State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
MEETING

Location of Meeting
Anchorage Marriott Hotel
820 W. 7th Avenue
Anchorage, Alaska

MINUTES OF
February 10-11, 2011

Thursday, February 10, 2011

CALL TO ORDER

In the absence of the Chair, VICE CHAIR SAM TRIVETTE called the meeting of the Alaska Retirement Management Board (ARMB) to order at 9:05 a.m.

ROLL CALL

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

ARMB Board Members Present
Gail Schubert, *Chair* (Feb. 11)
Sam Trivette, *Vice Chair*
Gayle Harbo, *Secretary*
Kristin Erchinger
Commissioner Becky Hultberg (Feb. 10)
Commissioner Bryan Butcher
Martin Pihl (Feb. 10)
Tom Richards
Mike Williams

ARMB Board Members Absent
Gail Schubert was absent on Feb. 10, and Martin Pihl and Commissioner Hultberg were absent on Feb. 11

Investment Advisory Council (IAC) Members Present
George Wilson
Dr. William Jennings *(by teleconference)*

Department of Revenue Staff Present
Jerry Burnett, Deputy Commissioner
Gary M. Bader, Chief Investment Officer
Pamela Leary, State Comptroller
Bob Mitchell, Senior Investment Officer
Ryan Bigelow, State Investment Officer
Zach Hanna, State Investment Officer
Scott Jones, Assistant State Comptroller
Judy Hall, Board Liaison Officer
Victor Djajalie, State Investment Officer
Steve Verschoor, State Investment Officer
Sean Howard, State Investment Officer
Alexander Sadighi, State Investment Officer
Jie Shao, State Investment Officer
Elizabeth Walton, Assistant Investment Officer

Department of Administration Staff Present
Mike Barnhill, Deputy Commissioner
Jim Puckett, Acting Director, Division of Retirement and Benefits
Teresa Kesey, Chief Financial Officer, DRB

Consultants, Invited Participants, and Others Present
Robert Johnson, ARMB legal counsel
Michael O'Leary, Callan Associates, Inc.
Ed Jonson, Advent Capital Management
Paul Latronica, Advent Capital Management
Tom Johnson, Timberland Investment Resources LLC
Mark Seaman, Timberland Investment Resources LLC
Tom Sarno, Hancock Timber Resource Group
Corbitt Simmons, Hancock Timber Resource Group
Melody McDonald, RCM
Peter Goetz, RCM
Victor Zollo, DePrince, Race & Zollo, Inc.
Greg Ramsby, DePrince, Race & Zollo, Inc.
Kristin Harper, Lord Abbett & Co. LLC
Anthony Hipple, Lord Abbett & Co. LLC
John Alcantra, NEA Alaska
Jack Kreinheder, PERS retiree
Larry Semmens, former ARMB trustee
Miles Baker, Senate Finance Committee
Christopher Poag, Alaska Department of Law

Chris Pace, AK State Employees Association
Pat Forgey, Juneau Empire

VICE CHAIR TRIVETTE welcomed two new trustees to the Board, Department of Administration Commissioner Becky Hultberg and Department of Revenue Commissioner Bryan Butcher.

PUBLIC MEETING NOTICE

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

APPROVAL OF AGENDA

<u>MS. HARBO moved to approve the agenda</u>. <u>MR. WILLIAMS seconded the motion</u>. The agenda was approved without objection.

PUBLIC/MEMBER PARTICIPATION, COMMUNICATIONS AND APPEARANCES

LARRY SEMMENS thanked the Board for the work it was doing and welcomed the two new commissioners. He said that as a former trustee he missed the challenge, the stimulation and the responsibility of being on the Board. He also thanked the staffs of the Departments of Administration and Revenue, whom he always found to be competent and very interested in the mission of the ARMB. He said he hoped to be a retiree soon and that his wife was far less confident about the money being there when he becomes actuarially insignificant in 30 years or so, and she is still living, which is most likely to happen. The last number the actuaries put out was that the retirement system was in excess of $9.7 billion in the hole. He is concerned about that, and he was sure everyone on the Board is concerned about that. It is not rocket science to figure out what to do about it, but it takes the same discipline that it takes for someone to forego today's gratification for the day that they might be retired. This Board has a role in that. The Board historically has simply adopted the actuary's projection of the actuarially required contribution rate, and that is fine, but when looking at the graphs that show huge state payments 15 years from now, one has to wonder how that is going to occur. One way to change that is to increase the contribution rate beyond the actuarially required rate. Another way would be to simply put more money in up front. Those are very difficult decisions that this Board could make, and the decisions would have political reverberations and ramifications. He encouraged the Board to consider these things because 20 or 30 years from now, and even 10 years from now, it will not be easier. The State will not have $12 billion in the constitutional budget reserve, unless something really significant happens very soon. He urged the Board to consider advance funding and to be bold in its mission to provide resources for the beneficiaries of the trust. He said he was thankful for every trustee's commitment to that.

JACK KREINHEDER said he retired January 1 after 30 years with the State. He urged continuing the discussion that the Trustee Study Group began at the November work session about the unfunded liability and the best way to pay that down in the future. He found the work session a very productive two days, even though others might not find it a success because the group did not find the magic answer or the perfect scenario that solved the problem. He would hate to see that work be dropped and for things to go into limbo for the next year or two. The parties all have the same interest to ensure the continued health of the trust funds.

JOHN ALCANTRA, government relations director for the National Education Association of Alaska, welcomed the two new commissioners to the Board and thanked the trustees and staff for the important work they do. He said Mr. Semmens's statements about the unfunded liability are incredibly valid. The Alaska Public Pension Coalition, of which NEA Alaska is a member, works on some options to try to get back to a dignified retirement with a defined benefit retirement plan. Since going to the defined contribution tiers, for whatever reason — and a big reason is obviously the 2008 stock market year — the unfunded liability has grown from $5.6 billion to $9.7 billion. This year the contributions to the Public Employees' Retirement System (PERS) and the Teachers' Retirement System (TRS) are about $477 million together, a significant amount of money. He hoped that before the end of the legislative session he would have information to share with the ARMB, the Legislature and others to try to look at some options. He urged the Board to look at potentially front-loading some of the payments; there is $12 to $14 billion in state savings, and now is the time to at least look at trying to front-load and pay off some of the unfunded liability.

MR. PIHL stated that work of the Trustee Study Group continues as it receives the additional information it requested at the November meeting.

VICE CHAIR TRIVETTE noted that Mike Barnhill, the Board's former legal counsel at the Alaska Department of Law, had been named deputy commissioner of the Department of Administration, and he offered congratulations on the Board's behalf.

APPROVAL OF MINUTES

<u>MR. PIHL moved to approve the minutes of the September 23-24, 2010 meeting as presented</u>. <u>MS. HARBO seconded the motion</u>. The motion passed without objection.

<u>MS. HARBO moved to approve the minutes of the December 2-3, 2010 meeting as presented</u>. <u>MR. WILLIAMS seconded the motion</u>. The motion passed with no objection.

REPORTS

1. Chair Report

Chair Schubert was absent to attend an AFN meeting on February 10.

2. Committee Reports

2(a). Audit Committee

Committee chair MARTIN PIHL reported on the committee's February 9 meeting in Juneau, at which they met the staff of the Division of Retirement & Benefits who conduct the employer audits, as well as the Treasury Division compliance team members. The committee received the schedule of employer audits, where the target is to complete 42 audits this fiscal year. There has been great progress and improvement in this area, but it is still an area of concern. The compliance team is seeing that procedures in the investment area are done in the right way. *[The minutes of the February 9, 2011 committee meeting are on file at the ARMB office.]*

3. Retirement & Benefits Division Report

MR. BARNHILL introduced JIM PUCKETT. He said Pat Shier had been appointed as acting director of the Division of Enterprise Technology, and Mr. Puckett had been named as acting director of the Division of Retirement & Benefits.

MR. PUCKETT distributed an information memorandum on the change to unisex retirement rates (instead of sex-distinct retirement rates) that Buck Consultants recommended as a result of their experience analysis. The Board adopted this and other assumption changes at the December 2-3, 2010 meeting. Gabriel Roeder Smith & Company (GRS), the reviewing actuary, had not agreed with Buck's recommendation on the use of unisex retirement rates when it presented its report to the Board at the December meeting. However, GRS and Buck subsequently reached agreement that the difference between the two reporting methods for retirement rates is insignificant, and Buck will use the unisex retirement rate in the June 30, 2010 actuarial valuations.

VICE CHAIR TRIVETTE inquired if Buck would still do research based upon men and women retirement rates, because he thought data trends could sometimes change radically in a period of two or three years.

MR. RICHARDS asked if using the unisex retirement rate would save money in Buck's services. MR. PUCKETT said he did not know, only that the difference between using the two methods was insignificant.

MR. WILLIAMS said he understood that the assumption change was a minor aspect of the whole actuarial analysis because it only affects the rate of retirement, and that experience showed that men and women were all retiring about the same time when they were eligible, no matter how long they worked.

3(a). Legislative Update

MR. BARNHILL reported on a list of bills the Department of Administration was following in the Legislature that dealt with the following: the unfunded liability issue; coverage of colonoscopy by the retiree health plan; retiree health plan to offer the same preventative health benefits as the active health plan; provision of a $100,000 occupational death benefit for peace officers and firefighters who die in the line of duty; allow voluntary deduction of dues from retirement benefits to retirement organizations; and provision of a survivor benefit for a particular situation.

4. Treasury Division Report

Department of Revenue Deputy Commissioner JERRY BURNETT said there were no significant staffing changes since the last meeting. He reported that the ARMB budget that was presented in the governor's [2012] budget is consistent with what the Board adopted and recommended in the Fall.

5. Chief Investment Officer Report

Chief Investment Officer GARY BADER reported that several new people were hired in the portfolio management section of the Treasury Division: Elizabeth Walton, Sean Howard, Alexander Sadighi and Jie Shao. James McKnight has moved over to work on compliance in the asset accounting section under Ms. Leary's supervision.

MR. BADER referred to the written report in the packet that included a record of the transfers and trust fund rebalancings that staff performed since the last board meeting. He said the ARMB has a large farmland portfolio, and farmland was one of the few asset classes that did not lose money in the recent economic down turn. The general plan in the farmland portfolio has been to rent the properties to operators. The Sonoma 12 property was leased to Kendall Jackson with an option to buy, but instead of exercising their option they turned the property back to the ARMB with $5.0 million as part of the agreement. The manager of that property is pursuing another lease or to sell the property.

MR. BADER said the date for the annual education conference was tentatively set for the week of October 24 in New York City, and staff would be contacting trustees to determine their availability. Staff was also looking at the week of May 23 to hold a one-day facilitated strategic planning session that board members have expressed an interest in. He urged trustees to contact staff with ideas on what they would like to see addressed.

MR. BADER reported that preliminary investment returns for the retirement fund were over 14% fiscal year to date at January 31, 2011. He emphasized that the number was an estimate and subject to change, depending upon the final real estate and private equity valuations.

MR. O'LEARY explained that ARMB uses current quarter timing on real estate reporting, in an effort to be more current in the valuation of the data, which is why it takes Callan Associates a little longer to issue the quarterly performance report. But some others in the industry lag the real estate reporting by a quarter, meaning they are able to generate the investment return more rapidly but without the real estate value for the quarter that just ended.

6. Fund Financial Report

State Comptroller PAMELA LEARY presented the financial report as of November 30, 2010. She said the PERS invested assets increased by 14% in the first five months of the 2011 fiscal year. The TRS invested assets increased by close to 12% in that period. The Judicial Retirement System invested assets rose by 8.5%. The National Guard Naval Militia Retirement system experienced a 9% rise in invested assets over the five months. The Supplemental Annuity Plan and the Deferred Compensation Plan net assets grew 8.5% and 9.5%, respectively.

MS. LEARY told the Board that the financial report for December was on line, and the total increase in invested assets for all the retirement systems was 16.8%, compared to 12.68% at November 30. She indicated that the regular financial statements and graphs were included in the meeting packet, and she would answer any questions on those.

Chief Financial Officer TERESA KESEY reviewed the Division of Retirement and Benefits supplemental financial report as of November 30, 2010. She noted that net contributions/withdrawals were a net withdrawal of approximately $52 million for the month of November.

7. Advent Capital Management LLC

ED JONSON and PAUL LATRONICA gave a presentation on the convertible bond strategy that Advent Capital Management manages on behalf of the Alaska retirement fund. *[A copy of Advent Capital's slide presentation is on file at the ARMB office.]*

MR. JONSON began with an overview of the firm and the portfolio management team for the Phoenix Convertible Income Strategy. He said that in the 15 years of this strategy they have never had a loss due to a bankruptcy or a default, which is clearly because of their rigid research and investment process. He said convertible bonds provide equity-like returns with much less risk than the common stocks. This strategy allows investors to participate in the up side of equities but gives a significant cushion of down side protection. Convertibles are simply a bond or a preferred stock with an embedded option that allows the holder to convert the bond into equities in the future at the investor's choice. Advent does not typically convert, but they will trade the value of the conversion premium.

Ultimately, convertibles combine the characteristics of the higher return of stocks and the lower risk of bonds, providing positive asymmetry.

At Mr. O'Leary's request, MR. LATRONICA explained the issuer's ability to force conversion on a security, which would typically be three to five years from issuance. He said that Advent, in managing $6 billion in this product, is a big player within this market. Oftentimes, companies may need to retire a bond and they work a deal with Advent to make an exchange to a new bond with an extra incentive.

MR. JONSON mentioned that the ARMB added to its investment with Advent, which they appreciated. He said that is very much in keeping with their experience in 2009 and 2010, when over 50% of the added capital in this strategy came from existing clients.

MR. LATRONICA reviewed the investment philosophy, as well as the investment strategy that focuses first on the credit story of a company and then on the equity story. Advent typically buys depressed priced securities that have good credit qualities, which are theoretically going to rebound, and that is how they find a lot of value and alpha. They have a clear buy discipline and a clear sell discipline that places them in the space between high yield type investors and more equity sensitive convertible players. Advent's strategy has had positive returns for 13 out of the last 14 years, the down year being 2008 when they were down 20%.

MR. LATRONICA said they run an average BB+ portfolio with a three-year average maturity. The current yield is 3.2%. The delta, which is the equity sensitivity of the portfolio, is 34%. Because Advent is a bottom-up investor, they tend to be overweight the index in the health care sector, which has very good balance sheets and good cash flow metrics.

MR. LATRONICA stated that the ARMB account returned 14.42% in 2010 versus the benchmark return of 13%. He said the first and second quarter returns were more credit driven, while options started to kick in towards the end of the year as equity markets started to move. He also presented the risk/return numbers of the Advent Phoenix convertible income composite portfolio compared to various indices over one, three, five, and ten-year periods.

