

## Minutes of the meeting held on May 21, 2018

Present: Francis Murphy – Chairman, James Monagle, Michael Gardner, John Shinkwin, Ellen Philbin, David Kale, Rafik Ghazarian and Chris Burns.

Left Early: Nadia Chamblin-Foster (Left following Lazard presentation)

The meeting was called to order at 11:08 AM. The meeting was digitally recorded.

Rafik Ghazarian provided an overview of the managers scheduled to present. There have been some performance issues with Lazard, although Ghazarian noted that they also underperformed in prior years, and then bounced back very strongly. He stated that there are index products available in the emerging markets equity space, although they are more expensive than comparable domestic equity funds. Ghazarian estimated that an EM equity index fund would charge 25-30 basis points annually.

Ghazarian reviewed Segal Marco's written analysis of investment performance for the period ending March 31, 2018. The overall markets have delivered negative returns over the last quarter, although emerging markets had slightly positive returns. Fixed income was also negative as US interest rates continued to rise.

Ghazarian reviewed the system's current asset allocation. The system remains significantly overweighted to equities, but some of these funds will be drawn down as new managers are funded. He stated that he expected that JP Morgan would draw their commitment within the next 90 days. This would bring the real estate sleeve close to the target. The PRIT fund continues to draw down the private equity commitment. Ghazarian stated that he still believes that the fund can reach the private equity target within two or three years.

Gardner stated that the system was likely to make changes to lower the return assumption in the next few months. He asked if it would be appropriate to perform a new asset allocation analysis in light of that. Ghazarian stated that if the Board requested it, he would be happy to perform a new study. The Chairman stated that Kathy Riley would present preliminary numbers at the regular June meeting. He stated that he hoped it would be possible to lower the return rate without impacting the appropriations or changing the date for full funding.

Overall, the total fund was valued at \$1.324 billion, representing a gain of 0.42% during the quarter. The fund outperformed with the policy index return of 0.08%. The system saw losses in the domestic and international equity sleeves, and in fixed income and high yield. International fixed income and infrastructure performed very well in the first quarter. The private equity portfolio also continues to generate strong returns. Kale asked about the options for dealing with an underperforming manager. Ghazarian stated that he is not concerned with Lazard's recent returns since their long-term record remains very strong. He stated that Segal still would rate them as "recommended" for any search they conducted.

The Board reviewed a schedule of completed and pending manager searches. The core bonds search should be made public within the next few days, and Segal said they could complete their analysis within six weeks after responses are received. Ghazarian reviewed the November vote to consolidate the domestic equity sleeve. The Chairman stated that he would prefer to focus on completing the core bonds search before making any moves to change the domestic equity managers. Ghazarian distributed his analysis of the benefit to maintaining a split between growth and value. He noted that there were slightly higher returns generated by investing in both growth and value stocks, but only if the Board were diligent about rebalancing to keep the weights equal.

Jason Crawshaw, Ashley Hyotte and Sumanta Biswas represented RBC Global Asset Management. A written portfolio review was submitted to the Board. Hyotte described management changes at RBC, but none affecting the portfolio team. Over the last year, the portfolio ran well ahead on the benchmark, returning 16.36% net vs. the index at 12.7%. Crawshaw stated that Bernard Horn has no plans to retire in the foreseeable future. He noted he is now more focused than ever on portfolio management, as the firm has grown and others have been brought in to manage the firm's operations. He also noted that the firm does have others running various portfolios, noting that Biswas is portfolio head on a small cap product, which has generated excellent returns over ten years. Crawshaw stated that he was confident that others could run the portfolio if Horn were to retire. Over the last year, holdings of British homebuilders were a major driver of performance. The portfolio had bought additional shares after the price dropped steeply following the Brexit vote, and profited when the stocks recovered. The portfolio has now sold shares of two of the firms, Persimmon PLC and Barratt Developments PLC, following the rally. Both stocks had been in the portfolio for over ten years. Teva Pharmaceutical was a significant detractor from performance. Crawshaw stated that the firm reviewed this holding very carefully, and opted to increase their investment. Popular, a Puerto Rican bank, was hurt due to losses following Hurricane Maria. However, the stock is up as the recovery from the storm has continued. Crawshaw stated that he visited Puerto Rico earlier in the year and was impressed by the pace of recovery.

