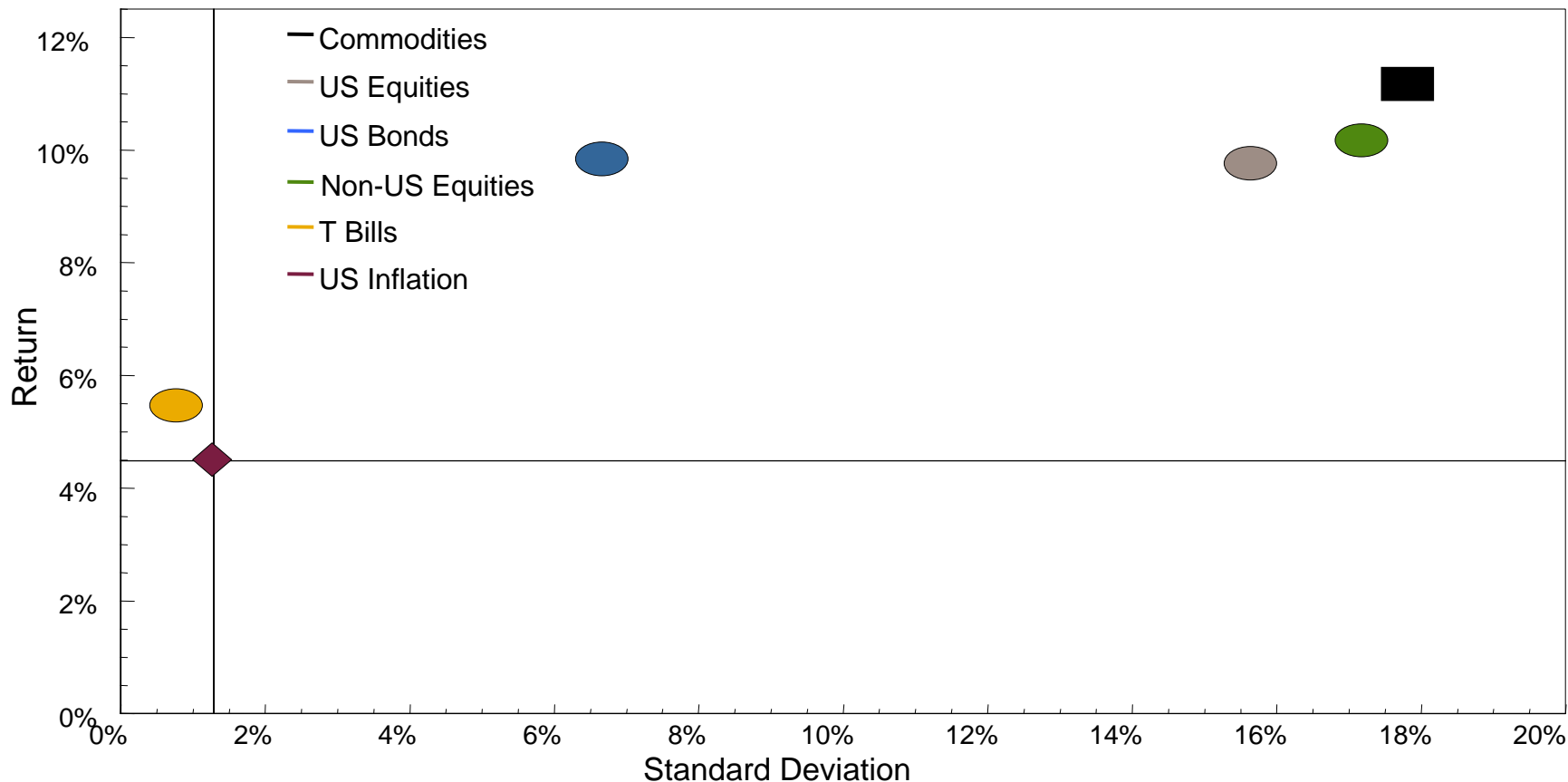
⁴Source: DJ UBS Financial Products – October 31, 2008



Asset Class: Risk/Return

January 1, 1970 – September 30, 2009

Source – Schroders Asset Management



- Commodity Index Blend
- World ex USA Equities
- S&P 500
- US Treasury T-Bill Auction Avg 1 Mo
- Dow Jones US Corporate Bond
- Ibbotson Associates SBBI US Inflation

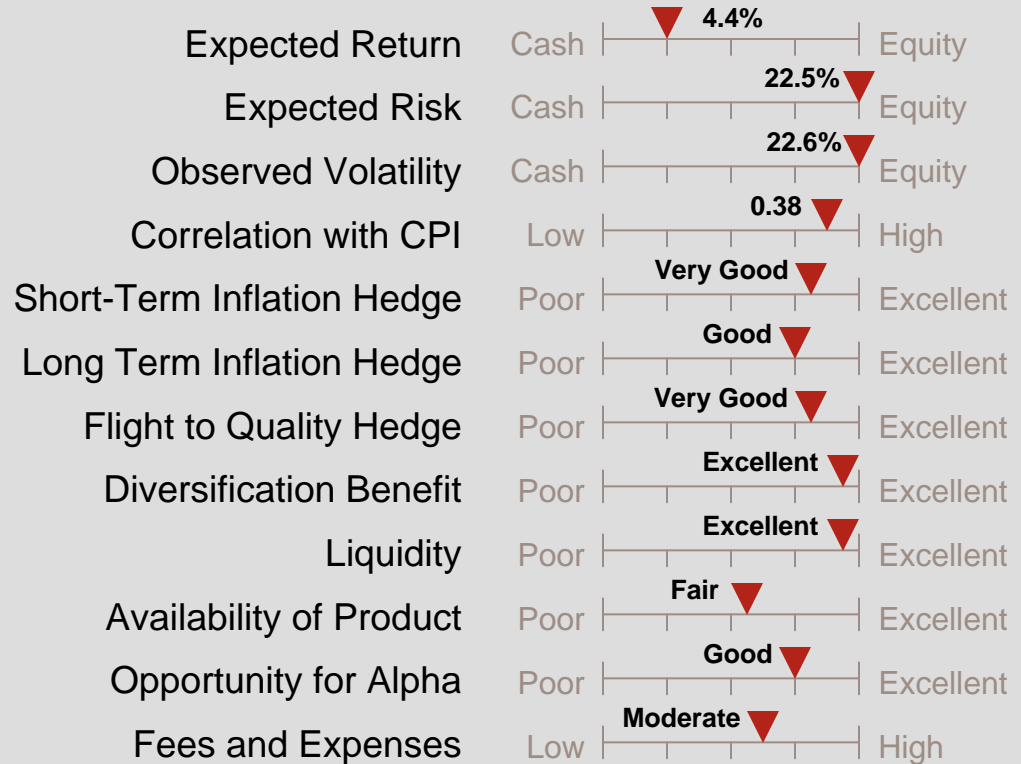
Source: Zephyr Style Advisor. Performance shown is past performance. Past performance is not necessarily a guide to future performance.
The value of investment can go down as well as up and is not guaranteed.



Asset Class Profile – Commodities

- **Adding exposure to commodities should only be considered in the context of an already diversified portfolio.**
- **They are potentially the highest correlation asset class with expected and actual inflation.**
- **They are extremely volatile, and should be actively rebalanced with uncorrelated assets.**
- **They are a good potential candidate for active management.**
- **They are a good complement to TIPS exposure in a real return portfolio.**

Overall Rating ★★★ Tier 3 asset class. Should be considered only in the context of an explicit inflation hedge. Extremely volatile as a stand-alone asset class. Relatively low expected return. Low or negative correlation to other asset classes. Optimal target percentage 10-15% of real return portfolio. Should be paired with TIPS and actively rebalanced.

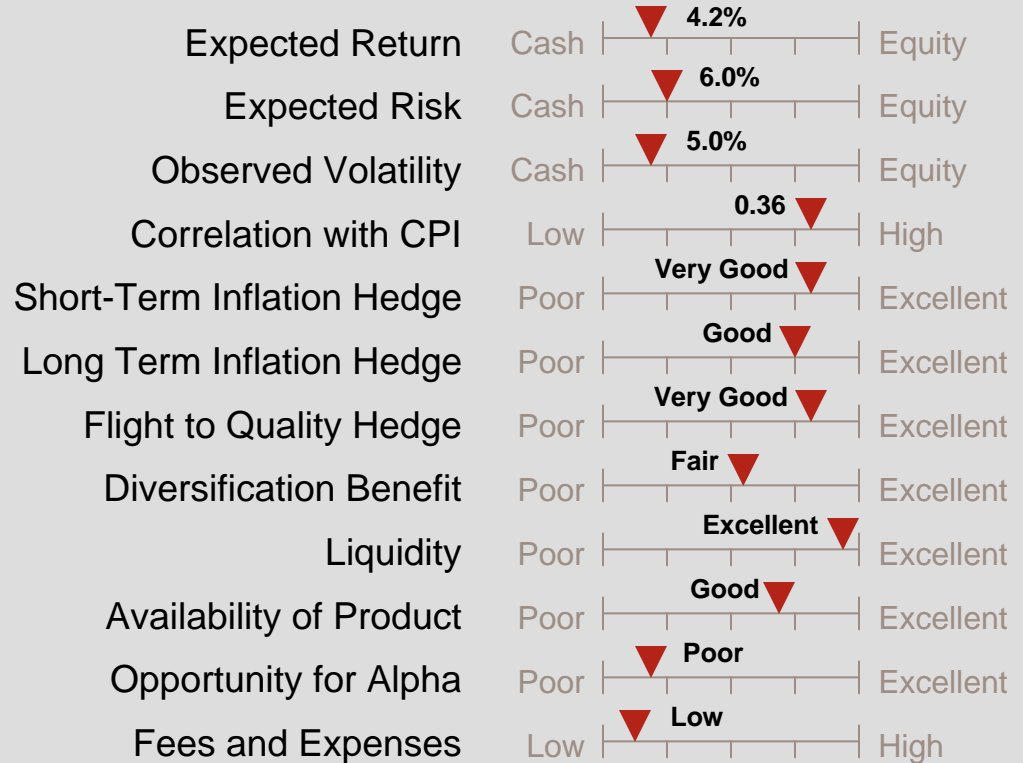




Asset Class Profile – US TIPS

- **TIPS can be included as either part of a real return portfolio, or as an inflation protection component of a fixed-income portfolio.**
- **They are impacted by supply and demand factors in the TIPS market and can produce negative real returns over short periods.**
- **They should provide a flight-to-quality hedge due to the fact that they are issued by the Treasury.**
- **They should be considered for portfolios of DC participants approaching retirement.**

Overall Rating ★★★★★ Tier 2 asset class. Can be considered as a diversifier to fixed income generally, or in the context of an explicit inflation hedge. Expected return and risk in line with nominal bonds without nominal interest rate risk. Will react badly to deflation. Not suitable for LDI in a DB context. Optimal target percentage 0-15% of total portfolio, 10-25% of real return portfolio.

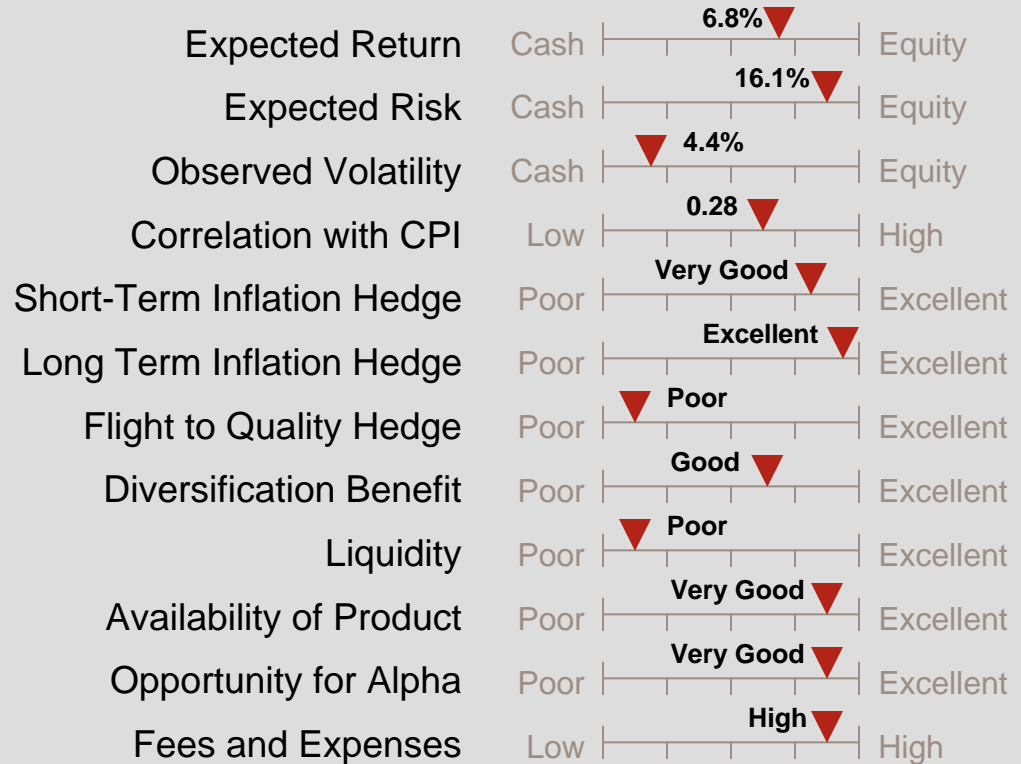




Asset Class Profile – Real Estate

- **Adding exposure to a diversified portfolio of commercial real estate should be the first step in building an inflation hedge.**
- **Provides a solid long-term hedge, with a reasonably high level of short-term correlation to inflation.**
- **Should hold up better than stocks, and will certainly outperform bonds, in a period of rapidly rising or sustained high inflation.**
- **During normal times it Provides high current income, a relatively high rate of return, low observed volatility, and is a good diversifier to a stock and bond portfolio.**

Overall Rating ★★★★★ Tier 1 asset class. Should be considered as a diversifier for any institutional portfolio above \$100 million in assets, regardless of inflation benefits. Excellent inflation hedge. Should represent the core allocation in any real return portfolio. Optimal target percentage 10-20% of total portfolio, 60-90% of real return portfolio.





Summary & Conclusion

- **ARMB already has a meaningful real return commitment.**
- **It is well diversified, however, we believe inclusion of a long only commodity exposure would be beneficial.**
- **The choice between passive and active long-only largely turns on individual client preference. Each approach has strong positives and challenges. If forced to choose a single approach, I would lean to the active alternative.**
- **Should the ARMB decide to proceed in this area, we suggest that candidates from both camps (active & passive long only) be considered.**
- **We do not believe that a publicly traded “natural resource” equity portfolio would provide meaningful additional benefits to ARMB’s existing program.**

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT: Commodities – Manager Search

ACTION: X

DATE: February 25, 2010

INFORMATION: _____

BACKGROUND

The Alaska Retirement Management Board has received several educational presentations on commodities investing over the last few years. Schrodgers presented at the Education Conference in September 2008 and Gresham presented at the Education Conference in September 2009. In December 2009, Callan Associates was asked to review commodities for suitability in the ARMB portfolio.

STATUS

Investing in commodities can increase portfolio diversification and add inflation protection for the ARMB portfolio. The ARMB already has significant investments in Real Assets. Currently, 14.9% of ARMB's assets are invested in Real Asset strategies as delineated below. The target asset allocation is 16% +/-8%.

ARMB Real Assets Investments
as of Sept 30, 2009 adjusted for subsequent capital flows

| | \$ (in millions) | % of ARMB | % of Real Assets |
|---------------------|------------------|-----------|------------------|
| Private Real Estate | \$1,153 | 8.5% | 57.2% |
| Public Real Estate | \$ 45 | .3% | 2.2% |
| Real Estate - Total | \$ 1,198 | 8.8% | 59.4% |
| Farmland | \$493 | 3.6% | 24.3% |
| Timber | \$170 | 1.3% | 8.4% |
| TIPs | \$75 | .6% | 3.7% |
| Energy | \$84 | .6% | 4.2% |
| Total Real Assets | \$2,020 | 14.9% | 100% |

Adding commodities to the existing portfolio is expected to further diversify the portfolio and add incremental inflation protection. Additionally, the existing Real Assets portfolio has very limited liquidity through public real estate and TIPS. Adding commodities would improve the Real Assets liquidity profile.

Callan Associates concludes that adding commodities to ARMB's existing Real Assets portfolio would be beneficial but the commodity portfolio must be paired with a TIPS portfolio and rebalanced on a disciplined basis in order to capture the additional returns available from the expected high volatility in commodities.

Staff recommends the ARMB move forward at this time and direct Callan to initiate a search for one or more commodity investment managers, including both passive and active management approaches. Simultaneous with the search, staff will develop recommendations for program implementation.

RECOMMENDATION

The ARMB authorize the Chief Investment Officer and Callan Associates to conduct a search for one or more commodities investment managers including both passive and active investment strategies.

Alaska Retirement Management Board

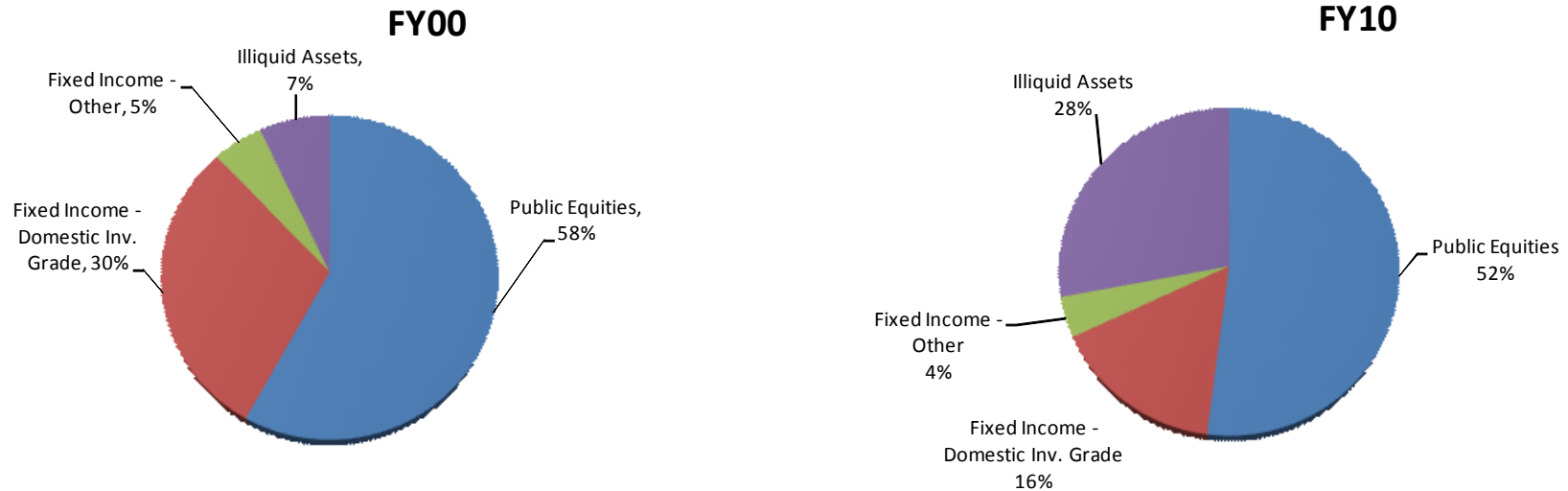
U.S. Treasuries are a Compelling Alternative
to Broad Domestic Bonds

February 25-26, 2010

Overview

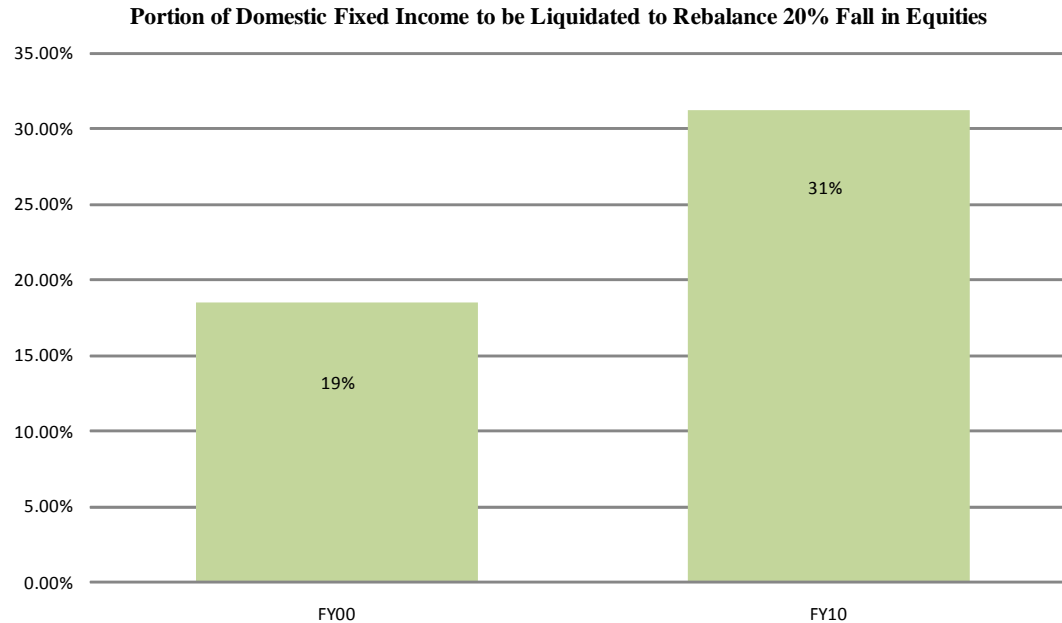
- The ARMB portfolio has increased its allocation to illiquid asset classes, largely at the expense of a lower allocation to fixed income. This has resulted in an increased need for liquidity as equity volatility places increasing demands on fixed income to be available for rebalancing and pension payments.
- The fixed income asset class has also become less liquid, with allocations to high yield and emerging market debt.
- The enhanced liquidity demands have placed stress on the internally-managed domestic fixed income portfolio, as demonstrated in the Fall of 2008.
- U.S. Treasuries provide superior liquidity. They have lower returns over time. However, they also possess lower equity correlations. The diversification benefits of Treasuries roughly offset their return disadvantage over time, resulting in very similar risk-adjusted performance at the portfolio level.
- Staff recommends transitioning the internally-managed domestic fixed income portfolio to one benchmarked against the Barclays Capital U.S. Treasury: Intermediate Index.

ARMB Asset Allocation has become Less Liquid



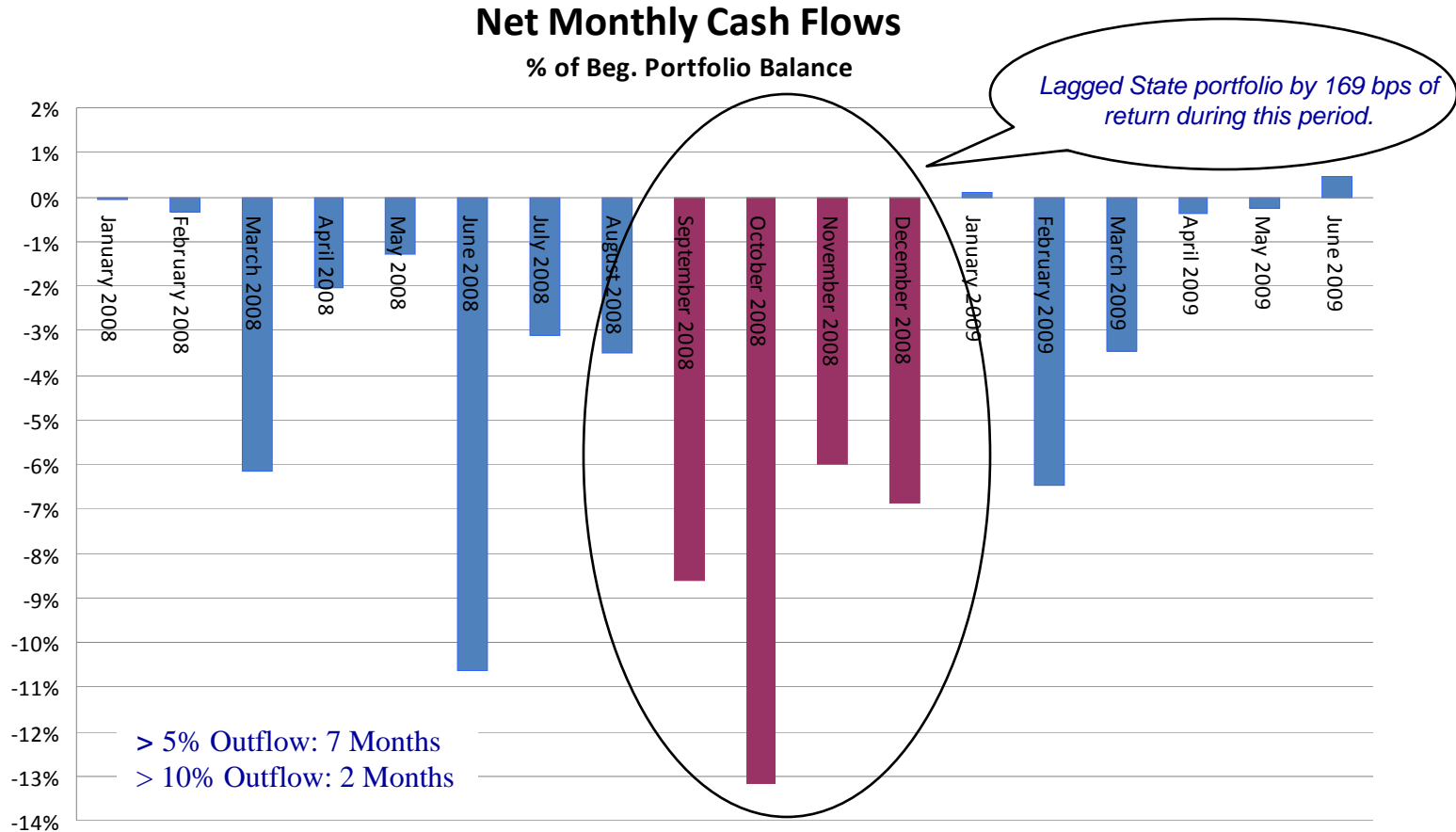
- Private Equity/Real/Absolute Return target allocation increased from 7% to 28%. Unfunded commitments represent an additional potential call on liquidity.
- Total Fixed Income fell from 35% to 20%. Internally-managed domestic fixed income fell from 30% to 16%.
- Public Equity allocation declined from 58% to 52%.