MR. O'LEARY mentioned that there will be times when the strategy will underperform the S&P 500 Index, which people should bear in mind when the convertible strategy is part of a client's equity portfolio. Referring to the three years of notable underperformance prior to 2000, MR. LATRONICA said it was a good thing that Advent stuck to their discipline because people were smiling in the years to follow. MR. JONSON added that historically they have captured 70% of the up side of equities, but they have only taken up 14% of the market down side.

MR. O'LEARY observed that Advent participated very nicely in 2010, barely distinguishable from the S&P 500 Index return, but people have to remember that the credit market was so devastated in the fourth quarter of 2008 and the first quarter of 2009 that it was an extraordinarily positive general environment in which to work. MR. LATRONICA responded that if the equity market is up 20% or 30%, one should not expect Advent to follow that, but they will track initially 30% to 40% of that. That will change because they will cut back and sell things down as things go up, and go back to the median.

Addressing the 2011 outlook, MR. LATRONICA said they are still seeing instability in credit, and they still look for undervalued credits to invest in. The convertible market in general is closer to fair value than it was last year as things have richened up a little. However, there are parts of the market that are fair value and other parts that are less expensive, and there is a combination of value in that. The BB, single B area that is typically overlooked is the part of the market that they look at. The combination of stable credit going forward, the higher equity prices, updated GDP numbers, and good corporate earnings reports means Advent is set to participate nicely with that. If that does not work out because of events happening in Egypt and Europe and corporates do pull back, an allocation to convertibles will give the ARMB a cushion in the overall portfolio sense. Equity markets look like they could continue to run, but if they do not, Advent does not want to make that call right now. The convertible strategy is an auto-allocating asset class: it gets more bond-like in down markets and it gets more equity-like in up markets.

MR. JONSON stated that they do not predict interest rates, but research has shown that in periods of rising interest rates convertibles have done well because of their ability to participate in the equity part of the curve.

MR. JONSON also responded to MR. WILSON's inquiry about Advent's major competition and their edge in competing against them. MR. LATRONICA added that Advent is dedicated to the convertible strategy and has a substantial global footprint, while in many other firms convertibles are a small part of a large asset base.

MR. BADER asked if the Board should be fearful that Advent would get so many assets under management that their investment style would be diluted. MR. JONSON said their style would not be diluted because they will always stick to their bottom-up discipline. He said people ask him what they should be concerned about. For him, there are two things: new issuance (so keep an eye on where new issuance is going and if the universe is shrinking), and to watch how much of a part convertible arbitragers are of the market (leverage that starts getting up over 6 times is cause for concern because theoretically they are buying more securities and leveraging a lot more to make their strategies work because the securities themselves are richer). Also, if so many people invest in the convertible strategy, there is a technical aspect of richness/cheapness to watch in the index of convertibles, but he would not stake a major claim on that. Those things are pertinent for where the convertible market does not look as attractive any more. Right now, leverage is around 3% or below, on average, and it will not likely go anywhere anytime soon.

MS. ERCHINGER requested a description of Advent's research team and their methodology. MR. LATRONICA and MR. JONSON talked about the 11 capital structure analysts on staff who have expertise on both the equity side and the fixed income side of Wall Street and who cover the whole market.

VICE CHAIR TRIVETTE thanked the gentlemen for the presentation and called a scheduled break from 10:28 a.m. to 10:40 a.m.

8. Timberland Investment Resources, LLC

MARK SEAMAN and TOM JOHNSON gave a report on the timberland portfolio they have managed for the ARMB for two years. *[The slides for the TIR presentation are on file at the ARMB office.]*

MR. SEAMAN gave an overview of Timber Investment Resources (TIR), saying that since the last time they met with the Board they have had over 40% growth in assets under management and have added staff in an equal percentage to manage the assets. In 2009, the firm bought out the passive investors who helped start up the business, and they are now 100% owned by the managing partners.

MR. JOHNSON reviewed the mandate the ARMB gave TIR in 2008 to manage $100 million in committed capital. Since 2008, TIR has acquired properties in six southeast states encompassing 222 tracts. He also described the stages that TIR goes through in analyzing and acquiring properties, using an example to show that they inspected 75 properties to ultimately acquire two for the ARMB portfolio. The projected IRR (internal rate of return) of the properties when acquired was roughly 9%-10% nominal. The investment theme is cash flow considerations that sellers are looking to address either in the public market meeting dividend requirements or the private market servicing debt obligations. It is a theme that TIR is trying to take advantage of.

MR. JOHNSON also spent some time explaining the basic background of the timber asset class in the United States: softwoods and hardwoods and growing a specific product for every specific market, and the species composition in different regions where the tree growth rates are different.

MR. JOHNSON stated that although the ARMB portfolio encompasses six states it spans ten separate timber markets across the Southeast. Mill infrastructure determines the markets because logs are difficult to transport and the distance to a mill is usually no more than 90 miles. The portfolio products are diversified into all five key timber products: pine pulpwood, pine chip-n-saw, pine saw timber, hardwood pulpwood, and hardwood saw timber.

MR. JOHNSON explained how TIR looks at third-party data to determine the demand for forest product sectors like lumber, paper, etc. One area they look at is the historic and projected housing starts because roughly 30% of saw timber is used for new home construction, and the balance is used for remodeling and commercial activities, among other things. There was record housing construction from 2002 through 2005, and that has abated to shave down the housing inventory that is available. Going forward is the issue of working through that inventory plus the shadow inventory of bankruptcies. But the demographics still exist in the U.S. because of population growth to eventually rebuild some of that housing demand over time. From a timing point of view, TIR has put the ARMB's money to work ahead of a projected higher demand for home construction in the coming years. Data on saw log consumption and demand also shows a projected increase in demand in 2011 and 2012. Resource Information Systems Inc. data indicates that as the economy and the housing markets recover, the prices for saw timber will rise gradually, with an expected return to peak prices by 2014.

MR. JOHNSON talked about how the demand for wood bioenergy and the number of wood energy facilities being built or announced will supplement the demand for pulpwood in the South. Wood is carbon neutral, so wood becomes an alternative energy source for those states that want to meet the renewable energy standards they have adopted. Not all the plants that have been announced will be established, but there will be some additional demand. Plus, if housing improves and when it improves, the demand for OSB (a substitute for plywood) and other engineered products will also increase.

MR. JOHNSON stated that as economic conditions improve, and as TIR grows the pulpwood and the other smaller trees into larger timber, their forecast for harvest will increase. The current timber harvest forecast for 2011-2019 for the ARMB portfolio shows harvest volume momentum picking up as the foresters grow the trees and economic conditions change.

Regarding performance results, MR. JOHNSON said the ARMB's portfolio has only been in place for two years. The one-year return is -6% and the two-year return is 4.15%. That will change as time goes on and TIR has an opportunity to add value to the portfolio and the market cycles adjust themselves.

At MR. O'LEARY's request, MR. JOHNSON provided more information to educate the Board that TIR buys fee simple timberland that includes the land and the trees, that they control the time of harvesting, and that they have annual third-party appraisals of the investment per the contract with ARMB. MR. JOHNSON said the NCREIF Timberland

Index is considering moving to an annual appraisal standard for everyone. MR. O'LEARY remarked that if that move is successful, the timberland index would always have some lag effects because not everyone would do their annual appraisals in the same quarter, and so the index would not be super-directly comparable. MR. JOHNSON agreed that the index would be more comparable than it is now but never perfectly comparable. He added that the target for annual appraisals for the ARMB portfolio is May 31. MR. O'LEARY asked how the values are updated for the subsequent non-appraisal quarters. MR. JOHNSON explained that every quarter TIR makes two adjustments, one for the biological growth of the trees using scientific models, and one for the value of the existing timber using third-party pricing in individual markets. TIR also hires third parties to regularly review and update the inventory values, and they use the models on an interim basis.

MS. HARBO inquired if TIR replanted trees once the timber was harvested. MR. JOHNSON replied that they typically replant, but in some cases they find it more advantageous to sell the land and the timber together as a unit. It is an analysis they go through every time they look at the harvesting of timber. MR. SEAMAN added that it takes about six to 12 months to cut the timber, and they replant within the next six to eight months.

MR. PIHL and MR. SEAMAN discussed the impact of OSB (oriented strand board) on the market for large dimension lumber, and timing a particular harvest to get the best price for the raw material, which is based on the demand for an end product. MR. SEAMAN said TIR does a lot of analysis to see when to cut timber, as well as on when to do forest management like applying herbicides, fertilizing, and other practices to enhance the growth of the trees.

IAC member GEORGE WILSON remarked that timber is a very complex asset class but a great area to invest and where the skill of the manager is very important. He noted that the NCREIF Timberland Property Index is a relatively small universe, and the behavior patterns of one or two very large investors can influence the index. He added that the appraisal process in timber is about as squishy as anything he has ever seen because there are so many moving pieces. The short-term results are really difficult to focus on because of the appraisal process, the complexity of the asset class, and the indices not being that robust. MR. JOHNSON said he agreed one hundred percent.

Noting that the properties in the portfolio are domestic, COMMISSIONER HULTBERG asked if TIR had any concerns about the regulatory environment, which in the United States seems to be getting more and more difficult, and how that might impact costs.

MR. JOHNSON said it is almost a regional question. The regulatory environment is very different in the Pacific Northwest than in the Southeast, and there are a lot of explanations behind it. The business is a three-legged stool: finance and economics, science, and public policy. In the area of public policy the regulatory environment is something TIR is concerned about, as well as about bioenergy — what are the rules around what can be used for bioenergy plants that may have government subsidies of some sort? It is something that TIR monitors. But in the Southeast there has always been a long-term public/private partnership, and TIR has always been able to work through a set of regulatory guidelines and rules that are scientifically based, that protect the environment, and that provide sustainability but are not overly punitive to the landowners. MR. SEAMAN added that they have been successful in that partnership because the land base in the Southeast is very fragmented, with literally thousands of landowners and an average tract size of about 100 acres. The private landowners all vote, and so the folks that make public policy realize they cannot cram anything down.

MS. ERCHINGER asked if it was standard practice for the timber investment manager to manage the properties. MR. JOHNSON responded that everybody in the business either directly or indirectly has foresters who work among the trees, but there are different business models. Some managers are more directly linked to that activity and others are farther removed. In TIR's case, they are very closely linked and have regional offices in order to be in the local markets to understand the manufacturing entities and the people who work at those manufacturing entities. It allows TIR the opportunity to get inside into market anomalies that they can take advantage of. For example, a local market may have had a drought condition or overly wet conditions, and those create pricing responses that TIR may accelerate harvest to take advantage of or slow down harvest, depending upon the situation.

VICE CHAIR TRIVETTE thanked the gentlemen from TIR for the report.

9. Hancock Timber Resource Group

TOM SARNO, the senior portfolio manager, and CORBITT SIMMONS, senior portfolio analyst, presented a report on the timberland investment program that Hancock Timber Resource Group (HTRG) has managed for the ARMB since April 2009. *[A copy of the Hancock slides is on file at the ARMB office.]*

MR. SARNO gave an overview of the HTRG firm founded in 1985 and with approximately $9.0 billion in assets under management. Their composite since-inception return is 13.2% (before fees), and the one-year return is 8.3%. HTRG is a global manager with about 59% of the assets under management in the U.S. and the balance non-U.S., mostly in Australia, New Zealand and Brazil.

MR. SARNO stated that the ARMB chose timberland because the asset grows, it has a high correlation to inflation but a low correlation to other assets, and it has the benefit during low market periods of not being perishable. The objective of the timberland portfolio is to maximize total return through appreciation, capital preservation, and current income.

The portfolio is designed to be diversified across the United States and to different timberland ownerships.

MR. SARNO reported that last week HTRG added one investment to the two existing investments in the ARMB portfolio, but their report to the Board was for portfolio activity through December 31, 2010. The two investments so far are in the Northwest in Oregon and in the South in Georgia and Alabama, with a total net market value of $47 million. The investment last week was a purchase from Weyerhaeuser in Washington. That brings the total for three assets in four states to $77 million (out of the $100 million that the ARMB committed). HTRG is still looking at assets for the remaining $23 million in uncalled commitment. HTRG has returned $4.0 million in dividends since the account's inception.

MR. SIMMONS reviewed the quantitative specifics of the portfolio: diversification, returns, appraisal values, land sales to date, and projected rates of return. He said there has been no harvest to date on the Oregon property, and the Georgia/Alabama property has had harvest deferrals. Annualized total return for one year is -0.4% and since inception -0.8%.

MR. SARNO explained that during the period in which HTRG holds property they optimize value through forest operations and they also look for opportunities for small tract land sales that add value. Of the existing ARMB portfolio, they have sold 2,300 acres with a premium to the purchase price of 50%. Dispositions have slowed down over the last year or so, and HTRG is not actively putting parcels on the market to sell. So dispositions of higher and better use tracts will be lower in the short term and then picking back up with recovering fundamentals and market conditions.

MR. SARNO showed a graph of projected net cash flow from the Oregon and Georgia/Alabama properties for 2011 to 2020. The cash yield is low in the first five years because HTRG has made an active decision to reduce the harvest on the properties because timber markets right now are at a low point. They have taken advantage of the ability to inventory on the stump, let the timber continue to grow, and to sell it at a time when markets are better.

MR. SARNO described the new acquisition purchased from Weyerhaeuser in southwest coastal Washington that closed February 3. Alaska owns a little under 11,000 acres of a total 81,000-acre acquisition. He explained how HTRG breaks the larger acquisitions into smaller pieces and assigns them to individual clients. Hancock is unique in having developed its own export program instead of just selling exports to a middle man. They have seen a lift in value of $7.0 million for all their clients this year on 11 vessels with product that have gone over to Asia. He also showed a graph of projected performance for 2011 to 2020 for the ARMB portfolio including the new acquisition.

MR. SARNO next talked about the outlook for timberland markets in general. The price for timber markets (logs) has gone down significantly since 2007, along with housing starts. Timberland markets themselves did not really go down until after the global financial crisis, the reason being that timberland investors were looking through the cash forecasts of the current period expecting them to recover quickly and still valuing assets at a higher level. Since the global financial crisis the prices have gone a bit lower than most people expected, and the down turn has lasted longer. HTRG has seen reductions in timberland values in 2009 and 2010 but believes the values reached bottom in 2010. Looking at all the investments across the country and across the globe, HTRG was relatively flat this year (about +2.0%), while the NCREIF Timberland Property Index was down around 2.0%.

MR. SARNO stated that HTRG believes positive fundamentals will lead the recovery of timberland values. The lowest level of housing starts since the 1940s is accompanied by a low level of lumber consumption, but the lumber decline is not as deep as the housing starts decline because of an uptick in repairs and remodeling. As the consumption of lumber goes down, the price of lumber goes down, and as that happens the price the sawmills can pay HTRG and the investors for their raw materials also goes down. The price of saw timber really drives the cash yield of the investments, and there has been an active decision to defer logging. Real saw timber stumpage prices in the U.S. have fallen by 50% since 2005. Two thousand nine was the lowest cash yield ever recorded for the NCREIF Timberland Property Index, running about 1.0%. It started to pick up in 2010, and the pickup is coming from the U.S. South, where there was a short-term spike in timber prices. The timber export market to Asia is really robust, and the cash yields in the Pacific Northwest were boosted during 2010. HTRG expects that demand to hold, and that will have an influence on the Washington property.

