

Minutes of the PRIM Real Estate and Timberland Committee Meeting Wednesday, August 1, 2018

Committee members present:

Committee members not present:

Robert Gifford

Carly Rose

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- Jill S. Hatton, CRE, Chair
- Treasurer Deborah Goldberg (arrived at 9:52 a.m.)
- Lydia Chesnick, Esq.
- Anthony E. Hubbard, Esq (via conference call)
- Jack Lutz, Ph.D. (via conference call)
- William F. McCall, Jr., CRE (via conference call)
- Garlan Morse, Jr., CRE
- Peter O'Connell

The PRIM Real Estate and Timberland Committee meeting was called to order at 9:30 a.m.

I. Approval of the Minutes (Voting Item)

The PRIM Real Estate and Timberland Committee could not approve the minutes of its January 31, 2018, meeting due to the lack of a quorum physically present in the room.

II. Executive Director/Chief Investment Officer Comments

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

We evaluate the performance of the PRIT Fund on three equally important metrics: return, risk, and cost. As mentioned earlier, the returns of each asset class and the entire PRIT Fund were very strong both relative to the benchmarks and in absolute terms, and importantly, expenses and risk remained tightly controlled. Even with the Board-approved, larger allocation in the fiscal year to high-performing, actively managed alternative asset classes such as Private Equity and PCS, we are pleased to report that the ratio of total expenses was 53 basis points in fiscal year 2018, compared with 54 basis points in fiscal year 2017. This decrease highlights our continuing efforts related to Project SAVE as well as our focus on lower-fee separately managed accounts in our PCS portfolio, the success of our Private Equity co-investment program, and new direct Real Estate investments, among other things. Moreover, the 9.5% return of the PRIT Fund for the year was achieved with a realized volatility of 4.3%, producing a very high Sharpe ratio of approximately 1.8. We believe this Sharpe ratio, which measures the risk-adjusted return of the PRIT Fund, would be among the highest in the country, meaning our portfolio is higher returning relative to our peers even though it has comparatively lower risk, and low cost. PRIM's strong performance in both up markets such as fiscal year 2018 and calendar year 2017, combined with our strong outperformance in down markets like we had in fiscal year 2016 (nation-leading, positive performance), gives us confidence that our investment program is performing as designed.

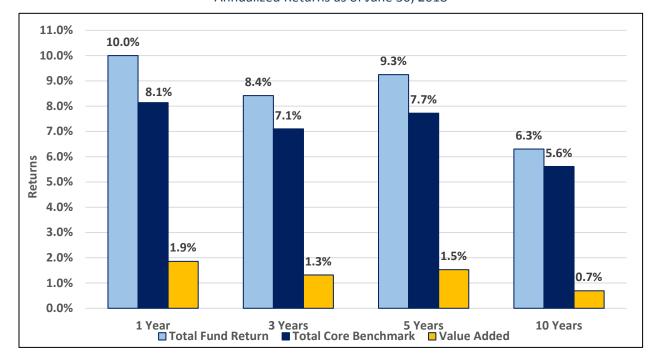
PRIT Fund Performance Summary

In this environment, the PRIT Fund has performed well:

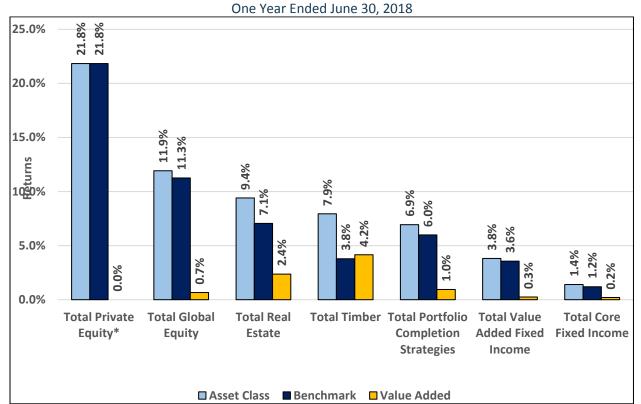
As of June 30, 2018, the PRIT Fund net asset value stood at \$71.8 billion. For the one-year ended June 30, 2018, the PRIT Fund rose 10.0% gross (9.5% net), outperforming the total core benchmark of 8.1% by 186 basis points (140 bps net).

