



PENSION RESERVES  
**INVESTMENT**  
MANAGEMENT BOARD

***Board Meeting***  
***Tuesday, October 13, 2015***  
***9:30 a.m.***

**I. MINUTES. (Voting Item)**

**II. EXECUTIVE DIRECTOR/CHIEF INVESTMENT OFFICER REPORT.**

**III. EXECUTIVE DIRECTOR:** Fiscal Year 2015 Performance Evaluation and Fiscal Year 2016 Goals & Objectives.  
**(Voting Item)**

**IV. INVESTMENT REPORT.**

A. Public Markets.

1. Portfolio Update.
2. Progress Core Bond Strategy.

B. Hedge Funds.

1. Portfolio Update.
2. Direct Hedge Fund Investment Recommendation: Davidson Kempner Special Opportunities Fund III, LP. **(Voting Item)**

C. Private Equity.

1. Performance Summary and Cash Flows.
2. Commitment Summary.
3. New Investment Opportunity: Lovell Minnick Equity Partners IV, L.P. **(Voting Item)**

D. Real Estate and Timberland.

1. Performance Review and Market Update.
2. AEW Transition Update.

**IV. FINANCE AND ADMINISTRATION REPORT.**

A. FY 2015 Audit Results. **(Voting Item)**

B. Proxy Voting Update and ISS contract extension. **(Voting Item)**

C. 2016 PRIM Board and Committee Meeting Schedule.

D. Legal / Legislative Update.



PENSION RESERVES  
**INVESTMENT**  
MANAGEMENT BOARD

E. Other Matters:

1. August 2015 PRIM Budget.
2. Travel and Staff Development.
3. Client Services.

**Appendices**

- A. Minutes of the PRIM Board meeting of August 11, 2015.
- B. Callan *PRIT Fund Performance Report* Color Charts (August 31, 2015).
- C. BNY Mellon Gross of Fees Performance Report (August 31, 2015).
- D. Callan *Investment Measurement Service Monthly Review* (August 31, 2015).
- E. PRIT Fund Performance & Public Markets Performance Detail (August 31, 2015).
- F. PRIM Progress Memorandum.
- G. Callan Progress Memorandum.
- H. Real Estate and Timberland Portfolio Report (August 31, 2015).
- I. KPMG Report on 2015 Audit.
- J. PRIT Audited Financials.
- K. PRIM Audited Financials.
- L. 2015 Proxy Voting Update.
- M. 2016 Proposed PRIM Board and Committee Schedule.
- N. Due Diligence Travel, Trustee and Staff Fiduciary Education, and Professional Development.

## I. Minutes. (Voting Item)

The minutes of the PRIM Board meeting on August 11, 2015 are contained at **Appendix A**.

## II. Executive Director/Chief Investment Officer Report.

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

### Organizational Updates

I am delighted to report that PRIM and our people continue to receive national recognition for our innovative and high-performing investment program and for our equally high-performing finance and legal work. A listing of recent awards is as follows:

- Buyouts Magazine* named PRIM as the best-performing private equity portfolio of the 22 largest pensions it evaluates for the 1-year, 3-year, 5-year, and 10-year time periods.
- Awarded the 10<sup>th</sup> consecutive Government Finance Officers Association (GFOA) Certificate of Achievement for Excellence in Financial Reporting.
- Michael G. Trotsky, CFA, was nominated as one of five finalists for Chief Investment Officer Magazine 2015 "CIO Industry Innovations Award."
  - From the editor: "*The central questions of these awards: What is innovation, and who is executing it? To the CIO editorial team and the board of asset owners—the Class of 2015 winners—who advise our judgments, innovation means more than re-labeling old strategies. It means more than producing sub-par returns for above-par prices. At its core, innovation means matching new challenges with new ideas—ridding the asset management world of its sacred cows and failed strategies. And it means results.*"
  - The nominees are: Massachusetts Pension Reserves Investment Management Board (Michael Trotsky), New Jersey Division of Investment (Chris McDonough), Oregon Investment Council (John Skjervem), Pennsylvania Public School Employees' Retirement System (Jim Grossman), Public Employees' Retirement System of Nevada (Steve Edmundson).
  - Award is to be announced on December 3, 2015 at the New York Public Library.
- Michael Bailey, Senior Investment Officer – Director of Private Equity, was nominated for the Investor Intelligence Award for Excellence in Private Equity by Investor Intelligence Network. Sponsored by Institutional Investor Magazine, the Investor Intelligence Awards recognize the most outstanding and innovative public plan sponsors in North America.
- Sarah Samuels, CFA, Deputy Chief Investment Officer, was named to Chief Investment Officer Magazine's 2015 "40 Under 40" list.
  - A worldwide award which recognizes up-and-coming asset owners who have made meaningful investment contributions to their organizations.
  - The "40 under 40" list includes asset owners from public and corporate pension plans, endowments and foundations, health care funds, and insurance funds across the globe.
- Chris Supple, Deputy Executive Director and General Counsel, was awarded the Commonwealth's Citation for Outstanding Performance in a September 24, 2015 State House Ceremony.
  - Awarded for his outstanding work in collaboration with the Treasury and Attorney General's Office when PRIM served as the lead plaintiff in three class action lawsuits.

- \$473 million recovered from Schering Plough. One of top 25 securities fraud settlements ever and the largest ever from a pharmaceutical company.
- \$265 million recovered from Massey Energy.
- \$170 million recovered from Fannie Mae.
- Chris was also re-appointed to a second term as Chair of the Securities Litigation Committee of the National Association of Public Pension Attorneys (NAPPA).

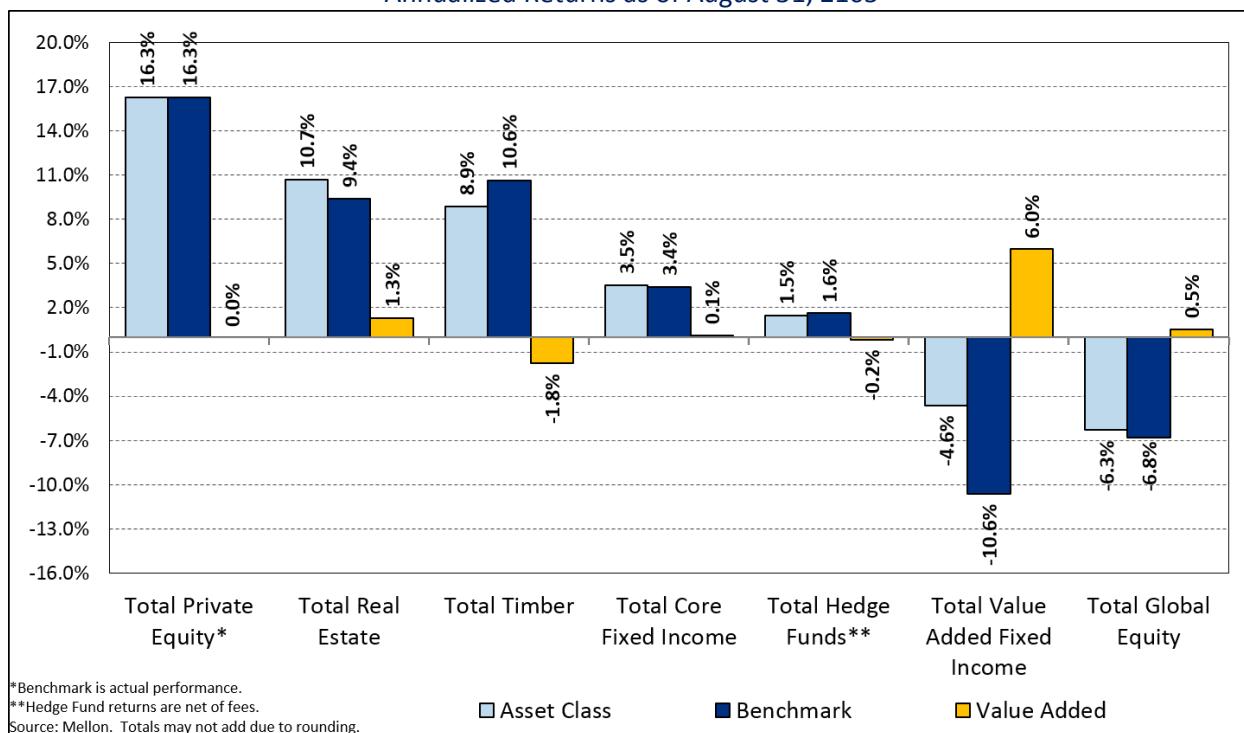
In other organizational news, Steffanny Rosario joined PRIM in September as the new Executive Assistant to the finance and investment teams. Steffanny joins us from the City of Boston Transportation Department, where she supported both the Commissioner and Deputy Commissioner. Steffanny attended Regis College and is finishing her Bachelors of Arts degree in Global Affairs at UMass Boston.

### **Market Analysis and PRIT Fund Performance**

The markets have been volatile and weak during the past three months as the Chinese slowdown and a surprise devaluation in their currency increased concerns about global growth. Fortunately, the PRIT fund has held up well in the recent market sell-off and the asset allocation changes we have made appear to be quite timely and effective for their purpose. We have been worried for a long time about the strength of the U.S. economic recovery and have long held the belief that conditions have not been supportive of higher interest rates. Furthermore, our valuation work on global equities, along with insightful economic observations, signaled that equity valuations were in a peak zone. Over the past five years, while the PRIT Fund recorded very strong performance (up on average 11 percent annually), we gradually reduced our exposure to equities and implemented strategies to buffer an equities sell-off. As a reminder, we have (1) reduced our global equities allocation from 49 percent to its current target of 40 percent, (2) converted our core fixed income portfolio to include long duration Treasury STRIPS, an asset that typically is negatively correlated to equities, and (3) created and funded a new allocation, Portfolio Completion Strategies, to identify and fund low volatility strategies with low correlation to equities. We continue to monitor market developments closely and have recently begun our annual asset allocation study to ensure that we remain ahead of the curve. We look forward to sharing our findings in the coming months.

### PRIT Asset Class Performance (Gross of Fees)

Annualized Returns as of August 31, 2105



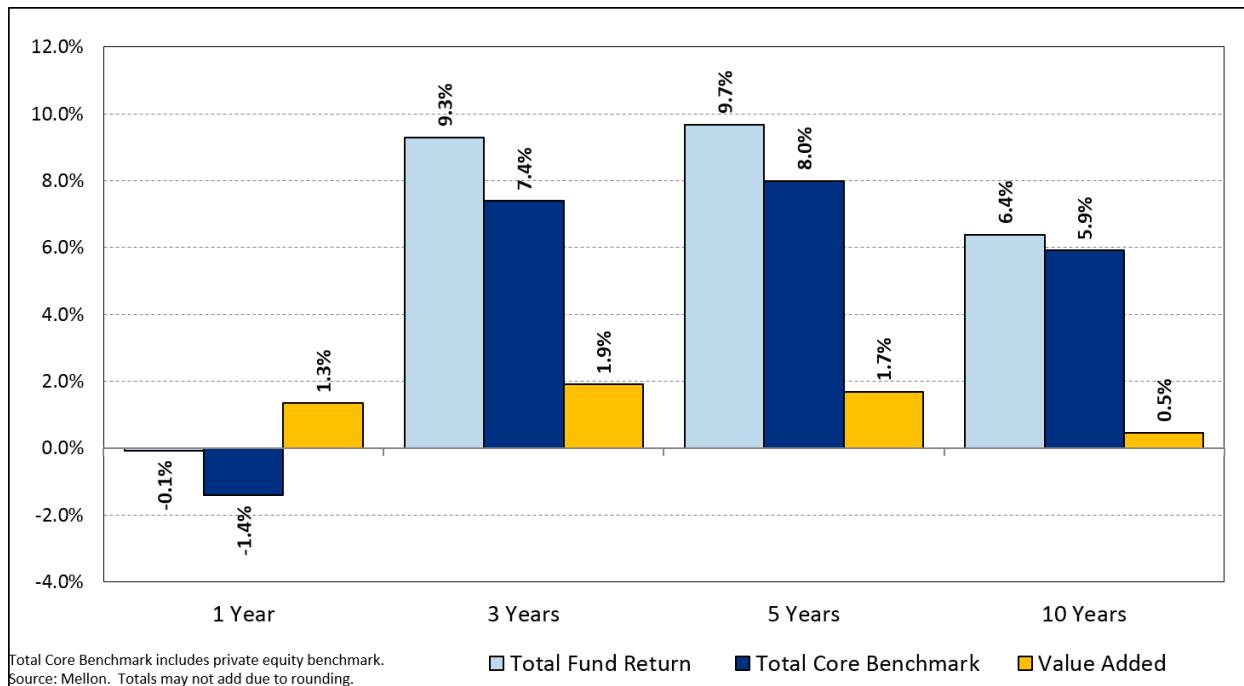
### PRIT Core Fund Performance Summary

Gross of Fees Performance

Trailing 1-Year Performance as of August 31, 2015

Trailing 1-Year Performance: Aug. 31, 2015	Benchmark	Over/(Under) Benchmark (bps)	\$Value (millions)	% of PRIT Fund
	Return	Return		
<b>Total PRIT Fund</b>	-0.1%	-1.4%	132	59,432 100%
<b>Total Global Equity</b>	-6.3%	-6.8%	54	24,927 41.9%
<i>Domestic Equity</i>	0.0%	0.3%	(35)	11,176 18.8%
<i>International Developed</i>	-6.4%	-8.3%	191	9,876 16.6%
<i>Emerging Markets</i>	-21.9%	-21.9%	5	3,874 6.5%
<b>Private Equity</b>	<b>16.3%</b>	<b>16.3%</b>	<b>0</b>	<b>6,699 11.3%</b>
<b>Real Estate</b>	<b>10.7%</b>	<b>9.4%</b>	<b>133</b>	<b>6,106 10.3%</b>
<b>Timberland/Natural Resources</b>	<b>-3.4%</b>	<b>-1.9%</b>	<b>(150)</b>	<b>2,252 3.8%</b>
<b>Hedge Funds</b>	<b>1.5%</b>	<b>1.6%</b>	<b>(16)</b>	<b>5,104 8.6%</b>
<b>Value Added Fixed Income</b>	<b>-4.6%</b>	<b>-10.6%</b>	<b>599</b>	<b>5,043 8.5%</b>
<b>Core Fixed Income</b>	<b>3.5%</b>	<b>3.4%</b>	<b>12</b>	<b>8,315 14.0%</b>

**Total PRIT Fund Returns (Gross of Fees)**  
Annualized Returns as of August 31, 2015



**PRIT Asset Class Performance (Gross of Fees)**  
Annualized Returns as of August 31, 2015

1 Year		3 Year		5 Year		10 Year	
Private Equity	16.3%	Private Equity	18.8%	Private Equity	18.3%	Private Equity	16.8%
Real Estate	10.7%	Real Estate	12.3%	Real Estate	13.1%	Timber	8.6%
Timber	8.9%	Global Equity	9.9%	Global Equity	10.3%	Real Estate	8.3%
Core Fixed Income	3.5%	Timber	9.1%	Timber	6.3%	Value-Added Fixed Income	7.3%
Hedge Funds	1.5%	Hedge Funds	7.4%	Value-Added Fixed Income	6.0%	Global Equity	5.6%
Value-Added Fixed Income	(4.6%)	Core Fixed Income	3.6%	Hedge Funds	5.7%	Core Fixed Income	5.0%
Global Equity	(6.3%)	Value-Added Fixed Income	3.4%	Core Fixed Income	4.6%	Hedge Funds	4.4%

The following detailed performance reports on the PRIT Fund as of August 31, 2015 are available in the Board package:

- Callan *PRIT Fund Performance Report* Color Charts. (**Appendix B**)
- BNY Mellon Gross of Fees Performance Report. (**Appendix C**)
- Callan *Investment Measurement Service Monthly Review*. (**Appendix D**)

### **III. Executive Director: Fiscal Year 2015 Performance Evaluation and Fiscal Year 2016 Goals & Objectives.**

The Chair of the Administration and Audit Committee is charged with coordinating the process for the Executive Director's evaluation by the Board and with ensuring that the Board has received all materials and information necessary to conduct the Executive Director's evaluation. The Chair of the Administration and Audit Committee will initiate the Executive Director's FY 2015 Performance Evaluation.

The Administration and Audit Committee's role, pursuant to the PRIM Charters, is to review the goals and objectives and recommend them to the PRIM Board for Approval. The Executive Director's FY 2016 Goals and Objectives were distributed previously. The Administration and Audit Committee (unanimously) is recommending that the PRIM Board approve the Executive Director's FY 2016 Goals and Objectives. (**Voting Item**)

### **IV. Investment Report.**

#### **A. Public Markets.**

##### **1. Portfolio Update.**

Sarah N. Samuels, CFA, Deputy Chief Investment Officer – Director of Public Markets and Investment Research. Mrs. Samuels' presentation is contained at **Appendix E**.

##### **2. Progress Core Bond Strategy.**

Chuck LaPosta, CFA, Senior Investment Officer – Fixed Income. Progress Investment Management Company, LLC, a Manager of Emerging Managers, was placed on PRIM's manager bench in 2013. A memorandum from PRIM is contained at **Appendix F**. A memorandum from Callan Associates is contained at **Appendix G**.

#### **B. Hedge Funds.**

##### **1. Portfolio Update.**

Eric R. Nierenberg, Ph.D., Senior Investment Officer – Director of Hedge Funds and Low Volatility Strategies.

##### **2. Direct Hedge Fund Investment Recommendation: Davidson Kempner Special Opportunities Fund III, LP. (**Voting Item**)**

Manager Name: Davidson Kempner Capital Management LP

Fund Name: Davidson Kempner Special Opportunities Fund III, LP

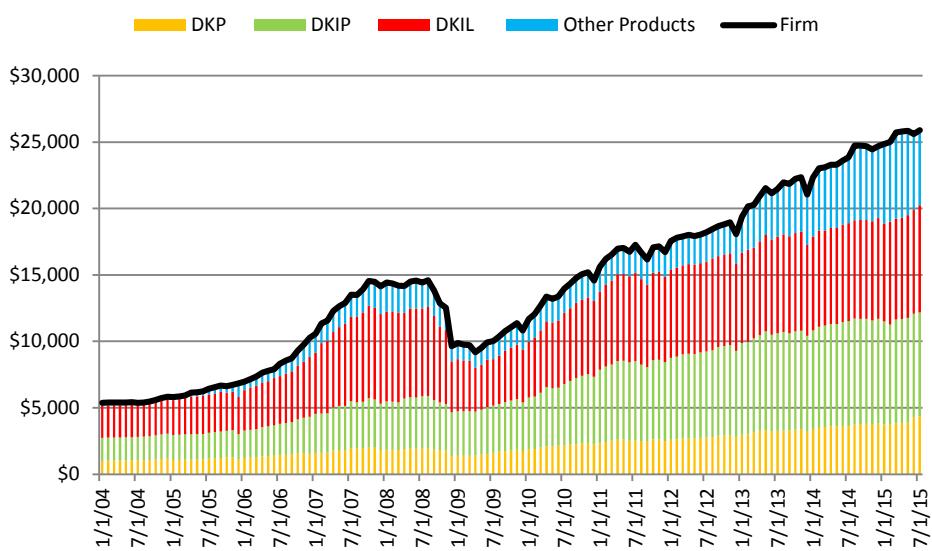
Fund Manager Size: \$26 billion

Fund/Strategy Size: \$800mn - \$1bn

### *Firm Overview*

Davidson Kempner (“DK”) currently has \$26 billion in assets under management, as of August 31<sup>st</sup>, 2015. The flagship multi-strategy product (of which PRIM is an investor) holds \$20.2 billion in assets, along with \$5.6 billion in other products, including the Distressed Opportunities Fund and the two previous Special Opportunities Funds. DK has 230 employees across offices in New York, London and Hong Kong. The firm has 95 investment professionals and 110 back and middle office personnel. DK’s 14 principals have approximately \$1.8 billion invested in the firm’s various strategies and collectively they comprise the firm’s single largest investor. DK has a diversified investor base comprised mainly of endowments, foundations, pensions (public and private), high net worth individuals, family offices and fund of hedge funds. The firm remains 100% employee-owned.

### Growth of Firm Assets Under Management



### *Firm History and Ownership*

M. H. Davidson & Co. was founded in 1983 by Marvin H. Davidson as a family office. Thomas L. Kempner, Jr. joined the firm at the end of 1984 and was later promoted to partner in 1986. In 1987, the firm changed its name to Davidson Kempner Capital Management, LLC as it transitioned from a family office to an asset manager, allowing it to raise outside capital. In 1990, the firm registered itself as an investment adviser with the SEC. Kempner succeeded Davidson as the firm’s Executive Managing Member in 2004.

### Thomas L. Kempner, Jr., Executive Managing Member

#### **EMPLOYMENT HISTORY:**

Davidson Kempner, 1984 – Present, Co-Founder and Executive Managing Member  
Mr. Kempner joined Davidson Kempner in December 1984. Mr. Kempner became a Managing Member of Davidson Kempner in January 1986 and was appointed Executive Managing Member in January 2004.

#### **EDUCATION**

**Harvard Business School**, 1978, with distinction  
**Yale College**, 1975, magna cum laude

Mr. Kempner is presently the Chairman of the Board of Trustees of the Central Park Conservancy, a member of the Board of Trustees of Harlem Village Academies and a member of the Board of Directors of Harvard Management Company. Mr. Kempner also serves on the board of the USA Cycling Development Foundation, the investment Committee of The St. Bernard's School in New York, and the Columbia University Medical Center Board of Advisors.

**Anthony A. Yoseloff, Deputy Executive Managing Member - Distressed Investments**

**EMPLOYMENT HISTORY:**

Davidson Kempner, 1999 - Present, Deputy Executive Managing Member

Mr. Yoseloff joined Davidson Kempner in August 1999 and became a Managing Member of Davidson Kempner in January 2004. He became Co-Deputy Executive Managing Member in January 2012 and the sole Deputy Executive Managing Member in January 2013. Mr. Yoseloff co-manages the distressed investments department.

**EDUCATION**

**Columbia Law School, 1999, JD**

**Columbia Graduate School of Business Administration, 1999, MBA**

**Princeton University, 1996, Public and International Affairs**

Mr. Yoseloff received a J.D. from Columbia Law School and an M.B.A. from the Columbia Graduate School of Business Administration in 1999. He earned an A.B., cum laude, from the Woodrow Wilson School of Public and International Affairs at Princeton University in 1996. Mr. Yoseloff is a member of the Board of Directors of DonorsChoose.org, a not-for-profit organization, and serves as the Chairman of its Audit Committee.

**Michael S. C. Herzog, Member and Co-Chief Executive Officer of Davidson Kempner European Partners, LLP; Merger Arbitrage and Long/Short Equities (London)**

**EMPLOYMENT HISTORY:**

Davidson Kempner, 2001 – Present, Member and Co-Chief Executive Officer of Davidson Kempner European Partners

Mr. Herzog joined Davidson Kempner in August 2001. Mr. Herzog became a Member and the Chief Executive Officer of Davidson Kempner European Partners, LLP in May 2004, was appointed Managing Director in January 2005 and became a Principal in 2008. Mr. Herzog co-manages the merger arbitrage department and manages the long/short equities department. From 1998 to 2001, Mr. Herzog was a Vice President in the Mergers and Acquisitions department at Merrill Lynch in London, where he advised on European cross-border transactions. .

**EDUCATION**

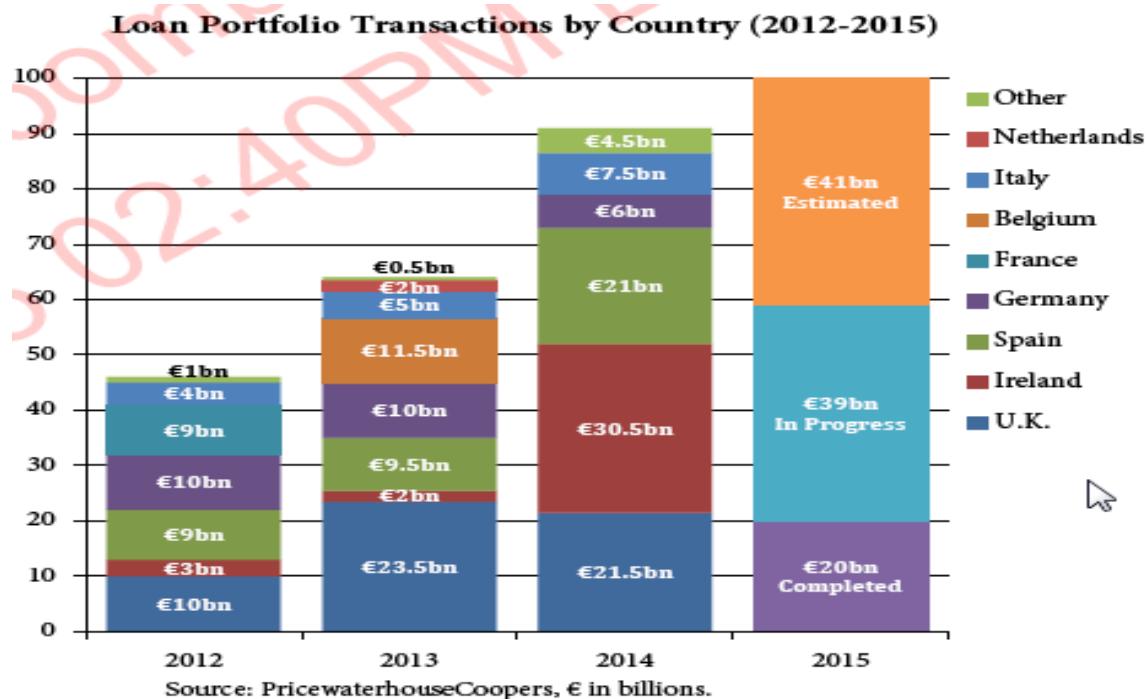
**University of Birmingham, 1992, Bachelor of Laws degree in Law and Business Studies with honors**

*Fund Strategy*

Davidson Kempner is launching the Special Opportunities Fund III (its predecessor, Special Opportunities Fund II launched in July 2014 and raised \$800 million) in order to capture the opportunities the DK investment team frequently uncovers in the illiquid credit space. Due to risk management constraints, the manager was unable to allocate to these illiquid opportunities in a meaningful way (the multi-strategy fund and distressed funds each operate with illiquid buckets capped at 15% and with individual positions typically not exceeding 1%). Despite the fact that they were performing all of the analysis and due diligence on the

underlying positions, DK was forced to syndicate out these very attractive deals because of sizing constraints. In launching the special opportunity funds, Davidson Kempner has created a structure that allows it the flexibility to invest in entire deals without exceeding the funds' risk management guidelines. Additionally, the drawdown structure of the Special Opportunities Fund allows the firm to more efficiently match the timing of individual deals with available capital.

The universe of investable assets for SOF III includes corporate debt, CRE loans, ABS, structured products, real estate, loans backed by hard assets, liquidations, restructurings, and other distressed opportunities. The manager believes that opportunities in distressed investing will continue to emerge from bank deleveraging and other structural changes in the global credit markets. DK views European banks as the biggest distressed seller as they remain under pressure to restructure their balance sheets. Though the space is competitive, DK notes that PE firms are unable to utilize the same levels of leverage used in the past, making investing in the space more appealing for unlevered players like DK. Additionally, the volume of available assets continues to increase; in 2014 there was a record €90 billion of asset sales, while 2015 is currently outpacing that total (see chart below).



In the US, DK is looking at companies that will struggle due to prolonged lower energy prices, as they feel many companies will be forced to restructure their debt profile at advantageous terms for the creditor. We feel that DK's size will be beneficial in sourcing and bidding on deals, as DK will be able to bid on larger blocks and mitigate concentration risk by allocating the name across multiple funds.

Once a name is taken to auction, usually 5-10 investors/funds are offered the opportunity to bid on the paper. DK's long history and established reputation in the market provide them an edge in getting the opportunity to see and bid on as wide a filter of deals as possible. We view this as a considerable edge that DK has relative to other players in the space.

Currently, DK has a pipeline of 40-60 deals and on average has bid on 1-2 names a month. DK noted that their success rate in going from 1<sup>st</sup> round bids to 2<sup>nd</sup> round bids is under 10%; DK is disciplined and does not compete on price. However, when DK is invited back for 2<sup>nd</sup> round bids they usually have a 40% success rate in winning the bid. In many of these instances they are not the highest bidder, but advance due to their reputation as a high-quality investor and being a strong partner. DK focuses on deals in the \$150-\$500 million range where it feels it can be more competitive. It tends to avoid \$1 billion+ deals.

While the primary focus is on performing extensive bottom up analysis on a deal-by-deal basis, DK also monitors the macroeconomic situation as an input into their investment process.

*Recommendation*

The Investment Committee (unanimously) and PRIM Staff are recommending that the Board approve an initial allocation of up to \$75 million to the Davidson Kempner Special Opportunities Fund III.

**C. Private Equity.**

Michael R. Bailey, Senior Investment Officer – Director of Private Equity.

1. Performance Summary and Cash Flows.

PRIM Board Private Equity Portfolio Performance as of August 31, 2015 <sup>1</sup>					
Committed	Contributed <sup>2</sup>	Distributed	Market Value	Total Value	Net IRR <sup>3</sup>
17,011,239,120	13,874,214,622	15,402,187,157	6,779,370,525	22,181,557,682	13.26%

1. Excludes Alternative Fixed Income and Private Natural Resources partnerships.

2. Contributions include fees.

3. Net IRR since inception, as calculated by Hamilton Lane's Portfolio Reporting System.

**2015 Cash Flows <sup>1</sup>**

Quarter	Contributions <sup>2</sup>	Distributions	Net Cash Flow
31-Mar-15	283,670,913	395,789,514	112,118,601
30-Jun-15	327,467,876	615,659,051	288,191,175
30-Sep-15			
31-Dec-15			
TOTAL	\$611,138,789	\$1,011,448,565	\$400,309,776

1. Excludes Alternative Fixed Income and Private Natural Resources partnerships.

2. Contributions include fees.

## 2. Commitment Summary.

PRIM Private Equity 2015 Investment Summary (\$ in Millions)				
<u>Partnership</u>	<u>Investment Focus</u>	<u>Special Equity</u>	<u>Venture Capital</u>	<u>Total PRIT Commitment</u>
<b><u>Approved as Interim Recommendations January 20th</u></b>				
<i>Catalyst Investors IV, L.P. *</i>		\$	65	
<i>Insight Venture Partners IX, L.P. *</i>		\$	120	
<i>Insight Growth-Buyout Coinvestment Fund, L.P. *</i>		\$	40	
<b><u>Approved at the February 11th Board Meeting</u></b>				
<i>Flagship Ventures Fund V, L.P. *</i>		\$	25	
<i>Rhône Partners V, L.P.</i>		\$ 106		
<b><u>Approved at the April 7th Board Meeting</u></b>				
<i>Blackstone Capital Partners VII, L.P. *</i>		\$ 225		
<i>TA XII, L.P. *</i>			\$ 200	
<i>Thoma Bravo Special Opportunities Fund II, L.P. *</i>		\$ 50		
<b><u>Approved at the June 4th Board Meeting</u></b>				
<i>Charterhouse Capital Partners X, L.P. *</i>		\$ 112		
<i>Quantum Parallel Partners VI-C, L.P. *</i>		\$ 45		
<b>Total</b>		\$ 537	\$ 450	\$ 987
<b>2015 Investment Plan</b>				\$1,700
<b>Remaining To Be Committed</b>				\$713
 <b>PRIM Alternative Fixed Income 2015 Investment Summary (\$ in Millions)</b>				
*Denotes existing PRIM relationship				
<u>Partnership</u>				<u>Total PRIT Commitment</u>
<b><u>Approved as Interim Recommendations March 2nd</u></b>				
<i>Oaktree Opportunities Fund X, L.P. *</i>		\$	75	
<i>Oaktree Opportunities Fund Xb, L.P. *</i>		\$	150	
<b><u>Approved at the April 7th Board Meeting</u></b>				
<i>CVI Credit Value Fund III, L.P.</i>		\$	150	
<b>Total</b>		\$	375	
<b>2015 Investment Plan</b>				\$700
<b>Remaining To Be Committed</b>				\$325

### 3. New Investment Opportunity: Lovell Minnick Equity Partners IV, L.P. (**Voting Item**)

Lovell Minnick Partners is establishing Lovell Minnick Equity Partners IV, L.P. (LMEP IV) to make private equity investments in middle market financial services companies. LMEP IV will be between \$550 - \$750 million in aggregate commitments and will acquire equity positions through a variety of transaction types, including management buyouts, corporate divestitures, and growth equity investments. Lovell Minnick Partners has \$1.2 billion in assets under management and has offices in Los Angeles and Philadelphia.

The PRIM Private Equity team believes that Lovell Minnick Equity Partners IV, L.P. provides that PRIT Fund with an attractive risk/return profile. Lovell Minnick Partners is a small highly focused firm with an experienced and motivated team. Lovell Minnick Partners has a strong and consistent track record.

The Investment Committee (unanimous vote) and PRIM Staff are recommending that the PRIM Board approve a capital commitment of up to \$100 million to Lovell Minnick Equity Partners IV, L.P.

### D. Real Estate and Timberland.

Timothy V. Schlitzer, CRE, Senior Investment Officer – Director of Real Estate and Timberland.

#### 1. Performance Review and Market Update.

##### Real Estate.

###### Total Real Estate Performance.

	PRIM Real Estate	Combined Benchmark*	Out/Under Performance
1 Year	10.7%	9.4%	1.3%
3 Year	12.2%	10.7%	1.5%
5 Year	13.1%	12.4%	0.7%
10 Year	8.3%	7.7%	0.6%

\*Includes NCREIF Property Index as of March 31, 2015 (One Quarter Lag). June returns not available in time for month-end performance calculation.

###### Private Real Estate Performance.

Through August 31, 2015, returns for private real estate over periods of one, three, five and ten years are as follows:

	PRIM Private Real Estate	Benchmark*	Out/Under Performance
1 Year	14.7%	12.7%	2.0%
3 Year	13.9%	11.5%	2.5%
5 Year	14.4%	12.7%	1.6%
10 Year	9.3%	8.4%	0.9%

\*NCREIF Property Index as of March 31, 2015 (One Quarter Lag). June Index returns not available in time for month-end performance calculation.

### *Real Estate Securities Performance.*

Through August 31, 2015, returns for REITs year-to-date and over periods of one, three, five and ten years are as follows:

	PRIM REITs	Benchmark*	Out/Under Performance
YTD	-4.6%	-5.4%	0.8%
1 Year	-3.1%	-4.1%	1.1%
3 Year	7.2%	7.1%	0.1%
5 Year	9.8%	10.0%	-0.2%
10 Year	4.7%	4.4%	0.4%

\*FTSE EPRA NAREIT Developed Net Total Return as of August 31, 2015.

### *Commentary - Real Estate.*

As of August 31, 2015, the real estate portfolio was valued at \$6.1 billion, 10.3% of the PRIT Fund, which is above the target allocation of 10%. Core real estate assets represent 75.4% of the total real estate portfolio, 7.2% is invested in non-core assets, and 18.6% of the portfolio is invested in REITs. The remainder is in short term cash pending reinvestment.

The private real estate portfolio returned 14.7% for the one-year period ended August 31, 2015, 200 basis points above benchmark. PRIM outperformed on both a levered and unlevered basis. One year NCREIF returns are now being led by the industrial sector at 14.8%, replacing retail which returned 13.6%. Apartments remain the laggard at 11.6%. Year to date, PRIM's advisors have acquired eight new properties for \$694.7 million in equity. Two dispositions have been completed for \$112.5 million.

### **NCREIF Property Returns.**

#### **June 30, 2015**

<b>Property Type</b>	<b>% of Index</b>	<b>Total One Year Return</b>
Apartments	24.1%	11.6%
Hotels	1.3%	14.0%
Industrial	13.2%	14.8%
Office	38.1%	12.9%
Retail	<u>23.3%</u>	<u>13.6%</u>
<b>Total</b>	<b>100%</b>	<b>13.0%</b>

PRIM's Global REIT portfolio returned -3.1% for the one-year period ended August 31, 2015, outperforming the benchmark by 107 basis points. Global REIT markets fell 5.7% in the second quarter with the Americas leading on the downside, returning -10.0%. Markets rebounded slightly in July returning 2.4% only to drop off again in August, down 6.3%. This correction left REIT valuations attractively positioned compared to historical levels. Green Street Advisors estimates that the observed global discount to asset NAV is 18%. However, analysis of historical spreads between REIT yields and various fixed income and equity instruments indicates that REITs are expensive compared to both stocks and bonds.

Growth has continued through 2015 with US GDP at 0.6% in the first quarter and 3.7% in the second quarter. The U.S. added 173,000 jobs in August, below the monthly average of 247,000 for the year, dropping the unemployment rate to 5.1%. Office vacancy is currently at 13.5%, its

lowest level since 2008 and 100 basis points lower year over year. The apartment sector, where caution has increased the most due to supply concerns, continued to see rent growth at 5% year over year (CBRE-EA). The industrial sector, a focus for PRIM given our development program, remains strong. Availability in the major markets such as the Inland Empire, Florida, New Jersey, Seattle and Chicago are all at pre-2008 lows. The recovery has broadened with 28 of the 58 major industrial markets reporting availability at or below 10%. Of those markets 52 have availability at or below their 10 year average (CBRE-EA, AEW).

### **Timberland.**

#### *Timberland Performance.*

Through August 31, 2015, returns for timberland over periods of one, three, five and ten years are as follows:

	PRIM Timberland	Benchmark*	Out/Under Performance
1 Year	8.9%	10.6%	-1.8%
3 Year	9.1%	9.8%	-0.7%
5 Year	6.3%	6.2%	0.1%
10 Year	8.6%	8.6%	0.0%

\* NCREIF Timberland Index as of March 31, 2015. June Index returns not available in time for month-end performance calculation.

#### *Total Timberland and Natural Resources Performance.*

Through August 31, 2015, returns for natural resources over periods of one, three, five and ten years are as follows:

	PRIM Total Natural Resources	Benchmark*	Out/Under Performance
1 Year	-3.4%	-1.9%	-1.5%
3 Year	4.8%	5.9%	-1.1%
5 Year	4.8%	5.5%	-0.6%
10 Year	6.1%	5.8%	0.3%

\* Includes NCREIF Timberland Index as of March 31, 2015. June Index returns not available in time for month-end performance calculation. Benchmark also includes the Lipper NR Global Fund Index (peer group data). Weightings are adjusted quarterly.

#### *Commentary – Timberland.*

As of August 31, 2015, the timberland and natural resources portfolio was valued at \$2.3 billion, 3.8% of the PRIT Fund, which is 0.3% below the target allocation. Timberland investments comprise \$1.6 billion, or 73.2%, of the portfolio while public and private natural resource investments comprise the remaining \$604 million, or 26.8% of the portfolio.

The timberland portfolio returned 8.9% over the one-year period ended August 31, 2015, 150 basis points below the timberland benchmark. Recent underperformance has been driven in part by international currency weakness impacting foreign demand and asset valuation. Regional NCREIF returns were 10.2% in the Pacific Northwest and 10.0% in the South year over year.

## **NCREIF Timberland Returns.**

**June 30, 2015**

<b>Property Type</b>	<b>% of Index</b>	<b>Total One Year Return</b>
South	69.1%	10.0%
Northwest	22.6%	10.2%
Northeast	4.8%	8.7%
Lake	<u>2.4%</u>	<u>12.6%</u>
<b>Total</b>	<b>100%</b>	<b>10.0%</b>

The public natural resources portfolio returned -35.3% over the one-year period ended August 31, 2015, 124 basis points below benchmark. Negative performance has been driven primarily by the steep decline in energy prices beginning in June 2014 as well as volatility in one of PRIM's two portfolios, driven by a more active, small cap strategy.

Performance data for real estate and timberland are contained at **Appendices C and H**.

### **2. AEW Transition Update.**

Timothy V. Schlitzer, Senior Investment Officer – Director of Real Estate and Timberland.

## **IV. Finance and Administration Report.**

### **A. FY 2015 Audit Results.**

The annual audits of PRIM and PRIT and the Agreed-Upon Procedures review of PRIM's Procurement Process for Investment Management and Other Professional Services and the PRIT Fund's Benchmark Calculations (the AUP reviews) have concluded with clean opinions and no audit exceptions.

KPMG's report is attached at **Appendix I** and includes an overview of the audit processes that were employed, copies of draft audit opinion letters, and KPMG's report on the AUP reviews. The draft PRIT and PRIM financial statements are attached at **Appendices J and K**.

The Administration and Audit Committee (unanimously) and PRIM Staff are recommending to the Board to accept the FY 2015 PRIM and PRIT financial statements and the Agreed-Upon Procedures reports on PRIM's Procurement Process for Investment Management and Other Professional Services and the PRIT Fund's Benchmark Calculations. (**Voting Item**)

### **B. Proxy Voting Update and ISS contact extension.**

PRIM staff will provide an update on PRIM's Proxy Voting, presentation is attached at **Appendix L**.

PRIM's current three year contract with Institutional Shareholder Services (ISS) expires on December 31, 2015. Given the recent changes in proxy voting guidelines, and proposed new 2016 proxy voting guideline implementation timeline, PRIM Staff is recommending to extend the ISS contract for another year. This extension will ensure continuity in implementing our custom proxy voting guidelines.

The Administration and Audit Committee (unanimously) and PRIM Staff are recommending to the PRIM Board to extend the ISS contract for one year, ending December 31, 2016. (**Voting Item**)

**C. 2016 Proposed PRIM Board and Committee Meeting Schedule.**

Attached at **Appendix M** is a copy of the 2016 Proposed PRIM Board and Committee Meeting Schedule. Board members are asked to review their calendars and report any potential conflicts to Amaran Soja by November 6, 2015. The Board will then likely vote on the schedule, as revised if necessary, at the December 1, 2015 meeting.

**D. Legal/Legislative Update.**

Chris Supple, Deputy Executive Director and General Counsel.

**E. Other Matters.**

1. August 2015 PRIM Operating Budget

<b>Budget as of August 31, 2015</b>					
<i>FY 2016</i>	<i>Investment Management Fees</i>	<i>YTD Actual</i>	<i>YTD Budget</i>	<i>Variance Under (Over)</i>	<i>%</i>
15,048,014	Domestic Equity	2,386,907	2,507,994	121,087	5%
16,912,003	International Equity	2,755,345	2,818,661	63,316	2%
19,402,865	Emerging Markets Equity	2,686,746	3,233,804	547,058	17%
4,758,798	Core Fixed Income	751,027	793,127	42,100	5%
10,743,249	Value Added Fixed Income	1,668,038	1,790,536	122,498	7%
4,905,660	Real Estate - REIT's	719,851	817,610	97,759	12%
0	Real Estate - Core Strategy	(1,603,405)	-	1,603,405	0%
3,050,037	Timber/Natural Resources	(1,700,417)	358,303	2,058,720	575%
2,424,000	Private Equity	152,812	530,144	377,332	71%
50,000	Hedge Funds	8,156	8,334	178	2%
416,553	Overlay/Foreign Currency	173,735	69,428	(104,307)	-150%
<b>77,711,179</b>	<b>Subtotal</b>	<b>7,998,795</b>	<b>12,927,941</b>	<b>4,929,146</b>	<b>38%</b>
PRIM Operations:					
<i>Custody &amp; Outside Advisors</i>					
790,000	Custodian	121,161	131,666	10,505	8%
786,375	Consultant - General	102,089	131,057	28,968	22%
1,500,000	Consultant - Private Equity	270,203	250,000	(20,203)	-8%
585,000	Consultant - Real Estate	61,667	97,498	35,831	37%
3,617,784	Consultant - Hedge Funds	350,076	602,964	252,888	42%
444,000	Audit & Tax	57,333	73,998	16,665	23%
375,000	Legal	-	62,510	62,510	100%
259,184	Governance	33,942	43,196	9,254	21%
1,231,226	Risk Management	169,363	205,202	35,839	17%
<b>9,588,569</b>	<b>Subtotal</b>	<b>1,165,834</b>	<b>1,598,091</b>	<b>432,257</b>	<b>27%</b>
<i>Operations:</i>					
6,822,823	Salaries	901,316	1,137,134	235,818	21%
855,464	Occupany	116,016	142,573	26,557	19%
303,336	Insurance	30,582	50,552	19,970	40%
167,500	Employee Benefits	17,401	27,914	10,513	38%
246,072	General Office Expenses	45,374	41,003	(4,371)	-11%
866,980	Computer & MIS	116,398	144,494	28,096	19%
215,000	Due Diligence Travel	7,643	35,832	28,189	79%
100,000	Professional Development	9,319	16,666	7,347	44%
86,787	Client Service	870	12,463	11,593	93%
80,000	Dues & Subscriptions	13,764	13,332	(432)	-3%
65,000	Temporary Labor	7,184	10,832	3,648	34%
<b>9,808,962</b>	<b>Subtotal</b>	<b>1,265,867</b>	<b>1,632,795</b>	<b>366,928</b>	<b>22%</b>
<b>19,397,531</b>	<b>Total Operations &amp; Advisors</b>	<b>2,431,701</b>	<b>3,230,886</b>	<b>799,185</b>	<b>25%</b>
<b>97,108,710</b>	<b>Total PRIM Direct Operating Budget</b>	<b>10,430,496</b>	<b>16,158,827</b>	<b>5,728,331</b>	<b>35%</b>
<i>Indirect Fees</i>					
24,445,573	Real Estate	-	-	-	0%
3,699,268	Timber	-	-	-	0%
108,873,088	Private Equity	-	-	-	0%
23,700,811	Distressed Debt	-	-	-	0%
79,835,832	Hedge Funds	-	-	-	0%
10,000	Portable Alpha Wind Down	-	-	-	0%
7,758,000	Commingled Funds	1,257,306	1,292,998	35,692	3%
2787377	Portfolio Completion Strategies	-	-	-	0%
<b>251,109,949</b>	<b>Total PRIM Indirect Budget</b>	<b>1,257,306</b>	<b>1,292,998</b>	<b>35,692</b>	<b>3%</b>
<b>348,218,659</b>	<b>Total PRIM Direct &amp; Indirect Fees</b>	<b>11,687,802</b>	<b>17,451,825</b>	<b>5,764,023</b>	<b>33%</b>

2. Travel and Staff Development.

A detailed schedule of expenses associated with due diligence travel and fiduciary education or professional development that have been reimbursed to employees since our prior report is attached at **Appendix N**.

Additional due diligence travel and fiduciary education or professional development that has either been approved or has occurred since our prior report, but has not yet been reimbursed is outlined below:

Date:	Name:	Location:	Organization:	Purpose:
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8/6/2015-8/7/2015	Eric R. Nierenberg	New York, NY	Arden	DD
8/13/2015	Michael R. Bailey	Amsterdam & Netherlands	Gilde Due Diligence	DD
9/9/2015	Sarah N. Samuels	New York, NY	AIF Woman Investors Forum	FE/PD
9/9/2015	Timothy V. Schlitzer	Chicago, IL	AEW Capital Property Tours	DD
9/10/2015	Michael G. Trotsky, David M. Gurtz, Michael M. McGirr, Eric R. Nierenberg, Paul E. Shanley, C. LaRoy Brantley, & Michael J. Heffernan	Boston, MA	BSAS (Ten Nobel Laureates In Economics)	FE/PD
9/15/2015-9/18/2015	Michael R. Bailey	Beijing, China	Hony Annual Meeting	DD
9/17/2015-9/18/2015	Erin K. McCafferty	Boston, MA	Onex Annual Meeting	DD
9/21/2015	Michael R. Bailey	Boston, MA	Hamilton Lane	DD
9/22/2015	David M. Gurtz	Washington, DC	US Treasury Conference	FE/PD
9/30/2015-10/2/2015	Ellen M. Hennessy	Boston, MA	CII Fall 2015 Conference	FE/PD
10/4/2015-10/5/2015	Jennifer L. Cole	Springfield, MA	MACRS Fall Conference	FE/PD
10/6/2015-10/7/2015	Sarah N. Samuels	San Francisco, CA	Thoma Bravo	DD
10/6/2015-10/8/2015	Timothy V. Schlitzer & John F. LaCara	Jacksonville, FL	Campbell Global Client Conference	DD
10/14/2015-10/15/2015	Michael M. McGirr	Virginia & New York	Quad C Advisory Committee & AGM	DD

10/27/2015	Michael M. McGirr	Philadelphia, PA	Lovell Minnick Annual Meeting	DD
11/17/2015- 11/18/2015	Michael M. McGirr	Florida	KPS Annual Meeting	DD

**Key: DD=Due Diligence; FE/PD=Fiduciary Education and/or Professional Development;  
SL=Securities Litigation.**

### 3. Client Service.

There are 94 retirement systems that currently invest in the PRIT Fund: 55 systems are fully invested ("Participating Systems"), including the State Employees/MA Turnpike, State Teachers, the State-Boston Retirement System - Teachers ("SBRS/Teachers"), and the Massachusetts State College Building Authority ("MSCBA"); 39 systems are partial investors that participate in the Segmentation Program. As of January 1, 2015, the Athol Retirement System was dissolved and its assets transferred to the Worcester Regional Retirement System, which is a Participating System in the PRIT Fund. PRIM serves as an investment manager for approximately 90% of all state and local retirement systems. There are currently 12 unaffiliated retirement systems that do not invest through PRIM. PRIM also manages the assets of the State Retiree Benefits Trust Fund ("SRBTF"), the Commonwealth's Other Post-Employment Benefits ("OPEB") liability fund.

#### *Client and Other Meetings.*

The client service team continues to meet with many of PRIM's member retirement systems and other jurisdictions. The Senior Client Services Officer also meets with professional organizations and government entities interested in learning more about the SRBTF. Some recent and upcoming meetings are as follows: Woburn (6/30/2015); Essex Regional, Danvers, MA (7/20/2015); SRBTF Board (8/6/2015); Webster (8/19/2015); MassPort Authority (8/20/2015); Barnstable County, Hyannis, MA (8/24/2015); Lexington (8/26/2015); Gloucester (8/26/2015); Attleboro (8/27/2015); Haverhill (9/8/2015); Brookline (9/16/2015); PERAC Emerging Issues Forum, Worcester, MA, OPEB Panel (9/17/2015); Fairhaven (9/22/2015); Shrewsbury (9/23/2015); Newburyport (9/24/2015); Amesbury (9/24/2015); Massachusetts Teachers Retirement System Annual Review and Constituent Meeting, Cambridge, MA (9/25/2015); Quincy (9/30/2015); MACRS, Springfield, MA (10/4 – 10/7/2015); Falmouth (10/8/2015); SRBTF Board (10/15/2015); Chicopee (10/15/2015); Winchester (10/20/2015); Holliston-OPEB (10/20/2015); Wellesley (10/27/2015); Salem (10/28/2015); Natick (10/28/2015); PRIM Investors' Conference (11/5/2015); Worcester, City of (11/12/2015); Concord (11/20/2015); Barnstable County, Hyannis, MA (11/24/2015); Clinton (11/24/2015); SRBTF Board (12/3/2015); Hampshire County, Northampton, MA (12/9/2015); and Chicopee (12/10/2015).

#### *SRBTF Update.*

The SRBTF Board approved four new local submissions for investment in the SRBTF at its August 6, 2015 meeting: the Town of Blackstone, the City known as the Town of Franklin, the Town of Lincoln, and the Town of Sherborn. In addition to the Massachusetts State Retirees OPEB assets, the SRBTF now has 42 government entity clients that have opted to invest in the SRBTF. As of July 31, 2015, the market value of the total SRBTF was \$868.5 million.



PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix A

Minutes of the PRIM Board Meeting of August 11, 2015

*PRIM Board Meeting  
Tuesday, October 13, 2015*

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1                   **COMMONWEALTH OF MASSACHUSETTS**  
2                   **PENSION RESERVES INVESTMENT MANAGEMENT BOARD**  
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12                  *Minutes of the August 11, 2015 Board Meeting*  
13                  *commencing at 9:30 a.m.*  
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23                  in the  
24                  **PRIM Board Offices**  
25                  at 84 State Street  
                      Boston, Massachusetts

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1                   D O C U M E N T S\*

- 2                   A Minutes of the PRIM Board meeting on  
3                   June 4, 2015.  
4                   B Callan *PRIT Fund Performance Report Color*  
5                   Charts (June 30, 2015).  
6                   C BNY Mellon Gross of Fees Performance Report  
7                   (June 30, 2015).  
8                   D Callan *Investment Measurement Service*  
9                   *Monthly Review* (June 30, 2015).  
10                  E PRIT Fund Performance & Public Markets  
11                  Performance Detail (June 30, 2015).  
12                  F Investment Research Update: Foreign  
13                  Currency Hedging.  
14                  G Real Estate and Timberland Portfolio Report  
15                  (June 30, 2015).  
16                  H Timber RFQ Evaluation Report.  
17                  I TTG Timber RFQ Recommendation.  
18                  J Due Diligence Travel, Trustee and Staff  
19                  Fiduciary Education, and Professional  
20                  Development.

21                  \*Referred to and/or used at the meeting and  
22                  retained at the PRIM Board office.

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1                   **A T T E N D E E S**

2                   **Board Members**

- 3                   · Treasurer Deborah B. Goldberg, Chair  
4                   · Robert L. Brousseau  
5                   · Ruth Ellen Fitch  
6                   · Michael J. Heffernan  
7                   · Anthony Hubbard, Esq.  
8                   · Theresa F. McGoldrick, Esq.  
9                   · Dennis J. Naughton  
10                  · Paul E. Shanley, Esq.

11                  Other Attendees:

- 12                  · Chandra Allard, Treasury  
13                  · Kendra Bergeron, Governo Law Firm  
14                  · Patrick Brock, Administration & Audit Committee  
15                  · Alberto Chavez, Treasury  
16                  · Melissa Cunningham, Middlesex County  
17                  · Henry Davis, Arden  
18                  · Michael DeVito, PERAC  
19                  · Virginia Dodge, Eppley Court Reporting  
20                  · Cori English, Hamilton Lane  
21                  · Constance Everson, Investment Committee  
22                  · Nick Favorito, State Retirement Board  
23                  · Nicole Giambusso, O'Neill & Associates  
24                  · Thomas Gibson, Middlesex Retirement County  
25                  · Paul Heffernan, Putnam  
· Glenn Hill, GE  
· Sarah Hollingsworth, Lord Abott  
· Bill Irvine, RBC Global Asset  
· Cayenne Isaksen, O'Neill & Associates  
· Sarah Kim, Treasury  
· Jim MacDonald, First Deputy Treasurer  
· Mike Manning, NEPC  
· Paul Nelson, NEPC  
· Jon Ostrowsky, Treasury  
· James Quirk, Barnstable Retirement Board  
· Millie Viqueira, Callan

## PROCEEDINGS

## A meeting of the Pension Reserves

3 Investment Management Board (PRIM Board) was held  
4 on August 11, 2015, at the PRIM Board office  
5 located at 84 State Street, Boston, Massachusetts.

6 || Call to Order:

7           The meeting convened at 9:41 a.m. Treasurer  
8 and Receiver-General Deborah Goldberg chaired the  
9 meeting.

TREASURER GOLDBERG: So hi, everybody.

11 MANY VOICES: Good morning.

12                   TREASURER GOLDBERG: So you're all very  
13                   fortunate you weren't around my office yesterday,  
14                   or you would have found yourself in an ice bucket  
15                   challenge.

16 MR. BROUSSEAU: Were you?

17 TREASURER GOLDBERG: You bet I was. My  
18 daughter did it too.

19 We had Pete Frates at the State House  
20 and his family, and we did this on the steps of  
21 the State House.

22 Jim MacDonald joined in. It was a good  
23 thing he brought gym clothes to work. Jim and  
24 gym.

25 || But not to be undone, I challenged my

1       entire -- all my deputy treasurers, our department  
2       heads and 227 and anyone else who wants to join us  
3       tomorrow. It won't be raining. It will be sunny  
4       again.

5                   3:30, correct?

6        MR. MacDONALD: Yes.

7        TREASURER GOLDBERG: At Ashburton Park, we  
8        are going to do it again. So because the idea is  
9        to keep knowledge going, raise money for a disease  
10      that had raised very little money in the past.

11       What happened last year is they raised a  
12      quarter of a billion dollars, and it was a game  
13      changer for the researchers. So we're going to  
14      keep on doing this till we find a cure.

15       And I'm more than happy to be involved.  
16       I saw myself on the news last night. My hair  
17      didn't look that good. But no shower caps are  
18      allowed.

19       So anybody who wants to be there, let us  
20      know. And it's actually a wonderful feeling. And  
21      to see Pete Frates there with his wife and his  
22      11-month-old baby was incredible.

23       So with that, we will open our meeting  
24      today. And I would like to entertain a motion for  
25      approval of the minutes of June 4, 2015.

1                   MR. BROUSSEAU: So moved.

2                   TREASURER GOLDBERG: Do I have a second?

3                   MS. FITCH: Second.

4                   TREASURER GOLDBERG: And discussion. Any

5                   comments, changes? Anything that comes to mind

6                   for anyone?

7                   MR. BROUSSEAU: Nope.

8                   TREASURER GOLDBERG: Well, in that context,

9                   we have a motion. We have a second.

10                  All those in favor?

11                  THE BOARD: Aye.

12                  MS. McGOLDRICK: I abstain.

13                  (VOTED: To approve the June 4, 2015

14                  minutes.)

15                  TREASURER GOLDBERG: Okay. Executive

16                  director/chief investment officer Michael Trotsky,

17                  the owner of the bucket.

18                  MR. TROTSKY: Thank you.

19                  Thanks for coming today. Hope you're

20                  enjoying your summer. I think today makes one of

21                  the only rainy days in a very long time, so

22                  hopefully we all have been enjoying the weather

23                  and some time off.

24                  You know, today or last week, I think

25                  the treasurer celebrated her six-month anniversary

1           as Treasurer of the Commonwealth of Massachusetts.  
2           Maybe not last week, but very recently.

3                         You're off to a wonderful start.

4           TREASURER GOLDBERG: July 21.

5           MR. TROTSKY: July 21. A couple weeks ago.

6                         Off to a wonderful start. I can say on  
7           behalf of PRIM that it's been a pleasure to work  
8           with you. You have a great staff around you. And  
9           we're already working on very many cooperative  
10          things.

11                         And it's been -- it's really been a  
12          tremendous success so far, and I wish you all the  
13          success in the next three and a half years and  
14          beyond. And I hope that the first six months sets  
15          the precedent for things to come.

16           TREASURER GOLDBERG: Thank you. I appreciate  
17          that.

18           MR. TROTSKY: Congratulations on that.

19                         A couple of other organizational  
20          updates.

21                         Amaran Soja -- where are you, Amaran? --  
22          joined us last week as executive assistant to  
23          Chris and me. Amaran joins us from Governo Law  
24          Firm where she worked as a senior legal secretary  
25          supporting senior partners there.

1                   Prior to that, Amaran worked at Liberty  
2 Mutual, and she also worked as an intern for the  
3 late Senator Ted Kennedy in constituent services.  
4 Amaran graduated with a BA in political science  
5 from Westfield State.

6                   You're off to a great start. You're  
7 keeping us organized and on target, working  
8 cooperatively with Jill right beside you.

9                   I'm also pleased to announce that  
10 yesterday, she enrolled in the Claritas program at  
11 the CFA, which is an in-depth educational program  
12 for finance professionals. 19 of us did that a  
13 couple years ago here.

14                  Off to a great start, and we look  
15 forward to your contributions.

16                  Second, I'm pleased to announce the  
17 promotion of Erin McCafferty -- where are you,  
18 Erin? Erin -- on the private equity team to  
19 senior investment officer.

20                  As you know, Erin joined PRIM in April  
21 of 2014, joined Mike and his team as an investment  
22 officer. At the time, the investment officer  
23 position was the only slot we had available. And  
24 we communicated to Erin that she would be eligible  
25 for a promotion, if she did a good job, within a

1 year's time, when we believed we would have a  
2 senior investment officer slot open on that team.

3 She's performed very well. You've seen  
4 her present in front of you several times now.  
5 We're very pleased with her performance and her  
6 contributions to the team.

7 So it gives me great pleasure to  
8 announce that she's been promoted recently to  
9 senior investment officer. She's a great team  
10 player and a valuable colleague.

11 And we also look forward to your many  
12 contributions in the future.

13 Third, and this is exciting, many of you  
14 know about this already, but I'm pleased to  
15 announce a new program at PRIM to pilot a  
16 cross-training and career development program.  
17 Many of our peers around the country have such a  
18 program, and it's designed to develop  
19 interdisciplinary skills and to bring down silos  
20 in organizations.

21 Furthermore, one of the great  
22 attractions of PRIM and the reasons why -- a  
23 reason why so many people join PRIM is because we  
24 have a very large, complex and sophisticated  
25 investment portfolio with many different asset

1       classes. This program will allow our high-  
2       performing employees to learn and grow their  
3       expertise across these asset classes and beyond  
4       their own personal scope.

5                 We're calling our pilot program the PRIM  
6       Professional Development Program. And I'm also  
7       pleased --

8                 TREASURER GOLDBERG: Am I getting any credit  
9       for that?

10          MR. TROTSKY: Yes.

11          TREASURER GOLDBERG: The PPDP, PRIM  
12       Professional Development Program.

13          MR. TROTSKY: And I'm pleased to announce  
14       that Sarah Samuels, our deputy CIO and director of  
15       public markets and director of research, is the  
16       first participant. And in fact, she's already  
17       begun.

18                 Sarah will rotate through private  
19       equity, real estate, hedge fund and risk for  
20       four-month intervals. She's begun her rotation  
21       with Mike Bailey and the private equity team  
22       already.

23                 And her goal is to learn about these  
24       asset classes, to contribute to their work and to  
25       encourage the cross-fertilization of ideas and

1 initiatives.

2                   And that's something that's very  
3 important to me. We've been working on that here,  
4 and I think this program will encourage more of  
5 that. I'm excited about this.

6                   We're still working out some of the  
7 details, but I believe Sarah is an excellent first  
8 choice for a number of reasons. Number 1, she is  
9 our deputy chief investment officer, so it will  
10 help her to learn about other asset classes aside  
11 from public markets.

12                  Number 2, as you know, she's  
13 consistently shown an eagerness and an ability to  
14 work with others on the team. She's a great team  
15 player; in fact, an exemplary team player.

16                  And third and very important also is  
17 she's built a very strong team underneath her with  
18 the two Andres and Chuck LaPosta on her team,  
19 willing and able to pick up some of Sarah's  
20 responsibilities when she does work in other asset  
21 classes.

22                  I'm very excited about it. And if it's  
23 successful, and I have every reason to believe it  
24 will be successful, we will begin to offer this  
25 program to other high-performing employees in the

1                   future, in the next 12 months and beyond.

2                   TREASURER GOLDBERG: I'd like to weigh in on  
3                   this.

4                   MR. TROTSKY: Sure.

5                   TREASURER GOLDBERG: So I want to just weigh  
6                   in on this, and I don't mean to interrupt Michael,  
7                   but we worked on this together because we felt  
8                   that it was a really critical piece in career  
9                   development.

10                  And what's really, really important in a  
11                  public pension fund -- because we compete with a  
12                  lot of area endowment funds and private pension  
13                  funds, and there can be some real salary  
14                  discrepancies -- that we do everything we possibly  
15                  can to make working here an extraordinarily  
16                  positive experience and a growth experience for  
17                  people.

18                  And that, along with other policies that  
19                  we've instituted, you know, such as the 12-week  
20                  paid parental leave, to make this a home and a  
21                  place where people can advance in their careers  
22                  and have exposure.

23                  The breaking down of silos is critical.  
24                  And as we move forward into the future, I think  
25                  that the kind of opportunities that will be

1        created and the kind of excitement and creativity  
2        we will see from being able to understand the  
3        whole breadth of the business will be impactful.

4              So I'm very excited about it. And  
5        literally, Michael and I sat there and said,  
6        "Okay. What can we call this?"

7              And I said, "Here we go."

8              MR. TROTSKY: It's a good name.

9              TREASURER GOLDBERG: It's my first acronym.  
10        Typically I say no acronyms.

11              MS. McGOLDRICK: State government, you have  
12        to have acronyms.

13              TREASURER GOLDBERG: No. I usually make  
14        people spell them out.

15              MR. BROUSSEAU: So PPDP.

16              TREASURER GOLDBERG: PRIM's Professional  
17        Development Program. I actually am calling it the  
18        PDP. PPDP is a long one.

19              MR. TROTSKY: Before I begin, I'd like to  
20        acknowledge at least two committee members in the  
21        audience today, Patrick Brock on the Admin and  
22        Audit Committee and also the Compensation  
23        Committee, and of course Connie Everson next to  
24        Patrick on the Investment Committee.

25              Thanks for coming.

1                   Am I missing anyone else from the  
2 committees?

3                   Thank you for coming.

4                   So with that organizational update, we  
5 can turn to markets and performance. And we spent  
6 a lot of time at the last investment committee  
7 meeting and also Connie spoke very eloquently  
8 about how we are feeling that the equity markets  
9 at least are in a peak zone or showing signs that  
10 they're in a peak zone.

11                  Recent waves of financial turbulence in  
12 Greece, China, Puerto Rico, coupled with mixed  
13 economic data in the U.S. made for a volatile end  
14 of the fiscal year and beyond actually. I'll talk  
15 about July and even August. But it's been  
16 volatile the last few months.

17                  After a strengthened April and May, June  
18 markets were down. July markets were up. And  
19 August, as you may have read, had seven down days  
20 before yesterday, which was a big up day. And  
21 even today before I came in here, the futures were  
22 down a lot as China is considering devaluating  
23 their currency.

24                  A lot going on, very turbulent time.  
25 Let me just review some numbers.

1                   In June, the S&P was down 1.9 percent.

2                   In July, it was up 2.3 percent. Developed  
3                   markets, equities were down 2.8 percent in June,  
4                   but up a percent in July.

5                   Emerging markets have been weak, mainly  
6                   due to China. Emerging markets were down  
7                   2.6 percent in June and down 7.7 percent in July.

8                   Europe was down 3 percent in June, but  
9                   actually up 2 percent in July. The bond market,  
10                  the Barclays Agg, a diversified index, was down  
11                  1.1 percent in June and up very slightly in July.

12                  STRIPS, our 20-year duration portfolio,  
13                  was down 6.4 percent in June, but then up  
14                  5.3 percent in July and up again in August  
15                  slightly.

16                  The calendar year and fiscal year are  
17                  sharply different. In fact, we've seen a turn in  
18                  the markets. I'll explain that in a minute. But  
19                  for the calendar year, the S&P was up 1.2 percent.  
20                  And for the fiscal year, the S&P was up  
21                  7.4 percent.

22                  Developed international markets were up  
23                  5.5 percent in the calendar year, but down  
24                  4.2 percent in the fiscal year. It means that  
25                  recently international markets are leading the

1       U.S. market, and that's the first time in a very  
2       long time that that's happened.

3                   Emerging markets were up 2.9 percent for  
4       the calendar year through June, but down  
5       5.1 percent for the fiscal year.

6                   In the bond market, really the Barclays  
7       Agg was flat for the calendar year so far, up a  
8       little in the fiscal year.

9                   STRIPS, the STRIPS portfolio has been  
10      weak for the calendar year. The first six months  
11      of the year down 9.6 percent. But last fiscal  
12      year, as you know, our STRIPS portfolio really  
13      added to our performance. It was up 9 percent for  
14      the fiscal year.

15                  Lots of themes. I know those numbers  
16      are confusing. A lot of volatility. But  
17      basically this is being caused by a divergence of  
18      international markets from the U.S., caused by a  
19      divergence in monetary policies across the world.

20                  In the U.S., the Fed, as you know, is  
21      considering tightening monetary policy and raising  
22      interest rates. We've talked a lot about that at  
23      the investment committee meeting. There's still a  
24      fair amount of uncertainty about if the economy  
25      will support such a rise in interest rates and

1       when that interest rate hike will occur, a lot of  
2       controversy around that.

3                 But abroad, central banks are putting  
4       into place stimulating monetary policies, lowering  
5       interest rates, and the markets are responding.  
6                 So a great divergence between what's happening  
7       here in the U.S. and what's happening abroad.

8                 And then we've seen a very anemic bond  
9       market. And in fact, we've seen a flattening of  
10      the yield curve. That benefited us last year as  
11      long interest rates fell, bond prices went up on  
12      the long end of the curve.

13                 But it may also indicate that the  
14       investing public believes that there's very little  
15       inflation on the horizon, and that's why long  
16       rates are actually down a little bit versus this  
17       point last year. So a lot going on.

18                 As I said, at the investment committee,  
19       we spoke about markets acting as if they're in a  
20       peak zone. That's mainly because of the diverging  
21       monetary policy, and the economic news continues  
22       to be mixed.

23                 We have uneven U.S. data. The Greek  
24       financial crisis, the slowdown in China and now a  
25       devaluation contemplated for the Chinese currency

1 and prospects of rate increases here.

2 Just yesterday, I got a synopsis of -- I  
3 love to read this particular synopsis of economic  
4 data. It's ISI actually, Ed Hyman. And every  
5 week, he puts out a good news/bad news piece,  
6 which I love to read because it highlights the  
7 crosscurrents that are out there.

8 Number 1, job gains are solid, but wages  
9 and labor participation is weak. So  
10 crosscurrents, even in the labor market.

11 Yesterday, a colleague pointed out that the  
12 expansion in job growth last month marks the 65th  
13 consecutive month, that's five and a half years,  
14 65 months, of private sector job growth. And that  
15 was a new record.

16 The previous record stood at 51 months.  
17 So 51 becomes 65, the new record. And the last  
18 record was a long time ago, and it occurred under  
19 President Clinton. So that's what kind of  
20 environment we're in.

21 The labor participation rate at  
22 66 percent is low, and it's been trending down  
23 since the early 2000s. That's not a good thing.  
24 And of course, wage growth has been very anemic.

25 So just a few more data points. On the

1 positive side, mortgage applications were up.  
2 Construction has increased. Small business hiring  
3 has picked up.

4                   On the negative side, of course Puerto  
5 Rico defaulted on bonds. Chinese manufacturing  
6 falls. U.S. manufacturing stuck in low gear. In  
7 fact, demand for American-made goods fell  
8 3 percent recently. And last, layoff plans hit a  
9 four-year high.

10                  All of this makes us comfortable with  
11 our fund positioning. You know for the past five  
12 years we've been slowly bringing down risk in the  
13 portfolio by reducing our global equity exposure  
14 from a target of 49 percent five years ago to a  
15 target of 40 percent today. And we're at 43.

16                  And we are continuing our search for  
17 non-correlated assets, including assets in Eric  
18 Nierenberg's PCS portfolio, portfolio completion  
19 strategies portfolio. And we're maintaining a  
20 position in fixed income securities with low  
21 correlation to equities, mainly long duration  
22 fixed income securities, which in bad times  
23 typically do better than equities.

24                  And we've started to see that  
25 performance of equity markets has stalled. And

1 I'll go into some of the performance of that.  
2 We're following two very strong years with a less  
3 than stellar fiscal 2015.

4 So I will turn to performance now. And  
5 they're in Appendix E. Give you a second to turn  
6 to that. And I'll turn to page 1.

7 As I mentioned, these results, these  
8 fiscal year results, come on the heels of  
9 exceptionally strong results in fiscal 2013. In  
10 fiscal 2013, the fund was up 12.7 percent. In  
11 fiscal 2014, last year, the fund was up  
12 17.6 percent.

13 And we announced that our fiscal 2015  
14 results, the fund was up 3.9 percent. And that  
15 was 113 basis points above benchmark. That's an  
16 investment gain of \$2.4 billion. And that equates  
17 to \$684 million above benchmark. Outflows to pay  
18 benefits for the year were \$1.3 billion.

19 You can see three- and five-year numbers  
20 were way above our actuarial rate of return. So  
21 it makes sense to me that these strong results  
22 couldn't continue for much longer, particularly in  
23 light of the fact that the economic data around  
24 the globe has been so mixed and valuations in fact  
25 in the equity markets have become stretched.

1                   But even still, you can see the 10-year  
2 number, which includes results from the world  
3 financial crisis, is up 7 percent, and even that's  
4 above our benchmark.

5                   Turning to the next page, you can see  
6 which asset classes did well. And you can also  
7 see that alternatives and core fixed income were  
8 the drivers last year. You can see private equity  
9 up 15.6 percent.

10                  And each of the asset class heads, as  
11 they come up here during their part of the agenda,  
12 will go into more detail on fiscal year  
13 performance on the portfolios. I'll just give you  
14 a highlight.

15                  Private equity up 15.6 percent. Real  
16 estate up a very healthy 12 percent. And core  
17 fixed income up 4.7 percent. We think that's a  
18 real outlier among our peers.

19                  If you remember, we had a STRIPS  
20 portfolio that was up 9 percent for the fiscal  
21 year versus the Barclays Agg. That was up only  
22 2 percent. That was very good timing.

23                  Hedge funds, we're happy with our  
24 performance in hedge funds overall. Our direct  
25 hedge fund portfolio, the funds that we have gone

1 direct with, was very strong. But our one  
2 remaining hedge fund of funds, which is focused on  
3 emerging managers, small managers, women,  
4 minority-owned managers, had a weaker year in  
5 fiscal 2015.

6 And then our value-added fixed income  
7 was weak, primarily as a result of emerging  
8 markets. And emerging markets, local currency  
9 debt portfolios in particular were weak.

10 Sarah will talk more about public  
11 markets in a minute.

12 There's a new chart in your book that  
13 I'd like to turn your attention to. I call it the  
14 heat map. I believe it's on page 3. Is that  
15 page 3? Yep.

16 And it shows a longer term historical  
17 snapshot of the PRIM portfolio. You can see  
18 number 1, private equity and real estate, really  
19 are the core drivers over all time periods. One-,  
20 three-, five- and ten-year periods, private equity  
21 is at the top of the heap. And real estate is up  
22 there over most time periods as well. Those  
23 groups are vitally important to our success here.

24 You can also see that core fixed income  
25 last year up 4.7 percent, that's normally at the

1 bottom of our performance sets in up markets. And  
2 that's attributable again to our move into long  
3 duration STRIPS. Don't get used to seeing that  
4 box at the top.

5 TREASURER GOLDBERG: Yes.

6 MR. TROTSKY: It's meant to be an insurance  
7 policy against a weakening equity environment, but  
8 we're still very happy with that performance.

9 And the fourth point that I'd like to  
10 make is our hedge fund program has improved  
11 steadily over time as we've moved from a hedge  
12 fund of funds approach to a direct approach.  
13 We're happy with its contribution to the fund.  
14 And we think we've made some great progress there.  
15 Eric will be talking more about that.

16 So as I mentioned, each asset class head  
17 will go into more detail about their particular  
18 portfolio, but I'm happy at this point to take  
19 questions.

20 Yes, Theresa.

21 MS. McGOLDRICK: Did you look at, had you not  
22 dialed back the global equity from 49 percent,  
23 what this fiscal year's return would have looked  
24 like?

25 MR. TROTSKY: Yes. That's a good point.

1 MS. McGOLDRICK: Also getting up to  
2 10 percent real estate, which is the number 2  
3 driver in the whole fund. Those differences in  
4 our achieving our asset allocation goals make a  
5 huge difference in the year-end return, I think.

6 MR. TROTSKY: Yes. Right.

7 We took 6 percent literally out of  
8 global equities. Global equities were -- I forgot  
9 the number, but up --

10 MS. SAMUELS: Up 80 basis points in the year.

11 MR. TROTSKY: About 7 percent last year in  
12 general?

13 MS. SAMUELS: No. Under one in the last  
14 year.

15 MR. TROTSKY: Fiscal year?

16 MS. SAMUELS: Yes.

17 MR. TROTSKY: Oh, because of emerging  
18 markets. So it didn't make a gigantic impact for  
19 the fiscal year. Had we been more exposed to U.S.  
20 equities, which were up 7.7 percent, that would  
21 have made a difference. But because international  
22 markets were weak and we kept our exposure in  
23 international markets, it didn't make a big  
24 difference to our performance over the last year.

25 But your point is well-taken. Had we

1       been more heavily invested in domestic equities,  
2       over the past few years really, our performance  
3       would have been higher. I haven't calculated what  
4       that number is.

5                 But on the other hand, we think it's  
6       prudent that as the recovery is now in its seventh  
7       year and equity valuations have become stretched,  
8       we've shown discipline in moving out of it.

9                 MS. McGOLDRICK: Right.

10          MR. TROTSKY: And still we were able to  
11       produce very strong results. Even this year  
12       competitively, our performance is fine. It's in  
13       the top third of all our colleagues around the  
14       country. And those who beat us, I'm sure it will  
15       show that they had a higher domestic equity  
16       exposure. And that's the difference.

17                 And as I mentioned before, there's a  
18       difference between the fiscal year performance and  
19       the calendar year performance. In this calendar  
20       year, we're starting to see U.S. equities lag  
21       international. And because we've kept our  
22       exposure in international equities, that should  
23       help us.

24                 MS. McGOLDRICK: Right.

25          MR. TROTSKY: So we're pretty comfortable

1       with what we've done. Hindsight is always 20/20.

2           MS. McGOLDRICK: Just curious.

3           MR. TROTSKY: It's a great question.

4       Something we've talked about.

5           MR. BROUSSEAU: Mike, just a couple of  
6 comments.

7           The amount of paid benefits we had here  
8 said 1.5 billion. You said 1.3. It seemed --

9           MR. TROTSKY: It is 1.5.

10          MR. BROUSSEAU: Oh, it is 1.5. Okay.

11          This is about the same --

12          MR. TROTSKY: That's a typo. I'm sorry.

13          MR. BROUSSEAU: It's about the same we've had  
14 then, each year. Okay.

15          The other thing, the Opal conference in  
16 Newport, the public fund summit that Dennis and  
17 Paul and I attended, on that Tuesday luncheon,  
18 they had a keynote address, and I should have  
19 brought the program book. I forgot the man's  
20 name. It was a professor, academia, who's done --  
21 presented for about 45 minutes and scared the  
22 daylights out of me in terms of China.

23          I mean, the information, the charts, the  
24 research that he had, not only just demographics,  
25 but the manipulation of that entire economy by a

1 government that does not have any transparency.  
2 And he hit the issue of manufacturing.  
3 He hit the banking issues. He went into all these  
4 areas. And when you finished saying -- I came in  
5 and said we'd better be very careful when it comes  
6 to a large exposure in China because that economy  
7 could be on the verge of some really sharp  
8 declines.

9 And you know, I know she's here today.  
10 I know Connie has even more of an insight.

11 I forget the man's name. He was very,  
12 very knowledgeable, and I forget where he taught.  
13 I don't think it was Brandeis. I think it was a  
14 university, could have been University of  
15 Pennsylvania, but he was excellent.

16 Do you have any insight on this? I know  
17 manufacturing has been weak here, everything I'm  
18 reading. And this is a hit in China, the  
19 manipulation of this.

20 MS. EVERSON: Yes. I don't disagree with  
21 anything you're saying. They do have billions,  
22 Chinese authorities, to spend on debt distress,  
23 but the question's raised whether they have more  
24 trouble in more places than even their buildings  
25 can handle.

1                   MR. BROUSSEAU: They're ordering the building  
2                   of all these buildings in the cities for  
3                   residential apartments. And they're empty.  
4                   Nobody's moving into them. And sooner or later,  
5                   this thing is going to implode on itself if it  
6                   continues in this way.

7                   MR. TROTSKY: That's actually a good segue to  
8                   our next --

9                   MR. BROUSSEAU: Before you -- I have one more  
10                  thing I want to say.

11                  I'd like the board to know that we  
12                  mentioned some of the organizational changes here,  
13                  but I did want to mark the month of August by  
14                  letting people know that I think it's five years  
15                  ago today -- not today. Was it the 15th?

16                  MR. TROTSKY: It's the 18th, my son's  
17                  birthday.

18                  MR. BROUSSEAU: The 18th of August, that  
19                  Michael was hired by this board. He's been with  
20                  us five years.

21                  I chaired the search committee. And it  
22                  certainly was -- it's been a pleasure the last  
23                  five years to have Michael at the helm. He's  
24                  brought us, I think, in some different directions  
25                  which have been very good. I think we've done

1 more looking at ourselves introspectively as an  
2 organization. And I think we've seen this in the  
3 results and the growth of PRIM.

4                   And I thank you very much and hope that  
5 he's with us at least another five years.

6                   MR. TROTSKY: Thank you. Thanks very much.

7                   (APPLAUSE)

8                   MR. TROTSKY: Time flies. I can't believe  
9 it's five years. And I am having fun. It's a  
10 great honor and a privilege to have this job and  
11 to work with you all.

12                  And I think we're doing great things for  
13 our beneficiaries. We're thoughtful about  
14 everything we do here, and I'm particularly proud  
15 of the work of the board and committees and my  
16 fantastic staff. So thank you, everyone.

17                  That's a great segue to Sarah.

18                  TREASURER GOLDBERG: The fabulous staff.

19                  MR. TROTSKY: We talked about China just  
20 yesterday. So maybe you can just begin. Maybe,  
21 Sarah, you can just begin with a brief update on  
22 China.

23                  MS. SAMUELS: Absolutely.

24                  So it's a great question. And it's  
25 something that we spend a lot of time talking

1 about. Just to give you a little bit of context  
2 in terms of China's meaning and its weight in the  
3 emerging markets equity index, it's about  
4 25 percent of the emerging markets equity index.  
5 And as a reminder, we have about 6 percent of the  
6 fund invested in emerging markets.

7 I think, you know, another thing to note  
8 is that China is up 25 percent in the last year.  
9 It's the best performing country in the emerging  
10 markets equity index over the last year.

11 Our active managers have a mandate to be  
12 fully invested. So in many cases, they are going  
13 to own China. But in almost all cases, our active  
14 managers are underweight China. And this is I  
15 think one of the real benefits of having good  
16 active managers because they can sort of pick  
17 through the wheat from the chaff. They can pick  
18 solid companies based on their fundamental  
19 research.

20 And so while being underweight with  
21 China has hurt our emerging markets equity return  
22 over the last year with China up 25 percent, our  
23 stock selection has actually added value. So  
24 they're picking good stocks.

25 And so I think that's important to know.

1 And I do think we're well-positioned going forward  
2 with our emerging markets equity portfolio.

3 So if I could ask everyone to turn to  
4 the same handout that Michael was speaking to,  
5 Appendix E, it's the performance handout.

6 And I'm going to just focus my comments  
7 on pages 4 through 6 of this handout. These pages  
8 show a few different cuts in portfolio performance  
9 for the fiscal year.

10 On page 4, we talked about this page a  
11 little bit last time, and I mentioned you'll  
12 likely see it regularly going forward.

13 This page shows performance by asset  
14 class and by economic environment. There's a lot  
15 on this page, but I think one of the great things  
16 about this page is that you can sort of let your  
17 eyes, you know, tell you where the hotspots are,  
18 which asset classes were really down a bunch in  
19 the last year and which did really well. And it  
20 also plots asset classes according to when they'll  
21 do well by economic environment.

22 So one thing you notice is that above  
23 the horizontal line is where most of our asset  
24 classes are. The PRIT fund is going to tend to do  
25 best when economic growth is strong and do

1 especially well when inflation was low but  
2 positive. You can see where the PRIT fund return  
3 dot is in the top left spot. Exactly.

4 So when we construct the portfolio, we  
5 seek to have a balanced and diversified portfolio  
6 by economic environment.

7 So I'm going to use this page as a  
8 little bit of a launch pad to talk about a few key  
9 themes. During the fiscal year, as Michael  
10 alluded to, there were really three themes that I  
11 think can explain a great deal of performance on  
12 this page.

13 The first theme is depreciating foreign  
14 currencies versus the U.S. dollar. The second  
15 theme is low interest rates. And the third theme  
16 is merger and acquisition activity.

17 So over the last year, foreign  
18 currencies have depreciated pretty meaningfully in  
19 a short amount of time versus the U.S. dollar.  
20 Developed market currencies like the euro and yen  
21 have depreciated 16 percent versus the dollar.  
22 And emerging market currencies in aggregate have  
23 depreciated about 13 percent versus the dollar.

24 So if you look at some of our emerging  
25 and non-U.S. asset classes like international

1 equities, emerging equities, emerging markets debt  
2 local, they're all in red in various shades, that  
3 can really be explained by the currency effect,  
4 the translation effect that U.S. investors have  
5 when they're on hedge with the foreign currencies.

6                   And Andre Clapp and I are actually going  
7 to speak about the research that we've done about  
8 currency hedging in just a moment.

9                   The second theme is low interest rates.  
10 Long treasuries, which are in the very bottom left  
11 quadrant there, have actually outperformed public  
12 equities in the fiscal year. This is not a  
13 relationship that we'd expect.

14                   30-year yields are 25 basis points lower  
15 in the last year. And today, 30-year yields are  
16 standing at about 2.8 percent. So they've  
17 continued to rally a little bit more this month.

18                   And these low interest rates sort of tie  
19 into the third theme, which is merger and  
20 acquisition activity. The fact that interest  
21 rates are as low as they are has led to lower  
22 borrowing costs for companies, which in turn has  
23 led to more cash in companies' balance sheets.

24                   Companies need to continue to grow  
25 earnings and revenues to keep their investors

1 happy, and many companies have exhausted other  
2 ways to generate shareholder return like share  
3 buybacks and special dividends.

4 So we're now seeing strong merger and  
5 acquisition activity. That's another way for  
6 companies to add value for their shareholders.

7 2015 is actually on track to be the  
8 biggest M&A year since 2007. A lot of companies  
9 are especially keen to get these deals done before  
10 the Fed begins to raise interest rates and it  
11 costs more to do that.

12 There is one major difference between  
13 today and the 2007 M&A environment. And that's  
14 that today most of the M&A activity is actually  
15 being done with strategic corporate buyers as  
16 opposed to 2007, when it was really more private  
17 equity doing all the transactions.

18 So all this has accelerated multiple  
19 expansions in U.S. equities. The S&P is trading  
20 at 16 and a half times earnings compared to  
21 14 times two years ago. And the S&P is actually  
22 up 250 percent in cumulative terms since March of  
23 '09, about 20 percent a year on average. So it's  
24 been quite a strong market for U.S. equities.

25 If we turn to page 5, I'll try to be

1 brief. I'm very pleased to share -- I'll talk  
2 about relative performance next, just sort of give  
3 an overview of absolute terms.

4 Very pleased to share that all three of  
5 our broad public market asset classes outperformed  
6 their indices in the fiscal year, so global  
7 equities, core fixed income and value-added  
8 income, all up.

9 If we look at our public equity  
10 portfolio here on page 5, this page drills a  
11 little deeper into performance by asset class.  
12 Our public equity portfolio stands at about  
13 \$26 billion or 43 percent of the fund. And much  
14 of our performance can be tied back to the three  
15 themes that I mentioned a moment ago.

16 U.S. large caps outperformed the index  
17 by 20 basis points. And as a reminder, we're  
18 about 80 percent indexed here, so 80 percent  
19 passive.

20 Our portfolio is really outperforming  
21 because of this M&A talk that I mentioned,  
22 especially in managed care companies, companies  
23 like Humana and CIGNA and Anthem. These stocks  
24 are up between 50 and 75 percent in the last year.  
25 And our portfolio happens to be overweight on

1 stocks.

2 Our small cap portfolio trailed the  
3 index for a couple of reasons, but one big reason  
4 was an underweight in biotech. Biotech was up  
5 60 percent in the last year. And active small cap  
6 managers tend to typically be underweight or avoid  
7 altogether biotech stocks because they're very  
8 volatile, sort of have a binary nature of returns.  
9 And that really hurts active managers, in  
10 particular ours.

11 In developed non-U.S. equity, that  
12 portfolio was outperformed by 180 basis points.  
13 We had strong stock selection in the UK and Japan,  
14 and all four of our active portfolios here  
15 outperformed the index. So we're really firing on  
16 all cylinders here.

17 And then emerging markets, our  
18 portfolios underperformed by 1.9 percent. One of  
19 the reasons is China, as I alluded to earlier.

20 Another reason is our legacy active  
21 managers. As you might recall, we actually  
22 transitioned from our prior managers to five new  
23 active managers in February of this year. So our  
24 legacy managers were underperforming, and so that  
25 contributed to the underperformance as well.

1                   If we turn to page 6, just a couple of  
2 quick comments on fixed income. Our fixed income  
3 portfolio is a total of about \$12 billion for  
4 20 percent of the fund. And in terms of relative  
5 returns, I'll just highlight a couple of asset  
6 classes here, but I'm happy to take questions on  
7 any of these.

8                   Our EMD dollar portfolio underperformed  
9 by 1.9 percent. And this is really for two main  
10 reasons. One is these portfolios were short  
11 duration in a falling rate environment. And the  
12 other is that these portfolios held Russian bonds,  
13 and Russian bonds are down about 40 percent in the  
14 last year.

15                  And then on the positive side, our high  
16 yield portfolios outperformed by 1.1 percent. And  
17 this can really be explained mostly by one  
18 portfolio within our high yield sleeve here. And  
19 that portfolio tends to have a higher quality  
20 buy-in. And in the last year, higher quality high  
21 yields actually outperformed lower quality high  
22 yields by about 9 percent. So that helped.

23                  I'm happy to take any questions on  
24 performance.

25                  If there are none, I'd like to invite

1 Andre Clapp up to the table for our next agenda  
2 item. This is not a voting item. This is just  
3 sort of an informational update on some investment  
4 research that we've been doing.

5 So I'd like to introduce to the board  
6 Andre Clapp. He's a senior investment officer on  
7 the public markets team. And we're going to talk  
8 today -- we're actually at Appendix F. Give you a  
9 moment to get up there.

10 It's a presentation on currency hedging.

11 So we thought this research was actually  
12 pretty interesting, especially given the times  
13 that we're in. I mentioned that foreign  
14 currencies have depreciated pretty meaningfully  
15 versus the U.S. dollar in the last year. That's  
16 hurt performance for U.S. investors.

17 This has prompted many consultants and  
18 asset owners to consider whether it makes sense to  
19 hedge a currency. And our own asset allocation  
20 advisor, NEPC, has similarly suggested PRIM look  
21 into currency hedging.

22 So we did that. We've been looking into  
23 it. We've been researching it. This research is  
24 part of my investment research annual plan. And  
25 we've spent the better part of five months

1 researching this topic in great depth.

2 Just by way of background, PRIM actually  
3 had a currency hedging program in place from '93  
4 to '05. Some of you might recall some details of  
5 the program. It was designed to reduce the  
6 volatility of our international equity portfolio.

7 And the program was terminated in 2005  
8 for two reasons. One reason was that the hedge  
9 ratio had dropped to about 18 percent of the  
10 international equity portfolio. It really just  
11 seemed to only have a marginal impact on the  
12 program, hedging at that low level.

13 And it was also terminated during a  
14 period of dollar weakness, and that actually would  
15 have hurt. When you hedge during a period of  
16 dollar weakness, it would have hurt returns.

17 So if I could ask the committee to turn  
18 to page 1 of Appendix F, the primary argument to  
19 hedge foreign currency exposures is that it  
20 reduces volatility. And that is true. Our  
21 research has found that that historically has been  
22 the case.

23 But our research also found that that's  
24 not the whole story. We focused our research not  
25 only on empirical analysis so historically has

1 hedging reduced volatility, what has it done to  
2 returns, things like that.

3 We also thought about the practical  
4 considerations of a hedging program especially for  
5 a fund the size of PRIM. We looked at things like  
6 cash flows related to the hedge, transaction costs  
7 and drawdowns.

8 So we're really lucky to have Andre  
9 Clapp contributing to this work. And I'd love to  
10 hand it over to Andre now to walk through it.?

11 DR. CLAPP: Thank you, Sarah.

12 So on page 1, the table at the bottom  
13 shows that we have approximately \$11.9 billion of  
14 the PRIM fund exposed to developed market  
15 currencies. And on this page, we make the point  
16 of why we focused this research on developed  
17 market currencies as opposed to emerging market  
18 currencies.

19 So in order to hedge a currency, you  
20 need to pay the carry on that currency against the  
21 U.S. dollar, which is simply the difference in  
22 interest rates. And emerging market currencies  
23 tend to have much higher interest rates than the  
24 U.S. Over the last 15 years, that's been about  
25 4 percent per year on average, and it's currently

1 about 4 percent.

2 So over the last 15 years, emerging  
3 market currencies have depreciated about  
4 0.8 percent against the U.S. dollar per year. And  
5 you might think that you would have made money by  
6 hedging those currencies, since they've  
7 depreciated, but actually because of this  
8 4 percent carry, you would have actually reduced  
9 your returns by 3.2 percent a year for 15 years.  
10 Very expensive, very big reduction in returns.

