



**PENSION RESERVES
INVESTMENT
MANAGEMENT BOARD**

Minutes of the PRIM Investment Committee Meeting
Tuesday, April 30, 2019

Committee members present:

- Treasurer Goldberg (arrived at 9:42 a.m.)
- Sue Perez, Chair on behalf of Treasurer until her arrival
- Joseph C. Bonfiglio
- C. LaRoy Brantley
- Michael Even, CFA
- Constance M. Everson, CFA
- Ruth Ellen Fitch, Esq. (arrived at 10:23 a.m.)
- Philip Rotner
- Paul E. Shanley, Esq.
- Glenn P. Strehle, CFA
- Timothy Vaill

Committee members not present:

- James B. G. Hearty
- Peter Monaco

The PRIM Investment Committee meeting was called to order at 9:33 a.m.

I. Approval of the Minutes (Voting Item)

The PRIM Investment Committee (unanimously) approved the minutes of its February 7, 2019 meeting.

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

For an unprecedented fourth year in a row, PRIM has been nominated for “Public Plan of the Year” at the Institutional Investor Hedge Fund Industry Awards, to be held in New York on June 27, 2019. PRIM won this award in 2016. The other nominees this year are Ontario Municipal, New Mexico, Wisconsin, Texas Teachers and Illinois Teachers.

PRIM continues to receive recognition for its innovative hedge fund program that produces very high risk-adjusted returns while saving approximately \$100 million annually on hedge funds fees. PRIM led the industry with the use of direct hedge fund investments replacing fund-of-funds. We also lead in our pursuit of separately managed accounts (SMA’s), which give us complete transparency, more control and lower fees than comingled funds that are the norm for most investors. SMAs now comprise more than 75% of the PRIM Fund’s hedge fund assets. PRIM’s SMA program and more recently, our Emerging Manager Program are being emulated by peers across the globe.

Last month, PRIM’s PCS Director Bill Li was inducted into the EQDerivatives Investing Hall of Fame, which “recognizes those individuals that have led the line in volatility and alternative risk premia thought leadership.”

We announced his promotion last cycle, but this cycle we announced that Andrew Gromer, Investment Officer on the Public Markets team, was recently accepted into the Yale School of Management and will be leaving PRIM this summer to begin their MBA program. We are happy for Andrew and support his pursuit of higher education, but at the same time, we are sorry to see him go. He has been a valuable employee on the Public Markets team and more recently he has been a valuable contributor to the Private Equity team.

We also announced that in March, Alyssa Fiore, Investment Officer on the Private Equity team, resigned to accept a position at JP Morgan. Alyssa joined the Private Equity team in 2016 as an Investment Analyst and was promoted last year. Alyssa was a valuable contributor to our fund underwriting effort and she helped manage the co-investment program. Alyssa's potential was well-recognized in the industry. We wish her well in her new endeavors. The Private Equity team is currently interviewing strong candidates for two open positions.

PRIM currently has four active investment staff job openings: Senior Investment Officer on the Public Markets team, an Investment Analyst on the Real Estate team, and two Investment Analysts on the Private Equity team. We have received more than 1,000 applications for those four slots. It is a compliment to all of us that so many highly qualified candidates want to work for PRIM.

And last, I'd like to highlight that we have added a third women-focused summer internship partner, the CFA Society Boston, to supplement our current efforts with Girls Who Invest and the Treasurer's Women in Finance Fellowship. We are excited to welcome three new summer internships at PRIM this summer.

