



PENSION RESERVES
INVESTMENT
MANAGEMENT BOARD

Board Meeting
Tuesday, August 11, 2015
9:30 a.m.

I. MINUTES. (Voting Item)

II. EXECUTIVE DIRECTOR/CHIEF INVESTMENT OFFICER REPORT.

III. INVESTMENT REPORT.

- A. Public Markets Portfolio Update.
- B. Investment Research Update: Foreign Currency Hedging.
- C. Hedge Funds.
 - 1. Portfolio Update.
 - 2. Direct Hedge Fund Investment Recommendation: Mudrick Capital Distressed Opportunity Strategy.
(Voting Item)
- D. Private Equity.
 - 1. Performance Summary and Cash Flows.
 - 2. Commitment Summary.
- E. Real Estate and Timberland.
 - 1. Performance Review and Market Update.
 - 2. Timberland Appraiser Request for Qualifications – Search Committee Recommendation.
(Voting Item)
 - 3. TA Associates Realty – Termination Recommendation. **(Voting Item)**

IV. FINANCE AND ADMINISTRATION REPORT.

- A. Legal / Legislative Update.
- B. June 2015 PRIM Budget.
- C. Travel and Staff Development Update.
- D. Client Services.

V. LITIGATION UPDATES (EXECUTIVE SESSION).



Appendices

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

I. Minutes. (Voting Item)

The minutes of the PRIM Board meeting on June 4, 2015 are contained at **Appendix A**.

II. Executive Director/Chief Investment Officer Report.

Organizational Updates

I am pleased to announce Amaran Soja joined PRIM in July as the new Executive Assistant to Chris and me. Amaran joins us from Governo Law Firm where she was a Senior Legal Secretary supporting senior partners. Prior to that, Amaran worked at Liberty Mutual and also interned for Senator Ted Kennedy in Constituent Services. Amaran graduated from Westfield State with a B.A. in Political Science. She has already begun studying for the CFA Institute's Claritas Program which covers the essentials of finance, ethics, and global investments.

Erin McCafferty, on the Private Equity team, was promoted to Senior Investment Officer. Erin joined PRIM in April 2014 as an Investment Officer. At the time of her hiring, it was the only opening available on the team, but we communicated to her that if she performed well, she would be eligible for a promotion after one year's time when another Senior Investment Officer position would be available in the budget. Erin performed very well over her first year and we are delighted to promote her. She is a highly-valued member of the PRIM team and we look forward to her contributions.

In other news, we announced a new program at PRIM to pilot a cross-training and career development program. Many of our peers around the nation have similar plans in order to develop employee interdisciplinary skills and to reduce silos in their organizations. One of the great attractions of PRIM, and a reason why many people join PRIM, is to gain exposure to our large, sophisticated and complex investment program spanning several asset classes. This program will allow our high-performing employees to grow their expertise beyond their core responsibilities. We are calling the program the PRIM Professional Development Program and we announced that Sarah Samuels, PRIM's Deputy Chief Investment Officer and Director of Public Markets and Research, will be the first participant.

Sarah will rotate through private equity, real estate, hedge funds and risk management for four month intervals to learn more about them, to contribute to their work, and to encourage cross fertilization of ideas and initiatives. Sarah is an excellent first choice because she is the Deputy Chief Investment Officer, she has consistently demonstrated an eagerness and an ability to work cooperatively with others, and she has built a very strong team in public markets who can assume additional responsibilities. This program, if it is successful, and we have every reason to believe it will be, will be offered to additional, high-performing employees next year, and in the coming years.

Market Analysis and PRIT Fund Performance

The mixed economic data around the globe coupled with continued turbulence in Greece, China, Puerto Rico, and the Middle East, continues to fuel market volatility. At the Investment Committee meeting last month, we spoke of developments around the globe that could indicate that the markets, now well into the 7th year of expansion, are acting as if they are in a peak zone. The anemic market performance for fiscal year 2015 validates our concerns and makes us comfortable with our asset allocation changes that were implemented in order to reduce the PRIT Fund's volatility. Specifically, we brought our global equities target down from 49% five years ago to 40% today, and we are continuing our search for non-correlated, diversifying asset classes such as U.S. Treasury securities and Portfolio Completion Strategies.

For the calendar year through June 2015, markets have weakened and international markets, for the first time in many years, led the U.S market, partly due to a divergence in global monetary policies. While international economies are implementing stimulative monetary policies with lower interest rates, the U.S.

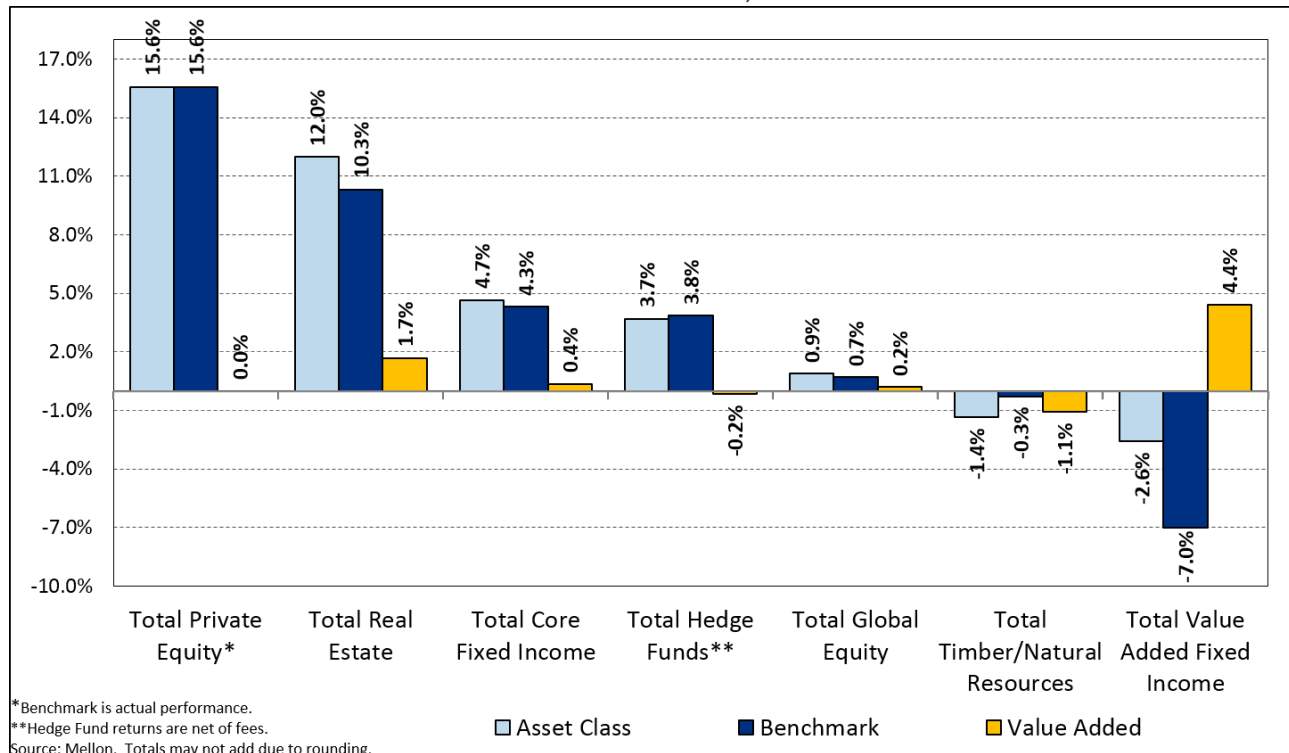
is nearing the implementation of tighter monetary policy through higher interest rates. There is still abundant uncertainty of the exact timing, but it is widely anticipated that the Federal Reserve will raise interest rates before the end of the calendar year. As a result, for the calendar year through June, U.S Large Cap equities are up only 1.2%, while developed international and emerging markets equities are up 5.5% and 2.9%, respectively. Diversified bonds are nearly flat for the calendar year, while long-duration Treasuries are down 9.6%.

Following very strong fiscal years in 2013 and 2014 in which the PRIT Fund was up 12.7% and 17.6%, respectively, markets weakened in fiscal year 2015. U.S. Large Cap equities were up 7.4% in the one-year period ending June 2015, while developed international equities were down 4.2% and emerging market equities were down 5.1%. Diversified bonds were up 1.9%, while long-duration Treasuries were up 8.9%.

The PRIT fund was up 3.9% in fiscal 2015, outperforming the benchmark by 113 basis points. The PRIT Fund's net asset value was \$61.2 billion on June 30, 2015. For the one-year period ending June 30, 2015.

- This performance equates to an investment gain of \$2.35 billion.
- This outperformance equates to \$684 million of value above the benchmark return.
- Net total outflows to pay benefits in fiscal 2015 were approximately \$1.5 billion.
- Five of the seven major asset classes outperformed their benchmarks.

PRIT Asset Class Performance (Gross of Fees)
One Year Ended June 30, 2015



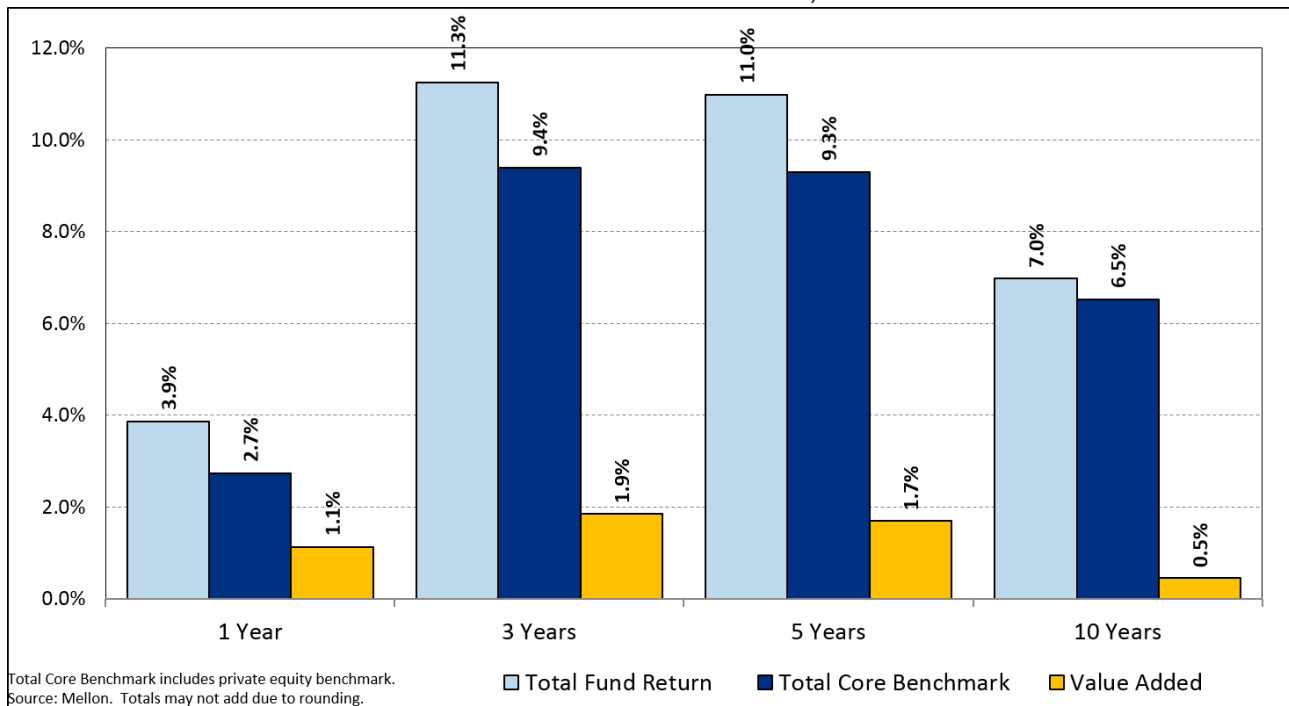
Trailing 1-Year Performance: June 30, 2015	Return	Benchmark Return	Over/(Under) Benchmark (bps)	\$Value (millions)	% of PRIT Fund
Total PRIT Fund	3.9%	2.7%	113	61,174	100%
Total Global Equity	0.9%	0.7%	19	26,098	42.7%
<i>Domestic Equity</i>	6.8%	7.1%	(37)	11,745	19.2%
<i>International Developed</i>	-2.8%	-4.5%	178	10,341	16.9%
<i>Emerging Markets</i>	-5.9%	-3.9%	(193)	4,011	6.6%
Private Equity	15.6%	15.6%	0	6,936	11.3%
Real Estate	12.0%	10.3%	167	6,093	10.0%
Timberland/Natural Resources	-1.4%	-0.3%	(107)	2,347	3.8%
Hedge Funds	3.7%	3.8%	(16)	5,575	9.1%
Value Added Fixed Income	-2.6%	-7.0%	441	5,053	8.3%
Core Fixed Income	4.7%	4.3%	38	8,378	13.7%

Performance for the fiscal year was driven by strong results in our alternative investments and core fixed income, while global equities, value-added fixed income and timberland/natural resources portfolios were weaker. We will review each asset class in more detail at the Board meeting.

Results for the 3, 5 and 10-year periods were strong on an absolute and relative basis; Alternative investments, specifically private equity and real estate, have consistently been top-performers, as depicted in the charts below.

Total PRIT Fund Returns (Gross of Fees)

Annualized Returns as of June 30, 2015



PRIT Asset Class Performance (Gross of Fees)

Annualized Returns as of June 30, 2015

1 Year	3 Year	5 Year	10 Year
Private Equity 15.6%	Private Equity 18.7%	Private Equity 18.4%	Private Equity 16.9%
Real Estate 12.0%	Global Equity 13.7%	Real Estate 13.8%	Real Estate 8.6%
Core Fixed Income 4.7%	Real Estate 12.8%	Global Equity 12.7%	Value-Added Fixed Income 7.7%
Hedge Funds 3.7%	Hedge Funds 8.8%	Value-Added Fixed Income 7.0%	Global Equity 6.7%
Global Equity 0.9%	Timber / Natural Resources 6.2%	Hedge Funds 6.4%	Timber / Natural Resources 6.4%
Timber / Natural Resources (1.3%)	Value-Added Fixed Income 4.9%	Timber / Natural Resources 5.8%	Hedge Funds 4.9%
Value-Added Fixed Income (2.6%)	Core Fixed Income 3.3%	Core Fixed Income 4.7%	Core Fixed Income 4.7%

The following detailed performance reports on the PRIT Fund as of June 30, 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. Investment Report.

A. Public Markets Portfolio Update.

Sarah N. Samuels, CFA, Deputy Chief Investment Officer, will provide an update on the public markets portfolio strategies. Ms. Samuels' presentation is contained at **Appendix E**.

B. Investment Research Update: Foreign Currency Hedging.

Sarah N. Samuels, CFA and Andre Clapp, Ph.D, CFA will present their research on the empirical findings and practical implications of implementing a developed market foreign currency hedging strategy. The presentation is contained at **Appendix F**.

C. Hedge Funds.

1. Portfolio Update.

Eric R. Nierenberg, Ph.D., Senior Investment Officer – Director of Hedge Funds and Low Volatility Strategies, will provide an update on the hedge fund portfolio.

2. Direct Hedge Fund Investment Recommendation: Mudrick Capital Distressed Opportunity Strategy. **(Voting Item)**

Manager Name:	Mudrick Capital Management
Fund/Strategy Name:	Mudrick Distressed Opportunity
Manager Size:	\$1.2 billion
Fund/Strategy Size:	\$780 million

Firm Overview

The Mudrick Distressed Opportunity strategy aims to achieve equity-like returns with credit-like risk and volatility in a relatively uncorrelated fashion to the overall markets. The portfolio is comprised of long and short investments primarily in distressed leveraged loans, distressed bonds, post-bankruptcy securities and other event driven special situations. Mudrick seeks to use the potential or actual restructuring process as a catalyst to capture the spread between market price and net asset values. Mudrick seeks to purchase cash flow positive businesses at low multiples of operating cash flow and uses its short portfolio to hedge longs, market/macro risks and generate alpha from overvalued securities. The strategy focuses primarily in North America and looks across the capital structure.

In addition to the issuer size premium enjoyed by the strategy, Mudrick's portfolio also offers uncorrelated returns to other stressed/distressed managers. Mudrick has been able to deploy capital in the current market environment and has been able to avoid larger "on-the-run" investment names with significant market beta. The combination of detailed bottom up analysis with the middle market focus has led to significant "credit selection alpha" relative to the index over time.

Firm History and Ownership

Mudrick Capital was founded in February 2009 by Jason Mudrick; the fund has an event-driven stressed/distressed credit mandate with catalysts coming from the restructuring process. Prior to founding Mudrick Capital, Jason Mudrick joined Contrarian Capital Management in 2001 where he focused on distressed investing. In October 2002, Mudrick launched the Contrarian ("post re-org") Equity Fund, which was an investment vehicle focused on purchasing distressed debt that would be restructured into equity, post-bankruptcy equities and other event-driven deep value special situations. As Managing Director and Portfolio Manager at Contrarian, Jason Mudrick grew the Contrarian Equity Fund to peak assets of approximately \$400mn and close to \$1bn in total assets for the strategy (including the positions in Contrarian's other funds co-invested alongside Jason's fund). Jason left Contrarian in October 2008 to launch Mudrick Capital. The Contrarian fund has an audited track record (19.5% net annualized return) from October 2002 – October 2008.

The firm has 17 employees, of which 8 are investment professionals. The firm has been looking to further match assets to investor liabilities and has announced its plan to close the quarterly investor share class to new investors (currently representing \$500mn) at year-end and concurrently launch a drawdown vehicle. The firm also manages two sidecar funds allowing investors to size up its media (15% NAV) and energy themes (20% NAV); these sidecar funds were created in 2014 and 2015 respectively.

Officer	Biography
Jason Mudrick, President & Chief Investment Officer	<p>Jason Mudrick is the primary risk taker at the firm. Mudrick is actively involved in the corporate restructuring process and has served on multiple creditors' committees and served on the Board of Directors of numerous public and private companies including Safety-Kleen Holdings, Integrated Alarm Services Group, Salton and Rotech Healthcare.</p> <p>In October 2002 Jason Mudrick launched the Contrarian ("post re-org") Equity Fund which was an investment vehicle focused on purchasing distressed debt that would be restructured into equity, post-bankruptcy equities and other event-driven deep value special situations. As Managing Director and Portfolio Manager at Contrarian, Jason Mudrick grew the Contrarian Equity Fund to peak assets of ~\$400mn and close to \$1bn in total assets (including the positions Contrarian's other funds co-invested alongside Jason's fund). Jason left Contrarian in October 2008 to launch Mudrick Capital. The fund has an audited track record (19.5% net annualized return) from October 2002 – October 2008.</p> <p>Jason earned a B.A. in Political Science from the University of Chicago and a J.D., <i>cum laude</i>, from Harvard Law School.</p>
Victor Danh Head of Research & Senior Analyst	<p>Victor Danh is Head of Research and a Senior Analyst at Mudrick Capital. He is responsible for analyzing distressed credit and equity opportunities across a diverse range of industries and oversees the research team.</p> <p>Danh focused on deep value and distressed investments in a wide range of industries across the entire capital structure while at Contrarian with Jason Mudrick.</p> <p>Victor earned an A.B. in Economics from Harvard University.</p>
David Kirsch Senior Analyst	<p>David Kirsch is a Senior Analyst at Mudrick Capital responsible for analyzing distressed credit and equity opportunities across a diverse range of industries.</p> <p>David was a Senior Analyst and Managing Director at Miura Global Management (a global long-short equity hedge fund) covering the financial and consumer industries across the Americas, Europe and Asia.</p> <p>David has restructuring experience as a Director at Alvarez & Marsal. He served in management roles on an interim basis for distressed companies and advised creditors on balance sheet solutions. Engagements include representing Senior Secured Creditors in the Delphi and Oneida restructurings and overseeing the Tarragon (public real estate development company) Finance Department during its restructuring.</p>

David earned a B.S. in Economics, *magna cum laude*, from the Wharton School at the University of Pennsylvania.

Fund Strategy

Mudrick focuses on “off-the-run” opportunities typically overlooked by larger distressed-focused firms; its investment universe consists of companies with enterprise values between \$500mn-\$2bn (“middle market” companies). Mudrick Capital is a value-focused, fundamentally driven investment firm with a niche in identifying value created by balance sheet events, or more generally, the restructuring process (potential or realized). Balance sheet events are used as a catalyst to capture the spread between market and net asset values. The fund focuses on low security valuations with a higher perceived margin of safety (2-4x EBITDA, cash flow positive) and repairable capital structures.

Investment Characteristics

- (i) low securities valuations and higher perceived margin of safety (2-4x EBITDA; cash flow positive; large discount to asset value: expanding margins).
- (ii) “good” businesses with repairable capital structures (i.e., companies with high barriers to entry, difficult to replicate).
- (iii) securities trading at discounted valuations due to event-related dynamics (facing technical selling pressure, complex and difficult to analyze distressed situations, possessing potential catalysts for value recognition).
- (iv) favorable risk/reward opportunities (capital structure arbitrage, pre-bankruptcy, distressed securities, post-bankruptcy securities).

Risk Management and Operational Review

Mudrick seeks to control risk through its bottom-up research approach on each individual security (roughly 35-40 names). Mudrick utilizes a deep value investment methodology of seeking to purchase free cash flow positive businesses at low multiples of earnings to provide some margin of safety. The strategy guidelines generally call for limited or no use of leverage on the long side and some hedging using bond shorts, CDS and equity index puts to manage downside risk. Additionally, the firm has been very deliberate in matching the liquidity terms of the strategy with the liquidity of the underlying assets in the portfolio.

Additional flexibility will be provided in the mandate to allow Mudrick to invest up to 20% of the portfolio in opportunistic, less liquid or other investments not otherwise accessible through the Mudrick flagship program or as otherwise agreed by the parties.

Recommendation

The Investment Committee and PRIM Staff are recommending that the PRIM Board approve an initial allocation of up to \$150 million to the Mudrick Capital Distressed Opportunity strategy.

D. Private Equity.

1. Performance Summary and Cash Flows.

PRIM Board Private Equity Portfolio Performance as of June 30, 2015 ¹					
Committed	Contributed ²	Distributed	Market Value	Total Value	Net IRR ³
16,387,226,490	13,517,411,775	14,733,843,875	6,805,240,229	21,539,084,104	13.23%

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 ¹

Quarter	Contributions ²	Distributions	Net Cash Flow
31-Mar-15	283,673,072	395,791,674	112,118,602
30-Jun-15	327,220,461	615,355,722	288,135,261
30-Sep-15			
31-Dec-15			
TOTAL	\$610,893,533	\$1,011,147,396	\$400,253,862

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

E. Real Estate and Timberland

1. Performance Review and Market Update.

Real Estate.

Total Real Estate Performance.

Through June 30, 2015, returns for real estate over periods of one, three, five and ten years are as follows:

	PRIM Real Estate	Combined Benchmark*	Out/Under Performance
1 Year	12.0%	10.3%	1.7%
3 Year	12.8%	11.2%	1.6%
5 Year	13.8%	12.9%	0.8%
10 Year	8.6%	7.9%	0.7%

**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 June 30, 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	15.30%	12.70%	2.50%
3 Year	14.00%	11.50%	2.50%
5 Year	14.40%	12.80%	1.70%
10 Year	9.50%	8.40%	1.10%

**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 June 30, 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	-2.30%	-2.90%	0.60%
1 Year	0.90%	0.30%	0.70%
3 Year	9.50%	9.40%	0.10%
5 Year	12.40%	12.50%	-0.10%
10 Year	5.30%	5.00%	0.40%

**FTSE EPRA NAREIT Developed Net Total Return as of June 30, 2015.*

Commentary - Real Estate.

As of June 30, 2015, the real estate portfolio was valued at \$6.1 billion, 10% of the PRIT Fund, which is at the target allocation. Core real estate assets represent 74% of the total real estate portfolio, 7% is invested in non-core assets, and 19% of the portfolio is invested in REITs. The remainder is in short term cash pending reinvestment.

The private real estate portfolio returned 15.3% for the one-year period ended June 30, 2015, 254 basis points above benchmark. PRIM outperformed on both a levered and unlevered basis. One year NCREIF returns were driven by strong industrial and retail performance, which returned 14.2% and 13.8%, respectively. NCREIF apartment returns underperformed within the group, returning 11.0%. Year to date, PRIM's advisors have acquired seven new properties for \$558.1 million in equity and

sold one property that resulted in a net distribution of \$74.7 million.

PRIM's Global REIT portfolio returned 0.9% for the one-year period ended June 30, 2015, outperforming the benchmark by 65 basis points. Global REIT markets decreased 5.7% in the second quarter with the Americas leading on the downside, returning -10.0%. Global markets were down -4.0% in June with all regions showing negative returns. Recent volatility continues to be driven primarily by interest rate fears and shifts in global sentiment based on a number of macroeconomic themes including Greek debt and Chinese equity markets. While much of the world is showing signs of strengthening economies, these global dynamics may slow growth rates in certain regions and impact bond yields in the near term. Geopolitical undercurrents are also creating greater volatility across equity and bond markets, currencies and interest rates.

The U.S. is experiencing the strongest job growth since the 1990's. U.S. jobs have moved above their pre-crisis levels with accelerating job growth leading to lower unemployment rates. Vacancy rates are now approaching long term averages resulting in higher growth trends in rents and operating incomes. The Pension Real Estate Association's most recent investor survey indicated expected commercial real estate returns of 8% over the next five years. Transaction levels for individual properties are now above the prior peak in 2007 at over \$300 billion (2014). This strong performance has resulted in historically low cap rates.

Timberland.

Timberland Performance.

Through June 30, 2015, returns for timberland over periods of one, three, five and ten years are as follows:

	PRIM Timberland	Benchmark*	Out/Under Performance
1 Year	9.7%	10.6%	-0.9%
3 Year	9.4%	9.8%	-0.4%
5 Year	6.5%	6.2%	0.3%
10 Year	8.7%	8.6%	0.1%

** 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 June 30, 2015, returns for timberland and natural resources over periods of one, three, five and ten years are as follows:

	PRIM Total Natural Resources	Benchmark*	Out/Under Performance
1 Year	-1.4%	-0.3%	-1.1%
3 Year	6.2%	7.4%	-1.2%
5 Year	5.8%	6.3%	-0.5%
10 Year	6.4%	6.1%	0.4%

** 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 and Natural Resources.

As of June 30, 2015, the timberland and natural resources portfolio was valued at \$2.3 billion, 3.8% of the PRIT Fund, which is 0.2% below the target allocation. Timberland investments comprise \$1.7 billion, or 72%, of the portfolio while public and private natural resource investments comprise the remaining \$651 million, or 28% of the portfolio.

The timberland portfolio returned 9.7% over the one-year period ended June 30, 2015, 95 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 11.0% in the Pacific Northwest and 10.4% in the South year over year.

The public natural resources portfolio returned -27.9% over the one-year period ended June 30, 2015, 197 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 is contained at **Appendix G**.

2. Timberland Appraisal Request for Qualifications – Search Committee Recommendation.
(Voting Item)

Background.

PRIM issued a Request for Qualifications ("RFQ") for timberland appraisal services on June 15, 2015. The purpose of the RFQ is to update PRIM's list of approved timberland appraisal firms. Firms selected as a result of this RFQ will be eligible to competitively bid for appraisal assignments that are scheduled to occur over the next three years (2015 to 2017). The search was advertised in Pension & Investments and was posted on PRIM's Web site. Responses to the RFQ were due by 3:00 p.m. ET on June 30, 2015. Eight responses were submitted by the deadline. A summary for each respondent is available in the evaluation committee report.

Evaluation Committee.

The Evaluation Committee members are as follows:

1. David Gurtz, Interim CFO & COO
2. John La Cara, Senior Investment Officer
3. Dr. Jack Lutz, Real Estate and Timber Committee
4. Tim Schlitzer, Senior Investment Officer
5. Dan Stenger, Consultant, The Townsend Group

Search Process.

Ten firms responded to the RFQ. Two firms submitted a response after the submission deadline and were not given further consideration. Responses were evaluated based on each firm's relevant qualifications and experience, knowledge of timberland valuations and appraisals, quality of RFQ response, quality of the proposed team, and references - particularly from PRIM's timberland investment managers. Seven of the responding firms are currently on PRIM's list of approved appraisal firms. Accordingly, given PRIM's familiarity with these seven firms, experience with past assignments and feedback from PRIM's timberland investment managers, they were considered qualified to remain on PRIM's list. The last respondent was invited to interview with members of the Evaluation Committee via a conference call. Subsequent to the call it was determined that the firm demonstrated the necessary qualifications required by PRIM to provide appraisal services.

Recommendation.

PRIM staff and the Real Estate and Timber Committee (unanimous vote) recommends that all eight responding firms be placed on PRIM's list of approved timberland appraisers. The firms are as follows:

1. Forecon Inc.

2. Larson & McGowin, Inc.
3. Legacy Appraisal Services, LLC
4. Mason Bruce & Girard, Inc.
5. Sizemore & Sizemore, Inc.
6. Sterling Consulting, LLC
7. Terra Source Valuation, LLC
8. The Healy Company.