11 So by contrast, developed market  
12 currencies have close to zero carry against the  
13 U.S. dollar. And they're a much better candidate  
14 for potentially hedging.

15 If you turn to page 2, there's a summary  
16 of our findings. And we found that in terms of  
17 risk return, hedging developed market currencies  
18 may not add much value in terms of risk return,  
19 that cash losses can be quite significant on short  
20 time periods, requiring forced selling of assets  
21 to cover these losses; that there are large  
22 monthly or quarterly cash flows generated from a  
23 currency hedge; and that there are a number of  
24 other costs and risks associated with hedging.

25 So if you will please turn to page 3 --

1                   MR. BROUSSEAU: Andre, have we ever -- your  
2                   research show your quarterly losses can exceed  
3                   1.5 billion. Did we ever get that at PRIM in your  
4                   research?

5                   DR. CLAPP: I don't think so. The portfolio  
6                   was significantly smaller then, and there were  
7                   some complexities around the hedge ratio, which I  
8                   could go into.

9                   MR. BROUSSEAU: You don't -- if we have not,  
10                  okay.

11                  DR. CLAPP: So it wasn't really a passive  
12                  hedge. They would adjust the hedge ratio  
13                  depending on various factors.

14                  MS. SAMUELS: Sort of a stop-loss type of  
15                  component.

16                  DR. CLAPP: So we analyzed a data set from  
17                  1973 to 2014, which is essentially the modern era  
18                  of currency trading, since the dissolution of the  
19                  Bretton Woods accord when developed market  
20                  currencies started to free float against each  
21                  other.

22                  And over that time period, the annual  
23                  risk, as measured by standard deviation, is  
24                  reduced from roughly 22 percent to 20 percent by  
25                  currency hedging. So in relative terms, there's a

1 10 percent reduction in volatility.

2 That has gone along with a reduction in  
3 return from 8.5 percent to 7.5 percent for a  
4 12 percent relative reduction in return. So if  
5 you were to calculate a risk return or a Sharpe  
6 ratio, the Sharpe ratio would have actually gone  
7 down slightly by hedging.

8 Now, if you look at the graph on the  
9 bottom of this page, the blue line is unhedged  
10 MSCI EAFE, and the green line is hedged MSCI EAFE.  
11 And if you look at the two ovals on top, you will  
12 see that these are fairly strong bull markets and  
13 that the green line is significantly below the  
14 blue line.

15 So the hedged portfolio really  
16 significantly underperformed the unhedged  
17 portfolio in these strong bull markets, thereby  
18 reducing volatility.

19 So you had a big reduction in your  
20 return in strong markets, which did affect your  
21 volatility, but that's not, I think, what people  
22 normally think of in terms of risk reduction. And  
23 if you think of risk reduction, you're really  
24 thinking about reducing your losses on the  
25 downside, not reducing your gains on the upside.

1                   And so if we look at the three ovals on  
2                   the bottom of this chart, these are some of the  
3                   worst bear markets during this period. And in all  
4                   cases, the green line is very similar to the blue  
5                   line, in fact worse in two of the three cases.

6                   So in down markets, hedging really  
7                   hasn't provided much protection and has actually  
8                   underperformed.

9                   All right. So now if you turn to  
10                  page 4, there is a graph of the euro, which I am  
11                  just using as an example of a developed market  
12                  currency.

13                  And I think the main thing to see from  
14                  this graph is U.S. dollar trends can be quite  
15                  long. They typically last seven to ten years.  
16                  And the red line on the left from mid-2001 to mid-  
17                  2008 is in fact a seven-year trend of weakness for  
18                  the U.S. dollar. And then on the right has been a  
19                  seven-year period from mid-2008 to mid-2015 of  
20                  U.S. dollar strength.

21                  It's worth noting that in the first  
22                  period, EAFE hedged underperformed EAFE unhedged  
23                  by 6.5 percent a year for seven years. And in  
24                  this current period of dollar strength, EAFE has  
25                  outperformed by 3.3 percent per year.

1                   So now turning to page 5, we wanted to  
2                   look at how bad could this be? How much of a  
3                   drawdown might you experience from a currency  
4                   hedge?

5                   So we looked at a full currency hedge on  
6                   an \$11.9 billion portfolio and found that on a  
7                   quarterly basis, you could lose over one and a  
8                   half billion dollars in a single quarter, in  
9                   excess of 10 percent of the portfolio, more like  
10                  13 or 14 percent of the portfolio.

11                  Currency hedges are typically  
12                  implemented through the use of forward contracts.  
13                  And so they need to be settled in cash on either a  
14                  monthly or quarterly basis. It's somewhat less  
15                  expensive to settle them on a quarterly basis.  
16                  And so we've looked at that.

17                  And there are some examples of the  
18                  losses that historically have experienced on the  
19                  bottom of the page. I'd just like to point out a  
20                  few.

21                  In Q2 of 2002, you would have lost  
22                  \$1.2 billion or 10 percent of the portfolio.  
23                  November 2008 to November 2009, we would have lost  
24                  \$1.7 billion or over 14 percent of the portfolio  
25                  value in a year.

1                   And the reason I'm sort of emphasizing  
2       these is these are times that are close to the  
3       bottom of major bear markets, the global financial  
4       crisis and the dot-com bust.

5                   And so in order to cover these losses,  
6       we would have to sell assets at close to the -- at  
7       the bottom of the market essentially. Forced  
8       selling of assets at a difficult time to sell and  
9       essentially locking in those losses permanently.

10                  So we see this as one of the main risks  
11       in currency hedging is that it might remove the  
12       possibility of buying and holding in bad markets  
13       and require forced selling just at a time when you  
14       would least like to sell your assets.

15                  So continuing to page 6, we feel that  
16       it's very difficult to predict the currency  
17       markets. We're not making a call on the U.S.  
18       dollar. Very difficult to tell whether the dollar  
19       will appreciate or depreciate from here.

20                  But one thing that's fairly certain is  
21       that there will be large cash flows sort of  
22       sloshing in and out of the portfolio generated by  
23       a currency hedge. And over time, these cash flows  
24       have sort of been on the order of 1.7 to  
25       \$2 billion cash flows per year.

1                   In order to -- so essentially what this  
2 creates is a situation where you have to sell  
3 stocks to cover your losses, or bonds, but you  
4 know, assets. Then you'll be buying back the same  
5 assets when you make gains. Then you'd be selling  
6 again to cover your losses.

7                   And this creates transaction costs, as  
8 you buy and sell back essentially the same assets.  
9 And on average, assuming sort of a weighted  
10 average cost of transacting in the public markets  
11 portfolio, we assume that these assets would be  
12 bought and sold out of public markets, this would  
13 have cost you \$5.2 million a year on average since  
14 1973, just in transaction costs.

15                  So turning to page 7, there are a number  
16 of costs and risks associated with currency  
17 hedging. As we just discussed, our estimate would  
18 be about \$5.2 million per year in transaction  
19 costs.

20                  There's also management fees, which  
21 would typically be 3 basis points or \$3.6 million  
22 a year, so together, \$8.8 million a year or  
23 roughly \$9 million a year, costs and fees that  
24 cannot be recouped.

25                  There's additional risks, as we

1 discussed. Forced selling in down markets.  
2 Forward contracts have a counterparty, and there  
3 is the possibility of default by that  
4 counterparty. So there's counterparty risk.

5 There's operational risk related to the  
6 quarterly cash flows. There's accounting and  
7 financial reporting requirements and the  
8 monitoring of these positions and exposures, which  
9 would be quite important.

10 So in summary, hedging developed market  
11 currencies may not add that much in terms of  
12 return. The volatility reduction from FX hedging  
13 historically has come at the cost of reduced  
14 upside and has not helped that much on the  
15 downside or bear markets. Cash losses can be  
16 quite significant, requiring forced selling,  
17 possibly in down markets. And there are large  
18 quarterly cash flows generated, which create  
19 transaction costs.

20 So based on our analysis, it's difficult  
21 to make a strong argument for currency hedging.  
22 Now, we at PRIM are always cognizant of reducing  
23 risk in the portfolio, but we feel that there are  
24 less costly and more efficient ways to reduce risk  
25 such as diversification into less correlated

1 assets.

2                   And examples of this would be long  
3 bonds, also PCS or portfolio completion strategy,  
4 which is targeting assets that have very low  
5 correlation to the equity portfolio.

6                   TREASURER GOLDBERG: What I want to say is  
7 when we heard this at the investment committee, I  
8 just thought this was --

9                   Andre, I really want to compliment you.  
10 I think the analysis is not only technically  
11 excellent, but your ability to articulate it in a  
12 very comprehensive way is outstanding. And I want  
13 to thank you for that. I walked away from that  
14 meeting going "Wow." I mean look at.

15                  MR. SHANLEY: I would reinforce what you say.  
16 I've been on the investment committee since the  
17 beginning. And the first time an analysis like  
18 this, every single member sitting around this  
19 table had a comment to say about the depth of the  
20 analysis and what was done. And I agree with the  
21 chairman wholeheartedly. Fabulous report.

22                  DR. CLAPP: Thank you.

23                  TREASURER GOLDBERG: Because, you know,  
24 obviously as I was looking at currencies, I was  
25 trying to think, is there a way that we can hedge

1 against the fluctuations in currencies? But your  
2 analysis shows that the risks and costs far  
3 outweigh what would -- you know, your immediate  
4 reaction would be "Oh, gee, can we hedge against  
5 these?"

6                 But I think the conclusion just does  
7 such an excellent summary as a quick crib sheet  
8 too. Memorize that, and you really have it. So I  
9 just love it. Thank you.

10               I don't know if others have questions.

11               MR. BROUSSEAU: This only reinforces what --  
12 after 29 years here, it took me about five years  
13 to get my head around what FX -- and I'm not a  
14 financial person. And it always left me cold as  
15 to is this worth doing? And especially after the  
16 FX debacle of a couple years ago all over the  
17 country with foreign exchange trading and even the  
18 mess we experienced up here at PRIM with it.

19               I'd never seen such a thorough academic  
20 analysis done of this entire issue. And it just  
21 reinforced what I thought, but I had nothing to  
22 put my, you know, put my thoughts on, that FX was  
23 not a profitable thing for PRIM to be involved in.

24               But it was the way I guess that most  
25 pension funds do business. They have FX trading

1 and hedging currencies. I mean, I'm not an  
2 economist, so I wasn't about to, you know,  
3 challenge the thinking of the time.

4                   But I'm glad to see this because it just  
5 reinforced what I have felt for a long time in  
6 terms of decision. Thank you.

7                   MR. HEFFERNAN: I was going to say it's white  
8 paper quality, and I think sharing with other  
9 investors is probably the best service we can  
10 provide.

11                  TREASURER GOLDBERG: I'll put I hope they're  
12 paying you for that.

13                  MR. TROTSKY: Mike, I'm glad you mentioned  
14 that because we are in fact working on a white  
15 paper and figuring out which journal would be a  
16 good target for this. We think it's of that  
17 quality too because foreign exchange hedging is  
18 such a popular thing, and we have such a  
19 differentiated view on it.

20                  TREASURER GOLDBERG: I think that's a great  
21 idea.

22                  MR. TROTSKY: So thanks for that. Thank you,  
23 Andre.

24                  TREASURER GOLDBERG: Eric is next up.

25                   Eric, everybody was talking about you

1 out at National Institute of Public Finance. All  
2 good. All good. All good.

3 MR. BROUSSEAU: He was scared for a minute.

4 TREASURER GOLDBERG: Michael doesn't want  
5 them to talk about you.

6 MR. TROTSKY: Not too much. Keep their hands  
7 off.

8 MR. NIERENBERG: Good morning, everyone.  
9 Glad to be here.

10 Before I begin, I just wanted to mention  
11 we have some interns joining us this year, and we  
12 have three interns working with hedge funds and  
13 portfolio completion strategies.

14 I'm just going to ask them to stand. We  
15 have Liying Lu, Lydia Wang and Lu Chang. I think  
16 they're all back here.

17 So all three recently graduated from  
18 Brandeis with a master's degree in finance.  
19 They're all students of mine as well. So happy to  
20 have them here. They've already made great  
21 contributions in the month or so they've been  
22 here. Feel free to introduce yourselves when you  
23 have the chance.

24 I'd like to begin just with a fiscal  
25 year review unless there are any questions off the

1 bat. So Michael already alluded to some of the  
2 points.

3 For the fiscal year 2015, the total  
4 hedge fund portfolio returned 3.68 percent, which  
5 was just slightly below the benchmark. It was  
6 about 16 basis points below. The direct hedge  
7 fund portfolio actually performed well. It  
8 returned 4.35 percent, about 50 basis points  
9 above.

10 Unfortunately, it was outweighed by weak  
11 performance in the PAAMCO portfolio, which on a  
12 relative basis was down 223 basis points. That  
13 PAAMCO weakness occurred in the first half of the  
14 fiscal year, which is the last part of calendar  
15 year 2014.

16 More recently, though, that performance  
17 has turned around; on the calendar year basis,  
18 PAAMCO was up about 70 basis points above the  
19 benchmark. And I think more importantly over the  
20 three-, five- and ten-year periods, PAAMCO returns  
21 continue to be quite impressive. So it just  
22 happens; a downturn, that is.

23 Overall, I think the hedge fund  
24 portfolio returns have been quite good. For the  
25 three-year period, our total hedge fund portfolio

1 has an annualized net return of 8.8 percent, which  
2 is about 260 basis points above the benchmark. So  
3 still in a good place.

4                   And I think just as important as the  
5 absolute return number is the risk-adjusted return  
6 number. And if you use the Sharpe ratio, which is  
7 a fairly common risk measure, we have a Sharpe  
8 ratio around 1.09 for the fiscal year. Anything  
9 above one would be considered very, very strong.

10          MR. TROTSKY: What kind of volatility is the  
11 portfolio running with?

12          MR. NIERENBERG: For the last fiscal year,  
13 volatility was under 3 percent. And if you look  
14 at it over a three-year period, you continue to  
15 run volatility in the 3 or 4 percent range.

16          MR. TROTSKY: Maybe you can put some context  
17 into that, stocks and bonds.

18          MR. NIERENBERG: I mean, stocks  
19 traditionally -- even with the lower volatility  
20 that stocks have experienced over the last few  
21 years, stock volatility usually is in the  
22 15 percent range. Fixed income volatility is  
23 actually higher than 3 to 4 percent. So we have  
24 been able to achieve these hedge fund returns with  
25 actually lower volatility than fixed income.

1                   MR. HEFFERNAN: You're actually investing in  
2 hedge funds.

3                   TREASURER GOLDBERG: And I'd like to actually  
4 make a point about that. I had to correct people  
5 at the hedge fund presentation. One of the  
6 gentlemen from New York, whose name I'm blocking,  
7 because he stood up there and said, "I'm going to  
8 use Massachusetts as an example."

9                   He had no idea who I was. I was sitting  
10 in the front row.

11                  And he said, "75 percent of their  
12 portfolio is directly invested. 25 percent is  
13 invested" -- "invested" is the word he used -- "in  
14 fund of funds."

15                  I said, "No, it isn't."

16                  He kind of looked and said, "Who's  
17 that?"

18                  So it was interesting.

19                  I wanted to make sure that when he was  
20 making a presentation to a large group of people,  
21 he was accurate.

22                  MR. NIERENBERG: Yes. Accuracy is clearly  
23 very important.

24                  For the fiscal year, the volatility was  
25 actually less than half of the marketplace

1 average. And I think also importantly, the  
2 positive returns for the hedge fund program were  
3 in eight of the 12 months of the fiscal year  
4 compared to six of the 12 for the S&P 500. The  
5 maximum monthly drawdown was about half that of  
6 the S&P 500.

7 So to get to your point, the idea really  
8 is to have this be a hedged program. And as we've  
9 shared with you before, we have a strong desire to  
10 continue to reduce the amount of equity beta  
11 within the program, which will make it more  
12 diversifying to the rest of the portfolio.

13 And at times, that can even be a bit of  
14 a detriment. When strategies like equity long/  
15 short tend to do better, we are strategically a  
16 little underweight relative to the benchmark.

17 And we continue to also look longer  
18 term, if we need to change the benchmark or tweak  
19 the benchmark to make it a more appropriate fit.

20 But even without that, we still think  
21 that it's worthwhile to kind of de-equitize the  
22 hedge fund portfolio, really to emphasize that  
23 hedge part.

24 Just from an attribution standpoint,  
25 CTAs (commodity trading advisors) and systematic

1 macro strategies were our best performer for the  
2 fiscal year. So that's actually a welcome change.  
3 They had several years where they really  
4 struggled.

5           They always had that diversification  
6 feature where they had low correlation to equity  
7 markets and even fixed income markets, which makes  
8 them a very attractive investment, at least in  
9 theory, but for a couple years at least, the  
10 returns had been weak.

11           But we seemed to have timed that pretty  
12 well. We made a pretty aggressive move into that  
13 space in late 2013, and that started paying off,  
14 particularly last fiscal year.

15           Credit and, ironically, discretionary  
16 macro strategies, the people who are well-known  
17 for actually trying to figure out which way the  
18 macro winds are going, had a tougher time in hedge  
19 funds last year.

20           The managed account program continues to  
21 move along quite nicely, and we're on target to  
22 have more than one and a half billion dollars in  
23 the separate accounts between hedge funds and  
24 portfolio completion strategies by the end of the  
25 year.

1                   And within hedge funds, we continue to  
2 source new and smaller talented managers, one of  
3 which we'll be talking about in just a couple of  
4 minutes, which we'll be asking for your approval.

5                   There's also a new academic study that  
6 came out just a couple weeks ago that provides, I  
7 think, more compelling evidence that smaller hedge  
8 managers provide both better returns and  
9 importantly better risk control, even in times  
10 like the financial crisis. I think it just adds  
11 further credence to our efforts to source emerging  
12 managers, with more niche expertise.

13                  Turning to portfolio completion  
14 strategies, we continue to investigate a number of  
15 quite intriguing potential investments in addition  
16 to the current basket of risk premia strategies we  
17 have already. Some of these areas include royalty  
18 streams, agriculture, which I think we're  
19 particularly excited about, and infrastructure.

20                  And because PCS is really designed to be  
21 a collaborative effort, we've worked with a number  
22 of the different people here at PRIM, who, based  
23 on their interest, will help contribute to the  
24 analysis and investigation into potential  
25 strategies.

1                   I'd particularly like to thank Mike  
2 McGirr from the private equity team and Tim  
3 Schlitzer, our head of real estate, for focusing  
4 on one of these infrastructure and agricultural  
5 investments which we think might be the next big  
6 piece for our PCS bucket.

7                   And I think that just draws an  
8 interesting distinction that PCS is designed to be  
9 really a very broad set of strategies. So on the  
10 one side, we're talking about alternative beta  
11 risk premia. And the other side, we're now  
12 talking potentially about farmland.

13                  MR. TROTSKY: Pecans in particular.

14                  MR. NIERENBERG: Pecans, blueberries.

15                  TREASURER GOLDBERG: Really?

16                  MR. TROTSKY: He loves pecans.

17                  MR. NIERENBERG: I am on to blueberries now.  
18 So if you want to know about blueberry growth  
19 production in the U.S., we're all set on that now.

20                  TREASURER GOLDBERG: As long as it's not  
21 timberland in Brazil.

22                  MR. NIERENBERG: It's not timberland in  
23 Brazil. For the moment, we're sticking to  
24 cropland in the U.S.

25                  MR. TROTSKY: Stay tuned.

1                   MR. NIERENBERG: We'll hopefully have some  
2 more for you in the coming months on that.

3                   Just briefly, I also wanted to mention,  
4 I know I shared some thoughts, Michael sent it out  
5 last week, but our advisor, Arden Asset  
6 Management, announced it was being acquired by  
7 Aberdeen Asset Management, which is one of the  
8 largest asset managers in the world.

9                   Happy to take any -- if you have any  
10 questions about that, Henry Davis, the president  
11 of Arden, who's our principal advisor, is here.  
12 He's happy to talk about it, if you so desire.

13                  MR. HEFFERNAN: I just have one question. I  
14 know it gives them more resources. Can we talk  
15 about how they manage potential conflicts of  
16 interest?

17                  MR. NIERENBERG: Sure.

18                  Do you want to come up and talk about  
19 that?

20                  MR. DAVIS: We're going to continue to  
21 operate our business, which is managing hedge fund  
22 portfolios and advising hedge fund investors, in  
23 the same way. The plan is to have continuity. So  
24 all of our policies and procedures that are in  
25 place, which are designed to mitigate or eliminate

1       any conflicts of interest, will continue.

2            MR. HEFFERNAN: I'll take your word on it.

3            MR. NIERENBERG: Okay. Other questions on  
4            that?

5            TREASURER GOLDBERG: With this change, are  
6            you seeing some new people coming in to invest  
7            with you and others possibly finding other  
8            opportunities? How is that working out? What's  
9            the impact of the change on --

10          MR. DAVIS: Every Arden employee is going to  
11          be given an employment agreement on the closing  
12          date. And the practical implication is that our  
13          investment team is going to get bigger. It's  
14          going to approximately double. Our investable  
15          universe is going to approximately double.

16          Currently, we have 125 investable  
17          managers. So the breadth and depth of our  
18          resources is going to increase. And we'll also  
19          have the benefit of having a global reach. They  
20          have 37 offices in 25 countries. And we think  
21          increasing the investment world, being connected  
22          to the global marketplace and being connected to  
23          global markets is important.

24          MR. TROTSKY: But I think the question was is  
25          there any impact on your current line of business?

1                   MR. DAVIS: No. No. This is transactionally  
2                   structured to provide as much continuity as  
3                   possible. And that's written in the document.

4                   TREASURER GOLDBERG: So then the challenge  
5                   will really be managing the -- there's an upside  
6                   to a larger organization, and then there's a  
7                   downside to that. It makes it a little bit harder  
8                   to control the quality.

9                   So I just want to make sure that you're  
10                  thinking about that as you move in. Managing  
11                  growth is one of the biggest challenges for any  
12                  organization.

13                  MR. DAVIS: We are. And we agree with that  
14                  comment.

15                  MR. NIERENBERG: Yes. I think from our point  
16                  of view as the client, one of the things that was  
17                  important to us, and it was brought up, some of  
18                  the comments that came out from last week was to  
19                  make sure that -- to your point, Treasurer -- that  
20                  the culture doesn't change, that we're making sure  
21                  that we're still getting sort of the customized  
22                  advice that we want.

23                  TREASURER GOLDBERG: Right.

24                  MR. NIERENBERG: And that it not become, you  
25                  know, bureaucratic or anything like that. And I

1 think both we as PRIM and Henry and Averell  
2 Mortimer at Arden are very, very mindful of that.  
3 I mean, this is a service business at the end of  
4 the day, and you have to make sure that your  
5 clients are happy.

6 I think we've been very, very pleased  
7 with the way that the relationship has gone for  
8 the last year.

9 TREASURER GOLDBERG: And that will be  
10 something that I am particularly watching and will  
11 be concerned with because I think for us, as you  
12 see in our strategy in the last couple years, it's  
13 really been to have individualized approaches,  
14 individualized relationships and our direct  
15 investment policy approach.

16 So it's just something that I know that  
17 we'll be watching. And I know you understand  
18 that. I just want to reemphasize it.

19 MR. NIERENBERG: I think it also bears  
20 mentioning, I think one of the reasons -- Aberdeen  
21 is a very large firm. Almost 500 billion in  
22 assets.

23 But it's very, very light in  
24 alternatives. So one of the attractions, as I  
25 understand it, of this acquisition is really to

1 gain the expertise that Arden has in things like  
2 managed accounts, how to create the sort of  
3 bespoke investments which they have been working  
4 with us for the last year on and which has been a  
5 big part of our program.

6                   And I think the idea is rather than try  
7 to now force some sort of one-size-fits-all model  
8 on us, it's more trying to, from Aberdeen's  
9 perspective, expand that as a service model and  
10 make that a competitive advantage in how they  
11 participate in the marketplace compared to others.

12                  So I think even from a philosophical  
13 standpoint, even though it's a large asset  
14 management firm acquiring them, their presence is  
15 so small at this point that it's really Arden that  
16 is the basis of their growth.

17                  But we'll be watching. And Henry knows  
18 that.

19                  MR. NAUGHTON: I have a question if I may.  
20 There are the abstract things that happen when  
21 combinations take place. And there are things  
22 that happen on a human note.

23                  Would you characterize the feelings of  
24 the staff at Arden in terms of how they are  
25 feeling this change on a personal level? And I'm

1 asking for your feelings about what impressions  
2 you have.

3 MR. DAVIS: Well, I think whenever there are  
4 combinations that go on, there's a sense of fear  
5 of the unknown. And last week, we had staff from  
6 Aberdeen in our office. And that made a huge  
7 difference in terms of how our staff felt.

8 And we started with a whole day with  
9 senior management, and then had two days with the  
10 senior investment team, and then we had one day  
11 with human resources. And every individual in our  
12 company had quality time and spent time with  
13 representatives from Aberdeen.

14 My sense is while there's always  
15 trepidation about change, the overall feeling is  
16 very positive and there's an understanding for the  
17 business rationale behind moving forward with  
18 this.

19 From the perspective of Aberdeen, it  
20 makes sense because they're very underweight in  
21 hedge funds and alternatives. And that's our  
22 expertise. They're also underweight in terms of  
23 their presence in the U.S. And that's our focus.

24 And for us, as our model has been  
25 evolving, we have seen that the way forward and

1       the way to succeed in allocating hedge funds doing  
2       what we do, which is traditionally a fund of fund  
3       format, is to partner with a larger financial  
4       services or asset management firm, which virtually  
5       every one of our competitors at this point has now  
6       done.

7                 In some ways, we were a rare and dying  
8       breed, trying to go it alone as a stand-alone  
9       boutique. And now we've identified a partner that  
10      we think is like-minded in their approach, and we  
11      are very excited about the future.

12                MR. HEFFERNAN: One more question on that.  
13       Are all of your key people -- and everybody has an  
14       appointment -- are all of your key people locked  
15       up for a long enough time and happy about it?

16                MR. DAVIS: We believe so. This was a  
17       critical element of the transaction, as you can  
18       imagine, from the perspective of Aberdeen. They  
19       wanted to make sure that the people who were  
20       riding the elevators and who had built the  
21       business weren't going to disappear within a short  
22       or even an intermediate period of time. So there  
23       are long-term incentives that have been built in.

24                MR. HEFFERNAN: I think you may or may not be  
25       able to discuss it, but how long-term? I mean are

1       we talking a year, 18 months, three years, five  
2       years?

3                   And if you can't, totally understand.

4       We're in a public meeting, but --

5       MR. DAVIS: We are. The terms are not  
6       supposed to disclosed, but we're in the back end  
7       of the range that you laid out.

8       MR. HEFFERNAN: Thank you for your clarity.

9       MR. NIERENBERG: Dennis, if I can just add  
10      one thing to your question, so I was at Arden last  
11      week when the human resources team was there. And  
12      I did speak to the director of human resources,  
13      who's based in their Philadelphia office.

14       And I said to her exactly what you said,  
15      Treasurer, that we're really going to be making  
16      sure that the culture fits and that it's a good  
17      fit, and we're going to be watching that.

18       But I did notice that the employees  
19      coming out were very happy when they came out of  
20      the HR meetings because they thought the benefits  
21      package from Aberdeen was great.

22       Talking about the vest on the 401(k) and  
23      how fantastic it was and how it vests immediately.  
24      So from that point of view, they seemed quite  
25      happy.

1                   MR. BROUSSEAU: Fast question to Henry. Is  
2        your client base likely to increase drastically in  
3        terms of the number of clients you have to  
4        service?

5                   MR. DAVIS: We're not inheriting or taking  
6        over any of Aberdeen's existing clients, so we  
7        don't believe so.

8                   MR. BROUSSEAU: Okay.

9                   MR. DAVIS: And what will happen going  
10      forward is to the extent we acquire additional  
11      clients, then there will be a need for more  
12      resources to service that, which is part of the  
13      reason why from our perspective this type of a  
14      joining of forces makes a lot of sense because  
15      they are resource rich.

16                  MR. HEFFERNAN: So just one follow-on, Henry.  
17        So it looks like they want -- there's obviously a  
18        lot of knowledge sharing at the senior level.

19                  Are you comfortable that your team, your  
20      senior team, has the bandwidth to be able to  
21      educate and, you know, grow Aberdeen as well as  
22      maintain the client base? Because there's going  
23      to be a lot of time spent between, you know, the  
24      U.S. and London and the other 37 offices.

25                  MR. DAVIS: That's a very thoughtful

1 question, and I don't really have a good answer to  
2 that.

3 Our expectation is there will be a lot  
4 of front-loaded work, so our expectation is that  
5 demands on us and our time are going to go up, at  
6 least in the short term. But we accept that, and  
7 we embrace that because we feel that's the path,  
8 the course that we need to take to get to where we  
9 want to go.

10 MR. HEFFERNAN: That's the honest answer.  
11 Thank you.

12 MR. NIERENBERG: Arden also has a London  
13 office already, and the Chief Investment Officer  
14 for Arden is in London. I think there's been some  
15 knowledge of the teams already, even before the  
16 transaction.

17 MR. TROTSKY: So maybe in conclusion, we've  
18 enjoyed a very unique relationship with Arden. I  
19 think we're one of the -- if not the only  
20 relationship where you provide this kind of  
21 service.

22 I know Eric is a tough customer. He's  
23 demanding and --

24 TREASURER GOLDBERG: He is a very nice  
25 person.

1                   MR. TROTSKY: He's a nice person, but he's a  
2 tough customer. Believe me. And he's been very  
3 pleased, which is a great endorsement.

4                   And I'll also remind you, not that this  
5 is any kind of warning or anything, that all our  
6 contracts are cancelable within 30 days. So that  
7 should give everyone comfort that we're watching  
8 it, and you know, we're on top of it. But so far,  
9 so good.

10                  MR. HEFFERNAN: I think, and I'm just  
11 speaking for myself, but I think either the board  
12 or the investment committee at a time that it's  
13 convenient would like to meet some of the Aberdeen  
14 folks as well. I know you're going to be very,  
15 very busy, but --

16                  MR. NIERENBERG: I'm sure they would love to  
17 come and meet with the board.

18                  TREASURER GOLDBERG: There is a nonstop from  
19 London to Boston several times a day.

20                  MR. HEFFERNAN: There is? Really?

21                  MR. DAVIS: They're also opening a office in  
22 Boston. They've already offered to come in. I  
23 think they're eager to meet with anyone to the  
24 extent there's room on the agenda for it.

25                  TREASURER GOLDBERG: Oh, we can make it.

1 MS. FITCH: When does it become final? Or is  
2 it final?

3 MR. DAVIS: It becomes final in the fourth  
4 quarter of this year.

5 MS. FITCH: Thanks.

6 MR. NIERENBERG: Great. So I'm just going to  
7 turn to the next item on the agenda, which is the  
8 investment recommendation.

9 MR. BROUSSEAU: I actually have a fast  
10 question, and it doesn't relate to this at all.

11 I've been reading in Pensions and  
12 Investments and all these things, California  
13 CalPERS is completely dumping their hedge fund  
14 program. Is this an internal political issue with  
15 them, or do you have insight on that?

16 MR. NIERENBERG: So I'll contrast CalPERS and  
17 CalSTRS because --

18 TREASURER GOLDBERG: Huge difference.

19 MR. NIERENBERG: Because they are going in  
20 two very opposite directions, right.

21 CalPERS did decide last year to  
22 completely eliminate their hedge fund program. It  
23 was very small. After Joe Dear unfortunately  
24 passed away -- he had been a big proponent of the  
25 hedge fund program -- there wasn't really as much

1       of an advocate within the pension fund.

2                  And they kind of had to make a decision.

3       Do we try to grow this so it becomes a meaningful  
4       part of our asset allocation? Or do we just sort  
5       of walk away? And they chose the latter approach.

6                  CalSTRS has been in a similar size  
7       position in terms of the percentage of their  
8       allocation into hedge funds -- call it 1 percent,  
9       1 to 2 percent area. And they seem to be going in  
10      the other direction, where they're now saying, "We  
11      are going to aggressively grow this program  
12      perhaps up to, say, \$10 billion in size."

13                 And they're interested in doing managed  
14       accounts. They're interested in having  
15       alternative beta risk premia-type investments.

16                 So even within, you know, the funds that  
17       are down the street from each other, they're  
18       taking different approaches.

19                 CalPERS, I think has been more of the  
20       outlier in the institutional community, although  
21       there are others. PGM in the Netherlands has  
22       pulled back from hedge funds as well. So it  
23       depends on what you're looking for in the program.

24                 MS. McGOLDRICK: Can I add it's not like a  
25       growing trend you see? There's a difference.

1           CalPERS is -- exactly.

2           MR. NIERENBERG: I think to the extent that  
3           people are pulling back, I think the big reason  
4           for it is people saying what are we paying all  
5           these fees for?

6           And I think that's a very, very  
7           legitimate question because if you're going to pay  
8           full freight fees for hedge funds, you really have  
9           to make sure you're in that tiny sliver of hedge  
10          funds that can deliver on that.

11          I think part of the approach that we've  
12          done and that other large investors like CalSTRS  
13          just starting down this route is going to managed  
14          accounts, going to more customized mandates with  
15          managers, negotiating aggressively over fees.

16          When you do that, you kind of stack the  
17          deck more in your favor so that you have a better  
18          chance of making the program actually succeed and  
19          actually deliver the results.

20          You know, that's my take on it, at  
21          least. So I think it's great that CalSTRS is  
22          moving in that direction. If nothing else, it  
23          also does send a stronger message, even beyond  
24          what we're doing here at PRIM, to the rest of the  
25          hedge fund community saying this is the new

1           normal. You really need to get on board here.

2           And not just even on a fee level, but  
3           with respect to the limited transparency that a  
4           lot of funds offer --

5           TREASURER GOLDBERG: And also, I mean, Seth  
6           Magaziner and New York state controller and NAST  
7           shortly are issuing statements about this. So  
8           there's going to be more and more pressure for  
9           transparency, for analysis of fees.

10          I think if people were to step back and  
11          look at what we've done, I think we've done an  
12          outstanding job on managing those relationships on  
13          a one-on-one basis, and I give you a lot of credit  
14          for that. So the mix that we have has reduced fee  
15          exposure.

16          The other funds could do that, rather  
17          than -- I think some of the approaches that  
18          they've contemplated, which I didn't support, was,  
19          you know, pushing the SEC on reporting.

20          And I said, no, no, no, no. That's  
21          getting really messy. You're better off managing  
22          your relationships and trying to negotiate with  
23          people. Otherwise, that whole group of people  
24          will start to dig their heels in.

25          MR. TROTSKY: It absolutely should be

1 highlighted that Eric's work together with Arden  
2 itself is leading edge.

3 TREASURER GOLDBERG: That's a model. That's  
4 a model.

5 MR. TROTSKY: It's leading edge in regards to  
6 how it supports Project SAVE and fees in general,  
7 transparency through managed accounts, of which I  
8 think we're the leader, and also alternative beta  
9 products, of which we're a leader and very  
10 frequently asked to speak on these issues.

11 So it shouldn't be lost on the board  
12 that we're leading the pack in terms of this.

13 With regard to CalPERS specifically, a  
14 little historical context. Two or so years ago  
15 when I was interviewing to fill the role that Eric  
16 has today, the CalPERS director of hedge funds at  
17 the time applied for it. And he was a very  
18 qualified guy. I liked him a lot.

19 I think I made the right hire.

20 MR. MacDONALD: You think?

21 MR. TROTSKY: Time will tell.

22 TREASURER GOLDBERG: Eric, he did.

23 You want him to leave? Stop it.

24 MR. TROTSKY: But at the time, he told me  
25 that CalPERS just didn't have the focus and they

1 weren't dedicating the resources to the hedge fund  
2 portfolio, and he was frustrated.

3                 Also very recently, you may have read  
4 that CalPERS is trying a concerted effort to  
5 lower, reduce the number of managers with whom  
6 they do business. And I'll remind you that five  
7 years ago, we had 237 underlying hedge funds.  
8 Today, we have 24.

9                 So imitation is the best form of  
10 flattery, it is said. And I believe that the  
11 hedge fund through Eric's work and those who  
12 preceded him are leading edge in this regard.

13                 MR. HEFFERNAN: And so Eric, you would agree,  
14 my assumption is, that our access to quality hedge  
15 funds, our access to asset classes, it's probably  
16 actually helped by these relationships, even  
17 though managing fees down. You don't think we're  
18 hurting in our access to any of the products.

19                 MR. NIERENBERG: I don't think so. We have  
20 not seen -- the formal academic term for that is  
21 negative selection bias. If you're pushing for  
22 lower fees, that you're only going to get the  
23 managers that you don't really want. We have not  
24 seen any evidence of that.

25                 On the contrary, I think one of the

1 things that it's done is increasingly managers  
2 view us as a high quality, sophisticated client,  
3 the way that people talk about Canadian pension  
4 plans or Norway or funds like that.

5 They see us as a client that can serve  
6 almost as a marketing benefit to others. And so  
7 people want us to become a client because they see  
8 us as a seal of approval that others might then  
9 follow up on.

10 So I think it's a testament to what the  
11 board here has approved in going along with the  
12 managed account program and being a strong  
13 supporter of that. It's being recognized out in  
14 the industry.

15 I think on the contrary, I think we've  
16 had no problem at all finding firms. And over  
17 just the last two years, the number of firms,  
18 including some sizable ones, that have proactively  
19 said, "We'll do a managed account."

20 MR. HEFFERNAN: So the best investors are  
21 also the ones that understand this is the future  
22 of the business model. Okay. Perfect.

23 MR. TROTSKY: That's right.

24 MR. HEFFERNAN: Surprised when people put  
25 their head in the sand.

1                   TREASURER GOLDBERG: Anyway, important  
2 discussion.

3                   And Henry, thank you for coming. I  
4 think that when transitions happen, we need to see  
5 and hear from people. So I appreciate your being  
6 here. And I know Eric is going to be closely  
7 working with you in a way that will make us feel  
8 very comfortable that the information that we're  
9 getting is accurate.

10                  So keep up the good work since this is  
11 an important part of our portfolio. Thank you.

12                  And this is not a voting item. This is  
13 just informational. The next item will be.

14                  MR. NIERENBERG: The next item is voting.

15                  TREASURER GOLDBERG: That's correct. Okay.  
16 Great.

17                  MR. NIERENBERG: Thanks.

18                  So turning to the voting item, we are  
19 bringing forward for your consideration the  
20 investment recommendation in the Mudrick Capital  
21 Distressed Opportunity Strategy. This was  
22 unanimously approved by the Investment Committee  
23 in July.

24                  Mudrick Capital fits into our philosophy  
25 of going for smaller managers that have more niche

1 expertise. Mudrick has a little over \$1 billion  
2 in capital. In this particular strategy, it's  
3 about \$800 million. It's a smaller firm led by  
4 Jason Mudrick, and it focuses on distressed  
5 investments.

6 Now we do have a number of distressed  
7 hedge fund investing firms already, but I would  
8 really contrast that Mudrick is very different  
9 from the rest of them. And part of that  
10 difference arises from the smaller size of the  
11 firm.

12 When you are a \$20 billion firm and  
13 you're doing distressed investing, in order to  
14 make a particular investment worthwhile, it has to  
15 be one where you can allocate a lot of capital to  
16 it.

17 So what would be an example? The Lehman  
18 Brothers liquidation, you know, which has been the  
19 gift that's kept on giving across Wall Street, has  
20 made a lot of money -- it's made a lot of money  
21 for PRIM. It's had very good returns over time.  
22 A number of our hedge funds are very active in  
23 that liquidation.

24 The Icelandic Bank unraveling. Returns  
25 haven't been quite as good as Lehman, but that's

1 another one where the firms have been active.

2           But if you look at that sort of upper  
3 tier -- "upper tier" meaning by size, not  
4 necessarily by quality -- of firms in, say, that  
5 distressed hedge fund arena, they have very  
6 similar positions. Lehman, Icelandics, TXU  
7 bankruptcy.

8           Mudrick, because he's smaller, has a  
9 tendency to really find these kind of one-off, in  
10 some case, what you might think of as dying  
11 industry positions, but that really when you look  
12 for deep value, he's able to find it.

13           And he's happy to either just hold it  
14 through a restructuring, if that's going to take  
15 place. Or if it's just a stressed bond, if he can  
16 get a very high coupon for making the investment,  
17 when the sponsor then buys out that tranche of  
18 securities, he gets a nice profit back.

19           So to give an example of the areas where  
20 he's focused, yellow page directories. Believe it  
21 or not, they still exist. They actually still  
22 throw off quite a lot of cash flow. And so at  
23 times, they can be a strong investment.

24           One of the investments he was pounding  
25 the table on when we met with him just last month

1       was one of the ring makers, making class rings and  
2       yearbooks. People still buy yearbooks. They  
3       still buy class rings. These are high cash flow  
4       businesses.

5               I won't go into the particulars of that  
6       investment, but the point was to say there was a  
7       very high margin of safety in these investments,  
8       overlooked by the rest of the industry, in part  
9       because the bite size of these opportunities were  
10      not necessarily large enough to attract the  
11      attention of some of the larger firms, but it was  
12      really right in his wheelhouse.

13              And he has a knack. He's been doing  
14      this for different firms for about a dozen years.  
15      He just has a knack for continuing to find these  
16      kind of interesting opportunities.

17              So that's an overview of Mudrick.

18              More specifically, though, on that  
19      particular fund, we are negotiating the mandate.  
20      I know I sent the details previously. This will  
21      be constructed within a managed account format.  
22      We created a very good term structure that both  
23      achieves what we're looking to do from a fee level  
24      and also from the alignment of incentives in terms  
25      of when things get crystallized and in terms of

1 incentive fees and things of that nature.

2                   From an investment characteristic  
3 standpoint, this idea of margin of safety is very,  
4 very important to Jason. These businesses have to  
5 be cash flow positive. There has to be a large  
6 discount to asset value.

7                   He's really looking for good businesses  
8 with terrible capital structures. He's not  
9 looking for business that have a flawed business  
10 model. These are businesses that might be  
11 overleveraged.

12                  The case I gave of the ring maker, it  
13 involved a private equity deal that happened at  
14 the peak of the bubble prior to the crisis and was  
15 overleveraged. And so they will repair that  
16 capital structure, but in the meantime, he's able  
17 to buy a security that will give him close to a  
18 20 percent ROI.

19                  And he's very flexible in that he can go  
20 across the capital structure. So if he thinks the  
21 value is in senior debt securities, that's where  
22 he'll participate. At times he'll go as low as  
23 equity.

24                  But I think another distinguishing  
25 feature between this firm and others in the

1           distressed space is that overall, his exposure to  
2         equity is very, very small. It's only about  
3         5 percent of the total fund on average.

4           That is different than some of the other  
5         larger distressed funds, which at times can be up  
6         to 30 or 40 percent equity, especially if the  
7         company is reorganized post bankruptcy.

8           We do think this is differentiated and  
9         has a quite interesting place in the portfolio,  
10       both as a return generator in relation to high  
11       alpha-type funds, but also having that benefit of  
12       true diversification. We think it hits on both  
13       fronts.

14           MR. HUBBARD: You mentioned his ability to  
15         identify one-off opportunities, but there's this  
16         terminology in the materials about "on the run,"  
17         "off the run." Can you explain that?

18           MR. NIERENBERG: Sure. "Off the run" is  
19         really just that concept of finding things that  
20         are under the radar; i.e., yellow pages, the ring  
21         maker.

22           In the past, he invested, and it was  
23         probably his best investment, in a company that  
24         made pagers. Who uses pagers anymore? Well, it  
25         turns out they're still widely used in the medical

1       community, and there's actually still a business  
2       there.

3                 The "on the run" opportunities would be  
4       things like Lehman, TXU -- the big bankruptcies  
5       everybody on Wall Street kind of has a hand in  
6       that you see as being the chunk of a lot of  
7       distressed private debt firms.

8                 That's kind of --

9       MR. HUBBARD: I'm sure you'll get to this,  
10      and I don't know how far to go with these  
11      protected materials, but I take it you're going to  
12      talk about the back office structure a little bit.

13       MR. NIERENBERG: Yes. So while the firm is  
14      small, it does have 17 professionals in total.  
15      Eight are on the investment side. The other nine  
16      are on the back office and middle office side.

17                 And it's actually -- and Henry can speak  
18      to this as well. They scored quite well on an  
19      operational due diligence basis. They have all  
20      the appropriate controls. They have systems.

21                 The one thing we have asked for and that  
22      they are in the process of executing is an  
23      improved order management system for their  
24      trading, which is what I would say is a "good to  
25      have." It's not necessarily a "need to have" for

1           this firm.

2           This firm doesn't do an extensive amount  
3           of trading. A lot of the trading they do is still  
4           sort of the old school kind of way, like you call  
5           up a broker because you're talking about stressed  
6           debt that is not necessarily very liquid. And  
7           it's not really even publicly -- I mean it's  
8           publicly traded, but it's not exchange-traded or  
9           anything like that.

10          Even so, it was Arden's recommendation  
11         that they upgrade their order management system  
12         for trading. And they've agreed to do that. And  
13         they're in the process of doing that.

14          MR. HUBBARD: And over what time will that  
15         happen approximately?

16          And when you say, like, the back office  
17         systems have been reliable or whatever, is that a  
18         function of the nine people there, or is it their  
19         system regardless of turnover? Is it reliable, I  
20         guess?

21          MR. NIERENBERG: I think it's both. They  
22         have been adding to that operational side. They  
23         just recently hired a new chief counsel and chief  
24         compliance officer, who came from one of the very  
25         largest hedge funds out there, Two Sigma, which is

1           a \$20 billion hedge fund.

2           His name is Trevor Wiessman. That was,  
3           to us, I think an important signal that they were  
4           really upgrading themselves in that capacity.

5           Jason himself was trained, like many  
6           people in the distressed area, as a lawyer. So he  
7           has a particular kind of sensitivity to making  
8           sure that he has a good structure to support what  
9           he needs to do with his investments. The legal  
10          side is important.

11          He did just hire a new operations  
12          associate to work with the team.

13          The other thing I should say as well,  
14          though, one of the reasons that makes a fund like  
15          this attractive to us is because when we have the  
16          managed account structure, a lot of the components  
17          that you otherwise might worry about in terms of  
18          middle office and back office are things that we  
19          now do effectively ourselves; not PRIM  
20          specifically doing it, but through our managed  
21          account service provider, HedgeMark.

22          HedgeMark picks up a lot of these roles  
23          in terms of working with the administrator, the  
24          auditors for the accounts. To Mudrick, that can  
25          be a benefit because that's less operational work

1       on their end. They can really focus more on  
2       analyzing investments. So it does cut both ways.

3                 But as a more general principle, I think  
4       what you're saying is really important. When  
5       we're dealing with smaller funds, you really do  
6       need to make sure that the operational  
7       infrastructure is solid because it isn't always  
8       there.

9                 Larger funds, on the investment merits,  
10      might seem weaker and we might be moving towards  
11      smaller managers because we think there are better  
12      opportunities.

13                 But one thing you can generally say  
14      about larger managers is that they have built out  
15      a very robust operational infrastructure.

16                 So it is a challenge with smaller  
17      managers -- we just have to do more digging to  
18      make sure what's there is appropriate.

19                 But if you look in the protected  
20      materials, there is a section in the Arden report  
21      where they go into great detail on the operational  
22      strengths and weaknesses. And it did get a quite  
23      solid rating. In Arden's opinion, there was no  
24      red flags of anything that could not be dealt with  
25      appropriately, particularly in the managed account

1 context.

2           MR. HUBBARD: It's interesting how we -- the  
3 process. I mean, and maybe just a larger point of  
4 how we got comfortable with their operations  
5 because there may be other emerging managers that  
6 we could utilize, I mean, similar processes. And  
7 maybe we get there and get comfortable or we  
8 don't. It depends on what the firm has and  
9 doesn't have.

10          MR. NIERENBERG: Let me give you another  
11 example. PAAMCO, which is a fund of funds which  
12 focuses on emerging managers, a lot of the funds  
13 that they invest in are day one startups. And so  
14 PAAMCO spends a huge amount of time on operational  
15 due diligence.

16          And in many cases, they are the advisor  
17 to the hedge fund, saying, "Look. Okay. I know  
18 you're starting your own hedge fund, and you've  
19 got these great ideas for investments, but this is  
20 what you need in order to get actually up and  
21 running. This is what you need for a trade  
22 system. This is what you need for an accounting  
23 system."

24          There is no question that there is a  
25 higher level of diligence, higher level of care

1           that's needed when you're talking about smaller  
2       funds.

3           We do think that overall, that added  
4       work can have high payoff because we can get those  
5       more nimble managers. But there's more that has  
6       to be done. So I think both Arden and PAAMCO  
7       really spend a lot of time here.

8           MR. DAVIS: Anthony, you also asked --

9           TREASURER GOLDBERG: So -- go ahead.

10          MR. DAVIS: You also asked about timing for  
11       the new order management system. They told us it  
12       will be in place by the end of the year. And one  
13       of the beauties about the managed account  
14       structure is you enter into documentation.

15          So we are right now finalizing an  
16       investment management agreement, subject to your  
17       approval, where we can include a representation by  
18       them that they will do it. So we will have a  
19       contractual right relating to that, as a way to  
20       get comfortable.

21          And then back to Eric's point about  
22       managed accounts generally, the beauty of the  
23       managed account, if you sort of strip it down to  
24       its most fundamental level, is that essentially  
25       the manager is only doing one thing. They are

1 just an authorized trader on your account. You or  
2 us, PRIM, owns everything about this investment  
3 program with one exception, which is they have  
4 essentially subcontracted trading authority to the  
5 hedge fund manager.

6 And Matt Liposky has spent an  
7 extraordinary amount of time managing the  
8 mechanics associated with ensuring that.

9 But at the end of the day, what it means  
10 is PRIM controls its assets. And it controls the  
11 assets in this investment. And if for whatever  
12 reason, there is a change of heart or there's  
13 concern about what's happening operationally with  
14 the manager, it's very easy because the assets  
15 never left PRIM's balance sheet. They're right  
16 there. And if you want to liquidate them, you can  
17 liquidate them. If you want to hire someone else  
18 to manage them, you can hire someone else to  
19 manage them.

20 It's a very elegant structure.

21 TREASURER GOLDBERG: Thank you.

22 MR. HUBBARD: Thank you.

23 TREASURER GOLDBERG: So with that --

24 MR. BROUSSEAU: Quick just one question.

25 Being a very small fund, and I see that, closing,

1 at the end, is for new investors currently  
2 500 million, how likely is it that we're going to  
3 get up to \$150 million buy-in?

4 MR. NIERENBERG: Yes. It's not like a  
5 private equity fund where there's limited  
6 capacity.

7 We have agreed to 150 million, and they  
8 would like that to be larger. If this works over  
9 time, there's potential to grow this size. So  
10 it's not -- there's no capacity --

11 MR. BROUSSEAU: We're one of very few  
12 investors looking at the size of the fund, totally  
13 of 700 million, if we're in it for 150.

14 MR. NIERENBERG: We'll be a very large  
15 investor in the fund. There's also one very large  
16 university endowment which has been with him since  
17 the inception of the firm, which also has a very  
18 sizable allocation as well.

19 MR. HEFFERNAN: Yale?

20 MR. NIERENBERG: It's Duke.

21 I should also just mention real quickly  
22 the firm does not use leverage.

23 MR. BROUSSEAU: I hate that word.

24 MR. NIERENBERG: That's why I mentioned it.

25 TREASURER GOLDBERG: Okay. So with that, I

1 would seek a motion for the approval of the  
2 capital commitment of up to 150 million to Mudrick  
3 Capital Distressed Opportunities Strategy, that  
4 the board approve the investment committee's  
5 recommendation of an initial capital commitment of  
6 up to 150 million to Mudrick Capital Distressed  
7 Opportunities Strategy, and further to authorize  
8 the executive director to take all actions  
9 necessary to effectuate this vote.

10 Is there a motion?

11 MR. BROUSSEAU: So moved.

12 TREASURER GOLDBERG: Second?

13 MR. NAUGHTON: Second.

14 TREASURER GOLDBERG: All those in favor?

15 THE BOARD: Aye.

16 TREASURER GOLDBERG: Thank you very much.

17 (VOTED: To approve the Investment  
18 Committee's recommendation of an initial  
19 capital commitment of up to \$150 million  
20 to Mudrick Capital Distressed  
Opportunity strategy, and further to  
authorize the Executive Director to take  
all actions necessary to effectuate this  
vote.)

21  
22 TREASURER GOLDBERG: Okay. Michael Bailey.

23 MR. BAILEY: Thank you, Treasurer Goldberg.

24 I'm just going to spend a few minutes  
25 talking about the fiscal year performance and then

1 shift gears to what we expect going forward in the  
2 private equity portfolio.

3 Coming on the fiscal year performance,  
4 as Michael and Sarah mentioned, we have very  
5 strong performance with this new year,  
6 15.6 percent. That's about 800 or 8 percent  
7 higher than the broad U.S. equities benchmark that  
8 we used.

9 As Michael and Sarah mentioned, the U.S.  
10 equities market found a slower gear. So that made  
11 that comparison a little easier to beat. But  
12 15.6 percent would be a fantastic number for this  
13 portfolio to deliver, you know, against our  
14 expectations.

15 And I would say that getting underneath  
16 that a little bit, I think we could talk about two  
17 themes. One is company performance. Companies  
18 across the board have performed very well.

19 As you all know, these are smaller  
20 companies, primarily U.S. companies. I would call  
21 out sectors like technology in particular,  
22 enterprise software, IT services, some  
23 applications relating to technology. All found,  
24 you know, strong performance contributions over  
25 this last fiscal year.

1                   Also in venture capital portfolio, Sarah  
2 mentioned biotechnology and how the capital  
3 markets have treated that. Inside this portfolio,  
4 some of the venture-backed biotechnology companies  
5 that are aiming at discovering new drugs, new  
6 compounds that will work in humans, a couple of  
7 those companies made positive discoveries.

8                   And on the back of those, we're able to  
9 revalue those companies at very high valuations.  
10 As you know, the venture capital world, you get  
11 involved at a very low valuation. So when you do  
12 strike gold, that has a huge impact on that  
13 investment. And one of the firms in particular  
14 here in Massachusetts did quite well there.

15                  I shift gears from companies to capital  
16 markets. Sarah and Michael talked a lot about  
17 capital markets today. I would say that capital  
18 markets continue to be very strong tailwinds for  
19 the private equity world. And our portfolio  
20 benefited from that.

21                  As you know, the portfolio has a number  
22 of older investments from that pre-global  
23 financial crisis era, the '06 to '08 period.  
24 Remember those larger companies now have access to  
25 the capital markets.

1                   As Sarah mentioned, a number of big  
2 corporations are using their cash war chests to  
3 purchase companies. So that has given our private  
4 equity firms a ready buyer for these large  
5 businesses.

6                   And one of our private equity firms just  
7 reported that about half of the companies it sold  
8 got their highest bid from corporations, which  
9 makes sense. As Sarah mentioned, the corporations  
10 have very low cost of debt. Their equities are  
11 trading at high valuations. So that lowers their  
12 cost of capital.

13                  And they can usually count on some type  
14 of synergy that other buyers can't compete with,  
15 cost reductions, as they put these businesses  
16 together.

17                  So that capital markets theme continues  
18 to deliver strong results as we continue to see  
19 liquidity out of the portfolio, particularly from  
20 the larger buyouts.

21                  The last thing I'd mention, as Dr. Clapp  
22 mentioned, we have some foreign currency exposure,  
23 mostly through the euro in the portfolio. That  
24 had hurt us until this last marking period. We  
25 finally got a little positive benefit from the

1 euro. But net, that was a negative for the fiscal  
2 year.

3 Then looking ahead for a couple of  
4 minutes, you know, I would say that if this trend  
5 of liquidity continues, you continue to see robust  
6 capital markets to sell companies. And so I would  
7 say -- and a good positive leading indicator for  
8 that is on page 10 of your materials. This last  
9 quarter, we generated about \$300 million of  
10 liquidity, primarily from about \$620 million of  
11 distributions, cash and stock distributions. So  
12 that engine of driving sales continues to be a  
13 positive indicator for performance for this year.

14 I think the negative is that, and Sarah  
15 alluded to this, the corporate buyers are really  
16 competing with the private equity firms for some  
17 of the same properties. So when companies come up  
18 for sale, oftentimes, it's the corporate buyer  
19 who's winning.

20 As Sarah mentioned, back in the old  
21 days, private equity firms were winning a lot of  
22 those situations. Now they're complaining that  
23 the corporate buyers are outbidding them. And  
24 there's strong competition for corporate  
25 acquisitions, especially as the number of great

1       property and great companies isn't that -- it's  
2       not infinite.

3                   So I would say the warning sign that the  
4       pace of acquisitions and buying things may slow  
5       here. That probably wouldn't be the worst thing,  
6       you know, if you sort of think about part of the  
7       investment idea here is that these people have  
8       discipline and can wait out overpriced markets.  
9       We're certainly hearing that.

10          But again, for the time being, this has  
11       been a really strong-performing portfolio. Its  
12       long-term performance is on the bottom of page 9.  
13       As you can see, it's still around 13.2 percent.

14          And the exposure drifted up a little bit  
15       to 11.3 percent. That's because we have these  
16       valuation increases in this roughly \$7 billion  
17       portfolio.

18          Then on page 10, you're well aware of  
19       the names of the firms we've committed to this  
20       year at about a billion dollars against that  
21       target, I'll call it, of \$1.7 billion for the  
22       calendar year.

23          We'll have more to do in the next  
24       meeting in terms of new investments. We don't  
25       have anything today to approve, but we have a

1 pretty high quality pipeline of investments we're  
2 very excited about, including probably some new  
3 firms would we'd like to add to the portfolio.

4 So those are my remarks. Any questions?

5 MR. NAUGHTON: I have one question. I know  
6 that, at least I understand that it's true, that  
7 the U.S. drug companies have a longer period of  
8 proprietary control over their drugs than most any  
9 other countries.

10 And we've been talking in light of that  
11 because of the expense of drugs for healthcare and  
12 all of that, having an impact by eliminating that  
13 length of time, reducing that length of time.

14 To what extent should we be concerned  
15 about that in investments?

16 MR. BAILEY: Sarah and Andre might want to  
17 comment on this too, but what we're hearing from  
18 the private equity firms is that -- you know, I  
19 think they're getting -- recently, I'll just  
20 mention it, that the U.S. FDA is trying to kind of  
21 provide some regulatory relief in the area of drug  
22 discovery. And I think it's probably partly  
23 competing with the European Union and the  
24 regulatory body over there.

25 So I don't think -- you know, I'm not an

1 expert in this, but I don't see that as a big  
2 negative. As we talk to the managers who back  
3 these small private companies, I think they're  
4 seeing a good path towards regulatory approval.

5 I would say that that's one of the  
6 reasons there are these venture capital firms  
7 because it's a very tricky thing to figure out how  
8 the regulator is going to react to different  
9 input.

10 And I'm sure Sarah sees it on the public  
11 side. It's tricky, and that's part of what  
12 creates skill, right. Because if you get that  
13 wrong, as Sarah mentioned, it's a binary outcome.  
14 You could spend hundreds of millions of dollars  
15 and have a zero. If you get it right, we just  
16 mentioned the example where the company is making  
17 some positive discoveries, the regulator is  
18 approving them, and now the company is worth more  
19 than a billion dollars.

20 So I don't see that -- I'm not hearing  
21 that as a significant negative. I don't know if  
22 Sarah or Andre have other comments on that. But  
23 I'm not hearing that as significant negative.

24 MR. NAUGHTON: The other issue in that whole  
25 situation is that, you know, you created the --

1 some years ago, back during the Bush  
2 administration, was the creation of the law for  
3 donut hole and all of that. And part of that deal  
4 was to prevent the importation of drugs,  
5 ostensibly because they might be dangerous from  
6 places like Canada and certain Third World  
7 countries.

8 (Laughter)

9 That's the other thing. Should it be  
10 somehow in the future done that that leg is  
11 eliminated, there would be an opening up of  
12 acquiring things at a cheaper price. That too  
13 could have -- those two things -- just a concern.

14 MR. BAILEY: Yes. Thanks for mentioning  
15 that.

16 TREASURER GOLDBERG: Great. Any other  
17 questions?

18 Okay. No votes today.

19 Thank you.

20 MR. BAILEY: Thanks.

21 TREASURER GOLDBERG: Okay, Tim. Where are  
22 you, Tim?

23 MR. SCHLITZER: Good morning.

24 TREASURER GOLDBERG: Good morning.

25 MR. SCHLITZER: Just for the minutes, I'm Tim

1           Schlitzer. And welcoming John La Cara, who's  
2           sitting up with me today.

3           We have two voting items. I'm going to  
4           go through fiscal year performance, and then we  
5           can move on to the recommendations.

6           The real estate and timberland portion  
7           of the agenda begins on page 11. And there is  
8           additional information in Appendices G through I.  
9           So I'll just go through those comments verbally as  
10          I typically do.

11          Just beginning from an allocation  
12          perspective, real estate's at \$6.1 billion.  
13          Theresa, you referenced this before, but we are at  
14          10 percent of the fund as of the end of the fiscal  
15          year. So that will continue to move around, but  
16          it's a good starting point.

17          We've completed eight new property  
18          acquisitions year to date for roughly 700 million.  
19          We've completed one disposition for 76 million.

20          I should note that we are expecting  
21          upwards of \$700 million to come back in return of  
22          capital through dispositions throughout the rest  
23          of the year, a big piece of that being through  
24          333 Bush, which is the San Francisco office  
25          building.

1           TREASURER GOLDBERG: Right. I just was  
2 saying how's California doing?

3           MR. SCHLITZER: Yes. Offers are due  
4 September 15.

5           So we'll continue working to find new  
6 investments to maintain that 10 percent, going  
7 forward.

8           (Mr. Hubbard left the meeting.)

9           MR. SCHLITZER: On to performance. Total  
10 real estate returned 12 percent during the year.  
11 That's 170 basis points above benchmark. The  
12 private portfolio had very strong relative  
13 performance at 15.3 percent. That's 250 basis  
14 points above benchmark.

15           Portfolio operations are very good on  
16 the direct side. We're 95 percent occupied. And  
17 we're tracking budget very well throughout the  
18 first half of the year.

19           I'll note that valuations were up  
20 2.4 percent in the second quarter. That's  
21 actually above the first quarter write-up at  
22 1.8 percent. So while it's a small sample, if  
23 anything, that appreciation may be accelerating a  
24 little bit, at least in the near term.

25           Non-core performance is very strong

1 right now at 14.5 percent. That's 115 basis  
2 points over benchmark. We're seeing extremely  
3 strong performance in the private equity vehicles  
4 that we're in, which as you know, are focused  
5 primarily on technology-related office buildings.  
6 We also have significant exposure to apartments in  
7 the value-added portfolio, which is the non-core  
8 portfolio.

9 And then lastly, the REIT portfolio  
10 returned 9 percent over the past year. So fairly  
11 weak on the absolute side, but 65 basis points  
12 above benchmark.

13 And let me just talk about the REIT  
14 markets for a second. REIT performance continues  
15 to be pretty volatile. The global index was down  
16 5.7 percent in the second quarter after being up  
17 almost that much in the first quarter. So it's  
18 kind of moving all over the place. And during the  
19 second quarter, the U.S. was down 10 percent.

20 So we're watching that pretty closely.  
21 Again, it's broad-based, and I would say it's  
22 primarily interest rate-driven. When you look at  
23 the companies, and we've talked with our managers  
24 a lot about this, there's not a lot of  
25 differentiation in performance between the

1 companies, so this indicates that it's probably  
2 something happening more at the macro level.

3 We are starting to see, however,  
4 underperformance in certain property types where  
5 there are longer leases characterizing the assets  
6 of the company. So that's sort of that duration  
7 risk where there's yield risk as interest rates  
8 increase.

9 Lots of -- and this has been referenced  
10 earlier in the meeting. There has been a fair  
11 amount of M&A activity in the REIT space, public  
12 to private transfers. That does make it a little  
13 bit harder for our managers in the short term to  
14 manage the portfolios and sort of adapt to some of  
15 those performance drivers as deals are completed.

16 But it may also provide a pricing floor  
17 going forward. As stock prices drop to a  
18 significant level below NAV, there's a good chance  
19 in many cases that those companies may become  
20 targets for privatization, so we're cognizant of  
21 that.

22 All of this said, and I sort of just  
23 mentioned it in the context of our own portfolio,  
24 fundamentals are very good. Capital markets  
25 remain very strong.

1                   To the extent that REITs are a forward  
2 indicator, I think we need to be thoughtful about  
3 it. But when we talked to our REIT managers, they  
4 generally say that at the company level,  
5 operational performance is very good.

6                   So if there aren't any questions on real  
7 estate, I'll move on to timber.

8                   The timber portfolio is currently valued  
9 at \$1.7 billion. That's 2.8 percent of the PRIT  
10 fund. That leaves us with approximately  
11 \$480 million currently invested in public natural  
12 resources for new investments.

13                  I'll note that we have not completed any  
14 new timberland investments year to date.

15                  I'll also point out that we did -- just  
16 so you don't think that there's no activity in the  
17 pipeline, we did recently take a very close look  
18 at a large U.S. timberland joint venture. I want  
19 to compliment John because he led the due  
20 diligence.

21                  And while it was disappointing to walk  
22 away from, we found something from a valuation  
23 perspective that disallowed us from moving  
24 forward. So I think it was good due diligence,  
25 and we'll continue to work to find new

1 opportunities.

2                   On the performance side, the total  
3 timberland portfolio returned 9.7 percent over the  
4 last 12 months. That's 95 basis points below  
5 PRIM's benchmark. I'll point out that we do have  
6 the unlagged benchmark data. And using that  
7 metric, we're 30 basis points under the benchmark.  
8 So generally in line.

9                   On the timber markets, and I'm sure  
10 you're aware of much of this, but there has  
11 been -- and it's somewhat mixed, but there has  
12 been some positive data on the housing front.  
13 Starts are at 1.2 million on an annualized basis.  
14 That's the most recent rating, which I think was  
15 June.

16                   I should point out that I think the vast  
17 majority, if not all, of that was driven by multi-  
18 family starts. And I pointed that out previously,  
19 but multi-family continues to lead the market from  
20 a development standpoint.

21                   And we're watching that obviously in the  
22 context of the commercial real estate portfolio,  
23 as well as the timberland portfolio.

24                   That being said, and the market  
25 continues to be patient and that's not lost on me,

1       but as you look at home sales, permits, certainly  
2       employment growth, I think there is an expectation  
3       that we will see single-family starts increasing  
4       going forward.

5               Lastly, on the timber price side, we  
6       continue to see moderate recovery in timber  
7       prices. Prices are actually off a little bit year  
8       to date, but well ahead of last year's prices. So  
9       a good trend there.

10              The export markets probably are part of  
11       that softness year to date, I would say, for  
12       reasons that we discussed during the meeting.

13              So I'll leave it at that. Happy to  
14       answer any other questions.

15              Let's move on to the first  
16       recommendation. Turn it over.

17              MR. LA CARA: Thank you.

18              Good morning, everyone.

19              TREASURER GOLDBERG: Good morning.

20              MR. LA CARA: You can find a brief narrative  
21       of the recommendation on page 13 of the agenda.  
22       You've also got the valuation committee report at  
23       Appendix H.

24              PRIM issued a request for qualifications  
25       for timberland appraisal services on June 15 of

1       this year. The purpose of the RFQ is to update  
2 PRIM's list of approved timberland appraisers.

3                 Firms selected as a result of this RFQ  
4 will be eligible to competitively bid for  
5 appraisal assignments that are scheduled to occur  
6 over the next three years, beginning in 2015 and  
7 ending in 2017.

8                 So effectively we did not solicit bids  
9 in this part of the process. Once the list is  
10 confirmed, then we go back out to a competitive  
11 bidding process.

12                Eight responses were submitted by the  
13 deadline. An evaluation committee was formed that  
14 consisted of David Gurtz; Dr. Jack Lutz, who is  
15 the timberland expert on the real estate and  
16 timber committee; Tim Schlitzer; and Dan Stenger,  
17 who is our consultant; and myself.

18                Responses were evaluated based on each  
19 firm's qualifications and experience, knowledge of  
20 timberland valuations, and feedback from our  
21 timberland investment managers, who keep an  
22 updated approved list of their own in-house. So  
23 that would be Campbell Global and FIA.

24                After reviewing the responses, it was  
25 determined that all eight firms demonstrated the

1       necessary qualifications required by PRIM to  
2       provide appraisal services.

3                  Therefore, PRIM staff and the real  
4       estate and timber committee recommend the  
5       selection of the following firms: Forecon Inc.,  
6       Larson & McGowin, Legacy Appraisal Services, Mason  
7       Bruce & Girard, Sizemore & Sizemore, Sterling  
8       Consulting, Terra Source Valuation, and The Healey  
9       Company.

10                 Seven of the eight are currently on the  
11      list and have done appraisal assignments for us in  
12      the past. One new addition would be Larson &  
13      McGowin. They have specialties in the South.

14                 That concludes my recommendation. I'd  
15      be happy to take any questions at this point.

16                 TREASURER GOLDBERG: We do have to -- this is  
17      a voting item. And I'd like to entertain a motion  
18      for approval of the recommendation of eight firms  
19      for timberland appraisal services, that the board  
20      approve the real estate and timberland committee's  
21      recommendation that eight firms be approved to be  
22      eligible to provide timberland appraisal services  
23      for calendar years ending in 2015, 2016 and 2017,  
24      and further authorize the executive director to  
25      take all actions necessary to effectuate this

1 vote.

2                   The eight firms are as follows: Forecon  
3 Inc., Larson & McGowin, Inc.; Legacy Appraisal  
4 Services, LLC; Mason Bruce & Girard, Inc.;  
5 Sizemore & Sizemore, Inc.; Sterling Consulting,  
6 LLC; Terra Source Valuation, LLC; and The Healey  
7 Company.

8                   Any discussion -- oh, first of all --

9 MR. BROUSSEAU: So moved.

10 TREASURER GOLDBERG: Second?

11 MR. NAUGHTON: Second.

12 TREASURER GOLDBERG: Discussion?

13                   I think it's pretty thorough. It's  
14 updating the list. Then it will go out to  
15 competitive bid.

16                   So I don't see any further discussion.  
17 And so all those in favor?

18 THE BOARD: Aye.

19 TREASURER GOLDBERG: Done.

20                   (VOTED: To approve the Real Estate and  
21 Timberland Committee's recommendation  
22 that eight firms be approved to be  
23 eligible to provide timberland appraisal  
24 services for calendar years ending in  
2015, 2016 and 2017; and further  
authorize the Executive Director to take  
all actions necessary to effectuate this  
vote.)

25 MR. LA CARA: Thank you.

1                   TREASURER GOLDBERG: Thank you, John.

2                   Okay. Next item.

3                   MR. BROUSSEAU: Termination.

4                   MR. SCHLITZER: So moving on to second and  
5 final recommendation, let me just first direct you  
6 to page 14 of the board agenda, which includes the  
7 writeup of this particular item.

8                   I am going to make the assumption that  
9 this has been reviewed, but I am also happy to  
10 answer any questions. I'll make a couple -- I  
11 don't have a lot of prepared comments, but I'll  
12 make a couple of comments on this. And obviously  
13 what we're talking about is a manager termination  
14 of a core real estate mandate.

15                  First off, we do not take manager  
16 recommendations in general lightly. That should  
17 be clear. This is a long-term relationship that  
18 goes back to the year 2000. The account is  
19 currently valued at roughly \$1.1 billion. It  
20 contains about 25 assets.

21                  So while relationships are certainly  
22 very important to us, especially ones as long as  
23 this one, this is a very large and important  
24 account that we've been monitoring closely for  
25 quite some time. And it very much moves the

1       needle when there's underperformance and concern  
2       about future underperformance.

3                  You know, I just touched on it, but TA  
4       officially has been on the watch list since  
5       February of 2014.

6                  And Treasurer, I think you summed this  
7       up pretty well at the committee meeting when we  
8       did discuss this, that there's really a confluence  
9       of challenges that I think we're facing with this  
10      mandate.

11                 And these are all, you know, events and  
12      performance issues that have come up over the past  
13      year and a half or so related to performance,  
14      organizational changes that are specific to PRIM's  
15      account. Probably most importantly, the recent  
16      exit of our portfolio manager. There was also a  
17      significant recent transaction which involved a  
18      sale of the majority of the company.

19                 And then we're, you know, also thinking  
20      more closely about how we want to conduct  
21      ourselves strategically going forward over the  
22      long term.

23                 And when we put all of these together, I  
24      think we feel that the best thing for PRIM and the  
25      beneficiaries going forward is to make this change

1 and finalize the termination.

2 I'll just confirm that again we did  
3 discuss this with the real estate committee, and  
4 we did have unanimous support to terminate.

5 TREASURER GOLDBERG: And we had a lengthy  
6 conversation about that.

7 MR. SCHLITZER: We did have a very long  
8 conversation.

9 TREASURER GOLDBERG: It's not easy to  
10 terminate relationships.

11 MR. SCHLITZER: So that's it. I mean, I'm  
12 happy to answer questions. If there's any other  
13 conversation, I'm happy to engage that.

14 MR. SHANLEY: Do you anticipate any issues  
15 with the transition to AEW?

16 MR. SCHLITZER: That's a very good question.  
17 It's very complicated. We've been through it  
18 before. We did it in 2010. We are -- it says  
19 this in the writeup -- in the transfer of the  
20 assets to AEW for a number of reasons. And it's  
21 really just a huge legal and information transfer  
22 exercise that I think will take two to three  
23 months. And then there will be a stabilization  
24 period with the new manager.

25 And then at that point, what we will do

1       is basically have a series of discussions with  
2       them. What do we figure out -- you know,  
3       ultimately what probably ends up with them, what  
4       may be disposal worthy, and what may end up with  
5       other managers that PRIM is currently working  
6       with.

7                 And we can run a series of processes to  
8       kind of figure out the answers to those questions.

9                 MR. SHANLEY: Thanks.

10                MR. BROUSSEAU: I'd just like to dovetail on  
11       Paul's because obviously the same question. This  
12       is going to be a permanent transfer of assets  
13       until -- they'll be liquidated, a lot of them.

14                Are you looking at probably down the  
15       road looking at finding another real estate  
16       manager?

17                MR. SCHLITZER: We're not right now.

18                MR. BROUSSEAU: Not right now.

19                MR. SCHLITZER: Bob, obviously you were  
20       around the last time we did this.

21                MR. BROUSSEAU: Yes.

22                MR. SCHLITZER: And that is a difference  
23       here. We feel like we've got a great stable of  
24       managers currently in place without too much  
25       concentration. There is a fee benefit in sizing

1 down the group a little bit. And we can always  
2 conduct a search in the future. And that's a  
3 conversation that we have with the committee every  
4 year, figuring out how the roster is looking, so  
5 to speak.

6 MR. BROUSSEAU: Okay.

7 TREASURER GOLDBERG: So as I said, we had a  
8 very lengthy conversation, and this is something  
9 that we've actually been talking about for a while  
10 and watching very closely.

11 Again, it's never great to have to  
12 terminate a relationship with people we've done  
13 business with, but it's in the best interest of  
14 the fund and our beneficiaries.

15 And we also did discuss, Bob, whether we  
16 would need another firm. As Tim said, as we  
17 looked at the assets, whether some get disposed;  
18 others can be reallocated. And the folks that  
19 we're working with now can handle that for the  
20 time being.

21 So with that, I would request a motion  
22 for approval of the termination of TA Realty's  
23 core real estate mandate, that the board  
24 retroactively approve the termination of  
25 TA Realty's core real estate mandate as of

1       July 23, 2015 and the account transfer to AEW  
2       Capital Management, and further, to authorize the  
3       executive director to take all actions necessary  
4       to effectuate this motion.

5                  Do I have a motion?

6                  MR. BROUSSEAU: So moved.

7                  TREASURER GOLDBERG: Second?

8                  MS. FITCH: Second.

9                  TREASURER GOLDBERG: All those in favor?

10                 THE BOARD: Aye.

11                 TREASURER GOLDBERG: Opposed?

12                 (VOTED: To approve the termination of  
13                 TA Realty's core real estate mandate as  
14                 of July 23, 2015, and the account  
15                 transfer to AEW Capital Management, and  
16                 further to authorize the Executive  
17                 Director to take all actions necessary  
18                 to effectuate this motion.)

19                 TREASURER GOLDBERG: Thank you very much,  
20                 Tim.

21                 MR. SCHLITZER: Thank you.

22                 TREASURER GOLDBERG: Chris?

23                 MR. BROUSSEAU: I have just one question on  
24                 finance and administration -- doesn't have  
25                 anything to do with voting. And the admin  
                   committee did not meet because there was no  
                   business to handle.

26                 On the June -- the PRIM budget, could

1       David just comment on the fees in the real estate  
2       and timber portfolio? We're looking at  
3       1688 percent and 154 percent overbudget in the  
4       fees.

5            MR. GURTZ: Sure. I'm happy to talk about  
6       that now.

7            They relate to performance fees. And we  
8       have one manager, AEW, in fact, on the real estate  
9       side, and Campbell Group on the timber side that  
10      have current performance fees. We don't budget  
11      for performances fees. They've had solid  
12      performance; hence the reason for the significant  
13      outperformance or overbudget.

14          MR. BROUSSEAU: The 1688 caught my eye very  
15      quickly.

16          MR. GURTZ: It jumps out at you. Yes.

17          MR. BROUSSEAU: Yes, it does. Okay.

18          MR. TROTSKY: But it means we're making  
19      money.

20          MR. BROUSSEAU: Wonderful.

21          MR. SCHLITZER: Want to see those go up.

22            (Mr. Hubbard rejoined the meeting.)

23          TREASURER GOLDBERG: Chris?

24          MR. SUPPLE: Thank you, Madam Chair, and  
25      members of the board. Good morning, just barely,

1 I guess.

2           I have a very brief report today. I  
3 don't think I have a need for an executive  
4 session.

5           On the legislative front, when this  
6 board last met in June and in its prior meeting as  
7 well, we discussed a number of provisions that  
8 were in play in the state budget process that  
9 could potentially have impacted PRIM.

10          That process concluded, as it typically  
11 does, in July. And none of the provisions that  
12 had appeared in the various proposals coming from  
13 the house and the senate was contained in the  
14 conference report that went to the governor's desk  
15 for signature. So none of those proposals that  
16 were in play have become law and appear to be not  
17 live issues, at least for now.

18          I might add that's not probably all by  
19 accident. There were many members of this board  
20 and our committees who made their views known in  
21 an effective way. I know there was a delegation  
22 that left the board meeting in June and went up to  
23 the State House to meet with various legislative  
24 leaders. So it appears as though those messages  
25 were impactful and had the intended effect.

1                   MR. BROUSSEAU: It was a very productive and  
2                   very effective meeting that we all had with the  
3                   senate president's staff as well as Representative  
4                   Dempsey's staff. It was a very good give-and-  
5                   take.

6                   MR. SUPPLE: Thank you.

7                   So that's all I have on the legislative  
8                   front.

9                   Just a reminder on the litigation front,  
10                  we have many items of litigation and in particular  
11                  foreign securities litigation that we're  
12                  constantly looking at with help from Sarah Kim and  
13                  lawyers at the Treasury staff as well as the AG's  
14                  office.

15                  I've mentioned many times that the  
16                  deadlines kind of seem to move around a little  
17                  bit. And we're always trying to make sure we take  
18                  as much time as we can to evaluate these but not  
19                  miss any deadlines, and we're always trying to  
20                  make sure which of the deadlines are firm and  
21                  which ones are not.

22                  It may be that later in the month or  
23                  into the fall, before this board meets again, we  
24                  will need to take an action in a case or two.  
25                  When that happens, what we do is we typically

1 inform the chairman of the admin and audit  
2 committee, the chairman of the board through her  
3 general counsel, the executive director and the  
4 attorney general's office. And then we go ahead  
5 and take the action and seek retroactive  
6 ratification the next time the admin and audit  
7 committee and board meet.

8 So I can go into further detail, if  
9 anyone would like. I'd probably want to go into  
10 executive session to do that, but I would just  
11 like you to know that these are cases that we've  
12 discussed in the past. And depending on how the  
13 deadlines play out, we will be keeping an eye on  
14 them.

15 TREASURER GOLDBERG: Does anyone feel the  
16 need to go into executive session?

17 MR. BROUSSEAU: I'd like to congratulate  
18 Chris on his recognition.

19 MR. SUPPLE: Thank you.

20 That's all I have.

21 TREASURER GOLDBERG: Excellent.

22 MR. BROUSSEAU: Motion to adjourn.

23 TREASURER GOLDBERG: I'm sure I could think  
24 of something else for us to talk about.

25 MR. BROUSSEAU: I missed the train by

1       10 minutes. Keep us here for another hour. I  
2       thought we were going to be out of here at 11.

