

Minutes of the Meeting held on Wednesday, September 20, 2017

Present: Francis Murphy – Chair, James Monagle, Michael Gardner, Nadia Chamblin-Foster, John Shinkwin, Ellen Philbin, Rafik Ghazarian, and Chris Burns.

The meeting was called to order at 11:03 AM. The meeting was digitally recorded.

Agenda Item #1 – Segal Rogerscasey

The Board reviewed a written analysis of investment performance for the period ending June 30, 2017. The broad market performance in the last quarter was strong, as it has been for the last year. Fixed income, real estate and hedge funds all showed positive returns, although they lagged other asset classes.

Ghazarian reviewed the current asset allocation. The system remains overallocated to equities, although the system is preparing to fund the JP Morgan real estate fund in the near future. The PRIM private equity funds continue to draw money slowly.

The portfolio saw good returns over the last quarter. Overall, the total fund was valued at \$1.225 billion, representing a gain of 3.09% during the quarter. The fund slightly outperformed the policy index return of 2.98%. In reviewing individual managers, he noted that Lazard has underperformed their benchmark over the last year. Their performance over the longer term has been stronger. Gardner stated that he remains concerned about inconsistent performance from Wedge. He also stated that the cumulative returns from the hedge fund sleeve, going back to 2007, total 36.67%. The S&P 500 has returned 88.1% over the same period. He stated that he still favors considering options for reducing the hedge fund allocation. The Chairman stated that Michael Trotsky reported on the performance of the PRIT fund at the recent conference at Holy Cross. The hedge fund sleeve has returned 9.33% over the last year. He stated that he would be hesitant to reduce this allocation in the near term, but would like to review the performance of Wedge and the hedge funds at the next quarterly meeting.

The Chairman asked for Ghazarian to provide information on the screen he used when preparing his report of fossil fuel holdings in the system. Ghazarain stated that he believed that Segal used the same “Carbon 200” list referenced by the MassDivest.org representatives, but that he would check with his research department and report back.

The Board reviewed Segal Marco’s analysis of the timber manager candidates. Seven firms submitted proposals. Segal eliminated two firms after their review. BTG was eliminated due to high staff turnover and small fund size. Catchmark was excluded due to lack of performance history. Hancock was one of the respondents, and Cambridge has a long history investing with that firm. Hancock’s newest product is an open-ended fund which invests in both timber and farmland. RMS is also offering an open-ended fund, investing exclusively in timber. The other respondents all offer closed-end funds. Ghazarian discussed the differences between open-end and closed-end funds. Ghazarian noted that the proposal from Campbell is differentiated because they invest very little in the United States, focusing mainly on Canada, Latin America and Australia. He noted that the system’s present investment with Hancock Fund X is primarily focused on the US. Molpus also submitted a proposal, although this fund has not formally launched yet and some details, including management fees, have yet to be determined. Stafford is the last manager to submit a proposal, and Ghazarian stated that they have a very solid track record. Gardner stated that he would be interested in talking to Campbell, due to the geographic diversity. The Chairman stated that he would favor hiring one of the open-end managers, because they would likely draw the commitment faster, and be easier to manage. Gardner stated that he would be interested in allocating more than the \$25 million that was advertised, and that

the system might do better to overcommit, given the current underallocation to alternative investments. Chamblin-Foster stated that she was aware of media reports of high turnover at Hancock Timber. Ghazarian stated that Segal has reviewed Hancock carefully, and is not concerned by employee turnover. Motion by Gardner, seconded by Monagle to invite Hancock, RMS and Campbell to interview. Voted unanimously.

Ashley Cassel and Tom Harvey represented Aberdeen. A written portfolio review was submitted to the Board. Cassel stated that in August, Aberdeen completed a merger with Standard Life PLC, another UK-based asset management firm. This has not resulted in any changes to the portfolio team. She stated that information regarding the firm's diversity initiatives was included in the written materials. Harvey reviewed the firm's investment process and recent returns. Returns throughout the emerging markets space have been extremely strong, partially as a result of the US dollar weakening in 2017. Aberdeen underperformed their benchmark over the last year, returning 17.5% net of fees, vs. the benchmark at 25.3%. Harvey noted that the portfolio was hurt by an underweight position in China. This position is driven by concerns about poor corporate governance in Chinese companies, making them vulnerable to undue influence from the government. Harvey described Aberdeen's analysis of two Chinese technology firms, Alibaba and Tencent, noting restrictions on foreigners owning shares of these firms. He stated there was a possibility that Aberdeen could invest in offshore entities tied to these firms. The decision not to hold those two stocks resulted in 260 basis points of underperformance. The main drivers of performance were stock selection in India, Brazil and Mexico. Gardner noted that in reviewing the performance of emerging markets over the last seven years, there had been significant volatility. Harvey confirmed that this was typical of the EM asset class, and Aberdeen attempts to mitigate risk through a focus on company fundamentals.

