

THE INVESTMENT COMMITTEE
OF THE
MARYLAND STATE RETIREMENT AND PENSION SYSTEM

MINUTES OF OPEN MEETING

September 17, 2019

The Investment Committee convened on Tuesday, September 17, 2019 at 9:00 a.m. in the 16th Floor Board Room of the State Retirement Agency, SunTrust Building, 120 E. Baltimore Street, Baltimore, MD.

Committee Members	Eric Brotman	F. Patrick Hughes, Chairman
Attending:	David Brinkley (1)	Stephen Kitsoulis
	Jamaal Craddock	Nancy K. Kopp
(1) Via telephone	Peter Franchot (1)	Richard Norman
	Ken Haines	Douglas Prouty
	David Hamilton	Michael J. Stafford, Jr.
	Linda A. Herman, Vice Chair	Lamont "Monte" Tarbox
	Sheila Hill	
Committee Members	Michael K. Barry	Charles W. Johnson
Not Attending:		
Also Attending:	Victor Adekoya	Larry Katsafanas
	Phillip Anthony (MLIS)	Dean Kenderine
	Anish Bedi	Rob Kochis (Townsend)
	Frank E. Benham (Meketa)	Jason Kramer (MLIS)
	Robert Burd, Deputy CIO	Thomas Kurowski (Alex Brown)
	Antionette Butcher	Michael McCord
	Rachel Cohen, OAG	Mary Mustard (Meketa)
	Melody Countess	Stephen Muturi
	Mike Fang	Ashu Pal
	Eric Farls	Andrew Palmer, CIO
	David Ferguson	Stephen Reilly
	Patricia Fitzhugh	David Rongione, Chief Internal
	Anne Gawthrop	Auditor, Internal Auditing Div.
	Michael Golden	Michael Rubenstein (MLIS)
	Dimitri Grechenko	Dan Schick
	Will Green (Loop Capital)	Jody Shaw, OAG
	Alex Harisiadis, OAG	Frederick "Beau" Smith
	Justin Hayes	Michael Stark (Townsend)
	Levar Hewlett	Toni Voglino
	Dana Johns	Patricia Wild
	Faina Kashtelyan	

Mr. Hughes, Chairman, called the Investment Committee meeting to order at 9:12 a.m.

Mr. Hughes stated that the Tiger Iron update was distributed prior to the meeting and will continue to be distributed prior to meetings as requested. He indicated any comments or questions related to the materials should be held and addressed during closed session.

Item 1: Ratification of Open Session Minutes

On a motion made by Mr. Prouty and seconded by Mr. Norman, the Investment Committee ratified the May 21, 2019 open meeting minutes.

Item 2: Meketa Contract Extension Recommendation

Mr. Hughes explained that the motion for consideration was a one-year contract extension for Meketa through the end of FY2021. Ms. Herman asked why the recommendation by Staff was to approve an automatic extension, given average reviews of Meketa by the Board and Staff. Mr. Tarbox asked if Meketa was aware of the survey comments. Mr. Palmer indicated that there had only been four survey responses from the Board and that these responses had not yet been shared with Meketa. He also explained that the System would undertake an RFP process during Meketa's final extension year, or during this fiscal year if Meketa's term were not extended. Mr. Tarbox said Meketa should be made aware of the comments and since the comments were largely acceptable the Board should approve the one-year extension. Ms. Herman indicated that she disagreed with the extension due to the continued poor performance of the Trust Fund, especially for the fiscal year ending June 30, 2019 wherein five of the six sectors underperformed the respective benchmarks. Mr. Hughes reiterated that the recommendation for the extension is a one-year extension and not longer.

On a motion made by Mr. Brotman and seconded by Mr. Prouty, the Investment Committee recommended to exercise the final one-year extension of the General Investment Consultant Services Contract with Meketa, effective July 1, 2020 through June 30, 2012.

Members voting in favor of the motion included Mr. Brinkley, Mr. Tarbox, Mr. Kitsoulis, Mr. Norman, Treasurer Kopp, Mr. Hughes, Mr. Haines, Mr. Hamilton, Mr. Brotman, Mr. Prouty, and Mr. Stafford. Opposed were: Ms. Herman and Comptroller Franchot. Motion carried 11 – 2. (Mr. Craddock and Ms. Hill were not present during this vote.)