3           TREASURER GOLDBERG: Before we do, Paul, do  
4       you have anything to add --

5           MR. SHANLEY: I'm good.

6           TREASURER GOLDBERG: -- in terms of client  
7       services at all?

8           MR. MacDONALD: That's this Paul over here.

9           TREASURER GOLDBERG: Of course, Paul Todisco.

10          MR. TODISCO: No, I don't. Thank you.

11          TREASURER GOLDBERG: Nothing?

12          MR. TODISCO: Nothing.

13          TREASURER GOLDBERG: Nothing. Okay.

14          MR. SHANLEY: Me neither.

15          TREASURER GOLDBERG: Well, we have been  
16       sitting here for a while.

17           All right then. Then I'd like to  
18       entertain a motion to adjourn.

19          MR. BROUSSEAU: So moved.

20          MR. SHANLEY: Second.

21          TREASURER GOLDBERG: All those in favor?

22          THE BOARD: Aye.

23          TREASURER GOLDBERG: Good meeting. Thank  
24       you, everybody.

25

1                             (VOTED: That the PRIM Board approve the  
2                             adjournment of the August 11, 2015 board  
3                             meeting at 11:59 a.m.)  
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PENSION RESERVES  
**INVESTMENT**  
MANAGEMENT BOARD

## Appendix B

Callan PRIT Fund Performance Report Color Charts

*PRIM Board Meeting  
Tuesday, October 13, 2015*

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# Callan

Commonwealth of Massachusetts Pension  
Reserves Investment Management Board

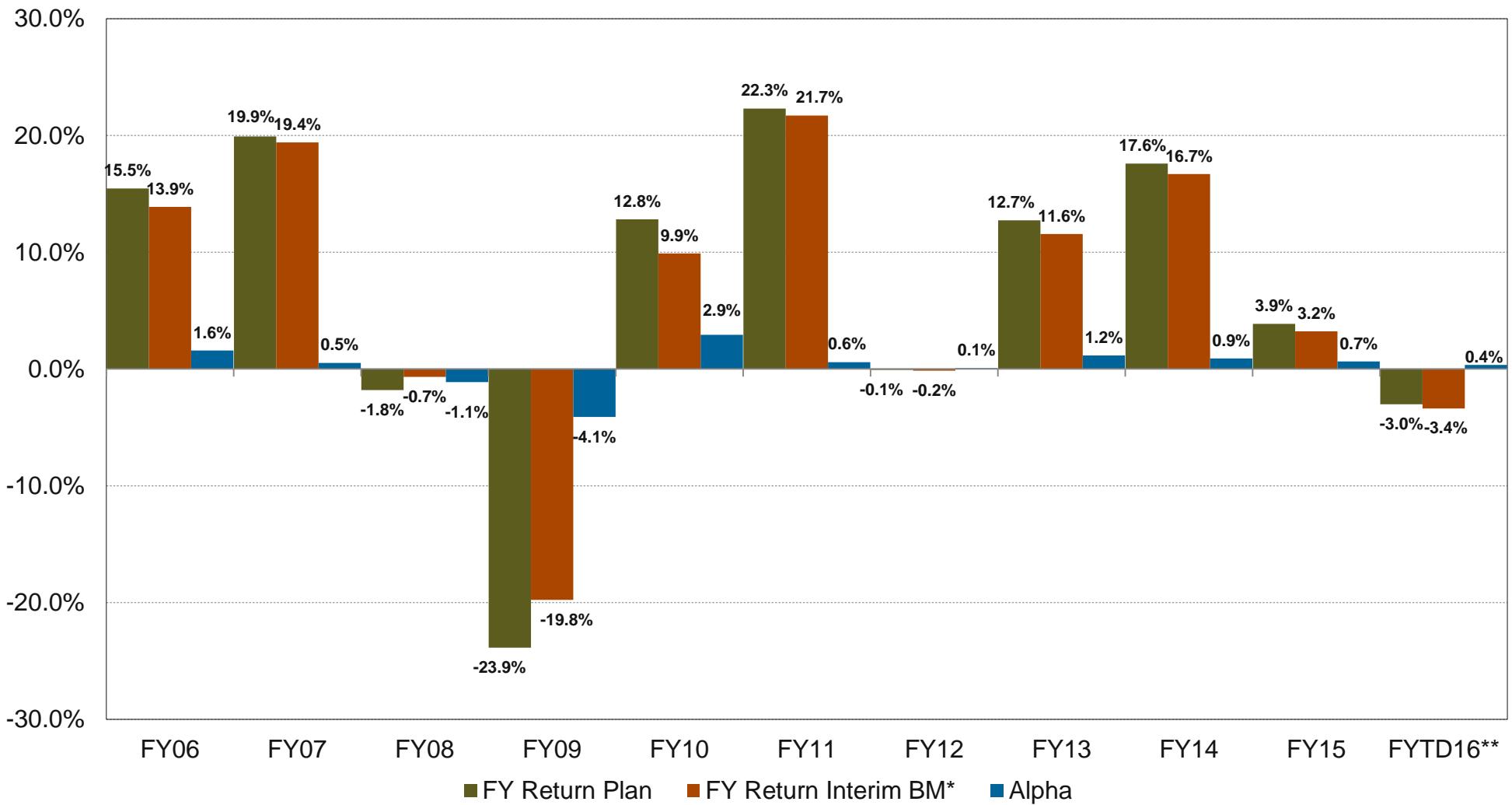


## PRIT Fund Performance Report

Gross of Fees for Period ending  
August 31, 2015

# Total PRIT Fund Fiscal Year Performance

## Gross of Fees

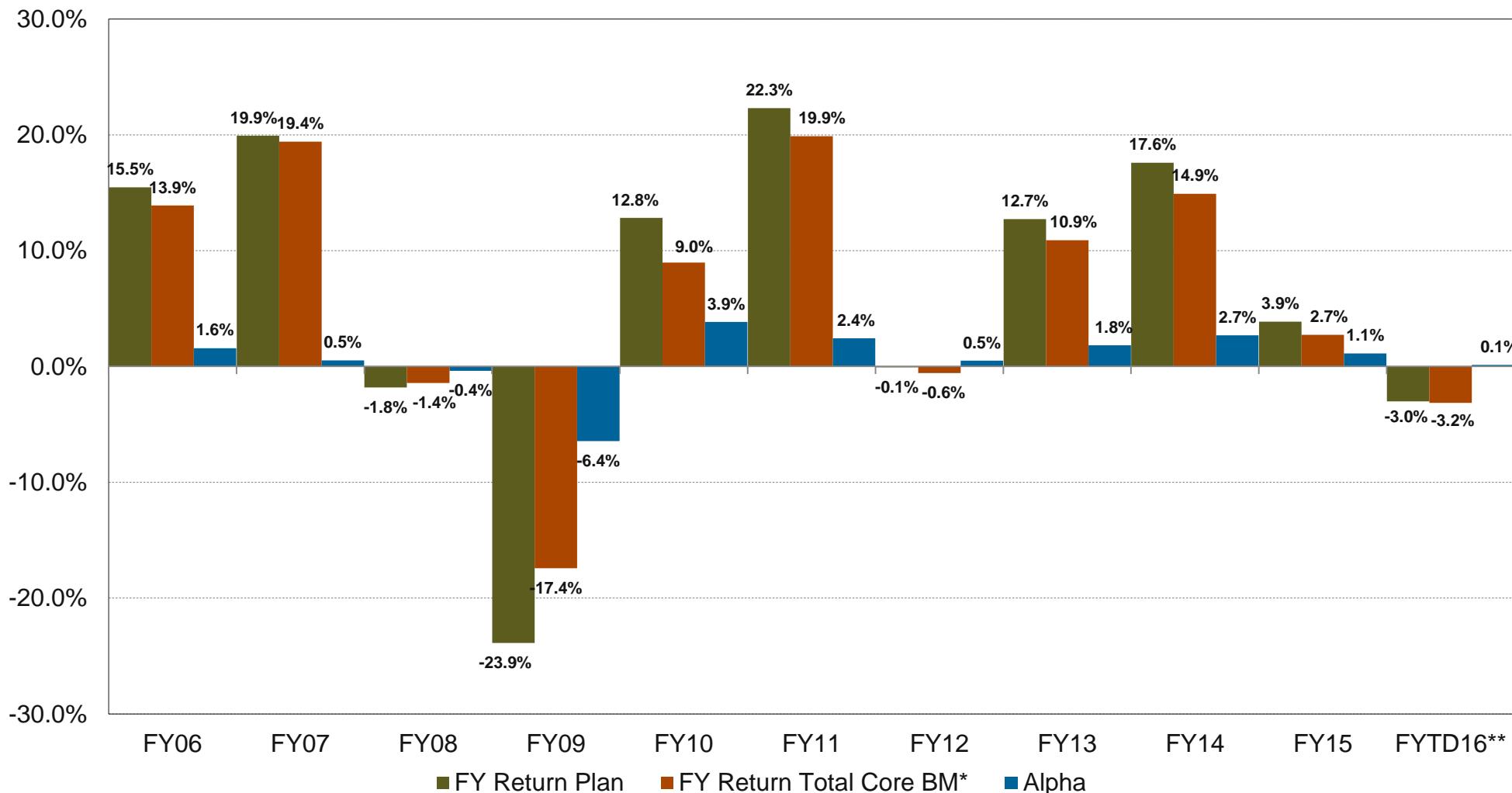


\*Excludes Private Equity Benchmark

\*\*As of August 31, 2015

# Total PRIT Fund Fiscal Year Performance

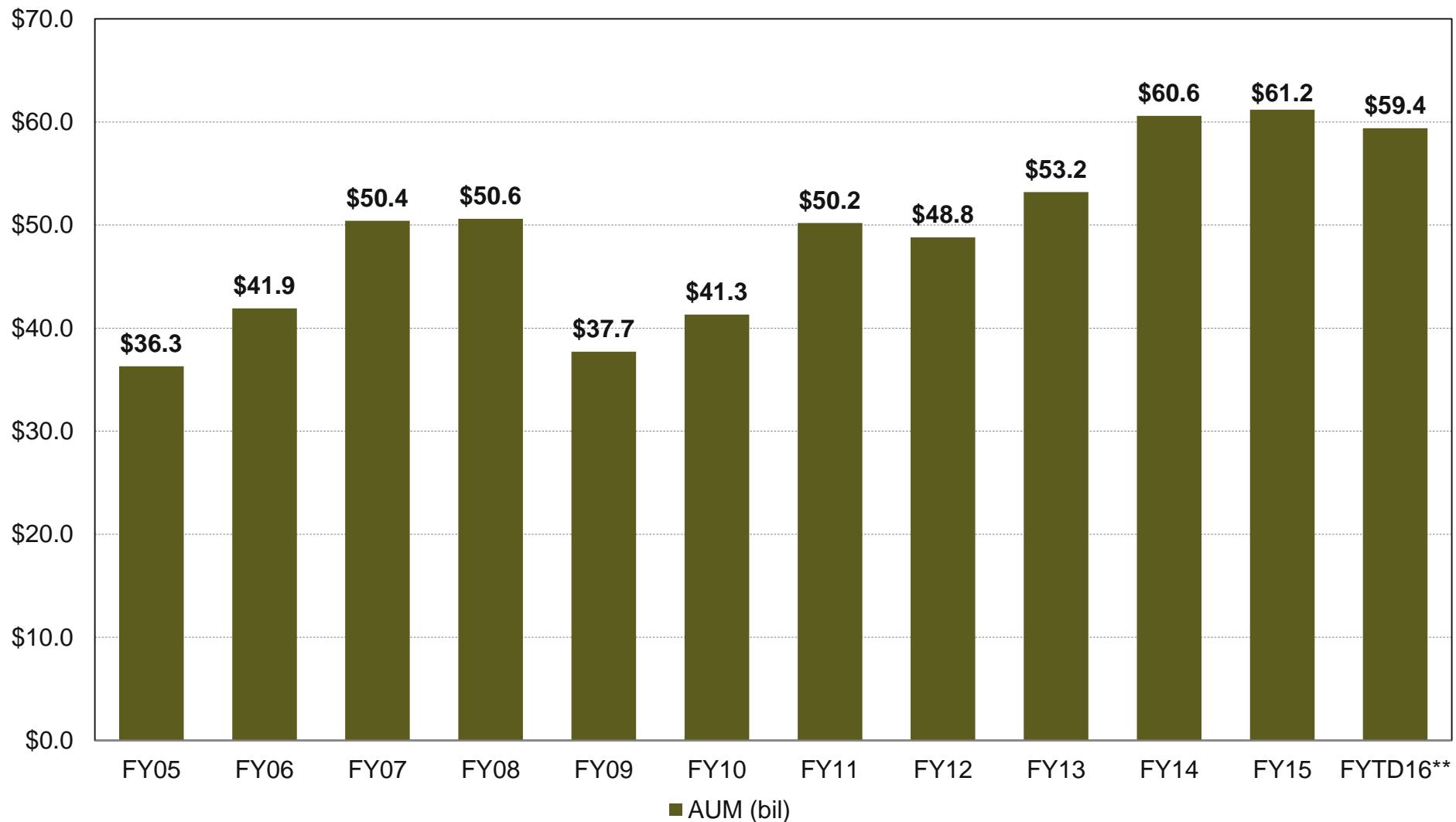
## Gross of Fees



\*Includes Private Equity Benchmark

\*\*As of August 31, 2015

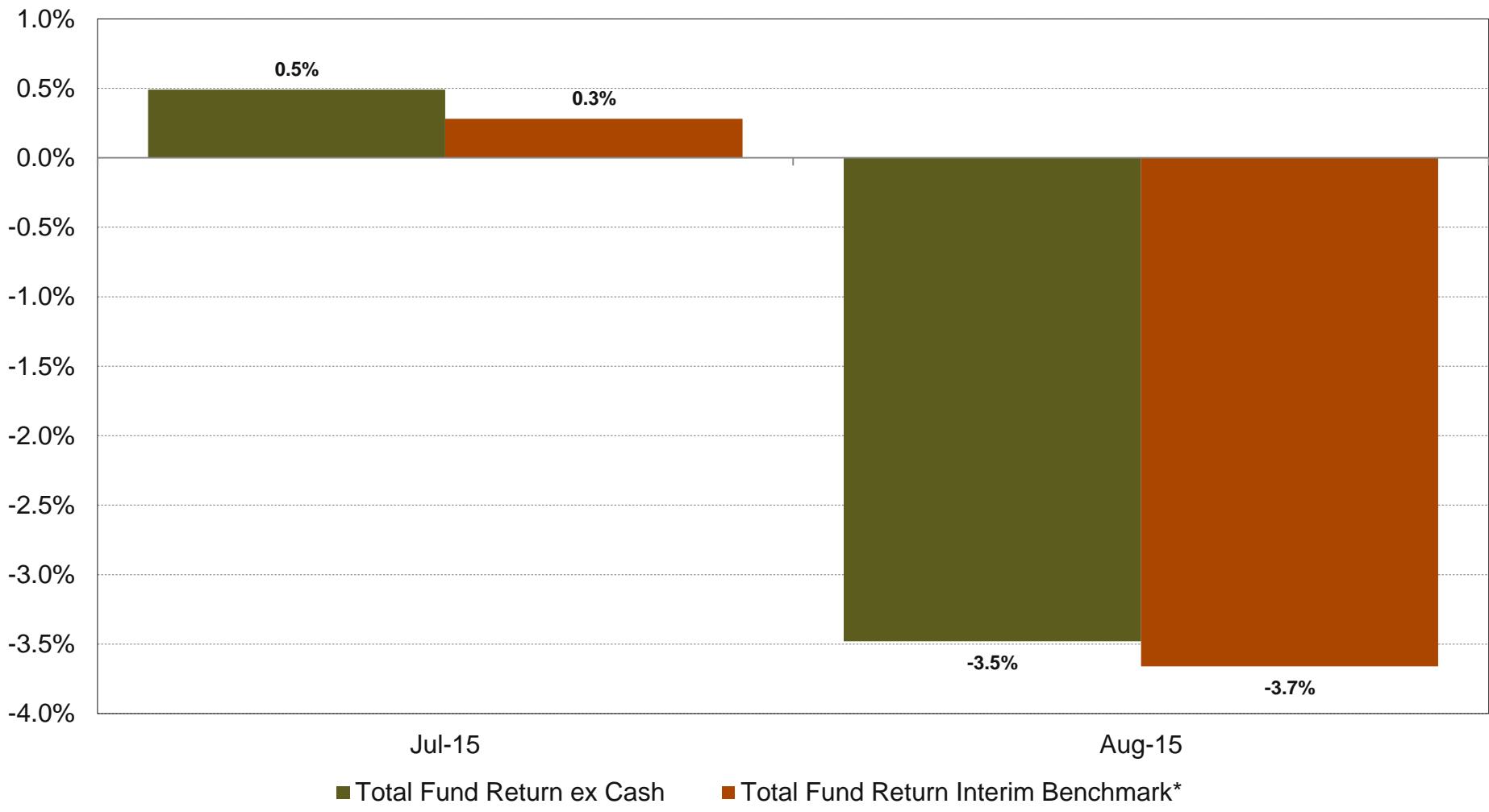
# Total PRIT Fund Fiscal Year Market Value (\$Billions)



*\*\*As of August 31, 2015*

# Total PRIT Fund Monthly Performance FYTD15

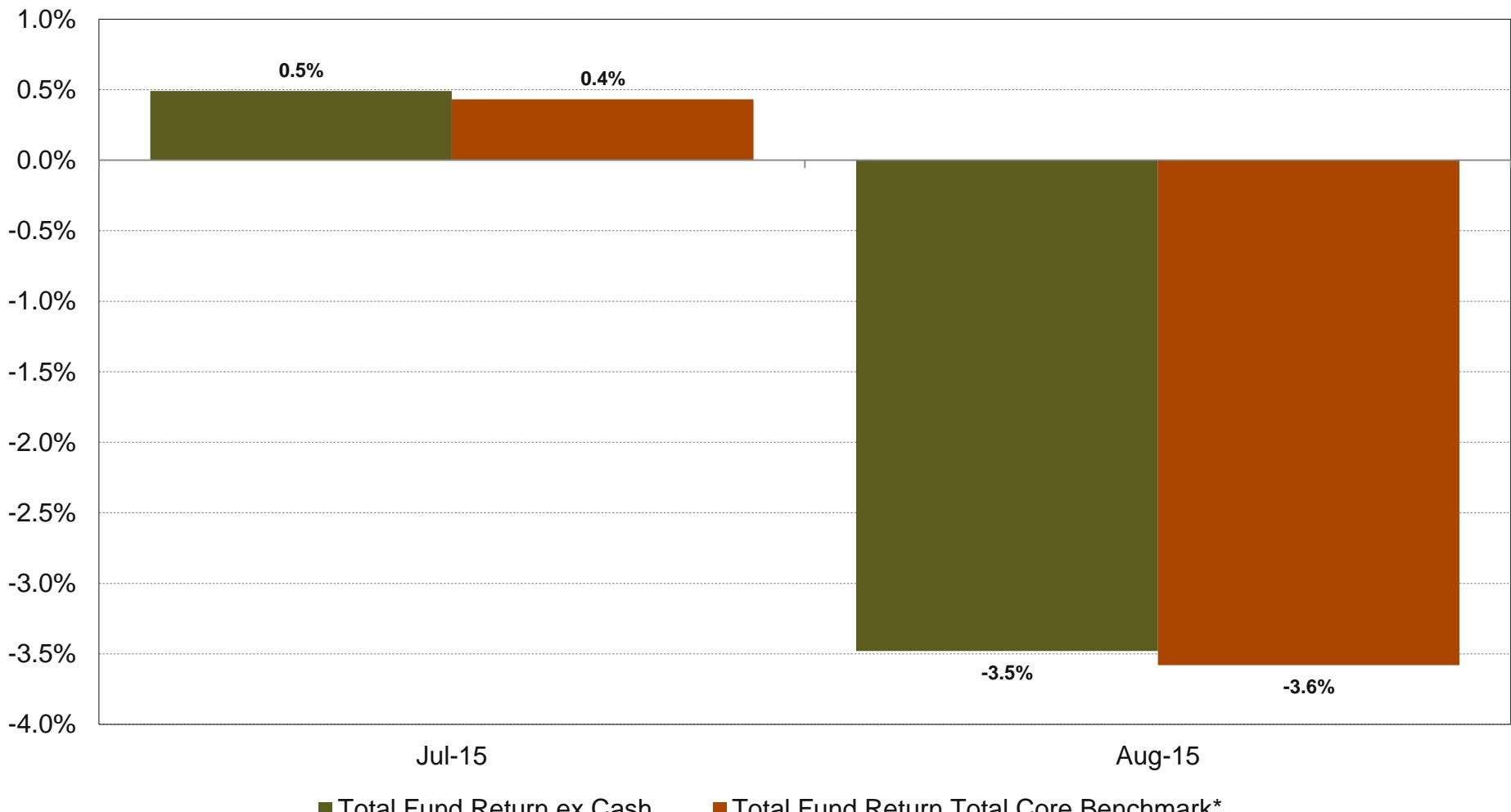
## Gross of Fees



\*Excludes Private Equity Benchmark

# Total PRIT Fund Monthly Performance FYTD15

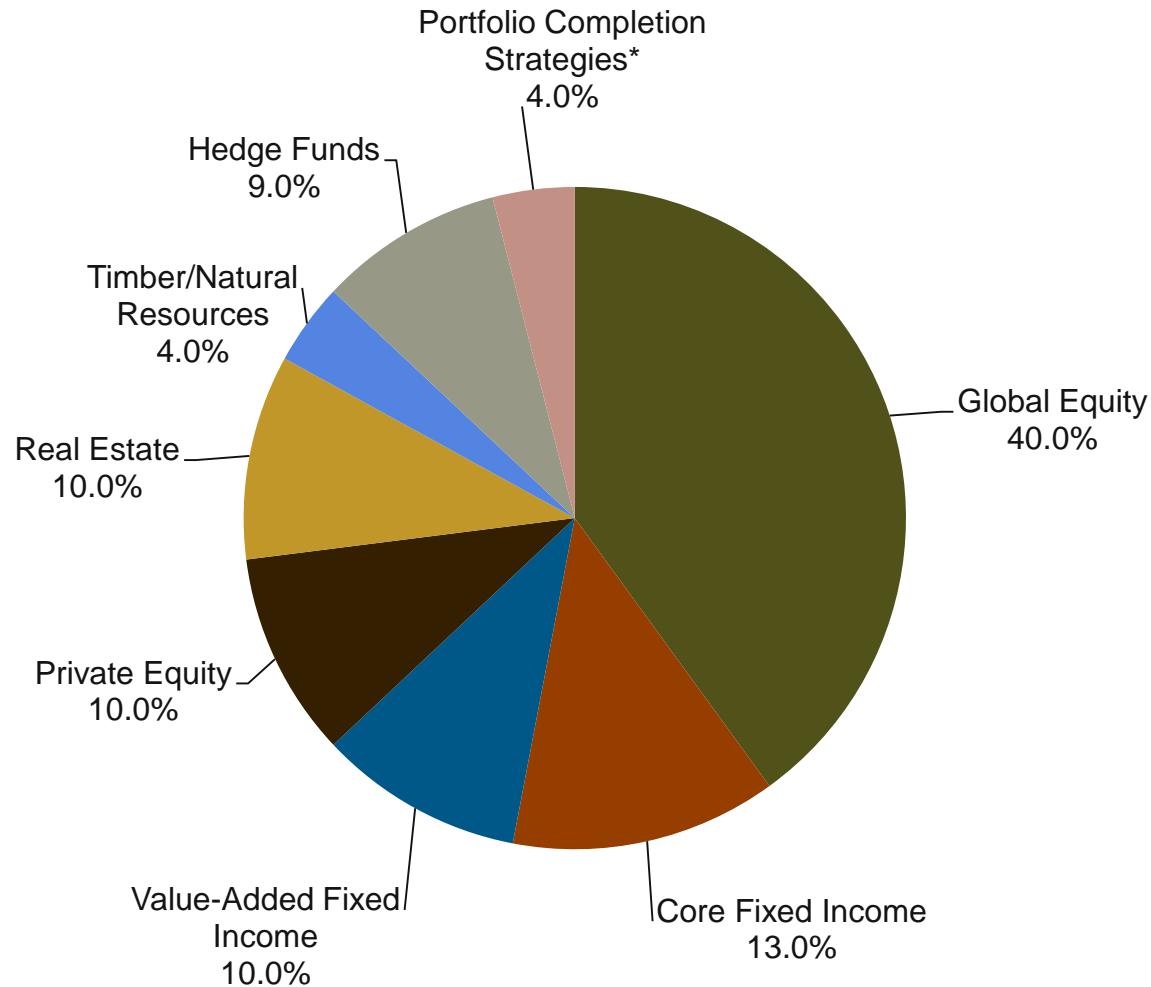
## Gross of Fees



\*Includes Private Equity Benchmark

# PRIT Fund Asset Allocation

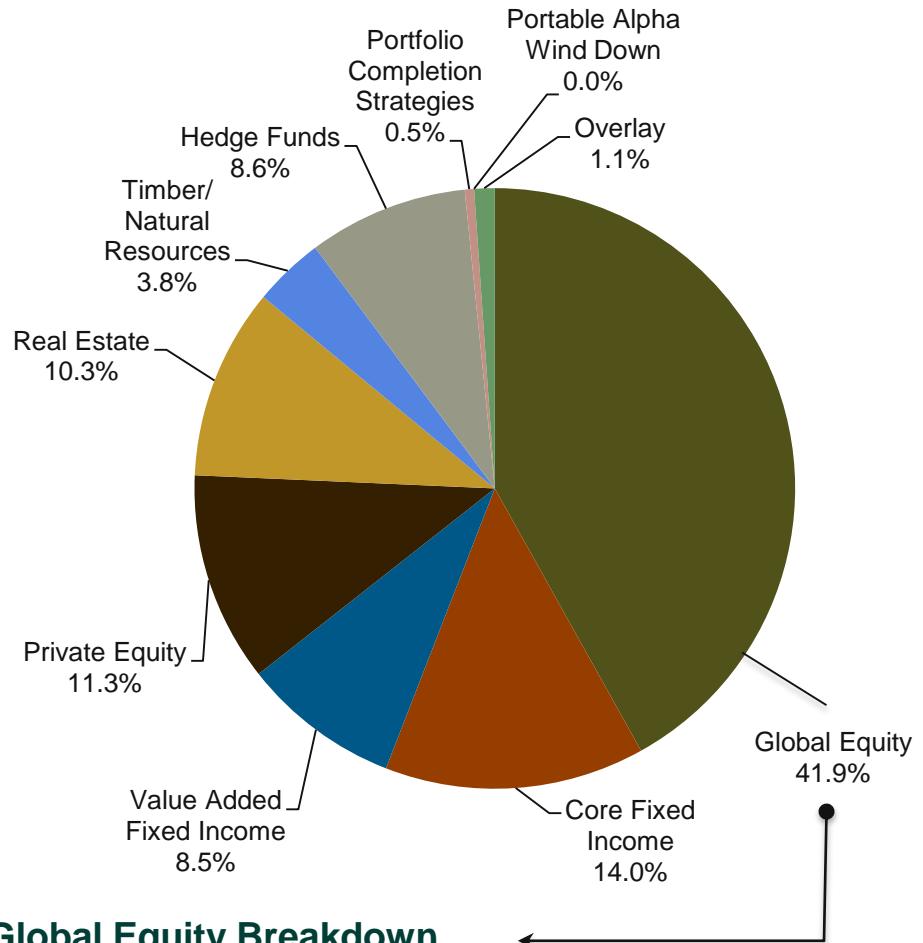
## Long-Term Asset Allocation Targets



\*Portfolio Completion Strategies (PCS) to be funded from Global Equities and Hedge Funds as new PCS investment strategies are recommended by PRIM Staff and approved by the Board.

# PRIT Fund Asset Allocation

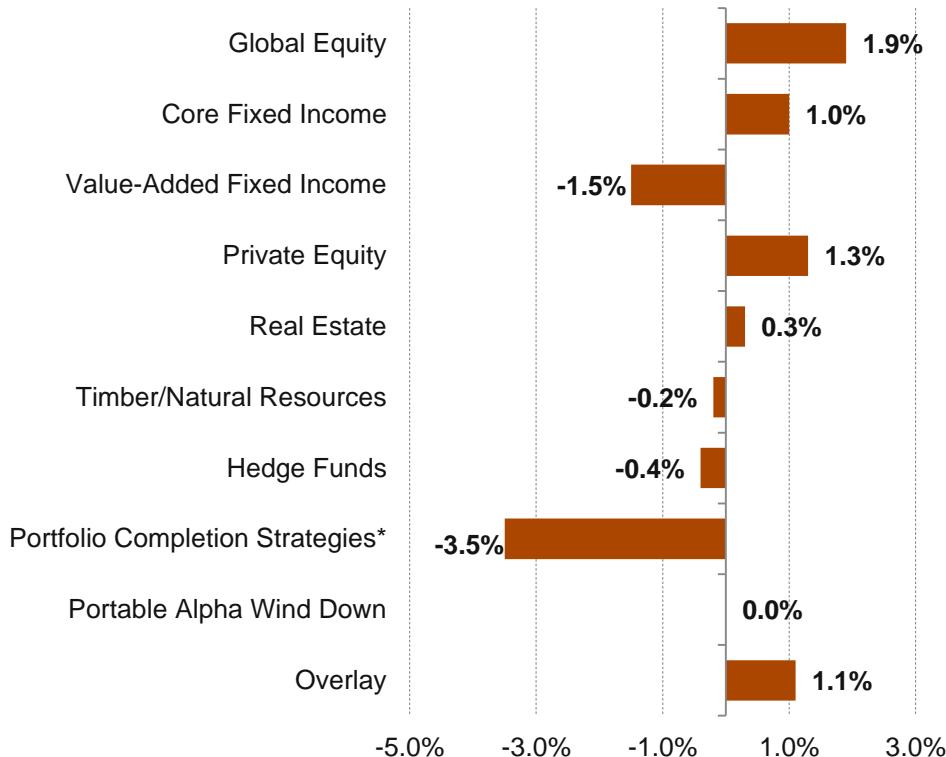
Actual Allocation as of August 31, 2015



## Global Equity Breakdown

Domestic Equity	18.8%
International Equity	16.6%
Emerging Markets Equity	6.5%

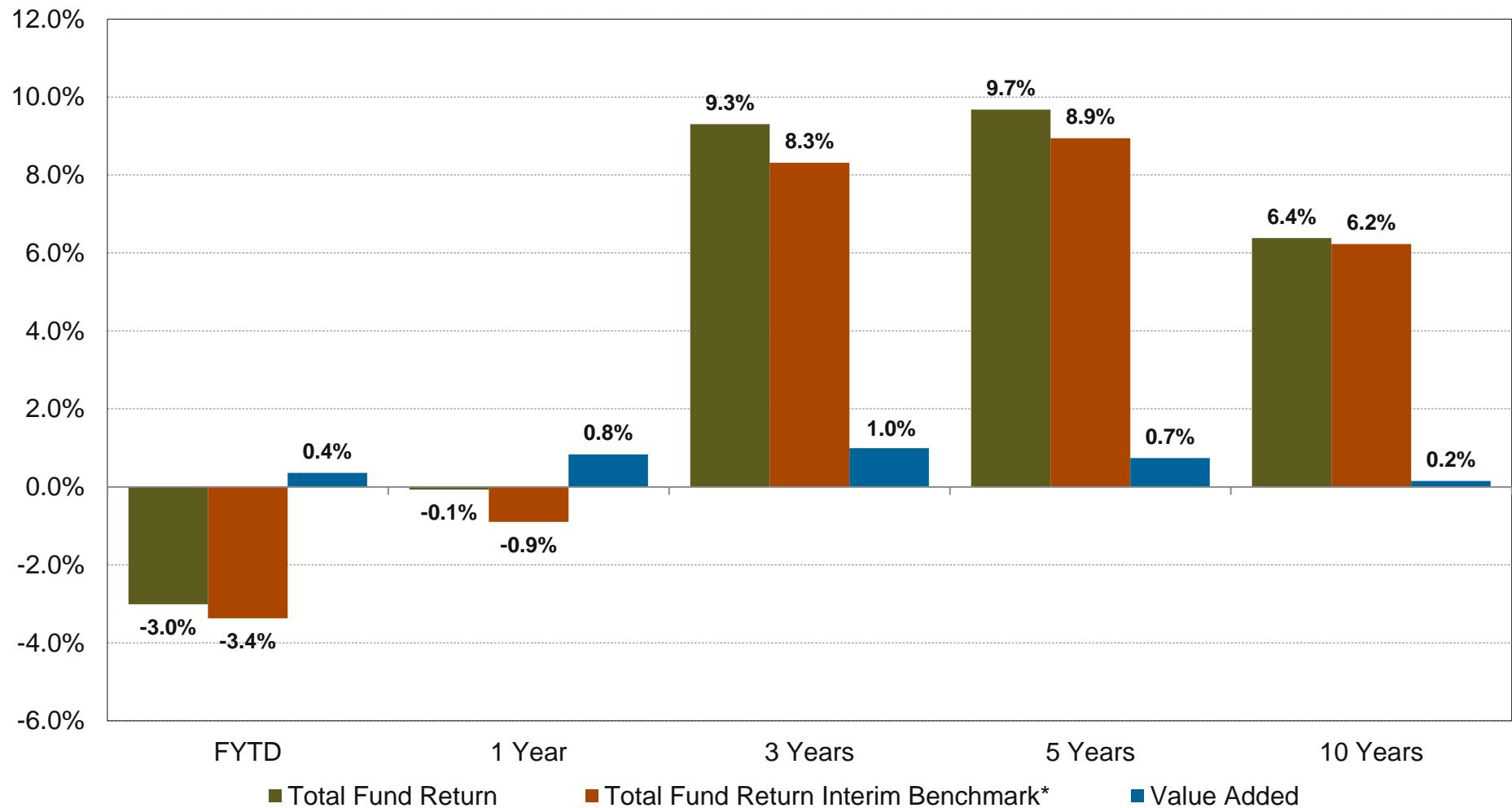
## Actual Allocation vs. Target Allocation



\*Portfolio Completion Strategies (PCS) to be funded from Global Equities and Hedge Funds as new PCS investment strategies are recommended by PRIM Staff and approved by the Board.

# Total PRIT Fund Performance (\$59.4 Billion in Assets)

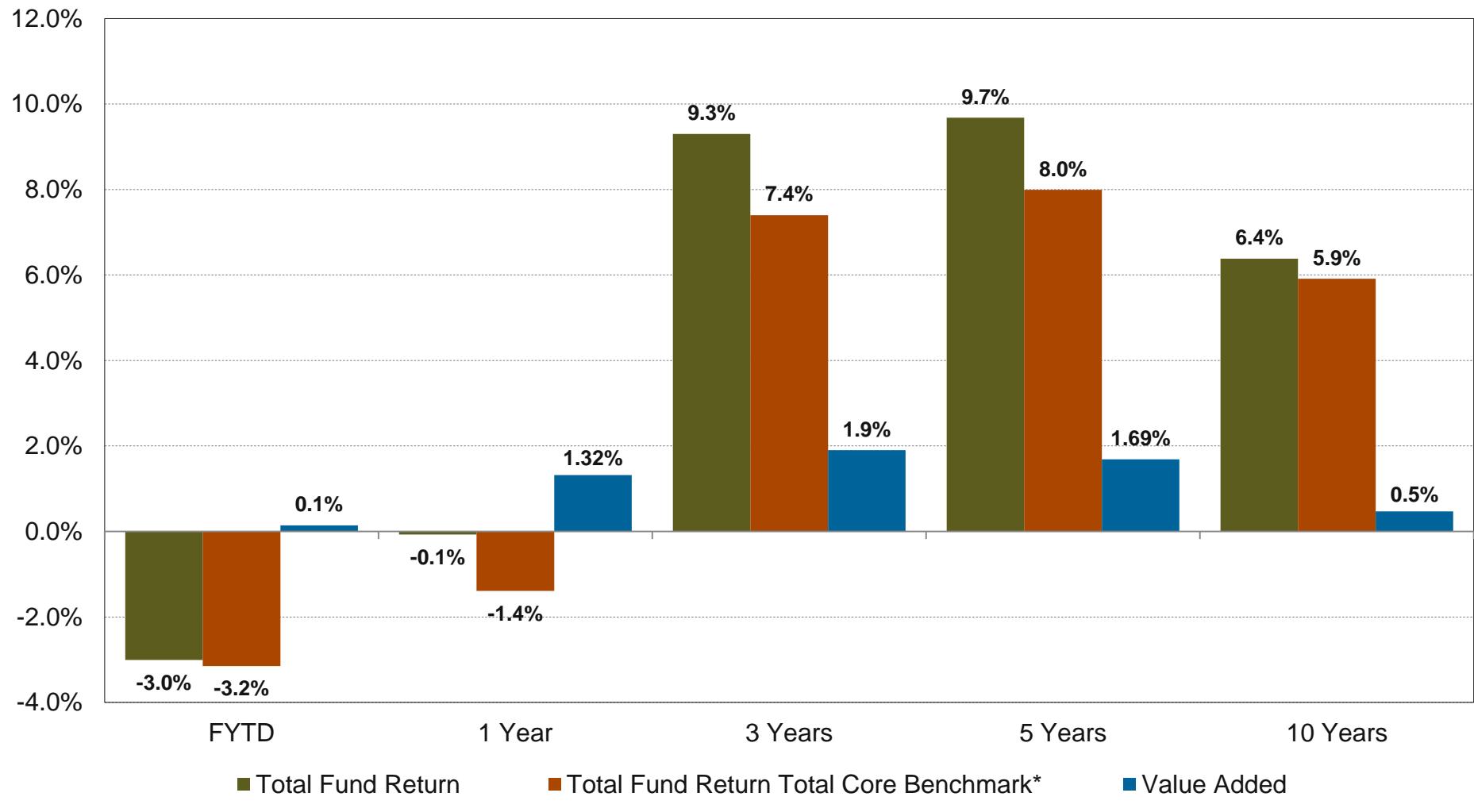
Gross of Fees as of August 31, 2015



\*Excludes Private Equity Benchmark

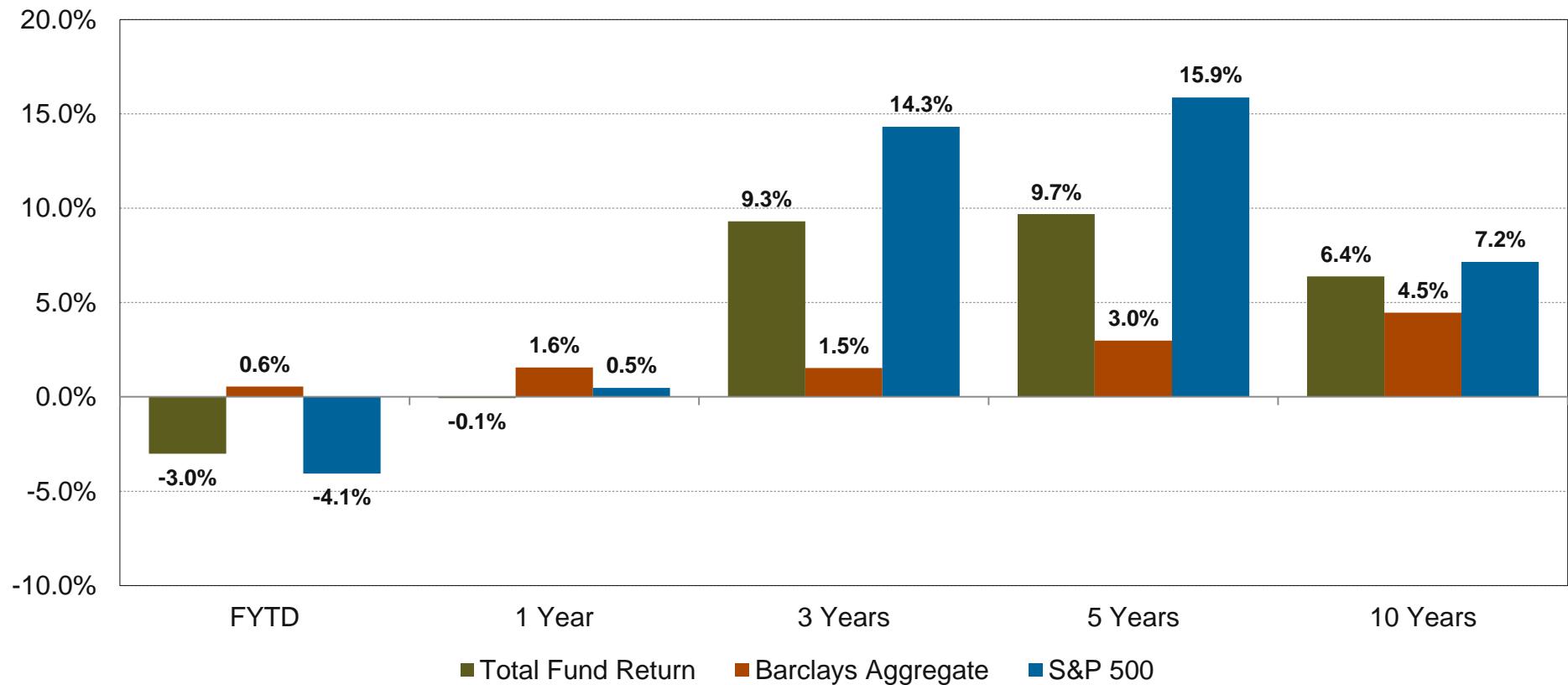
# Total PRIT Fund Performance (\$59.4 Billion in Assets)

Gross of Fees as of August 31, 2015



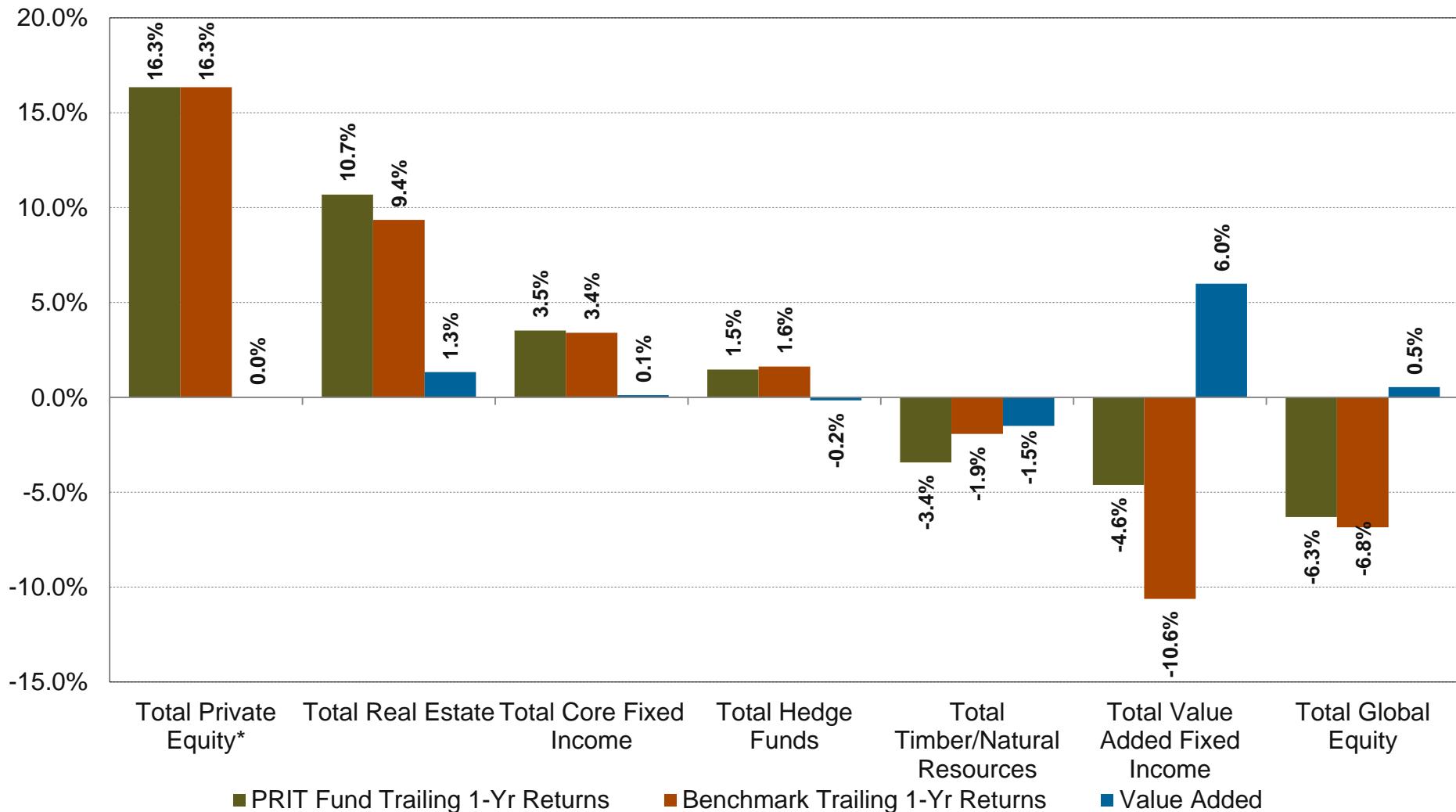
# Total PRIT Fund Performance

Gross of Fees compared to Bonds and Stocks as of August 31, 2015



# PRIT Asset Class Gross Performance – Trailing 1-Year

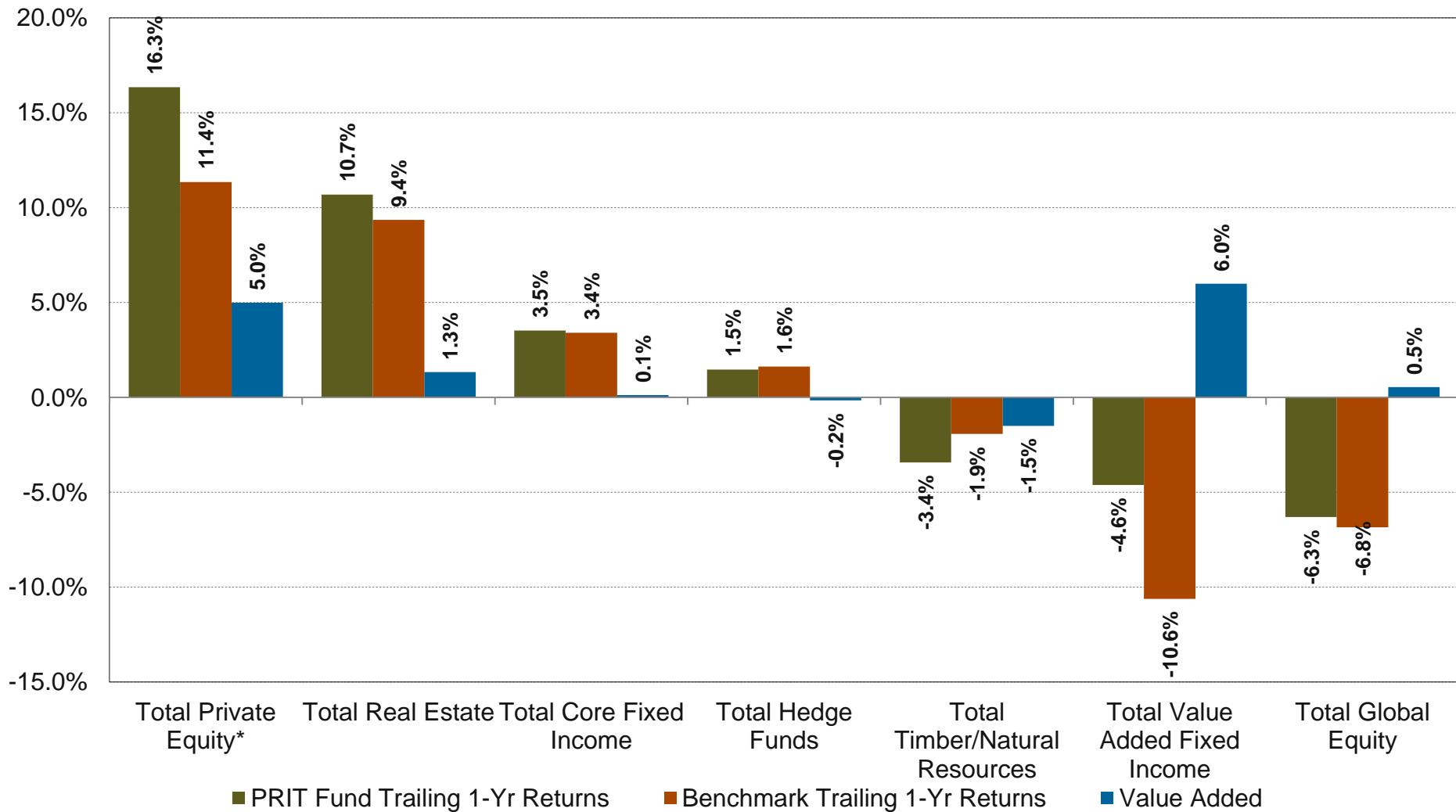
as of August 31, 2015



\*Benchmark is actual performance

# PRIT Asset Class Gross Performance – Trailing 1-Year

as of August 31, 2015



\*Benchmark is 7yr Annualized Russell 3000 +3%

# Total PRIT Fund Performance Attribution

Gross of Fees as of August 31, 2015

## August Attribution

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Core Fixed Income	14%	13%	(0.29%)	(0.23%)	(0.01%)	0.02%	0.01%
Value Added Fixed Inc	8%	10%	(1.76%)	(3.52%)	0.15%	(0.00%)	0.14%
Real Estate	10%	10%	(0.88%)	(1.18%)	0.03%	0.00%	0.03%
Timber/Natural Resources	4%	4%	(0.74%)	(0.82%)	0.00%	(0.01%)	(0.01%)
Private Equity	11%	10%	0.18%	0.94%	(0.08%)	0.03%	(0.05%)
Overlay	1%	0%	(2.85%)	(2.85%)	0.00%	0.01%	0.01%
Portable Alpha	0%	0%	(0.99%)	(0.99%)	0.00%	0.00%	0.00%
Portfolio Completion Stra	0%	0%	(1.56%)	0.26%	(0.01%)	(0.01%)	(0.01%)
Global Equity	43%	43%	(6.72%)	(6.92%)	0.08%	(0.02%)	0.06%
Hedge Funds	8%	10%	(2.53%)	(1.99%)	(0.05%)	(0.03%)	(0.08%)
<b>Total</b>			<b>(3.48%) = (3.58%) + 0.12% + (0.02%)</b>				<b>0.10%</b>

## Fiscal Year to Date Attribution

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Core Fixed Income	14%	13%	2.53%	2.63%	(0.01%)	0.03%	0.02%
Value Added Fixed Income	8%	10%	(2.31%)	(5.07%)	0.23%	0.04%	0.27%
Real Estate	10%	10%	0.08%	(0.50%)	0.06%	0.00%	0.06%
Timber/Natural Resources	4%	4%	(2.57%)	(2.22%)	(0.01%)	(0.01%)	(0.02%)
Private Equity	11%	10%	(0.30%)	1.97%	(0.25%)	0.04%	(0.21%)
Overlay	1%	0%	(2.38%)	(2.38%)	0.00%	0.01%	0.01%
Portable Alpha	0%	0%	(1.95%)	(1.95%)	0.00%	0.00%	0.00%
Portfolio Completion Stra	0%	0%	1.81%	0.52%	(0.00%)	(0.01%)	(0.01%)
Global Equity	43%	43%	(6.46%)	(6.71%)	0.11%	(0.02%)	0.09%
Hedge Funds	9%	10%	(2.08%)	(1.78%)	(0.02%)	(0.03%)	(0.05%)
<b>Total</b>			<b>(3.01%) = (3.15%) + 0.10% + 0.05%</b>				<b>0.15%</b>

## One Year Attribution

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Core Fixed Income	15%	13%	3.53%	3.41%	0.02%	(0.03%)	(0.01%)
Value Added Fixed Income	8%	10%	(4.62%)	(10.61%)	0.54%	0.16%	0.69%
Real Estate	9%	10%	10.69%	9.36%	0.12%	(0.07%)	0.05%
Timber/Natural Resources	4%	4%	(3.42%)	(1.92%)	(0.06%)	(0.01%)	(0.07%)
Private Equity	11%	10%	16.34%	11.35%	0.48%	0.08%	0.56%
Overlay	1%	0%	(1.59%)	(1.59%)	0.00%	(0.00%)	(0.00%)
Portable Alpha	0%	0%	(6.15%)	(6.15%)	0.00%	(0.00%)	(0.00%)
Portfolio Completion Stra	0%	0%	(3.37%)	2.11%	(0.01%)	(0.01%)	(0.02%)
Global Equity	42%	43%	(6.30%)	(6.84%)	0.25%	(0.08%)	0.17%
Hedge Funds	9%	10%	1.47%	1.63%	(0.01%)	(0.04%)	(0.06%)
<b>Total</b>			<b>(0.07%) = (1.39%) + 1.33% + (0.02%)</b>				<b>1.31%</b>

# Total Global Equity Performance Attribution

Gross of Fees as of August 31, 2015

## August Attribution

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	35%	35%	(6.06%)	(6.03%)	(0.01%)	0.00%	(0.01%)
Small/SMID Equity	10%	9%	(5.80%)	(5.91%)	0.01%	0.00%	0.01%
International Equity	40%	40%	(6.74%)	(7.11%)	0.15%	0.00%	0.15%
Emerging Equity	16%	16%	(8.71%)	(8.95%)	0.04%	0.01%	0.04%
<b>Total</b>			<b>(6.72%) = (6.92%) + 0.19% + 0.01%</b>				<b>0.20%</b>

## Fiscal Year to Date Attribution

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	35%	35%	(4.10%)	(4.06%)	(0.01%)	0.00%	(0.01%)
Small/SMID Equity	10%	9%	(6.37%)	(6.40%)	0.00%	(0.01%)	(0.00%)
International Equity	40%	40%	(5.38%)	(5.60%)	0.08%	(0.01%)	0.07%
Emerging Equity	16%	16%	(14.09%)	(15.26%)	0.19%	0.00%	0.20%
<b>Total</b>			<b>(6.46%) = (6.71%) + 0.26% + (0.01%)</b>				<b>0.25%</b>

## One Year Attribution

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	36%	35%	0.62%	0.48%	0.05%	0.01%	0.06%
Small/SMID Equity	10%	9%	(2.65%)	(0.51%)	(0.19%)	(0.02%)	(0.21%)
International Equity	39%	40%	(6.35%)	(8.26%)	0.74%	0.01%	0.75%
Emerging Equity	16%	16%	(21.88%)	(21.94%)	(0.00%)	(0.05%)	(0.05%)
<b>Total</b>			<b>(6.30%) = (6.84%) + 0.59% + (0.05%)</b>				<b>0.54%</b>



## Appendix

Gross of Fees Asset Class &  
Manager Specific Performance

# Major Contributors Gross Performance – Trailing 1-Year

as of August 31, 2015

	% of PRIT Fund	1-Year Relative Performance (BPS)	One Year	3 Years	5 Years	10 Years	Since Inception	Inception
<b>DISTRESSED DEBT</b>	2.3%	50.97	3.96	12.10	11.53	11.50	14.17	07/31/2001
Altman NYU Saloman Center Combined Defaulted Public Bond & Bank Loan Index			-18.08	1.18	2.83	6.07	10.21	
Value Added (bps)			2204	1091	870	544	396	
<b>MARATHON ASSET MANAGEMENT</b>	4.0%	26.74	-0.89	12.32	10.41	7.78	8.68	10/31/1996
Custom MSCI EAFE Standard Index Net Divs			-7.57	8.60	6.97	3.95	4.47	
Value Added (bps)			668	372	343	383	421	
<b>SSGA WORLD EX-US</b>	8.3%	5.81	-8.26	8.57	7.26	4.56	5.99	03/31/1992
Custom MSCI World Ex-US IMI Net Divs			-8.95	7.90	6.65	3.93	5.51	
Value Added (bps)			70	67	61	64	48	
<b>INTECH</b>	1.4%	4.86	3.84	15.56	16.81		7.66	01/31/2006
S&P 500			0.48	14.31	15.87	-	7.09	
Value Added (bps)			336	125	93	-	57	
<b>DIRECT HEDGE FUNDS</b>	6.9%	3.59	2.15	7.33			6.60	11/30/2011
HFRI Fund of Funds Composite Index			1.63	5.10	-	-	4.37	
Value Added (bps)			52	222	-	-	223	
<b>MONDRIAN INVESTMENT</b>	1.3%	2.62	-5.52	9.75	8.05		0.74	06/30/2008
Custom MSCI EAFE Standard Index Net Divs			-7.57	8.60	6.97	-	-0.11	
Value Added (bps)			205	115	108	-	85	
<b>CENTERSQUARE GLOBAL REIT</b>	1.2%	1.86	-2.65	7.60			8.01	05/31/2012
FTSE EPRA NAREIT Developed Net Total Return			-4.15	7.05	-	-	7.44	
Value Added (bps)			151	54	-	-	58	
<b>LOOMIS SAYLES CORE</b>	1.9%	1.75	2.48	3.03	4.44	5.30	7.48	05/31/1990
Barclays Capital Aggregate			1.56	1.53	2.98	4.46	6.50	
Value Added (bps)			92	150	146	84	98	
<b>ING</b>	0.8%	1.59	3.01	5.13	5.94		5.94	07/31/2008
S&P LSTA Leveraged Loan			0.98	3.85	4.94	-	5.38	
Value Added (bps)			203	128	101	-	56	
<b>T.ROWE PRICE NR</b>	0.3%	1.50	-28.96	-0.69	2.22		-5.30	07/31/2008
Lipper Natural Resources Global Fund Index			-34.11	-5.35	-1.72	-	-8.84	
Value Added (bps)			515	466	395	-	354	

\*The relative outperformance is calculated by multiplying the outperformance versus the benchmark times the allocation to the overall PRIT fund.

# Major Detractors Gross Performance – Trailing 1-Year

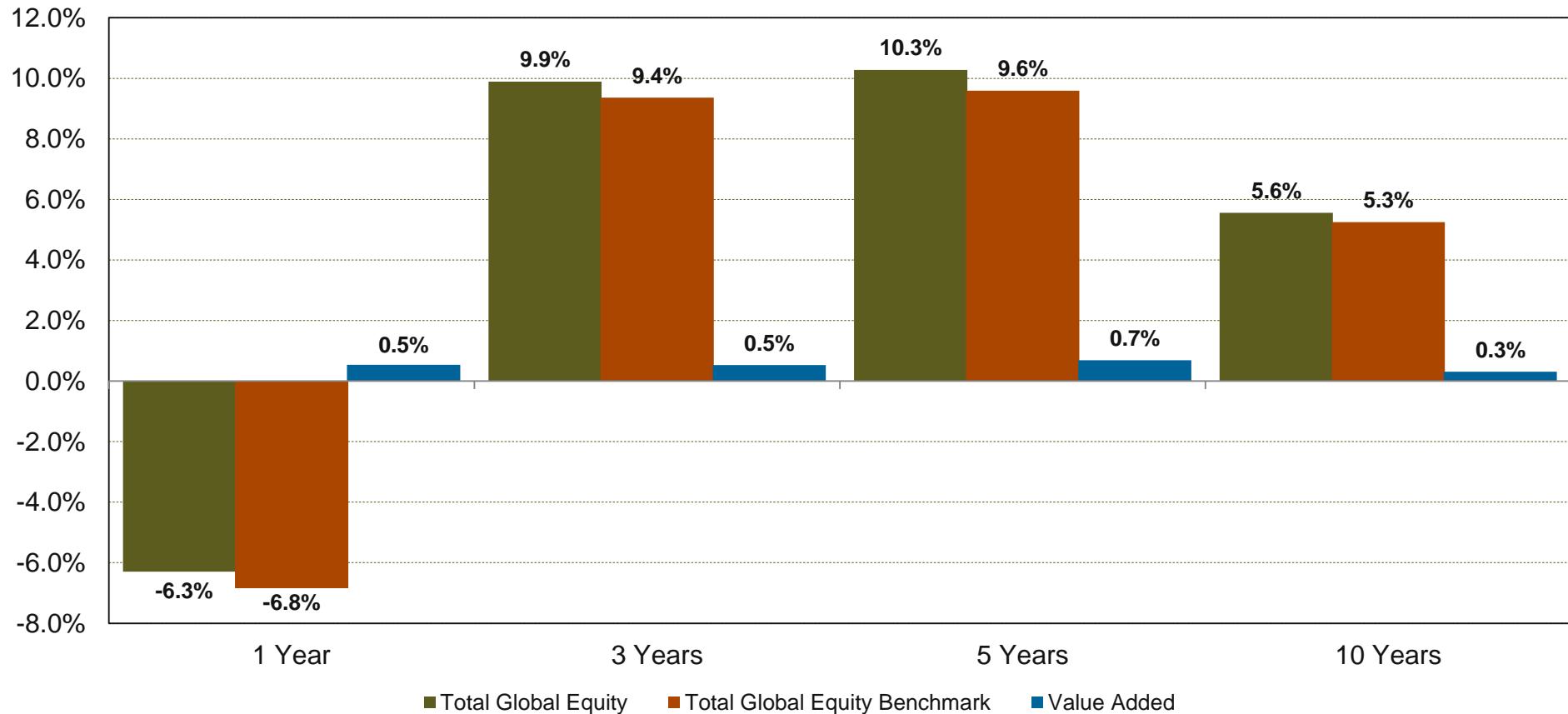
as of August 31, 2015

	% of PRIT Fund	1-Year Relative Performance (BPS)	One Year	3 Years	5 Years	10 Years	Since Inception	Inception
<b>HUBER</b>	0.4%	-5.16	-18.08				-0.76	05/31/2013
Russell 2000 Value			-4.95	-	-	-	7.01	
Value Added (bps)			-1313	-	-	-	-777	
<b>PAAMCO</b>	1.5%	-3.88	-0.89	7.81	5.61	5.02	5.00	08/31/2004
100% HFRI Fund of Funds Composite Index			1.63	5.10	3.64	4.78	4.93	
Value Added (bps)			-252	271	198	24	7	
<b>BAILLIE GIFFORD</b>	2.8%	-3.41	-8.78	8.28	8.43	6.02	7.51	08/31/2004
Custom MSCI EAFE Standard Index Net Divs			-7.57	8.60	6.97	3.95	5.59	
Value Added (bps)			-121	-32	146	207	191	
<b>SOUTHERNSUN</b>	0.2%	-2.97	-12.77				9.75	05/31/2013
Russell 2500			-0.32	-	-	-	10.92	
Value Added (bps)			-1246	-	-	-	-116	
<b>SSGA S&amp;P 500</b>	11.8%	-2.41	0.27	14.40			15.52	12/31/2011
S&P 500			0.48	14.31	-	-	15.43	
Value Added (bps)			-20	8	-	-	9	
<b>JENNISON</b>	0.3%	-1.88	-41.00	-7.98	-3.78		-7.03	07/31/2008
Lipper Natural Resources Global Fund Index			-34.11	-5.35	-1.72	-	-8.84	
Value Added (bps)			-689	-263	-206	-	181	
<b>ASHMORE</b>	0.8%	-1.63	-5.00	1.13	4.58		9.18	01/31/2004
JPM EMBI Global			-2.98	1.47	5.04	7.08	7.67	
Value Added (bps)			-202	-35	-45	-708	151	
<b>PIMCO EMD</b>	0.5%	-1.05	-5.06	0.76	4.42	6.80	7.56	02/29/2004
JPM EMBI Global			-2.98	1.47	5.04	7.08	7.68	
Value Added (bps)			-208	-71	-61	-29	-12	
<b>SUMMIT CREEK</b>	0.3%	-0.60	3.32				13.14	05/31/2013
Russell 2000 Growth			5.11	-	-	-	14.01	
Value Added (bps)			-180	-	-	-	-87	
<b>PIMCO DOMESTIC</b>	1.5%	-0.57	0.09	14.56	16.78		7.51	02/28/2006
S&P 500			0.48	14.31	15.87	-	6.86	
Value Added (bps)			-39	25	90	-	64	

\*The relative underperformance is calculated by multiplying the underperformance versus the benchmark times the allocation to the overall PRIT fund.

# PRIT Global Equity (\$24.9 Billion)

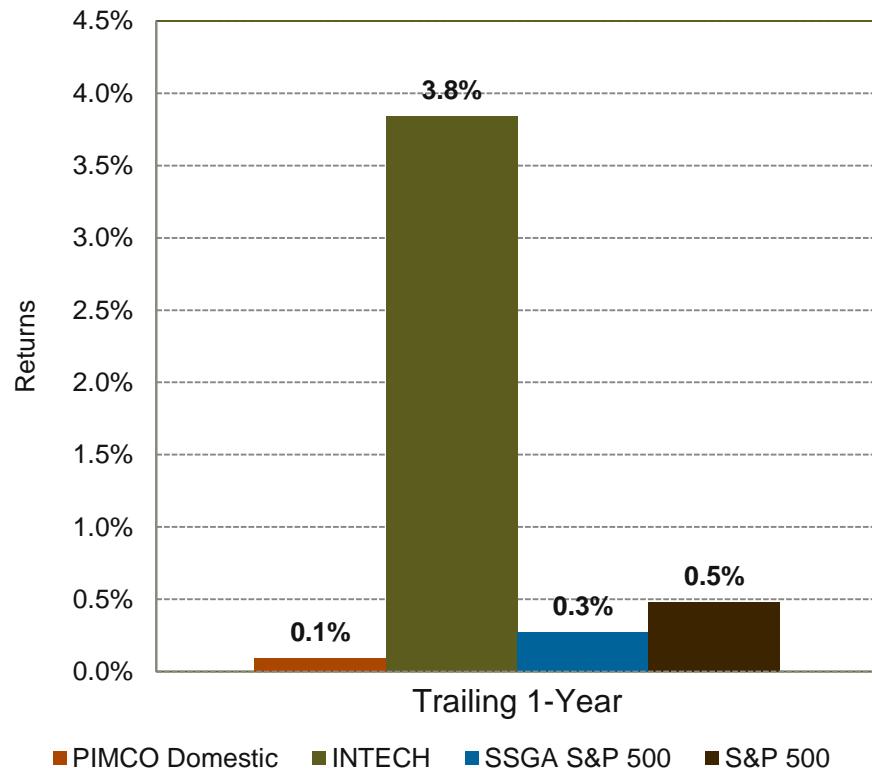
Gross of Fees Performance as of August 31, 2015



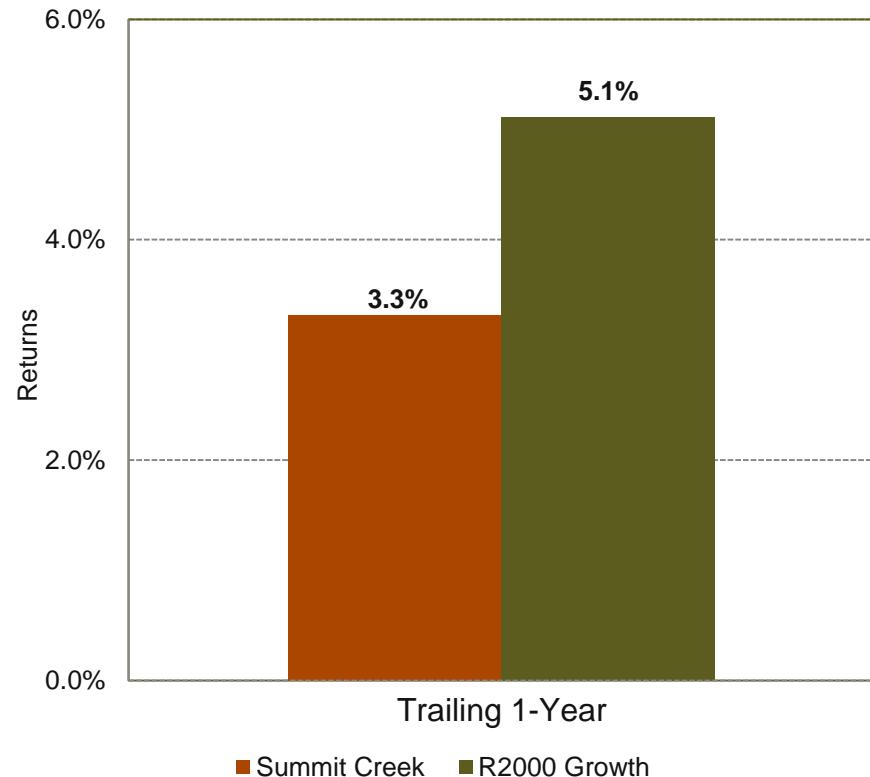
# Domestic Equity Managers

as of August 31, 2015

## Large Cap Managers vs. S&P 500



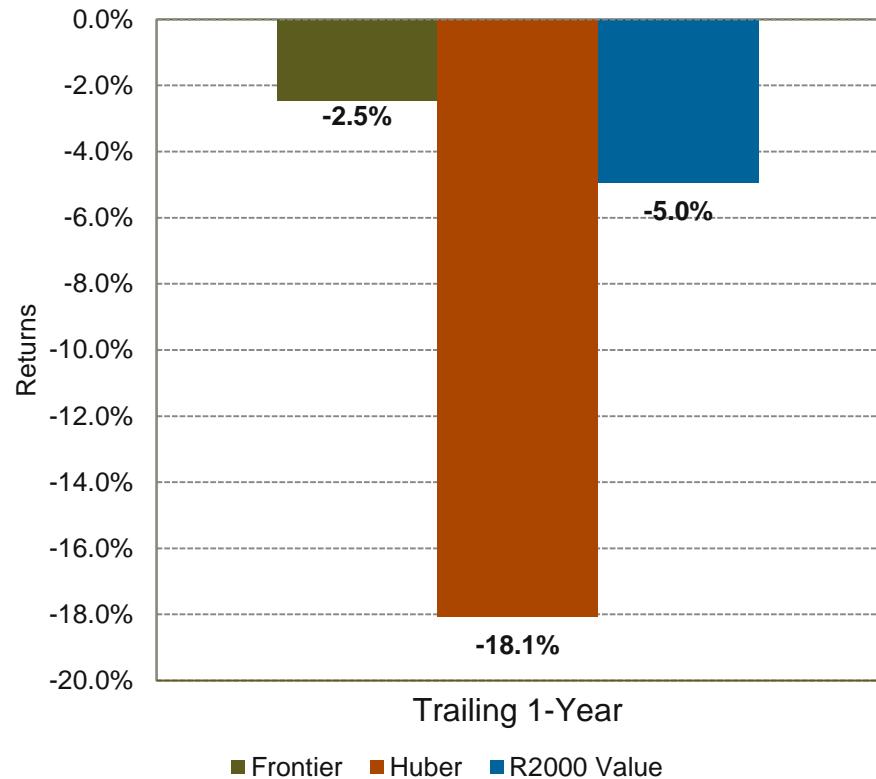
## Small Cap Growth Manager vs. R2000 Growth



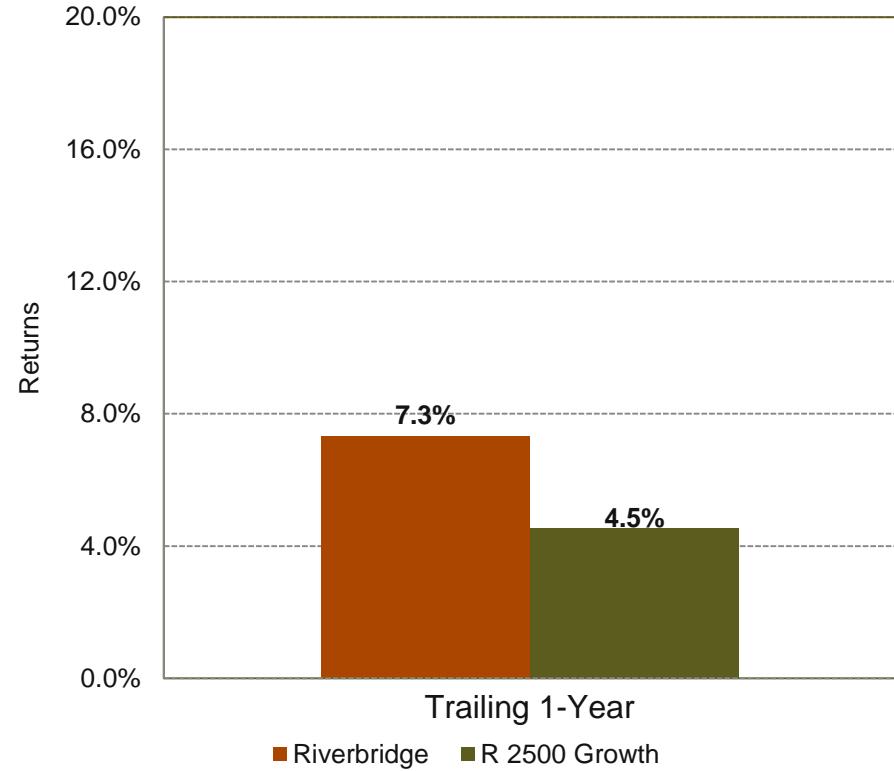
# Domestic Equity Managers

as of August 31, 2015

## Small Cap Value Managers vs. Russell 2000 Value



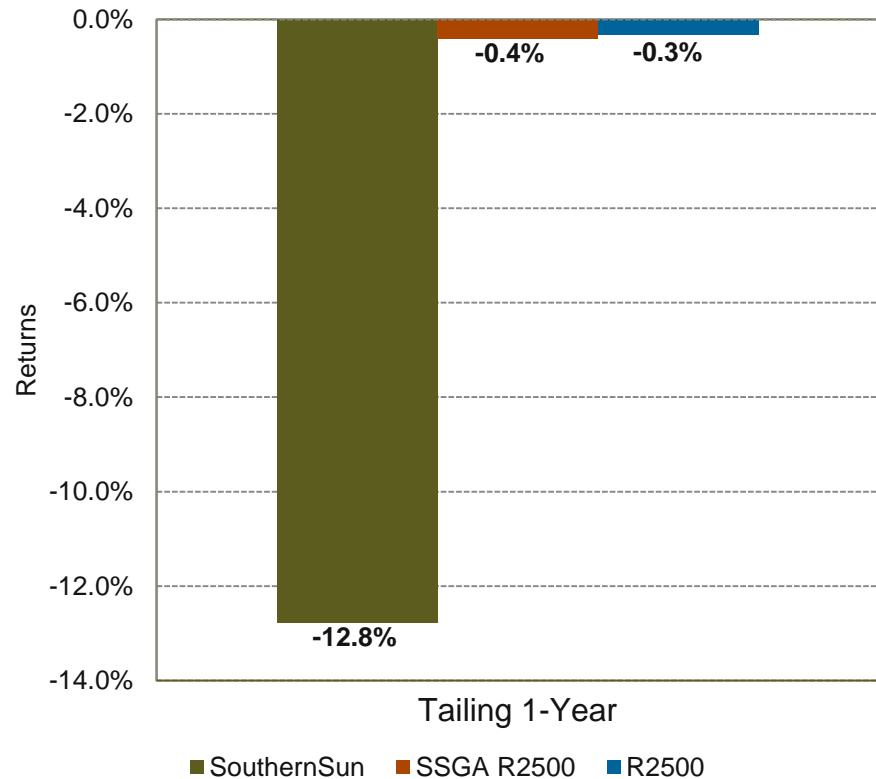
## Smid Cap Growth Manager vs. Russell 2500



# Domestic Equity Managers

as of August 31, 2015

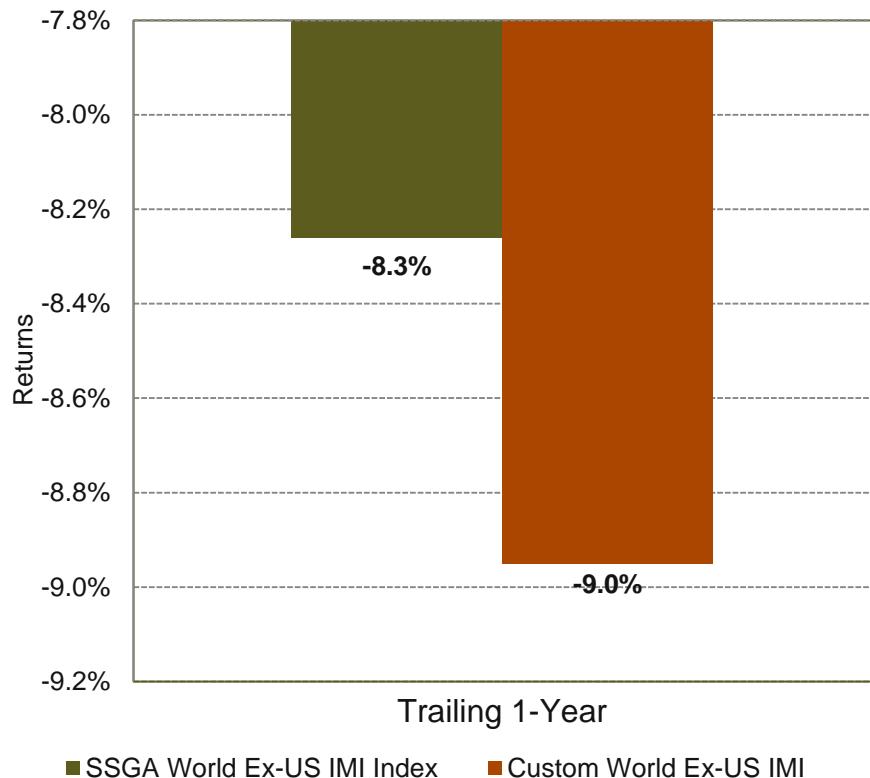
## Smid Cap Core Managers vs. Russell 2500



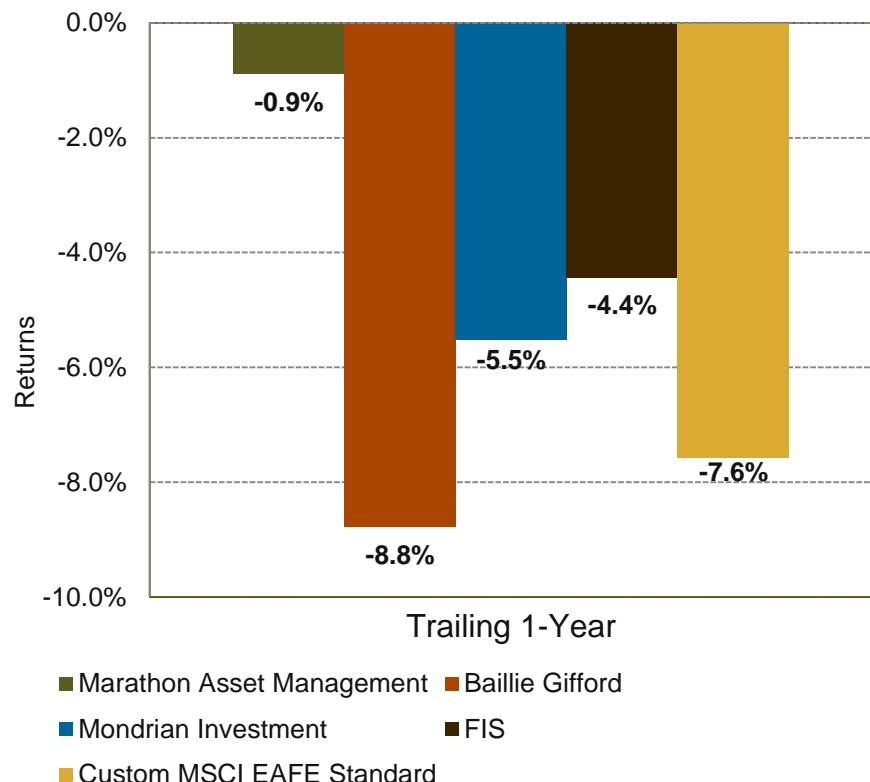
# PRIT International Equity Managers

as of August 31, 2015

## Versus World Ex-US IMI Index



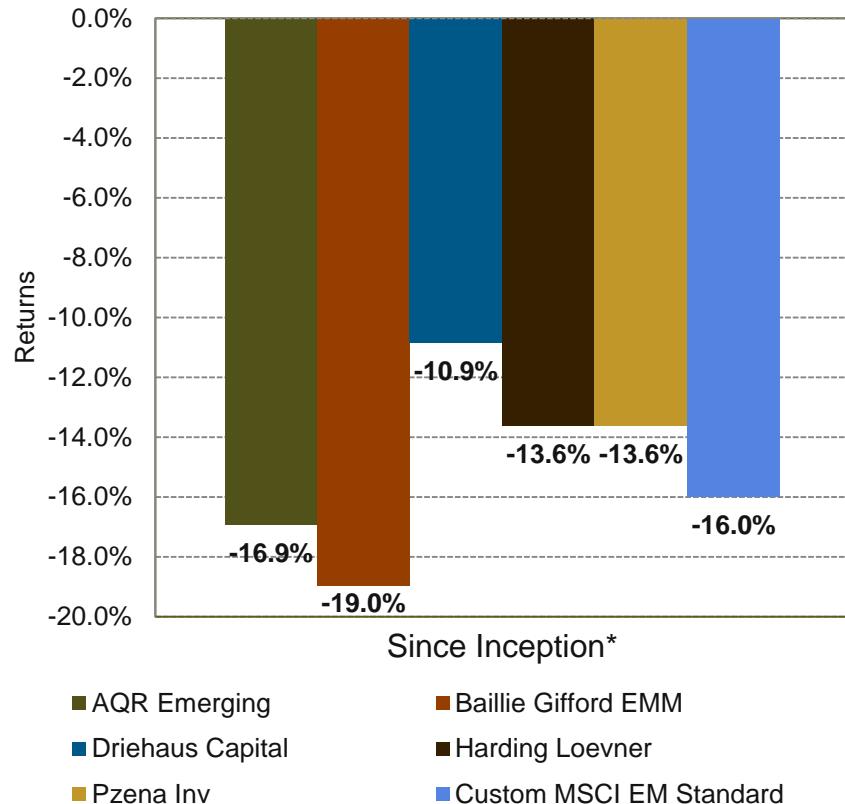
## Versus MSCI EAFE Standard Index



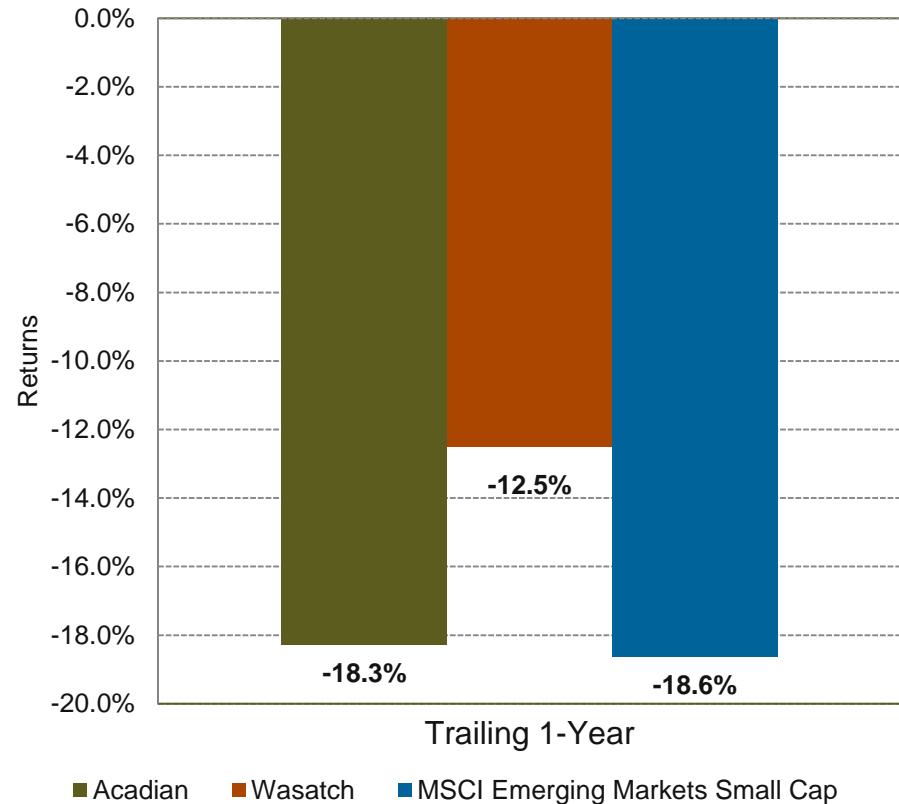
# PRIT Emerging Markets Equity Managers

as of August 31, 2015

## Versus MSCI Emerging Markets Standard Index



## Versus MSCI Emerging Markets Small Cap Index

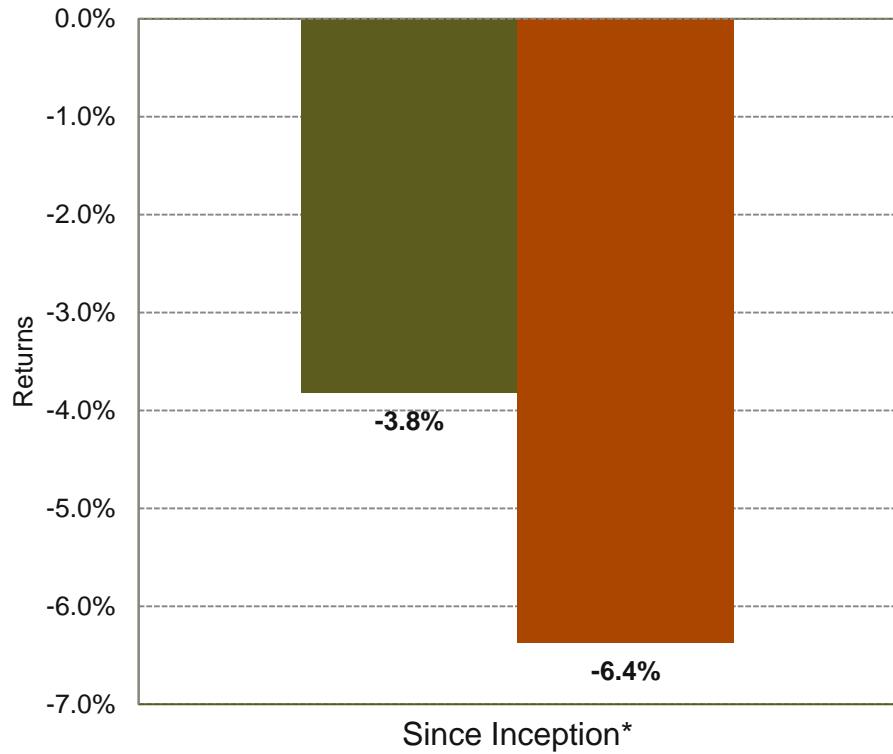


\* "Since Inception" figure used due to lack of trailing 1-year returns.  
Inception date of 3/31/2015 for AQR Emerging, Baillie Gifford EMM,  
Driehaus Capital, Harding Loevner and Pzena Inv.

# PRIT Emerging Markets Equity Managers

as of August 31, 2015

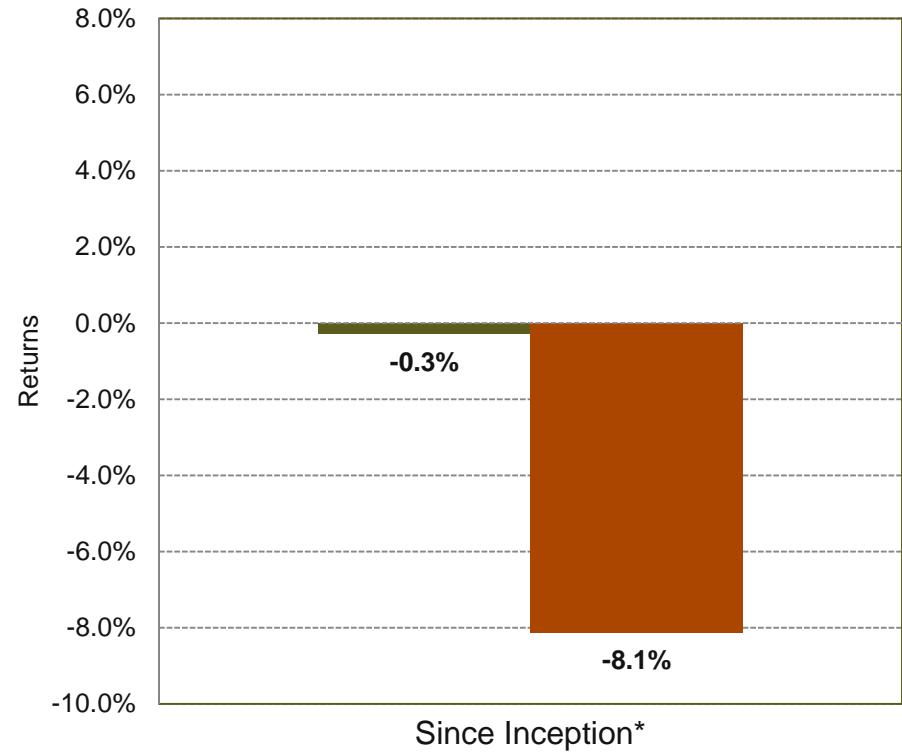
## Versus MSCI Frontier Markets Country Capped Index



■ City of London ■ MSCI Frontier Markets Country Capped Net Divs

\* "Since Inception" figure used due to lack of trailing 1-year returns. Inception date of 2/28/2015 for City of London.

## Versus MSCI Frontier Markets Country Capped Index

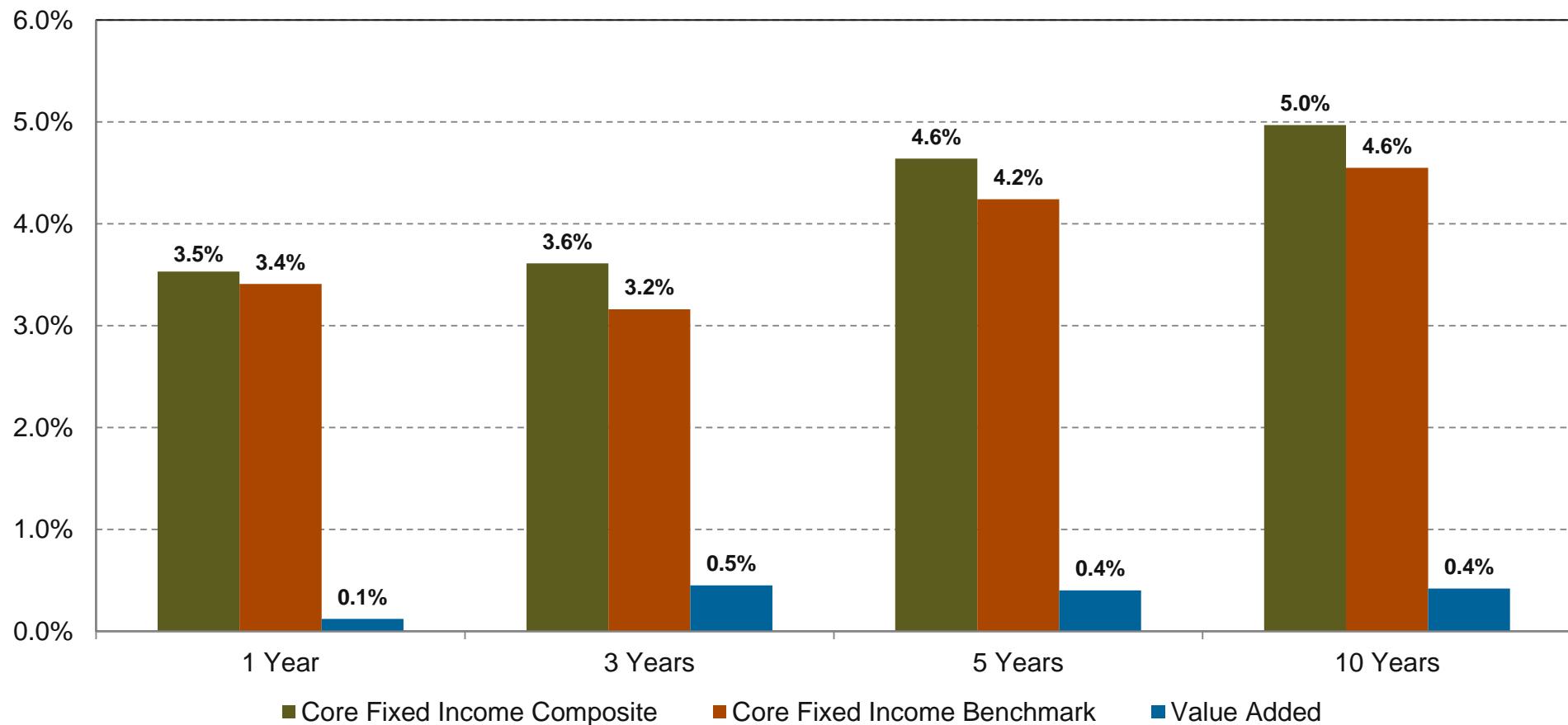


■ Acadian Frontier ■ MSCI Frontier Markets Country Capped Net Divs

\* "Since Inception" figure used due to lack of trailing 1-year returns. Inception date of 4/30/2015 for Acadian Frontier.