- This performance equates to an investment gain of \$6.4 billion, net of fees.
- This outperformance equates to \$935 million of value above the benchmark return, net of fees.
- Six of the seven major asset classes outperformed their respective benchmarks.
- Net total outflows to pay benefits for the one-year ended June 30, 2018, were approximately \$1.4 billion.

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



Total PRIT Fund Returns (Gross of Fees) Annualized Returns as of June 30, 2018



PRIT Asset Class Performance (Gross of Fees)

PRIT Core Fund Performance Summary Gross of Fees Performance Trailing 1-Year Performance as of June 30, 2018

	Ŭ		Over/(Under)		% of
Trailing 1-Year Performance:		Benchmark	Benchmark	\$Value	PRIT
June 30, 2018	Return	Return	(bps)	(millions)	Fund
Total PRIT Fund	10.0%	8.1%	186	71,802	100%
Total Global Equity	11.9%	11.3%	66	30,064	41.9%
Domestic Equity	15.6%	15.4%	25	13,696	19.1%
International Developed	8.7%	8.0%	69	11,831	16.5%
Emerging Markets	9.1%	7.8%	129	4,537	6.3%
Private Equity	21.8%	21.8%	0	7,735	10.8%
Real Estate	9.4%	7.1%	236	6,455	9.0%
Total Timberland	7.9%	3.8%	415	2,434	3.4%
Total PCS	6.9%	6.0%	95	9,622	13.4%
Value Added Fixed Income	3.8%	3.6%	25	5,760	8.0%
Core Fixed Income	1.4%	1.2%	20	9,154	12.8%

1 Year	3 Year	5 Year	10 Year	
PRIVATE EQUITY	PRIVATE EQUITY	PRIVATE EQUITY	PRIVATE EQUITY	
21.8%	18.3%	19.4%	13.6%	
GLOBAL EQUITY	REAL ESTATE	REAL ESTATE	REAL ESTATE	
11.9%	9.4%	10.8%	6.9%	
REAL ESTATE 9.4%	GLOBAL EQUITY 9.1%	GLOBAL EQUITY 10.0%	VALUE-ADDED FIXED INCOME 6.8%	
TIMBER	TIMBER	TIMBER	GLOBAL EQUITY	
7.9%	5.5%	7.6%	6.6%	
PORTFOLIO COMPLETION STRATEGIES 6.9%	VALUE-ADDED FIXED INCOME 5.0%	PORTFOLIO COMPLETION STRATEGIES 4.8%	TIMBER 4.6%	
VALUE-ADDED	CORE FIXED	VALUE-ADDED	CORE FIXED	
FIXED INCOME	INCOME	FIXED INCOME	INCOME	
3.8%	3.6%	4.4%	4.0%	
CORE FIXED INCOME 1.4%	PORTFOLIO COMPLETION STRATEGIES 3.3%	CORE FIXED INCOME 4.3%	PORTFOLIO COMPLETION STRATEGIES 3.2%	

PRIT Asset Class Performance (Gross of Fees) Annualized Returns as of June 30, 2018

Organizationally, fiscal 2018 was another outstanding year. One senior-level employee departed, the first such departure in several years, and consistent with the Board-approved hiring plans, we filled six staff vacancies with top talent. We are staffed with exceptional investment and finance professionals, and all our job postings attract literally hundreds of talented and well-qualified applicants. Our team continues to be recognized around the nation for the success and innovation of our investment program and for the transparency and completeness of our financial reporting. Our comparatively small staff researched and deployed approximately \$5.4 billion in new Board-approved investments in fiscal year 2018 – a new milestone for PRIM's productivity.