Fixed Income Liquidity Requirements have Increased



- In FY00, a 20% drop in the public equity market would require liquidating 19% of the internally-managed domestic fixed income portfolio to rebalance to target.
- A 20% drop today would require liquidating 31% of the internally-managed domestic fixed income portfolio.

Bond Portfolio Experienced Significant Outflows



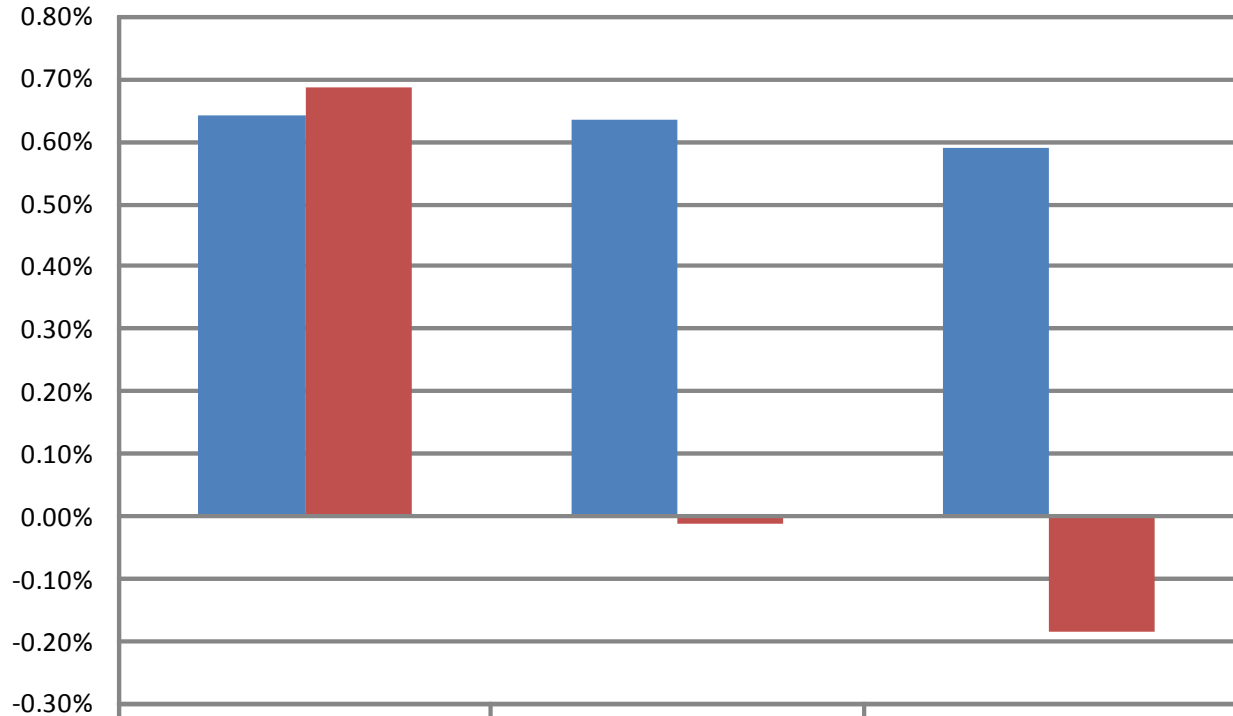
Broad Bond Market and U.S. Treasuries

| periods ending 9/30/09 | BC Aggregate Index | BC Treasury Index | BC Intermediate Treasury Index |
|-----------------------------------|---------------------------|--------------------------|---------------------------------------|
| 30 Year Return | 8.67% | 8.59% | 8.11% |
| 20 Year Return | 7.20% | 7.06% | 6.50% |
| 10 Year Return | 6.30% | 6.21% | 5.53% |
| 5 Year Return | 5.13% | 5.21% | 4.81% |
| | | | |
| 30 Year Standard Deviation | 5.97% | 5.80% | 4.46% |
| 20 Year Standard Deviation | 3.86% | 4.64% | 3.23% |
| 10 Year Standard Deviation | 3.79% | 4.96% | 3.40% |
| 5 Year Standard Deviation | 3.62% | 4.70% | 3.41% |
| | | | |
| 30 Year Sharpe Ratio | 0.453 | 0.456 | 0.497 |
| 20 Year Sharpe Ratio | 0.748 | 0.595 | 0.696 |
| 10 Year Sharpe Ratio | 0.817 | 0.613 | 0.710 |
| 5 Year Sharpe Ratio | 0.532 | 0.439 | 0.495 |

The modified adjusted durations of the Aggregate, Treasury and Intermediate Treasury indices on September 30, 2009 were 4.43, 5.27 and 3.96 years, respectively. With its longer duration, the Treasury index has benefited more from generally falling interest rates in recent decades. For this reason, the Intermediate Treasury index more closely represents the relative performance of U.S. Treasuries after accounting for duration differences.

Treasuries Outperform when Equities Underperform

Average Monthly Returns



| | July 1976 - September 2009 | 5% Worst Wilshire 5000 Monthly Returns | 5% Worst MSCI EAFE Monthly Returns |
|--------------------------------|----------------------------|--|------------------------------------|
| BC Intermediate Treasury Index | 0.64% | 0.63% | 0.59% |
| BC Aggregate Index | 0.69% | -0.01% | -0.18% |

Hypothetical Equity/Bond Portfolio over 30 Years

Less Return, Less Risk, Similar Sharpe Ratios

| periods ending 9/30/09 | Portfolio with Aggregate Index | Portfolio with Intermediate Treasury Index |
|-------------------------------|---|---|
| 30 Year Return | 9.00% | 8.84% |
| 20 Year Return | 6.44% | 6.24% |
| 10 Year Return | 2.65% | 2.44% |
| 5 Year Return | 3.29% | 3.26% |
| | | |
| 30 Year Standard Deviation | 10.73% | 10.35% |
| 20 Year Standard Deviation | 10.31% | 10.00% |
| 10 Year Standard Deviation | 11.28% | 10.89% |
| 5 Year Standard Deviation | 11.89% | 11.28% |
| | | |
| 30 Year Sharpe Ratio | 0.278 | 0.273 |
| 20 Year Sharpe Ratio | 0.204 | 0.191 |
| 10 Year Sharpe Ratio | -0.041 | -0.061 |
| 5 Year Sharpe Ratio | 0.014 | 0.012 |

Note: the portfolios were rebalanced to a target allocation of 47% Wilshire 5000, 20% EAFE and 33% “bonds” on a monthly basis.

Summary

- The ability of the ARMB portfolio to provide liquidity has diminished in recent years.
- The liquidity requirements for fixed income have increased, as the proportion of public equity to fixed income has risen in recent years resulting in the need for additional fixed income liquidity to affect asset rebalancing.
- Treasuries provide superior liquidity. The diversification benefits of Treasuries roughly offset their return disadvantage over time, resulting in very similar risk-adjusted performance at the portfolio level.
- **Staff recommendation:** authorize staff to transition the internally-managed domestic fixed income account currently managed to the Barclays Capital Aggregate Index to a new mandate managed against the Barclays Capital U.S. Treasury: Intermediate Index.

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT: Transition Domestic Fixed Income to
Intermediate U.S. Treasuries

ACTION: X

DATE: February 25-26, 2010

INFORMATION: _____

BACKGROUND:

The Alaska Retirement Management Board (ARMB) has increased its allocation to illiquid asset classes in recent years. This has largely come at the expense of the fixed income allocation. The fixed income asset class has also become less liquid in recent years, with allocations being made to high yield and emerging market bonds. As a result, the return volatility inherent in equities has been transformed into a heightened need for liquidity within the domestic fixed income portfolio. During the recent liquidity crisis the ARMB's internally-managed domestic fixed income portfolio, with its allocation to corporate bonds, collateralized mortgages and other asset backed securities, placed the ARMB at a great disadvantage when forced to come to the market to raise cash. The domestic fixed income portfolio had difficulty in providing the necessary liquidity to rebalance and provide pension payments during the decline in public equity valuations in the Fall of 2008.

STATUS:

Intermediate U.S. Treasuries provide a more liquid alternative to broad domestic fixed income. Intermediate U.S. Treasuries have historically provided a greater diversification benefit versus equities than the broad domestic fixed income market. This diversification advantage roughly offsets their return disadvantage. As a result, a portfolio substituting U.S. Treasuries for broad domestic fixed income securities would be expected to have a slightly lower return with a notable reduction in volatility. In a January 8, 2010 teleconference, staff presented a proposal to the IAC and General Consultant suggesting replacing the Barclay's Capital Aggregate Index with an intermediate Treasury mandate for the internally-managed domestic bond portfolio. They supported staff's proposal.

RECOMMENDATION:

Effective immediately, authorize staff to transition the internally-managed domestic fixed income account currently managed to the Barclays Capital Aggregate Index to a new mandate managed against the Barclays Capital U.S. Treasury: Intermediate Index and approve Resolution 2010-03 which establishes investment guidelines for the new mandate.

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to Intermediate U.S. Treasury Fixed Income Guidelines

Resolution 2010-03

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 the funds of the Public Employees' Retirement System, Teachers' Retirement System, Judicial Retirement System, and Alaska National Guard and Naval Militia Retirement System; 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 fixed income securities; and

WHEREAS, the Board will establish and from time to time as necessary modify guidelines for fixed income securities.

NOW THEREFORE BE IT RESOLVED THAT THE ALASKA RETIREMENT MANAGEMENT BOARD adopts the attached Intermediate U.S. Treasury Fixed Income Guidelines, attached hereto and made a part hereof, regarding investment in domestic fixed income securities.

This resolution repeals and replaces Resolution 2008-25.

DATED at Juneau, Alaska this _____ day of February, 2010.

Chair

ATTEST:

Secretary

INTERMEDIATE U.S. TREASURY INVESTMENT GUIDELINES

- A. Purpose.** The emphasis of investments in fixed income securities shall be diversification, subject to defined constraints, to minimize risk.
- B. Barclays Capital U.S. Treasury: Intermediate Index Portfolio.**
- 1. Investment Structure.** Permissible U.S. dollar denominated debt Investments shall be limited to the following:
 - a. Money market investments comprising:
 1. Repurchase agreements collateralized only by U.S. Treasury obligations, including bills, notes, and bonds, and only when the collateral carries a market value equal to or greater than 102% of the amount of the repurchase agreements, and only when the custodial bank appointed by retirement funds will take custody of the collateral; and
 2. Commercial paper rated at least Prime-1 by Moody's Investor Services, Inc. and A-1 by Standard and Poor's Corporation; and
 3. Negotiable certificates of deposit and bankers acceptances; provided that an issuing bank must have total assets in excess of \$5 billion.
 - b. United States Treasury obligations including bills, notes, bonds, other debt obligations issued by the United States Treasury, and backed by the full faith and credit of the U.S. Government.
 - c. Other full faith and credit obligations of the U.S. Government.
 - d. Securities issued or guaranteed by agencies and instrumentalities of the U.S. Government, but not explicitly backed by the full faith and credit of the U.S. Government.
 - e. Securities issued or guaranteed by municipalities in the United States.
 - f. Obligations of foreign governments, sovereign states, supranational entities, and their instrumentalities denominated in U.S. dollars.

- g. Investment grade corporate debt securities comprising:
 - 1. Corporate debt issued in the U.S. capital markets by U.S. companies; and
 - 2. Euro-dollar debt (that is, U.S. dollar-denominated securities issued outside the U.S. capital markets by U.S. companies or by foreign issuers); and
 - 3. Yankee debt (that is, U.S. dollar denominated obligations and issued in the U.S. capital markets by foreign issuers).
- h. Asset-backed Securities (ABS).
- i. Agency and non-agency mortgage-backed securities backed by loans secured by residential, multifamily and commercial properties including, but not limited to pass-throughs, collateralized mortgage loans (CMO's), project loans, construction loans and adjustable rate mortgages.
- j. Total return swaps referenced to components or sub-components of fixed income indices. To mitigate interest rate risk, the proceeds may not be invested in securities with a maturity beyond 90 days, unless invested in the Department of Revenue internally-managed Short-Term Fixed Income Pool.
- k. The internally managed short-term or substantially similar portfolio.
- ~~l. The internally managed enhanced cash fund or substantially similar portfolio.~~

2. Limitation on Holdings. The manager of the fixed-income portfolio shall apply appropriate diversification standards subject, however, to the following limitations based on the current market value of assets:

- a. The portfolio's effective duration may not exceed a band of +/- 20% around the **modified adjusted duration (or effective duration)** of the **Barclays Capital U.S. Treasury: Intermediate Index**, unless the investment agreement with an external manager specifically allows for a different band.
- b. Investments in fixed-income securities shall be placed solely in U.S. dollar denominated debt instruments.
- c. **The manager may not invest more than 5% of the portfolio in securities that are not full faith and credit obligations of the U.S. Government at the time of purchase.**

- d. The manager may not invest more than 10% of the portfolio in securities that are not nominal, coupon-paying United States Treasury obligations at the time of purchase.
- e. Corporate, asset-backed and non-agency mortgage securities must be rated investment grade. The investment grade rating is defined as the median rating of the following three rating agencies: Standard & Poor's Corporation, Moody's and Fitch. Asset-backed and non-agency mortgage securities may be purchased if only rated by one of these agencies if they are rated AAA. Corporate bonds may be purchased if rated by two of these agencies.
- ~~f. The manager may not invest more than 15% of the portfolio's assets in BBB+ to BBB-rated debt by Standard and Poor's Corporation or the equivalents by Moody's or Fitch.~~
- ~~g. The manager may not invest more than 25% of the portfolio's assets in any one corporate sector as defined by the Lehman Brothers Aggregate Index.~~
- h. The manager may not purchase more than 10% of the currently outstanding par value of any corporate bond issue.
- i. The manager may not invest more than 5% of the portfolio's assets in corporate bonds of any one company or affiliated group.

3. **Coverage.** The manager will execute trades with dealers that will execute orders promptly at the most favorable prices reasonably attainable.

- a. **Internally managed assets.** The manager may only execute trades with U.S. Treasury primary dealers; provided that the dealer shall have a minimum of \$200,000,000 in capital. This requirement does not apply to or restrict trades with direct issuers of commercial paper and mortgage-backed securities otherwise eligible for investment under these guidelines. The dealers must be able to execute orders promptly at the most favorable prices reasonably attainable.
- b. **Externally managed assets.** Internal cross trades are permitted at prevailing market levels, in accordance with Department of Labor's Prohibited Transaction Exemption 95-66.

4. **Specific Exclusions on Investments.** The manager shall apply appropriate limitations designed to reduce risk exposure at the time investment securities are purchased, and shall, at a minimum, apply the following limitations:
 - a. There shall be no investment in private placements, except Rule 144A securities.
 - b. The manager shall not sell securities short.
 - c. The manager shall not purchase securities on margin.
 - d. The manager shall not utilize options or futures.

5. **Required Remedies.** Recognizing that ratings and relative asset worth may change, the manager shall liquidate invested securities with care and prudence when the credit rating of a security falls below the minimum standards set in these guidelines or when the relative market value of that investment type exceeds the levels of holdings permitted in these guidelines. The manager is required to notify the chief investment officer to discuss the situation and the proposed liquidation strategy if it is not prudent simply to liquidate immediately.

INTERMEDIATE U.S. TREASURY INVESTMENT GUIDELINES

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 2. Commercial paper rated at least Prime-1 by Moody's Investor Services, Inc. and A-1 by Standard and Poor's Corporation; and
 3. Negotiable certificates of deposit and bankers acceptances; provided that an issuing bank must have total assets in excess of \$5 billion.
- b. United States Treasury obligations including bills, notes, bonds, other debt obligations issued by the United States Treasury, and backed by the full faith and credit of the U.S. Government.
- c. Other full faith and credit obligations of the U.S. Government.
- d. Securities issued or guaranteed by agencies and instrumentalities of the U.S. Government, but not explicitly backed by the full faith and credit of the U.S. Government.
- e. Securities issued or guaranteed by municipalities in the United States.
- f. Obligations of foreign governments, sovereign states, supranational entities, and their instrumentalities denominated

in U.S. dollars.

- g. Investment grade corporate debt securities comprising:
 - 1. Corporate debt issued in the U.S. capital markets by U.S. companies; and
 - 2. Euro-dollar debt (that is, U.S. dollar-denominated securities issued outside the U.S. capital markets by U.S. companies or by foreign issuers); and
 - 3. Yankee debt (that is, U.S. dollar denominated obligations and issued in the U.S. capital markets by foreign issuers).
- h. Asset-backed Securities (ABS).
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- j. Total return swaps referenced to components or sub-components of fixed income indices. To mitigate interest rate risk, the proceeds may not be invested in securities with a maturity beyond 90 days, unless invested in the Department of Revenue internally-managed Short-Term Fixed Income Pool.
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- c. The manager may not invest more than 5% of the portfolio in securities that are not full faith and credit obligations of the U.S. Government at the time of purchase.

- d. The manager may not invest more than 10% of the portfolio in securities that are not nominal, coupon-paying United States Treasury obligations at the time of purchase.
 - e. Corporate, asset-backed and non-agency mortgage securities must be rated investment grade. The investment grade rating is defined as the median rating of the following three rating agencies: Standard & Poor's Corporation, Moody's and Fitch. Asset-backed and non-agency mortgage securities may be purchased if only rated by one of these agencies if they are rated AAA. Corporate bonds may be purchased if rated by two of these agencies.
 - f. The manager may not purchase more than 10% of the currently outstanding par value of any corporate bond issue.
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- a. **Internally managed assets.** The manager may only execute trades with U.S. Treasury primary dealers; provided that the dealer shall have a minimum of \$200,000,000 in capital. This requirement does not apply to or restrict trades with direct issuers of commercial paper and mortgage-backed securities otherwise eligible for investment under these guidelines. The dealers must be able to execute orders promptly at the most favorable prices reasonably attainable.
 - b. **Externally managed assets.** Internal cross trades are permitted at prevailing market levels, in accordance with Department of Labor's Prohibited Transaction Exemption 95-66.
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- 5. Required Remedies.** Recognizing that ratings and relative asset worth may change, the manager shall liquidate invested securities with care and prudence when the credit rating of a security falls below the minimum standards set in these guidelines or when the relative market value of that investment type exceeds the levels of holdings permitted in these guidelines. The manager is required to notify the chief investment officer to discuss the situation and the proposed liquidation strategy if it is not prudent simply to liquidate immediately.



ARMB

Why International Small Cap?

Part II

Callan Associates Inc.

Michael J. O'Leary CFA
Executive Vice President



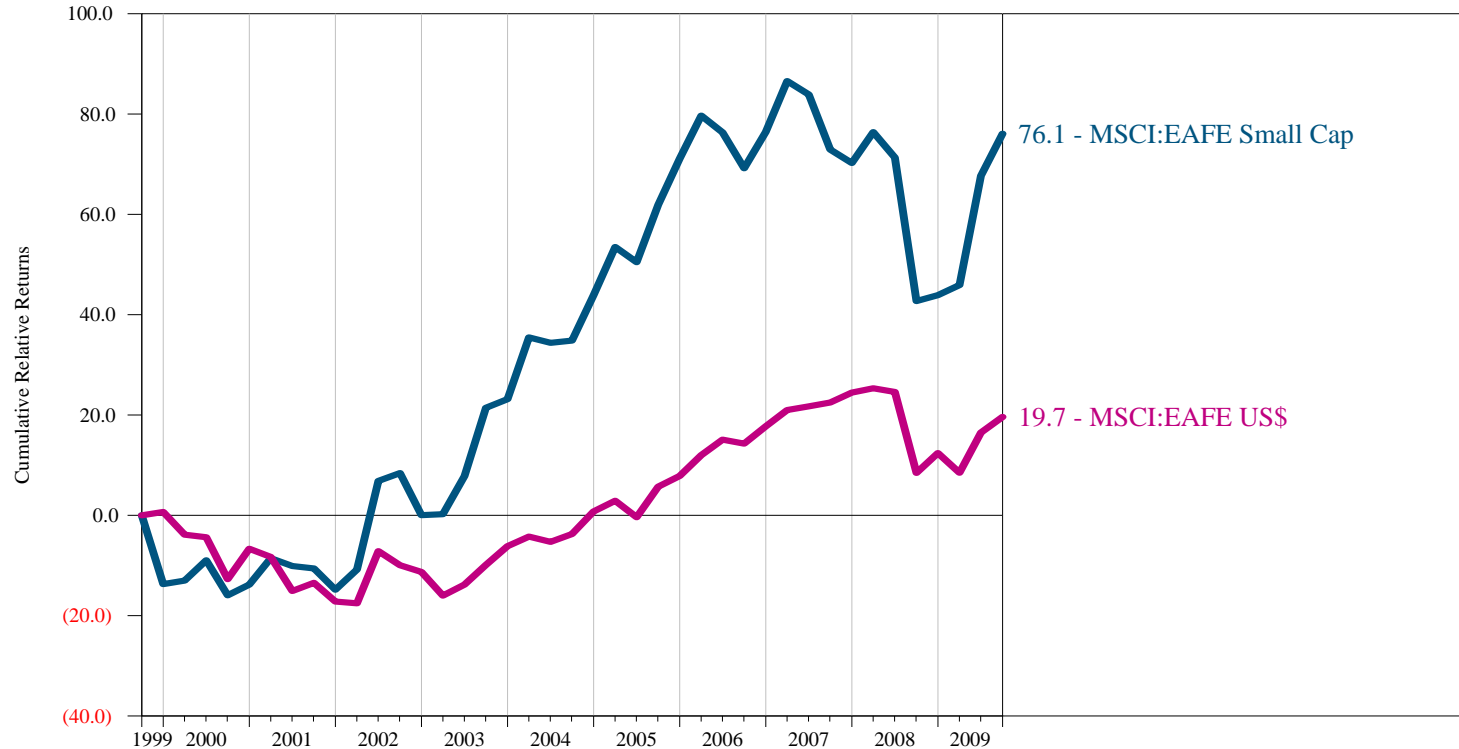
Where do we go from here?