# PRIT Core Fixed Income (\$8.3 Billion)

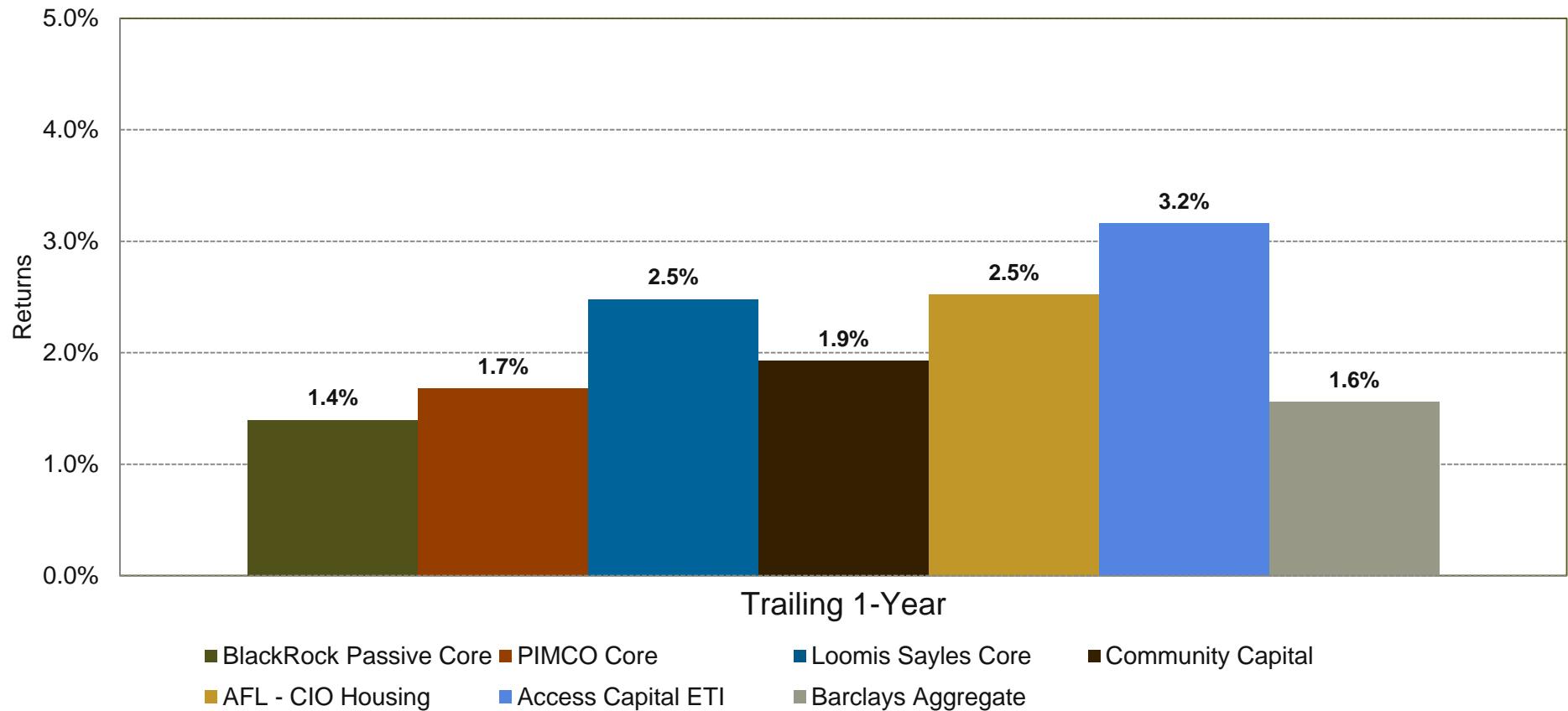
Gross of Fees Performance as of August 31, 2015



# PRIT Fixed Income Managers

as of August 31, 2015

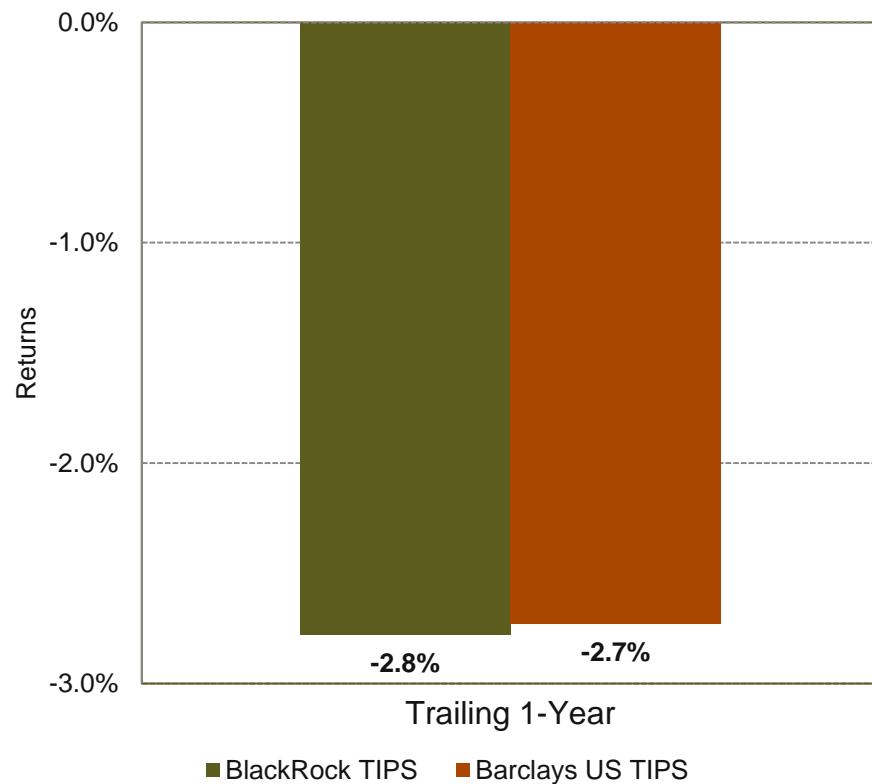
## Versus Barclays Aggregate



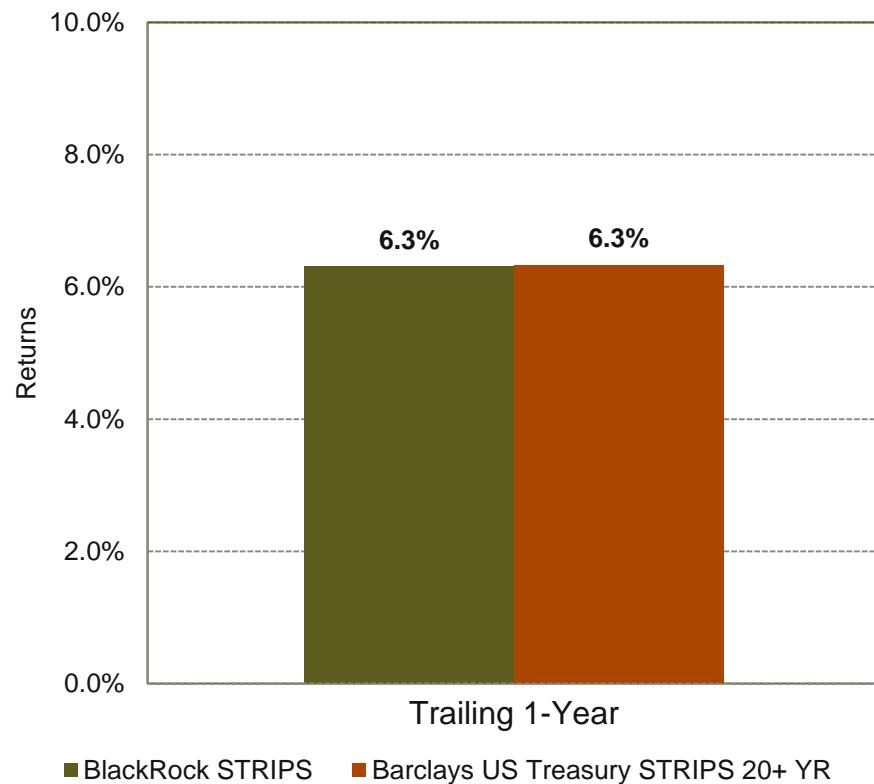
# PRIT Fixed Income Managers

as of August 31, 2015

## BlackRock Versus Barclays U.S. TIPS



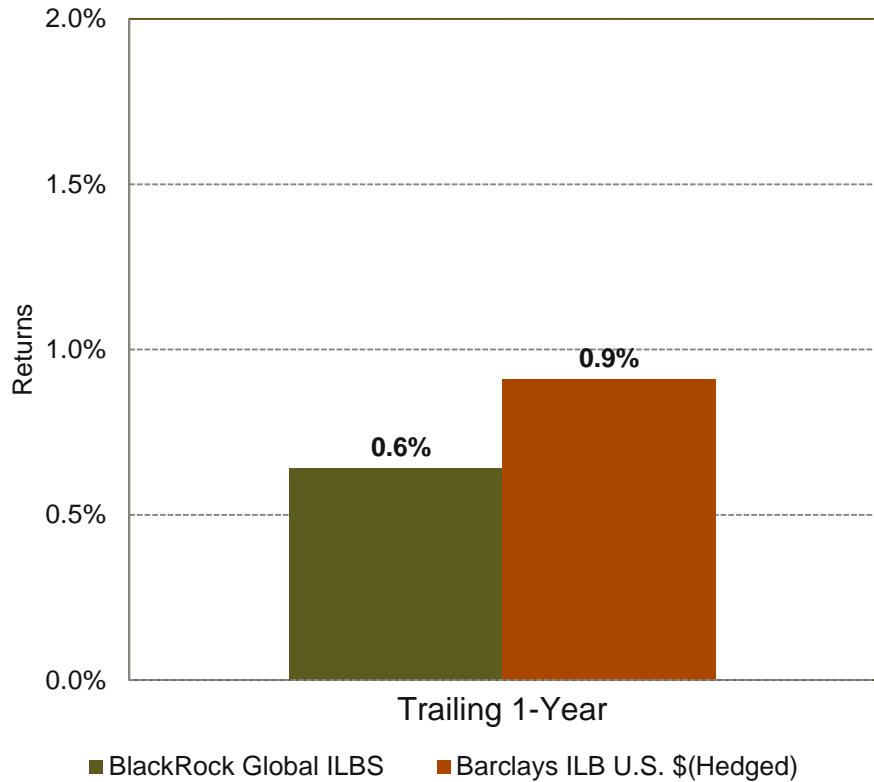
## BlackRock STRIPS vs. BC U.S. Treasury STRIPS 20+ Year



# PRIT Fixed Income Managers

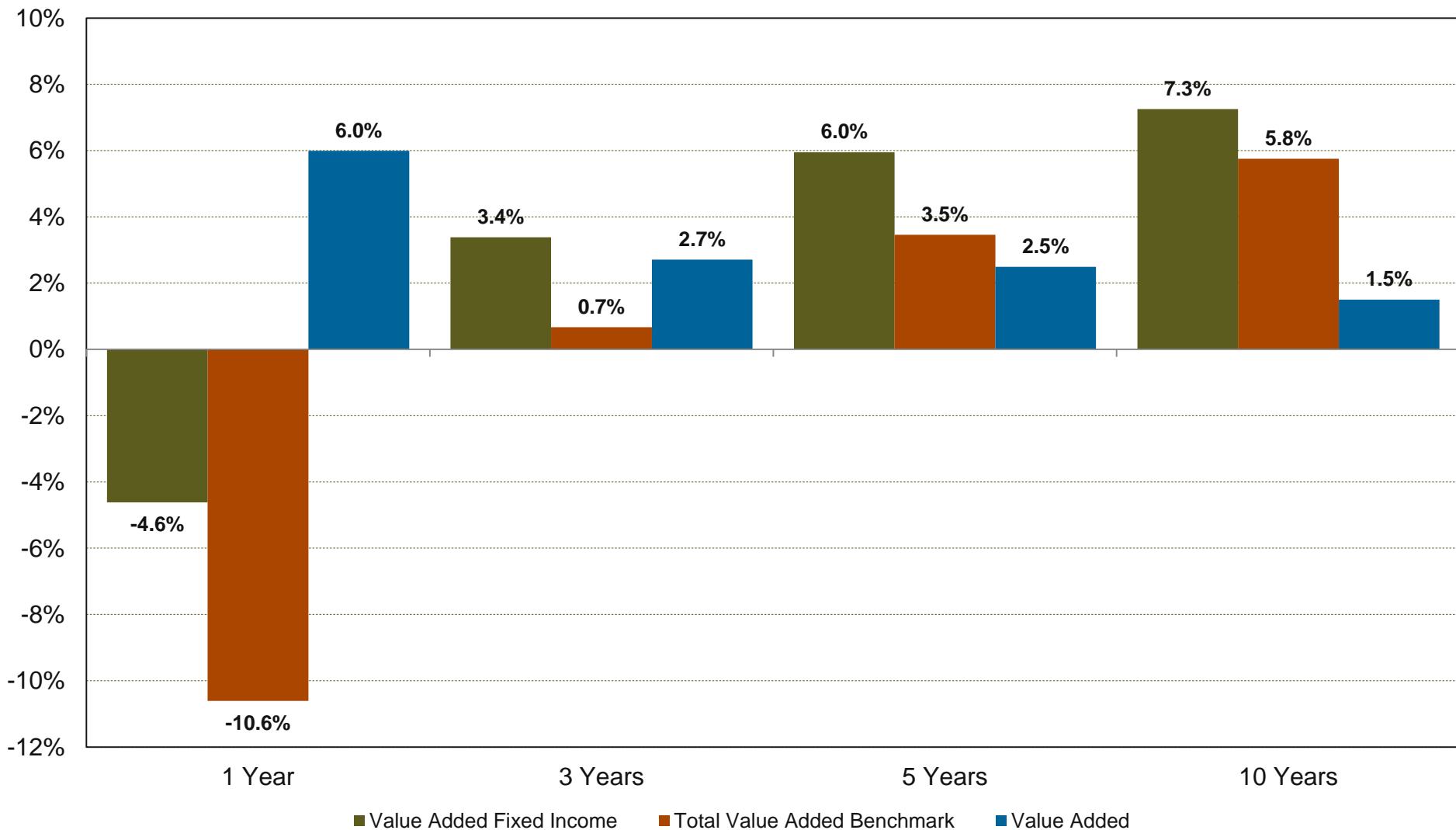
as of August 31, 2015

## BlackRock Global vs. Barclays ILB U.S.\$ (Hedged)



# PRIT Value Added Fixed Income (\$5.0 Billion)

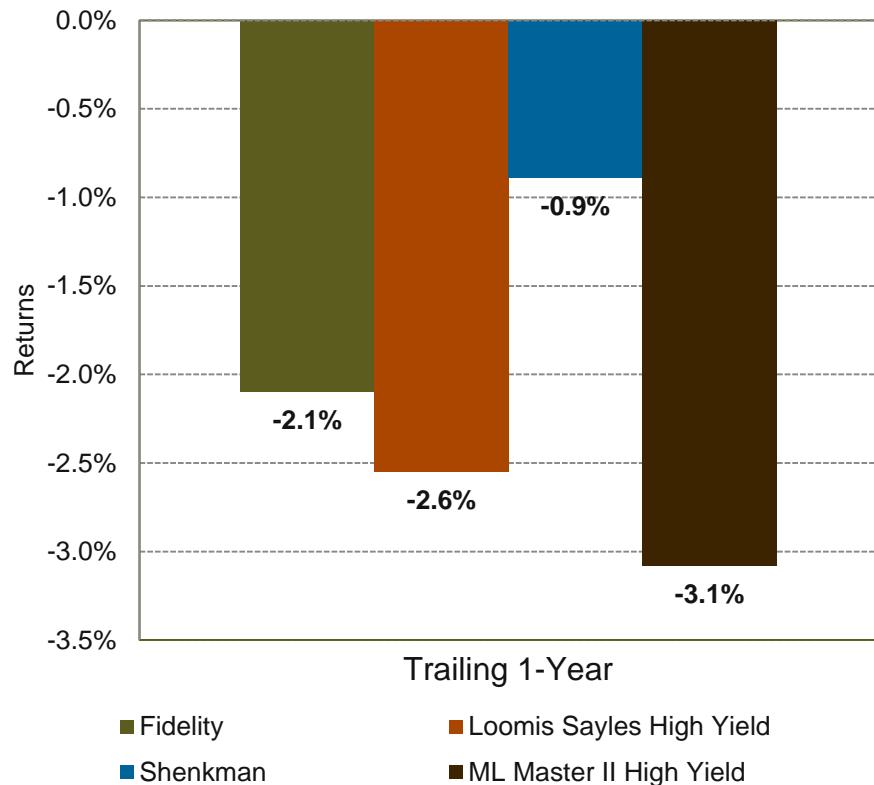
Gross of Fees Performance as of August 31, 2015



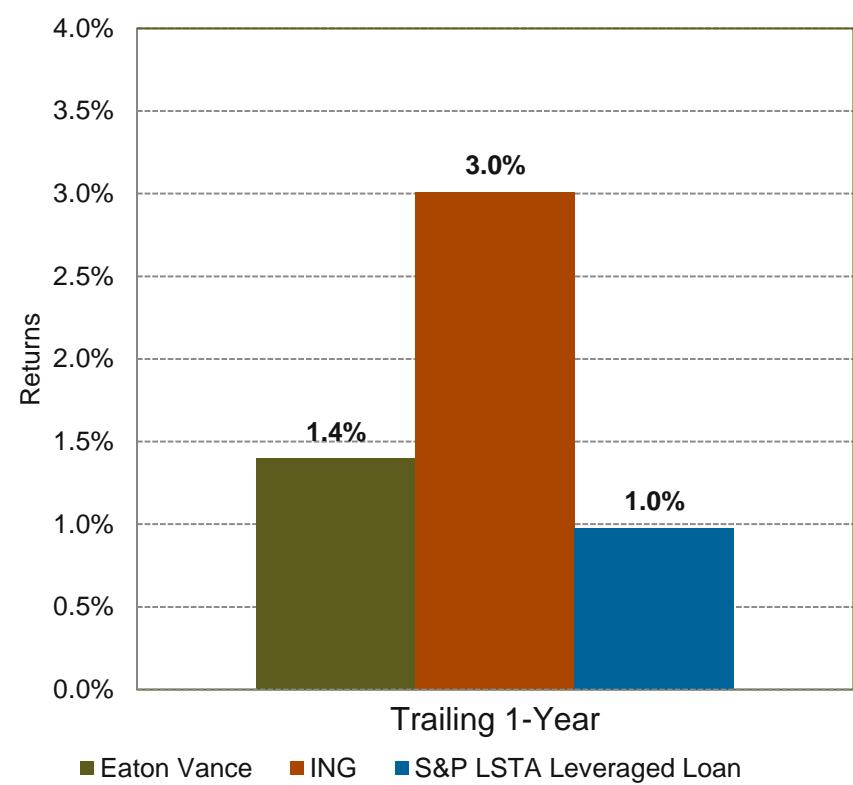
# PRIT Value Added Fixed Income Managers

as of August 31, 2015

## High Yield Managers vs. ML Master II High Yield



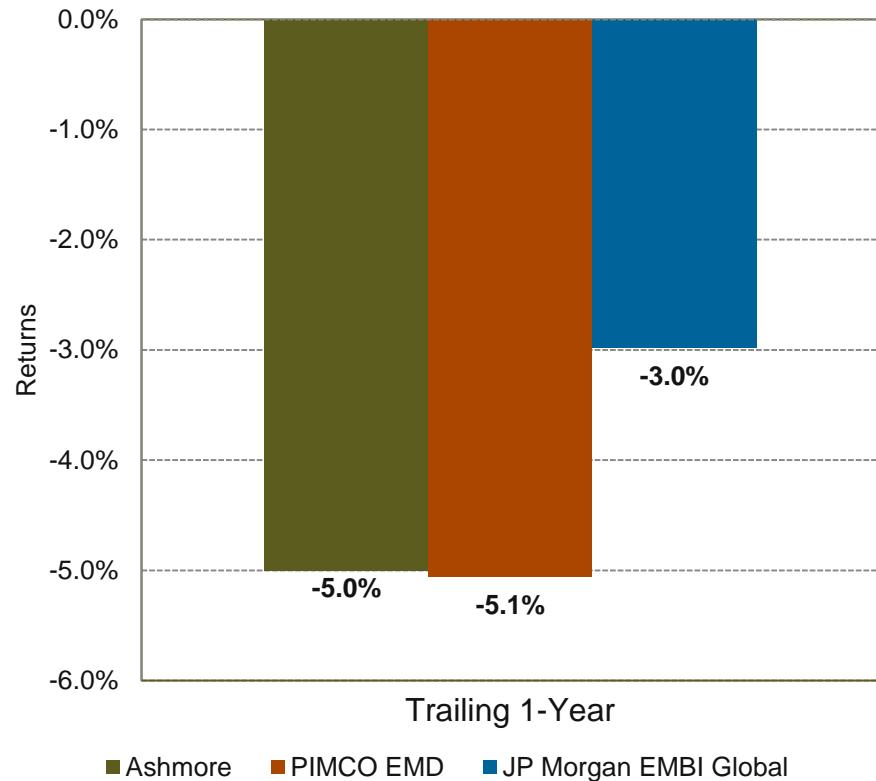
## Bank Loan Managers vs. S&P LSTA Leveraged Loan



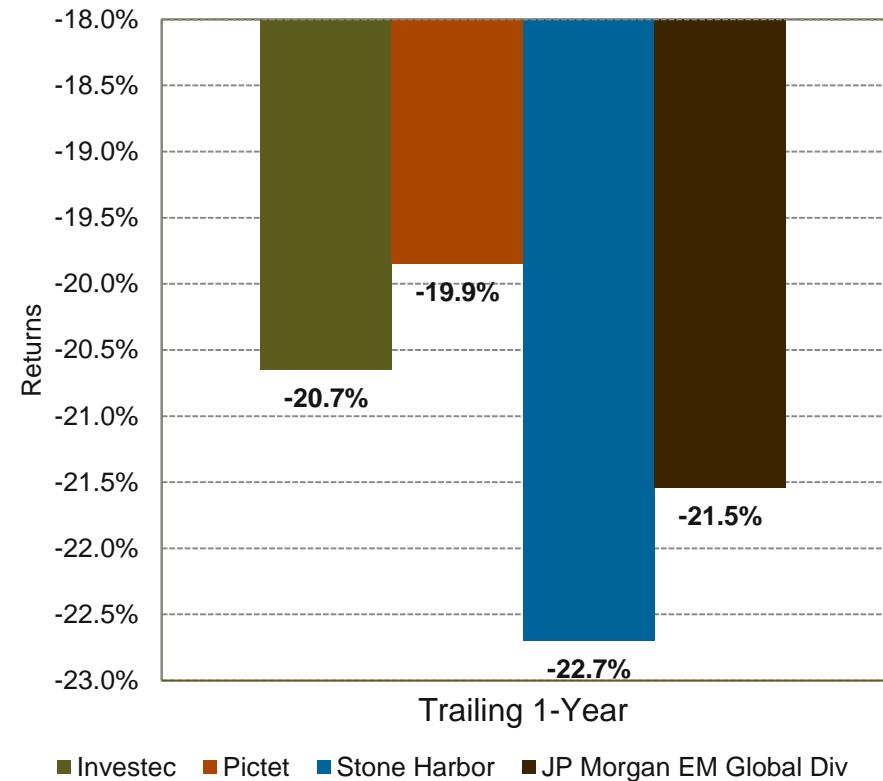
# PRIT Value Added Fixed Income Managers

as of August 31, 2015

## Emerging Debt Managers vs. JP Morgan EMBI Global



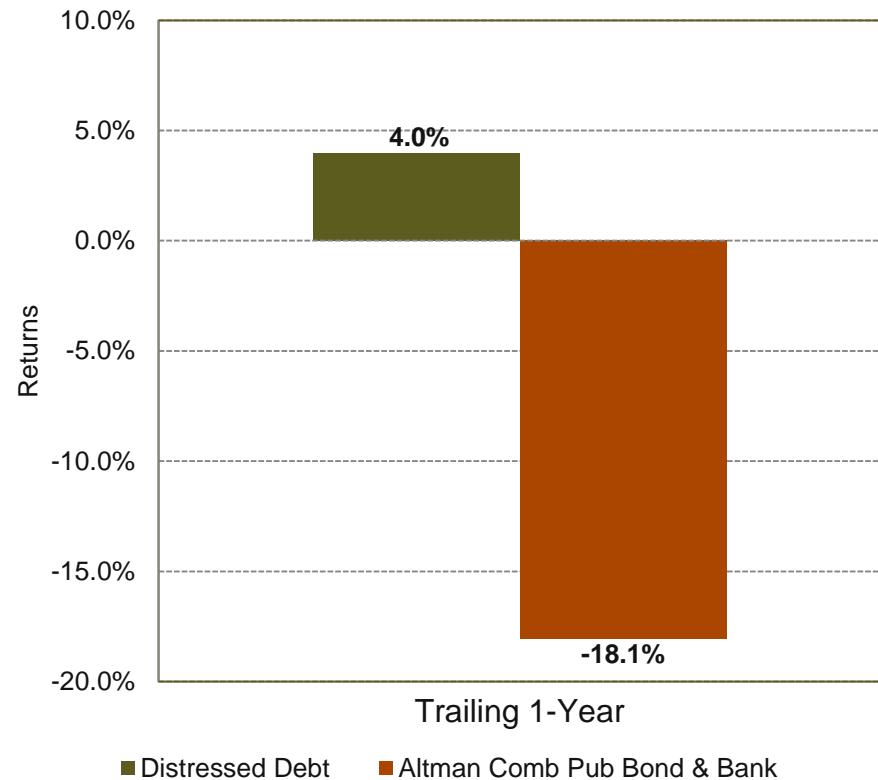
## Emerging Markets Debt Local vs. JP Morgan EM Global Diversified



# PRIT Value Added Fixed Income Managers

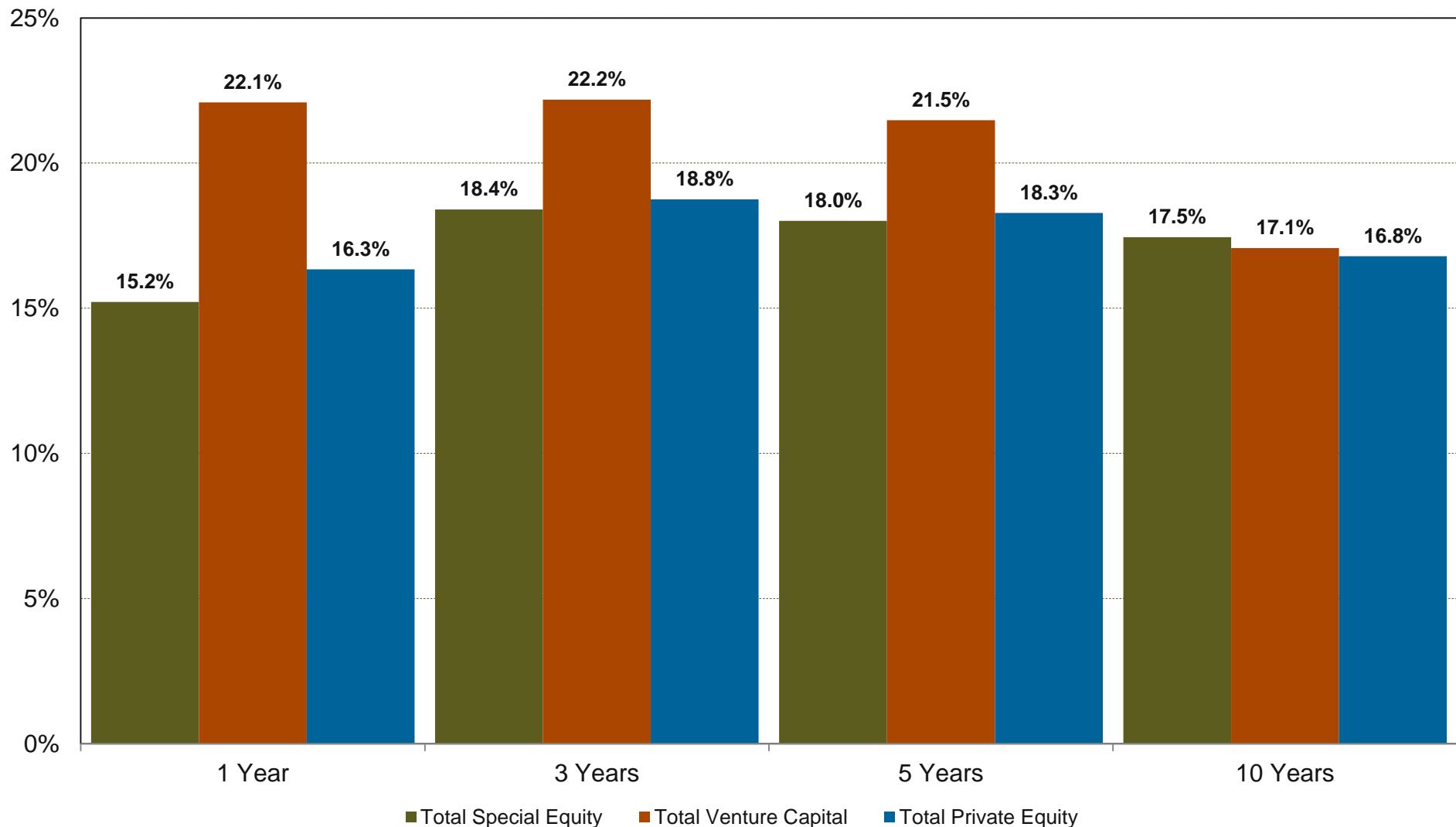
as of August 31, 2015

## Distressed Debt vs. Altman Comb Pub Bond & Bank



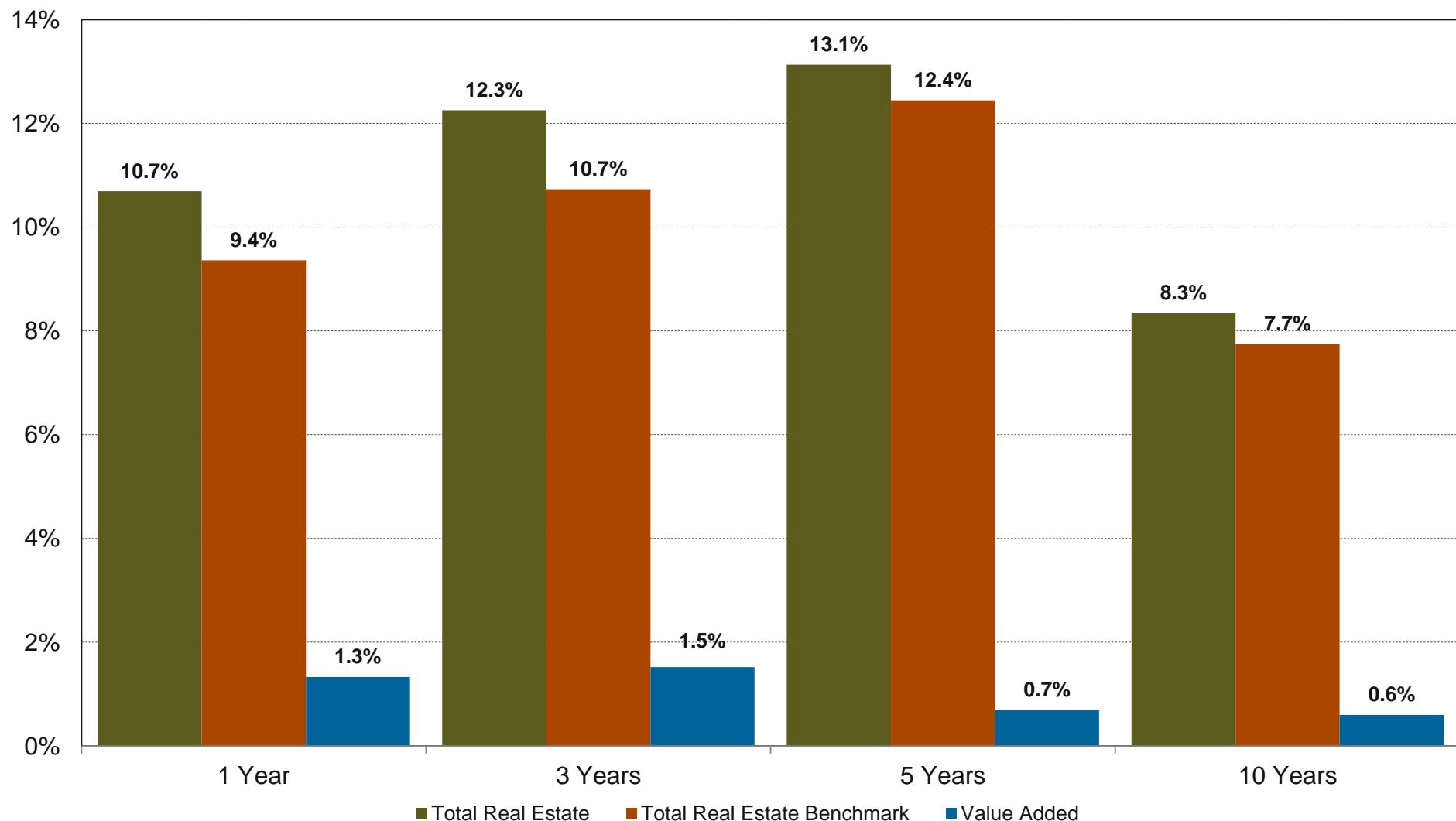
# PRIT Private Equity (\$6.7 Billion)

Gross of Fees Performance as of August 31, 2015



# PRIT Real Estate (\$6.1 Billion)

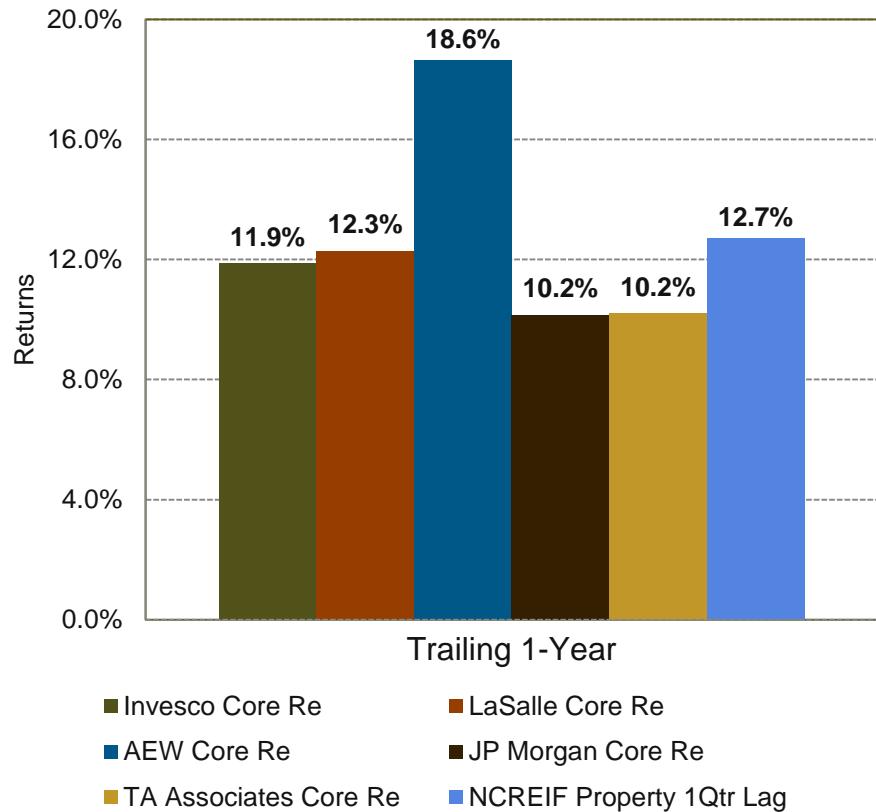
Gross of Fees Performance as of August 31, 2015



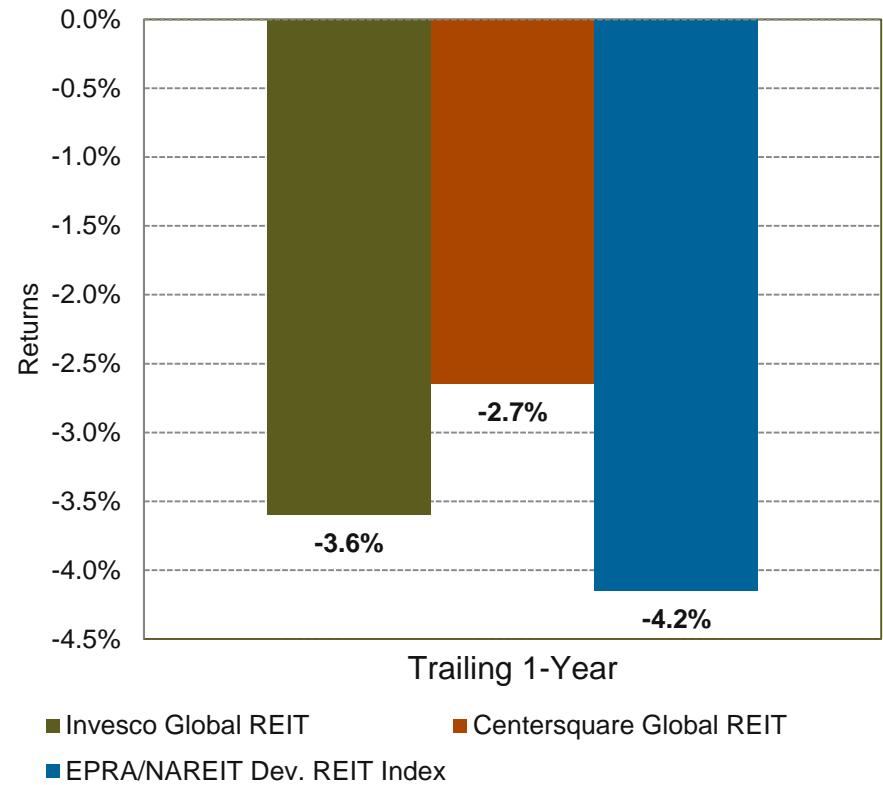
# PRIT Real Estate Managers

as of August 31, 2015

## Real Estate (SA) vs. NCREIF (One Quarter Lag)

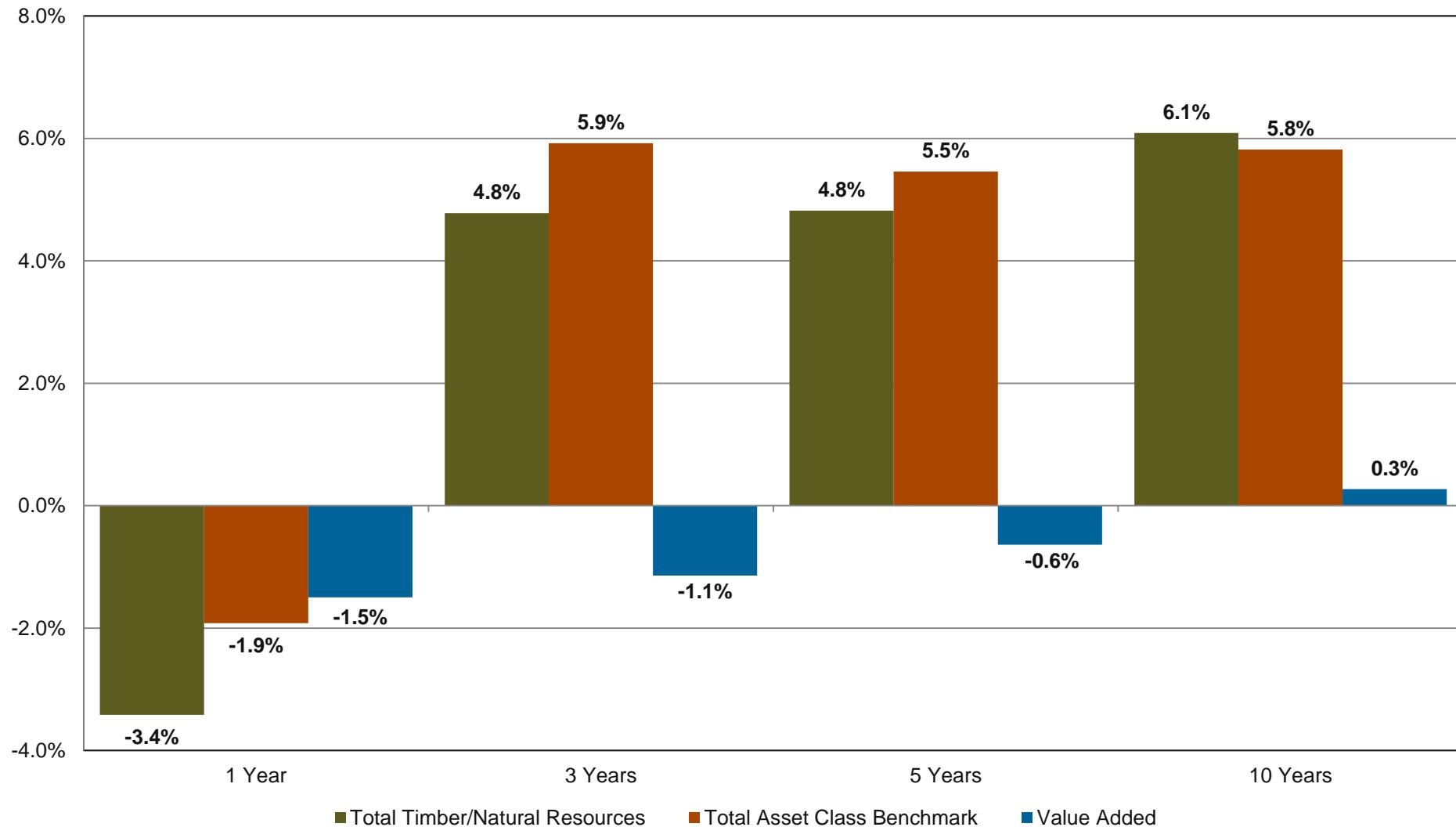


## Global REIT Managers vs. EPRA/NAREIT Developed REIT Index



# PRIT Timber/Natural Resources (\$2.3 Billion)

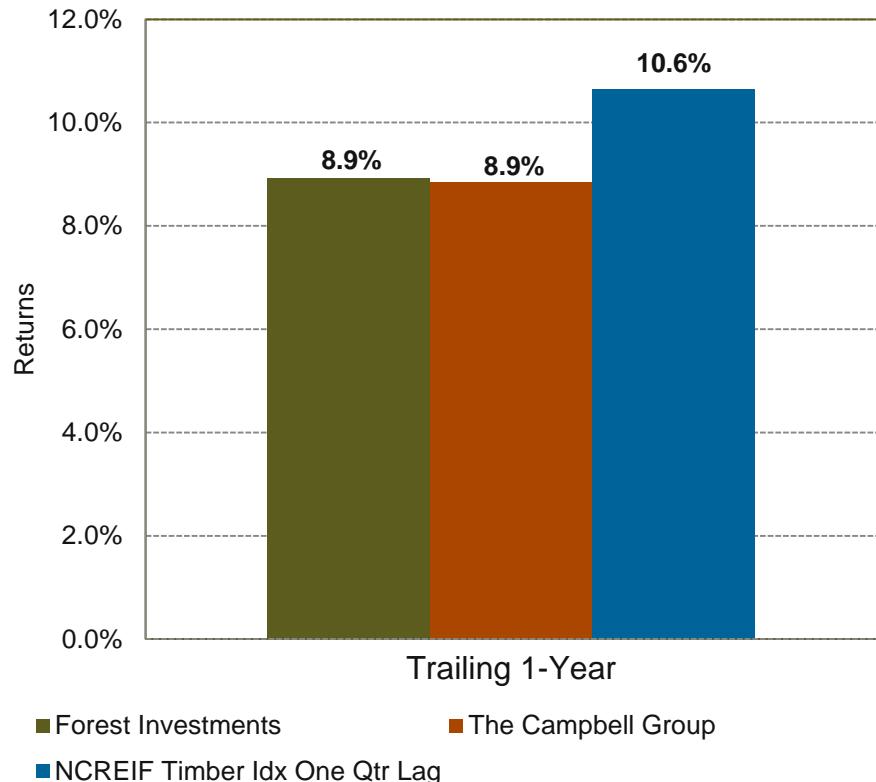
Gross of Fees Performance as of August 31, 2015



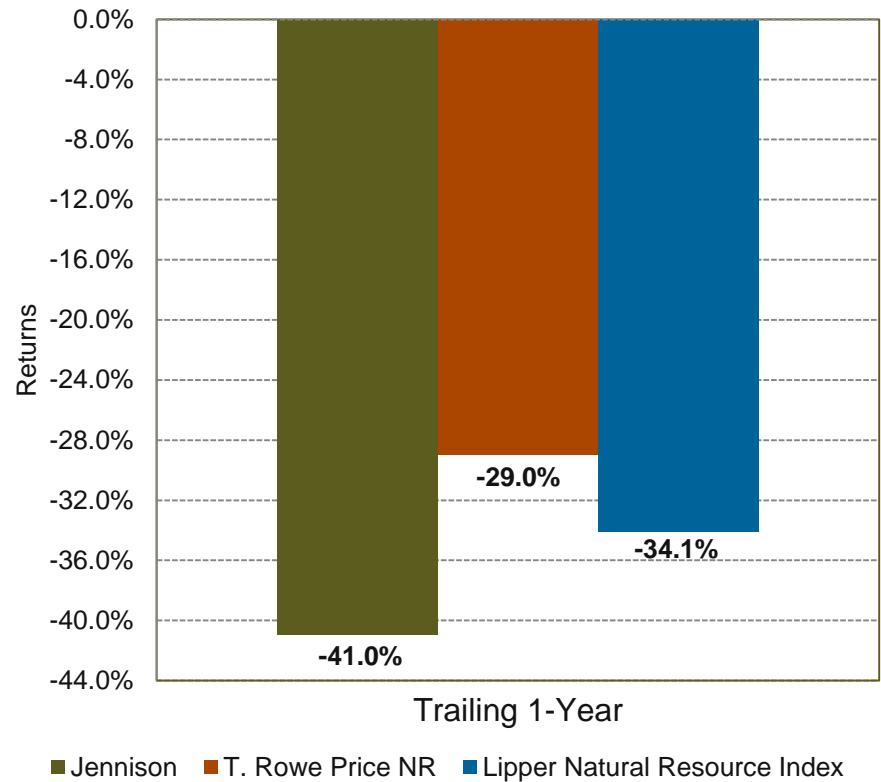
# PRIT Timber/Natural Resource Managers

as of August 31, 2015

## Timber Managers vs. NCREIF Timber (One Qtr Lag)



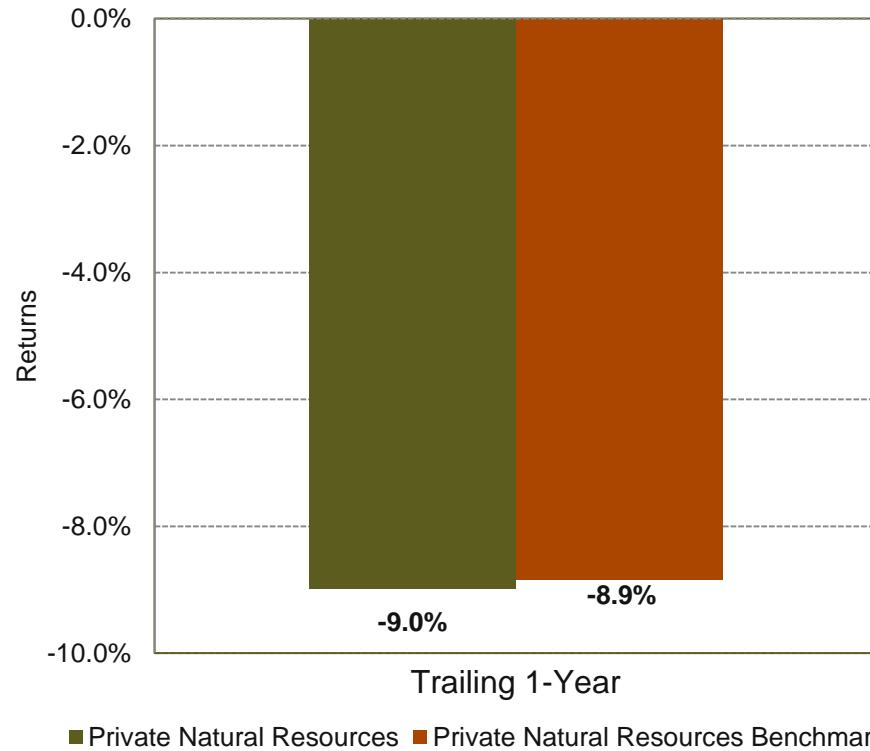
## Natural Resources vs. Lipper Natural Resource Index



# PRIT Private Natural Resource Managers

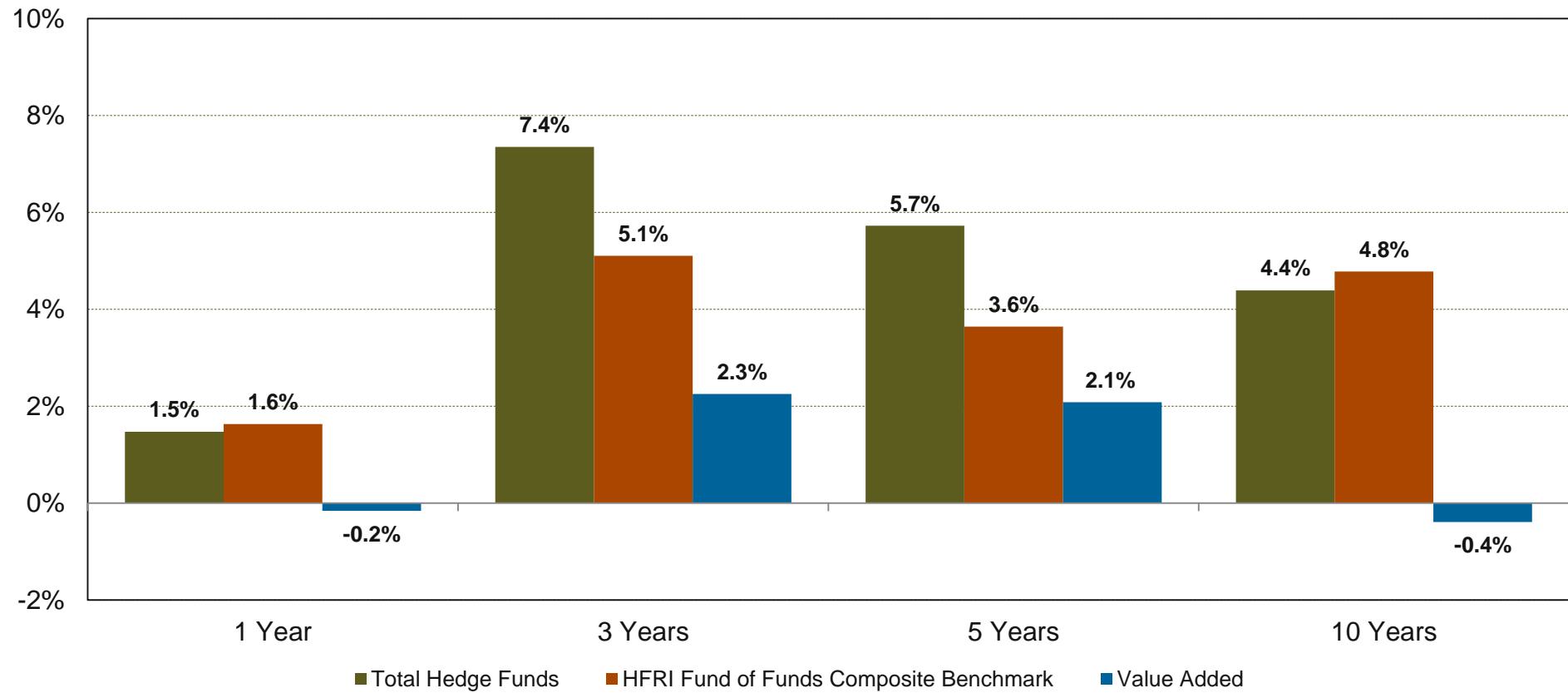
as of August 31, 2015

## Private Natural Resources vs. Private Natural Resources Benchmark



# PRIT Hedge Funds (\$5.1 Billion)

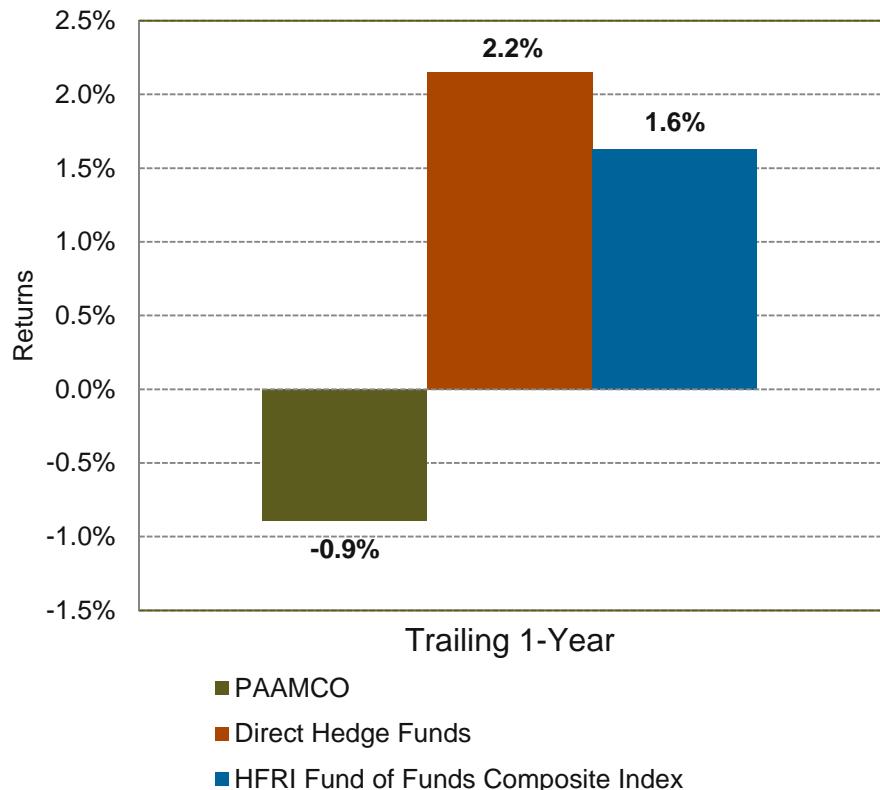
NET of Fees Performance as of August 31, 2015



# PRIT Hedge Fund Managers

NET of Fees Performance as of August 31, 2015

## Hedge Funds Versus HFRI Fund of Funds Composite Index



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PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix C

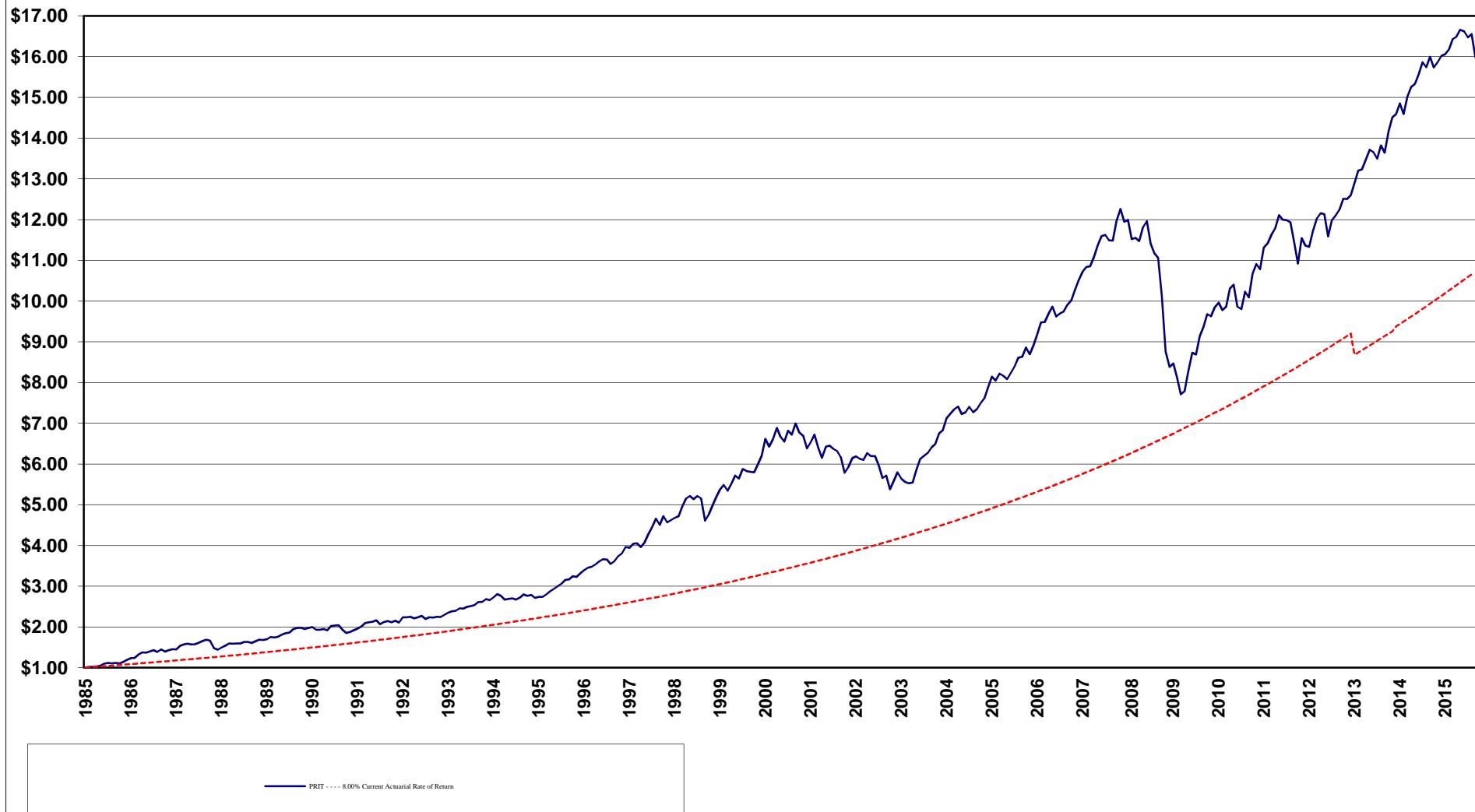
BNY Mellon Gross of Fees Performance Report

*PRIM Board Meeting  
Tuesday, October 13, 2015*

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**Pension Reserves Investment Management Board  
Performance Measurement  
August 31, 2015**

**Growth of a Dollar invested in the PRIT Fund**  
Monthly, December 31, 1984 to August 31, 2015  
**\$1.00 invested in the PRIT Fund on January 1, 1985 would have grown to \$15.98 by August 31, 2015**



PENSION RESERVES INVESTMENT TRUST SUMMARY OF PLAN PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending August 31, 2015											
	NAV \$ (M)	Target Allocation %	Actual Allocation %	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Since Inception
<b>GLOBAL EQUITY</b>	24,926,618	42.8%	41.9%	-6.72	-6.46	-3.09	-6.30	9.89	10.28	5.56	5.13
<b>CORE FIXED INCOME</b>	8,314,710	13.0%	14.0%	-0.29	2.53	-1.87	3.53	3.61	4.64	4.97	7.68
<b>VALUE-ADDED FIXED INCOME</b>	5,043,157	10.0%	8.5%	-1.76	-2.31	-1.57	-4.62	3.38	5.95	7.25	8.53
<b>PRIVATE EQUITY</b>	6,699,371	10.0%	11.3%	0.18	-0.30	8.95	16.34	18.75	18.28	16.79	14.48
<b>REAL ESTATE</b>	6,105,539	10.0%	10.3%	-0.88	0.08	5.28	10.69	12.25	13.13	8.34	6.38
<b>TIMBER/NATURAL RESOURCES</b>	2,251,895	4.0%	3.8%	-0.74	-2.57	-3.63	-3.42	4.78	4.82	6.09	7.80
<b>HEDGE FUNDS (NET OF FEES)</b>	5,104,041	10.0%	8.6%	-2.53	-2.08	0.45	1.47	7.35	5.72	4.39	4.76
<b>PORTFOLIO COMPLETION STRATEGIES</b>	293,636	0.2%	0.5%	-1.57	1.81	-3.37					-3.37
<b>PORTABLE ALPHA WIND DOWN (NET OF FEES)</b>	27,634	0.0%	0.0%	-0.99	-1.95	-7.22	-6.15	-3.24	-2.47		-5.75
<b>OVERLAY</b>	665,345	0.0%	1.1%	-2.85	-2.38	-1.71	-1.59				4.67
<b>TOTAL CORE</b>	<b>59,431,947</b>	<b>100%</b>	<b>100%</b>	<b>-3.48</b>	<b>-3.01</b>	<b>-0.47</b>	<b>-0.07</b>	<b>9.30</b>	<b>9.68</b>	<b>6.38</b>	<b>9.40</b>
<i>INTERIM BENCHMARK (target allocation without private equity benchmark)<sup>1</sup></i>				-3.66	-3.37	-0.53	-0.90	8.31	8.94	6.23	9.92
<i>TOTAL CORE BENCHMARK (target allocation with private equity benchmark)<sup>2</sup></i>				-3.58	-3.15	-0.66	-1.39	7.40	7.99	5.91	9.81
PARTICIPANTS CASH	50,555			0.02	0.03	0.10	0.15	0.14	0.15	1.50	4.00
TEACHERS' AND EMPLOYEES' CASH	26,892			0.02	0.03	0.10	0.14	0.14	0.15	1.24	2.77
<b>TOTAL FUND</b>	<b>59,509,393</b>			<b>-3.47</b>	<b>-3.00</b>	<b>-0.47</b>	<b>-0.07</b>	<b>9.27</b>	<b>9.64</b>	<b>6.36</b>	<b>9.46</b>

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending August 31, 2015												
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
<b>DOMESTIC EQUITY</b>												
INTECH	860,270	1.4%	-5.55	-2.95	-1.04	3.84	15.56	16.81		7.66	7.09	1/31/2006
PIMCO DOMESTIC	883,910	1.5%	-6.57	-4.65	-3.11	0.09	14.56	16.78		7.51	6.86	2/28/2006
SSGA S&P 500	7,030,009	11.8%	-6.06	-4.18	-3.02	0.27	14.40			15.52	15.43	12/31/2011
CLOSED PORTFOLIOS	0	0.0%										
TOTAL LARGE CAP MANAGERS	8,774,189	14.8%	-6.06	-4.10	-2.84	0.62	14.54	17.78	7.99	7.12	6.46	7/31/1997
<i>S&amp;P 500</i>			-6.03	-4.06	-2.88	0.48	14.31	15.87	7.15			
SUMMIT CREEK	199,754	0.3%	-7.74	-5.88	0.63	3.32				13.14	14.01	5/31/2013
<i>RUSSELL 2000 GROWTH</i>			-7.58	-7.20	0.91	5.11						
FRONTIER	173,575	0.3%	-2.93	-5.15	-2.74	-2.48				10.37	7.01	5/31/2013
HUBER	233,572	0.4%	-5.96	-9.73	-9.98	-18.08				-0.76	7.01	5/31/2013
TOTAL SMALL CAP VALUE	407,147	0.7%	-4.69	-7.83	-7.03	-12.09				3.40	7.01	5/31/2013
<i>RUSSELL 2000 VALUE</i>			-4.91	-7.53	-6.83	-4.95						
RIVERBRIDGE	161,449	0.3%	-5.34	-3.38	1.28	7.32				11.65	14.09	5/31/2013
<i>RUSSELL 2500 GROWTH</i>			-7.01	-5.90	1.71	4.53						
SOUTHERNSUN	141,471	0.2%	-5.78	-8.79	-4.67	-12.77				9.75	10.92	5/31/2013
SSGA R2500	1,492,865	2.5%	-5.89	-6.11	-1.70	-0.41	14.86			15.09	15.26	12/31/2011
TOTAL SMID CAP CORE	1,634,336	2.7%	-5.88	-6.35	-1.97	-1.62	14.76			15.00	15.26	12/31/2011
<i>RUSSELL 2500</i>			-5.92	-6.10	-1.58	-0.32	15.10					
TOTAL SMALL/SMID CAP EQUITY	2,402,685	4.0%	-5.80	-6.37	-2.45	-2.65	13.87			14.29	15.10	12/31/2011
<i>70.5% RUSSELL 2500/5.5% RUSSELL 2500 GROWTH/6.5% RUSSELL 2000 GROWTH/17.5% RUSSELL 2000 VALUE<sup>3</sup></i>				-5.91	-6.40	-2.17	-0.51	14.90				
CLOSED PORTFOLIOS	(0)	0.0%										
DOMESTIC EQUITY CASH	(551)	0.0%										
<b>TOTAL DOMESTIC EQUITY</b>	<b>11,176,323</b>	<b>18.8%</b>	<b>-6.00</b>	<b>-4.59</b>	<b>-2.72</b>	<b>-0.03</b>	<b>14.43</b>	<b>15.87</b>	<b>6.04</b>	<b>10.19</b>	<b>10.44</b>	<b>2/28/1983</b>
<i>ASSET CLASS BENCHMARK: 78.9% S&amp;P 500/14.88% RUSSELL 2500/1.16% RUSSELL 2500 GROWTH/1.37% RUSSELL 2000 GROWTH/3.69% RUSSELL 2000 VALUE<sup>4</sup></i>			-6.01	-4.56	-2.71	0.32	14.45	15.92	6.90			

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending August 31, 2015												
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
<b>INTERNATIONAL EQUITY</b>												
SSGA WORLD EX-US	4,956,633	8.3%	-6.86	-5.65	-0.79	-8.26	8.57	7.26	4.56	5.99	5.51	3/31/1992
CUSTOM MSCI WORLD EX-US IMI NET DIVS <sup>5</sup>			-6.89	-5.71	-1.20	-8.95	7.90	6.65	3.93			
MARATHON ASSET MANAGEMENT	2,379,477	4.0%	-5.49	-3.54	5.53	-0.89	12.32	10.41	7.78	8.68	4.47	10/31/1996
BAILLIE GIFFORD	1,676,091	2.8%	-7.93	-7.68	-1.04	-8.78	8.28	8.43	6.02	7.51	5.59	8/31/2004
MONDRIAN INVESTMENT	759,628	1.3%	-7.26	-4.35	0.90	-5.52	9.75	8.05		0.74	-0.11	6/30/2008
FIS	103,481	0.2%	-6.12	-4.20	2.23	-4.43				2.21	0.10	10/31/2013
SSGA TRANSITION INTERNATIONAL EQUITY			-	0.0%								
CLOSED PORTFOLIOS	14	0.0%										
INTERNATIONAL EQUITY CASH	665	0.0%										
CUSTOM MSCI EAFE STANDARD INDEX NET DIVS <sup>6</sup>					-7.33	-5.49	-0.34	-7.57	8.60	6.97	3.95	
<b>TOTAL INTERNATIONAL EQUITY</b>	<b>9,875,988</b>	<b>16.6%</b>	<b>-6.74</b>	<b>-5.38</b>	<b>0.84</b>	<b>-6.35</b>	<b>9.53</b>	<b>8.35</b>	<b>5.09</b>	<b>7.93</b>	<b>6.40</b>	<b>7/31/1986</b>
ASSET CLASS BENCHMARK: 50% CUSTOM MSCI WORLD EX-US IMI NET DIVS, 50% CUSTOM MSCI EAFE STANDARD INDEX NET DIVS <sup>7</sup>					-7.11	-5.60	-0.77	-8.26	8.17	6.81	4.01	
<b>EMERGING MARKETS EQUITY</b>												
SSGA EMERGING MKTS	986,624	1.7%	-8.89	-15.42	-12.18	-21.84	-1.56	-0.35		-1.01	-1.35	5/31/2010
CUSTOM MSCI EM IMI NET DIVS <sup>8</sup>			-9.10	-15.56	-12.50	-22.15	-1.74	-0.70				
AQR EMERGING	504,478	0.8%	-8.71	-15.56						-16.94	-16.00	3/31/2015
BAILLIE GIFFORD EMM	549,785	0.9%	-10.09	-16.82						-18.95	-16.00	3/31/2015
DRIEHAUS CAPITAL	537,460	0.9%	-8.00	-11.34						-10.86	-16.00	3/31/2015
HARDING LOEVNER	370,005	0.6%	-8.95	-12.76						-13.61	-16.00	3/31/2015
PZENA INV	517,732	0.9%	-8.05	-13.50						-13.63	-16.00	3/31/2015
EMERGING MARKETS TRANSITION	34,558	0.1%										
TOTAL EMERGING MARKETS CORE	2,514,018	4.2%	-8.75	-14.04	-14.12	-23.04	-2.66	-1.38	4.38	8.82	4.74	2/28/1990
CUSTOM MSCI EM STANDARD INDEX NET DIVS <sup>9</sup>					-9.02	-15.38	-12.93	-22.65	-2.12	-0.79	5.65	
CLOSED PORTFOLIOS	55	0.0%										
EMERGING MARKETS CASH	255	0.0%										
ACADIAN	122,922	0.2%	-10.27	-15.83	-10.08	-18.29	10.70		9.28	-0.40		5/31/2012
WASATCH	93,499	0.2%	-8.71	-11.68	-7.83	-12.50	1.86		-0.21	-0.40		5/31/2012
TOTAL EMERGING MARKETS SMALL CAP	216,421	0.4%	-9.60	-14.08	-9.12	-15.88	4.35		2.49	-0.40		5/31/2012
CUSTOM MSCI EM SMALL CAP NET DIVS <sup>10</sup>					-9.57	-16.50	-9.47	-18.62	1.03			
ACADIAN FRONTIER	61,994	0.1%	-5.68	-4.30						-0.29	-8.12	4/30/2015
CITY OF LONDON	94,938	0.2%	-5.43	-6.61						-3.82	-6.37	2/28/2015
TOTAL FRONTIER	156,932	0.3%	-5.53	-5.86						-3.12	-6.37	2/28/2015
CUSTOM MSCI FRONTIER MKTS COUNTRY CAPPED INDEX NET DIVS					-5.64	-8.42						
<b>TOTAL EMERGING MARKETS</b>	<b>3,874,306</b>	<b>6.5%</b>	<b>-8.71</b>	<b>-14.09</b>	<b>-12.69</b>	<b>-21.89</b>	<b>-1.63</b>	<b>-0.33</b>	<b>4.82</b>	<b>9.00</b>	<b>4.78</b>	<b>2/28/1990</b>
ASSET CLASS BENCHMARK <sup>11</sup>					-8.95	-15.26	-12.27	-21.94	-1.65	-0.65	5.75	
<b>TOTAL GLOBAL EQUITY<sup>12</sup></b>	<b>24,926,618</b>	<b>41.9%</b>	<b>-6.72</b>	<b>-6.46</b>	<b>-3.09</b>	<b>-6.30</b>	<b>9.89</b>	<b>10.28</b>	<b>5.56</b>	<b>5.13</b>	<b>4.14</b>	<b>1/31/2001</b>
ASSET CLASS BENCHMARK: 44% DOMESTIC EQUITY BM/40% INTERNATIONAL EQUITY BM/16% EMERGING MARKETS BM <sup>13</sup>					-6.92	-6.71	-3.43	-6.84	9.36	9.59	5.25	

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending August 31, 2015												
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
<b>DOMESTIC INVESTMENT GRADE FIXED INCOME</b>												
BLACKROCK PASSIVE	888,129	1.5%	-0.15	0.51	0.31	1.40	1.49	3.02	4.53	5.60	5.62	6/30/1995
PIMCO CORE	788,970	1.3%	-0.51	0.11	0.46	1.68	2.02	3.30	5.27	7.30	6.39	9/30/1990
LOOMIS SAYLES CORE	1,125,543	1.9%	-0.16	0.45	1.17	2.48	3.03	4.44	5.30	7.48	6.50	5/31/1990
COMMUNITY CAPITAL MANAGEMENT	27,800	0.0%	0.06	0.71	1.13	1.93	2.14	3.13		4.85	5.01	7/31/2006
AFL - CIO HOUSING INVESTMENT	125,214	0.2%	-0.05	0.62	1.10	2.52	1.81	3.26		5.05	4.81	8/31/2007
ACCESS CAPITAL - ETI	103,090	0.2%	0.08	0.51	1.46	3.16	2.29	3.25	4.49	4.35	4.30	4/30/2004
TOTAL AGGREGATE <sup>14</sup>	3,058,745	5.1%	-0.23	0.39	0.84	2.10	2.09	3.45	4.80	5.71	5.34	7/31/1999
BARCLAYS CAPITAL AGGREGATE					-0.14	0.55	0.45	1.56	1.53	2.98	4.46	
BLACKROCK - STRIPS	3,412,582	5.7%	0.13	6.00	-4.09	6.31				16.81	16.73	4/30/2014
BC US TREASURY STRIPS 20+ YR INDEX					0.12	5.98	-4.16	6.33				
CLOSED PORTFOLIOS	1	0.0%										
FIXED INCOME CASH	2,259	0.0%										
<b>TOTAL DOMESTIC INVESTMENT GRADE FIXED INCOME</b>	<b>6,473,587</b>	<b>10.9%</b>	<b>-0.04</b>	<b>3.33</b>	<b>-2.32</b>	<b>4.59</b>	<b>4.42</b>	<b>4.86</b>	<b>5.57</b>	<b>6.24</b>	<b>5.80</b>	<b>7/31/1999</b>
<i>DOMESTIC INVESTMENT GRADE FIXED INCOME BM<sup>15</sup></i>				0.00	3.40	-2.50	4.37	3.91	4.42	5.19		
<b>INFLATION-LINKED FIXED INCOME</b>												
BLACKROCK - TIPS	591,359	1.0%	-0.70	-0.57	-0.17	-2.78	-1.49	2.80	4.03	5.44	5.50	4/30/2001
BARCLAYS CAPITAL US TIPS			-0.76	-0.56	-0.22	-2.73	-1.47	2.79	4.06			
BLACKROCK ILBs	1,249,764	2.1%	-1.35	-0.04	0.03	0.64	1.78	4.03		0.98	0.50	10/31/2005
CLOSED PORTFOLIOS	-	0.0%										
TOTAL ILBs	1,249,764	2.1%	-1.35	-0.04	0.03	0.64	1.78	4.03		0.83	0.50	10/31/2005
BC LB USS HEDGED <sup>16</sup>			-1.13	0.21	0.06	0.91	1.40	3.74				
<b>TOTAL INFLATION-LINKED FIXED INCOME</b>	<b>1,841,123</b>	<b>3.1%</b>	<b>-1.14</b>	<b>-0.21</b>	<b>-0.03</b>	<b>-0.48</b>	<b>0.69</b>	<b>3.70</b>	<b>1.46</b>	<b>3.61</b>	<b>1.27</b>	<b>4/30/2001</b>
<i>33% BC US TIPS/67% BC ILB USS HEDGED<sup>17</sup></i>			-1.01	-0.04	-0.03	-0.30	0.45	3.43	1.25			
<b>TOTAL CORE FIXED INCOME</b>	<b>8,314,710</b>	<b>14.0%</b>	<b>-0.29</b>	<b>2.53</b>	<b>-1.87</b>	<b>3.53</b>	<b>3.61</b>	<b>4.64</b>	<b>4.97</b>	<b>7.68</b>	<b>7.12</b>	<b>9/30/1985</b>
<i>ASSET CLASS BENCHMARK<sup>18</sup></i>			-0.23	2.63	-2.00	3.41	3.16	4.24	4.55			



PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending August 31, 2015													
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month	
<b>PRIVATE EQUITY</b>													
SPECIAL EQUITY	19,155	0.0%	0.07	0.04	8.47	26.96	18.37	18.54	14.92	14.89		9/30/1986	
SPECIAL EQUITY - 2000	12,290	0.0%	0.00	0.00	13.45	40.23	27.71	19.10	18.97	16.22		2/29/2000	
SPECIAL EQUITY - 2001	58,506	0.1%	-0.17	-0.32	11.36	9.37	20.12	15.86	20.94	20.31		4/30/2001	
SPECIAL EQUITY - 2002	4,496	0.0%	1.04	0.48	5.77	4.89	11.18	24.69	24.24	17.87		7/31/2002	
SPECIAL EQUITY - 2003	92,612	0.2%	0.10	-0.02	1.91	12.07	10.78	11.64	17.33	15.87		7/31/2003	
SPECIAL EQUITY - 2004	77,373	0.1%	-0.34	-0.57	14.02	15.95	20.86	21.47	14.51	12.59		7/31/2004	
SPECIAL EQUITY - 2005	385,869	0.6%	0.32	0.04	6.73	14.01	16.74	17.76	11.92	11.61		6/30/2005	
SPECIAL EQUITY - 2006	620,323	1.0%	0.06	-0.19	5.67	12.41	17.42	18.30		5.61		4/30/2006	
SPECIAL EQUITY - 2007	841,985	1.4%	0.44	-0.02	5.66	9.65	16.22	16.08		7.41		7/31/2007	
SPECIAL EQUITY - 2008	875,237	1.5%	0.33	0.07	9.69	19.24	24.00	21.73		9.31		4/30/2008	
SPECIAL EQUITY - 2009	232,228	0.4%	0.14	-0.01	12.67	28.64	25.78	20.07		10.31		8/31/2009	
SPECIAL EQUITY - 2010	483,109	0.8%	0.20	-0.23	5.81	14.35	17.00			4.52		1/31/2011	
SPECIAL EQUITY - 2011	572,441	1.0%	0.03	-0.71	18.20	27.88	17.55			-26.84		7/31/2011	
SPECIAL EQUITY - 2012	230,454	0.4%	1.18	0.47	6.53	9.68	9.08			-13.41		8/31/2012	
SPECIAL EQUITY - 2013	168,464	0.3%	0.09	-1.62	1.69	4.05				2.79		6/30/2013	
SPECIAL EQUITY - 2014	212,421	0.4%	-0.54	-2.20	-2.55	3.60				-13.39		5/31/2014	
SPECIAL EQUITY - 2015	80,337	0.1%	0.20	-2.38						-5.74		3/31/2015	
TOTAL SPECIAL EQUITY	4,967,299	8.4%	0.23	-0.26	7.86	15.21	18.40	18.01	17.45	16.08		9/30/1986	
 VENTURE CAPITAL													
VENTURE CAPITAL	12,953	0.0%	0.00	0.00	6.54	12.53	11.65	9.75	16.24	11.43		4/30/1986	
VENTURE CAPITAL - 2000	66,841	0.1%	-0.62	-0.70	1.95	-5.09	8.44	10.64	10.52	6.16		2/29/2000	
VENTURE CAPITAL - 2001	36,657	0.1%	1.22	1.18	7.16	8.34	10.27	10.89	12.93	12.29		2/28/2001	
VENTURE CAPITAL - 2002	14,160	0.0%	0.00	0.00	0.66	6.09	5.57	3.16	0.20	0.01		4/30/2003	
VENTURE CAPITAL - 2003	30,763	0.1%	0.00	0.44	23.11	24.27	34.12	23.11	14.24	13.45		2/29/2004	
VENTURE CAPITAL - 2004	36,050	0.1%	0.00	0.00	30.03	-12.10	21.38	42.02	27.85	25.68		2/28/2005	
VENTURE CAPITAL - 2005	117,359	0.2%	-0.07	-0.15	17.52	32.76	21.57	19.49	11.93	10.97		3/31/2005	
VENTURE CAPITAL - 2006	135,519	0.2%	0.00	0.00	7.35	17.40	16.62	17.97		11.00		4/30/2006	
VENTURE CAPITAL - 2007	180,641	0.3%	0.00	-0.11	7.86	25.07	22.50	26.77		16.30		4/30/2007	
VENTURE CAPITAL - 2008	31,510	0.1%	0.00	0.00	6.25	26.62	29.36	39.69		24.37		7/31/2008	
VENTURE CAPITAL - 2009	226,186	0.4%	-0.04	-2.10	10.94	22.25	23.78	19.19		11.80		8/31/2009	
VENTURE CAPITAL - 2010	257,394	0.4%	0.00	-0.19	29.52	38.12	36.74	20.75		16.80		4/30/2010	
VENTURE CAPITAL - 2011	90,917	0.2%	0.13	-0.04	17.74	29.43	23.74			12.46		2/28/2011	
VENTURE CAPITAL - 2012	215,418	0.4%	0.10	-0.58	15.79	28.98	24.00			10.51		5/31/2012	
VENTURE CAPITAL - 2013	43,821	0.1%	0.00	0.00	8.36	8.83				3.29		6/30/2013	
VENTURE CAPITAL - 2014	49,229	0.1%	-0.19	-1.00	2.00	-1.31				-3.73		6/30/2014	
VENTURE CAPITAL - 2015	3,497	0.0%	0.00	0.00						-9.01		3/31/2015	
TOTAL VENTURE CAPITAL	1,548,914	2.6%	0.01	-0.48	14.00	22.09	22.18	21.48	17.07	12.94		4/30/1986	
 PRIVATE EQUITY CASH													
PRIVATE EQUITY CASH	183,158	0.3%											
<b>TOTAL PRIVATE EQUITY</b>	<b>6,699,371</b>	<b>11.3%</b>	<b>0.18</b>	<b>-0.30</b>	<b>8.95</b>	<b>16.34</b>	<b>18.75</b>	<b>18.28</b>	<b>16.79</b>	<b>14.48</b>	<b>17.00</b>	<b>4/30/1986</b>	
 <i>ASSET CLASS BENCHMARK<sup>24</sup></i>													
<i>ASSET CLASS BENCHMARK<sup>24</sup></i>					0.18	-0.30	8.95	16.34	18.75	18.28	16.79		
 <b>7 YEAR ANNUALIZED RETURN PE<sup>25</sup></b>													
<b>7 YEAR ANNUALIZED RETURN PE<sup>25</sup></b>					<b>0.94</b>	<b>1.87</b>	<b>7.20</b>	<b>10.93</b>	<b>12.38</b>	<b>14.34</b>	<b>14.79</b>	<b>7.73</b>	<b>7/31/2007</b>
 <i>7 YEAR ANNUALIZED RUSSELL 3000 +3%<sup>26</sup></i>													
<i>7 YEAR ANNUALIZED RUSSELL 3000 +3%<sup>26</sup></i>					0.94	1.97	7.90	11.35	9.61	8.72			

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending August 31, 2015												
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
<b>PRIVATE REAL ESTATE</b>												
CORE												
INVESCO CORE	1,117,221	1.9%	0.32	0.72	3.45	11.86	13.19	14.55	8.86	9.87	9.64	5/31/1995
LASALLE	1,481,034	2.5%	0.31	0.53	7.39	12.29	13.34	14.76	9.09	10.43	9.58	1/31/1995
AEW	1,126,756	1.9%	0.34	0.65	8.90	18.63	14.40			14.25	12.02	1/31/2011
JP MORGAN	755,892	1.3%	0.25	0.75	6.17	10.16	9.03	12.92	7.64	10.42	8.97	9/30/2000
TA ASSOCIATES	1,120,069	1.9%	0.37	0.77	7.32	10.20	10.31	11.56	7.60	8.85	8.97	9/30/2000
CLOSED PORTFOLIOS	-	0.0%										
TOTAL CORE ACCOUNTS	5,600,972	9.4%	0.32	0.67	6.66	12.42	12.00	13.28	8.36	9.91	9.62	12/31/1994
PORTFOLIO DEBT	(994,522)	-1.7%										
CLOSED PORTFOLIOS	-	0.0%										
<b>TOTAL SEPARATE ACCOUNTS - LEVERAGED</b>	<b>4,606,451</b>	<b>7.8%</b>	<b>0.34</b>	<b>0.69</b>	<b>7.58</b>	<b>14.66</b>				<b>14.54</b>	<b>11.28</b>	<b>2/28/2013</b>
<b>NON-CORE</b>												
NON-CORE	424,797	0.7%	0.13	0.35	6.68	14.44	15.48			11.42	10.93	1/31/2012
NON-CORE (ETI EXCLUDED)	424,797	0.7%	0.13	0.35	6.68	14.44	15.48			11.42	10.93	1/31/2012
<b>ETI (PARTNERSHIPS)</b>												
CANYON JOHNSON II	5,519	0.0%	0.00	0.00	1.09	5.06	-2.45	-2.50	-4.75	-4.60	8.47	5/31/2005
INTERCONT IV	1,036	0.0%	0.00	0.00	22.15	51.21	19.37	14.72	-1.36	-1.34	8.25	7/31/2005
NEW BOSTON URBAN I	7,428	0.0%	0.00	0.00	-2.33	0.12	3.63	4.38		-4.41	6.88	12/31/2006
TOTAL ETI ACCOUNTS	13,983	0.0%	0.00	0.00	0.14	6.57	2.24	2.09	-4.85	-4.70	8.47	5/31/2005
<b>TOTAL NON-CORE</b>	<b>438,779</b>	<b>0.7%</b>	<b>0.12</b>	<b>0.33</b>	<b>6.43</b>	<b>14.15</b>	<b>12.03</b>	<b>7.17</b>	<b>-2.51</b>	<b>-2.43</b>	<b>8.47</b>	<b>5/31/2005</b>
<b>TOTAL PRIVATE REAL ESTATE<sup>27</sup></b>	<b>5,045,230</b>	<b>8.5%</b>	<b>0.32</b>	<b>0.66</b>	<b>7.48</b>	<b>14.72</b>	<b>13.94</b>	<b>14.39</b>	<b>9.33</b>	<b>10.93</b>	<b>9.58</b>	<b>11/30/1994</b>
NCREIF PROPERTY ONE QTR LAG					0.00	0.00	6.72	12.72	11.47	12.75	8.39	

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending August 31, 2015												
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
<b>PUBLIC REAL ESTATE (REITS)</b>												
INVESCO GLOBAL REIT	257,778	0.4%	-5.79	-2.29	-4.87	-3.60	7.74			8.09	7.44	5/31/2012
CENTERSQUARE GLOBAL REIT	734,519	1.2%	-5.81	-2.46	-4.44	-2.65	7.60			8.01	7.44	5/31/2012
INVESCO TRANSITION	140,912	0.2%	-5.77	-2.29	-4.94	-3.66				-2.81	-2.49	8/31/2014
TOTAL GLOBAL REITS	1,133,208	1.9%	-5.80	-2.40	-4.65	-3.12	7.18			7.49	7.44	5/31/2012
<i>FTSE EPRA NAREIT DEVELOPED NET TOTAL RETURN</i>					-5.91	-2.65	-5.45	-4.15	7.05			
<b>CLOSED PORTFOLIOS</b>	26											
REIT CASH	44	0.0%										
<b>TOTAL REITS</b>	<b>1,133,278</b>	<b>1.9%</b>	<b>-5.80</b>	<b>-2.39</b>	<b>-4.61</b>	<b>-3.08</b>	<b>7.19</b>	<b>9.81</b>	<b>4.74</b>	<b>9.37</b>	<b>7.93</b>	<b>6/30/1998</b>
<i>100% FTSE EPRA NAREIT DEVELOPED NET TOTAL RETURN<sup>28</sup></i>					-5.91	-2.65	-5.45	-4.15	7.05	10.01	4.35	
REAL ESTATE LEVERAGE CASH	(55)	0.0%										
CORE REAL ESTATE CASH	(72,914)	-0.1%										
REAL ESTATE TRANSITION	0	0.0%										
TOTAL CORE ACCOUNT	6,105,539	10.3%	-0.88	0.08	5.28	10.69	12.25	13.13	8.34	10.58	9.73	12/31/1994
<b>TOTAL REAL ESTATE</b>	<b>6,105,539</b>	<b>10.3%</b>	<b>-0.88</b>	<b>0.08</b>	<b>5.28</b>	<b>10.69</b>	<b>12.25</b>	<b>13.13</b>	<b>8.34</b>	<b>6.38</b>	<b>7.88</b>	<b>1/31/1986</b>
<i>ASSET CLASS BENCHMARK: 80% NCREIF PROPERTY ONE QTR LAG/20% FTSE EPRA NAREIT DEVELOPED NET TOTAL RETURN<sup>29</sup></i>					-1.18	-0.50	4.29	9.36	10.73	12.44	7.74	

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending August 31, 2015												
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
<b>TIMBER</b>												
FOREST INVESTMENTS	1,109,273	1.9%	0.00	0.00	1.45	8.92	9.38	6.46	7.38	7.57	7.33	1/31/2002
THE CAMPBELL GROUP	538,301	0.9%	-1.04	-2.41	0.87	8.85	8.30			6.52	7.74	11/30/2011
TIMBER CASH	56	0.0%										
<b>TOTAL TIMBER</b>	<b>1,647,630</b>	<b>2.8%</b>	<b>-0.34</b>	<b>-0.80</b>	<b>1.26</b>	<b>8.88</b>	<b>9.13</b>	<b>6.34</b>	<b>8.61</b>	<b>9.66</b>	<b>7.33</b>	<b>1/31/2002</b>
<i>NCREIF TIMBER INDEX ONE QTR LAG<sup>30</sup></i>			0.00	0.00	7.88	10.64	9.80	6.20	8.60			
<b>NATURAL RESOURCES - PUBLIC</b>												
JENNISON	162,393	0.3%	-2.66	-13.75	-16.54	-41.00	-7.98	-3.78		-7.03	-8.84	7/31/2008
T.ROWE PRICE NR	172,963	0.3%	-3.69	-10.41	-13.33	-28.96	-0.69	2.22		-5.30	-8.84	7/31/2008
PUBLIC NATURAL RESOURCES CASH	8	0.0%										
<b>TOTAL NATURAL RESOURCES PUBLIC</b>	<b>335,364</b>	<b>0.6%</b>	<b>-3.19</b>	<b>-12.06</b>	<b>-14.91</b>	<b>-35.35</b>	<b>-4.50</b>	<b>-0.81</b>		<b>-6.11</b>	<b>-8.84</b>	<b>7/31/2008</b>
<i>LIPPER NATURAL RESOURCES GLOBAL FUND INDEX</i>			-5.04	-13.28	-15.21	-34.11	-5.35	-1.72				
<b>NATURAL RESOURCES- PRIVATE</b>												
NATURAL RESOURCES- PRIVATE	268,917	0.5%	0.00	-0.04	-14.62	-8.98	-4.22	4.81		1.50	1.06	8/31/2008
PRIVATE NATURAL RESOURCES CASH	(16)	0.0%										
<b>TOTAL NATURAL RESOURCES PRIVATE</b>	<b>268,901</b>	<b>0.5%</b>	<b>0.00</b>	<b>-0.04</b>	<b>-14.55</b>	<b>-8.85</b>	<b>-4.10</b>	<b>4.95</b>		<b>1.06</b>	<b>1.06</b>	<b>8/31/2008</b>
<i>BENCHMARK - NAT. RES. PRIVATE<sup>31</sup></i>			0.00	-0.04	-14.55	-8.85	-4.10	4.95				
<b>TOTAL TIMBER/NATURAL RESOURCES</b>	<b>2,251,895</b>	<b>3.8%</b>	<b>-0.74</b>	<b>-2.57</b>	<b>-3.63</b>	<b>-3.42</b>	<b>4.78</b>	<b>4.82</b>	<b>6.09</b>	<b>7.80</b>	<b>5.31</b>	<b>1/31/2002</b>
<i>ASSET CLASS BENCHMARK<sup>32</sup></i>			-0.82	-2.23	0.91	-1.92	5.92	5.46	5.82			

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending August 31, 2015												
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
<b>HEDGE FUNDS (NET OF FEES)</b>												
ARDEN HFOF LIQUIDATION	46,207	0.1%	-0.42	-1.60	0.82	-0.02				6.17		10/31/2012
IVY LIQUIDATION	4,680	0.0%	-0.10	-0.26	2.65	6.61	6.70	2.85		2.80		3/31/2009
PAAMCO	914,846	1.5%	-2.26	-3.16	0.01	-0.89	7.81	5.61	5.02	5.00	4.93	8/31/2004
<i>100% HFRI FUND OF FUNDS COMPOSITE INDEX<sup>33</sup></i>			<i>-1.99</i>	<i>-1.78</i>	<i>0.87</i>	<i>1.63</i>	<i>5.10</i>	<i>3.64</i>	<i>4.78</i>			
DIRECT HEDGE FUNDS	4,077,273	6.9%	-2.64	-1.83	0.43	2.15	7.33			6.60	4.37	11/30/2011
<i>HFRI FUND OF FUNDS COMPOSITE INDEX<sup>34</sup></i>			<i>-1.99</i>	<i>-1.78</i>	<i>0.87</i>	<i>1.63</i>	<i>5.10</i>					
HEDGE FUND CASH	61,034	0.1%										
<b>TOTAL HEDGE FUNDS (NET OF FEES)</b>	<b>5,104,041</b>	<b>8.6%</b>	<b>-2.53</b>	<b>-2.08</b>	<b>0.45</b>	<b>1.47</b>	<b>7.35</b>	<b>5.72</b>	<b>4.39</b>	<b>4.76</b>	<b>4.94</b>	<b>7/31/2004</b>
<b>ASSET CLASS BENCHMARK:</b>												
<i>HFRI FUND OF FUNDS COMPOSITE INDEX<sup>35</sup></i>					<i>-1.99</i>	<i>-1.78</i>	<i>0.87</i>	<i>1.63</i>	<i>5.10</i>	<i>3.64</i>	<i>4.78</i>	
<b>PORTFOLIO COMPLETION STRATEGIES</b>	<b>293,636</b>	<b>0.5%</b>	<b>-1.57</b>	<b>1.81</b>	<b>-3.37</b>					<b>-3.37</b>	<b>2.11</b>	<b>1/31/2015</b>
<i>PORTFOLIO COMPLETION STRATEGIES COMPOSITE INDEX<sup>36</sup></i>						<i>0.26</i>	<i>0.52</i>	<i>2.11</i>				

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending August 31, 2015												
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
<b>PORTABLE ALPHA WIND DOWN (NET OF FEES)</b>												
AUSTIN CAPITAL	1,576	0.0%	-0.02	0.13	0.57	0.51	-12.15	-11.17	-9.60	-0.80	9/30/2008	
CRESTLINE	11,067	0.0%	-0.70	-1.40	-10.85	-8.08	-3.14	-0.80	0.56	-0.25	9/30/2006	
STRATEGIC	14,988	0.0%	-1.30	-2.58	-4.96	-5.44	-1.07	-2.18	-0.92	-0.53	10/31/2006	
TOTAL FUND OF FUNDS (NET OF FEES)	27,631	0.0%	-0.99	-1.95	-7.30	-6.25	-3.27	-2.41	-0.77	-0.25	9/30/2006	
CLOSED PORTFOLIOS	-	0.0%										
PORTABLE ALPHA CASH	3	0.0%										
<b>TOTAL PORTABLE ALPHA WIND DOWN (NET OF FEES)</b>	<b>27,634</b>	<b>0.0%</b>	<b>-0.99</b>	<b>-1.95</b>	<b>-7.22</b>	<b>-6.15</b>	<b>-3.24</b>	<b>-2.47</b>	<b>-0.75</b>	<b>-0.25</b>	<b>9/30/2006</b>	
<b>ASSET CLASS BENCHMARK:</b>												
<i>HFR Fund of Funds Composite Index<sup>37</sup></i>					-1.99	-1.78	0.87	1.63	5.10	3.64		
<b>OVERLAY</b>												
CLIFTON	141,790	0.2%	-4.80	-3.97	-3.15	-3.93				5.05	5.05	
OVERLAY CASH	523,555	0.9%										
<b>TOTAL OVERLAY</b>	<b>665,345</b>	<b>1.1%</b>	<b>-2.85</b>	<b>-2.38</b>	<b>-1.71</b>	<b>-1.59</b>				<b>4.67</b>	<b>4.67</b>	<b>10/31/2013</b>
<b>ASSET CLASS BENCHMARK<sup>38</sup></b>					-2.85	-2.38	-1.71	-1.59				

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending August 31, 2015												
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
<b>TOTAL CORE</b>	<b>59,431,947</b>	<b>99.9%</b>	<b>-3.48</b>	<b>-3.01</b>	<b>-0.47</b>	<b>-0.07</b>	<b>9.30</b>	<b>9.68</b>	<b>6.38</b>	<b>9.40</b>		<b>2/28/1985</b>
<b>CASH FUND</b>												
PARTICIPANTS' CASH (NET OF FEES)	50,555	0.1%	0.02	0.03	0.10	0.15	0.14	0.15	1.50	4.00	3.83	7/31/1985
<i>MERRILL LYNCH 90 DAY T BILL</i>				0.01	0.01	0.02	0.03	0.06	0.08	1.36		
MASS STATE TEACHERS CASH (NET OF FEES)	8,390	0.0%	0.01	0.03	0.10	0.14	0.14	0.15	1.24	2.60	2.61	7/31/1996
MASS STATE EMPLOYEES CASH (NET OF FEES)	18,501	0.0%	0.02	0.03	0.10	0.14	0.14	0.15	1.25	2.60	2.61	7/31/1996
<i>MERRILL LYNCH 90 DAY T BILL</i> <sup>39</sup>				0.01	0.01	0.02	0.03	0.06	0.08	1.50		
TEACHERS' AND EMPLOYEES' CASH	26,892	0.0%	0.02	0.03	0.10	0.14	0.14	0.15	1.24	2.77		7/31/1996
<b>TOTAL FUND</b>	<b>59,509,393</b>	<b>100.0%</b>	<b>-3.47</b>	<b>-3.00</b>	<b>-0.47</b>	<b>-0.07</b>	<b>9.27</b>	<b>9.64</b>	<b>6.36</b>	<b>9.46</b>		<b>1/31/1985</b>
POLICY RETURN <sup>40</sup>					-3.38	-2.76	-0.64	-0.59	8.61	9.26	6.59	9.54
<i>TOTAL CORE BENCHMARK</i>					-3.58	-3.15	-0.66	-1.39	7.40	7.99	5.91	9.81

PENSION RESERVES INVESTMENT TRUST  
FOOTNOTES  
RATES OF RETURN  
Periods Ending August 31, 2015

**Direct Real Estate**

- (1) Direct core and value real estate performance is time series weighted and based on property distributed income and capital appreciation/depreciation resulting from external appraisals and dispositions. PRIM's real estate appraisal policy requires that approximately one quarter of the directly owned properties be appraised by a real estate appraiser with an MAI designation every quarter. The goal is to obtain updated market values for each property annually.
- (2) The NCREIF Property Index (NPI) is an unleveraged, time series composite measurement of the investment performance of a large group of commercial real estate properties. The NPI is released 25 days after the end of each quarter. Because Mellon's performance report is released earlier, the NPI used as benchmark is lagged one quarter.
- (3) Direct Real Estate Manager NAV's are net of property level debt.

**Timber/Natural Resources**

- (4) PRIM's Timber/Natural resources appraisal policy states that all timber/natural resources properties be externally appraised every three years using a full narrative report format. These reports (and property values) are then updated annually by a Timber/Natural Resources Appraiser to reflect changes in timber markets, inventories and land values. The goal is to obtain market values for each timberland annually.
- (5) PRIM's timber portfolio currently does not utilize leverage.
- (6) The NCREIF Timber/Natural Resources Index (NTI) is an unleveraged, time series composite measurement of the investment performance of individual timber properties. The NTI is released 25 days after the end of each quarter. Because Mellon's performance report is released earlier, the NTI used as benchmark is lagged one quarter.

**REITs**

- (7) The FTSE NAREIT ALL EQUITY REITS Index is an unmanaged index of publicly traded U.S., tax-qualified REITs that have 75% or more of their gross assets invested in the equity ownership of real estate. This index does not include Real Estate Operating Companies (REOCs) although these are acceptable investments as part of the manager's guidelines and included in PRIM's REIT holdings.
- (8) The FTSE NAREIT ALL EQUITY REITS index can be considered a "leveraged" index given that the majority of the REITs included in the index use leverage as part of their investment strategy.

**ETI**

- (9) Real estate ETI Funds are primarily invested in development projects with a three to five year lifecycle. These investments require substantial capital investment with very little income during the initial stage of the cycle, resulting in a J curve return profile. The returns are expected later in the cycle, upon project completion and lease up. For lack of a better benchmark, the NPI which is a core property benchmark used to track stabilized, institutional grade properties is used by PRIM. However, Staff is focused more on deal flow quality and on returns generated relative to the risk adjusted returns projected by Managers in their offering memoranda.

**Private Equity**

- (10) Private Equity performance represents time weighted returns reflecting the most recent partnership financial statement valuations (typically lagging one calendar quarter) adjusted for actual cash flows through the reporting date. The Private Equity portfolio consists primarily of assets that are illiquid in nature, and valuations are determined by the General Partner based on current industry fair market value practices. Limited Partnership valuations are reviewed through a formal audit process annually, and valuations are also commonly reviewed by partnership advisory boards on a quarterly basis.

**Hedge Fund of Funds**

- (11) The Hedge Fund of Fund valuations are net of underlying manager fees and net of all Hedge Fund manager administrative, base and performance fees.

