

Minutes of the PRIM Investment Committee Meeting Tuesday, January 31, 2017

Committee member attendees:

- Treasurer Deborah B. Goldberg, Chair
- Joseph Bonfiglio
- C. LaRoy Brantley
- Constance M. Everson, CFA
- Ruth Ellen Fitch
- James Hearty
- Edward Kane
- Peter Monaco
- Paul E. Shanley, Esquire
- Glenn P. Strehle, CFA
- Timothy Vaill

Committee members not present:

Michael Even, CFA

The PRIM Investment Committee meeting was called to order at 9:39 a.m.

I. Approval of the Minutes

The PRIM Investment Committee unanimously approved the minutes of the November 15, 2016 meeting.

II. Executive Director/Chief Investment Officer Comments

Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer, 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.

Connie Everson, Committee member, made two comments on market development. The first was to caution that there is a significant gap between high investment sentiment and data in areas such as

consumer spending and borrowing that would suggest more caution may be in order. Additionally, she said, there is growing evidence non-US equity markets, including Eurozone markets, are in a position to outperform U.S. markets after years of lagging. It is no longer true, she said, that U.S. equities, in U.S. dollars, was the place one "had to be,".

PRIT Fund Performance Summary

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

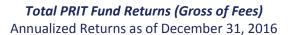
For the one-year ended December 31, 2016, the PRIT Fund was up 8.0%, underperforming the total core benchmark of 8.9% by 83 basis points.

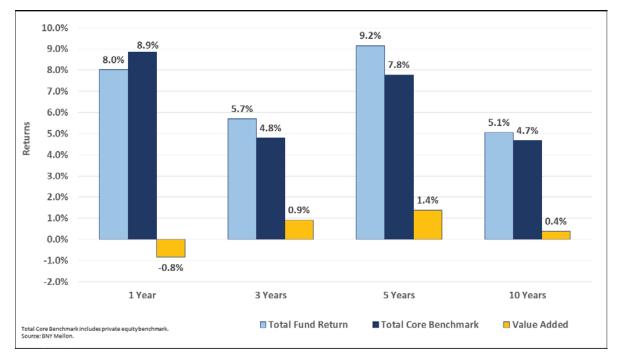
- This performance equates to an investment gain of \$4.8 billion.
- This underperformance equates to \$494 million of value below the benchmark return.
- Four of the seven major asset classes outperformed their respective benchmarks.
- Net total outflows to pay benefits for the one-year ended December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

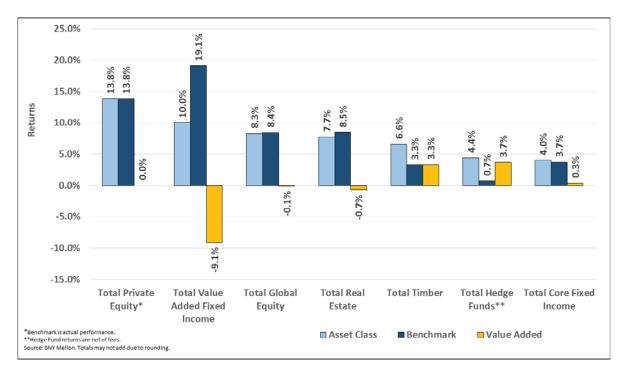
Mr. Trotsky referred to the following slides in describing the PRIT Fund's performance:





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

		Over/(Under)			% of
Trailing 1-Year		Benchmark	Benchmark	\$Value	PRIT
Performance: Dec. 31, 2016	Return	Return	(bps)	(millions)	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. Vaill noted that Private Equity should review its short-term benchmarks and Mr. Brantley agreed. Mr. Trotsky agreed the matter will be explored, and explained some of the difficulties of benchmarking private equity.

III. Asset Allocation Recommendations (Voting Item)

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.

Michael Manning and Phil Nelson from NEPC presented NEPC's five to seven year asset class return forecasts and risk assumptions. NEPC highlighted the proposed 2017 asset allocation changes and how PRIM peers' asset allocations compared to the PRIT Fund's asset allocations.

Mr. Brantley asked whether PRIM ought to consider increasing the allocation to asset classes that are expected to return over 7.5%, according to NEPC's return assumptions, such as emerging markets equities and distressed debt, given PRIM's return target of 7.5%. Mr. Brantley also asked whether the PRIT Fund's target allocation to private equity should be even higher than the proposed 11% allocation. NEPC representatives explained that the 7.5% target rate of return is a long-term target and that the recommended asset allocation contemplated that goal, but also incorporates data about the volatility of investments and the need to balance the risk of the portfolio with the return objectives..

