

ALASKA PERMANENT FUND CORPORATION
ANNUAL MEETING OF THE BOARD OF TRUSTEES

September 25-26, 2019
8:30 a.m.

Location of Meeting:
The Robert Atwood Room
Atwood Conference Center
550 West 7th Avenue
Anchorage, Alaska 99501

SUMMARY MINUTES

Trustees Present:	Craig Richards, Chair	Carl Brady, Vice Chair
	William G. Moran	Marty Rutherford
	Bruce Tangeman	Corri A. Feige

Investment Advisor:	Timothy Walsh
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Staff Present:	Angela Rodell, CEO	Valerie Mertz, CFO
	Chris Poag, General Counsel	Maggie Meiners
	Paulyn Swanson	Valeria Martinez
	Jim Parise	Masha Skuratovskaya
	Sebastian Vadakumcherry	Sara Race
	Chad Brown	Mason Kullander

Invited Participants and Others Present:	Gregory Allen, Callan Associates
	Steven Center, Callan Associates
	Rick Steiner, Public Comment
	Doug Woodby, Public Comment via Speakerphone
	Julian Beron, Allianz
	Sam Hogg, Allianz

PROCEEDINGS

September 25, 2019

CALL TO ORDER

CHAIR RICHARDS called the meeting to order at 8:30, and asked for the roll call. There was a quorum and he moved to approval of the agenda.

APPROVAL OF AGENDA

MOTION: A motion to approve the agenda was made by TRUSTEE RUTHERFORD; seconded by TRUSTEE FEIGE.

The MOTION WAS APPROVED with NO OBJECTION.

APPROVAL OF MINUTES (May 22-23, 2019)

MOTION: A motion to approve the minutes of May 22-23, 2019 was made by TRUSTEE MORAN; seconded by TRUSTEE RUTHERFORD.

The MOTION WAS APPROVED with NO OBJECTION.

SCHEDULED APPEARANCES AND PUBLIC PARTICIPATION

CHAIR RICHARDS stated to Mr. Steiner that it was nice to meet him in person after the many shared communications.

MR. STEINER reciprocated the sentiment and commended the trustees for holding the Environmental Social and Governance session 1.5 years ago and stated that the people of Alaska would like to know if there has been any action taken by the trustees as a result of that session. He added that there were a lot of good, tangible recommendations there. He asked that all of the Permanent Fund's fossil fuel assets be identified; and the performance of those assets, since they were acquired, be clearly and transparently communicated to the people in Alaska. He stated that there is a lot of interest in that issue, and that would be prudent as a matter of public transparency. He then brought up the Norway Pension Fund, which is a trillion-dollar fund built off of oil revenues. They are primarily pointed towards divestment for the financial risk that is posed. He moved to the University of California, the pension fund and endowment that is far larger than the Permanent Fund and is divesting from fossil fuels, not for political reasons, but for financial risk. He continued that, in his view, the Permanent Fund is doing the exact opposite and staying in fossil fuels for political reasons. He added that many Alaskans would like to have the issue of fossil fuel divestment on the agenda, along with the fiduciary responsibilities of that fund and how that interacts with it. He appreciated the consideration and thanked all.

CHAIR RICHARDS thanked Mr. Steiner and asked for any testimony over the phone.

MR. WOODYBY stated that he serves as co-chair of 350 Juneau-Climate Action for Alaska. He

responded to the climate crisis and the global reality of it really happening. He continued that he was here to support the Corporation's mandate of maximizing returns by following the prudent investor rule. He supported growing the Fund's corpus and receiving a larger dividend. He also requested that the Permanent Fund Corporation provide a clear description to the public of how climate risks are taken into account. 350 Juneau believes that divestment is how to secure a healthier and safe future for the children, which is their goal.

CHAIR RICHARDS thanked Mr. Woodby and asked for any other testimony. He then moved to the Executive Director's Report.

CHIEF EXECUTIVE OFFICER'S REPORT

CEO RODELL highlighted the HR report that included the activity over fiscal year '19 where there were 19 vacancies at one point. This made it a busy year for the HR department, in addition to the fact of having the capital plan going on with the buildout in Juneau. A number of those vacancies have been filled. She stated that the lapse in personal services is due to the huge vacancy rate that was carried over the course of the year, which will not be a normal lapse seen in the future. Since the last Board meeting, the risk parity program was finalized. She added that there are changes to the Investment Guidelines per the Investment Policy.

TRUSTEE RUTHERFORD asked about the investment policy.

CEO RODELL replied that the Board approved an investment policy, and as an appendix to that policy there are detailed guidelines. Those guidelines can be amended without Board approval and are brought forward for informational purposes. Agreements were entered into with risk parity managers this year, and there is a risk parity strategy that Valeria Martinez manages. She added that those agreements reflect the guidelines.

CHAIR RICHARDS asked about the risk appetite assessment.

CEO RODELL replied that the risk assessment is working with the Board. It was identified as part of the strategic plan that over the next year will work with the Board to get an assessment of risk appetite in light of different issues that are presented.

CHAIR RICHARDS moves to the memo on the internships and stated that he was pleased that progress on that was being made. He added that the other trustees would be more than happy to call the managers and encourage them to participate.

MR. BROWN stated that as the HR manager, he has been working on having introductions provided to those managers and will continue to look to expand as there is success.