MR. SARNO said that HTRG expects the U.S. housing sector to recover and that lumber demand should begin to rebound during 2012 with the recovery of new housing starts. However, HTRG understands that the forecast is dependent upon job creation in the United States; without jobs coming back, the housing starts forecast will get pushed out. HTRG firmly believes that underlying demographics support a housing recovery, and they think it is more of a question of when, not if, a recovery happens.

MR. SARNO stated that HTRG is harvesting less than what the properties are growing, so they expect appraised values to come up faster than the market outlook as HTRG adds volume and value on the assets themselves. Real internal rates of return, the discount rate used to purchase assets, will be somewhere around 6.0%, or about 9.0% in nominal terms. He and Mr. Simmons, along with HTRG's acquisition team and investment committee, will look at additional acquisitions for the remainder of the ARMB commitment that has yet to be invested and will try to balance those with the existing portfolio for good diversification. He said ARMB staff member Steve Sikes has agreed that Elk River, the recent purchase in Washington, was a good fit for the portfolio. HTRG expects the next acquisition will probably occur in the Lake States, the Northeast, or the South, as the portfolio is about 60% weighted in the Northwest.

MR. RICHARDS asked if HTRG had some potential acquisitions in the pipeline. MR. SARNO replied that they were looking at several assets, but some assets were for sale at a higher expected value than HTRG was willing to pay. HTRG has promised ARMB staff that they would be patient in putting together very good transactions for the timberland portfolio, rather than putting the money to work quickly in transactions that may be marginal. There is nothing in front of them that they expect to call capital on, but the pipeline is fairly robust right now. The ARMB portfolio is limited to the United States, but the acquisition pipeline is deeper outside of the U.S. currently, where HTRG can get better value. HTRG will continue to look at acquisitions until they find one that makes sense.

MR. O'LEARY asked how clients can trust that an asset's value is allocated appropriately among the various subgroups of clients. MR. SARNO explained how HTRG first breaks a property into parts using their internal modeling, where the modelers do not know which investors they are looking at. They take the characteristics, such a return on investments and cash yields, etc., and then they test it for fairness. Going beyond that, HTRG sends the data to a third party to determine if the allocation was done fairly and that every client has a mirror image of the overall acquisition. Within a couple of weeks of an acquisition, he sends the information to ARMB staff.

MR. O'LEARY asked about the valuation process once a property is acquired. MR. SARNO stated that all the assets they manage are third-party appraised annually. So within 12 months of acquisition they have third-party appraisals on the asset and every year thereafter. HTRG sends the appraiser the inventory volume on a property and the attributes. Then each appraiser looks at the asset three ways: a cost approach, an income approach, and a comparable sales approach. The appraiser develops a harvest schedule, looks at the comparable sales, and uses their own price forecast to come back with an appraised value.

MS. ERCHINGER questioned why HTRG parcelized the properties instead of allocating a pro rata share of a entire property among the investors. MR. SARNO said that certain investors, like the ARMB, do not wish to participate in a commingled investment vehicle and want the liquidity of an individual asset so they can make the decisions.

Responding to MR. RICHARDS, MR. SARNO stated that the ARMB holds legal title to each parcel, the boundaries are surveyed, and the parcel has legal access. So the ARMB can sell either an entire parcel or portions of it, regardless of what other investors that invested in the overall acquisition decide to do.

MS. HARBO inquired of staff if the ARMB's timberland guidelines limited investments to U.S. only. MR. BADER said that at present they do. He added that the Investment

Fiduciary Services (IFS) audit report contained a recommendation to look at international timberland investments, however, staff was not taking up that recommendation at this meeting. He and Mr. Sikes have been discussing that and will be discussing it with the timberland investment managers to see whether staff would recommend that the Board accept the IFS recommendation.

MR. WILSON remarked that investing in non-U.S. timberland is complex because it involves tax laws, currency risks, export markets, etc. HTRG has a fair amount of expertise in non-U.S. investing but not many people do, and not many people have been successful at it.

MR. BADER stated that having a separate account also gives the Board the flexibility to terminate the manager if a problem develops. Staff has found that experience in separate accounts is preferable to commingled funds.

MR. PIHL asked if many of HTRG's previous holdings in Washington were acquired from Weyerhaeuser over time. MR. SARNO replied that a portion of the holdings were acquired from Weyerhaeuser, one portion was Champion's, one was Green Diamond, and also a portion that was owned by Harvard.

VICE CHAIR TRIVETTE thanked the gentlemen for the presentation. He then recessed the meeting at 11:50 a.m. for the lunch break. The meeting reconvened at 1:15 p.m. with seven trustees present.

10. RCM SRI Presentation

MR. BADER gave a brief history of the Alaska State Pension Investment Board first offering a socially responsible investment option for participant-directed plans. The fund was successful initially and then had its ups and downs. Eventually, the owner of the fund merged with a mutual fund. Staff visited the acquiring firm and talked about their strategies, fees, etc. and concluded that participants would be better off with another approach, if available. RCM came up with a suggestion, which was later approved by the board, and today's was the first presentation on the RCM socially responsible investing fund.

RCM relationship manager MELODY MCDONALD and senior portfolio manager PETER GOETZ were present to talk about the ESG (environmental, social and corporate governance) portfolio that started with about $25 million in October 2008 and has grown to about $80 million, partly due to market appreciation and RCM management and partly from participant contributions.

MS. MCDONALD gave a brief overview of the global RCM firm, saying the personnel has been very stable, with one junior analyst leaving to work in investment banking and one portfolio manager who left in early 2010.

MR. GOETZ explained that RCM partnered with a leader in ESG research that, based on their proprietary models, determines a score on a ranking for every company in the broader universe. From that score, they construct a portfolio of different universes based on style and size. RCM chose the U.S. large cap and mid cap ESG portfolios, and then RCM looks at them strictly from an investment perspective. RCM is attempting to identify what they think are the best companies based on risk and reward and to construct a portfolio relative to the S&P 500 Index. The difference between what the universe looks like and what the index looks like from a characteristic standpoint can sometimes be small and sometimes large.

MR. O'LEARY said this was an important subject for the Board, in terms of performance expectations. The manager is attempting to outperform an index that includes securities of companies in which they cannot invest. He recalled that IFS had commented about whether the broad market was an appropriate benchmark, but that is the ultimate goal, and the manager has accepted that charge. The socially responsible index is comprised of approximately 400 large cap companies, and the types of companies that are in a broader market index tend to be some of the commodity companies and others of that ilk. Everyone has to understand that if those types of companies are doing very well in the marketplace for a period of time, this portfolio would underperform in that same span.

MR. GOETZ agreed and said RCM ESG has actually had better success in identifying commodity oriented businesses and companies. Their challenge has been in technology, which is not exactly what one would expect. Based on research and the methodology of constructing a universe, one glaring example is that Apple Computer is restricted from investment based on some issues with their supply chain out of China, as well as not being very forthright with their corporate governance and not showing a lot of initiative toward sustainability. Over the last couple of years Apple has been one of the largest contributors to performance for the broader market, and not being able to invest in Apple Computer has actually cost the portfolio anywhere between 200 and 300 basis points of performance. RCM does hold Apple Computer in its large cap core growth portfolio, which the ARMB is also invested in.

MR. GOETZ stated that the ESG portfolio underperformed the index for calendar 2010 (13.66% versus the S&P at 15.06%), and it substantially outperformed the index for calendar 2009 (32.62% versus the S&P at 26.46%). He stressed the benefit of looking at returns over the context of a longer period because sometimes strategies work in the shorter period and sometimes they do not. Oftentimes, it is not really reflective of the ability of an investment manager to identify very strong companies and very strong themes, which are played out over a longer period of time. It is important to understand what happened over the shorter term, and to make changes to a portfolio if necessary, but to focus on how it does over a long-term period. Since the portfolio's inception in 2008, which is not a long period, the ESG portfolio was up 16.67% compared to 16.24% for the S&P 500. He also reported that performance has been strong so far in 2011.

MR. GOETZ spent a little time talking about what sector weightings and stocks worked in the ESG portfolio in 2010, what decisions hurt performance, and what changes the portfolio team has made. He noted that the portfolio began in 2008 at a very uncertain time in the global economy, and a lot of investors were getting very cautious. RCM was looking for what kind of a response there would be, both on a monetary basis as well as a fiscal basis. They believed that the steps being taken actually were strong enough such that the economic recovery and the market recovery subsequent to that would be more similar to past recoveries than not. As a result, starting in about April 2009, RCM switched the portfolio over from being much more defensive to being much more pro-cyclically biased.

MR. GOETZ said that RCM's investment philosophy and process is bottom-up driven, but in the context of looking at a company and looking at a market they have to be cognizant of the economic environment they are in. That is especially important when there is a great deal of uncertainty or if you are at an inflection point - either heading up or heading down. So during this period they incorporated a little bit more economic analysis and a bit more top-down analysis in structuring the portfolio, and as a result of that they were more positively biased toward the outcome, and a result of that maintained a pro-cyclical posture for the portfolio. That means investing in companies that are going to gain leverage as the economy improves. Historically those have been industrial companies, basic materials companies, commodity oriented companies, energy, and consumer discretionary companies. What historically has been more defensive has been consumer staples and health care. So they had a portfolio more biased toward that. They were able to add a lot of performance to the overall returns through stock selection within those cyclical industries. Conversely, they struggled a bit in the more defensive areas and had negative returns in their stock selection in health care and consumer staples. Technology, which historically has been a more cyclical industry, really did not participate in the economic recovery to the extent that it has historically. In addition, as the benchmark universe changed a bit, it pushed them into some of the larger cap technology companies that have actually struggled relative to the rest of technology. So the portfolio was positioned appropriately from an economic standpoint, and they were able to exhibit very strong stock selection within those particular industries, and the combination of those two was enough to outweigh some of the negative stock selection that they had in health care and consumer staples.

Looking at calendar year 2010, MR. GOETZ said the overweights that helped were industrials and consumer discretionary, strong companies that had been effectively left for dead in the down turn. The underweights that helped were in the more defensive areas - utilities and financials. Regarding what hurt performance, technology did not participate like it has historically, and the technology companies RCM was able to invest in were the slow-growing companies; investors had moved away from those towards faster-growing technology companies, especially cloud computing types. Other underweights that hurt were in consumer staples and energy. The other stocks that helped really boiled down to identifying solid businesses, such as Starwood Hotels and Resorts and Eaton Corp., that had been sold down to extraordinarily cheap levels because people were fearful of the outlook for those companies based on the economic environment.

MR. GOETZ described the characteristics of the ESG portfolio of 58 stocks as of December 31, 2010. He noted that there is no growth bias in the portfolio, although they have a bit more active emphasis toward growth right now. As they feel that other sectors of the market are more attractively priced or positioned they will move that bias back more toward the S&P 500. He said they tend not to take very large sector weights because the idea is to outperform the benchmark through stock selection and not necessarily through sector weightings or macro bets.

MR. GOETZ stated that RCM is still relatively positive on the economic environment for the U.S., and they are positive on the outlook for the U.S. equity market. Stocks are relatively attractive but not the deal that they were in 2009. Of course, the economic and political environments are a lot more stable than they were back then. Historically, the S&P 500 Index tends to normalize at a P/E multiple of earnings of about 15 times to 15.5 times; RCM's expectations are that in 2011 the earnings on the S&P 500 are going to grow to anywhere between $95 and $100. Applying that to 15 times to 15.5 times for the forward P/E multiple, it is looking at an S&P 500 of 1500 or a bit above. Currently, it is around the 1300 range. Without a lot of heroics, the market probably has 15% to 20% appreciation potential over the course of the balance of the year.

MR. GOETZ said one of the biggest risks is the potential for sovereign debt risk in Europe to spread to the U.S. and spark a double-dip recession. He did not think that was on the table anymore. The biggest issue is commodity prices throughout the world and what the response will be by the emerging market countries. The world has already seen responses from China, India and Brazil. Raising rates in those countries has not helped their particular markets, as emerging market stocks have underperformed. RCM has tried to find companies that are actually going to benefit from the high commodity prices, like on the industrial side that have the ability to pass through prices. RCM is trying to determine where they think the environment is going to be and what the risks are and then structure a portfolio that will take advantage of that. If commodity prices continue to run amok, RCM will have to rethink how long they want to have a growth bias to the portfolio. Their anticipation was that they would probably be fine out to 2012, but given the rapid acceleration in prices they will likely have to rethink whether that is going to last through 2011.

VICE CHAIR TRIVETTE thanked Mr. Goetz and Ms. McDonald for the report and for stepping in to manage the socially responsible fund for the ARMB.

11. Micro Cap Investment Manager Search

MR. BADER stated that at the September 2010 meeting the Board authorized a manager search for one or more micro cap equity investment managers. Micro cap managers invest in publicly traded companies that have market capitalizations between $25 million and $500 million. Staff asked Callan Associates, Inc. to conduct a manager search and provide a list of managers that might be successful proposers.

MR. O'LEARY described the Callan manager search process. He said that because the micro cap is highly volatile Callan believes it is important that there be multiple managers and not a single manager. The two primary drivers behind that view are that capacity is very limited in the micro cap space, and the managers who tend to gravitate to this space often have a pronounced preference toward a growth style or a value style in their investment approach. Ideally, there would be strong candidates in each camp that could be blended together to reduce some of the inherent volatility in micro cap land. It is very common to see micro cap products be closed and then something happen along the line that they reopen. Callan identified nine qualified firms that were a mixture of growth-oriented and value-oriented, and created a report in November 2010 for ARMB staff.

MR. BADER stated that staff reviewed all the data in the report from Callan and considered each firm's investment style. From their review, staff determined that two firms, one growth and one value, looked acceptable for a contract award with the ARMB. Staff did on-site due diligence with those two managers: DePrince, Race & Zollo, Inc., and Lord, Abbett & Company. Staff talked with their investment teams and are confident that they have back office capabilities that are appropriate for an institutional account such as ARMB's. The two managers would be making presentations at this meeting for the Board to decide if they were suitable to manage a micro cap mandate.

MS. ERCHINGER asked, if down the road one of the managers did not perform, if the recommendation would be to replace a growth manager with another growth manager, for example. MR. BADER replied that if it were subsequently determined that a manager was not meeting the needs of the Board and they were underperforming, or if there was a significant event in the firm, such as the loss of a portfolio manager or something that made the Board uncomfortable with the relationship, then staff would recommend that the Board terminate that manager and initiate a search for another manager that had that investment style.