Mr. Kane said PRIM's international exposure is in line with our peers but PRIM's liabilities are all in U.S. Dollars and questioned the additional currency risk PRIM is taking relative to its liabilities. NEPC representatives responded that PRIM is like other U.S. pension plans whose liabilities are dollar denominated, however the key question is if PRIM is getting compensated for taking the additional currency risk, and NEPC believes so.

Following NEPC's presentation, 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
 - o 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 longterm 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. Kane left the meeting at 11:26 a.m.

After the presentations were completed, the Investment Committee voted unanimously to recommend to the PRIM Board that the Board approve the 2017 Asset Allocation Recommendations

as described in Appendix E and F of the Expanded Agenda, and further to authorize the Executive Director to take all actions necessary to effectuate this vote.

The Committee took a brief break at 11:49 a.m. The meeting resumed at 11:54 a.m.

IV. Public Markets

a. Performance Summary

Chuck LaPosta, Senior Investment Officer – Fixed Income updated the Committee on the public markets portfolio performance. Among Mr. LaPosta's observations:

Mr. LaPosta said assets that were most sensitive to growth and low inflation performed the best, while others that were more sensitive to inflation also performed well. Within specific strategies SMID-Cap Equities under performed by 260bps and is attributable to two managers who are lagging their benchmarks by more than 10% over the past 12 months. Mr. LaPosta said other markets like Large Cap Equities and Emerging Markets have done well and that Fixed Income's more risky assets are performing best. Fixed Income assets with more interest rate sensitivity, such as STRIPS, had the lowest performance.

b. International Small-Cap Equity RFP Recommendation (Voting Item)

Andre Clapp, Ph.D., CFA, Senior Investment Officer — Public Markets presented the recommendation for Active Developed International Small-Cap Equity Investment Management Services.

The Evaluation Committee recommended five managers for a combined total of \$900 million allocation to Active Developed International Small-Cap Equity, which is 9% of the total equity allocation and 1.5% of the PRIT Fund. Over 45 responses to the Request for Proposals were received. The vetting process produced 10 semi-finalists, which the Evaluation Committee interviewed. After the Evaluation Committee's interviews, eight finalists were selected, for further due diligence. After on-site due diligence visits were conducted at the eight finalist firms, the Evaluation Committee is recommending five firms for approval. The five firms are Acadian, AQR, LMCG, Strategic Global Advisors (SGA) and TimesSquare.

Mr. Brantley noted that he is acquainted with four of the five firms and knows them to be great firms. Mr. Brantley requested that the recommended firms' assets under management for the particular product be included in the write-up. Mr. Brantley also asked what factors lead to the allocation sizing for each firm. Dr. Clapp responded that it was a combination of the level of conviction the Evaluation Committee had with a particular manager and how a manager's strategy and style fit within the portfolio.

The Investment Committee voted unanimously to recommend to the PRIM Board that the Board approve, subject to successful contract negotiations, five firms – Acadian, ACQ, LMCG, Strategic Global Advisors (SGA) and TimesSquare for a combined \$900 million allocation to Active Developed International Small-Cap Equity in the following amounts, as described in Appendices G and H of the Expanded Agenda, and further to authorize the Executive Director to take all actions necessary to effectuate this vote.

Firm	Allocation (in millions)
Acadian Asset Management	\$300
AQR Capital Management	\$150
LMCG Investments	\$100
Strategic Global Advisors (SGA)	\$100
TimesSquare Capital Management	\$250
TOTAL	\$900

Due to time constraints, the Committee decided to bypass the Hedge Fund and Private Equity Performance Summary and proceed to the next voting item.

V. Securities Lending Financing Program (Voting Item)

Donald Payne, Risk Management Officer and John La Cara, Senior Investment Officer – Real Estate and Timberland, presented to the Committee a recommendation to expend the current securities lending list of permissible investments to include PRIT Core Realty LLC, in order to finance Real Estate Debt. By expanding the list of permissible investments to include PRIT Core Realty, LLC, it will save the Real Estate Financing program an estimated \$3 to \$4 million dollars, per year, and will provide more flexibility to the Real Estate Financing program. The current securities lending program was initiated in January 2015 and has earned approximately \$22 million since inception.

The Investment Committee voted unanimously to recommend to the PRIM Board to approve the addition of PRIT Core Realty, LLC to the list of permissible investments per PRIM's securities lending cash collateral investment guidelines, in order to finance Real Estate Debt as described in Appendix I of 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 12:31 p.m.

List of document and other exhibits used at the meeting:

- Minutes of the PRIM Investment Committee Meeting of November 15, 2016
- PRIT Fund Performance
- 2017 Investment Team Annual Plans
- NEPC Asset Allocation Presentation
- 2017 Asset Allocation Presentation
- International Small-Cap Equity RFP Recommendation
- Securities Lending Financing Program