Item 3: Investment Policy Manual

Mr. Hughes stated that the next item for consideration by the Investment Committee included proposed changes to the Investment Policy Manual (IPM). Mr. Burd summarized the proposed changes, indicating that they were related to adding information regarding the staff compensation and incentive plans, as well as changes related to removing public REITs from the Real Estate benchmark, each of which were prior decisions taken by the Investment Committee and Board. Mr. Burd noted that the Board previously approved compensation and financial incentive criteria for the CIO and Investment Division staff, and these items were now being incorporated into the IPM in an effort to document the compensation and financial incentive plan.

Mr. Kenderdine offered one clarification regarding prior actions taken by the Board. Referencing master page 23 of the Agenda packet (pg. 100 in IPM), he explained that one objective criterion for the CIO compensation was inadvertently omitted from the memo to the Board in July. The objective criterion relating to "employee salary range placement" was left out. Mr. Kenderdine noted that this criterion should be included in the IPM, as it was approved in January but inadvertently left out of the memo in July.

On a motion made by Mr. Brotman and seconded by Mr. Norman, the Investment Committee approved the recommended changes to the Investment Policy Manual relating to the compensation and financial incentive program for the CIO and Investment Division staff, as well as changes to the Real Estate benchmark and policy benchmark weights.

Item 4: Report on Asset Allocation Process Roles and Responsibilities

Mr. Palmer reviewed the different roles and responsibilities as they relate to asset allocation as described in the IPM and the various Governance Charters. Mr. Hughes asked if the work of the actuary relating to the ability of the plan to hit its targeted return can influence the asset allocation recommendation. Mr. Palmer indicated that the actuarial work could show something different, such as a stress test that could show the System is taking risks that would put its ability to satisfy its obligations in jeopardy. Mr. Hughes stated that the process must adequately address the risk versus reward trade-off. Treasurer Kopp stated that it was helpful to set out the role of Trustees in the asset allocation process. She asked if the public advisors should take a more formalized role in the process ahead of the Board meeting, rather than just providing individual feedback. Mr. Hughes indicated that the Board previously had distinct committees such as the Real Estate Committee, which could filter issues for the Board. He also stated that there could be an expanded role of the public advisors in the asset allocation process ahead of the Investment Committee meeting, but that a structure that conformed to the Open Meetings Act would need to be developed. Mr. Tarbox indicated that he speaks with Mr. Palmer informally on a regular basis regarding asset allocation and would be happy to do so more formally. Mr. Hughes stated that Mr. Palmer has informal discussions relating to asset allocation with other Board members ahead of the meetings. Mr. Palmer mentioned that Meketa has noted that other clients have different processes, but more collaboration is positive and the information should be shared more broadly. Mr. Hughes encouraged Board members to offer input and express any concerns regarding the System's asset allocation.

Item 5: Investment Division Fiscal Years 2020 and 2021 Budgets

Mr. Burd summarized the proposed changes to the fiscal year 2020 budget, as well as presented the proposed full budget for fiscal year 2021 that had been approved by the Administrative Committee at its last meeting. Current fiscal year budget changes included: updated salary information; a trade order management system; manager background checks for private managers where the consultant does not conduct a background check; compliance software related to staff personal trading; a public manager database; and additional funds for the System's tax agent to perform customary duties. The investment accounting system, which was approved last year as part of the 2020 budget, was removed from the budget. This function is currently performed by the custodian and included in their fees. The investing accounting system expenditure may need to be added back in the future if the custodian no longer agrees to perform this function at the current service level.

The fiscal 2021 budget included: an expected increase in consulting fees as a result of the System's RFP for a Private Asset Consultant, increased staff compensation reflecting the ongoing adjustment to the pay scale adopted in 2019, and six additional staff members to continue the deepening of staff resources and in anticipation of a growing internal investment function.

Mr. Hughes asked Mr. Norman if the budget changes reflected those approved by the Administrative Committee. Mr. Norman stated that the budget had been brought before the Administrative Committee and it had been unanimously approved. Mr. Stafford asked if there would be an expense related to reconciliation of the investment book of record, or IBOR. Mr. Palmer indicated this could be an additional expense, but staff would try to include it with other services. Mr. Brotman stated that, consistent with the Objective Criteria Committee's expectations, the budget should be presented in a way that showed a reduction in third-party fees to offset the additional expenses related to internal management. Mr. Palmer agreed and indicated that projected, long-run fee savings were shown in a different memo. Mr. Palmer further explained that some of the current increase in expenses is related to start-up costs and that fee reduction, as well as potential return enhancements, would come later. Mr. Hughes asked about the potential savings as a result of internal management based on the Cutter-Funston study. Mr. Brotman responded that the report indicated a significant reduction in expenses, but that he had expected to see hard reductions in expenses over a relatively short time. Mr. Palmer explained that the internal management program would need to