Ben Wulfsohn represented Lazard Asset Management. A written portfolio review was submitted to the Board. Wulfsohn noted that the firm's style appeared to be out of favor in 2015 and 2017. Lazard has not held the large Chinese e-commerce stocks, Tencent, Alibaba and JD.com. Collectively, they comprise almost 10% of the emerging markets index. The decision not to buy them cost over 400 basis points of performance. Wulfsohn stated that he still believes the stocks are overvalued. He noted that the firms are all profitable and growing quickly, but that the valuation of the stock can't be justified. The portfolio also held a high cash position in 2017, averaging almost 4% of the fund. This cost about 120 basis points of returns. He stated that it can be difficult to execute trades in a "momentum market" such as existed in 2017. As prices continue to rise, the fund may not be able to execute trades at the desired price, which can result in holding cash until the price dips. Wulfsohn described the strong returns in 2016, noting that it was a reversion to the mean after another momentum market in 2015. He also noted that rising interest rates has resulted in less demand for stocks as investors can get more reasonable returns from fixed income. Over the last two years, Lazard has seen a higher percentage of returns from currency effects than normal. The firm does not hedge currency, but will take it into account when setting a price target. Wulfsohn stated that the portfolio does not have significant exposure to products that might be hurt from new tariffs imposed by the Trump administration, although a broader trade war would certainly hurt emerging markets.

Bob McManama and Tom Stolberg represented Loomis Sayles. A written portfolio review 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 3.91% net of fees, vs. the BARC High Yield Index at 3.78%. The last year has also seen the rate on 10-year treasuries increase by about 70 basis points. Stolberg described how movement of treasury rates can affect high yield debt. The firm continues to hold 8% of the portfolio in bank loans, which pay a significantly lower rate than high yield debt. This was a positive driver of performance as they are adjustable rate loans. Looking forward, Stolberg stated that he continued to expect modest returns from the portfolio, although he was confident that defaults would be low. He stated that he believes that the economy is at the end of a credit cycle. He also stated that he was concerned about low-quality firms borrowing, and weak covenants to protect lenders. He anticipates that the portfolio will maintain a defensive position over the next year.

Jonathan Cordo and Brian Giuliano represented Brandywine. A written portfolio report was submitted to the Board. There have been no significant changes to the portfolio team or investment strategy. In June, the firm will move to a larger office, but is remaining headquartered in Philadelphia. The firm now has \$80 billion in assets under management. Cordo noted that Brandywine is now offering a Global Opportunistic Fixed Income strategy, which includes some high yield debt, and targets a higher return. The portfolio underperformed the benchmark over the last year, returning 11.85% net vs. the Citigroup WGBI Ex-US at 12.93%. The portfolio has now run behind the benchmark over the trailing three-year period. Giuliano stated that the past five years have been extremely challenging for this asset class, with very modest returns. He attributed this primarily to the strong run for the US dollar. He stated that the economy now appears to be moving toward a weaker dollar environment, which should benefit the portfolio. Investments in South Africa performed well, as a change in leadership has improved the economy. Over the last year, the fund generated most of its return from currency effects. The Mexican Peso was a significant driver of returns. The fund has moved to shorten durations significantly, anticipating higher interest rates going forward. At present, the fund has no exposure to Japanese bonds, which continue to pay an interest rate close to zero. The fund does have exposure to the Japanese Yen, however, and holds a number of currency-only positions. Gardner requested that Segal provide a breakdown of how much of this fund is invested in bonds and how much is in currency.