PRIT Fund Performance Summary

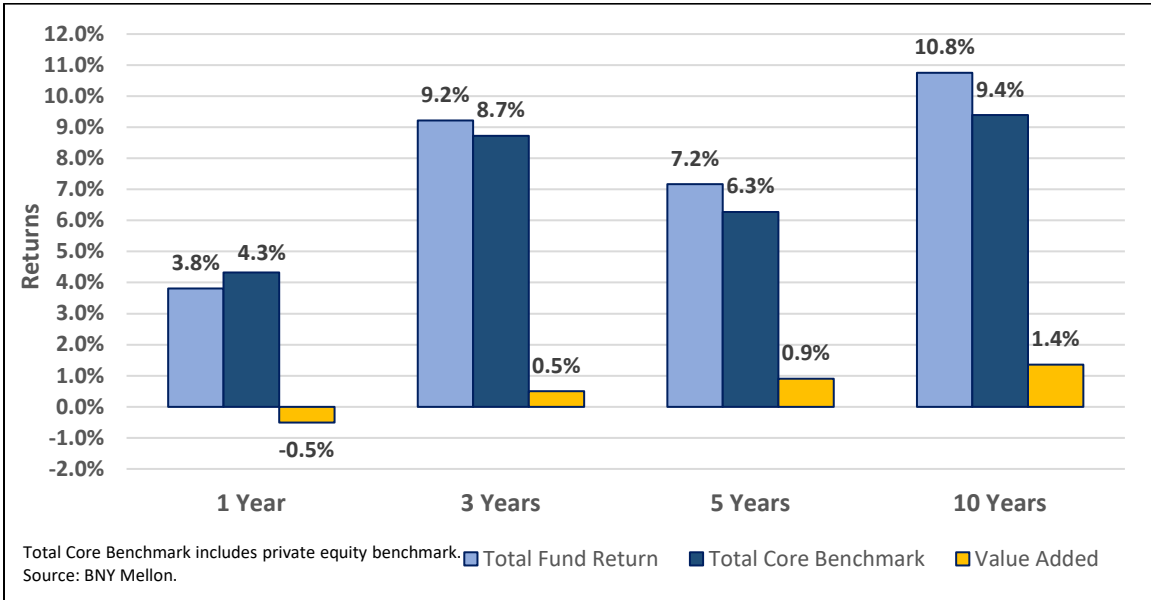
Mr. Trotsky reported investment performance as follows:

As of March 31, 2019, the PRIT Fund net asset value stood at \$73.1 billion. For the one-year ended March 31, 2019, the PRIT Fund was up 3.8% (3.4% net), underperforming the total core benchmark of 4.3% by 49 basis points (93 bps net).

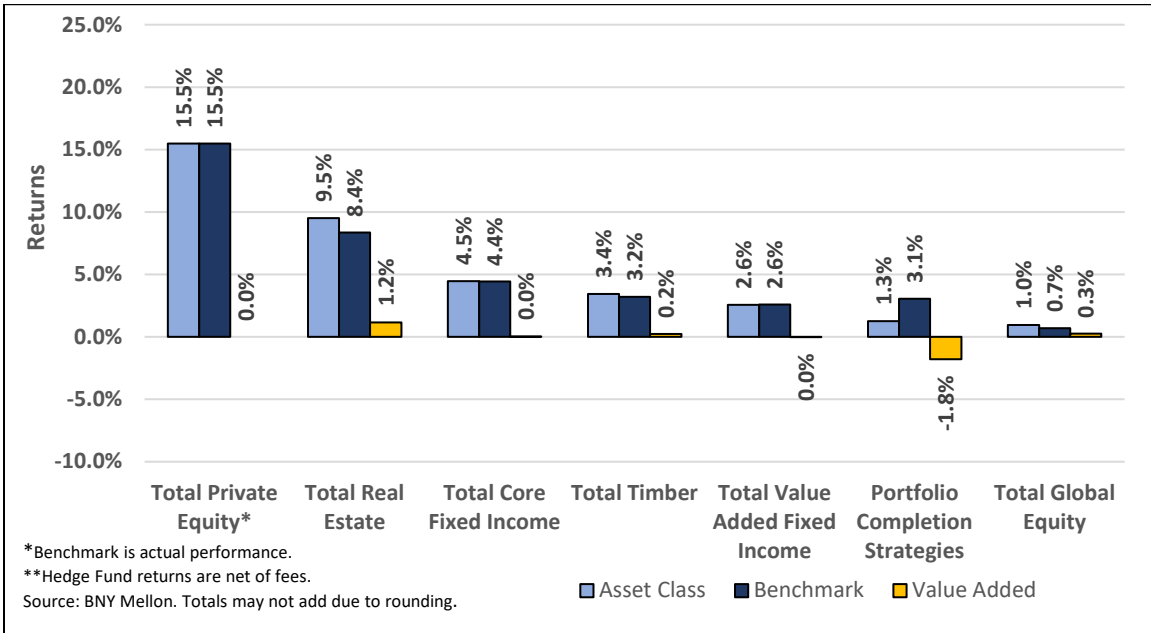
- This performance equates to an investment gain of \$2.4 billion, net of fees.
- Net total outflows to pay benefits for the one-year ended March 31, 2019, were approximately \$956 million.

