



**PENSION RESERVES
INVESTMENT
MANAGEMENT BOARD**

Minutes of the PRIM Real Estate and Timberland Committee Meeting
Wednesday, February 1, 2017

Committee members present:

- Jill S. Hatton, CRE, Chair
- Treasurer Deborah B. Goldberg (arrived at 9:38 a.m.)
- Sarah Kim, Esq., Treasurer's designee
- Lydia Chesnick, Esq.
- Robert Gifford
- Anthony E. Hubbard, Esq.
- Jack Lutz, Ph.D.
- William F. McCall, Jr., CRE
- Garlan Morse, Jr., CRE

Committee members not present:

- Peter O'Connell
- Carly Rose

The PRIM Real Estate and Timberland Committee meeting was called to order at 9:33 a.m.

I. Approval of the Minutes (Voting Item)

The Real Estate and Timberland Committee unanimously approved the minutes of the November 16, 2016 meeting, amended to indicate that PRIM Board member Carly Rose was present at the November meeting as a guest. (The PRIM Board at its December 2016 meeting voted unanimously to appoint Ms. Rose to the Real Estate and Timberland Committee.)

II. Executive Director/Chief Investment Officer Comments

Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer, reminded the Committee that PRIM annually invites the state Ethics Commission to provide an ethics presentation at PRIM, and that it will be conducted immediately following the meeting. Mr. Trotsky invited Committee members to attend.

Mr. Trotsky updated the Committee on numerous matters including, but not limited to:

Market Summary

Since early November, equity markets have been strong while bonds, particularly long-duration bonds, have been weak. Markets continue to be focused on several expansionary aspects of the Trump policy platform: tax reform, fiscal stimulus, infrastructure spending and deregulation are expected to boost growth in the near term, and combined with mostly positive current economic data, have driven equity markets and bond yields higher.

More recently, we have seen some glimpses of policies which may reduce growth longer term. In recent weeks we have seen aggressive new policies on immigration, tariffs and trade. President Trump has officially abandoned the Trans-Pacific Partnership (TPP) global trade agreement and has indicated that the North American Free Trade Agreement (NAFTA) will be renegotiated.

PRIM staff still believes there are many risks to the economy longer term; PRIM staff is recommending modest changes to the PRIT Fund asset allocation targets, which we believe will enable the PRIT Fund to perform well in all market environments.

PRIT Fund Performance Summary

As of December 31, 2016, the PRIT Fund net asset value was \$62.7 billion.

For the one-year ended December 31, 2016, the PRIT Fund was up 8.0%, underperforming the total core benchmark of 8.9% by 83 basis points.

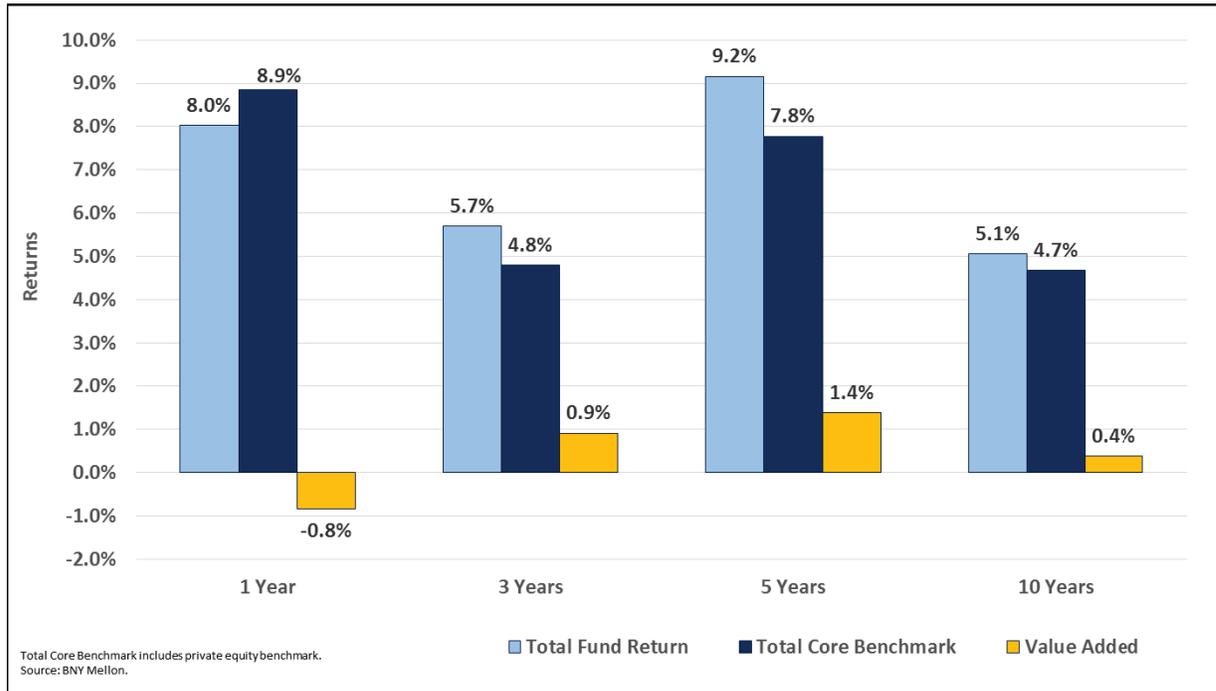
- This performance equates to an investment gain of \$4.8 billion.
- This underperformance equates to \$494 million of value below the benchmark return.
- Four of the seven major asset classes outperformed their respective benchmarks.
- Net total outflows to pay benefits for the one-year ended December 31, 2016 were approximately \$1.4 billion.