Each firm will be eligible to bid on timberland appraisal assignments that are scheduled to occur for calendar years ending 2015, 2016 and 2017. The complete evaluation committee report can be found at **Appendix H**. A recommendation from the Townsend Group can be found at **Appendix I**.

3. TA Associates Realty – Termination Recommendation. **(Voting Item)**

On July 22, 2015, staff presented the Real Estate and Timberland Committee with a recommendation to terminate TA Realty's core real estate mandate. The recommendation received unanimous support from the Committee. In the interest of time and in an effort to mitigate operational risk at the property level, staff informed TA of the decision immediately after the meeting. We are seeking retroactive Board approval of the termination, effective July 23, 2015.

Rationale

TA began a formal performance improvement plan on February 1, 2014. During the 18 month period that followed, PRIM's real estate staff and TA's portfolio management team met monthly to discuss performance as well as transactional and operational matters. PRIM also hosted two meetings with TA which were attended by members of PRIM's Real Estate and Timberland Committee and executive staff from both organizations.

The decision to terminate was based on the following four primary factors:

1. Performance – As of June 30, 2015, TA's performance remains under PRIM's benchmark across all time periods. TA also ranks in the third quartile versus its peer group across the three and five year periods.
2. Turnover – TA recently informed PRIM of four related departures of senior level staff members including two members of PRIM's portfolio management team and two of TA's five senior acquisitions officers.
3. Recent sale of company – In October, 2014, TA announced the sale of 70% of their investment management platform to The Rockefeller Group, a wholly owned subsidiary of Mitsubishi Estate Co., Ltd, a Japanese real estate company. The sale introduced uncertainty to the future of the organization. The turnover referenced above appears to be a direct result of the change in ownership.
4. Strategy – TA's strategy of buying smaller assets, often located in secondary markets, no longer fits PRIM's core investment strategy or return requirements. The below benchmark performance of the portfolio since inception supports this change.

Management of the portfolio will be transferred in the near-term to AEW Capital Management. AEW was selected due to their strong performance since inception, demonstrated portfolio management capabilities and capacity, and attractive fees. AEW's headquarters are located in Boston, which should allow for increased levels of interaction and communication throughout the transition process.

IV. Finance and Administration Report.

A. Legal / Legislative Update.

PRIM's General Counsel will update the Board on legal and legislative matters.

B. June 2015 PRIM Budget.

PENSION RESERVES INVESTMENT MANAGEMENT BOARD					
Budget as of June 30, 2015					
<u>FY 2015</u>	<u>Investment Management Fees</u>	<u>YTD Actual</u>	<u>YTD Budget</u>	<u>Variance Under (Over)</u>	<u>%</u>
16,030,444	Domestic Equity	14,077,599	16,030,444	1,952,845	12%
19,180,985	International Equity	16,408,905	19,180,985	2,772,080	14%
15,940,909	Emerging Markets Equity	11,641,465	15,940,909	4,299,444	27%
5,664,998	Core Fixed Income	6,116,599	5,664,998	(451,601)	-8%
11,100,907	Value Added Fixed Income	10,414,025	11,100,907	686,882	6%
5,541,369	Real Estate - REIT's	5,443,769	5,541,369	97,600	2%
450,000	Real Estate - Core Strategy	8,048,246	450,000	(7,598,246)	-1688%
3,502,456	Timber/Natural Resources	8,891,527	3,502,456	(5,389,071)	-154%
2,945,000	Private Equity	1,499,500	2,945,000	1,445,500	49%
0	Hedge Funds	37,637	-	(37,637)	0%
490,000	Overlay/Foreign Currency	600,188	490,000	(110,188)	-22%
80,847,068	Subtotal	83,179,460	80,847,068	(2,332,392)	-3%
PRIM Operations:					
	<u>Custody & Outside Advisors</u>				
725,000	Custodian	674,303	725,000	50,697	7%
779,024	Consultant - General	718,270	779,024	60,754	8%
1,760,000	Consultant - Private Equity	1,617,412	1,760,000	142,588	8%
663,000	Consultant - Real Estate	791,469	663,000	(128,469)	-19%
2,125,000	Consultant - Hedge Funds	973,607	2,125,000	1,151,393	54%
0	Portfolio Completion Strategie	77,452	-	(77,452)	0%
459,500	Audit & Tax	322,407	459,500	137,093	30%
375,000	Legal	533,268	375,000	(158,268)	-42%
250,658	Governance	214,231	250,658	36,427	15%
1,029,573	Risk Management	928,735	1,029,573	100,838	10%
8,166,755	Subtotal	6,851,154	8,166,755	1,315,601	16%
	<u>Operations:</u>				
6,114,492	Salaries	6,040,093	6,114,492	74,399	1%
935,966	Occupany	689,682	935,966	246,284	26%
297,951	Insurance	183,189	297,951	114,762	39%
152,507	Employee Benefits	104,761	152,507	47,746	31%
243,232	General Office Expenses	200,381	243,232	42,851	18%
1,001,980	Computer & MIS	576,079	1,001,980	425,901	43%
215,000	Due Diligence Travel	134,226	215,000	80,774	38%
100,000	Professional Development	69,329	100,000	30,671	31%
81,412	Client Service	26,381	81,412	55,031	68%
70,000	Dues & Subscriptions	45,906	70,000	24,094	34%
35,000	Temporary Labor	68,930	35,000	(33,930)	-97%
9,247,540	Subtotal	8,138,957	9,247,540	1,108,583	12%
17,414,295	Total Operations & Advisors	14,990,111	17,414,295	2,424,184	14%
98,261,363	Total PRIM Direct Operating Budget	98,169,571	98,261,363	91,792	0%
	<u>Indirect Fees</u>				
21,725,165	Real Estate	21,151,362	21,725,165	573,803	3%
3,892,636	Timber	2,417,120	3,892,636	1,475,516	38%
112,109,597	Private Equity	97,657,278	112,109,597	14,452,319	13%
26,085,100	Distressed Debt	20,418,768	26,085,100	5,666,332	22%
89,446,352	Hedge Funds	77,352,642	89,446,352	12,093,710	14%
53,000	Portable Alpha Wind Down	9,058	53,000	43,942	83%
8,130,000	Commingled Funds	7,777,668	8,130,000	352,332	4%
0	Portfolio Completion Strategie	187,228	-	(187,228)	0%
261,441,850	Total PRIM Indirect Budget	226,971,124	261,441,850	34,470,726	13%
359,703,213	Total PRIM Direct & Indirect Fees	325,140,695	359,703,213	34,562,518	10%

C. Travel and Staff Development Update.

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 as **Appendix J**.

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:
5/7/2015	Peony K. Keve	Cambridge, MA	Kepha Partners 2015 Annual Meeting	DD
5/14/2015- 5/15/2015	Eric R. Nierenberg	Cambridge, MA	State Street Global Markets Conference	DD & FE/PD
5/15/2015	Michael R. Bailey	Waltham, MA	Meeting at Brandeis	FE/PD
5/19/2015- 5/20/2015	Peony K. Keve	Boston, MA	Bain Capital Annual Meeting	DD
6/11/2015- 6/12/2015	Eric R. Nierenberg	New York, NY	2015 Carter Burden Investment Conference	DD & FE/PD
6/16/2015- 6/18/2015	Peony K. Keve	Boston, MA	Super Return US 2015	FE/PD
6/18/2015	Jiazhu Zhang	New York, NY	Inside the Black Box Conference	FE/PD
6/23/2015- 6/26/2015	Chris Supple	Austin, TX	NAPPA 2015	FE/PD
7/13/2015- 7/14/2015	Chuck LaPosta	New York, NY	Institutional Investor Forums	FE/PD
7/14/2015- 7/15/2015	Eric R. Nierenberg	New York, NY	Arden, CNBC Delivering Alpha Conference, Mudrick, BlackRock	DD & FE/PD
7/27/2015- 7/31/2015	Timothy V. Schlitzer	London, Paris	Investment Manager Due Diligence	DD
8/24/2015- 8/25/2015	Michael M. McGirr	Los Angeles, CA	LMCP	DD
8/24/2015- 8/25/2015	Sarah N. Samuels & Chuck LaPosta	San Francisco, CA & Los Angeles, CA	Progress Investment Management Company, LLC, Lovell Minnick, & Huber	DD
10/20/2015- 10/21/2015	Sarah N. Samuels	Washington, DC	Kayo Women's Private Equity Conference	FE/PD
10/26/2015- 10/28/2015	Michael G. Trotsky	Boston, MA	Global ARC Conference	FE/PD
11/12/2015	Michael G. Trotsky	Boston, MA	Boston Investment Conference	FE/PD

Key: DD=Due Diligence; FE/PD=Fiduciary Education and/or Professional Development

D. Client Services.

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. 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: Webster (7/15/2015); Essex Regional Retirement Board (7/20/2015); MassPort (8/20/2015); Newton (8/25/2015); Barnstable (8/25/2015); Lexington (8/26/2015); Gloucester (8/26/2015); Wellesly (8/27/2015); Haverhill (9/8/2015); and Chicopee (9/10/2015).

SRBTF Update.

The SRBTF Board approved two new local submissions for investment in the SRBTF at its June 2015 meeting: the Town of Ayer and the City of Newburyport. In addition to the Massachusetts State Retirees' OPEB assets, the SRBTF now has 38 government entity clients that have opted to invest in the SRBTF. As of June 30, 2015, the market value of the total SRBTF was \$852 million.

V. Litigation Updates (Executive Session).

PRIM's General Counsel will provide in Executive Session an update on litigation matters.

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PENSION RESERVES
INVESTMENT
MANAGEMENT BOARD

Appendix A

Minutes of the PRIM Board Meeting
June 4, 2015

*PRIM Board Meeting
Tuesday, August 11, 2015*

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**COMMONWEALTH OF MASSACHUSETTS
PENSION RESERVES INVESTMENT MANAGEMENT BOARD**

***Minutes of the June 4, 2015, Board Meeting
commencing at 9:30 a.m.***

**in the
PRIM Board Offices
at 84 State Street
Boston, Massachusetts**

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D O C U M E N T S*

- A Minutes of the PRIM Board Meeting of April 7, 2015
- B 2015 Board Education Plan
- C Callan PRIT Fund Performance Report Color Charts (April 30, 2015)
- D BNY Mellon Gross of Fees Performance Report (April 30, 2015)
- E Callan Investment Measurement Service Monthly Review (April 30, 2015)
- F PRIT Fund Performance & Public Markets Detail (April 30, 2015)
- G Securities Lending Presentation
- H Real Estate and Timberland Portfolio Report
- I Diversity Initiative Update
- J KPMG 2015 Audit Plan
- K PRIT Core Realty Holdings, LLC December 31, 2014 Audited Financial Statements
- L Travel and Staff Development
- M Handout - Parental Leave Memo

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

A T T E N D E E S

Board Members

- Treasurer Deborah B. Goldberg, Chair
- Robert L. Brousseau
- Ruth Ellen Fitch
- Michael J. Heffernan
- Anthony Hubbard, Esq.
- Dennis J. Naughton
- Dana A. Pullman
- Paul E. Shanley, Esq.

Others Attending:

- Chandra Allard, Treasury
- Kevin Blanchette, Worcester Regional
- Richard Bowers, Baystate Financial
- Nora Bowman, eSecLending
- Patrick Brock, Hampshire County
- Christopher Crevier, Neuberger Berman
- Melissa Cunningham, Middlesex County
- Henry Davis, Arden
- Michael DeVito, PERAC
- Constance Everson, Investment Committee
- Nicola Favorita, State Retirement Board
- Nicole Giambusso, O'Neill and Associates
- Sarah Kim, Treasurer's Office
- Michael Koenig, Hamilton Lane
- Chuck Kostro, Essex Regional
- Jim MacDonald, First Deputy Treasurer
- Kevin Meehan, Goldman Sachs
- Phil Nelson, NEPC
- Jon Ostrowsky, Treasurer's Office
- Bud Pellechia, Callan
- Jim Quirk, Barnstable
- Carolyn J. Rogers, RPR, C.J. Reporting
- Dylan Ross, eSecLending
- Bruce Shain, BNY Mellon
- Kevin Sullivan, BNY Mellon
- Timothy Vaill, Investment Committee
- Millie Viqueira, Callan

P R O C E E D I N G S

A meeting of the Pension Reserves Investment Management Board (PRIM Board) was held on June 4, 2015, at the PRIM Board office located at 84 State Street, Boston, Massachusetts.

Call to Order:

The meeting convened at 9:38 a.m. Treasurer and Receiver-General Deborah Goldberg Chaired the meeting.

TREASURER GOLDBERG: Everybody all set? We're rocking and rolling. The Massachusetts open meeting law permits meetings to be recorded and states that the Chair shall inform attendees at the beginning of the meeting of any such recordings. So accordingly, I am informing you that Carolyn Rogers, seated here to my left is transcribing and also recording this meeting. If anyone else in attendance today is recording the meeting I would ask that you identify yourselves.

Also, for the benefit of our stenographer and all those who are listening, please identify yourself by name when you speak and speak clearly and audibly. Thank you very much.

The first item on the agenda is a

1 consent agenda. Dave.

2 MR. GURTZ: Good morning, everybody, and
3 we're going to try something a little different.
4 My name is David Gurtz and about a year ago this
5 Board approved the use of a consent agenda, but
6 we haven't done it yet. We decided to utilize it
7 today in order to optimize the Board's time and
8 focus on the most sensitive discussions rather
9 than spend a lot of time on sort of routine or
10 non-controversial discussions.

11 We haven't utilized a consent agenda
12 until today's meeting. So today we have six
13 items that we think can be voted on as a single
14 item under this consent agenda. We think these
15 items are routine and non-controversial, and they
16 were also all unanimously recommended by the
17 respective committees.

18 In terms of procedures, if one or more
19 board members would like to discuss an item in
20 more detail, that item will be removed from the
21 consent agenda and voted on separately. With
22 that said, questions or discussions can still
23 occur after this motion has been seconded, like
24 every other vote. It's just if the board member
25 would like to substantively talk about an item,

1 then we will remove that item and vote on it
2 separately. The consent agenda is not designed
3 to shortchange discussion or questions but rather
4 to optimize our discussions on more important
5 topics later this afternoon or this morning.

6 So page 3 and 4 of your agenda
7 highlights these six items for your
8 consideration. I'm happy to answer any questions
9 on them at this point in time. Otherwise, hear
10 your thoughts and if you want to make a motion or
11 not.

12 TREASURER GOLDBERG: Well, I want to mention
13 that we do this at the retirement board, and what
14 it does is allows us more -- you know how
15 whenever we get towards the end of a meeting,
16 we're rushing and can't always necessarily
17 discuss some of the substantive issues, this
18 allows us to move more quickly through these
19 items unless there is one that needs to be
20 discussed.

21 So I would entertain a motion on
22 approval of these six items. Is there a motion?

23 MR. BROUSSEAU: So moved.

24 MR. SHANLEY: Second.

25 TREASURER GOLDBERG: Is there a question or

1 a discussion on any of them?

2 MR. NAUGHTON: Dennis Naughton. I just have
3 a quick question on Item No. 3. Is the idea
4 there to maintain a three-year time period or to
5 increase it to five?

6 MR. GURTZ: For the request for proposals
7 for real estate appraisal services?

8 MR. NAUGHTON: Right.

9 MR. GURTZ: Yes. At this point in time, it
10 still can continue on as a three-year cycle.

11 MR. NAUGHTON: Thanks.

12 MR. BROUSSEAU: Dana, did you want to make a
13 correction the minutes?

14 MR. PULLMAN: I was omitted from the
15 minutes.

16 MR. BROUSSEAU: He was here the last
17 meeting. I was reading through the minutes and
18 he seconded one of the motions.

19 MR. TROTSKY: We'll make that correction.

20 TREASURER GOLDBERG: We'll amend the
21 attendance of the minutes to reflect that Dana
22 was here. I saw him. With that, we have a
23 motion, we have a second. All those in favor?

24 THE BOARD: Aye (unanimous).

25 TREASURER GOLDBERG: Opposed? Thank you.

(VOTED: That the PRIM Board approve the Consent Agenda Items 1 through 6 as described in the Expanded Agenda, and further to authorize the Executive Director to take all actions necessary to effectuate this vote.)

TREASURER GOLDBERG: The next item on the agenda would be the executive director's report. The executive director or chief investment officer has a problem. I've taken away his analogy, his bucket analogy, and I now own it. I've trademarked it.

MR. TROTSKY: I'm happy to donate it.

TREASURER GOLDBERG: Thank you.

MR. TROTSKY: And for any of you who don't know, the analogy is that we have a bucket of assets. We're trying to fill that bucket to fill the unfunded liability gap, but that bucket has a hole in it. So it makes our job more difficult filling that bucket. The hole is the outflow to pay benefits. So that's the analogy. I'm glad you like it, and feel free to use it.

TREASURER GOLDBERG: I elaborated. I said as we're pouring water in it, has a hole, and some of the water escapes down to the bottom.

MR. TROTSKY: I will find one to steal from you some day. Thank you.

1 We have a lot on the agenda today. So
2 the consent was a great idea. Not the least of
3 which we'll be putting \$700 million to work today
4 in our investment program. That will include
5 later on hearing from the hedge fund team. One
6 hedge fund, one new hedge fund, two new portfolio
7 completion strategies, and then the private
8 equity team will be presenting two new private
9 equity deals for a total of \$700 million, should
10 you approve that today.

11 I'll begin with an organizational
12 update, and you'll notice today Tom Hanna is no
13 longer with PRIM. Many of you know, Tom decided
14 to leave PRIM at the end of May to take an
15 extended break and know that he's already
16 enjoying that break somewhere in Europe. As many
17 of you may not know, about two years ago Tom had
18 major surgery. He came to me a couple months ago
19 and he said, gee, you know, I'm in my early 50s,
20 my parents were sick and passed when they were
21 young. I'm young, single, have some money saved,
22 I want to take some time off.

23 And I did try to convince him out of
24 doing that. It was a hard thing to do. I think
25 we'd all like to take that time off if we're

1 able, but after several weeks of trying to
2 convince Tom not to leave, he was resolute in his
3 decision, and we're going to miss him. He was
4 hardworking, dependable, he was a great friend to
5 me, to many of you on the board, and a great
6 colleague to work with. He was here for
7 15 years, loyal, dependable, hardworking. We'll
8 really miss him.

9 We all have a great luxury here at PRIM
10 in that we at the table seldom worry about the
11 accuracy, timeliness, completeness of our
12 financial reporting. That's in large part due to
13 the unsung heroes on the finance and operations
14 team that I always talk about. It's a great
15 luxury not to have to worry about that end of the
16 business. We have won awards for the
17 transparency and completeness of our financials
18 for ten straight years, and it's largely due to
19 the staff that Tom built around it. The silver
20 lining, however, is that we have built a deep
21 bench here at PRIM.

22 I immediately announced that David Gurtz
23 has been appointed interim CFO-COO while we
24 conduct a search for Tom's replacement. Dave is
25 in his eighth year at PRIM and is both a CFA and

1 a CPA. He is the only one here at PRIM to have
2 expertise both on the investment side, having
3 headed our risk group and also due diligence, but
4 he also has experience on the finance side. You
5 may not be aware that he spent his first years at
6 PRIM on the finance team and before that he was a
7 hedge fund auditor and an investment management
8 auditor for KPMG. He is our go-to guy for
9 operations and investment due diligence on any
10 manager regardless of the asset class. We intend
11 to keep using him in that capacity, but most
12 important Dave's institutional knowledge after
13 eight and a half years is truly unsurpassed. He
14 has both sides of the equation.

15 I also announced at the same time that
16 Sarah Samuels has been promoted to deputy CIO
17 from her previous position as senior investment
18 officer in charge of public markets and director
19 of investment research. Sarah was hired as an
20 investment officer about four years ago. You
21 have seen her work and you have witnessed with me
22 her incredible path to success. She is a
23 success. You'll hear more about that later in
24 addition to this promotion.

25 But nobody in the history of PRIM has

1 been promoted more quickly than Sarah, and I can
2 honestly say that no one's deserved it as much as
3 Sarah. So we're delighted to have that occur.
4 Sarah has exceeded our expectations at every
5 juncture. I also announced that both Sarah and
6 Dave will join Chris and me on the executive
7 management team. That's the group that meets
8 weekly to discussion operational matters,
9 day-to-day matters, as well as strategic matters.

10 In other news around the organization,
11 I'm pleased to report that Michael Bailey was
12 recently nominated for the Institutional Investor
13 Intelligence Award for private equity. This
14 nomination recognizes the most outstanding and
15 innovative public plan employees in North
16 America. That's great. And also Sarah Samuels
17 was selected as one of Chief Investment Officer
18 Magazine's 40 under 40 list.

19 Sarah's award recognizes up-and-coming
20 asset owner employees who have made meaningful
21 investment contributions to their organization.
22 Congratulations to both of you. These are the
23 two most recent examples of PRIM receiving
24 national recognition for the success and strength
25 of our staff and the success and our innovation

1 of our investment program. So that's great news.

2 I also want to mention briefly that last
3 month Governor Baker declared the month of May as
4 Putting Investors First month. This was a result
5 of some effort of the CFA institute and the local
6 Boston Chapter of the CFA institute called the
7 Boston Securities Analyst Society. I'm a board
8 member of both organizations. It's important to
9 me. Their initiative, called the Future of
10 Finance, of which Putting Investors First month
11 is part of, is designed to promote integrity in
12 the financial services industry. You know that
13 I've been involved in the Asset Manager Code of
14 Conduct, and this is the same institution that
15 brought us GIBS compliant performance reporting
16 and the Investor Bill of Rights and several
17 financial literacy programs, some of which we're
18 pursuing with Treasury. So I'll stop there.
19 That's the organizational update. Lots of good
20 going on. You'll hear from Dave and Sarah later,
21 as Dave will take the helm from Tom on an interim
22 basis.

23 Now I'll turn to markets, if you will,
24 just briefly before we move into the agenda. The
25 markets continue to be volatile in 2015. January

1 was down. February was up. March was down.
2 April and May were pretty solid. So kind of a
3 roller coaster. Right. For the year
4 international markets have led the way. That's
5 good for us. If you remember, we've been
6 bringing our global equity exposure down, but
7 we've been maintaining a pretty high exposure to
8 international developed markets and emerging
9 markets, particularly in equity, that served us
10 well.

11 While the S&P is up only 3.2 percent for
12 the calendar year, developed international
13 markets are up nearly 9 percent, and emerging
14 markets are up nearly 6 percent. Bonds have been
15 relatively flat for the year. The Barclays Agg.
16 was up about 1 percent for the year. Our STRIPS
17 portfolio, which we'll talk about later, is down
18 about 3.4 percent for the year. We'll talk more
19 about that later, but I will say that at the
20 Investment Committee meeting we talked a lot
21 about the economic environment still being mixed.

22 Some of the positives include the
23 leading economic indicators have strengthened.
24 Just today we read about the trade gap narrowing
25 and the job market has been strengthening.

1 Initial jobless claims are low, and the
2 unemployment rate fell to 5.4 percent. Still in
3 the negative side, wage growth is anemic,
4 industrial production is weak, consumer
5 confidence has been plummeting, and GDP growth,
6 as you know, in Q1 actually contracted. So in Q1
7 the initial reading was for 0.2 percent positive.
8 It actually came in at a negative 0.7 percent.
9 The international monetary fund has been cutting
10 its growth estimates for the US. This all the
11 while stocks continue to rise, albeit slowly.
12 This means that valuations in the stock market
13 have become a little bit stretched.

14 Turning to performance, and there should
15 be performance slides in front of you or in your
16 packet. You'll notice from the PRIT fund total
17 returns the one-year performance of 8.6 percent
18 through April, we don't have May yet. We believe
19 May will probably be up a little bit, but for the
20 one year, 8.6 percent, that's a 95 basis point
21 outperformance above benchmark. That equates to
22 an investment gain of \$5 billion. We're filling
23 the bucket by \$5 billion over the last year. The
24 outperformance is \$560 million above benchmark.
25 The outflow to pay benefits for the year were

1 \$1.5 billion.

2 You can see that all time periods were
3 solidly positive, both on an absolute and
4 relative basis. The five-year number, 9.9
5 percent, very strong. That indicates the
6 strength since the world financial crisis, and
7 even including the world financial crisis, the 10
8 year number up 7.5 percent.

9 Last month I also received some very,
10 very good news that I don't normally talk about.
11 I don't normally talk about the TUCS rankings.
12 TUCS are the rankings of PRIM relative to its
13 peers but it ignores asset allocation
14 differences. Asset allocation differences are
15 very important because every board around the
16 country has a different investment program and a
17 different risk appetite. However, I will mention
18 it today in that our rankings improved
19 dramatically. In Q1 we're in the top
20 15 percentile of all managers around the country.
21 Our one-year number and our three-year number are
22 solidly in the top quartile, and our ten-year
23 number is solidly in the top quartile. This is a
24 sharp difference from five years ago when these
25 numbers showed that we're in the bottom decile.

1 In fact, I think one of the numbers I saw was a
2 98 percentile almost five years ago. So
3 admittedly, we've had a very strong equity market
4 and a rebound providing a tailwind to us, but
5 we're very -- this is our sweet spot. This is
6 our sweet spot in that our rankings are
7 improving.

8 Asset class performance, and you'll hear
9 more about this later, alternatives remain very
10 strong. Private equity leads away for the one
11 year returning 14 percent. Real estate also very
12 strong. Our direct real estate program is firing
13 on all cylinders, up 13.4 percent, and even our
14 hedge funds strong at 6.7 percent. All of them
15 have outperformed their respective benchmarks.

16 I'll draw your attention quickly before
17 I stop to total core fixed income. For the one
18 year through April 30th our total core fixed
19 income portfolio was up 12.6 percent. I've said
20 it before and I'll say it again. Don't get used
21 to that kind of performance for total core fixed
22 income. Usually single digit kind of returns.
23 The success that we saw last year was largely due
24 to our STRIPS portfolio allocation that we made
25 in February of 2014. STRIPS were up 25 percent

1 for the year ending April 30th, the strongest
2 performing asset class in the universe, compared
3 to the Barclays Agg. which was up only
4 4.4 percent. You're going to hear more about the
5 STRIPS portfolio during the public markets
6 discussion. We will be scaling that back again,
7 and you'll hear about that from Sarah and Chuck
8 shortly. So that's my update. I'll take any
9 questions, or we can move into the rest of the
10 agenda. Thank you.

11 TREASURER GOLDBERG: Great. Thank you,
12 Michael. So we're doing well with the bucket.

13 MR. TROTSKY: The bucket is filling.

14 TREASURER GOLDBERG: Are there any questions
15 on the executive director's report? Let's move
16 on to the investment report, public markets
17 update and strategy review.

18 MS. SAMUELS: Good morning, everyone. We're
19 at Appendix F. I'll give you a few moments to
20 get there. It's called PRIT Fund Performance and
21 Public Markets Performance Detail. So this
22 morning I'm going to give a brief update on
23 performance on the equity portfolio, and then
24 Chuck LaPosta, our senior investment officer
25 covering fixed income is going to talk about

1 fixed income performance, and then both Chuck and
2 I are going to sort of take a step back and talk
3 about the fund from a holistic 30,000-foot level.
4 We're going to talk about our asset allocation,
5 our portfolio construction, and the drivers of
6 risk and return at the fund level.

7 So as Michael mentioned, despite the
8 mixed economic data, the S&P 500 has actually hit
9 record and cycle highs. It's trading at about 17
10 times forward earnings compared to a five-year
11 average of 13.9. So by some metrics it does seem
12 somewhat expensive. Growth in stocks have
13 outperformed over the last year and quality and
14 value stocks have under performed over the last
15 year. This really isn't surprising in the mid to
16 later stage of the current economic cycle where
17 the market leadership becomes more narrow and
18 investors continue to bid up a smaller subset of
19 stocks.

20 If we turn to performance on page 3 of
21 this Appendix F, our public equity portfolios
22 total about \$27 billion. This is roughly
23 43 percent of the PRIT fund, and I'm going to
24 focus my remarks this morning on the two equity
25 asset classes that we have the largest exposure

1 to, and therefore they're the biggest drivers of
2 our equity return such as US large cap equity and
3 developed non-US equity. So that's the leftmost
4 and the rightmost assets classes on this chart.

5 US large cap, that's the S&P 500, rose
6 13 percent in the last year on record profit
7 margins, and our portfolios outperformed the
8 index by 20 basis points, which is in line with
9 our expectations because we are largely indexed
10 here. Developed non-US equities on the other
11 hand, which are about two-thirds Europe and 20
12 percent Japan, were up only about 3 percent in
13 the last year. They were up more in local terms
14 but when we translate it back after the currency
15 depreciation in Europe and Japan, the returns
16 were less favorable in dollar terms. But our
17 portfolios, on the bright side, did outperform by
18 1.3 percent in the last year. And this has to do
19 with two factors, one is an overweight to Japan.
20 Japan was up actually 20 percent in dollar terms
21 and even more in local terms, and strong stock
22 selection in Japan and the UK.