- **At the last meeting, Janet Becker-Wold presented the rationale for inclusion of a dedicated small cap commitment as a part of your international management structure.**
- **She demonstrated that, like domestic small cap, international small cap has provided a performance premium to the developed market large cap. This premium has been accompanied by higher volatility.**
- **While there are fewer active international small cap managers than there are domestic, we believe that there is a reasonable set of manager alternatives.**
- **Over the past 2-4 years there have been significant enhancements to international equity market indices. The improvements have resulted in the inclusion of many more companies. As these indexes become more broadly used, we believe that investors will move toward increased usage of small cap opportunities.**
- **In this presentation, we include several of the slides previously presented and then focus on the current ARMB portfolio in order to develop a specific recommendation for your consideration.**



Small Cap Premium

Cumulative Relative Returns Relative To Russell:3000 Index
for 10 Years Ended September 30, 2009

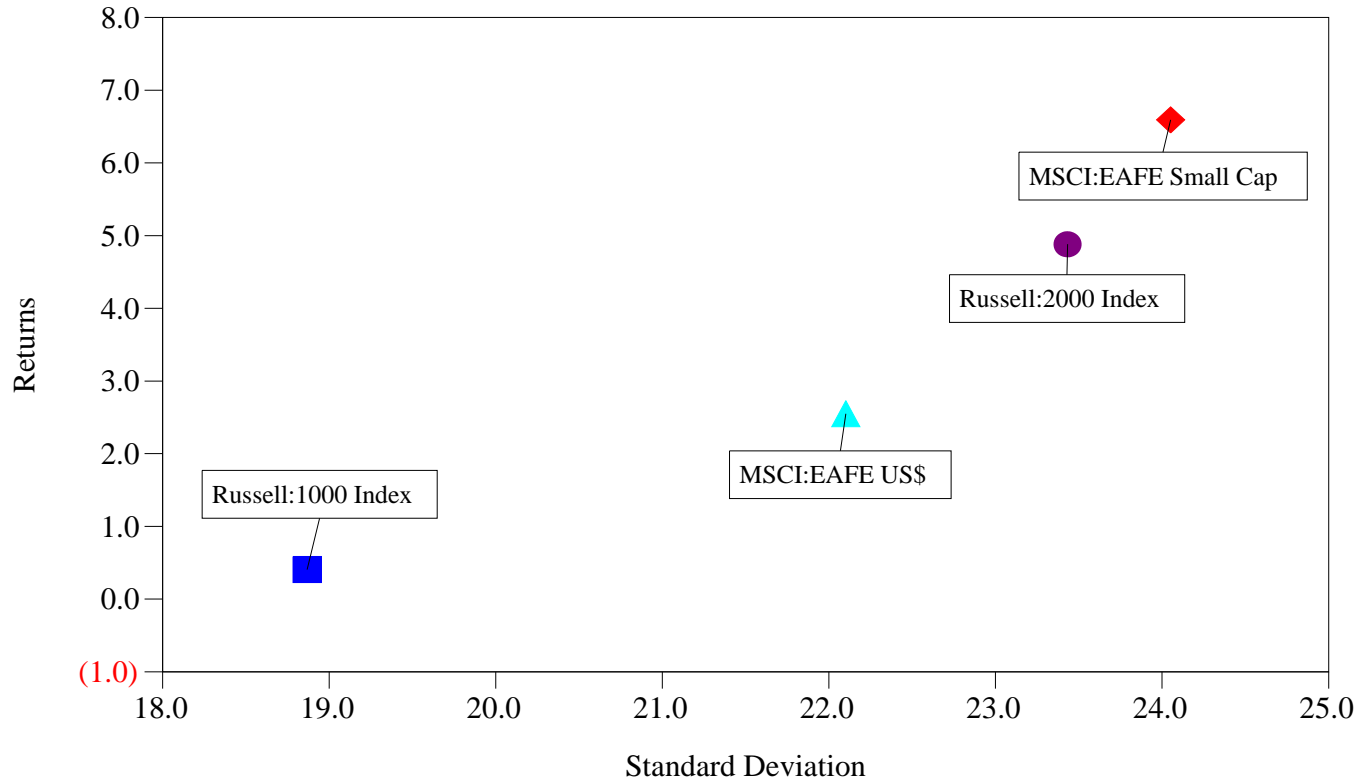


- Like the US, international small cap shows a risk premium to large cap



Risk Reward Tradeoff

Scatter Chart
for 10 Years Ended September 30, 2009



- **Small cap is riskier than large cap in both the US and non-US.**
- **Over the last 10 years, US small cap added 4.4% per annum with an increase in risk of 25%.**
- **International small cap has added 4% with 9% increase in risk**



Benefit of Diversification

Periodic Table of Investment Returns
for Calendar Years
10 Years Ended September 30, 2009

| 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 3 Qtrs. 2009 |
|--------------------------------------|---------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---------------------------------------|-------------------------------------|
| Russell:2000 Index (3.0%) | Russell:2000 Index 2.5% | MSCI:Emer Markets (6.0%) | MSCI:EAFE Small Cap 61.3% | MSCI:EAFE Small Cap 30.8% | MSCI:Emer Markets 34.5% | MSCI:Emer Markets 32.6% | MSCI:Emer Markets 39.8% | Russell:2000 Index (33.8%) | MSCI:Emer Markets 64.9% |
| MSCI:EAFE Small Cap (7.6%) | MSCI:Emer Markets (2.4%) | MSCI:EAFE Small Cap (7.8%) | MSCI:Emer Markets 56.3% | MSCI:Emer Markets 26.0% | MSCI:EAFE Small Cap 26.2% | MSCI:EAFE US\$ 26.3% | MSCI:EAFE US\$ 11.2% | Russell:1000 Index (37.6%) | MSCI:EAFE Small Cap 48.3% |
| Russell:1000 Index (7.8%) | Russell:1000 Index (12.4%) | MSCI:EAFE US\$ (15.9%) | Russell:2000 Index 47.3% | MSCI:EAFE US\$ 20.2% | MSCI:EAFE US\$ 13.5% | MSCI:EAFE Small Cap 19.3% | Russell:1000 Index 5.8% | MSCI:EAFE US\$ (43.4%) | MSCI:EAFE US\$ 29.0% |
| MSCI:EAFE US\$ (14.2%) | MSCI:EAFE Small Cap (12.5%) | Russell:2000 Index (20.5%) | MSCI:EAFE US\$ 38.6% | Russell:2000 Index 18.3% | Russell:1000 Index 6.3% | Russell:2000 Index 18.4% | MSCI:EAFE Small Cap 1.4% | MSCI:EAFE Small Cap (47.0%) | Russell:2000 Index 22.4% |
| MSCI:Emer Markets (30.6%) | MSCI:EAFE US\$ (21.4%) | Russell:1000 Index (21.7%) | Russell:1000 Index 29.9% | Russell:1000 Index 11.4% | Russell:2000 Index 4.6% | Russell:1000 Index 15.5% | Russell:2000 Index (1.6%) | MSCI:Emer Markets (53.2%) | Russell:1000 Index 21.1% |

- Performance of market segments varies over time



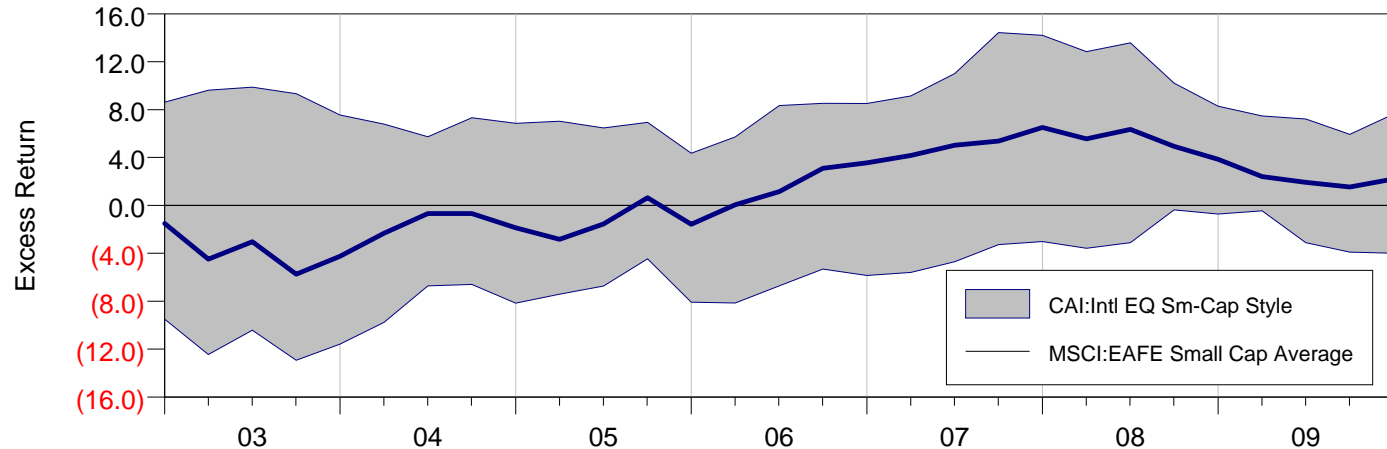
Good Use of Active Management Updated since last presentation

Percent of Three-Year Periods where Manager Beat Benchmark by More than Hurdle - by Percentile

| Hurdle | 0.45% | 0.50% | 0.55% | 0.60% | 0.65% | 0.70% | 0.75% | 0.80% | 0.85% | 0.90% |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Median | 57% | 57% | 57% | 57% | 54% | 54% | 54% | 54% | 54% | 54% |
| 45th Percentile | 61% | 61% | 61% | 61% | 61% | 61% | 61% | 61% | 57% | 57% |
| 40th Percentile | 64% | 64% | 64% | 64% | 64% | 64% | 64% | 64% | 64% | 61% |
| 35th Percentile | 79% | 79% | 79% | 79% | 75% | 75% | 75% | 75% | 71% | 71% |
| 30th Percentile | 96% | 96% | 96% | 96% | 96% | 96% | 93% | 93% | 93% | 93% |
| 25th Percentile | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

Average Annualized Excess Return - Median Manager: 1.06%

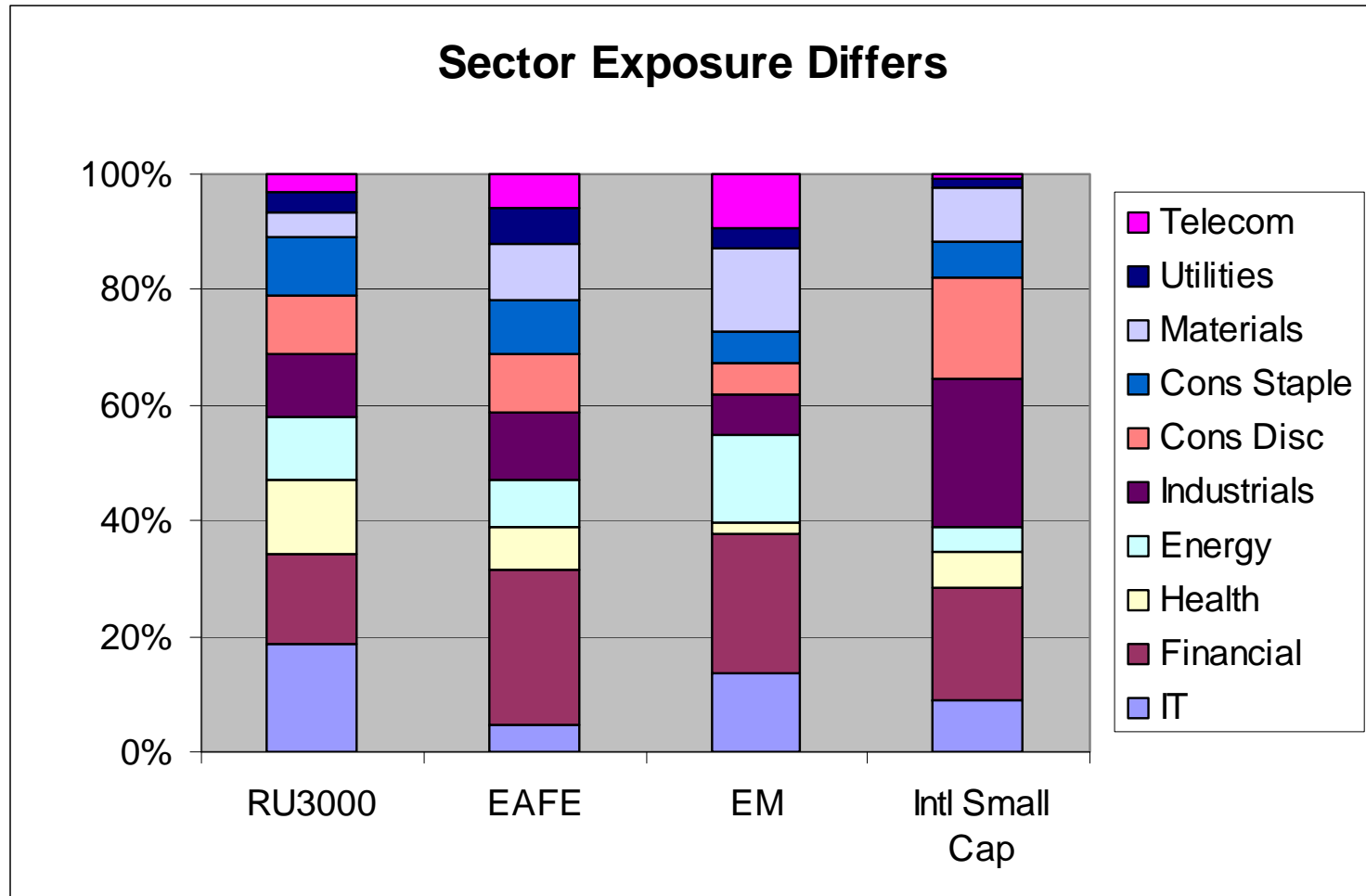
Rolling 12 Quarter Excess Return Relative To MSCI:EAFE Small Cap
for 7 Years Ended December 31, 2009



■ Actively managed international small cap universe beats EAFE small cap index



Diversification of Sectors



■ **International Small Cap brings a different Sector Mix**



Benchmarks have Improved

- **Improved Benchmarks**

- MSCI benchmark enhancements
 - No overlap between Small Cap and Standard (Large + Mid Cap)
 - Improved Coverage to 99th Percentile of Universe

- **Implementation Consideration**

- Integrated through MSCI EAFE IMI (All Cap)
- Segmented through MSCI EAFE Standard + Small Cap

- **Risks**

- Liquidity
- Capacity
- Volatility



International Small Cap – Implementation Callan Universe

Callan's Manager Database

- **98 International small cap strategies**
 - 17 Value (MSCI Z-Score -0.20 and lower)
 - 25 Core (MSCI Z-Score -0.20 to +0.20)
 - 58 Growth (MSCI Z-Score +0.20 and higher)

- **Product capacity is a moving target**
 - Many products have reopened recently
 - Rationale for reopening is scrutinized



Summary of Pros & Cons of Pursuing International Small Cap for U.S. Investors

■ Pros

- Take advantage of increased opportunity set outside of the U.S.
- Capture higher growth potential
- Potential for alpha from active management in less efficient markets
- Broader diversification

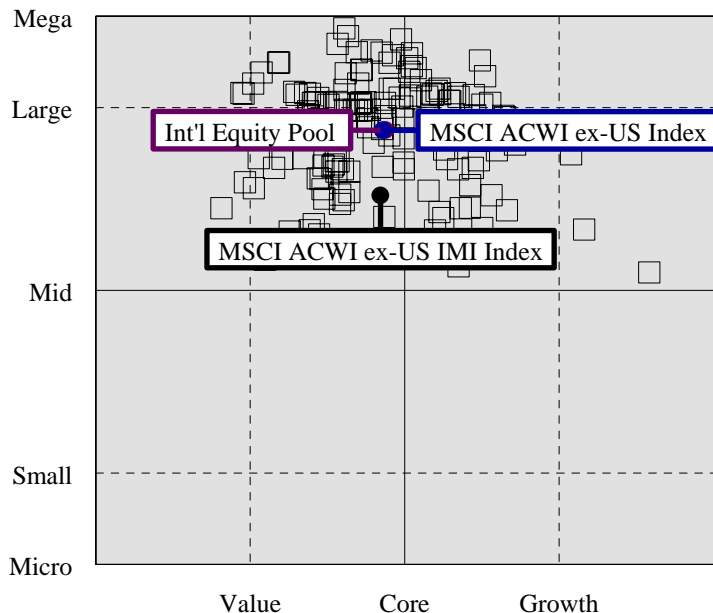
■ Cons

- Greater liquidity risk
- Less product capacity
- Higher volatility in isolation



ARMB's Total International Diversification

Style Map vs CAI Non-U.S. Equity Style Holdings as of September 30, 2009



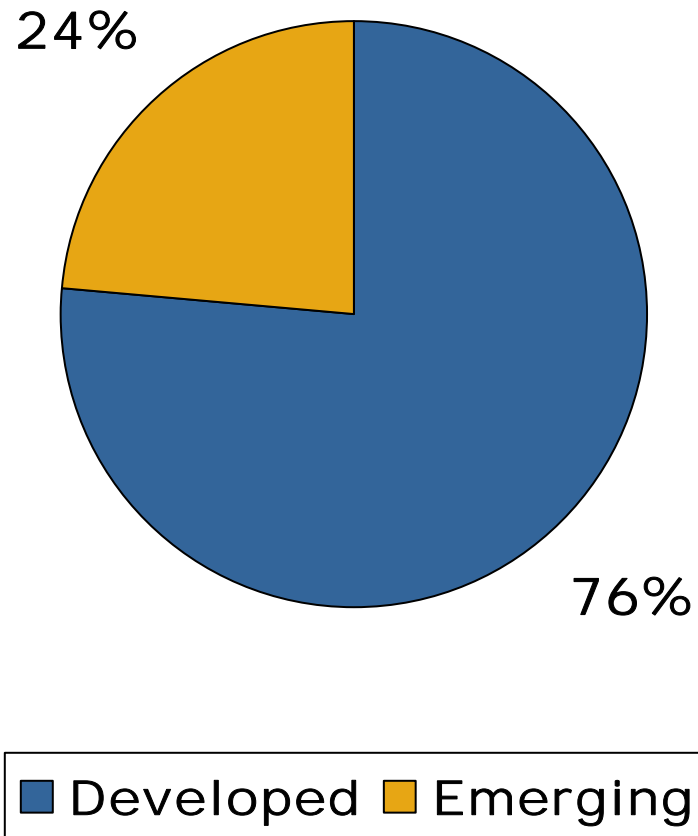
Style Exposure Matrix Holdings as of September 30, 2009

| | | | | |
|-------|---------------------|---------------------|---------------------|----------------------|
| Large | 16.0% (40) | 20.2% (40) | 10.0% (30) | 46.1% (110) |
| | 17.5% (50) | 18.5% (44) | 9.7% (36) | 45.7% (130) |
| | 14.6% (47) | 14.3% (45) | 8.4% (34) | 37.2% (126) |
| Mid | 9.9% (55) | 11.6% (77) | 10.2% (93) | 31.7% (225) |
| | 7.1% (83) | 9.7% (111) | 9.8% (123) | 26.6% (317) |
| | 6.4% (79) | 8.5% (102) | 8.9% (112) | 23.8% (293) |
| Small | 6.0% (109) | 7.4% (153) | 5.5% (136) | 18.9% (398) |
| | 6.2% (206) | 6.6% (210) | 6.5% (223) | 19.3% (639) |
| | 5.5% (195) | 6.4% (212) | 6.0% (206) | 18.0% (613) |
| Micro | 0.8% (126) | 2.4% (2249) | 0.2% (79) | 3.3% (2454) |
| | 3.5% (304) | 2.3% (200) | 2.5% (217) | 8.3% (721) |
| | 4.2% (893) | 13.3% (3290) | 3.5% (691) | 21.0% (4874) |
| Total | 32.6% (330) | 41.5% (2519) | 25.9% (338) | 100.0% (3187) |
| | 34.3% (643) | 37.1% (565) | 28.5% (599) | 100.0% (1807) |
| | 30.8% (1214) | 42.5% (3649) | 26.8% (1043) | 100.0% (5906) |
| | Value | Core | Growth | Total |

- The graphs do not explicitly include the Eaton Vance portfolio and only include estimates for Lazard's emerging impact.
- Key take away – current program is well diversified versus ACWI ex-US but underweight smaller cap versus MSCI ACW ex-US IMI.
- Suggest reader sum Small & Micro to gain perspective.



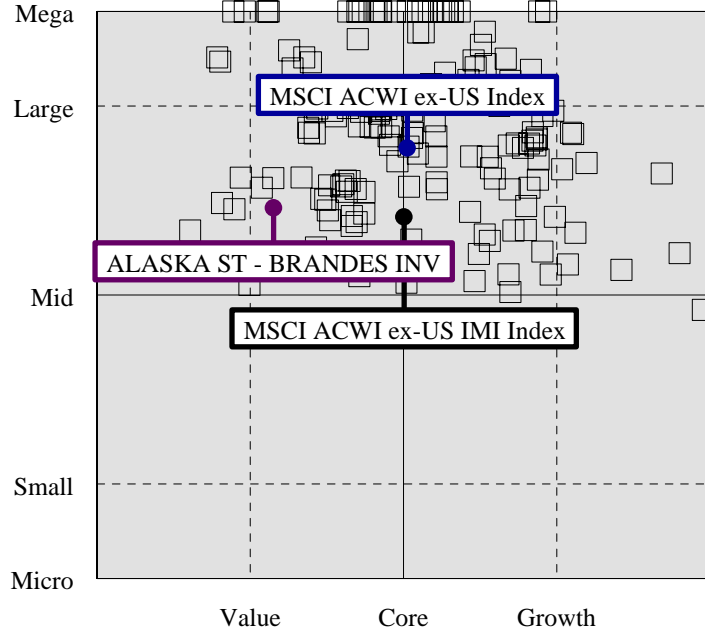
Your recent manager international diversification by mandate Data as of 9/30/09





Individual Developed Market Managers Brandes

Style Map vs CAI Non-U.S. Equity Style Holdings as of September 30, 2009

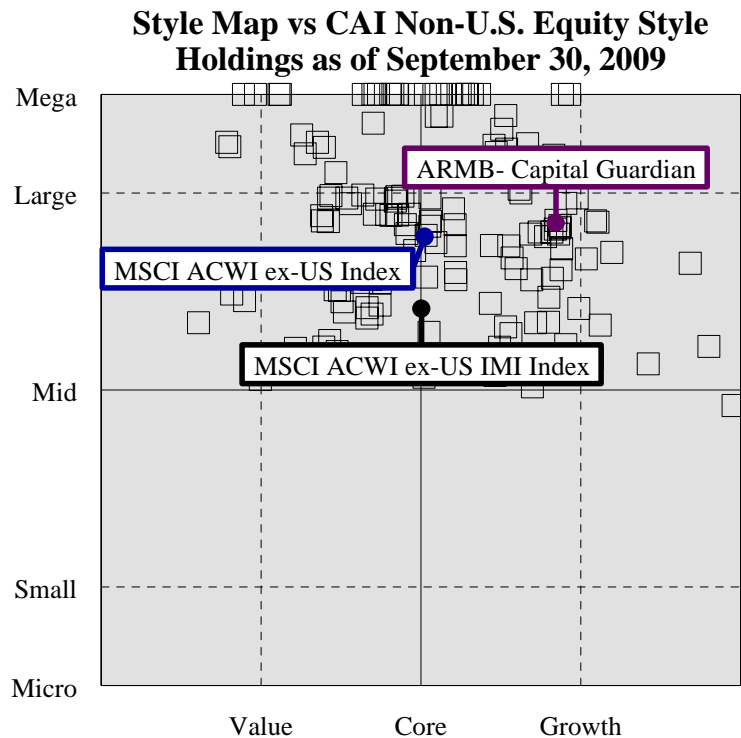


Style Exposure Matrix Holdings as of September 30, 2009

| | | | | |
|--------------|---------------------|---------------------|---------------------|----------------------|
| Large | 15.5% (10) | 15.2% (11) | 3.5% (4) | 34.2% (25) |
| | 17.5% (50) | 18.5% (44) | 9.7% (36) | 45.7% (130) |
| | 14.6% (47) | 14.3% (45) | 8.4% (34) | 37.2% (126) |
| Mid | 17.1% (12) | 11.9% (11) | 6.0% (5) | 35.0% (28) |
| | 7.1% (83) | 9.7% (111) | 9.8% (123) | 26.6% (317) |
| | 6.4% (79) | 8.5% (102) | 8.9% (112) | 23.8% (293) |
| Small | 11.7% (12) | 11.6% (14) | 4.8% (5) | 28.1% (31) |
| | 6.2% (206) | 6.6% (210) | 6.5% (223) | 19.3% (639) |
| | 5.5% (195) | 6.4% (212) | 6.0% (206) | 18.0% (613) |
| Micro | 0.5% (2) | 2.3% (10) | 0.0% (0) | 2.8% (12) |
| | 3.5% (304) | 2.3% (200) | 2.5% (217) | 8.3% (721) |
| | 4.2% (893) | 13.3% (3290) | 3.5% (691) | 21.0% (4874) |
| Total | 44.8% (36) | 40.9% (46) | 14.3% (14) | 100.0% (96) |
| | 34.3% (643) | 37.1% (565) | 28.5% (599) | 100.0% (1807) |
| | 30.8% (1214) | 42.5% (3649) | 26.8% (1043) | 100.0% (5906) |
| | Value | Core | Growth | Total |



Capital Guardian – Developed Markets



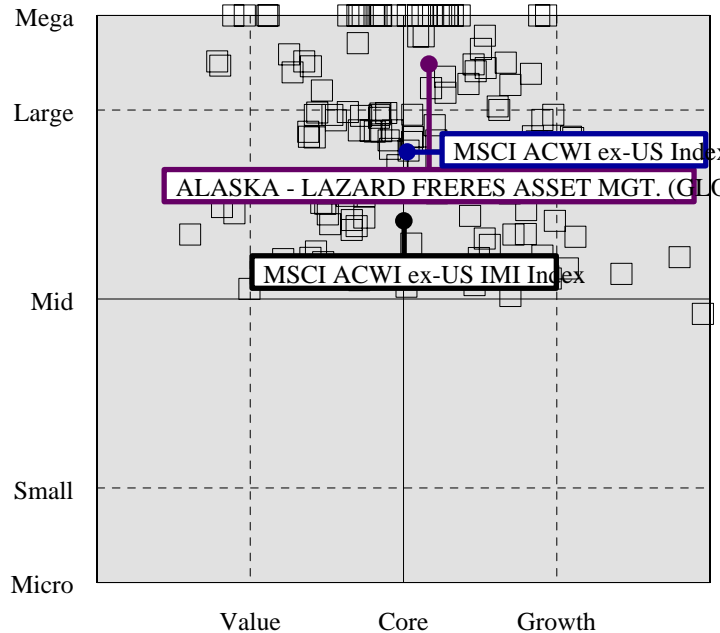
Style Exposure Matrix Holdings as of September 30, 2009

| | | | | |
|--------------|---------------------|---------------------|---------------------|----------------------|
| Large | 12.9% (23) | 20.7% (23) | 15.6% (19) | 49.2% (65) |
| | 17.5% (50) | 18.5% (44) | 9.7% (36) | 45.7% (130) |
| | 14.6% (47) | 14.3% (45) | 8.4% (34) | 37.2% (126) |
| Mid | 5.5% (12) | 15.3% (24) | 14.7% (30) | 35.5% (66) |
| | 7.1% (83) | 9.7% (111) | 9.8% (123) | 26.6% (317) |
| | 6.4% (79) | 8.5% (102) | 8.9% (112) | 23.8% (293) |
| Small | 3.3% (12) | 6.4% (16) | 4.2% (13) | 13.9% (41) |
| | 6.2% (206) | 6.6% (210) | 6.5% (223) | 19.3% (639) |
| | 5.5% (195) | 6.4% (212) | 6.0% (206) | 18.0% (613) |
| Micro | 0.6% (4) | 0.5% (3) | 0.3% (2) | 1.4% (9) |
| | 3.5% (304) | 2.3% (200) | 2.5% (217) | 8.3% (721) |
| | 4.2% (893) | 13.3% (3290) | 3.5% (691) | 21.0% (4874) |
| Total | 22.3% (51) | 42.9% (66) | 34.8% (64) | 100.0% (181) |
| | 34.3% (643) | 37.1% (565) | 28.5% (599) | 100.0% (1807) |
| | 30.8% (1214) | 42.5% (3649) | 26.8% (1043) | 100.0% (5906) |
| | Value | Core | Growth | Total |