CHAIR RICHARDS stated that, for the second time, Chad Brown was recommended to the Forbes Human Resources Council and congratulated him.

MR. BROWN thanked him and stated that it was quite an honor.

CEO RODELL noted that Marcus Frampton continues to be on jury duty, but did put a lot of work in the upcoming presentation. She stated that Jim Parise will walk through the Chief Investment Officer's report.

CHIEF INVESTMENT OFFICER'S REPORT

MR. PARISE stated that his goal is to go over five different subjects that have been discussed in previous meetings and that Mr. Frampton wanted to present to the board. He began with the asset allocation discussion prelude – Yale Endowment and Washington State Investment Board. He explained that Yale is considered the best-performing endowment and one of the most aggressive in private markets. They only allocate to managers. The thing to remember about Yale and Washington are the fact that most of the funds that are aggressive in private markets also barbell with market insensitive types of securities or asset classes. He continued that the Yale Endowment has outperformed APFC in 17 of the past 20 years; about 5.52% or about 500 basis points annually. He moved to Washington State Investment Board which essentially has the largest private market allocation among all state funds. Within Private Markets, APFC's performance stacks up favorably with WSIB.

MR. ALLEN stated that it is important to understand that absolute return is likely to become very illiquid in any type of market. It does not really provide the barbell that fixed income does and, in particular, Treasuries and investment-grade corporate. He continued that the more it goes into equity-focused investment, it does start to point towards de-risking the fixed income portfolio so that it can provide that liquidity when it is actually needed.

CEO RODELL noted that the FY21 allocation was not thought of as an outlier high. It is aggressive, and we believe it is an acceptable allocation.

MR. PARISE moved to the currency management discussion. In early FY 2018, the APFC embarked on a currency management program managed by an external manager. The three goals were to mitigate foreign currency risk, reduce volatility, and then, by utilizing the discretionary approach selecting the hedge ratios, avoid the cash flows associated with a full hedging program. It is close to two years into this program and it has not delivered on these objectives. He stated that the program was not doing what it was supposed to be doing, so there was no real program. He moved to APFC Industry Recognition where good press is continuous. Industry observers continue to recognize the APFC as a thought-leader in our industry that, in spite of our relatively small investment team, innovates and produces leading investment results for stakeholders.

CEO RODELL added that the full report is in the Board packet.

MR. PARISE moved on to the Alaska In-State Manager Program. The Board passed a resolution in September 2018 supporting the In-State Emerging Manager Program. The work on that was started immediately. Recent process to hire four new emerging market debt managers played out on a similar timeline and this speaks to the thoroughness of APFC's manager selection process. He stated that the Alaska Investment Policy has changed recently and the APFC staff was encouraged to identify and invest the Fund in additional compelling in-state investments. The APFC's Fixed Income Benchmark has gone through significant change over the past 10 to 15 years in conjunction with the heavy turnover at the Chief Investment Officer position. APFC Staff in 2016 did a comprehensive re-write of the Investment Policy & Procedures document, including a fourth major adjustment to our Fixed Income Custom Benchmark in a 10-year period. He stated that some of the benchmarks play to the strengths. He continued that the next steps will be to propose to the Board taking REITs and listed

infrastructure out of that benchmark and replacing it with those structure products and spreading out across the rest of the assets within fixed income.

CEO RODELL noted that the timing for things like that is to try to bring it to the Board for adoption in May so they take effect with a July 1 start date so that the performance can be measured correctly through the fiscal year.

ADVISOR COMMENTS

MR. WALSH stated that he is a big believer in comparative management in life in the public fund or the endowment world. Putting it simply, he continued that if we cannot be better than the peers, just try to be average because less problems come up with that. He added that he has been very impressed with the public funds and endowment talks about the need for coinvesting. He talked about the pension funds, the endowment, and the Yale model. He stated that the article is great for Yale, is horrible for investing, but is definitely worth reading. He made a point with an example and stated that just because it is a private market does not mean it is a bad investment in a public market; it is a warning sign that everyone needs to hear.

CAPITAL MARKET OVERVIEW

MR. ALLEN stated that Mr. Center will give an overview of what happened in the capital markets leading up to June 30, 2019. He continued that it is important to understand the reason for giving this lens for interpreting the performance. It is a backward-looking exercise which is important for understanding why the equity portfolio underperformed or outperformed; why real estate underperformed or outperformed.

MR. CENTER began with Broad Capital Market Performance over the trailing periods over June 30th and stated that the U.S. equity market continued to be the driver of performance. He pointed out that, in the last year period, the sheer divergence in the U.S. equity markets, large cap equities up 10 percent and small cap equities down negative 3 percent. When talking about the performance of the equity portfolio, the Permanent Fund's equity portfolio trailed its benchmark. One of the reasons is an overweight to small cap equities. He explained that while the small cap equity program did well relative to its benchmark, it still detracted from overall performance. He talked about Callan's periodic table of investment returns which pointed out that asset class that performs well one year is not always the asset class that performs well the next year. He moved to the overall market environment which showed the strong equity markets continuing in the second quarter. He pointed out that through yesterday, the U.S. equity market was up almost 21 percent year to date. He then gave a U.S. economy overview and stated that it remains quite strong. The labor market has been fairly tight. He continued that the negative global growth impact could ultimately weigh on the U.S. and the Fed's ability or need to reverse policy and begin to cut interest rates is what has been seen. He added that the Fed has moved twice, and the market is pricing the Fed to move one more time before year-end. He moved to the conversation about the trade wars between the U.S. and China and how much it will potentially impact the U.S. from a GDP standpoint. He brought up that the U.S. market is not as dependent on trade as many other developed markets and explained this more fully. Germany is the export economy and could stand to be the biggest developed market that gets impacted by a trade war. He moved to sector performance and talked about the U.S. equity markets rebounding in Q2. There was strong performance from a couple of cyclical areas: financials did quite well; IT did quite well;

there was a spike in energy so far in Q3. Growth continues to outpace value; valuation sensitive stocks did struggle quite a bit; and small caps did lag large caps.