23 MR. LAPOSTA: And I will walk through our
24 public fixed income portfolio as well. This
25 portfolio is about 21 percent of our asset,

1 representing \$13 billion, and as we've alluded
2 to, the largest driver is the STRIPS allocation
3 and the returns experienced there, that is the
4 outlier on the extreme left, 25 percent of return
5 for that portfolio over the 12 months ending on
6 April 30th as a result of falling interest rates
7 in long-term bond markets. So they fell 75 basis
8 points in net basis over that period. However,
9 during that period they actually have fallen
10 significantly lower through January 2015 and then
11 kind of crept up a little bit higher more
12 recently.

13 The next asset class is TIPS and ILBs,
14 which returned 6 percent, and they also
15 benefitted from interest rate fall as the market
16 has kind of shifted its expectations from growth,
17 and inflation has been fairly benign and still
18 below fed target. Real rates have fallen and
19 TIPS and ILBs have benefitted from that without
20 any additional benefit from inflation.

21 The next four asset classes are all more
22 credit sensitive asset classes. They have some
23 interest rate sensitivity, but they also have
24 credit sensitivity within them. The last
25 12 months environment through credit has been

1 fairly benign. It has not moved dramatically one
2 way or the other, and this is reflective of a
3 slow but steadily improving economy. So the real
4 benefit in here has been from the rate
5 sensitivity component, and they all have
6 something in the 4 to 5 percent return rate for
7 the year, and then on the extreme right end is
8 emerging market local debt, which has a negative
9 9.4 percent return for the asset class and
10 slightly better for our portfolios, but this has
11 been largely driven by the depreciation in
12 foreign currencies. In fact, foreign currency
13 return was negative 16 percent for emerging
14 markets during the period and then coupon and
15 price performance gave the asset class a little
16 bit more of a benefit.

17 So all in all, the portfolio was
18 constructed to be exposed to various conditions
19 and we lived through them. We can start a new
20 analogy, we have the roller coaster analogy,
21 specifically for the interest rates we've gone
22 through the period where we come down the great
23 little thing like this and everyone puts their
24 hands in the air. We may be climbing up but we
25 may be coming down again, and at the end we're

1 going to end and ride again. And with that
2 analogy, feel free to steal it.

3 TREASURER GOLDBERG: Well, I don't know if
4 you saw my hand motions about what the market's
5 been doing. I went like this, this, and this. I
6 do that stuff too. It's called the investment
7 dance.

8 MS. SAMUELS: If we just take a step back
9 from the asset class performance and turn to
10 page 5. I'm going to talk for a moment about the
11 factors that drive risk and return for the PRIT
12 fund. We do have a voting item related to this
13 discussion, and we'll come to that in just a
14 moment.

15 We've had several conversations with
16 committee and board members who are worried about
17 the volatility of the STRIPS component of our
18 portfolio. We spent a great deal of time at the
19 Investment Committee discussing the research that
20 we've put into our portfolio construction and
21 some of the scenario analysis that we've done to
22 understand how our portfolio behaves in this
23 market environment, and we're going to go through
24 that with you this morning.

25 So on page 5, the thought process behind

1 our portfolio construction at the end of the day
2 is that the majority of the fund is necessarily
3 growth oriented. And that's because we need to
4 achieve an 8 percent return target over the long
5 term.

6 Page 5 breaks down our asset class
7 exposures three ways. The first bar on the left
8 breaks down our market value exposures. So this
9 breaks down how our money is invested. The
10 second bar is broken out by contribution to total
11 return over the last year. So for example,
12 global equities, that's the bar on the bottom in
13 blue, contributed almost 40 percent to the fund's
14 total return of 8.6 percent in the last year, and
15 then the third bar on the right is broken out by
16 contribution to risk, and risk is defined as
17 standard deviation or volatility of the fund.

18 So a couple points that I'd like you to
19 take away from this page. One is that
20 equity-like growth, sensitive assets comprise
21 about 60 percent of the fund. Two is that these
22 equity-like assets comprise not 60 percent but
23 more like 85 percent of the fund's total risk.
24 Meaning that equity drives the bus when it comes
25 to our risk and return. When equities do well,

1 PRIM will do well. And when equities suffer,
2 PRIM's return will likely be disappointing. And
3 the third point is that we actually do have
4 dedicated assets to offset this meaningful equity
5 risk, and that's primarily our core fixed income
6 and our STRIPS portfolio. That's the portfolio
7 construction point.

8 So if you look at the bar on the right,
9 you look at the purple bar, it's small and it's
10 actually negative. It's below the line. This is
11 our core fixed income contribution to risk. You
12 can see that it's below the line meaning that it
13 actually decreases our fund's total volatility,
14 and that's because of the negative correlation to
15 equities.

16 This point is shown a little bit
17 differently on page 6. The chart on page 6 plots
18 our asset classes according to when they'll do
19 best according to different economic
20 environments. So you'll probably see this chart
21 going forward in my performance reviews. This
22 chart takes a little bit of explaining. There's
23 a lot going on here. So I'll try to show you
24 what we're trying to illustrate here.

25 I like to view portfolio construction as

1 a perennial garden. We've got another analogy
2 here. In any given season I want something to be
3 in bloom. And if you assume that equities and
4 rates are uncorrelated, something will always be
5 in bloom. The size of the bubbles on this chart
6 roughly represent the allocation in dollar terms.
7 So the bigger the bubble the more dollars we have
8 allocated to an asset class, and the color and
9 number inside the bubbles represent the one-year
10 return.

11 In this case it's through December 31st
12 of 2013, and I'll explain why in a moment, but
13 it's basically because that's an example of a
14 time period where long interest rates rose
15 meaningfully. So basically the color scheme is
16 in the legend here. Dark green means a return
17 greater than 10 percent. Bright red means less
18 than negative 10 percent and the rest is in the
19 middle.

20 This chart is really designed to show us
21 visually where our portfolio's economic exposures
22 are. There are four quadrants here, and using
23 the season analogy you can view each quadrant as
24 a season. The top left is rising growth and low
25 inflation. The top right is rising growth and

1 high inflation. The bottom left is a falling
2 growth deflationary environment, and the bottom
3 right is a stagflationary environment where
4 growth is falling but inflation is rising. So
5 our portfolio construction is designed with two
6 things in mind. One is that our growth bias is
7 really necessary in order to achieve an 8 percent
8 return. So you might notice that the majority of
9 our asset classes are above that horizontal line.
10 And two is that our asset allocation roughly
11 approximates the frequency of these regimes or
12 seasons when we look back historically. So
13 research shows that the top two quadrants, rising
14 growth environments, have occurred about
15 60 percent of the time historically, and we've
16 got about 60 percent of our assets invested in
17 growth-oriented asset classes.

18 The bottom left quadrant, that's your
19 falling growth/falling inflation environment, has
20 actually occurred 30 percent of the time
21 historically, and I think that's a figure that's
22 probably higher than folks might think it is when
23 you think about it intuitively. So we did a lot
24 of research on this about 18 months ago. We
25 determined that we were under protected in this

1 type of environment. So we decided to allocate
2 strategically a portion of our fund to long
3 Treasuries, which will do well in this type of
4 environment. And then the bottom right quadrant
5 is the stagflationary environment that occurs
6 about 10 percent of the time historically.

7 So pages 6 through 8, I'm not going to
8 go through all of them, but you might notice that
9 there are some similarities. This is the same
10 graph for three different time periods in which
11 long interest rates rose meaningfully. So you
12 can see in each of these graphs, if you just flip
13 through them, the bottom left quadrant has a big
14 bright red bubble for long treasuries. That's
15 because long treasuries will experience negative
16 returns. But what I would like to draw your
17 attention to is that in each of these examples,
18 the rest of the portfolio, for the most part, is
19 dark green, the rest of the portfolio is going to
20 do quite well when long rates fall off. This is
21 because rising interest rates typically reflect a
22 growing economy and the PRIT fund is geared
23 toward doing well in this type of environment.

24 MR. LAPOSTA: One other thing, so the PRIT
25 fund total return is outside the box in the left

1 corner as well. So you can see examples of the
2 performance of the PRIT fund in general in total
3 experience. So 15, 17, and 23 percent.

4 TREASURER GOLDBERG: Skip page 9.

5 MR. LAPOSTA: So unfortunately, we cannot
6 skip page 9. Page 9 may occur again. And we
7 have to be prepared for these page 9 scenarios.
8 And this is the exact scenario where our STRIPS
9 allocation, which is new in the history of PRIM,
10 it's been in place for about a year and a half
11 but had not been in existence in 2009, but were
12 it in place in 2009, STRIPS performed 24 percent
13 whereas the Agg. returned negative 1 percent for
14 that time period. So in the periods where growth
15 is falling and inflation is falling, that's the
16 period where interest rate sensitive assets do
17 best.

18 So interest rates fell 75 basis points
19 in this period in 2009. Long US Treasuries rose
20 24 percent. And that dampened the blow in an
21 otherwise dismal market for growth assets. And
22 these occur about 30 percent of the time. So
23 like I said, we can't skip 2009, but we can only
24 prepare for having a better experience than 2009.
25 So again, the factors that lead to positive

1 performance in growth assets typically lead to
2 negative performance in treasuries because when
3 growth inflation is higher, interest rates tend
4 to rise. Conversely, when growth and inflation
5 are falling, rates tend to fall, treasuries do
6 better. So again, it's designed to cushion the
7 blow, if you will, for these types of scenarios.

8 So again, we have a negative correlation
9 historically over long periods of time. There
10 can be periods of positive correlation between
11 equities and rates, but in the long periods of
12 time they're typically regular negatively
13 correlated, and in the last five bear markets,
14 which are markets where equities were greater
15 than negative 10 percent or less than negative 10
16 percent returns, interest rate sensitive assets
17 have provided positive returns to dampen that
18 blow. So again, that speaks to the rationale
19 behind this construction, what we had discussed
20 at length over the last year and a half or so,
21 and things that we continue to consider as we
22 move forward.

23 I'll turn your attention to page 10 a
24 little bit to give you some further analysis in
25 the examples of the analysis we continue to do as

1 we review the portfolio, and this looks at
2 various iterations of our portfolio. So the blue
3 box represents the total PRIT fund portfolio, and
4 then across the columns we have various
5 scenarios, and then on the green box we have just
6 the fixed income allocation on a standalone basis
7 in the same scenarios.

8 So the important thing to look at, and,
9 again, we try to look at the total portfolio
10 because that is the most meaningful piece of what
11 we're doing here, but we can't ignore the fixed
12 income piece in general. Total portfolio
13 volatility, if we were allocated to the Agg.,
14 which is where we were a year and a half ago,
15 volatility is at 8.6 but moving to STRIPS reduces
16 the volatility of the total portfolio to 8.3, and
17 that is in the first column under volatility, and
18 then modulating a bit the allocation between
19 STRIPS and the Agg. will alter the total
20 portfolio volatility.

21 In the next line is 100 basis point
22 interest rate increase. So if interest rates
23 were to rise 100 basis points, you would expect
24 the longer duration assets to underperform, and
25 that's true. So looking at the Agg., which has

1 the duration of about five versus the portfolio
2 with an allocation to STRIPS with a duration of
3 26, you have about 190 basis points
4 underperformance relative to the portfolio. That
5 only includes the Agg., and that's for 100 basis
6 point rate increase.

7 If you skip over to the global equities
8 up 25 percent, you will see that, as we've
9 alluded to, we are kind of geared towards equity
10 risk. If equities go up, we will do well,
11 16 percent return. I think everyone would be
12 quite happy with that in that scenario. However,
13 the STRIPS, because in the environment where
14 equities go up, interest rates typically rise,
15 therefore STRIPS would underperform other fixed
16 income assets. So we would have some negative
17 impact to our total portfolio because of that.

18 The important thing to know is that in
19 the converse scenarios where rates decrease or
20 equities fall, the STRIPS portfolio provides the
21 benefit, and that benefit is typically greater
22 than the cost, if you will, in the rising rate or
23 growing equity scenarios. But turning your
24 attention to the green bar which has the isolated
25 fixed income, you can see that STRIPS are highly

1 volatile. Almost 20 percent volatility. That is
2 as volatile as some of the most volatile equity
3 asset classes. Whereas an Agg. portfolio would
4 only have a 3.7 percent volatility, which is
5 typical, run of the mill fixed income volatility
6 that many people look for in their fixed income,
7 but because that volatility is negatively
8 correlated, the higher volatility actually
9 reduces portfolio risk by more than the Agg.
10 volatility.

11 So these, as I've mentioned, they're all
12 things we've considered and discussed many times,
13 but if you look at various connotations of the
14 STRIPS portfolio, so we are currently -- we were
15 at 7 percent. We're a little bit lower in our
16 STRIPS allocation, but if we were to move from 7
17 percent STRIPS to 5 percent STRIPS, which is
18 roughly the breakout in the PRIT fund 15-year
19 duration, which is the last portfolio, the
20 volatility is about the same, and the return
21 experiences in various scenarios is fairly
22 similar as well.

23 So as we've mentioned, we have had many
24 discussions, we've discussed this, you know, in
25 2014 when we made the original recommendation to

1 migrate to 10 percent STRIPS, our fixed income
2 from Agg. STRIPS, that was made in February 2014.
3 In February 2015 we decided having had outside
4 returns experienced from STRIPS kind of going
5 down that roller coaster, everyone had their
6 hands up and said yay, we decided that maybe it
7 is time to pull back a little bit, and we
8 determined that a 7 percent allocation to STRIPS
9 was appropriate, and the other 3 percent would be
10 invested in the Agg.

11 In the May Investment Committee meeting
12 we had discussed having greater flexibility and
13 ability to modulate our exposure between 7 1/2
14 percent and 2 1/2 percent in PRIT fund assets to
15 kind of smooth that roller coaster ride, if you
16 will. So we're seeking your approval currently
17 to authorize us to move between 7 1/2 to 2 1/2
18 percent PRIT fund assets to be allocated to our
19 STRIPS portfolio.

20 TREASURER GOLDBERG: So we at the Investment
21 Committee had this conversation and admitted, you
22 know, I know everyone knows when I arrived even
23 during the transition, we began these
24 conversations because although I wasn't with you
25 as we went "whee," I was looking at the numbers

1 and went "wooh-whee," and so said this has been a
2 great ride, surprisingly great ride, but the
3 issue around interest rates was making me itchy,
4 and we've seen that.

5 I mean, I saw Connie come in. Connie
6 gives the most phenomenal explanations in trying
7 to explain what the Fed and the world are doing
8 around interest rates, and we've seen strange
9 remarks coming out of the Fed, but as of last
10 week now we're seeing more affirmative remarks
11 again that they are seriously looking at shifting
12 interest rates. It's been all over the place,
13 and of course that could change again. But
14 meanwhile, this is a volatile investment. We've
15 done a great job with it. It is a strong
16 correlation against equities, but when we talk
17 about some of the shifts we're looking at in our
18 equity investments to take advantage of where the
19 growth is, we at the Investment Committee had a
20 lengthy discussion about this, and feel very
21 comfortable with the recommendation. I don't
22 know if anyone else wants to comment on it. One
23 of the people who really has a strong
24 understanding of equities is Mr. Heffernan, and
25 he's on the Investment Committee. But I know

1 that we can't have a conversation until I
2 entertain a motion. So first I'm going to
3 entertain a motion.

4 MR. BROUSSEAU: So moved.

5 MR. HEFFERNAN: Second.

6 TREASURER GOLDBERG: And then I really would
7 appreciate Mr. Heffernan's comments on this.
8 Sorry to put you on the spot.

9 MR. HEFFERNAN: I'm going to start with a
10 question. We actually had outperformance at
11 STRIPS and at the same time we had
12 outperformance, which is counter to the hedge
13 that we want. How often does that happen, and do
14 we know, and if we go back in time with that
15 environment, what happens in the next leg of our
16 roller coaster analogy when you've actually had
17 both asset classes outperform? So you didn't get
18 the hedge which is good, but what happens?

19 MS. SAMUELS: There are other examples of
20 periods like 2014. So 1995, '97, and '98. So
21 there are even examples of two years in a row
22 with them both doing quite well, but I think
23 generally the year following that strong rally
24 you would see a little bit of that.

25 MR. TROTSKY: We're starting to see that.

1 MR. HEFFERNAN: So again reflecting your
2 tactical move to have the flexibility to take
3 that hedge off, even though we made money for
4 the -- we had the best of the Goldilocks world is
5 what we call it when everything works at the same
6 time.

7 MR. TROTSKY: I'm glad you mentioned that.
8 I mean, you're right if you take a look at page
9 6, which ends in December 2013. If we had the
10 same chart that said December 2014, it would show
11 that everything is in that top left quadrant.
12 Everything is bright green and that can't --
13 that's part of the rationale of this decision.
14 It's like we just went through a really anomalous
15 time. Let's take some of the money off the
16 table.

17 MR. HEFFERNAN: So the way to look at it is
18 that we know what happens when it -- it's not
19 unusual for all these asset classes to move in
20 lockstep, but it tells you in that asset class,
21 even though it's there in the equity hedge, to
22 take it back down relatively quickly for our
23 purposes in order not to get our fingers wet.
24 And then just on rates in general, is the US
25 still considered to have the highest real rates?

1 MR. LAPOSTA: Well, in developed markets,
2 compared to Germany and specifically yes, US has
3 the highest real rates, and that has provided
4 some level of support as other investors have
5 sought real rate opportunities but that may come
6 and go.

7 MR. HEFFERNAN: Which kind of underlays
8 where our allocation to fixed income as a whole
9 is going to come from?

10 MS. SAMUELS: I'll just add that although
11 both assets classes were up in 2014, the
12 correlation was actually still negative when you
13 look at the daily and monthly correlation, and
14 that's because STRIPS did zig when equities
15 zagged, but in aggregate they did rise.

16 MR. HUBBARD: When you look at correlations,
17 it is very time-period dependent. We look at
18 them daily, we look at them monthly, we look at
19 short periods, long periods, and they've all been
20 negative, but there are periods of time,
21 especially within the short term daily
22 correlations where they have been positive in
23 those dates that it doesn't feel great to have
24 this position, but in the long run they migrate
25 towards.

1 MR. HEFFERNAN: And just to reflect back on
2 our Investment Committee meeting, I think we
3 realized how volatile the STRIPS can be and I
4 think we built in an inherent flexibility to
5 investment staff to make those tactile decisions
6 on getting in and getting out of STRIPS because
7 of that inherent volatility.

8 MR. TROTSKY: And also to Chuck's comment,
9 there's no guarantee that it will be negatively
10 correlated when you need it the most, and that
11 wasn't the case in some time periods in 2008 and
12 2009. We became positively correlated in a
13 negative direction for periods of time.

14 MR. HUBBARD: So as you take this down from
15 7 to 5, what is the trade? Is it into the
16 Barclays Agg.? That's what it's going to be?

17 MR. TROTSKY: Yes.

18 MR. HUBBARD: Are the trades just completely
19 discretionary or do you have like -- when we got
20 into this we had a plan. As the S&P moved in
21 certain directions and certain amounts, you were
22 going to move so much into the long term
23 treasury. What is the plan?

24 MR. TROTSKY: We haven't specifically talked
25 about that, but it will probably be a regular and

1 systematic monthly move to get to that point,
2 just like we did last time.

3 MR. HEFFERNAN: And we talked about that at
4 the investment, you're moving a large amount of
5 money, and it takes a little bit of time to make
6 those asset allocations.

7 MR. TROTSKY: Similar to what we do in other
8 asset class moves.

9 TREASURER GOLDBERG: So we have a motion.
10 We have a second. I think we've had a really
11 good conversation about this, including at the
12 Investment Committee. And so all those in favor?

13 THE BOARD: Aye (unanimous).

14 TREASURER GOLDBERG: Opposed? Thank you.

15 **(VOTED: That the PRIM Board approve**
16 **the Investment Committee's**
17 **recommendation to grant to the**
18 **Executive Director the authority to**
19 **move the STRIPS Portfolio within the**
20 **range of 2.5%-7.5% of the PRIT Fund**
without requiring further approval
from the Board or Committee, and
further to authorize the Executive
Director to take all actions necessary
to effectuate this vote.)

21 TREASURER GOLDBERG: Thank you very much.

22 MR. TROTSKY: Good job.

23 TREASURER GOLDBERG: Next is our securities
24 lending program update.

25 MR. PAYNE: I'm going to be referring to

1 Appendix G in your package. A brief background
2 on securities lending, the program we had set up
3 here at MassPRIM, and how the program has
4 progressed since we implemented it the beginning
5 of 2015. In short, securities lending is an
6 investment strategy in which investors make
7 short-term loans of their securities to generate
8 incremental revenues. These loans are
9 collateralized up to 105 percent which reduces
10 credit exposure to the borrower. Beneficial
11 owners of the securities retain all economic
12 benefits except the ability to vote shares. The
13 PRIM program was launched at the hiring of
14 eSecLending in 2015. The goal of the PRIM
15 program is to be very conservative. PRIM would
16 focus on the intrinsic value lending, which is
17 based on the demands of the security in the
18 market. The higher the demand and the less
19 supply of the security the higher premium the
20 market will pay to borrow it. PRIM has set its
21 minimum threshold for lending at an intrinsic
22 value of 50 basis points. Cash collateral
23 received is then reinvested by the lender. This
24 is where lenders got themselves in trouble in
25 2008. They incurred losses through reinvestment

1 strategies.

2 PRIM has chosen to reinvest in liquid,
3 low-risk securities, namely government backed
4 securities. PRIM has also chosen to restrict
5 lending in markets where lending could have any
6 potential negative impact on our portfolio
7 managers.

8 Page 2 summarizes the program results to
9 date. As you can see, the program has been
10 ramping up and as of April was generating just
11 north of a million dollars per month in revenue
12 while only utilizing about 1.5 percent of our
13 lendable assets, which is significantly lower
14 than our peers, who typically lend about 10
15 percent of their assets. We will see this amount
16 increase in Q2, due to it being peak European
17 dividend season. To date, we feel the program
18 has met our intended target via Project SAVE and
19 generating approximately \$10 to \$15 million a
20 year in incremental revenues for the fund with
21 minimal incremental risk, and I'm happy to answer
22 any questions.

23 TREASURER GOLDBERG: This is not a vote.
24 This is just an update. Are there any questions
25 about this? Okay, great. Thank you very much.

1 Hedge fund and portfolio completion strategies.
2 Eric.

3 MR. NIERENBERG: So I'm here to talk about
4 hedge funds and portfolio completion strategies.
5 I want to start off with managed accounts, which
6 is something I've been talking about a lot over
7 the last year and a half. We've now completed
8 four managed accounts: One is a new hedge fund;
9 one is a new portfolio completion strategy; and
10 we converted two of our existing hedge fund
11 managers into managed accounts.

12 With your approvals today, which we'll
13 get into in a minute, there will be two more
14 managed accounts, one on the hedge fund side and
15 one on the portfolio completion strategy side,
16 along with the fund of one. If you approve those
17 recommendations today, we'll have over \$1.3
18 billion allocated to customized vehicles, the
19 vast majority of which is in managed accounts.

20 And I want to specifically thank our
21 finance and operations team, Matt Liposky in
22 particular, for their dedication and hard work in
23 making this managed account process a smooth one.
24 I really can't emphasize how much we really rely
25 on our operations team to coordinate this effort

1 and make sure that it goes well.

2 I also wanted to provide an update, and
3 if you have any questions on the managed accounts
4 or anything else, please feel free to interrupt
5 me at any time. I also wanted to provide an
6 update on the Project SAVE achievements for hedge
7 funds and PCS. Since the beginning of the fiscal
8 year, based on actual returns, we have now
9 realized \$13 million in savings from a
10 combination of lower management fees and
11 incentive fees. That does not include the
12 perpetual \$40 million run rate in savings from
13 the switch from fund of funds to direct hedge
14 fund investing.

15 Hedge fund replication efforts continue.
16 That part of the portfolio performs well, and
17 we're researching potential extensions. Our
18 efforts to enhance the risk management of our
19 hedge fund portfolio, which is really closely
20 tied to our managed accounts effort is ongoing.
21 We're working closely with our risk team, David
22 Gurtz and Donny Payne, as well as with Arden and
23 our hedge fund team, to enhance our reporting in
24 that respect.

25 In close conjunction with Arden, our

1 advisor, we've been meeting with a number of
2 smaller managers, many of whom are developing
3 into very solid prospects, one of whom we will be
4 bringing to you today, 400 Capital. And with
5 that I'd like to move to the investment
6 recommendations where we seek your approval,
7 unless there are questions about any of the
8 things I mentioned.

9 TREASURER GOLDBERG: At this time I'm going
10 to do it in the right order. I'm going to seek a
11 motion that we -- the approval of a capital
12 commitment of up to \$150 million to 400 Capital
13 Credit Opportunities Strategy, that the PRIM
14 Board approve the Investment Committee's
15 recommendation of an initial capital commitment
16 of up to \$150 million to 400 Capital Credit
17 Opportunities Strategy, and further to authorize
18 the executive director to take on the actions
19 necessary to effectuate this vote. Is there a
20 motion?

21 MS. FITCH: So moved.

22 MR. BROUSSEAU: Second.

23 TREASURER GOLDBERG: Discussion?

24 MR. TROTSKY: Do you want to present it?

25 TREASURER GOLDBERG: Sorry about that.

1 MR. NIERENBERG: 400 Capital is a structured
2 credit manager based in New York, founded by
3 Chris Hentemann, who is the CIO. His background
4 in structured credit prior to 400 Capital was at
5 Banc of America Securities.

6 Currently the firm manages about
7 \$1.6 billion across structured credit and private
8 debt and will look to generate positive returns
9 with low volatility and low correlation to
10 traditional fixed income and equity markets.
11 They invest across the structured credit
12 universe. The principal sectors in which they
13 invest are US Residential Mortgage-Backed
14 Securities, known as RMBS, Collateralized Loan
15 Obligations (CLOs), as well as Commercial
16 Mortgage-Backed Securities. The firm is managed
17 by Chris Hentemann and Alex Cha. Chris Hentemann
18 is the managing partner and chief investment
19 officer. Alex Cha is partner and head of
20 portfolio management. Heloisa Chaney is partner
21 and chief operating officer.

22 The firm currently has a focus on
23 vintage RMBS. So these are the same securities
24 that brought down the financial institutions
25 leading into the crisis. There's actually value

1 in a lot of these vintage RMBS. And this team in
2 particular has shown themselves to be really
3 skilled at navigating this sector, finding those
4 pockets of value where the market seems to have
5 really misestimated the likelihood of
6 delinquencies or possibility of recovery and some
7 of the underlying home values. Unless there are
8 any other questions, I'll stop there.

9 MR. HEFFERNAN: Just a conversation we had
10 off line. They do it without leverage?

11 MR. NIERENBERG: Yes.

12 MR. HEFFERNAN: Purely investment.

13 MR. NIERENBERG: Yes. I think leverage
14 would be inappropriate here. You have a lot of
15 embedded leverage because we're buying in
16 securities at such a low dollar price already,
17 and also these are not securities which the banks
18 would provide leverage on.

19 TREASURER GOLDBERG: Are there any other
20 questions or comments? I did the exact opposite.
21 I did the motion ahead of time. We have a motion
22 and a second. All those in favor?

23 THE BOARD: Aye (unanimous).

24 TREASURER GOLDBERG: Thank you.

25 **(VOTED: That the PRIM Board approve
the Investment Committee's**

1 **recommendation of an initial capital**
2 **commitment of up to \$150 million to**
3 **400 Capital Credit Opportunities**
4 **Strategy, and further to authorize the**
5 **Executive Director to take all actions**
6 **necessary to effectuate this vote.)**

7 TREASURER GOLDBERG: Next.

8 (Mr. Hubbard leaves the room.)

9 MR. NIERENBERG: The next two are for
10 portfolio completion strategies, and these are
11 similar strategies. The first is the Goldman
12 Sachs Active Management Diversifying Alternative
13 Risk Premia (DARP) Strategy. This is along the
14 lines of the recommendation that we voted on back
15 last year, which is the Panagora Effective
16 Premium which is designed to be a risk premia
17 fund to capture certain market premia that we
18 think are not captured by traditional asset
19 classes and which can provide hopefully positive
20 returns and zero or very low correlation way to
21 our existing equity and fixed income allocations
22 and provide consistent returns over time.

23 Specifically, GSAM is one of the world's
24 largest investment managers with over 2,000
25 professionals in 33 offices worldwide. This
26 product is managed by the Advanced Investment
27 Strategies Group, which manages over \$4 billion

1 in advanced beta strategies. What we're
2 specifically looking at here is a portfolio of 12
3 sub-strategies which trades across equities,
4 bond/rate futures, credit default indices,
5 foreign exchange and commodities. And again, the
6 goal was to achieve attractive risk-adjusted
7 returns with target volatility of 10 percent and
8 near zero correlation to the S&P.

9 TREASURER GOLDBERG: So I would seek a
10 motion that the PRIM board approve the Investment
11 Committee's recommendation of an initial capital
12 commitment of up to \$200 million to Goldman Sachs
13 Asset Management Diversifying Alternative Risk
14 Premia, better known as DARP strategy, and
15 further to authorize the executive director to
16 take all actions necessary to effectuate this
17 vote.

18 MR. BROUSSEAU: So moved.

19 TREASURER GOLDBERG: Second?

20 ^ : Second.