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

Total PRIT Fund Returns (Gross of Fees)
Annualized Returns as of March 31, 2019



PRIT Asset Class Performance (Gross of Fees)
Trailing One Year Performance as of March 31, 2019



PRIT Asset Class Performance (Gross of Fees)

Annualized Returns as of March 31, 2019

1 Year	3 Year	5 Year	10 Year
PRIVATE EQUITY 15.5%	PRIVATE EQUITY 18.4%	PRIVATE EQUITY 17.2%	PRIVATE EQUITY 17.4%
REAL ESTATE 9.5%	GLOBAL EQUITY 11.1%	REAL ESTATE 10.0%	GLOBAL EQUITY 12.8%
CORE FIXED INCOME 4.5%	REAL ESTATE 8.2%	GLOBAL EQUITY 6.7%	REAL ESTATE 10.7%
TIMBER 3.4%	VALUE-ADDED FIXED INCOME 7.0%	TIMBER 5.5%	VALUE-ADDED FIXED INCOME 9.4%
VALUE-ADDED FIXED INCOME 2.6%	TIMBER 5.9%	CORE FIXED INCOME 4.6%	CORE FIXED INCOME 5.5%
TOTAL PCS 1.3%	TOTAL PCS 5.2%	VALUE-ADDED FIXED INCOME 3.9%	TOTAL PCS 5.2%
GLOBAL EQUITY 1.0%	CORE FIXED INCOME 2.1%	TOTAL PCS 3.0%	TIMBER 3.2%

PRIT Core Fund Performance Summary

Gross of Fees Performance

Trailing 1-Year Performance as of March 31, 2019

Trailing 1-Year Performance: March 31, 2019	Return	Benchmark Return	Over/(Under) Benchmark (bps)	\$Value (millions)	% of PRIT Fund
Total PRIT Fund	3.8%	4.3%	(49)	73,067	100%
Total Global Equity	1.0%	0.7%	30	31,783	43.6%
<i>Domestic Equity</i>	8.6%	8.4%	28	15,805	21.7%
<i>International Developed</i>	-4.1%	-4.1%	(1)	11,400	15.6%
<i>Emerging Markets</i>	-7.4%	-8.3%	88	4,579	6.3%
Private Equity	15.5%	15.5%	0	7,997	11.0%
Real Estate	9.5%	8.4%	116	6,971	9.6%
Total Timberland	3.4%	3.2%	23	2,863	3.9%
PCS	1.3%	3.1%	(180)	7,346	10.1%
Value Added Fixed Income	2.6%	2.6%	(2)	5,955	8.2%
Core Fixed Income	4.5%	4.4%	4	9,316	12.8%

Constance M. Everson, CFA, Investment Committee member, discussed the challenges of sustaining a market and economic rebound.

III. Public Markets

a. Performance Summary

David Gurtz, CPA, CFA, Deputy Chief Investment Officer – Director of Public Markets, Andre Clapp, Ph.D. CFA, Senior Investment Officer – Public Equities, and Chuck LaPosta, Senior Investment Officer – Fixed Income, provided the Committee with the Public Markets Performance Summary.

