THE INVESTMENT COMMITTEE
OF THE
MARYLAND STATE RETIREMENT AND PENSION SYSTEM

MINUTES OF OPEN MEETING

February 20, 2018

The Investment Committee convened on Tuesday, February 20, 2018 at 10:00 a.m. in the 16th Floor Board Room of the State Retirement Agency, SunTrust Building, 120 E. Baltimore Street, Baltimore, MD.

Committee Members Attending:	Michael K. Barry	Larry E. Jennings, Jr.
	Eric Brotman	Charles W. Johnson
	Peter Franchot	Nancy K. Kopp
(1) Via telephone	David Hamilton (1)	Theresa Lochte
	Linda A. Herman, Vice-Chair	Richard Norman
	Lisa James-Henson	Douglas Prouty
	Sheila Hill	Michael J. Stafford, Jr.
Committee Members Not Attending:	James Harkins	David Brinkley
	F. Patrick Hughes, Chairman	Stephen Kitsoulis
Also Attending:	Victor Adekoya	Larry Katsafanas
	Cliff Asness (AQR Capital)	Aaron Kelley (AQR Capital)
	Anish Bedi	Dean Kenderdine
	Frank E. Benham (Meketa)	John Kenney
	Colleen Bower	Michael McCord
	Susanne Brogan	Mary Mustard (Meketa)
	Robert Burd, Deputy CIO	Stephen Muturi
	Antionette Butcher	Eileen O'Grady (UniteHere!)
	Elizabeth Burton	Andrew Palmer, CIO
	Rachel Cohen, OAG	Stephen Reilly
	Michael Dilamani (AQR Capital)	David Rongione, Chief Internal Auditor, Internal Auditing Div.
	Eric Farls	Dan Schick
	David Ferguson	Jody Shaw, OAG
	Michael Golden	Frederick "Beau" Smith
	Dimitri Grechenko	Toni Voglino
	Alex Harisiadis, OAG	Kathleen Wherthey, OAG
	Justin Hayes	Patricia Wild
	Levar Hewlett	Elizabeth Yan (AQR Capital)
	Dana Johns	Alex Zlotnikov
	Gregory Kasten	
	Faina Kashtelyan	

Ms. Herman, Vice-Chairman, called the Investment Committee meeting to order at 10:00 a.m.

Item 1: Minutes

On a motion made by Ms. Hill and seconded by Mr. Norman, the Investment Committee ratified the November 21, 2017 open meeting minutes.

Item 2: Public Member Position- Call for Nominations

Mr. Kenderdine announced that Mr. Jennings' term will expire June 30, 2018 and that he will not seek another nomination as a public advisor to the Investment Committee, therefore, the System is seeking nominations for this position. Mr. Kenderdine directed the Committee to page 10 of the agenda which outlines the criteria for nominees and the due date for nominations of March 1, 2018. It was further detailed that up to three candidates will be brought to the Investment Committee at the May Investment Committee meeting.

Items 3: Factor Investing

Mr. Palmer explained that the AQR presentation is the third in a series of educational sessions relating to factor investing. Mr. Palmer introduced Dr. Cliff Asness, Managing and Founding Principal of AQR. Mr. Palmer further detailed that AQR handles over $1.7 billion in two strategies for the System.

Dr. Asness discussed various pages in the presentation and explained what factor investing means, some of the myths associated with the strategies, and some of the factors typically included, such as value and momentum.

Comptroller Franchot asked Mr. Palmer to comment on the presentation. Mr. Palmer replied that factor-based investing can be good portfolio diversifiers, and that the System currently has exposure to these strategies. Mr. Palmer further explained that factor investing can be less expensive than other types of active management, and that he is exploring the possibility of expanding the use of factor investing internally. Mr. Palmer indicated that he finds many managers have significant exposures to common factors, and charge higher fees associated with active management. Comptroller Franchot asked what amount of System assets was allocated to factor strategies, and how they are benchmarked. Mr. Palmer responded that the System has over $3 billion allocated to factor-based strategies. Mr. Palmer also explained that factor mandates could be benchmarked against custom indices specific to individual factors, or relative to broader asset class targets.

Item 4: Report from CIO

Mr. Palmer detailed the agenda for the CIO Report that included an update on Investment Division activities, a review of key performance indicators, a detailed presentation on the Rate Sensitive asset class, and an update on the current market environment.

Mr. Palmer highlighted that staff's activities can be organized into two broad themes, which consist of lowering costs and improving productivity and efficiency of staff. He noted that staff continues to develop its new Code Red software to automate certain administrative tasks and conduct process reviews around the design of asset classes and manager selection. Mr. Palmer also mentioned staff efforts in the ESG space, and the importance of incorporating this risk factor into the investment process.