MR. O'LEARY said the intent at the outset was to look at investing up to $75 million with each firm. He asked trustees to bear that in mind when listening to the presentations because that much money would be a significant part of a manager's book of business in this narrow little product area.

11(a). DePrince, Race & Zollo, Inc. - Micro Cap Value Income

VICTOR ZOLLO, JR., one of the founders of DePrince, Race & Zollo, Inc., introduced GREGORY RAMSBY, a partner and chief portfolio manager for the small cap and micro cap investment disciplines. *[A copy of the slide presentation is on file at the ARMB office.]*

MR. ZOLLO began by describing the firm of DePrince, Race & Zollo, Inc. (DR&Z) that was formed almost 16 years ago, saying they are a smaller firm that has been totally dedicated and singularly serving the institutional marketplace since its inception. DR&Z is a value firm, and everything they do is predicated on their investment discipline that was created 25 years ago in a large cap value product. It is the cornerstone of the firm, and the small cap and micro cap disciplines, which they have been running respectively for 16 and 14 years, have come off of that discipline. Total firm assets are $6.0 billion across the spectrum of the investment disciplines. DR&Z has always managed each one of the investment disciplines with an eye to some level of asset cap. Their mission statement from 16 years ago was to protect the investment methodology, which hopefully protects their clients. The reason for the asset caps is really to protect their ability to generate the alpha that the institutional clients deserve. Finally, DR&Z has always served the public fund sector.

MR. ZOLLO stated that DR&Z has the same investment team of 24 professionals that has grown together as partners over the years without losing any key personnel. The firm has put in place an equity transference program to broaden out the number of partners to seven. They are implementing a program for the third generation in the firm to participate in ownership, in order to serve the best interests of all the clients.

MR. ZOLLO stated that DePrince, Race & Zollo has always believed that undervalued stocks with above-average dividends give them a unique opportunity to generate alpha for their clients but to do so with less risk. It is entirely a bottom-up approach to investing, which is why they have the hard asset caps. Because they are a bottom-up firm, there are opportunities for them to take profits and move to the next idea. They are an active manager looking for the better risk/reward prospect, so they do not want to get so large that trading can be impaired.

MR. ZOLLO explained that DR&Z has been doing yield investing throughout all the economies and markets, and there are reasons why they still today so strongly believe in their work. They believe that the dividend yield provides a bit of protection in downward markets. He showed the cumulative performance of the Russell 2000 Value Index and the Russell 2000 Growth Index since inception of the indices to illustrate that dividend yield certainly provides a meaningful portion of the market's return (the Russell 2000 Value has a 39% increase above the total return).

MR. ZOLLO stated that DR&Z has been able to protect their clients during down markets, but in their micro cap they have had the unusual ability to participate as markets are more robust.

MR. RAMSBY reviewed the buy decision process on how a stock gets into the micro cap portfolio. A stock has to meet three criteria at the same time to get into the portfolio: (1) a market capitalization of less than $500 million; (2) each individual security has to have a dividend yield of at least 1.0%; and (3) a fundamental catalyst that indicates a company's prospects will improve. The resulting universe of 1,000 or so stocks is winnowed down to a subset that is trading at its cheapest relative valuation. DR&Z uses a fact-set-driven valuation model that ranks the 1,000 stocks from one to 10 based on the 10-year relative valuation for yield, price to book, price to earnings, and price to cash flow. Then comes the bottom-up fundamental research part of the process where the analysts dig into the stocks defined as the cheapest and project the fundamentals forward. They are trying to find something inside a business that is changing for the better, that will give the market a reason to revalue the stock higher. DR&Z believes that without that catalyst you have a cheap stock that is going to stay that way for a long time. Once DR&Z finds something that meets the three criteria they will set valuation parameters and be able to get a risk/reward score for each stock. They are only looking to buy stocks that have at least two times the up side versus the down side.

MR. RAMSBY next reviewed the criteria that trigger a sell decision, which is the inverse of the buy decision. If the market cap goes above $500 million or if the dividend yield on any individual security falls below 1.0% then the stock has violated that criteria and will be coming out of the portfolio. Also, if the stock reaches or approaches the relative valuation price target that was set when DR&Z bought it, then obviously the stock is a candidate to come out of the portfolio. Finally, if the catalyst that DR&Z identified as the reason for buying the cheap stock turns out to be wrong, either on the magnitude of the catalyst or the timing of the catalyst, then it is a really cheap stock that is probably going to stay that way because there is no reason for other investors to seek out this particular opportunity and want to buy it. On the sell decision, if any one of the criterion independently is violated then the stock is going to be removed from the portfolio.

MR. O'LEARY asked if DR&Z would sell something with a market cap of $499 million when they bought it if the company grew to $500 million the next day.

MR. RAMSBY replied that they try not to buy something that was $499 million market cap because if it went up at all it would be out of their universe of stocks. The vast majority of the names when they buy are going to be in the $200 to $300 million range, and they would not be interested in looking at buying something that is that close to their market cap cutoff. He assured Mr. O'Leary that their $500 million market capitalization is a number that the ARMB can take literally. He said the average market cap of the portfolio is about $250 million. And looking at the portfolio at any point in time one would never see any stocks that are $600 million market cap, although there may be a company at $502 million that is on its way out of the portfolio. It is important to keep the portfolio true micro cap and not become one of the ARMB's small cap managers. He manages both the DR&Z small cap and the micro cap portfolios, and, with each fund having roughly 75 stocks, the overlap between those two funds is three or four stocks. The portfolios are managed distinctly and there is a very distinct cutoff at the $500 million market cap level.

MS. ERCHINGER inquired about the turnover rate, given that the sell decision can be prompted by identifying stocks with better risk/reward on the buy side. MR. RAMSBY stated that the process is fairly active, and the turnover is somewhere in the 80%-100% range. True turnover is in the 50% range on an annual basis, and the rest of the 80%-100% turnover number is capturing trading around core positions as they keep an eye on maintaining the risk/reward profile of the portfolio. If they do not bank the relative outperformance and wait until the stock reaches the price target, the market could go lower and they will have a lot of stocks that do not have the same kind of risk/reward ratio as when they bought them, meaning they do not have the same down-side risk protection that they like to keep at all times.

MR. RAMSBY presented three of the larger positions in the micro cap value portfolio and went into more detail on the apparel company Cherokee Inc. He said that 20% to 30% of the portfolio is usually in the top 10 holdings, and he showed a list of the top 10 names at December 31, 2010. There is a very wide variety of businesses and every kind of industry represented in the micro cap universe. While the portfolio is constructed bottom up, it winds up with a lot of cyclical exposure, particularly industrial cyclicals and basic industry and consumer cyclicals, and then reasonable exposure in some of the more defensive areas. The biggest outlier for them right now is energy, which is strictly due to relative valuation. Since the bottom of the market in 2009, the energy stocks in the universe have doubled and tripled and they are no longer screening cheaply, and therefore DR&Z cannot own them. It has been hurting performance a little bit with energy stocks doing so well, but they make up the alpha somewhere else.

MR. RICHARDS commented on the recent explosion of ETFs built around yield and asked if it affected DR&Z's approach at all. MR. RAMSBY said not really, that they have seen some changes on the margin in the way some of the stocks act when money is flowing into those ETFs, but it is really not a micro cap phenomenon but more of a small cap phenomenon. There is a micro cap ETF, but to his knowledge there was no micro cap value ETF. There is not very much money in the micro cap ETF relative to the other ETFs going up the market capitalization spectrum.

MR. WILLIAMS pointed to the $5.8 billion in total assets under management and asked how much was in the micro cap strategy. He also asked what additional allocation the firm could absorb, both from an internal ability to manage as well as any impact on the universe of options from which to choose.

MR. RAMSBY stated that if DR&Z were fortunate enough to work with the ARMB, Alaska would be the last piece of business they would take, and the micro cap product would be closed. DR&Z is just below $400 million and has had a long-standing goal of closing the product in the $400 to $450 million range. Some of that [capacity] has been taken away through appreciation over the last several years. Their asset cap goal for micro cap has not changed since they started the product 14 years ago; it is their best guess as to how much money they think they can prudently run in this space.

Citing his 25 years of experience, MR. ZOLLO said that [asset caps] are hard things to get perfectly. DR&Z has always tried to honor the asset caps, maybe overly zealously so at times. He said he told ARMB staff during their on-site visit that if DR&Z were to find capacity it would be their hope and intent to save that for the Alaska retirement system, if that was the ARMB's choice. DR&Z has the ability in emerging markets and international and global products to have great continued growth in the firm, and large cap and small cap still have capacity. They believe they can grow the firm but not try to be excessive in gathering assets.

At VICE CHAIR TRIVETTE's request, MR. RAMSBY described how the four analysts on the team for small cap and micro cap do their research.

MR. ZOLLO stated that DR&Z wants their clients to have a report card to see that they are not drifting outside their style and to understand how they add value through activity. He showed a graph from 1998 to 2010 to illustrate how they consistently add value through the buy/sell decisions the portfolio team makes every day. Another graph showed the equity characteristics of the micro cap value portfolio, and he said the characteristics have not changed in 25 years.

Referring to a graph of performance over different periods since the micro cap inception in 1997, MR. ZOLLO said one does not build a record of returns and peer rankings easily. There are times when DR&Z has struggled and has been, and will be, out of favor. Clients who have been with DR&Z have endured those periods and come out on top over the long term. He said DR&Z would like the opportunity to do that for the Alaska Retirement Management Board.

11(b). Lord, Abbett & Co. - Micro Cap Growth Equity Management

KRISTIN HARPER and ANTHONY HIPPLE of Lord Abbett & Co. joined the meeting to talk about the firm's micro cap growth equity product. *[A copy of the slides for the Lord Abbett presentation is on file at the ARMB office.]* MS. HARPER, the client relations person, quickly reviewed some facts about the independently owned firm itself, and said it is focused solely on investment management. She said Mr. Hipple is the co-portfolio manager with Tom O'Halloran of the micro cap growth product, and is an analyst on the small cap team.

MR. HIPPLE stated that he and Mr. O'Halloran make the final investment decisions for the micro cap growth portfolio. There are sector specialists within the investment team who are focused only on small and micro cap stocks. He does technology and internet stocks primarily, and the others cover financials and consumer, health care, and industrials. Combined as a team, they have seven years of total small cap growth experience.

MR. HIPPLE reviewed the core beliefs and philosophy for managing money. They look for micro cap companies that are market leaders or gaining market share and have the potential to be small and mid cap stocks. They are primarily looking for sales and earnings growth and revenue growth, and are focused on special companies that are innovative or disruptive in markets. Lord Abbett believes these companies have greater potential return due to that upside in general. They have a fundamental bottom-up approach and do not construct the portfolio based on sectors. They have a disciplined and repeatable process that employs in-depth fundamental research. They continually monitor risk, and their risk-adjusted returns per unit of risk are very high. They buy growthier stocks, and are at a market multiple or at a premium; that is primarily due to their high quality threshold with limited leverage on the balance sheet and positive earnings.

MR. HIPPLE showed a diagram of the micro cap growth investment process. They start by screening 2,500 companies down to a manageable universe of 600 companies. Fundamental research starts in stage two of the process, where they narrow the universe down to 300 companies by looking for strong businesses versus mediocre, management with vision and execution, favorable industry conditions, and market leaders that can gain share against an incumbent. Networking is a major theme within the portfolio, and they also focus on med-tech type of companies that are really saving and innovating in people's lives. Stage three is looking for good company versus good stock, and this is where they model the near, intermediate and long-term earnings and revenue growth of each company. This is where they believe they do better than their peers because they are able to recognize the early market leaders two or three years before the market does, and that allows Lord Abbett to capture significant up side before a traditional manager would buy that company. They also look at the rate of growth and would say that faster is better than slower, and they look at acceleration of growth versus deceleration (intending to sell a stock way ahead of the market if the growth is dropping). They look at the embedded market expectations, something that the Lord Abbett micro cap team has done very well in identifying, to decide when to trim or take profits. Valuation is something they look at continually.

MR. HIPPLE picked a stock in the portfolio as an example to describe how Lord Abbett applies each step in their investment process.

MR. O'LEARY inquired about Lord Abbett's median market capitalization of $700 million versus the prior micro cap value manager's absolute market capitalization cutoff at $500 million. He said half of Lord Abbett's portfolio market cap exceeds $700 million.

MR. HIPPLE responded that it is because they have been successful with the returns that the market cap is a little higher currently. Traditionally, they do not establish a new micro cap position if it is above $750 million in market capitalization. The top end range of the market cap of the index today is $1.2 billion, so he regards that if a company is within the market cap range of the index then he should be there because a client is buying active exposure. He did not think a hard ceiling was correct because if the market moves up 30% between now and next year, would a manager move their hard ceiling of $500 million up 30%? Lord Abbett likes to use the top end of the index. When the Russell Micro Cap Index rebalanced in June, they looked at the top end of that and said that $750 million is the right range and that they would not buy a new company above $750 million. They find the sweet spot of a new investment between $250 million and $500 million. But they also do not want to sell a name that they think is going to double because it is $1.2 billion market cap. If they think it still offers good near-term potential in the next 12 months, they believe it is their fiduciary duty to continue to hold that stock. However, they are much more inclined to take profits and trim on positions that move north of roughly $1.1 billion.

MR. HIPPLE confirmed for MR. O'LEARY that at the time of purchase there is some limit but it is related to the then-current conditions of the market, and Lord Abbett does not have a mechanical forced sale.

MS. HARPER mentioned that the investment team has a quality bias, and sometimes the stocks that they buy are going to be higher up the cap range because the team is looking for companies with profits that have a senior team that is a market leader and so forth.

MR. O'LEARY said all the growth-oriented indices tend to have a greater market capitalization than the companion value indices.

MR. HIPPLE reviewed the sell discipline of the micro cap growth portfolio, saying it was the mirror image of the buying process. He noted that many times they find that growth companies have not hired the correct sales people and are not able to continue the growth rate. Lord Abbett has a diversified portfolio, and looking at their outperformers versus their laggers, what they do very well is control losses when there is a fundamental deterioration. They try to make sure that the winners provide much more alpha than the losers.

MR. HIPPLE described the growth parameters of the micro cap portfolio that generally holds 75 to 100 stocks. The largest positions are traditionally in the 2% to 3% range. The top ten holdings typically account for less than 25% of the portfolio.

MR. HIPPLE presented the portfolio characteristics and highlighted that the price/earnings ratio is at a premium compared to the index, but the growth rate is significantly higher, at 22% versus the index's 17.9%. The ratio of total debt to total capital at 18.0% is significantly below that of the index. He also talked about the portfolio's sector underweights and overweights at December 31, 2010. He also highlighted two of the largest holdings, one in health care (home dialysis) and one in information technology (industrial fiber laser).