For the quarter ended December 31, 2016, the PRIT Fund was down -0.2%, underperforming the total core benchmark of 0.1% by 32 basis points.

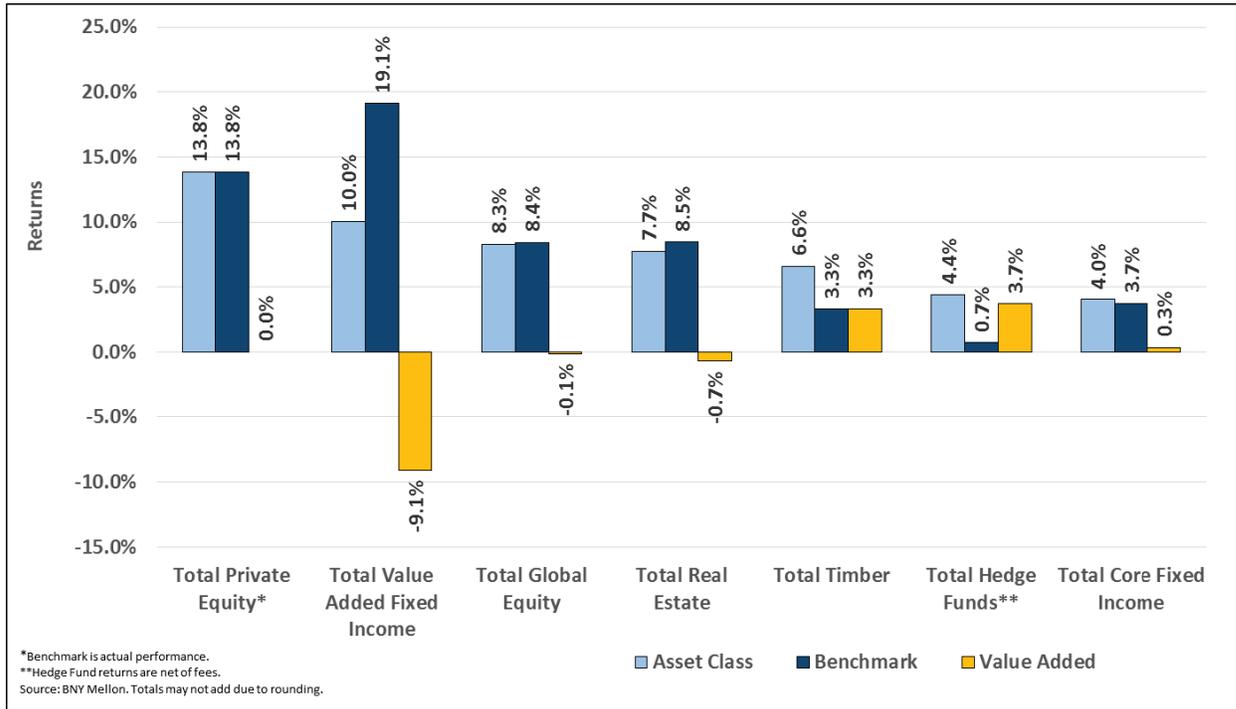
- This performance equates to an investment loss of \$126 million over the quarter.
- This underperformance equates to \$202 million of value below the benchmark return.
- Four of the seven major asset classes outperformed their respective benchmarks.