Mr. Palmer discussed the key performance indicators, noting that the System was up 9.7% to roughly $53 billion fiscal year-to-date through January 2018, while being even with the policy benchmark.

Comptroller Franchot inquired about the underperformance of the natural resources portfolio compared to the benchmark. Mr. Palmer replied that the benchmark for natural resources is not a perfect fit relative to the composition of the portfolio. He further explained that the former benchmark was CPI+5%, but that measure did not reflect the volatility of the assets. The benchmark was changed to an index based only on public securities. Mr. Reilly commented, when asked to comment by Comptroller Franchot, that the current benchmark still represented a mismatch for the asset class. He further explained that the mismatch stems from the difficulty in properly benchmarking private assets, and using the public market indices to benchmark private investments.

Mr. Palmer detailed the new hire and cash flow information pages in the CIO Report. The majority of the cash flow activity was due to implementing the asset allocation changes to the portfolio. Specifically, most of the activity was related to restructuring the Absolute Return portfolio and the Terra Maria program.

Mr. Grechenko presented an in-depth review of the Rate Sensitive asset class. Specifically, Mr. Grechenko detailed the impact on the portfolio of the policy changes implemented in 2015. He also provided the current characteristics of the portfolio, and the details of the restructuring of the Rate Sensitive Terra Maria program. Mr. Grechenko explained that the portfolio's exposure to inflation-linked bonds had been reduced, while interest rate sensitivity had increased, mostly in the nominal and treasury portions of the portfolio. He further detailed that the majority of the portfolio's duration is in the long-dated end of the curve. Mr. Grechenko also noted that the portfolio had transitioned from generalist mandates to a generalist/specialist blend approach.

Ms. Herman asked staff for information on the fiscal year 2017 currency program as had recently been reported in the press. Mr. Burd explained that when the dollar weakens, as it had over the last few years, the currency hedging program acts as a drag against performance. Mr. Palmer added that since the System pays benefits in dollars, and given that a portion of the System's investments are in foreign currency, the program is a hedge, and essentially amounts to buying insurance.

Mr. Palmer indicated that the remaining information in the CIO Report is similar to what is normally provided and that staff is available to answer any questions.

Item 5: Meketa Reports

Mr. Benham and Ms. Mustard from Meketa Investment Group presented the Current Topics document within the exhibit book. Mr. Benham noted that Meketa would not likely be recommending any changes to the asset allocation at the May meeting. However, Meketa may recommend policy benchmark changes. The benchmark review will likely focus on Real Assets and Absolute Return. Mr. Benham indicated that a more appropriate benchmark for Absolute Return may be cash + 3.5%. Mr. Barry commented that cash + 3.5% seems like a very low hurdle. Mr. Benham replied that the Absolute Return portfolio is structured to be a less risky portfolio with very little equity beta exposure, which supports the lower premium to cash. Mr. Palmer noted that Meketa's average expected return for absolute return strategies was about 5.25%. If cash is 2%, the benchmark would be 5.5%, which represents a reasonable premium to the assumed asset class return. Ms. Herman requested that Meketa report back to the Committee in May with benchmark data used by other plans with similar absolute return portfolios.

Mr. Benham reminded the Committee about previous discussions on the use of leverage in the portfolio. Mr. Benham discussed examples of leverage, how leverage can be used in a portfolio, and the benefits and challenges of using leverage in a portfolio. He mentioned that leverage may make sense for the plan and that, while leverage risks cannot be eliminated, they can be mitigated. Mr. Benham also detailed how the portable alpha strategy could be used with leverage. Mr. Brotman asked if Meketa is recommending the use of explicit leverage. Mr. Benham responded that utilizing such leverage is an asset allocation decision. He further explained that the plan has less risk than its peers, and that applying leverage is one option to increase or decrease the risk and return profile of the plan.

Ms. Mustard discussed the history of the Terra Maria program. Ms. Mustard explained that the equity Terra Maria program was restructured in 2017, which resulted in a reduction in the number of underlying mandates from 99 to 32. She pointed out that the System's Terra Maria program is the 4th largest emerging manager program among public plans, with $2.3 billion in assets. Mr. Brotman asked why the returns for the U.S. equity Terra Maria program are significantly lower than the index for the total U.S. equity portfolio, and if it made sense to maintain an underperforming strategy. Ms. Mustard replied that most of the performance numbers reflect the period prior to the restructuring of the Terra Maria program, and that since the restructuring the performance has improved. Mr. Brotman asked if the System had a legislative mandate that required the System to invest in an emerging manager program. Mr. Palmer replied that there is no mandate. Mr. Palmer also explained that the performance differential in U.S. equity is due to the use of different benchmarks. The benchmark for the total U.S. equity portfolio is the Russell 3000, while the U.S. equity Terra Maria program is benchmarked to a weighted combination of small cap indices. Ms. Herman asked if the performance was net of all fees. Mr. Palmer indicated that the program manager fees, which represent roughly fifteen basis points, are not included in the net manager performance. Mr. Johnson asked how many direct investments the System has with women or minority-owned managers. Mr. Palmer indicated that 17% of the assets are with women or minority managers. Mr. Johnson requested a performance report of women- and minority-owned managers outside of the Terra Maria program.