We have never been stronger or more productive, but retention of key employees remains my primary concern. The employment environment in the nation and in the region is strong – meaning there are numerous opportunities for our employees outside of PRIM - and we have spent considerable time and effort on retention strategies for PRIM employees. We continue to ensure that we provide a challenging and rewarding opportunity for all our employees, and that PRIM continues to maintain a positive culture and working environment that our employees enjoy and value. We owe a great deal of gratitude to our Board and committees for providing the support necessary to advance our investment program and to attract and retain the highly-qualified employees who have created one of the best performing public pension plans in the nation.

We are truly privileged to have volunteers of such high caliber and professional achievement on the PRIM committees and Board, and we recognize that our success is due in large part to your dedication, hard work, and expert oversight.

Treasurer Goldberg arrived at 9:52a.m.

Recent Recognition

The American Investment Council ranked PRIM Private Equity **#1 in private equity returns** among 163 U.S. public pension fund in 2018 based on trailing 10-year performance. PRIM is the only fund that has been in the Top 5 of all private equity portfolios in every year the American Investment Council has performed the study (since 2012) – including previous #1 rankings in 2015 and 2013.

In May, and for the 13th consecutive year, PRIM was awarded the *Government Finance Officer Association's* Certificate of Achievement for Excellence in Financial Reporting for the completeness and timeliness of our Comprehensive Annual Financial Report.

Michael McGirr, Senior Investment Officer on the Private Equity team, was awarded the Treasurer's 2018 Citation for Outstanding Performance. Those selected for this honor have made notable contributions to the office of the Treasurer, and the citizens of Massachusetts.

Michael Trotsky, CFA, Executive Director and Chief Investment Officer, was elected Vice-Chair of *the CFA Society Boston* in late June. In the ordinary course of succession at the CFA, the Board's Vice-Chair is likely to serve as Chair of the Board in the following year. The *CFA Society Boston* serves more than 5,700 members in the greater Boston area. Last August, Michael completed his 3-year term as a Governor of the *CFA Institute*. The *CFA Institute* is the global parent of the *CFA Society Boston*, serving more than 150,000 members worldwide.

New PRIM employees

Jennifer Kuhn joined in May as Director of Human Resources. Jennifer was employed for nearly 15 years at Big Brothers Big Sisters of Massachusetts Bay, where she was most recently the Director of Human Resources. She began her career as a portfolio administrator at The Colony Group, and was also the Assistant Director of Development at Horizons for Homeless Children. She holds a bachelor's degree in Business Administration from Elon University.

David Griswold joined in June as the Director of Information Technology. David has more than 20 years of information technology and communications experience and is joining us after 12 years at The Hancock Natural Resource Group (HNRG) and Forest Capital Partners. During his time at HNRG and Forest Capital, David was responsible for managing an international team of engineers and analysts, covering a variety of technology functions. David holds a bachelor's degree in Business Management with a concentration in Computer Science from Bentley College.

Sylvia Argiropoulos joined in June as Administrative Assistant. She will support the Real Estate and Timberland and the Portfolio Completion Strategies team. Sylvia brings 25 years of administrative experience to PRIM, most recently an Executive Assistant at Ernst & Young supporting their audit and consulting partners. Sylvia has her Associate Degree from Cape Cod Community College.

This summer we are pleased to welcome two interns from the Treasurer's *Women in Finance* initiative. **Anmei Zhi** is working with the Real Estate and Timber team and is a rising junior from Smith College. **Isabelle Tabak** is working with the Public Markets team and is a rising junior from Babson College.

Additionally, we welcome one intern who joins us from the national program, Girls Who Invest. **Alexis Sabbaghian** is a rising junior from Boston College and is working with the Private Equity team.

I also want to congratulate **Andre Abouhala**, Investment Analyst on the Public Markets Team, who earned an MBA from Boston University in May.