<b>PENSION RESERVES INVESTMENT TRUST</b> <b>BENCHMARK/COMPOSITE FOOTNOTES</b> <b>RATES OF RETURN</b> Periods Ending August 31, 2015
<p><b>Interim Benchmark</b>  (1) Interim benchmark is calculated by applying the investment performance of the asset class benchmarks to the Fund's asset allocation targets. The PE component of this uses the S&amp;P 500 + 5% through 6/30/2000; currently Actual PE Performance (formally labeled Interim Policy Benchmark)</p> <p><b>Total Core Benchmark</b>  (2) The Total Core benchmark is calculated by applying the investment performance of the asset class benchmarks to the Fund's asset allocation targets. The Private Equity benchmark used for the Total Core benchmark calculation is the 7-year annualized return of the Russell 3000 +3% (formally labeled Policy Benchmark)</p> <p><b>Domestic Equity</b>  (3) Russell 2500 through 6/30/14; currently 70.5% Russell 2500/5.5% Russell 2500 Growth/6.5% Russell 2000 Growth/17.5% Russell 2000 Value  (4) Dow Jones Wilshire 5000 through 04/30/08; Russell 3000 through 06/30/2009; 78% Russell 3000/22% 3 Month Libor + 3% through 12/31/2009; Russell 3000 through 10/31/2011; 80% S&amp;P 500/20% Russell 2500 through 6/30/2014; currently 78.9% S&amp;P 500/14.88% Russell 2500/1.16% Russell 2500 Growth/1.37% Russell 2000 Growth/3.69% Russell 2000 Value</p> <p><b>International</b>  (5) MSCI EAFE Net Dividends through 9/30/2007; MSCI EAFE Net Dividends Provisional Standard Index through 5/31/2008; MSCI EAFE Net Dividends Standard Index through 12/31/2009; MSCI World ex-US IMI Net Dividends through 12/31/2010; currently Custom World ex-US IMI Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.  (6) MSCI EAFE Net Dividends through 9/30/2007; MSCI EAFE Net Dividends Provisional Standard Index through 5/31/2008; MSCI EAFE Net Dividends Standard Index through 12/31/2010; currently Custom MSCI EAFE Net Dividends Standard Index, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.  (7) MSCI EAFE Net Dividends through 9/30/2007; MSCI EAFE Net Dividends Provisional Standard Index through 5/31/2008; MSCI EAFE Net Dividends Standard Index through 12/31/2009; MSCI World ex-US IMI Net Dividends through 12/31/2010; Custom World ex-US IMI Net Dividends through 8/31/2014; currently 50% custom MSCI World Ex-US IMI Net Dividends, 50% Custom MSCI EAFE Standard Index Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities. (Current blend is maintained by MSCI)</p> <p><b>Emerging Markets</b>  (8) MSCI Emerging Markets IMI Net Dividends through 12/31/2010; currently Custom MSCI Emerging Markets IMI Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.  (9) MSCI EMF through 6/30/2004; MSCI Emerging Markets Net Dividends through 9/30/2007; MSCI Emerging Markets Net Dividends Provisional Standard Index through 5/31/2008; MSCI Emerging Markets Net Dividends Standard Index through 12/31/2010; currently Custom MSCI Emerging Markets Net Dividends Standard Index, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.  (10) MSCI Emerging Markets Small Cap Net Dividends Index through 8/31/2014; currently Custom MSCI Emerging Market Small Cap Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.    (11) MSCI EMF through 6/30/2004; MSCI Emerging Markets Net Dividends through 9/30/2007; MSCI Emerging Markets Net Dividends Provisional Standard Index through 5/31/2008; MSCI Emerging Markets Net Dividends Standard Index through 4/30/2010; MSCI Emerging Markets IMI Net Dividends through 12/31/2010; Custom MSCI Emerging Markets IMI Net Dividends through 8/31/2014; 50% Custom MSCI EM Standard Net Dividends, 43% Custom MSCI EM Standard Net Dividends, 7% Custom MSCI EM Small Cap Net Dividends through 1/31/2015; 25% Custom MSCI EM IMI Net Dividends, 67.37% Custom MSCI EM Standard Net Dividends, 7% Custom MSCI EM Small Cap Net Dividends, .63% Custom MSCI Frontier Markets Country Capped Net Dividends through 2/28/2015. currently weights are based on the beginning adjusted monthly market value of each index group, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities. (Current blend is maintained by MSCI)</p> <p><b>Global Equity</b>  (12) The Total Global Equity composite inception date coincides with the establishment of the MSCI All Country World Index on January 1, 2001.  (13) MSCI All Country World Net Index through 4/30/2010; MSCI All Country World IMI Net Dividends through 12/31/2010; Custom MSCI All Country World IMI Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities through 10/31/2011; 35% S&amp;P 500/8% Russell 2500/42% Custom MSCI World Ex-US IMI Net Dividends/15% Custom MSCI EM IMI Net Dividends through 4/30/2012; 35% S&amp;P 500/9% Russell 2500/40% Custom MSCI World Ex-US IMI Net Dividends/16% Custom MSCI EM IMI Net Dividends through 6/30/2014; currently 44% Domestic Equity BM/40% International Equity BM/16% Emerging Markets BM</p> <p><b>Core Fixed Income</b>  (14) Effective 2/28/2015, the Total Aggregate performance was changed to include the complete performance histories of Economically Targeted Investment managers: Access Capital, Community Capital Management, and AFL-CIO Housing Investment. As a result, prior period Total Aggregate performance was revised from 4/30/2004-1/31/2015.  (15) 100% BC Aggregate through 2/28/2014; 34% BC Agg/66% BC STRIPS 20+ through 2/28/2015; currently Domestic Investment Grade Fixed Income benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weight within the core fixed income portfolio.  (16) BC Aggregate through 6/01; 67% BC Aggregate / 20% BC US TIPS/13% Custom Commodities BM ; Custom Commodities BM through 06/30/2009; currently BC ILB USS Hedged  (17) 33% BC US TIPS/67% BC ILB USS Hedged  (18) 77% BC Aggregate / 8% BC US TIPS/15% BC ILB USS Hedged through 2/28/2014; currently weights are based on the beginning adjusted monthly market value of each index group.</p> <p><b>Value-Added Fixed Income</b>  (19) CSFB Thru 07/2002; ML Master II HY Thru 02/2007; currently ML Master II HY Constrained Index  (20) Public Value Added benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the public value added fixed income portfolio. These weightings will be automatically adjusted at the end of every quarter for usage in the upcoming quarter.  (21) Actual Performance through 2/07; ML Master II FI Constrained Index through 12/31/2009; currently Altman NYU Salomon Center Combined Defaulted Public Bond &amp; Bank Loan Index  (22) The Total Value-Added Fixed Income composite inception date coincides with PRIM's initiative to separate High Yield from Core Fixed Income. Underlying manager market values and cash flows are unavailable prior to July 1, 2001.</p> <p>(23) CSFB through 7/02 / 43% ML Master II HY Index/43% JPM EMBI Global/14% Actual Distressed Debt through 02/07/ through 06/08 60% ML Master II HY Constrained Index and 40% JPM EMBI Global/ 50% ML Master II HY Constrained Index/ 33% JPM EMBI Global/17% S&amp;P LSTA Leveraged Index through 06/30/2009; 18% ML Master II HY Constrained Index/25% JPM EMBI Global/17% S&amp;P LSTA Leveraged Index through 12/31/2009; 24% ML Master II HY Constrained Index/17% S&amp;P LSTA Leveraged Index/20% JPM EMBI Global/39% Altman Index through 03/31/2010; 24.20% ML Master II HY Constrained Index/16.56% S&amp;P LSTA Leveraged Index/19.43% JPM EMBI Global/39.81% Altman Index through 06/30/2010; 22.10% ML Master II HY Constrained Index/14.60% P/LSTA Leveraged Loan Index/20.65% JPM EMBI Global/42.65% Altman Index through 09/30/2010, 22.46% ML Master II HY Constrained Index/12.92% S&amp;P LSTA Leveraged Loan Index/21.56% JPM EMBI Global/43.06% Altman Index through 12/31/2010; 22.14% ML Master II HY Constrained Index/11.13% S&amp;P LSTA Leveraged Loan Index/21.60% JPM EMBI Global/45.13% Altman Index through 3/31/2011; 23.15% ML Master II HY Constrained Index/9.45% S&amp;P LSTA Leveraged Loan Index/22.74% JPM EMBI Global/44.66% Altman Index through 6/30/2011; 23.95% ML Master II HY Constrained Index/9.21% S&amp;P LSTA Leveraged Loan Index/22.96% JPM EMBI Global/43.88% Altman Index through 9/30/2011; 21.58% ML Master II HY Constrained Index/11.08% S&amp;P LSTA Leveraged Loan Index/22.24% JPM EMBI Global/45.10% Altman Index through 12/31/2011; 27.90% ML Master II HY Constrained Index/13.58% S&amp;P LSTA Leveraged Loan Index/20.65% JPM EMBI Global/37.87% Altman Index through 3/31/2012; 28.24% ML Master II HY Constrained Index/13.30% S&amp;P LSTA Leveraged Loan Index/20.71% JPM EMBI Global/37.75% Altman Index through 4/30/2012; 23.55% ML Master II HY Constrained Index/10.63% S&amp;P LSTA Leveraged Loan Index/16.61% JPM EMBI Global/20.36% JPM GBI-EM Global Diversified/28.85% Altman Index through 6/30/2012; 18.21% ML Master II HY Constrained Index/11.24% S&amp;P LSTA Leveraged Loan Index/17.63% JPM EMBI Global/20.80% JPM GBI-EM Global Diversified/32.12% Altman Index through 9/30/2012; 18.29% ML Master II HY Constrained Index/11.98% S&amp;P LSTA Leveraged Loan Index/18.28% JPM EMBI Global/21.32% JPM GBI-EM Global Diversified/29.10% Altman Index through 12/31/2012; 19.40% ML Master II HY Constrained Index/11.90% S&amp;P LSTA Leveraged Loan Index/18.28% JPM EMBI Global/21.32% JPM GBI-EM Global Diversified/29.10% Altman Index through 2/28/2013; Value Added benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the value added fixed income portfolio. These weightings will be automatically adjusted at the end of every quarter for usage in the upcoming quarter.</p> <p><b>Private Equity</b>  (24) Through 6/30/2000, S&amp;P 500 + 5%; currently Actual Performance. This benchmark is used in the Interim Policy Benchmark.  (25) The 7 Year Annualized performance is used in the Policy Return and Policy Benchmark.  (26) Wilshire 5000 + 3% through 4/30/2008; Currently 7 Year Annualized Russell 3000 + 3%</p>

**PENSION RESERVES INVESTMENT TRUST**  
**BENCHMARK/COMPOSITE FOOTNOTES**  
**RATES OF RETURN**  
 Periods Ending August 31, 2015

**Real Estate - Private/Public**

(27) On 06/30/02 PRIM instituted portfolio leverage of up to 40%; increased to 50% leverage on 02/03/04. Portfolio leverage was paid down in September 2005 (\$450 million), October 2005 (\$200 million), and July 2007 (\$450 million). Composite includes Value Added Separate Account opened 4/30/2007 and closed 12/31/2010.

(28) FTSE NAREIT ALL EQUITY REITS through 3/31/2008; 63% FTSE NAREIT ALL EQUITY REITS/27% NAREIT Global REIT/10% NAREIT International REIT through 06/30/09; 50% FTSE NAREIT ALL EQUITY REITS/50% EPRA NAREIT Developed Ex US REIT through 4/30/2012; currently 100% FTSE EPRA NAREIT Developed Net Total Return

(29) NCREIF through 6/30/03; 67% NCREIF/33% FTSE NAREIT ALL EQUITY REITS through 12/31/06; NCREIF + Ratio of 2% FTSE NAREIT ALL EQUITY REITS to PRIT Fund through 03/31/08; 73% NCREIF Property One Qtr Lag/17% FTSE NAREIT ALL EQUITY REITS/7.25% NAREIT Global REIT/2.75% NAREIT Intl REIT through 06/30/09; 82% NCREIF Property One Qtr Lag/9% FTSE NAREIT ALL EQUITY REITS/9% FTSE EPRA NAREIT Developed Ex US REIT through 7/31/09; 80% NCREIF Property One Qtr Lag/10% FTSE NAREIT ALL EQUITY REITS/10% FTSE EPRA NAREIT Developed Ex US REIT through 4/30/2012; currently 80% NCREIF PROPERTY ONE QTR LAG/20% FTSE EPRA NAREIT Developed Net Total

**Timber/Natural Resources**

(30) NCREIF Timber Index through 6/30/03; NCREIF Timber Index Ex-PRIM through 2/28/2010; currently NCREIF Timber Index

(31) Currently Private Natural Resources Actual Performance.

(32) NCREIF Timber Index through 6/30/03; NCREIF Timber Index Ex-PRIM through 06/30/08; 50% NCREIF Timber Index Ex-PRIM/ 42% Lipper Natural Resources Global Fund Index/ 8% Actual Natural Resources Private through 2/28/2010; 50% NCREIF Timber Index/ 42% Lipper Natural Resources Global Fund Index/ 8% Actual Natural Resources Private through 10/31/2011; 53% NCREIF Timber Index/ 39% Lipper Natural Resources Global Fund Index/ 8% Actual Natural Resources Private through 2/28/2014; currently the Timber/Natural Resources benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the Timber/Natural Resources portfolio. These weightings will be automatically adjusted at the end of every quarter for usage in the upcoming quarter.

**Hedge Funds**

(33) ML 90 Day T-Bill + 4% through 12/31/2009; currently HFRI Fund of Funds Composite Index. (HFRI indices - Flash returns are used through 12/31/11. Current returns reflect most up to date performance and are subject to change)

(34) HFRI Fund of Funds Composite Index. (HFRI indices - Flash returns are used through 12/31/11. Current returns reflect most up to date performance and are subject to change)

(35) ML 90 Day T-Bill + 4% through 12/31/2009; currently HFRI Fund of Funds Composite Index. (HFRI indices - Flash returns are used through 12/31/11. Current returns reflect most up to date performance and are subject to change)

**Portfolio Completion Strategies**

(36) Portfolio Completion Strategies Composite Index is calculated by applying the underlying benchmark return for each manager to the manager's weight within the Portfolio Completion Strategies Composite. These weights are based on the beginning adjusted monthly market value of each portfolio.

**Portable Alpha Wind Down**

(37) S&P 500 Index through April 2008; Russell 3000 Index through July 2009; US 3 Month Libor + 3% through 12/31/2009; currently HFRI FOF Composite Index. (HFRI indices - Flash returns are used through 12/31/11. Current returns reflect most up to date performance and are subject to change)

**Overlay**

(38) Actual performance

**Total Fund**

(39) ML 90 Day T-Bill through 6/30/03; ML 3-Month Libor through 03/31/08; currently ML 90 Day T-Bill

**Policy Return**

(40) The Policy Return is calculated by applying the investment performance of each asset class times its actual allocation. The Private Equity portion of the Policy Return is the 7-year annualized return of the Private Equity asset class monthized.

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PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix D

Callan Investment Measurement Service Monthly Review

*PRIM Board Meeting  
Tuesday, October 13, 2015*

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August 31, 2015



**Massachusetts Pension  
Reserves  
Investment Management Board**

**Investment Measurement Service  
Monthly Review**

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The following report was prepared by Callan Associates Inc. ("CAI") using information from sources that include the following: fund trustee(s); fund custodian(s); investment manager(s); CAI computer software; CAI investment manager and fund sponsor database; third party data vendors; and other outside sources as directed by the client. CAI assumes no responsibility for the accuracy or completeness of the information provided, or methodologies employed, by any information providers external to CAI. Reasonable care has been taken to assure the accuracy of the CAI database and computer software. Callan does not provide advice regarding, nor shall Callan be responsible for, the purchase, sale, hedge or holding of individual securities, including, without limitation securities of the client (i.e., company stock) or derivatives in the client's accounts. In preparing the following report, CAI has not reviewed the risks of individual security holdings or the conformity of individual security holdings with the client's investment policies and guidelines, nor has it assumed any responsibility to do so. Advice pertaining to the merits of individual securities and derivatives should be discussed with a third party securities expert. Copyright 2015 by Callan Associates Inc.

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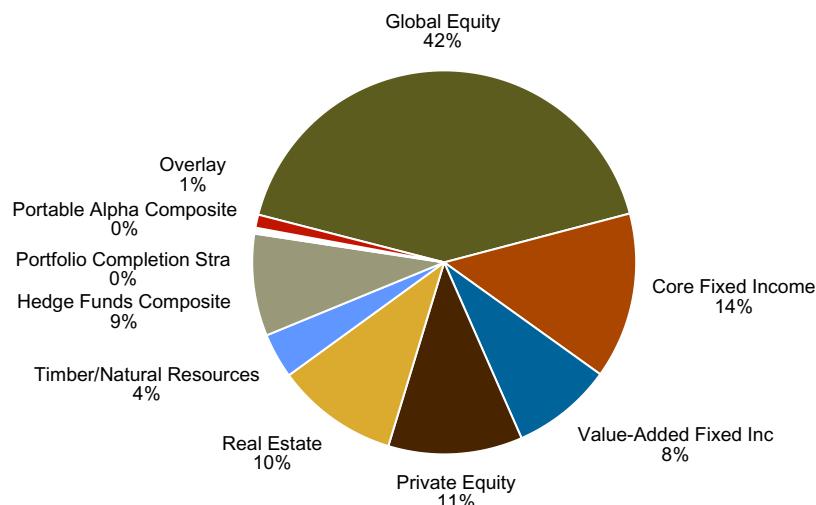
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**August 31, 2015**

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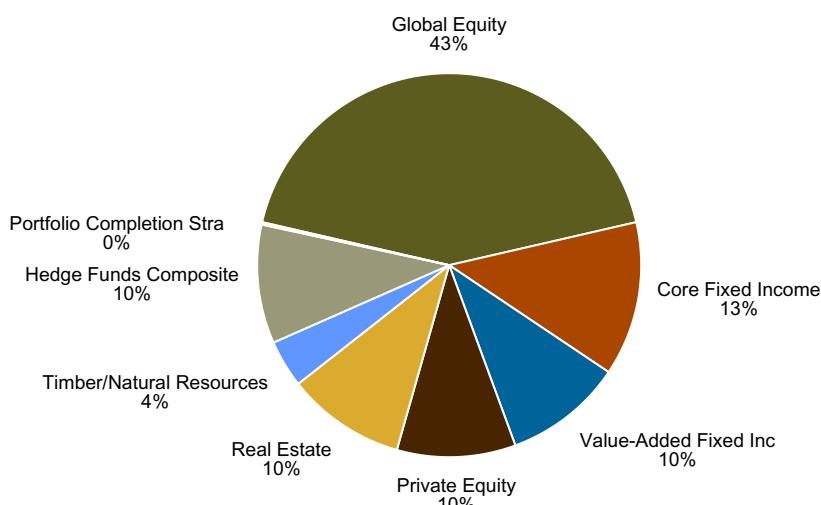
## Actual vs Target Asset Allocation

The first chart below shows the Fund's asset allocation as of August 31, 2015. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

**Actual Asset Allocation**



**Target Asset Allocation**



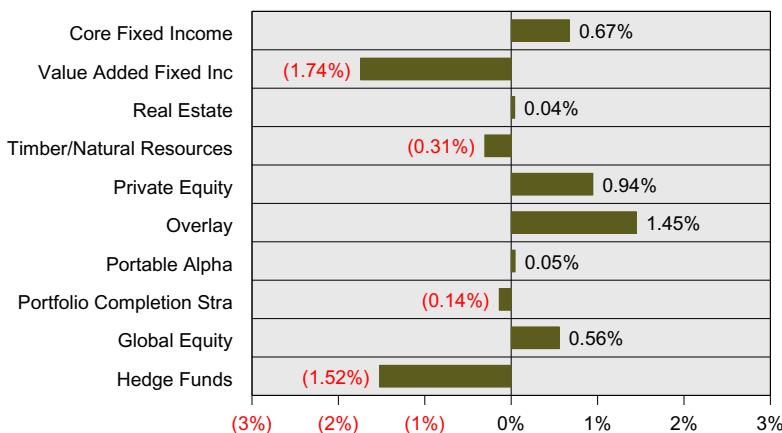
Asset Class	\$000s Actual	Percent Actual	Percent Target	Percent Difference	\$000s Difference
Global Equity	24,926,618	41.9%	42.8%	(0.9%)	(510,255)
Core Fixed Income	8,314,710	14.0%	13.0%	1.0%	588,556
Value-Added Fixed Inc	5,043,157	8.5%	10.0%	(1.5%)	(900,037)
Private Equity	6,699,371	11.3%	10.0%	1.3%	756,177
Real Estate	6,105,539	10.3%	10.0%	0.3%	162,344
Timber/Natural Resources	2,251,895	3.8%	4.0%	(0.2%)	(125,383)
Hedge Funds Composite	5,104,041	8.6%	10.0%	(1.4%)	(839,154)
Portfolio Completion Stra	293,636	0.5%	0.2%	0.3%	174,772
Portable Alpha Composite	27,634	0.0%	0.0%	0.0%	27,634
Overlay	665,345	1.1%	0.0%	1.1%	665,345
Total	59,431,947	100.0%	100.0%		

\*Current Month Target Performance is calculated using monthly rebalancing.

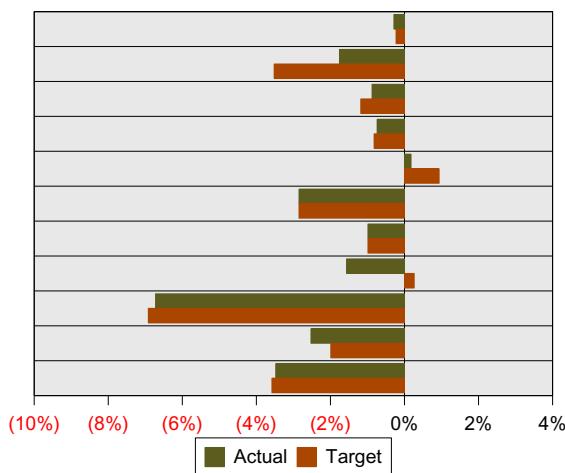
## Monthly Total Fund Relative Attribution - August 31, 2015

The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

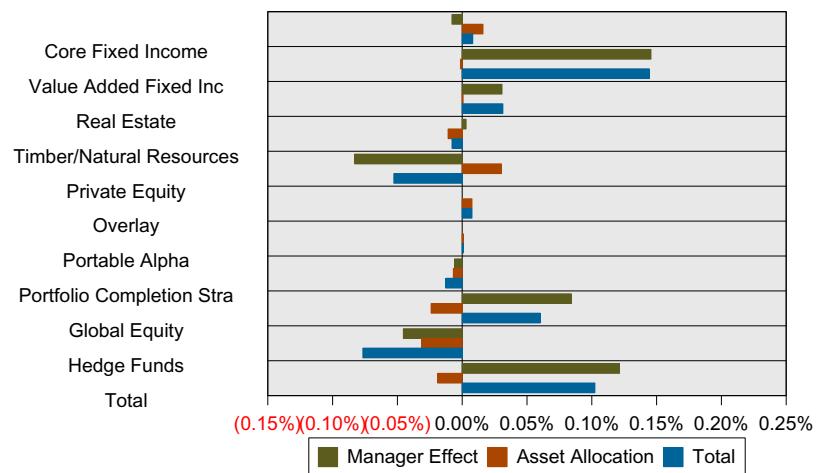
**Asset Class Under or Overweighting**



**Actual vs Target Returns**



**Relative Attribution by Asset Class**



**Relative Attribution Effects for Month ended August 31, 2015**

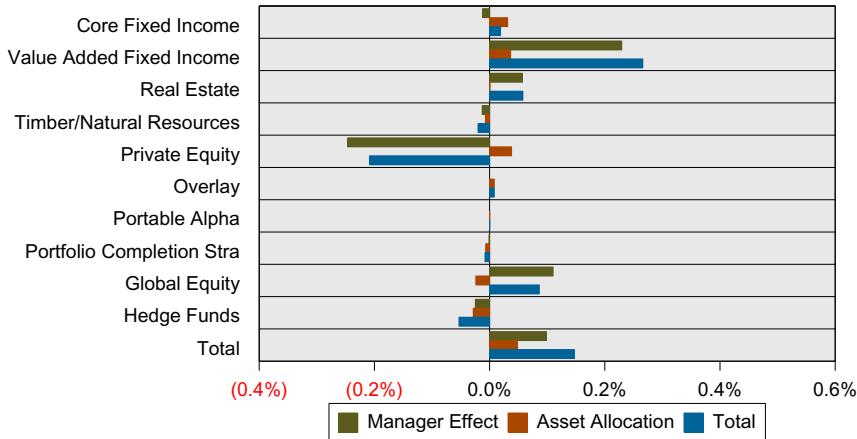
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Core Fixed Income	14%	13%	(0.29%)	(0.23%)	(0.01%)	0.02%	0.01%
Value Added Fixed Inc	8%	10%	(1.76%)	(3.52%)	0.15%	(0.00%)	0.14%
Real Estate	10%	10%	(0.88%)	(1.18%)	0.03%	0.00%	0.03%
Timber/Natural Resources	4%	4%	(0.74%)	(0.82%)	0.00%	(0.01%)	(0.01%)
Private Equity	11%	10%	0.18%	0.94%	(0.08%)	0.03%	(0.05%)
Overlay	1%	0%	(2.85%)	(2.85%)	0.00%	0.01%	0.01%
Portable Alpha	0%	0%	(0.99%)	(0.99%)	0.00%	0.00%	0.00%
Portfolio Completion Stra	0%	0%	(1.56%)	0.26%	(0.01%)	(0.01%)	(0.01%)
Global Equity	43%	43%	(6.72%)	(6.92%)	0.08%	(0.02%)	0.06%
Hedge Funds	8%	10%	(2.53%)	(1.99%)	(0.05%)	(0.03%)	(0.08%)
<b>Total</b>			<b>(3.48%)</b>	<b>= (3.58%) + 0.12% + (0.02%)</b>			<b>0.10%</b>

\* Current Month Target = 42.5% Global Equity Benchmark (12), 13.0% Core Fixed Income Benchmark, 10.0% Value-Added FI Benchmark (21), 10.0% Real Estate Benchmark (27), 10.0% Hedge Fund Benchmark (33), 10.0% 7 YEAR ANNUALIZED Rus 3000+3% (24), 4.0% Timberland/Natural Benchmark (30) and 0.5% MassPRIM-Portfolio Completion Stat BM.  
Attribution is run on Gross returns.

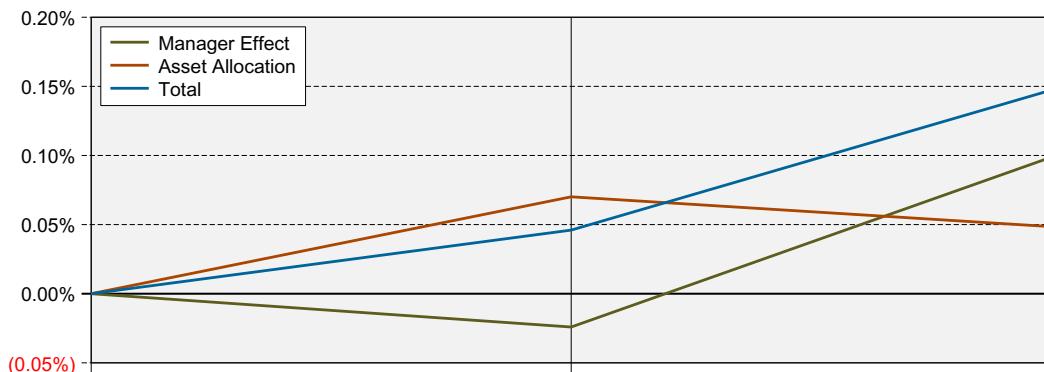
## Cumulative Total Fund Relative Attribution - August 31, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Two Months Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Two Months Relative Attribution Effects

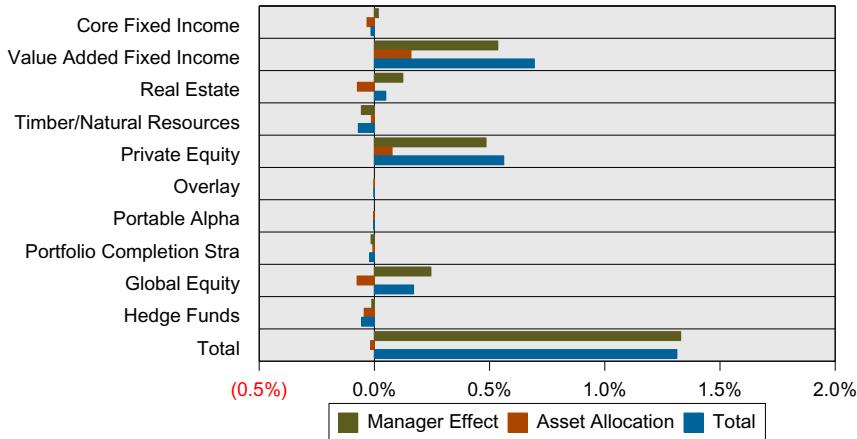
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Core Fixed Income	14%	13%	2.53%	2.63%	(0.01%)	0.03%	0.02%
Value Added Fixed Income	8%	10%	(2.31%)	(5.07%)	0.23%	0.04%	0.27%
Real Estate	10%	10%	0.08%	(0.50%)	0.06%	0.00%	0.06%
Timber/Natural Resources	4%	4%	(2.57%)	(2.22%)	(0.01%)	(0.01%)	(0.02%)
Private Equity	11%	10%	(0.30%)	1.97%	(0.25%)	0.04%	(0.21%)
Overlay	1%	0%	(2.38%)	(2.38%)	0.00%	0.01%	0.01%
Portable Alpha	0%	0%	(1.95%)	(1.95%)	0.00%	0.00%	0.00%
Portfolio Completion Stra	0%	0%	1.81%	0.52%	(0.00%)	(0.01%)	(0.01%)
Global Equity	43%	43%	(6.46%)	(6.71%)	0.11%	(0.02%)	0.09%
Hedge Funds	9%	10%	(2.08%)	(1.78%)	(0.02%)	(0.03%)	(0.05%)
<b>Total</b>					<b>(3.01%) = (3.15%) + 0.10% + 0.05%</b>		<b>0.15%</b>

\* Current Month Target = 42.5% Global Equity Benchmark (12), 13.0% Core Fixed Income Benchmark, 10.0% Value-Added FI Benchmark (21), 10.0% Real Estate Benchmark (27), 10.0% Hedge Fund Benchmark (33), 10.0% 7 YEAR ANNUALIZED Rus 3000+3% (24), 4.0% Timberland/Natural Benchmark (30) and 0.5% MassPRIM-Portfolio Completion Stat BM.  
Attribution is run on Gross returns.

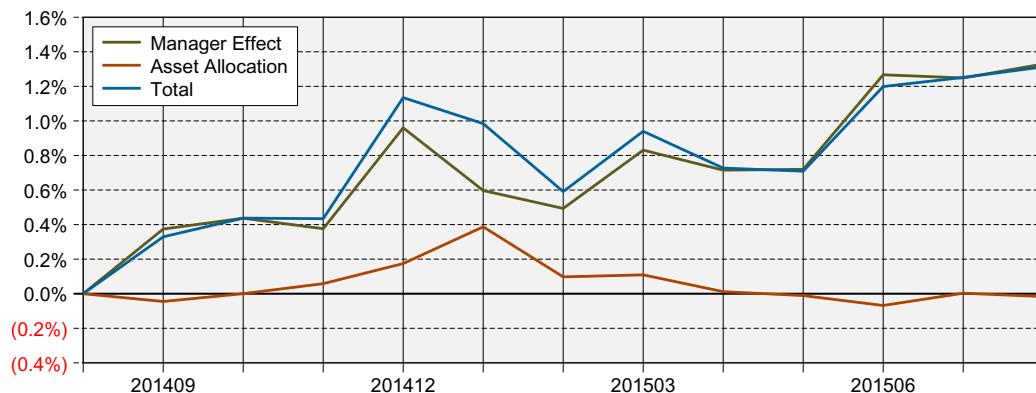
## Cumulative Total Fund Relative Attribution - August 31, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### One Year Relative Attribution Effects



### Cumulative Relative Attribution Effects



### One Year Relative Attribution Effects

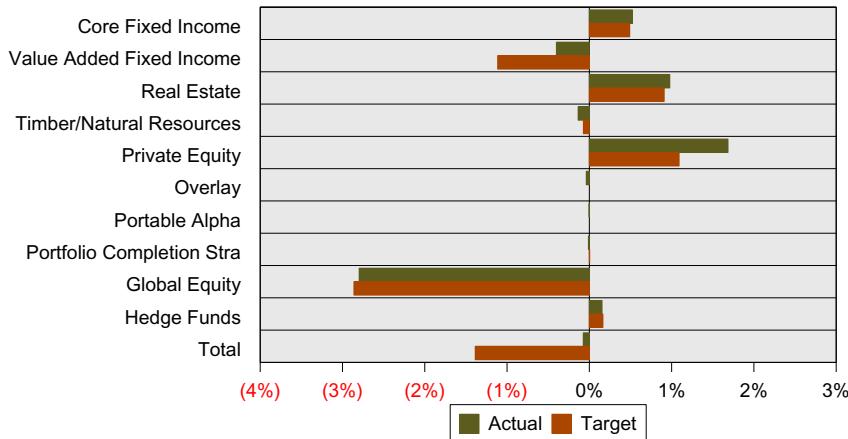
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Core Fixed Income	15%	13%	3.53%	3.41%	0.02%	(0.03%)	(0.01%)
Value Added Fixed Income	8%	10%	(4.62%)	(10.61%)	0.54%	0.16%	0.69%
Real Estate	9%	10%	10.69%	9.36%	0.12%	(0.07%)	0.05%
Timber/Natural Resources	4%	4%	(3.42%)	(1.92%)	(0.06%)	(0.01%)	(0.07%)
Private Equity	11%	10%	16.34%	11.35%	0.48%	0.08%	0.56%
Overlay	1%	0%	(1.59%)	(1.59%)	0.00%	(0.00%)	(0.00%)
Portable Alpha	0%	0%	(6.15%)	(6.15%)	0.00%	(0.00%)	(0.00%)
Portfolio Completion Stra	0%	0%	(3.37%)	2.11%	(0.01%)	(0.01%)	(0.02%)
Global Equity	42%	43%	(6.30%)	(6.84%)	0.25%	(0.08%)	0.17%
Hedge Funds	9%	10%	1.47%	1.63%	(0.01%)	(0.04%)	(0.06%)
<b>Total</b>			<b>(0.07%) = (1.39%) + 1.33% + (0.02%)</b>				<b>1.31%</b>

\* Current Month Target = 42.5% Global Equity Benchmark (12), 13.0% Core Fixed Income Benchmark, 10.0% Value-Added FI Benchmark (21), 10.0% Real Estate Benchmark (27), 10.0% Hedge Fund Benchmark (33), 10.0% 7 YEAR ANNUALIZED Rus 3000+3% (24), 4.0% Timberland/Natural Benchmark (30) and 0.5% MassPRIM-Portfolio Completion Stat BM.  
Attribution is run on Gross returns.

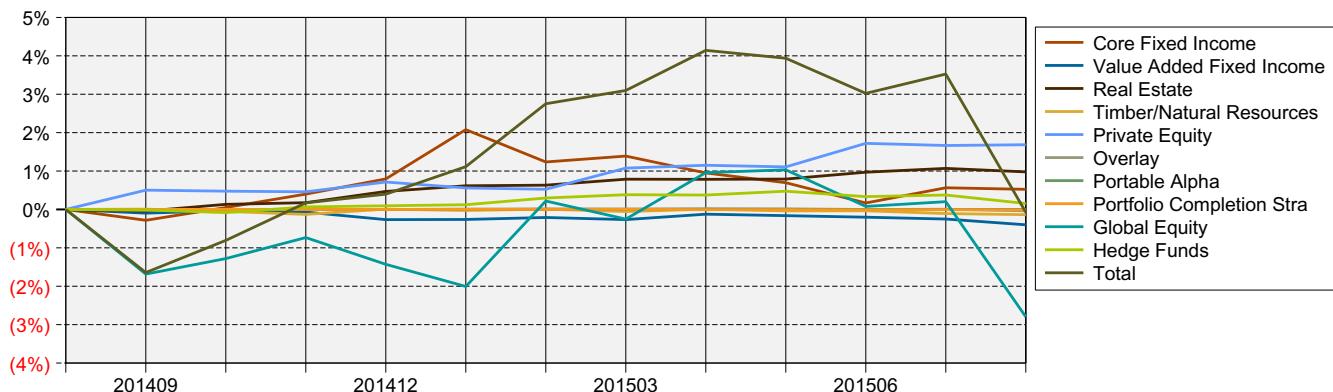
## Cumulative Total Fund Absolute Attribution - August 31, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of absolute total fund Performance and target performance. These cumulative results quantify the longer-term contribution of each asset class to absolute total fund return as well as the target return.

### One Year Absolute Return Contributions



### Cumulative Absolute Return Contributions



### One Year Absolute Attribution Effects

Asset Class	Effective Actual Weight	Actual Return	Absolute Return Contribution	Effective Target Weight	Target Return	Target Return Contribution	Return Contribution Difference
Core Fixed Income	15%	3.53%	0.52%	13%	3.41%	0.49%	0.03%
Value Added Fixed Income	8%	(4.62%)	(0.40%)	10%	(10.61%)	(1.11%)	0.71%
Real Estate	9%	10.69%	0.98%	10%	9.36%	0.91%	0.07%
Timber/Natural Resources	4%	(3.42%)	(0.14%)	4%	(1.92%)	(0.07%)	(0.06%)
Private Equity	11%	16.34%	1.69%	10%	11.35%	1.09%	0.59%
Overlay	1%	(1.59%)	(0.04%)	0%	(1.59%)	0.00%	(0.04%)
Portable Alpha	0%	(6.15%)	(0.00%)	0%	(6.15%)	0.00%	(0.00%)
Portfolio Completion Stra	0%	(3.37%)	(0.01%)	0%	2.11%	0.00%	(0.02%)
Global Equity	42%	(6.30%)	(2.80%)	43%	(6.84%)	(2.86%)	0.06%
Hedge Funds	9%	1.47%	0.15%	10%	1.63%	0.17%	(0.01%)

**Total Fund Return (0.07%)**

**Target Return (1.39%)**

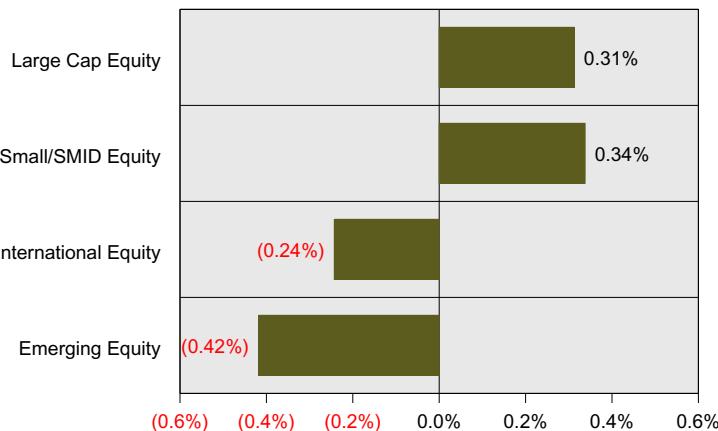
**1.31%**

\* Current Month Target = 42.5% Global Equity Benchmark (12), 13.0% Core Fixed Income Benchmark, 10.0% Value-Added FI Benchmark (21), 10.0% Real Estate Benchmark (27), 10.0% Hedge Fund Benchmark (33), 10.0% 7 YEAR ANNUALIZED Rus 3000+3% (24), 4.0% Timberland/Natural Benchmark (30) and 0.5% MassPRIM-Portfolio Completion Stat BM.  
Attribution is run on Gross returns.

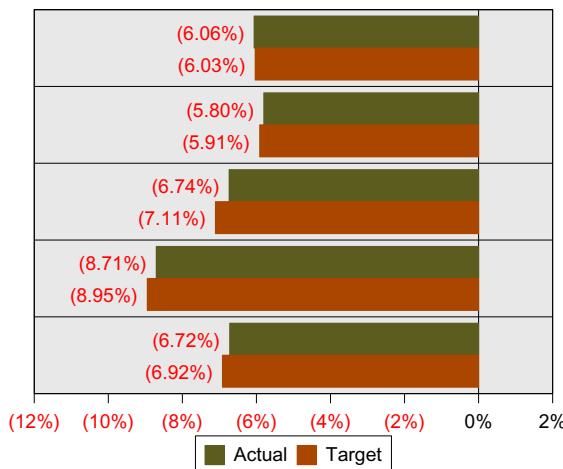
## Monthly Total Fund Relative Attribution - August 31, 2015

The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

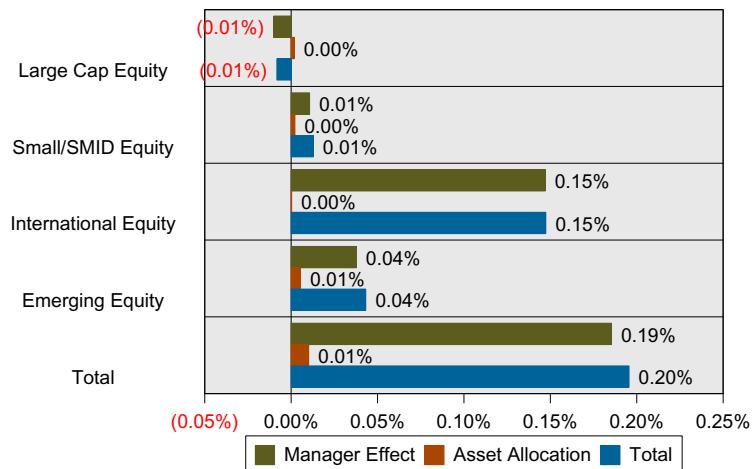
**Asset Class Under or Overweighting**



**Actual vs Target Returns**



**Relative Attribution by Asset Class**



**Relative Attribution Effects for Month ended August 31, 2015**

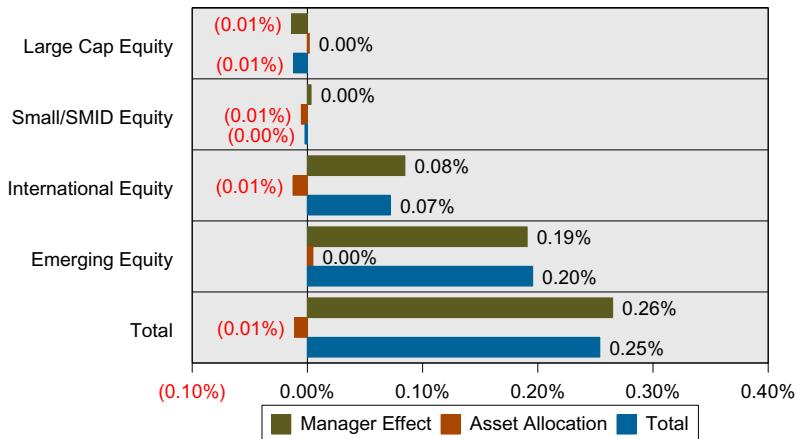
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	35%	35%	(6.06%)	(6.03%)	(0.01%)	0.00%	(0.01%)
Small/SMID Equity	10%	9%	(5.80%)	(5.91%)	0.01%	0.00%	0.01%
International Equity	40%	40%	(6.74%)	(7.11%)	0.15%	0.00%	0.15%
Emerging Equity	16%	16%	(8.71%)	(8.95%)	0.04%	0.01%	0.04%
<b>Total</b>			<b>(6.72%)</b>	<b>= (6.92%) + 0.19% + 0.01%</b>			<b>0.20%</b>

\* Current Month Target = 40.0% Custom World Ex-US IMI Net Divs (7), 34.7% S&P 500 Index, 16.0% Custom MSCI EM IMI Net Divs (10), 6.5% Russell 2500 Index, 1.6% Russell 2000 Value Index, 0.6% Russell 2000 Growth Index and 0.5% Russell 2500 Growth Index.  
Attribution is run on Gross returns.

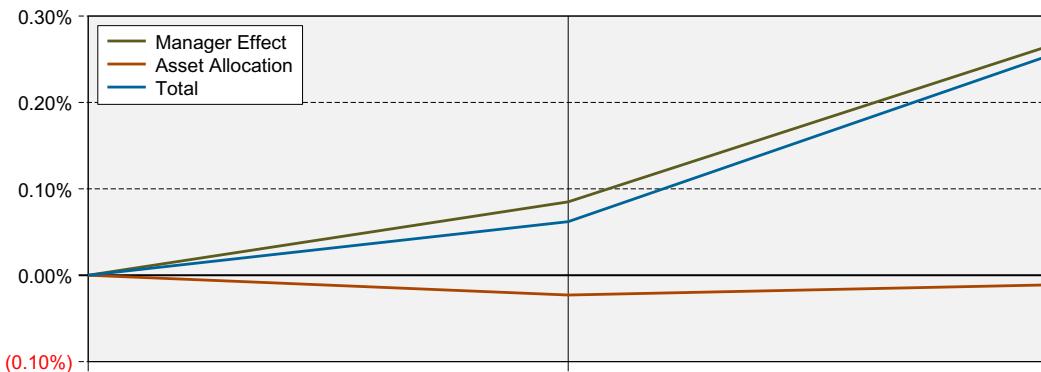
## Cumulative Total Fund Relative Attribution - August 31, 2015

The charts below accumulate the Total Global Equity Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total global equity fund performance relative to target. These cumulative results quantify the longer-term sources of total global equity fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total global equity fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Two Months Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Two Months Relative Attribution Effects

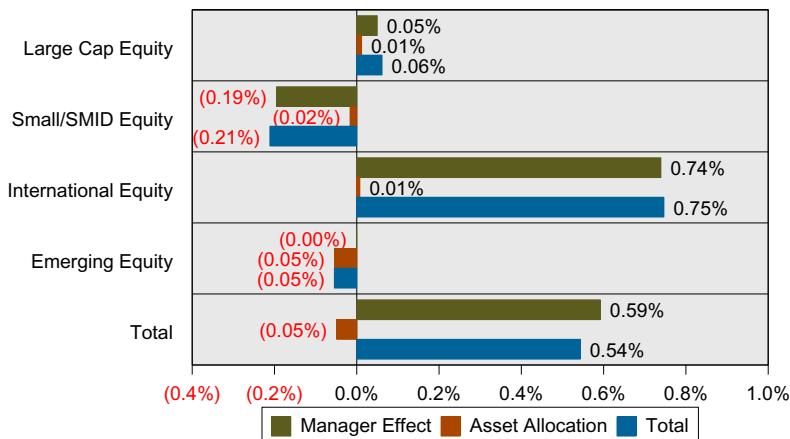
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	35%	35%	(4.10%)	(4.06%)	(0.01%)	0.00%	(0.01%)
Small/SMID Equity	10%	9%	(6.37%)	(6.40%)	0.00%	(0.01%)	(0.00%)
International Equity	40%	40%	(5.38%)	(5.60%)	0.08%	(0.01%)	0.07%
Emerging Equity	16%	16%	(14.09%)	(15.26%)	0.19%	0.00%	0.20%
<b>Total</b>			<b>(6.46%) = (6.71%) + 0.26% + (0.01%)</b>				<b>0.25%</b>

\* Current Month Target = 40.0% Custom World Ex-US IMI Net Divs (7), 34.7% S&P 500 Index, 16.0% Custom MSCI EM IMI Net Divs (10), 6.5% Russell 2500 Index, 1.6% Russell 2000 Value Index, 0.6% Russell 2000 Growth Index and 0.5% Russell 2500 Growth Index.  
Attribution is run on Gross returns.

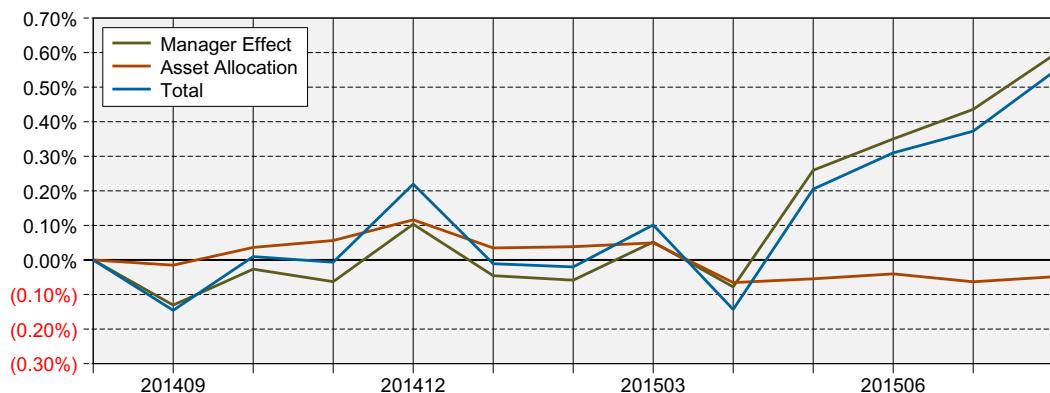
## Cumulative Total Fund Relative Attribution - August 31, 2015

The charts below accumulate the Total Global Equity Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total global equity fund performance relative to target. These cumulative results quantify the longer-term sources of total global equity fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total global equity fund excess return into Asset Allocation Effect and Manager Selection Effect.

### One Year Relative Attribution Effects



### Cumulative Relative Attribution Effects



### One Year Relative Attribution Effects

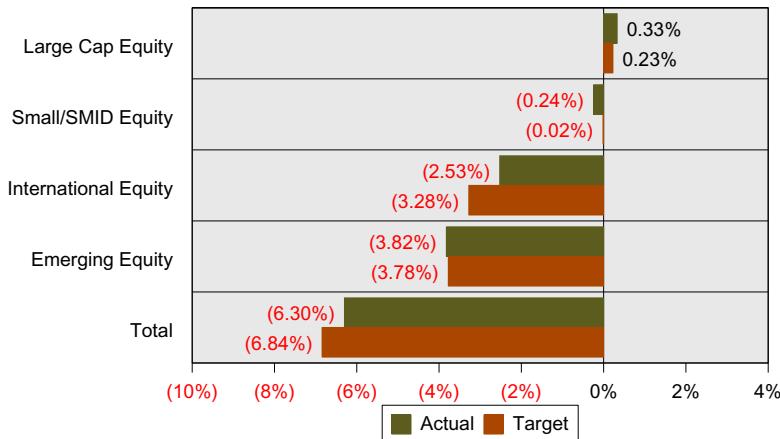
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	36%	35%	0.62%	0.48%	0.05%	0.01%	0.06%
Small/SMID Equity	10%	9%	(2.65%)	(0.51%)	(0.19%)	(0.02%)	(0.21%)
International Equity	39%	40%	(6.35%)	(8.26%)	0.74%	0.01%	0.75%
Emerging Equity	16%	16%	(21.88%)	(21.94%)	(0.00%)	(0.05%)	(0.05%)
<b>Total</b>			<b>(6.30%) = (6.84%) + 0.59% + (0.05%)</b>				<b>0.54%</b>

\* Current Month Target = 40.0% Custom World Ex-US IMI Net Divs (7), 34.7% S&P 500 Index, 16.0% Custom MSCI EM IMI Net Divs (10), 6.5% Russell 2500 Index, 1.6% Russell 2000 Value Index, 0.6% Russell 2000 Growth Index and 0.5% Russell 2500 Growth Index.  
Attribution is run on Gross returns.

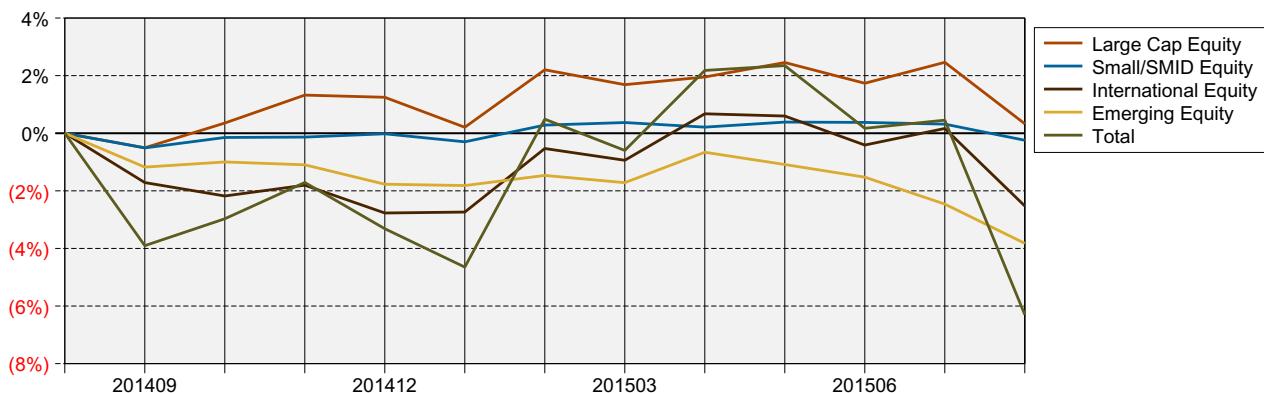
## Cumulative Total Fund Absolute Attribution - August 31, 2015

The charts below accumulate the Total Global Equity Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total global equity fund performance relative to target. These cumulative results quantify the longer-term sources of total global equity fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total global equity fund excess return into Asset Allocation Effect and Manager Selection Effect.

### One Year Absolute Return Contributions



### Cumulative Absolute Return Contributions



### One Year Absolute Attribution Effects

Asset Class	Effective Actual Weight	Actual Return	Absolute Return Contribution	Effective Target Weight	Target Return	Target Return Contribution	Return Contribution Difference
Large Cap Equity	36%	0.62%	0.33%	35%	0.48%	0.23%	0.10%
Small/SMID Equity	10%	(-2.65%)	(-0.24%)	9%	(-0.51%)	(-0.02%)	(-0.23%)
International Equity	39%	(-6.35%)	(-2.53%)	40%	(-8.26%)	(-3.28%)	0.75%
Emerging Equity	16%	(-21.88%)	(-3.82%)	16%	(-21.94%)	(-3.78%)	(-0.05%)
<b>Total Fund Return (6.30%)</b>				<b>Target Return (6.84%)</b>			<b>0.54%</b>

\* Current Month Target = 40.0% Custom World Ex-US IMI Net Divs (7), 34.7% S&P 500 Index, 16.0% Custom MSCI EM IMI Net Divs (10), 6.5% Russell 2500 Index, 1.6% Russell 2000 Value Index, 0.6% Russell 2000 Growth Index and 0.5% Russell 2500 Growth Index.  
Attribution is run on Gross returns.

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of January 31, 2015, with the distribution as of December 31, 2014. All Returns and market values provided by custodian.

### Asset Distribution Across Investment Managers

	August 31, 2015	July 31, 2015		
	Market Value	% of Total Fund	Market Value	% of Total Fund
<b>Total Global Equity</b>	<b>\$24,926,617,925</b>	<b>41.89%</b>	<b>\$26,292,481,051</b>	<b>42.58%</b>
Intech	860,270,264	1.45%	910,596,517	1.47%
PIMCO Stock Plus	883,910,019	1.49%	945,714,959	1.53%
SSgA S&P 500	7,030,009,033	11.81%	7,383,167,646	11.96%
Summit Creek SCG	199,754,002	0.34%	216,221,969	0.35%
Frontier SCV	173,574,723	0.29%	178,542,071	0.29%
Huber SCV	233,572,049	0.39%	247,837,154	0.40%
Riverbridge SMIDG	161,448,616	0.27%	170,370,398	0.28%
SouthernSun SMID	141,470,940	0.24%	149,975,123	0.24%
SSgA Russell 2500	1,492,864,963	2.51%	1,586,247,848	2.57%
Domestic Equity Closed Portfolios	-	-	0	0.00%
Domestic Eq. Cash	-551,156	(0.00%)	1,292,617	0.00%
SSgA World ex-US	4,956,632,812	8.33%	5,221,281,121	8.46%
Marathon Asset Mgmt	2,379,476,720	4.00%	2,518,413,407	4.08%
Baillie Gifford	1,676,091,241	2.82%	1,819,656,065	2.95%
Mondrian Investment Partners	759,627,721	1.28%	819,371,956	1.33%
FIS	103,480,943	0.17%	110,300,849	0.18%
International Equity Cash	664,625	0.00%	1,385,358	0.00%
SSgA Emerging Markets	986,624,091	1.66%	992,389,247	1.61%
AQR Emerging	504,477,725	0.85%	512,357,961	0.83%
Baillie Gifford EMM	549,785,111	0.92%	560,627,010	0.91%
Driehaud Capital	537,460,313	0.90%	584,530,876	0.95%
Harding Loewner	370,005,338	0.62%	405,969,251	0.66%
Pzena Inv	517,732,196	0.87%	513,145,729	0.83%
Acadian EM SC	122,922,159	0.21%	136,739,451	0.22%
Wasatch EM SC	93,499,217	0.16%	102,542,516	0.17%
Acadian FM	61,993,906	0.10%	50,659,736	0.08%
City of London FM	94,938,246	0.16%	100,291,051	0.16%
Emerging Markets Transition	34,557,636	0.06%	52,478,357	0.08%
Emerging Markets Cash	255,142	0.00%	303,208	0.00%
<b>Core Fixed Income</b>	<b>\$8,314,710,096</b>	<b>13.97%</b>	<b>\$8,486,603,384</b>	<b>13.74%</b>
Blackrock Passive (Core)	888,128,839	1.49%	889,417,330	1.44%
PIMCO (Core)	788,969,971	1.33%	793,110,589	1.28%
Loomis Sayles Core Corporate	1,125,542,998	1.89%	1,127,496,449	1.83%
Blackrock STRIPS	3,412,582,329	5.73%	3,557,924,765	5.76%
Blackrock TIPS	591,358,826	0.99%	595,518,930	0.96%
Blackrock Global ILBs	1,249,764,073	2.10%	1,266,523,205	2.05%
Access Capital/Merrill Lnch ETI	103,090,075	0.17%	103,062,742	0.17%
Community Capital Management	27,799,821	0.05%	27,764,813	0.04%
AFL-CIO Housing Investor Trust	125,213,758	0.21%	125,290,446	0.20%
Core FI Closed Portfolios	748	0.00%	751	0.00%
Core Fixed Cash	2,258,658	0.00%	493,363	0.00%
<b>Value Added Fixed Income</b>	<b>\$5,043,157,449</b>	<b>8.47%</b>	<b>\$5,024,335,305</b>	<b>8.14%</b>
Fidelity (High Yield)	314,200,071	0.53%	318,158,027	0.52%
Loomis Sayles High Yield	317,531,528	0.53%	325,034,179	0.53%
Shenkman	296,107,076	0.50%	301,739,172	0.49%
FI Distressed Debt Cash	-15,530,997	(0.03%)	-9,590,212	(0.02%)
FI High Yield Debt Cash	126,203	0.00%	107,250	0.00%
Eaton Vance Bank Loans	468,058,946	0.79%	471,038,490	0.76%
ING Bank Loans	465,742,355	0.78%	467,584,472	0.76%
Ashmore Emerging Markets Debt	479,592,759	0.81%	490,812,720	0.79%
PIMCO Emerging Debt	301,039,917	0.51%	307,596,196	0.50%
Investec EM Debt	286,107,160	0.48%	276,912,897	0.45%
Pictet EM Debt	474,641,403	0.80%	444,605,326	0.72%
Stone Harbor EM Debt	281,488,338	0.47%	273,157,318	0.44%
Distressed Debt Portfolio	1,374,052,690	2.31%	1,357,179,472	2.20%

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of January 31, 2015, with the distribution as of December 31, 2014. All Returns and market values provided by custodian.

### Asset Distribution Across Investment Managers

	August 31, 2015	July 31, 2015		
	Market Value	% of Total Fund	Market Value	% of Total Fund
<b>Private Equity</b>	<b>\$6,699,371,458</b>	<b>11.26%</b>	<b>\$6,783,888,985</b>	<b>10.99%</b>
Special Equity	19,154,826	0.03%	19,141,834	0.03%
Special Equity 2000	12,290,067	0.02%	26,277,508	0.04%
Special Equity 2001	58,505,732	0.10%	58,673,948	0.10%
Special Equity 2002	4,495,701	0.01%	5,405,428	0.01%
Special Equity 2003	92,612,144	0.16%	93,465,135	0.15%
Special Equity 2004	77,372,906	0.13%	77,776,536	0.13%
Special Equity 2005	385,869,008	0.65%	392,258,801	0.64%
Special Equity 2006	620,322,648	1.04%	632,790,165	1.02%
Special Equity 2007	841,984,676	1.41%	905,945,916	1.47%
Special Equity 2008	875,237,225	1.47%	907,351,211	1.47%
Special Equity 2009	232,228,186	0.39%	232,031,626	0.38%
Special Equity 2010	483,109,007	0.81%	499,892,715	0.81%
Special Equity 2011	572,440,736	0.96%	560,046,918	0.91%
Special Equity 2012	230,454,449	0.39%	242,097,333	0.39%
Special Equity 2013	168,464,399	0.28%	168,111,561	0.27%
Special Equity 2014	212,420,569	0.36%	175,323,376	0.28%
Special Equity 2015	80,336,981	0.13%	66,105,052	0.11%
Venture Capital	12,953,229	0.02%	12,953,229	0.02%
Venture Capital 2000	66,840,764	0.11%	67,359,185	0.11%
Venture Capital 2001	36,656,826	0.06%	39,179,753	0.06%
Venture Capital 2002	14,159,907	0.02%	14,159,907	0.02%
Venture Capital 2003	30,762,823	0.05%	30,762,823	0.05%
Venture Capital 2004	36,050,216	0.06%	36,050,216	0.06%
Venture Capital 2005	117,358,713	0.20%	118,650,464	0.19%
Venture Capital 2006	135,519,347	0.23%	135,519,347	0.22%
Venture Capital 2007	180,641,136	0.30%	191,584,088	0.31%
Venture Capital 2008	31,509,807	0.05%	31,509,807	0.05%
Venture Capital 2009	226,185,673	0.38%	230,766,673	0.37%
Venture Capital 2010	257,393,620	0.43%	256,799,933	0.42%
Venture Capital 2011	90,916,514	0.15%	89,801,345	0.15%
Venture Capital 2012	215,418,266	0.36%	213,484,734	0.35%
Venture Capital 2013	43,821,323	0.07%	43,071,323	0.07%
Venture Capital 2014	49,229,285	0.08%	46,817,727	0.08%
Venture Capital 2015	3,496,814	0.01%	3,496,814	0.01%
Private Equity Cash	183,157,950	0.31%	159,226,547	0.26%
<b>Real Estate</b>	<b>\$6,105,538,763</b>	<b>10.26%</b>	<b>\$6,179,518,667</b>	<b>10.01%</b>
Invesco Core	1,117,221,044	1.88%	1,116,785,044	1.81%
LaSalle Core	1,481,033,775	2.49%	1,480,810,775	2.40%
AEW Core	1,126,756,489	1.89%	993,977,967	1.61%
JP Morgan I.M.	755,891,685	1.27%	755,124,720	1.22%
TA Associates	1,120,069,371	1.88%	1,155,908,128	1.87%
Core Real Estate Portfolio Debt	-994,521,816	(1.67%)	-1,002,037,756	(1.62%)
Canyon-Johnson II	5,518,556	0.01%	5,518,556	0.01%
Intercontinental IV	1,035,695	0.00%	1,035,695	0.00%
New Boston Urban I	7,428,285	0.01%	7,450,445	0.01%
Non Core 2011	424,796,635	0.71%	419,787,858	0.68%
INVESCO Global REIT	257,777,801	0.43%	273,751,138	0.44%
CenterSquare Global REIT	734,519,084	1.23%	780,094,186	1.26%
EII (INVESCO TRAN)	140,911,536	0.24%	149,615,497	0.24%
RREEF/European Investors Tran	25,629	0.00%	26,211	0.00%
Real Estate Leverage Cash	-55,159	(0.00%)	-11,020	(0.00%)
REIT Cash	44,328	0.00%	47,261	0.00%
Core Real Estate Cash	-72,914,203	(0.12%)	41,633,931	0.07%

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of January 31, 2015, with the distribution as of December 31, 2014. All Returns and market values provided by custodian.

**Asset Distribution Across Investment Managers**

	August 31, 2015		July 31, 2015	
	Market Value	% of Total Fund	Market Value	% of Total Fund
<b>Timber/Natural Resources</b>	<b>\$2,251,895,079</b>	<b>3.78%</b>	<b>\$2,268,540,919</b>	<b>3.67%</b>
Forest Investment Associates	1,109,272,886	1.86%	1,109,272,886	1.80%
The Campbell Group	538,300,957	0.90%	543,000,271	0.88%
Timber Cash	56,213	0.00%	5,420	0.00%
Jennison Natural Resources	162,393,484	0.27%	166,914,038	0.27%
T Rowe Natural Resources	172,962,599	0.29%	179,688,491	0.29%
Public Natural Resources Cash	7,854	0.00%	2,825	0.00%
Private Natural Resources	268,916,736	0.45%	268,916,736	0.44%
Private Natural Resources Cash	-15,649	(0.00%)	740,252	0.00%
<b>Portfolio Completion Strategy</b>	<b>\$293,636,301</b>	<b>0.49%</b>	<b>\$98,113,739</b>	<b>0.16%</b>
Portfolio Completion Strategy	293,636,301	0.49%	98,113,739	0.16%
<b>Hedge Funds</b>	<b>\$5,104,040,966</b>	<b>8.58%</b>	<b>\$5,196,678,486</b>	<b>8.42%</b>
Arden HFOF (Liquidating)	46,207,164	0.08%	47,906,085	0.08%
Ivy (Liquidating)	4,680,156	0.01%	4,684,780	0.01%
PAAMCO	914,845,783	1.54%	997,221,235	1.62%
Direct Hedge Funds	4,077,273,486	6.85%	4,112,852,167	6.66%
Hedge Fund Cash	61,034,377	0.10%	34,014,219	0.06%
<b>Portable Alpha</b>	<b>\$27,633,676</b>	<b>0.05%</b>	<b>\$27,931,301</b>	<b>0.05%</b>
Austin Capital Management	1,576,199	0.00%	1,576,464	0.00%
Crestline Advisors	11,066,508	0.02%	11,144,460	0.02%
Strategic Investment	14,988,456	0.03%	15,185,620	0.02%
Portable Alpha Cash	2,513	0.00%	24,757	0.00%
<b>Total Overlay</b>	<b>\$665,344,830</b>	<b>1.12%</b>	<b>\$1,098,747,823</b>	<b>1.78%</b>
Clifton Overlay	141,790,266	0.24%	178,599,422	0.29%
Overlay Cash	523,554,564	0.88%	920,148,401	1.49%
Participant Cash	50,554,656	0.08%	221,524,869	0.36%
Teachers and Employees Cash	26,891,585	0.05%	67,122,687	0.11%
<b>Total Fund</b>	<b>\$59,509,392,784</b>	<b>100.0%</b>	<b>\$61,745,487,215</b>	<b>100.0%</b>

## Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended August 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended August 31, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
<b>Total Fund ex-cash (Core)</b>	(3.48%)	(3.01%)	(0.07%)	9.30%	9.68%
Interim Benchmark (1)	(3.66%)	(3.37%)	(0.90%)	8.31%	8.95%
Total Core Bechmark (2)	(3.58%)	(3.15%)	(1.39%)	7.40%	7.99%
Global Equity	(6.72%)	(6.46%)	(6.30%)	9.89%	10.28%
Global Equity Benchmark (13)	(6.92%)	(6.71%)	(6.84%)	9.36%	9.59%
Core Fixed Income	(0.29%)	2.53%	3.53%	3.61%	4.64%
Core Fixed-Income Bench (18)	(0.23%)	2.63%	3.41%	3.16%	4.24%
Value-Added Fixed Income	(1.76%)	(2.31%)	(4.62%)	3.38%	5.95%
Value-Added Benchmark (23)	(3.52%)	(5.07%)	(10.61%)	0.68%	3.46%
Private Equity	0.18%	(0.30%)	16.34%	18.75%	18.28%
Private Equity Benchmark (24)	0.18%	(0.30%)	16.34%	18.75%	18.28%
Private Equity Benchmark (26)	0.94%	1.97%	11.35%	9.61%	8.72%
Real Estate	(0.88%)	0.08%	10.69%	12.25%	13.13%
Real Estate Benchmark (29)	(1.18%)	(0.50%)	9.36%	10.73%	12.43%
Timber/Natural Resources	(0.74%)	(2.57%)	(3.42%)	4.78%	4.82%
Timber/Natural Benchmark (32)	(0.82%)	(2.22%)	(1.92%)	5.92%	5.46%
Portfolio Completion Strategy	(1.56%)	1.81%	-	-	-
Portfolio Completion Benchmark (36)	0.26%	0.52%	-	-	-
Hedge Funds	(2.53%)	(2.08%)	1.47%	7.35%	5.72%
Hedge Funds Benchmark (35)	(1.99%)	(1.78%)	1.63%	5.10%	3.63%
Portable Alpha	(0.99%)	(1.95%)	(6.15%)	(3.24%)	(2.47%)
Portable Alpha Benchmark (37)	(1.99%)	(1.78%)	1.63%	5.10%	3.63%
Total Overlay	(2.85%)	(2.38%)	(1.59%)	-	-
Total Overlay Benchmark (38)	(2.85%)	(2.38%)	(1.59%)	-	-
Participant Cash	0.02%	0.03%	0.15%	0.14%	0.15%
Teachers and Employees Cash	0.01%	0.03%	0.14%	0.14%	0.15%
Merrill Lynch 90 Day Tbill (39)	0.01%	0.01%	0.03%	0.06%	0.08%
<b>Total Fund</b>	<b>(3.47%)</b>	<b>(3.00%)</b>	<b>(0.07%)</b>	<b>9.27%</b>	<b>9.64%</b>
Interim Benchmark (1)	(3.66%)	(3.37%)	(0.90%)	8.31%	8.95%
Total Core Bechmark (2)	(3.58%)	(3.15%)	(1.39%)	7.40%	7.99%

\* Current Month Target = 42.5% Global Equity Benchmark (12), 13.0% Core Fixed Income Benchmark, 10.0% Value-Added FI Benchmark (21), 10.0% Real Estate Benchmark (27), 10.0% Hedge Fund Benchmark (33), 10.0% 7 YEAR ANNUALIZED Rus 3000+3% (24), 4.0% Timberland/Natural Benchmark (30) and 0.5% MassPRIM-Portfolio Completion Stat BM.  
All returns reported gross-of-fee.

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of August 31, 2015, with the distribution as of July 31, 2015.

**Asset Distribution Across Investment Managers**

	August 31, 2015		July 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
<b>Domestic Equity</b>	\$11,176,323,453	44.84%	\$11,789,966,301	44.84%
<b>Large Cap</b>	\$8,774,189,316	35.20%	\$9,239,479,122	35.14%
Intech	860,270,264	3.45%	910,596,517	3.46%
PIMCO Stock Plus	883,910,019	3.55%	945,714,959	3.60%
SSgA S&P 500	7,030,009,033	28.20%	7,383,167,646	28.08%
<b>Small/SMID Cap Core</b>	\$2,402,685,294	9.64%	\$2,549,194,563	9.70%
<b>Small Cap Growth</b>				
Summit Creek SCG	199,754,002	0.80%	216,221,969	0.82%
<b>Small Cap Value</b>	\$407,146,772	1.63%	\$426,379,225	1.62%
Frontier SCV	173,574,723	0.70%	178,542,071	0.68%
Huber SCV	233,572,049	0.94%	247,837,154	0.94%
<b>SMID Growth</b>				
Riverbridge SMIDG	161,448,616	0.65%	170,370,398	0.65%
<b>SMID Cap Core</b>	\$1,634,335,904	6.56%	\$1,736,222,971	6.60%
SouthernSun SMID	141,470,940	0.57%	149,975,123	0.57%
SSgA Russell 2500	1,492,864,963	5.99%	1,586,247,848	6.03%
Domestic Equity Closed Portfolios			0	0.00%
Domestic Eq. Cash	-551,156	(0.00%)	1,292,617	0.00%
<b>International Equity</b>	\$9,875,988,483	39.62%	\$10,490,422,976	39.90%
SSgA World ex-US	4,956,632,812	19.88%	5,221,281,121	19.86%
Marathon Asset Mgmt	2,379,476,720	9.55%	2,518,413,407	9.58%
Baillie Gifford	1,676,091,241	6.72%	1,819,656,065	6.92%
Mondrian Investment Partners	759,627,721	3.05%	819,371,956	3.12%
FIS	103,480,943	0.42%	110,300,849	0.42%
International Equity Cash	664,625	0.00%	1,385,358	0.01%
<b>Emerging Markets</b>	\$3,874,305,989	15.54%	\$4,012,091,773	15.26%
Acadian Frontier	61,993,906	0.25%	50,659,736	0.19%
SSgA Emerging Markets	986,624,091	3.96%	992,389,247	3.77%
AQR Emerging	504,477,725	2.02%	512,357,961	1.95%
Baillie Gifford EMM	549,785,111	2.21%	560,627,010	2.13%
Driehaud Capital	537,460,313	2.16%	584,530,876	2.22%
Harding Loevner	370,005,338	1.48%	405,969,251	1.54%
Pzena Inv	517,732,196	2.08%	513,145,729	1.95%
Acadian EM SC	122,922,159	0.49%	136,739,451	0.52%
Wasatch EM SC	93,499,217	0.38%	102,542,516	0.39%
City of London EM	94,938,246	0.38%	100,291,051	0.38%
Emerging Markets Transition	34,557,636	0.14%	52,478,357	0.20%
Emerging Markets Cash	255,142	0.00%	303,208	0.00%
<b>Total Global Equity</b>	\$24,926,617,925	100.0%	\$26,292,481,051	100.0%

## Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended August 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended August 31, 2015

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
<b>Domestic Equity</b>	(6.00%)	(4.59%)	(0.03%)	14.43%	15.87%
Domestic Equity Benchmark (4)	(6.01%)	(4.56%)	0.32%	14.45%	15.92%
<b>Large Cap</b>	(6.06%)	(4.10%)	0.62%	14.54%	17.78%
Intech	(5.55%)	(2.95%)	3.84%	15.56%	16.81%
PIMCO Stock Plus	(6.57%)	(4.65%)	0.09%	14.56%	16.78%
SSgA S&P 500	(6.06%)	(4.18%)	0.27%	14.40%	-
S&P 500 Index	(6.03%)	(4.06%)	0.48%	14.31%	15.87%
<b>Small/SMID Cap Core</b>	(5.80%)	(6.37%)	(2.65%)	13.87%	-
Small/SMID Benchmark (3)	(5.91%)	(6.40%)	(0.51%)	14.90%	-
<b>Small Cap Growth</b>	(7.74%)	(5.88%)	3.32%	-	-
Summit Creek SCG	(7.58%)	(7.20%)	5.11%	16.47%	17.83%
Russell 2000 Growth Index					
<b>Small Cap Value</b>	(4.69%)	(7.83%)	(12.09%)	-	-
Frontier SCV	(2.93%)	(5.15%)	(2.48%)	-	-
Huber SCV	(5.96%)	(9.73%)	(18.08%)	-	-
Russell 2000 Value Index	(4.91%)	(7.53%)	(4.95%)	11.77%	13.23%
<b>SMID Cap Growth</b>	(5.34%)	(3.38%)	7.32%	-	-
Riverbridge SMIDG	(7.01%)	(5.90%)	4.53%	16.84%	18.12%
Russell 2500 Growth Index					
<b>SMID Cap Core</b>	(5.88%)	(6.35%)	(1.62%)	14.76%	-
SouthernSun SMID	(5.78%)	(8.79%)	(12.77%)	-	-
SSgA Russell 2500	(5.89%)	(6.11%)	(0.41%)	14.86%	-
Russell 2500 Index	(5.92%)	(6.10%)	(0.32%)	15.10%	16.22%
<b>International Equity</b>	(6.74%)	(5.38%)	(6.35%)	9.53%	8.35%
International Equity Benchmark (7)	(7.11%)	(5.60%)	(8.26%)	8.17%	6.81%
SSgA World ex-US	(6.86%)	(5.65%)	(8.26%)	8.57%	7.26%
International Equity Benchmark (5)	(6.88%)	(5.71%)	(8.95%)	7.90%	6.65%
Marathon Asset Mgmt	(5.49%)	(3.54%)	(0.89%)	12.32%	10.41%
Baillie Gifford	(7.93%)	(7.68%)	(8.78%)	8.28%	8.43%
Mondrian Investment Partners	(7.26%)	(4.35%)	(5.52%)	9.75%	8.05%
FIS	(6.12%)	(4.20%)	(4.43%)	-	-
International Equity Benchmark (6)	(7.33%)	(5.49%)	(7.57%)	8.60%	6.97%
<b>Emerging Markets</b>	(8.71%)	(14.09%)	(21.88%)	(1.63%)	(0.33%)
EM Benchmark (8)	(8.95%)	(15.26%)	(21.94%)	(1.65%)	(0.65%)
SSgA Emerging Markets	(8.89%)	(15.42%)	(21.84%)	(1.56%)	(0.35%)
CUSTOM MSCI EM IMI NET DIVS (8)	(9.10%)	(15.56%)	(22.14%)	(1.74%)	(0.70%)
AQR Emerging	(8.71%)	(15.56%)	-	-	-
Baillie Gifford EMM	(10.09%)	(16.82%)	-	-	-
Driehaus Capital	(8.00%)	(11.34%)	-	-	-
Harding Loevner	(8.95%)	(12.76%)	-	-	-
Pzena Inv	(8.05%)	(13.50%)	-	-	-
Custom MSCI EM STANDARD INDEX (9)	(9.01%)	(15.38%)	(22.65%)	(2.12%)	(0.79%)
<b>Emerging Markets Small Cap</b>	(9.60%)	(14.08%)	(15.88%)	4.35%	-
Acadian EM SC	(10.27%)	(15.83%)	(18.29%)	10.70%	-
Wasatch EM SC	(8.71%)	(11.68%)	(12.50%)	1.86%	-
Custom MSCI Emer Mkt SC (10)	(9.57%)	(16.50%)	(18.61%)	1.03%	-
<b>Total Frontier</b>	(5.53%)	(5.86%)	-	-	-
Acadian Frontier	(5.68%)	(4.30%)	-	-	-
City of London EM	(5.43%)	(6.61%)	-	-	-
Custom MSCI Frontier Mkt Capped Net	(5.64%)	(8.42%)	-	-	-
<b>Global Equity (12)</b>	(6.72%)	(6.46%)	(6.30%)	9.89%	10.28%
Global Equity Benchmark (13)	(6.92%)	(6.71%)	(6.84%)	9.36%	9.59%

All returns reported gross-of-fee.

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## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of August 31, 2015, with the distribution as of July 31, 2015.

**Asset Distribution Across Investment Managers**

	August 31, 2015		July 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
<b>Domestic Investment Grade Fixed Income</b>	\$6,473,587,196	77.86%	\$6,624,561,248	78.06%
<b>Total Aggregate</b>	<b>\$3,058,745,462</b>	<b>36.79%</b>	<b>\$3,066,142,369</b>	<b>36.13%</b>
Blackrock Passive (Core)	888,128,839	10.68%	889,417,330	10.48%
PIMCO (Core)	788,969,971	9.49%	793,110,589	9.35%
Loomis Sayles Core Corporate	1,125,542,998	13.54%	1,127,496,449	13.29%
Access Capital/Merrill Lynch ETI	103,090,075	1.24%	103,062,742	1.21%
Community Capital Management	27,799,821	0.33%	27,764,813	0.33%
AFL-CIO Housing Investor Trust	125,213,758	1.51%	125,290,446	1.48%
<b>Blackrock STRIPS</b>	<b>\$3,412,582,329</b>	<b>41.04%</b>	<b>\$3,557,924,765</b>	<b>41.92%</b>
<b>TIPS &amp; ILBs Fixed Income</b>	<b>\$1,841,122,899</b>	<b>22.14%</b>	<b>\$1,862,042,136</b>	<b>21.94%</b>
Blackrock TIPS	591,358,826	7.11%	595,518,930	7.02%
Blackrock Global ILBs	1,249,764,073	15.03%	1,266,523,205	14.92%
Core Fixed Cash	2,258,658	0.03%	493,363	0.01%
Core FI Closed Portfolios	748	0.00%	751	0.00%
<b>Core Fixed Income</b>	<b>\$8,314,710,096</b>	<b>100.0%</b>	<b>\$8,486,603,384</b>	<b>100.0%</b>

## Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended August 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended August 31, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
<b>Domestic Investment Grade Fixed Income (0.04%)</b>		3.33%	4.59%	4.41%	4.86%
Domestic Invest Grade Fixed (15)	(0.00%)	3.40%	4.37%	3.91%	4.42%
<b>Total Aggregate (14)</b>	(0.23%)	0.39%	2.10%	2.09%	3.45%
Blackrock Passive (Core)	(0.15%)	0.51%	1.40%	1.49%	3.02%
PIMCO (Core)	(0.51%)	0.11%	1.68%	2.02%	3.30%
Loomis Sayles Core Corporate	(0.16%)	0.45%	2.48%	3.03%	4.44%
Community Capital Management	0.06%	0.71%	1.93%	2.14%	3.13%
AFL-CIO Housing Investor Trust	(0.05%)	0.62%	2.52%	1.81%	3.26%
Access Capital/Merrill Lynch ETI	0.08%	0.51%	3.16%	2.29%	3.25%
Barclays Aggregate Index	(0.14%)	0.55%	1.56%	1.53%	2.98%
<b>Blackrock STRIPS</b>	0.13%	6.00%	6.31%	-	-
Barclays US Strip 20+ Idx	0.12%	5.98%	6.33%	1.54%	8.10%
<b>TIPS &amp; ILBs Fixed Income</b>	(1.14%)	(0.21%)	(0.48%)	0.69%	3.70%
33% BC Tips/67% BC ILB Hedged (17)	(1.01%)	(0.04%)	(0.30%)	0.45%	3.43%
Blackrock TIPS	(0.70%)	(0.57%)	(2.78%)	(1.49%)	2.80%
Barclays US TIPS Index	(0.76%)	(0.56%)	(2.73%)	(1.47%)	2.79%
Blackrock Global ILBs	(1.35%)	(0.04%)	0.64%	1.78%	4.03%
BC ILB US Hedged (16)	(1.13%)	0.21%	0.91%	1.40%	3.74%
<b>Core Fixed Income</b>	(0.29%)	2.53%	3.53%	3.61%	4.64%
Core Fixed-Income Bench (18)	(0.23%)	2.63%	3.41%	3.16%	4.24%

All returns reported gross-of-fee.

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of August 31, 2015, with the distribution as of July 31, 2015.

**Asset Distribution Across Investment Managers**

	August 31, 2015		July 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
<b>Total High Yield</b>	<b>\$927,964,878</b>	<b>18.40%</b>	<b>\$945,038,628</b>	<b>18.81%</b>
Pyramis (High Yield)	314,200,071	6.23%	318,158,027	6.33%
Loomis Sayles High Yield	317,531,528	6.30%	325,034,179	6.47%
Shenkman	296,107,076	5.87%	301,739,172	6.01%
FI High Yield Debt Cash	126,203	0.00%	107,250	0.00%
<b>Total Bank Loans</b>	<b>\$933,801,301</b>	<b>18.52%</b>	<b>\$938,622,962</b>	<b>18.68%</b>
Eaton Vance Bank Loans	468,058,946	9.28%	471,038,490	9.38%
ING Bank Loans	465,742,355	9.24%	467,584,472	9.31%
<b>Total Emerging Debt</b>	<b>\$780,632,676</b>	<b>15.48%</b>	<b>\$798,408,915</b>	<b>15.89%</b>
Ashmore Emerging Markets Debt	479,592,759	9.51%	490,812,720	9.77%
PIMCO Emerging	301,039,917	5.97%	307,596,196	6.12%
<b>Total EM Debt - Local</b>	<b>\$1,042,236,901</b>	<b>20.67%</b>	<b>\$994,675,540</b>	<b>19.80%</b>
Investec	286,107,160	5.67%	276,912,897	5.51%
Pictet	474,641,403	9.41%	444,605,326	8.85%
Stone Harbor	281,488,338	5.58%	273,157,318	5.44%
Distressed Debt Portfolio	1,374,052,690	27.25%	1,357,179,472	27.01%
Distressed Debt Cash	-15,530,997	(0.31%)	-9,590,212	(0.19%)
<b>Value Added Fixed Income</b>	<b>\$5,043,157,449</b>	<b>100.0%</b>	<b>\$5,024,335,305</b>	<b>100.0%</b>

## Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended August 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended August 31, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
<b>Total High Yield</b>	(1.77%)	(2.13%)	(1.85%)	5.66%	7.98%
Pyramis (High Yield)	(1.21%)	(0.96%)	(2.10%)	5.94%	8.61%
Loomis Sayles High Yield	(2.27%)	(3.09%)	(2.55%)	6.41%	8.62%
Shenkman	(1.83%)	(2.32%)	(0.89%)	4.59%	6.67%
ML Master II HY Benchmark (19)	(1.77%)	(2.37%)	(3.08%)	4.86%	7.10%
<b>Total Bank Loans</b>	(0.49%)	(0.22%)	2.20%	4.37%	5.36%
Eaton Vance Bank Loans	(0.62%)	(0.47%)	1.40%	3.62%	4.80%
ING Bank Loans	(0.37%)	0.04%	3.01%	5.13%	5.94%
S&P/LSTA Leveraged Loan	(0.70%)	(0.71%)	0.98%	3.85%	4.91%
<b>Total Emerging Debt</b>	(2.22%)	(2.04%)	(5.03%)	0.98%	4.52%
Ashmore Emerging Markets Debt	(2.23%)	(1.99%)	(5.00%)	1.13%	4.58%
PIMCO Emerging	(2.19%)	(2.09%)	(5.06%)	0.76%	4.42%
JPM EMBI Global	(1.08%)	(0.67%)	(2.98%)	1.47%	5.04%
<b>Total EM Debt - Local</b>	(4.81%)	(7.23%)	(20.88%)	(7.30%)	-
Investec	(5.21%)	(7.46%)	(20.65%)	(6.36%)	-
Pictet	(4.02%)	(6.28%)	(19.85%)	(7.10%)	-
Stone Harbor	(5.70%)	(8.47%)	(22.70%)	(8.56%)	-
JPM GBI EM GI Diversified	(5.38%)	(7.80%)	(21.54%)	(7.00%)	(1.88%)
<b>Public Value-Add Fixed Income</b>	(2.42%)	(3.09%)	(7.50%)	0.42%	3.86%
Public VAFI BM (20)	(2.34%)	(3.10%)	(7.79%)	0.28%	3.74%
Distressed Debt Portfolio	0.10%	(0.12%)	3.96%	12.10%	11.53%
Altman Benchmark (21)	(6.74%)	(10.36%)	(18.08%)	1.21%	2.84%
<b>Value Added Fixed Income (22)</b>	(1.76%)	(2.31%)	(4.62%)	3.38%	5.95%
Value-Added Benchmark (23)	(3.52%)	(5.07%)	(10.61%)	0.68%	3.46%

All returns reported gross-of-fee.

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of August 31, 2015, with the distribution as of July 31, 2015.

**Asset Distribution Across Investment Managers**

	August 31, 2015		July 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
<b>Total Special Equity</b>	<b>\$4,967,299,262</b>	<b>74.15%</b>	<b>\$5,062,695,064</b>	<b>74.63%</b>
Special Equity	19,154,826	0.29%	19,141,834	0.28%
Special Equity 2000	12,290,067	0.18%	26,277,508	0.39%
Special Equity 2001	58,505,732	0.87%	58,673,948	0.86%
Special Equity 2002	4,495,701	0.07%	5,405,428	0.08%
Special Equity 2003	92,612,144	1.38%	93,465,135	1.38%
Special Equity 2004	77,372,906	1.15%	77,776,536	1.15%
Special Equity 2005	385,869,008	5.76%	392,258,801	5.78%
Special Equity 2006	620,322,648	9.26%	632,790,165	9.33%
Special Equity 2007	841,984,676	12.57%	905,945,916	13.35%
Special Equity 2008	875,237,225	13.06%	907,351,211	13.38%
Special Equity 2009	232,228,186	3.47%	232,031,626	3.42%
Special Equity 2010	483,109,007	7.21%	499,892,715	7.37%
Special Equity 2011	572,440,736	8.54%	560,046,918	8.26%
Special Equity 2012	230,454,449	3.44%	242,097,333	3.57%
Special Equity 2013	168,464,399	2.51%	168,111,561	2.48%
Special Equity 2014	212,420,569	3.17%	175,323,376	2.58%
Special Equity 2015	80,336,981	1.20%	66,105,052	0.97%
<b>Total Venture Capital</b>	<b>\$1,548,914,262</b>	<b>23.12%</b>	<b>\$1,561,967,367</b>	<b>23.02%</b>
Venture Capital	12,953,229	0.19%	12,953,229	0.19%
Venture Capital 2000	66,840,764	1.00%	67,359,185	0.99%
Venture Capital 2001	36,656,826	0.55%	39,179,753	0.58%
Venture Capital 2002	14,159,907	0.21%	14,159,907	0.21%
Venture Capital 2003	30,762,823	0.46%	30,762,823	0.45%
Venture Capital 2004	36,050,216	0.54%	36,050,216	0.53%
Venture Capital 2005	117,358,713	1.75%	118,650,464	1.75%
Venture Capital 2006	135,519,347	2.02%	135,519,347	2.00%
Venture Capital 2007	180,641,136	2.70%	191,584,088	2.82%
Venture Capital 2008	31,509,807	0.47%	31,509,807	0.46%
Venture Capital 2009	226,185,673	3.38%	230,766,673	3.40%
Venture Capital 2010	257,393,620	3.84%	256,799,933	3.79%
Venture Capital 2011	90,916,514	1.36%	89,801,345	1.32%
Venture Capital 2012	215,418,266	3.22%	213,484,734	3.15%
Venture Capital 2013	43,821,323	0.65%	43,071,323	0.63%
Venture Capital 2014	49,229,285	0.73%	46,817,727	0.69%
Venture Capital 2015	3,496,814	0.05%	3,496,814	0.05%
Private Equity Cash	183,157,950	2.73%	159,226,547	2.35%
<b>Private Equity</b>	<b>\$6,699,371,458</b>	<b>100.0%</b>	<b>\$6,783,888,985</b>	<b>100.0%</b>

## Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended August 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended August 31, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
<b>Total Special Equity</b>	<b>0.23%</b>	<b>(0.26%)</b>	<b>15.21%</b>	<b>18.40%</b>	<b>18.01%</b>
Special Equity	0.07%	0.04%	26.96%	18.37%	18.54%
Special Equity 2000	0.00%	0.00%	40.23%	27.71%	19.10%
Special Equity 2001	(0.17%)	(0.32%)	9.37%	20.12%	15.86%
Special Equity 2002	1.04%	0.48%	4.89%	11.18%	24.69%
Special Equity 2003	0.10%	(0.02%)	12.07%	10.78%	11.64%
Special Equity 2004	(0.34%)	(0.57%)	15.95%	20.86%	21.47%
Special Equity 2005	0.32%	0.04%	14.01%	16.74%	17.76%
Special Equity 2006	0.06%	(0.19%)	12.41%	17.42%	18.30%
Special Equity 2007	0.44%	(0.02%)	9.65%	16.22%	16.08%
Special Equity 2008	0.33%	0.07%	19.24%	24.00%	21.73%
Special Equity 2009	0.14%	(0.01%)	28.64%	25.78%	20.07%
Special Equity 2010	0.20%	(0.23%)	14.35%	17.00%	-
Special Equity 2011	0.03%	(0.71%)	27.88%	17.55%	-
Special Equity 2012	1.18%	0.47%	9.68%	9.08%	-
Special Equity 2013	0.09%	(1.62%)	4.05%	-	-
Special Equity 2014	(0.54%)	(2.20%)	3.60%	-	-
Special Equity 2015	0.20%	(2.38%)	-	-	-
<b>Total Venture Capital</b>	<b>0.01%</b>	<b>(0.48%)</b>	<b>22.09%</b>	<b>22.18%</b>	<b>21.48%</b>
Venture Capital	0.00%	0.00%	12.53%	11.65%	9.75%
Venture Capital 2000	(0.62%)	(0.70%)	(5.09%)	8.44%	10.64%
Venture Capital 2001	1.22%	1.18%	8.34%	10.27%	10.89%
Venture Capital 2002	0.00%	0.00%	6.09%	5.57%	3.16%
Venture Capital 2003	0.00%	0.44%	24.27%	34.12%	23.11%
Venture Capital 2004	0.00%	0.00%	(12.10%)	21.38%	42.02%
Venture Capital 2005	(0.07%)	(0.15%)	32.76%	21.57%	19.49%
Venture Capital 2006	0.00%	0.00%	17.40%	16.62%	17.97%
Venture Capital 2007	(0.00%)	(0.11%)	25.07%	22.50%	26.77%
Venture Capital 2008	0.00%	0.00%	26.62%	29.36%	39.69%
Venture Capital 2009	(0.04%)	(2.10%)	22.25%	23.78%	19.19%
Venture Capital 2010	(0.00%)	(0.19%)	38.12%	36.74%	20.75%
Venture Capital 2011	0.13%	(0.04%)	29.43%	23.74%	-
Venture Capital 2012	0.10%	(0.58%)	28.98%	24.00%	-
Venture Capital 2013	0.00%	0.00%	8.83%	-	-
Venture Capital 2014	(0.19%)	(1.00%)	(1.31%)	-	-
Venture Capital 2015	0.00%	0.00%	-	-	-
<b>Private Equity</b>	<b>0.18%</b>	<b>(0.30%)</b>	<b>16.34%</b>	<b>18.75%</b>	<b>18.28%</b>
Private Equity Benchmark (24)	0.18%	(0.30%)	16.34%	18.75%	18.28%
Private Equity Benchmark (26)	0.94%	1.97%	11.35%	9.61%	8.72%

All returns reported gross-of-fee.

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of August 31, 2015, with the distribution as of July 31, 2015.