Mr. Jennings questioned the Committee's focus on the underperformance of the Terra Maria program, which represents a small part of the System's total assets, when the underperformance of the Absolute Return portfolio has a much larger impact on the total fund. Mr. Palmer replied that staff has been restructuring the Absolute Return portfolio, and that this portion of the total fund has experienced staff turnover, and has recently changed consultants. He also noted that the Absolute Return benchmark does not perfectly reflect the risk and return profile of the portfolio.

Ms. Herman asked for a report from the new hedge fund consultant that includes their philosophy and potential ways to improve the efficiency of the Absolute Return asset class. Mr. Palmer indicated that the Absolute Return consultant is scheduled to present to the Committee in May.

Item 6: Meketa Reports

Ms. Mustard from Meketa Investment Group presented the fourth quarter 2017 performance update and current market overview to the Committee. Ms. Mustard also pointed out that the System is in the 67th percentile in the TUCS universe fiscal year-to-date.

Item 7: Report from Staff

Mr. Palmer invited Eric Farls, Michael McCord and Stephen Muturi to join him at the presenting table to discuss the ESG (environmental, social and governance) report. Mr. Palmer noted that Mr. McCord, Mr. Farls, and Mr. Muturi volunteered to form the ESG Committee and produced the ESG report. Mr. Palmer explained that the Committee began the ESG efforts with an evaluation of the UNPRI principles and how the System implements each principle. The evaluation revealed that the System could improve its reporting function, which led to the creation of the ESG report. Treasurer Kopp thanked staff for the report, and indicated that she found it very interesting and useful.

Item 8: Investment Reports

The Committee received the following investment reports:

- State Street Performance Reports
- Terra Maria Performance Reports
- Private Markets Performance Reports
- Securities Lending Report
- Division's FY18 Travel Plan - Update
- Quarterly ORP Performance Report
- OPEB-PHBT Update
- New Hire Manager Report

On the Directors Desk:

- Broker Commission Reports

On a motion made by Ms. Hill and seconded by Ms. Lochte, the Investment Committee voted without objection to meet in closed session at 1:20 p.m. for the purposes of: (1) reviewing the closed session Investment Committee meeting minutes, pursuant to General Provisions Art., § 3-103(a)(1)(i) the exercise of an administrative function; (2) reviewing a private equity manager due diligence report provided by the System's private equity consultant, pursuant to General Provisions Art., Section 3-305(b)(5), to consider the investment of public funds, and General Provisions Art., Section 3-305(b)(13), to comply with a specific statutory requirement that prevents public disclosure, namely, General Provisions Art., Section 4-335 preventing the disclosure of trade secrets and confidential commercial or financial information; and (3) discussing matters regarding the investment of public funds with staff, pursuant to General Provisions Art., Section 3-305(b)(5).

CLOSED SESSION

Committee Members Attending: (1) Via telephone	Michael K. Barry Eric Brotman Peter Franchot David Hamilton (1) Linda A. Herman, Vice-Chair Lisa James-Henson Sheila Hill	Larry E. Jennings, Jr. Charles W. Johnson Nancy K. Kopp Theresa Lochte Richard Norman Douglas Prouty Michael J. Stafford, Jr.
Committee Members Not Attending:	David Brinkley James Harkins	F. Patrick Hughes, Chairman Stephen Kitsoulis
Also Attending:	Robert Burd, Deputy CIO Antionette Butcher Rachel Cohen, OAG Alex Harisiadis, OAG Justin Hayes	Dean Kenderdine Andrew Palmer, CIO Jody Shaw, OAG Toni Voglino Kathleen Wherthey, OAG

On a motion made by Ms. Lochte and seconded by Mr. Brotman, the Investment Committee returned to open session at 2:30 p.m.

OPEN SESSION

During closed session, the Investment Committee discussed and took action on the following matters:

The Committee reviewed and approved the November 21, 2017 closed session meeting minutes.

The Committee discussed a presentation regarding a due diligence report.

Adjournment — There being no further business before the Investment Committee, on a motion made by Mr. Johnson and seconded by Mr. Norman, the meeting adjourned at 2:30 p.m.

Respectfully submitted,

Andrew C. Palmer
Chief Investment Officer