

INVESTMENT ADVISORY COUNCIL
Wednesday, September 14, 2016

MEETING NO. 434

Members present:

Thomas Fiore, representing Benjamin Barnes*
Joshua Hall
David (Duke) Himmelreich
Steven Muench**
William Murray
Denise L. Nappier, Treasurer
Carol Thomas, Interim Chair

Absentees:

Michael LeClair

Others present:

Lawrence Wilson, Interim Deputy Treasurer
Deborah Spalding, Chief Investment Officer
David Barrett, Director of Communications
Karen Grenon, Assistant General Counsel
Mary Phil Guinan, Assistant Treasurer-Policy
Wayne Hypolite, Executive Assistant
Catherine E. LaMarr, General Counsel
Christina McGinnis, Executive Secretary
Christine Shaw, Chief Compliance Officer
Linda Tudan, Executive Assistant

*Arrival 9:15a.m.

**Left at 1:00p.m.

Guests:

Dave Breazzano, DDJ Capital Management, LLC
Charles Byrne, RBC Global Asset Management Inc.
Robert Carr, Penserra
David Crall, Nomura Corporate Research and Asset Management
Kristen DePlatchett, StepStone Group, LP
Gershon Distenfeld, Alliance Bernstein L.P.
Michael Dugan, Nomura Corporate Research and Asset Management
Michael Elio, StepStone Group, LP
Will Greene, Loop Capital Markets
Kim Hekking, Shenkman Capital Management, Inc.
Peter Keliuotis, Cliffwater, LLC
Stephen Kotsen, Nomura Corporate Research and Asset Management
Adam Kurzer, Shenkman Capital Management, Inc.
John O'Connor, DDJ Capital Management, LLC
Justin Rico Oyola, SEIU (Capital Stewardship Program)
Thomas Ryan, Deutsche Bank
Jennifer Ponce de Leon, Columbia Management Investment

Advisers LLC
Claire Shaugnessy, AonHewitt Investment Consulting
Mark Shenkman, Shenkman Capital Management, Inc.
John Sherman, DDJ Capital Management, LLC
Liz Smith, Alliance Bernstein L.P.
Diane Smola, AonHewitt Investment Consulting
Steven Snyder, Columbia Management Investment Advisers
LLC
Michael Stark, The Townsend Group
Kevin Sullivan, Bank of New York Mellon
Michael Sweeney, Deutsche Bank
Vincent Wile, Stepstone Group, LP
Charles Youngblood, Nomura Corporate Research and Asset
Management

With a quorum present, Interim Chair Carol Thomas called the Investment Advisory Council (“IAC”) meeting to order at 9:03 a.m.

Approval of Minutes of the July 13, 2016 IAC Meeting

Chair Thomas called for a motion to approve the minutes of the July 13, 2016 IAC meeting. **Duke Himmelreich moved to approve the minutes of the July 13, 2016 IAC meeting. The motion was seconded by Joshua Hall. There was one abstention, William Murray. There being no further discussion, the Chair called for the vote. The motion passed unanimously.**

Comments by the Treasurer

Treasurer Denise L. Nappier began her opening remarks by welcoming everyone back after the August break from IAC business.

Treasurer Nappier then informed the IAC members that five semi-finalist firms were being presented for consideration as part of the High Yield Debt Fund (“HYDF”) manager mandate for the Connecticut Retirement Plans and Trust Funds (“CRPTF”). She added it was a competitive search, conducted through a Request for Proposals (“RFP”), and that the search plan and the screening and selection criteria were presented at the February, 2015 IAC meeting. Treasurer Nappier said that the HYDF primarily invests in domestic below investment grade debt securities and currently consists of actively managed fixed income portfolios. This mandate is part of a diversification strategy designed to achieve a long-term, real rate of return above the inflation rate.

Treasurer Nappier stated the managers who would be presenting were AB Global (“AB”), formerly Alliance Bernstein, LP; Columbia Management Investment Advisers, LLC (“Columbia”); DDJ Capital Management, LLC (“DDJ”); Nomura Corporate Research and Asset Management (“Nomura”); and Shenkman Capital Management, Inc. (“Shenkman”). She commented that there were 43 firms that responded to the RFP. All were fully vetted and underwent a lengthy and thorough due diligence with primary assistance from our general

investment consultant, AonHewitt Investment Consulting (“AON”), prior to the semi-finalist firms presented for her review. Treasurer Nappier added that the five semi-finalists were qualified and possessed the necessary skill set to provide the CRPTF with high yield fixed income investment management services.