expand beyond the initial phase to more active management strategies in order to generate significant fee savings. Mr. Brotman asked how long it would take until there was a net positive savings result. Mr. Palmer stated that the initial exercise is preparing the System for the future by building qualified investment staff. Mr. Brotman noted that it is important to minimize costs during the initial start-up phase and to generate net savings as quickly as possible. Ms. Herman stated that the Board needs detailed reporting of costs related to internal management including staff time as well as systems and other expenses. Mr. Palmer stated that the initial costs have been absorbed by current staff, and that new hires in fiscal year 2021 are expected to be largely allocated to internal management. Mr. Stafford asked what order management system was currently being used for the TIPS program. Mr. Palmer replied that the current process does not include a formal order management system, and that reconciliations were being performed manually. Mr. Stafford said it is important to provide staff with all the tools they need to implement an internal management program, including an order management system, and cautioned against expanding internal management without corresponding short-term expenses to best implement the program. Mr. Brotman and Ms. Herman indicated that they agreed but emphasized the need for reports which clearly articulate the costs of investing assets internally.

Mr. Norman made a motion to approve the budgets, which was seconded by Ms. Hill. Those in favor were Mr. Norman, Ms. Hill, Mr. Tarbox, Mr. Kitsoulis, Mr. Craddock, Treasurer Kopp, Mr. Hughes, Mr. Haines, Mr. Hamilton, Mr. Prouty, Mr. Brinkley, and Mr. Stafford. Those opposed included: Mr. Brotman, Ms. Herman, and Comptroller Franchot. Motion carried 12 – 3.

Item 6: The Townsend Group Report

The real estate program update was presented by Mr. Kochis and Mr. Stark from The Townsend Group and Mr. Reilly from staff. Mr. Kochis stated that real estate supply and demand were in balance and that real estate pricing was elevated. He indicated that real estate was delivering solid base yield and inflation type growth. Trends included: low interest rates; demographic shifts towards the south geographically and an aging population; retail real estate disrupted by e-commerce; and office space trends towards collaborative workspace.

Mr. Kochis indicated that these trends have led to some attractive value add opportunities in rental housing, medical office and senior housing, repurposing of retail space, and increased demand for warehouse space driven by e-commerce.

Mr. Tarbox inquired if Amazon is expanding its warehouse/distribution space by using its own balance sheet. Mr. Kochis replied that Amazon is likely leasing the space from third parties creating opportunities for real estate owners and developers.

Mr. Stafford noted that real estate has typically produced attractive returns during times of inflation, but asked about its performance during deflationary periods such as in Japan. Mr. Kochis responded that in those environments, real estate becomes a spread investment and the returns are generated mainly from the spread between borrowing costs and rents. Mr. Stafford asked if rents maintained their real value. Mr. Kochis replied that rents tend to grow only at the rate of GDP growth. He also stated that there were signs that Europe is entering this type of environment now. Mr. Stafford asked if WeWork and its business model presented systemic risk. Mr. Kochis responded that the business model essentially shifted risk from the landlord to WeWork and would only be a problem for landlords if WeWork fails.

Mr. Hughes stated that the IRR's associated with spread investing were low and highly sensitive to moves in interest rates. He indicated that returns could be increased through value-add strategies such as adaptive re-use and development based on a solid thesis. Mr. Kochis replied that the System's non-core part of the portfolio is invested this way, through both dedicated value add strategies and small allocations to value-add within existing core portfolios. He also stated that the core portfolio was well positioned for cap rate

compression. Mr. Hughes replied that core real estate is more risky than is apparent due to rapid market changes and that it might be a good time to sell core. Mr. Kochis responded that the System's core portfolio is comprised of large diversified open-end pools with low leverage and the ability to recycle assets through selling some assets and reinvesting in better opportunities. He further indicated that the System's core portfolio was very stable and safe with a 4 -5% income yield and 1 – 2% inflation. The core funds are relatively liquid and the System also has the capability to make changes with money that was generated from the sale of the public REIT portfolio.

Mr. Stafford asked if the benchmark would be changed now because public REITs have been removed. Mr. Kochis responded that this change had already occurred. Mr. Stafford asked how the ODCE index compares to the universe and how international real estate was benchmarked. Mr. Kochis replied that the index is the best available index and that it is 100% domestic. He added that only 3.5% of the System's real estate exposure is international.