21 TREASURER GOLDBERG: Discussion? Any
22 discussion or questions? All those in favor?

23 THE BOARD: Aye (unanimous).

24 TREASURER GOLDBERG: Opposed? Thank you.

25 **(VOTED: That the PRIM Board approve
the Investment Committee's**

1 **recommendation of an initial capital**
2 **commitment of up to \$200 million to**
3 **Goldman Sachs Asset Management**
4 **Diversifying Alternative Risk Premia**
5 **(DARP) Strategy, and further to**
6 **authorize the Executive Director to**
7 **take all actions necessary to**
8 **effectuate this vote.)**

9 TREASURER GOLDBERG: Thank you.

10 (Mr. Hubbard enters the room.)

11 MR. NIERENBERG: Thank you very much. The
12 final recommendation is also for portfolio
13 completion strategy. This is for AQR Capital
14 Management Style Premia Strategy.

15 TREASURER GOLDBERG: Pardon me. Before you
16 continue. I just want to -- although we all saw
17 that Anthony left the room, he intentionally
18 recused himself from this vote. So we want that
19 on the record. Sorry, Eric. Go ahead.

20 MR. NIERENBERG: So the style premia bears
21 some resemblance to the Goldman Sachs strategy.
22 It's a multi-strategy risk premia program
23 launched by AQR. They have \$6 billion under
24 management. AQR is also one of the world's
25 leading asset management firms. This strategy is
26 a systematic market neutral strategy that takes
27 long/short exposure across equities, fixed
28 income, foreign exchange and commodities which

1 AQR refers to as Style Premia. This strategy has
2 a target volatility of 12 percent. The goal of
3 this program is to achieve a long-term Sharpe
4 ratio 0.7 over a full market cycle, and since all
5 of the strategies are designed to be market
6 neutral, it has targeted very low correlation,
7 which, again, is one of the defined features of
8 the portfolio completion strategies program that
9 we've authorized. And both of these are very
10 liquid strategies.

11 TREASURER GOLDBERG: I would seek a motion
12 that the PRIM board approve the Investment
13 Committee's recommendation of an initial capital
14 commitment of up to \$200 million in AQR Capital
15 Management Style Premia Strategy and further to
16 authorize the executive director to take all
17 actions necessary to effectuate this vote. Do I
18 see a motion?

19 MR. HEFFERNAN: So moved.

20 MR. BROUSSEAU: Second.

21 TREASURER GOLDBERG: Discussion? Questions?
22 Seeing none, all those in favor?

23 THE BOARD: Aye (unanimous).

24 TREASURER GOLDBERG: Thank you.

25 **(VOTED: That the PRIM Board approve
 the Investment Committee's**

1 **recommendation of an initial capital**
2 **commitment of up to \$200 million to**
3 **AQR Capital Management Style Premia**
4 **Strategy, and further to authorize the**
5 **Executive Director to take all actions**
6 **necessary to effectuate this vote.)**

7 TREASURER GOLDBERG: So moving on to Mike
8
9 Bailey.

10 MR. BAILEY: Thank you. I'm just going to
11 say a few words about performance, and we've got
12 a couple of voting items that my colleagues will
13 present on, and we'll be working off of page 17
14 of the expanded agenda. As Michael and Sarah
15 talked about, the equities markets continue to
16 perform strongly in private equity, which
17 reflects that led the asset classes with about a
18 14 percent one-year performance number. You're
19 seeing that ease off a little bit as we get more
20 towards long-term performance in that mid teen
21 range.

22 We had some very high performance at the
23 end of 2014 that partly reflected some really
24 strong technology venture capital backed
25 companies that went public in prior reporting
 periods, and we picked up extraordinarily high
 performance from that. So 14 is a great number.
 Still leading the equities benchmark by over a
 hundred basis points for the one-year period and

1 the music continues to play, not to keep bringing
2 in analogies.

3 Another article in the paper today about
4 the private equity world taking advantage of very
5 liquid capital markets, pretty strong credit
6 markets, as Chuck mentioned, all of the
7 ingredients that would continue to drive
8 performance, and this is a largely domestically
9 oriented portfolio, and as we've talked about in
10 the past, the earnings growth in these small
11 companies is pretty strong. So even without
12 multiple expansion or higher PE multiples, I
13 think you can continue to see some good valuation
14 increases as these private companies continue to
15 benefit from the maybe clunky economic recovery,
16 but if you're a small company, a little economic
17 recovery goes a long way in your income
18 statement.

19 The drivers of performance are, as you
20 can imagine, around a \$7 billion portfolio.
21 There are a lot of small companies in here, but
22 we could call out a private drug company that had
23 a very strong valuation increase as it raised
24 some additional capital. Several software
25 companies drove performance over the one-year

1 period. Several companies delivering enterprise
2 software and, as you know, about 7 percent of the
3 portfolio is publically traded, and that
4 generally benefitted us with companies like a
5 technology infrastructure company, a well-known
6 specialty retailer, and on the negative side, as
7 we've talked about, with respect to energy, if
8 you were a publicly-traded energy company,
9 especially in the upstream oil area, you got
10 hurt, we have some small exposure there, and that
11 did detract from performance in the one-year
12 period.

13 And I think some of those companies that
14 are highly levered, we don't know where commodity
15 prices will go, but it's pretty likely some of
16 those private companies won't be able to survive
17 without a debt restructuring. So you'll probably
18 see some of the equities actually go to zero in
19 that portfolio, but again, it won't hurt us a
20 lot. It's a pretty small piece of the portfolio.
21 And then on the long-term performance on the
22 bottom of 17, holding steady at about
23 13.2 percent.

24 And the exposure, we talked about this,
25 and I kind of think of this as a big ship with a

1 small rudder, we can drive this in really minute
2 ways in short periods of time, but it did ease
3 off to about 10.8 percent, about 30 basis points
4 lower than it was at the end of 2014. Largely
5 because the denominator continues to grow. The
6 PRIT fund continues to grow. This \$7 billion
7 just became a little bit smaller part of the PRIM
8 fund. We sort of held steady about at
9 \$7 billion. As we got more money back than we
10 put in, as you can see on page 18, performance
11 kind of made up for that decrease in market
12 value.

13 And then I would just say that we're on
14 track to -- you can see on the table on 18 that
15 we've approved about \$900 million of new
16 commitments today. You remember that we had
17 talked about a \$1.7 billion run rate of approvals
18 for this year. So we're a little over halfway
19 there. And if you approve the investments that
20 we're going to recommend in a few minutes, we'll
21 be over a billion dollars of commitment.

22 Something we don't talk about a lot but
23 I've talked with Anthony and Michael about
24 recently is you're seeing about I guess this will
25 be about ten investments that we've come to you

1 for approval. What you didn't see is about 6 or
2 7 investments that came back to us this year that
3 we decided not to bring to you for approval
4 because they didn't meet our high bar for
5 investment. I'm really proud of the team's work.
6 The team is being very disciplined. There's no
7 free pass in private equity. You really have to
8 generate great performance on a risk adjusted
9 basis to deserve to be in the portfolio. So
10 about half of the investments that came back did
11 not get to the level that we felt comfortable
12 recommending them to you. So with that I think
13 I'll stop unless there are questions, and we can
14 move on to the recommendations.

15 TREASURER GOLDBERG: Any questions?

16 MS. MCCAFFERTY: I'm here this morning to
17 recommend a capital commitment of up to €100
18 million to Charterhouse Capital Partners X. It's
19 on page 19 of the agenda.

20 Charterhouse is targeting a fund size of
21 €3 billion for Fund X. The fund will invest in
22 mid to large market buyouts in Western Europe
23 that typically represent controlling equity
24 stakes in private companies. PRIM has invested
25 in one previous Charterhouse fund, committing €80

1 million in 2009 to Charterhouse Capital Partners
2 IX.

3 Charterhouse was founded in 1934. They
4 manage nine investment vehicles and have one
5 office located in London. We're recommending
6 this investment based on Charterhouse's
7 investments in mid-market media companies with
8 strong earnings growth, their ability to build
9 strong companies through acquisition, and their
10 attractive risk return profile. Charterhouse is
11 a strong firm in the middle market space in
12 Europe that invests in market leading companies
13 that have clear growth prospects and defensible
14 positioning in partnership with management. The
15 firm generates returns by selecting companies
16 with strong earnings growth and in addition will
17 pursue acquisition strategies to grow companies
18 as well.

19 The low leverage and historic low loss
20 ratios make Charterhouse an attractive investment
21 based on its risk return profile. PRIM staff and
22 the Investment Committee, by unanimous vote, are
23 recommending that the PRIM board approve a
24 capital commitment of up to €100 million to
25 Charterhouse Capital Partners X. With that I'll

1 answer questions.

2 TREASURER GOLDBERG: So I will entertain a
3 motion that the PRIM Board approve the Investment
4 Committee's recommendation of a capital
5 commitment of up to €100 million to Charterhouse
6 Capital Partners X, L.P., and to further
7 authorize the executive director to take all
8 actions necessary to effectuate this vote. May I
9 have a motion, please.

10 MR. BROUSSEAU: So moved.

11 TREASURER GOLDBERG: Second?

12 MR. SHANLEY: Second.

13 TREASURER GOLDBERG: Any discussion or
14 questions on this recommendation?

15 MR. BROUSSEAU: What has been our previous
16 return on this, the 2009 fund, the only one we've
17 invested in? I know we invested in this one and
18 then in the quantum also. Those are all previous
19 investments. What has been our --

20 MS. MCCAFFERTY: Our returns, about
21 13 percent, but that was also hurt about 300
22 basis points by FX.

23 TREASURER GOLDBERG: Any other questions?
24 We have a motion. We have a second. All those
25 in favor?

1 THE BOARD: Aye (unanimous).

2 TREASURER GOLDBERG: Thank you.

3 (VOTED: That the PRIM Board approve
4 the Investment Committee's
5 recommendation of a capital commitment
6 of up to €100 million to Charterhouse
7 Capital Partners X, L.P., and further
8 to authorize the Executive Director to
9 take all actions necessary to
10 effectuate this vote.)

11 TREASURER GOLDBERG: Next.

12 MR. BAILEY: We have one more. Michael
13 McGirr is going to present on Quantum.

14 MR. MCGIRR: So we're recommending a
15 commitment of up to \$50 million dollars to the
16 Quantum Parallel Partners VI-C. This writeup is
17 also on page 19. Quantum is an energy-focused
18 private equity firm that makes investments in the
19 upstream oil and gas, midstream power generation,
20 and energy sectors. Quantum is targeting \$750
21 million in commitments for the parallel fund
22 VI-C. PRIM has committed to two previous Quantum
23 funds starting in 2009, and this past fall the
24 PRIM Board closed on \$100 million commitment in
25 Quantum VI.

26 The parallel fund that we are presenting
27 today will coinvest alongside Fund VI. The new
28 parallel fund will invest in the exact same terms

1 and conditions as Fund VI, and only existing
2 L.P.s in Fund VI are permitted into this parallel
3 partnership. And importantly, there's no fees
4 and no carrier associated with this investment.
5 We are recommending an investment of up to \$50
6 million in Parallel Partners VI-C.

7 TREASURER GOLDBERG: So I will entertain a
8 motion that the PRIM Board approve the Investment
9 Committee's recommendation of a capital
10 commitment of up to \$50 million to Quantum
11 Parallel Partners VI-C, L.P., and further to
12 authorize the executive director to take all
13 actions necessary to effectuate this vote. Is
14 there a motion?

15 MR. SHANLEY: So moved.

16 TREASURER GOLDBERG: Is there a second?

17 MR. BROUSSEAU: Second.

18 TREASURER GOLDBERG: Discussion? Questions?

19 MR. BROUSSEAU: Same question. What have
20 been our returns on the previous two funds?

21 MR. MCGIRR: So Fund VI, really, it's too
22 early to tell. The returns aren't meaningful
23 there.

24 MR. BROUSSEAU: The 2009 one.

25 MR. MCGIRR: 2005 and 2009, and these

1 returns were affected by the downturn in
2 commodity prices, but as of 12/31 they're
3 generating a 21 percent net IRR with a 1.4
4 multiple.

5 MR. BROUSSEAU: Okay. Just a commentary,
6 not a criticism. I see that, again, this is an
7 energy investment. And of course, we've had the
8 go around here out front and at the legislature
9 on fossil fuels, and I guess that is more or less
10 dead this year in the legislature. I guess the
11 commission was not approved, I don't think. In
12 our private equity, Michael, do you know
13 approximately how many of these private equity
14 investors do we have that are in the oil, gas,
15 this energy thing that is categorized as fossil
16 fuel. I know sometime down the road we're
17 probably going to have to get our hands around
18 this if we're asked to quantify exactly what
19 PRIM's commitment is to these things.

20 TREASURER GOLDBERG: Well, isn't this also
21 including -- this is a fund that looks at
22 alternative energies also.

23 MR. BROUSSEAU: Renewables and alternatives.

24 MR. MCGIRR: We should think of this
25 investment as being primarily upstream oil and

1 gas.

2 MR. BAILEY: I think compared to many of our
3 peers, we're underweight in this type of
4 investment in the private portfolio. You can
5 count on really one hand the number of managers,
6 and as you know, there are over a hundred
7 managers. So call it five or six with two hands
8 firms that pay attention to that sector. And
9 some of them are more focused on infrastructure
10 investing like power generation than upstream oil
11 and gas.

12 As Michael pointed out, this one
13 really -- you can think of as out there on the
14 upstream oil and gas side, but it's a small part
15 of the portfolio, and we can come back to you
16 with the exact dollar numbers, but just looking
17 at it quickly, it's about 5 percent of the
18 7 billion, 5 percent of the 7 billion in exposure
19 right now.

20 MR. BROUSSEAU: I guess I'm amazed that some
21 of the critics of our investment in fossil fuels
22 are saying that we have a billion and a half
23 dollars only that would be impacted by fossil
24 fuels, and I'm saying, I don't know where they're
25 getting these figures from because even we don't

1 have that information as a board. Now, where
2 these figures are coming from, somebody they've
3 told people in the legislature that it would
4 impact PRIM to a billion and a half to divest in
5 this, and I don't know where this is coming from,
6 and I don't think we've even taken the time nor
7 have we been mandated to do an impact study of
8 what this would do in terms of fossil fuels.
9 Just a commentary. It doesn't require an answer,
10 but I think it's out there.

11 TREASURER GOLDBERG: Any comments on that?
12 So this is a -- what you're suggesting is that
13 it's a fictitious number?

14 MR. BROUSSEAU: No. I don't know what the
15 figure would be. I don't know if somebody just
16 grabbed a figure out of thin air when even nobody
17 on this board has an idea of what our exposure is
18 to fossil fuel investment. That would take an
19 indepth study, probably a consultant and an
20 analysis to do this. But I think at some point
21 in time I think we are going to be asked to do
22 it, probably sooner than later, as this --
23 because there are people in the legislature who
24 are very much in favor of moving in this
25 direction, and I think we have to be cognizant of

1 it.

2 TREASURER GOLDBERG: You may want to know
3 that my family and I have divested from fossil
4 fuels in our investments, and it has not
5 negatively impacted. It's not at these numbers
6 but it is identifiable. So we will be able to do
7 it, not even necessarily needing a consultant.

8 MR. BROUSSEAU: We can do this in-house?

9 TREASURER GOLDBERG: I believe so. Don't
10 you agree, Michael?

11 MR. TROTSKY: Well, I think the only thing
12 that I've said publicly about this issue is that
13 the concept of what a fossil fuel investment is,
14 it is not clearly defined to us. So that, you
15 know, my testimony that I submitted 2 1/2 years
16 ago at this point, and I haven't said a thing
17 since, is that in order to do an impact study, we
18 would need a more clear definition of what that
19 is. The term fossil fuel company is very
20 ambiguous to us, and it's impossible, based on
21 that alone, to do an impact study.

22 TREASURER GOLDBERG: Well, plus the work
23 that I've been doing with CERES and talking with
24 other treasurers who are socially progressive
25 treasurers is that we are actually having an

1 impact on a lot of the quote/unquote fossil fuel
2 companies by proxy voting, by attending their
3 annual meetings and speaking out about their
4 valuations of their old line fossil fuels and the
5 like. And it's actually beginning to have some
6 impact and, of course, we've talked about
7 activism with proxy voting, which we are finding
8 is a really good strategy in terms of real
9 impact, and it's becoming the norm. Shareholder
10 activism is becoming the norm, not just in public
11 pension funds but with private funds also, which
12 I'm finding fascinating. It's a real change over
13 the last 20 years.

14 MR. TROTSKY: So two other clarifications, I
15 guess, is maybe even a question but the
16 divestment piece of the legislation I've even
17 seen up until now does not include private
18 investments. It's only public markets. So this
19 wouldn't even fall under the divestment mandate
20 of any of the legislation that I've seen.

21 TREASURER GOLDBERG: Well, regardless,
22 nothing has been laid out. If there's actually a
23 study committee, then I'm assuming everything is
24 on the table, but anyway.

25 MR. TROTSKY: And secondarily, the only

1 point I'd want to make is that the fact that
2 we're seeing a parallel partner shift opportunity
3 is evidence that we're at a point in the cycle
4 where money can be made here, and our private
5 equity folks see that as a huge opportunity to
6 make money. Despite how you feel about anything
7 else, it is clear to us that at this point
8 there's a lot of opportunity. Some of our
9 colleagues in endowment spaces have increased
10 their exposure to fossil fuel investments
11 sevenfold, some locally.

12 MR. BROUSSEAU: Just a commentary. At the
13 Mass Teachers Association annual meeting in May
14 here in the city, the Mass 350 group, their
15 presence was very strong, and they offered a new
16 business item to urge the PRIM Board and to get
17 the legislature to have us divest of all fossil
18 fuel investments. Dennis and I, through the
19 network we had and our ability -- this discussion
20 went on for over one hour on this very issue. We
21 were able to get it defeated through an amendment
22 that if and when this came that MTA would push
23 the idea of an impact study as to how it would
24 impact PRIM specifically, because it was aimed at
25 them, but these people are not going to go away,

1 and they were very vocal, but we had an hour
2 discussion on just one new business item. That's
3 an issue that has generated a great deal of
4 interest. It was defeated overwhelmingly, but
5 thanks to some of us who were there who know this
6 investment world that we're dealing with, and the
7 delegates usually listen to their people who
8 serve on these boards.

9 MR. NAUGHTON: I spoke at the annual
10 meeting, MTA annual meeting, and the sense I had,
11 I don't know if you share this, but the sense I
12 had on the vote on that, what I explained to
13 people was that you did not want to fool around
14 with investments in a willy-nilly fashion until
15 you saw clearly how it would impact on the
16 investments. And of course, when you tell people
17 that when they retire, and there were a large
18 number of retiree delegates, including Bob and I,
19 but everyone got this. It was an overwhelming
20 vote against, based on the fact that they clearly
21 placed their primary concern on the returns until
22 they could see clearly that those returns would
23 not be negatively affected.

24 TREASURER GOLDBERG: And that's what we've
25 talked about. I mean, even Mike and I discussed

1 that during our campaign last year, that you
2 don't want to negatively impact returns. You
3 want to be socially conscious, and you want to do
4 a lot of the right things, but you want to
5 balance it against the returns, because our
6 fiduciary duty is to assure that the assets are
7 available to support the retirement system, and
8 that retirement system is the economic security
9 of a lot of people out there, and the good news
10 is people are living longer, and so we need to
11 make sure we have the liquidity to support them
12 in their retirement.

13 And I think that what you're saying,
14 Dennis, is that once you put that out there that
15 it's critical that we look at it, and if we do
16 anything ever, we do it in a very slow and
17 methodical way to make sure that all our -- that
18 we don't drop. I mean, right now we're trying to
19 have greater than anticipated returns. We're
20 trying to fill that bucket. Because we still
21 have an unfunded liability, and the whole concept
22 is to get there faster and faster, if we can.

23 MR. NAUGHTON: When we left the meeting,
24 though, the motion that people supported, was to
25 prevail in the legislature to ask us to conduct a

1 study, and I don't think that's been successful
2 this year.

3 MR. BROUSSEAU: Well, I think they monitor
4 what's going on in the legislature and
5 establishing the investment commission, which I
6 think will probably be charged to do this, am I
7 correct, did not pass the legislature. It did
8 but there was a proposal for a divestment
9 commission, and I think that has, from what I've
10 read, is off the table right now.

11 MR. SUPPLE: The proposal that was made as
12 part of the budget process did not go forward as
13 part of the budget process, but there are
14 freestanding pieces of legislature that are still
15 in place.

16 MR. BROUSSEAU: And that's what our motion
17 addressed at the annual meeting.

18 MR. NAUGHTON: I think if it doesn't succeed
19 soon, the consequence of that, we'll take an
20 example of the MTA membership, it might not be so
21 easy to get as many people in the future, they
22 might figure, well, we wanted the best. We have
23 to take a chance on it. I don't know how long it
24 would take people to get to that point, but I
25 personally would like to see a study done.

1 MR. BROUSSEAU: I don't like to have us be
2 in a reactive mode. I'd rather be on top of this
3 and ahead of the curve. It's not going to go
4 away, because it's all over the county. So I'd
5 rather not to be reactive but be right there with
6 the information we need. I'm off the subject.

7 TREASURER GOLDBERG: We have a motion and we
8 have a second on a \$50 million investment. All
9 those favor?

10 THE BOARD: Aye (unanimous).

11 TREASURER GOLDBERG: Thank you.

12 **(VOTED: That the PRIM Board approve**
13 **the Investment Committee's**
14 **recommendation of a capital commitment**
15 **of up to \$50 million to Quantum**
16 **Parallel Partners VI-C, L.P., and**
17 **further to authorize the Executive**
18 **Director to take all actions necessary**
19 **to effectuate this vote.)**

20 TREASURER GOLDBERG: I think we're moving on
21 to real estate and timber.

22 MR. BAILEY: Thank you.

23 MR. SCHLITZER: First of all, thank you for
24 approving that RFP. I'm just going to give an
25 overview of performance and then we can move on
26 to the Admin. & Audit portion of the meeting.
27 I'm just going to go through everything verbally
28 as I typically do, but the materials begin on

1 page 19, and additional information in
2 Appendix H. So just starting with commercial
3 real estate, from an allocation perspective we're
4 valued at 5.9 billion. That's 9.5 percent of the
5 PRIT fund. That leaves us with approximately
6 \$340 million, which potentially could be invested
7 to get to target.

8 We've completed five new acquisitions
9 year to date, \$460 million. One thing that I did
10 want to mention which was discussed in length at
11 the Real Estate Committee meeting was that one of
12 our investment managers had recently recommended
13 the sale of PRIM's largest asset, which is a
14 class A office building located in downtown San
15 Francisco. 333 Bush Street is the address.

16 So again, we did discuss this in a fair
17 amount of detail at the meeting. I want to make
18 it clear that this is a discretionary
19 recommendation so there's no vote, but especially
20 given that we're in separate accounts, we always
21 have a lot of ability to be involved in these
22 things and to not accept a recommendation if we
23 so choose. Just to give you a dollar estimate,
24 we would probably expect roughly \$350 million in
25 return of capital were the building to be sold,

1 and that would be reinvested in real estate.

2 Moving on to performance, total real
3 estate performed 13.4 percent. That's 160 basis
4 points over benchmark. The private portion of
5 that returned 14 percent, 220 basis points above
6 benchmark. I just thought I'd mention
7 operationally that the portfolio continues to be
8 in pretty good shape. The core portfolio was 94
9 percent occupied. We have 4.5 years of average
10 remaining lease term in place. So what that
11 really means is that we have a very durable,
12 contractual cash flow in place over the next four
13 to five years in the event of a downturn. And
14 then, lastly, we did have just under a 2 percent
15 writeup in the first quarter. We're still
16 waiting for second quarter appraisals to come in.
17 So that's an increase of 91 million.

18 The REIT portfolio was up 11.3 percent
19 over the past year. That's 50 basis points above
20 benchmark. Michael mentioned some monthly
21 volatility in the public markets, and we're
22 certainly seeing that in the REIT markets as
23 well. I'd say a lot of that is driven by
24 interest rate speculation, and we'll talk about
25 markets a little more, but the fundamental story

1 at the real estate level has not changed much.
2 So this environment has probably provided some
3 trading opportunities. But generally our
4 managers, as you know, take more of a long-term
5 view in terms of company selection.

6 Again, things are pretty good, both from
7 a fundamentals and capital markets perspective.
8 We've seen no pull back in capital demand. I've
9 talked a little bit about this from US or
10 international investors in currency or oil prices
11 or anything else. It's a very, very robust
12 capital market environment. Initially, yields
13 are 4 to 5 percent, which is 150, 200 basis
14 points above the ten-year treasury, and we have
15 the opportunity going in to further add 200 to
16 300 basis points of additional return in expected
17 rental growth.

18 And then lastly, vacancies are down
19 about 1 percent across all property types. We're
20 approaching equilibrium levels from a supply and
21 demand perspective. That feels pretty good and
22 could lead to rent growth that's being
23 underwritten going forward.

24 If there aren't any questions on real
25 estate, and I'm happy to answer any, I'll just

1 move on to the natural resources portfolio. From
2 an allocation perspective, the total natural
3 resources portfolio is valued at \$2.4 billion.
4 That's 3.48 percent of the fund. The timberland
5 portion of that bucket is 1.7 billion or 2.7
6 percent of the fund. That leaves us with
7 approximately \$530 million, which is currently
8 invested in public natural resource equity
9 portfolios. It's liquidity for new timberland
10 investments going forward. We have not completed
11 any new timberland acquisitions year to date, and
12 I've talked about how illiquid that market has
13 been and how lumpy it's been. There are a couple
14 of large portfolios that are in the market
15 currently and they're in different stages, and
16 PRIM is involved in both of those. And to the
17 extent that either of them materialize for the
18 fund, we'll certainly let you know.

19 Moving on to performance. Total natural
20 resources returned 1.8 percent over the last
21 twelve months. That's 61 basis points below
22 benchmark. So let me just talk about how that
23 breaks out. Timberland returned 9.4 percent.
24 That's 112 basis points below benchmark. This
25 has been referenced earlier in the meeting, but

1 currency is probably the primary culprit there.
2 We've had a negative impact from the translation
3 effect on our Australian investment. Although,
4 operations continue to be very good there, but
5 valuation has been hurt by the currency issue.
6 And we've experienced a pretty steep drop in
7 European demand for certain types of timber due
8 to Euro weakness. So that has affected one
9 property in particular that's an overweight in
10 the fund. So those issues being both overweights
11 from a portfolio perspective brought down
12 relative performance.

13 The public natural resources portfolio,
14 again, where the uninvested timberland capital
15 was held, was down 14 percent over the past year.
16 That's 46 basis points below benchmark. That's
17 really sort of been driven by one manager. This
18 particular group is running a smaller market cap
19 strategy. They're much more growth focused, and
20 that particular approach has not performed very
21 well, as you might imagine, in this energy
22 environment. I would note that this same group
23 is outperforming by over 300 basis points year to
24 date as oil prices have recovered. So there's
25 certainly some ebb and flow in the short-term

1 figures.

2 Just lastly, let me make a couple of
3 points on the timberland markets. You may have
4 seen that housing starts did jump quite a bit in
5 April. Starts are now running at 1.4 million.
6 That's about 20 percent above the March figures.
7 Single family starts were up 17 percent.
8 Multi-family continues to be strong at
9 32 percent. And permits were up 10 percent.

10 In terms of timber prices, we're still
11 working off Q1 numbers, which had a lot of noise
12 and have been pretty volatile in general. Lumber
13 futures are up quite a bit based on the housing
14 numbers, and we're expected to see some positive
15 data in the timber prices in the second quarter.

16 So I'm happy to answer any questions on
17 the natural resources portfolio.

18 TREASURER GOLDBERG: We do not have a vote.
19 This was an update. So this is discussion and
20 any questions -- I'm going to have to make my
21 standard operating procedure comment: I'm still
22 waiting for the fieldtrip, and now I know we need
23 to stop in San Francisco on the way to Australia.
24 So we can do real estate and timberland in one
25 trip.

1 MR. SHANLEY: Are we recommending that we're
2 going to sell it?

3 MR. SCHLITZER: I am. We're very
4 comfortable.

5 MR. SHANLEY: What was our initial
6 investment?

7 MR. SCHLITZER: We bought the property for
8 about \$265 million. There was some debt
9 involved, and we do have a joint venture partner,
10 but there was the gross price going there, and
11 we'll -- I don't want to get ahead of myself
12 because we haven't started marketing it, but
13 we'll potentially realize a very good return,
14 which is why we think it's prudent to accept the
15 recommendation.

16 TREASURER GOLDBERG: Very good.

17 MR. SCHLITZER: Thank you.

18 TREASURER GOLDBERG: Thank you. Next on the
19 agenda. Finance and Administration report.
20 David, we have a very -- from my point of view a
21 very exciting item, Item No. A.

22 MR. GURTZ: Yes. We make a lot of babies
23 here at PRIM.

24 TREASURER GOLDBERG: And I'm going to say
25 exactly what I've said at a few other meetings,

1 that, believe it or not, our first deputy has a
2 background in emergency treatment. So if ever
3 needed, it will happen. He really does,
4 actually.

5 MR. MACDONALD: I've done six in the field.

6 TREASURER GOLDBERG: I'm telling you, he can
7 run down from the State House really fast. I
8 wasn't kidding. So given the water here. . .