MR. O'LEARY inquired about Lord Abbett's assets in the micro cap area and what the cap was. MR. HIPPLE said they have approximately $260 million in the strategy today, and they would shut the strategy at $500 million in assets.

MR. HIPPLE reviewed the rates of return, noting that over a ten-year period they have beaten the benchmark index by almost 800 basis points, over five years they are almost 1,100 basis points ahead, and the three-year number is 5.0% ahead of the index.

MS. HARPER mentioned that the materials included two pages of attribution analysis to show that most of the alpha has come from stock selection. MR. HIPPLE said that even though technology has outperformed, they have a lot of diversity within the portfolio because they look at stocks on an individual name basis.

When speaking about the firm's proximity to New York City, MS. HARPER said it is company policy that the analysts and portfolio managers share meetings. If they have a mid cap growth company that might be of interest, and one of the competitors is micro cap, Mr. Hipple and the team are invited to the meeting. Being all under the same roof works well for sharing ideas. Another unique aspect of Lord Abbett with regard to micro cap and small cap is that the trading department is almost like an extension of the team, meaning they have a specific trader they work with who knows the style of the team and what they are looking for. It gives an advantage and saves the clients a lot of money in trading between small cap and micro cap.

Responding to MR. PIHL, MS. HARPER said Lord Abbett runs four separate accounts in micro cap, and assets are not at capacity where they should not be taking any more. It is very liquid, and the teams can easily handle the assets that have been brought on board and have room for more. The investment teams look at micro cap as a sort of breeding ground for the small cap growth portfolio. MR. PIHL asked if performance differed among the micro cap accounts. MR. HIPPLE said not unless there is a restriction that they could not buy a gambling company or liquor company, for example. The team models all the separate accounts the same.

MR. HIPPLE stated that traditionally in a bull market the micro cap strategy captures a lot more up side, and they traditionally protect more on the down side in a bear market than the average manager. Their beta traditionally is less than the benchmark, which is why their per average unit of risk looks better. They are buying higher quality companies, which is lowering the risk within the portfolio. The preponderance for profitability and earnings definitely lowers the risk.

MS. HARPER closed by saying that the ARMB was a very valued client in small cap equity, and Lord Abbett would offer a 10% discount if they were hired in micro cap growth. She thanked the Board for its business.

VICE CHAIR TRIVETTE called a scheduled break from 3:03 p.m. to 3:14 p.m.

11(c). Discussion/Action: Selection of Micro Cap Manager

VICE CHAIR TRIVETTE posed a question regarding the amount of the investment that staff was recommending for a micro cap portfolio.

MR. BADER said the action memo stated up to $100 million to two managers. He added that when Mr. Williams asked DePrince, Race & Zollo about their asset cap, they did not answer directly. Staff's understanding with DR&Z was that they would accept $50 million in assets, if selected, because they had a hard cap. He and Mr. Bigelow thought that even at $50 million DePrince, Race & Zollo were the best micro cap value manager that they could select. When staff met with the firm, they also explained about two pension funds merging where the successor pension fund may want to go in a different direction, which if that materialized would free up $25 million in capacity. Since DR&Z could not commit to that today, he thought that was why they were not as direct as they should have been with Mr. Williams. Lord Abbett does not have that restriction. Given the DePrince, Race & Zollo restriction, staff's recommendation to the Board was to approve up to $75 million for each manager, and staff would try to get capacity for the other $25 million from DR&Z.

MS. HARBO asked for clarification about Lord Abbett's 10% discount offer on management fees. MR. BADER gave his interpretation and noted that fees are always negotiable, although micro cap is a very limited asset class.

<u>MR. PIHL moved that the Alaska Retirement Management Board select DePrince, Race & Zollo, Inc. and Lord, Abbett & Company to invest up to $75 million each in a micro cap portfolio, and direct staff to enter into investment contracts with those managers subject to successful contract and fee negotiations</u>. <u>MS. HARBO seconded</u>.

MS. ERCHINGER stated that she was fine with staff's original recommendation to invest up to $100 million with each manager, if that was what Mr. Bader preferred.

MR. BADER stated that he would prefer to keep the option of investing up to $100 million, in case DePrince, Race & Zollo were able to take the larger amount of money.

There was no objection from the maker of the motion and the second to changing the amount of investment to "up to $100 million each" (as written in the staff report).

MR. WILLIAMS asked if a micro cap equity investment was creating a new asset class or if it would be subtracting from another asset to create a micro cap portfolio.

MR. BADER stated that he had reported to the Board after the annual manager review meeting in Denver that one of the recommendations was to look at the small cap, and after the micro cap manager search, get back to the Board on how to possibly structure this portfolio. He said it might take away from an existing manager, but he considered the micro cap investment to be small cap equity.

MR. O'LEARY reminded everyone that an active small cap manager had been terminated, and from his perspective he viewed micro cap as a segment of the whole smaller cap portion of the domestic equity portfolio.

On a roll call vote, the motion passed unanimously, 8-0.

VICE CHAIR TRIVETTE thanked Mr. Bader and staff for pursuing another small segment in an effort to add value to the overall retirement fund. He also thanked Callan Associates for their work on the manager search and to ARMB staff for their due diligence on the pared-down list of nine firms to get to what appear to be two high-quality micro cap equity managers. He added that the Board just expects the exceptional from its staff and consultant, and they provide it, and the Board appreciates their work.

12. Reconsideration: Resolution 2010-29 Relating to PERS/TRS Experience Analysis and Assumption Change Recommendations
Action: Resolution 2011-01

A brief discussion ensued about the procedure for reconsideration and that staff would provide a replacement resolution (2011-01) on the following day that would repeal Resolution 2010-29.

The Board's attorney ROB JOHNSON suggested deferring any action until the following day so that he and staff could double-check and make sure that the replacement resolution would do everything that trustees expected it to do.

MR. PIHL indicated that he would not be present on February 11 to vote, but if his vote was needed he would be an affirmative.

VICE CHAIR TRIVETTE rescheduled this item to immediately following lunch on the second day of the meeting.

RECESS FOR THE DAY

VICE CHAIR TRIVETTE recessed the meeting for the day at 3:30 p.m.

Friday, February 11, 2011

CALL BACK TO ORDER

CHAIR SCHUBERT was present on the second day and called the meeting back to order at 9:00 a.m. Trustees Trivette, Harbo, Erchinger, Richards, Williams and Schubert were present, and Commissioner Butcher arrived mid-morning.

REPORTS (Continued)

13. Capital Market Assumptions - 2011

MR. O'LEARY informed the Board that Callan's numbers were preliminary when the meeting packet was put together and that there could be some modest differences in the numbers he was presenting at this meeting. *[A copy of the Callan slide presentation entitled "2011 Economic Environment and Capital Markets Review" is on file at the ARMB office.]*

MR. O'LEARY briefly described Callan's capital market projection process. He stressed that they were not making point projections for each asset category but were trying to develop a range of return expectations for various asset classes that are consistent with one another, that are consistent with long-run history, and that also take into account shorter-term volatility. He said the one thing that has been driven home to him in all the years he has been doing this is that people think of this as an assurance that they will get the mid-point return, which is not the case. The odds very heavily favor getting a return within the distribution, but the distribution is so wide as to be not much help in the short term. It is designed as a long-term planning tool.

Callan Associates has a Capital Markets Research Group that spends all its time looking at the economy and capital markets. They do not profess to be the best economists in the world, nor do they profess to be the most enlightened when it comes to changes in the capital markets. Callan does have a very disciplined process, and they have access to a large number of people at some of the major financial institutions and in the academic world. The Research Group stays current with what those people are saying, so that creates Callan's frame of reference. Callan genuinely believes that the intermediate term (3-5 years) economic outlook, including real growth, inflation, and governmental policies — both monetary and fiscal — all have a major bearing on profitability and on the financial markets. Callan tries to understand where the country is in the business cycle and what some of the long-term trends are that are either acting as a wind at the back of the financial markets or acting as a wind in the face.

Every quarter Callan updates long-term returns and relationships to try to determine whether they are changing. In the short run, they know that if there is a panic or a flight to quality, diversification does not seem to matter because everything goes in the same direction. But over time different asset categories have different inter-relationships, and unfortunately that is the most difficult thing to project. So they always try to be mindful of what the long-term tendency for one asset class is with respect another asset class: are they highly correlated, are they negatively correlated (rare), or are they somewhat independent of one another?

MR. O'LEARY said that correlation coefficiencies is the category that receives the least scrutiny from people, yet they are, in many respects, the most important assumptions in doing modeling for policies. Callan tries to have all their correlation estimates be somewhere between what has been recently observed and the long-term historic trend of correlations. The same with Callan's measures of volatility: indexes change, investment practices change, and the use of derivatives to attempt to hedge volatility in different ways actually changes the level of volatility. It is a subjective assessment, and Callan is trying to always point to the really long-term record of volatility and say that their long-term planning estimate is consistent with that.

Ultimately, Callan tries to develop a set of assumptions that will not seem outrageous to their clients, because clients cannot afford to make huge radical changes in their policies on a short-term basis. Twenty percent to 30% of a typical client's portfolio is illiquid, and it does not do them any good if Callan this year uses assumptions that create a suggested allocation of 40% in illiquid investments and the year after comes up with an assumption that would suggest 10% in illiquid investments, because the client could not implement it.

MR. O'LEARY stated that Callan's Client Policy Review Committee, comprised of senior people in the firm, participates in the work of the Capital Markets Research Group and ultimately approves the specific assumptions.

Callan will develop the major asset class input assumptions, and inevitably clients have unique circumstances and want projections for a certain index that may be a narrower part of a broader asset category. Callan will develop projections for very small slices of the investable world and make them consistent with the major asset class assumptions. But Callan would be unable to run an optimization program that took into account the projections of all those asset categories so that the correlation estimates would be workable.

Addressing themes explored in setting the 2011 expectations, MR. O'LEARY said that clearly the recession seems to be over, but what he hears the most about is whether inflation is a risk and how it will manifest itself. While the economy has barely recovered from the meltdown of 2008 and the first quarter of 2009, the stock market has had two tremendous years and stocks are not as cheap as they were in February and March of

2009. And the economic outlook is not without problems, so the rate of economic growth is likely to be slow. Callan did not expect the bond market to do as well as it did in 2010, and that is a huge challenge in looking forward from today's level of interest rates. Interest rates are too low and, in Callan's opinion, unlikely to stay as low as they are. Therefore, returns from bonds looking forward will be less than they have been. The return potential available from bonds clearly affects the valuation level for equities. If the common wisdom today is that interest rates are going to go up, at the margin people are buying other things. Then as rates do go up, they are going to say maybe it is time to reduce their exposure to those other things.

MR. O'LEARY showed a chart of the year-by-year progression of the returns from major asset categories since 2005. He also provided a histogram showing annual stock market returns going back 223 years. Of interest was how extraordinary the recovery was in 2009 (26.5%), although returns of that magnitude have not been uncommon. The 2010 return of 15.1% was not unusual at all. What was clearly unusual was the 2008 return of -37.0%.

Addressing the current economic environment, MR. O'LEARY highlighted the following points from slide 5:

- Unemployment was at 9% in January. The shorter-term numbers are subject to huge revisions at unprecedented rates. Part of that is because the adjustment factors used to try to smooth out seasonal changes are being swamped by unusual policy actions. That was evident in housing, where various incentive programs shifted demand from one period to another.
- Even in light of the recovery, people are less well off than they had been. Consumers are still deleveraging. If, as reported, Freddie Mac and Fannie Mae go away, a consequence over the long term will be that mortgages will cost more and down payments will be larger. The ability for every person to own a home will be more challenged, and that has an impact on behavior.
- When recessions have a huge financial component to them (problems in the banking sector, etc.) the recoveries tend to be slower than when the recessions are led by inventories that have gotten out of hand and production gets cut back until inventories can be liquidated. In prior recessions, normally one could expect a substantial above-average growth in the initial stages of recovery. In this recovery, growth has just gotten to what many would believe is the long-term trend growth, not a period of above-trend growth in the recovery.
- Tax uncertainty contributed a little bit to the slower recovery. An agreement on the extension of the "Bush tax cuts" and further tax cuts as part of that deal helped economic activity in the fourth quarter of 2010 and caused a lot of people to now expect that growth will be a little more rapid in 2011 than expected three months ago. Global Insights projects real GDP growth at 3.2% for 2011.
- Consumer spending is positive and is recovering but well below the levels observed

in the early part of the decade.

- Housing is still weak but there are some signs of stabilization. There is still a huge inventory of houses on the market, plus a shadow inventory of houses yet to foreclose. Callan believes this Spring will be an important time for housing.
- Capital spending has been fairly strong but it has been primarily in equipment rather than in plant expansions.
- Headline inflation was negative in 2009. The most recent producer price index (PPI) number is 6.6%, because of producer prices, commodities and energy. The most recent year-over-year CPIU (core) number is just 1.5%. So inflation is a little bit higher than it was but by historic standards it is very low. It is reasonable to look at the difference in yield between a treasury bond and a TIPS index as one measure of what people expect future inflation to be. As of year end, the market was saying it expected inflation to be less than 3% (although the market can be wrong).

MR. O'LEARY stated that Callan believes inflation will be increasing, but it is increasing from such a low level that it is already priced in the market. Callan lowered its longer-term inflation forecast, not because they think inflation is less of a problem but simply to acknowledge that they had been too concerned about inflation previously. Instead of 2.75%, Callan's long-run estimate of inflation is now 2.5%, which is well above where inflation has been on a year-over-year basis. The 2.5% inflation number is in line with more typical expectations in the financial marketplace but it is not meant to change the level of concern.

MR. O'LEARY mentioned that the fourth quarter of 2010 was a great quarter for stock markets, particularly the U.S. stock market. When looking at measures of valuation, stocks do not seem expensive but look reasonably priced in an historic context. The question is whether stocks look reasonably priced because people have become too optimistic about future earnings; Callan does not think so because earnings in 2011 look pretty good. Callan is a bit more concerned about expectations for 2012 in terms of the rate of growth of profits. At some point it will begin to diminish. The reciprocal of a price-earnings ratio is earnings yield. The earnings yield of an index like the S&P 500 compared to bond yields looks very inexpensive. But if bond yields are expected to rise, that attractiveness will begin to diminish. Corporate balance sheets are very strong. Developing countries, despite some policy actions taken in China and India to try to deal with their inflation issues, are expected to have much stronger absolute growth than growth in the developed economies. All of that is positive for equities.

Short-term interest rates have negative yields. Even though inflation is low, short-term interest rates are lower. Bond people know that when the income level from bonds is very low and interest rates go up, there is less cushion to the principal value, so arguably there could be more price volatility.

Dividend yields are not high but in line with recent experience, but the earnings yield is attractive relative to bonds. Corporate behavior has changed over time: corporations used to pay out much more of their earnings than they have of late, and part of that is because of the tax policy over the years. Another change in corporate behavior is that increasingly companies consider the possibility of buying back shares rather than paying the dividend. Those shareholders who retain their positions benefit because there are now fewer shares outstanding and that helps value per share.