Lazard – Int'l Component of Global Portfolio

Style Map vs CAI Non-U.S. Equity Style Holdings as of September 30, 2009



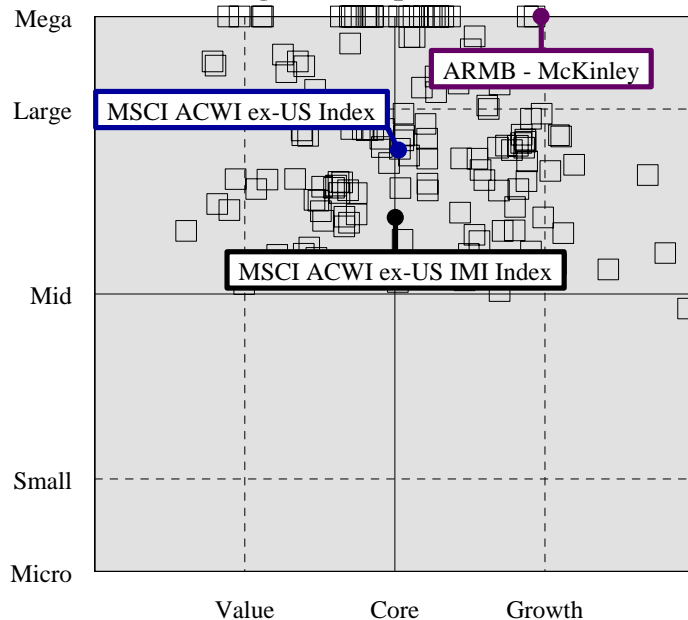
Style Exposure Matrix Holdings as of September 30, 2009

| | | | | |
|--------------|---------------------|---------------------|---------------------|----------------------|
| Large | 29.4% (14) | 23.3% (12) | 12.7% (8) | 65.4% (34) |
| | 17.5% (50) | 18.5% (44) | 9.7% (36) | 45.7% (130) |
| | 14.6% (47) | 14.3% (45) | 8.4% (34) | 37.2% (126) |
| Mid | 5.5% (4) | 7.9% (6) | 8.5% (6) | 21.8% (16) |
| | 7.1% (83) | 9.7% (111) | 9.8% (123) | 26.6% (317) |
| | 6.4% (79) | 8.5% (102) | 8.9% (112) | 23.8% (293) |
| Small | 1.5% (3) | 2.4% (2) | 7.4% (6) | 11.4% (11) |
| | 6.2% (206) | 6.6% (210) | 6.5% (223) | 19.3% (639) |
| | 5.5% (195) | 6.4% (212) | 6.0% (206) | 18.0% (613) |
| Micro | 0.0% (0) | 1.3% (2) | 0.0% (0) | 1.3% (2) |
| | 3.5% (304) | 2.3% (200) | 2.5% (217) | 8.3% (721) |
| | 4.2% (893) | 13.3% (3290) | 3.5% (691) | 21.0% (4874) |
| Total | 36.4% (21) | 35.0% (22) | 28.6% (20) | 100.0% (63) |
| | 34.3% (643) | 37.1% (565) | 28.5% (599) | 100.0% (1807) |
| | 30.8% (1214) | 42.5% (3649) | 26.8% (1043) | 100.0% (5906) |
| | Value | Core | Growth | Total |



McKinley Capital

Style Map vs CAI Non-U.S. Equity Style Holdings as of September 30, 2009



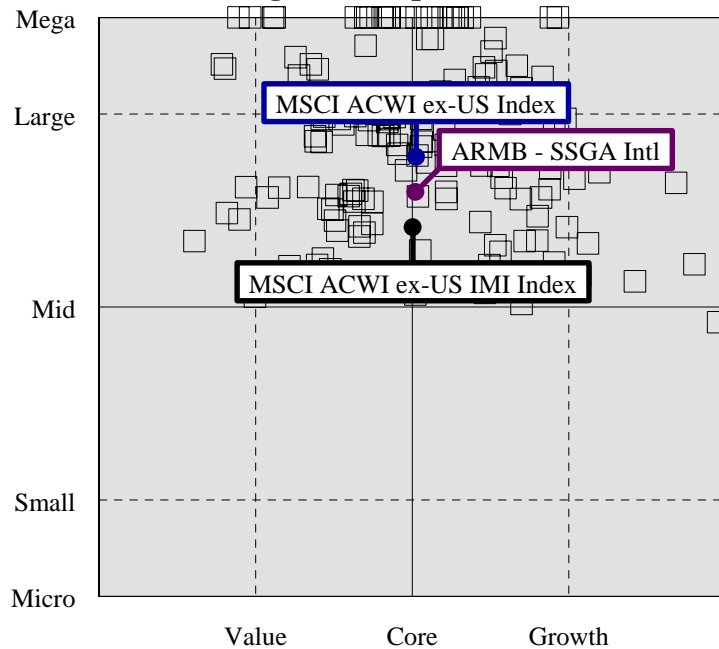
Style Exposure Matrix Holdings as of September 30, 2009

| | | | | |
|--------------|---------------------|---------------------|---------------------|----------------------|
| Large | 7.6% (4) | 32.1% (14) | 16.1% (9) | 55.8% (27) |
| | 17.5% (50) | 18.5% (44) | 9.7% (36) | 45.7% (130) |
| | 14.6% (47) | 14.3% (45) | 8.4% (34) | 37.2% (126) |
| Mid | 3.5% (3) | 10.3% (8) | 17.3% (13) | 31.1% (24) |
| | 7.1% (83) | 9.7% (111) | 9.8% (123) | 26.6% (317) |
| | 6.4% (79) | 8.5% (102) | 8.9% (112) | 23.8% (293) |
| Small | 0.0% (0) | 3.1% (4) | 7.8% (9) | 10.9% (13) |
| | 6.2% (206) | 6.6% (210) | 6.5% (223) | 19.3% (639) |
| | 5.5% (195) | 6.4% (212) | 6.0% (206) | 18.0% (613) |
| Micro | 1.5% (2) | 0.6% (2) | 0.0% (0) | 2.2% (4) |
| | 3.5% (304) | 2.3% (200) | 2.5% (217) | 8.3% (721) |
| | 4.2% (893) | 13.3% (3290) | 3.5% (691) | 21.0% (4874) |
| Total | 12.7% (9) | 46.1% (28) | 41.2% (31) | 100.0% (68) |
| | 34.3% (643) | 37.1% (565) | 28.5% (599) | 100.0% (1807) |
| | 30.8% (1214) | 42.5% (3649) | 26.8% (1043) | 100.0% (5906) |
| | Value | Core | Growth | Total |



SSgA

Style Map vs CAI Non-U.S. Equity Style Holdings as of September 30, 2009



Style Exposure Matrix Holdings as of September 30, 2009

| | | | | |
|--------------|---------------------|---------------------|---------------------|----------------------|
| Large | 18.8% (39) | 17.3% (32) | 10.3% (30) | 46.5% (101) |
| | 17.5% (50) | 18.5% (44) | 9.7% (36) | 45.7% (130) |
| | 14.6% (47) | 14.3% (45) | 8.4% (34) | 37.2% (126) |
| Mid | 5.9% (51) | 7.9% (65) | 8.6% (81) | 22.5% (197) |
| | 7.1% (83) | 9.7% (111) | 9.8% (123) | 26.6% (317) |
| | 6.4% (79) | 8.5% (102) | 8.9% (112) | 23.8% (293) |
| Small | 4.4% (106) | 6.1% (145) | 5.0% (131) | 15.5% (382) |
| | 6.2% (206) | 6.6% (210) | 6.5% (223) | 19.3% (639) |
| | 5.5% (195) | 6.4% (212) | 6.0% (206) | 18.0% (613) |
| Micro | 2.1% (123) | 12.0% (2244) | 1.4% (79) | 15.5% (2446) |
| | 3.5% (304) | 2.3% (200) | 2.5% (217) | 8.3% (721) |
| | 4.2% (893) | 13.3% (3290) | 3.5% (691) | 21.0% (4874) |
| Total | 31.3% (319) | 43.3% (2486) | 25.4% (321) | 100.0% (3126) |
| | 34.3% (643) | 37.1% (565) | 28.5% (599) | 100.0% (1807) |
| | 30.8% (1214) | 42.5% (3649) | 26.8% (1043) | 100.0% (5906) |
| | Value | Core | Growth | Total |



Eaton Vance Structured Emerging Markets Fund Capitalization Diversification

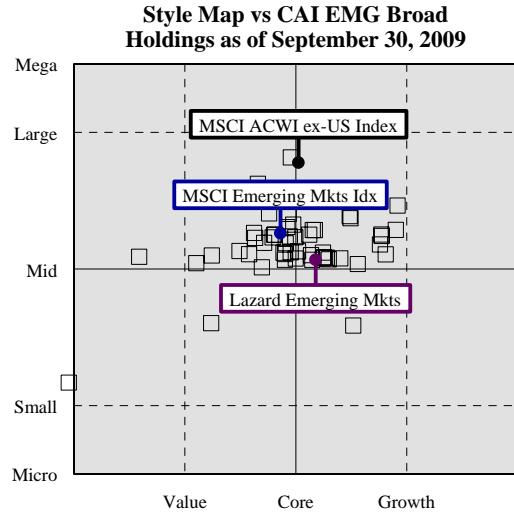
| | Market Cap Range | Weight |
|--------------|------------------|-------------|
| 1 | 50,000-150918.6 | 5.55% |
| 2 | 15,000-50,000 | 14.71% |
| 3 | 10,000-15,000 | 5.69% |
| 4 | 7,500-10,000 | 6.86% |
| 5 | 7,000-7,500 | 1.16% |
| 6 | 2,000-7,000 | 32.14% |
| 7 | 1,500-2,000 | 5.93% |
| 8 | 750-1,500 | 12.94% |
| 9 | 500-750 | 4.59% |
| 10 | 400-500 | 2.34% |
| 11 | 0-400 | 8.10% |
| Total | | 100% |

- **This diversification breakdown was provided by Eaton Vance**
- **Data as of 12/31/09 & reflects size ranges used by the mgr.**
- **Our assessment is that the fund provides significant small cap exposure**



Other Emerging Managers

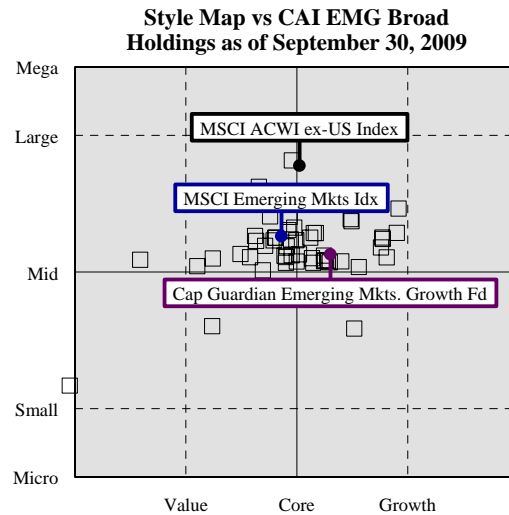
Lazard



Style Exposure Matrix Holdings as of September 30, 2009

| | Value | Core | Growth | Total |
|--------------|--------------------|--------------------|--------------------|----------------------|
| Large | 4.7% (1) | 7.9% (4) | 1.7% (1) | 14.3% (6) |
| | 7.6% (10) | 15.9% (10) | 5.5% (6) | 29.1% (26) |
| | 17.5% (50) | 18.5% (44) | 9.7% (36) | 45.7% (130) |
| Mid | 2.1% (1) | 16.7% (9) | 8.2% (4) | 27.0% (14) |
| | 7.0% (25) | 11.9% (38) | 10.6% (39) | 29.5% (102) |
| | 7.1% (83) | 9.7% (111) | 9.8% (123) | 26.6% (317) |
| Small | 7.7% (4) | 22.1% (18) | 8.8% (6) | 38.6% (28) |
| | 9.7% (84) | 7.1% (65) | 7.6% (74) | 24.4% (223) |
| | 6.2% (206) | 6.6% (210) | 6.5% (223) | 19.3% (639) |
| Micro | 3.1% (4) | 9.6% (10) | 7.5% (8) | 20.2% (22) |
| | 7.0% (165) | 4.5% (107) | 5.4% (128) | 17.0% (400) |
| | 3.5% (304) | 2.3% (200) | 2.5% (217) | 8.3% (721) |
| Total | 17.6% (10) | 56.3% (41) | 26.1% (19) | 100.0% (70) |
| | 31.4% (284) | 39.5% (220) | 29.1% (247) | 100.0% (751) |
| | 34.3% (643) | 37.1% (565) | 28.5% (599) | 100.0% (1807) |

Capital Guardian



Style Exposure Matrix Holdings as of September 30, 2009

| | Value | Core | Growth | Total |
|--------------|--------------------|--------------------|--------------------|----------------------|
| Large | 2.3% (4) | 18.3% (14) | 4.1% (4) | 24.7% (22) |
| | 7.6% (10) | 15.9% (10) | 5.5% (6) | 29.1% (26) |
| | 17.5% (50) | 18.5% (44) | 9.7% (36) | 45.7% (130) |
| Mid | 4.4% (7) | 8.6% (27) | 13.4% (26) | 26.4% (60) |
| | 7.0% (25) | 11.9% (38) | 10.6% (39) | 29.5% (102) |
| | 7.1% (83) | 9.7% (111) | 9.8% (123) | 26.6% (317) |
| Small | 5.7% (19) | 9.5% (26) | 7.4% (20) | 22.6% (65) |
| | 9.7% (84) | 7.1% (65) | 7.6% (74) | 24.4% (223) |
| | 6.2% (206) | 6.6% (210) | 6.5% (223) | 19.3% (639) |
| Micro | 7.8% (37) | 11.5% (75) | 7.0% (43) | 26.3% (155) |
| | 7.0% (165) | 4.5% (107) | 5.4% (128) | 17.0% (400) |
| | 3.5% (304) | 2.3% (200) | 2.5% (217) | 8.3% (721) |
| Total | 20.3% (67) | 47.8% (142) | 31.9% (93) | 100.0% (302) |
| | 31.4% (284) | 39.5% (220) | 29.1% (247) | 100.0% (751) |
| | 34.3% (643) | 37.1% (565) | 28.5% (599) | 100.0% (1807) |



Key Issues

- **Should a dedicated small cap program be structured with the EAFE Small Cap as the primary frame of reference?**
 - We believe that the answer is yes.
 - The standard emerging markets index already has meaningful smaller cap exposure.
 - In addition, ARMB's emerging markets exposure includes managers who have meaningful commitments to smaller companies.
 - We would not preclude use of emerging markets within a small cap portfolio but would prefer that such exposure be either moderate and/or opportunistic.
- **How many small cap managers would we need?**
 - Using the new index structure (i.e. IMI) small cap accounts for less than 15% of the MSCI-ACWI ex US IMI by market cap but almost 70% by names.
 - 15% of your recent developed market exposure is \$300+ million.
 - Capacity is always an issue in capacity constrained segments. We, therefore, suggest that a minimum of 2 managers be employed should the Board wish to proceed.
 - In an effort to minimize the number of manager relationships and provide leverage in fee negotiations, we suggest that existing managers with requisite qualifications be given preference in the selection process.

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT: International Small Cap

ACTION: X

DATE: February 25, 2010

INFORMATION:

BACKGROUND:

At the December 2009 meeting, the Alaska Retirement Management Board (ARMB) received a presentation on international small cap securities. Investing in international small cap securities can provide performance and diversification benefits similar to those of investing in US small cap securities, without significantly increasing the risk of the international portfolio.

STATUS:

Staff has considered international small cap and has concluded that investing in international small cap securities should provide additional opportunities to further diversify the portfolio and should result in a more efficient portfolio.

RECOMMENDATION:

That the Alaska Retirement Management Board direct Callan Associates and staff to conduct a search for one or more international small cap investment manager(s).

Attachment:

- *“Why International Small Cap?” Janet Becker-Wold, Callan Associates*
-



Why International Small Cap?

Callan Associates Inc.

Janet Becker-Wold, CFA
Senior Vice President
Denver Fund Sponsor Consulting



Why International Small Cap?

- **Performance Potential**
- **Active Management Potential**
- **Diversification Benefits**
- **Implementation Issues**

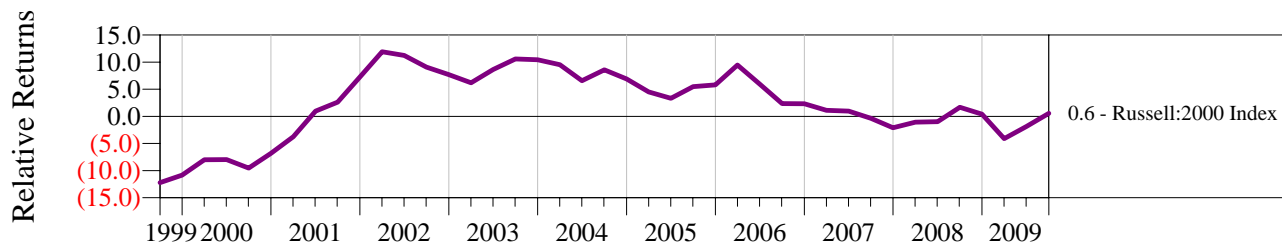


Cycles of Performance

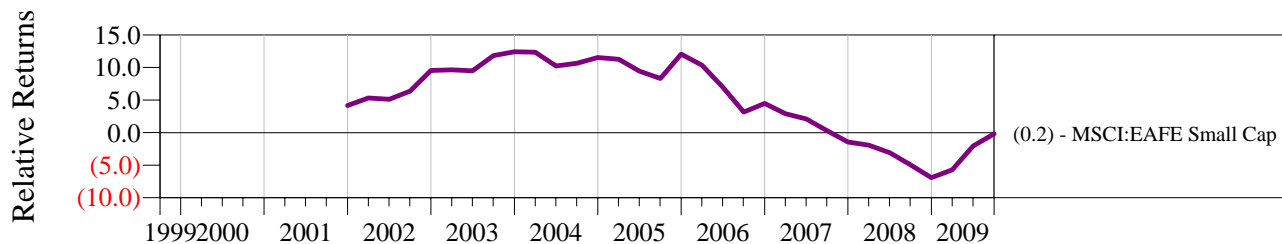
Large vs. Small - US and Non-US

Rolling 3-year periods

Rolling 12 Quarter Relative Returns Relative To Russell:1000 Index
for 10 Years Ended September 30, 2009



Rolling 12 Quarter Relative Returns Relative To MSCI:EAFE US\$
for 10 Years Ended September 30, 2009

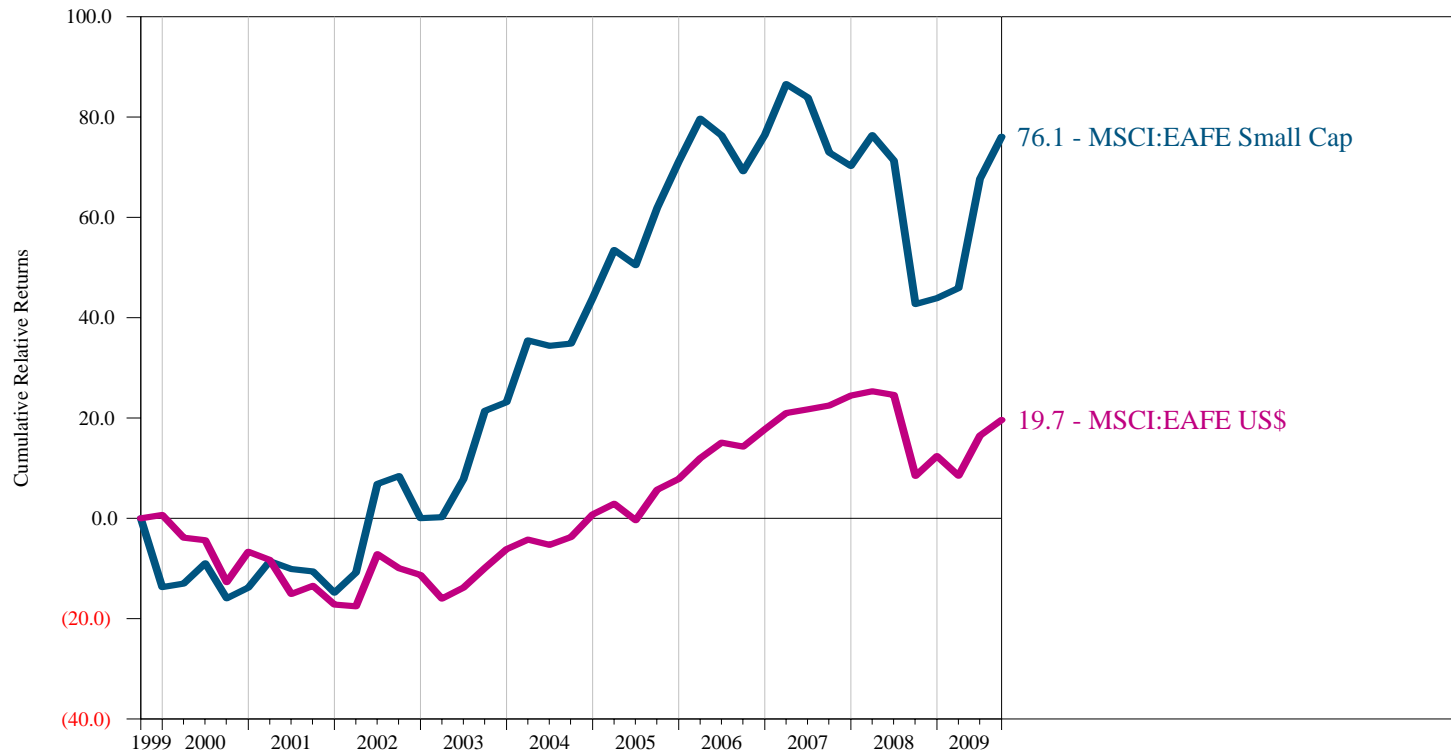


- Like the US, international small caps exhibit performance cycles



Small Cap Premium

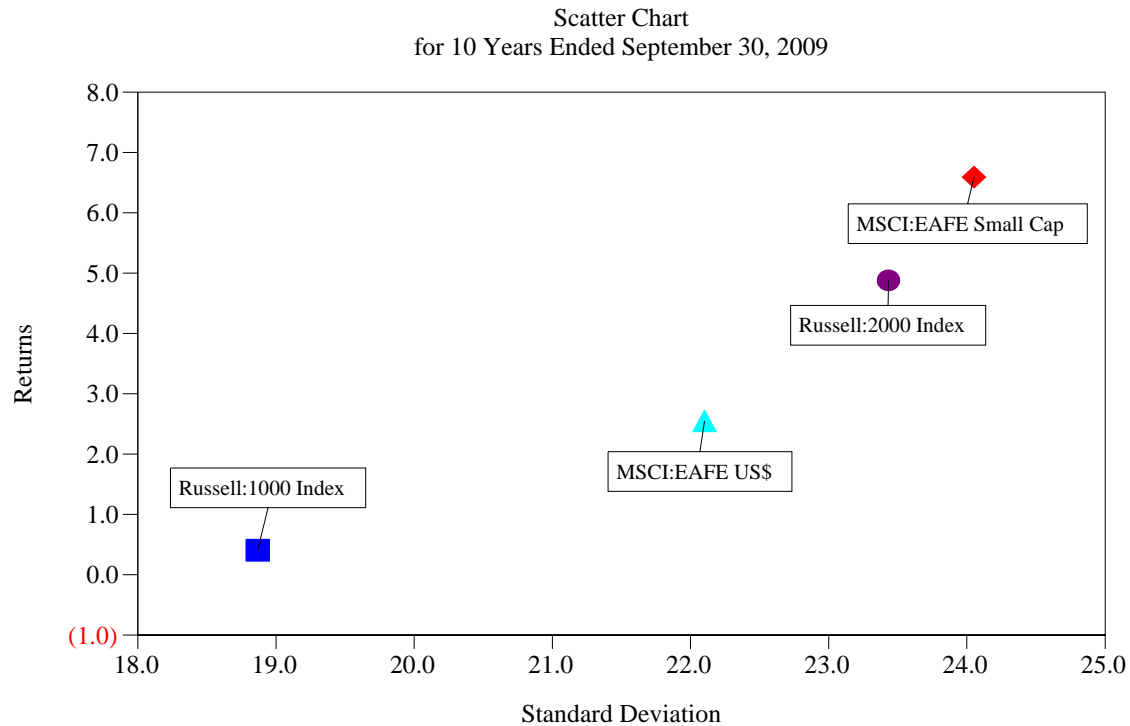
Cumulative Relative Returns Relative To Russell:3000 Index
for 10 Years Ended September 30, 2009



- Like the US, international small cap shows a premium to large cap



Risk Reward Tradeoff



Sharpe Ratio

| | |
|----------------|--------|
| Russell 1000 | - 0.14 |
| Russell 2000 | 0.07 |
| EAFE | - 0.02 |
| EAFE Small Cap | 0.14 |

- Small cap is riskier than large cap in both the US and non-US
- Over the last 10 years, US small cap added 4.4% per annum with an increase in risk of 25%
- International small cap has added 4% per annum with 9% increase in risk