**Asset Distribution Across Investment Managers**

	August 31, 2015		July 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
<b>Private Real Estate</b>	<b>\$5,045,229,720</b>	<b>82.63%</b>	<b>\$4,934,361,432</b>	<b>79.85%</b>
<b>Private Core Real Estate</b>	<b>\$5,600,972,364</b>	<b>91.74%</b>	<b>\$5,502,606,634</b>	<b>89.05%</b>
Invesco Core	1,117,221,044	18.30%	1,116,785,044	18.07%
LaSalle Core	1,481,033,775	24.26%	1,480,810,775	23.96%
AEW Core	1,126,756,489	18.45%	993,977,967	16.09%
JP Morgan I.M.	755,891,685	12.38%	755,124,720	12.22%
TA Associates	1,120,069,371	18.35%	1,155,908,128	18.71%
Core Real Estate Debt	-994,521,816	(16.29%)	-1,002,037,756	(16.22%)
<b>Total Non-Core</b>	<b>\$438,779,172</b>	<b>7.19%</b>	<b>\$433,792,554</b>	<b>7.02%</b>
<b>Total ETI</b>	<b>\$13,982,536</b>	<b>0.23%</b>	<b>\$14,004,696</b>	<b>0.23%</b>
Canyon-Johnson II	5,518,556	0.09%	5,518,556	0.09%
Intercontinental IV	1,035,695	0.02%	1,035,695	0.02%
New Boston Urban I	7,428,285	0.12%	7,450,445	0.12%
Non Core 2011	424,796,635	6.96%	419,787,858	6.79%
<b>Total REITs</b>	<b>\$1,133,278,378</b>	<b>18.56%</b>	<b>\$1,203,534,292</b>	<b>19.48%</b>
<b>Global REITS</b>	<b>\$1,203,460,820</b>	<b>19.71%</b>	<b>\$1,203,460,820</b>	<b>19.47%</b>
INVESCO Global REIT	257,777,801	4.22%	273,751,138	4.43%
CenterSquare Global REIT	734,519,084	12.03%	780,094,186	12.62%
EII (INVESCO TRAN)	140,911,536	2.31%	149,615,497	2.42%
RREEF/European Investors Tran	25,629	0.00%	26,211	0.00%
REIT Cash	44,328	0.00%	47,261	0.00%
Real Estate Leverage Cash	-55,159	(0.00%)	-11,020	(0.00%)
Core Real Estate Cash	-72,914,203	(1.19%)	41,633,931	0.67%
<b>Total Real Estate</b>	<b>\$6,105,538,763</b>	<b>100.0%</b>	<b>\$6,179,518,667</b>	<b>100.0%</b>

## Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended August 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended August 31, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
<b>Total Private Real Estate (27)</b>	<b>0.32%</b>	<b>0.66%</b>	<b>14.72%</b>	<b>13.94%</b>	<b>14.39%</b>
<b>Private Core Real Estate</b>	<b>0.32%</b>	<b>0.67%</b>	<b>12.42%</b>	<b>11.99%</b>	<b>13.28%</b>
Invesco Core	0.32%	0.72%	11.86%	13.19%	14.55%
LaSalle Core	0.31%	0.53%	12.29%	13.34%	14.76%
AEW Core	0.34%	0.65%	18.63%	14.40%	-
JP Morgan I.M.	0.25%	0.75%	10.16%	9.03%	12.92%
TA Associates	0.37%	0.77%	10.20%	10.31%	11.56%
NCREF Property 1Q Lag	0.00%	0.00%	12.72%	11.47%	12.75%
<b>Total Non-Core Real Estate</b>	<b>0.12%</b>	<b>0.33%</b>	<b>14.15%</b>	<b>12.03%</b>	<b>7.17%</b>
<b>ETI (Partnerships)</b>	<b>0.00%</b>	<b>0.00%</b>	<b>6.57%</b>	<b>2.24%</b>	<b>2.09%</b>
Canyon-Johnson II	0.00%	0.00%	5.06%	(2.45%)	(2.50%)
Intercontinental IV	0.00%	0.00%	51.21%	19.37%	14.72%
New Boston Urban I	0.00%	0.00%	0.12%	3.63%	4.38%
Non Core 2011	0.13%	0.35%	14.44%	15.48%	-
NCREF Property 1Q Lag	0.00%	0.00%	12.72%	11.47%	12.75%
<b>Total REITs</b>	<b>(5.80%)</b>	<b>(2.39%)</b>	<b>(3.08%)</b>	<b>7.19%</b>	<b>9.81%</b>
REIT Benchmark (28)	(5.91%)	(2.65%)	(4.15%)	7.05%	10.01%
<b>Global REITS</b>	<b>(5.80%)</b>	<b>(2.40%)</b>	<b>(3.12%)</b>	<b>7.18%</b>	-
INVESCO Global REIT	(5.79%)	(2.29%)	(3.60%)	7.74%	-
CenterSquare Global REIT	(5.81%)	(2.46%)	(2.65%)	7.60%	-
EII (INVESCO TRAN)	(5.77%)	(2.29%)	-	-	-
EPRA/NAREIT Dev Net Total Idx	(5.91%)	(2.65%)	(4.15%)	7.05%	-
<b>Real Estate</b>	<b>(0.88%)</b>	<b>0.08%</b>	<b>10.69%</b>	<b>12.25%</b>	<b>13.13%</b>
Real Estate Benchmark (29)	(1.18%)	(0.50%)	9.36%	10.73%	12.43%

All returns reported gross-of-fee.

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of August 31, 2015, with the distribution as of July 31, 2015.

**Asset Distribution Across Investment Managers**

	August 31, 2015		July 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
<b>Total Timber</b>	<b>\$1,647,630,056</b>	<b>73.17%</b>	<b>\$1,652,278,577</b>	<b>72.83%</b>
Forest Investment Associates	1,109,272,886	49.26%	1,109,272,886	48.90%
The Campbell Group	538,300,957	23.90%	543,000,271	23.94%
Timber Cash	56,213	0.00%	5,420	0.00%
<b>Natural Resources - Public</b>	<b>\$335,363,937</b>	<b>14.89%</b>	<b>\$346,605,354</b>	<b>15.28%</b>
Jennison Natural Resources	162,393,484	7.21%	166,914,038	7.36%
T. Rowe Natural Resources	172,962,599	7.68%	179,688,491	7.92%
Public Natural Resources Cash	7,854	0.00%	2,825	0.00%
<b>Natural Resources - Private</b>	<b>\$268,901,087</b>	<b>11.94%</b>	<b>\$269,656,988</b>	<b>11.89%</b>
Private Natural Resources	268,916,736	11.94%	268,916,736	11.85%
Private Natural Resources Cash	-15,649	(0.00%)	740,252	0.03%
<b>Total Timber/Natural Resources</b>	<b>\$2,251,895,079</b>	<b>100.0%</b>	<b>\$2,268,540,919</b>	<b>100.0%</b>

## Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended August 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended August 31, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
<b>Total Timber</b>	<b>(0.34%)</b>	<b>(0.80%)</b>	<b>8.88%</b>	<b>9.13%</b>	<b>6.34%</b>
Forest Investment Associates	0.00%	0.00%	8.92%	9.38%	6.46%
The Campbell Group	(1.04%)	(2.41%)	8.85%	8.31%	-
NCREIF Timber Index 1 Qtr Lag (30)	0.00%	0.00%	10.64%	9.80%	6.20%
<b>Natural Resources Public</b>	<b>(3.19%)</b>	<b>(12.06%)</b>	<b>(35.35%)</b>	<b>(4.50%)</b>	<b>(0.81%)</b>
Jennison Natural Resources	(2.66%)	(13.75%)	(41.00%)	(7.98%)	(3.78%)
T. Rowe Natural Resources	(3.69%)	(10.41%)	(28.96%)	(0.69%)	2.22%
Lipper Glbl Nat Res Idx	(5.04%)	(13.28%)	(34.11%)	(5.35%)	(1.72%)
<b>Total Natural Resources Private</b>	<b>0.00%</b>	<b>(0.04%)</b>	<b>(8.85%)</b>	<b>(4.10%)</b>	<b>4.95%</b>
Private Natural Resources	0.00%	(0.04%)	(8.98%)	(4.22%)	4.81%
Natural Resource Private Bench (31)	0.00%	(0.04%)	(8.85%)	(4.10%)	4.95%
<b>Timber/Natural Resources</b>	<b>(0.74%)</b>	<b>(2.57%)</b>	<b>(3.42%)</b>	<b>4.78%</b>	<b>4.82%</b>
Timber/Natural Benchmark (32)	(0.82%)	(2.22%)	(1.92%)	5.92%	5.46%

All returns reported gross-of-fee.

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## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of August 31, 2015, with the distribution as of July 31, 2015.

**Asset Distribution Across Investment Managers**

	August 31, 2015		July 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
Portfolio Completion Strategy	293,636,301	100.00%	98,113,739	100.00%
<b>Total Portfolio Completion Strategy</b>	<b>\$293,636,301</b>	<b>100.0%</b>	<b>\$98,113,739</b>	<b>100.0%</b>

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## Investment Manager Returns

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The table below details the rates of return for the fund's investment managers over various time periods ended August 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended August 31, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
Portfolio Completion Strategy	(1.56%)	1.81%	-	-	-
<b>Total Portfolio Completion Strategy</b>	<b>(1.56%)</b>	<b>1.81%</b>	-	-	-
Total Portfolio Completion BM (36)	0.26%	0.52%	-	-	-

All returns reported gross-of-fee.

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## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of August 31, 2015, with the distribution as of July 31, 2015.

**Asset Distribution Across Investment Managers**

	August 31, 2015		July 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
Arden HFOF (Liquidating)	46,207,164	0.91%	47,906,085	0.92%
Ivy (Liquidating)	4,680,156	0.09%	4,684,780	0.09%
PAAMCO	914,845,783	17.92%	997,221,235	19.19%
Direct Hedge Funds	4,077,273,486	79.88%	4,112,852,167	79.14%
Hedge Fund Cash	61,034,377	1.20%	34,014,219	0.65%
<b>Hedge Funds Composite</b>	<b>\$5,104,040,966</b>	<b>100.0%</b>	<b>\$5,196,678,486</b>	<b>100.0%</b>

## Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended August 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended August 31, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
Arden HFOF (Liquidating)	(0.42%)	(1.60%)	(0.02%)	-	-
Ivy Liquidating	(0.10%)	(0.26%)	6.61%	6.70%	2.85%
PAAMCO	(2.26%)	(3.16%)	(0.89%)	7.81%	5.61%
HFRI Composite Index (33)	(1.99%)	(1.78%)	1.63%	5.10%	3.63%
Direct Hedge Funds	(2.64%)	(1.83%)	2.15%	7.33%	-
HFRI Composite Index (34)	(1.99%)	(1.78%)	1.63%	5.10%	3.63%
<b>Hedge Funds</b>	<b>(2.53%)</b>	<b>(2.08%)</b>	<b>1.47%</b>	<b>7.35%</b>	<b>5.72%</b>
Total Hedge Funds Benchmark (35)	(1.99%)	(1.78%)	1.63%	5.10%	3.63%

All returns reported gross-of-fee.

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## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of August 31, 2015, with the distribution as of July 31, 2015.

**Asset Distribution Across Investment Managers**

	August 31, 2015		July 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
<b>Portable Alpha</b>	\$27,631,163	99.99%	\$27,906,544	99.91%
Austin Capital Management	1,576,199	5.70%	1,576,464	5.64%
Crestline Advisors	11,066,508	40.05%	11,144,460	39.90%
Strategic Investment	14,988,456	54.24%	15,185,620	54.37%
Portable Alpha Cash	2,513	0.01%	24,757	0.09%
<b>Total Portable Alpha Wind Down</b>	<b>\$27,633,676</b>	<b>100.0%</b>	<b>\$27,931,301</b>	<b>100.0%</b>

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## Investment Manager Returns

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The table below details the rates of return for the fund's investment managers over various time periods ended August 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended August 31, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
<b>Portable Alpha</b>	(0.99%)	(1.95%)	(6.25%)	(3.27%)	(2.41%)
Austin Capital Management	(0.02%)	0.13%	0.51%	(12.15%)	(11.17%)
Crestline Advisors	(0.70%)	(1.40%)	(8.08%)	(3.14%)	(0.80%)
Strategic Investment	(1.30%)	(2.58%)	(5.44%)	(1.07%)	(2.18%)
<b>Total Portable Alpha</b>	(0.99%)	(1.95%)	(6.15%)	(3.24%)	(2.47%)
Portable Alpha Benchmark (37)	(1.99%)	(1.78%)	1.63%	5.10%	3.63%

All returns reported gross-of-fee.

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## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of August 31, 2015, with the distribution as of July 31, 2015.

**Asset Distribution Across Investment Managers**

	August 31, 2015		July 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
Clifton Overlay	141,790,266	21.31%	178,599,422	16.25%
Overlay Cash	523,554,564	78.69%	920,148,401	83.75%
<b>Total Overlay</b>	<b>\$665,344,830</b>	<b>100.0%</b>	<b>\$1,098,747,823</b>	<b>100.0%</b>

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## Investment Manager Returns

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The table below details the rates of return for the fund's investment managers over various time periods ended August 31, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended August 31, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
Clifton Overlay	(4.80%)	(3.97%)	(3.93%)	-	-
<b>Total Overlay</b>	<b>(2.85%)</b>	<b>(2.38%)</b>	<b>(1.59%)</b>	-	-
Total Overlay Benchmark (36)	(2.85%)	(2.38%)	(1.59%)	-	-

All returns reported gross-of-fee.

#### Interim Benchmark

(1) Interim benchmark is calculated by applying the investment performance of the asset class benchmarks to the Fund's asset allocation targets. The PE component of this uses the S&P 500 + 5% through 6/30/2000; currently Actual PE Performance (formally labeled Interim Policy Benchmark)

#### Total Core Benchmark

(2) The Total Core benchmark is calculated by applying the investment performance of the asset class benchmarks to the Fund's asset allocation targets. The Private Equity benchmark used for the Total Core benchmark calculation is the 7-year annualized return of the Russell 3000 +3% (formally labeled Policy Benchmark)

#### Adjusted Policy Benchmark

(2) The Adjusted Policy Benchmark is calculated by subtracting the cost of all the Fund's illiquid investments for the applicable fiscal year (for example, Private Equity, Hedge Funds, Distressed Debt, Real Estate, Timber and Natural Resources) from the Policy Benchmark.

#### Domestic Equity

(3) Russell 2500 through 6/30/14; currently 70.5% Russell 2500/5.5% Russell 2500 Growth/6.5% Russell 2000 Growth/17.5% Russell 2000 Value

(4) Dow Jones Wilshire 5000 through 04/30/08; Russell 3000 through 06/30/2009; 78% Russell 3000/22% 3 Month Libor + 3% through 12/31/2009; Russell 3000 through 10/31/2011; 80% S&P 500/20% Russell 2500 through 6/30/2014; currently 78.9% S&P 500/14.88% Russell 2500/1.16% Russell 2500 Growth/1.37% Russell 2000 Growth/3.69% Russell 2000 Value

#### International

(5) MSCI EAFE Net Dividends through 9/30/2007; MSCI EAFE Net Dividends Provisional Standard Index through 5/31/2008; MSCI EAFE Net Dividends Standard Index through 12/31/2009; MSCI World ex-US IMI Net Dividends through 12/31/2010; currently Custom World ex-US IMI Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.

(6) MSCI EAFE Net Dividends through 9/30/2007; MSCI EAFE Net Dividends Provisional Standard Index through 5/31/2008; MSCI EAFE Net Dividends Standard Index through 12/31/2010; currently Custom MSCI EAFE Net Dividends Standard Index, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.

(7) MSCI EAFE Net Dividends through 9/30/2007; MSCI EAFE Net Dividends Provisional Standard Index through 5/31/2008; MSCI EAFE Net Dividends Standard Index through 12/31/2009; MSCI World ex-US IMI Net Dividends through 12/31/2010; Custom World ex-US IMI Net Dividends through 8/31/2014; currently 50% custom MSCI World Ex-US IMI Net Dividends, 50% Custom MSCI EAFE Standard Index Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities. (Current blend is maintained by MSCI)

#### Emerging Markets

(8) MSCI Emerging Markets IMI Net Dividends through 12/31/2010; currently Custom MSCI Emerging Markets IMI Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.

(9) MSCI EMF through 6/30/2004; MSCI Emerging Markets Net Dividends through 9/30/2007; MSCI Emerging Markets Net Dividends Provisional Standard Index through 5/31/2008; MSCI Emerging Markets Net Dividends Standard Index through 12/31/2010; currently Custom MSCI Emerging Markets Net Dividends Standard Index, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.

(10) MSCI Emerging Markets Small Cap Net Dividendss Index through 8/31/2014; currently Custom MSCI Emerging Market Small Cap Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.

(11) MSCI EMF through 6/30/2004; MSCI Emerging Markets Net Dividends through 9/30/2007; MSCI Emerging Markets Net Dividends Provisional Standard Index through 5/31/2008; MSCI Emerging Markets Net Dividends Standard Index through 4/30/2010; MSCI Emerging Markets IMI Net Dividends through 12/31/2010; Custom MSCI Emerging Markets IMI Net Dividends through 8/31/2014; 50% Custom MSCI EM IMI Net Dividends, 43% Custom MSCI EM Standard Net Dividends, 7% Custom MSCI EM Small Cap Net Dividends through 1/31/2015; 25% Custom MSCI EM IMI Net Dividends, 67.37% Custom MSCI EM Standard Net Dividends, 7% Custom MSCI EM Small Cap Net Dividends, .63% Custom MSCI Frontier Markets Country Capped Net Dividends through 2/28/2015. currently weights are based on the beginning adjusted monthly market value of each index group, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities. (Current blend is maintained by MSCI)

### Global Equity

(12) The Total Global Equity composite inception date coincides with the establishment of the MSCI All Country World Index on January 1, 2001.

(13) MSCI All Country World Net Index through 4/30/2010; MSCI All Country World IMI Net Dividends through 12/31/2010; Custom MSCI All Country World IMI Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities through 10/31/2011; 35% S&P 500/8% Russell 2500/42% Custom MSCI World Ex-US IMI Net Dividends/15% Custom MSCI EM IMI Net Dividends through 4/30/2012; 35% S&P 500/9% Russell 2500/40% Custom MSCI World Ex-US IMI Net Dividends/16% Custom MSCI EM IMI Net Dividends through 6/30/2014; currently 44% Domestic Equity BM/40% International Equity BM/16% Emerging Markets BM

### Core Fixed Income

(14) Effective 2/28/2015, the Total Aggregate performance was changed to include the complete performance histories of Economically Targeted Investment managers: Access Capital, Community Capital Management, and AFL-CIO Housing Investment. As a result, prior period Total Aggregate performance was revised from 4/30/2004-1/31/2015.

(15) 100% BC Aggregate through 2/28/2014; 34% BC Agg/66% BC STRIPS 20+ through 2/28/2015; currently Domestic Investment Grade Fixed Income benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the core fixed income portfolio.

(16) BC Aggregate through 6/01; 67% BC Aggregate / 20% BC US TIPS/13% Custom Commodities BM ; Custom Commodities BM through 06/30/2009; currently BC ILB US\$ Hedged

(17) 33% BC US TIPS/67% BC ILB US\$ Hedged

(16) 80% ML MTGS 30 YR / 20% ML US TREAS 1-10 YR through 12/31/08; currently BC Securitized Index

(18) 77% BC Aggregate / 8% BC US TIPS/15% BC ILB US\$ Hedged through 2/28/2014; currently weights are based on the beginning adjusted monthly market value of each index group.

### Value-Added Fixed Income

(19) CSFB Thru 07/2002; ML Master II HY Thru 02/2007; currently ML Master II HY Constrained Index

(20) Public Value Added benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the public value added fixed income portfolio. These weightings will be automatically adjusted at the end of every quarter for usage in the upcoming quarter.

(21) Actual Performance through 2/07; ML Master II FI Constrained Index through 12/31/2009; currently Altman NYU Salomon Center Combined Defaulted Public Bond & Bank Loan Index

(22) The Total Value-Added Fixed Income composite inception date coincides with PRIM's initiative to separate High Yield from Core Fixed Income. Underlying manager market values and cash flows are unavailable prior to July 1, 2001.

(23) CSFB through 7/02 / 43% ML Master II HY Index/43% JPM EMBI Global/14% Actual Distressed Debt through 02/07/ through 06/08 60% ML Master II HY Constrained Index and 40% JPM EMBI Global/ 50% ML Master II HY Constrained Index/ 33% JPM EMBI Global/17% S&P LSTA Leveraged Index through 06/30/2009; 58% ML Master II HY Constrained Index/ 25% JPM EMBI Global/17% S&P LSTA Leveraged Index through 12/31/2009; 24% ML Master II HY Constrained Index/17% S&P LSTA Leveraged Index/20% JPM EMBI Global/39% Altman Index through 03/31/2010; 24.20% ML Master II HY Constrained Index/16.56% S&P LSTA Leveraged Index/19.43% JPM EMBI Global/39.81% Altman Index through 06/30/2010; 22.10% ML Master II HY Constrained Index/14.60% S&P LSTA Leveraged Loan Index/20.65% JPM EMBI Global/42.65% Altman Index through 09/30/2010; 22.46% ML Master II HY Constrained Index/12.92% S&P LSTA Leveraged Loan Index/21.56% JPM EMBI Global/43.06% Altman Index through 12/31/2010; 22.14% ML Master II HY Constrained Index/11.13% S&P LSTA Leveraged Loan Index/21.60% JPM EMBI Global/45.13% Altman Index through 3/31/2011; 23.15% ML Master II HY Constrained Index/9.45% S&P LSTA Leveraged Loan Index/22.74% JPM EMBI Global/44.66% Altman Index through 6/30/2011; 23.95% ML Master II HY Constrained Index/9.21% S&P LSTA Leveraged Loan Index/22.96% JPM EMBI Global/43.88% Altman Index through 9/30/2011; 21.58% ML Master II HY Constrained Index/11.08% S&P LSTA Leveraged Loan Index/22.24% JPM EMBI Global/45.10% Altman Index through 12/31/2011; 27.90% ML Master II HY Constrained Index/13.58% S&P LSTA Leveraged Loan Index/20.65% JPM EMBI Global/37.87% Altman Index through 3/31/2012; 28.24% ML Master II HY Constrained Index/13.30% S&P LSTA Leveraged Loan Index/20.71% JPM EMBI Global/37.75% Altman Index through 4/30/2012; 23.55% ML Master II HY Constrained Index/10.63% S&P LSTA Leveraged Loan Index/16.61% JPM EMBI Global/20.36% JPM GBI-EM Global Diversified/28.85% Altman Index through 6/30/2012; 18.21% ML Master II HY Constrained Index/11.24% S&P LSTA Leveraged Loan Index/17.63% JPM EMBI Global/20.80% JPM GBI-EM Global Diversified/32.12% Altman Index through 9/30/2012; 18.29% ML Master II HY Constrained Index/11.98% S&P LSTA Leveraged Loan Index/18% JPM EMBI Global/21.03% JPM GBI-EM Global Diversified/30.70% Altman Index through 12/31/2012; 19.40% ML Master II HY Constrained Index/11.90% S&P LSTA Leveraged Loan Index/18.28% JPM EMBI Global/21.32% JPM GBI-EM Global Diversified/29.10% Altman Index through 2/28/2013; Value Added benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the value added fixed income portfolio. These weightings will be automatically adjusted at the end of every quarter for usage in the upcoming quarter.

#### Private Equity

- (24) Through 6/30/2000, S&P 500 + 5%; currently Actual Performance. This benchmark is used in the Interim Policy Benchmark  
(25) The 7 Year Annualized performance is used in the Policy Return and Policy Benchmark.  
(26) Wilshire 5000 + 3% through 4/30/2008; Currently 7 Year Annualized Russell 3000 + 3%

#### Real Estate - Private/Public

- (27) On 06/30/02 PRIM instituted portfolio leverage of up to 40%; increased to 50% leverage on 02/03/04. Portfolio leverage was paid down in September 2005 (\$450 million), October 2005 (\$200 million), and July 2007 (\$450 million). Composite includes Value Added Separate Account opened 4/30/2007 and closed 12/31/2010.  
(28) FTSE NAREIT ALL EQUITY REITS through 3/31/2008; 63% FTSE NAREIT ALL EQUITY REITS/27% NAREIT Global REIT/10% NAREIT International REIT through 06/30/09; 50% FTSE NAREIT ALL EQUITY REITS/50% FTSE EPRA NAREIT Developed Ex US REIT through 4/30/2012; currently 100% FTSE EPRA NAREIT Developed Net Total Return  
(29) NCREIF through 6/30/03; 67% NCREIF/33% FTSE NAREIT ALL EQUITY REITS through 12/31/06; NCREIF + Ratio of 2% FTSE NAREIT ALL EQUITY REITS to PRIT Fund through 03/31/08; 73% NCREIF Property One Qtr Lag/17% FTSE NAREIT ALL EQUITY REITS/7.25% NAREIT Global REIT/2.75% NAREIT Intl REIT through 06/30/09; 82% NCREIF Property One Qtr Lag/9% FTSE NAREIT ALL EQUITY REITS/9% FTSE EPRA NAREIT Developed Ex US REIT through 7/31/09; 80% NCREIF Property One Qtr Lag/10% FTSE NAREIT ALL EQUITY REITS/10% FTSE EPRA NAREIT Developed Ex US REIT through 4/30/2012; currently 80% NCREIF PROPERTY ONE QTR LAG/20% FTSE EPRA NAREIT Developed Net Total Return

#### Timber/Natural Resources

- (30) NCREIF Timber Index through 6/30/03; NCREIF Timber Index Ex-PRIM through 2/28/2010; currently NCREIF Timber Index  
(31) Currently Private Natural Resources Actual Performance.  
(32) NCREIF Timber Index through 6/30/03; NCREIF Timber Index Ex-PRIM through 06/30/08; 50% NCREIF Timber Index Ex-PRIM/ 42% Lipper Natural Resources Global Fund Index/ 8% Actual Natural Resources Private through 2/28/2010; 50% NCREIF Timber Index/ 42% Lipper Natural Resources Global Fund Index/ 8% Actual Natural Resources Private through 10/31/2011; 53% NCREIF Timber Index/ 39% Lipper Natural Resources Global Fund Index/ 8% Actual Natural Resources Private through 2/28/2014; currently the Timber/Natural Resources benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the Timber/Natural Resources portfolio. These weightings will be automatically adjusted at the end of every quarter for usage in the upcoming quarter.

#### Hedge Funds

- (33) ML 90 Day T-Bill + 4% through 12/31/2009; currently HFRI Fund of Funds Composite Index. (HFRI indices - Flash returns are used through 12/31/11. Current returns reflect most up to date performance and are subject to change)  
(30) ML 90 Day T-Bill + 4% through 12/31/2009; 90% HFRI Fund of Funds Conservative Index/10% HFRI Emerging Markets Global Index through 12/31/2010; currently 100% HFRI Fund of Funds Composite Index(HFRI indices - Flash returns are used through 12/31/11. Current returns reflect most up to date performance and are subject to change)  
(34) HFRI Fund of Funds Composite Index. (HFRI indices - Flash returns are used through 12/31/11. Current returns reflect most up to date performance and are subject to change)  
(35) ML 90 Day T-Bill + 4% through 12/31/2009; currently HFRI Fund of Funds Composite Index. (HFRI indices - Flash returns are used through 12/31/11. Current returns reflect most up to date performance and are subject to change)

#### Portfolio Completion Strategies

- (36) Portfolio Completion Strategies Composite Index is calculated by applying the underlying benchmark return for each manager to the manager's weight within the Portfolio Completion Strategies Composite. These weights are based on the beginning adjusted monthly market value of each portfolio.

#### Portable Alpha Wind Down

- (37) S&P 500 Index through April 2008; Russell 3000 Index through July 2009; US 3 Month Libor + 3% through 12/31/2009; currently HFRI FOF Composite Index. (HFRI indices - Flash returns are used through 12/31/11. Current returns reflect most up to date performance and are subject to change)

#### Overlay

- (38) Actual performance

#### Total Fund

- (39) ML 90 Day T-Bill through 6/30/03; ML 3-Month Libor through 03/31/08; currently ML 90 Day T-Bill

Policy Return

(40) The Policy Return is calculated by applying the investment performance of each asset class times its actual allocation. The Private Equity portion of the Policy Return is the 7-year annualized return of the Private Equity asset class monthized.

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PENSION RESERVES  
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## Appendix E

PRIT Fund Performance & Public Markets Performance Detail

*PRIM Board Meeting  
Tuesday, October 13, 2015*

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# ***PRIT Fund Performance & Public Markets Performance Detail***

***Presentation to the PRIM Board***

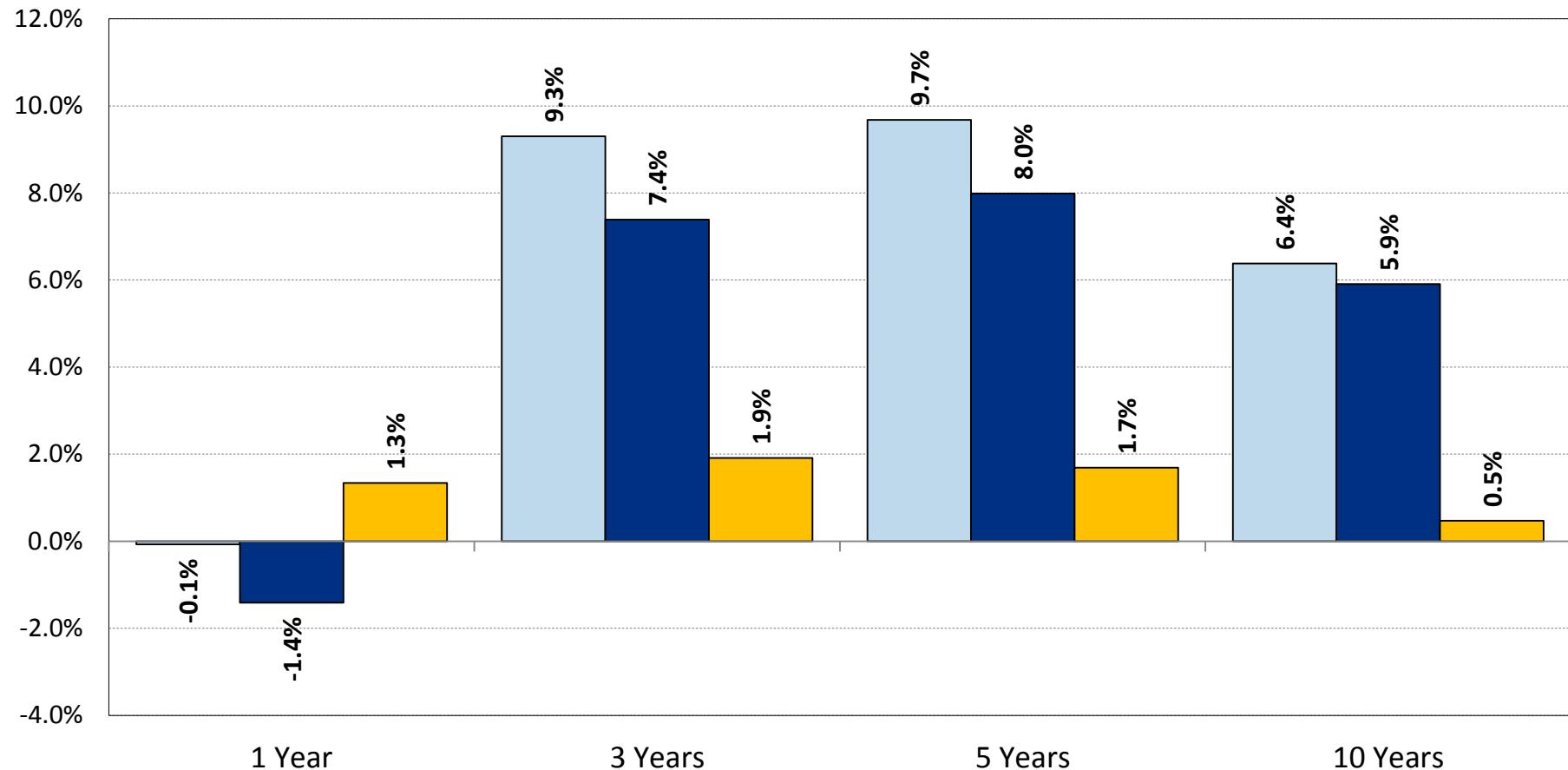
***October 13, 2015***

***Deborah B. Goldberg, Treasurer and Receiver General, Chair  
Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer***



# Total PRIT Fund Returns (Gross of Fees)

Annualized Returns as of August 31, 2015



Total Core Benchmark includes private equity benchmark.  
Source: Mellon. Totals may not add due to rounding.

■ Total Fund Return   ■ Total Core Benchmark   ■ Value Added

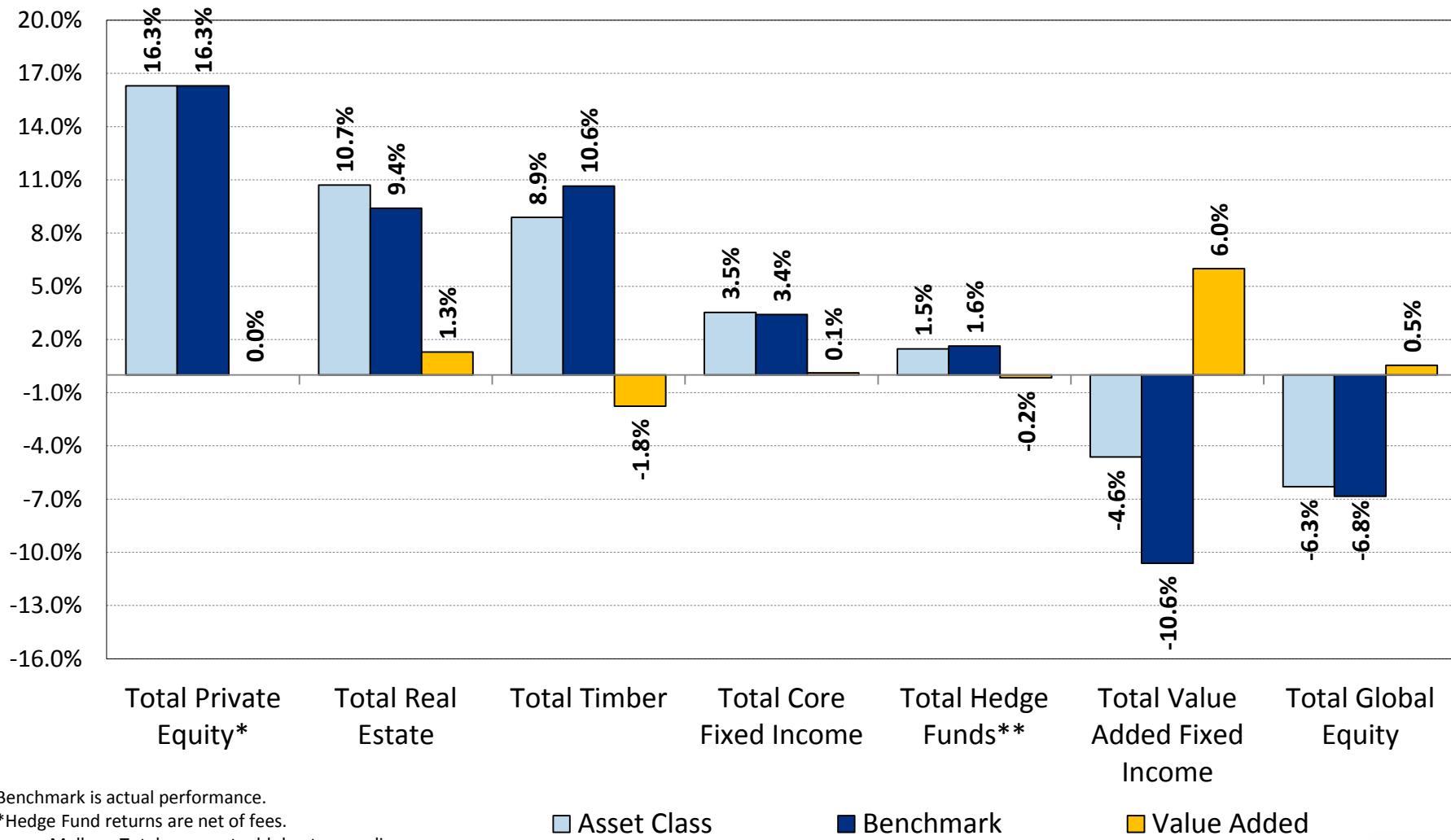


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# PRIT Asset Class Performance (Gross of Fees)

One Year Ended August 31, 2015



# **PRIT Asset Class Performance (Gross of Fees)**

Annualized Returns as of August 31, 2015

1 Year	3 Year	5 Year	10 Year
Private Equity 16.3%	Private Equity 18.8%	Private Equity 18.3%	Private Equity 16.8%
Real Estate 10.7%	Real Estate 12.3%	Real Estate 13.1%	Timber 8.6%
Timber 8.9%	Global Equity 9.9%	Global Equity 10.3%	Real Estate 8.3%
Core Fixed Income 3.5%	Timber 9.1%	Timber 6.3%	Value-Added Fixed Income 7.3%
Hedge Funds 1.5%	Hedge Funds 7.4%	Value-Added Fixed Income 6.0%	Global Equity 5.6%
Value-Added Fixed Income (4.6%)	Core Fixed Income 3.6%	Hedge Funds 5.7%	Core Fixed Income 5.0%
Global Equity (6.3%)	Value-Added Fixed Income 3.4%	Core Fixed Income 4.6%	Hedge Funds 4.4%

Hedge fund returns are net of fees.

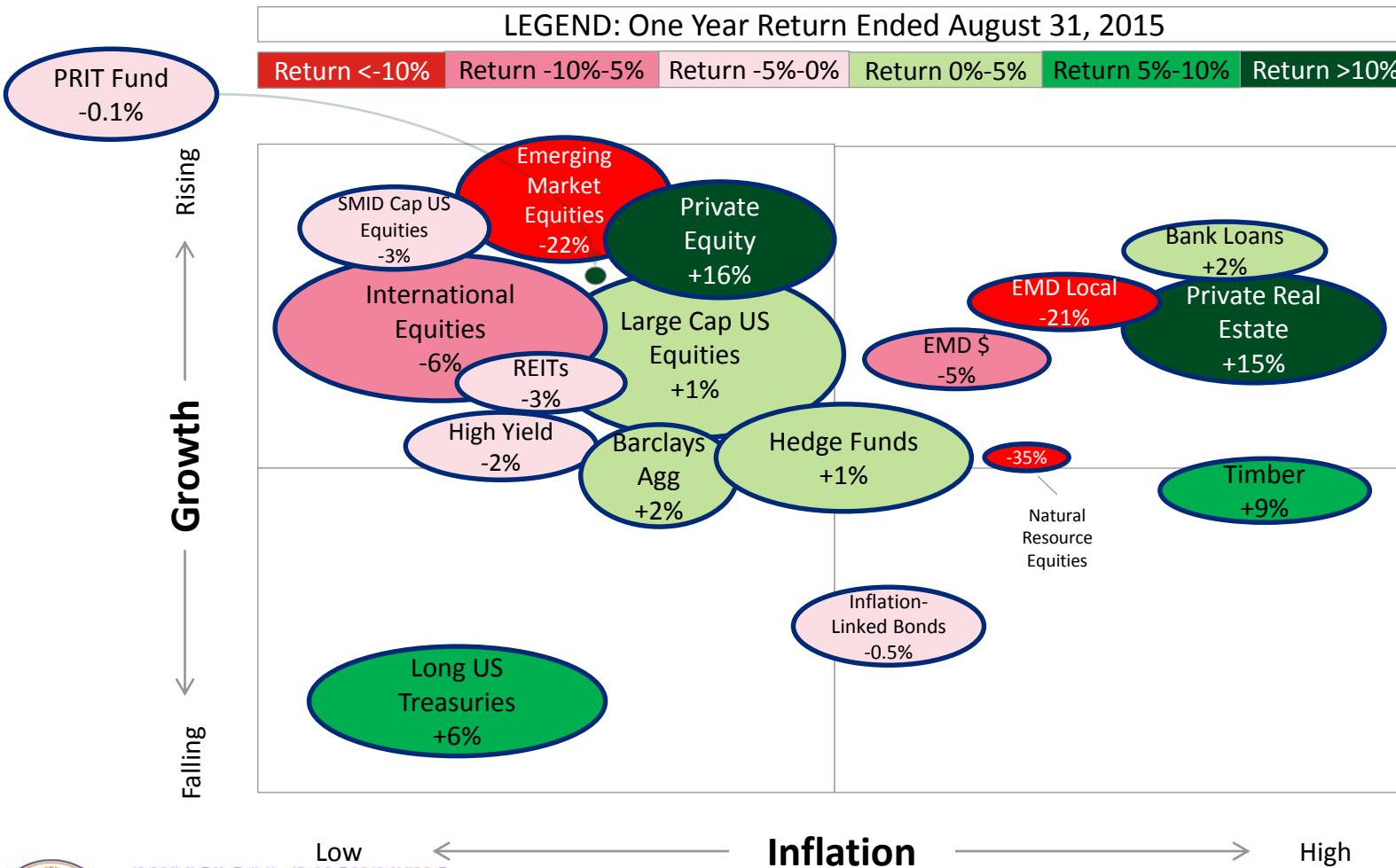


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**INVESTMENT**  
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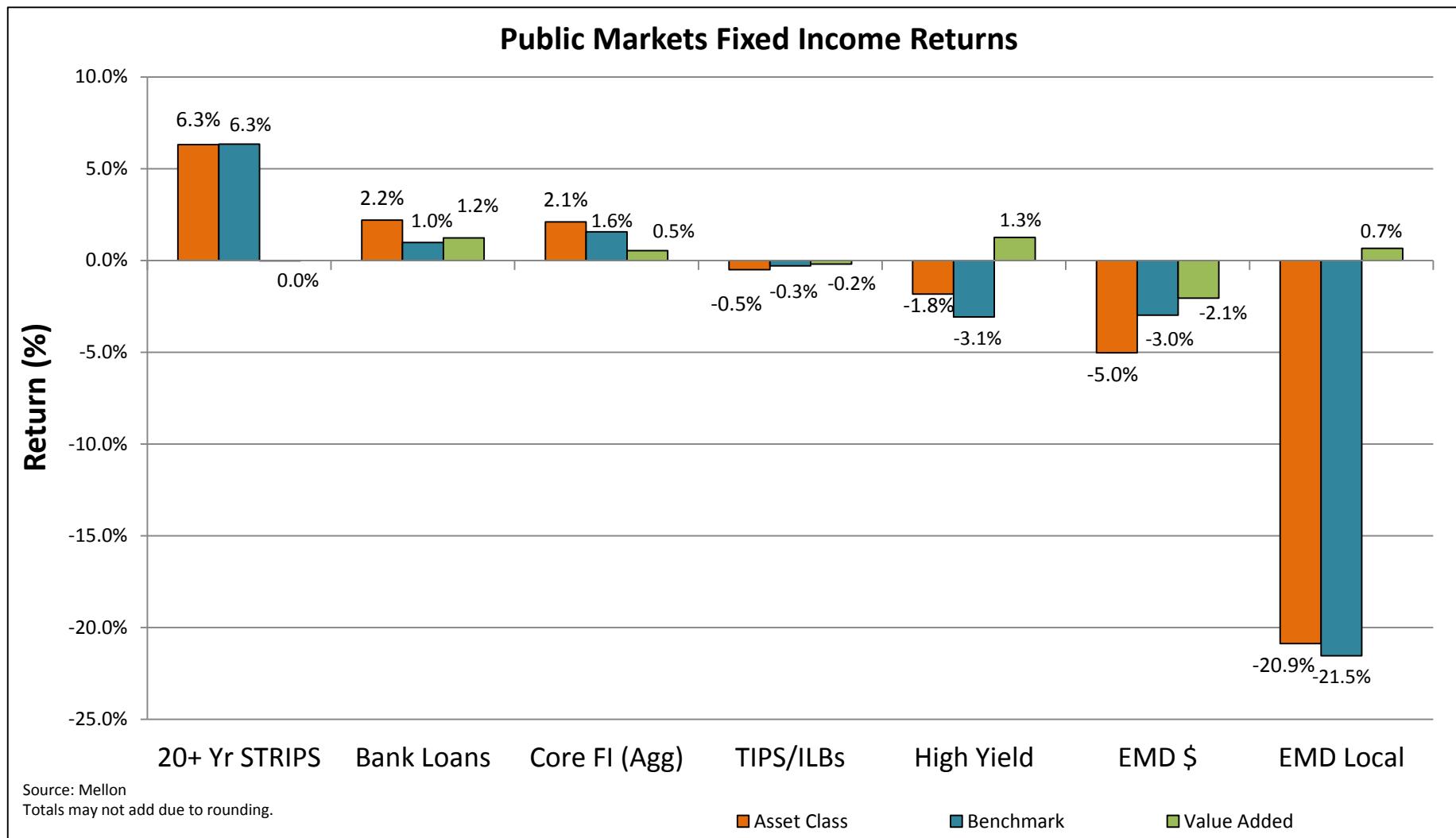
# Asset Classes & Regimes – One Year Ended August 31, 2015

- GDP Growth: +2.7%
- CPI: +1.8%
- 30yr yields: -12 bps



# **Public Markets Performance – Fixed Income (20.2% of PRIT Fund)**

One Year Ended August 31, 2015

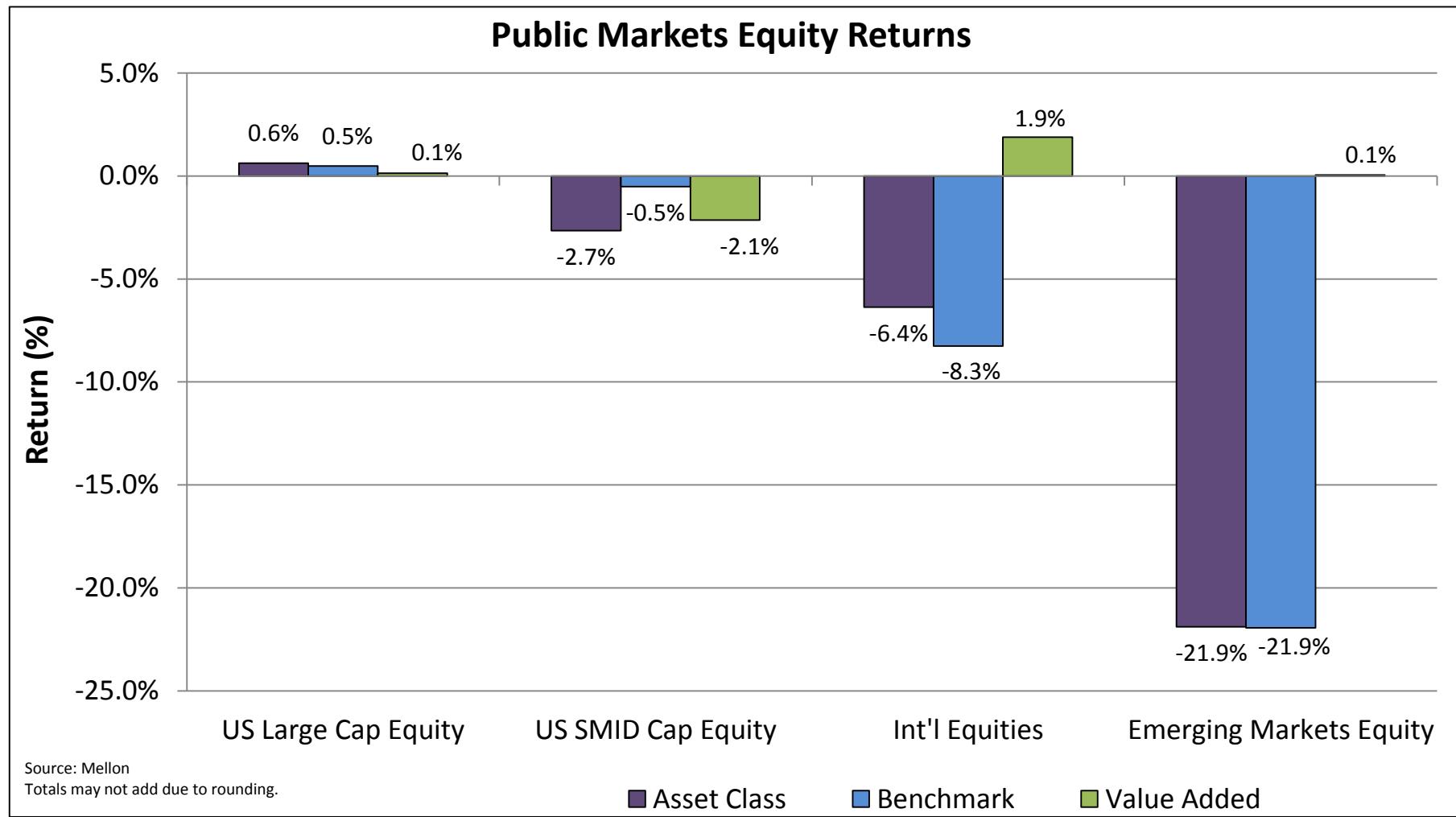


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# **Public Markets Performance – Equities (41.9% of PRIT Fund)**

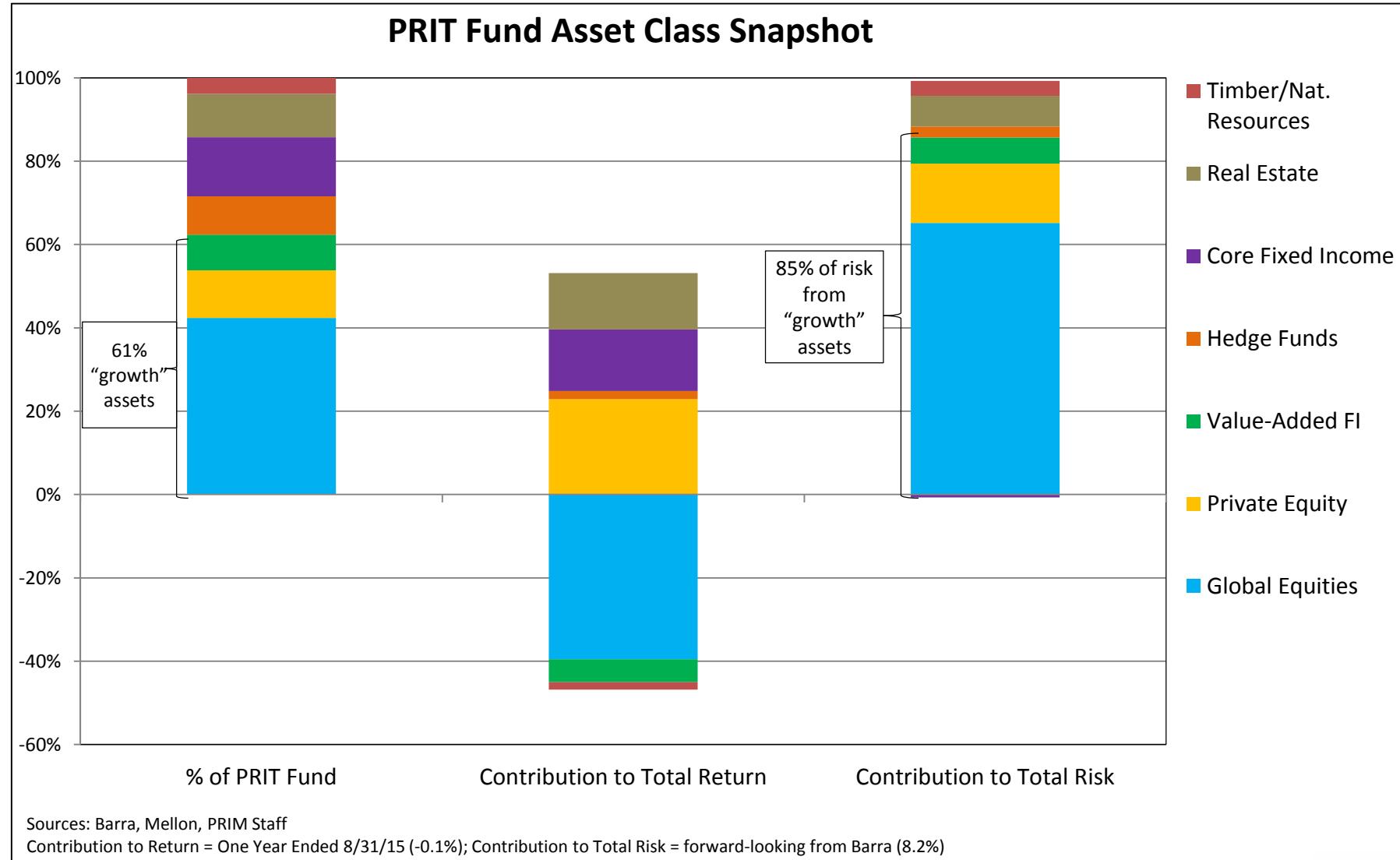
One Year Ended August 31, 2015



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# Appendix: Overall PRIT Fund – Risk & Return



PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD





PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix F

PRIM Progress Memorandum

*PRIM Board Meeting*  
*Tuesday, October 13, 2015*

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**PENSION RESERVES INVESTMENT MANAGEMENT BOARD**

**Manager of Emerging Markets: Progress Investment Management Company – Core Fixed Income**

*Background*

On April 30, 2012, PRIM issued a Request for Proposals (RFP) for Manager of Emerging Managers Investment Management Services across multiple asset classes. On August 8, 2013, the PRIM Board approved the addition of Progress Investment Management Company (Progress) to PRIM's manager bench for their Core Fixed Income strategy. After considerable due diligence and analysis, PRIM staff and Callan Associates deemed Progress to be a strong organization with deep experience constructing Manager of Emerging Manager portfolios. Furthermore, Progress' Core Fixed Income strategy ranked favorably, posting strong results relative to both the Barclays Aggregate Index and peers. Progress was placed on PRIM's manager bench because, at that time, PRIM had formed a Fixed Income Working Group to evaluate the construction of its Core Fixed Income allocation and did not feel that funding Progress' Core Fixed Income Strategy was appropriate until the analysis was complete.

The recommendation from the Fixed Income Working Group was to replace the Core Fixed Income allocation to the Barclays Aggregate Index with an allocation to Long Duration Treasury STRIPS. As a result of this recommendation, Progress' Core Fixed Income strategy no longer fit within PRIM's asset allocation and Progress remained on the manager bench. We have recently altered the allocation to Long Duration Treasury STRIPS within our Core Fixed Income sleeve and now have a 5% target allocation to strategies benchmarked to the Barclays Aggregate Bond Index. Chuck LaPosta and Sarah Samuels of PRIM, along with Millie Viqueira and Nate Wong of Callan Associates, have reviewed Progress' current Manager of Emerging Managers Core Fixed Income capabilities and results, including an on-site visit to their San Francisco headquarters, in light of the 2013 approval and subsequent asset allocation shifts.

*Firm Update*

Progress is an independent, 100% employee-owned Minority and/or Women-owned Business Enterprise (MWBE) certified registered investment adviser and has been a pioneer Manager of Emerging Managers for 25 years. Progress has an experienced staff of 36 professionals who focus on all aspects of the asset management business for emerging managers. They have worked with over 150 emerging managers across a multitude of strategies. As of June 30, 2015, Progress has \$8.8 billion in assets under management (AUM), including nearly \$2.0 billion in fixed income mandates.

Progress uses a 40 factor model to evaluate new and existing managers. They seek to provide 80% of their alpha from manager selection. They use their database of over 3,000 products as well as their industry presence and professional network to source managers. They currently have 10 fixed income managers on their approved list and allocate portfolios across 5 or 6 managers to achieve diversity of investment strategy as well as exposure to various phases of business development within the Emerging Manager universe.

The Progress Core Fixed Income Composite has outperformed the benchmark on a gross of fee basis by nearly 1% over 3 and 5 year periods.

Total Return	3yr	5yr
<b>Progress Core Fixed Income Composite</b>	2.8%	4.3%
<b>Barclays Aggregate Index</b>	1.8%	3.4%
<b>Alpha</b>	1.0%	1.0%

*Gross returns as of 6/30/15.*

*Source: Progress Investment Company*

These results rank Progress within the 8<sup>th</sup> percentile of the over 200 products within the Core Fixed Income Universe according to PRIM's custom manager ranking model.

#### *Removal from Manager Bench*

Following continued strong performance while on PRIM's manager bench, as well as PRIM's recent asset allocation changes to include a 5% Core Fixed Income allocation, PRIM staff will remove Progress Core Fixed Income strategy from the manager bench and, pending successful contract negotiations, fund up to the \$100 million allocation amount approved at the August 8, 2013 Board meeting.



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## Appendix G

Callan Progress Memorandum

*PRIM Board Meeting  
Tuesday, October 13, 2015*

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## Memorandum

**To:** Sarah Samuels and Chuck LaPosta, PRIM  
**From:** Millie Viqueira, Senior Vice President and Nathan Wong, Vice President  
**Date:** September 2, 2015  
**Subject:** Progress Trust

### Background

Following an extensive RFP process in 2012-2013, Progress was identified and selected as one of three emerging manager-of-managers to be placed on PRIM's manager bench. Though Progress had submitted an rfp response for both Core Fixed Income and International Equity, the evaluation process particularly highlighted the organization's fixed income capabilities. This coincided, however, with PRIM's adoption of a new asset allocation strategy which called for the elimination of "core" fixed income mandates and the adoption of Long Treasury Strips. Given the success of that strategy and the changing environment, core fixed income will regain greater prominence in the portfolio and has provided the opportunity to re-visit Progress's potential role in the portfolio.

An on-site was held in San Francisco in Progress's office on Monday, August 24, 2015. Meeting attendees included: Sarah Samuels and Chuck LaPosta of PRIM; Thurman White, Mona Williams, Alex Hsiao, Jose Balagot, Tony Lee, Tung Ming and Beverly Harrison of Progress; and, Nathan Wong and myself from Callan. Progress provided an update on the organization, staffing, philosophy, and process employed to identify emerging firms and construct portfolios.

Highlights from the meeting include:

- Assets have continued to grow. Mid-year 2013, assets stood at \$7.5 billion. Currently they manage \$8.8 billion. Approximately \$2.0 billion is across 7 dedicated fixed income mandates and 2 multi-asset portfolios.
- The firm continues to be independently owned though the ownership structure has been modified since mid-2013. In 2013, there were 6 Class A shareholders (must buy in) and 23 Class B shareholders. Today, there are 5 Class A shareholders and only 3 Class B shareholders. The rationale for making the change was to make ownership more meaningful to those who have it and to recognize those with a longstanding commitment to the firm.

- The senior leadership team has been stable. Alex Hsiao, CIO; Jose Balagot Deputy CIO, Tony Lee and Tung Ming focus on the firm's fixed income effort. Tony Lee is the newest addition to the firm. He joined in 2014.
- Current approved list capabilities include: LDI, Intermediate, Short duration, TIPS, Emerging Market Debt, High Yield, Global Credit, Structured Credit and Distressed Debt.
- Core Plus portfolios focus on high yield, emerging market debt and TIPS as the "plus" sectors.
- Will maintain a duration that is neutral to the benchmark.
- Goal is to have 80% of alpha coming from manager selection.
- Portfolios are typically constructed with 6 underlying managers: 2 core; 3 core plus and one high yield.
- There are currently ten approved managers on the fixed income platform.
- Overall, the portfolio positioning should be approximately 70% core plus and 30% core.
- Manager sourcing is conducted via their proprietary database, active prospecting and client/manager referrals. They did note, however, that new firm formation specific to fixed income has been quieter.
- Managers are ranked using a 40-factor model to measure the level of conviction on every potential new manager. Managers are re-evaluated on a quarterly basis.
- Individual manager allocations are limited to 25% of total mandate size to ensure broad diversification.
- Progress allocation limited to 30% of manager's total assets to limit business risk.

## Summary

Progress has built out a solid infrastructure and process over the past 25 years focusing on emerging managers. While fixed income comprises less than 25% of their assets under management, they have managed fixed income back to the firm's inception. Led by Alex Hsiao, Chief Investment Officer, the investment team has developed a sound, repeatable process to identify a stable of emerging fixed income managers. The infrastructure at the firm enables them to perform in-depth evaluation of each potential manager's process, firm, and performance; required for any manager evaluation but especially necessary for smaller, emerging managers. The firm has exhibited a history of providing support to emerging managers to grow their businesses infrastructure, marketing plans and assets under management. Similarly, they closely monitor "approved" firms to identify issues and cut ties, as necessary, to those firms who display warning signs.

The portfolio proposed by Progress for PRIM is comprised of six managers: 30% to two core managers (evenly split); 65% to three core plus managers (evenly split); and, one high yield manager. Callan is familiar with five of the six managers, with Concerto, the high yield manager, being the exception.

Progress provided the rationale for their selection and its concerns about Concerto's low AUM and its evolution to becoming a long-only manager. As currently proposed, the portfolio is a broadly diversified, high quality, liquid portfolio that should exhibit core-like performance as measured against the Barclays U.S. Aggregate Bond Index. Progress has conveyed their willingness to change the allocation and/or customize guidelines to suit PRIM's goals and objectives. Callan would be supportive of PRIM making an allocation to Progress Trust to manage a portion of the core fixed income portfolio of the PRIT, subject to successful fee, contract and guideline negotiation.

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PENSION RESERVES  
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## Appendix H

### Real Estate and Timberland Portfolio Report

*PRIM Board Meeting*  
*Tuesday, October 13, 2015*



# *Real Estate and Timberland Portfolio Report As of August 31, 2015*

*By Timothy V. Schlitzer, CRE  
Senior Investment Officer  
Director of Real Estate and Timberland Investments*

*Presentation to the PRIM Board  
October 13, 2015*

*Deborah B. Goldberg, Treasurer and Receiver General, Chair  
Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer*



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5. Timberland Portfolio	15-20



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# *Portfolio Overview*

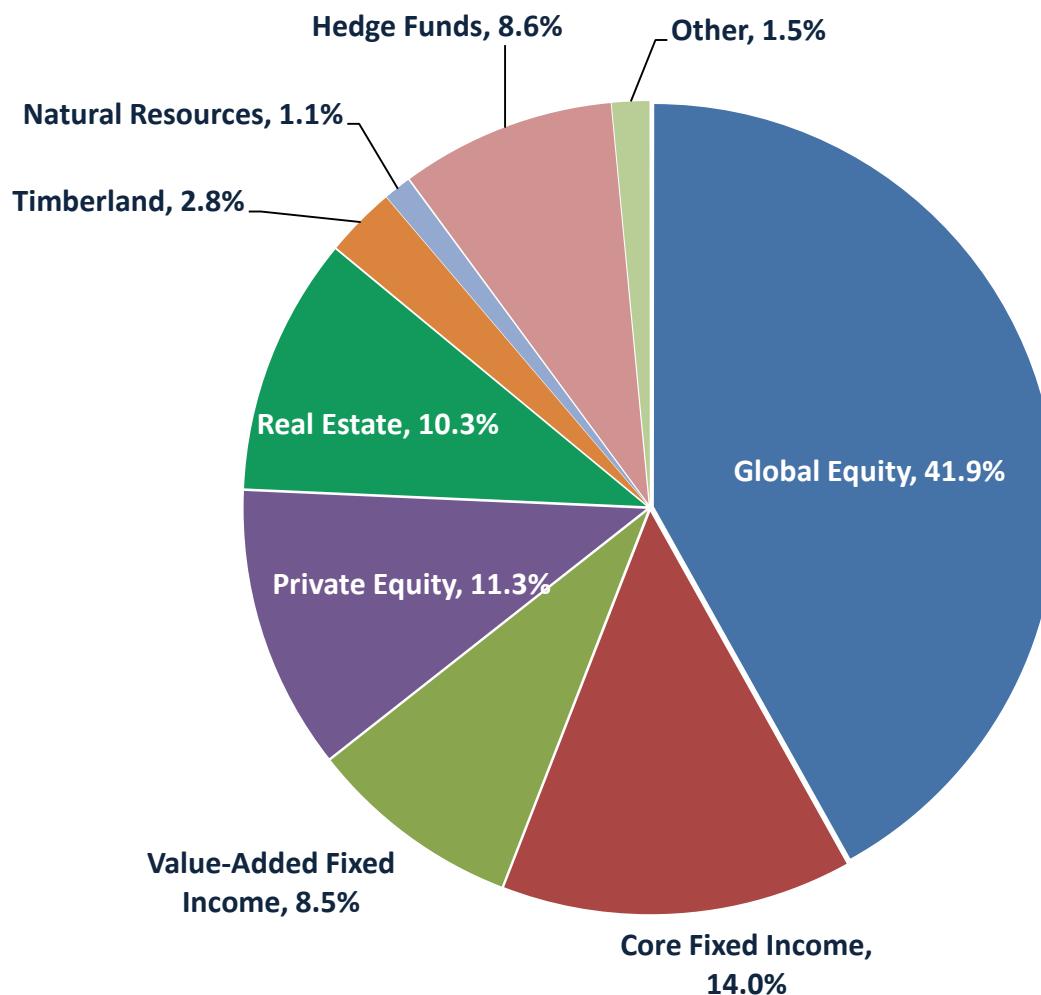


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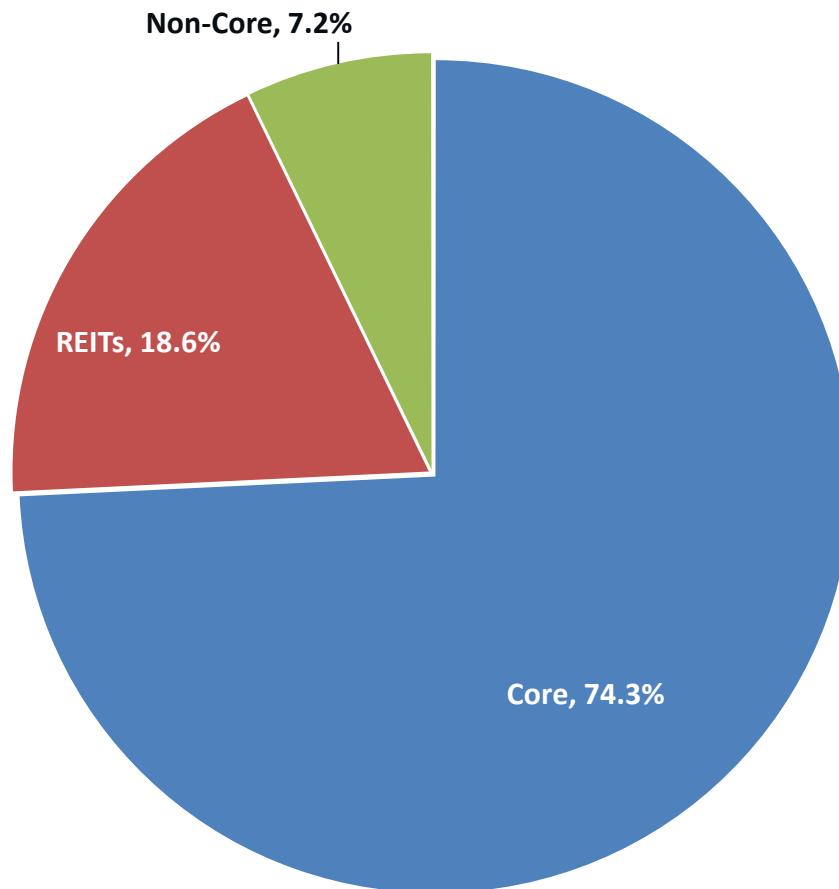
# PRIT Asset Allocation

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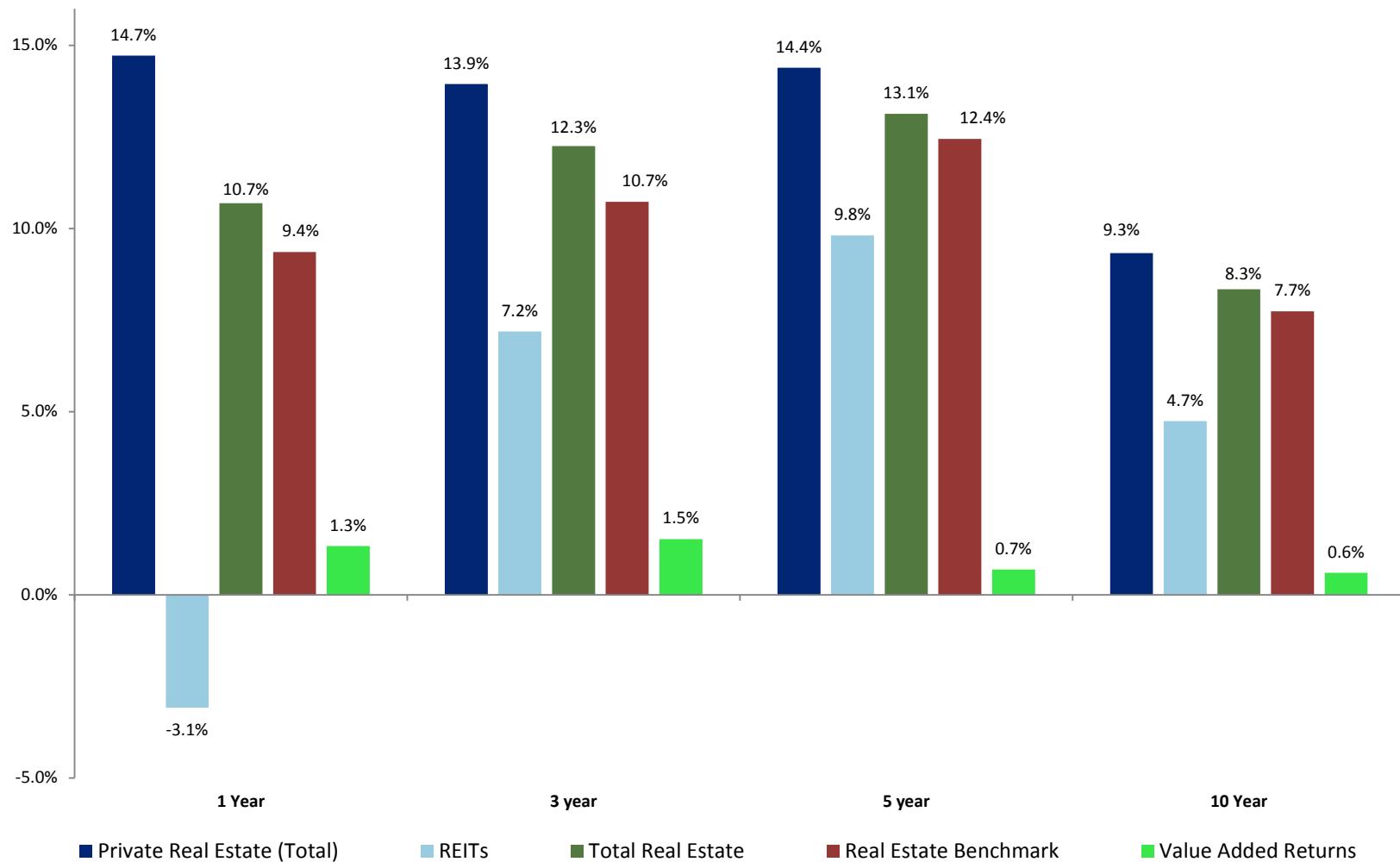


# Real Estate Asset Allocation

Targets	
Core	70%
Non-Core	10%
REITs	20%



# Total Real Estate Performance



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# *Private Real Estate Portfolio*



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# Manager Performance

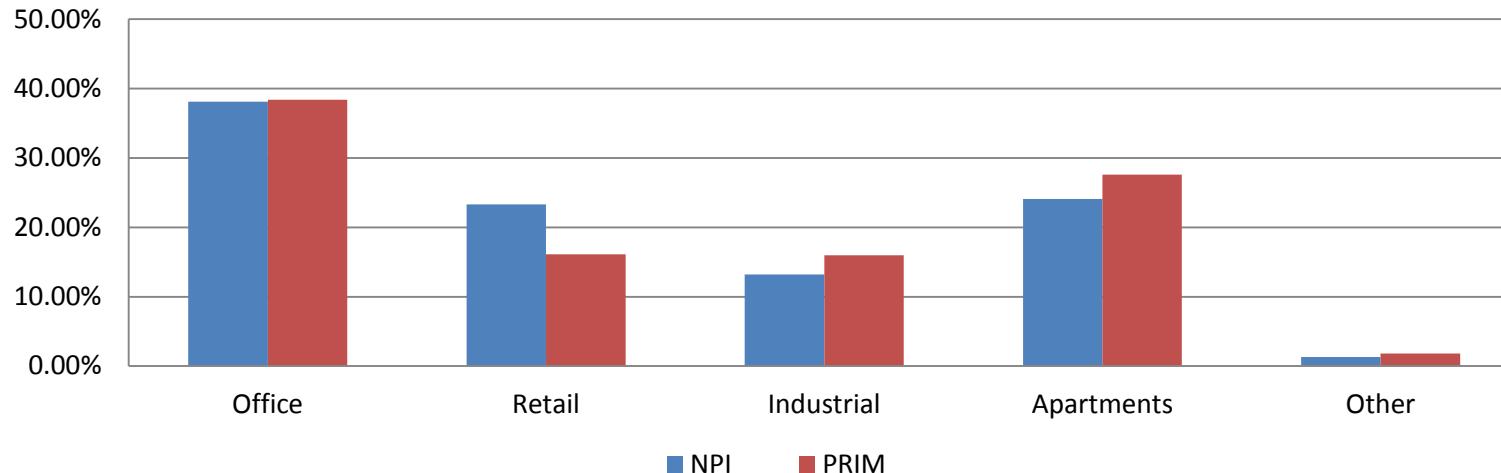
Separate Accounts	1 year	3 years	5 years	10 years	ITD
<b>AEW</b>	<b>18.6%</b>	<b>14.4%</b>			<b>14.3%</b>
<i>Excess Return</i>	5.9%	2.9%			2.2%
<b>LaSalle</b>	<b>12.3%</b>	<b>13.3%</b>	<b>14.8%</b>	<b>9.1%</b>	<b>10.4%</b>
<i>Excess Return</i>	-0.4%	1.9%	2.0%	0.7%	0.9%
<b>TA</b>	<b>10.2%</b>	<b>10.3%</b>	<b>11.6%</b>	<b>7.6%</b>	<b>8.9%</b>
<i>Excess Return</i>	-2.5%	-1.2%	-1.2%	-0.8%	-0.1%
<b>Invesco</b>	<b>11.9%</b>	<b>13.2%</b>	<b>14.6%</b>	<b>8.9%</b>	<b>9.9%</b>
<i>Excess Return</i>	-0.9%	1.7%	1.8%	0.5%	0.2%
<b>J.P. Morgan</b>	<b>10.2%</b>	<b>9.0%</b>	<b>12.9%</b>	<b>7.6%</b>	<b>10.4%</b>
<i>Excess Return</i>	-2.6%	-2.4%	0.2%	-0.8%	1.5%
<b>Total Core Composite</b>	<b>12.4%</b>	<b>12.0%</b>	<b>13.3%</b>	<b>8.4%</b>	<b>9.9%</b>
<i>Excess Return</i>	-0.3%	0.5%	0.5%	0.0%	0.3%
<b>Total Core Composite Leveraged</b>	<b>14.7%</b>				<b>14.5%</b>
<i>Excess Return</i>	1.9%				3.3%
<b>NCREIF Property Index (Quarter Lag)</b>	<b>12.7%</b>	<b>11.5%</b>	<b>12.8%</b>	<b>8.4%</b>	

\* Green Box: Positive Relative Return. Red Box: Negative Relative Return

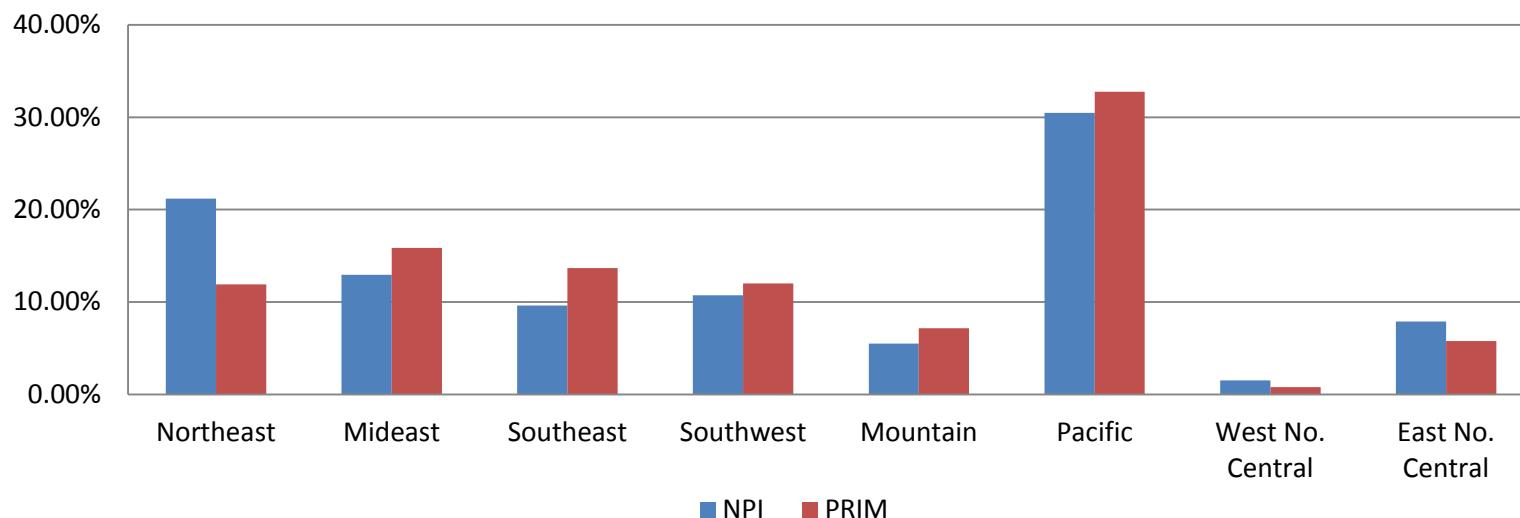


# Exposure

## Property Type Exposure

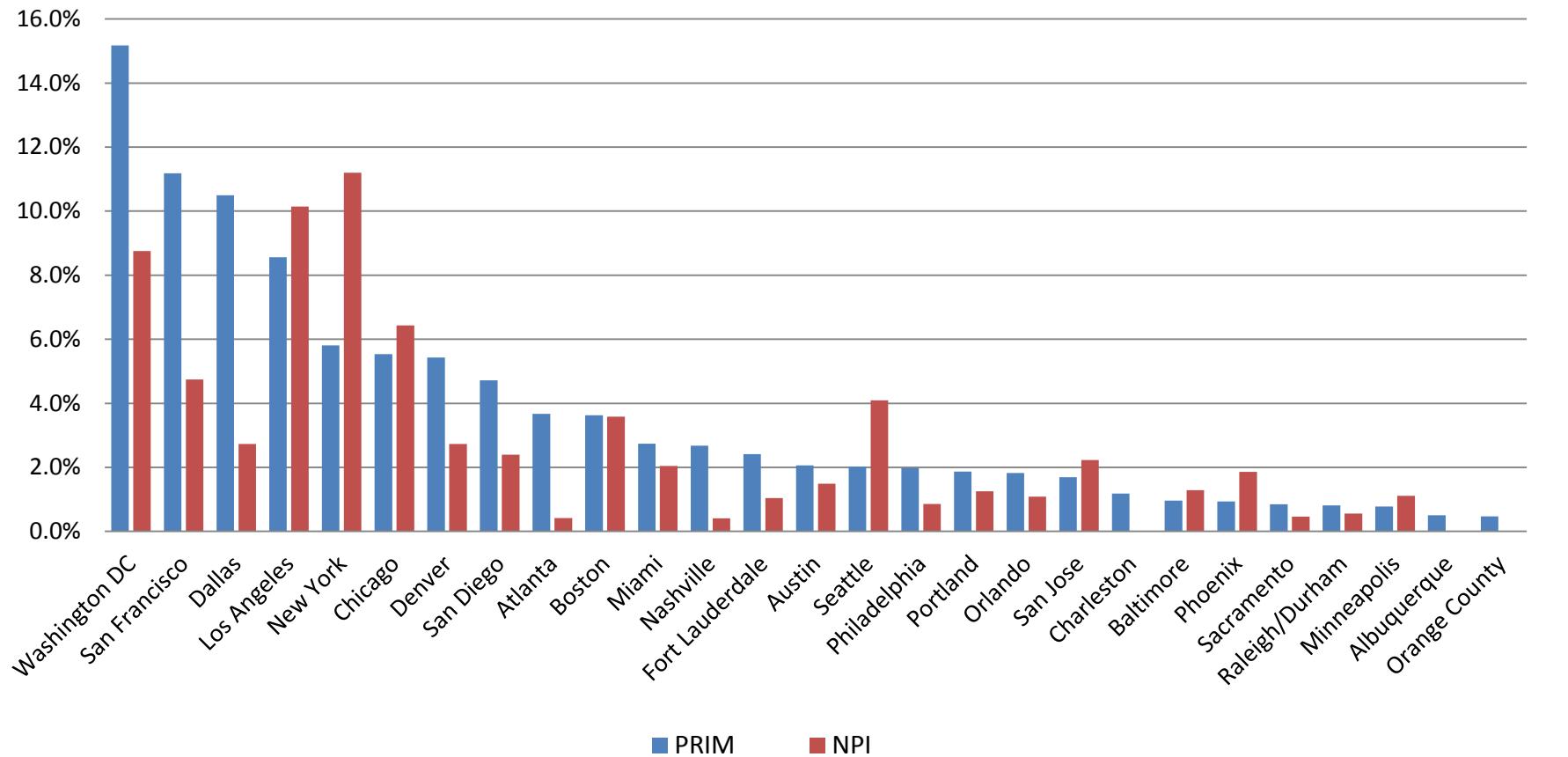


## Regional Exposure



# Exposure by MSA

## Ranked by PRIM Exposure



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## *Non-Core Real Estate*



# Performance & Summary of Fund Investments

	1 year	3 years	5 years	ITD
Intercon IV	51.2%	19.4%	14.7%	-1.4%
<i>Excess Return</i>	38.5%	7.9%	2.0%	-9.6%
Canyon Johnson	5.1%	-2.5%	-2.5%	-4.6%
<i>Excess Return</i>	-7.7%	-13.9%	-15.3%	-13.1%
New Boston	0.1%	3.6%	4.4%	-4.4%
<i>Excess Return</i>	-12.6%	-7.8%	-8.4%	-11.3%
Non Core (Ex. ETI)*	14.4%	15.5%		11.4%
<i>Excess Return</i>	1.7%	4.0%		0.5%
<b>NCREIF Property Index (Quarter lag)</b>	<b>12.7%</b>	<b>11.5%</b>	<b>12.8%</b>	
<i>Green Box: Positive Relative Return; Red Box: Negative Relative Return</i>				
*Reflects J-curve impact of development projects.				

Summary of Fund Investments					
Firm	Inception	Commitment	Capital Called	Remaining Capital	ITD Return
Canyon Johnson	4/30/2005	\$20,000,000	\$17,997,408	\$0	-4.6%
New Boston	11/30/2006	\$10,000,000	\$10,000,000	\$0	-4.4%
Intercontinental	6/30/2005	\$10,000,000	\$10,000,000	\$0	-1.4%
Carlyle	11/15/2011	\$47,500,000	\$23,479,849	\$21,635,378	21.8%
DivcoWest III	12/15/2011	\$50,000,000	\$49,048,540	\$0	28.0%
DivcoWest IV	12/11/2013	\$100,000,000	\$50,672,138	\$18,077,552	11.0%
<b>Total</b>		<b>\$237,500,000</b>	<b>\$161,197,935</b>	<b>\$39,712,930</b>	



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# ***Public Real Estate (REITs) Portfolio***



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# Manager Performance & Top Holdings

REITs Performance					
Global REITs	Month	1 year	3 years	5 years	ITD
Invesco	-5.8%	-3.6%	7.7%		8.1%
Excess Return	0.1%	0.6%	0.7%		0.7%
CenterSquare	-5.8%	-2.7%	7.6%		8.0%
Excess Return	0.1%	1.5%	0.6%		0.6%
Invesco Takeover	-5.8%	-3.7%			-2.8%
Excess Return	0.1%	0.5%			-0.3%
<b>EPRA NAREIT Developed</b>	<b>-5.9%</b>	<b>-4.2%</b>	<b>7.1%</b>		

\* Green Box: Positive Relative Return; Red Box: Negative Relative Return.

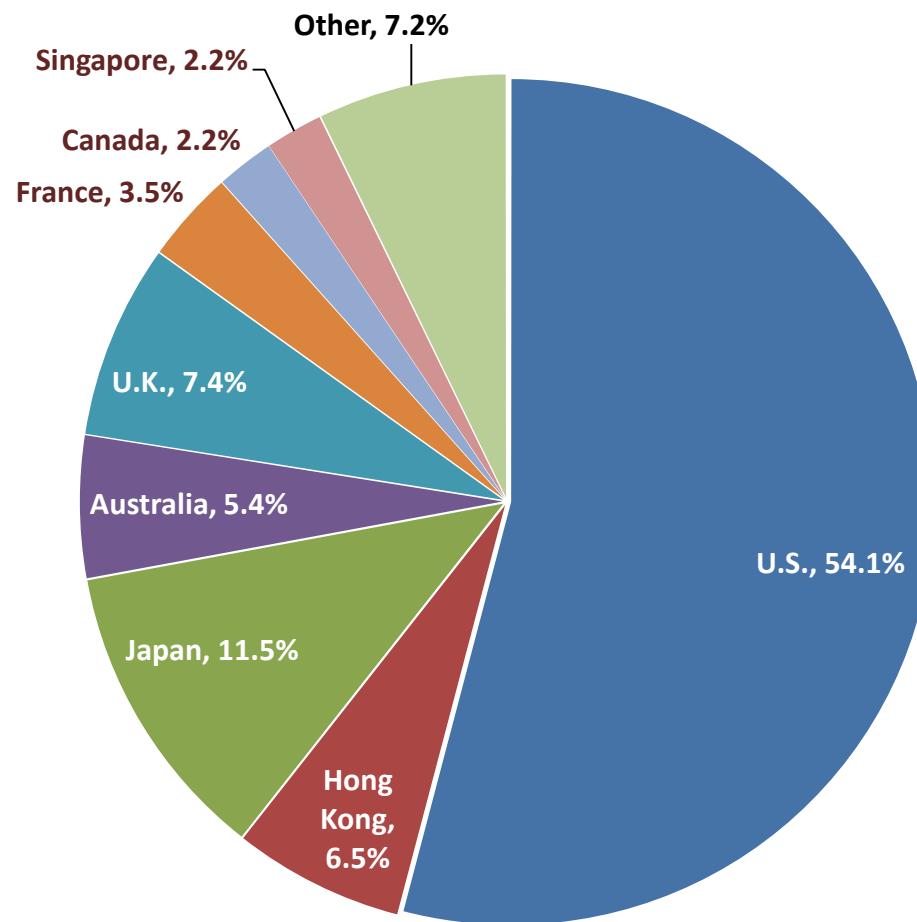
Total REITs	Month	1 year	3 years	5 years	ITD
Total REITs Composite	-5.8%	-3.1%	7.2%	9.8%	9.4%
Excess Return	0.1%	1.1%	0.1%	-0.2%	1.4%
<b>Total REITs Benchmark</b>	<b>-5.9%</b>	<b>-4.2%</b>	<b>7.1%</b>	<b>10.0%</b>	<b>7.9%</b>

Top 10 Holdings	
Security	%
SIMON PROPERTY GROUP INC	5.6%
AVALONBAY	3.3%
MITSUI FUDOSAN	3.0%
PUBLIC STORAGE	2.7%
LAND SECURITIES	2.6%
BOSTON PROPERTIES	2.4%
ESSEX PROPERTY	2.2%
VENTAS	2.1%
SUN HUNG KAI	2.0%
PROLOGIS	2.0%
<b>Top 10 Holdings</b>	<b>27.9%</b>



# *REITs Exposure by Country*

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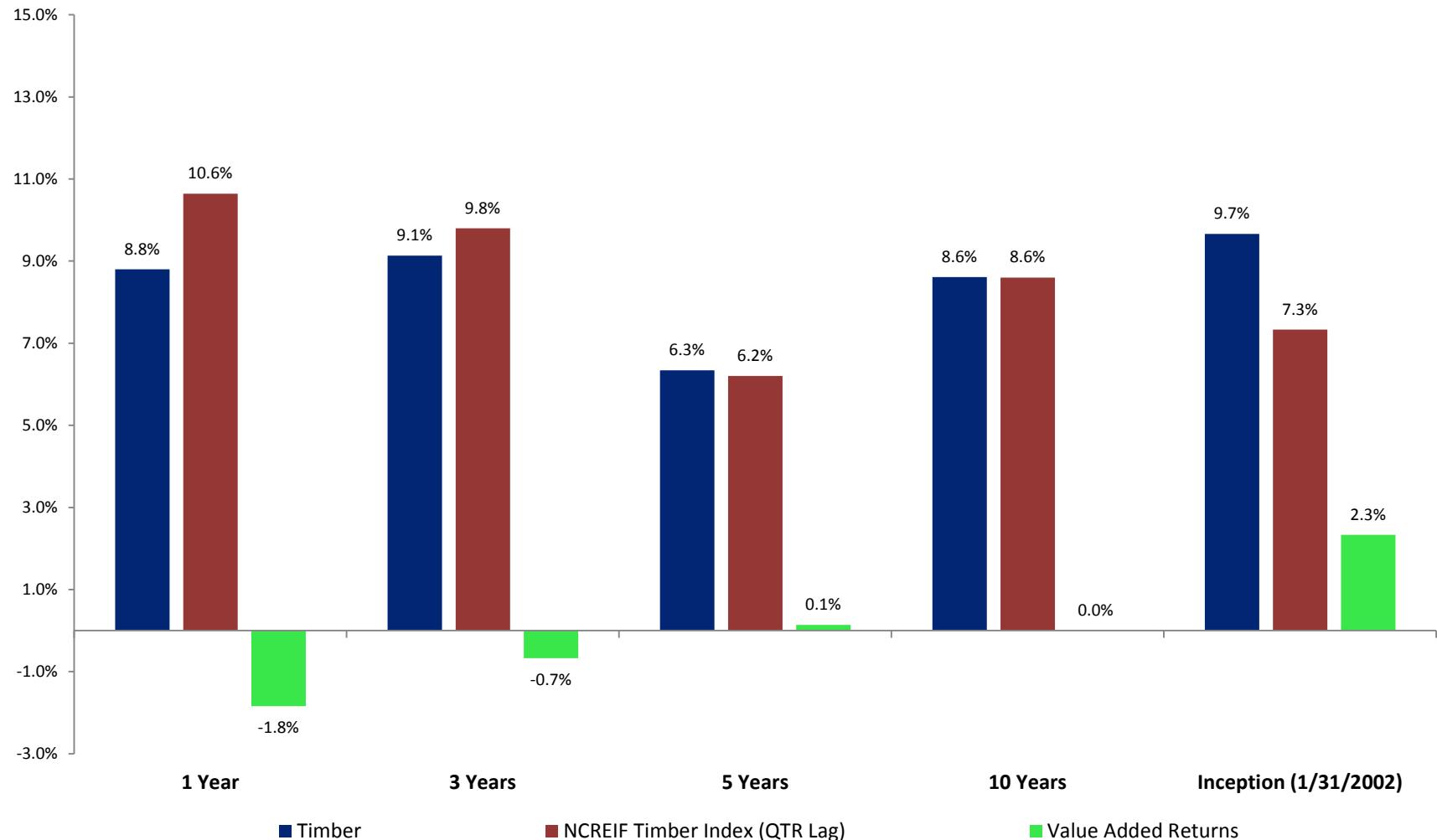


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# *Timberland Portfolio*



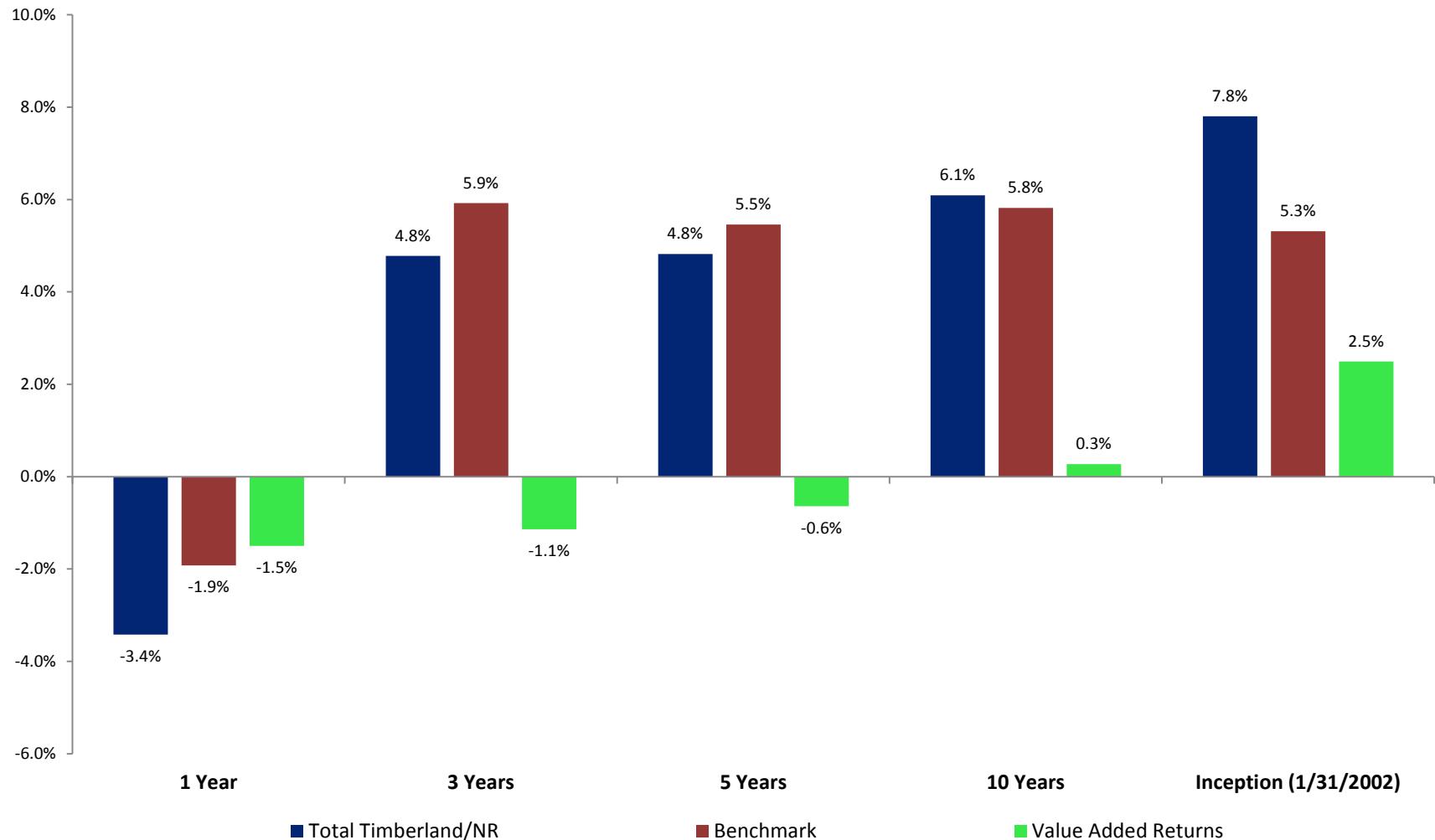
# *Timberland Performance*



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# Total Timberland/Natural Resources Performance



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# Manager Performance

Timberland	1 year	3 years	5 years	ITD
FIA	8.9%	9.4%	6.5%	7.6%
<i>Excess Return vs. NTI</i>	-1.7%	-0.4%	0.3%	0.2%
CG	8.9%	8.3%		6.5%
<i>Excess Return vs. NTI</i>	-1.8%	-1.5%		-1.2%
Total Timber Composite	8.8%	9.1%	6.3%	9.7%
<i>Excess Return vs. NTI</i>	-1.8%	-0.7%	0.1%	2.3%
<b>NCREIF Timber Index (Quarter Lag)</b>	<b>10.6%</b>	<b>9.8%</b>	<b>6.2%</b>	

\* Green Box: Positive Relative Return; Red Box: Negative Relative Return.