Ms. Herman asked about the underperformance of the real estate portfolio on the State Street performance report relative to the index. Mr. Reilly responded that there was some residual impact of older closed-end funds in the performance numbers. Mr. Palmer added that the biggest driver of the underperformance was a timing mismatch between the index and reported performance. Mr. Kochis pointed out an exhibit in the Townsend presentation that adjusted performance for this timing issue.

Item 7: Staff Update on Risk Management and Credit Portfolios

Mr. Palmer presented a chart that illustrated the reporting cycle. Mr. Palmer then introduced Mr. Smith, Senior Risk Officer, to present the risk management report. Mr. Smith spoke about asset allocation and expected risk versus return. He also spoke about the impact of factors on the equity markets and how that has impacted returns. Mr. Smith stated that the relative volatility of the portfolio has been low given the portfolio composition.

Mr. Hamilton asked about the meaning of tracking error decomposition per manager. Mr. Smith explained the meaning and usefulness of the chart. He stated that staff's main role is implementation and highlighted differences from benchmark during implementation. Most tracking error comes from the selection component which is composed of manager selection of securities and staff's selection of managers.

Ms. Herman stated that the data shows underperformance versus the benchmark for the last three years and asked how this could be improved in the future. Mr. Smith replied that the System is much tighter to the benchmark now at the asset class level, and the historical impact was largely due to a massive factor rotation. Ms. Herman stated that the analysis was very good and very helpful and she would like to see on the report shown on master page 59 on a quarterly basis. Mr. Palmer stated that he expects better performance going forward in part driven by staff's understanding of this analysis. Mr. Kitsoulis mentioned that he thought it was a good report and noted that it is difficult to change performance in the short run. He asked if staff had done an ex-ante to ex-post analysis. Mr. Smith said that it would be valuable and that staff is working on it.

Mr. Palmer discussed the general structure of the credit portfolio and changes that have been made. He indicated that most of the alpha had been provided by the private credit portion of the portfolio. Staff has been working on restructuring the portfolio to improve performance.

Item 8: Meketa Private Market Benchmarking

Mr. Benham and Ms. Mustard discussed Meketa's report on private market benchmarks. Mr. Benham stated that benchmarks are important for measuring performance and value add, and that the report they are presenting is just an initial step in evaluating private market benchmarks. He indicated that private markets are difficult to benchmark and that the System's peers use a variety of methods. The basic

structure includes long-term strategic measures such as comparing private equity returns to public equity returns and shorter-term peer related measures such as comparison versus a fund universe. In the study, Meketa reviewed the practices of the System's peers and the strengths and weaknesses of various private market benchmarks. Mr. Benham stated that there were no clear answers but there may be better choices for benchmarks and that Meketa would work with staff to suggest any changes. Mr. Hughes stated that the Board relies on Meketa's independent view on benchmarks.

Item 9: Meketa Reports

Ms. Mustard presented the Meketa performance reports. Within their reporting package, Meketa included two research reports. Ms. Mustard presented an update on 2Q performance including attribution analysis and an analysis of the allocation effect. Mr. Brotman asked how much of the global equity allocation is in the U.S. and should we break down the global allocation to show the total domestic equity exposure rather than have it in two places. Ms. Mustard replied that it used to be done that way but it made the presentation more complicated and the current presentation matches the format of the asset allocation.

Mr. Brotman asked if we could reallocate the money away from global managers. Ms. Mustard replied that active global managers have a broader opportunity set and can make tactical allocations between geographies to generate additional alpha. Mr. Brotman stated that generalists may have a more difficult time generating alpha than specialists. Ms. Mustard replied that global managers have demonstrated success in being able to choose from the broader opportunity set. Mr. Brotman asked if we should adjust the policy weight to show the actual impact of global weights. Ms. Mustard replied that there is little consistency in how plans address this issue. Mr. Palmer added that in the System's experience, global managers have delivered alpha. Mr. Brotman responded that making the adjustment to the policy weights might make attribution easier and that the committee should consider it.

Ms. Mustard then presented the peer group comparison using Investor Force data. Mr. Kitsoulis asked if the peer performance comparison is risk-adjusted since the plan takes less risk than its peers. Ms. Mustard stated that Sharp ratios can be used to evaluate the relative risk and pointed out the appropriate exhibit in the presentation. Mr. Hughes noted that it is important to communicate the story about risk-adjusted returns to the System's stakeholders.

