

Minutes of the PRIM Administration and Audit Committee Thursday, February 14, 2019

Committee members present:

- Robert L. Brousseau, Chair
- Treasurer Deborah B. Goldberg
- Patrick E. Brock
- James B.G. Hearty
- Joseph A. Connolly
- Dennis J. Naughton via phone
- Eileen Glovsky via phone

Committee members not present:

- Karen E. Gershman, CPA
- Michele A. Whitham, Esq.
- Theresa T. McGoldrick, Esq.

The PRIM Administration and Audit Committee meeting was called to order at 10:09 a.m. The meeting was properly noticed as an open meeting but was without a full quorum physically present (five members were physically present and two participated remotely by phone, but a quorum requires six to be physically present).

I. Approval of the Minutes

The approval of the minutes of the November 15, 2018, Administration and Audit Committee was postponed due to the lack of a full quorum.

II. Executive Director / Chief Investment Officer Comments

Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer, made comments to the Committee, including:

Organizational Update

Mr. Trotsky indicated he was pleased to announce a number of recent staff promotions as follows:

Andre Abouhala on the Public Markets team was promoted to Investment Officer. Andre joined PRIM in 2014 as an Investment Analyst and has become a valuable resource to the team, most recently leading the U.S. micro-cap research and becoming the team's expert in utilizing the eVestment manager database, FactSet portfolio analysis, and the PCS team's proprietary quantitative tools. Andre also earned an MBA from Boston University this past May. Andre will continue to expand his responsibilities in manager monitoring and investment analytics, reporting to David Gurtz, CPA, CFA.

Alyssa Fiore, CFA on the Private Equity team was promoted to Investment Officer. Since joining the Private Equity team in 2016 as an Investment Analyst, Alyssa has made valuable contributions supporting new fund commitments to existing managers, new investment managers and PRIM's expanding co-investment program. Alyssa also supported the team's growth equity research and investment underwriting. Alyssa earned a CFA Charter in November 2017. As an Investment Officer reporting to Mike Bailey, Alyssa will now also have responsibilities for manager monitoring and relationship management. Additionally, she will have a leading role in Private Equity investment research.

Andrew Gromer, CFA on the Public Markets team was promoted to Investment Officer. Andrew joined PRIM in 2016 as an Investment Analyst supporting fixed income investments. More recently, he has also

supported the Private Equity team. Andrew is responsible for PRIM's "State of the Industry" research project, which will help guide PRIM's long-term investment strategy. He has participated in several investment industry conference panels where he has spoken on fixed income topics. Andrew earned a CFA Charter in November 2017 and was recently appointed to Chair the CFA Boston Young Leaders Committee. Andrew reports to David Gurtz, CPA, CFA and will continue to expand his responsibilities in manager monitoring and investment analytics.

Bill Li, CFA, CAIA on the Portfolio Completion Strategies team was promoted to Senior Investment Officer - Director of Portfolio Completion Strategies (PCS). Bill joined the Strategy team in 2016 as an Investment Officer and was promoted to Senior Investment Officer in 2017. Bill has expanded and refined PRIM's distinctive suite of analytical tools, manager sourcing processes, idea generation and portfolio construction across several asset class teams. He combines impressive thought creativity and ingenuity with strong technical skills and conceptual understanding. Bill spearheaded the creation of PRIM's hedge fund emerging manager program negotiating new mandates with several hedge fund managers and researched and deployed PRIM's innovative and successful equity hedge program utilizing a put spread collar package of trades. Bill will continue to report to Eric Nierenberg and have responsibility for the oversight of the entire PCS portfolio.

Christina Marcarelli, CAIA on the Real Estate and Timberland team was promoted to Senior Investment Officer. Christina joined the Real Estate and Timberland team as an Investment Officer in 2016 with expertise in asset management, acquisitions and development projects. Christina has been extremely productive since joining PRIM and this past year she successfully led the private real estate RFP process, which resulted in awarding \$1 billion to three real estate investment managers. She also contributed to the team's direct investing platform and portfolio management research. Christina's collaboration with the PRIM Public Markets and Strategy teams has enabled PRIM to expand investments in the Other Credit Opportunities allocation. Additionally, Christina has earned the CAIA charter. Reporting to Tim Schlitzer, Christina will have increased responsibility for manager and property oversight throughout the entire Real Estate and Timberland portfolio.