Dr. Clapp updated the Committee on the PRIT Fund's Global Equity portfolio and noted the PRIT Global Equity portfolio rose 12.4% in Q1, beating the benchmark by 58bps net of fees. For the trailing year both absolute and relative returns have been positive but low. For the trailing year Global Equities were up 1.0%, outperforming the benchmark by 8bps net of fees.

Dr. Clapp noted that the low absolute returns can be attributed to a very weak Q4 of 2018 and underperforming International and Emerging markets. In Q4 of 2018, Global Equities were down roughly 13% led by Domestic Equity which was down 15%. For the trailing year, however, International and Emerging markets have been the underperformers.

For the trailing year, International Equity underperformed Domestic Equity by 13.8%. Of this, 7.1%, or roughly half, was due to currency. In Emerging Markets, the underperformance to Domestic Equity was closer to 18%. 5.8% or roughly a third of this underperformance was due to currency.

Mr. LaPosta updated the Committee on the PRIT Fund's Fixed Income portfolio. Mr. LaPosta noted that over the last six months the markets probability of a Fed rate hike changed from a high probability of a Fed rate hike in late 2018, to probable rate cut in October 2019. PRIM's active Core Fixed Income managers have all outperformed over the trailing year, outperforming by 30 bps alpha, gross of fees.

Mr. LaPosta noted that similar to Global Equities, the Emerging Markets fixed income investments were the worst performing fixed income asset class over the trailing 12 months, returning -9.1%. Foreign currency contributed approximately 80% of this negative performance.

b. U.S. Micro-Cap Recommendation (Voting Item)

Andre Abouhala, Investment Officer, presented the recommendation to allocate \$100 million to Driehaus Capital Management's U.S. Micro-Cap Growth Equity Strategy. He noted that funding for this investment will be sourced from PRIM's existing passive U.S. SMID-Cap equity portfolio. PRIM has an existing relationship with Driehaus through an Emerging Markets Equity mandate.

Mr. Abouhala explained that Driehaus employs an active, earnings-growth momentum investment philosophy. The strategy focuses on identifying company-specific growth inflection points and exploiting how stocks trade during the subsequent periods of strong growth. The proposed strategy is overseen by Portfolio Manager Jeff James (22 years at Driehaus) and Assistant PM Michael Buck (17 years). Driehaus will close the strategy to new and existing clients upon PRIM's allocation.

The Investment Committee (unanimously) voted to recommend to the PRIM Board to approve an initial allocation of \$100 million to Driehaus Capital Management's U.S. Micro-Cap Growth Equity Strategy as described in Appendices D and E of the Expanded Agenda, and further to authorize the Executive Director to take all actions necessary to effectuate this vote.

c. Request for Passive Short-Term Fixed Income Investment Management Services RFP (Voting Item)

Mr. Gurtz presented the recommendation for the approval of the issuance of a Request for Proposals (RFP) for Passive Short-Term Fixed Income Investment Management Services. He explained that at

its February 26, 2019 meeting, the PRIM Board approved the PRIT Fund asset allocation which included a new allocation to Short-Term Fixed Income.

The Investment Committee (unanimously) voted to recommend to the PRIM Board the approval of the issuance of a Request for Proposals for Passive Short-Term Fixed Income Investment Management Services as described in the Expanded Agenda, and further to authorize the Executive Director to take all actions necessary to effectuate this vote.

IV. Portfolio Completion Strategies (PCS)

a. Performance Summary

Eric Nierenberg, Ph.D., Chief Strategy Officer, and Bill Li, CFA, CAIA, Senior Investment Officer for Portfolio Completion Strategies, reviewed PCS performance, which included the following comments:

In the first quarter, the PRIM Hedge Fund portfolio delivered 3.1%, underperforming the benchmark by 29bps. Trailing three years, Hedge Funds returned 5.6%, outperforming the benchmark by 160bps. Together with a 2.8% volatility, that translates into a Sharpe Ratio of 1.5 – that’s a higher risk-adjusted return than both the S&P 500 and Barclays Agg, and betas remained negligible to both equity and bond markets.