Ms. Mustard went on to discuss factor performance and one-year index return data. Mr. Brotman asked if historically high asset valuations were a concern. Ms. Mustard replied that they were but they have been a concern for some time and Meketa would not recommend making any drastic asset allocation changes.

Item 10: Report from CIO

Mr. Palmer presented an Investment Division update and discussed the CIO report. He indicated that staff has been making changes to the CIO report in an effort to make it more usable and that additional changes are coming, including the addition of asset class summary one-pagers. In discussing current initiatives, Mr. Palmer indicated that the first phase of internal management was underway with management of a portion of the TIPS portfolio internally. The fee savings from this first initiative are small but it is an important first step in the longer-term internal management process. Ms. Herman asked how the internal TIPS performance will be reported by State Street and how fees would be determined. Mr. Palmer stated that it would be reported as a separate line item.

Mr. Palmer then discussed the System's KPIs to show that even with the underperformance in the one-year period the System has matched the benchmark with lower volatility over the longer term. Mr. Kitsoulis asked how the currency hedging program works. Mr. Palmer said that the amount of the currency hedge adjusts with relative movements in the various developed currencies and that the System is trying to take profits when they are accumulated to avoid losing hedging gains when the markets

reverse. Mr. Kitsoulis asked how much of the currency exposure was currently hedged. Mr. Burd indicated that it was currently about 30%.

Mr. Palmer stated that the portfolio is largely sound and the exposures are appropriate. He further pointed out that staff is constantly looking for opportunities to improve the portfolio. Mr. Hughes stated that it was a good discussion on performance and that he appreciated how the staff is managing through the transition to internal management.

Item 11: Investment Reports

The Committee received the following investment reports:

- State Street Performance Reports
- Terra Maria Performance Reports
- Private Markets Performance Reports
- Securities Lending Report
- TUCS Report
- Division's FY20 Travel Plan - Update
- Quarterly ORP Performance Report
- OPEB-PHBT Update
- New Hire Manager Report

On the Directors Desk:

- Broker Commission Reports

Ms. Herman asked about the performance of AQR fund in the ORP. Mr. Palmer stated that the underperformance was largely in the last eighteen months and mainly due to the underperformance of the small and value equity factors. Ms. Herman asked if it should be in a defined contribution plan given the risk. Mr. Palmer responded that staff conducts periodic reviews of the managers, but frequent changes of managers in the plan would have a negative impact on participants.

Item 12: Motion by the Investment Committee to meet in Closed Session

On a motion made by Mr. Brotman and seconded by Mr. Norman, the Investment Committee voted without objection to meet in closed session at 12:35 p.m. for the purposes of (a) reviewing the closed session Investment Committee minutes, pursuant to General Provisions Art., Section 3-103(a)(1)(i), the exercise of an administrative function; and (b) conducting an evaluation of the CIO's performance pursuant to General Provisions Art., Section 3-305(b)(1), consideration of a personnel matter.

CLOSED SESSION

Committee Members	Eric Brotman	F. Patrick Hughes, Chairman
Attending:	David Brinkley (1)	Stephen Kitsoulis
	Jamaal Craddock	Nancy K. Kopp
(1) Via telephone	Peter Franchot (1)	Richard Norman
	Ken Haines	Douglas Prouty
	David Hamilton	Michael J. Stafford, Jr.
	Linda A. Herman, Vice Chair	Lamont "Monte" Tarbox
	Sheila Hill	
Also Attending:	Dean Kenderdine	

Item 15: Motion by Investment Committee to adjourn closed session

On a motion made and seconded, the Investment Committee voted to adjourn closed session and return to open session at 1:20 p.m.

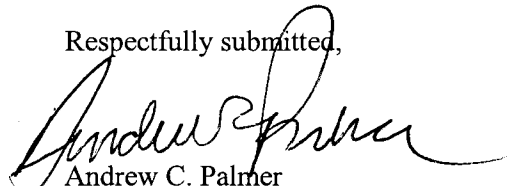
During closed session, the Investment Committee discussed and took action on the following matters:

The Investment Committee reviewed and ratified the Closed Session minutes from the May 21, 2019 meeting; and

The Committee conducted an evaluation of the CIO's performance.

Adjournment There being no further business before the Investment Committee, on a motion made and seconded, the meeting adjourned at 1:20 p.m.

Respectfully submitted,



Andrew C. Palmer
Chief Investment Officer