9 MR. GURTZ: So this is the last voting item
10 of the day. We'll be speaking a little bit to
11 this interoffice memo that was left in front of
12 your seat. So PRIM's parental leave policy
13 historically provides only two weeks at full pay.
14 And birth mothers may have taken an additional
15 two weeks short-term disabilities at two-thirds
16 pay, up to a maximum of \$1,000 per week. That
17 parental leave policy has been in place for quite
18 some time and appears to be have been based on
19 the Commonwealth's Human Resource Division's red
20 book policy of family leave.

21 And we discussed this topic at the
22 Admin. & Audit Committee on May 21, and PRIM
23 staff and several board and committee members
24 believed that this policy was insufficient and
25 quite honestly not competitive with some other

1 governmental agencies and more importantly with
2 other local financial services institutions with
3 whom PRIM competes to attract and retain our
4 employees. So therefore, Michael Trotsky emailed
5 on May 28th of this year and changed PRIM's
6 parental leave program to include eight fully
7 paid weeks for birth mothers and/or primary care
8 providers upon the birth or adoption of a child,
9 and this is an increase from the previous two
10 weeks that we've had in place.

11 PRIM determined that the eight weeks was
12 a good first step that needed to be done
13 immediately based on our informal review of
14 local investment firms and other governmental
15 agencies as well as from our compensation
16 consultants 2014 formal survey that they
17 conducted. McLagan, our compensation consultant,
18 surveyed 68 investment firms of which 62 percent
19 of those firms provided 100 percent of pay for at
20 least eight weeks or more. And in fact, nearly
21 half of the firms, 46 percent to be precise,
22 provided 100 percent of paid for 12 weeks or
23 more.

24 So further review of this policy and
25 PRIM's entire employee handbook will continue

1 throughout this year to ensure PRIM remains a
2 competitive employer, but PRIM today is seeking
3 retroactive ratification for the outdated
4 parental leave policy. With that, I'm happy to
5 answer any questions or if anybody has any
6 thoughts or comments.

7 TREASURER GOLDBERG: Yes. I think that I
8 should let everyone in the room know that this
9 morning Treasury announced a 12-week parental
10 leave policy, and it is being very well received.
11 When we had our meeting last week and we
12 discussed on the -- well, we had not a meeting
13 but a group conversation, I felt that this was an
14 excellent proposal because it was a step in the
15 right direction, and we all said on the phone
16 that this was the beginning, and one of the
17 things is to do the right thing, it's also to be
18 a supportive employer and an attractive employer.

19 And in many ways, it's a step in our
20 diversity initiatives, because we are competing
21 for a younger cohort of very highly regarded
22 individuals, both male and female who feel that
23 support of a family, because so many families are
24 both working in very demanding careers, that this
25 gives us an advantage and out there in the

1 private investment world, they're doing this, and
2 we have a passion about diversifying everyone who
3 works here and those that we work with and so we
4 should be leading on this, not following the red
5 book.

6 So what we decided yesterday at Treasury
7 was that we felt strongly for both parents, and
8 in birth or adoption, that we have 12 weeks. And
9 we did it and we announced it. And maybe Jay ran
10 it this morning. So I feel that although we are
11 initially proposing eight, I think we should do
12 twelve.

13 MR. HEFFERNAN: I second that motion.

14 TREASURER GOLDBERG: So we now have a
15 motion, an amended motion, and a second on an
16 amended motion. Discussion?

17 MR. BROUSSEAU: I'm all for it. No problem.

18 MR. HUBBARD: Retroactive back to when?

19 MR. BROUSSEAU: May 28.

20 MR. HEFFERNAN: It's retroactive to when the
21 memo came out.

22 MR. GURTZ: That's correct.

23 TREASURER GOLDBERG: I'm so proud of
24 everybody.

25 MS. FITCH: It's a go.

1 MR. TROTSKY: Definitely a go.

2 TREASURER GOLDBERG: So we have a formal
3 amended motion that the PRIM Board retroactively
4 ratify the updated parental leave policy as
5 described in the expanded agenda and amended by
6 the Board, and in the executive director's email
7 as amended by the board now of May 28, 2015, to
8 PRIM Board, Committee and Staff members, and
9 further to authorize the executive director to
10 take all actions necessary to effectuate this
11 vote. All those in favor?

12 THE BOARD: Aye (unanimous).

13 TREASURER GOLDBERG: Thank you.

14 **(VOTED: That the PRIM Board**
15 **retroactively ratify the Updated**
16 **Parental Leave Policy, as described in**
17 **the Expanded Agenda and amended by the**
18 **Board, and further to authorize the**
19 **Executive Director to take all actions**
20 **necessary to effectuate this vote.)**

21 TREASURER GOLDBERG: This is the way that
22 we're going to continue to attract smart and
23 terrific families into state government work, and
24 that's what we need to do. So thank you. Next
25 item.

26 MR. GURTZ: The next topic is the diversity
27 initiative. So I'm going to invite a couple more

1 colleagues up here. Sarah Samuels will be
2 joining me as well as Dan Eckman, who is the
3 director of finance here at PRIM. And I'll be
4 referring to or we'll be referring to
5 Appendix I.

6 As you find that Appendix I, PRIM has
7 been thinking about diversity for several years,
8 but today for the first time, we present PRIM's
9 firm-wide diversity initiative to this Board. We
10 did discuss this at the Committee Meeting a
11 couple weeks ago. While today is the first time
12 we're doing it as a firm-wide initiative, it
13 certainly will not be the last, and I think we
14 expect to regularly update both the committee and
15 the board on this initiative. It's one of those
16 initiatives that will not be corrected overnight
17 and so we want to be continually updating you
18 guys on our progress.

19 So if you do have that agenda, I want to
20 flip through the agenda real briefly. Today
21 we're going to discuss the recent research that
22 supports why diversity is important, how public
23 plans are playing an active role in this growing
24 initiative. Sarah is going to be discussing the
25 industry challenges, and Dan and Sarah will

1 present what PRIM as an organization has done
2 both from a staffing perspective as well as from
3 an investment management perspective.

4 So on page 2, why it's important. In
5 February of this year McKenzie and Company
6 published their Diversity Matters report. Their
7 report reviewed 366 public companies across a
8 range of industries located in the UK, Canada,
9 the US, and Latin America. The research looked
10 at the relationship between the level of
11 diversity defined as woman in ethnicity in the
12 leadership of large companies, and a company's
13 financial performance measured as the average
14 earning before interest and taxes or EBIT from
15 2010 to 2013.

16 Now, McKenzie's findings showed that
17 companies with the highest gender or ethnic
18 diversity in leadership positions reported
19 significantly better financial performance,
20 higher than companies with low gender or ethnic
21 diversity. In fact, McKenzie states, "The
22 companies in the top quartile for gender
23 diversity were 15 percent more likely to have
24 financial returns that were above their national
25 industry median, and that companies in the top

1 quartile for racial ethnic diversity were
2 35 percent more likely to have financial returns
3 above their national industry median."

4 So McKenzie's research revealed that
5 more diverse companies performed better.
6 McKenzie's report also identified key factors
7 driving better performance, highlighted on
8 page 3. These factors include recruiting the
9 best talent, stronger customer orientation,
10 increased employee satisfaction, and improved
11 decision making.

12 For PRIM, I think the relevant factors
13 are winning the war for talent by recruiting the
14 best, which leads to improved decision making,
15 which ultimately, bottom line, hopefully improves
16 the PRIT fund's returns.

17 PRIM is not alone in this. Many public
18 plans are playing an active role and encouraging
19 diversity, and I've noted two quick examples that
20 have gained headlines recently. The first one in
21 March, nine public pension plans representing
22 over a trillion dollars in investment assets sent
23 a letter to the SEC to update its board nominee
24 disclosure awards in order to help investors
25 better know their board's diversity.

1 Specifically, the letter asked that the
2 rules require companies to create a chart or a
3 matrix of each nominee's gender, race, ethnicity,
4 skill, experience, and attributes. And then just
5 last month the 160 billion New York City pension
6 plan announced new diversity guidelines that will
7 be used in hiring investment managers. The New
8 York City pension plan is expected to survey
9 managers this year seeking information about the
10 ethnic and gender breakdown of their boards and
11 executives.

12 So with that I'll turn it over to Sarah
13 to talk about the challenges we face.

14 MS. SAMUELS: Thanks, Dave. If we turn to
15 pages 5 and 6, these pages show external research
16 and suggest that both women and minorities are
17 under represented in leadership positions across
18 the financial services industry. So page 5 shows
19 research put out by Chief Investment Officer
20 Magazine, and this breaks out senior female
21 leadership roles by financial profession.

22 So for example, the top left shows that
23 10 percent of long-only investment firm leaders
24 are women. That compares to 3 percent for hedge
25 funds on the far right. Other industries outside

1 of asset management have better female leadership
2 representation with law at 22 percent; STEM,
3 that's Science, Technology, Engineering, and
4 Math, at 24 percent.

5 TREASURER GOLDBERG: You said better but
6 it's still not good. I want to make that clear.

7 MS. SAMUELS: And women practicing medicine
8 at 34 percent. Page 6 shows research by the
9 Government Accountability Office, and this page
10 breaks out minority leadership representation
11 across financial services industries. According
12 to this research, in 2011 less than 20 percent of
13 managers in the financial services industry were
14 classified as minorities.

15 MR. ECKMAN: Thanks, Sarah. Moving on to
16 the next slide, slide 7, what PRIM has done in
17 staffing. In an effort to increase the amount of
18 diverse candidates we get responding to job
19 postings, we reached out to local investment
20 firms, Wellington and State Street Global
21 Advisors to learn about their diversity
22 recruitment programs.

23 Both firms were happy to share
24 information and invited us in for meetings.
25 During these visits it was clear how much effort

1 both firms put into their programs on an ongoing
2 basis as they're competing with other investment
3 firms, investment banks, commercial banks, and
4 management consulting firms.

5 On the new hire front they work with
6 colleges and universities through attending
7 on-campus job fairs, inhouse workshops, and
8 speaking at events that students will be in
9 attendance. Through these methods both have
10 created a presence on campuses and built a
11 pipeline of full-time and internship hires.

12 The firms have employed similar
13 strategies on the experienced hire side as well.
14 Groups such as National Association of Black
15 Accountants, NABA, the Tweego Foundation, the
16 Partnership, the Boston Club, and 100 Woman in
17 Hedge Funds are targeted high-priority affinity
18 groups. Employees are encouraged to become
19 members and foster relationships between the
20 firms and the groups. These relationships are
21 important not only to build pipelines for new
22 employees but also to increase the amount of
23 diverse workers in the investments industry.

24 Another consistent strategy between
25 firms was if using recruiters to fill positions,

1 both firms instruct recruiters to provide them
2 with a full slate of candidates. Searches aren't
3 closed until this goal is met. In trying to
4 expand our pool for applicants, we've already
5 targeted groups NABA, Tweego Foundation, and 13
6 local university and college affinity groups. In
7 some cases this has already produced results in
8 terms of applicants.

9 As in prior years we've continued our
10 internship programs receiving over 60 applicants
11 and hiring five summer interns from various
12 schools, Brandeis, Cornell, and Boston
13 University. Two, Rebecca and Bernardo, are here
14 today, and the other three will be starting in
15 the next month or so. We're excited for them,
16 and we feel this program is crucial as we try to
17 build a pipeline going forward.

18 Once again, it's clear how lucky we are
19 to have Sarah Samuels, our new deputy CIO, as she
20 is already a member of the 100 Woman in Hedge
21 Funds and the Boston Club. In addition, she
22 attended and was a speaker at the AICIO, the
23 Missing Women of Asset Management Conference. On
24 that note, I'll turn it back over to Sarah.

25 MS. SAMUELS: So Dan spoke about what we've

1 done on the staffing front to promote diversity.
2 I'm going to speak on page 8 about what we've
3 done to promote diversity in our investment
4 program. First and foremost, in 2011 PRIM
5 adopted an emerging manager policy, and this
6 encourages the hiring of small investment firms
7 and/or minority or women-owned investment firms
8 as part of our program.

9 Today PRIM invests nearly \$1 billion,
10 almost 2 percent across eleven women in minority
11 owned investment firms across the fund. We
12 issued an RFP for emerging manager of managers in
13 2012, and the board voted in 2013 to hire one
14 international equity emerging manager. And we
15 also placed a core fixed income emerging manager
16 on our manager bench. This is Progress
17 Investment Management. They manage a Barclays
18 Aggregate portfolio. The reason we put them on
19 the bench was because we had high conviction. In
20 2013 we were about to embark on a full scale
21 review of our core fixed income portfolio, which
22 we've talked about at length, and we weren't sure
23 what would happen to it with the restructure of
24 our portfolio, because of some of the asset
25 allocation changes that we've made through our

1 core fixed income portfolio, the fact that we are
2 keeping an allocation to the Barclays Agg., we're
3 going to revisit Progress Investment, and you may
4 see a recommendation regarding that organization
5 later this year.

6 Elsewhere in our program PRIM has
7 retained one woman-owned real estate investment
8 advisor. And finally, as you all know quite
9 well, we recently improved our proxy voting
10 guidelines to include firms who employ diversity
11 and equal employment opportunity.

12 MR. TROTSKY: Just a clarification, Sarah,
13 they're on the bench so they are preapproved. So
14 it won't require an approval, but we'll be
15 refreshing our due diligence and make sure we're
16 comfortable with them.

17 MR. GURTZ: So page 9 is PRIM's next steps.
18 As I said, I want to obtain your feedback, some
19 feedback from the Admin. Committee, and I'd like
20 to get your feedback today or at any other point
21 in time. This is an ongoing initiative. So if
22 at any point in time if you think of some idea or
23 you've heard some good idea from another
24 colleague or some other organization, please let
25 us know. We're going to continue to reach out

1 and expand our presence in affinity groups in
2 terms of recruiting more employees. We're
3 working with the Boston Securities Analysts
4 Society to host a women in investment management
5 conference here in Boston.

6 TREASURER GOLDBERG: When will that be; do
7 you know?

8 MR. GURTZ: We're looking at I think this
9 fall. They hosted one actually yesterday. It
10 was out in New Mexico. So we want to do --

11 TREASURER GOLDBERG: I would like you, as
12 soon as you can, to make sure that that is on my
13 schedule, because I think what I am finding is
14 that my chairing so many of these boards, MSTA,
15 it is encouraging more women to look toward the
16 work that we do. I can tell you, and I was
17 recruiting during transition, we had many women
18 and many minority applicants, and we hired quite
19 a number, and part of it is because when a woman
20 can walk in a room and see the person leading the
21 meeting is a woman, it is meaningful. And for
22 those who have already been there I have found
23 they're stepping up more and expressing
24 themselves more and engaging more, which is going
25 to give them more opportunity for personal

1 growth. There's a greater level of confidence.

2 So I want to be at that meeting, and any
3 recruiting opportunities where you feel I can
4 help close the deal, I want to make myself
5 available.

6 MR. GURTZ: Thank you. Michael, as Sarah
7 just mentioned, we're going to continue to fund
8 PRIM's emerging managers program. Specifically,
9 first in line is Progress, and then again, last
10 but not least, this is not a one and done
11 conversation, and we're going to continue to
12 update this board on our initiative going
13 forward.

14 TREASURER GOLDBERG: And in fact, I think
15 one of things I've talked about with Ruth Ellen
16 is she and I together have a very personal
17 interest in this, and Ruth Ellen, I'd like you to
18 add something at this point.

19 MS. FITCH: My particular interest is in the
20 emerging managers and how we go about it, how we
21 do it, and I get the high level stuff, but I
22 think it's all in the details, and that's really
23 what matters, and one of the things that we
24 talked about was a subcommittee or a committee
25 that I really would like to see --

1 TREASURER GOLDBERG: And Michael is fully
2 aware of this and supportive of it.

3 MS. FITCH: And what I'd really like to see
4 it come together not only for myself but I think
5 for the benefit of PRIM to really understand what
6 we're doing and what we cannot necessarily do
7 better because we are doing, but what more
8 perhaps we can do and how we target and use our
9 resources, et cetera, et cetera, because I think
10 it's absolutely doable in a very substantive way,
11 but we all have these lives that we lead and so
12 we just need to focus, and I think it's really
13 important, in both women and emerging managers,
14 but I will say from that from my perspective,
15 emerging managers is really important.

16 TREASURER GOLDBERG: And then the other
17 thing, which some of you may recall, I said at
18 the end of the conversation last time is we want
19 to be leading on this. We want to show the way
20 that it can be done and with others, and so as we
21 do this, we also want to push our vendors to be
22 thinking that way too, and when we do RFPs, I
23 don't know how we can be encouraging, but in the
24 same way in our proxy voting guidelines, although
25 it wasn't a compelling -- we weren't requiring

1 companies, we were asking them to look at things
2 around wage equity and pay transparency and
3 supporting those kind of issues, and I think that
4 that's what we need to also be taking it to the
5 next step with our vendors. So I see this as the
6 beginning, and I feel that we can succeed in it,
7 and I look forward to working with you, all of
8 you, on this. You know, everybody's job that's
9 involved here at the Board is to also, when
10 you're out there, be identifying talent that we
11 could bring within. It's amazing how that can
12 actually work. So it's all of our jobs.

13 MS. FITCH: Let me just add that what I see
14 us really being able to take advantage of, and I
15 think it's in everyone's head, that we've got a
16 heck of a presence in this world, we being PRIM,
17 in the success that we've had, that we can use to
18 our advantage in these circumstances.

19 TREASURER GOLDBERG: And again, for all of
20 us who are here, public service is appealing.
21 There are intrinsic rewards. And so there are
22 people who understand that they may not
23 necessarily make the same kind of money as they
24 would out there in more of a dog-eat-dog world,
25 and that's why, though, we have to continue in,

1 like, the parental leave is a piece of this is
2 what we're about. You may not make as much
3 money, but you're serving the public good.

4 I think that one of things we always
5 need to remind people is a visual that I actually
6 talked about this week, which is what we are all
7 doing is that 85-year old woman who was a teacher
8 who is on a walker in a fixed income is supported
9 by the work that we do. We're creating economic
10 security for her, for the firefighter, for the
11 state trooper, you name it. Those are the people
12 who have done for us, and now we're doing for
13 them, and I think when people see that visual,
14 because we talk about investments and this is a
15 business here, but when we realize at the end of
16 the day it's the bucket.

17 MR. BROUSSEAU: This came before the Admin.
18 Committee, and we had a very indepth conversation
19 about this and made the recommendation that this
20 report come to the board today, not only to make
21 us aware but to build a certain level of
22 sensitivity among all board members to this
23 issue, and I know that as we go forward, as PRIM
24 put some of these policies in place and Dana will
25 be updating the Admin. Committee meeting

1 probably, at least on a quarterly basis, if not
2 more often, on our successes in this area, and
3 we'll likewise be informing the Board of this.

4 TREASURER GOLDBERG: Very good.

5 MR. HUBBARD: I just want to applaud the
6 staff. This is a great step forward. I'm
7 interested to hear, and maybe this isn't the
8 right time, but how PRIM will interact with some
9 of the affinity groups and so forth. There's a
10 number of solid asset managers and professionals
11 that sometimes haven't met our investment
12 criteria over whatever period of time, but
13 interacting with them and having them better
14 understand what we're looking for I think would
15 be significant.

16 TREASURER GOLDBERG: Terrific. Very good.

17 MR. GURTZ: Thank you. On page 22 of your
18 agenda, the topic is audit reports and interim
19 audit update. I want to give you an update. So
20 as our year ended June 30th is fast approaching,
21 our audits have begun on the PRIT and PRIM
22 organization. Dave Gagnon, KPMG's audit partner
23 discussed at the Admin. & Audit Committee the
24 2015 audit plan. KPMG's 2015 audit plan is
25 contained in Appendix J. I'm certainly not going

1 to go through it, but we did go through that at
2 the meeting.

3 Mr. Gagnon also reviewed the PRIT core
4 real estate holdings LLC audit, which is as of
5 December 31, 2014, and as a reminder, this audit
6 is now required due to our debt leverage program
7 for our real estate portfolio. This LLC audit
8 contains five of our core real estate investment
9 managers, our global REITs, and our non-core
10 partnerships in our real estate portfolio. It is
11 a very complicated audit, as you can see, it's in
12 Appendix K. It's a 50-page set of financials.
13 It did receive an unqualified opinion from KPMG.

14 And I think the only thing I want to
15 leave you with KPMG and our audit process is we
16 seem to have an audit going on pretty much
17 year-round now with KPMG. We do a number of
18 audits. The PRIT-PRIM audit, the LLC is not only
19 an audit but it's also a quarterly review that
20 they do for us. KPMG also does a writeup on
21 procedures regarding our procurement process as
22 well as our benchmarks. They also review our
23 annual CAFR and they do the three audits of our
24 timberland portfolios as well as the five core
25 real estate managers, and they're going to be

1 working on some new managed accounts for our
2 hedge fund managers.

3 So we've got KPMG in touch on a weekly
4 basis, and they're working almost year-round at
5 this point. So if there's any questions, I'm
6 happy to answer them.

7 TREASURER GOLDBERG: Do we have a legal and
8 legislative update?

9 MR. SUPPLE: Good morning. Chris Supple. I
10 just have one legislative update. I don't have a
11 need to request an executive session today. The
12 legislative update is that the state budget
13 process is underway, and there are a couple of
14 provisions that are in play that could affect
15 PRIM. There were previously a larger number, but
16 as the process has unfolded some of those have
17 gone by the wayside and there's just a couple
18 still left. And just by way of a reminder, we're
19 not part of the state budget but because it's a
20 legislative vehicle that moves forward every
21 year, people try to put proposals tacked onto it
22 called "outside sections" or "budget riders."
23 And those are the provisions typically that tend
24 to affect us, and that's the case this year as
25 well.

1 So one subject is the size of the PRIM
2 Board and the composition of the PRIM Board.
3 Those of you who were here at this time last year
4 remember we had a similar discussion because last
5 year the house budget included a provision which
6 would have added two members, the president of
7 MACRS or his designee. And as the Treasurer
8 pointed out last time, we now know that the
9 president of MACRS will actually be a her and not
10 a he, as I think the election was earlier this
11 week. But it said the president of MACRS or his
12 designee, and last year it would have added the
13 secretary of state as well. So that was passed
14 as an amendment on the house side to the House
15 Ways and Means budget. It then went to the
16 senate. A similar amendment was offered on the
17 senate side to add those two additional members.
18 That did not pass in the Senate budget last year.
19 So the issue went to conference in that format,
20 and the conference committee report did not
21 include the House version. So that provision
22 died at that point, and there was no change made
23 to the PRIM Board.

24 So fast forward to this year, a close
25 cousin of the House provision from last year was

1 proposed again this year to add the president of
2 MACRS, but this time it was not the secretary of
3 state, it was the president of AIM, the
4 Associated Industries of Massachusetts. That
5 provision passed in the House budget. So that is
6 in the House budget this year. Then the Senate
7 took up its budget process and a proposal was
8 made to amend the Senate Ways and Means budget
9 proposal to add to the PRIM Board, again the
10 president of MACRS, and also an appointment of
11 the Treasurer. That provision passed. So that
12 provision is now in the House budget, and now
13 that goes to conference -- I'm sorry, it's in the
14 Senate budget.

15 So you have the one provision in the
16 House, MACRS and AIM, and a separate provision in
17 the Senate, MACRS and a Treasury appointment. So
18 that now goes to conference and State House News
19 is reporting that the conference committee is
20 meeting today for the first time.

21 TREASURER GOLDBERG: Have they worked out
22 the rules?

23 MR. SUPPLE: I think that's usually what
24 they start off with as business item No. 1 when
25 they meet. So that's probably going to happen

1 today, but it's three House members. It's the
2 ways and means chair, the vice chair, and the
3 ranking minority member, and three members on the
4 Senate side, same thing, ways and means chair,
5 vice chair, and ranking minority member. So that
6 provision will be discussed in conference and we
7 will see what happens.

8 MR. NAUGHTON: Can I ask a question. So
9 when it comes to how the law is stated in terms
10 of the current situation, is there anybody
11 besides the constitutional officers that have
12 designee rights?

13 MR. SUPPLE: That's it, just the
14 constitutional officers.

15 MR. NAUGHTON: This is way out of ordinary
16 that the MACRS person would be able to choose a
17 designee.

18 MR. SUPPLE: It is for the PRIM Board
19 legislation. It's not unusual in other boards
20 affecting other areas where organizations that
21 are involved will be named and the organization
22 usually can offer the designee. It's not unheard
23 of, but you're correct that it would be new to
24 the PRIM Board, except for the constitutional
25 officers as you mentioned.

1 MR. BROUSSEAU: If I may, just a few
2 comments, needless to say, I was quoted in the
3 Boston Globe article yesterday. I am not ashamed
4 of what I said. I am absolutely opposed to this
5 thing. We saw it last year and it wasn't
6 included. All research that is done. We have
7 Cortex Applied Research. They've been with us
8 since 2004. They tell us you look at large
9 public pension funds, over 300 of them, none of
10 them have 11 member boards. It is not good
11 business practice. The range is 5 to 9. You
12 might rule -- nine might be at the upper levels.

13 When this law was initially passed in
14 1983, some of the historian, this grew out of the
15 Elio Commission of the early 1980s, when they
16 began to get a handle -- I think it was in the
17 Dukakis administration -- on the tremendous
18 unfunded liability that we face in this state,
19 and this piece of legislation, Chapter 32,
20 Section 23, was very carefully crafted by the
21 legislature. They worked closely with the Elio
22 Commission in establishing PRIM, what its duties
23 and responsibilities would be, the makeup of the
24 board, and it was purposely done to keep this
25 from becoming -- or keep us as non-political as

1 possible in this kind of environment.

2 As I quoted yesterday, I think this
3 proposal, if enacted, would politicize the board
4 which is not a good thing, number one; and number
5 two, it is bad public policy. We're in the
6 business of investing billions of dollars for
7 350,000 beneficiaries, and I cannot see how
8 adding two more members to this board is going to
9 make us operate more efficiently or do a better
10 job or make more money.

11 And I'm not one to hold my tongue when I
12 feel strongly about something, but this I do feel
13 strongly about, and I would hope that the rest of
14 the board would feel that way also. I know this
15 afternoon myself and several other people from
16 this board, we're going to go up to the hill, and
17 we're going to speak with the president of the
18 senate and also with the chair of the House Ways
19 and Means Committee on this issue. There's a lot
20 of talking points we could do, but I'm just
21 appalled that this would happen in this kind of a
22 vacuum and nobody up there could not see the
23 fallacy of this kind of a proposal, and I'm
24 still -- not in shock. I know things can happen
25 up there that shouldn't put me in shock, but this

1 one I really feel strongly about.

2 MR. NAUGHTON: If I may, I'd like to make a
3 further observation, I agree with what you said,
4 but even if I felt otherwise, it's not just
5 what's being proposed, it's the way it's being
6 proposed in a way that will obviate any kind of
7 true analysis and discussion of the impact of
8 such a change, but rather to just go ahead and do
9 it. To me, it's not a considerate way to do
10 business, particularly with the kind of
11 responsibilities that this Board has.

12 TREASURER GOLDBERG: So I would like to make
13 a comment about -- since you raised the article.
14 I feel it misrepresented my position to a certain
15 degree and I called Michael about it yesterday
16 morning. I was not aware of this going on until
17 actually Dennis told me about it, and so when I
18 started to look into it, I could not understand,
19 for example, why AIM was being proposed. It
20 turns out AIM has no interest in being on our
21 board, because this is a public pension fund, and
22 it's -- I could not -- I just couldn't fathom it.

23 So my comments to those proposing it
24 were, and I didn't argue for it, and it's not
25 called -- it shouldn't be "her"; it was referred

1 to as "her amendment." I said if you're going to
2 do something like this, then the Treasurer should
3 be involved in it and should be appointing
4 someone who's relevant to the work we do. I'm
5 not taking a position on this at all, and I think
6 the way that Dennis just articulated it, that it
7 if we were to expand the board, it should be done
8 so in a more considerate fashion.

9 Now, I'm going to say, I do understand
10 MACRS's viewpoint in terms of some systems are
11 now fully invested with us, and they represent a
12 certain group of employees who are not sitting at
13 this table, and you've got to remember, I come
14 from a contributory retirement system in
15 Brookline. So I understand their point of view.
16 But I also came into this in the middle of the
17 process. And so I did not like the way I was
18 portrayed in that article, and I was going to say
19 this to people individually, but since it has now
20 come up in the room, I might as will state it
21 fully that it really kind of misrepresented the
22 flavor, because Dennis is well aware of the fact
23 that I didn't know until you told me about it,
24 and I called Michael and said What is this, and
25 then I called people who I guess were proposing

1 it to find out what this was about. So it will
2 be interesting to see.

3 MR. BROUSSEAU: I can understand the
4 concerns of some of the MACRS people, but there
5 are three board members sitting here who are
6 representing constituent organizations who
7 already belong to MACRS. They were all at the
8 conference Monday, Tuesday, Wednesday. Paul,
9 you're representing an organization that is a
10 constituent member of MACRS. Theresa does.
11 Dennis does. And the fact that it's not
12 representation, our committee, the Admin.
13 Committee has two MACRS people on the committee.
14 So this -- I mean, some do not know all of this
15 information, which we're going to try to make
16 them aware of.