Treasurer Nappier commented on the agenda then discussed the investment performance for the month ended July 31, 2016 for the two largest pension plans in the CRPTF: the State Employees’ Retirement Fund (“SERF”) and the Teachers’ Retirement Fund (“TERF”). She said for the month ended July 31 2016, the performance of the TERF and the SERF was up 2.73% and 2.70%, respectively, lagging the respective benchmarks by 14 and 18 basis points (“bps”), and as of June 30 fiscal year end, the unaudited market value of the CRPTF had increased nearly \$1 billion.

Next, she spoke about two articles on the CRPTF’s performance for the fiscal year end June 30, 2016 and had stated on numerous occasions, including in the August 22 press release concerning fund performance, that it was imperative the respective state pension boards lower the actuarial return assumptions to conform with the muted financial market outlook likely to return low single digit performance results, far below the 8% actuarial assumed rate of return. Treasurer Nappier then talked about an article on the settlement of the class action suit against Amgen where the Office of the State Treasurer (“OTT”) was the lead plaintiff. The case continued for nearly a decade and went to the Supreme Court, which rejected Amgen’s appeal and secured a landmark ruling in the OTT’s favor. She added that in July 2016, Amgen agreed to pay \$95 million to settle the matter, pending approval by the court.

Lastly, Treasurer Nappier read a resolution to acknowledge the passing of Peter Thor and his many contributions as a longtime member of the IAC, to be included as part of the meeting minutes. The resolution was unanimously adopted by the IAC.

Update on the Market, the Connecticut Retirement Plans and Trust Funds Final Performance for Month Ended June 30, 2016 and July 31, 2016

Deborah Spalding, Chief Investment Officer (“CIO”), provided an update on the capital market environment, its impact on the CRPTF performance and the economic outlook. She reported on the investment performance periods ended June 30, 2016 and July 31, 2016, for the two largest pension plans, TERF and SERF. For the fiscal year ended June 30, 2016, the TERF returned a positive 25 bps versus a negative 6 bps for the customized benchmark while the SERF returned a positive 26 bps versus a customized benchmark down 1 basis point, respectively. Ms. Spalding added that the Municipal Employees Retirement Fund (“MERF”) was up 115 bps versus a customized benchmark of 77 bps. She said fiscal year 2016 was a year of weakness in non-U.S. equities, both in developed markets and emerging markets, and that the larger exposure to those markets caused the SERF and TERF performance deviation from MERF; in contrast, High Yield held in much better. Ms. Spalding then reviewed the plans and trusts for fiscal year ended June 30, 2016 and added that there was wide dispersion of performance, largely driven by asset allocation. Next, Ms. Spalding gave an overview of the month ended July 31, 2016 and indicated that while both developed and emerging equity markets had regained performance lost

at fiscal year-end 2016 the developed markets were up 874 bps over the previous month. She reported that for the month ended July 31, 2016, the TERF returned 2.73 bps versus a benchmark of 2.87 bps and SERF returned 2.70 bps versus a benchmark of 2.88 bps. Lastly, she noted that there were no changes and no new managers added to the Watch List. Thomas Fiore and Mr. Himmelreich posed questions in regard to the next asset allocation study, to which Ms. Spalding provided satisfactory responses.

Next, Claire Shaughnessy, Partner, and Diane Smola, Senior Consultant, AON, reported on the Combined Investment Funds ("CIF") for the quarter ended June 30, 2016 and month ended July 31, 2016, as well as the Connecticut Horizon Fund ("CHF") for the quarter ended June 30, 2016. Ms. Shaughnessy provided a market overview with comments on global public equities and fixed income. She commented on the economic highlights regarding higher volatility and returns within the equity markets. Ms. Shaughnessy added that the U.S. equity markets ended June 30, 2016 with modest gains overall despite weakening economic data and the turmoil caused by the United Kingdom's ("UK") vote to exit the European Union.

Next, Ms. Smola provided a summary of the returns for the individual plans and trusts within the CRPTF. She reviewed the performance attribution for the fiscal year ended June 30, 2016 for the TERF, SERF and MERF and said that TERF and SERF outpaced its benchmarks by 31 and 26 bps, respectively; MERF outpaced by 38 bps. For the second quarter ended June 30, 2016, Ms. Smola said returns for TERF and SERF were up 1.7%, outpacing their benchmarks by 14 bps and 12 bps, respectively, while MERF returned 2.1%, in line with its benchmark. She then reviewed asset allocation and performance of the trusts, stating that most of them had higher policy weightings in fixed income.