MR. O'LEARY showed a graph of the equity volatility (VIX) since 2001, and he noted the most recent spike up in volatility in 2010 around the euro pressure and concern about what was going to happen to Greece's debt. It appears that equity volatility is returning to more normal levels.

Using a graph, MR. O'LEARY pointed out the very wide spread between yields on the 1-3 year treasury and the 20-year treasury, so a steep yield curve. He said the difference was not unprecedented but very wide. Another graph depicted the yield on the Barclays Aggregate Index. He said that although there was a spike up in yields right at the end of 2010, the yield on the Aggregate was less than 3%. This is Callan's starting point for developing a bond projection. That is because over five years the vast majority of return on the bond market is going to be income. He disaggregated the aggregate bond returns to show the shrinking income component over time. The secular decline in interest rates is probably past, and the expectation is that investors will not have the wind at their backs with regard to bond returns. The only way to expect more than 3% earnings from bonds is to expect interest rates to be flat and to own the riskier part of the investment grade bond market, or to hope for slight increases in yield.

MR. O'LEARY outlined Callan's five-year capital market expectations, as follows:

- Expected bond return is reduced to 3.8%. The cash return is 3%. And the 10-year Treasury is expected to reach 5%.
- Broad U.S. equity returns reduced to around 8%. Broad non-U.S. equity returns decreased by 50 basis points.
- Real estate return reduced to just under 7%.
- Hedge fund expectation is close to 6%.

He said Callan did not make any significant changes in any of the projected standard deviations. Because 2010 was an above-average year for stocks, the expectation now is that future earnings growth will not be as much of a supportive factor. On the bond side, the starting point is lower because the level of interest rates is lower.

MR. O'LEARY explained that Callan has historically used a five-year geometric mean return, but increasingly people have asked them to model the 10-year geometric mean return number as well.

He presented the preliminary correlation coefficient matrix to show the calculated correlations of each asset class with every other asset class, based on the 2011 capital market expectations. Callan then puts the numbers in the optimizer to create an array of efficient asset mix alternatives.

MR. BADER commented that the Board had taken certain actions in the past year to reduce the volatility in some of the large cap equity mandates, using convertible bonds, covered calls, etc. He asked how that would be taken into account when Callan runs the optimizer.

MR. O'LEARY said he and Mr. Bader would have to talk about alternative ways of doing it. Another idea is to simply treat the Board's efforts as an implementation strategy to try to tone down the volatility. Or it could be a combination of both approaches.

MR. O'LEARY stated that last year the ARMB asset allocation policy had a projected arithmetic mean return of 8.68% and a projected standard deviation of 13.36%. The policy had a five-year geometric mean return of 8.07%. Last year the inflation expectation was 25 basis points higher (2.75%). That is part of the difference between last year and this year, but the rest of the difference is driven primarily by the lower expected returns on both stocks and bonds, driven largely by the lower level of interest rates.

MR. O'LEARY provided some projections from JP Morgan and super conservative GMO for comparison purposes and said the point is that other organizations have similar types of return expectations.

MR. RICHARDS referred to Callan's graph showing 10-year Treasury yields above the S&P 500 Index earnings yield until 2002 and then falling below since then. He asked if those lines would cross over again or if the ARMB would be better off buying an S&P 500 Index fund rather than Treasuries to get that yield.

MR. O'LEARY responded that there is no magic that the earnings yield for stocks being above the yield on Treasuries assures one that they are safe. There is plenty of history contrary to that. One would expect stocks, because they are inherently riskier than bonds, to return more than bonds over the long term. That is a very reasonable assumption over the long term. In order to believe that, one has to expect that there is real growth. Stocks let an investor share in growth while bonds do not. Dividend yields today are about 2%. At times in the last 15 years companies have bought back enough shares that they actually could have raised their dividends to 3%-3.5% because they were shrinking their shareholder base. Companies seem to be using some of the cash on the balance sheet to do that now because it gives them a bit more flexibility.

MS. HARBO asked for comment on why companies have good balance sheets. She thought it was because they were laying off workers or not hiring and therefore were putting out less on wages. MR. O'LEARY explained that if companies could make more money they would hire more people. It is amazing that productivity growth has been tremendous, and the problem is that the work force that is not part of that change is less able to participate in that growth. The high-paying manufacturing jobs that went away are not coming back to the same order of magnitude because the manufacturing processes have increasingly taken advantage of technological breakthroughs.

MR. TRIVETTE asked if Mr. O'Leary expected to recommend major changes to the ARMB asset allocation. MR. O'LEARY said the ARMB staff and advisors will look at the different permutations and combinations before reaching any conclusions. But his own perspective was that most people would regard the ARMB's total fixed income exposure as low, and the retirement fund benefitted from it being low over the last couple of years, particularly the past year. In an environment where fixed income returns are expected to be even lower than expected a year ago, he could not see increasing that allocation. At the margin, the Board has very gradually moved toward a more global approach to equity, and that trend may continue or be paused, depending on the outcome of discussions. The ARMB has less in international equity than the policy target of the Alaska Permanent Fund (APFC). The APFC uses a global equity benchmark as its frame of reference. The ARMB has a combination of U.S. and non-U.S. that is not weighted the same as that benchmark. At least one of the Board's advisors is always pushing for global, and everyone is moving in that direction but the comfort with the pace of change varies a little. He said it is important to recognize that the more invested in international the more currency effect is potentially encountered. The ARMB has made changes at the margin like having some emerging market debt as part of the fixed income program, and that type of thing may be a structural way to try and help the return. The ARMB is quite high in private equity, actually over the target allocation currently. The absolute return program seems to be doing better, and in the type of expected environment where the interest rate wind is not at an investor's back, maybe those skill-based strategies will bear fruit. He would not be recommending major changes to the asset allocation policy, but he expected that there would be some changes at the margins.

MR. WILSON commented that there are levels of risk relative to the decision of international versus domestic equity. Most large U.S. institutions are more heavily weighted to the U.S. The APFC being benchmarked off the international marketplace, as Mr. O'Leary mentioned, means that the index is roughly 45% comprised of U.S. stocks. The ARM Board has an intrinsic bet in the portfolio that the United States is going to do better than the rest of the world because it has overweighted the U.S. To him, one of the strategic questions when looking at the next ten or twenty years is whether that is a good bet to have in a world where the U.S. is running trillion dollar deficits and emerging markets are actually running surpluses. The fund he works for does not have that bet in it, and it is a really important decision.

CHAIR SCHUBERT thanked Mr. O'Leary and called a five-minute break at 10:24 a.m. before taking up the next item.

14. Active/Passive Discussion

14(a). Efficient Market Hypothesis

MR. BADER remarked that this was about the third time in eight years that this Board and its predecessor board have had a presentation on active versus passive equity management. *[A copy of the slides for each segment of the presentation, including the written comments sent in by Dr. Jennings, are in file at the ARMB office.]* He explained that a passive strategy is one in which the investor invests in accordance with a predetermined strategy that does not entail forecasting. The most popular method is to mimic the performance of an externally specified index. The ARMB passive investment components are the Russell 1000 Value, the Russell 1000 Growth, the Russell 200 Index, the Russell 2000 Value, and the Russell 2000 Growth.

MR. BADER reviewed the history of academic support for passive investing. He went into more detail on Dr. Fama's work in the 1960s on the efficient market hypothesis, which was broken down into three types of efficient markets:

- Weak-form efficiency - future prices cannot be predicted by looking at past prices. Security price movement is random.
- Semi-strong-form efficiency - everybody knows what is public information, and it is already built into the price of a security.
- Strong-form efficiency - even that which is not public information cannot be used in the market because the market already knows. Not a lot of support for strong-form efficiency. We are so convinced that private information is an advantage that people are jailed for using insider information.

MR. BADER said that William Sharpe had a simple explanation of why he felt that on average the average investor would not be able to outperform an index after fees. There are people who take exception to the efficient market hypothesis. Some say there are greater returns on small capitalization companies, even adjusted for risk. And there is the value effect, where low P/E stocks over time seem to outperform higher P/E stocks. There are momentum stocks, where the effect of positive (or negative) growth in price seems to persist longer than one would think if price was essentially random in nature. Another exception to the efficient market hypothesis is the calendar effect, which basically says that the way January goes is how the rest of the year is likely to go.

MR. BADER stated that other comments by William Sharpe emphasized that he was talking about "on average." Sharpe says that it is possible for some active managers to beat their passive brethren, even after management costs. Not all managers in the set have to beat their passive benchmark, only those managing a majority of a fund's assets. The best way to measure a manager's performance is to compare his or her return with that of a comparable alternative index, which is what the ARM Board attempts to do.

DR. JENNINGS said he had reviewed both Mr. O'Leary's and Mr. Bader's presentations and felt they accurately conveyed the academic point of view. On Mr. O'Leary's upcoming presentation, there are other data sets and academic analysis that are a bit more pessimistic than Callan is about active management. Part of that has to do with academic [indistinguishable] not only to show that some funds outperform the benchmark but that they want to show that it is statistically significant outperformance. Generally, research shows that index funds outperforming 60% or two-thirds of actively managed funds would be a good way to characterize it. So if 30% or 40% of actively managed funds are outperforming, the professors are focused on that they can only confident that a handful of those are doing it from skill rather than from luck.

Referring to MR. BADER's presentation on Sharpe saying that the average actively managed fund is going to underperform by the level of expenses, DR. JENNINGS said it would sort of make sense that it would be shifted slightly so that, with actively managed funds charging more, the ARMB ends up in the 60%-70% range of actively managed funds.

DR. JENNINGS stated that while it may be possible to have actively managed funds that outperform, people should also think about the ability to implement that well. The hurdles to success are whether the organization is structured to identify and hire good managers, and is there confidence that the managers that go through the search process actually do have skill and are not just merely at the peak of a lucky run. Other hurdles to success are whether the product stays available, that the investment firm sticks to its knitting and does not shift from what the Board thought it hired, and that the product does not get too large to implement the strategy that generated the alpha. The Board should feel confident that the firm and the individual it hired will stay there. The last question important to ask is whether the Board is going to stick with the manager who is truly a good manager through the periods of underperformance. An example is the presentations from Brandes about how the top managers might have three- and four-year periods of underperformance, even though they turn out to be top-decile performers over decade-long periods.

DR. JENNINGS said that a belief in market efficiency clearly gets one to choosing indexing, but indexing does not necessarily require one to believe in efficiency. Choosing indexing could be a reasonable response to believing that the hurdles mentioned above are going to prevent a successful active management program. The cost savings of passive investing is a certainty versus the active management outperformance that is more hoped-for. His recommendation is to have a target active-passive mix, and, as Mr. O'Leary's presentation points out, it may vary by asset class. Even though it might be painful, once the Board comes up with what that right number is, he recommended that the active managers be scaled to fit. That may mean trimming some active managers that have been successful. At the end of the whole process, it is probably good practice to think about how much is invested with any particular active manager.

MR. WILSON commented that the great investment committees he has worked for summarize it as what investment edge or competitive edge an institution has, as well as a specific manager. Investment management is a very competitive business; roughly two-thirds of the people who do it are going to fail. Institutions are trying to get into the very top third, which is not an easy thing to do. As the Board does it strategic planning in the next few months, he urged trustees to think about what competitive edges it has in Alaska. One of the foremost is that the ARMB is located away from the fray, so it has a different perspective. An institution has to think differently, be different, and manage differently to actually outperform — because if it looks like everybody else, after skimming off the fees, it will not beat the average. He recently heard the head of the Harvard endowment speak, where she gave a list of what they look for and have found in managers that have the ability to outperform. The characteristics were along the lines of the manager only has one or two products, they are owned by the people who run the products, they typically run between $5 billion and $15 billion in assets, and everybody's compensation in the firm is aligned toward their clients' success. Two of the managers the ARMB decided to hire yesterday fit that mold, and those are the type of managers that the funds he has been associated with have had the best long-term success with.

14(b). Historical Active Management Premiums by Class and Style

MR. O'LEARY said this presentation on active and passive management was based on work done by Greg Allen, Callan's director of research and president. He stated that an institution cannot passively manage an asset class if the index fluctuates wildly from day to day, so one has to think about what the characteristics of a good index are. Number one, know what is in the index in advance, and two, that the index can actually be replicated. Indexes do not have transaction costs, so they are a tough hurdle, and there are management costs in hiring someone to manage an index product. If an index really captures a whole market, should anybody be surprised that it ought to over the long term do as well as, or even a tad better than, the average manager? If the index has all the securities that are the market, and it has no transaction costs, and it is weighted appropriately, it is the market.

MR. O'LEARY posed the question that if there were no active managers, would the index fairly represent value. An active marketplace is the basis for determining the value of company A or company C. That gets to the issue of market extremes, like the dot-com companies in 1999 that had little sales and no earnings being a huge part of the market, or the early 1970s and the era of the nifty fifty, where the biggest companies in the market accounted for the vast majority of the market value of the S&P 500. The indices did not cause the dot-com companies to be irrationally valued, but something fundamental about indices is that larger market capitalized companies tend to dominate the indices. Apple Computer early in 2010 was about 5% of the Russell 1000 Growth Index: should it be 5%, and what is the basis for that weighting? A passive investor in the large cap growth universe at the time that Apple's 5% weighting was true was putting 5% of every dollar into Apple Computer. So the Board needs to feel comfortable with an index's representation.

MR. O'LEARY stated that asset allocation is the primary driver of investment performance. There are a lot of different ways of using active and passive strategies. Some managers have a growth bias or a value bias, as the Board heard from two micro cap equity managers yesterday, and growth and value mean different things to different people. In his experience, a lot of the misunderstanding about active management is the frame of reference used. Brandes is an example of a manager that is quite extreme in their definition of value, and they are fairly concentrated in their portfolio construction. So Brandes' performance will be wildly different from a broad measure of the market. It will still be wildly different from a style benchmark because the style benchmark will be less extreme in its characteristics than Brandes is in constructing their portfolio, and that can create a great deal of investor discomfort.

MR. O'LEARY related that Callan's typical client says it is much more difficult for large cap managers, when the universe is quite well defined, to add value on an after-fee basis, so they take at least part of their large cap allocation and invest it passively. And a few clients will put all their large cap into passive management. Over the years the ARMB has made a significant passive commitment in large cap equity.

MR. O'LEARY said Mr. Allen looked at the Callan database, which is a broad representation of corporate and public plan sponsors, for returns over various time periods through the quarter ended September 30, 2010. He found that the vast majority of the differences in performance are explained by differences in asset allocation, or by people being undisciplined in their asset allocation and changing their minds. The ARMB has done a pretty good job over the years of maintaining the Board's policies in challenging periods.