Mr. Trotsky referred to the following slides in describing the PRIT Fund’s performance:

Total PRIT Fund Returns (Gross of Fees)
Annualized Returns as of December 31, 2016



PRIT Asset Class Performance (Gross of Fees)
Trailing 1-year Performance as of December 31, 2016



PRIT Core Fund Performance Summary
Gross of Fees Performance
Trailing 1-Year Performance as of December 31, 2016

Trailing 1-Year Performance: Dec. 31, 2016	Return	Benchmark Return	Over/(Under) Benchmark (bps)	\$Value (millions)	% of PRIT Fund
Total PRIT Fund	8.0%	8.9%	(83)	62,491	100%
Total Global Equity	8.3%	8.4%	(14)	27,009	43.2%
Domestic Equity	12.9%	13.7%	(81)	12,175	19.5%
International Developed	1.8%	1.9%	(9)	10,492	16.8%
Emerging Markets	11.9%	9.8%	205	4,342	6.9%
Private Equity	13.8%	13.8%	0	6,935	11.1%
Real Estate	7.7%	8.5%	(71)	6,256	10.0%
Total Timberland	6.6%	3.3%	332	2,251	3.6%
Hedge Funds	4.4%	0.7%	369	5,623	9.0%
Value Added Fixed Income	10.0%	19.1%	(911)	5,204	8.3%
Core Fixed Income	4.0%	3.7%	32	7,657	12.3%

PRIT Asset Class Performance (Gross of Fees)
Annualized Returns as of December 31, 2016

1 Year	3 Year	5 Year	10 Year
PRIVATE EQUITY 13.8%	PRIVATE EQUITY 16.8%	PRIVATE EQUITY 17.4%	PRIVATE EQUITY 14.1%
VALUE-ADDED FIXED INCOME 10.0%	REAL ESTATE 11.4%	REAL ESTATE 11.8%	TIMBER 6.9%
GLOBAL EQUITY 8.3%	TIMBER 5.6%	GLOBAL EQUITY 9.9%	REAL ESTATE 6.5%
REAL ESTATE 7.7%	CORE FIXED INCOME 5.5%	TIMBER 6.7%	VALUE-ADDED FIXED INCOME 6.5%
TIMBER 6.6%	GLOBAL EQUITY 3.3%	HEDGE FUNDS (NET OF FEES) 5.7%	CORE FIXED INCOME 5.1%
HEDGE FUNDS (NET OF FEES) 4.4%	VALUE-ADDED FIXED INCOME 2.8%	VALUE-ADDED FIXED INCOME 5.3%	GLOBAL EQUITY 3.9%
CORE FIXED INCOME 4.0%	HEDGE FUNDS (NET OF FEES) 2.7%	CORE FIXED INCOME 4.0%	HEDGE FUNDS (NET OF FEES) 3.3%

Organizational Update

In December, PRIM closed on its first ever direct real estate investment. The \$112 million investment consists of 21 acres of land and a 60 year-plus ground lease in Santa Clara, California. The land is leased to the largest real estate developer in California and there are three buildings on the land. PRIM expects to save \$11 million in investment management fees.

Christina Satcher, Accounting Assistant on the finance team, studied for and passed the CFA Investment Foundations exam. The CFA Investment Foundations program provides a comprehensive understanding of finance, ethics and the investment industry. Christina joins more than 20 PRIM colleagues who have similarly studied for and passed the Investment Foundations exam.

Summary of the 2017 Annual Plans

Mr. Trotsky then proceeded to highlight PRIM’s 2017 Investment Team’s Annual Plans. The Public Markets team will be doing an in depth liquidity study to evaluate liquidity needs of the PRIT Fund and will also be building a new allocation within Value-Added Fixed Income called Other Credit Opportunities. Eric R. Nierenberg, Ph.D., Senior Investment Officer – Director of Hedge Funds and Low Volatility Strategies will research a new form of equity hedging within Portfolio Completion Strategies. Private Equity is going to recommend increasing its allocation. In order to fulfill the increased

allocation, Michael R. Bailey, Senior Investment Officer - Director of Private Equity, will fill an open Investment Officer position. David M. Gurtz, CPA, CFA, Chief Operating Officer and Chief Financial Officer is close to filling the open Director of Risk Management position. PRIM will continue to research if internal asset management is appropriate for PRIM as part of Project SAVE Phase II with Mr. Trotsky noting that Committee member Michael Even will be spending more time at PRIM working on this project. Also, the Risk Team will be conducting a review of asset class benchmarks to make sure benchmarks are appropriate and follow best practices.