Ms. Smola then provided a report on the CHF as of June 30, 2016 and said that it returned 1.13%, net of fees, underperforming the Connecticut Horizon Index return of 2.52%; and that the four underlying CHF fund-of-funds managers outperformed their respective benchmarks for the quarter. She stated that since inception, the CHF has returned 5.87% versus the benchmark of 6.50. Ms. Smola then gave an overview on the public markets, focusing on diversity statistics and manager allocation.

Presentation by and Consideration of the Semi-Finalists for the High Yield Debt Fund Manager Search

Ms. Spalding provided opening remarks and introduced the semi-finalists AB, Columbia, DDJ, Nomura, and Shenkman for the HYDF investment management services for the CRPTF and provided an overview of each firm. She stated that 43 firms responded to the search and noted that Loomis Sales was not part of the search and remained in the fund as their contract does not expire until 2020. Ms. Spalding described the finalists as a suitable slate of candidates who possessed the necessary skill set and highlighted some of the attributes among them in terms of their organizations and investment approaches to different markets. She added that the finalists represented a mixture of core managers, managers providing more downside protection and capital preservation, as well as opportunistic managers with a higher portfolio beta.

Presentation by AB Global

AB, represented by Gershon Distenfeld, Senior Vice President and Director of High Yield, and Liz Smith, Senior Managing Director of Public Funds, made a presentation to the IAC. Ms. Smith began by introducing the executive team.

Ms. Smith then continued with a brief overview of the firm and background of the management team. She said the firm was established in 1971 and was a global, diversified asset manager, headquartered in New York, with approximately \$490 billion in assets under management firm wide as of June 30, 2016. Ms. Smith then reviewed AB's diversity and inclusion, the firm-wide commitment to responsible investing, and its partnership with clients in incorporating Environmental, Social and Governance ("ESG") guidelines into their investment portfolios. She then addressed a question posed by Chair Thomas with regard to past security violations within AB.

Next, Mr. Distenfeld spoke about AB's performance and discussed their investing approach, which benefited from a skilled trading team and strong risk management. He further discussed the firm's research capabilities, portfolio management team, current strategy and trading.

Mr. Fiore posed a question in regards to liquidity and trading, to which Mr. Distenfeld answered to his satisfaction.

Presentation by Columbia Management Investment Advisers, LLC

Columbia, represented by Jennifer Ponce de Leon, Senior Portfolio Manager, Head of High Yield Fixed Income, and Steven Snyder, Head of US Institutional Distribution, made a presentation to the IAC. Mr. Snyder began by introducing the executive team.

Mr. Snyder stated the organization was a global asset manager and was a wholly-owned subsidiary of Ameriprise Financial, Inc., headquartered in Boston, Massachusetts, while the high-yield and research teams were located in Minneapolis. He then stated Columbia had assets under management of \$460 billion.

Next, Ms. Ponce de Leon spoke about Columbia's investment team of 22 experienced portfolio managers, traders and analysts responsible for over \$17 billion in high yield assets under management as of June 30, 2016. She then discussed their investment process, investment and research philosophy and risk rating system, as well as their systematic investment oversight, portfolio construction and composite performance.

Several IAC members posed questions surrounding performance, rising interest rates, and diversity, to which Mr. Snyder answered to their satisfaction.

Presentation by DDJ Capital Management, LLC

DDJ, represented by Dave Breazzano, President, CIO and Portfolio Manager, John Sherman, Assistant Portfolio Manager and John O'Connor, Senior Vice President, Head of Business

Development and Client Service, made a presentation to the IAC. Mr. O'Connor began by introducing the executive team.

He stated that DDJ was founded in 1996 with a 19-member investment team located in Waltham, Massachusetts and had total assets under management of \$7.1 billion as of June 30, 2016. Mr. O'Connor then gave an executive summary and highlighted their seasoned investment firm, research, portfolio construction and diversification. He then described DDJ's firm profile, investment team, and the US opportunistic high yield strategy. Next, Mr. Breazzano discussed its investment philosophy and spoke about capturing value, exploiting mispriced risk and that their investment approach focuses on deep-rooted inefficiencies in the high yield bond and leverage loan markets.