Bob McManama and Tom Stolberg represented Loomis Sayles. A written proposal was submitted to the Board. There have been no changes to the portfolio team or investment strategy. Over the last year, the portfolio has run in-line with the benchmark, returning 11.7% net of fees, vs. the BARC High Yield Index at 11.82%. Stolberg stated that he believes that the economy is now at the end of a credit cycle, and he has worked to de-risk the portfolio. He noted that the firm had invested 8% of the portfolio in bank loans, paying about 2.5%, significantly lower than high yield debt. This was a drag on performance. Looking forward, the firm anticipates yields of about 5.5%. After deducting 75 basis points for anticipated defaults, returns could be under 5% for the near future. He noted that while investing in riskier assets could add to returns, he does not feel it would be a prudent move. He also described the risks of the Fed moving too quickly to raise interest rates, and the effect that could have on the portfolio. Gardner asked about the portfolio's cash holding. Stolberg stated that he normally holds about 3% in cash, to allow the portfolio to make purchases without having to immediately sell another holding.

Leigh Crosby, Michael Henry and Katrina Uzun represented Wellington Management. A written portfolio summary was reviewed by the Board. Crosby reported that the SEC has opened an investigation of Wellington, regarding their valuation of private holdings. She stated that the firm has cooperated with the investigation. Ghazarain stated that his research team had been in contact with Wellington, and Segal Marco would likely prepare a memo for their clients. Crosby also reported one change to the firm's managing partnership. There have been no changes to the investment strategy. Henry discuss the firm's investment process and risk management. The firm is headquartered in Boston and has additional offices in London and Hong Kong. Researchers travel extensively in order to monitor investments. The fund has generated returns in-line with the benchmark, returning 12.78% net of fees since inception vs. the index at 12.74%. Security selection has been the primary driver of performance, with currency effects having little impact. Investments in Uruguay, India and Ghana performed strongly. Henry stated that he

feels the portfolio is well positioned for strong returns in the future. Growth in the EM space remains strong, and commodity prices have been stabilizing. Gardner asked for information on the correlation between EM debt and EM equity. Henry noted some correlation as both are susceptible to the same currency effects. However, bonds and equities are not strongly correlated. He also noted that some countries where Wellington invests, such as Thailand and Malaysia, don't tend to correlate with broader world markets.

Jeff Kusek represented Penn Square Real Estate. A written review of the portfolio was presented to the Board. Kusek stated that the Townsend Group was purchased by Aon. The transaction will closed by the end of the year. Kusek stated that he did not anticipate any changes at Penn Square. The portfolio is well into the harvesting phase, and has now returned \$4.5 million on \$3.4 million in contributed capital. He stated that he expected significant distributions in 2017 and 2018, with the fund winding down in 2019. Ghazarain stated that once JP Morgan was funded, the system's real estate allocation should be in line with the target, and that there was no urgency to seek out a new real estate fund. Kusek stated that the portfolio was able to generate early returns with five secondary investments, which allowed them to recycle distributions rather than calling funds. Kusek noted that the portfolio was well timed, as they were able to buy while prices were still depressed, and are now selling into a very strong market. The majority of underlying funds have performed well. He noted some issues with two funds in Brazil, where currency issues and instability in the government have been a drag on performance. Industrial properties have performed well. Kusek stated that he feels retail continues to be a very risky area, although one fund performed very well investing in a series of grocery-anchored retail centers. He stated that the portfolio has little exposure to Houston, and he was not concerned about losses from Hurricane Harvey. The portfolio does have holdings in Florida, but it was too soon to judge the impact from Hurricane Irma.

Walter Dick and Luke Burns represented Ascent. A written overview of the portfolio was presented to the Board. Dick stated that he is in the process of transitioning out of Ascent over the next several years. He stated he will maintain his roles connected to open funds, but will not participate in any future funds. Cambridge has investments in four Ascent funds. In Fund II, Ascent has exited the last company in the portfolio. ZoomInfo was acquired in August for \$240 million, which represents a 32x multiple. Other than a small amount of cash and funds in escrow, Fund II is now terminated. Fund III has one firm remaining, Exchange Solutions. The firm changed leadership in 2016. Dick stated that he anticipates the company being sold in the next 18 months. In Fund IV, there are three companies remaining in the portfolio that have significant upside potential, and could be candidates for IPOs or acquisition in the next few years. Burns reviewed the transaction with Fort Washington to buy out SBA interests. He stated that he felt that there was a good possibility of the fund breaking even. Dick described Ascent's involvement with firms in their portfolio. Ascent always takes a Board seat, and is involved with key hires, strategy and merger/acquisition talks. Burns reviewed the performance of Fund V. The fund has ended the investment phase. It made ten investments and has completed four exits. The fund has called 88% of the capital commitment, and Burns stated he did not believe much more would be called. Of the six remaining companies, four have potential for very strong upside. Burns stated that the firm would likely launch Fund VII in the second half of 2018, targeted for \$125 million. He stated that he felt that Ascent was better positioned to make investments in smaller start-up firms than bigger managers. Dick noted that the PRIT private equity fund is weighted toward buyouts, and that Ascent could provide some diversification by putting more money in venture capital.

The Board agreed to conduct interviews with the timber managers on October 10.

Monagle moved to adjourn at 2:45 PM.