Mr. Morse asked how often PRIM reviews the performance of managers. Mr. Trotsky informed Mr. Morse that PRIM staff speaks with each manager at least once per quarter. Moreover, Mr. Trotsky said, PRIM's investment team uses tools that provide timely information about how the performance of PRIM managers compares with that of peers. Those tools, Mr. Trotsky added, also allow PRIM staff to identify superb managers and invite them to respond to RFPs.

III. PRIM Asset Allocation

Mr. Trotsky introduced the proposed 2017 asset allocation and noted the changes to the asset allocation targets revolve around five key themes:

1. Maintain Global Equity exposure of 40%, but evaluate alternative equity hedging strategies.
2. Reposition Core Fixed Income portfolio to mitigate higher inflation risk.
3. Restructure Value-Added Fixed Income portfolio to introduce a new sub-asset class called Other Credit Opportunities.
4. Increase Private Equity allocation.
5. Combine Hedge Funds and Portfolio Completion Strategies (PCS) into a single allocation to focus on diversifying assets uncorrelated to equities.

PRIM staff provided the Committee with an overview of each asset class, highlighting proposed asset allocation changes.

Chuck LaPosta, CFA, noted the following regarding Global Equities:

- Maintain 40% Global Equity target allocation, since high equity exposure is necessary to achieve the 7.5% target return.
- Equity valuations appear high compared to the last five years but on an interest rate adjusted basis they appear less expensive.
 - P/E ratios are closer to fair value when compared to longer history.
 - Interest rate adjusted valuations are cheap when compared to longer history
- US equities appear supported by improved outlook for growth
- International equities appear supported by higher earnings growth and dividend yields

Mr. LaPosta, CFA noted the following regarding Core Fixed Income:

- Recommending reducing US Long Duration Treasury STRIPS from 5% to 2%
 - PRIM staff and Committee members are concerned that the historically negative correlation between equities and Treasuries may not continue in the future.
 - Positive correlation environments in the past were driven by a) inflation concerns and b) market expectations of major monetary policy shifts – both of which are reasonably likely in the future

- Market expectation for inflation is about 2% while NEPC forecast calls for 2.5% inflation
- The Federal Reserve has begun tightening monetary policy and will likely move 2-3 more times this year.
- Recommend increasing US TIPS by 2%
 - US TIPS provide inflation protection
 - TIPS values adjust with changes in headline inflation
 - Commodity stability, wage pressure and fiscal stimulus could all contribute to higher inflation.

Mr. LaPosta, CFA noted the following regarding Value Added Fixed Income:

- Maintain the 10% allocation to Value Added Fixed Income (VAFI), which provides exposure to high inflation and rising growth environments, the “top-right quadrant of the garden chart”.
 - VAFI has positive beta to growth and inflation
- Recommend creating a new 2% allocation to Other Credit Opportunities
 - Provides PRIM staff the ability, similar to Portfolio Completion Strategies, to source and invest in strategies that currently don’t have a set allocation within our VAFI allocation
 - Seek similar sensitivity to growth and inflation with better return opportunity
- Eliminate the 2% allocation to Emerging Markets Debt Local Currency allocation
 - Risk and return is dominated by currency exposure
 - Difficult asset class to add alpha as each investment requires managers to be right on both the yield curve and the currency bet
- Increase Bank Loans by 1.5% to 2.5% of the PRIT Fund
 - Floating rate structure is attractive in a potentially rising rate environment
 - Corporate credit should continue to improve with increased growth and modest inflation
- Reduce Distressed Debt by 1% to 3% of the PRIT Fund
 - Distressed Debt is an episodic opportunity and does not exist continuously throughout a business cycle, so this reduction is to better align a target allocation with our actual allocation

Mr. Michael R. Bailey noted the following regarding Private Equity:

- Increase Private Equity target from 10% to 11%
 - Continue to believe private equity investing will offer a premium to public equities, especially in the middle market space which PE team is focused on
 - Actual allocation is close to 11% currently, but this allocation increase impacts the PE teams future commitment levels

Mr. Timothy V. Schlitzer, CRE, CFA noted the following regarding Real Estate and Timberland:

- Recommending maintaining 10% allocation to Real Estate

- Commercial real estate should continue to provide the PRIT Fund with attractive long-term risk adjusted returns, with low correlation with other asset types as well as inflation protection
- Real estate fundamentals and values are stable, but exhibiting mid-to late cycle characteristics
- Fundamentals (rents/occupancy) are strong and support currently high valuations (low cap rates or yields)
- Recommending maintaining 4% allocation to Timberland
 - Similar to real estate – timberland should continue to provide the PRIT Fund with attractive long-term risk adjusted returns, with low correlation with other asset types as well as inflation protection
 - PRIM staff continue to be confident in the long term drivers of timberland returns – biological growth (60% of return), land and timber appreciation driven by global population growth, employment, housing formation, and new construction (all inflationary pressures).