Maria Bascetta represented UBS. A written overview of the portfolio was presented to the Board. Cambridge has been an investor since 1988, gaining a 9.05% annual return since that time. Bascetta stated that, as of April 2018, UBS will no longer charge the incentive portion of the management fee, which had been assessed on returns exceeding 5% annually. She also announced that Paul Canning will take over as senior portfolio manager, replacing Kevin Crean, who is retiring. She stated she expected a very smooth transition. The fund also maintains a focus on properties on the coasts. The fund now has \$23.5 billion in assets, consisting of 208 properties. Value-added properties currently comprise 3% of the portfolio. The portfolio remains overweighted to apartments, with Bascetta stating the firm feels apartment properties are more stable. She stated that the fund will likely sell some office properties in the near future. She described some difficulties in renting vacant space at the 53 State Street property. Bascetta stated that the fund is reviewing retail holdings very carefully. She noted that they are seeking approval to make significant changes to the CambridgeSide Galleria, by converting some of the retail space into offices or apartments. In general, malls are being repositioned as gathering spaces, with a greater focus on restaurants, entertainment and supermarkets, and fewer stores which would be subject to competition from online retailers, such as clothing. She also noted a reduced need for parking, as more people use ride-sharing to get to the mall. The firm now feels that they are in a mature economy and property appreciation has slowed. In the near future, they expect returns will primarily be driven by rent income. Bascetta stated that she feels the portfolio is well positioned, and is now moving to increase holdings of industrial properties. She stated that the majority of the apartment units in the portfolio would be considered high-end units.

Andrew Blanchard and Maria Vasilatos represented Rockwood Capital. A written review of the portfolio was submitted to the Board. There have been no changes to the portfolio team or investment strategy. Cambridge is currently invested in Fund IX, having committed \$18 million in 2013. Vasilatos stated that the fund is targeting a 14.4% net IRR. At the end of 2017, the firm closed two new funds, an opportunistic real estate fund, and a real estate debt fund. Blanchard reviewed activity in Fund IX. The fund has now completed the investment cycle, with the final acquisitions closing in Spring 2016. Liquidation activity has picked up. The fund closed on 23 properties and has now sold 14. The fund has now returned 95% of called capital, and should be over 100% by the end of June. The nine properties sold in 2017 closed at a 1.8x multiple. The fund has targeted five additional properties for sale within the next year. To date, the fund has called 91% of committed capital. The remaining amount will be held in reserve. Blanchard stated that he

expects the fund to be fully liquidated by the end of 2021. Blanchard reviewed the investment strategy and risk management. At the start of the fund, the majority of the targeted properties are planned to generate income within 12 to 18 months. A number of properties generate income immediately. The firm attempts to control risk by holding longer renovations (24-36 months) to between 15-30% of the fund. By the end of 2018, there should be only one property still undergoing construction, with others either sold or generating income. He noted that in Fund X, the firm has taken a slightly more conservative approach, with more focus on income-generating properties. The firm will likely launch Fund XI at the end of 2018, at a target size of \$1.2 - \$1.5 billion. Ghazarian asked about the performance of funds that were active during the Great Recession. Blanchard stated that Funds VI and VII were challenged, with VII terminating at a loss to investors.

Scott Humber and Ira Shaw represented Landmark Partners. A written portfolio report was submitted to the Board. There have been no significant changes to the portfolio team over the last year. The Board is now invested in two secondary funds, Real Estate Fund VI and Private Equity Fund XV. The firm is now raising Private Equity Fund XVI and recently closed on Real Estate Fund VIII. The investment strategy in the most recent funds remains consistent with prior funds. Shaw reviewed the acquisition process, noting that the firm considers the underlying fund's management fees when negotiating a purchase.

Shaw reviewed the performance of the real estate fund. This fund is now fully subscribed. The portfolio closed 30 transactions, acquiring 83 partnership interests. It is generating a net IRR of 20.42%. The total fund invested \$681 million, and has now made \$876 million in distributions. The remaining value of the fund is \$156 million. Shaw stated that most of that balance should be returned within two years. The firm may also explore options for selling the tail-end balance on the secondary market.

Humber reviewed the performance of the private equity fund. The fund closed in 2014 and has now finalized its investments. The portfolio closed 56 transactions, acquiring 176 partnership interests. It is generating a net IRR of 16.5%. The portfolio is well diversified in terms of vintage year, industry and strategy. Humber described how the portfolio manages cash flow. Landmark uses a credit facility to fund purchases. The life of the fund should extend for about six more years. In 2017, the secondary market as a whole closed \$53 billion in transactions, which was a record year. Humber stated that he felt that number was sustainable.

Ghazarian stated that, given the impending end of the real estate funds, the Board may wish to consider looking for a new value-added manager at the end of the year.

Monagle moved to adjourn at 2:20 PM.