MR. ALLEN stated that the big change that is trending is the ongoing dismantling of hedge fund portfolios. It is a tough time to be a hedge fund or a hedge fund-of-fund manager because those are negative. There have been a lot more hedge funds shutting down than opening, which is the opposite of what went on the previous ten years.

MR. CENTER stated that there have been discussions on the end of the credit cycle which means that more debt could be downgraded. He moved to nonU.S. equity performance, with China being the only negative number in the last quarter. Because of the shortness in time he went through a couple of high points and then moved to real estate, which has continued to be a positive area for performance, but the returns are moderated rather substantially. Most return is now coming from income with limited appreciation. Retail had a negative for the quarter, depreciated from the retail space. Industrial has been the strongest performer for the last quarter; and the West continues to drive most performance from a regional standpoint.

CHAIR RICHARDS thanked Callan for the presentation, and called a break.

(Break.)

CHAIR RICHARDS called the meeting back to order and moved to the asset class overview.

ASSET CLASS OVERVIEW

MR. CENTER stated that the capital market presentation will be combined with Callan's performance measurement commentary with some of the asset class details that used to come from the specialists. He began with the Total Fund Asset Allocation and Performance which remains well diversified across asset classes: about 38 percent allocated to public equity; about 24 percent allocated to the fixed-income-plus categories. The remainder is split among alternative asset classes. This is the exact same asset allocation as last quarter from a public versus private standpoint. Alternatives include private equity, special opportunities, real estate, private infrastructure; and always state that private equity, real estate, and infrastructure are reported on a one-quarter lag. The performance and benchmarks are also lagged by one quarter. He pointed out that overall asset allocations are within guidelines. He stated that the total Fund did lag its blended benchmark for the quarter and longer-term performance is quite strong. The Fund outperformed its blended benchmark over all time periods. He added that while the Fund did underperform its benchmark over the last quarter and year, it was actually above median over the last year. He moved to risk and went through a few more risk comparisons, and then included the Fund performance scorecards. He explained that former CIO Read put it in place and it is a way to measure short-term, medium-term and long-term performance. He then talked about the asset classes structure and performance before diving into the equity structure. The U.S. equity portfolio was talked about, and then he touched on the nonU.S. global equity portfolios of which 60 percent is invested in global strategies. These strategies can buy both U.S. and nonU.S. with the remainder split between dedicated emerging markets and developed international that includes small cap. He added that performance is above the benchmark, and the developed equity portfolio fell short of its benchmark over the quarter and the one year. The key driver of that negative performance is the dedicated exposure to nonU.S. small cap.

MR. PARISE stated that the relative performance showed that it has been a tough quarter and tough year. External active managers contributed to a minus 1 basis points quasi passive which have a value bias, negative 12. The emerging market overweight is negative 18 for the quarter, which shows the excess return versus the benchmark minus 50 as well as a tactical tilt. He continued that fiscal year '19 shows where, with the active value, who underperformed and who did not. Unfortunately, all underperformed and are all negative.

MR. ALLEN observed that, in looking at value versus growth from different perspectives and over the very long term can look at the cumulative performance of value index versus just the index itself showed both growth and value and then growth. He then took the Russell value and the Russell growth and compared to the Russell 1000 getting back to 1980. The surprise found is that value cumulatively is ahead of growth. In the last 12 years almost all of that has been made up. He concluded that over the very long term they are actually very close in terms of cumulative. He stated that having Mr. Razzaque understanding the portfolio and being consistent over the long term is a very valuable asset of the Permanent Fund.

MR. CENTER stated that the next section has to do with fixed income performance, which has done very well. 65 percent of the income-plus portfolio is managed internally and looks great. The primary driver of performance for the US Fixed Income portfolio relative to peers can be attributed to the lower-than-average allocation to corporate bonds and higher-than-average allocation to U.S. Treasuries and Government-related debt. The nonU.S. fixed income portfolio, which includes both in-house portfolio and external managed assets, has done very well. The APFC Global High Yield performance continued to trail its benchmark and peer group over the time periods exhibited. APFC Emerging Market Debt portfolio exceeded its target over all time periods except over the five-year. He added that this portfolio has been very benchmarked over time. He stated that the TIPS performance is a blend of the internal portfolio and a portfolio managed by Alaska Permanent Capital. Over the long-term it has been very benchmark-like, slightly trailing the benchmark over five years, but ahead of the index over 7 and just under 10 years. He continued that the REIT benchmark is a global benchmark, which is why this performance will vary quite a bit from the peers. The Permanent Fund's portfolio has done very well relative to the global REIT market, outperforming over all time periods, up 13 percent over the last ten years; quite a strong performance. He moved to the real estate portfolio, 98 percent of it is invested in direct separate account investments, 2 percent in real estate portfolio. The 2-percent structure is co-investments with real estate debt programs that are building up. Performance relative to peers last fiscal year was pretty touchy, and longer-term performance is slightly below median over the last ten years, also trailing behind its benchmark.