George Tsipakis on the Investment Operations team was promoted to Director of Investment Operations. George joined the Investment Operations team in 2016 as Manager of Real Estate and Timberland reporting. He has quickly demonstrated the analytical skills necessary to enable the team to innovate, particularly in the real estate direct investing platform. George also restructured PRIM's investment cash operations and improved the team's investment support capacity. George reports to Matt Liposky and will manage a team of four finance and operations professionals responsible for asset class reporting.

Mr. Trotsky also shared with the Committee that **Morgan Burns, CFA, CPA**, an Accounting Assistant on the Finance team, recently appeared on the television game show *Jeopardy*, and did a fantastic job, placing second of three.

Mr. Trotsky also informed the Committee that PRIM has adopted the Global Investment Performance Standards (GIPS) from the CFA Institute and is one of only a handful of large public pension funds to do so. Mr. Trotsky added that adopting these standards demonstrates a commitment to transparency, ethical best practices and strong internal controls, and thanked Matt Liposky, PRIM's Chief Investment Operating Officer, for leading the effort.

PRIT Fund Performance Summary

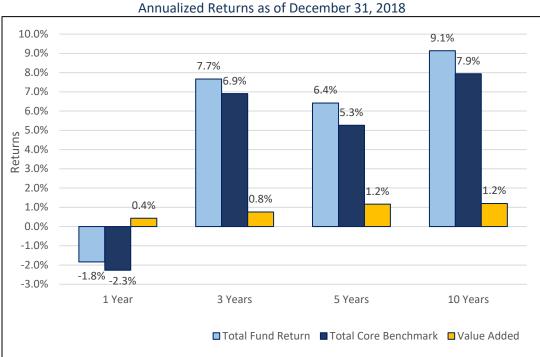
Mr. Trotsky reported investment performance as follows:

In this environment, the PRIT Fund has performed well:

As of December 31, 2018, the PRIT Fund net asset value stood at \$69.3 billion. For the one-year ended December 31, 2018, the PRIT Fund was down 1.8%, (-2.3% net), outperforming the total core benchmark of -2.3% by 43 basis points (0 bps net).

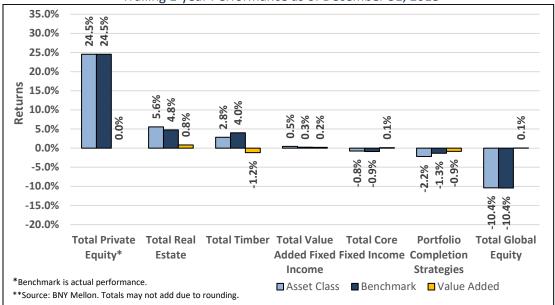
- This performance equates to an investment loss of \$1.6 billion, net of fees.
- Net total outflows to pay benefits for the one-year ended December 31, 2018, were approximately \$1.0 billion.

Mr. Trotsky made reference in his remarks to the following charts:



Total PRIT Fund Returns (Gross of Fees) Annualized Returns as of December 31, 2018

PRIT Asset Class Performance (Gross of Fees) Trailing 1-year Performance as of December 31, 2018



PRIT Core Fund Performance Summary Gross of Fees Performance

Trailing 1-Year Performance: December 31, 2018	Return	Benchmark Return	Over/(Under) Benchmark (bps)	\$Value (millions)	% of PRIT Fund
Total PRIT Fund	-1.8%	-2.3%	43	69,285	100%
Total Global Equity	-10.4%	-10.4%	5	26,109	37.8%
Domestic Equity	-5.1%	-5.4%	29	11,713	17.0%
International Developed	-14.5%	-14.2%	(28)	10,277	14.9%
Emerging Markets	-15.2%	-15.2%	(3)	4,119	6.0%
Private Equity*	24.5%	24.5%	0	8,335	12.1%
Real Estate	5.6%	4.8%	81	6,476	9.4%
Total Timberland	2.8%	4.0%	(117)	2,843	4.1%
PCS	-2.2%	-1.3%	(85)	9,787	14.2%
Value Added Fixed Income	0.5%	0.3%	20	5,749	8.3%
Core Fixed Income	-0.8%	-0.9%	12	8,975	13.0%

Trailing 1-Year Performance as of December 31, 2018

*Benchmark is actual performance.