17 TREASURER GOLDBERG: Any other comments on
18 this?

19 MR. NAUGHTON: Just one, I've never heard it
20 said that anyone felt that any damage was
21 suffered at the hand of the current board for any
22 of the MACRS contributors. So that would be a
23 question I would ask. When you got to the point
24 where you want to make that big a change, it's
25 got to be something that rattled your cage.

1 MR. BROUSSEAU: When I went on this board in
2 1987 we had 1.7 billion. We're at 62 billion
3 plus. We must be doing something right. If it
4 ain't broke, don't fix it.

5 MR. NAUGHTON: Well, that's assuming it's
6 based on the issues and not something else.

7 TREASURER GOLDBERG: Any other comments?

8 MR. BROUSSEAU: Motion to adjourn.

9 TREASURER GOLDBERG: Motion to adjourn.

10 MR. NAUGHTON: So moved.

11 TREASURER GOLDBERG: Do I have a second?

12 MR. HUBBARD: Second.

13 TREASURER GOLDBERG: Any discussion around
14 that? All those in favor?

15 THE BOARD: Aye (unanimous).

16 TREASURER GOLDBERG: Opposed? Thank you.

17 **(VOTED: That the PRIM Board approve**
18 **the adjournment of the June 4, 2015**
19 **board meeting at 11:51 a.m.)**

20

21

22

23

24

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PENSION RESERVES
INVESTMENT
MANAGEMENT BOARD

Appendix B

Callan PRIT Fund Performance Report Color Charts.
June 30, 2015

*PRIM Board Meeting
Tuesday, August 11, 2015*

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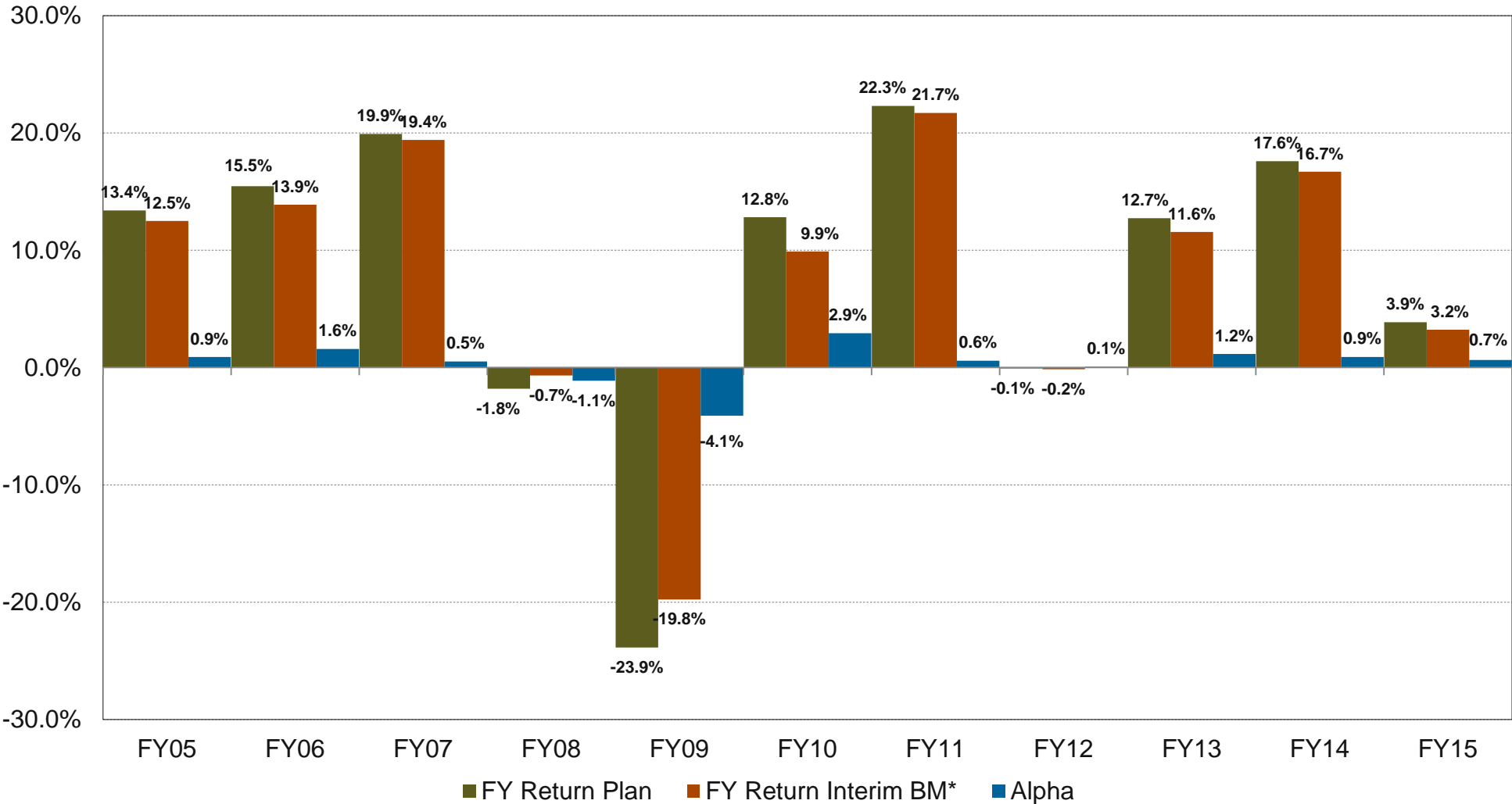
Commonwealth of Massachusetts Pension
Reserves Investment Management Board