MR. PARISE explained that the sale of Simpson Housing took out multifamily. Multifamily has been one of the strongest performers and it sold that at a 5.5 cap rate. It is now at 4 percent. This also put retail overweight because there was a large retail portion. Now retail is one of the worst performers.

MR. ALLEN observed that the Permanent Fund has a very unique approach to real estate and is, in large part, a legacy. It has been done this way for a long time and has been done successfully.

MR. PARISE stated that real estate is looking at portfolio investments or platform investment where an entire portfolio of a retail sector and/or multifamily sector can be purchased. A consultant was hired to look at alternatives, and the problems are understood.

MR. CENTER looked at the infrastructure and income opportunities area which is the one that underperformed its public market benchmark for the last quarter and year. About 50 percent of this portfolio is invested in infrastructure funds, with 30 percent invested in private credit mandates and 20 percent in income opportunities. The overall portfolio came in at the positive 3.6 percent return last quarter, and a positive 11 percent return for the last year. Performance relative to its benchmark did trail and this is a public market benchmark. He stated that the absolute return portfolio had a pretty strong performance, as well. It moved more from a fund-of-fund structure to more of a direct structure.

MR. PARISE explained that there is not a lot to expand on except that 11 percent for private income is a very good number and it is just that the benchmark did that much better. He added that there is no concern there with that underperformance. The absolute return is the same thing, the managers were not working, and we concentrated and tried to make in noncorrelated to equities and it has done what it was expected to do. It is a really good program, but it is still young.

MR. CENTER stated that real estate is the largest area of concern. He agreed that the structure that the Permanent Fund has is unique, investing directly in so many trophy properties, not investing in some kind of commingled vehicle as a corpus. Most of the institutional clients do use some kind of commingled vehicle for real estate, and it might make sense. It may help get to the target allocation, which will continue to grow in a quicker manner.

CHAIR RICHARDS called a lunch break.

(Break.)

CHAIR RICHARDS reconvened the meeting and moved to Risk Overview.

RISK OVERVIEW

MR. VADAKUMCHERRY stated that there are two sections to the risk part. The second part is the normal presentation and the first part is slightly different. The attempt is to address three or four key questions: One is what is a good sort of time horizon for APFC in terms of performance, risk and asset allocation; the other is how to fare in terms of the long-term performance; then how would performance be impacted by a stress scenario. He also addressed asset allocation from the prospective of what the asset allocations are to look at. He explained the time horizon and stated that the long-term benchmark has consistently been beaten. He moved to the stress scenario which took the same declines that the APFC portfolio registered during the '07, '09 crisis; about six quarters of negative returns and about six quarters of subsequent positive returns. Part of the object was to look at the portfolio as it is and then look at it by scaling down the fixed income portion. He added that it is not just about fixed income, but it was used because it is the least risky component of the portfolio presently. He focused on how this was impacted in terms of fair payments and payments to State, dividends, and such. He explained these are serious discussions that need to be thought about. He moved to the value and margins of risk and stated that the portfolio is riskier than 2008. The key drivers of that increased risk are three factors: there was more real estate in 2008; private equity has exponentially increased compared to 2007; and the fixed income portfolio in 2007 was a pure fixed income portfolio. Today there are riskier components. The point that he highlighted when looking at fixed income in an allocation exercise, it should show what is desired in that asset

allocation. He moved to the role of fixed income and highlighted its role with the key point being that it is a diversifier. Second is that it is a very efficient liquidity pool; then is opportunity capital, which can be redeployed in a downturn. The important point is it plays a role in the whole asset allocation exercise. He moved on to talk about private assets and the commitments. He finished with the dashboard that is sent on a daily basis.

FIXED INCOME, ASSET CLASS UPDATE

MR. PARISE stated that they are a five-person team, and all take on multiple roles. Tom O'Day manages the cash portfolio and will help Chris Cummins manage the collateral for the MBS portfolio. There is a lot of overlap there. Masha Skuratovskaya does the global rates, the Fund's rates, emerging market debt, and the FX. The team has overlaps and all do different things and are not siloed into one particular area, because it is a lean team. He went over the decision-making process explaining the different decisions and how they were made and gave a real-life example with great detail. There are very complex robust systems for both portfolio analytics, the BlackRock Aladdin system. That gives the portfolio analytics that determine the weighting, that ticket comes in, is entered and then fed back into the portfolio. This gives an exactness to the positioning, all within a few minutes. The implementation of this system is more difficult, which is why there is the middle office with Finance. There are three people that have to settle that trade.