PRIT Asset Class Performance (Gross of Fees) Annualized Returns as of December 31, 2018

1 Year	3 Year	5 Year	10 Year	
PRIVATE EQUITY 24.5%	PRIVATE EQUITY 20.8%	PRIVATE EQUITY 19.8%	PRIVATE EQUITY 15.9%	
REAL ESTATE 5.6%	REAL ESTATE 7.4%	REAL ESTATE 9.7%	GLOBAL EQUITY 10.2%	
TIMBER 2.8%	GLOBAL EQUITY 7.0%	TIMBER 5.6%	VALUE-ADDED FIXED INCOME 9.1%	
VALUE-ADDED FIXED INCOME 0.5%	VALUE-ADDED FIXED INCOME 6.8%	GLOBAL EQUITY 4.5%	REAL ESTATE 9.0%	
CORE FIXED INCOME (0.8%)	TIMBER 5.9%	CORE FIXED INCOME 4.2%	CORE FIXED INCOME 5.2%	
TOTAL PCS (2.2%)	TOTAL PCS 3.3%	VALUE-ADDED FIXED INCOME 3.8%	TOTAL PCS 5.0%	
GLOBAL EQUITY (10.4%)	CORE FIXED INCOME 2.9%	TOTAL PCS 2.8%	TIMBER 3.0%	

Summary of 2019 Annual Plan Highlights

Mr. Trotsky told the Committee that each year, each senior staff member and each asset class head prepares an annual plan for 2019. Mr. Trotsky noted that PRIM's Investment Team's Annual Plans were presented at the Investment Committee on February 7, 2019, and to the Real Estate and Timberland Committee on February 13, 2019, for feedback and comment so that the plans may then be presented to the Board for its feedback and comment.

Mr. Trotsky told the Committee that PRIM staff will summarize PRIM's Finance and Administration, Investment Operations, Technology, Legal Services, and Client Services Annual Plans for the Committee and will revise the plans as appropriate to incorporate feedback received from the Committee and then present the plans to the Board at its February 26th meeting.

Anthony Falzone, Chief Operating Officer, discussed annual plans that are especially appropriate for consideration by the Administration and Audit Committee. Key points included:

Finance and Administration

- Implement strategies to enhance diversity and inclusion
- Collaborate with the Investment Team to develop hiring plans
- Complete the PRIM Board Governance Manual review
- Develop and conduct staff training initiatives in the following areas:
 - Cyber Security, Sexual Harassment, Unconscious Bias, Time Management, Team Management and Fraud Awareness

Investment Operations

- Issue and complete two PCS related Request for Proposals (RFPs)
- Evaluate tools to increase operational efficiency and promote prescriptive analytics
- Complete the implementation of Global Investment Performance Standards (GIPS)
- Support Project Save Phase II Internal Management

Technology

- Review and organize PRIM's data, electronic files and folders
- Evaluate and update end user equipment and desktop technology
- Develop and deploy educational webinar capabilities for Board, committees and staff
- Support Project Save Phase II Internal Management

Legal Services

- Legal support of the review/update/revision of PRIM's Governance Manual Policies and Charters
- Legal support of contract negotiation, drafting and review
- Continued legal support of PRIM activities and initiatives, including direct real estate investment, private equity co-investment, and Project Save Phase II consideration of internal asset management
- Litigation, including foreign securities litigation, domestic securities litigation claims-filing, and lead plaintiff class action litigation
- Review/analyze legislation and legislative initiatives (e.g., Fossil Fuel Divestment)
- "Government Law" issues (Open Meeting Law, Public Records Act, Ethics/Conflict of Interest, and the like)

