

Minutes of the Meeting held on October 28, 2015

Present: Francis Murphy – Chair, James Monagle, Michael Gardner, John Shinkwin, Louis DePasquale, Ellen Philbin, Rafik Ghazarian and Chris Burns.

Absent: Nadia Chamblin-Foster

The meeting was called to order at 11:14 AM. The meeting was digitally recorded.

Agenda Item #1 – High Yield Investment Manager Interviews

Mark Hudoff and Pat McMenamin represented Hotchkis & Wiley. A written proposal was submitted to the Board. The firm was founded in 1980. The firm is employee-owned and has \$30 billion in total assets under management, with \$3 billion in high yield. They plan to close the high yield portfolio to new investors at \$5 billion. Their research staff covers both the high yield and equity portfolios. Hudoff reviewed his history with the firm, and his decision, with several other colleagues to leave Pimco and move to Hotchkis & Wiley, noting that a major factor in his decision was his feeling that the Pimco portfolio had grown too large to generate strong returns, and made it impossible to invest in some of the smaller bond issuers. The portfolio is targeted to 120 holdings, and now has 134. A single holding typically comprises 75 basis points in the portfolio, with the largest holdings at about 125 basis points. Hudoff stated that the fund will tend to outperform in “steady as she goes” markets, protect against down markets, and underperform in strong bull markets. Hudoff stated that he considers B rated bonds to be the sweet spot for the portfolio, and the fund will typically be underweighted to CCC bonds. Over the last five years, the portfolio has returned 7.5% vs. the Bank of America High Yield index at 6.0%. The portfolio is benchmark-agnostic, and Hudoff stated that the portfolio could be measured against any benchmark chosen by the system. Hudoff stated the firm does track its default rate, and strives to avoid unanticipated defaults, but noted that the firm had been able to do well in certain instances buying bonds which were just emerging from a default and restructuring. This type of opportunistic investment comprises less than 1% of the portfolio. At present the default rate is about 0.35% per year.

Todd Vandam, John Meyer and Orr Shepherd represented Loomis Sayles. A written proposal was submitted to the Board. Loomis Sayles was founded in 1926, and is headquartered in Boston. They have \$232 billion in assets under management. They have 18 Massachusetts public funds as clients. The research team covers both high yield and investment grade bonds. Over the last ten years, the firm has significantly expanded their quantitative research team. Vandam reviewed the firm’s investment process. The firm uses a top-down process in evaluating the credit cycle and industry rankings, but also applies a bottom-up approach to reviewing individual bonds. The portfolio will generally hold about 100 bonds. Each bond will comprise no fewer than 50 basis points. At present the portfolio’s largest holding is Sprint, which is now 3.5% of the portfolio. Vandam described the firm’s analysis of macroeconomic data, and described the actions the firm will take at each stage of the economic cycle, noting that different industries may be in different phases at the same time. He described the firm’s credit analysis, noting that their research is more forward-looking than the ratings provided by the major rating agencies. The firm may invest up to 20% of the portfolio in off-benchmark positions including bank loans and non-US dollar bonds. Since 2009, the portfolio has seen only four defaults. Vandam stated the portfolio could be measured against any high yield benchmark. Since inception, the fund has returned 8.38% net of fees, vs. the Barclays Capped HY Index at 8.07%. Meyer stated that, given the firm’s existing commitment to Massachusetts public funds, they would be willing to reduce their management fee to 40 basis points annually, including custody and trading expenses.