MS. SKURATOVSKAYA stated that global rates have been part of the portfolio for a long time. It has grown as part of the portfolio with the ability to actually manage it in-house. One of the things done differently in this portfolio is that there is a constant hedging activity that goes on and is part of the benchmark. She explained the program and stated that it started in 2013 and we were only trading five countries and BONY was auto-hedging all the transactions. It was a bunch of spreadsheets and was very fast and stressful; it grew incrementally mostly by just expanding the operational setup and finding counterparts. She moved on to the EM debt manager and stated that EM was originally part of fixed income. Initially, the mandate was emerging markets and high yield together, and then they got decoupled. Then it moved out of fixed income into special opportunities. It came back two years ago highly transformed but with the same manager. It was watched for two years and determined that changes needed to be made. She gave an update on what emerging markets involve and talked about the external debt that is issued by emerging market countries in Euros, dollars, yen. That debt is highly correlated to the interest trades of the developed market it is issued in. It is traded at a spread much like high yield or corporates. The risk faced there is more driven by the foreign exchange rates of these countries. She reported that there are two blended managers, Prudential Global Investment Management, which has the largest allocation. They are an outgrowth of their parent who is an insurance company and are very strongly grounded in risk management. The other two are Colchester based in London, a black-box inflation forecasting shop with superior ability to forecast inflation, and then Payden & Rygel, based in L.A.

CHAIR RICHARDS thanked them and welcomed Ms. Martinez.

ASSET ALLOCATION, ASSET CLASS UPDATE

MS. MARTINEZ stated that she is the director of asset allocation responsible in this role for two main areas: liquidity and multi-asset portfolios, which include risk parity and the liquidity overlay

strategy. She went through the objectives and then the three main strategies: Cash; liquidity overlay; and risk parity strategies.

MR. ALLEN clarified that whether or not to use the overlay program and how much to use the overlay program is at the discretion of the CIO, and he is looking at the entire portfolio. Ms. Martinez is not making these calls on a day-to-day basis, and is an input. Because the portfolio is being benchmarked under the assumption that the overlay program always overlays all the cash or most of the cash, if it is not overlaid and the markets go up, this portfolio will not go up and she will bear the brunt of all that underperformance.

CEO RODELL stated that it was important to recognize that the liquidity demands changed significantly. When Mr. Read was CIO, there was no POMV program or an agreement with the State where more cash was being turned. Marcus took the responsibility of turning cash, looking at cash drag, looking at risk from a total portfolio, and looking how to optimize a program, a toll. The overlay program has always been talked about as a tool to use in order to help mitigate cash drag. She continued that cash drag can be cash positive at times, and the other thing to recognize is that this is a period where it seems that the markets are headed down. So, there is no cash drag, and we have cash loose rather than in risky assets at times. One of the primary responsibilities for the CIO is to manage through that; and it is important to continue having this overlay tool available to manage through that.

CHAIR RICHARDS expressed concern about the risk associated with using an overlay program like this as sort of a market timing tool which may cause a problem.

MS. MARTINEZ stated that it is not necessarily being used as a market tool to time the market, but we are trying to time the duration of the obligations and how those cash flows come in and out and where they are going to come in and out. She moved to the proposed schedule of the ERA transfers for the fiscal year 2020. These are the most significant payments that happened during a quarter. She stated that all the cash flows are to create a cash ladder that is approved every day. The point is it tells by date the amounts in the different liquidity accounts, and the colors represent each of those accounts, the cash flows that are coming and how the balances are going to change over time. In conclusion, she summarized the portfolio with all the strategies that are performing to as expected versus their benchmark and on a mathematical basis.

CHAIR RICHARDS called a break.

(Break.)

CHAIR RICHARDS reconvened the meeting and moved to the review of asset allocation.

REVIEW OF ASSET ALLOCATION

MR. PARISE stated that the purpose of this presentation is not to set asset allocation, but to start the discussion. He continued that starting in May 2020 it will start to be set for 2026 and beyond. Currently, a multi-year asset allocation plan is being managed and was established in 2016 up until 2021. The plan with asset allocations and private equity is on schedule. He added that this is not easy to do, especially with the funding of private markets, and it needs to be well thought out, well planned, and then it takes time to implement. Throughout this process, there will be a lot of assumptions, a lot of models. Different models will show different outputs. Also

discussed was where we are, what is trying to be achieved, and some of the challenges that will happen along the way.

MR. ALLEN talked about what Callan does for the purposes of this discussion. A set of return and standard deviation and correlation estimates are developed that are designed to reflect the outlook, but also to cooperate with each other in a mean variance optimization framework. That second thing actually puts some big constraints on the kinds of assumptions to make. If just the experience that the Permanent Fund had with their private equity portfolio was used, real estate portfolio, hedge fund portfolio, it will understate the risk and the correlation with the equity markets because if the private equity was priced minute by minute, private equity would move a lot like equities. What has been attempted in the risk-and-return correlation estimates is to take that into account so that the optimizer does not try to gobble up way more of something than a portfolio should have. He stated that he thinks the Fund has a setup which allows better than the average private equity portfolio and can expect to get Alpha from that program.

MR. VADAKUMCHERRY began the discussion and stated the need to make sure that the skill sets are adequately reflected in an optimization model; qualitative, but it has to be reflected because it is suboptimum.

MR. PARISE stated that seven different decisions will be presented to the board, none of them have to be done and it will be just seven chosen by staff because the choices are infinite. He continued that this will use staff assumptions. He went through the summary of the hypothetical portfolio.

MR. ALLEN explained the Monte Carlo model that they built may be useful and would volunteer it at the May meeting. This would be through Callan's lens of risk, where, again, a sort of true economic risk can be assigned to private equity which will allow it to be translated through the lens of the Fund itself.