Client Services

• Begin planning the 2020 PRIM Investor Conference

- Begin planning the PRIM Board 2020 elections
- Implement GIPS reporting in prospective participant presentations
- Review segmentation suite of offerings available to current and prospective purchasing systems

Chief Operating Officer's Comments

After discussing the annual plans Mr. Falzone provided the Committee with an overview of his team's growth over the last 12-18 months and a brief overview of his team's structure. He highlighted that in order to continue supporting PRIM's growth and innovation, more expertise in specific areas such as compliance and technology would be needed. He mentioned that adding a Human Resource Director was an example of increasing PRIM's knowledge in an area that required a more dedicated expert resource to perform a critical business function.

Mr. Falzone also mentioned that with the increasingly complex investment program and a heightened focus on research and quantitative analysis, there might be a need to grow the technology team and technology budget to enhance PRIM's infrastructure, supporting additional quantitative tools and data.

Communications Strategy

Mr. Trotsky presented a Communications Strategy Update to the Committee mentioning the challenges that exist when trying to communicate PRIM's complexity and sophistication to all the different stakeholders. He also spoke about the transition of the media landscape from traditional to digital media, and the need for PRIM to modernize its communication efforts.

Asset Allocation

Mr. Trotsky mentioned to the Committee that PRIM is guided by the mandated rate of return which is 7.35%, and as a backdrop for the asset allocation overview, provided the Committee with PRIM's top core investment beliefs as follows:

- We believe that nobody can predict the future, so we don't try.
- We believe nobody can predict the direction of the stock market, so we don't try.
- We don't make tactical asset allocation decisions, or any investment decisions based on market or economic predictions.
- We believe that any investment must be evaluated on three equally important parameters: risk, return and cost. Too often, especially in years like we just had, investors are focused more on return than they are on risk and cost.
- We value a basis point of cost reduction more than a basis point of return. Why? We can count on cost savings every year, but nobody ever really knows what the markets will deliver.

Mr. Trotsky invited Maria Garrahan, Investment Officer, Portfolio Completion Strategies, to present the asset allocation overview.

Ms. Garrahan told the Committee that PRIM focuses on achieving a dual objective, seeking to meet the actuarial return of 7.35%, as it is legislatively mandated to do so, as well as downside protection. PRIM's internal research defines the downside protection measure as the probability of achieving no drawdown greater than 20% within the next three years. The combination of these two objectives creates PRIM's dual objective, achieving the actuarial return and downside protection.

Last year, a new asset allocation framework was introduced using principal component analysis (PCA) to explore asset allocation through a different lens. Ms. Garrahan described the analogy of viewing the PRIT fund portfolio as a soup. The ingredients are the asset classes, (equities, bonds, real estate) and the underlying components, principal components, are like the nutrients within the soup. PRIM's goal is to

design the asset allocation (the soup) with a balance of principal components (nutrients) that increases the probability of achieving the dual objective.

The team developed a systematic framework to determine which nutrients (components) offer the most meaningful additions and reductions to the portfolio. The asset allocation process blends this quantitative analysis with insights from NEPC while addressing feasibility/practicality concerns from PRIM's asset class heads. Ms. Garrahan referred to the following chart summarizing the proposed asset allocation changes:

	AA 2019 Target Range	AA 2018 Target Range	Changes in Target Range
Global Equity (including Put Spread Collar)	34% 44%	37% 47%	-3%
Core Fixed Income	12% 18%	9% 15%	+3%
Value-Added Fixed Income	5% 11%	7% 13%	-2%
Private Equity	10% 16%	9% 15%	+1%
Real Estate	7% 13%	7% 13%	
Timberland	1% 7%	1% 7%	
Portfolio Completion Strategies	8% 14%	7% 13%	+1%
Probability of Achieving Dual Objective	60%	55%	

III. 2019 Proxy Voting Guidelines

Ellen Hennessy, Compliance Analyst, joined Mr. Falzone along with two representatives from PRIM's proxy voting consultant, ISS, participating via conference call: Mikayla Kuhns and Michael Crovetto. Ms. Hennessey reviewed the enhancements made to PRIM's proxy voting guidelines in 2018, along with PRIM's proxy voting statistics in several key areas including but not limited to board diversity and overboarding.