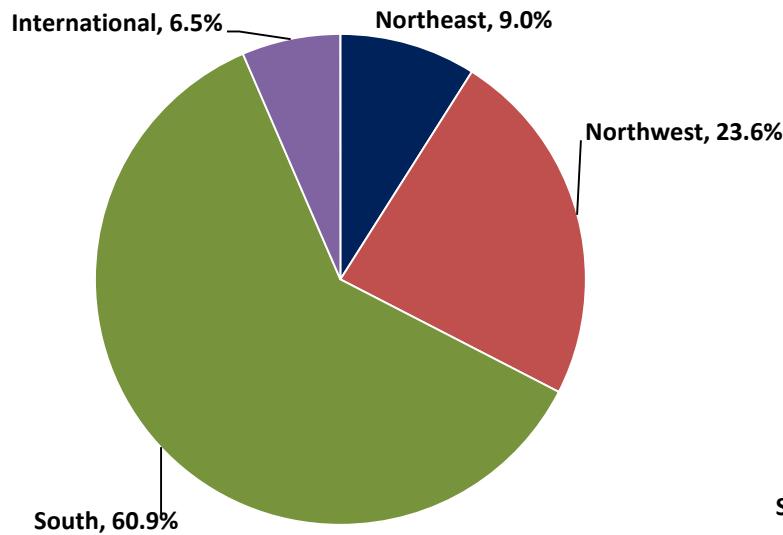
Natural Resources	1 year	3 years	5 years	ITD
Jennison	-41.0%	-8.0%	-3.8%	-7.0%
<i>Excess Return</i>	-6.9%	-2.6%	-2.1%	1.8%
T. Rowe Price	-29.0%	-0.7%	2.2%	-5.3%
<i>Excess Return</i>	5.1%	4.7%	3.9%	3.5%
Total Composite	-35.4%	-4.5%	-0.8%	-6.1%
<i>Excess Return</i>	-1.3%	0.9%	0.9%	2.7%
<b>Lipper Natural Resources Global Fund Index</b>	<b>-34.1%</b>	<b>-5.4%</b>	<b>-1.7%</b>	

\* Green Box: Positive Relative Return; Red Box: Negative Relative Return.

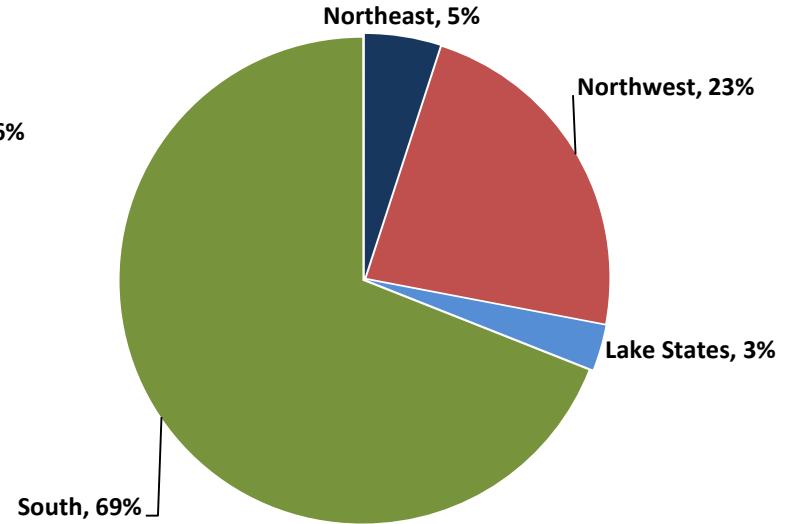


# *Exposure to Timberland by Region*

**Region Exposure**

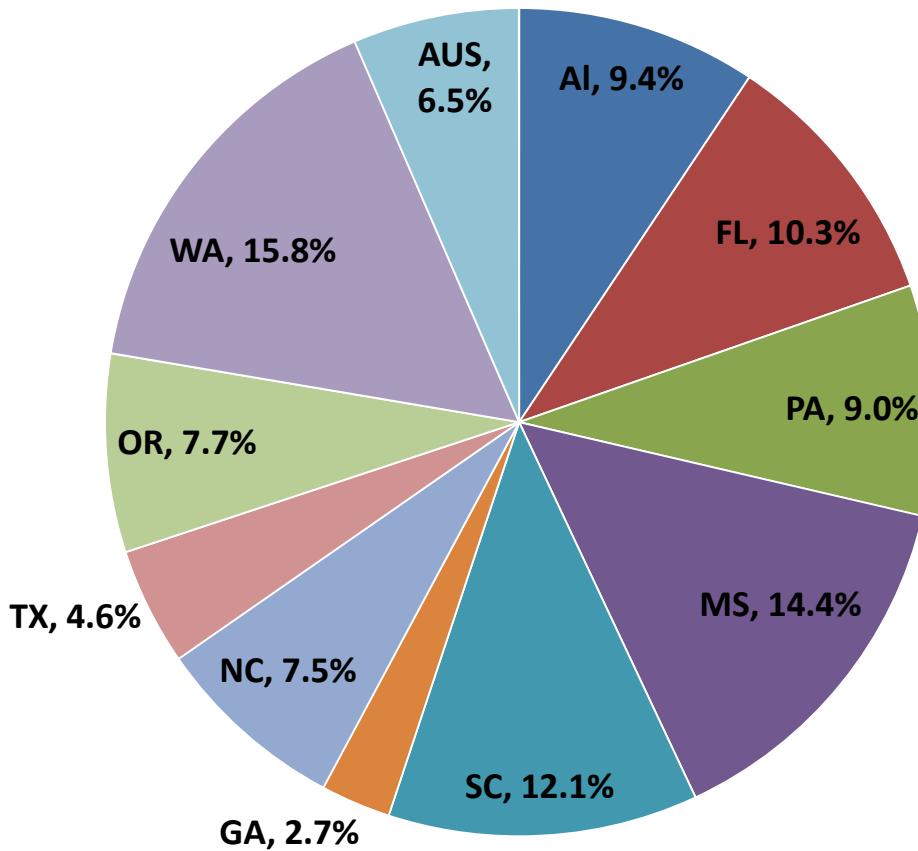


**Benchmark**



# *Exposure to Timberland by State*

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## Appendix I

KPMG Report on 2015 Audit

*PRIM Board Meeting*  
*Tuesday, October 13, 2015*

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# Pension Reserves Investment Management Board 2015 Audit Results

October 13, 2015

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## 1.0 Responsibilities

## 2.0 Audit status

## 3.0 Audit results

- Areas of emphasis
- Summary of uncorrected differences
- Audit observations
- Required communications

## 4.0 Agreed-upon Procedures – Procurement

## 5.0 Material written communications between KPMG and management

## 6.0 Independence

## 7.0 KPMG's Audit Committee Institute and Accounting Updates

### Appendix A – Draft audit reports

### Appendix B – Draft reports on internal control over financial reporting in accordance with *Government Auditing Standards*

### Appendix C – Draft benchmarking agreed-upon-procedures report

### Appendix D – Draft procurement process agreed-upon-procedures report

# 1.0

# Responsibilities

# Responsibilities

## **Management is responsible for:**

- Adopting sound accounting policies
- Fairly presenting the financial statements, including disclosures, in conformity with generally accepted accounting principles (GAAP)
- Establishing and maintaining effective internal control over financial reporting (ICFR), including internal controls to prevent, deter, and detect fraud
- Identifying and ensuring that the PRIM Board and the PRIT Fund comply with laws and regulations applicable to its activities, and for informing the auditor of any known material violations of such laws and regulations
- Making all financial records and related information available to the auditor
- Providing unrestricted access to personnel within the entity from whom the auditor determines it necessary to obtain audit evidence
- Adjusting the financial statements to correct material misstatements
- Providing the auditor with a letter confirming certain representations made during the audit that includes, but is not limited to, management's:
  - Disclosure of all significant deficiencies, including material weaknesses, in the design or operation of internal controls that could adversely affect the PRIM Board's or the PRIT Fund's financial reporting
  - Acknowledgement of their responsibility for the design and implementation of programs and controls to prevent, deter, and detect fraud; and
  - Affirmation that the effects of any uncorrected misstatements aggregated by the auditor are immaterial, both individually and in the aggregate, to the financial statements taken as a whole

# Responsibilities (continued)

## **The Administration and Audit Committee is responsible for:**

- Oversight of the financial reporting process and oversight of internal control over financial reporting (ICFR)
- Oversight of the establishment and maintenance of programs and internal controls designed to prevent and detect fraud

## **Management and the Administration and Audit Committee are responsible for:**

- Setting the proper tone and creating and maintaining a culture of honesty and high ethical standards

**The audit of the financial statements does not relieve management or the Administration and Audit Committee of their responsibilities.**

## **KPMG is responsible for:**

- Forming and expressing an opinion about whether the financial statements that have been prepared by management with the oversight of the Administration and Audit Committee are presented fairly, in all material respects, in conformity with GAAP
- Planning and performing the audit with an attitude of professional skepticism
- Conducting the audit in accordance with relevant professional standards, including generally accepted auditing standards in the United States of America, *Government Auditing Standards* issued by the Comptroller General of the United States, and complying with the Code of Professional Conduct of the American Institute of Certified Public Accountants, and the ethical standards of relevant CPA societies and relevant state boards of accountancy
- Evaluating ICFR as a basis for designing audit procedures, but not for the purpose of expressing an opinion on the effectiveness of the entity's ICFR
- Communicating to management and the Administration and Audit Committee all required information, including significant matters
- Communicating to management and the Administration and Audit Committee in writing all significant deficiencies and material weaknesses in internal control identified in the audit and reporting to management all deficiencies noted during our audit that are of sufficient importance to merit management's attention

# Responsibilities (continued)

## **Responsibilities for other information in documents containing audited financial statements:**

- The auditors' report on the financial statements does not extend to other information in documents containing audited financial statements, excluding required supplementary information.
- We are required to:
  - Read the other information to identify material inconsistencies with the audited financial statements or material misstatements of fact, and
  - Make appropriate arrangements with management or the Administration and Audit Committee to obtain the other information prior to the report release date.
- Any material inconsistencies or misstatement of facts that are not resolved prior to the report release date, and that require revision of the other information, may result in KPMG modifying or withholding the auditors' report or withdrawing from the engagement.
- We will perform the following procedures with respect to the Comprehensive Annual Financial Report (CAFR):
  - Read the CAFR, and
  - Compare information in the CAFR to the audited financial statements to identify material inconsistencies or misstatements of fact.

## **2.0**

# **Audit status**

# Audit status

## Significant changes to our audit plan

There have been no changes to our audit plan dated May 21, 2015

## Pending matters, as of Thursday, October 1, 2015

- Evaluate the impact of GASB 68, *Accounting and Financial Reporting for Pensions*, on the PRIM Board financial statements and notes
- Conduct annual fraud interviews in accordance with SAS 99
- Outstanding open trade confirmations (3 of 9) from external brokers
- Legal confirmations (5 of 5) to be received close to the date of sign-off, as required by our audit process
- Completion of documentation regarding controls over the valuation of investments
- Final assessment of valuation difference for private equity portfolio
- Approval/acceptance of the financial statements by the PRIM Board
- Evaluate effect of any subsequent events
- Obtain management representation letters
- Completion

## **3.0**

# **Audit results**

# Areas of emphasis

## The PRIM Board – Areas of Emphasis

- Recalculated a sample of management and performance fees
- Reviewed other operating results

## The PRIT Fund – Areas of Emphasis

- Investments are measured at fair value. Most of the portfolio is comprised of separate accounts with marketable securities or funds holding marketable securities. The PRIT Fund utilizes net asset value (NAV), which is reviewed by management, as a practical expedient to estimate fair value of its alternative investments, which are held through commingled funds and limited partnerships. During our audit we:
  - Assessed the design and operating effectiveness of custodial controls over valuation of directly held marketable investments and management's controls over certain alternative investments
  - Confirmed existence and performed valuation procedures over a sample of marketable securities and REIT investments
  - Confirmed a sample of private equity and hedge fund investments with underlying investment managers
  - Performed substantive test-of-details over the accuracy of a sample of private equity, hedge fund, real estate and timber investments, utilizing audited NAV statements, cash activity, and benchmark data
  - Tested reasonableness of a sample of real estate appraisals
  - Reviewed contributions from and redemptions to members

## Other Areas of Emphasis

- Reviewed conformity of presentation and disclosure with GASB standards

## Non-GAAP policies

- The PRIT Fund - Management records the investment valuation results for certain alternative investments on a quarter lag, due to the timing of receipt of financial information. See Summary of Unadjusted Audit Differences (SUAD) slide for impact.

The following Non-GAAP policy is below KPMG's SUAM posting threshold:

- The PRIT Fund - Management records net derivative activity in investments, instead of gross derivative activity.

## Areas of emphasis (continued)

Results of Fair Value Testing	Percentage of Portfolio
<p><b>■ Marketable Securities</b></p> <ul style="list-style-type: none"> <li>– Reviewed the process for holding and valuing marketable securities, including reviewing BNY Mellon's SOC 1 report, as well as relevant user controls at the PRIM Board</li> <li>– Priced a sample of marketable securities using independent third party vendors</li> <li>– Reviewed a sample of pricing reconciliations between investment managers and BNY Mellon</li> </ul>	67%
<p><b>■ Private Equity</b></p> <ul style="list-style-type: none"> <li>– Reviewed controls in place over valuation and existence of private equity investments</li> <li>– Confirmed a sample of private equity investments and compared to the PRIM Board's valuation</li> <li>– Reviewed selected December 31, 2014 audited financial statements and performed a rollforward to the NAV to June 30, 2015, including the reasonableness of the private equity investments performance</li> </ul>	11%
<p><b>■ Hedge Funds</b></p> <ul style="list-style-type: none"> <li>– Reviewed controls in place over valuation and existence of hedge fund investments</li> <li>– Confirmed a sample of commingled and direct hedge investments and compared to the PRIM Board's valuation</li> <li>– Reviewed selected December 31, 2014 audited financial statements and performed a rollforward to the NAV to June 30, 2015, including the reasonableness of the hedge fund investments performance</li> </ul>	9%
<p><b>■ Real Estate</b></p> <ul style="list-style-type: none"> <li>– Reviewed controls in place over valuation and existence of real estate investments</li> <li>– Tested a sample of real estate valuation statements to the PRIM Board's records</li> <li>– Reviewed selected December 31, 2014 audited financial statements and performed a rollforward to the NAV to June 30, 2015, including the reasonableness of the real estate investments performance</li> <li>– Tested mortgage and unsecured debt and related covenant compliance</li> </ul>	10%
<p><b>■ Timber</b></p> <ul style="list-style-type: none"> <li>– Reviewed controls in place over valuation and existence of timber investments</li> <li>– Tested a sample of timber valuation statements to the PRIM Board's records</li> <li>– Reviewed selected December 31, 2014 audited financial statements and performed a rollforward to the NAV to June 30, 2015, including the reasonableness of the timber investments performance</li> </ul>	3%

***KPMG noted no material fair value pricing exceptions.***

# Summary of uncorrected audit differences (in thousands)

## The PRIM Board

Audit difference related to performance fees where the incorrect hurdle rate was used in the calculation of the Campbell incentive, resulting in an over-accrual of fees. The impact on the financial statements to correct this difference is as follows:

Decrease reimbursement of fees and other expenses	196
Decrease accrued investment fee liability	196
Decrease investment fee expense	196
Decrease receivable from PRIT	196

## The PRIT Fund

Valuation difference on private equity, real estate and timber funds due to the use of 3/31/15 values in accordance with the PRIM Board's historical accounting policy. At the time of printing, the impact on the financial statements to record this difference is as follows:

Increase private equity investments	294,577*
Increase real estate investments	48,291
Increase timber investments	6,049
Decrease net change in unrealized appreciation	99,217*
Increase pooled net position as of June 30, 2014	448,134**

\* Number is subject to change upon receipt of additional 6/30/15 reports

\*\* Adjustment includes impact of comparable 6/30/14 unrecorded audit difference

# Audit observations

## The PRIT Fund

- We noted during our audit that management's review of controls at BNY Mellon does not include a robust review of the periodic Service Organizations Controls Report (SOC 1 Report) issued by BNY Mellon:
  - Management should enhance their review process and documentation around the SOC 1 Reports to ensure that the PRIM Board adequately addresses all control considerations and exceptions at the service organizations that could impact the relevant control environment relating to the PRIM Board and the PRIT Fund.
  - Management should review and address all relevant User Control Considerations outlined in the SOC 1 reports, to ensure that the PRIM Board and the PRIT Fund's control environment adequately considers them.

## The PRIM Staff Response:

- PRIM staff communicates informally with BNY Mellon on a daily basis. Formally, PRIM staff meets with BNY Mellon on a monthly basis to discuss upcoming portfolio changes, benchmark changes, cash flows from clients, as well as relevant updates from BNY Mellon. PRIM staff has requested that BNY Mellon formally present the relevant SOC1 report s at a formal monthly meeting, thus allowing PRIM staff and BNY Mellon to discuss any findings and PRIM staff's User Control Considerations. This enhanced process will ensure the proper attention and documentation of the SOC1 reports is achieved.

## Required communications – The PRIM Board and the PRIT Fund

Errors or omissions in disclosures	No material items noted
Related-party transactions	Related party transactions are sufficiently described in the notes to the financial statements for the PRIM Board and the PRIT Fund
Litigations, claims, and assessments	None noted
Illegal acts or fraud	None noted
Noncompliance with laws and regulations	None noted
Significant difficulties encountered during the audit	No matters to report
Disagreements with management	No matters to report
Management's consultation with other accountants	To our knowledge, no matters to report
Significant issues discussed, or subject to correspondence, with management	No matters to report
Scope limitation	None
Other Information in Documents Containing Audited Financial Statements	Consistent with audited financial statements

## **4.0**

# **Agreed-upon Procedures – Procurement**

# Agreed-upon Procedures – Procurement

## For the year ended June 30, 2015

- The PRIM Board has controls related to the selections of third parties to provide investment management, investment advisory, custody and recordkeeping, auditing, and other professional services related to the management of the PRIM Board and the PRIT Fund.
- These controls are in place to ensure the PRIM Board's procurement process of professional services is open, competitive, objective, and designed to ensure that the Trustees have access to a broad array of the highest quality service providers.
- KPMG performed agreed-upon procedures on these procurement controls solely to assist specified parties in evaluating the PRIM Board's procurement process.
- KPMG did not find any exceptions in the agreed-upon procedures performed.

## **5.0 Material written communications between KPMG and management**

# Material written communications between KPMG and management

## **Material written communications**

- Draft audit reports (Appendix A)
- Draft reports on internal control over financial reporting in accordance with *Government Auditing Standards* (Appendix B)
- Draft benchmarking agreed-upon-procedures report (Appendix C)
- Draft procurement process agreed-upon-procedures report (Appendix D)

## 6.0 Independence

# Independence

In our professional judgment, we are independent with respect to the PRIM Board and the PRIT Fund, as that term is defined by the professional standards.

## **7.0**

# **KPMG's Audit Committee Institute and Accounting Updates**

# KPMG's Audit Committee Institute (ACI)

## *In depth insights. In time to matter.*

### ACI Programs

- Audit Committee Roundtable Series
- Quarterly Audit Committee Webcast
- 12<sup>th</sup> Annual Audit Committee Issues Conference
  - February 1-2, 2016, San Francisco, CA

### Suggested Publications (available for download at [www.kpmg.com/aci](http://www.kpmg.com/aci))

- Directors Quarterly
- Global Boardroom Insights
- On the 2015 Audit Committee and Board Agendas
- 2015 Global Audit Committee Survey

### Resources

- ACI Web site: [www.kpmg.com/aci](http://www.kpmg.com/aci)
- ACI mailbox: [auditcommittee@kpmg.com](mailto:auditcommittee@kpmg.com)
- ACI hotline: [1-877-KPMG-ACI](tel:1-877-KPMG-ACI)



## Accounting Updates

- **GASB 68 – Accounting and Financial Reporting for Pensions—an amendment of GASB Statement No. 27**
  - Effective for Fiscal year 2015
- **GASB 72 – Fair Value Measurement and Application, issued in February 2015**
  - Effective for Fiscal year 2016
- **GASB 74 – Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans**
  - Effective for Fiscal year 2017
- **GASB 75 – Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions**
  - Effective for Fiscal year 2018
- **GASB 76 – The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments**
  - Effective for Fiscal year 2016
- **FASB Accounting Standards Update (ASU) 2015-07, Disclosures for Investments in Certain Entities that Calculate Net Asset Value per Share (or its Equivalent)**
  - Effective for PRIT Core entities in Fiscal year 2017 but may be adopted early

# Appendix A

## **Independent Auditors' Report**

The Administrative and Audit Committee and Trustees,  
Pension Reserves Investment Management Board:

### **Report on the Financial Statements**

We have audited the accompanying financial statements of the Pension Reserves Investment Management Board (the PRIM Board), as of and for the years ended June 30, 2015 and 2014, and the related notes to the financial statements, which collectively comprise the PRIM Board's basic financial statements as listed in the table of contents.

#### ***Management's Responsibility for the Financial Statements***

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### ***Auditors' Responsibility***

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### ***Opinion***

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Pension Reserves Investment Management Board as of June 30, 2015 and 2014, and the changes in fiduciary net position for the years then ended, in accordance with U.S. generally accepted accounting principles.

#### ***Other Matter – Required Supplementary Information***

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages        be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### ***Other Reporting Required by Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated October 13, 2015 on our consideration of the PRIM Board's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the PRIM Board's internal control over financial reporting and compliance.

October 13, 2015

## **Independent Auditors' Report**

The Administrative and Audit Committee and Trustees,  
Pension Reserves Investment Management Board and  
Participating and Purchasing Systems of the Pension Reserves Investment Trust Fund:

### **Report on the Financial Statements**

We have audited the accompanying financial statements of the Pension Reserves Investment Trust Fund (the PRIT Fund), a component unit of the Commonwealth of Massachusetts, as of and for the years ended June 30, 2015 and 2014, and the related notes to the financial statements, which collectively comprise the PRIT Fund's basic financial statements as listed in the table of contents.

#### ***Management's Responsibility for the Financial Statements***

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### ***Auditors' Responsibility***

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### ***Opinion***

In our opinion, the financial statements referred to above present fairly, in all material respects, the pooled net position of the Pension Reserves Investment Trust Fund as of June 30, 2015 and 2014, and the changes in its pooled net position for the years then ended in accordance with U.S. generally accepted accounting principles.

## ***Other Matters***

### ***Required Supplementary Information***

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages        be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### ***Other Information***

Our audit was conducted for the purpose of forming an opinion on the PRIT Fund's basic financial statements. The Schedule of Pooled Net Position – Capital Fund and Cash Fund and Schedule of Changes in Pooled Net Position – Capital Fund and Cash Fund (collectively, the Schedules) are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

### ***Other Reporting Required by Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated October 13, 2015 on our consideration of the PRIT Fund's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the PRIT Fund's internal control over financial reporting and compliance.

October 13, 2015

## **Appendix B**

**Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance  
and Other Matters Based on an Audit of Financial Statements Performed in Accordance With  
*Government Auditing Standards***

The Administrative and Audit Committee and Trustees,  
Pension Reserves Investment Management Board:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the Pension Reserves Investment Management Board (the PRIM Board), which comprise the statement of fiduciary net position as of June 30, 2015, the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated **October 13, 2015**.

**Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the PRIM Board's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the PRIM Board's internal control. Accordingly, we do not express an opinion on the effectiveness of the PRIM Board's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

## **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the PRIM Board's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and other matters, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

## **Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the PRIM Board's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the PRIM Board's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

October 13, 2015

**Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance  
and Other Matters Based on an Audit of Financial Statements Performed in Accordance With  
*Government Auditing Standards***

The Administrative and Audit Committee and Trustees,  
Pension Reserves Investment Management Board and Participating and  
Purchasing Systems of the Pension Reserves Investment Trust Fund:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the Pension Reserves Investment Trust Fund (the PRIT Fund), which comprise the statement of pooled net position as of June 30, 2015, the related statement of changes in pooled net position for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated **October 13, 2015**.

**Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the PRIT Fund's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the PRIT Fund's internal control. Accordingly, we do not express an opinion on the effectiveness of the PRIT Fund's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

## **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the PRIT Fund's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and other matters, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

## **Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the PRIT Fund's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the PRIT Fund's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

October 13, 2015

## Appendix C

**Independent Accountants' Report  
on Applying Agreed-Upon Procedures**

Pension Reserves Investment Management Board:

We have performed the procedures enumerated below, which were agreed to by the Pension Reserves Investment Management Board (the PRIM Board), to assist you in determining the accuracy of the Total Core, Net-of-Fees Adjusted Policy, Interim, and Asset Class Benchmark Returns (collectively, the Benchmarks) used in the Performance Measurement Presentation during the year ended June 30, 2015.

The PRIM Board's management is responsible for the construction and presentation of the Performance Measurement Presentation, and Bank of New York Mellon (BNYM) is responsible for the calculation of the Benchmarks used in the Performance Measurement Presentation. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

As agreed with management, any differences resulting in an impact of less than 0.01% (i.e., less than or equal to 0.009%) to the report are considered to be immaterial, and are not reported herein.

The procedures that we performed, and our findings with respect thereto, are as follows:

I. Obtained the following reports:

- 1) Performance Measurement Presentation, prepared and provided by BNYM as of June 30, 2015.
- 2) Benchmark List, prepared and provided by BNYM listing all benchmarks used in the Performance Measurement presentation and their unique identifiers.
- 3) Master Structure Map, prepared and provided by BNYM, listing the composite benchmark, the benchmarks that make up the composite, start date, end date, segment, category, sector, level, and the weighted % of the composite.
- 4) Benchmark Return Streams, prepared and provided by BNYM for the Total Core Benchmark, Net-of-Fees Adjusted Policy Benchmark, Interim Benchmark, and the following asset class benchmarks: Domestic Equity, International Equity, Emerging Markets, Global Equity, Core Fixed Income, Value Added Fixed Income, Private Equity, Real Estate, Timber/Natural Resources, Hedge Funds, Portfolio Completion Strategies, and Portable Alpha Wind Down, for the year ended June 30, 2015 obtained by BNYM directly from data vendors.
- 5) Benchmark Change Letters, prepared by the PRIM Board and periodically sent to BNYM instructing any changes to benchmark construction. Change Letters received from the

PRIM Board for the following dates: August 6, 2014, February 5, 2015, and March 11, 2015.

- 6) Benchmark Maintenance Forms, prepared and provided by BNYM to document the authorization, execution, and review of the benchmark changes requested in the Benchmark Change Letters. Maintenance Forms received for the following dates: August 6, 2014 with an effective date of July 31, 2014 and September 30, 2014, February 5, 2015 with an effective date of January 31, 2015, and March 11, 2015 with an effective date of February 28, 2015.

II. To evaluate the construction of each benchmark the following procedures were performed:

- 1) Obtained copies of the following Benchmark Change Letters in order to determine that all Total Core, Net-of-Fees Adjusted Policy, Interim, and asset class benchmarks included in the scope of the review were constructed as instructed in the following letters:

<u>Letter Date</u>	<u>Effective Date of Change</u>
August 6, 2014	July 31, 2014 and September 30, 2014
February 5, 2015	January 31, 2015
March 11, 2015	February 28, 2015

*No exceptions noted.*

- 2) Obtained the following Benchmark Maintenance Forms in order to determine that they were completed by BNYM:

<u>Benchmark</u>	<u>Form Date</u>	<u>Effective Date of Change</u>
Global Equity	August 6, 2014	July 31, 2014
Domestic Equity	August 6, 2014	July 31, 2014
Emerging Markets Equity	August 6, 2014	September 30, 2014
International Equity	August 6, 2014	September 30, 2014
Interim	February 5, 2015	January 31, 2015
Total Core	February 5, 2015	January 31, 2015
Portfolio Completion Strategies	February 5, 2015	January 31, 2015
Interim	March 11, 2015	February 28, 2015
Total Core	March 11, 2015	February 28, 2015
Emerging Markets Equity	March 11, 2015	February 28, 2015

*No exceptions noted.*

III. For each of the Asset Class Benchmarks, using the Benchmark Return Streams, performed the following procedures:

- 1) Recalculated the June 30, 2015 Month to Date Return and agreed it to the Performance Measurement Presentation

*No exceptions noted, other than those caused by subsequent revisions to industry benchmarks. See note <sup>(1)</sup>.*

<u>Asset Class</u>	<u>KPMG Calculation</u>	<u>BNY Report</u>	<u>Difference</u>
Hedge Funds	(1.07)	(1.17)	0.10 <sup>(1)</sup>
Portable Alpha Wind Down	(1.07)	(1.17)	0.10 <sup>(1)</sup>

- 2) Recalculated the June 30, 2015 Quarter to Date Return and agreed it to the Performance Measurement Presentation

*No exceptions noted, other than those caused by subsequent revisions to industry benchmarks. See note <sup>(1)</sup>.*

<u>Asset Class</u>	<u>KPMG Calculation</u>	<u>BNY Report</u>	<u>Difference</u>
Hedge Funds	0.17	0.09	0.08 <sup>(1)</sup>
Portable Alpha Wind Down	0.17	0.09	0.08 <sup>(1)</sup>

- 3) Recalculated the Calendar Year to Date Return (January 1, 2015 – June 30, 2015) and agreed it to the Performance Measurement Presentation

*No exceptions noted, other than those caused by subsequent revisions to industry benchmarks. See note <sup>(1)</sup>.*

<u>Asset Class</u>	<u>KPMG Calculation</u>	<u>BNY Report</u>	<u>Difference</u>
Hedge Funds	2.68	2.58	0.10 <sup>(1)</sup>
Portable Alpha Wind Down	2.68	2.58	0.10 <sup>(1)</sup>

- 4) Recalculated the 1 Year Return (July 1, 2014 – June 30, 2015) and agreed it to the Performance Measurement Presentation

*No exceptions noted, other than those caused by subsequent revisions to industry benchmarks. See note <sup>(1)</sup>.*

<u>Asset Class</u>	<u>KPMG Calculation</u>	<u>BNY Report</u>	<u>Difference</u>
Hedge Funds	3.93	3.84	0.09 <sup>(1)</sup>
Portable Alpha Wind Down	3.93	3.84	0.09 <sup>(1)</sup>

- 5) Recalculated the Trailing 3 Year Return ( July 1, 2012 – June 30, 2015) and agreed it to the Performance Measurement Presentation

*No exceptions noted, other than those caused by subsequent revisions to industry benchmarks. See note <sup>(1)</sup>.*

<u>Asset Class</u>	<u>KPMG Calculation</u>	<u>BNY Report</u>	<u>Difference</u>
Hedge Funds	6.24	6.23	0.01 <sup>(1)</sup>
Portable Alpha Wind Down	6.24	6.23	0.01 <sup>(1)</sup>

- 6) Recalculated the Trailing 5 Year Return ( July 1, 2010 – June 30, 2015) and agreed it to the Performance Measurement Presentation

*No exceptions noted, other than those caused by subsequent revisions to industry benchmarks. See note <sup>(1)</sup>.*

<u>Asset Class</u>	<u>KPMG Calculation</u>	<u>BNY Report</u>	<u>Difference</u>
Hedge Funds	4.15	4.14	0.01 <sup>(1)</sup>
Portable Alpha Wind Down	4.15	4.14	0.01 <sup>(1)</sup>

- 7) Recalculated the Trailing 10 Year Return ( July 1, 2005 – June 30, 2015) and agreed it to the Performance Measurement Presentation

*No exceptions noted. Not applicable for the Portable Alpha Wind Down Asset Class because it has not been used for 10 years.*

IV. Using the monthly Asset Class Benchmarks recalculated in Section III, performed the following procedures over the Total Core Benchmark and the Interim Benchmark:

- 1) Recalculated the June 30, 2015 Month to Date Return and agreed it to the Performance Measurement Presentation

*No exceptions noted, other than those caused by subsequent revisions to industry benchmarks. See note <sup>(1)</sup>.*

<u>Asset Class</u>	<u>KPMG Calculation</u>	<u>BNY Report</u>	<u>Difference</u>
Interim	(0.91)	(0.92)	0.01 <sup>(1)</sup>
Total Core	(1.36)	(1.37)	0.01 <sup>(1)</sup>

- 2) Recalculated the June 30, 2015 Quarter to Date Return and agreed it to the Performance Measurement Presentation

*No exceptions noted, other than those caused by subsequent revisions to industry benchmarks. See note <sup>(1)</sup>.*

<u>Asset Class</u>	<u>KPMG Calculation</u>	<u>BNY Report</u>	<u>Difference</u>
Interim	(0.03)	(0.04)	0.01 <sup>(1)</sup>
Total Core	(0.33)	(0.34)	0.01 <sup>(1)</sup>

- 3) Recalculated the Calendar Year to Date Return (January 1, 2015 – June 30, 2015) and agreed it to the Performance Measurement Presentation

*No exceptions noted, other than those caused by subsequent revisions to industry benchmarks. See note <sup>(1)</sup>.*

<u>Asset Class</u>	<u>KPMG Calculation</u>	<u>BNY Report</u>	<u>Difference</u>
Total Core	2.58	2.57	0.01 <sup>(1)</sup>

- 4) Recalculated the 1 Year Return (July 1, 2014 – June 30, 2015) and agreed it to the Performance Measurement Presentation

*No exceptions noted, other than those caused by subsequent revisions to industry benchmarks. See note <sup>(1)</sup>.*

<u>Asset Class</u>	<u>KPMG Calculation</u>	<u>BNY Report</u>	<u>Difference</u>
Interim	3.23	3.22	0.01 <sup>(1)</sup>
Total Core	2.75	2.74	0.01 <sup>(1)</sup>

- 5) Recalculated the Trailing 3 Year Return (July 1, 2012 – June 30, 2015) and agreed it to the Performance Measurement Presentation

*No exceptions noted, other than those caused by subsequent revisions to industry benchmarks. See note <sup>(1)</sup>.*

<u>Asset Class</u>	<u>KPMG Calculation</u>	<u>BNY Report</u>	<u>Difference</u>
Interim	10.36	10.35	0.01 <sup>(1)</sup>
Total Core	9.41	9.40	0.01 <sup>(1)</sup>

- V. Using the monthly Total Core Benchmark recalculated in Section IV, subtracted the monthly fees as provided by BNYM, and listed below, related to the illiquid investments (private equity, hedge funds, portfolio completion strategies, distressed debt, real estate, timber, and natural resources) and performed the following procedures over the Net-of-Fee Adjusted Policy Benchmark:

<u>Month</u>	<u>Fees Subtracted</u>
July 2014	\$ 397,909.05
August 2014	\$ 378,260.84
September 2014	\$ 57,021,208.48
October 2014	\$ (577,205.56)
November 2014	\$ 337,341.87
December 2014	\$ 64,824,764.09
January 2015	\$ (487,997.38)
February 2015	\$ (589,499.39)
March 2015	\$ 56,556,012.07
April 2015	\$ 268,924.91
May 2015	\$ (554,343.43)
June 2015	\$ 64,948,858.94

- 1) Recalculated the June 30, 2015 Month to Date Return and agreed it to the Performance Measurement Presentation

*No exceptions noted.*

- 2) Recalculated the June 30, 2015 Quarter to Date Return and agreed it to the Performance Measurement Presentation

*No exceptions noted.*

- 3) Recalculated the Calendar Year to Date Return (January 1, 2015 – June 30, 2015) and agreed it to the Performance Measurement Presentation

*No exceptions noted.*

- 4) Recalculated the 1 Year Return (July 1, 2014 – June 30, 2015) and agreed it to the Performance Measurement Presentation

*No exceptions noted.*

- 5) Recalculated the Trailing 3 Year Return ( July 1, 2012 – June 30, 2015) and agreed it to the Performance Measurement Presentation

*No exceptions noted.*

## **Discussion of Results**

- <sup>(1)</sup> KPMG investigated all differences identified in Section II, III, IV, and V, and their procedures listed above. Through discussions with BNYM, it was determined that the returns for the HFRI Fund of Funds Composite Index (“HFRI Index”) were revised by HFRI subsequent to the date of the PRIM Board’s performance report, June 30, 2015. BNYM noted that effective January 1, 2012; it is the PRIM Board’s policy to update certain asset class benchmarks (including the Hedge Funds, and Portable Alpha Wind Down) for any subsequent revisions reported by the benchmark data vendors. These two indices are components of the Interim, Total Core benchmark, and Net-of-Fees Adjusted Policy benchmarks; therefore, these benchmarks are subject to the same revisions that the Hedge Funds and Portable Alpha are subject to. The HFRI Index represented 100% of the Hedge Fund and Portable Alpha Wind Down asset class benchmarks. KPMG agreed each of the final revised monthly returns provided by BNYM to Bloomberg without material exception.

KPMG determined that this revision impacted the returns for each period by the differences identified above. BNYM noted that this revision will be captured in the extended period returns presented in the Performance Measurement Presentation going forward; therefore, no adjustment is considered necessary as BNYM followed policy and revised the Hedge Fund and Portable Alpha Wind Down asset class benchmarks for prospective reporting upon receiving the revision reported by the benchmark data vendor.

We were not engaged to, and did not conduct an examination, the objective of which would be the expression of an opinion on the benchmark returns within the PRIM Board's Performance Measurement Presentation as of June 30, 2015. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the information and use of management and the Administration and Audit Committee of the PRIM Board and is not to be distributed externally to third parties, in whole or in part, without prior written consent from KPMG in each instance, or used for any other purpose. We disclaim any intention to update or revise the observations whether as a result of new information, future events, or otherwise. Should additional documentation or other information become available that impacts upon the observation reached in our deliverables, we reserve the right to amend our observations and summary documents accordingly.

October 13, 2015

## **Appendix D**

**PENSION RESERVES INVESTMENT MANAGEMENT BOARD (THE PRIM BOARD)**

Report on the PRIM Board's  
Procurement Process for Investment Management and  
Other Professional Services

Period from July 1, 2014 to June 30, 2015

**PENSION RESERVES INVESTMENT MANAGEMENT BOARD (THE PRIM BOARD)**

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## SECTION I

### Overview

#### A. Description

This Section describes the controls of the Pension Reserves Investment Management Board (the PRIM Board) as they relate to the selection of third parties to provide investment management, advisory, custody and recordkeeping, auditing and other professional services related to the management of the PRIM Board and the Pension Reserves Investment Trust Fund (the PRIT Fund). Section II contains the report of KPMG LLP (KPMG). Section III details control objectives and related controls prepared by the PRIM Board, a description of the tests of selected controls performed by KPMG, and the results of those tests. Section IV provides a listing of the services covered by this report that were procured by the PRIM Board during the period from July 1, 2014 to June 30, 2015.

#### B. PRIM Board/PRIT Fund Overview

##### *Organization*

The PRIT Fund, a component unit of the Commonwealth of Massachusetts, was created in 1983 under Chapter 661 of the Acts of 1983, as amended by Chapter 315 of the Acts of 1996. The PRIT Fund is a pooled investment fund that invests the assets of the State Teachers' and State Employees' Retirement Systems of Massachusetts and the assets of county, authority, school district, and municipal retirement systems that choose to invest in the PRIT Fund. The PRIT Fund is not registered with the Securities and Exchange Commission, but is subject to oversight provided by the PRIM Board. The PRIM Board was created by legislation to provide general supervision of the investments and management of the PRIT Fund.

A nine-member Board of Trustees (the Board or the Trustees) governs the PRIM Board. The Board has authority to employ an Executive Director, outside investment managers, custodians, advisors, and others it deems necessary; to formulate policies and procedures; and to take such other actions as necessary and appropriate to manage the assets of the PRIT Fund. See Massachusetts General Laws (M.G.L) ch. 32, sec. 23(2A) (e). To assist them in carrying out their duties, the Board has established four advisory committees: Investment, Administration and Audit, Real Estate and Timber, and Compensation.

As Trustees of the PRIT Fund, members of the Board are fiduciaries. The PRIM Board members fiduciary standards are guided by M.G.L ch. 32, sec. 23(3). Fiduciary standards of conduct also apply to the PRIM Board committee members, staff, investment managers, custodians, investment advisors, and others who exercise discretionary authority or discretionary control over the management or disposition of the PRIT Fund assets. See M.G.L. ch. 32, sec. 1.

Specific duties and responsibilities of the Board, Board Chair, Executive Director and Committees are outlined in the Board Governance Manual.

The mission of the PRIT Fund is to ensure that assets to support current and future pension benefit obligations are invested in a cost-effective manner. The PRIM Board seeks to maximize the total return on investments within acceptable levels of risk for a public pension fund.

The PRIM Board employs professional investment managers and gives them discretion, consistent with specified objectives and guidelines, to manage the PRIT Fund's assets. Each investment manager

## SECTION I

### Overview

operates under a contract that delineates responsibilities and performance expectations, including investment guidelines and administrative requirements.

The PRIM Board may contract with investment management advisors to assist the Board, committees, and staff in performance review, asset allocation studies, investment structure analyses, manager screening and selection, investment research and other matters of investment policy, procedures and implementation.

The PRIM Board may contract with one or more custodian banks or trust institutions to provide the PRIT Fund with comprehensive global custodial services associated with a complex, multi-billion dollar pension investment fund client. The custodian is responsible for the physical retention and administration of property received by the PRIT Fund, the collection of income, disbursement of funds, and the monthly reporting of all transactions in accordance with generally accepted accounting principles.

The PRIM Board may utilize the services of independent auditors, appraisers and other third parties, as needed.

#### C. Summary of the PRIM Board's Procurement Practices

The PRIM Board's procurement procedures apply to the selection of investment managers, advisors, custodians, auditors and other specific providers of services to the PRIM Board. Procurement procedures are designed to ensure that the PRIM Board has access to a broad array of the highest quality of service providers. The PRIM Board's procurement practices are detailed in its Procurement Policy.

##### *Request for Proposals*

The PRIM Board's Request for Proposals (RFP) practice includes the following:

1. The PRIM Board staff, in conjunction with an advisor where appropriate, recommends to the appropriate Committee to request the Board issue a RFP for the specific services. The Board must approve the issuance of all RFPs.
2. The PRIM Board staff, in conjunction with an advisor where appropriate, drafts and issues a RFP. The RFP provides background information on the PRIM Board, outlines the scope of services, minimum criteria (if applicable), selection criteria and process, and requests detailed information on all topics relevant to the services sought. The RFP is advertised in industry and/or local publications.
3. An evaluation committee (typically comprised of the PRIM Board staff, an advisor where appropriate, and potentially representatives of the Trustees and/or their pertinent Committee) reviews the proposals received and makes objective judgments based solely on the selection criteria outlined in the RFP. The evaluation committee may interview finalists, undertake site visits, and conduct such other due diligence as is prudent and warranted under the circumstances. The evaluation committee's recommendation is presented to the pertinent Committee of the Trustees for review. If approved, the Committee presents that recommendation to the Trustees for final approval. If approved, the Trustees delegate to the Executive Director the authority to carry out the recommendation.

## SECTION I

### Overview

During the search process, all participants are provided with identical information and judged by the same criteria. The PRIM Board's principal tool to ensure the fairness of the process is an open RFP process. The PRIM Board do not employ "by invitation only" RFPs. The RFP guides participants through the process of offering to manage assets for, or provide other services to, the PRIM Board. It lays out the rules of the RFP process, establishes the selection criteria and provides applicable documents which may influence how participants would manage a portfolio for, or provide other services to, the PRIM Board. Once the search is concluded, all relevant information to the selection process are available to the public.

The most fundamental procurement risk the PRIM Board faces is that of selecting an investment manager or other professional service provider who does not perform up to expectations. When this occurs, the PRIM Board incurs opportunity costs and potential disruption of its investment program.

While it is never possible to predict any future performance, the RFP process is intended to give the PRIM Board the opportunity to engage organizations whose investment skill and/or other capabilities (e.g., client service) will persist. The RFP is a detailed document and seeks to approach each of the principal issues in the selection process from a variety of perspectives. The evaluation committee reviews each proposal and prepares an evaluation committee memorandum summarizing the selection process.

Firms assessed through the RFP process generally are judged on the following criteria: 1) the firm's stability and general experience; 2) the experience of firm personnel; 3) client relations and referrals; 4) philosophy/process; and 5) fees.

If the evaluation committee is seeking to engage an investment manager, it makes a quantitative and qualitative assessment of how the manager will fit into the existing portfolio in the particular asset class or subasset class. Such an assessment is based on many of the same factors used in asset allocation, namely, risk, return and correlation among managers, as well as a thorough understanding of the types of risk factors the managers use to earn excess return. It is intended to avoid the risk that by hiring a particular manager, the PRIM Board may overweight a particular investment style or factor and thereby create an unintended bias.

If the evaluation committee is seeking to engage an advisor, custodian, auditor or other professional service provider, it makes an assessment of how the firm will meet the needs of the PRIM Board and the PRIT Fund. It will assess which firm can best provide the required services outlined in the RFP, with consideration given to the cost of providing those services.

The Trustees vote to approve the engagement of investment managers and other professional service providers is made during public board meetings and is subject to the satisfactory outcome of contract and fee negotiations.

## SECTION I

### Overview

#### ***Alternate Procurement for Investment Opportunities***

Certain investments, such as Private Equity, Alternative Debt, Direct Hedge Fund, Real Estate partnerships, Real Estate direct property level investments, and Portfolio Completion Strategies (PCS) investments, cannot be sourced through a competitive bidding process (RFP process). Therefore, the Trustees have developed the following process to source, evaluate and select these investment opportunities as they arise.

The Trustees will select investments based on the due diligence and the resulting recommendation of the PRIM Board staff and investment advisor, where appropriate. The following criteria generally will be considered when selecting investments for recommendation:

- a. Quality and stability of the investment team.
- b. Previous investment track record.
- c. Proposed investment strategy.
- d. Ability of investment manager to demonstrate its capability to generate superior returns.
- e. Alignment of interests.
- f. Operational capabilities.
- h. PRIT Fund portfolio fit.

The Trustees select investments in accordance with the following process:

- a. The PRIM Board staff, in conjunction with an advisor, where applicable, performs due diligence on investment opportunities that meet the selection criteria and are appropriate for investment.
- b. An Investment Report, which includes the PRIM Board staff's recommendation and an advisor's due diligence report, where applicable, is presented to the Trustees' Investment or Real Estate and Timber Committee, whichever is appropriate for review. If approved, the appropriate Committee presents that recommendation to the Trustees for final approval. If approved, the Trustees delegate to the Executive Director the authority to carry out the recommendation.
- c. If the closing of a private equity or alternative debt investment conflicts with the PRIM Board's Investment Committee and Board meetings, an interim meeting approval process is followed. This interim meeting approval process may only be used for investment recommendations for existing relationships that the Board has previously approved. Upon completion of due diligence, the PRIM Board staff provides Investment Committee and Trustees with the Investment Report, which includes the PRIM Board staff's recommendation and an advisor's due diligence report. Investment Committee and Trustees may present questions and concerns to the PRIM Board staff. In consideration of all discussion with Investment Committee and Board members, the Chief Investment Officer has discretion to approve an investment in the recommended vehicle.

## SECTION II

### Independent Accountant's Report On Applying Agreed-Upon Procedures

The Pension Reserves Investment Management Board:

For each of the services procured through Request for Proposal (RFP) (see Section IV), we have performed the procedures enumerated in Section III, which were agreed to by the Audit and Administration Committee and management of the Pension Reserves Investment Management Board (the PRIM Board), solely to assist the specified parties in evaluating the procurement process for the selection of third parties to provide investment management, advisory, custody and recordkeeping, auditing and other professional services (Procurement Process) related to the management of the PRIM Board and the Pension Reserves Investment Trust Fund (the PRIT Fund) during the year ended June 30, 2015. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described in Section III either for the purpose for which this report has been requested or for any other purpose.

The procedures applied are enumerated in Section III and the results indicate that no exceptions were noted.

We were not engaged to, and did not, conduct an examination, the objective of which would be the expression of an opinion on the Procurement Process related to the management of the PRIM Board and the PRIT Fund for the year ended June 30, 2015. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the information and use of the Audit and Administration Committee and management of the PRIM Board, and is not intended to be and should not be used by anyone other than these specified parties.

[*(signed) KPMG LLP*]

October 13, 2015

## SECTION III

### The PRIM Board Control Objectives, Controls and KPMG Agreed-Upon Procedures

#### Introduction

KPMG's agreed-upon procedures over controls were restricted to the control objectives and related procedures specified by the PRIM Board. It is each interested party's responsibility to evaluate this information in relation to the controls in place at user organizations.

KPMG's agreed-upon procedures covered all RFPs listed in Section IV for which services were procured during the period from July 1, 2014 to June 30, 2015. Those agreed-upon procedures consisted of inquiries of management and inspection of documents and included sampling of information where appropriate. Sample sizes were determined using the following matrix:

Population Size	Sample Size
Less than 13	2
13 to 52	5
53 to 365	15
More than 365	25

The results of those agreed-upon procedures are described for each of the PRIM Board controls listed by management. The controls listed are management's responsibility.

#### ***Results of Procedures Performed***

No exceptions noted on the agreed-upon-procedures performed as described on pages 7 – 23.

## **THE PRIM BOARD CONTROL OBJECTIVES, CONTROLS AND KPMG AGREED-UPON PROCEDURES**

### **A. Public Markets, Hedge Funds, Real Estate and Timber Investment Managers**

1. Controls provide reasonable assurance that the Trustees approve the issuance of Requests for Proposals.

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• The PRIM Board staff requests the appropriate Committee to make a recommendation to the Trustees to issue a Request for Proposals (RFP). If granted, the Committee makes a formal recommendation to the Trustees, which is included in the Board Meeting Agenda package. The Board has the authority to issue an RFP without prior recommendation from the committee.</li><li>• The Trustees decide by a majority vote during a public meeting whether to accept or reject the recommendation of the Committee to issue an RFP.</li></ul>	<ul style="list-style-type: none"><li>• For all RFPs for which services were procured during the period, we inspected the Board Meeting Agenda package and noted an agenda item of the recommendation by the PRIM Board staff and the applicable Committee to request the Trustees to issue the RFP.</li><li>• For all RFPs for which services were procured during the period, we inspected Trustees' meeting minutes and noted Trustees' vote to issue the RFP.</li></ul>

2. Controls provide reasonable assurance that pertinent information regarding the RFP process is provided to potential respondents.

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• Each RFP authorized and issued by the Trustees defines the scope of services to be provided.</li><li>• Each RFP authorized and issued by the Trustees includes a copy of The PRIM Board's standard investment management agreement, if applicable.</li></ul>	<ul style="list-style-type: none"><li>• For all RFPs for which services were procured during the period, we inspected copies of the RFPs and noted that there was a section containing a scope of services.</li><li>• For all RFPs for which services were procured during the period, we inspected copies of the RFPs and noted inclusion of a standard investment management agreement in the RFP.</li></ul>

## THE PRIM BOARD CONTROL OBJECTIVES, CONTROLS AND KPMG AGREED-UPON PROCEDURES

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"> <li>• Each RFP authorized and issued by the Trustees describes the selection process.</li> <li>• Each RFP authorized and issued by the Trustees provides a tentative timetable for the selection process.</li> <li>• Each RFP authorized and issued by the Trustees defines minimum qualifications (if appropriate) that respondents must meet in order to be granted further consideration.</li> <li>• Each RFP authorized and issued by the Trustees contains selection criteria that will be used to evaluate respondents' proposals.</li> </ul>	<ul style="list-style-type: none"> <li>• For all RFPs for which services were procured during the period, we inspected copies of the RFPs and noted that the selection process was described in the RFP.</li> <li>• For all RFPs for which services were procured during the period, we inspected copies of the RFPs and noted inclusion of a tentative timetable in the RFP.</li> <li>• For all RFPs for which services were procured during the period, we inspected copies of the RFPs and noted that the minimum qualifications were defined in the RFP.</li> <li>• For all RFPs for which services were procured during the period, we inspected copies of the RFPs and noted that the specific selection criteria was detailed in the RFP.</li> </ul>
<p>3. Controls provide reasonable assurance that potential respondents are informed about the legal structure of the PRIM Board as well as the overall investment mix of the PRIT Fund.</p>	

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"> <li>• Each RFP authorized and issued by the Trustees includes summary information on The PRIM Board's legal structure, the PRIT Fund's investment allocation (if appropriate), and/or a link referring potential respondents to a website which contains such information.</li> </ul>	<ul style="list-style-type: none"> <li>• For all RFPs for which services were procured during the period, we inspected copies of the RFPs and noted the inclusion of a summary of the PRIM Board's legal structure, the PRIT Fund's investment allocation, and/or a link referring potential respondents to a website which contains such information in the RFP.</li> </ul>

## **THE PRIM BOARD CONTROL OBJECTIVES, CONTROLS AND KPMG AGREED-UPON PROCEDURES**

4. Controls provide reasonable assurance that communication with potential respondents during the search process is organized and controlled.

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• Each RFP authorized and issued by the Trustees includes the name of the Procurement Officer and clearly states that all communications regarding the RFP and selection process should be directed to the Procurement Officer.</li><li>• Each RFP authorized and issued by the Trustees provides an opportunity and means for potential respondents to submit questions and obtain responses from the Procurement Officer prior to the Proposal Deadline.</li><li>• Inquiries from potential respondents are answered when received in writing on or before the stated Question Deadline Date. Questions received subsequent to the deadline are not answered.</li></ul>	<ul style="list-style-type: none"><li>• For all RFPs for which services were procured during the period, we inspected copies of the RFPs and noted inclusion of the name of Procurement Officer and a section directing all questions to the Procurement Officer in the RFP.</li><li>• For all RFPs for which services were procured during the period, we noted an explanation of the question and answer process and deadline for submission of questions in the RFP.</li><li>• For all RFPs for which services were procured during the period, we inspected the PRIM Board's Responses to Questions, which comprises a listing of questions and responses. We selected a sample of questions from the list in accordance with the sample size matrix on page 6 and agreed them to the originating firm's transmittal. We noted that the date and time stamp was dated before or on the Question Deadline Date stated in the RFP.</li><li>• For all RFPs for which services were procured during the period, we selected a sample of questions from the population of respondent transmittals in accordance with the sample size matrix on page 6. We noted that the date and time stamp was dated before or on the Question Deadline Date in the RFP. We compared those questions to the PRIM Board's Responses to Questions and found no exceptions.</li></ul>

## **THE PRIM BOARD CONTROL OBJECTIVES, CONTROLS AND KPMG AGREED-UPON PROCEDURES**

5. Controls provide reasonable assurance that information regarding the issuance of an RFP is widely disseminated.

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• Each RFP issuance is advertised in industry publications, local publications or both, if appropriate.</li><li>• Each RFP is available on PRIM Board's website (<a href="http://www.mapension.com">www.mapension.com</a>) until the Proposal Deadline.</li></ul>	<ul style="list-style-type: none"><li>• For all RFPs for which services were procured during the period, we inspected copies of and/or original advertisements.</li><li>• For all RFPs for which services were procured during the period, we inspected a series of screen shots and/or confirmation from website administrator evidencing that a respondent could download the RFP from the PRIM Board's website.</li></ul>

6. Controls provide reasonable assurance that proposals received after the stated deadline are not evaluated.

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• Each RFP authorized and issued by the Trustees contains a Proposal Deadline. All responses to RFPs are denoted with date and time of receipt. The Evaluation Committee does not consider proposals received after the Proposal Deadline.</li></ul>	<ul style="list-style-type: none"><li>• For all RFPs for which services were procured during the period, we inspected the date and time stamp on the submitted proposal and noted that all proposals considered were received prior to or on the Proposal Deadline in the RFP.</li></ul>

7. Controls provide reasonable assurance that responses to an RFP are reviewed and evaluated objectively.

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• For each RFP, an Evaluation Committee is established.</li></ul>	<ul style="list-style-type: none"><li>• For all RFPs for which services were procured during the period, we inspected the Evaluation Committee Summary Report and noted that an Evaluation Committee was established.</li></ul>

## **THE PRIM BOARD CONTROL OBJECTIVES, CONTROLS AND KPMG AGREED-UPON PROCEDURES**

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• The Evaluation Committee initially reviews responses to ensure that respondents meet the minimum qualifications as stipulated in the RFP.</li><li>• The Evaluation Committee may invite selected respondents (finalists) to a face to face interview.</li><li>• The Evaluation Committee evaluates the respondents and makes objective judgments and recommendations based on the selection criteria outlined in the RFP.</li></ul> <p>8. Controls provide reasonable assurance that an investment advisor, where appropriate, provides insight into the selection process.</p>	<ul style="list-style-type: none"><li>• For all RFPs for which services were procured during the period, we inspected a sample of RFP response packages in accordance with the sample size matrix on page 6, noting that only those respondents that met the minimum qualifications as stipulated in the RFP were considered by the Evaluation Committee.</li><li>• For all RFPs, if applicable, for which services were procured during the period, we inspected the letters sent to each finalist, noting the time, place and duration of a face to face interview.</li><li>• For all RFPs for which services were procured during the period, we inspected the Evaluation Committee report and noted that the objective selection criteria outlined in the RFP was used to determine their selections.</li></ul>

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• For each RFP, an investment advisor (if appropriate) assists the Evaluation Committee in the evaluation of responses and provides the appropriate Committee and Trustees with an independent recommendation (if applicable).</li></ul>	<ul style="list-style-type: none"><li>• For all RFPs, if applicable, for which services were procured during the period, we inspected copies of the Evaluation Committee reports addressed to the appropriate Committee and noted inclusion of separate reports of the investment advisor.</li></ul>

## **THE PRIM BOARD CONTROL OBJECTIVES, CONTROLS AND KPMG AGREED-UPON PROCEDURES**

9. Controls provide reasonable assurance that potential conflicts of interest are identified.

<b>The PRIM Board Controls</b>	<b>KPMG Agreed-Upon Procedures</b>
<ul style="list-style-type: none"><li>For each recommendation, the Evaluation Committee ensure the recommended firms have completed the Disclosure Statement that requires the respondent to disclose relationships with the PRIM Board, the Commonwealth of Massachusetts and its Office of the Treasurer.</li></ul>	<ul style="list-style-type: none"><li>For all recommendations approved by the Trustees during the period, we inspected copies of Disclosure Statements and noted that they were completed.</li></ul>

10. Controls provide reasonable assurance that the appropriate Committee is educated about the search and selection process in order to make an informed recommendation to the Trustees.

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>The selection process is summarized by the Evaluation Committee in a written report that is included in the appropriate Committee Meeting Agenda package and discussed during the Committee meeting.</li><li>The appropriate Committee decides by a majority vote whether to accept, reject or modify the recommendation of the Evaluation Committee. The Committee then makes a formal recommendation to the Trustees, which is included in the Board Meeting Agenda package.</li></ul>	<ul style="list-style-type: none"><li>For all RFPs for which services were procured during the period, we inspected copies of applicable Committee materials, noting inclusion of the Evaluation Committee reports in the Committee Meeting Agenda package. We also verified discussion in the Committee meeting minutes.</li><li>For all RFPs for which services were procured during the period, we inspected the Board Meeting Agenda package, noting the formal recommendation made by the applicable Committee to the Trustees.</li></ul>

## **THE PRIM BOARD CONTROL OBJECTIVES, CONTROLS AND KPMG AGREED-UPON PROCEDURES**

11. Controls provide reasonable assurance that the Trustees are informed about the search and selection process prior to accepting, rejecting or modifying the recommendation of the appropriate Committee.

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• The selection process is summarized by the Evaluation Committee in a written report that is included in the Board Meeting Agenda package and discussed during the Board meeting.</li> <li>• The Trustees decide by a majority vote whether to accept, reject or modify the recommendation of the appropriate Committee during a public meeting.</li></ul>	<ul style="list-style-type: none"><li>• For all RFPs for which services were procured during the period, we inspected Trustees' meeting agendas and minutes and noted presentation by the appropriate Committee to the Trustees, including results of the search and the applicable Committee's recommendation.</li> <li>• For all RFPs for which services were procured during the period, we inspected the Trustees' meeting minutes and noted the decision to accept, reject or modify the recommendation of the applicable Committee was made by a majority vote.</li></ul>

## **THE PRIM BOARD CONTROL OBJECTIVES, CONTROLS AND KPMG AGREED-UPON PROCEDURES**

### **B. Advisors, Custodians, Auditors and Other Professionals**

1. Controls provide reasonable assurance that the Trustees approve the issuance of Requests for Proposals.

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"> <li>• The PRIM Board staff requests the appropriate Committee to make a recommendation to the Trustees to issue a Request for Proposals (RFP). If granted, the Committee makes a formal recommendation to the Trustees, which is included in the Board Meeting Agenda package. The Board has the authority to issue an RFP without prior recommendation from the committee.</li> <li>• The Trustees decide by a majority vote during a public meeting whether to accept or reject the recommendation of the Committee to issue an RFP.</li> </ul>	<ul style="list-style-type: none"> <li>• For all RFPs for which services were procured during the period, we inspected the Board Meeting Agenda package and noted an agenda item of the recommendation by the PRIM Board staff and the applicable Committee to request the Trustees to issue the RFP.</li> <li>• For all RFPs for which services were procured during the period, we inspected the Trustees' meeting minutes and noted the Trustees' vote to issue an RFP.</li> </ul>
<ol style="list-style-type: none"> <li>2. Controls provide reasonable assurance that pertinent information regarding the RFP process is provided to potential respondents.</li> </ol>	<ol style="list-style-type: none"> <li>2. Controls provide reasonable assurance that pertinent information regarding the RFP process is provided to potential respondents.</li> </ol>
<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"> <li>• Each RFP authorized and issued by the Trustees defines the scope of services to be provided.</li> <li>• Each RFP authorized and issued by the Trustees describes the selection process.</li> <li>• Each RFP authorized and issued by the Trustees provides a tentative timetable for the selection process.</li> </ul>	<ul style="list-style-type: none"> <li>• For all RFPs for which services were procured during the period, we inspected copies of the RFPs and noted that there was a section containing a scope of services.</li> <li>• For all RFPs for which services were procured during the period, we inspected copies of the RFPs and noted that the selection process was described in the RFP.</li> <li>• For all RFPs for which services were procured during the period, we inspected copies of the RFPs and noted inclusion of a tentative timetable in the RFP.</li> </ul>

## **THE PRIM BOARD CONTROL OBJECTIVES, CONTROLS AND KPMG AGREED-UPON PROCEDURES**

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• Each RFP authorized and issued by the Trustees defines minimum qualifications (if appropriate) that respondents must meet in order to be granted further consideration.</li><li>• Each RFP authorized and issued by the Trustees contains selection criteria that will be used to evaluate respondents' proposals.</li></ul>	<ul style="list-style-type: none"><li>• For all RFPs for which services were procured during the period, we inspected copies of the RFPs and noted that the minimum qualifications (if applicable) were defined in the RFP.</li><li>• For all RFPs for which services were procured during the period, we inspected copies of the RFPs and noted that the specific selection criteria was detailed in the RFP.</li></ul>
3. Controls provide reasonable assurance that potential respondents are informed about the legal structure of the PRIM Board as well as the overall investment mix of the PRIT Fund (if appropriate).	
<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• Each RFP authorized and issued by the Trustees includes summary information on PRIM Board's legal structure, the PRIT Fund's investment allocation (if appropriate), and/or a link referring potential respondents to a website which contains such information.</li></ul>	<ul style="list-style-type: none"><li>• For all RFPs for which services were procured during the period, we inspected copies of the RFPs and noted the inclusion of a summary of the PRIM Board's legal structure, the PRIT Fund's investment allocation (if applicable), and/or a link referring potential respondents to a website which contains such information in the RFP.</li></ul>
4. Controls provide reasonable assurance that communication with potential respondents during the search process is organized and controlled.	
<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• Each RFP authorized and issued by the Trustees includes the name of the Procurement Officer and clearly states that all communications regarding the RFP and selection process should be directed to the Procurement Officer.</li></ul>	<ul style="list-style-type: none"><li>• For all RFPs for which services were procured during the period, we inspected copies of the RFPs and noted inclusion of the name of the Procurement Officer and a section directing all questions to the Procurement Officer in the RFP.</li></ul>

## **THE PRIM BOARD CONTROL OBJECTIVES, CONTROLS AND KPMG AGREED-UPON PROCEDURES**

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• Each RFP authorized and issued by the Trustees provides an opportunity and means for potential respondents to submit questions and obtain responses from the Procurement Officer prior to the Proposal Deadline.</li><li>• Inquiries from potential respondents are answered when received in writing on or before the stated Question Deadline Date. Questions received subsequent to the deadline are not answered.</li></ul>	<ul style="list-style-type: none"><li>• For all RFPs for which services were procured during the period, we noted an explanation of the question and answer process and deadline for submission of questions in the RFP.</li><li>• For all RFPs for which services were procured during the period, we inspected the PRIM Board's Responses to Questions, which comprises a listing of questions and responses. We selected a sample of questions from the list in accordance with the sample size matrix on page 6 and agreed them to the originating firm's transmittal. We noted the date and time stamp was dated before or on the Question Deadline Date.</li><li>• For all RFPs for which services were procured during the period, we selected a sample of questions from the population of respondent transmittals in accordance with the sample size matrix on page 6. We noted the date and time stamp was dated before or on the Question Deadline Date. We compared those questions to the PRIM Board's Responses to Questions and found no exceptions.</li></ul>
5. Controls provide reasonable assurance that information regarding the issuance of an RFP is widely disseminated.	

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• Each RFP issuance is advertised in industry publications, local publications or both, if appropriate.</li></ul>	<ul style="list-style-type: none"><li>• For all RFPs for which services were procured during the period, we inspected copies of and/or original advertisements.</li></ul>

## **THE PRIM BOARD CONTROL OBJECTIVES, CONTROLS AND KPMG AGREED-UPON PROCEDURES**

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• Each RFP is available on the PRIM Board's website (<a href="http://www.mapension.com">www.mapension.com</a>) until the Proposal Deadline.</li></ul>	<ul style="list-style-type: none"><li>• For all RFPs for which services were procured during the period, we inspected a series of screen shots and/or confirmation from website administrator evidencing that a respondent could download the RFP from the PRIM Board website.</li></ul>
<p>6. Controls provide reasonable assurance that proposals received after the stated deadline are not evaluated.</p>	
<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• Each RFP authorized and issued by the Trustees contains a Proposal Deadline. All responses to RFPs are denoted with date and time of receipt. The Evaluation Committee does not consider any proposal received after the Proposal Deadline.</li></ul>	<ul style="list-style-type: none"><li>• For all RFPs for which services were procured during the period, we inspected the date and time stamp on the submitted proposal and noted that all proposals considered were received prior to or on the Proposal Deadline in the RFP.</li></ul>
<p>7. Controls provide reasonable assurance that responses to an RFP are reviewed and evaluated objectively.</p>	
<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• Based on the scope of each RFP, an Evaluation Committee is established if appropriate.</li></ul>	<ul style="list-style-type: none"><li>• For all RFPs, if applicable, for which services were procured during the period, we inspected the Evaluation Committee Summary Report and noted that an Evaluation Committee was established.</li></ul>

## **THE PRIM BOARD CONTROL OBJECTIVES, CONTROLS AND KPMG AGREED-UPON PROCEDURES**

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"> <li>• The Evaluation Committee initially reviews responses to ensure that all respondents meet the minimum qualifications as stipulated in the RFP.</li> <li>• The Evaluation Committee may invite selected respondents (finalists) to a face to face interview.</li> <li>• The Evaluation Committee evaluates the respondents and makes objective judgments and recommendations based on the selection criteria outlined in the RFP.</li> </ul>	<ul style="list-style-type: none"> <li>• For all RFPs for which services were procured during the period, we inspected a sample of RFP response packages in accordance with the sample size matrix on page 6, noting that only those respondents that met the minimum qualifications as stipulated in the RFP were considered by the Evaluation Committee.</li> <li>• For all RFPs, if applicable, for which services were procured during the period, we inspected the letters sent to each finalist, noting the time, place and duration of a face to face interview.</li> <li>• For all RFPs for which services were procured during the period, we inspected the Evaluation Committee report and noted that the objective selection criteria outlined in the RFP was used to determine their selections.</li> </ul>

8. Controls provide reasonable assurance that potential conflicts of interest are identified.

<b>The PRIM Board Controls</b>	<b>KPMG Agreed-Upon Procedures</b>
<ul style="list-style-type: none"> <li>• For each recommendation, the Evaluation Committee ensure the recommended firms have completed the Disclosure Statement that requires the respondent to disclose relationships with the PRIM Board, the Commonwealth of Massachusetts and its Office of the Treasurer.</li> </ul>	<ul style="list-style-type: none"> <li>• For all recommendations approved by the Trustees during the period, we inspected copies of Disclosure Statements and noted that they were completed.</li> </ul>

## **THE PRIM BOARD CONTROL OBJECTIVES, CONTROLS AND KPMG AGREED-UPON PROCEDURES**

9. Controls provide reasonable assurance that the appropriate Committee is educated about the search and selection process in order to make an informed recommendation to the Trustees.

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• The selection process is summarized by the Evaluation Committee in a written report that is included in the appropriate Committee Meeting Agenda package and discussed during the Committee meeting.</li><li>• The applicable Committee decides by a majority vote whether to accept, reject or modify the recommendation of the Evaluation Committee. The Committee then makes a formal recommendation to the Trustees, which is included in the Board Meeting Agenda package.</li></ul>	<ul style="list-style-type: none"><li>• For all RFPs for which services were procured during the period, we inspected copies of applicable Committee materials. We noted the inclusion of reports from the Evaluation Committee.</li><li>• For all RFPs for which services were procured during the period, we inspected the Board Meeting Agenda package, noting the formal recommendation made by the applicable Committee to the Trustees.</li></ul>

10. Controls provide reasonable assurance that the Trustees are informed about the search and selection process prior to accepting, rejecting or modifying the recommendation of the appropriate Committee.

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• The selection process is summarized by the Evaluation Committee in a written report that is included in the Board Meeting Agenda package and discussed during the Board meeting.</li><li>• The Trustees decide by a majority vote whether to accept, reject or modify the recommendation of the appropriate Committee during a public meeting.</li></ul>	<ul style="list-style-type: none"><li>• For all RFPs for which services were procured during the period, we inspected Trustees' meeting agendas and minutes and noted presentations by the applicable Committee to the Trustees, including results of the search and the applicable Committee's recommendation.</li><li>• For all RFPs for which services were procured during the period, we inspected the Trustees' meeting minutes and noted the decision to accept, reject or modify the recommendation of the applicable Committee was made by a majority vote.</li></ul>

## **THE PRIM BOARD CONTROL OBJECTIVES, CONTROLS AND KPMG AGREED-UPON PROCEDURES**

### **C. Alternative Investments**

1. Controls provide reasonable assurance that an investment advisor, where appropriate, provides insight into investment opportunities.

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• An investment advisor provides a detailed Investment Analysis Report for each proposed investment opportunity that concludes with a recommendation which generally considers the following criteria:<ul style="list-style-type: none"><li>– Quality and stability of the investment team.</li><li>– Previous investment track record.</li><li>– Proposed investment strategy.</li><li>– Ability of investment manager to demonstrate its capability to generate superior returns.</li><li>– Legal and economic terms governing the investment structure.</li><li>– Alignment of interests.</li><li>– Operational capabilities.</li><li>– PRIT Fund portfolio fit.</li></ul></li><li>• The PRIM Board staff and the investment advisor, where appropriate, must agree to recommend investing in an opportunity prior to presenting to the appropriate Committee.</li></ul>	<ul style="list-style-type: none"><li>• For all Alternative Investments approved by the Trustees during the period, we inspected copies of the investment advisor's report and noted the inclusion of information specified.</li><li>• For all Alternative Investments approved by the Trustees during the period, we reviewed the applicable Committee Meeting Agenda package and investment advisor reports to verify that both the PRIM Board staff and the investment advisor recommended the Alternative Investment. If the investment was approved via an Interim Recommendation, we performed alternate procedures to verify the Alternative Investment was documented.</li></ul>

## **THE PRIM BOARD CONTROL OBJECTIVES, CONTROLS AND KPMG AGREED-UPON PROCEDURES**

2. Controls provide reasonable assurance that potential conflicts of interest are identified.

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>For each investment, the general partner/manager must complete a standard Disclosure Statement. The Disclosure Statement requires the respondent to disclose relationships with the PRIM Board, the Commonwealth of Massachusetts and its Office of the Treasurer.</li></ul>	<ul style="list-style-type: none"><li>For all Alternative Investments approved by the Trustees during the period, we inspected copies of the Disclosure Statements and noted that they were completed.</li></ul>

## **THE PRIM BOARD CONTROL OBJECTIVES, CONTROLS AND KPMG AGREED-UPON PROCEDURES**

3. Controls provide reasonable assurance that the appropriate Committee is educated about investment opportunities in order to make an informed recommendation to the Trustees.

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• Each investment opportunity is summarized by PRIM Board staff and is included in the appropriate Committee Meeting Agenda package.</li> <li>• The investment advisor's Investment Analysis Report for each investment opportunity is provided as an appendix to the appropriate Committee Meeting Agenda package, if applicable.</li></ul>	<ul style="list-style-type: none"><li>• For all Alternative Investments approved by the Trustees during the period, we inspected copies of applicable Committee materials and reviewed the PRIM Board staff and the investment advisor recommendations. If the investment was approved via an Interim Recommendation, we performed alternate procedures to verify the Alternative Investment was documented.</li> <li>• For all Alternative Investments approved by the Trustees during the period, we inspected the applicable Committee Meeting Agenda package to verify that the investment advisor's Investment Analysis Report for each Alternative Investment opportunity is provided as an appendix. If the investment was approved via an Interim Recommendation, we performed alternate procedures to verify the Alternative Investment was documented.</li></ul>

## **THE PRIM BOARD CONTROL OBJECTIVES, CONTROLS AND KPMG AGREED-UPON PROCEDURES**

<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• The applicable Committee decides by a majority vote whether to accept or reject the recommendation of PRIM Board staff and the investment advisor, if appropriate. If accepted, the Committee then makes a formal recommendation to the Trustees, which is included in the Board Meeting Agenda package.</li></ul>	<ul style="list-style-type: none"><li>• For all Alternative Investments approved by the Trustees during the period, we inspected the Board Meeting Agenda package to verify the Committee's formal recommendation to the Trustees. If the investment was approved via an Interim Recommendation, we performed alternate procedures to verify the Alternative Investment was documented.</li></ul>
4. Controls provide reasonable assurance that the Trustees are informed about the investment opportunity prior to accepting or rejecting the recommendation of the appropriate Committee.	
<b>The PRIM Board Controls</b>	<b>KPMG Tests and Relevant Exception, if any</b>
<ul style="list-style-type: none"><li>• The investment opportunity is summarized and included in the Board Meeting Agenda package and discussed during the Board meeting.</li></ul>	<ul style="list-style-type: none"><li>• For all Alternative Investments approved by the Trustees during the period, we inspected Trustees' meeting agendas and minutes and noted presentations by the applicable Committee to the Trustees, including recommendation of the Alternative Investment. If the investment was approved via an Interim Recommendation, we performed alternate procedures to verify the Alternative Investment was documented.</li></ul>
<ul style="list-style-type: none"><li>• The Trustees decide by a majority vote whether to accept, reject or modify the recommendation of the appropriate Committee during a public meeting.</li></ul>	<ul style="list-style-type: none"><li>• For all Alternative Investments approved by the Trustees during the period, we inspected the Trustees' meeting minutes and noted that the decision to accept, reject or modify the recommendation by the applicable Committee was made by a majority vote. If the investment was approved via an Interim Recommendation, we performed alternate procedures to verify the Alternative Investment was documented.</li></ul>

**SECTION IV**  
 Listing of Services Provided Through RFP  
 July 1, 2014 – June 30, 2015

RFP No.	Board approval date	Advisory committee	Decision	Type of RFP	Description
1	8/12/2014	Investment	Approval to Hire	Hedge Fund Managed Account Services	Hire HedgeMark
2	8/12/2014	Investment	Approval to Hire	Real Estate and Timberland Consulting Services	Hire The Townsend Group for general consulting services and select six firms for project consulting services
3	8/22/2014	Investment	Approval to Invest*	Private Equity	Invest up to \$230 million to Hellman & Friedman Capital Partners VIII, L.P.
4	10/7/2014	Investment	Approval to Hire	Securities Lending Services	Hire eSecLending
5	10/7/2014	Investment	Approval to Invest	Private Equity	Invest up to \$200 million to Centerbridge Capital Partners Fund III, L.P.
6	10/22/2014	Investment	Approval to Invest*	Private Equity	Invest up to \$100 million to Quantum Energy Partners VI, L.P. and up to \$50 million to Thomas H. Lee Equity Fund VII, L.P.
7	12/2/2014	Investment	Approval to Invest	Long Duration US Treasury STRIPS Indexed Investment Management Services	Hire BlackRock to manage up to \$6 billion or 10% of PRIT Fund assets in Long Duration US Treasury STRIPS
8	12/2/2014	Investment	Approval to Invest	Active Emerging Markets Equity	Approve a combined \$2.8 billion allocation to seven firms and place two managers on "manager bench"
9	12/2/2014	Investment	Approval to Invest	Hedge Fund	An initial allocation of \$150 million to the PanAgora Diversified Arbitrage Strategy
10	12/2/2014	Investment	Approval to Invest	Portfolio Completion Strategies	An initial allocation of \$100 million to the PanAgora Diversified Factor Premia Strategy
11	12/2/2014	Investment	Approval to Invest	Private Equity	Invest up to \$175 million to American Securities Partners VII, L.P. and up to \$125 million to H.I.G. Bayside Loan Opportunity Fund IV, L.P.
12	1/20/2015	Investment	Approval to Invest*	Private Equity	Invest up to \$65 million to Catalyst Investors IV, L.P., up to \$120 million to Insight Venture Partners IX, L.P., and up to \$40 million to Insight Growth-Buyout Coinvestment Fund, L.P.
13	2/10/2015	Investment	Approval to Hire	Stock Distribution Management Services	Hire Russell Investments
14	2/10/2015	Investment	Approval to Hire	Private Equity Advisory Services	Hire Hamilton Lane
15	2/11/2015	Investment	Approval to Invest	Private Equity	Invest up to \$25 million to Flagship Ventures Fund V, L.P. and up to €100 million to Rhône Partners V, L.P.
16	3/2/2015	Investment	Approval to Invest*	Private Equity	Invest €30 million in Index Venture Growth III, up to \$75 million to Oaktree Opportunities Fund X, L.P., and up to \$150 million to Oaktree Opportunities Fund Xb, L.P.
17	4/7/2015	Investment	Approval to Hire	Public Markets and Strategic Asset Allocation Advisory Services	Hire Callan Associates as Public Markets Advisor and NEPC, LLC as Strategic Asset Allocation Advisor
18	4/7/2015	Investment	Approval to Invest	Private Equity	Invest up to \$250 million to Blackstone Capital Partners VII, L.P. up to \$150 million to CVI Credit Value Fund III, L.P., up to \$200 million to TA XII, L.P., and up to \$50 million to Thoma Bravo Special Opportunities Fund II, L.P.
19	4/7/2015	Audit and Admin	Approval to Hire	Audit and Tax Services	Hire KPMG LLP for audit services and Deloitte Tax LLP for tax services
20	6/4/2015	Investment	Approval to Invest	Private Equity	Invest €100 million in Charterhouse Capital Partners X, L.P. and up to \$50 million to Quantum Parallel Partners VI-C, L.P.
21	6/4/2015	Investment	Approval to Invest	Hedge Fund	An initial allocation of up to \$150 million to the 400 Capital Credit Opportunities Strategy
22	6/4/2015	Investment	Approval to Invest	Portfolio Completion Strategies	An initial allocation of up to \$200 million to the Goldman Sachs Asset Management Diversifying Alternative Risk Premia Strategy and an initial allocation of up to \$200 million to the AQR Capital Management Style Premia Strategy

\* Investment approved by PRIM's Chief Investment Officer in accordance with the PRIM Board's interim alternative investment review procedures.



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PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix J

### PRIT Audited Financials

*PRIM Board Meeting*  
*Tuesday, October 13, 2015*

*Final Editorial Review Not Completed*

<b>NDPPS USE ONLY</b>	
<b>NDPPS ID:</b>	_____
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<b>Special Instructions</b>	_____
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<i>Version</i>	_____

**PENSION RESERVES INVESTMENT TRUST FUND**  
(A Component Unit of the Commonwealth of Massachusetts)

Financial Statements and Required Supplementary and  
Other Supplementary Information

June 30, 2015 and 2014

(With Independent Auditors' Report Thereon)

**PENSION RESERVES INVESTMENT TRUST FUND**  
(A Component Unit of the Commonwealth of Massachusetts)

June 30, 2015 and 2014

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## **Independent Auditors' Report**

The Administrative and Audit Committee and Trustees,  
Pension Reserves Investment Management Board and  
Participating and Purchasing Systems of the Pension Reserves Investment Trust Fund:

### **Report on the Financial Statements**

We have audited the accompanying financial statements of the Pension Reserves Investment Trust Fund (the PRIT Fund), a component unit of the Commonwealth of Massachusetts, as of and for the years ended June 30, 2015 and 2014, and the related notes to the financial statements, which collectively comprise the PRIT Fund's basic financial statements as listed in the table of contents.

#### ***Management's Responsibility for the Financial Statements***

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### ***Auditors' Responsibility***

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### ***Opinion***

In our opinion, the financial statements referred to above present fairly, in all material respects, the pooled net position of the Pension Reserves Investment Trust Fund as of June 30, 2015 and 2014, and the changes in its pooled net position for the years then ended in accordance with U.S. generally accepted accounting principles.

### ***Other Matters***

#### ***Required Supplementary Information***

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages 3-6 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### ***Other Information***

Our audit was conducted for the purpose of forming an opinion on the PRIT Fund's basic financial statements. The Schedule of Pooled Net Position – Capital Fund and Cash Fund and Schedule of Changes in Pooled Net Position – Capital Fund and Cash Fund (collectively, the Schedules) are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

#### ***Other Reporting Required by Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated **October 13, 2015** on our consideration of the PRIT Fund's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the PRIT Fund's internal control over financial reporting and compliance.

**October 13, 2015**

**PENSION RESERVES INVESTMENT TRUST FUND**  
(A Component Unit of the Commonwealth of Massachusetts)

Required Supplementary Information –  
Management’s Discussion and Analysis

June 30, 2015 and 2014

(Unaudited)

This section presents management’s discussion and analysis of the Pension Reserves Investment Trust Fund’s (the PRIT Fund’s) financial performance for the fiscal years ended June 30, 2015 and 2014 and should be read in conjunction with the financial statements, which follow this section.

The PRIT Fund is a pooled investment fund, created in 1983 through Massachusetts legislation, that invests the assets of the State Teachers’ and State Employees’ Retirement Systems, and the assets of county, authority, school district, and municipal retirement systems that choose to invest in the PRIT Fund, as well as the assets of the State Retiree Benefits Trust (SRBT) Fund.

The investment return percentages reported in management’s discussion and analysis are presented gross of management fees.

### **Overview of the Financial Statements**

The financial statements include the statements of pooled net position and the statements of changes in pooled net position. They present the financial position of the PRIT Fund as of June 30, 2015 and 2014 and its financial activities for the years then ended. The notes to the financial statements provide further information that is essential to a full understanding of the financial statements. The notes describe the significant accounting policies of the PRIT Fund and provide detailed disclosures on certain account balances. The supplementary schedules of pooled net position and changes in pooled net position on pages 35 and 36 separately display the balances and activities of the Capital Fund and Cash Fund of the PRIT Fund.

The financial statements of the PRIT Fund are reported using the economic resources measurement focus and the accrual basis of accounting. They are prepared in conformity with U.S. generally accepted accounting principles, as promulgated by the Governmental Accounting Standards Board (GASB).

### **Financial Highlights**

#### ***Fiscal Year 2015***

- The net position of the PRIT Fund increased \$567.0 million during the year ended June 30, 2015. Total net position was \$61.2 billion at June 30, 2015, compared to \$60.7 billion at June 30, 2014.
- Net investment income for fiscal year 2015 was \$2.1 billion, compared to net investment income of \$9.0 billion for the prior fiscal year. The PRIT Fund returned 3.86% in fiscal year 2015, compared to 17.53% in fiscal year 2014.
- Contributions to the PRIT Fund totaled \$2.2 billion during fiscal year 2015, compared to \$2.1 billion in 2014.
- Redemptions from the PRIT Fund totaled \$3.7 billion during the year ended June 30, 2015, compared to \$3.6 billion during the year ended June 30, 2014.

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(Unaudited)

**Fiscal Year 2014**

- The net position of the PRIT Fund increased \$7.4 billion during the year ended June 30, 2014. Total net position was \$60.7 billion at June 30, 2014, compared to \$53.2 billion at June 30, 2013.
- Net investment income for fiscal year 2014 was \$9.0 billion, compared to net investment income of \$5.9 billion for the prior fiscal year. The PRIT Fund returned 17.53% in fiscal year 2014, compared to 12.69% in fiscal year 2013.
- Contributions to the PRIT Fund totaled \$2.1 billion during fiscal year 2014, compared to \$1.8 billion in 2013.
- Redemptions from the PRIT Fund totaled \$3.6 billion during the year ended June 30, 2014, compared to \$3.4 billion during the year ended June 30, 2013.

**Condensed Financial Information**

Summary balances and activities of the PRIT Fund as of and for the years ended June 30, 2015, 2014, and 2013 are presented below:

	June 30		
	2015	2014	2013
(Dollars in thousands)			
<b>Summary of pooled net position:</b>			
<b>Assets:</b>			
Investments	\$ 62,536,105	62,501,717	54,619,445
Cash	282,624	189,947	140,375
Securities lending collateral	557,158	—	—
Receivables and other assets	1,658,706	1,045,399	1,155,290
<b>Total assets</b>	<b>65,034,593</b>	<b>63,737,063</b>	<b>55,915,110</b>
<b>Liabilities:</b>			
Other liabilities	3,193,890	3,035,697	2,661,583
Securities lending obligations	557,135	—	—
Management fees payable to PRIM	39,823	24,592	23,902
<b>Total liabilities</b>	<b>3,790,848</b>	<b>3,060,289</b>	<b>2,685,485</b>
<b>Net position held in trust for pool participants</b>	<b>\$ 61,243,745</b>	<b>60,676,774</b>	<b>53,229,625</b>

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	<b>June 30</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
(Dollars in thousands)			

Summary of changes in pooled net position:

Additions:			
Contributions	\$ 2,178,927	2,050,248	1,812,191
Net investment income	<u>2,073,376</u>	<u>8,991,375</u>	<u>5,922,932</u>
Total additions	4,252,303	11,041,623	7,735,123
Deductions:			
Redemptions	<u>3,685,332</u>	<u>3,594,474</u>	<u>3,373,305</u>
Change in pooled net position	566,971	7,447,149	4,361,818
Net position held in trust for pool participants:			
Balance, beginning of year	<u>60,676,774</u>	<u>53,229,625</u>	<u>48,867,807</u>
Balance, end of year	<u>\$ 61,243,745</u>	<u>60,676,774</u>	<u>53,229,625</u>

**The PRIT Fund Performance during the year ended June 30, 2015**

The PRIT Fund began fiscal year 2015 with net position of \$60.7 billion and ended the fiscal year with a net position of \$61.2 billion, representing a 0.93% increase. Net investment income for the year ended June 30, 2015 was \$2.1 billion, which when added to net participant redemptions (contributions less redemptions) of \$1.5 billion, resulted in an overall increase in net position of \$567.0 million.

For the year ended June 30, 2015, the PRIT Fund returned 3.86%, exceeding its benchmark of 2.74% by 112 basis points. The benchmark provides a measure of how well the PRIT Fund has implemented its asset allocation plan. It assumes that the PRIT Fund's actual allocation is identical to its target allocation and that all asset classes achieve index-like returns.

The asset classes of the PRIT Fund and related investment returns for the year ended June 30, 2015 are as follows: Domestic Equity 6.75%; International Equity -2.76%; Emerging Markets -5.85%; Core Fixed Income 4.68%; Value-Added Fixed Income -2.60%; Private Equity 15.57%; Real Estate 11.99%; Timber/Natural Resources -1.35%; Hedge Funds 3.68%; Portfolio Completion Strategies -5.09%; and Overlay 2.09%.

The PRIT Fund outperformed its benchmark for the fiscal year ended June 30, 2015 and has returned an average of 9.62% annually since January 1, 1985. According to the Trust Universe Comparison Service (TUCS) for Public Pension Funds, the most widely accepted benchmark for the performance of institutional assets, the PRIT Fund ranked in the second quartile of public pension plans with net position in excess of \$1 billion over the ten-year period ended June 30, 2015.

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**The PRIT Fund Performance during the year ended June 30, 2014**

The PRIT Fund began fiscal year 2014 with net position of \$53.2 billion and ended the fiscal year with a net position of \$60.7 billion, representing a 13.99% increase. Net investment income for the year ended June 30, 2014 was \$9.0 billion, which when added to net participant redemptions (contributions less redemptions) of \$1.5 billion, resulted in an overall increase in net position of \$7.4 billion.

For the year ended June 30, 2014, the PRIT Fund returned 17.53%, exceeding its benchmark of 14.92% by 261 basis points. The benchmark provides a measure of how well the PRIT Fund has implemented its asset allocation plan. It assumes that the PRIT Fund’s actual allocation is identical to its target allocation and that all asset classes achieve index-like returns.