MR. PARISE stated that it is very important to make sure the staff and board are on the same page in the understanding of this discussion.

CHAIR RICHARDS stated that the meeting is adjourned until tomorrow.

(Alaska Permanent Fund Corporation Full Board meeting adjourned at 4:52 p.m.)

September 26, 2019

CHAIR RICHARDS called the meeting back into session, and welcomed Allianz as the first presentation.

APFC PORTFOLIO UPDATE & DISCUSSION OF MARKET ENVIRONMENT FOR GLOBAL SOVEREIGN BONDS

MR. BERON stated that he is the head of developed markets at Allianz. He continued that he has managed money for over 20 years and is the main global fund manager for rates and currency funds. He added that he is joined by his colleague Sam Hogg, a portfolio manager on his fixed-income team in London. Allianz has had a relationship with the Permanent Fund for over 20 years. For 22 years, they managed an international sovereign mandate, hedged back to

U.S. dollars. Both he and Sam have been responsible for the Fund mandate for the past eight years. He began with some background information about Allianz which has managed global bonds since 1984 and has a global approach. Allianz believes in healthy countries, healthy entities, and like to provide customized solutions to all their clients; ideally with a partnership approach. He continued that they are here to talk about fixed income, negative yields and what should be done about them. The presentation has been structured into three parts: Asset class considerations; fixed-income strategy; and macroeconomic backdrop. He brought attention to two key fixed-income concepts: First, income does not equal yield; second, yield does not equal return. He stated that negative yields do not mean negative profits. Negative yields simply mean the expected value of the future cash flows is below the current market price of the fixed-income bond if held to maturity. He continued that when investing globally on a currency-hedge basis, the concept to maturity misses a very important element of expected return, and that is the impact from currency-hedging the assets back into U.S. dollars.

CHAIR RICHARDS asked how there is a negative cash market.

MR. BERON replied that in institutional mandates when there is European cash there will often be a negative interest rate that has to be paid. If there are high cash balances in these markets, they have to be paid. He stated that there is a differential growth and subsequent interest rates, like the negative interest rate policy in the Bank of Japan, have led to an increase in the pickup that U.S. investors earn from hedging nondollar assets back into dollars. He added that this analysis can extend to the whole of the investment universe that is managed for the Alaska Permanent Fund. The mandate is a global Treasury, ex-U.S. benchmark, currency-hedged into dollars.

MR. HOGG moved to the second concept, yield does not equal return; and stated that it is important to understand this concept in an environment of negative bond yields. He explained the process and stated that the message is that traditionally, most fixed income investor decision-making processes were based on income analysis.

MR. BERON continued that they are here to talk about the capital return and given that the macroeconomic backdrops across the globe are quite weak, poor and sanguine, we think the bonds can continue to deliver a decent total return. He moved to the concept called the 3Ds: Disinflation, demographics, debt. He focused on disinflation which showed a clear downward trend for inflation, a global phenomenon; demographics, everyone is getting older, also a global phenomenon. He explained what was behind debt and added that there is just too much debt in the world; again a global phenomenon. He continued with the theme about growth and declining growth rates. He talked about government spending and cutting taxes, and then moved to negative bond yields. He added that global bond yields are set to stay lower for longer. His four conclusions were: There is a natural ceiling of bond yields as a function of the 3Ds; add duration, there is no zero-bound for bond yields; yield does not equal return; and fixed income will provide healthy returns especially on a currency-hedged-to-dollars basis.

MR. HOGG moved to the visual representation of the global sovereign bond universe. From a conceptual perspective, investing globally means accessing different bond markets for countries at different points in the economic cycle. It is important to stress that they are desynchronized. Global fixed income has consistently delivered superior returns and risk-adjusted returns.

MR. BERON moved to the market views, strategy, and how it related to the Fund's portfolio that

is currently managed. Allianz Global Investors believe in a healthy country, healthy entity philosophy. There are a mixture of directional strategies, overweight and underweight duration, yield curve strategies, underweighting short-rated bonds, overweighting nonrated bonds is taking the curve. The focus is on relative value, overweights and underweights, to mitigate some of the directionality.

MR. HOGG explained that investing globally in sovereign bond markets with a top-down, fundamental macro-approach investing is how it is thought about. The heart of the investment process is debt dynamics; the next step is then overweight the valuations; and the final step is running this through a qualitative overlay.

MR. BERON recapped the material presented and concluded the outlook for global fixed income. He stated that they recommend investing globally: No. 1 is that it offers a better return outlook; No. 2, diversifications across the cycle; No. 3, it is difficult to stress how important liquidity remains at this point in both the macroeconomic cycle and the market cycle. Global fixed income, sovereign fixed income remains very liquid. No. 4, an evaluation basis, particularly for investors, hedging back into dollars, it looked very attractive from a valuation perspective.

CHAIR RICHARDS thanked Allianz for the informative presentation and called a break.

(Break.)

CHAIR RICHARDS called the meeting back on the record and moved to the report of Annual Audit.