MR. O'LEARY stated that the choice of benchmark is a very important decision. It seems that new ETFs are coming out almost every day, and some of them are benchmarked over things that almost do not exist. He said that 20 years ago the question of whether to have international stocks in a public plan's portfolio was a big deal; today it is a presumption. Ten years ago international was developed markets. Today it is developed and emerging markets. ARMB hired an international manager and the benchmark was the developed markets, and the manager had 20% of the portfolio in emerging markets. Was that skill the cause of the manager's outperformance versus others? Maybe or maybe not, but it was definitely guts, because if the benchmark was a developed market benchmark like EAFE and the manager chose to use emerging markets, the manager knew that that would add volatility and growth potential, and they made a decision — hopefully well reasoned — that it was worth the risk of having different performance than the developed market benchmark. And, hopefully, the client was smart enough to recognize that this was a key element of the manager's strategy, and they were willing for that manager to invest a portion of the portfolio in that area.

Regarding tracking error, MR. O'LEARY said he was not a big fan of many of the quantitative measures that are used to evaluate managers because they are often misunderstood.

MR. O'LEARY said that Callan acknowledges the academic work on efficient market hypotheses. Experience tells them that there are some people who point to passive because they genuinely believe that investors generally cannot beat the market on an after-fee basis. Other say that that is probably true in some areas, but they will not bet the ranch on it — and they may be the blend. The Board has seen managers who have done better than the index over a very long period of time, and fortunately the ARMB has a few of those managers. There are a lot of investors who may not have had a huge amount of assets under management who have clearly done much better than a broad measure of the market. They may have done things that would make a typical institutional investor very uncomfortable along the way, but they have been successful. He said he strongly believes personally in alignment of the Board's goals with the manager's goals, so it does not matter how much money the active manager makes if they deliver the goods to the client.

MR. O'LEARY had a list of the pros and cons for active management. He said the typical actively managed portfolio has a little bit of cash, and when things are dicey the manager may increase that cash slightly. They are not market timing; they are just waiting for a better buying opportunity. In something like the fourth quarter of 2008 and the first quarter of 2009, a little bit of cash often contributes to the portfolio doing better in a declining market.

Pros for active management include the index construction issue. Something is going on in the industry that is not a big wave yet, but it makes some sense. Market-capitalization-weighted indices are not the best indices, so there has been a proliferation of what are called value-weighted indices. Japan is an example where it comprised a large portion of the EAFE Index, and alternative indices used GDP-weighted or some other company fundamental measures of scale to try and do away with part of the over-emphasis to one country. Some of the success of active international managers was simply their decision to not have 80% of their portfolio in Japan, when Japan started going down for 20 years.

MR. O'LEARY said some people, when they are thinking about their manager structure, are saying that it is not just active and passive; it is active and something that may be in between passive and active where there is a conscious bias tilt. It may be largely passive in nature but actually have some active part in a structural process that tends to be quantitatively oriented.

MR. O'LEARY explained that Mr. Allen looked at the rolling three-year returns of the average large cap domestic equity product compared to the Russell 1000 Index, and 42% of the time periods were positive [excess return] for active. The calculation included growth managers and value managers. When looking at the range of rolling three-year returns for small cap, the record was much better for active managers (98% of the small cap products beat the Russell 2000 Index on average). Part of this is that the small cap indexes are limited (the two primary are the Russell 2000 and the S&P 600). The results were 89% positive for active developed international equity managers compared to the MSCI EAFE Index. The return of the average emerging markets product was positive over the emerging markets index 91% of the rolling three-year periods (more of an issue with survivor bias in this database).

MR. O'LEARY spent some time explaining the range of tracking error (good or bad variance from an index) by equity asset class for the ten years ended September 30, 2010. The median tracking error for active U.S. small cap products was over 9% from the Russell 2000 Index. When there is a big tracking error the expectation is that there will be periods of wide divergence between a manager's actual return and the benchmark return. There are small cap value managers, small cap growth managers, and micro cap managers, and so there could be a lot of other factors that help explain some of that variation. In practice, an investor is probably not comparing their small cap value manager with the core small cap index but comparing them against the small cap value index, in which case the tracking error would be lower because any portion of the tracking error attributable to that style would go away.

MR. O'LEARY stated that if an investor has an ability to select a reasonable number of decent managers they can diversify away most of the tracking error and still have active managers who can add incremental return over time. The median tracking error for active large cap products was over 7% from the Russell 1000 Index, and the source was likely because there are very growth-oriented managers and very value-oriented managers.

MR. O'LEARY discussed another quantitative measure called the information ratio. He thought one of the greatest failings in the industry today is managers misrepresenting what alpha is when talking about their return relative to an index. Alpha is excess risk-adjusted returns, calculated by doing a regression analysis of the variation in return for a portfolio from an index. The information ratio is calculated by dividing alpha by the residual risk statistic over a period of time. It is Mr. Allen's assessment that it is reasonable to expect a 1%-2% excess return in exchange for 3%-5% in tracking error in active small cap and non-U.S. equities. That says nothing about a reasonable expectation for U.S. large cap.

MR. O'LEARY gave some background on Callan's conviction that the active premium in small cap equity has been enough to overcome the long-term negative risk premium in small cap. The tracking error for an individual small cap manager is so high that the odds are really stacked against people making good decisions in terms of hiring and firing. He described Callan's domestic small cap fund that is built using 40 managers and how the approach is a way of reducing a big risk. In three years the fund has generated returns net of fees that are close to the average small cap manager that has slightly beaten the benchmark, and has been doing so on a consistent basis. The Permanent Fund accepted that multiple-manager notion and built up a large number of small cap managers. The small cap pool was performing quite well, and then their board made the judgment not to spend the APFC's limited resources keeping track of a $60 million portfolio but to try to have a bigger impact at the total fund level, which was an entirely reasonable decision.

MR. BADER stated for the record that staff has looked into this arrangement with Callan before mention of this at the meeting, and Mr. O'Leary has not pitched the small cap product to staff. MR. O'LEARY added that he was merely using Callan's fund as a real-life illustration, and Russell, along with others, also has a multi-manager small cap fund.

MR. O'LEARY showed a graph to illustrate that in a 10-year period ended 9/30/2010 the median large cap manager in Callan's universe beat the Russell 1000 Index by 1.32%, pre-fee. Large cap managers with a core orientation did not do quite as well (1.18%) over that period. If the manager was a very quantitatively oriented product but not really quasi-index they only had 16 basis points of advantage over the index. If they were an enhanced large cap index fund, the median over 10 years was a nine-basis-point drag. The point is, in that large cap universe where people are saying these managers did or did not outperform, there is a broad set of different management styles and products.

In conclusion, MR. O'LEARY stated that Callan has seen periods where plain-vanilla, market-weighted passive indices of large caps beat the socks off of active managers — three- and four-year periods where the S&P 500 Index looks like it is in the top quartile. He has also seen periods where the broad market index is in the bottom quartile. Over the long term he expected it to be somewhere low in the second quartile, a little bit better than median because of the inherent cost advantage. It makes a great deal of sense that a significant portion of the ARMB's large cap equity exposure be passively managed. Most of Callan's clients are somewhere in the 35% to 60% range for large cap passive.

On the small cap side, the starting point is typically zero passive. It probably makes a lot of sense for big plans or plans with liquidity needs to have some minimal amount passively managed, perhaps 20%. The long-run case for passive in developed international should be stronger than for domestic passive management because transaction costs are higher for international equity. But to date a plan would be better off with international being more actively managed, and he would not object to having some passive commitment in international. He strongly counseled that the vast majority of emerging markets exposure be actively managed, because there is no other way to deal with the difficult-to-measure risks of investing in a very risky area. Wherever there is active management investing the long-term target should be to achieve a net-of-fee advantage over an after-fee index fund of 1.0%.

14(c). ARMB Equity Manager Returns

MR. BADER explained that there is an inherent survivorship bias which arises when analyzing data containing only current managers while excluding managers that have previously been terminated. In the past eight years, since he has been chief investment officer, two investment managers have been hired and fired. One was Turner, a small cap equity manager, and they were terminated for underperformance. The other was a State Street international manager that was underperforming but would not ordinarily have been terminated were it not for the fact that the portfolio investment team was lifted out and transferred to another one of the ARMB's investment managers. So there were some managers included that should be included in the presentation.

Looking at the ARMB's large cap active managers, MR. BADER pointed out that RCM was hired to be a growth manager and so they are compared against the S&P 500 growth index, which they have outperformed. Relational Investors is a manager that has 10 to 15 stocks in the portfolio and that will have a lot of tracking error. Relational has underperformed the S&P 500 Index since the Board hired them in 2005, although this year they are ahead of the index by 600 basis points. The debate at the time they were hired was whether to include them as a large cap manager or a private equity manager. Of the six large cap active managers, only one (Relational) is underperforming inception to date. Lazard is actually a global manager for the ARMB, but their returns frequently are presented as a domestic component and an international component.

MR. BADER stated that two out of the three active small cap equity managers are outperforming their index. The ARMB has four international active managers, and Brandes has significantly outperformed the EAFE Index since the portfolio inception in 1997. He recalled that just two months after Brandes was hired they invested in a company that went out of business; the members of the board were so irate at the time that there was talk about whether or not to fire Brandes after two months of service. It speaks to what Mr. O'Leary and Dr. Jennings mentioned about having the ability to stick with a manager. It has turned out that Brandes has served the Board well, with 600 basis points of outperformance over a 12-year period.

Two out of the three emerging markets active managers have outperformed the MSCI Emerging Markets Index. Eaton Vance Management's investment style could be called quasi-index in that they have target country allocations that they stick with. Advent Capital is the ARMB's convertible bond manager and was outperforming their index at year end.

MR. BADER said that the three large cap passive managers have outperformed their respective indices. The two small cap passive equity managers have experienced underperformance, and in State Street Global Advisor's case by 76 basis points since inception in 2007. Mr. O'Leary said in his presentation that having an index manager does not guarantee index returns. Staff called SSgA and determined that when ARMB staff uses the passive managers to rebalance, there can be a cash drag if the market fluctuates during the few days when SSgA sells securities and is holding cash before the money leaves the portfolio. There is a small amount of international passive equity, and it has been outperforming the index. One way passive managers outperform an index is to make a bet as to what is going to happen when they receive notice that a stock is going to be added or deleted from the index.

MR. BADER referred to an action memorandum later in the agenda that would ask the Board to allow the managers to hold ETFs or invest in futures to negate the fact that they are in cash for a few days before the money goes out of their fund. He said an upcoming item for Board consideration will be a request to grant staff the authority to do some internal investing in a passive or quasi-passive index where staff could be more deliberate in terms of buying and selling stocks so as to not affect returns as much.

MR. BADER directed attention to the "Recommendation" page of Dr. Jennings's slides:

- *Have a target active-passive mix.* At the annual manager review meeting staff and the advisors talked about getting to a 60% passive large cap target. Today it is at about 55%, and staff expects to be at 60% by the end of the year. More discussion is required on small cap passive.
- *Rescale active managers to fit.* Staff had stated in December that once a micro cap manager was selected they would do a review of small cap in particular. They are very aware of the overweight in small cap value relative to the rest of the active managers.
- *Have limits on how much invested with any particular manager.* Staff has already started to pare back Brandes a bit because the manager is a large percentage of the overall portfolio.

CHAIR SCHUBERT recessed the meeting at 11:58 a.m. for lunch. The meeting was gaveled back to order at 1:15 p.m.

12. Reconsideration: Resolution 2010-29 Relating to PERS/TRS Experience

Analysis and Assumption Change Recommendations (Continued)

CHAIR SCHUBERT brought this item back up that had been tabled the day before.

MS. ERCHINGER referred to a memorandum related to the action the Board took at the December meeting to reconsider Resolution 2010-29. She said action was taken yesterday to table it in order to work on the correct verbiage in the resolution. Staff drafted a new resolution that accomplishes what she had intended by amending or reconsidering 2010-29. It had to do with the modifications to the economic assumptions related to the investment interest rate and inflation assumption that the Board had approved. One of those rates was recommended to be changed in Resolution 2010-29 but not both of them, so the new resolution would make the resolution consistent with the previous board action where both the investment return assumption and the inflation rate assumption were modified. *[The memorandum and Resolution 2011-01 are on file at the ARMB office.]*

MS. ERCHINGER moved that the Alaska Retirement Management Board repeal Resolution 2010-29...(not complete). VICE CHAIR TRIVETTE seconded.

CHAIR SCHUBERT stated that the way the recommendation in the memorandum was worded it was not necessary to repeal Resolution 2010-29 because Resolution 2011-01 superseded that resolution, and all that was required was to adopt Resolution 2011-01.

MS. ERCHINGER said that according to Robert's Rules or Order she understood that the Board could not take action on another resolution until it has at least addressed the resolution that was tabled and brought back before it. She was trying to accomplish those both at the same time, but she agreed that adopting the new resolution would also repeal and replace the former resolution.

Amended motion by MS. ERCHINGER that the Alaska Retirement Management Board adopt Resolution 2011-01. MS. HARBO seconded.

MR. JOHNSON said that in order to properly identify what the resolution does the memorandum included language to make that clear.

CHAIR SCHUBERT asked if the maker and second of the motion objected to including the language. They did not. The language read as follows:

> "That the Alaska Retirement Board repeal Resolution 2010-29 and adopt Resolution 2011-01, approving and adopting recommendations for assumption changes based on the June 30, 2009 actuarial experience analysis prepared by Buck Consultants for the Public Employees' and Teachers' Defined Contribution Retirement Systems, including a Board requested modification of Section II A (Economic Assumptions - Investment

Return or Interest Rate) and Section II B (Economic Assumptions - Inflation) as follows:

Section II A. 4.88% Real Rate of Return Expectation
Section II B. 3.12% Inflation Rate

The result of which will be a Rate of Return Expectation of 8.0%."

Roll call vote:
Ayes: Williams, Trivette, Richards, Harbo, Erchinger, Schubert
Nays: None

The motion passed unanimously, 6-0.

15. IFS Report Action Items

MR. BADER stated that the Board contracted with Independent Fiduciary Services (IFS) to conduct an independent review of the performance consultant and to evaluate the investment policies of each fund entrusted to the Board. IFS presented its final report at the December board meeting, including a list of recommendations. Mr. Bader had informed the Board in December that staff would be coming back over a series of meetings with responses to the IFS recommendations. He did not think the staff recommendations today would have major policy implications for the Board but they would certainly affect the way the ARMB does business.

B.1.b#6 - Exposure Limits/International Fixed Income

IFS report recommendation #6, page 48, states:

In the International Fixed Income Guidelines, add guidance on investing in non-U.S. sovereign debt securities in terms of maximum exposure and/or credit rating.

MR. BADER said staff concurred with this recommendation and included in the packet the draft revised investment guidelines with changes highlighted in red.