The asset classes of the PRIT Fund and related investment returns for the year ended June 30, 2014 are as follows: Domestic Equity 24.93%; International Equity 24.44%; Emerging Markets 14.07%; Core Fixed Income 5.77%; Value-Added Fixed Income 9.98%; Private Equity 26.75%; Real Estate 13.52%; Timber/Natural Resources 13.43%; Hedge Funds 10.78%; and Overlay 9.52%.

**Other Information**

This financial report is designed to provide a general overview of the PRIT Fund’s financial results. Additional information can be found on the PRIM Board’s website at [www.mapension.com](http://www.mapension.com). Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Pension Reserves Investment Management Board, 84 State Street, Boston, Massachusetts 02109.

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Statements of Pooled Net Position

June 30, 2015 and 2014

(Dollars in thousands)

	<b>2015</b>	<b>2014</b>
<b>Assets:</b>		
Investments, at fair value (note 3):		
Short-term	\$ 1,733,529	1,152,040
Fixed income	14,389,277	14,942,944
Equity	24,642,955	25,123,614
Real estate (note 6)	7,678,800	6,964,718
Timberland	1,664,581	1,510,688
Private equity	6,980,423	6,912,243
Hedge funds	5,351,631	5,895,470
Other	94,909	—
Total investments	62,536,105	62,501,717
Cash	282,624	189,947
Securities lending collateral (notes 3 and 5)	557,158	—
Interest and dividends receivable	139,679	142,634
Receivable for investments sold and other assets	1,281,902	791,846
Securities sold on a when-issued basis	223,685	103,776
Unrealized gains on foreign currency exchange contracts	13,440	7,143
Total assets	65,034,593	63,737,063
<b>Liabilities:</b>		
Payable for investments purchased and other liabilities	1,007,366	1,198,048
Real estate debt (note 7)	1,511,769	1,548,854
Securities lending obligations (note 5)	557,135	—
Securities purchased on a when-issued basis	648,945	273,711
Unrealized losses on foreign currency exchange contracts	25,810	15,084
Management fees payable to PRIM (note 9)	39,823	24,592
Total liabilities	3,790,848	3,060,289
Net position held in trust for pool participants	\$ 61,243,745	60,676,774

See accompanying notes to financial statements.

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Statements of Changes in Pooled Net Position

Years ended June 30, 2015 and 2014

(Dollars in thousands)

	<b>2015</b>	<b>2014</b>
Additions:		
Contributions:		
State employees	\$ 580,527	547,627
State teachers	721,148	709,114
Other participants	877,252	793,507
Total contributions	<u>2,178,927</u>	<u>2,050,248</u>
Net investment income:		
From investment activities:		
Net realized gain on investments and foreign currency transactions	2,552,747	2,948,549
Net change in unrealized (depreciation) appreciation on investments and foreign currency translations	(1,730,479)	4,646,758
Interest income	270,131	358,677
Dividend income	650,996	699,442
Real estate income	260,366	241,202
Timberland income	11,854	8,724
Private equity income	151,001	172,187
	<u>2,166,616</u>	<u>9,075,539</u>
Management fees (note 9)	(98,166)	(84,164)
Net income from investment activities	<u>2,068,450</u>	<u>8,991,375</u>
From securities lending activities:		
Securities lending income	5,624	—
Securities lending expenses	(698)	—
Net income from securities lending activities	<u>4,926</u>	<u>—</u>
Total net investment income	<u>2,073,376</u>	<u>8,991,375</u>
Total additions	<u>4,252,303</u>	<u>11,041,623</u>
Deductions:		
Redemptions:		
State employees	1,266,799	1,220,075
State teachers	1,650,026	1,635,224
Other participants	768,507	739,175
Total deductions	<u>3,685,332</u>	<u>3,594,474</u>
Net increase in pooled net position	<u>566,971</u>	<u>7,447,149</u>
Net position held in trust for pool participants:		
Balance, beginning of year	<u>60,676,774</u>	<u>53,229,625</u>
Balance, end of year	<u>\$ 61,243,745</u>	<u>60,676,774</u>

See accompanying notes to financial statements.

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(Dollars in thousands)

**(1) Description of the Pension Reserves Investment Trust Fund**

*(a) General*

The Pension Reserves Investment Trust Fund (the PRIT Fund), a component unit of the Commonwealth of Massachusetts, was created in 1983 under Chapter 661 of the Acts of 1983, as amended by Chapter 315 of the Acts of 1996. The PRIT Fund is a pooled investment fund that invests the assets of the State Teachers' and State Employees' Retirement Systems of Massachusetts and the assets of county, authority, school district, and municipal retirement systems that choose to invest in the PRIT Fund. The PRIT Fund is not registered with the Securities and Exchange Commission, but is subject to oversight provided by the Pension Reserves Investment Management Board (the PRIM Board). The PRIM Board was created by legislation to provide general supervision of the investments and management of the PRIT Fund. The PRIM Board is a separate legal entity that issues its own financial statements, which are not included in the accompanying financial statements of the PRIT Fund.

A nine-member Board of Trustees governs the PRIM Board. The Trustees include: (1) the Governor, ex officio, or his designee; (2) the State Treasurer, ex officio, or his designee who shall serve as Chair of the PRIM Board; (3) a private citizen experienced in the field of financial management appointed by the State Treasurer; (4) an employee or retiree who is a member of the State Teachers' Retirement System, elected by the members of such system for a term of three years; (5) an employee or retiree who is a member of the State Employees' Retirement System, elected by the members of such system for a term of three years; (6) the elected member of the State Retirement Board; (7) one of the elected members of the Teachers' Retirement Board chosen by the members of the Teachers' Retirement Board; (8) a person who is not an employee or official of the Commonwealth appointed by the Governor; and (9) a representative of a public safety union appointed by the Governor. Appointed members serve for a term of four years. The Board of Trustees has the authority to employ an Executive Director, outside investment managers, custodians, consultants, and others as it deems necessary; to formulate policies and procedures; and to take such other actions as necessary and appropriate to manage the assets of the PRIT Fund.

The PRIM Board seeks to maximize the total return on investments within acceptable levels of risk for a public pension fund. Under current law, by the year 2040, the PRIT Fund will have grown, through annual payments in accordance with a legislatively approved funding schedule and through total return of the PRIT Fund, to an amount sufficient to meet the then-existing pension obligations of the Commonwealth. The Commonwealth has adopted a schedule of state pension appropriations that assumes a long-term actuarial rate of return for the PRIT Fund of 7.75%.

The State Teachers' and State Employees' Retirement Systems are mandated by statute to invest all of their assets in the PRIT Fund and are, therefore, considered involuntary participants. Other retirement systems have the option to become Participating or Purchasing System participants in the PRIT Fund. Participating Systems must transfer all of their assets to the PRIT Fund, commit to remain invested for five years, and are entitled to share in appropriations made to the PRIT Fund by the Commonwealth in accordance with Massachusetts General Laws, Chapter 32, Section 22B. The Commonwealth has

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made no such appropriation to the PRIT Fund on behalf of Participating Systems since fiscal year 2000.

Purchasing Systems may invest all or a portion of their assets in the PRIT Fund and retain the ability to contribute and withdraw funds at their discretion; however, they are not entitled to state appropriations. Participating and Purchasing Systems share in the investment earnings of the PRIT Fund based on their proportionate share of net assets. As of June 30, 2015, there were 41 Participating Systems and 54 Purchasing Systems invested in the PRIT Fund.

On July 15, 2007, the Governor signed into law Chapter 68 of the Acts of 2007, An Act to Reduce the Stress on Local Property Taxes through Enhanced Pension Fund Investment, better known as the Municipal Partnership Act. Section 2 of Chapter 68 requires the Public Employee Retirement Administration Commission (PERAC) to assess the investment performance and funded ratio of retirement systems as of January 1 of each year. If a system is less than 65% funded and has trailed the performance of the PRIT Fund by 2% or more on an annualized basis over the previous 10-year period, then PERAC declares the system “underperforming” and requires it to transfer its assets to the PRIT Fund as a participating system. For the years ended June 30, 2015 and 2014, no retirement systems were required to transfer their assets to the PRIT Fund under the provisions of this Act.

**(b) *Investment Funds***

The PRIT Fund consists of two investment funds, the Capital Fund and the Cash Fund. Each of these funds is managed, accounted for, and held separately by the PRIT Fund’s custodian.

The Cash Fund consists of short-term investments, which are used to meet the liquidity requirements of Participating and Purchasing Systems. All Cash Fund earnings are reinvested. The State Teachers’ Retirement System and the State Employees’ Retirement System make daily deposits into the Cash Fund, which is their source of funds for benefit payments and operating expenses. The Cash Fund maintains a stable net asset value of \$1.00 per unit.

Assets contributed by retirement systems are initially deposited in the Cash Fund and then transferred to the Capital Fund. Funds transferred into the Capital Fund are generally invested in the General Allocation Account, which invests in all asset classes of the PRIT Fund in accordance with the PRIM Board’s asset allocation plan and investment policy guidelines. The Capital Fund serves as the investment portfolio of the PRIT Fund and consists of the following accounts at June 30, 2015: General Allocation (holds units of all other accounts), Domestic Equity, Core Fixed Income, Value-Added Fixed Income, International Equity, Emerging Markets, Real Estate, Timber/Natural Resources, Hedge Funds, Distressed Debt, Overlay, Portfolio Completion Strategies, Private Equity Investments, and Private Equity Investments Vintage Years 2000-2015. Vintage Year refers to the fiscal year in which the PRIT Fund made a commitment to invest in a private equity investment.

The Capital Fund consists of the following accounts at June 30, 2014: General Allocation (holds units of all other accounts), Domestic Equity, Core Fixed Income, Value-Added Fixed Income, International

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Equity, Emerging Markets, Real Estate, Timber/Natural Resources, Hedge Funds, Distressed Debt, Overlay, Private Equity Investments, and Private Equity Investments Vintage Years 2000-2014.

Upon deposit by a Participating or Purchasing System into the accounts of the Capital Fund, units of participation equal to the total value of the contribution are issued. The value of a unit of each account is determined monthly by dividing the value of the net assets of the account by the number of units outstanding at each month-end valuation date. The unit price fluctuates with the performance of the Capital Fund. The number of units generally changes only when a retirement system makes a contribution or redemption.

Chapter 84 of the Acts of 1996 permits Massachusetts retirement boards to purchase units in the individual investment accounts of the PRIT Fund as an alternative to investing in its General Allocation Account. This investment option, also referred to as “segmentation,” was established by an amendment to the PRIM Board’s Operating Trust Agreement in 1994 in response to requests from retirement boards wishing to invest in certain asset classes of the PRIT Fund. Purchasing Systems, as “segmented investors,” may invest in one or more of the following accounts of the Capital Fund: Domestic Equity, International Equity, Emerging Markets, Core Fixed Income, Public Value Added Fixed Income, Real Estate, Hedge Funds, and Private Equity Vintage Year accounts. At June 30, 2015 and 2014, there were 39 segmented investors in the PRIT Fund. The remaining Purchasing Systems invested in the General Allocation Account.

**(2) Summary of Significant Accounting Policies**

**(a) Basis of Accounting and Financial Statement Presentation**

The financial statements of the PRIT Fund are reported using the economic resources measurement focus and the accrual basis of accounting. They are prepared in conformity with U.S. generally accepted accounting principles, which require management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities, at the dates of the financial statements and the reported amounts of additions and deductions during the reporting periods. Actual results could differ from those estimates.

The PRIT Fund follows Governmental Accounting Standards Board (GASB) guidance as applicable to external investment pools.

**(b) Investments**

The PRIM Board recognizes that over the long term, asset allocation is the single greatest contributor of return and risk to the PRIT Fund. The PRIM Board’s asset allocation plan embodies its decisions to invest portions of the Capital Fund in domestic and international equity securities, emerging markets, fixed income securities, value added fixed income, real estate, timberland, hedge funds, natural resources, private equity and, where appropriate, the various sub asset classes of each asset class. Statutes prohibit the PRIT Fund from investing in certain securities. The PRIM Board ensures that investment managers adhere to the requirements of Massachusetts General Laws.

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Security transactions are recorded on the date the securities are purchased or sold. The cost of a security is the purchase price or, in the case of assets transferred to the PRIT Fund by a Participating or Purchasing System, the fair value of the securities on the transfer date. The calculation of realized gains (losses) is independent of the calculation of the net change in unrealized appreciation (depreciation) on investments. Realized gains and losses on investments sold in the current year include previously recorded unrealized amounts and are included in net realized gain on investments in the accompanying statements of changes in pooled net position.

The PRIM Board values investments in fixed income, money market, other short-term investments, and U.S. government agency obligations using independent pricing services. In determining the price, the services may reflect such factors as market prices, yields, maturities, and ratings, supplemented by dealer quotations. Investments in equity securities traded on national securities exchanges are valued at the last daily sale price or, if no sale price is available, at the closing bid price. Securities traded on any other exchange are valued in the same manner or, if not so traded, on the basis of closing over-the-counter (OTC) bid prices. If no bid price exists, valuation is determined by the custodian bank either by establishing the mean between the most recent published bid and asked prices or averaging quotations obtained from dealers, brokers, or investment bankers. Securities for which such valuations are unavailable are reported at their fair value as estimated in good faith by the PRIM Board based on information provided by the investment managers responsible for such investments. Fair values for investments in pooled investment vehicles (commingled funds) are based on the commingled fund's net asset value as determined by the investment managers.

The PRIT Fund invests a portion of its assets in emerging capital markets. These investments may involve greater risks than investments in more developed markets, and the prices of such investments may be volatile. The consequences of political, social, or economic changes in these markets may have disruptive effects on the market prices of these investments and the income they generate, as well as the PRIT Fund's ability to repatriate such amounts.

Investments in real estate represent the PRIT Fund's ownership interest in PRIT Core Realty Holdings LLC (the LLC) (see note 6). The LLC holds investments in real estate properties, real estate private equity fund investments, and Real Estate Investment Trust (REIT) securities. Investments in real estate properties are stated at fair value based on appraisals prepared by independent real estate appraisers or on estimated valuations determined by the PRIM Board. These estimated valuations are based on valuations prepared by the real estate investment managers under the general supervision of the PRIM Board. Generally, third-party appraisals are performed on each real estate property within 18 months of the date of acquisition and at least annually thereafter. Determination of fair value involves judgment because the actual fair value of a real estate investment can be determined only by negotiation between parties in a sales transaction. Due to the inherent uncertainty of valuation, fair values used may differ significantly from values that would have been determined had a ready market for the investments existed, and the differences could be material. Real estate private equity fund investments are invested through limited partnerships and are recorded at fair value estimated by the PRIM Board in the same manner as the PRIT Fund's private equity investments. REIT securities are

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publicly traded securities and are valued in the same manner as the PRIT Fund's traded equity securities.

Investments in timberland are valued similarly to investments made by the LLC in real estate properties; however, independent appraisals of timberland investments are required to be performed every three years, but management has had independent appraisals performed annually.

Hedge fund investments represent the PRIT Fund's ownership in both direct hedge funds including managed accounts and hedge fund-of-funds. The investment in hedge funds is recorded at fair value as estimated by the PRIM Board, generally using the net asset value as a practical expedient. These estimated fair values are determined in good faith by the PRIM Board with guidance from the PRIT Fund's hedge fund investment managers and is based on the value of the PRIT Fund's ownership in the underlying hedge fund investments.

Private equity investments are typically made through limited partnerships that, in turn, invest in venture capital, leveraged buyouts, private placements, and other investments where the structure, risk profile, and return potential differ from traditional equity and fixed income investments. These investments are recorded at fair values estimated by the PRIM Board, generally using the net asset value of the underlying fund as a practical expedient. These estimated fair values are determined in good faith by investment managers or general partners using consistently applied procedures.

Portfolio completion strategies investments are recorded at fair value as estimated in good faith by the PRIM Board based on information provided by the investment managers responsible for the investments.

**(c) *Investment Income***

Dividend income is recorded on the ex-dividend date, and interest income is accrued as earned. For the years ended June 30, 2015 and 2014, foreign taxes withheld of \$25,167 and \$24,519, respectively, have been netted against dividend income in the statements of changes in pooled net position. Real estate income includes dividends earned on REIT securities as well as cash distributions of operating income from investments in real estate properties less interest expenses on real estate debt. Timberland income includes cash distributions of operating income from investments in timberland properties. Private equity investment income is recorded on a cash distribution basis.

**(d) *Foreign Currency Translation and Transactions***

The accounting records of the PRIT Fund are maintained in U.S. dollars. Investment securities and other assets and liabilities denominated in a foreign currency are translated into U.S. dollars at the prevailing rates of exchange at month-end. Purchases and sales of securities, income receipts, and expense payments are translated into U.S. dollars at the prevailing exchange rate on the respective dates of the transactions.

Unrealized net currency gains and losses from valuing foreign currency-denominated assets and liabilities at month-end exchange rates are reflected as a component of net unrealized appreciation

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(depreciation) on investments. For financial reporting purposes, it is not practicable to isolate that portion of the results of operations arising as a result of changes in foreign exchange rates from the fluctuations arising from changes in the market price of securities during the period.

Net realized gains and losses on foreign currency transactions represent principally gains and losses from sales and maturities of forward foreign currency contracts, disposition of foreign currencies, and currency gains and losses realized between the trade and settlement dates on securities transactions.

**(e) Derivative Instruments**

In accordance with GASB Statement No. 53, *Accounting and Financial Reporting of Derivative Instruments*, the PRIT Fund has recorded all of its derivative activity at fair value as investment instruments within the equity, fixed income, and real estate investments and the related change in such instruments within the net change in unrealized appreciation (depreciation) on investments and foreign currency translations in the accompanying financial statements.

The PRIT Fund regularly trades derivative financial instruments with off-balance sheet risk in the normal course of its investing activities to manage exposure to certain risks within the fund. The PRIT Fund also enters into derivative transactions to gain exposure to currencies and markets where derivatives are the most effective instrument. The PRIT Fund's derivative financial instruments include foreign currency exchange contracts, financial and commodity futures contracts, and customized swap agreements (see note 8 for more detail). These derivative instruments can be exchange-traded or OTC contracts. The primary difference in risk associated with OTC contracts and exchange-traded contracts is credit and liquidity risks. For exchange-traded contracts, credit risk is limited to the role of the exchange or clearing corporation. OTC contracts contain credit risk for unrealized gains from various counterparties for the duration of the contract.

**(f) When-Issued Securities Transactions**

The PRIT Fund may purchase or sell securities on a "when-issued" or delayed-delivery basis. Delivery and payment for such securities may take place a month or more after the trade date. Normally, settlement occurs within three months. The price of the underlying securities and the date when the securities will be delivered and paid for are fixed at trade date. During the time a delayed delivery sell transaction is outstanding, the contract is marked to market daily and substantially equivalent deliverable securities are held by the PRIT Fund for the transaction to the extent available. For delayed delivery purchase transactions, the PRIT Fund maintains segregated assets with a fair value equal to or greater than the amount of its purchase commitments. The receivables and payables associated with the sale and purchase of delayed delivery securities are reflected in the accompanying statements of pooled net position as securities sold and purchased on a when-issued basis. Losses may arise due to changes in the value of the underlying securities, if the counterparty does not perform under the contract, or if the issuer does not issue the securities due to political, economic, or other factors.

The PRIT Fund may also enter into mortgage dollar-roll and reverse mortgage dollar-roll agreements on a when-issued basis. A mortgage dollar-roll is an agreement in which the PRIT Fund sells securities on a when-issued basis and simultaneously contracts with the same counterparty to repurchase similar

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(same type, coupon, and maturity) but not identical securities on a specified future date. During the roll period, principal and interest on these securities are not received. The PRIT Fund is compensated by the difference between the current sales price and the forward price for the future purchase. A reverse mortgage dollar-roll is an agreement to buy securities and to sell substantially similar securities on a specified future date. During the roll period, the PRIT Fund receives the principal and interest on the securities purchased. The receivables and payables associated with mortgage dollar-rolls and reverse mortgage dollar-rolls are also reflected in the accompanying statements of pooled net position as securities sold and purchased on a when-issued basis.

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**(3) Investments and Securities Lending Collateral Investments**

A summary of investments, at fair value, is as follows:

	June 30	
	2015	2014
Short-term:		
Money market investments	\$ 1,733,529	1,152,040
Fixed income:		
U.S. government obligations (1)	5,225,621	4,463,870
Domestic fixed income (2)	4,660,555	5,545,436
International fixed income (3)	3,152,349	3,604,539
Distressed debt	<u>1,350,752</u>	<u>1,329,099</u>
	<u>14,389,277</u>	<u>14,942,944</u>
Equity:		
Domestic equity securities	10,353,626	10,409,415
International equity securities	<u>14,289,329</u>	<u>14,714,199</u>
	<u>24,642,955</u>	<u>25,123,614</u>
Real estate	7,678,800	6,964,718
Timberland	1,664,581	1,510,688
Private equity:		
Venture capital	1,579,463	1,389,868
Special equity	<u>5,400,960</u>	<u>5,522,375</u>
	<u>6,980,423</u>	<u>6,912,243</u>
Hedge funds:		
Direct hedge funds and hedge fund of funds	5,323,426	5,845,788
Liquidating hedge fund of funds	<u>28,205</u>	<u>49,682</u>
	<u>5,351,631</u>	<u>5,895,470</u>
Other:		
Portfolio completion strategies investment funds	<u>94,909</u>	<u>—</u>
Total investments excluding securities lending collateral	<u>\$ 62,536,105</u>	<u>62,501,717</u>
Securities lending collateral investments:		
Repurchase agreements	\$ 200,000	—
Money market investments	147,978	—
Domestic fixed income (4)	<u>209,180</u>	<u>—</u>
Total securities lending collateral investments	<u>557,158</u>	<u>—</u>
Total investments including securities lending collateral	<u>\$ 63,093,263</u>	<u>62,501,717</u>

- (1) Fiscal 2015 rates range from 0.00% to 9.13%, and maturities range from 2015 to 2045. Fiscal 2014 rates range from 0.00% to 10.63%, and maturities range from 2014 to 2044
- (2) Fiscal 2015 rates range from 0.00% to 12.64%, and maturities range from 2015 to 2115. Fiscal 2014 rates range from 0.00% to 13.79%, and maturities range from 2014 to 2114.

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- (3) Fiscal 2015 rates range from 0.00% to 16.39%, and maturities range from 2015 to 2115. Fiscal 2014 rates range from 0.00% to 16.00%, and maturities range from 2014 to 2073.
- (4) U.S. government agency securities with maturities of less than three months.

**(4) Deposits and Investments Risks**

**(a) Custodial Credit Risk**

Custodial credit risk is the risk that in the event of bank failure, the PRIT Fund's deposits and investments may not be returned. The PRIM Board manages the PRIT Fund's exposure to custodial credit risk by requiring all relevant investment managers to hold investments in separate accounts with the PRIM Board's custodian (see note 9). The PRIM Board has not adopted a formal custodial credit risk policy.

Cash balances represent amounts held in bank depository accounts that may be subject to custodial credit risk. As of June 30, 2015 and 2014, all but \$250 of the PRIT Fund's \$282,624 and \$189,947 cash balances, respectively, were uninsured and uncollateralized and, therefore, exposed to custodial credit risk.

**(b) Interest Rate Risk**

Interest rate risk is the risk that changes in interest rates of fixed income investments will adversely affect the fair value of an investment. While the PRIM Board does not have a formal policy relating to interest rate risk, the PRIM Board manages the PRIT Fund's exposure to fair value loss arising from movements in interest rates by establishing duration guidelines with its fixed income investment managers. The guidelines with each individual manager require that the effective duration of the domestic fixed income investment portfolio be within a specified percentage or number of years of the effective duration band of the appropriate benchmark index. For emerging markets fixed income investments, the portfolio must have duration with a band ranging from three to eight years. Effective duration is a measure of a fixed income investment's exposure to fair value changes arising from changes in interest rates. Effective duration makes assumptions regarding the most likely timing and amounts of variable cash flows. These assumptions take into consideration factors indicative of investments highly sensitive to interest rate changes, including callable options, prepayments, and other factors. These factors are reflected in the effective duration numbers provided in the following table. The PRIM Board compares the effective duration of a manager's portfolio to their relevant benchmark including Barclays Capital Aggregate index, US Treasury STRIPS 20+ Year index, Barclays Capital US TIPS index, Barclays Capital Inflation Linked Bonds index, S&P LSTA Leveraged Loan index, JPMorgan Global Emerging Markets Bond index, JPMorgan Global Diversified Emerging Markets Bond index, and the Merrill Lynch High Yield Master II index.

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The following table shows the debt investments by investment type, fair value, and effective weighted duration rate at June 30:

Investment	2015		2014	
	Fair value	Effective weighted duration rate (Years)	Fair value	Effective weighted duration rate (Years)
Asset-backed securities	\$ 154,740	2.19	\$ 238,794	1.83
Commercial mortgage-backed securities	235,583	2.18	395,208	2.89
Commercial paper and CDs	51,922	0.14	48,875	1.33
Corporate bonds and other credits	4,018,855	13.01	5,124,760	5.21
U.S. government bonds	3,988,370	24.23	3,271,542	21.81
U.S. government agencies	55,097	3.91	93,468	3.97
U.S. government TIPS	1,237,251	8.04	1,192,328	8.37
U.S. government mortgage-backed securities	1,179,408	1.99	1,193,603	2.80
Global inflation linked bonds	378,121	9.61	376,534	7.32
Municipal bonds	40,134	10.35	54,426	10.54
Pooled money market fund	1,733,529	—	1,152,040	—
Other pooled funds	<u>3,049,796</u>	—	<u>2,953,406</u>	—
Total fixed income and short-term investments	<u>\$ 16,122,806</u>		<u>\$ 16,094,984</u>	
Securities lending collateral investments:				
U.S. government agencies	\$ 209,180	—	\$ —	—
Pooled money market fund	147,978	—	—	—
Repurchase agreements	<u>200,000</u>	—	<u>—</u>	—
Total securities lending collateral investments	<u>\$ 557,158</u>		<u>\$ —</u>	

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**(c) Credit Risk**

Credit risk is the risk that an issuer or other counterparty to an investment will fail to meet its debt obligations.

The PRIM Board does not have a formal investment policy governing credit risk; each fixed income securities investment managers is given a specific set of guidelines to invest within based on the mandate for which it was hired. These guidelines vary depending on the manager's strategy and the role of its portfolio to the overall diversification of the PRIT Fund. The guidelines for the PRIT Fund's core fixed income portfolio establish the minimum credit rating for any security in the portfolio and the overall weighted average credit rating of the portfolio. For example, all securities held must generally be investment grade. The guidelines for the PRIT Fund's high yield fixed income portfolio establish a market value range of securities to be held with a specific minimum credit rating and the overall weighted average credit rating of the portfolio.

Credit risk for derivative instruments held by the PRIT Fund results from counterparty risk. The PRIT Fund is exposed to credit risk resulting from counterparties being unable to meet their obligations under the terms of the derivative agreements. See note 8 for more information on the PRIT Fund's derivative instruments.

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The weighted average quality rating of the debt securities portfolio, excluding pooled investments, investments explicitly backed by the U.S. government and other nonrated investments was A- at June 30, 2015 and BBB+ at June 30, 2014. The following tables present the PRIT Fund's fixed-income securities credit ratings at June 30:

Investment	Total fair value	2015					
		Investment grade			Noninvestment grade		
		AAA	AA+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Not rated
Asset-backed securities	\$ 154,740	69,846	76,967	779	6,905	243	—
Commercial mortgage-backed securities	235,583	64,170	57,091	52,448	37,610	23,050	1,214
Commercial paper and CDs	51,922	—	3,097	48,825	—	—	—
Corporate bonds and other credits	4,018,855	127,408	1,271,634	1,318,177	889,931	141,220	270,485
U.S. government agencies	55,097	—	55,097	—	—	—	—
U.S. government mortgage-backed securities	988,164	105	636,993	—	—	—	351,066
Global inflation linked bonds	378,121	110,287	172,755	95,079	—	—	—
Municipal bonds	40,134	593	34,475	1,948	3,118	—	—
Pooled money market fund	1,733,529	—	—	—	—	—	1,733,529
Other pooled funds	3,049,796	—	—	—	—	—	3,049,796
Total credit risk, fixed income, and short-term investments	10,705,941	372,409	2,308,109	1,517,256	937,564	164,513	5,406,090
Fixed income investments explicitly backed by the U.S. government	5,416,865						
Total fixed income and short-term investments	\$ 16,122,806						
Securities lending collateral investments:							
U.S. government agencies	\$ 209,180	—	209,180	—	—	—	—
Pooled money market fund	147,978	—	—	—	—	—	147,978
Repurchase agreements	200,000	—	—	200,000	—	—	—
Total securities lending collateral investments	\$ 557,158	—	209,180	200,000	—	—	147,978

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Investment	Total fair value	2014					
		Investment grade			Noninvestment grade		
		AAA	AA+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Not rated
Asset-backed securities	\$ 238,794	96,734	125,689	989	6,714	8,373	295
Commercial mortgage-backed securities	395,208	158,394	70,098	91,866	46,563	26,879	1,408
Commercial paper and CDs	48,875	—	13,694	2,286	—	—	32,895
Corporate bonds and other credits	5,124,760	239,913	1,196,204	1,670,820	698,436	209,665	1,109,722
U.S. government agencies	93,468	—	93,364	—	—	—	104
U.S. government mortgage-backed securities	974,362	—	817,444	—	—	—	156,918
Global inflation linked bonds	376,534	191,512	152,644	32,378	—	—	—
Municipal bonds	54,426	1,673	47,652	1,921	3,180	—	—
Pooled money market fund	1,152,040	—	—	—	—	—	1,152,040
Other pooled funds	2,953,406	—	—	—	—	—	2,953,406
Total credit risk, fixed income, and short-term investments	11,411,873	688,226	2,516,789	1,800,260	754,893	244,917	5,406,788
Fixed income investments explicitly backed by the U.S. government		4,683,111					
Total fixed income and short-term investments	\$ 16,094,984						

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**(d) Foreign Currency Risk**

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of investments. Although the PRIM Board has no overall policy regarding foreign currency risk, the PRIM Board does manage the PRIT Fund's exposure to foreign currencies by establishing investment guidelines with each of its international managers. These guidelines set maximum investment balances for any currency and/or country holdings must be within a certain percentage of predefined benchmarks. In addition, the PRIM Board's investment managers may actively manage the PRIT Fund's exposure to foreign currencies through the use of forward foreign currency contracts. The following tables present the PRIT Fund's foreign currency exposures at June 30 (stated in U.S. dollars):

	2015					
	<b>Cash and short-term investments</b>	<b>Equity</b>	<b>Fixed income</b>	<b>Private equity investments</b>	<b>Timber investments</b>	<b>Total</b>
Australian Dollar	\$ 4,699	452,827	12,549	—	172,588	642,663
Brazilian Real	918	108,213	197,872	—	—	307,003
British Pound	29,184	2,276,111	362,371	91,237	—	2,758,903
Canadian Dollar	23,085	462,151	31,505	18,364	—	535,105
Danish Krone	351	303,635	3,947	—	—	307,933
Euro	9,530	2,340,962	293,225	1,188,043	—	3,831,760
Hong Kong Dollar	9,336	1,077,867	—	—	—	1,087,203
Japanese Yen	116,886	2,240,071	47,659	—	—	2,404,616
Mexican Peso	13,091	103,000	129,819	—	—	245,910
New Taiwan Dollar	16,188	449,513	—	—	—	465,701
S. African Comm Rand	1,729	286,470	91,292	—	—	379,491
South Korean Won	2,614	514,806	27,665	—	—	545,085
Swedish Krona	808	366,189	16,956	—	—	383,953
Swiss Franc	11,318	789,138	—	—	—	800,456
Other foreign currencies	<u>13,614</u>	<u>1,002,358</u>	<u>681,368</u>	<u>—</u>	<u>—</u>	<u>1,697,340</u>
Total securities subject to foreign currency risk	253,351	12,773,311	1,896,228	1,297,644	172,588	16,393,122
International investments denominated in U.S. dollars	<u>—</u>	<u>1,516,018</u>	<u>1,256,121</u>	<u>—</u>	<u>—</u>	<u>2,772,139</u>
Total international investments and cash deposits	<u>\$ 253,351</u>	<u>14,289,329</u>	<u>3,152,349</u>	<u>1,297,644</u>	<u>172,588</u>	<u>19,165,261</u>

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	2014					
	Cash and short-term investments	Equity	Fixed income	Private equity investments	Timber investments	Total
Australian Dollar	\$ 5,629	567,019	134,282	—	172,373	879,303
Brazilian Real	3,662	236,552	295,874	—	—	536,088
British Pound	37,611	2,180,933	340,590	112,710	—	2,671,844
Canadian Dollar	11,437	532,480	37,880	15,192	—	596,989
Danish Krone	64	326,814	2,757	—	—	329,635
Euro	58,882	2,457,268	428,037	1,327,484	—	4,271,671
Hong Kong Dollar	6,216	971,845	—	—	—	978,061
Indian Rupee	3,783	234,396	2,830	—	—	241,009
Indonesian Rupiah	700	104,435	96,780	—	—	201,915
Japanese Yen	42,637	1,963,600	38,037	—	—	2,044,274
Malaysian Ringgit	601	106,236	119,357	—	—	226,194
Mexican Peso	1,223	145,564	122,637	—	—	269,424
New Taiwan Dollar	2,198	432,813	—	—	—	435,011
New Turkish Lira	824	113,709	107,661	—	—	222,194
S. African Comm Rand	1,133	280,808	107,698	—	—	389,639
South Korean Won	1,857	661,188	20,660	—	—	683,705
Swedish Krona	3,239	380,903	19,668	—	—	403,810
Swiss Franc	172	807,726	—	—	—	807,898
Other foreign currencies	9,563	649,630	422,700	—	—	1,081,893
Total securities subject to foreign currency risk	191,431	13,153,919	2,297,448	1,455,386	172,373	17,270,557
International investments denominated in U.S. dollars	—	1,560,280	1,307,091	—	—	2,867,371
Total international investments and cash deposits	\$ 191,431	14,714,199	3,604,539	1,455,386	172,373	20,137,928

**(e) Concentration of Credit Risk**

The PRIM Board manages the PRIT Fund's exposure to concentration of credit risk by establishing guidelines with each investment manager that limit the percentage of investment in any single issue or issuer. The PRIT Fund has no investments, at fair value, that exceed 5% of the PRIT Fund's total investments as of June 30, 2015 and 2014.

**(f) Financial Instruments with Off-Balance-Sheet Risk**

In the normal course of business, the PRIT Fund enters into financial instrument transactions with off-balance-sheet risk. These financial instruments involve varying degrees and type of risks, including credit and market risks, which may be in excess of the amounts recognized in the Statements of Pooled Net Position. Futures and foreign currency exchange contracts represent commitments to purchase or sell foreign currencies at a future date and at a specified price. The PRIT Fund could be exposed to

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risks if the counterparties to the contracts are unable to meet the terms of their contracts or if the value of the foreign currency changes unfavorably.

**(5) Securities Lending Program**

In October 2014, the PRIM Board hired a third-party securities lending agent to launch a securities lending program on January 2, 2015. The program loans domestic and international equity, REIT, and fixed income securities for collateral with a simultaneous agreement to return the collateral for the same securities in the future. Securities on loan are secured with collateral ranging from 102% to 105% determined by the type of securities lent. Securities on loan are valued daily to maintain the collateral requirement and, where applicable, additional collateral is delivered. At June 30, 2015, PRIT has no credit risk exposure to borrowers because the borrowers provided collateralization greater than 100% of the fair value of the securities on loan. PRIT cannot pledge or sell the collateral securities unless the lending agent defaults. The lending agent is required to indemnify PRIT in the event that it fails to return the securities on loan (and if the collateral is inadequate to replace the securities on loan) or if the lending agent fails to perform its obligations as stipulate in the agreement. There was no loss during the year ended June 30, 2015 resulting from default by the lending agent.

Securities loans are terminable on demand therefore maturities of the securities loans do not generally match the maturities of investments made with cash collateral. Investments made with cash collateral are primarily in short-term investments with maximum maturity of three months from the date of purchase.

Securities on loan are included in investments at fair value in the accompanying statements of pooled net position. As of June 30, 2015, the fair value of securities on loan was \$534,843 and the associated cash collateral was \$557,135. The cash collateral received is reported as securities lending obligations in the accompanying statements of pooled net position. There was no security collateral or noncash collateral at June 30, 2015. The fair value of reinvested cash collateral was \$557,158 at June 30, 2015 and is reported as securities lending collateral in the accompanying statements of pooled net position. There were no securities on loan in 2014.

**(6) Real Estate – Investment in the LLC**

On October 19, 2001, the LLC was formed and was governed by an operating agreement entered into by the PRIM Board, as trustee of the PRIT Fund, as the sole member. The principal purpose of the LLC is to conduct the investment activities of the real estate program in a manner consistent with the PRIT Fund Declaration of Trust and any business or activities incidental to or in support of such investment activities.

According to the operating agreement, as of any valuation date, the net assets of the LLC shall be the fair value of investments, less the amount of debt and accrued expenses. The unit net asset value of the LLC shall be the net asset value of the LLC divided by the number of units outstanding on such date. The LLC holds core and value real estate assets consisting of real estate properties, real estate private equity investments, and REIT securities.

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**(7) Real Estate Debt**

**(a) Notes Payable**

The LLC's notes payable obligations consisted of the following as of June 30:

	<b>Face value</b>	
	<b>2015</b>	<b>2014</b>
Senior unsecured term loan	\$ 500,000	500,000
Senior unsecured notes	500,000	500,000
<b>Total</b>	<b>\$ 1,000,000</b>	<b>1,000,000</b>

Scheduled long-term maturities of existing indebtedness at June 30, 2015 in each of the next five years and in the aggregate thereafter are as follows:

	<b>Amount</b>	
	Year ending June 30:	
2016	\$ —	—
2017	—	—
2018	500,000	—
2019	—	—
2020	175,000	—
2021–2025	325,000	—
	<b>\$ 1,000,000</b>	<b>—</b>

**(i) Senior Unsecured Term Loan**

On February 12, 2013, the LLC issued a Senior Unsecured Term Loan in the aggregate principal amount of \$500,000, maturing February 12, 2018. Interest is payable monthly based on LIBOR plus an applicable rate based upon the range into which the Total Leverage Ratio falls as outlined in the Term Loan agreement. As of June 30, 2015 and 2014, the applicable rate is 1.15%.

**(ii) Senior Unsecured Notes**

On February 14, 2013, the LLC issued 3.25% Series A Senior Notes in the aggregate principal amount of \$175,000 maturing February 14, 2020; 3.85% Series B Senior Notes in the aggregate principal amount of \$175,000 maturing February 14, 2023; 4.00% Series C Senior Notes in the aggregate principal amount of \$150,000 maturing February 14, 2025. Interest on the notes is payable semi-annually.

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Both the Senior Unsecured Term Loan and Senior Unsecured Notes contain certain financial covenants as outlined in the respective agreements. The LLC was in compliance with such covenants at June 30, 2015 and 2014.

**(b) Mortgage Loans Payable**

The LLC had 21 and 19 property-level mortgage loans payable as of June 30, 2015 and 2014, respectively. The mortgages have a weighted average interest rate of 3.86% and 3.76% and a weighted average maturity of 2.9 and 3.5 years at June 30, 2015 and 2014, respectively. The following table presents the face value of mortgage loans payable at June 30:

	<b>2015</b>	<b>2014</b>
Mortgage loans payable	\$ 511,769	548,854
Total	\$ 511,769	548,854

**(8) Derivative Investments**

The PRIT Fund regularly trades financial instruments with off-balance-sheet risk in the normal course of its investing activities to assist in managing exposure to market risks. These financial instruments include foreign currency exchange contracts, futures contracts, and swap contracts.

**(a) Foreign Currency Exchange Contracts**

A foreign currency exchange contract is an agreement between two parties to buy or sell a fixed quantity of currency at a set price on a future date. The PRIT Fund may enter into foreign currency exchange contracts to hedge its exposure to the effect of changes in foreign currency exchange rates upon its non-U.S. dollar-denominated investments. The fair value of such contracts will fluctuate with changes in currency exchange rates. The contracts are valued daily, and the changes in fair value are recorded by the PRIT Fund as unrealized gains or losses. When the contract is closed, the PRIT Fund records a realized gain or loss equal to the difference between the cost of the contract at the time it was opened and the value at the time it was closed.

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Foreign currency exchange contracts open at June 30 (in U.S. dollars) were as follows:

			<b>2015</b>			
	<b>Fair value</b>	<b>Aggregate face value</b>	<b>Delivery date(s)</b>	<b>Unrealized gains</b>	<b>Unrealized losses</b>	
<b>Foreign currency exchange contracts purchased:</b>						
Australian Dollar	\$ 34,988	34,852	7/2/15–8/17/15	\$ —	(136)	
Brazilian Real	167,092	167,462	7/1/15–10/4/16	370	—	
British Pound	749,982	740,541	7/2/15–8/5/15	—	(9,441)	
Canadian Dollar	51,671	52,682	7/2/15–7/21/15	1,011	—	
Chinese Yuan Renminbi	49,068	48,222	7/23/15–9/16/15	—	(846)	
Euro	603,573	601,815	7/2/15–8/18/15	—	(1,758)	
Japanese Yen	279,827	277,681	7/2/15–9/24/15	—	(2,146)	
Mexican New Peso	159,721	163,325	7/7/15–9/30/15	3,604	—	
New Turkish Lira	80,305	78,889	7/15/15–9/16/15	—	(1,416)	
Polish Zloty	36,427	36,939	7/2/15–9/16/15	512	—	
Singapore Dollar	57,915	57,712	7/2/15–9/16/15	—	(203)	
South African Comm Rand	48,899	48,356	7/3/15–9/16/15	—	(543)	
South Korean Won	38,164	38,225	7/1/15–9/16/15	61	—	
Other foreign currencies	224,170	225,609	7/1/15–12/4/15	2,683	(1,246)	
<b>Foreign currency exchange contracts sold:</b>						
Brazilian Real	144,387	143,624	7/2/15–9/16/15	763	—	
British Pound	385,343	386,077	7/1/15–8/5/15	—	(734)	
Canadian Dollar	34,009	34,345	7/3/15–7/22/15	—	(336)	
Chilean Peso	42,621	43,701	7/27/15–9/16/15	—	(1,080)	
Chinese Yuan Renminbi	54,564	53,939	8/13/15–9/16/15	625	—	
Euro	348,545	350,536	7/1/15–8/18/15	—	(1,991)	
Indian Rupee	37,051	36,763	7/1/15–9/16/15	288	—	
Japanese Yen	171,258	169,829	7/1/15–9/15/15	1,429	—	
Malaysian Ringgit	34,848	35,210	7/2/15–9/17/15	—	(362)	
Mexican New Peso	61,529	62,623	7/1/15–9/30/15	—	(1,094)	
New Turkish Lira	91,317	90,507	7/29/15–9/16/15	810	—	
Polish Zloty	66,252	67,074	7/2/15–9/16/15	—	(822)	
South African Comm Rand	50,825	49,936	7/6/15–9/16/15	889	—	
Other foreign currencies	241,876	243,137	7/1/15–12/16/15	395	(1,656)	
Total				<u>\$ 13,440</u>	<u>(25,810)</u>	

**PENSION RESERVES INVESTMENT TRUST FUND**  
 (A Component Unit of the Commonwealth of Massachusetts)

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(Dollars in thousands)

				<b>2014</b>		
		<b>Fair value</b>	<b>Aggregate face value</b>	<b>Delivery date(s)</b>	<b>Unrealized gains</b>	<b>Unrealized losses</b>
<b>Foreign currency exchange contracts purchased:</b>						
Australian Dollar	\$ 278,708	277,562	7/1/14–9/12/14	\$ —	(1,146)	
Brazilian Real	131,237	129,567	7/1/14–5/5/15	—	(1,670)	
British Pound	351,167	349,512	7/1/14–9/11/14	—	(1,655)	
Canadian Dollar	41,839	40,617	7/3/14–9/18/14	—	(1,222)	
Colombian Peso	26,593	25,887	7/7/14–8/29/14	—	(706)	
Euro	521,140	518,405	7/1/14–9/17/14	—	(2,735)	
Hungarian Forint	27,627	27,807	7/2/14–2/18/15	180	—	
Japanese Yen	82,648	82,234	7/1/14–9/12/14	—	(414)	
New Turkish Lira	25,522	25,367	7/1/14–9/17/14	—	(155)	
Russian Rubel	56,204	53,842	7/2/14–10/31/14	—	(2,362)	
South African Comm Rand	35,256	35,332	7/1/14–9/17/14	76	—	
Singapore Dollar	37,933	37,767	7/1/14–9/17/14	—	(166)	
Other foreign currencies	220,039	219,048	7/1/14–9/8/15	941	(1,932)	
<b>Foreign currency exchange contracts sold:</b>						
Australian Dollar	120,718	120,557	7/1/14–9/12/14	161	—	
Brazilian Real	93,305	92,580	7/1/14–8/4/14	725	—	
Chinese Yuan Renminbi	42,747	42,756	7/3/14–9/8/15	—	(9)	
Colombian Peso	40,604	39,165	7/1/14–10/15/14	1,439	—	
Euro	94,912	94,474	7/1/14–2/18/15	438	—	
Indian Rupee	31,973	31,702	7/2/14–9/17/14	271	—	
Malaysian Ringgit	28,490	28,155	7/4/14–8/25/14	335	—	
Mexican New Peso	46,153	46,051	7/1/14–10/22/14	102	—	
New Turkish Lira	31,998	32,024	8/5/14–9/17/14	—	(26)	
Peruvian Nuevo Sol	26,619	26,645	7/16/14–8/4/14	—	(26)	
Polish Zloty	40,545	40,786	8/11/14–9/17/14	—	(241)	
Russian Rubel	48,363	47,327	7/2/14–10/15/14	1,036	—	
Thailand Baht	25,645	25,635	7/16/14–9/17/14	10	—	
Other foreign currencies	162,678	161,867	7/1/14–11/19/14	1,429	(619)	
Total				\$ 7,143	(15,084)	

For the years ended June 30, 2015 and 2014, the change in net unrealized appreciation (depreciation) on foreign currency exchange contracts was \$(4,429) and \$(15,476), respectively.

**(b) Futures Contracts**

The PRIT Fund enters into financial and commodity futures on various exchanges. A futures contract is an agreement between two parties to buy or sell units of a particular index, security, or commodity at a set price on a future date. Upon entering into financial and commodity futures contracts, the PRIT Fund is required to pledge to the broker an amount of cash or securities equal to a certain percentage of the contract amount (initial margin deposit). Pursuant to the contract, the PRIT Fund agrees to

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receive from, or pay to, the broker an amount of cash equal to the daily fluctuation in value of the contract. Such receipts or payments are known as “variation margin” and are recorded by the PRIT Fund as unrealized gains or losses. When the contract is closed, the PRIT Fund records a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed. The potential risk to the PRIT Fund is that the change in value of futures contracts primarily corresponds with the value of underlying instruments, which may not correspond to the change in value of the hedged instruments. The PRIT Fund is also subject to credit risk should its clearing brokers be unable to meet their obligations to the PRIT Fund.

Futures contracts held at June 30 were as follows:

<b>Description</b>	<b>Number of contracts</b>	<b>Expiration date</b>	<b>2015</b>		
			<b>Gross notional amount</b>	<b>Fair value of notional amount</b>	<b>Unrealized appreciation (depreciation)</b>
Short cash and cash equivalents:					
90-Day Eurodollar	(3,243)	12/15-12/17	\$ (792,354)	(796,126)	(3,772)
Long cash and cash equivalents:					
90-Day Eurodollar	3,895	7/15-3/16	968,943	970,133	1,190
Other long cash and cash equivalents	1,642	9/15	173,229	173,642	413
Long fixed income:					
US 5-Yr Treasury Notes	818	9/15	97,279	97,553	274
US 10-Yr Treasury Notes	2,580	9/15	327,007	325,523	(1,484)
Ultra US Treasury Bond	1,490	9/15	231,003	229,553	(1,450)
Other long fixed income	4,041	8/15-9/15	61,747	64,493	2,746
Short fixed income:					
TSE 10-Yr Japanese Government Bond	(61)	9/15	(72,048)	(73,266)	(1,218)
US 10-Yr Treasury Notes	(386)	9/15	(48,770)	(48,702)	68
Other short fixed income	(631)	9/15	(107,490)	(105,804)	1,686
Short equity and commodities:					
Other short equity and commodities	(1,495)	7/15-9/15	(21,461)	(21,514)	(53)
Long equity and commodities:					
S&P 500 E-mini Index	6,319	9/15	661,075	649,088	(11,987)
S&P 500 Index	1,175	9/15	614,290	603,480	(10,810)
MINI MSCI Emerging Markets Index	4,264	9/15	205,358	204,544	(814)
MSCI EAFE Index	1,122	9/15	104,814	102,887	(1,927)
Dow Jones EURO STOXX 50 Index	1,477	9/15	58,338	56,545	(1,793)
Other long equity and commodities	3,378	7/15-9/15	353,241	348,252	(4,989)
Total futures exposure			\$ 2,814,201	2,780,281	(33,920)

**PENSION RESERVES INVESTMENT TRUST FUND**  
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(Dollars in thousands)

<b>Description</b>	<b>Number of contracts</b>	<b>Expiration date</b>	<b>2014</b>		
			<b>Gross notional amount</b>	<b>Fair value of notional amount</b>	<b>Unrealized appreciation (depreciation)</b>
Short cash and cash equivalents:					
90-Day Eurodollar	(957)	6/15	\$ (238,093)	(238,018)	75
Long cash and cash equivalents:					
90-Day Eurodollar	5,221	9/15–9/16	1,289,077	1,291,240	2,163
Other long cash and cash equivalents	1,295	9/14–3/17	191,732	194,193	2,461
Long fixed income:					
US 5-Yr Treasury Notes	2,738	9/14	326,983	327,084	101
US 10-Yr Treasury Notes	2,023	9/14	253,038	253,223	185
Ultra US Treasury Bond	1,431	9/14	211,165	214,561	3,396
Other long fixed income	1,543	8/14–9/14	33,425	34,883	1,458
Short fixed income:					
Australian 10-Yr Treasury Bond	(686)	9/14	(76,155)	(78,004)	(1,849)
US 2-Yr Treasury Notes	(275)	9/14	(60,380)	(60,388)	(8)
US 10-Yr Treasury Notes	(301)	9/14	(37,520)	(37,677)	(157)
US Treasury Bond	(443)	9/14	(60,231)	(60,774)	(543)
Other short fixed income	(402)	9/14	(103,653)	(105,294)	(1,641)
Long equity and commodities:					
S&P 500 E-mini Index	4,612	9/14	445,115	450,223	5,108
S&P 500 Index	1,175	9/14	566,295	573,518	7,223
MINI MSCI Emerging Markets Index	1,665	9/14	86,675	86,638	(37)
Dow Jones EURO STOXX 50 Index	1,182	9/14	52,622	52,305	(317)
Other long equity and commodities	2,897	7/14–9/14	332,153	337,850	5,697
Total futures exposure			\$ 3,212,248	3,235,563	23,315

For the years ended June 30, 2015 and 2014, the change in net unrealized appreciation (depreciation) on futures contracts was \$(57,235) and \$44,490, respectively.

**(c) Swaps**

The PRIT Fund enters into swap agreements to gain exposure to certain markets and actively hedge other exposures to market and credit risks. The PRIT Fund utilizes interest rate, credit default, inflation, and total return swaps within the portfolio. The PRIT Fund's OTC swap agreements are recorded at fair value as estimated by the PRIM Board. These estimated fair values are determined in good faith by using information from the PRIT Fund's investment managers, including methods and assumptions considering market conditions and risks existing at the date of the statements of pooled net position. Such methods and assumptions incorporate standard valuation conventions and techniques, such as

**PENSION RESERVES INVESTMENT TRUST FUND**  
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June 30, 2015 and 2014

(Dollars in thousands)

discounted cash flow analysis and option pricing models. All methods utilized to estimate fair values result only in general approximations of value, and such values may or may not actually be realized.

Open swap contracts at June 30 were as follows:

<b>Description</b>	<b>2015</b>					<b>Net unrealized appreciation (depreciation)</b>
	<b>PRIT pays/receives interest rate</b>	<b>PRIT pays/receives index/protection</b>	<b>Maturity date</b>	<b>Gross notional amount</b>		
Interest rate swaps	0.12%–13.92%	Various*	4/16–12/45	\$ 1,335,368		2,669
Inflation swaps	1.85%–3.52%	Inflation protection	3/16–12/44	61,214		(599)
Credit default swaps	0.11%–3.36%	Credit default protection	9/15–5/46	186,582		(5,677)
Total swaps				\$ 1,583,164		(3,607)

\* PRIT pays/receives counterparty based on 1-Month LIBOR, 3-Month USD LIBOR, 3-Month CNY rate, 3-Month HKD HIBOR rate, 3-Month SAFEX-JIBAR rate, 6-Month Euro LIBOR, 6-Month GBP LIBOR, 6-Month JPY LIBOR, 6-Month SGD rate, 6-Month THBFIIX rate, Brazil CDI rate, China seven-day repo rate, Mexican TIIE rate.

<b>Description</b>	<b>2014</b>					<b>Net unrealized appreciation (depreciation)</b>
	<b>PRIT pays/receives interest rate</b>	<b>PRIT pays/receives index/protection</b>	<b>Maturity date</b>	<b>Gross notional amount</b>		
Interest rate swaps	0.4%–12.56%	Various*	10/14–3/44	\$ 1,521,506		8,078
Inflation swaps	1.85%–2.07%	Inflation protection	2/16–3/18	116,010		92
Credit default swaps	0.18%–5.00%	Credit default protection	9/14–7/45	289,001		2,913
Total swaps				\$ 1,926,517		11,083

\* PRIT pays/receives counterparty based on 3-Month AUD BBSW, 6-Month AUD-BBR-BBSW, 3-Month LIBOR, 3-Month Euribor, Fed Funds rate, Brazil CDI rate, Mexican TIIE rate, 6-Month THBFIIX rate, and 3-Month KLIBOR.

For the years ended June 30, 2015 and 2014, the change in net unrealized appreciation (depreciation) on swap contracts was \$(14,690) and \$(8,929), respectively.

**PENSION RESERVES INVESTMENT TRUST FUND**  
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(Dollars in thousands)

The PRIT Fund's exposures in the event of nonperformance by counterparties at June 30 were as follows:

Counterparty	Credit rating	2015					
		Interest rate swaps		Credit default swaps		Inflation swaps	
		Gross notional	Fair value	Gross notional	Fair value	Gross notional	Fair value
Bank of America NA	A	\$ 966	(2)	33,385	(2,259)	—	—
Barclays Bank PLC	A-	47,978	160	31,513	(590)	54,860	(279)
CME Group Inc.	AA-	212,920	636	—	—	—	—
Citibank NA	A	21,807	52	10,213	(339)	—	—
Deutsche Bank AG	BBB+	6,899	68	26,300	(153)	—	—
LCH.Clearnet Ltd	A+	386,810	1,541	—	—	—	—
UBS AG	BBB+	23,797	(361)	21,071	(3)	—	—
U.S. Bank National Association	AA-	500,000	303	—	—	—	—
All others	Various	134,191	272	64,100	(2,333)	6,354	(320)
		<b>\$ 1,335,368</b>	<b>2,669</b>	<b>186,582</b>	<b>(5,677)</b>	<b>61,214</b>	<b>(599)</b>

Counterparty	Credit rating	2014					
		Interest rate swaps		Credit default swaps		Inflation swaps	
		Gross notional	Fair value	Gross notional	Fair value	Gross notional	Fair value
Barclays Bank PLC	A	\$ 23,150	291	12,500	(64)	116,010	92
CME Group Inc.	AA-	784,699	4,955	—	—	—	—
Citibank NA	A	181,717	107	29,361	14	—	—
Deutsche Bank AG	A	—	—	35,700	255	—	—
Intercontinental Exchange Inc.	A-	—	—	78,294	2,653	—	—
JPMorgan Chase Bank NA	A+	22,617	(19)	9,900	45	—	—
UBS AG	A	4,582	42	27,346	152	—	—
U.S. Bank National Association	AA-	500,000	2,603	—	—	—	—
All others	Various	4,741	99	95,900	(142)	—	—
		<b>\$ 1,521,506</b>	<b>8,078</b>	<b>289,001</b>	<b>2,913</b>	<b>116,010</b>	<b>92</b>

**(9) Management Fees**

In accordance with the PRIM Board's Operating Trust Agreement, expenses incurred by the PRIM Board in managing the PRIT Fund are charged to the PRIT Fund in the form of management fees. These expenses consist of investment management fees, investment advisory fees, custodian fees and professional fees, as well as staff salaries and other administrative expenses of the PRIM Board.

**PENSION RESERVES INVESTMENT TRUST FUND**  
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Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

**(a) *Investment Management Fees***

Investment management fees are paid to discretionary managers pursuant to executed contracts. Total investment management fees were \$83,142 and \$69,564 for the years ended June 30, 2015 and 2014, respectively.

All domestic, international, and emerging market equity managers are paid a base fee calculated as a percentage of either current net assets under management or an agreed-upon funded amount, typically equal to the amount of original and subsequent funding. In certain cases, this is subject to periodic revision. Base fees are paid quarterly. In addition, some active (nonindexed) equity managers are eligible to receive a performance fee. Such fees are earned annually by those managers whose annualized three-year performance exceeds the contractual benchmark by a specified minimum amount.

Fixed income managers are generally paid a quarterly asset-based fee. Certain managers are eligible for a performance fee.

Fees for private equity investments are typically a percentage of committed capital with the fee percentage decreasing over time. In addition, the general partners (investment managers) of private equity limited partnerships are entitled to a performance fee based on the net gains on realized partnership investments.

The LLC's investment management fees generally consist of a base fee and a performance fee. Base fees are calculated and paid monthly. Performance fees are paid every two years to managers who out-perform their respective hurdle rates.

Timberland investment management fees consist of a base fee and a performance fee component and are calculated and paid similar to the LLC's investment management fees; however, performance fees are paid every three years.

Hedge fund-of-funds investment managers are paid base fees, which are calculated and paid quarterly.

Fees for direct hedge fund investments generally consist of a base fee and a performance fee based on return.

The majority of investment management fees for private equity and distressed debt investments are charged by the general partners to the investment partnerships and not to the limited partner investors directly. All investment management fees for hedge funds and commingled account investments are charged to the respective investments. Base investment management fees for investments in real estate properties and timber are charged against the respective investments. Therefore, the fair values of these investments are reported net of "indirect" management fees.

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Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

**(b) Investment Advisory Fees**

NEPC, LLC, Callan Associates, Arden Asset Management, LLC, Hamilton Lane, and The Townsend Group served as the PRIM Board's principal investment advisors in fiscal year 2015. NEPC, LLC served as the asset allocation advisor, Callan Associates served as the public markets advisor, Arden Asset Management, LLC provided hedge fund advisory services, Hamilton Lane served as the private equity advisor, and The Townsend Group provided real estate and timberland advisory services. These investment advisors, among others, provided the PRIM Board with comprehensive investment advisory services, including recommendations on asset allocation, selection of investment managers, and the monitoring of performance of the PRIT Fund and its individual investment managers.

For the years ended June 30, 2015 and 2014, as compensation for their services, investment advisors earned fees aggregating \$4,161 and \$4,493, respectively, and are included in management fees in the accompanying statements of changes in pooled net position.

**(c) Custodian Fees**

BNY Mellon is the investment custodian and record keeper for the PRIT Fund. BNY Mellon records all daily transactions, including investment purchases and sales, investment income, expenses, and all participant activity for the PRIT Fund. BNY Mellon also provides portfolio performance analysis each month for the PRIT Fund.

In December 2013, BNY Mellon agreed to reimburse the PRIM Board \$15,450 in the form of a discount in custodian fees over a nine-year period to settle alleged foreign currency transaction overcharges from January 2000 to May 2011. In addition, BNY Mellon reimbursed the PRIM Board \$100 for legal fees incurred. For the years ended June 30, 2015 and 2014, custodian fees were \$674 and \$690, respectively, and are included in management fees in the accompanying statements of changes in pooled net position.

**(d) Other Administrative Fees**

For the years ended June 30, 2015 and 2014, other administrative expenses of the PRIM Board, including employee compensation, professional fees and occupancy costs, charged to the PRIT Fund totaled \$10,189 and \$9,417, respectively, and are included in management fees in the accompanying statements of changes in pooled net position.

**(10) Commitments**

As of June 30, 2015, the PRIT Fund had outstanding unfunded commitments to invest approximately \$5.2 billion in private equity, venture capital, distressed debt, hedge fund, and real estate investments.

**PENSION RESERVES INVESTMENT TRUST FUND**  
 (A Component Unit of the Commonwealth of Massachusetts)

Schedule of Pooled Net Position – Capital Fund and Cash Fund

June 30, 2015

(Dollars in thousands)

	<b>Capital Fund</b>	<b>Cash Fund</b>	<b>Total</b>
<b>Assets:</b>			
Investments, at fair value:			
Short-term	\$ 1,664,130	69,399	1,733,529
Fixed income	14,389,277	—	14,389,277
Equity	24,642,955	—	24,642,955
Real estate	7,678,800	—	7,678,800
Timberland	1,664,581	—	1,664,581
Private equity	6,980,423	—	6,980,423
Hedge funds	5,351,631	—	5,351,631
Other	94,909	—	94,909
Total investments	<u>62,466,706</u>	<u>69,399</u>	<u>62,536,105</u>
Cash	282,624	—	282,624
Securities lending collateral	557,158	—	557,158
Interest and dividends receivable	139,650	29	139,679
Receivable for investments sold and other assets	1,281,902	—	1,281,902
Securities sold on a when-issued basis	223,685	—	223,685
Unrealized gains on foreign currency exchange contracts	13,440	—	13,440
Total assets	<u>64,965,165</u>	<u>69,428</u>	<u>65,034,593</u>
<b>Liabilities:</b>			
Payable for investments purchased and other liabilities	1,007,366	—	1,007,366
Real estate debt	1,511,769	—	1,511,769
Securities lending obligations	557,135	—	557,135
Securities purchased on a when-issued basis	648,945	—	648,945
Unrealized losses on foreign currency exchange contracts	25,810	—	25,810
Management fees payable to PRIM	39,823	—	39,823
Total liabilities	<u>3,790,848</u>	<u>—</u>	<u>3,790,848</u>
Net position held in trust for pool participants	<u>\$ 61,174,317</u>	<u>69,428</u>	<u>61,243,745</u>

See accompanying independent auditors' report.

**PENSION RESERVES INVESTMENT TRUST FUND**  
 (A Component Unit of the Commonwealth of Massachusetts)

Schedule of Changes in Pooled Net Position – Capital Fund and Cash Fund

Year ended June 30, 2015

(Dollars in thousands)

	<b>Capital Fund</b>	<b>Cash Fund</b>	<b>Total</b>
<b>Additions:</b>			
Contributions:			
State employees	\$ —	580,527	580,527
State teachers	—	721,148	721,148
Other participants	—	877,252	877,252
Total contributions	<hr/> —	<hr/> 2,178,927	<hr/> 2,178,927
Net investment income:			
From investment activities:			
Net realized income on investments and foreign currency transactions	2,552,747	—	2,552,747
Net change in unrealized depreciation on investments and foreign currency translations	(1,730,479)	—	(1,730,479)
Interest income	269,864	267	270,131
Dividend income	650,996	—	650,996
Real estate income	260,366	—	260,366
Timberland income	11,854	—	11,854
Private equity income	151,001	—	151,001
<hr/> Management fees	<hr/> 2,166,349	<hr/> 267	<hr/> 2,166,616
Net income from investment activities	<hr/> (98,166)	<hr/> —	<hr/> (98,166)
<hr/> 2,068,183	<hr/> 267	<hr/> 2,068,450	
From securities lending activities:			
Securities lending income	5,624	—	5,624
Securities lending expenses	(698)	—	(698)
Net income from securities lending activities	<hr/> 4,926	<hr/> —	<hr/> 4,926
<hr/> 2,073,109	<hr/> 267	<hr/> 2,073,376	
Total net investment income	<hr/> 2,073,109	<hr/> 2,179,194	<hr/> 4,252,303
Total additions	<hr/> 2,073,109	<hr/> 2,179,194	<hr/> 4,252,303
<b>Deductions:</b>			
Redemptions:			
State employees	—	1,266,799	1,266,799
State teachers	—	1,650,026	1,650,026
Other participants	—	768,507	768,507
Total deductions	<hr/> —	<hr/> 3,685,332	<hr/> 3,685,332
Interfund transfers (out) in, net	<hr/> (1,502,350)	<hr/> 1,502,350	<hr/> —
Net increase (decrease) in pooled net position	570,759	(3,788)	566,971
Net position held in trust for pool participants:			
Balance, beginning of year	60,603,558	73,216	60,676,774
Balance, end of year	<hr/> \$ 61,174,317	<hr/> 69,428	<hr/> 61,243,745

See accompanying independent auditors' report.

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PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix K

### PRIM Audited Financials

*PRIM Board Meeting*  
*Tuesday, October 13, 2015*

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*Final Editorial Review Not Completed*

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**PENSION RESERVES INVESTMENT  
MANAGEMENT BOARD**

Financial Statements and Required Supplementary Information

June 30, 2015 and 2014

(With Independent Auditors' Report Thereon)

**PENSION RESERVES INVESTMENT  
MANAGEMENT BOARD**

Financial Statements and Required Supplementary Information

June 30, 2015 and 2014

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## **Independent Auditors' Report**

The Administrative and Audit Committee and Trustees,  
Pension Reserves Investment Management Board:

### **Report on the Financial Statements**

We have audited the accompanying financial statements of the Pension Reserves Investment Management Board (the PRIM Board), as of and for the years ended June 30, 2015 and 2014, and the related notes to the financial statements, which collectively comprise the PRIM Board's basic financial statements as listed in the table of contents.

#### ***Management's Responsibility for the Financial Statements***

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### ***Auditors' Responsibility***

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### ***Opinion***

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Pension Reserves Investment Management Board as of June 30, 2015 and 2014, and the changes in fiduciary net position for the years then ended, in accordance with U.S. generally accepted accounting principles.

***Other Matter – Required Supplementary Information***

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages 3-5 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

***Other Reporting Required by Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated **October 13, 2015** on our consideration of the PRIM Board's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the PRIM Board's internal control over financial reporting and compliance.

**October 13, 2015**

**PENSION RESERVES INVESTMENT  
MANAGEMENT BOARD**

Required Supplementary Information –  
Management’s Discussion and Analysis

June 30, 2015 and 2014

(Unaudited)

This section presents management’s discussion and analysis of the Pension Reserves Investment Management Board’s (the PRIM Board’s) financial performance for the fiscal years ended June 30, 2015 and 2014 and should be read in conjunction with the financial statements, which follow this section.

The PRIM Board was created by Massachusetts legislation to provide supervision of the management of the investments of the Pension Reserves Investment Trust Fund (the PRIT Fund).

**Overview of the Financial Statements**

The financial statements include the statements of fiduciary net position, which present the PRIM Board’s financial position as of June 30, 2015 and 2014, and the statements of changes in fiduciary net position, which present the PRIM Board’s financial activities for the years then ended. The notes to the financial statements provide additional information that is essential to a full understanding of the financial statements. The notes describe the significant accounting policies of the PRIM Board and provide detailed disclosures on certain account balances.

The PRIM Board’s financial statements are prepared in conformity with U.S. generally accepted accounting principles as applied to governmental fiduciary funds and employ the accrual basis of accounting.

**Financial Highlights and Analysis**

At June 30, 2015, the PRIM Board maintained a fiduciary net position value of zero, consistent with the prior year. Total assets and liabilities increased approximately 60.3% in fiscal year 2015, primarily due to higher accrued investment management fees, which were approximately \$37.3 million and \$22.1 million at June 30, 2015 and 2014, respectively.

Total assets and liabilities increased approximately 2.2% from June 30, 2013 to June 30, 2014, due to higher accrued investment management fees during the fiscal year.

	<b>June 30</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
(Amounts in thousands)			
Total assets	\$ 40,862	25,486	24,934
Total liabilities	<u>40,862</u>	<u>25,486</u>	<u>24,934</u>
Total fiduciary net position	\$ —	—	—

All expenses of the PRIM Board are reimbursed by the PRIT Fund; therefore, additions equaled deductions for the years ended June 30, 2015, 2014, and 2013.

**PENSION RESERVES INVESTMENT  
MANAGEMENT BOARD**

Required Supplementary Information –  
Management's Discussion and Analysis

June 30, 2015 and 2014

(Unaudited)

	<b>June 30</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
(Amounts in thousands)			
Total additions	\$ 98,576	84,199	73,406
<b>Deductions:</b>			
Investment management fees	83,180	69,599	57,571
Investment advisory fees	4,161	4,493	4,529
Custodian fees	674	690	2,700
Other expenses	10,561	9,417	8,606
Total deductions	<u>98,576</u>	<u>84,199</u>	<u>73,406</u>
Change in fiduciary net position	—	—	—
Fiduciary net position, beginning of year	—	—	—
Fiduciary net position, end of year	<u>\$ —</u>	<u>—</u>	<u>—</u>

The PRIM Board expenses were \$98.6 million for the year ended June 30, 2015 compared to \$84.2 million for the year ended June 30, 2014, representing a 17.1% increase in total expenses. Investment management fees, which include both base and performance fees, increased by \$13.6 million in fiscal 2015. Base fees decreased by \$0.7 million and performance fees increased by \$14.3 million. The base fee decreased 1.0% despite an increase in the PRIT Fund's assets under management due to rebalancing of assets and better fee negotiations. The performance fee increase was due to outperformance by a core real estate manager and a timberland manager. Investment advisory fees decreased 7.4% primarily due to lower contractual hedge fund advisory fees. Custodian fees decreased 2.3% due to lower contractual fee arrangements. Other operating expenses increased 12.1%, primarily due to Board-approved compensation and staff increases, higher legal fees and pension expense recognized in fiscal 2015, offset by lower occupancy costs. Occupancy costs decreased despite an expansion of office space due to a 7-year lease executed in September 2014 with better terms. GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, which was adopted by the PRIM Board effective in fiscal 2015, requires participating employers and nonemployers to recognize their proportionate share of the collective pension liability, deferrals and pension expense. For the year ended June 30, 2015, the PRIM Board recognized pension expense of \$372 and a corresponding amount of reimbursement income in the accompanying statement of changes in fiduciary net position. No liability is recognized in the PRIM Board financial statements because the Commonwealth funds all contributions to the plan. The 2014 and 2013 statements have not been retroactively restated as comparative information is not available from the Commonwealth.

**PENSION RESERVES INVESTMENT  
MANAGEMENT BOARD**

Required Supplementary Information –  
Management’s Discussion and Analysis

June 30, 2015 and 2014

(Unaudited)

The PRIM Board’s expenses were \$84.2 million for the year ended June 30, 2014 compared to \$73.4 million for the year ended June 30, 2013, a 14.7% increase in total expenses. Investment management fees, which include both base and performance fees, increased by \$12.0 million in fiscal 2014. Overall, base fees increased by approximately 22.7% and performance fees decreased by 35.2%. The base fee increase is attributable to an overall increase in the PRIT Fund’s assets under management and funding of new managers. The performance fee decrease was due to underperformance by fixed income and emerging markets equity managers compared to predetermined benchmarks partially offset by an increase in performance fees due to outperformance by a core real estate manager. Investment advisory fees decreased by approximately 0.8%, primarily due to the completion of certain projects which began in the prior fiscal year. The decrease was offset by higher contractual hedge fund advisory fees. Custodian fees decreased by 74.4%. The decrease was a result of significant fee discount that was negotiated as part of a foreign currency transaction overcharges claim settlement with BNY Mellon. Other operating expenses increased 9.4%, due to staff and office expansion, offset by lower legal fees, which were down 67%.

**Other Information**

This financial report is designed to provide a general overview of the PRIM Board’s financial results. Additional information can be found on the PRIM Board’s website at [www.mapension.com](http://www.mapension.com). Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Pension Reserves Investment Management Board, 84 State Street, Boston, Massachusetts 02109.

**PENSION RESERVES INVESTMENT  
MANAGEMENT BOARD**

Statements of Fiduciary Net Position

June 30, 2015 and 2014

(Dollars in thousands)

	<b>2015</b>	<b>2014</b>
<b>Assets:</b>		
Cash	\$ 21	41
Receivable from PRIT (notes 2 and 3)	39,823	24,592
Other assets	1,018	853
<b>Total assets</b>	<b>40,862</b>	<b>25,486</b>
<b>Liabilities:</b>		
Accrued custodian fees (note 4)	145	240
Accrued investment advisory fees (note 4)	1,155	963
Accrued investment management fees (note 4)	37,283	22,083
Other accrued expenses	2,279	2,200
<b>Total liabilities</b>	<b>40,862</b>	<b>25,486</b>
<b>Fiduciary net position</b>	<b>\$ —</b>	<b>—</b>

See accompanying notes to financial statements.

**PENSION RESERVES INVESTMENT  
MANAGEMENT BOARD**

Statements of Changes in Fiduciary Net Position

Years ended June 30, 2015 and 2014

(Dollars in thousands)

	<b>2015</b>	<b>2014</b>
Additions:		
Reimbursement of fees and other expenses (notes 2, 3 and 7)	\$ 98,576	84,199
Deductions (notes 2 and 4):		
Investment management fees:		
Base fees	67,748	68,437
Performance fees	15,432	1,162
Investment advisory fees	4,161	4,493
Custodian fees (note 4)	674	690
Other expenses:		
Salaries and employee benefits	6,109	5,180
Legal and audit fees	856	459
Occupancy	690	755
Pension (note 7)	372	—
Other	2,534	3,023
Total deductions	<hr/> 98,576	<hr/> 84,199
Change in fiduciary net position	—	—
Fiduciary net position, beginning of year	—	—
Fiduciary net position, end of year	<hr/> \$ —	<hr/> —

See accompanying notes to financial statements.

## PENSION RESERVES INVESTMENT MANAGEMENT BOARD

Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

### **(1) Description of the PRIM Board**

The Pension Reserves Investment Management Board (the PRIM Board) was created in 1983 by the Commonwealth of Massachusetts (the Commonwealth) through legislation (Chapter 661 of the Acts of 1983, as amended by Chapter 315 of the Acts of 1996), to provide general supervision of the investments and management of the Pension Reserves Investment Trust Fund (the PRIT Fund). The PRIT Fund was created by the same legislation and is the investment portfolio for the assets of the State Employees' and State Teachers' Retirement Systems, as well as local retirement systems that choose to invest in the PRIT Fund.

The PRIM Board is governed by a nine-member board of trustees. The Trustees include: (1) the Governor, ex officio, or his designee; (2) the State Treasurer, ex officio, or his designee, who shall serve as Chair of the PRIM Board; (3) a private citizen, experienced in the field of financial management, appointed by the State Treasurer; (4) an employee or retiree, who is a member of the State Teachers' Retirement System, elected by the members of such system, for a term of three years; (5) an employee or retiree, who is a member of the State Employees' Retirement System, elected by the members of such system for a term of three years; (6) the elected member of the State Retirement Board; (7) one of the elected members of the Teachers' Retirement Board chosen by the members of the Teachers' Retirement Board; (8) a person who is not an employee or official of the Commonwealth appointed by the Governor; and (9) a representative of a public safety union appointed by the Governor. Appointed members serve for a term of four years.

The PRIM Board seeks to maximize the return on investments within acceptable levels of risk for a public pension fund. Under current law (as amended by Section 45 of Chapter 68 of the Acts of 2011), by the year 2040, the PRIT Fund will have grown, through annual payments in accordance with a legislatively approved funding schedule and through total return of the PRIT Fund, to an amount sufficient to meet the then-existing pension obligations of the Commonwealth. The Commonwealth has adopted a schedule of state pension appropriations that assumes a long-term actuarial rate of return for the PRIT Fund of 7.75%.

The nine-member Board of Trustees has the authority to employ an Executive Director, outside investment managers, custodians, consultants, and others as it deems necessary; to formulate policies and procedures; and to take such other actions as necessary and appropriate to manage the assets of the PRIT Fund.

The PRIM Board is the legal custodian of the PRIT Fund and has fiduciary responsibility for the assets transferred to the PRIT Fund. The PRIM Board selects investment managers and advisors, reviews and evaluates performance, and performs various other activities in the daily management of the PRIT Fund. As of June 30, 2015 and 2014, the PRIT Fund had net assets totaling \$61,243,745 and \$60,676,774, respectively. Net assets increased \$566,971 in 2015 and increased \$7,447,149 in 2014. For a copy of the audited financial statements of the PRIT Fund, contact the PRIM Board.

### **(2) Summary of Significant Accounting Policies**

#### **(a) Basis of Accounting and Financial Statement Presentation**

The PRIM Board's financial statements are reported using the economic resources measurement focus and the accrual basis of accounting as specified by the Governmental Accounting Standards Board's (GASB's) requirements for fiduciary activities.

**PENSION RESERVES INVESTMENT  
MANAGEMENT BOARD**

Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

**(b) Additions and Deductions**

In accordance with the PRIM Board's operating trust, expenses incurred by the PRIM Board in managing the PRIT Fund are charged to the PRIT Fund in the form of management fees. These expenses consist of investment management, investment advisory, custodian and other professional fees, salaries, and expenses of the PRIM Board.

**(c) Use of Estimates**

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities, at the dates of the financial statements and the reported amounts of additions and deductions during the reporting periods. Actual results could differ from those estimates.

**(3) Receivable from PRIT**

The receivable from the PRIT Fund includes amounts due to the PRIM Board for reimbursement of management fees and other expenses incurred as a result of supervising the investments and management of the PRIT Fund. Certain investment management fees and other expenses are paid over a period longer than one year.

**(4) Investment Management, Investment Advisory, Custodian, and Other Fees**

**(a) Investment Management Fees**

Investment management fees are paid to managers pursuant to executed contracts.

All domestic, international, and emerging market equity managers are paid a base fee calculated as a percentage of either current net assets under management or an agreed-upon funded amount, typically equal to the amount of original and subsequent funding. In certain cases, this is subject to periodic revision. Base fees are paid quarterly. In addition, some active (nonindexed) equity managers are eligible to receive a performance fee. Such fees are earned annually by those managers whose annualized three-year performance exceeds the contractual benchmark by a specified minimum amount.

Fixed income managers are generally paid a quarterly asset-based fee. Certain managers are eligible for a performance fee.

Fees for private equity investments are typically a percentage of committed capital, with the fee percentage decreasing over time. In addition, the general partners (investment managers) of private equity investment limited partnerships are entitled to a performance fee based on the net gains on realized partnership investments.

**PENSION RESERVES INVESTMENT  
MANAGEMENT BOARD**

Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

Real estate and timberland investment management fees consist of a base fee and a performance fee. Base fees are calculated and paid monthly. Performance fees are paid every two years for real estate managers and every three years for timberland managers.

Hedge fund-of-funds investment managers are paid base fees, which are calculated and paid quarterly.

Fees for direct hedge fund investments generally consist of a base fee and a performance fee based on return.

The majority of investment management fees for private equity investments and distressed debt investments are charged by the general partners to the investment partnerships and not to the limited partner investors directly. All investment management fees for hedge funds are charged to the respective investments. Most investment management base fees for investments in real estate properties and timberland are charged against the respective investments. In addition, certain investments are in commingled funds, which charge fees at the fund level. Therefore, these investments are reported net of “indirect” management fees.

**(b) *Investment Advisory Fees***

NEPC, LLC, Callan Associates, Arden Asset Management, LLC, Hamilton Lane, and The Townsend Group served as the PRIM Board’s principal investment advisors in FY2015. NEPC, LLC served as the asset allocation advisor, Callan Associates served as the public markets advisor, Arden Asset Management, LLC provided hedge fund advisory services, Hamilton Lane served as the private equity advisor, and The Townsend Group provided real estate and timberland advisory services. These investment advisors, among others, provided the PRIM Board with comprehensive investment advisory services, including recommendations on asset allocation, selection of investment managers, and the monitoring of performance of the PRIT Fund and its individual investment managers.

For the years ended June 30, 2015 and 2014, as compensation for their services, investment advisors earned fees aggregating \$4,161 and \$4,493, respectively.

**(c) *Custodian Fees***

BNY Mellon is the custodian and record-keeper for the PRIT Fund. BNY Mellon records all daily transactions, including investment purchases and sales, investment income, expenses, and all participant activity, for the PRIT Fund. BNY Mellon also provides portfolio performance analysis each month for the PRIT Fund.

In December 2013, BNY Mellon agreed to reimburse the PRIM Board \$15,450 in the form of a discount in custodian fees over a nine-year period to settle alleged foreign currency transaction overcharges from January 2000 to May 2011. In addition, BNY Mellon reimbursed the PRIM Board \$100 for legal fees incurred. For the years ended June 30, 2015 and 2014, custodian fees were \$674 and \$690, respectively.

**PENSION RESERVES INVESTMENT  
MANAGEMENT BOARD**

Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

**(d) Other Expenses**

For the years ended June 30, 2015 and 2014, other expenses of the PRIM Board, including employee compensation, professional fees, occupancy costs, and fixtures and depreciation, charged to the PRIT Fund totaled \$10,189 and \$9,417, respectively.

**(5) Operating Leases**

The PRIM Board leases office space at 84 State Street in Boston, Massachusetts from a PRIT Fund real estate subsidiary. In September 2014, the PRIM Board amended the office lease by entering into a new lease with the PRIT Fund real estate subsidiary. The lease expires in August 2021 and includes an expansion of the office space.

For the years ended June 30, 2015 and 2014, total expenses incurred under operating leases were \$611 and \$667, respectively, which are included in occupancy expenses on the statements of changes in fiduciary net position.

The PRIM Board's future minimum payments under the noncancelable operating lease for office space in effect at June 30, 2015 are approximately as follows:

Fiscal year:		
2016	\$	672
2017		689
2018		705
2019		722
2020		739
Thereafter		881
Total	\$	<u>4,408</u>

**PENSION RESERVES INVESTMENT  
MANAGEMENT BOARD**

Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

**(6) Custodial Credit Risk**

At June 30, 2015 and 2014, the PRIM Board held no investments (investments are held by the PRIT Fund). As a result, its custodial credit risk was limited to its deposits. Custodial credit risk is the risk that, in the event of bank failure, the PRIM Board's deposits and investments may not be returned to it. The PRIM Board manages its exposure to custodial credit risk by requiring all cash to be held with a major financial institution. The PRIM Board has not adopted a formal custodial credit risk policy.

Cash balances represent amounts held in bank depository accounts that may be subject to custodial credit risk. As of June 30, 2015 and 2014, none of the PRIM Board's \$21 and \$41 cash balances, respectively, was uninsured or exposed to custodial credit risk.

**(7) Pension and Health Plans**

All full-time employees of the PRIM Board must participate in the Massachusetts State Employees' Retirement System (SERS). The percentage rate of contribution is determined by an employee's entry date into the SERS. Such employees become vested after ten years of creditable service. The Commonwealth is legally responsible for making all actuarially determined employer contributions on behalf of the PRIM Board.

GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, which was adopted by the PRIM Board effective in fiscal 2015, requires participating employers and nonemployers to recognize their proportionate share of the collective pension liability, deferrals and pension expense. The collective pension amounts of participating entities in SERS have been allocated based on actual employer contribution and nonemployer contributions made by the Commonwealth. For the year ended June 30, 2015, the PRIM Board recognized pension expense of \$372 and a corresponding amount of reimbursement income in the accompanying statement of changes in fiduciary net position. The 2014 statement has not been retroactively restated as comparative information is not available from the Commonwealth.

At June 30, 2015, the net pension liability associated with the PRIM Board was as follows:

	<u>2015</u>
Net pension liability	\$ <u>5,226</u>
Less:	
Nonemployer funding by the Commonwealth	<u>(5,226)</u>
Net pension liability as reported in the Statement of Fiduciary Net Position	<u>\$ —</u>

The net pension liability was measured as of June 30, 2014, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of January 1, 2014 rolled forward to June 30, 2014.

In addition to pension costs, the employer share of retiree health insurance costs has historically been paid by the Commonwealth and, accordingly, no expense or obligation for such benefits has been recognized in the accompanying financial statements.



PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix L

2015 Proxy Voting Update

*PRIM Board Meeting*  
*Tuesday, October 13, 2015*

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PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

# 2015 Proxy Voting Update

*Presentation to the PRIM Board*  
*October 13, 2015*

***Deborah B. Goldberg, Treasurer and Receiver General, Chair***  
***Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer***



# **PRIM Custom Policy Enhancements**

---

- PRIM implemented the following enhancements in 2015:

## **Board Diversity**

- Vote AGAINST /WITHHOLD from all board nominees if less than 25 percent of board is diverse in terms of both gender and race.

## **Equal Employment Opportunity**

- Vote FOR shareholder proposals requesting nondiscrimination in salary, wages and all benefits.
- Vote FOR shareholder proposals calling for action on equal employment opportunity and antidiscrimination.

## **Labor and Human Rights Standards**

- Vote FOR shareholder proposals to implement human rights standards and workplace codes of conduct.

## **Linking Executive Compensation to Non-Financial Factors**

- Vote FOR shareholder proposals calling for linkage of executive pay to non-financial factors including performance against social and environmental goals, customer/employee satisfaction, corporate downsizing, community involvement, human rights, or predatory lending.
- Vote FOR shareholder proposals seeking reports on linking executive pay to non-financial factors.

# **PRIM Custom Policy Enhancements (continued)**

---

- PRIM implemented the following enhancements in 2015:

## **Human Rights Risk Assessment**

- Vote FOR proposals requesting that a company conduct an assessment of the human rights risks in its operations or in its supply chain, or report on its human rights risk assessment process.

## **Recycling**

- Vote FOR shareholder proposals requesting the preparation of a report on the company's recycling efforts.
- Vote FOR shareholder proposals that ask companies to increase their recycling efforts or to adopt a formal recycling policy.

## **Renewable Energy**

- Vote FOR shareholder proposals seeking: 1) reporting on activities related to development of renewable energy sources and 2) increased investment in renewable energy sources unless the terms of the resolution are overly restrictive.

## **Energy Efficiency**

- Vote FOR shareholder proposals requesting a report on company energy efficiency policies and/or goals.

## **Tobacco Advertising**

- Vote FOR shareholder proposals seeking a report on a tobacco company's advertising approach.

# ***Impact of Changes to 2015 (May - June) Proxy Votes***

---

	2015 Custom Policy (Actual Votes)	Based on Previous 2014 Custom Policy (Hypothetical)	Difference
<b>Board Diversity</b>			
For	32.6%	85.1%	52.5%
Against/Withhold	67.4%	14.9%	
Total Votes	10,512	10,512	
<b>Labor and Human Rights Standards</b>			
For	80.0%	20.0%	60.0%
Against/Withhold	20.0%	80.0%	
Total Votes	5	5	
<b>Linking Executive Compensation to Non-Financial Factors</b>			
For	100%	-	100.0%
Against/Withhold	-	100%	
Total Votes	4	4	
<b>Human Rights Risk Assessment</b>			
For	100%	50.0%	50.0%
Against/Withhold	-	50.0%	
Total Votes	4	4	
<b>Recycling</b>			
For	100%	100%	0.0%
Against/Withhold	-	-	
Total Votes	4	4	
<b>Renewable Energy</b>			
For	100%	100%	0.0%
Against/Withhold	-	-	
Total Votes	2	2	

# ***ISS Contract Extension***

---

- Given ISS' knowledge of PRIM's Custom Policy evolution, it has proven to be very beneficial to have continuity in the Proxy Voting Advisory Services provider especially given all the proxy voting changes PRIM initiated in 2015.
  
- PRIM Staff is proposing extending ISS Proxy Voting Advisory Services contract for one additional year - through December 31, 2016.

# **Next Steps**

---

PRIM Staff recommended timeline for updating 2016 Custom Policy to better align enhancements with Proxy Voting Season.

## Timeline:

- December – ISS Releases Updated 2016 Benchmark Voting Policies
- January – Administration and Audit Committee may recommend enhancements to PRIM's Custom 2016 Policy
- February – ISS Global Policy Updates will take effect for meetings that occur on or after February 1, 2016
- February – PRIM Board approves proxy voting policy



PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix M

2016 Proposed PRIM Board and Committee Schedule

*PRIM Board Meeting*  
*Tuesday, October 13, 2015*

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## **Committee and Board Meeting Potential Dates.**

### **January 2016.**

Tuesday, January 19, 2016 - Investment Committee.  
Wednesday, January 20, 2016 – Real Estate and Timberland Committee.  
Thursday, January 21, 2016 – Admin and Audit Committee.

### **February 2016**

Tuesday, February 2, 2016 – Board Meeting.

### **March 2016**

Tuesday, March 22, 2016 – Investment Committee.  
Wednesday, March 23, 2016 – Real Estate and Timberland Committee.  
Thursday, March 24, 2016 – Admin & Audit Committee.

### **April 2016**

Tuesday, April 5, 2016 – Board Meeting.

### **May 2016**

Tuesday, May 24, 2016 – Investment Committee.  
Wednesday, May 25, 2016 – Real Estate and Timberland Committee.  
Thursday, May 26, 2016 – Admin and Audit Committee.

### **June 2016**

Tuesday, June 7, 2016 – Board Meeting.

### **July 2016**

Tuesday, July 26, 2016 – Investment Committee.  
Wednesday, July 27, 2016 – Real Estate and Timberland Committee.  
Thursday, July 28, 2016 – Admin and Audit Committee.

### **August 2016**

Tuesday, August 9, 2016 – Board Meeting.

### **September 2016**

Tuesday, September 20, 2016 – Investment Committee.  
Wednesday, September 21, 2016 – Real Estate and Timberland Committee.  
Thursday, September 22, 2016 – Admin & Audit Committee.

### **October 2016**

Tuesday, October 4, 2016 – Board Meeting.

### **November 2016**

Tuesday, November 15, 2016 – Investment Committee.  
Wednesday, November 16, 2016 – Real Estate and Timberland Committee.  
Thursday, November 17, 2016 – Admin and Audit Committee.  
Thursday, November 17, 2016 – Compensation Committee.

### **December 2016**

Tuesday, December 6, 2016 – Board Meeting.

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PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix N

Due Diligence Travel, Trustee and Staff Fiduciary Education, and Professional Development

*PRIM Board Meeting*  
*Tuesday, October 13, 2015*

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PRIM BOARD  
 Due Diligence Travel, Trustee and Staff Fiduciary Education, and Professional Development  
 FY 2016

<i>Dates</i>	<i>Name</i>	<i>Organization</i>	<i>Location</i>	<i>Purpose</i>	<i>Due Diligence Travel</i>	<i>Staff Development</i>
7/1/2015	Morgan Burns	CFA Level II	Boston, MA	Fiduciary Education	1,498.56	
	Total Morgan Burns				1,498.56	
7/13/15-7/14/15	John LaPosta	Institutional Investor Forum	New York City, NY	Fiduciary Education	1,270.06	
8/24/15-8/25/15	John LaPosta	Progress Investment Management	San Francisco, CA	Due Diligence	586.20	
	Total John LaPosta				586.20	1,270.06
7/15/15-7/16/15	Erin McCafferty	ICS New England Impact Capitalism Summit	Boston, MA	Fiduciary Education	2,019.96	
7/28/2015	Erin McCafferty	Ascent Venture	Boston MA	Due Diligence	78.88	
	Total Erin McCafferty				78.88	2,019.96
7/14/15-7/15/15	Eric Nierenberg	Delivering Alpha Conference	New York City, NY	Fiduciary Education	847.79	
7/14/15-7/15/15	Eric Nierenberg	Meeting with Arden	New York City, NY	Due Diligence	847.79	
	Total Eric Nierenberg				847.79	847.79
8/24/15-8/25/15	Sarah Samuels	Progress Investment Management and potential managers	San Francisco and Los Angeles	Due Diligence	525.00	
	Total Sarah Samuels				525.00	-
7/27/15-7/31/15	Tim Schlitzer	Property Tours and potential managers	London and Paris	Due Diligence	5,350.62	
	Total Tim Schlitzer				5,350.62	-
7/19/15-7/22/15	Robert Brousseau	Opal Conference	Newport, RI	Fiduciary Education	1,240.86	
	Total Robert Brousseau				-	1,240.86
7/19/15-7/22/15	Dennis Naughton	Opal Conference	Newport, RI	Fiduciary Education	1,067.76	
	Total Dennis Naughton				-	1,067.76
7/19/15-7/22/15	Paul Shanley	Opal Conference	Newport, RI	Fiduciary Education	1,373.54	
	Total Paul Shanley				-	1,373.54