REPORT OF ANNUAL AUDIT

MS. MERTZ stated that the full audit report and financial statements are in the last section in the Annual Report and went over the results of the FY19 Audit. She thanked Paulyn Swanson and the Finance Team in Juneau for all their work in getting this together. She continued that the audit and financial results for FY19 were reviewed at the Audit Committee Meeting where all of the Board members attended. The Governance Manual requires the full Board to accept the results of the Audit in order for it to be published in the Annual Report. She added that at the end of the presentation a motion to accept the FY19 Audit will be requested. She pointed out that the only significant change since the meeting was the removal of references to inflation-proofing with regard to the \$4 billion transfer from Earnings Reserve. Throughout the Audit Report and the MDA, the footnotes, and all of that, any reference to inflation-proofing has been removed. She introduced Beth Stuart, the office managing partner of KPMG in Anchorage, and also the engagement partner on the Audit.

MS. STUART thanked all and stated her pleasure to be presenting in front of the trustees. She noted that an unmodified opinion on the financial statements was issued on September 6th, and the Audit was conducted in accordance with both Generally Accepted Auditing Standards as well as Government Auditing Standards, which as a layer of additional diligence on top of Generally Accepted Auditing Standards. There were no changes made to the Audit Plan that was originally presented to the Audit Committee in May, and KPMG was able to execute as planned. It was very consistent with the timing that had been expected. She continued that there was

some additional emphasis on product management and workflow and streamlining the communication between KPMG and the corporation. That was successful and went well.

TRUSTEE RUTHERFORD commended KPMG and Ms. Stuart and staff and Ms. Mertz and her staff for a great job. She stated that her involvement was very smooth and that she was impressed.

CHAIR RICHARDS asked for an action to accept the annual report.

MOTION: A motion to accept the annual report was made by TRUSTEE RUTHERFORD; seconded by TRUSTEE FEIGE.

After the ROLL CALL, The MOTION was unanimously approved (BRADY, MORAN, RUTHERFORD, TANGEMAN, FEIGE, RICHARDS).

TRUSTEE RUTHERFORD stated that at the Audit Committee Meeting developing the RFP was discussed. She had asked for feedback from any of the trustees about their interest in an operating audit and if they had any suggestions on how to approach the RFP for an audit for the new audit contract. She continued that she had not received an indication that there was any trustee interest in an operational audit; and the only comment she received was a suggestion to add herself to the RFP Development Committee. She added that she was fine with that idea and, if the Board is comfortable with that, she suggested that she would participate.

CHAIR RICHARDS moved on to budget approval.

FY20 BUDGET APPROVAL

MS. RACE stated that she is the operations manager for APFC, and the budget request is an action item. At the end of her presentation she would ask for a motion to approve the budget in its final stage; then, that budget will go to OMB tomorrow. She continued that four different budget scenarios were presented and those have been pared down to two scenarios. The other two scenarios include the value-added location which will continue to be worked on with potential consideration for the FY2022 budget. The adjustments that were requested during the budget work session were included into this finalized budget with very minimal changes. This is broken into two allocations: the corporate operations and the investment management feeds. She asked that, with the motion of the Board, the corporation's budget be included into the language section of the Operating Budget Bill as a single allocation, as a total-to-not-exceed amount. This is a similar request to what was requested in the budget cycle for FY20. She explained that the corporate operations allocation consists of five components: Personal service, travel, contractual services, commodities, and equipment.

CEO RODELL stated that a motion and action were needed.

CHAIR RICHARD read the motion: "An amount not to exceed \$149,901,495 is appropriated from Alaska Permanent Fund Corporate proceeds for the investments and operating costs for Alaska Permanent Fund Corporation, recognizing a \$700,000 travel budget and presenting it with two allocations for Operations and Investment fees."

MOTION: A motion was made that an amount not to exceed \$149,901,495 is appropriated from Alaska Permanent Fund Corporate proceeds for the investments and operating costs for Alaska Permanent Fund Corporation, recognizing a \$700,000 travel budget and presenting it with two allocations for Operations and Investment fees was made by TRUSTEE RUTHERFORD; seconded by TRUSTEE TANGEMAN.

After the ROLL CALL, The MOTION was unanimously approved (BRADY, MORAN, RUTHERFORD, TANGEMAN, FEIGE, RICHARDS).

CHAIR RICHARDS moved to legislative initiatives.

LEGISLATIVE INITIATIVES

MS. SWANSON stated that, in addition to the FY21 budget proposal and exhibits for incentive that was just approved and passed, staff will be looking for other direction with regards to initiatives. She reported that the 31st Alaska State Legislature is scheduled to convene their regular session, second session, on Tuesday, January 21st, 2020; the use of the earnings from the Permanent Fund continues to be a topic of debate, now that distributions are used to support both government services and the dividend program. The Legislature did establish the Bicameral Permanent Fund Working Group in June of this year in recognition that in finding a long-term solution to the State's fiscal issues, it is necessary first to resolve issues surrounding the future issues of the Earnings Reserve Account.

CHAIR RICHARDS moved to the investment adviser review.

INVESTMENT ADVISOR CHARTER REVIEW

CEO RODELL reported that the Governance Committee met on Wednesday and reviewed proposed changes to the charter of the Investment Advisory Group. She stated that a clean copy and a red-line copy was distributed so the changes can be seen. She continued that the bulk of the changes are under the duties and responsibilities. The expectation is that members will be expected to attend at least three out of the four meetings each year. At least one topic will be put before the Board for consideration by the group itself annually. The other big change is the addition that the group will coordinate or contact the chief investment officer prior to each Board meeting to discuss topics on the upcoming agenda, including performance and any changes that are being considered; and we would like to see the members come to Juneau and attend Investment Committee just to understand the internal process. She added that the Committee recommended that the Board pass a motion and recommended that the Board adopt these changes to the charter. She opened it for questions.