PRIT Fund Performance Report

Gross of Fees for Period ending
June 30, 2015

Total PRIT Fund Fiscal Year Performance

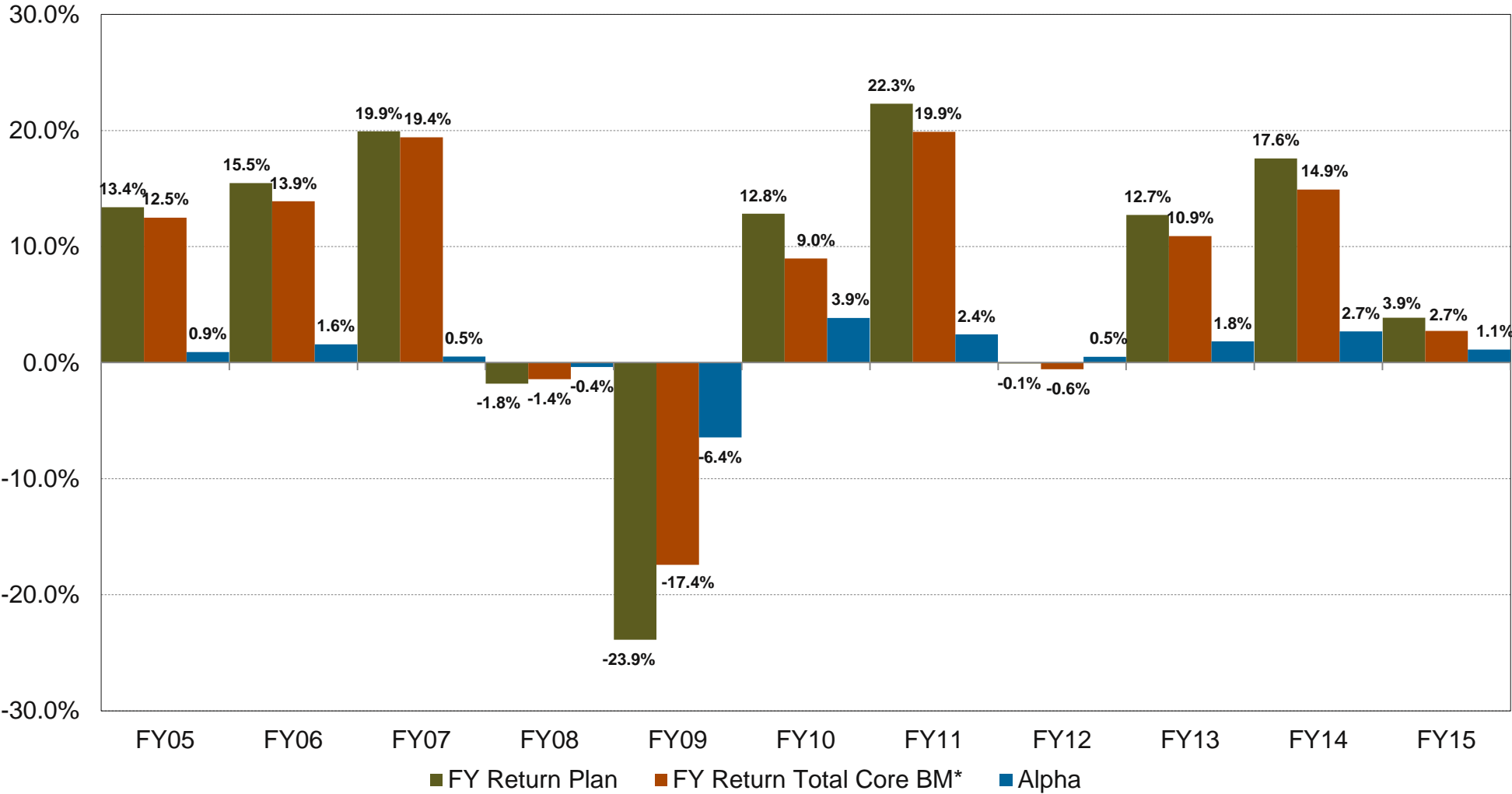
Gross of Fees



**Excludes Private Equity Benchmark*

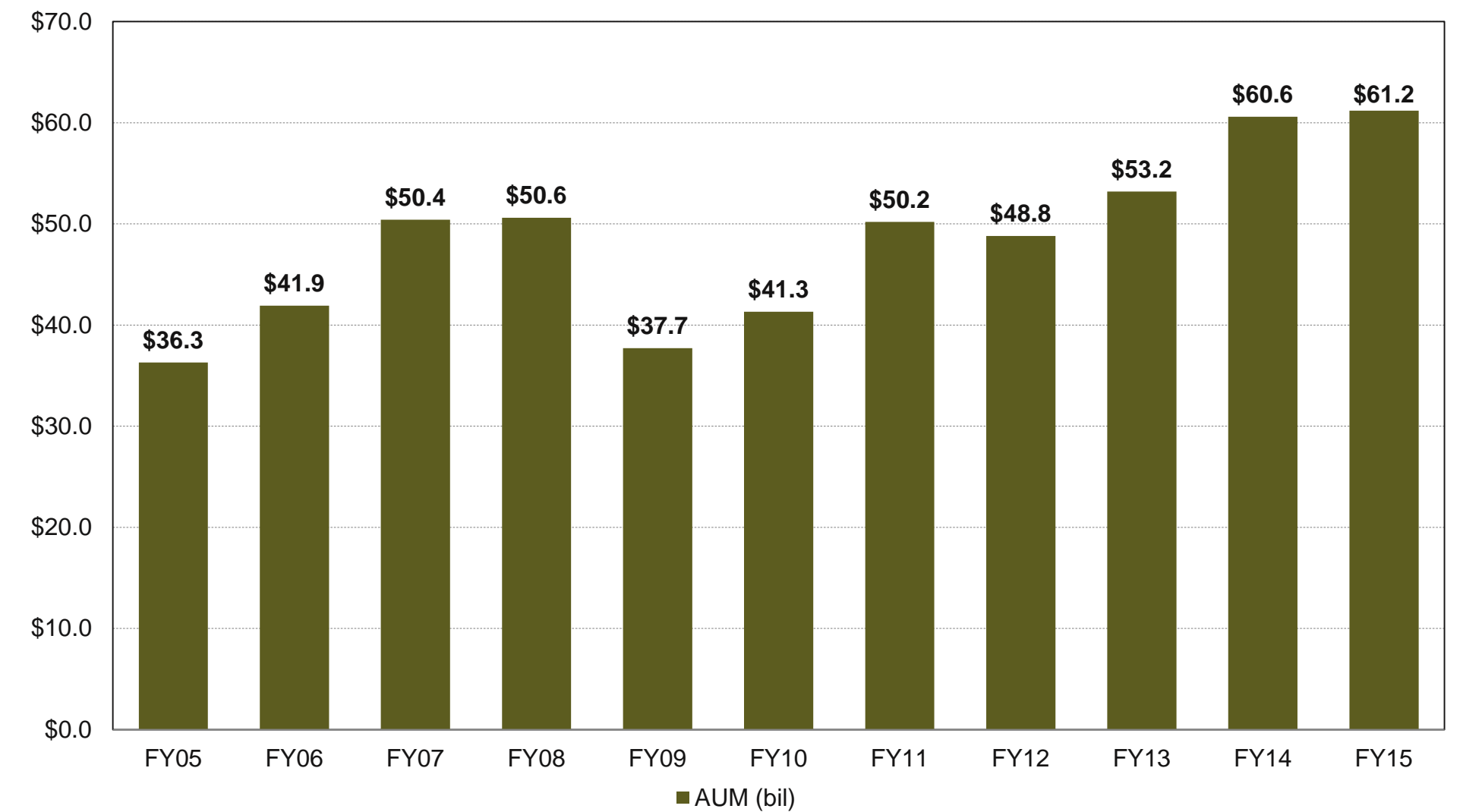
Total PRIT Fund Fiscal Year Performance

Gross of Fees



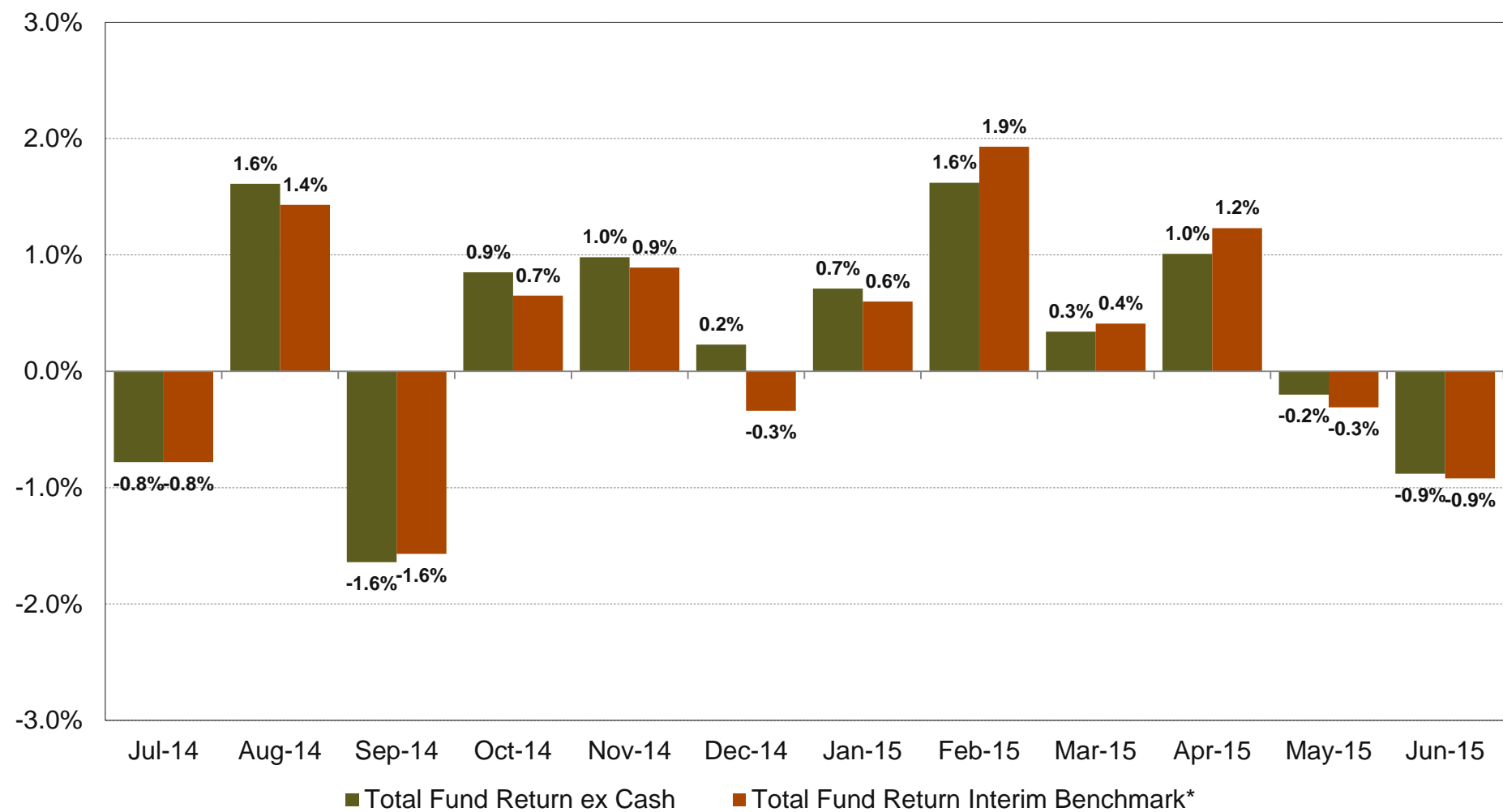
**Includes Private Equity Benchmark*

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



Total PRIT Fund Monthly Performance FY15

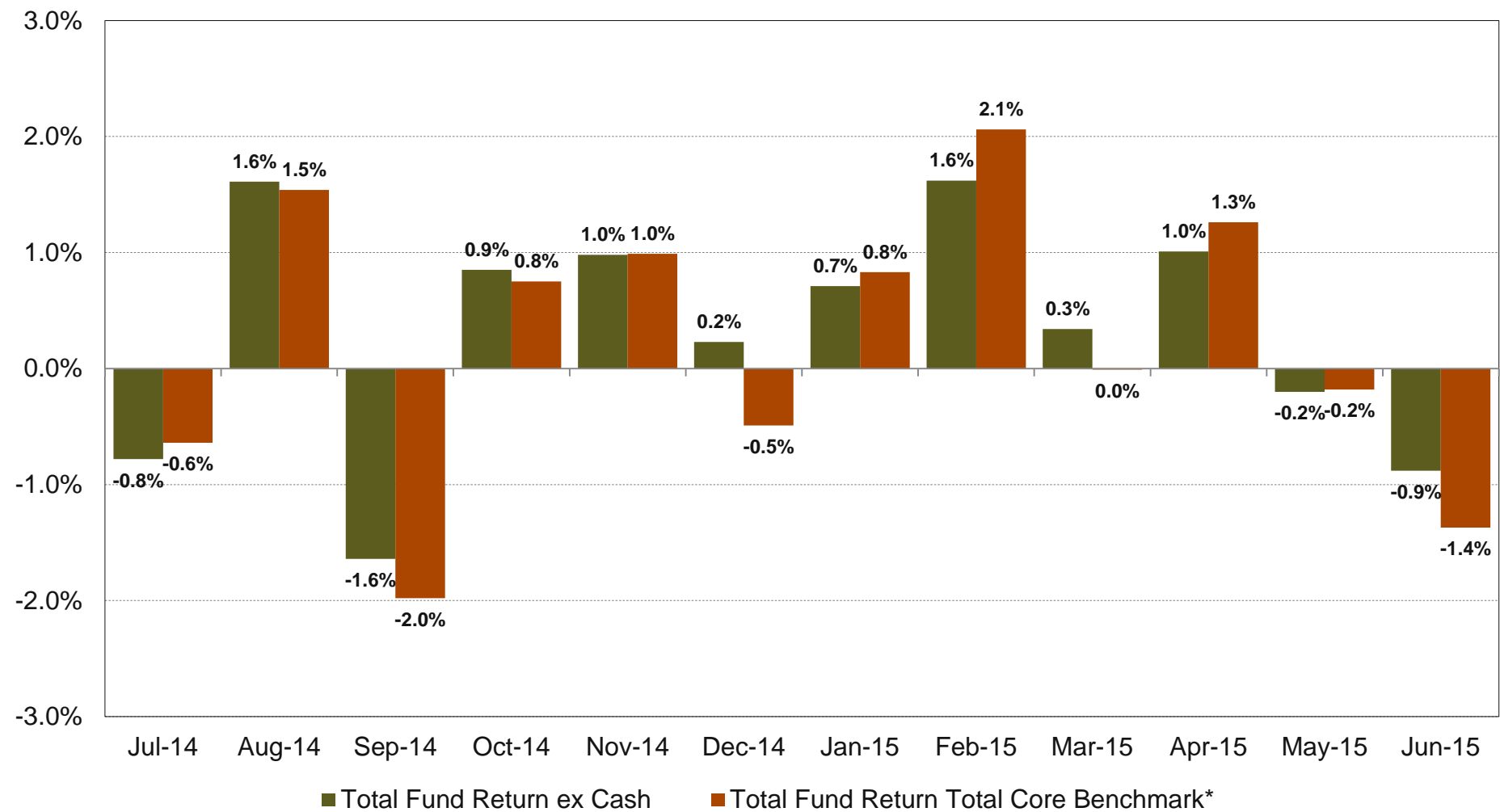
Gross of Fees



**Excludes Private Equity Benchmark*

Total PRIT Fund Monthly Performance FY15

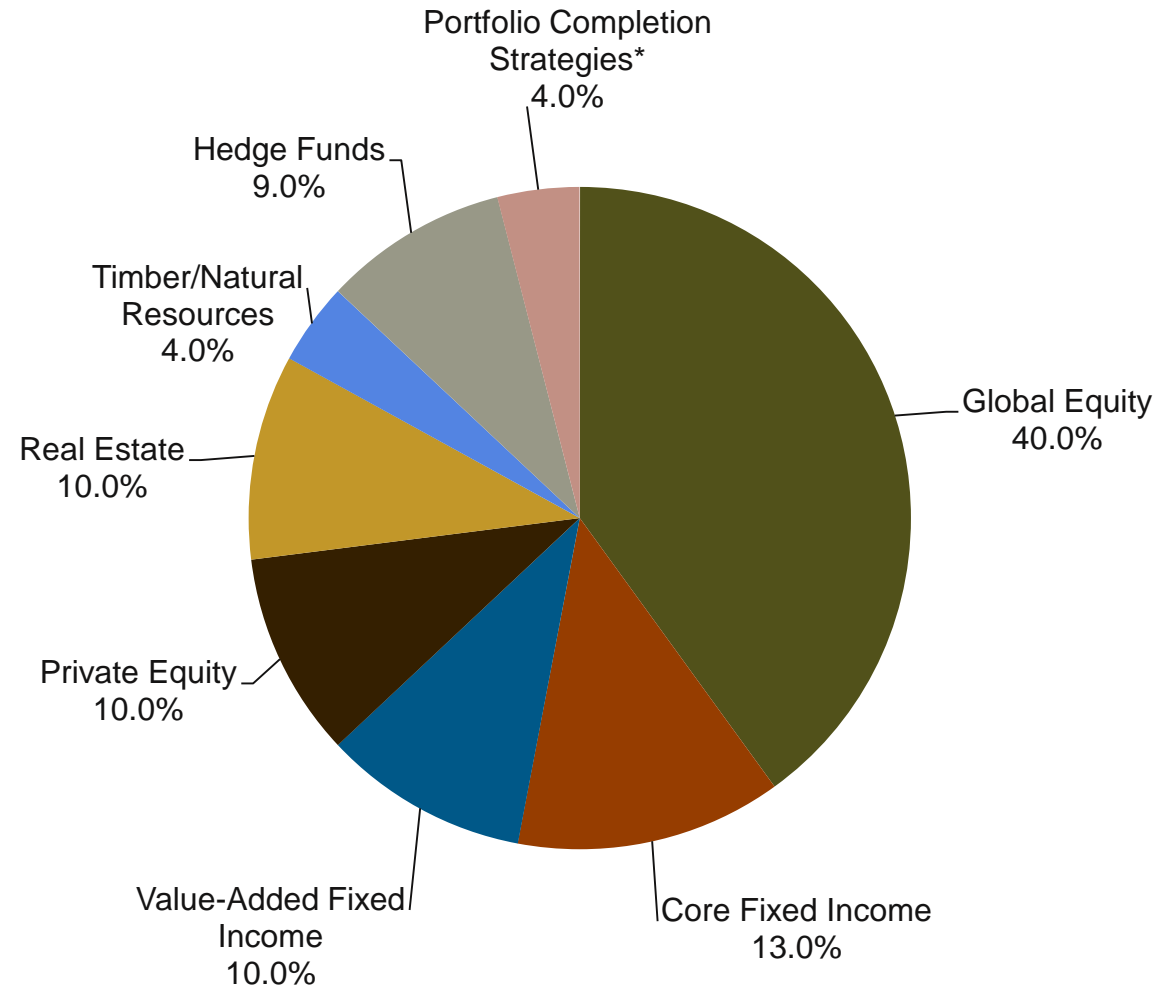
Gross of Fees



**Includes Private Equity Benchmark*

PRIT Fund Asset Allocation

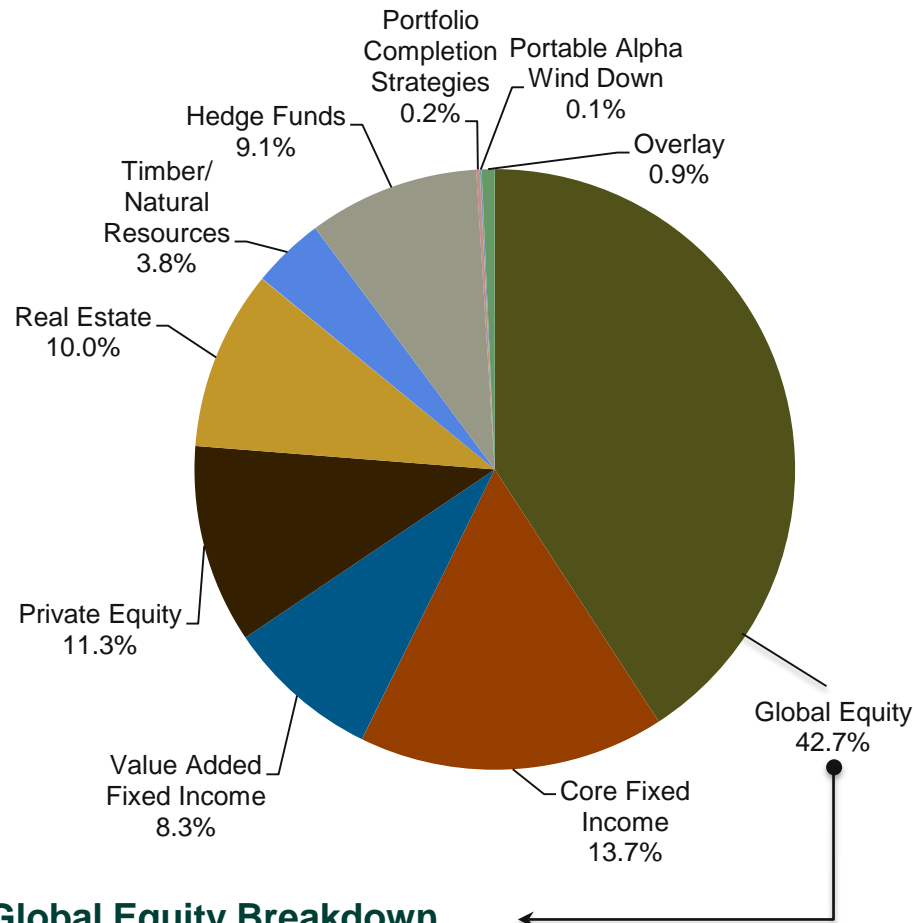
Long-Term Asset Allocation Targets



**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

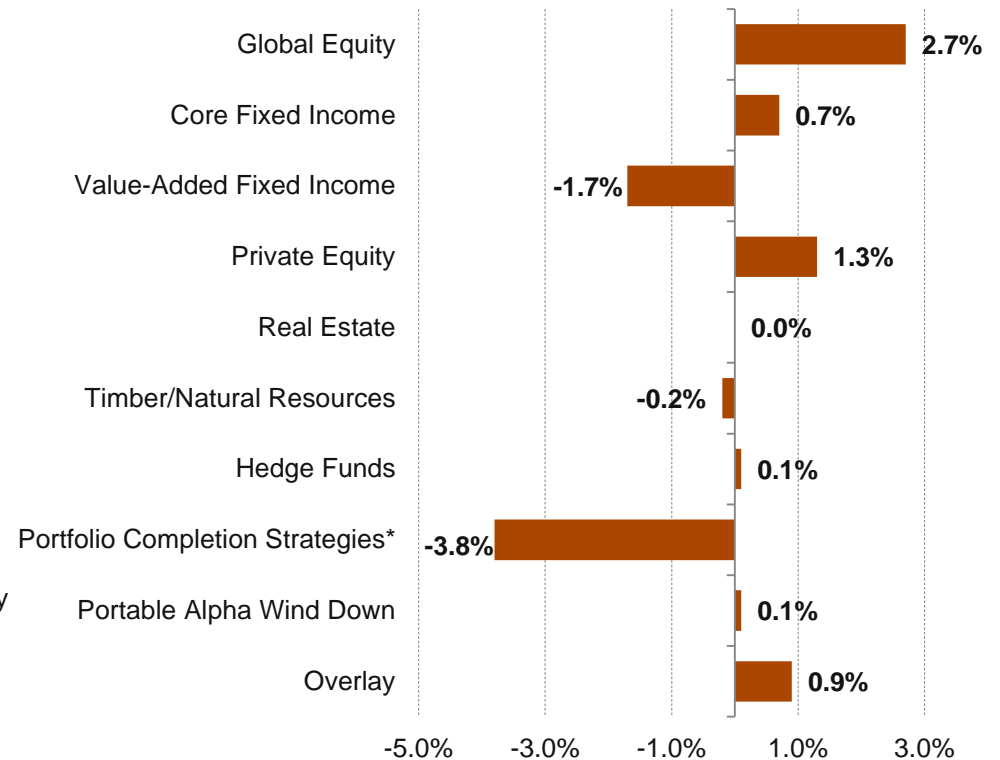
Actual Allocation as of June 30, 2015



Global Equity Breakdown

Domestic Equity	19.2%
International Equity	16.9%
Emerging Markets Equity	6.6%

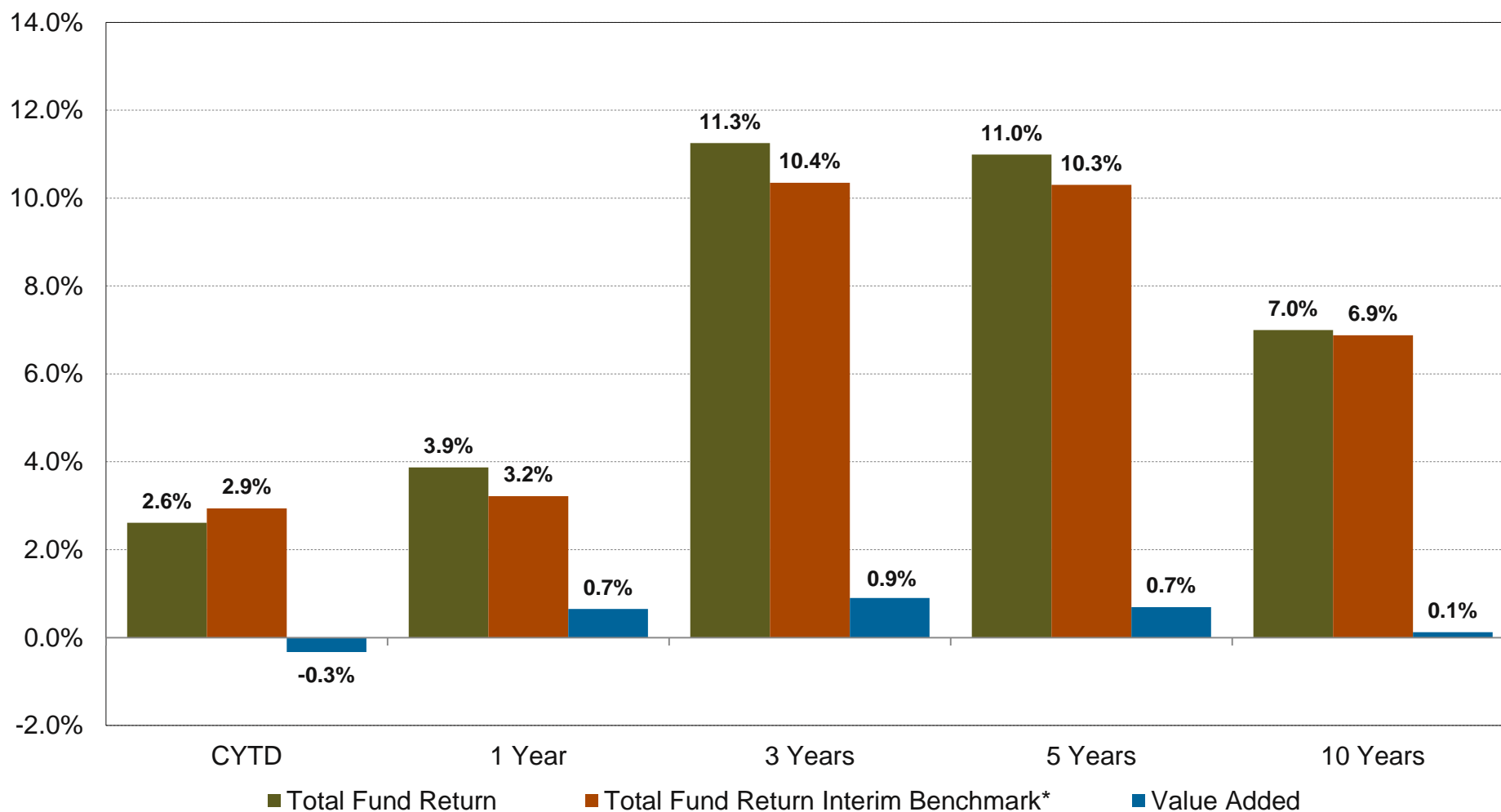
Actual Allocation vs. Target Allocation



*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 (\$61.2 Billion in Assets)

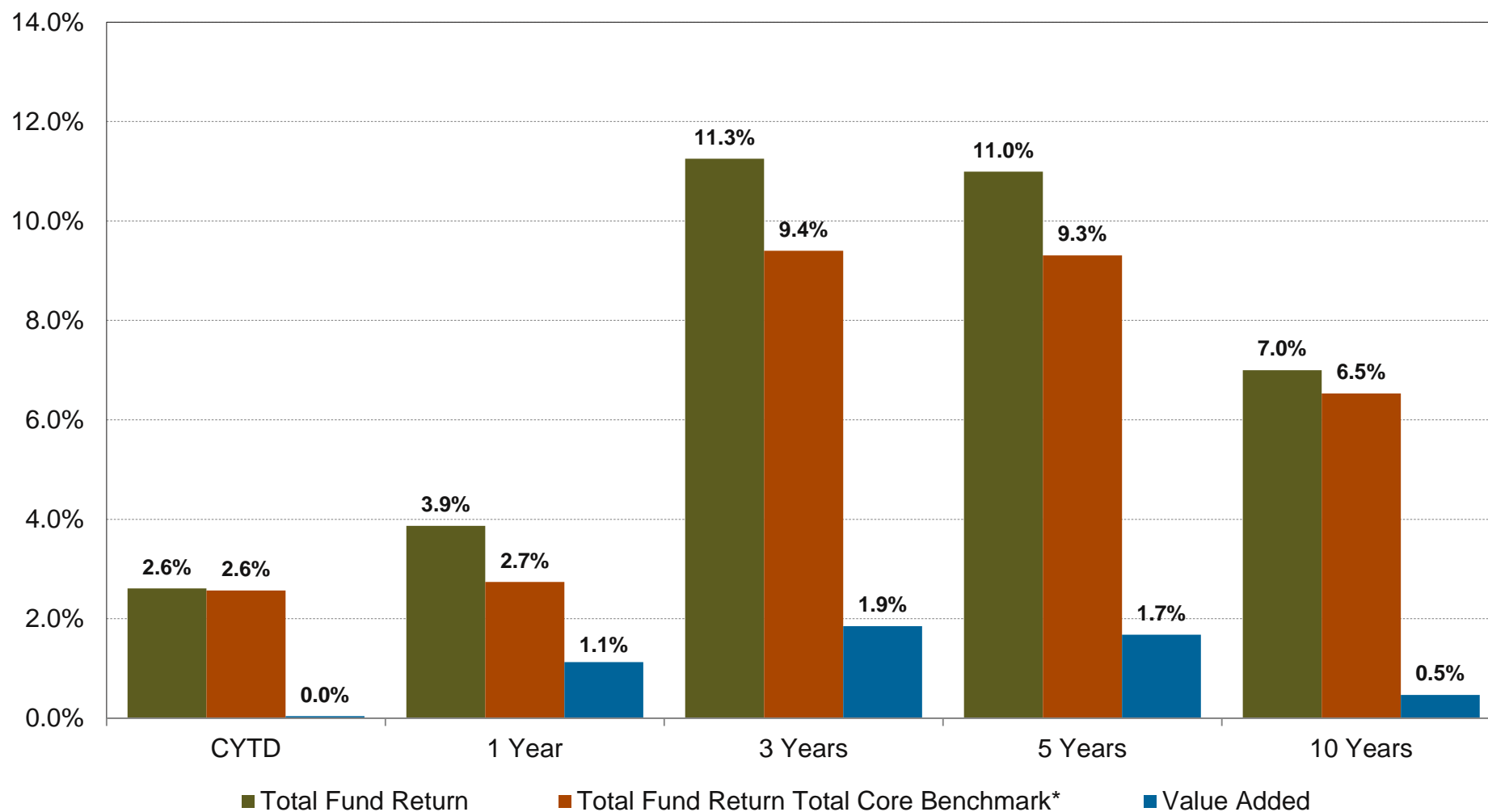
Gross of Fees as of June 30, 2015



**Excludes Private Equity Benchmark*

Total PRIT Fund Performance (\$61.2 Billion in Assets)

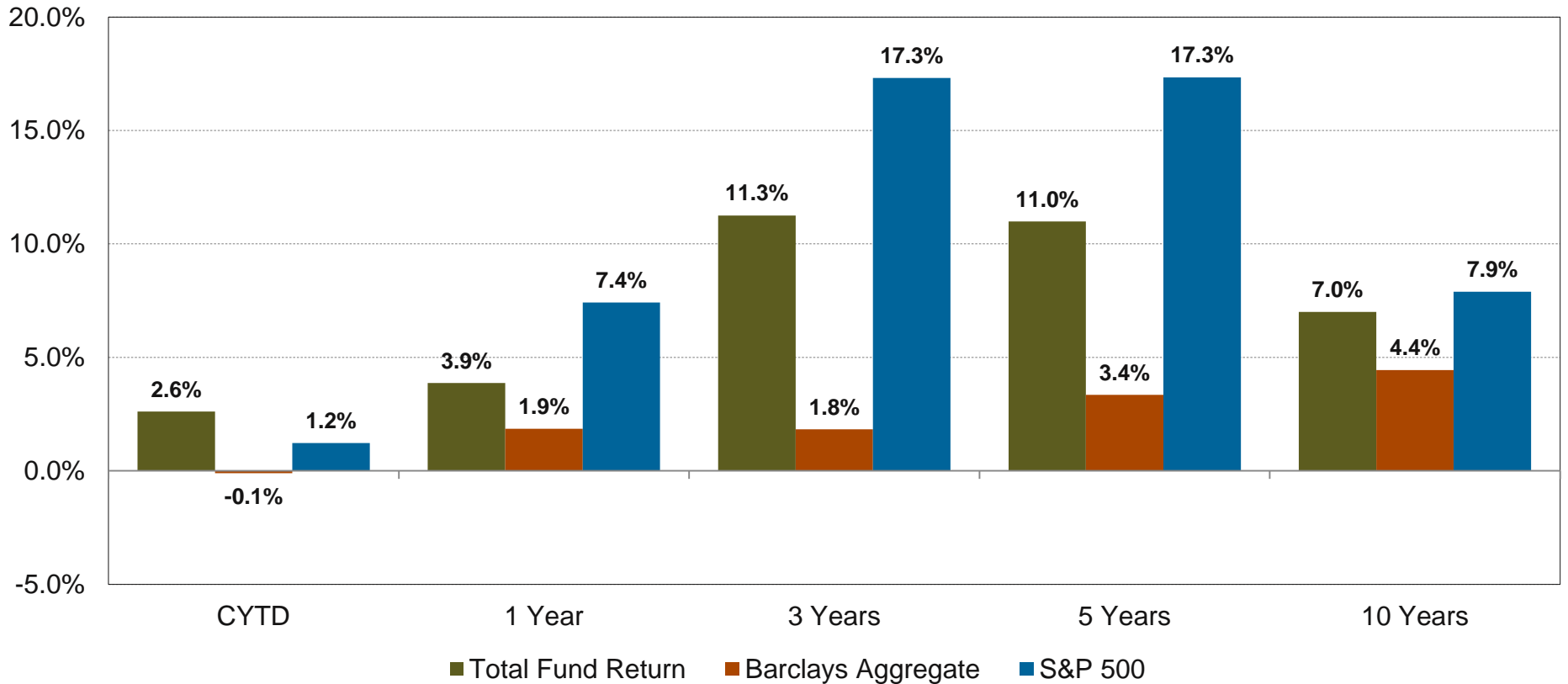
Gross of Fees as of June 30, 2015



**Includes Private Equity Benchmark*

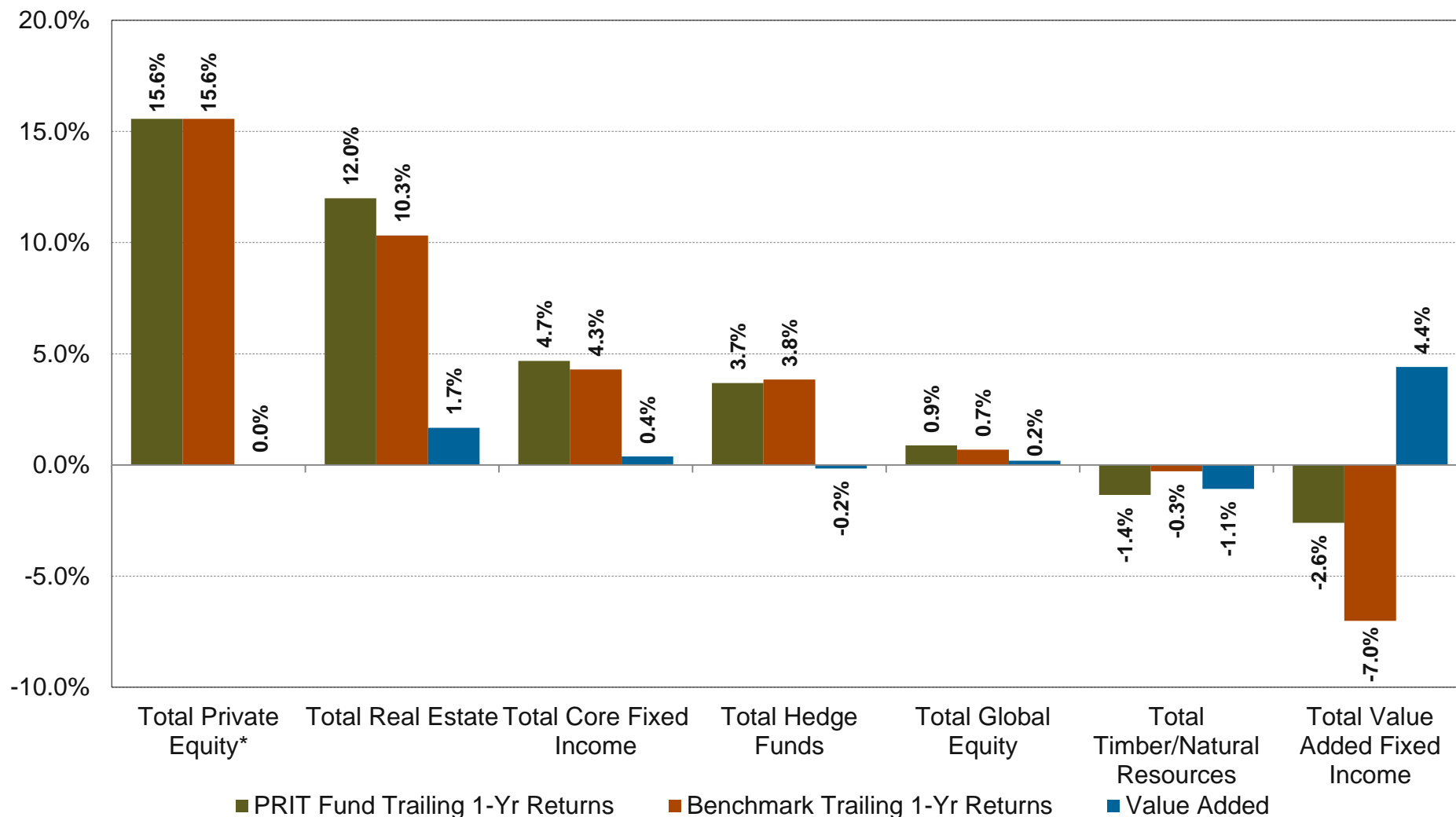
Total PRIT Fund Performance

Gross of Fees compared to Bonds and Stocks as of June 30, 2015



PRIT Asset Class Gross Performance – Trailing 1-Year

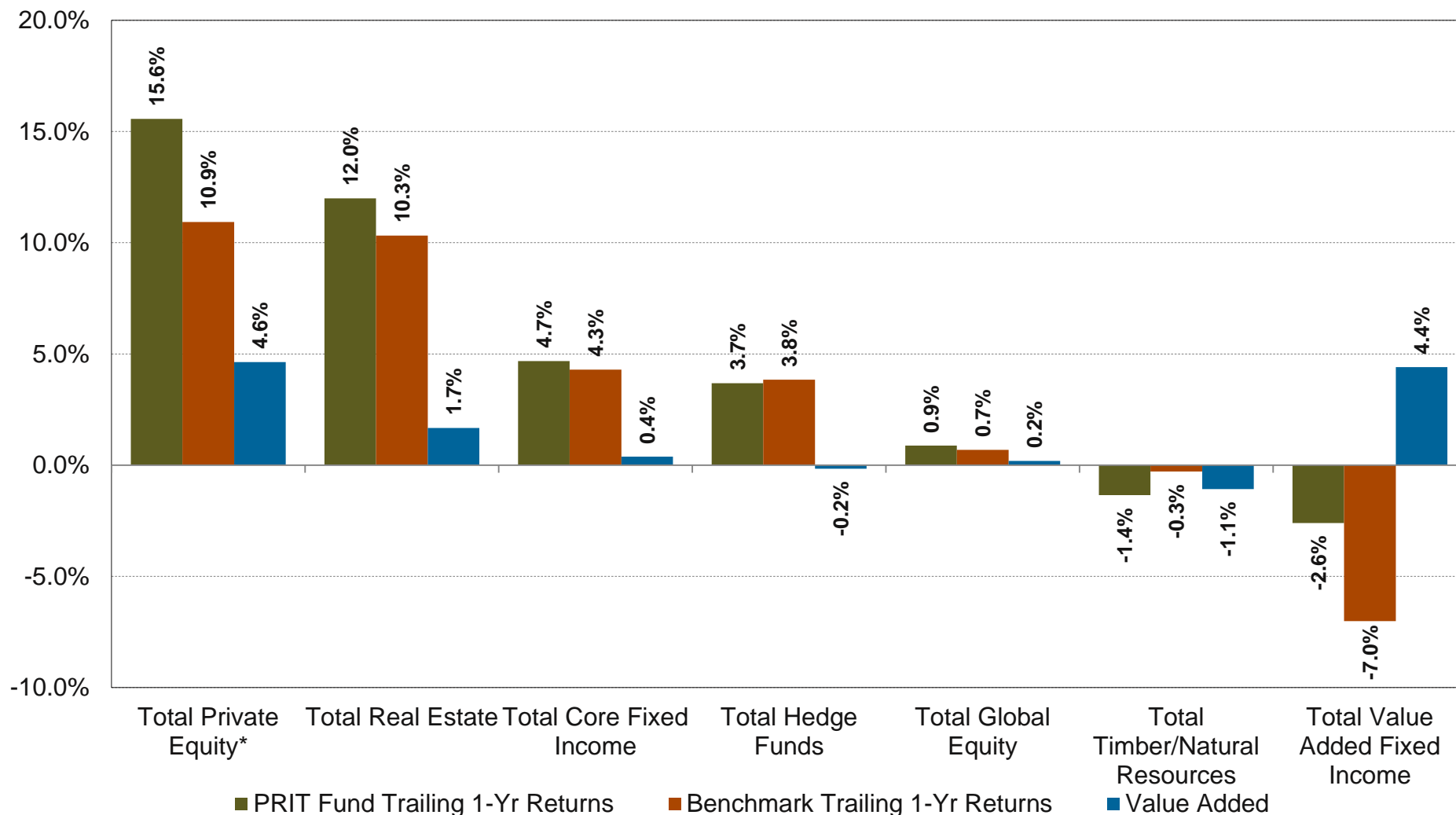
as of June 30, 2015



*Benchmark is actual performance

PRIT Asset Class Gross Performance – Trailing 1-Year

as of June 30, 2015



*Benchmark is 7yr Annualized Russell 3000 +3%

Total PRIT Fund Performance Attribution

Gross of Fees as of June 30, 2015

June 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%	(3.61%)	(3.69%)	0.01%	(0.03%)	(0.02%)
Value Added Fixed Inc	8%	10%	(0.47%)	(1.34%)	0.07%	(0.00%)	0.07%
Real Estate	10%	10%	1.76%	2.08%	(0.03%)	(0.01%)	(0.04%)
Timber/Natural Resources	4%	4%	0.09%	0.16%	(0.00%)	(0.00%)	(0.01%)
Private Equity	11%	10%	5.49%	1.00%	0.48%	0.01%	0.49%
Overlay	1%	0%	(1.86%)	(1.86%)	0.00%	(0.01%)	(0.01%)
Portable Alpha	0%	0%	(3.08%)	(3.08%)	0.00%	(0.00%)	(0.00%)
Portfolio Completion Stra	0%	0%	(2.40%)	0.26%	(0.00%)	(0.00%)	(0.00%)
Global Equity	43%	43%	(2.13%)	(2.23%)	0.05%	(0.00%)	0.04%
Hedge Funds	9%	10%	(1.45%)	(1.17%)	(0.03%)	(0.00%)	(0.03%)
Total			(0.88%)	(1.37%)	0.55%	(0.05%)	0.49%

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%	4.68%	4.30%	0.05%	(0.03%)	0.03%
Value Added Fixed Income	8%	10%	(2.60%)	(7.01%)	0.40%	0.17%	0.57%
Real Estate	9%	10%	11.99%	10.31%	0.15%	(0.07%)	0.08%
Timber/Natural Resources	4%	4%	(1.35%)	(0.28%)	(0.04%)	(0.01%)	(0.05%)
Private Equity	11%	10%	15.57%	10.93%	0.48%	0.05%	0.53%
Overlay	1%	0%	2.09%	2.09%	0.00%	(0.01%)	(0.01%)
Portable Alpha	0%	0%	(4.27%)	(4.27%)	0.00%	(0.00%)	(0.00%)
Portfolio Completion Stra	0%	0%	(5.09%)	1.58%	(0.01%)	0.00%	(0.01%)
Global Equity	42%	43%	0.88%	0.69%	0.09%	(0.05%)	0.03%
Hedge Funds	9%	10%	3.68%	3.84%	(0.02%)	(0.01%)	(0.03%)
Total			3.87%	2.74%	1.10%	0.03%	1.13%

Total Global Equity Performance Attribution

Gross of Fees as of June 30, 2015

June 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%	(2.01%)	(1.94%)	(0.02%)	0.00%	(0.02%)
Small/SMID Equity	10%	9%	(0.11%)	(0.40%)	0.03%	0.01%	0.03%
International Equity	40%	40%	(2.48%)	(2.73%)	0.10%	0.00%	0.10%
Emerging Equity	15%	16%	(2.77%)	(2.71%)	(0.01%)	0.00%	(0.01%)
Cash Equiv	0%	0%	58.89%	58.89%	0.00%	0.00%	0.00%
Total			(2.13%)	(2.23%)	+ 0.09%	+ 0.01%	0.11%

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%	7.63%	7.42%	0.07%	0.01%	0.08%
Small/SMID Equity	10%	9%	3.31%	5.71%	(0.22%)	(0.02%)	(0.25%)
International Equity	39%	40%	(2.76%)	(4.54%)	0.71%	0.03%	0.75%
Emerging Equity	16%	16%	(5.85%)	(3.92%)	(0.33%)	(0.05%)	(0.38%)
Cash Equiv	0%	0%	143.63%	143.63%	0.00%	0.00%	0.00%
Total			0.88%	0.69%	+ 0.23%	+ (0.03%)	0.20%



Appendix

Gross of Fees Asset Class &
Manager Specific Performance

Major Contributors Gross Performance – Trailing 1-Year

as of June 30, 2015

	% of PRIT Fund	1-Year Relative Performance (BPS)	One Year	3 Years	5 Years	10 Years	Since Inception	Inception
DISTRESSED DEBT	2.2%	36.73	3.55	12.12	11.64	11.52	14.36	07/31/2001
Altman NYU Saloman Center Combined Defaulted Public Bond & Bank Loan Index			-13.09	5.52	4.98	7.23	11.20	
Value Added (bps)			1663	660	666	428	316	
MARATHON ASSET MANAGEMENT	4.0%	17.22	0.02	15.06	12.23	8.73	8.97	10/31/1996
Custom MSCI EAFE Standard Index Net Divs			-4.25	12.06	9.47	5.11	4.83	
Value Added (bps)			427	300	276	362	414	
AEW	1.6%	9.69	18.72	14.36			14.65	01/31/2011
NCREIF Property One Qtr Lag			12.72	11.47	-	-	12.49	
Value Added (bps)			600	289	-	-	216	
BAILLIE GIFFORD	3.0%	8.47	-1.40	13.14	11.44	7.52	8.42	08/31/2004
Custom MSCI EAFE Standard Index Net Divs			-4.25	12.06	9.47	5.11	6.23	
Value Added (bps)			285	108	197	240	219	
SSGA WORLD EX-US	8.4%	5.74	-4.47	12.17	9.76	5.75	6.30	03/31/1992
Custom MSCI World Ex-US IMI Net Divs			-5.15	11.51	9.17	5.12	5.81	
Value Added (bps)			68	66	60	64	48	
DIRECT HEDGE FUNDS	6.6%	3.37	4.35	8.78			7.45	11/30/2011
HFRI Fund of Funds Composite Index			3.84	6.23	-	-	5.06	
Value Added (bps)			51	254	-	-	239	
INTECH	1.4%	3.36	9.74	18.26	18.02		8.14	01/31/2006
S&P 500			7.42	17.31	17.34	-	7.69	
Value Added (bps)			232	96	68	-	46	
LOOMIS SAYLES CORE	1.8%	2.16	3.04	3.58	4.96	5.31	7.51	05/31/1990
Barclays Capital Aggregate			1.86	1.83	3.35	4.44	6.52	
Value Added (bps)			118	175	161	87	99	
CENTERSQUARE GLOBAL REIT	1.2%	2.02	1.92	9.98			9.31	05/31/2012
FTSE EPRA NAREIT Developed Net Total Return			0.29	9.37	-	-	8.76	
Value Added (bps)			164	61	-	-	55	
T. ROWE PRICE NR	0.3%	1.31	-21.80	5.10	5.70		-3.93	07/31/2008
Lipper Natural Resources Global Fund Index			-25.93	0.81	1.80	-	-7.17	
Value Added (bps)			414	429	390	-	324	

*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

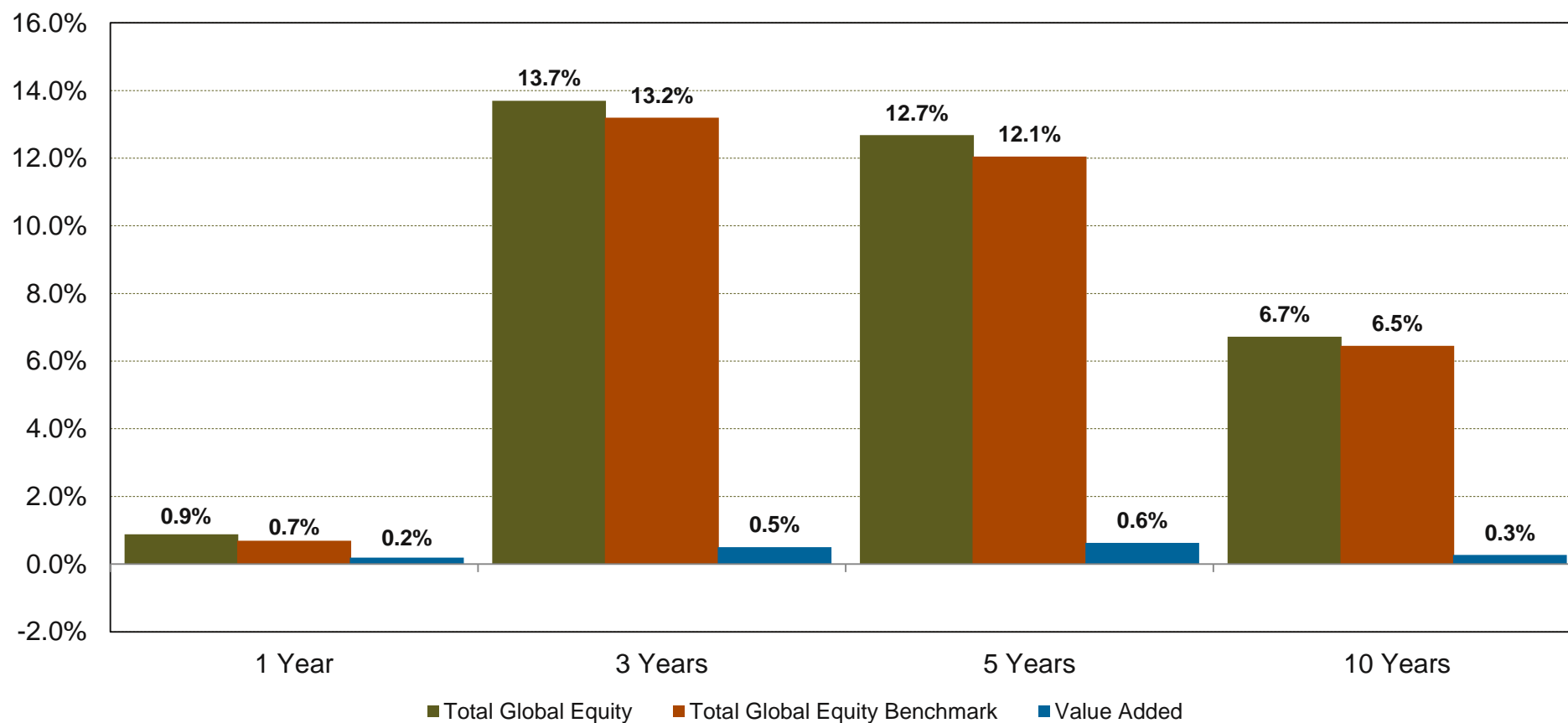
as of June 30, 2015

	% of PRIT Fund	1-Year Relative Performance (BPS)	One Year	3 Years	5 Years	10 Years	Since Inception	Inception
HUBER	0.4%	-5.23	-11.60				3.98	05/31/2013
Russell 2000 Value			0.78	-	-	-	11.53	
Value Added (bps)			-1237	-	-	-	-755	
TA ASSOCIATES	1.8%	-4.58	10.20	10.31	11.59	7.91	8.89	09/30/2000
NCREIF Property One Qtr Lag			12.72	11.47	12.75	8.39	9.08	
Value Added (bps)			-252	-115	-117	-48	-18	
PAAMCO	2.0%	-4.42	1.61	9.67	6.42	5.57	5.39	08/31/2004
100% HFRI Fund of Funds Composite Index			3.84	6.23	4.14	5.08	5.17	
Value Added (bps)			-224	343	228	50	22	
FOREST INVESTMENTS	1.8%	-3.13	8.92	9.38	6.46	7.38	7.67	01/31/2002
NCREIF Timber Index One Qtr Lag			10.64	9.80	6.20	8.60	7.43	
Value Added (bps)			-172	-42	26	-122	25	
JP MORGAN	1.2%	-3.12	10.19	8.97	12.94	6.13	10.48	09/30/2000
NCREIF Property One Qtr Lag			12.72	11.47	12.75	8.39	9.08	
Value Added (bps)			-253	-249	18	-226	141	
SOUTHERNSUN	0.3%	-2.49	-3.92				15.34	05/31/2013
Russell 2500			5.92	-	-	-	15.10	
Value Added (bps)			-984	-	-	-	24	
JENNISON	0.3%	-2.25	-33.23	-1.06	0.42		-5.21	07/31/2008
Lipper Natural Resources Global Fund Index			-25.93	0.81	1.80	-	-7.17	
Value Added (bps)			-730	-187	-138	-	196	
ASHMORE	0.8%	-1.78	-3.79	3.08	6.54	8.30	9.51	01/31/2004
JPM EMBI Global			-1.57	3.44	6.52	7.34	7.85	
Value Added (bps)			-222	-35	2	96	167	
SUMMIT CREEK	0.3%	-1.13	9.08				17.46	05/31/2013
Russell 2000 Growth			12.34	-	-	-	19.20	
Value Added (bps)			-326	-	-	-	-175	
SSGA S&P 500	12.0%	-0.76	7.36	17.46			17.69	12/31/2011
S&P 500			7.42	17.31	-	-	17.56	
Value Added (bps)			-6	15	-	-	13	

*The relative underperformance is calculated by multiplying the underperformance versus the benchmark times the allocation to the overall PRIT fund.