Next, Mr. Sherman talked about the implementation of their philosophy and the role of analysts in the investment process. He stated that they are organized by industry versus product which provided DDJ the ability to look at an industry's high-yield bonds, bank loans and individual industries to determine the most attractive investments. Several IAC members posed questions, to which they answered to their satisfaction.

Presentation by Nomura Corporate Research and Asset Management

Nomura, represented by David Crall, CIO and Portfolio Manager, Stephen Kotsen, Managing Director and Portfolio Manager, Michael Dugan, Executive Director and Product Specialist, and Charles Youngblood, Vice President, Institutional Business Development, the Americas, made a presentation to the IAC. Mr. Youngblood began by introducing the executive team.

Mr. Crall stated the firm was a New York-based fixed income investment management boutique established in 1991, focused primarily on high yield securities. He said the firm had total assets under management of approximately \$15.3 billion as of June 30, 2016, with \$11.8 billion in the high yield mandate under consideration. He described Nomura's advantages, performance, and stability of the team and highlighted the twelve analysts supporting the portfolio managers.

Mr. Kotsen then spoke about the in-depth credit analysis and the due diligence process undertaken, as well as risk management and portfolio oversight. Mr. Kotsen then reviewed investment performance and fund characteristics of the high yield total return strategy.

In closing, Mr. Dugan highlighted some points on their philosophy, the firm's track record, and team stability. Several IAC members posed questions, to which they answered to their satisfaction.

Presentation by Shenkman Capital Management, Inc.

Shenkman, represented by Mark Shenkman, President and Co-CIO, Kim Hekking, Senior Vice President, Director of Client Services, and Adam Kurzer, Executive Vice President, Director of Research, made a presentation to the IAC. Ms. Hekking began by introducing the executive team.

Mr. Kurzer gave a firm overview and stated that Shenkman was one of the few remaining boutiques exclusively focused on the high-yield leverage finance market. He mentioned that the firm was founded by Mr. Shenkman thirty-one years ago in Connecticut with offices in New York and London. Mr. Kurzer stated that the total assets under management are roughly \$30 billion as of June 30, 2016. He explained the depth of the firm's investment team, strategic hires, conservative style and performance goal.

Next, Mr. Shenkman talked about their disciplined investment process which uses a proprietary score system to identify credit risk. He then spoke about the credit risk assessment process, investment philosophy, style and metrics.

Lastly, Mr. Kurzer talked about the power of the compounding coupon and the State of Connecticut's performance over multi-year credit cycles.

IAC members posed questions surrounding diversity and Shenkman's succession plans to which they answered to their satisfaction.

Roll Call of Reactions of the Semi-Finalists for the High Yield Debt Fund Manager Search

Steven Muench, Messrs. Murray, Himmelreich, Fiore, Hall, and Chair Thomas provided feedback to the Treasurer and supported all five firms. Messrs. Muench, Murray, Himmelreich, and Fiori all favored AB. Messrs. Muench, Himmelreich, and Hall noted the strong performance from Nomura. Messrs. Muench, Himmelreich, Fiore and Hall remarked favorably on Shenkman. Messrs. Muench, Himmelreich and Ms. Thomas supported Columbia but not as a first choice and Mr. Muench supported DDJ but not as a first choice.

Alternative Investment Fund Review as of June 30, 2016

Lawrence Wilson, Interim Deputy Treasurer, introduced the Alternative Investment Fund ("AIF") consultant to the CRPTF, Pete Keliuotis, Senior Managing Director of Cliffwater LLC, who presented the report for the quarter ended June 30, 2016. Mr. Keliuotis gave an overview of the executive summary, portfolio, benchmark performance, portfolio investment activity and fund level performance.

He reported that as of quarter ended June 30, 2016, the HFRI Fund Weighted and Fund-of-Funds Composite Index fell 0.3%, while the HFRI Fund Weighted Composite Index returned 1.80%. Mr. Keliuotis stated that hedge fund returns moderated in June as the Brexit vote on June 23 led to market uncertainty and a spike in volatility, affecting all major asset classes. He said equity long/short benefited from more direct beta exposure, closely followed by event driven and high yield bonds, and structured credit also rallied. Mr. Keliuotis then reviewed the AIF Hedge Fund-of-Fund performance and portfolio compliance as of June 30, 2016.

Lastly, he reported on the real assets, opportunistic strategy and the investment summary. Mr. Keliuotis mentioned that the fair value ended at \$109.4 million for first quarter March 31, 2016, with current contributions of \$14 million.