Andrew Susser and Kirk Kashevaroff represented MacKay Shields. A written proposal was submitted to the Board. Kashevaroff thanked the Board for their continued investment, noting that Cambridge has been a client since 1998. There have been no changes to the management or investment strategy over the last year. Susser reviewed MacKay's investment process and risk analysis. He noted that the firm eliminates any bonds that don't pay a sufficient premium over investment grade bonds, and that the firm does not buy a bond unless they believe that the value of the firm is at least 150% of the value of outstanding debt. He also described the firm's risk analysis process. The portfolio has performed well on a relative basis over the last year, returning 0.16% net of fees, vs. the Credit Suisse HY Index at -3.96%. Susser noted that the portfolio has always been measured against this index, but the portfolio could also be measured against the Merrill Lynch index. Susser stated that he does not feel that looking at the default rate is a particularly good way of measuring performance. He observed that a firm could exit a bond by selling at a steep discount before a firm defaults, without taking a hit to their default rate. He suggested that, in addition to past performance, the Board consider the firm's risk adjusted returns. He noted that over the last five years, the firm has had significantly less volatility than the index, and has offered good protection in down markets. The portfolio has consistently had shorter durations and lower interest rate risk than the index. The portfolio typically consists of about 300 bonds, issued by roughly 200 companies. Susser noted that they were still largely concentrated, with 75% of the portfolio consisting of 125 bonds. MacKay has proposed a fee of 45 basis points, the same rate they have previously been charging.

Agenda #2 – Infrastructure Manager Interviews

Brooks Kaufman and Rena Pulido represented IFM Investors. A written proposal was submitted to the Board. IFM was founded by a group of Australian pension funds, and is still owned by a group of 30 funds. The firm has \$44 billion under management, with \$21 billion in the infrastructure portfolio. The firm has two infrastructure funds, one of which invests exclusively in Australian assets. The product under consideration is their global infrastructure fund. The global fund consists of twelve investments. The fund is open-ended, although Pulido noted that the firm hopes to attract long-term investors. Investors may choose to add additional money to their initial commitment, and to reinvest dividends paid by the fund. The fund invests primarily in North American and Europe, and does not hedge against currency fluctuations. Since inception the fund has returned 8.3% annually, measured in local currency, but only 7.2% measured in US dollars. Pulido reviewed the firm's diversity initiatives, and their efforts to provide a flexible work environment for employees. She noted that, under Australian law, they are barred from recording employee's ethnicity, but she did provide a breakdown by gender. Once the Board commits to an investment, Cambridge would enter a queue to invest. The queue is now \$1.8 billion, although \$1.1 billion has already been earmarked for a new acquisition. The firm has deployed \$6 billion over the last two years. Pulido estimated that Cambridge could be fully invested in 12-18 months. The firm does not charge a management fee until committed funds are actually drawn down. Management fees are 97 basis points, plus 20% of returns over 8% annually. Pulido stated that, being owned by a group of pension funds, the firm is very sensitive to the fees they charge. Fees are calculated on a cost-plus basis and the firm periodically reviews expenses and will offer to reduce fees when possible. Kaufman reviewed the firm's investment strategy. IFM invests primarily in core, stable brownfield assets. The firm generally does not invest in development of new assets. The average portfolio leverage is 43.5%.

Peter Kenny and Paul Ryan represented J.P. Morgan Asset Management. A written proposal was submitted to the Board. Kenny noted that J.P. Morgan has over 1000 employees in Massachusetts, and is a supporter of several local charities. The firm has five Massachusetts public funds as clients. The firm has a commitment to diversity, and achieved a 100% rating on the Corporate Equality index. The Infrastructure Investments Fund is open ended, with \$4.2

billion under management, invested primarily in North America, Western Europe and Australia. The fund does not hedge against currency fluctuations. The fund consists of twelve investments in power generation, transportation and utilities. The fund has targeted to raise \$1-\$1.5 billion per year, and to close three transactions per year. They hope to eventually have twenty assets in the portfolio. Ryan noted that the portfolio tends to perform better in periods with higher inflation. He described the process for performing maintenance on their properties, and noted their good working relationships with various regulators. He also discussed the importance of independent directors in assuring that needed maintenance is not deferred in order to provide a good short-term return. Since inception, the fund has returned 6.6% annually, or 3.6% including currency effects. Returns over the trailing five years have been stronger at 7.3% including FX. Ryan stated that for an investor who remains in the portfolio for at least eight years, the currency effects would likely be negligible. He stressed that the portfolio is designed to provide consistent returns over the long term. Fees for an 8-year hard lock investor would be 1.1% on the first \$50 million invested, plus 15% of returns over 7%. To date, the firm has never collected the incentive fee.