VICE CHAIR BRADY asked who the members were.

CEO RODELL replied George Zinn, Jerry Mitchell, and Tim Walsh. Jerry Mitchell cannot continue if he has to be at three meetings because he is obligated to the ARM Board to attend every meeting and he lives in Boston. George Zinn would like to continue, if possible, and is working things out with his employer.

MR. WALSH stated that he was fine with it and the dates do not conflict with the two other boards he is on.

VICE CHAIR BRADY stated his disappointment in losing the benefit of Jerry Mitchell's 25-plus years of counsel. He thinks that taking another look at this is needed.

TRUSTEE TANGEMAN asked to set this aside until the next meeting.

CEO RODELL suggested the Board consider adopting this today and then adopting a second motion that says, "notwithstanding this, keep the current contracts in place and revisit as they expire."

MOTION: A motion to move the Charter of the investment adviser was made by TRUSTEE MORAN. A friendly amendment was made by TRUSTEE RUTHERFORD to make it clear that does assume George Zinn and Jerry Mitchell's contracts remain in place and not be affected by this resolution; seconded by TRUSTEE FEIGE for the amendment and for the whole charter.

After the ROLL CALL, The MOTION was unanimously approved (BRADY, MORAN, RUTHERFORD, TANGEMAN, FEIGE, RICHARDS).

CHAIR RICHARDS called a 15-minute break.

(Break.)

ELECTION OF CORPORATE OFFICERS

CHAIR RICHARDS stated that next on the agenda is nomination of officers. The two officer positions are Chair and Vice Chair.

TRUSTEE RUTHERFORD asked if the Chair then appoints committees.

CEO RODELL replied that the Vice Chair is automatically Chair of the Governance Committee, but the Chair assigns the Governance and Audit Committee positions.

MOTION: TRUSTEE MORAN nominated Craig Richards as Chairman of the Board next year, and Carl Brady as Vice Chair; seconded by TRUSTEE RUTHERFORD.

After the ROLL CALL, The MOTION was unanimously approved (BRADY, MORAN, RUTHERFORD, TANGEMAN, FEIGE, RICHARDS).

CHAIR RICHARDS stated that the committee assignments will remain the same.

MS. MEINERS asked that the calendar be done first.

CEO RODELL stated that locations were not put on the 2021 calendar and the 2020 calendar reflects what has been approved in the past in terms of dates and locations. She wanted to confirm that the May meeting would be in Kenai; the meetings were divided between Anchorage, Juneau, and Kenai. She suggested that for 2021 to keep the February meeting in Juneau because of the legislative session. She proposed that the September 2nd meeting be in

Anchorage; the annual meeting be in Juneau; and the December meeting be in Anchorage. After discussion, the May meeting was planned for Kodiak.

MOTION: A motion to adopt the calendar as discussed was made by TRUSTEE MORAN; seconded TRUSTEE FEIGE.

After the ROLL CALL, The MOTION was unanimously approved (BRADY, MORAN, RUTHERFORD, TANGEMAN, FEIGE, RICHARDS).

CHAIR RICHARDS asked Mr. Walsh for any comments.

MR. WALSH gave a couple of high-level observations and then talked a bit about the asset allocation discussion which he thought is probably the most important dialogue. He stated that the thought of doing a new asset class every meeting was a great idea.

CHAIR RICHARDS asked Steve Center for any comments.

MR. CENTER stated that what is important to remember with the return expectation is that they are their expectations for the average investor for each asset class. These are not expectations being made for how well the Permanent Fund will implement in those asset classes.

CHAIR RICHARDS moved to trustee comments.

TRUSTEE RUTHERFORD stated that she had introduced Chair Richards to Tom Chapman who was instrumental in getting the incentive comp program approved for Wyoming. He agreed to share his presentation materials and stated that it might be useful and worth following up on.

VICE CHAIR BRADY reiterated that, if the desire is to hold meetings outside of our norm and go to Kodiak and Kenai, the purpose is for the benefit of those local communities and the people of those communities. It would be providing something that they can attend that they would not otherwise see. He suggested to not continue doing those in the future because of the costs, but since it has been agreed to it should get done in the right fashion.

CEO RODELL suggested that this should be done for Kenai instead of the December meeting in Fairbanks, because there would be more time to plan for a successful meeting.

MR. BROWN stated that for Fairbanks in December he has spoken with the head of the Student Investment Fund; there will be five or eight students attending the meeting, as well.

TRUSTEE RUTHERFORD stated that she feels strongly that when the board undertakes something which involves a reception or something like that the board members have responsibility and sometimes those responsibilities are financial.

CHAIR RICHARDS asked for any other trustee comments. He stated that the IFSWF Conference was phenomenal and was impressed with how staff totally pulled together and supported each other with everything.

TRUSTEE RUTHERFORD stated that it was amazing and the presentations were knock-your-socks off.

TRUSTEE TANGEMAN stated it was a nice job.

CHAIR RICHARDS adjourned the meeting.

(Alaska Permanent Fund Corporation Full Board Meeting adjourned at 12:36 p.m.)