Private Investment Fund Review as of March 31, 2016

Mr. Wilson introduced the Private Investment Fund (“PIF”) consultant to the CRPTF, Michael Elio, Partner, and Kristen DePlatchett, Principal, of StepStone Group, LP, who presented the report for the quarter ending March 31, 2016. Mr. Elio gave an overview of the portfolio and performance, market update and quarterly highlights.

Mr. Elio stated that from the program’s inception in 1987 through March 31, 2016, the PIF had committed \$7.6 billion to 95 funds and had a market value of \$2.5 billion, which represents approximately 8.5% of the total CRPTF assets. He then reviewed performance versus benchmark and stated for quarter ended March 31, 2016, the PIF generated a net internal rate of return (“IRR”) of 9.0% versus a public market equivalent IRR of 6.7%, and had underperformed its benchmark by 26 bps. For the 10 year period, he stated that the PIF generated a net IRR of 10.5% versus a public market generated an IRR of 7.9%, which underperformed its benchmark by 237 bps.

Next, Ms. DePlatchett reviewed the quarterly highlights and discussed investment commitments, net cash inflow, contributions, distributions, valuations and annual cash flow.

Mr. Elio then reviewed performance by strategy and noted that for the ten-year period ended March 31, 2016, returns generated within middle-market buyout funds had greatly exceeded other strategies, with strong performance in the early stage venture capital and distressed funds. He discussed performance by vehicle, portfolio diversification, and changes in capital account changes.

Real Estate Fund Review as of March 31, 2016

Mr. Wilson introduced the Real Estate Fund (“REF”) consultant to the CRPTF, Michael Stark, Associate of The Townsend Group, who presented the report for the quarter ending March 31, 2016. Mr. Stark gave an overview of the market and performance.

Mr. Stark remarked that the REF was 7.1% of the CRPTF for quarter ended March 31, 2016 versus a 7% target allocation, with \$445 million of unfunded commitments. He added that the REF had a reduced risk profile as core had increased to 63% from 32% at the start of 2012 and that the performance remained solid and outperformed the NPI. He reported that as of March 31, 2016, the REF returned 2.2% for the quarter, and 11.8%, 12.5% and 11.4% on a net of fee basis over the past 1, 3 and 5-year horizons, respectively. Mr. Stark reviewed the core performance and added that it had outperformed the NPI (National Property Index) and the NFI-ODCE index overall.

Mr. Stark talked about Brexit and noted that the international and UK exposures remained modest at 6.1% of first quarter ended March 31, 2016, and uncertainty was expected in the short term.

Securities Lending Review of June 30, 2016

Mr. Wilson introduced the Securities Lending consultants to the CRPTF, Michael Sweeney, Vice President, and Thomas Ryan, Director, Head of US Trading of Deutsche Bank, who presented the activity for the quarter ended June 30, 2016 and fiscal year 2016.

Mr. Sweeney provided an executive summary overview and stated for the quarter ended June 30, 2016, returns on the \$17.6 billion lendable portfolio was 10.44 bps, or \$4.3 million, net of fees, with \$1.9 million derived from lending and \$2.41 million from reinvestment of collateral. He stated that the highest demand was for domestic equities, followed closely by international equities. Mr. Sweeney noted that Morgan Stanley was the largest borrower, representing 13.9% of the total loan balance as of June 30, 2016. He then reported on the earnings and performance highlights for the fiscal year 2016 and discussed the reinvestment program overview and borrower exposure.

Other Business

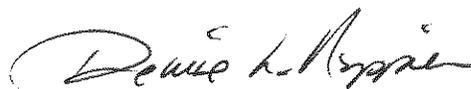
Chair Thomas invited the IAC members to submit agenda items for the October 12, 2016 IAC meeting.

Comments by the Chair

There being no further business, Chair Thomas called for a motion to adjourn the meeting. **Mr. Himmelreich moved to adjourn the meeting and the motion was seconded by Mr. Murray. There being no discussion, the meeting was adjourned at 2:15 p.m.**

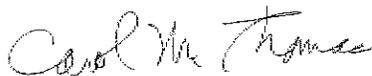
This meeting was electronically recorded.

Respectfully submitted,



**DENISE L. NAPPIER
SECRETARY**

Reviewed by,



**CAROL THOMAS
INTERIM CHAIR**