Vikram Bhaskar, Akhil Unni and Sean Conroy represented GCM Grosvenor. A written proposal was submitted to the Board. Grosvenor is independently owned, headquartered in Chicago, and has \$51 billion in assets under management. The firm has previously managed money for PRIT, but lost the account following PRIT's move to direct investments. The infrastructure fund has \$3 billion under management, mostly consisting of separate accounts for institutional clients. Conroy reviewed the firm's diversity statistics and initiatives, including mandatory interviewing of diverse candidates for senior roles. Bhaskar described the structure of the product being offered. It is a closed end fund-of-funds, targeted to raise \$650 million. The fund will invest primarily in North America and Western Europe. Their prior fund has achieved a net IRR of 9.6% and has a positive cash yield in 18 out of 22 quarters. Most of the fund will be invested in primary funds, with smaller amounts targeted to secondaries, co-investments and debt. Bhaskar described the firm's ability to mitigate any J-curve effects by negotiating discounts on secondary investments. Ghazarian noted that the firm's fee structure is more complex than the other candidates, and structured more like a private equity fund. The firm charges 60 basis points on committed capital, plus 2.5% carried interest. The fund has already had a first close. Should Cambridge choose to invest, the firm would likely draw 20% of the capital immediately, and the rest over the next three years. The life of the fund would be about fifteen years.

Ghazarian reviewed a written analysis of the High Yield finalists prepared by Segal Rogerscasey. He described some of the most significant differences between the firms. Loomis is significantly larger than the other two candidates, with \$232 billion under management. MacKay is much less concentrated than the other two, with 381 bonds in the portfolio. Hotchkis & Wiley portfolio invests about 20% of assets in non-US and emerging market debt. Ghazarian noted this would overlap with other managers in the system's portfolio. Loomis would offer the lowest management fees. In comparing performance, Hotchkis and Loomis have both shown better returns than MacKay over the last five years. Gardner noted that in most years, MacKay has performed below the median of their universe. Ghazarian reviewed a chart showing their rolling five-year returns, and he stated that he would agree that MacKay has lagged, particularly in strong bull markets. Ghazarian stated that he believed the transaction costs involved in switching to a new manager would be minimal. The Chairman stated that he would favor hiring Loomis Sayles, due to their strong performance, low fees, and local presence. Gardner moved to transfer the High Yield mandate from MacKay Shields to Loomis Sayles, and to indicate to Loomis that their movement on fees was an important consideration in the decision to hire them. Shinkwin seconded the motion and it was voted unanimously.

Ghazarian reviewed a written analysis of the Infrastructure finalists prepared by Segal Rogercasey. The Chairman stated that he was concerned that none of the candidates would be able to put funds to work in the near future. Ghazarian noted that Grosvenor's fund-of-funds structure would result in significantly higher fees than the other two managers. Grosvenor is the largest firm, with \$238 billion in assets under management, though most of this is in other asset classes. Grosvenor is the only firm that does not utilize leverage in their portfolio. The other funds are about 50% leveraged. Comparing fees, Ghazarian stated that IFM had somewhat more favorable fees. He also stated that their ownership structure is unique, in being wholly owned by a group of pension funds. IFM has had stronger returns over the last five years. Ghazarian stated that he would recommend that the system reinvest dividends, should they choose to hire either IFM or JP Morgan. Gardner moved to hire IFM, investing \$30 million. Monagle seconded the motion and it was voted unanimously.

Ghazarian reviewed a revised draft of his memorandum regarding fees charged by UBS and PRIT. The memo lists fees paid to UBS in each year since 2010, and breaks out the incentive fee. Segal believes that the fees are in-line with competitors in the real estate universe. DePasquale stated that he felt the full fee breakdown was more information than the City Council would need in order to respond to their order. He recommended a simple statement that the fees were reasonable. Segal's memo shows that the PRIT Hedge Fund sleeve is charging 139 basis points. This breaks down to 136 points for underlying managers, 2 point for consultant fees, and 1 point for PRIT's overhead. Ghazarian stated that PRIT benefits from their direct investment program and economies of scale in this asset class. He estimated that if Cambridge were to attempt to invest in hedge funds independently, they could pay twice as much in fees.

Monagle moved to adjourn at 4:15 PM.