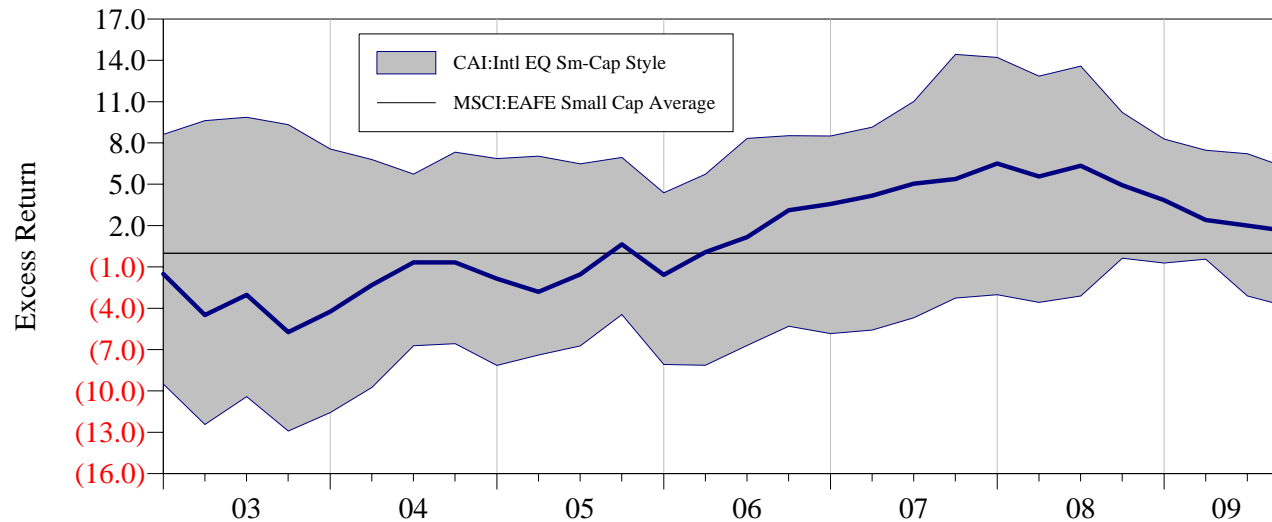
Good Use of Active Management

Percent of Three-Year Periods where Manager Beat Benchmark by More than Hurdle - by Percentile

| Hurdle | 0.45% | 0.50% | 0.55% | 0.60% | 0.65% | 0.70% | 0.75% | 0.80% | 0.85% | 0.90% |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Median | 56% | 56% | 56% | 56% | 52% | 52% | 52% | 52% | 52% | 52% |
| 45th Percentile | 59% | 59% | 59% | 59% | 59% | 59% | 59% | 59% | 56% | 56% |
| 40th Percentile | 63% | 63% | 63% | 63% | 63% | 63% | 63% | 63% | 63% | 59% |
| 35th Percentile | 78% | 78% | 78% | 78% | 74% | 74% | 74% | 74% | 70% | 70% |
| 30th Percentile | 96% | 96% | 96% | 96% | 96% | 96% | 93% | 93% | 93% | 93% |
| 25th Percentile | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

Average Annualized Excess Return - Median Manager: 1.02%

Rolling 12 Quarter Excess Return Relative To MSCI:EAFE Small Cap for 6 3/4 Years Ended September 30, 2009



- Actively managed international small cap universe consistently beats EAFE small cap index



Benefit of Diversification

Periodic Table of Investment Returns
for Calendar Years
10 Years Ended September 30, 2009

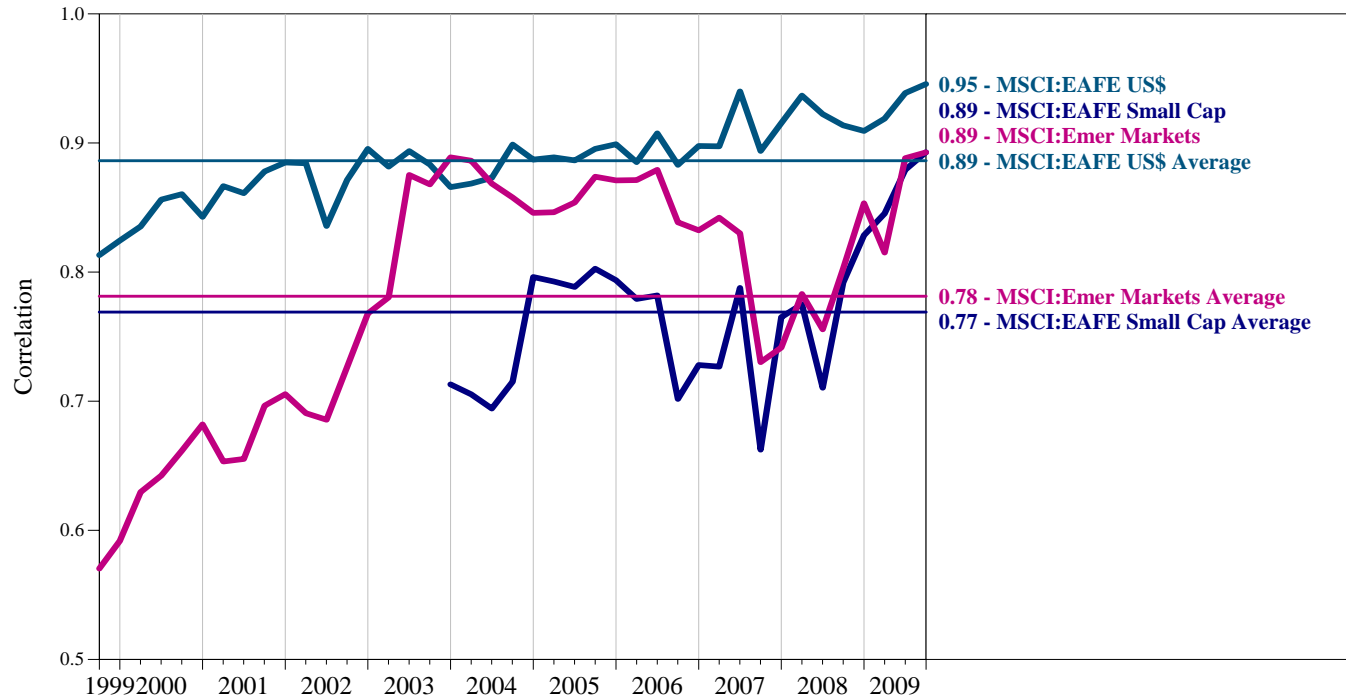
| 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 3 Qtrs. 2009 |
|--------------------------------------|---------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---------------------------------------|-------------------------------------|
| Russell:2000 Index (3.0%) | Russell:2000 Index 2.5% | MSCI:Emer Markets (6.0%) | MSCI:EAFE Small Cap 61.3% | MSCI:EAFE Small Cap 30.8% | MSCI:Emer Markets 34.5% | MSCI:Emer Markets 32.6% | MSCI:Emer Markets 39.8% | Russell:2000 Index (33.8%) | MSCI:Emer Markets 64.9% |
| MSCI:EAFE Small Cap (7.6%) | MSCI:Emer Markets (2.4%) | MSCI:EAFE Small Cap (7.8%) | MSCI:Emer Markets 56.3% | MSCI:Emer Markets 26.0% | MSCI:EAFE Small Cap 26.2% | MSCI:EAFE US\$ 26.3% | MSCI:EAFE US\$ 11.2% | Russell:1000 Index (37.6%) | MSCI:EAFE Small Cap 48.3% |
| Russell:1000 Index (7.8%) | Russell:1000 Index (12.4%) | MSCI:EAFE US\$ (15.9%) | Russell:2000 Index 47.3% | MSCI:EAFE US\$ 20.2% | MSCI:EAFE US\$ 13.5% | MSCI:EAFE Small Cap 19.3% | Russell:1000 Index 5.8% | MSCI:EAFE US\$ (43.4%) | MSCI:EAFE US\$ 29.0% |
| MSCI:EAFE US\$ (14.2%) | MSCI:EAFE Small Cap (12.5%) | Russell:2000 Index (20.5%) | MSCI:EAFE US\$ 38.6% | Russell:2000 Index 18.3% | Russell:1000 Index 6.3% | Russell:2000 Index 18.4% | MSCI:EAFE Small Cap 1.4% | MSCI:EAFE Small Cap (47.0%) | Russell:2000 Index 22.4% |
| MSCI:Emer Markets (30.6%) | MSCI:EAFE US\$ (21.4%) | Russell:1000 Index (21.7%) | Russell:1000 Index 29.9% | Russell:1000 Index 11.4% | Russell:2000 Index 4.6% | Russell:1000 Index 15.5% | Russell:2000 Index (1.6%) | MSCI:Emer Markets (53.2%) | Russell:1000 Index 21.1% |

- Performance of market segments varies over time



International Small Caps Diversify US Equity

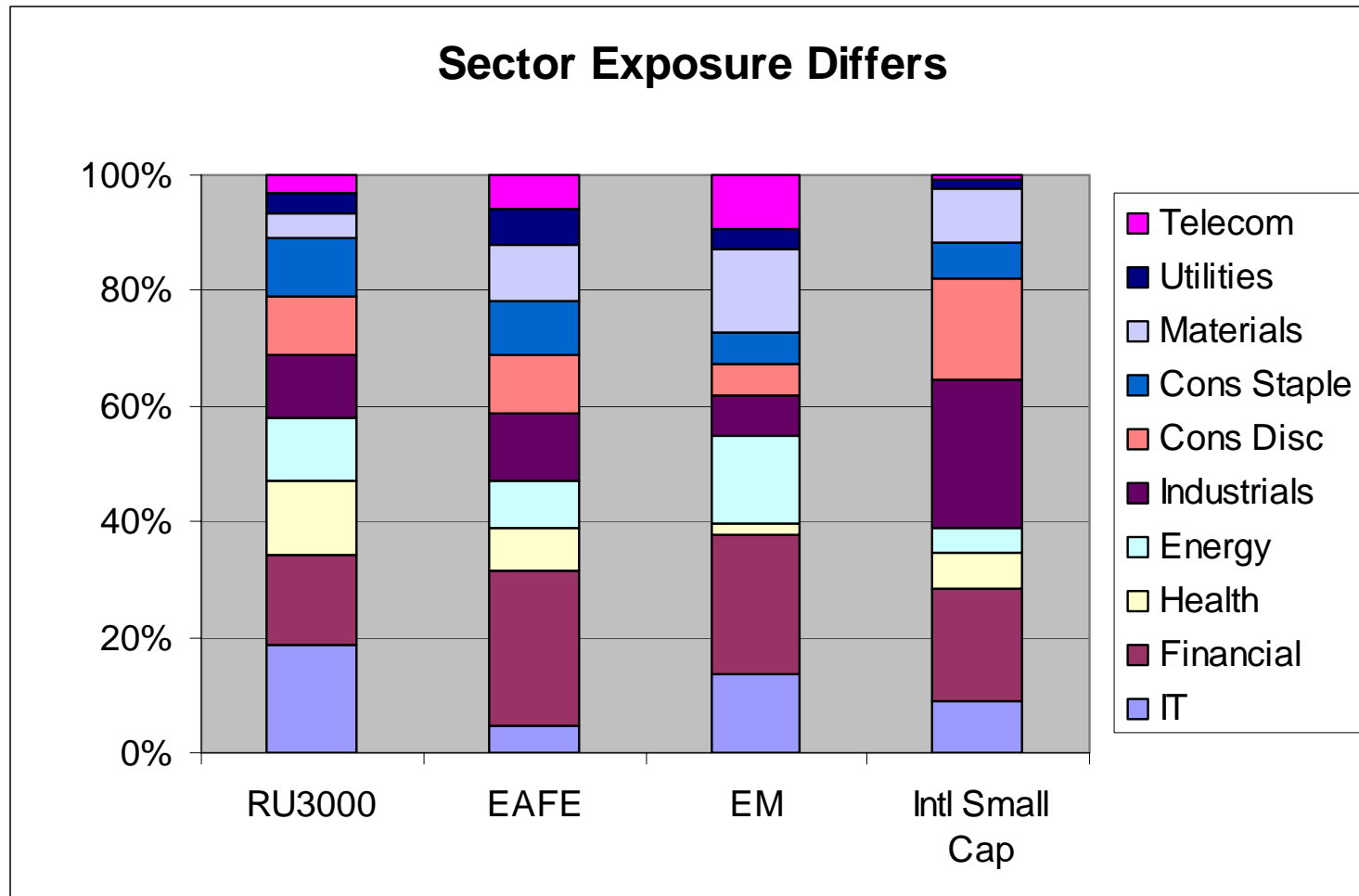
Rolling 20 Quarter Correlation Relative To S&P:500
for 10 Years Ended September 30, 2009



- **Correlation of international small cap to the S&P 500 is, on average, similar to the emerging markets**
- **Recent correlations have risen for all segments**



Diversification of Sectors



- International small cap brings a different sector mix



Commonly Used International Small Cap Indices

| | Construction Methodology | Weighted Average Mkt Cap (mm) | Market Cap Range (mm) | Number of Stocks | Japan Weight | UK Weight | 3-Year Return | 3-Year Std. Dev. | Rebalance |
|--|--|-------------------------------|-----------------------|------------------|--------------|-----------|---------------|------------------|----------------------------|
| MSCI EAFE Small Cap | Bottom 15% of market cap in each country subject to a total coverage of 99% of investable universe | \$1,369 | \$27 - \$5,020 | 2260 | 27.9% | 19.8% | -3.8% | 33.7% | May & November |
| S&P Developed ex-US <\$2 Billion | All stocks under \$2 billion cap range in each country | \$1,049 | \$20 - \$2,450 | 3136 | 29.20% | 12.6% | -3.0% | 32.3% | Annually- last day in July |
| S&P Developed ex-US Small Cap Index | Bottom 15% of market cap in each country | \$2,158 | \$6.5 - \$11,550 | 3356 | 20.1% | 17.3% | -2.9% | 33.1% | Annually- last day in July |

Data as of 9/30/09

* All indices are float adjusted

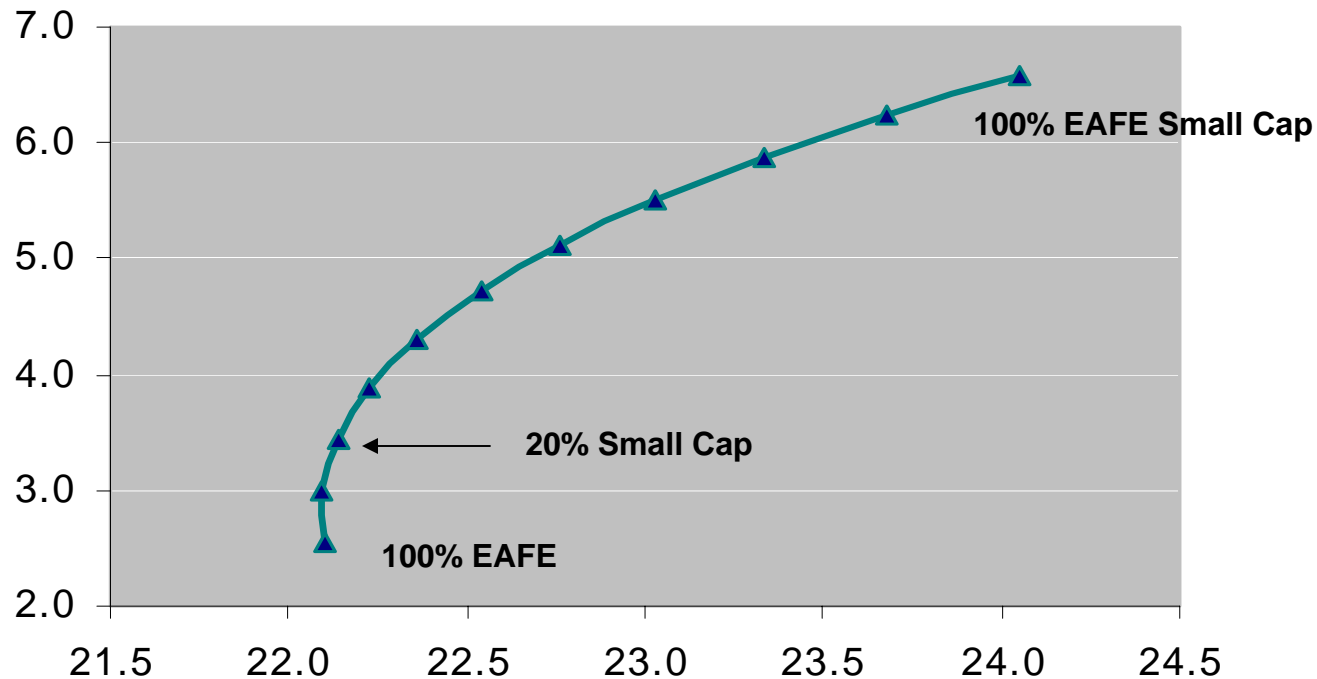
** EAFE Small cap does not include Canada and South Korea which are included in the S&P Global BMI Indices

MSCI World ex-US includes Canada

- **Most commonly used index is S&P Developed ex-US Small Cap**
- **All indices have been improved in last two years**
- **Both MSCI and S&P have expanded coverage and improved construction**



Efficient Frontier - EAFE and EAFE Small Cap 10 Years Ended 9/30/09



- Adding a modest amount of small cap can improve the return of the total international portfolio without increasing the risk



International Small Cap – Implementation

- **Callan’s Manager Database**
 - 98 International small cap strategies
 - 17 Value (MSCI Z-Score -0.20 and lower)
 - 25 Core (MSCI Z-Score -0.20 to +0.20)
 - 58 Growth (MSCI Z-Score +0.20 and higher)
- **Product capacity is a moving target**
 - Many products have reopened recently
- **Manager persistence tends to be low like the U.S. so multi-manager structure is advised**

Source: Callan PEP, MSCI, Russell



Pros & Cons of Pursuing International Small Cap for U.S. Investors

■ Pros

- Take advantage of increased opportunity set outside of the U.S.
- Diversification
- Potential for alpha from active management in less efficient markets
Capture higher growth potential

■ Cons

- Greater liquidity risk
- Less product capacity
- Higher volatility in isolation

An Emerging Markets Growth Fund review to

Alaska Retirement Management Board

Year to date
December 2009

Mandate review

Emerging Markets Growth Fund

Account inception – 05-May-1994

Objective – long-term growth of capital by investing in companies throughout the emerging markets

Benchmark – MSCI Emerging Markets IMI

**Account assets – \$382.23 million
(as of 31-Dec 2009)**

Meeting participants



Paula Pretlow

is a senior vice president and relationship manager for Capital Group Institutional Investment Services with client relations and marketing responsibilities. She works primarily with public employee benefit plans in addition to endowments, foundations and corporate pension plans. Prior to joining the Capital organization in 1999, she was with Montgomery Asset Management and Chancellor LGT. Ms. Pretlow spent many years at Barclays Global Investors, where she headed up the firm's public plan business development effort. Her investment industry experience includes fixed-income sales with Credit Suisse First Boston and several years as a portfolio engineer with AXA Rosenberg. She began her career more than 30 years ago after earning an MBA in finance and economics from Northwestern University's Kellogg School of Management and a BA in political science from Northwestern University. She is based in San Francisco.



Victor Kohn

is president and a director of Capital International, Inc., chairman of the CII Emerging Markets Investment Committee and an emerging markets equity portfolio manager. He is also president of Capital International's Emerging Markets Growth Fund. Prior to joining Capital International in 1986 as a financial analyst, he spent two years at Montgomery Securities, where he was an analyst in the firm's venture capital group. Mr. Kohn earned bachelor's and master's equivalent degrees (summa cum laude) in industrial engineering from the Universidad de Chile, and an MBA from Stanford Graduate School of Business. He holds the Chartered Financial Analyst® designation and is based in Los Angeles.

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Capital International

Investment philosophy

Invest for the long term

Active management adds value. Investing in securities for the long term is the most reliable approach

Manage risk

Risk goes beyond volatility and is best managed through fundamental research and knowledge

Keep a global perspective

A global perspective is crucial to understanding markets

Let conviction shine through

Individuals make better decisions than committees; combining people with different perspectives adds value

Business approach

Focus

Investment management is our only business

Relationship

Client goals are aligned with our own; manager compensation is tied to investment results

Durability

Private ownership encourages decision making with a long-term perspective

Relevance

We strive to be innovative, not trendy; thoughtful, not academic

Seek to produce consistently superior long-term investment results for clients

Capital Group organization

The Capital Group Companies, Inc.

For over 75 years, the Capital Group organization has been serving thousands of leading public and private pension plans, endowments and foundations, as well as millions of individual investors worldwide.

American Funds

Capital Guardian Trust Company

Capital International

The companies within Capital Group International, Inc., which include Capital Guardian Trust Company and Capital International, and Capital Research and Management Company, investment adviser to The American Funds®, manage equity assets independently from one another.

Capital Group history

Providing institutional investors with durable investment solutions for over 40 years

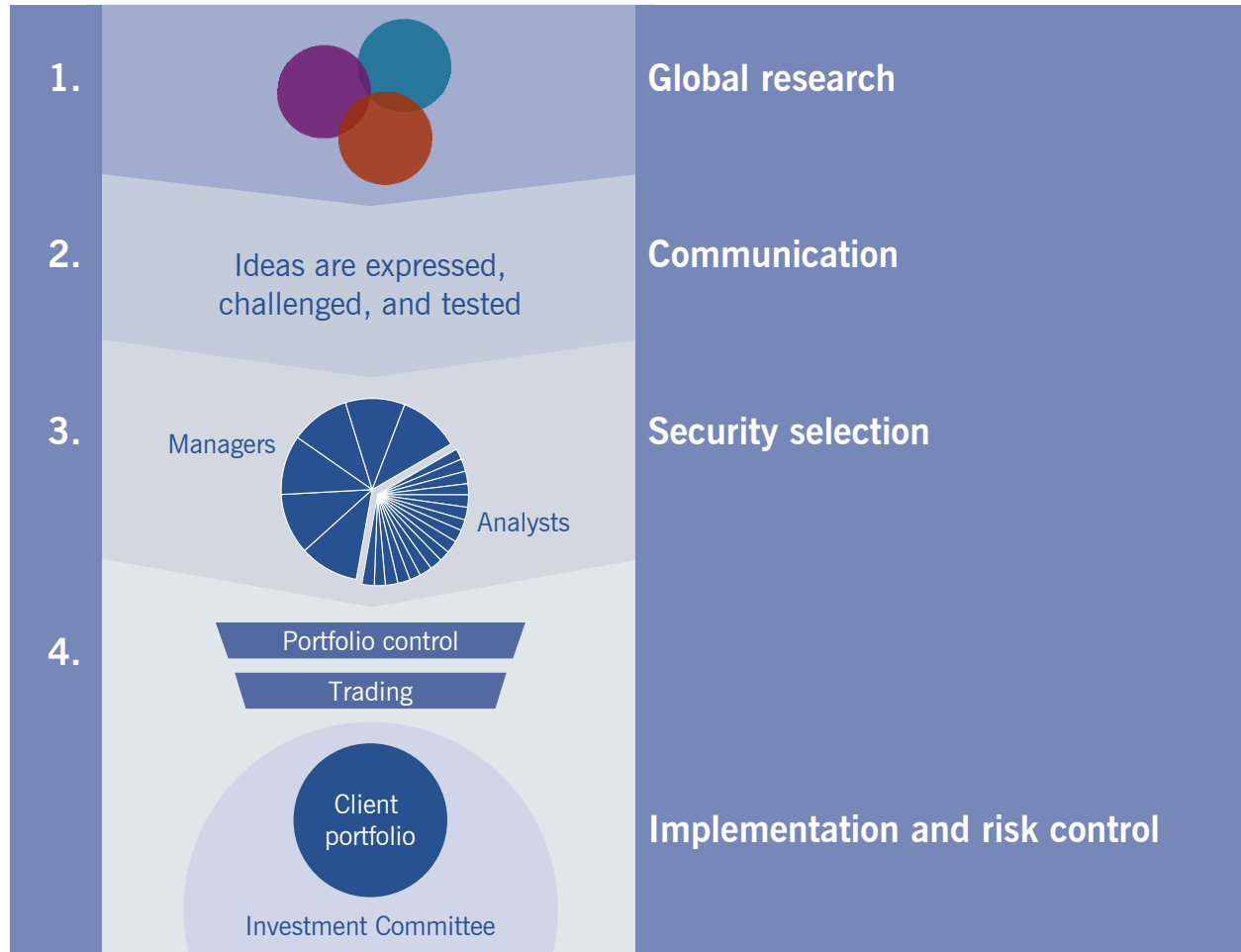
Multiple portfolio manager approach in place for more than half a century

Pioneers in international investing — one of the first firms to invest in international equities

| | |
|------|---|
| 1931 | The Capital organization is founded in Los Angeles by Jonathan Bell Lovelace |
| 1933 | Investment Company of America, the first mutual fund of what will become the American Funds family, is acquired |
| 1953 | Capital invests in Royal Dutch Petroleum and becomes one of the first U.S.-based investment firms to invest outside North America |
| 1958 | Capital develops Multiple Portfolio Management System |
| 1962 | Geneva office opens, making the Capital organization one of the first U.S.-based investment firms to have an office outside of the U.S. |
| 1965 | Capital International develops international indices that became MSCI |
| 1967 | General Mills becomes Capital's first U.S. equity institutional client |
| 1968 | Capital Guardian Trust Company is founded to manage assets for U.S. institutional clients |
| 1973 | Capital launches U.S. Core fixed income strategy |
| 1978 | Capital begins managing non-U.S. assets for U.S. institutional clients |
| 1986 | International Finance Corporation appoints Capital to manage the world's first emerging markets equity fund |
| 1992 | Capital International launches its first emerging markets private equity fund |
| 2008 | Capital opens its 11 th investment office |

Capital Research and Management Company, and the companies within Capital Group International, Inc., which include Capital Guardian Trust Company and Capital International, manage equity assets independently from one another. Capital Research and Management Company manages equity assets through two investment divisions. These divisions make investment decisions independently.

A proven approach

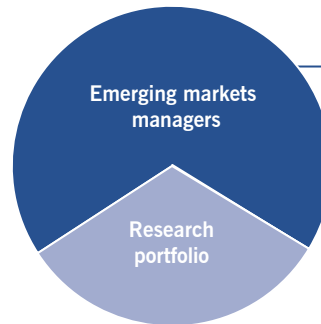


The Emerging Markets equity team

Advantages of the multiple portfolio manager system

Collective independence

- Managers own only high-conviction ideas
- Diversity of ideas and disciplines
- Average years of experience: 28



Christopher Choe
David Fisher
Victor Kohn
Luis Oliveira
Lisa Thompson
Shaw Wagener

A range of investment styles



Christopher Choe

Chris looks for high growth potential and discrepancies between a company's share price and its inherent worth. He sells stocks when he believes they have reached fair value. He emphasizes understanding managements and controlling shareholders.



David Fisher

David focuses on company management and invests where he believes people can make a difference. He dislikes businesses driven largely by macroeconomic factors such as oil prices. He is willing to pay for quality.