MS. HARBO moved that the Alaska Retirement Management Board approve Resolution 2011-02, adopting revised international fixed income guidelines. MR. TRIVETTE seconded. By a roll call vote, the motion passed unanimously, 6-0, with trustees Schubert, Trivette, Harbo, Erchinger, Williams and Richards present. [Trustees Hultberg, Butcher and Pihl were absent for this plus the next six board actions on IFS report recommendations.]

B.1.b#4 - Fixed Income Investment Guidelines

IFS report recommendation #4, page 48, states:

Consider adopting specific fixed income guidelines for each fixed income investment manager, rather than for each particular fixed income strategy. At a minimum, ensure that all guidelines reference the additional restrictions that are documented in the individual managers' contracts to help eliminate potential confusion.

MR. BADER said that staff believes that locating all the investment restrictions in the investment guidelines rather than embedding them within individual manager contracts allows for more flexibility, and future guidelines changes would not require a contract amendment. It is a more efficient way to do business, and it is consistent with the second (minimum) option in the IFS recommendation.

MS. HARBO moved that the Alaska Retirement Management Board authorize staff to draft amendments to fixed income manager investment contracts to remove investment restrictions germane to their respective fixed income strategies, to embed a reference to the investment guidelines, and to draft modified investment guidelines as necessary. MR. RICHARDS seconded. On a roll call vote, the motion passed unanimously, 6-0.

A.1.b#1 - TIPS and REIT Performance Reporting
IFS report recommendation #1, page 18, states:

ARMB should request that Callan include the TIPS portfolio and the REIT portfolio in the Investment Manager Returns exhibit and provide an investment summary page for the TIPS portfolio.

MR. BADER reported that staff communicated that request to Callan Associates, and they are in agreement to do this. He asked the Board to ratify the decision to implement this IFS report recommendation.

MS. HARBO moved that the ARMB ratify the CIO decision to implement IFS recommendation #1 in Task Area A.1.b related to TIPS and REIT performance reporting. MR. WILLIAMS seconded. The motion passed unanimously on a roll call vote, 6-0.

A.1.b#6 - Report Inception Dates for IMAs
IFS report recommendation #6, page 23, states:

ARMB should ask Townsend to show the inception date for the IMAs (individually managed accounts, also called separate accounts).

MR. BADER reported that staff asked Townsend to do that, and they have agreed. He requested the Board's approval.

<u>MR. WILLIAMS moved that the Alaska Retirement Management Board ratify the CIO decision to implement IFS recommendation #6 in Task Area A.1.b related to reporting inception dates for IMAs</u>. <u>MR. TRIVETTE seconded</u>. The motion carried unanimously on a roll call vote, 6-0.

A.1.b#7 - Performance Reporting for IMAs
IFS report recommendation #7, page 23, states:

ARMB should ask Townsend to show annualized performance for a time period greater than five years (e.g., seven or 10 years) for the IMAs, where applicable.

MR. BADER said staff has directed Townsend to do that, and he wished for the Board to ratify that decision.

<u>MS. HARBO moved that the ARMB ratify the CIO decision to implement IFS recommendation #7 in Task Area A.1.b related to performance reporting for IMAs</u>. <u>Seconded by MR. TRIVETTE</u>. By roll call vote the motion passed unanimously, 6-0.

A.1.b#8 - Real Estate IRRs
IFS report recommendation #8, page 23, states:

ARMB should ask Townsend to show performance for the IMAs as an internal rate of return (IRR) in addition to time-weighted returns.

MR. BADER stated that staff had directed Townsend to do so, and he asked the Board to ratify that decision.

<u>MS. HARBO moved that the ARMB ratify the CIO decision to implement IFS recommendation #8 in Task Area A.1.b related to adding IRRs to the Townsend performance report</u>. <u>MS. ERCHINGER seconded</u>. The motion passed unanimously on a roll call vote, 6-0.

A.1.b#11 - Real Estate Percentage Allocations
IFS report recommendation #11, page 24, states:

ARMB should consider asking Townsend to show the allocation to each fund (as well as the sub-portfolios and total portfolio) by percentage.

MR. BADER said that staff concurred with the recommendation and had requested that Townsend do so. He asked that the Board ratify his decision to implement recommendation #11.

MR. TRIVETTE moved that the ARMB ratify the CIO decision to implement IFS recommendation #11 in Task Area A.1.b related to adding real estate percentage allocations to the Townsend performance report. Seconded by MS. HARBO. By roll call vote the motion passed unanimously, 6-0.

16. Investment Actions

16(a). Investment Advisory Council (IAC) Action

MR. BADER stated that the term of Dr. Jennings on the three-member IAC expires June 30, 2011. He asked for Board direction to advertise for persons interested in serving as the academic advisor on the IAC.

MS. HARBO moved that the Alaska Retirement Management Board direct staff to advertise and solicit applications from Dr. Jennings and other persons interested in serving as the academic advisor on the Investment Advisory Council. MR. RICHARDS seconded.

MR. TRIVETTE said he respected Dr. Jennings tremendously, but he thought it was prudent for the Board, as a general rule, to occasionally search the market to see what talent was available out there.

The motion passed unanimously. MR. BADER indicated he would report the status of the search at the next meeting and suggest any appropriate action.

16(b). Securitizing Cash Using Futures and ETFs

MR. BADER briefly reviewed the February 11, 2011 staff memorandum in the packet that explained how rebalancing transactions are done and the one- to three-day settlement period involved, as well as the benefits of facilitating manager contribution and redemption activity using futures and exchange traded funds. He said he had talked to Mr. Bigelow and State Street about when staff utilizes a transition manager to facilitate rebalancing transactions.

MR. BADER mentioned that staff already has the authority to buy futures in managing the cash balances. But it gets dicey when dealing with a transition when they do not know how much of the activity in a manager is related to what they have been asked to liquidate and how much is from other activity in their portfolio. So staff would like the transition manager to be allowed to securitize the frictional cash during these transactions by using futures contracts and ETFs.

MS. HARBO moved that the Alaska Retirement Management Board approve the use of standardized equity index futures and ETFs to facilitate manager cash flow. MR. TRIVETTE seconded.

MR. O'LEARY stated that what staff described is typically the norm, and he was very comfortable with the recommendation.

MR. TRIVETTE asked if staff thought there should be a separate policy for this. MR. BADER said he did not think it was necessary, because typically staff goes to State Street for a transition and they have a box to check.

The roll was called, and the motion passed unanimously, 6-0.

UNFINISHED BUSINESS

1. Disclosure Reports

MS. HALL stated that the disclosure report listing financial disclosures submitted since the last meeting was included in the packet, and there was nothing unusual to disclose to the Board.

2. Meeting Schedule

The meeting schedule was included in the packet. MS. HALL indicated she would be sending everyone two emails in an effort to find suitable dates for the trustee strategic planning session and the education conference in October.

3. Legal Report

Deputy Commissioner of Administration MIKE BARNHILL informed the Board that his successor at the Department of Law who will be working with the ARMB is Chris Poag. *[Mr. Poag arrived later and was introduced to the trustees at that time.]*

MR. BARNHILL reported that in his last semi-official duty for the Department of Law he attended the National Association of Attorneys General meeting last week in Washington, D.C. He promised to summarize what took place and send it to the trustees, staff and board legal counsel. The theme among the experts in the room was that the federal government is very interested in taking a fresh look at public pension plans and determining whether it is time to step up federal regulation of the plans. The most significant way this is manifesting itself right now is an SEC (Securities and Exchange Commission) release that came out earlier this year regarding municipal advisors and municipal entities, which seems to strongly suggest that board members like the ARMB trustees may be subjected to a registration requirement with the SEC if that rule is adopted. That has caused a hue and cry amongst boards across the nation, and there is a spectrum of views as to whether the SEC will ultimately adopt the rule requiring registration and whether the law supports that.

MR. JOHNSON stated that ARMB trustees probably thought of themselves as being advised and not as advisors. But the SEC has taken at least one provision of the Dodd-Frank bill to draw a potential conclusion that the trustees would fit a definition of "municipal advisor" and thereby be required to submit a lengthy application for municipal advisor registration for natural persons. There is a technical issue as to whether the law even contemplates requiring registration for people like the ARMB. There is also an overall policy argument as to whether it is even appropriate for the feds to contemplate requiring registration of local entities such as the ARMB, most particularly on the notion of how board members would really be considered to be advisors. Presumably the assumption is that because the board is making decisions for investments of funds for others — that is, the beneficiaries of trusts — that the ARMB is effectively in some measure advising the beneficiaries. The SEC is requesting comments by February 22. It has been considered that there would be some kind of state response to the SEC suggesting that this is not the way to go. He said he drafted a letter that perhaps the chair or one of the commissioners or the governor might want to sign.

CHAIR SCHUBERT asked, if the Board were to submit anything in opposition, if it would be through the Alaska Department of Law or by asking its legal counsel to respond on the Board's behalf. MR. BARNHILL replied that the ARMB is entitled to submit comments under its own name or through either the attorney general or the commissioner of the Department of Revenue — or all of the above.

Deputy Commissioner of Revenue JERRY BURNETT stated that he had provided a copy of the response that the National Association of State Treasurers is making. He said that he and Commissioner Butcher sit on several state agency boards, and organizations that represent each of those on a national basis are submitting comments to the SEC. He assumed that national pension organizations are submitting comments.

MR. BARNHILL said it was clear that the public pension community nationwide is very well represented on this issue.

CHAIR SCHUBERT stated that in that case the ARMB probably did not need to respond separately.

MR. JOHNSON said that unless he could be sure that other entities in the state of Alaska have submitted comments he would suggest that the ARMB should submit its own comments.

CHAIR SCHUBERT asked Mr. Johnson to work with Mr. Burnett on the board response.

Continuing his legal report, MR. JOHNSON said he had been working with staff — Ryan

Bigelow, in particular — on some matters. They are perpetually working on responding to proposed investment relationships, where the ARMB is presented with a package of what appear to be extreme boilerplate or broad-based applications. He works with staff in trying to tailor documents so they work for the ARMB's purposes. This takes time and slows down the process sometimes of actually being able to place the monies.

NEW BUSINESS - None.

OTHER MATTERS TO PROPERLY COME BEFORE THE BOARD

MR. BADER mentioned an article in the day's *Juneau Empire* about the retirement fund's timber investments. He said he wanted to make it clear for the record that the ARMB's contracts with the timber investment managers is to find investments in the United States. The newspaper article made it sound like the ARMB was looking outside and had forgotten about Alaska. That is not the case. The ARMB is looking for the best investments it can have and that meet the investment criteria. The timber investment managers have not found any public land for sale in Alaska that has proper infrastructure around it, and that is why there are no investments in Alaska yet. He hoped that there will be.

PUBLIC/MEMBER COMMENTS - None.

INVESTMENT ADVISORY COUNCIL COMMENTS

MR. WILSON indicated that he had voiced his comments on agenda items as they were being taken up.

TRUSTEE COMMENTS

MS. HARBO thanked Teresa Kesey for including information in the CAFRs (Comprehensive Annual Financial Reports) that she and Mr. Pihl had requested.

MR. WILLIAMS stated that Chris Poag had represented the Department of Revenue on several tax matters over the years, and he had worked with him on occasion. He had found Mr. Poag to be a very capable individual and thought he would serve the Board well.

MR. BURNETT, speaking for the other half of the Department of Revenue, said they had worked with Mr. Poag on a number of issues and found him to be very responsive.

MR. TRIVETTE said he was bothered and had received phone calls over the last few weeks that certain legislators and maybe some staff were bad-mouthing the ARMB, including that the board ought to be abolished and the retirement money managed by the Alaska Permanent Fund. He hoped that somebody would be able to speak to some of the committees in the Legislature, the Finance Committee in particular, to present the history and explain that what happened in the last decade was way out of the ordinary. He said the ARMB's investment returns match up quite well with the Permanent Fund's returns, and the Board has extremely professional people working in the Department of Revenue for it. People who contacted him had seen some of the remarks on Gavel to Gavel and at legislative press events. He also reported that a number of trustees attended the Callan Conference in late January in San Francisco, and he hoped to find time to put together a written summary to share with other trustees. One topic he found interesting were the sessions on the behavioral aspects of investing that this board does not get to talk about very much. Lastly, at the request of Chair Schubert, he and Ms. Harbo attended a pension forum that he found excellent.

MR. RICHARDS stated that he really enjoyed the presentations at this meeting, especially the active/passive management presentations from three different perspectives. He thanked Mr. Barnhill for his work on the Board's behalf and said the Board pulled another coup by continuing to have Mr. Barnhill's knowledge on the other side of the table. He also looked forward to working with the two new commissioners.

CHAIR SCHUBERT congratulated Mr. Barnhill on the new direction he was going in and said the Department of Administration was very fortunate to have someone with his depth of knowledge of state government, the law, and the way the system works. She said it would be nice working closer with him.

CHAIR SCHUBERT said she had not heard before today that there had been complaints about the ARMB's performance measurement, and she wondered where that was coming from.

A discussion ensued about the confusion that arose from a person looking at an actuarial valuation report that contained earnings for fiscal year 2009 for the retirement funds at the same time as they were getting current investment results from the Permanent Fund. Current ARMB returns were presented to the Senate Finance Committee since then.

MR. TRIVETTE said it would be helpful if he and other trustees had the information from Mr. Burnett so he could respond with knowledge about the situation when retirement system members contact him with questions.

MR. BADER stated that one aspect that can contribute to confusion is that the ARMB delays reporting of returns until the private market estimates of return are completed. Many funds actually just lag their private market returns and acknowledge that lag. He said the Board's practice warrants some discussion between Mr. O'Leary and staff at a later time about changing the practice to get more timely returns to the Board.

MR. O'LEARY said that Townsend provides the preliminary real estate returns typically mid second month after a quarter end. Callan has not seen those numbers yet for the December quarter. All the other return numbers are basically available to Callan. He added that based on the information he has seen to date, the ARMB performance for the current fiscal year is every bit as strong as other major funds in the state.

MR. O'LEARY and MR. WILSON briefly discussed the time frame in which other Callan clients with large real estate programs and/or private equity programs report their quarterly returns.

MS. HARBO asked about the possibility of a press release about how positive the ARMB investment returns have been. MR. BADER responded that in more visible positions he has held previously he never found it useful to do that. This issue has happened once in the duration of the Board, and while it is unfortunate that some beneficiaries may be relying on the misinformation, the matter will soon pass, and the record will be set straight of its own accord.

FUTURE AGENDA ITEMS - None.

ADJOURNMENT

There being no objection and no further business to come before the board, the meeting was adjourned at 2:15 p.m. on February 11, 2011, on a motion made by Ms. Harbo and seconded by Mr. Richards.

Chair of the Board of Trustees
Alaska Retirement Management Board

ATTEST:

Gayle Harbo

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 recording of the meeting and presentation materials on file at the ARMB office.

Confidential Office Services
Karen Pearce Brown
Juneau, Alaska