Outside of the Hedge Fund portfolio, the first quarter was a strong quarter for Alternative Risk Premia as well, which returned 4.6%. Yet, looking further back, performance was not encouraging, as the trailing 1-year number was negative 3.8% and since inception, that number has been flat. Such suboptimal performance has been in line with that of many other conventional quant strategies. Incrementally, the team is less constructive on Alternative Risk Premia strategies, mostly because the space is becoming increasingly crowded, which compressed return prospects. The program is thus under very close scrutiny.

Mr. Li explained that, since March, the team has been upsizing the Put Spread Collar (PSC) Equity Hedge strategy and reporting it under U.S. domestic equities, and by the end of May, the strategy would be approximately 5% of total PRIT Fund. The strategy targets to reshape the distribution of S&P 500 and moderate the volatility risk as well as drawdown risk.

b. PCS Advisory and Managed Account Platform Services RFP Recommendations (Voting Item)

Mr. Li and Matt Liposky, Chief Investment Operating Officer presented the PCS Advisory and Managed Account Platform Services RFP recommendations. Mr. Li recommended Aberdeen Standard Investments for PCS advisory services noting that PRIM has been working with them since 2014. He noted that Aberdeen has been instrumental in helping PRIM upgrade the hedge fund portfolio, by vetting new managers and converting some legacy holdings from commingled funds to managed accounts. He also recommended hiring NewAlpha Asset Management as a specialist advisor focusing on Global Macro, Relative Value Trading, and Systematic Strategies. Mr. Li noted that NewAlpha is one of the most active advisors and investors in the boutique manager space.

Mr. Liposky then recommended HedgeMark Advisors to provide Managed Account Platform services. He stated that PRIM has been working with HedgeMark for the past 4+ years and they have been instrumental in onboarding, operating and monitoring PRIM’s 20 separately managed accounts.

The Investment Committee (unanimously) voted to recommend that the PRIM Board approve the selection of Aberdeen Standard Investments as primary advisor, NewAlpha Asset Management as a specialist advisor, and HedgeMark Advisors to provide managed account platform services for the PCS managed account platform program as described in Appendix F of the Expanded Agenda, for a 5-year period, plus up to two additional one-year extensions, and further to authorize the Executive Director to take all actions necessary to effectuate this vote.

V. Private Equity Performance Summary

Michael Bailey, Senior Investment Officer – Director of Private Equity, provided an update on private equity performance.

Mr. Bailey stated the portfolio return for the year ended March 31, 2019 was 15.5%, gross of fees, exceeding the performance of public equity benchmarks. PRIM's Private Equity portfolio continued to generate significant liquidity through the quarter. Mr. Bailey reported that market conditions for buyouts remain constructive, supporting investments based upon plans that rely on greater value added to companies post acquisition.

Mr. Bailey noted that with their approvals at the meeting, the Investment Committee will have approved nine funds totaling \$1.1 billion in commitments.

VI. Request for Operational Due Diligence Services RFP (Voting Item)

Mr. Liposky explained to the Committee that as PRIM continues to explore and invest in more complex asset classes, targeted and specialized operational due diligence on potential and existing investment managers is required. PRIM staff is seeking approval to issue a Request for Proposals (RFP) for Operational Due Diligence Services.

The Investment Committee (unanimously) voted to recommend that the Board approve the issuance of a Request for Proposals for Operational Due Diligence Services as described in the Expanded Agenda, and further to authorize the Executive Director to take all actions necessary to effectuate this vote.

The PRIM Investment Committee meeting adjourned at 11:24 a.m.

List of documents and exhibits used during the meeting:

- Minutes of the PRIM Investment Committee Meeting of February 7, 2019
- PRIT Fund Performance Report
- BNY Mellon Gross of Fees Performance Report
- Driehaus U. S. Micro-Cap Growth Equity Presentation
- Callan's Memorandum on Driehaus U. S. Micro-Cap Growth Equity
- PCS Advisory and Managed Account Platform Services RFP Memo