Victor Kohn

Victor seeks to invest in businesses that are great long-term franchises and is willing to pay a near-term premium to purchase them. He avoids commodity-based companies and turn-around stories.



Luis Oliveira

Luis studies the macro environment and tends to avoid companies that need a high growth rate to justify valuations. He places a premium on companies with proven track records and management continuity.



Lisa Thompson

Lisa is attracted to growth stocks that she believes the market does not fully understand. She focuses on understanding the drivers behind returns and is comfortable buying stocks that are not represented in the index.



Shaw Wagener

Shaw invests in a variety of stocks, many of which are long-term holdings. He often seeks companies with above-average growth and stable-to-improving profitability, or companies where fundamental change will eventually be recognized.

As of 31 December 2009

Investment results

State of Alaska Department of Revenue Capital International, Inc.
Emerging Markets Growth Fund, Inc.

Results as of 31 December 2009

| | Q409 % | 1 year % | 3 years % | 5 years % | 10 years % | 15 years % | Lifetime % |
|--|-----------|-------------|--------------|--------------|---------------|---------------|---------------|
| Total investments | | | | | | | |
| – gross of operating expenses | 7.84 | 79.06 | 8.32 | 19.48 | 10.72 | 10.64 | 10.98 |
| – net of operating expenses | 7.66 | 77.82 | 7.57 | 18.65 | 9.95 | 9.84 | 10.17 |
| MSCI Emerging Markets IMI with net dividends reinvested | 8.99 | 82.36 | 5.53 | 15.79 | 9.95 | 7.23 | 7.45 |
| Emerging Markets Index - Standard | 8.55 | 78.51 | 5.11 | 15.51 | 9.82 | 7.15 | 7.36 |

Annual results as of 31 December

| | 2000 % | 2001 % | 2002 % | 2003 % | 2004 % | 2005 % | 2006 % | 2007 % | 2008 % | 2009 % |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Total investments | | | | | | | | | | |
| – gross of operating expenses | -30.48 | -2.74 | -9.28 | 52.53 | 21.58 | 39.33 | 37.48 | 39.48 | -49.11 | 79.06 |
| – net of operating expenses | -30.98 | -3.43 | -9.93 | 51.51 | 20.74 | 38.35 | 36.53 | 38.58 | -49.49 | 77.82 |
| MSCI Emerging Markets IMI with net dividends reinvested | -30.61 | -2.62 | -6.17 | 55.82 | 25.55 | 34.00 | 32.17 | 39.42 | -53.78 | 82.36 |
| Emerging Markets Index - Standard | -30.61 | -2.61 | -6.17 | 55.82 | 25.55 | 34.00 | 32.17 | 39.39 | -53.33 | 78.51 |

Lifetime: 6 May 1994–31 December 2009

Results in US\$. Periods greater than one year are annualized.

Gross of operating expenses reflect the investment results of the Emerging Markets Growth Fund after adding back fund operating expenses, such as custodial and investment management fees.

Net of operating expenses total return percentages are calculated from net asset value assuming all distributions are reinvested.

MSCI Emerging Markets IMI reflects S&P/IFC Global Composite Index with gross dividends reinvested from 31 May 1986 through 31 December 1987, MSCI Emerging Markets Index with gross dividends reinvested through

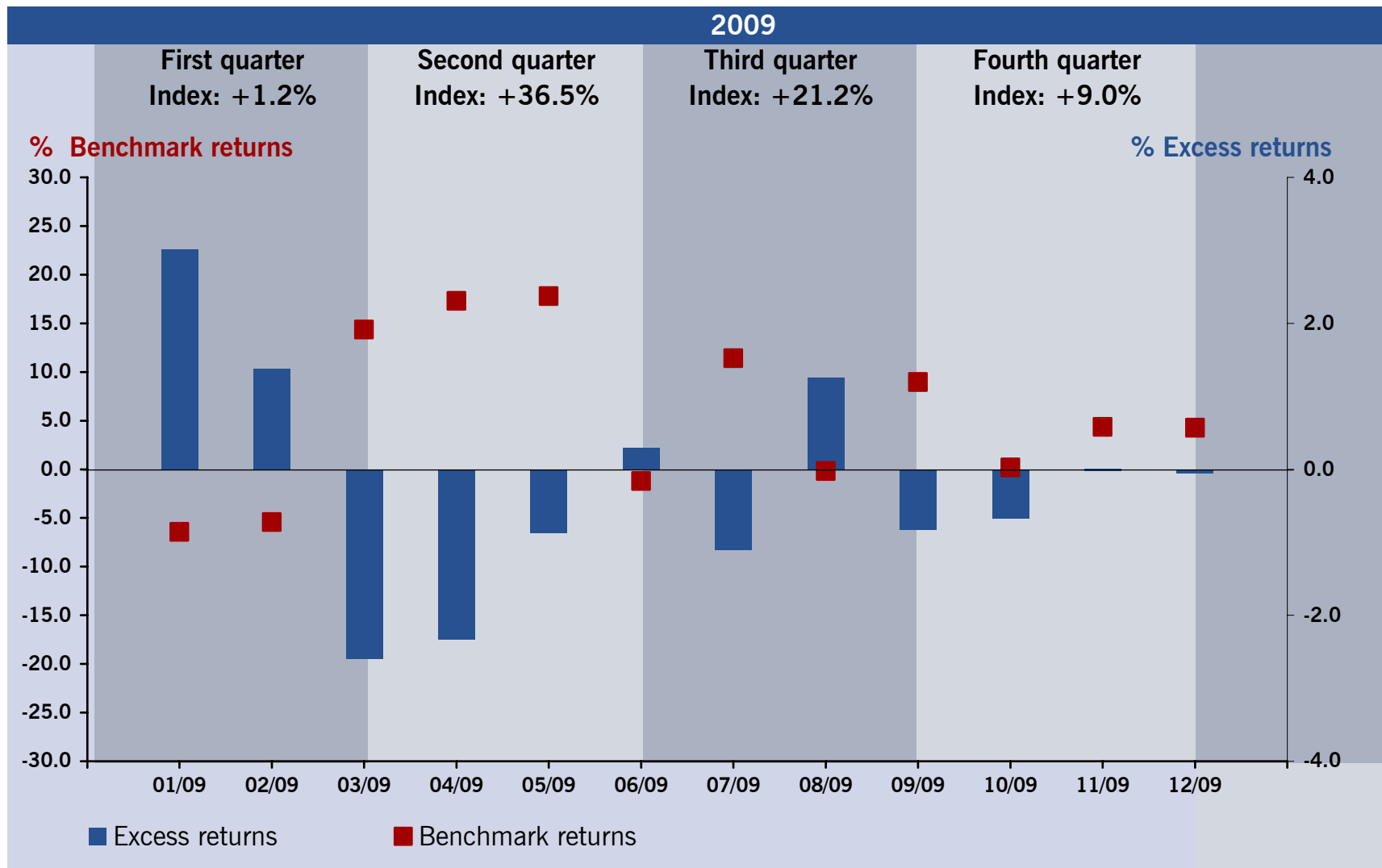
31 December 2000, MSCI Emerging Markets Index with net dividends reinvested through 30 November 2007 and MSCI Emerging Markets Investable Market Index with net dividends reinvested thereafter.

Emerging Markets Index – Standard reflects S&P/IFC Global Composite Index with gross dividends reinvested from 31 May 1986 through 31 December 1987, MSCI Emerging Markets Index with gross dividends reinvested through

31 December 2000 and the MSCI Emerging Markets Index with net dividends reinvested thereafter.

All indices are unmanaged.

2009 monthly returns



The red markers graph monthly MSCI Emerging Markets IMI returns. The blue bars represent monthly excess returns of Emerging Markets Growth Fund vs. MSCI Emerging Markets IMI. Emerging Markets Growth Fund total return percentages net of operating expenses are calculated from net asset value assuming all distributions are reinvested, before fair value adjustments. This information supplements or enhances required or recommended disclosure and presentation provisions of the GIPS® standards, which if not included herein, are available upon request. GIPS is a trademark owned by CFA Institute. All indices are unmanaged.

2009: A review of the year

Market leaders

| MSCI EM IMI | | Country | | Sector | | Large Cap companies | |
|-------------|------------|---------------|-------------|-------------------------------|-------------|----------------------|-------------|
| 1st quarter | 1% | Chile | 14% | Info technology | 17% | MediaTek | 40% |
| 2nd quarter | 37% | India | 65% | Financials | 49% | ICICI Bank | 130% |
| 3rd quarter | 21% | Indonesia | 36% | Info technology | 33% | LG Chem | 70% |
| 4th quarter | 9% | Chile | 15% | Consumer staples | 15% | Sberbank | 39% |
| 2009 | 83% | Brazil | 135% | Consumer discretionary | 120% | OGX Petroleum | 335% |

First half:

- China successfully reinvigorates its economy
- Oil hits a low of \$34 per barrel
- Eastern Europe suffers with default fears
- Indian election an endorsement of current regime, rural gains and infrastructure spending
- China-Taiwan relations enter a new era
- China motor vehicle sales outpace the U.S.
- Swine flu grabs headlines

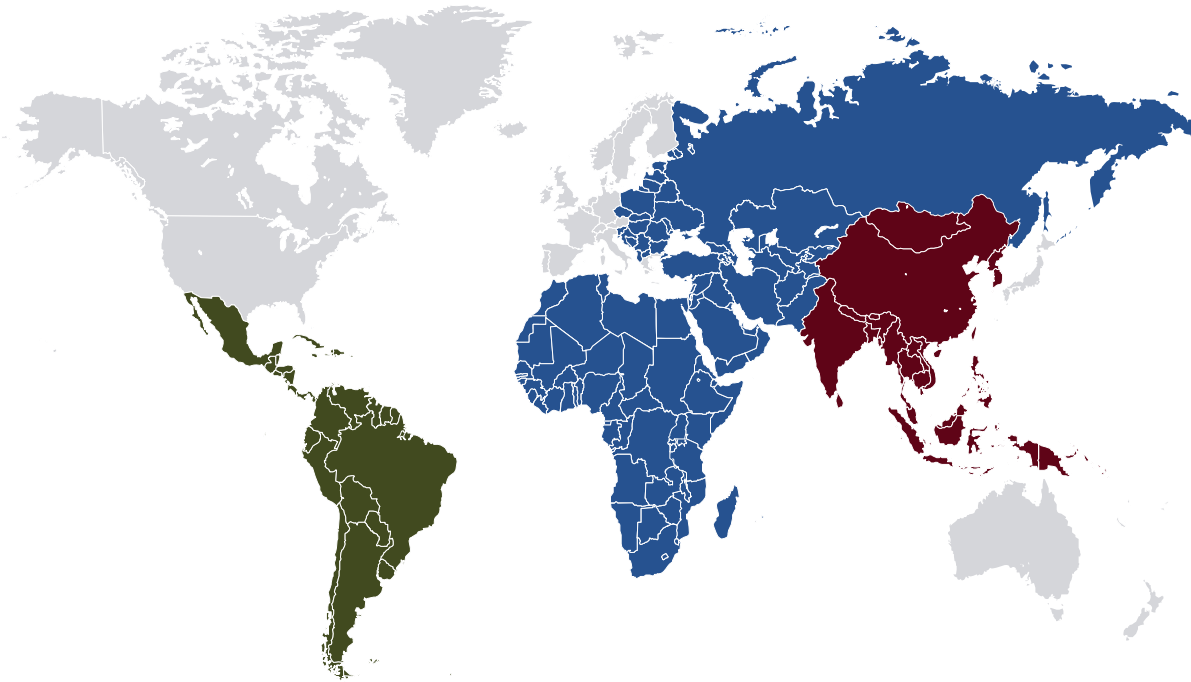
Second half:

- Dubai sends shock waves through global financial system as Dubai World postpones debt payments
- Asian countries benefit from rising China demand and region gains momentum
- Pressure mounts on China to revalue its currency
- U.S. and China implement selected tariff increases
- Brazil selected to host 2016 Olympics
- Brazil imposes a 2% tax on security purchases
- Mexican authorities continue to battle drug cartel

As of 31 December 2009
Source: FactSet

Emerging markets at a glance

Year ending 31 December 2009



| | % local currency return | % currency return | % US\$ return |
|--------------------------|----------------------------|----------------------|------------------|
| MSCI EM IMI | 66.6 | 9.8 | 82.9 |
| MSCI AC World IMI | 31.8 | 4.1 | 37.2 |

Latin America

| | % local currency return | % currency return | % US\$ return |
|--------------------------------------|----------------------------|----------------------|------------------|
| MSCI EM Latin America IMI | 66.8 | 25.1 | 108.7 |
| Brazil | 76.0 | 33.8 | 135.4 |
| Mexico | 48.7 | 6.1 | 57.8 |

Europe, Middle East & Africa

| | % local currency return | % currency return | % US\$ return |
|----------------------|----------------------------|----------------------|------------------|
| MSCI EMEA IMI | 51.1 | 12.0 | 69.3 |
| Israel | 60.4 | -0.2 | 60.1 |
| South Africa | 25.8 | 25.5 | 58.0 |
| Russia | 87.0 | 10.6 | 106.8 |

Asia

| | % local currency return | % currency return | % US\$ return |
|-------------------------|----------------------------|----------------------|------------------|
| MSCI EM Asia IMI | 72.9 | 3.7 | 79.4 |
| China | 69.4 | 0.0 | 69.3 |
| India | 97.4 | 4.7 | 106.7 |
| Korea | 58.2 | 8.2 | 71.1 |
| Taiwan | 84.9 | 2.6 | 89.7 |
| Malaysia | 52.7 | 1.1 | 54.3 |

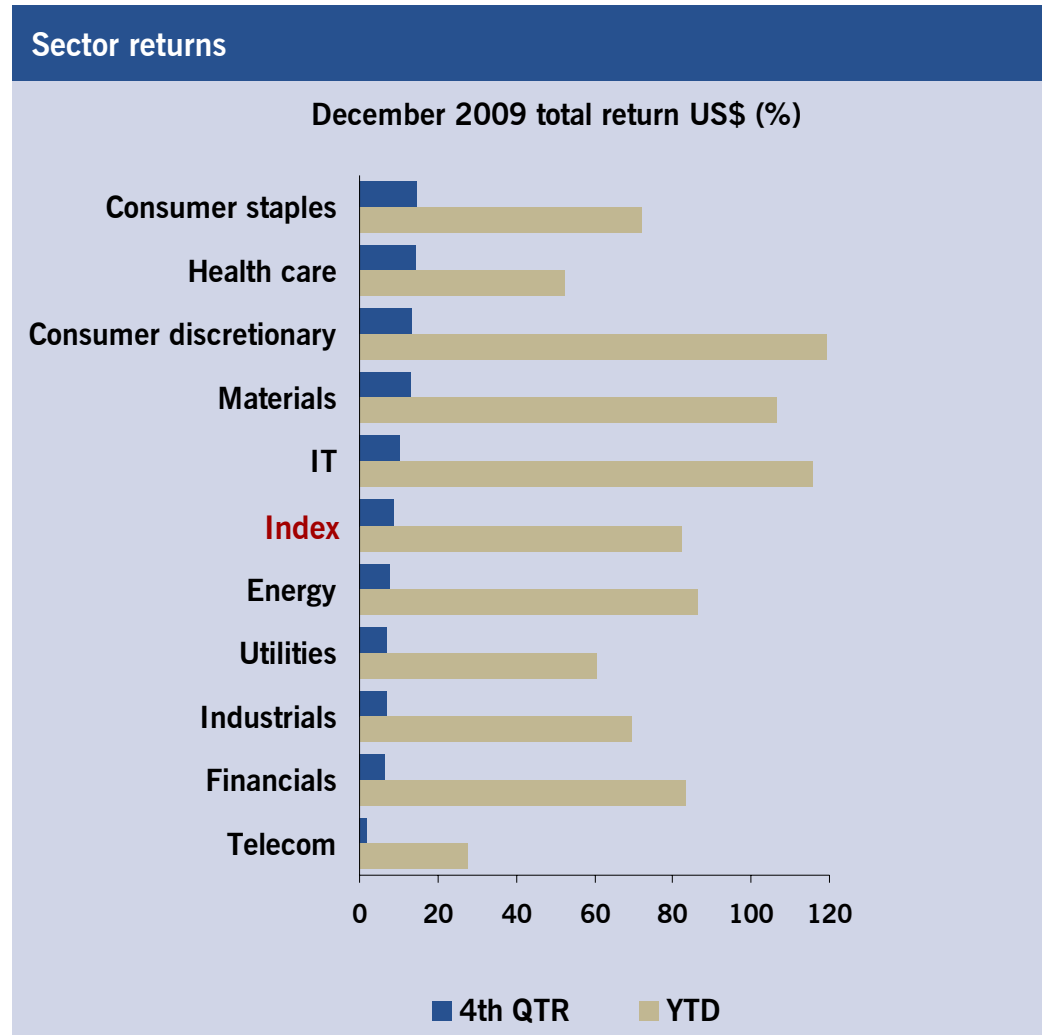
MSCI Emerging Markets Investable Market Index indices with gross dividends reinvested.

Please note that some local indices contain US\$ traded securities. The calculated exchange rate is the percent difference between the MSCI EM Investable Market Index local index return and the MSCI EM Investable Market Index US\$ index return.

Source: MSCI data from RIMES

Market overview

MSCI Emerging Markets IMI



Source: RIMES
MSCI Emerging Markets IMI with net dividends reinvested as of 31 December 2009.

Attribution — Emerging markets

As of 31 December 2009

What helped

What hurt

Fourth quarter 2009

- Stock selection in China
- Stock selection in industrials and utilities
- Holdings in retail and apparel as well as beverages
- Stock selection in Thailand — Banpu
- Brazilian holdings

- Indian holdings
- Stock selection in materials, information technology and financials
- Large allocation to telecom services
- Stock selection in Russia and South Africa
- Cash

2009

- Extremely strong stock selection in 5 sectors
 - Consumer staples, industrials, telecom, utilities and information technology
- Stock selection in China
 - 5 of top 10 contributors
- Small capitalization stocks

- Cash
- Sizeable allocation to telecoms
- Low exposure to metals and mining companies
- Brazil: Low exposure to country and currency
- Stock selection in India, South Africa and Mexico
- Taiwan positions

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Top relative contributors and detractors

Year to date December 2009

Contributors

| | Impact (bps) | Return (%) | Country |
|-----------------------------------|-----------------|---------------|-------------|
| China Mobile Ltd.* | 237 | -3.4 | China |
| BYD | 191 | 438.7 | China |
| Nine Dragons Paper * | 140 | 466.9 | China |
| China Shenhua Energy | 122 | 136.7 | China |
| Teva Pharmaceutical Industries | 107 | 33.1 | Israel |
| Hypermarcas | 98 | 301.7 | Brazil |
| Banpu* | 95 | 173.5 | Thailand |
| Weichai Power * | 93 | 331.8 | China |
| P.T. Astra International | 76 | 295.5 | Indonesia |
| Energy Development Corp. * | 57 | 228.5 | Philippines |

Detractors

| | Impact (bps) | Return (%) | Country |
|-------------------------------|-----------------|---------------|-----------|
| Bharti Airtel * | -179 | -3.3 | India |
| Telmex | -85 | -14.9 | Mexico |
| Sberbank * | -68 | 288.5 | Russia |
| Telekomunikacja Polska | -66 | -6.4 | Poland |
| China Railway Construction | -57 | -13.0 | China |
| Gazprom * | -54 | 71.5 | Russia |
| América Móvil | -53 | 55.7 | Mexico |
| Sasol | -52 | 37.2 | S. Africa |
| Harmony Gold Mining | -50 | -3.6 | S. Africa |
| AngloGold Ashanti | -45 | 49.7 | S. Africa |

Red text denotes holding significantly below benchmark weight.

*Represents companies that are top relative contributors and detractors for both the quarter and the year.

31 December 2008–31 December 2009

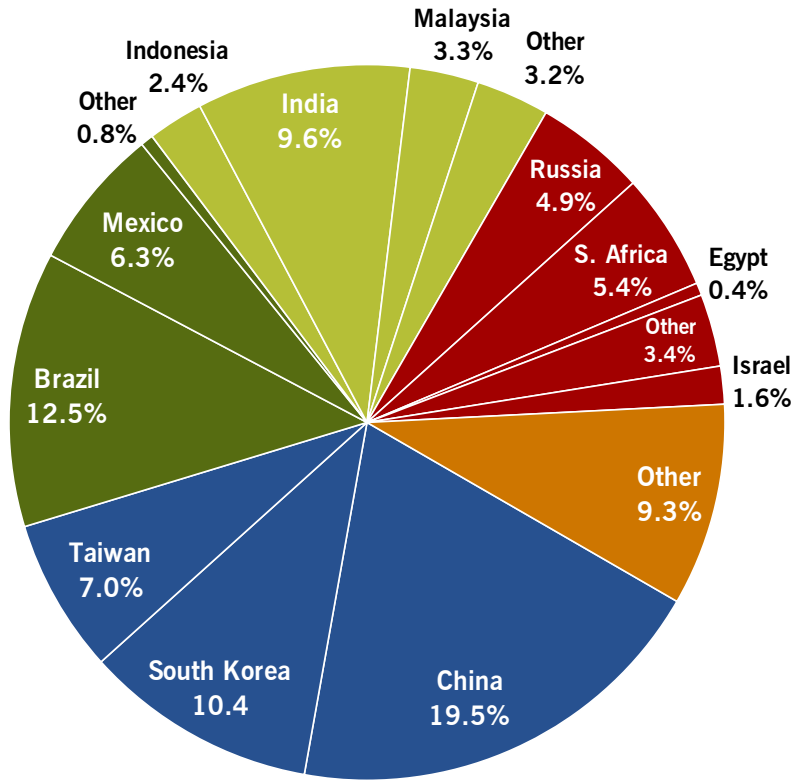
Source: Vestek

The holdings listed above represent Capital International's Emerging Markets Growth Fund.

Country weights

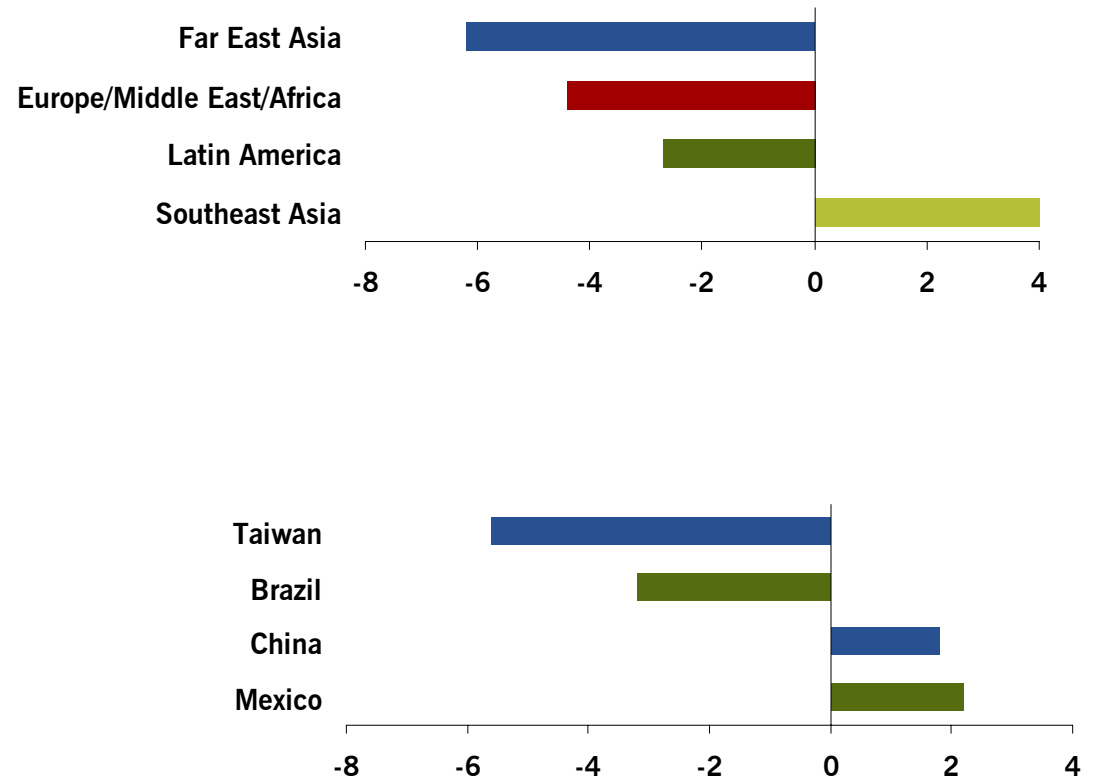
31 December 2009

Emerging Markets Growth Fund



| | |
|---------------------------|-------|
| Far East Asia | 36.9% |
| Latin America | 19.6% |
| Southeast Asia | 18.5% |
| Europe/Middle East/Africa | 15.7% |

Relative weighting vs. MSCI Emerging Markets IMI

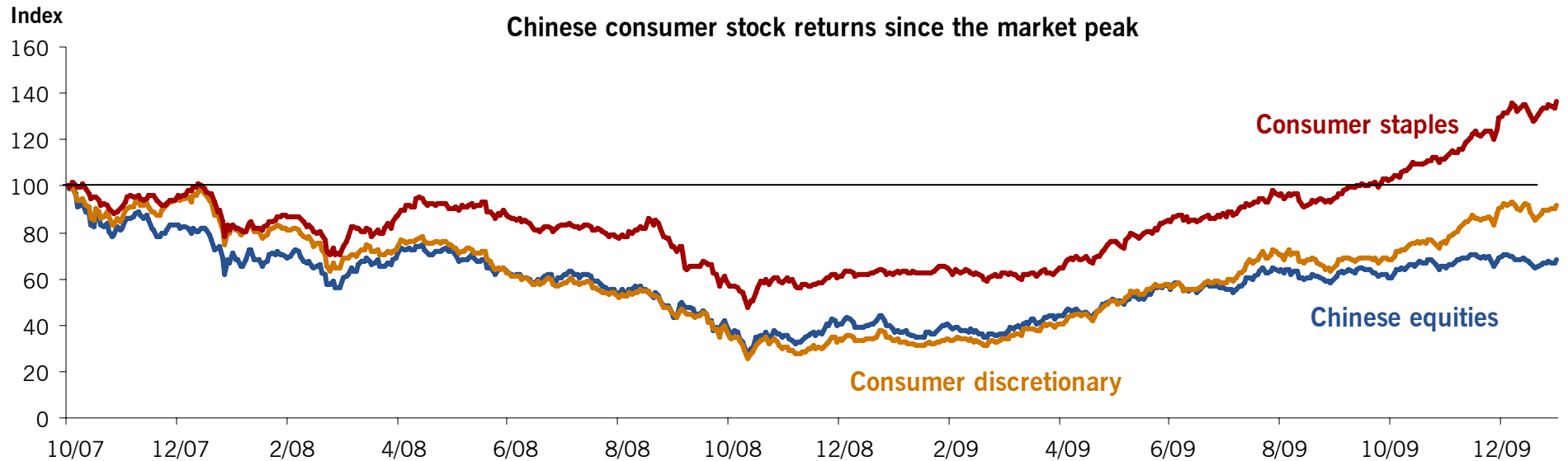


Emerging Markets Growth Fund and the MSCI Emerging Markets IMI.
MSCI data from RIMES.