Representatives from ISS presented changes to their broader proxy voting policy along with several changes to PRIM's custom policy for 2019. PRIM's proposed changes were as follows:

- Vote FOR shareholder proposals seeking to prohibit non- disclosure agreements in settlements of sexual harassment, assault, or discrimination.
- Vote FOR shareholder proposals seeking disclosure of legal, buyout, compensation, or other costs related to complaints of harassment, assault, or discrimination.
- Vote FOR shareholder proposals that require companies to provide mandatory employee harassment training.

Discussion ensued, and both James B.G. Hearty and Patrick Brock asked for additional legal clarification before supporting the proposal. Additional information was expected to be provided after the meeting.

IV. Board Governance Manual Review

Mr. Falzone introduced Tom Iannucci, President of Cortex Applied Research, Inc. (Cortex), PRIM's governance consultant since 2004. Mr. Falzone noted that Mr. Iannucci had planned to be present in person but instead would be participating via telephone due to a weather-related flight cancellation.

Mr. lannucci began by outlining the timeline and process for the governance manual review project. He told the Committee that all interviewees indicated high levels of satisfaction with the Board's current governance practices, and with the performance of the Board, committee members, and management.

They also indicated that the governance charters and policies are sufficiently clear, easy to use, and generally comprehensive. Cortex identified five findings based on interviews with Board and committee members:

- 1. There is general satisfaction with the manual
- 2. Different perspectives exist regarding the PRIM Governance Model
 - a. Board-focused model: Nine trustees all equally accountable
 - b. Chair-focused model: Chair is perceived to have more accountability and therefore should have greater authority
- 3. Opportunities exist to further strengthen the manual
- 4. There is a perceived need for a Board policy regarding committees
- 5. There is lack of consensus regarding the Board's position on shareholder engagement.

Mr. lannucci continued by reviewing his three proposed recommendations:

- 1. Develop proposed revisions to the manual for recommendation to the Board
- 2. Develop a draft policy on Board committees for recommendation to the Board
- 3. Develop an ad hoc share holder engagement committee to help the Board define its position on shareholder engagement

The unanimous consensus of the seven Committee members present and on the telephone was that an informal ad hoc working group should be formed to study the issues of:

- 1. Committee composition
- 2. Shareholder engagement, and
- 3. Appropriate follow-up to the menu of issues that Cortex prepared based on interview of Board and committee members.

This ad hoc working group should then present its findings back to the Administration and Audit Committee.

V. Global Investment Performance Standards (GIPS)

Mr. Falzone mentioned that Mr. Trotsky had already mentioned the adoption of GIPS standards and that the brief presentation attached as Appendix K was for informational purposes only.

VI. Legal/Legislative Update

PRIM's General Counsel indicated there were no significant updates to provide on legal and legislative matters.

VII. Other Matters:

The Committee members briefly discussed the following topics:

- a. September 2018 PRIM budget
- b. Travel
- c. Client Service

The PRIM Administration and Audit Committee meeting adjourned at 12:27 p.m.

List of documents and exhibits used during the meeting:

- Minutes of the PRIM Administration and Audit Committee Meeting of November 15, 2018
- PRIT Fund Performance Report
- BNY Mellon Gross of Fees Performance Report
- 2019 Finance and Administration, Investment Operations, Technology, Legal Services and Client Services Annual Plans
- 2019 Investment Teams Annual Plans
- Communications Strategy Executive Summary Presentation
- 2018 Proxy Voting Review
- ISS' Executive Summary of 2019 Global Proxy Voting Guidelines Updates and Process
- PRIM Custom Policy Matrix 2019 Proxy Voting Policy Update
- Cortex's Memo of Findings and Recommendations
- Global Investment Performance Standards (GIPS) Overview
- December 2018 PRIM Operating Budget
- Travel