III. Performance Review and Market Update

Timothy Schlitzer, CRE, CFA, Senior Investment Officer - Director of Real Estate and Timberland, updated the Committee on performance.

Real estate was valued at \$6.4 billion or 9% of the PRIT Fund at year end. This equates to a dollar underweight to the mid-point of our range of \$725 million. The denominator effect has narrowed given that real estate returned 4.9% year-to-date versus the equity and bond portfolios, which were approximately flat. PRIM continues to be slightly overweight PRIM's combined benchmark to REITs at 25.2% versus the 20% target. Timberland is valued at \$2.4 billion or 3.4% of the PRIT Fund, a dollar underweight to the asset class mid-point of approximately \$438 million.

Real estate returned 9.4%, 236 basis points above the asset class benchmark and Timberland returned 7.9% for the past year, 415 basis points above benchmark. Both asset classes contributed to PRIM's overall return/risk goals, diversifying the portfolio and providing stability, particularly in an environment of growing inflation.

Private real estate appraisals and internal valuations provided \$47 million in appreciation or a 0.8% gain in the second quarter. The private portfolio returned 10.1%, 302 basis points above benchmark. PRIM's capital structure continues to be accretive with levered returns adding 265 basis points to the private core return. Non-core real estate underperformed the NCREIF benchmark by 135 basis points. This was driven primarily by the j-curve effect of PRIM's development project in Cambridge as well as the pending stabilization of PRIM's apartment development project in Fort Lauderdale. The REIT portfolio returned 7.5% for the last year, outperforming the NAREIT global benchmark by 105 basis points.

The NCREIF Property Index returned 7.2% for the year, including a 4.6% income return with the remainder in appreciation. Industrial was the top performer at 14%, where PRIM was overweight by approximately 5%. Retail was the laggard at 4.6% where PRIM was underweight by approximately 8%. The office and multifamily segments returned approximately 6.5%. The NCREIF non-core index returned 11.6% (including 50% leverage), net of fees.

Mr. Schlitzer mentioned that U.S. equity REITs were up 4.9% for the fiscal year, while the S&P 500 was up 14.4% for the same period. Self-storage was one one of the leaders for the year in the U.S., while healthcare was the laggard, down 8%. The global index was up 7.25% for the year, led by Asia and Europe at 10.8% and 12%, respectively. About a quarter of the non-US returns were currency related. The US returned 3.9%. As mentioned at the last meeting, the US REIT market sold off in the first quarter making it the poorest performing asset class, down approximately 8%. US REITs rebounded in the second quarter, up 10%.

Mr. Schlitzer then discussed U.S. private real estate. New supply has increased over the past three years and is approaching the long-term average of about 1.5% of stocking. These numbers increase when considering that retail has seen virtually no new supply. Most of the supply has been in the major coastal cities ("Gateways") but supply is also moving to the southeast (Nashville, Orlando, Dallas) due to strong population growth.

Mr. Schlitzer noted that no timberland acquisitions have been completed this year, but that PRIM's timberland acquisition in New Zealand is pending regulatory approval and is expected to close shortly.

The NCREIF Timberland Index returned 3.6% for the year with the Northwest returning 9.1% and the South returning 1.8%. Housing starts in June were 1.17 million (annualized), a decline of 12.3% from May. Permits were also down 2.2%, with single family starts down 9%, and multifamily starts down 20%.

Mr. Schlitzer noted that issues in the housing sector such as increasing mortgage rates, lack of savings for down payments, increasing labor costs, immigration policy and tariffs were challenging the long term

drivers of the asset class such as population growth, housing formation, home renovation, and forest product innovation.

The PRIM Real Estate and Timberland Committee meeting adjourned at 10:45 a.m.

List of documents and exhibits used during the meeting:

- Minutes of the PRIM Real Estate and Timberland Committee Meeting of January 31, 2018
- PRIT Fund Performance Report
- BNY Mellon Gross of Fees Performance Report
- Real Estate and Timberland Performance Charts