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Chinese consumers

Chinese consumer stock returns since the market peak



Li Ning Company — Sporting goods enterprise

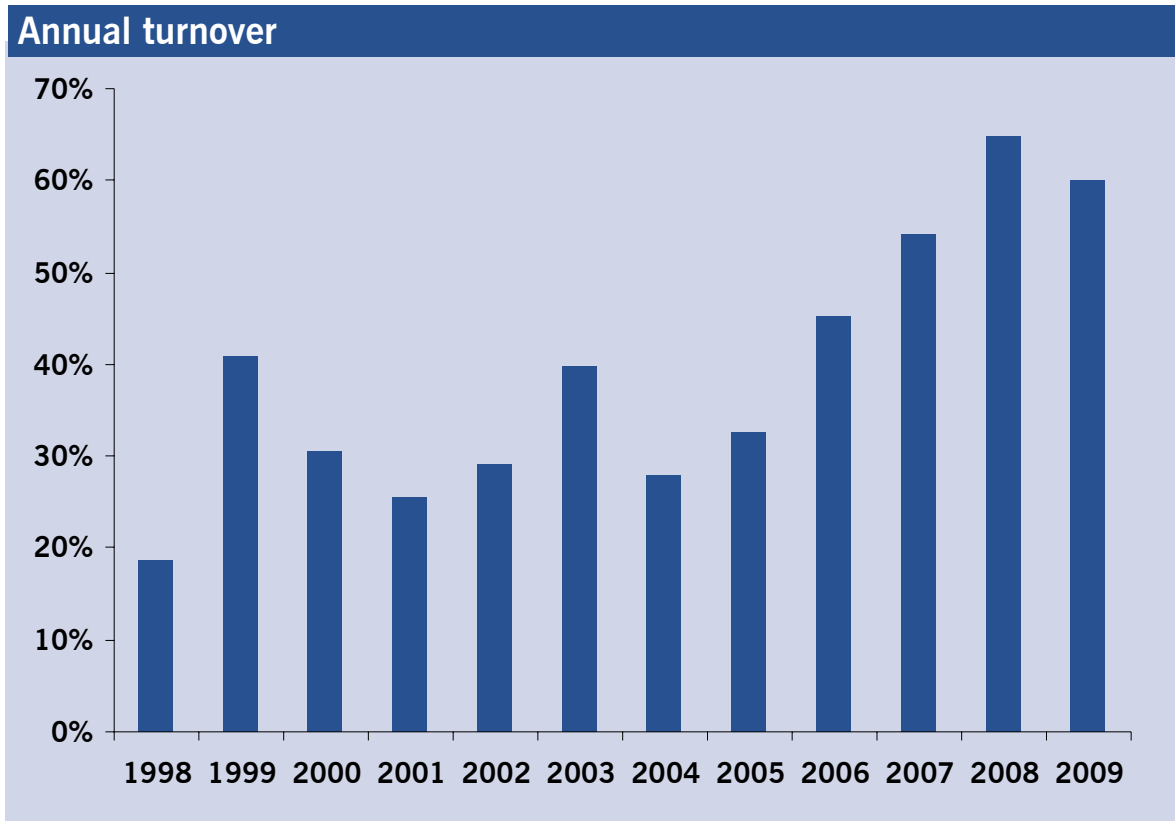
- Leader in Chinese sportswear industry
- Competes successfully with Nike and Adidas
- 7,000 stores on the way to 10,000
- Moving from building brand awareness to building brand loyalty
- Expanding reach to badminton and table tennis
- Expected growth of 20+%
- 2009 returns of 147%

Bawang International Holding — Herbal personal care products

- 50% share of fast growing herbal shampoo market
- Unique brand — recognition, positioning and reputation
- Nationwide distribution
- Second shampoo brand — Royal Wind
- Herbal skin care line being launched
- Competes successfully with international packaged goods companies
- IPO in mid-2009; return of 78%

As of 31 December 2009
Source: RIMES

Portfolio turnover remains elevated



- Sharp market movements
- Continued high levels of volatility
- Rotation across countries, sectors and market cap
- Securities reaching price targets
- Abundance of new ideas

As of 31 December 2009
Turnover is the lesser of sales or purchases divided by average market value

Major purchases and sales

Second half of 2009

Buys

Mining, Energy & Commodities

LG Chem
Anglo American
MMC Norilsk Nickel

Telecommunications

SK Telecom
MTN Group
Telmex
Maxis

IT and Internet

MediaTek
B2W - Cia. Global do Varejo
Epistar

Banks & Real Estate

Longfor Properties
CIMB Group Holdings

Consumers

United Spirits
Falabella

Misc: Construction & Utilities

China Shanshui Cement
Centrais Eletricas Brasileiras
CESP – Cia. Energética de São Paulo
China Railway Construction

Sells

Mining, Energy & Commodities

China Shenhua Energy
Gazprom
Nine Dragons Paper
Tenaris
Petróleo Brasileiro – Petrobras
Harmony Gold Mining

Telecommunications

América Móvil

IT and Internet

Samsung Electronics
BYD
Tencent Holdings
NetEase.com

Banks & Real Estate

Standard Chartered

Consumers

Fomento Económico Mexicano
AmBev
Ripley Corp
Net Servicos de Comunicação

Misc: Construction

Anhui Conch Cement

30 June 2009 – 31 December 2009

The holdings listed above represent Capital International's Emerging Markets Growth Fund.

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Twenty largest holdings

Emerging Markets Growth Fund

| Ranking | | Security | % Total portfolio | % Index ¹ | Description |
|-------------------------------------|-----------|---|-------------------|----------------------|---|
| 31 Dec 08 | 31 Dec 09 | | | | |
| 2 | 1 | Samsung Electronics | 3.0 | 2.3 | Korea's top electronics manufacturer and a global leader in semiconductor production. |
| 7 | 2 | Reliance Industries | 2.4 | 0.8 | Manufactures a wide range of synthetic textiles, petrochemicals and plastics. Also involved in oil exploration and production, and electricity generation and distribution. |
| 56 | 3 | Gazprom | 2.3 | 1.5 | The largest natural gas producer and transporter in Russia. |
| 3 | 4 | China Shenhua Energy | 2.1 | 0.4 | Energy company engaged in the production and transport of coal in China and the Asia Pacific region. |
| 1 | 5 | América Móvil | 2.0 | 1.2 | Latin America's largest cellular communications provider. |
| 11 | 6 | Industrial and Commercial Bank of China | 2.0 | 1.0 | A state-owned commercial bank in China and one of the world's largest banks. |
| 16 | 7 | Sasol | 2.0 | 0.6 | Produces synthetic fuel, gasoline and chemical products. Also venturing into natural gas exploration. |
| 8 | 8 | Vale | 1.9 | 2.5 | The world's largest exporter of iron ore. Also provides logistics services via an extensive rail network in Brazil. |
| na | 9 | LG Chem | 1.7 | 0.2 | Major chemical company serving a variety of industries throughout the world. |
| 10 | 10 | Bharti Airtel | 1.5 | 0.0 | India's leading telecommunication services provider. |
| Total companies 1 through 10 | | | 20.9 | 10.5 | |
| 14 | 11 | Banpu | 1.4 | 0.1 | Thailand-based energy company focused on coal mining and coal-fired power generation. |
| 20 | 12 | Telmex International | 1.4 | 0.1 | Telecom operator mainly serving Brazil and Colombia, with an additional presence in Argentina, Chile, Ecuador and Peru. |
| 17 | 13 | DLF Ltd. | 1.3 | 0.1 | Major real estate development company based in India. |
| 4 | 14 | Taiwan Semiconductor Manufacturing | 1.3 | 1.3 | One of the world's largest semiconductor manufacturers. |
| 88 | 15 | Hypermarcas | 1.2 | 0.0 ² | Consumer products manufacturer based in Brazil. |
| 61 | 16 | CIMB Group Holdings | 1.2 | 0.2 | Involved in banking, financial services and real estate management. |
| 30 | 17 | Bank of China | 1.1 | 0.8 | One of China's largest commercial banks. |
| 25 | 18 | BYD | 1.1 | 0.1 | One of the largest makers of rechargeable batteries. |
| 44 | 19 | LG Electronics | 1.0 | 0.3 | Designs and manufactures appliances and home electronics. |
| 9 | 20 | AngloGold Ashanti | 1.0 | 0.3 | One of the world's largest gold producers. |
| Total companies 1 through 20 | | | 32.9 | 13.8 | |

¹MSCI Emerging Markets Investable Market Index

²Holding is less than 0.05% of the index

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Top holdings by sector

Emerging Markets Growth Fund

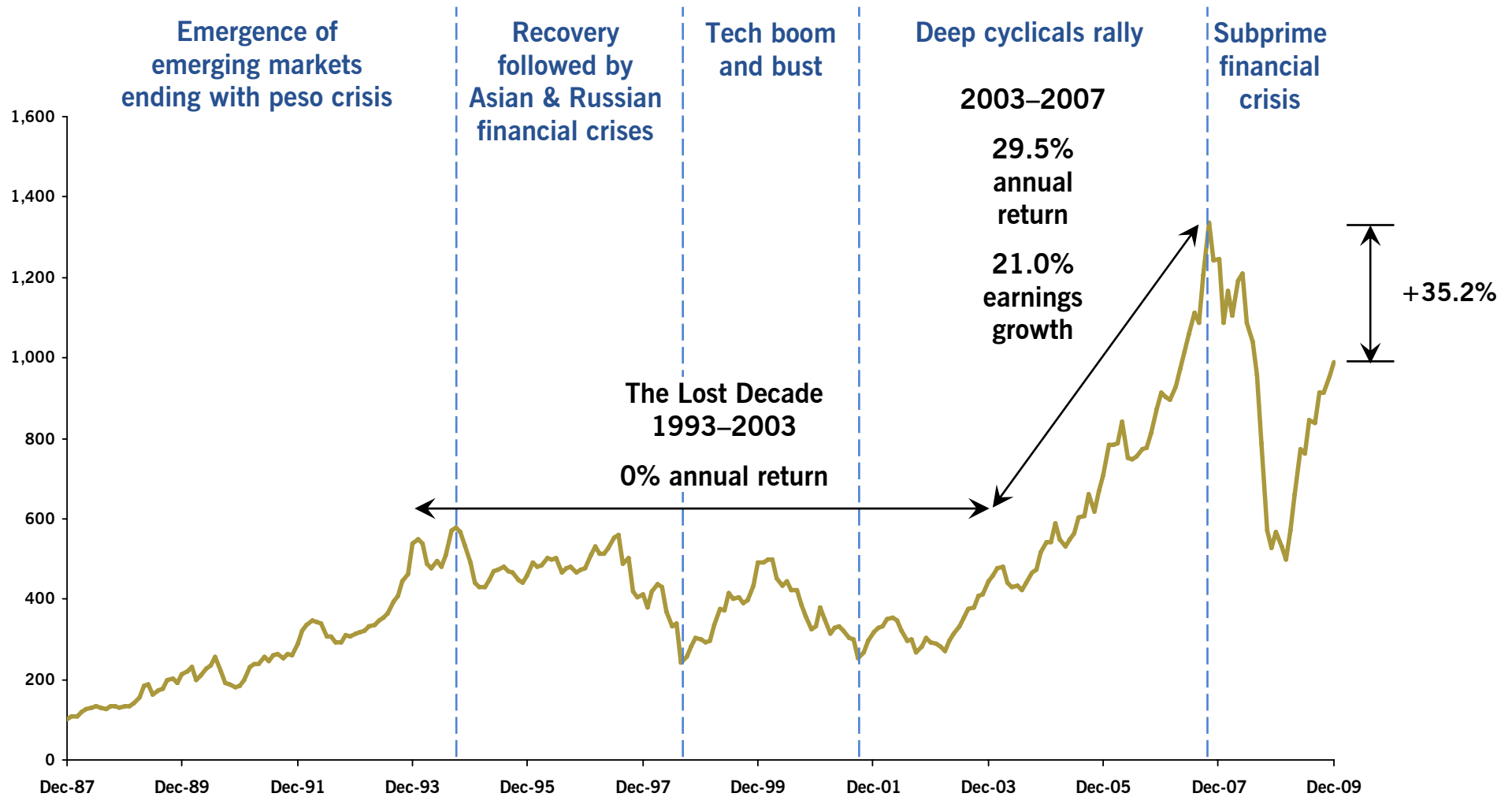
| | % Total portfolio 31 Dec 08 | % Total portfolio 31 Dec 09 | % Index ¹ 31 Dec 09 |
|---------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| ENERGY | 13.9 | 12.6 | 13.1 |
| Reliance Industries | | 2.4 | |
| Gazprom | | 2.3 | |
| China Shenhua Energy | | 2.1 | |
| Sasol | | 2.0 | |
| Banpu | | 1.4 | |
| Petróleo Brasileiro - Petrobras | | 0.9 | |
| OTHERS | | 1.5 | |
| MATERIALS | 11.9 | 12.8 | 14.6 |
| Vale | | 1.9 | |
| LG Chem | | 1.7 | |
| AngloGold Ashanti | | 1.0 | |
| Anglo American | | 0.8 | |
| Anhui Conch Cement | | 0.5 | |
| MMC Norilsk Nickel | | 0.5 | |
| OTHERS | | 6.4 | |
| INDUSTRIALS | 7.2 | 7.1 | 8.1 |
| Cia. de Concessões Rodoviárias | | 0.9 | |
| ALL - América Latina Logística | | 0.6 | |
| China Railway Construction | | 0.6 | |
| OTHERS | | 5.0 | |
| CONSUMER DISCRETIONARY | 7.3 | 8.1 | 7.4 |
| LG Electronics | | 1.0 | |
| Astra International | | 0.8 | |
| Genting | | 0.7 | |
| OTHERS | | 5.6 | |
| CONSUMER STAPLES | 6.2 | 8.5 | 5.8 |
| Hypermarcas | | 1.2 | |
| United Spirits | | 0.8 | |
| Marfrig Alimentos | | 0.6 | |
| OJSC Magnit | | 0.6 | |
| OTHERS | | 5.3 | |
| HEALTH CARE | 0.8 | 0.5 | 2.5 |
| Bumrungrad Hospital | | 0.3 | |
| OTHERS | | 0.2 | |

| | % Total portfolio 31 Dec 08 | % Total portfolio 31 Dec 09 | % Index ¹ 31 Dec 09 |
|---|-----------------------------------|-----------------------------------|-----------------------------------|
| FINANCIALS | 9.6 | 15.5 | 23.3 |
| Industrial and Commercial Bank of China | | 2.0 | |
| DLF Ltd. | | 1.3 | |
| CIMB Group Holdings | | 1.2 | |
| Bank of China | | 1.1 | |
| Itaúsa | | 1.0 | |
| China Construction Bank | | 0.8 | |
| Itaú Unibanco Holding | | 0.7 | |
| OTHERS | | 7.4 | |
| INFORMATION TECHNOLOGY | 12.0 | 12.9 | 13.8 |
| Samsung Electronics | | 3.0 | |
| Taiwan Semiconductor Manufacturing | | 1.3 | |
| BYD | | 1.1 | |
| Hon Hai Precision Industry | | 0.9 | |
| Tencent Holdings | | 0.9 | |
| MediaTek | | 0.7 | |
| OTHERS | | 5.0 | |
| TELECOMMUNICATION SERVICES | 16.4 | 12.5 | 7.7 |
| América Móvil | | 2.0 | |
| Bharti Airtel | | 1.5 | |
| Telmex International | | 1.4 | |
| Telmex | | 0.8 | |
| MTN Group | | 0.7 | |
| SK Telecom | | 0.7 | |
| OTHERS | | 5.4 | |
| UTILITIES | 3.7 | 3.7 | 3.7 |
| ELETROBRÁS | | 0.8 | |
| OTHERS | | 2.9 | |
| OTHER | 1.3 | 0.9 | 0.0 |
| Baring Vostok | | 0.4 | |
| OTHERS | | 0.5 | |
| Total equity | 90.3 | 95.1 | 100.0 |
| Total fixed income | 2.7 | 0.7 | |
| Total cash and equivalents | 7.0 | 4.2 | |
| Total assets | 100.0 | 100.0 | |

¹MSCI Emerging Markets Investable Market Index

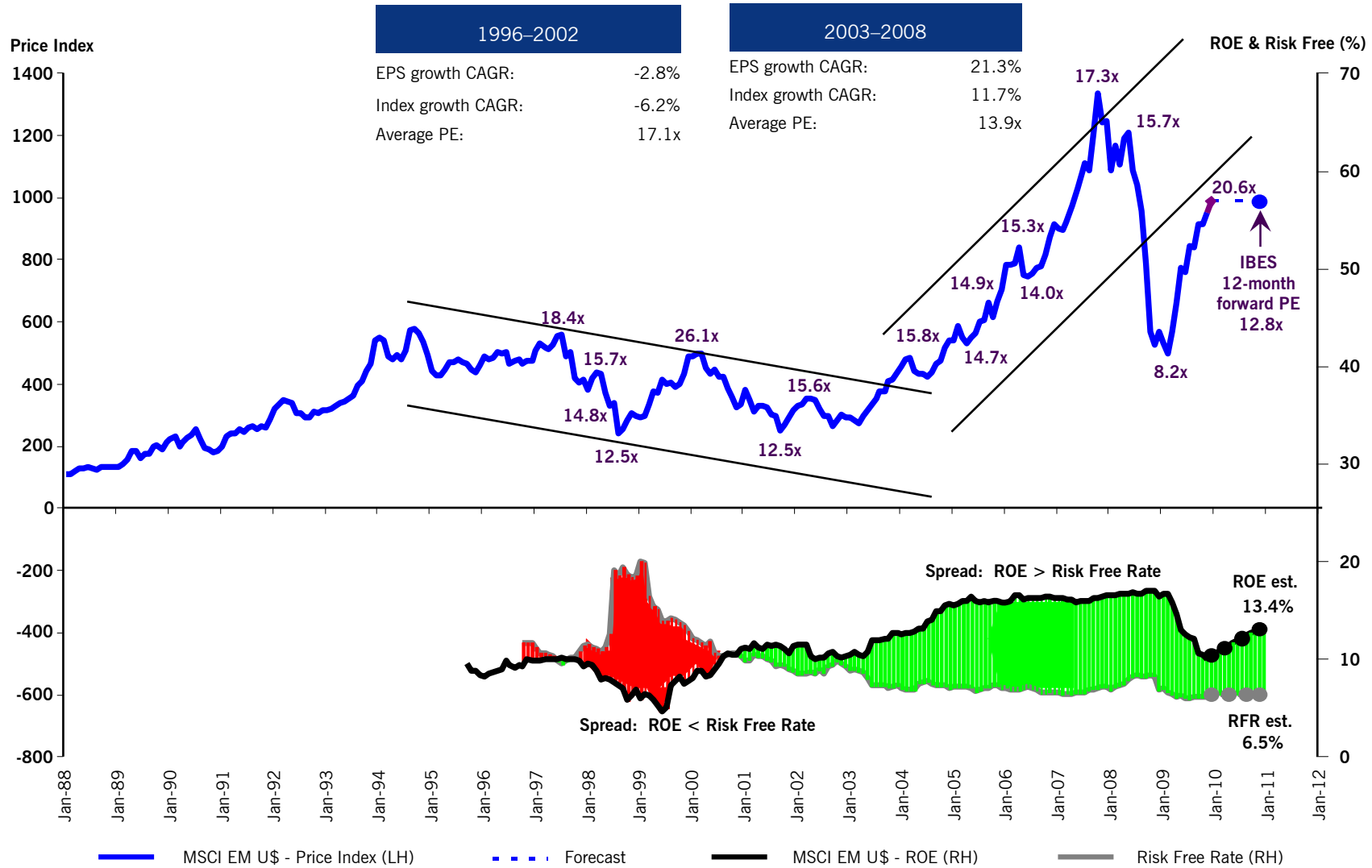
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Emerging markets equity over time



As of 31 December 2009. Growth of 100 based on month-end observations of the MSCI Emerging Markets Price Index.
Source: MSCI

Looking ahead at 2010 suggests emerging markets are attractive



As of 31 December 2009.

Sources: Datastream, IBES Global Aggregates (12-month forward EPS and PE); IMF (GDP numbers); JPMorgan (Average risk-free rate, US\$ ROE)

2010 Outlook

- **Global economic recovery will continue to gain traction**
 - Lagged influence of tremendous global fiscal and monetary stimuli
 - China a key source of growth

- **Equity markets already discount much of the economic rebound**
 - More modest returns
 - Emerging markets benefit from domestic gains as well as global rebound

- **China and India will remain an important focus**
 - India's promise reflects domestic development
 - China's reach is much larger with economic activity benefiting Southeast Asia
 - China leveraged to improving global demand via exports

- **Sector rotation should benefit the laggards of 2009**
 - Information technology and consumer discretionary will moderate as will banks
 - Concentrate on beneficiaries of longer-term improvements — energy, materials, consumer staples and telecom

- **Stock picking will be important with more modest gains**
 - High dividend yield
 - Valuation, cash flow and quality of earnings

Looking ahead — themes



Energy

- Coal
- Unique assets
- Alternative
- Green technology

Infrastructure

- Transportation
- Investments in future capacity
- Services
- Cement

Global leaders

- Strong franchises
- Global players/reach
- Global recovery

Consumer affluence

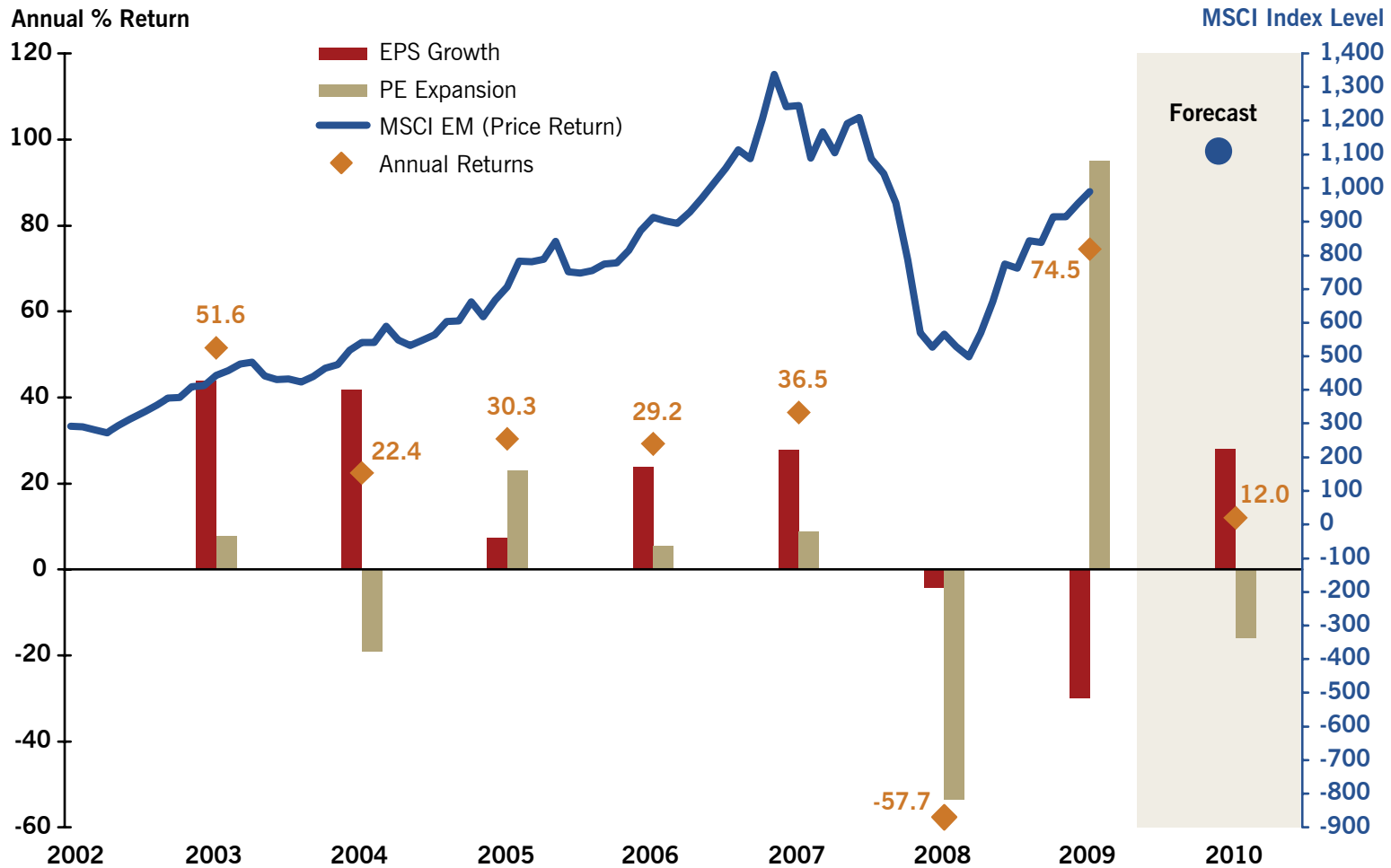
- Local brands
- Internet
- Precious metals
- Leisure
- Rural development