Mr. Eric R. Nierenberg, Ph.D. noted the following regarding Hedge Funds and Portfolio Completion Strategies (PCS):

- Recommending merging hedge funds into PCS – creating a 13% target allocation
 - PRIM’s Hedge Fund objectives are very similar to the objectives of PCS, which is to invest in investments that have low correlation to the rest of the PRIT Fund.
 - Hedge funds are not an asset class, rather they are investment structures that trade in a wide variety of investments.
- PRIM staff is researching other equity hedging strategies to be included within PCS
 - Equity hedging strategies are a more perfect hedge to our equity portfolio, unlike the STRIPS portfolio

Mr. Gifford asked whether Mr. Schlitzer is comfortable with the geographic distribution of PRIT Fund real estate investments. Mr. Schlitzer said he is concerned that the PRIT Fund may be over-exposed in the Washington D.C. area. Mr. Morse noted that investing in New York City is extremely expensive and PRIM has been outbid in efforts to acquire property there.

IV. Performance Review and Market Update

Mr. Schlitzer presented the Real Estate and Timberland 2017 Performance Review and Market Update

Mr. Schlitzer told the Committee that Real Estate is valued at \$6.3 billion, or 10% of the PRIT Fund, and Timberland at about \$2.3 billion, or 3.6% of the Fund. This leaves room for about \$260 million in new timberland investments, Mr. Schlitzer said.

V. 2017 Real Estate and Timberland Annual Plan

Mr. Schlitzer presented the Real Estate and Timberland annual plan.

Highlights included:

- Capital Allocation
 - \$200 million – Direct Real Estate Investments
 - Continue to develop direct investing infrastructure and investment process

- Implement internal financing facility
- Asset Management
 - Prepare analysis of key portfolio return and risk exposures
 - Research and Recommendations
 - Consulting – Request for Proposals
 - Formally evaluate Core Real Estate and Timberland manager market
 - Evaluate office sector strategy
 - Review current active and bench REIT managers
 - Participate in private credit opportunity working group. Focus on private real estate debt opportunities

Committee member Jack Lutz presented an update on the timberland market, including data on leading sources of supply and demand. He noted, among other things, that economic development around the world brings with it demand for wood. Lutz also said that when economic growth is strong in at least two of the three primary regions (North America, Europe and Asia) of the world, he would expect demand for timberland would exceed supply. Mr. Lutz said that trade relations with Canada around timber are complex and that new tariffs imposed by the U.S. could lead to retaliatory tariffs that would harm timber valuations.

Committee members thanked Mr. Lutz for the thoroughness of his presentation.

VI. Securities Lending – Real Estate Financing Program

John La Cara, Senior Investment Officer – Real Estate and Timberland, and Donald R. Payne, Risk Management Officer, updated the Committee on the securities lending and real estate financing program. Mr. La Cara informed the Real Estate and Timberland Committee that PRIM’s Investment Committee, the day before, approved using PRIM’s securities lending program to provide debt financing to PRIT Core Realty. Mr. La Cara highlighted that this same form of borrowing was previously used by PRIM from 2002 to 2007 and that it was the most cost-effective, flexible and efficient way for the real estate program to employ leverage. He also stated that the first draw from the program would be applied to the recent acquisition of Santa Clara Gateway.

The PRIM Real Estate and Timberland Committee meeting adjourned at 11:46 a.m.

List of documents and exhibits used during the meeting:

- *Minutes of the PRIM Real Estate and Timberland Committee Meeting of November 16, 2016*
- *PRIT Fund Performance Report*
- *BNY Mellon Gross of Fees Performance Report*
- *2017 Investment Team Annual Plans*
- *2017 Asset Allocation Presentation*
- *Real Estate and Timberland Portfolio Report*
- *2017 Real Estate and Timberland Annual Plan*
- *Securities Lending – Real Estate Financing Presentation*
- *Handout – Who Has Timber? Who wants Timber? Why?*