Telecom services

- Restructuring
- High dividend yield
- Growth potential
- 2009 laggard

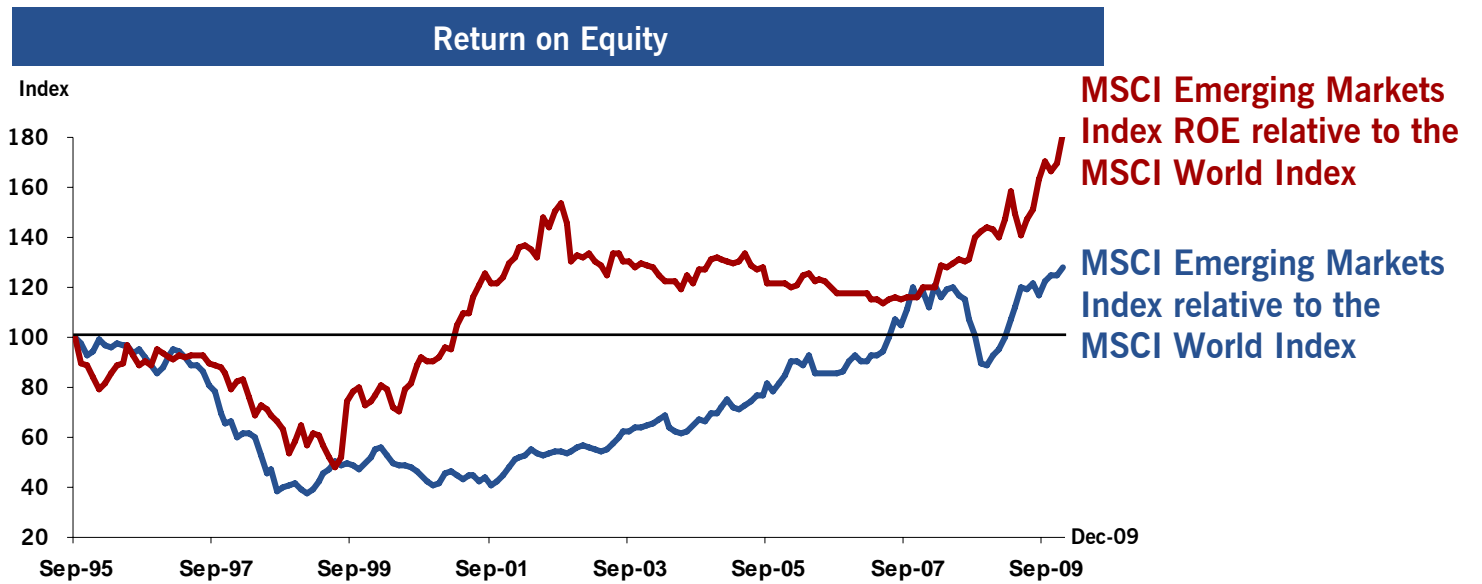
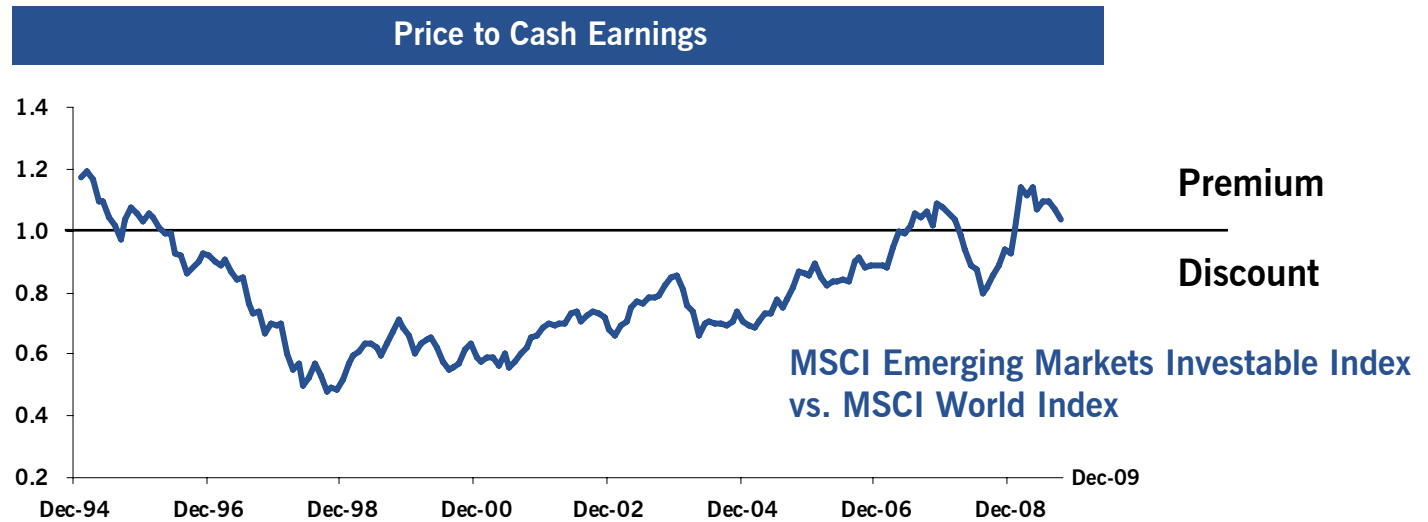
Appendix

Emerging markets returns and earnings: 2003–2010



*Morgan Stanley forecast.
As of 31 December 2009.
Sources: MSCI, Morgan Stanley, Capital International

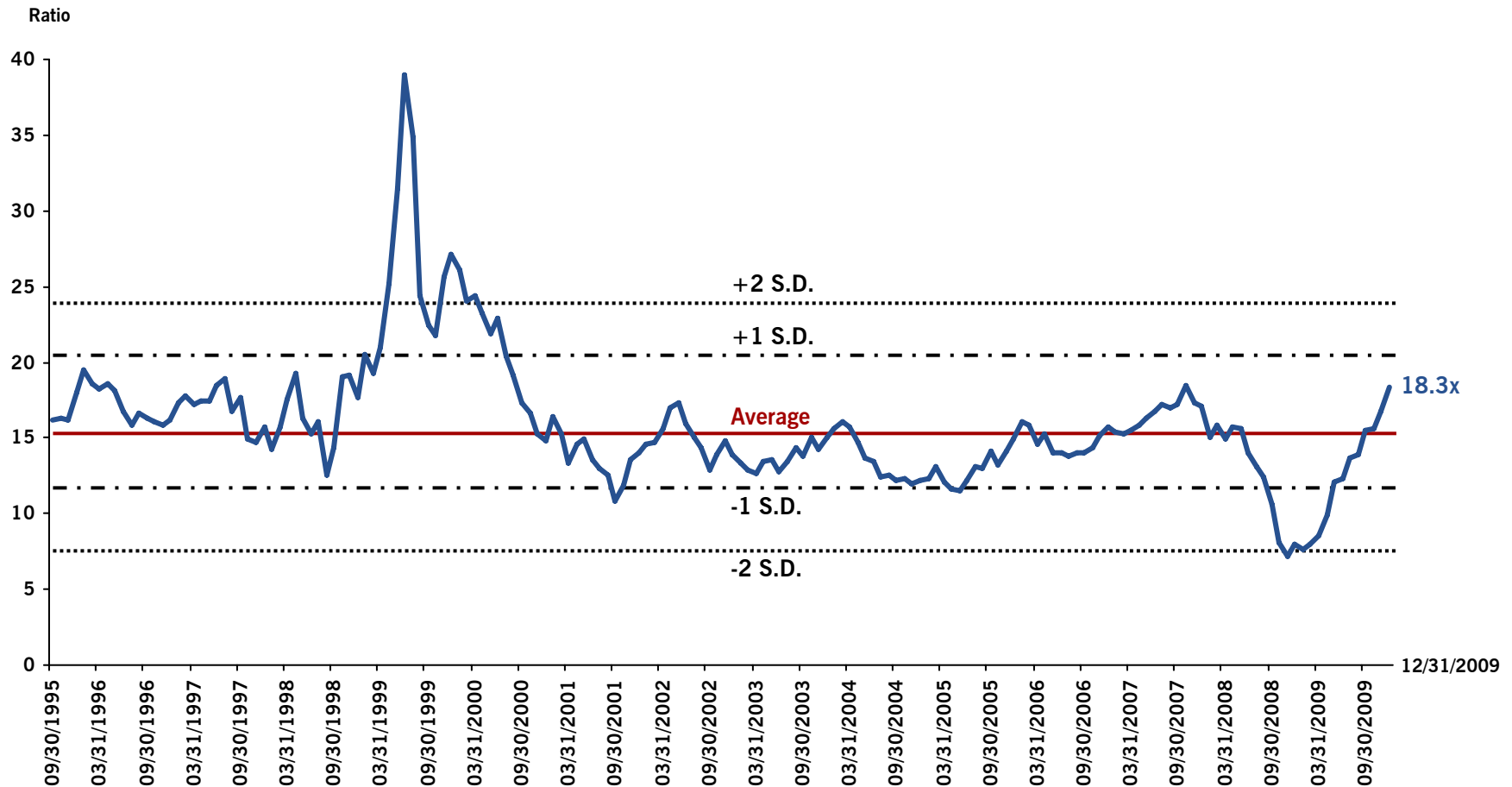
Valuations



As of 31 December 2009
Source: MSCI data from RIMES

Valuation: At “normal” price earnings ratio

Emerging markets equities: 12-month trailing earnings



Excludes companies with negative earnings after 31 October 2008. Trailing 12-month earnings.
As of 31 December 2009.
Source: MSCI

Diversification by country

Emerging Markets Growth Fund

| | % Total portfolio 31 Dec 08 | % Total portfolio 31 Dec 09 | % Index ¹ 31 Dec 09 | | % Total portfolio 31 Dec 08 | % Total portfolio 31 Dec 09 | % Index ¹ 31 Dec 09 |
|-----------------------|-----------------------------------|-----------------------------------|-----------------------------------|---|-----------------------------------|-----------------------------------|-----------------------------------|
| LATIN AMERICA | 21.2 | 19.6 | 22.3 | EMERGING EUROPE/MIDDLE EAST/AFRICA | 14.8 | 15.7 | 20.1 |
| BRAZIL | 10.3 | 12.4 | 15.7 | SOUTH AFRICA | 6.5 | 5.4 | 7.1 |
| MEXICO | 8.9 | 6.4 | 4.1 | RUSSIAN FEDERATION | 3.1 | 5.0 | 5.7 |
| CHILE | 1.8 | 0.8 | 1.4 | ISRAEL | 1.6 | 1.5 | 2.8 |
| REPUBLIC OF COLOMBIA | 0.1 | 0.0 | 0.6 | TURKEY | 0.9 | 1.2 | 1.6 |
| PERU | 0.1 | 0.0 | 0.5 | POLAND | 0.7 | 1.1 | 1.3 |
| | | | | EGYPT | 1.1 | 0.4 | 0.5 |
| SOUTHEAST ASIA | 16.1 | 18.6 | 14.5 | HUNGARY | 0.2 | 0.0 | 0.5 |
| INDIA | 7.9 | 9.6 | 8.0 | CZECH REPUBLIC | 0.3 | 0.8 | 0.4 |
| MALAYSIA | 2.8 | 3.5 | 2.7 | MOROCCO | 0.1 | 0.1 | 0.2 |
| INDONESIA | 2.3 | 2.3 | 1.8 | CROATIA | 0.1 | 0.0 | 0.0 |
| THAILAND | 2.0 | 1.9 | 1.5 | SAUDI ARABIA | 0.0 | 0.1 | 0.0 |
| PHILIPPINES | 1.0 | 1.1 | 0.5 | SULTANATE OF OMAN | 0.2 | 0.1 | 0.0 |
| PAKISTAN | 0.0 | 0.1 | 0.0 | | | | |
| SRI LANKA | 0.1 | 0.1 | 0.0 | OTHER² | 3.6 | 4.8 | 0.0 |
| FAR EAST ASIA | 34.6 | 36.4 | 43.1 | Total equity | 90.3 | 95.1 | 100.0 |
| CHINA | 19.3 | 18.2 | 17.7 | Total fixed income | 2.7 | 0.7 | |
| SOUTH KOREA | 7.3 | 10.2 | 12.8 | Total cash and equivalents | 7.0 | 4.2 | |
| TAIWAN | 7.0 | 6.9 | 12.6 | Total assets | 100.0 | 100.0 | |
| HONG KONG | 1.0 | 1.1 | 0.0 | | | | |

¹MSCI Emerging Markets Investable Market Index

²The current period includes 4.5% in companies with substantial business assets in emerging markets but that are domiciled in developed markets, and 0.3% in CII's Private Equity funds.

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Attribution summary (relative)

31 December 2008 - 31 December 2009

| | |
|------------------|---------|
| Portfolio return | 83.54 % |
| Benchmark return | 83.02 % |

Largest contributors (%)

| | +/- weight | Return | Impact |
|------------------------------|------------|--------|--------|
| ISR: CHINA MOBILE LTD | -2.03 | -3.44 | 2.37 |
| BYD CO 'H'CN1 | 0.95 | 438.71 | 1.91 |
| NINE DRAGONS PAPER HKD0.1 | 0.56 | 466.94 | 1.40 |
| CHINA SHENHUA ENER 'H'CN1.00 | 2.22 | 136.70 | 1.22 |
| TEVA PHARMA IND ILS0.1 | -1.63 | 33.14 | 1.07 |
| HYPERMARCAS SA COM NPV | 0.71 | 301.74 | 0.98 |
| ISR: BANPU PUBLIC CO | 1.23 | 173.45 | 0.95 |
| WEICHA1 POWER CO 'H'CN1 | 0.58 | 331.77 | 0.93 |
| P.T. ASTRA INTL IDR500 | 0.60 | 295.49 | 0.76 |
| ENERGY DEVELOP COR PHP1 | 0.63 | 228.50 | 0.57 |

Largest detractors (%)

| | +/- weight | Return | Impact |
|----------------------------|------------|--------|--------|
| CASH | 4.68 | 0.15 | -4.96 |
| BHARTI AIRTEL LTD INR5 | 1.71 | -3.26 | -1.79 |
| ISR: TELEFONOS DE MEXICO | 0.59 | -14.93 | -0.85 |
| ISR: SAVINGS BK RUSSIA FED | -0.42 | 288.52 | -0.68 |
| TELEKOMUNIKACJA PO PLN3 | 0.56 | -6.45 | -0.66 |
| CHINA RAILWAY CONS 'H'CN1 | 0.43 | -13.00 | -0.57 |
| ISR: GAZPROM | 0.64 | 71.51 | -0.54 |
| ISR: AMERICA MOVIL SA | 1.59 | 55.71 | -0.53 |
| ISR: SASOL | 1.07 | 37.16 | -0.52 |
| ISR: HARMONY GOLD MNG | 0.67 | -3.64 | -0.50 |

Sector (%)

| | +/- weight | Sector impact | Stock impact | Impact |
|------------------------|------------|---------------|--------------|--------|
| Consumer Staples | 1.84 | 0.12 | 2.17 | 2.29 |
| Industrials | -0.88 | 0.15 | 1.39 | 1.54 |
| Utilities | -0.19 | 0.01 | 1.28 | 1.30 |
| Health Care | -2.15 | 0.85 | -0.13 | 0.72 |
| Consumer Discretionary | 1.41 | 0.45 | 0.24 | 0.69 |
| Information Technology | 0.62 | 0.22 | 0.35 | 0.58 |
| Energy | 1.14 | 0.13 | 0.42 | 0.55 |
| Materials | -1.84 | -0.37 | 0.08 | -0.29 |
| Financials | -8.93 | 0.08 | -0.80 | -0.72 |
| Telecomm Service | 4.27 | -2.86 | 1.70 | -1.15 |
| Cash | 4.70 | 0.00 | -4.98 | -4.98 |

Country (%)

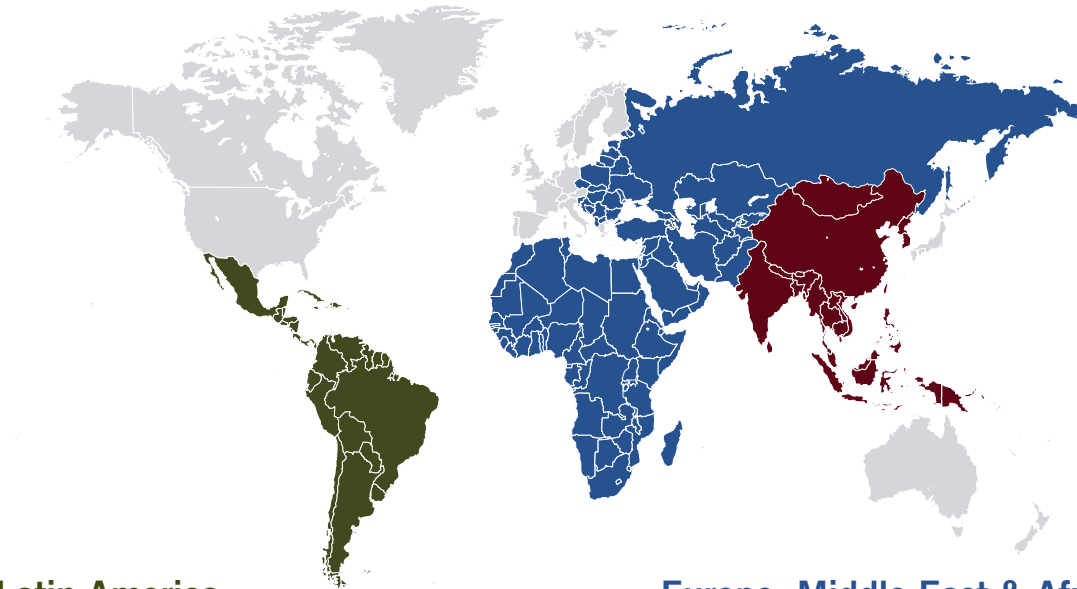
| | +/- weight | Country impact | Stock impact | Impact |
|-------------|------------|----------------|--------------|--------|
| CHINA | 1.30 | 0.32 | 7.71 | 8.87 |
| INDONESIA | 0.63 | 0.11 | 0.53 | 0.87 |
| U.K. | 0.72 | 0.00 | 0.53 | 0.85 |
| MALAYSIA | 0.35 | -0.08 | 0.78 | 0.84 |
| PHILIPPINES | 0.67 | 0.01 | 0.61 | 0.77 |
| MEXICO | 3.54 | -0.80 | -1.02 | -1.25 |
| BRAZIL | -2.98 | -0.19 | 0.24 | -1.91 |
| TAIWAN | -5.24 | -0.85 | -0.89 | -2.60 |
| INDIA | 1.61 | 0.70 | -3.67 | -2.82 |
| CASH | 4.70 | 0.00 | -4.08 | -4.07 |

Emerging Markets Growth Fund, Inc. vs. MSCI Emerging Markets IMI

The analysis includes equity investments and cash. It excludes commingled fund activity, forward contracts and fixed-income investments, if applicable. This information supplements or enhances required or recommended disclosure and presentation provisions of the GIPS® standards, which if not included herein, are available upon request. GIPS is a trademark owned by CFA Institute.

Emerging markets at a glance

Fourth quarter 2009



| | % local currency return | % currency return | % US\$ return |
|--------------------------|-------------------------------|-------------------------|---------------------|
| MSCI EM IMI | 7.6 | 1.3 | 9.0 |
| MSCI AC World IMI | 4.8 | -0.2 | 4.6 |

Latin America

| | % local currency return | % currency return | % US\$ return |
|--------------------------------------|-------------------------------|-------------------------|---------------------|
| MSCI EM Latin America IMI | 10.3 | 2.5 | 13.0 |
| Brazil | 11.3 | 2.2 | 13.7 |
| Mexico | 9.9 | 3.4 | 13.7 |

Europe, Middle East & Africa

| | % local currency return | % currency return | % US\$ return |
|--------------------------|-------------------------------|-------------------------|---------------------|
| MSCI EMEA IMI | 8.3 | 0.6 | 9.0 |
| Israel | 14.3 | -0.3 | 14.0 |
| South Africa | 6.1 | 2.9 | 9.1 |
| Russia | 11.4 | -0.7 | 10.6 |

Asia

| | % local currency return | % currency return | % US\$ return |
|-------------------------|-------------------------------|-------------------------|---------------------|
| MSCI EM Asia IMI | 6.4 | 1.0 | 7.5 |
| China | 11.2 | -0.1 | 11.1 |
| India | 4.3 | 3.4 | 7.8 |
| Korea | 1.0 | 1.2 | 2.2 |
| Taiwan | 9.1 | 0.5 | 9.7 |
| Malaysia | 5.4 | 1.1 | 6.5 |

30 September 2009–31 December 2009

MSCI Emerging Markets Investable Market Index indices with gross dividends reinvested.

Please note that some local indices contain US\$ traded securities. The calculated exchange rate is the percent difference between the MSCI EM Investable Market Index local index return and the MSCI EM Investable Market Index US\$ index return.

Source: MSCI data from RIMES

Top relative contributors and detractors

Fourth quarter 2009

Contributors

| | Impact (bps) | Return (%) | Country |
|-----------------------------------|-----------------|---------------|-------------|
| Banpu * | 30 | 35.3 | Thailand |
| Weichai Power * | 26 | 53.4 | China |
| China Mobile Ltd. * | 22 | -3.7 | China |
| United Spirits | 18 | 42.3 | India |
| Telmex | 17 | 28.3 | Mexico |
| Cia. de Concessões Rodoviárias | 16 | 34.5 | Brazil |
| | | | S. Africa |
| Aquarius Platinum | 12 | 47.8 | (Australia) |
| Energy Development Corp. * | 11 | 28.1 | Philippines |
| Nine Dragons Paper * | 11 | 25.5 | China |
| Tencent Holdings | 10 | 33.6 | China |

Detractors

| | Impact (bps) | Return (%) | Country |
|---------------------|-----------------|---------------|----------|
| Bharti Airtel * | -47 | -18.8 | India |
| DLF Ltd. | -36 | -14.8 | India |
| Sberbank * | -17 | 42.5 | Russia |
| Samsung Electronics | -16 | -0.8 | S. Korea |
| Gazprom * | -16 | 2.3 | Russia |
| POSCO | -16 | 28.4 | S. Korea |
| Reliance Industries | -11 | 2.9 | India |
| SK Telecom | -10 | -6.5 | S. Korea |
| LG Electronics | -9 | -2.5 | S. Korea |
| Perfect World | -9 | -18.0 | China |

Red text denotes holding significantly below benchmark weight.

*Represents companies that are top relative contributors and detractors for both the quarter and the year.

30 September 2009–31 December 2009

The holdings listed above represent Capital International's Emerging Markets Growth Fund.

Source: Vestek

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- The attribution data was produced using Vestek, a third-party software system
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- Data elements such as pricing, income, market cap, etc. were provided by Vestek
- The attribution is calculated based on the frequency of holdings available in Vestek. For periods using daily holdings, no intra-day trading is captured and trades are assumed to occur at the end of the day only. For periods using monthly holdings, the analysis is an approximation based on a buy and hold methodology where intra-month trading is assumed to occur at month-end only. The index provided for attribution is based on Vestek's methodology
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- This information supplements or enhances required or recommended disclosure and presentation provisions of the GIPS standards, which if not included herein, are available upon request

**ALASKA RETIREMENT MANAGEMENT BOARD
M E M O R A N D U M**

To: ARMB Trustees
From: Judy Hall
Date: February 12, 2010
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 |
|-----------------|--------------------------|----------------------|--|
| Gary Bader | Chief Investment Officer | Equities | 12/16/09 |
| Bob Mitchell | Investment Officer | Equities Equities | 11/24/09 12/16/09 12/22/09 |
| Victor Djajalie | Investment Officer | Equities | 11/23/09 1/15/10 1/19/10 1/21/10 1/27/10 |
| Nicholas Orr | Investment Officer | Equities | 12/21/09 2/11/10 |
| | | | |

Alaska Retirement Management Board
2010 Meeting Calendar

| | |
|---|---|
| February 24 | Committee Meetings: Audit |
| February 25-26 Thursday-Friday Juneau | *Review Capital Market Assumptions *Manager Presentations *Actuarial Audit Report |
| April 22-23 Thursday-Friday Anchorage | *Adopt Asset Allocation *Performance Measurement - 4 th Quarter *Buck Consulting Actuary Report *GRS Actuary Certification *Review Private Equity Annual Plan Abbott Capital Management Pathway Capital Management *Manager Presentations |
| June 23 | Committee Meetings: Audit |
| June 24-25 Thursday-Friday Anchorage | *Final Actuary Report/Adopt Valuation/Contribution Rates *Performance Measurement - 1 st Quarter *Manager Presentations |
| September ____ | Committee Meetings: Real Estate - Salary Review - Budget |
| September 22 | Committee Meetings: Audit |
| September 23-24 Thursday-Friday Fairbanks | *Audit Results/Assets - KPMG *Approve Budget *Performance Measurement - 2 nd Quarter *Real Estate Annual Plan *Real Estate Evaluation - Townsend Group *Manager Presentations |
| October _____ | Education Conference |
| December 1 | Audit Committee |
| December 2-3 Thursday-Friday Anchorage | Audit Report Performance Measurement - 3 rd Quarter Manager Review (Questionnaire) Private Equity Review Economic Round Table *Manager Presentations |