PRIT Global Equity (\$26.1 Billion)

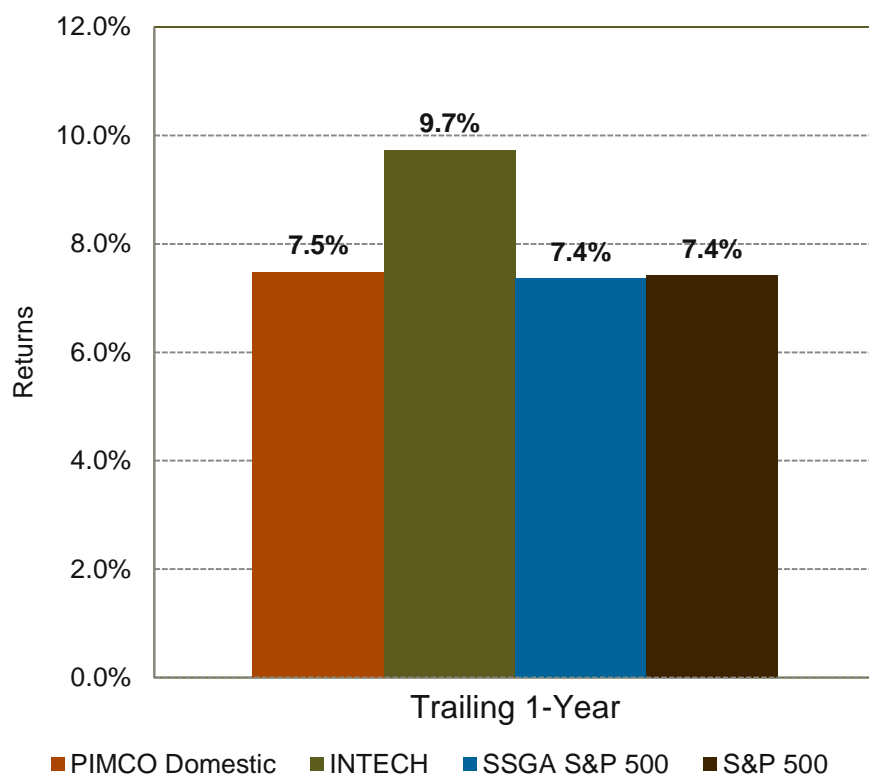
Gross of Fees Performance as of June 30, 2015



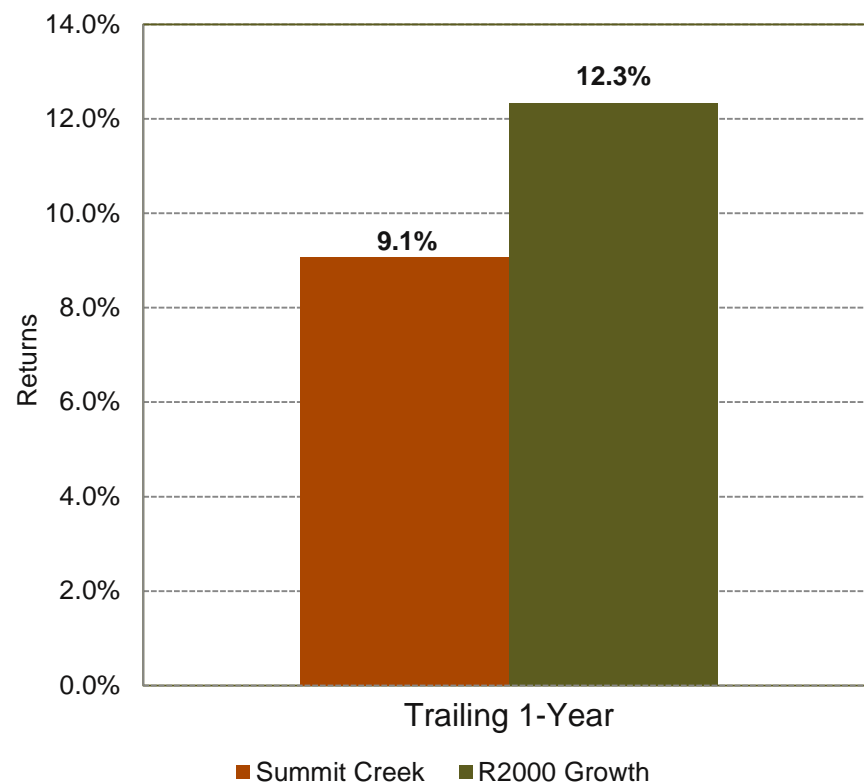
Domestic Equity Managers

as of June 30, 2015

Large Cap Managers vs. S&P 500



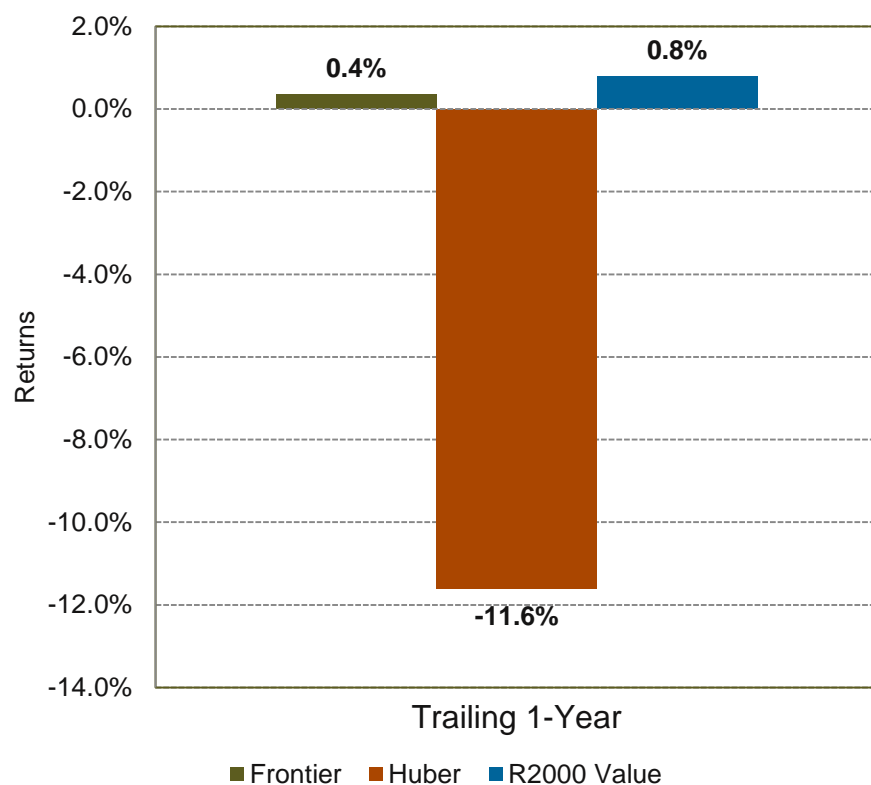
Small Cap Growth Manager vs. R2000 Growth



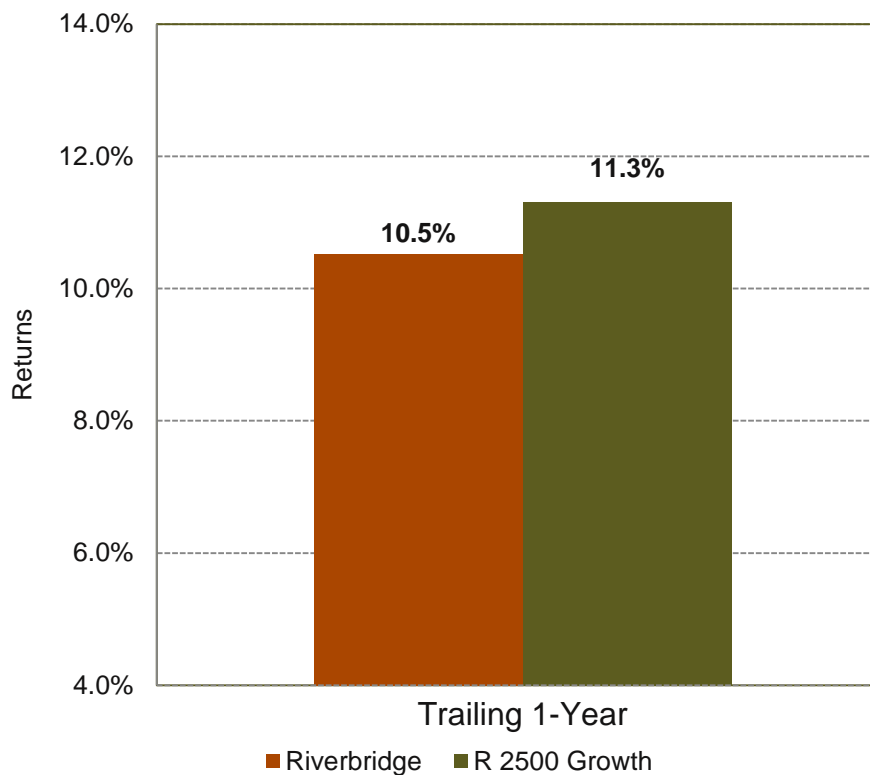
Domestic Equity Managers

as of June 30, 2015

Small Cap Value Managers vs. Russell 2000 Value



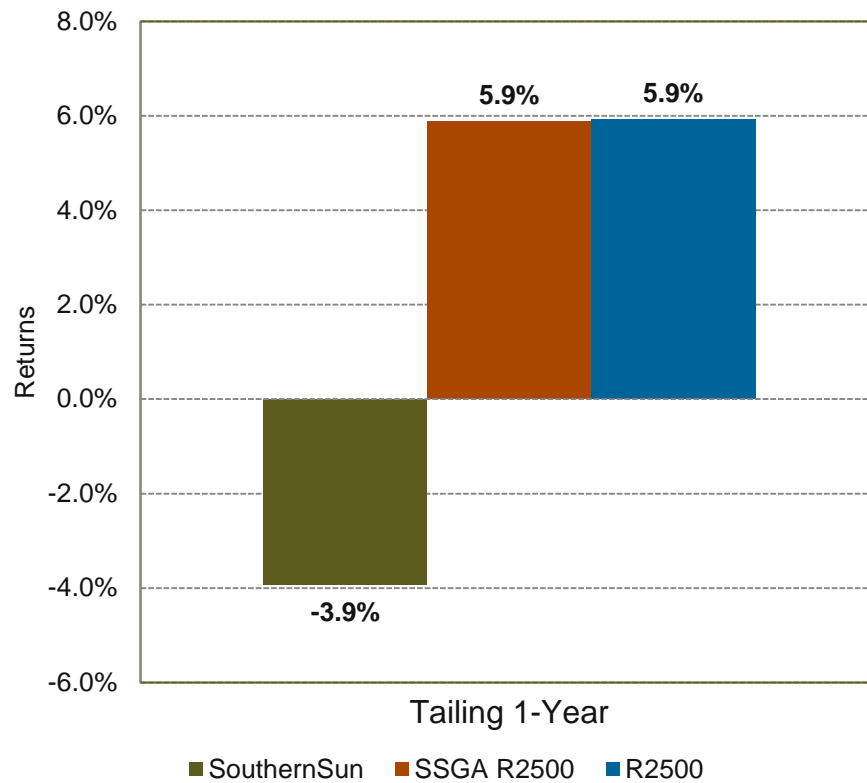
Smid Cap Growth Manager vs. Russell 2500



Domestic Equity Managers

as of June 30, 2015

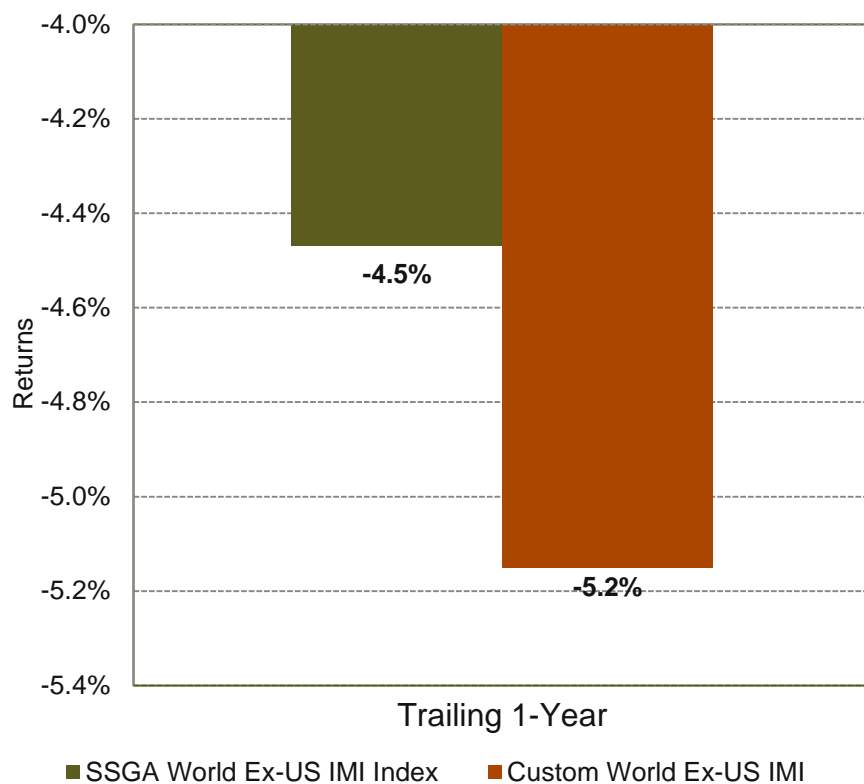
Smid Cap Core Managers vs. Russell 2500



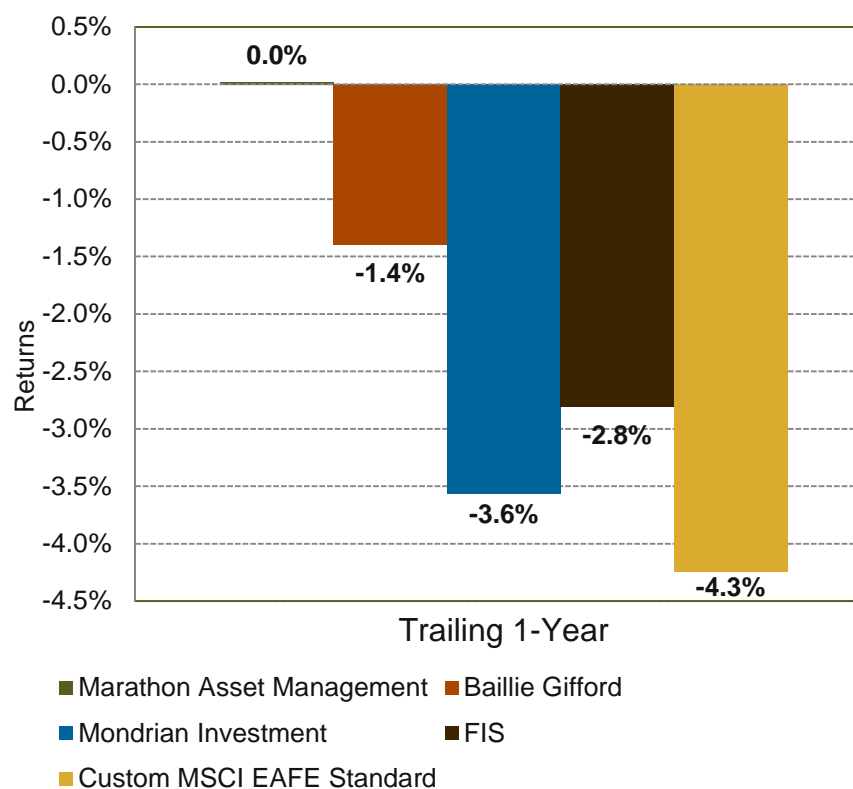
PRIT International Equity Managers

as of June 30, 2015

Versus World Ex-US IMI Index



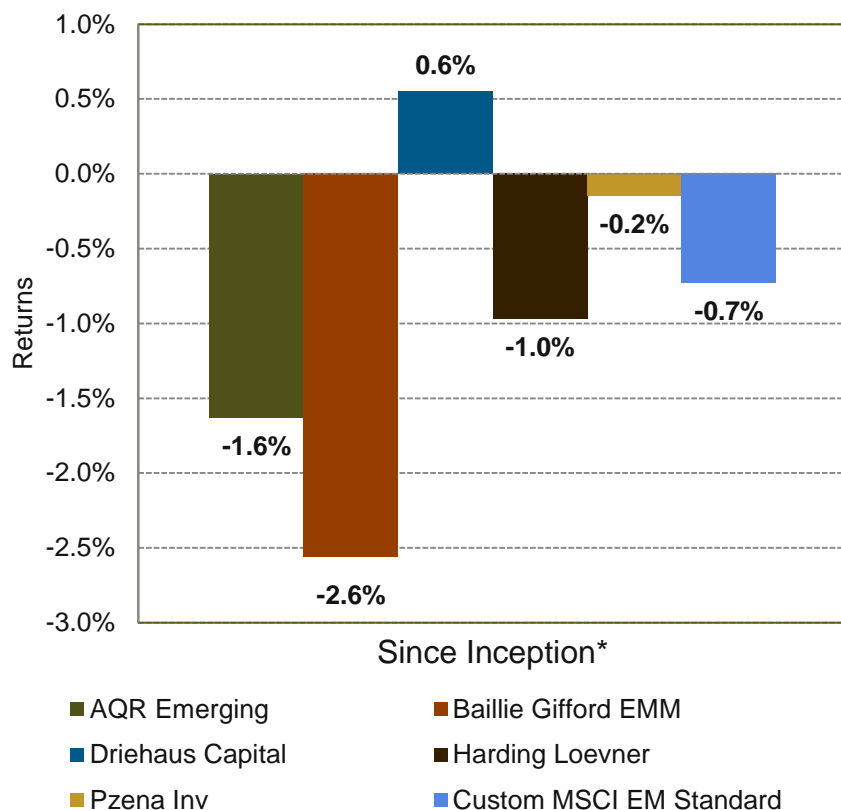
Versus MSCI EAFE Standard Index



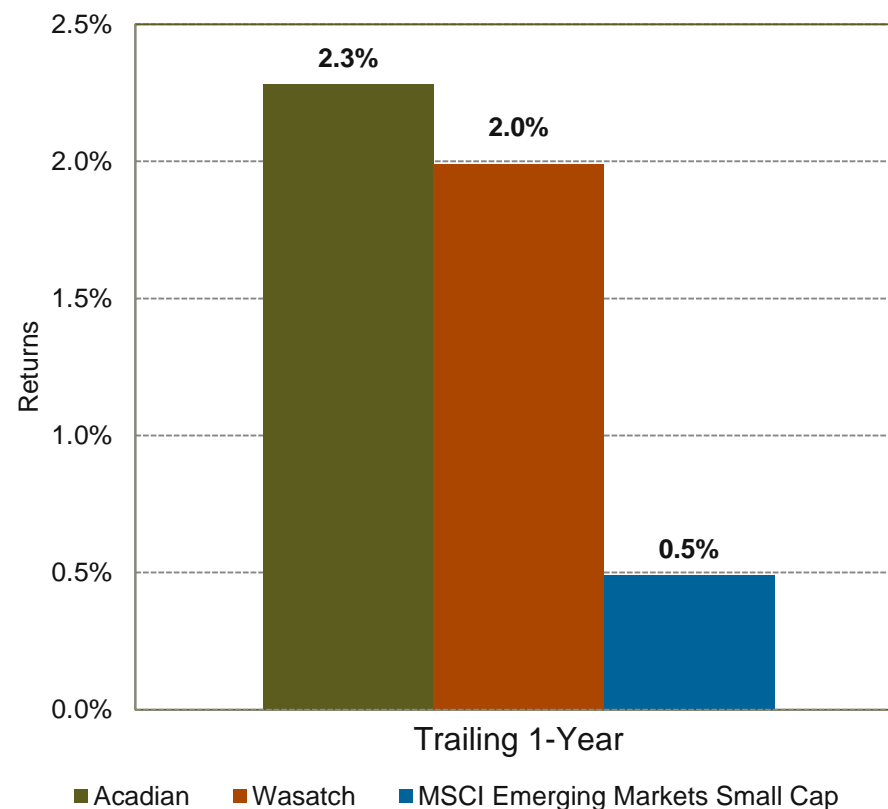
PRIT Emerging Markets Equity Managers

as of June 30, 2015

Versus MSCI Emerging Markets Standard Index



Versus MSCI Emerging Markets Small Cap Index

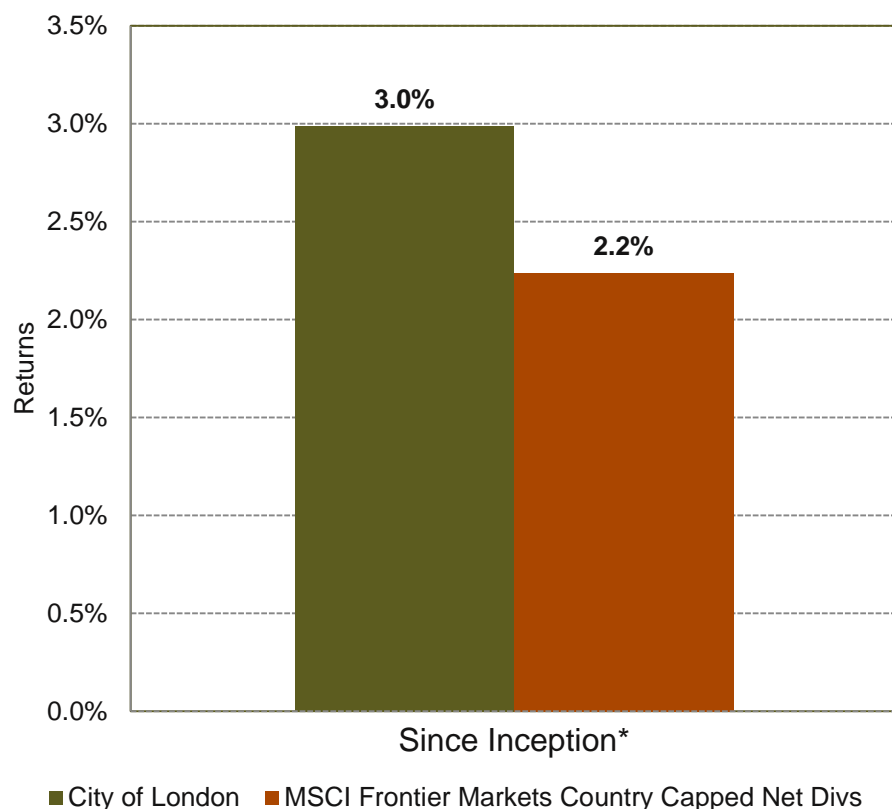


* "Since Inception" figure used due to lack of trailing 1-year returns.
Inception date of 3/31/2015 for AQR Emerging, Baillie Gifford EMM, Driehaus Capital, Harding Loevner and Pzena Inv.

PRIT Emerging Markets Equity Managers

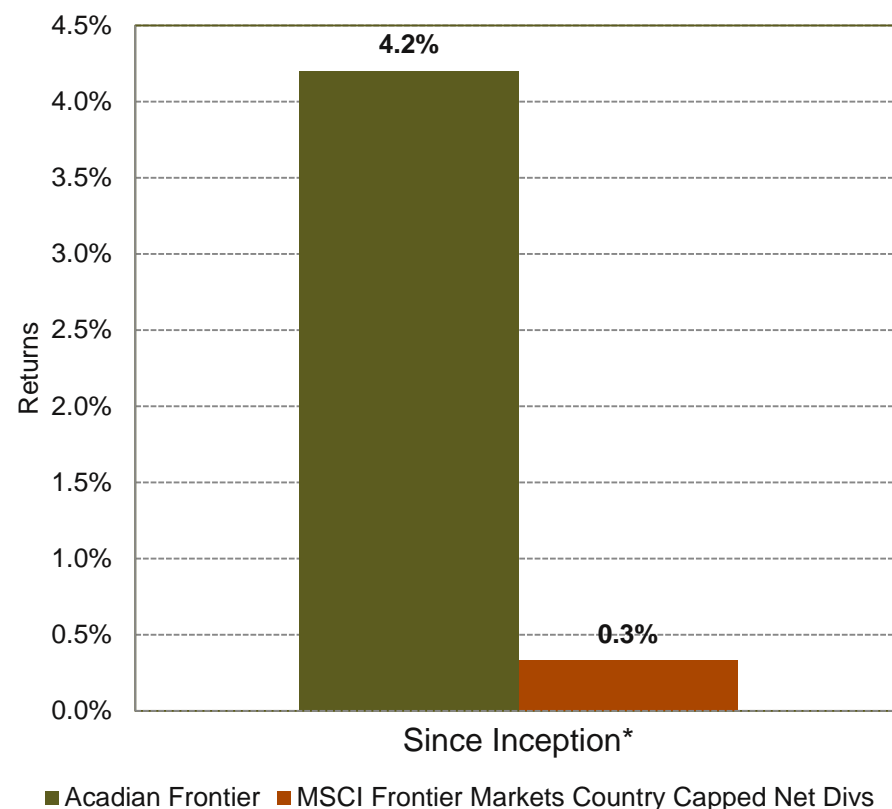
as of June 30, 2015

Versus MSCI Frontier Markets Country Capped Index



* "Since Inception" figure used due to lack of trailing 1-year returns. Inception date of 2/28/2015 for City of London.

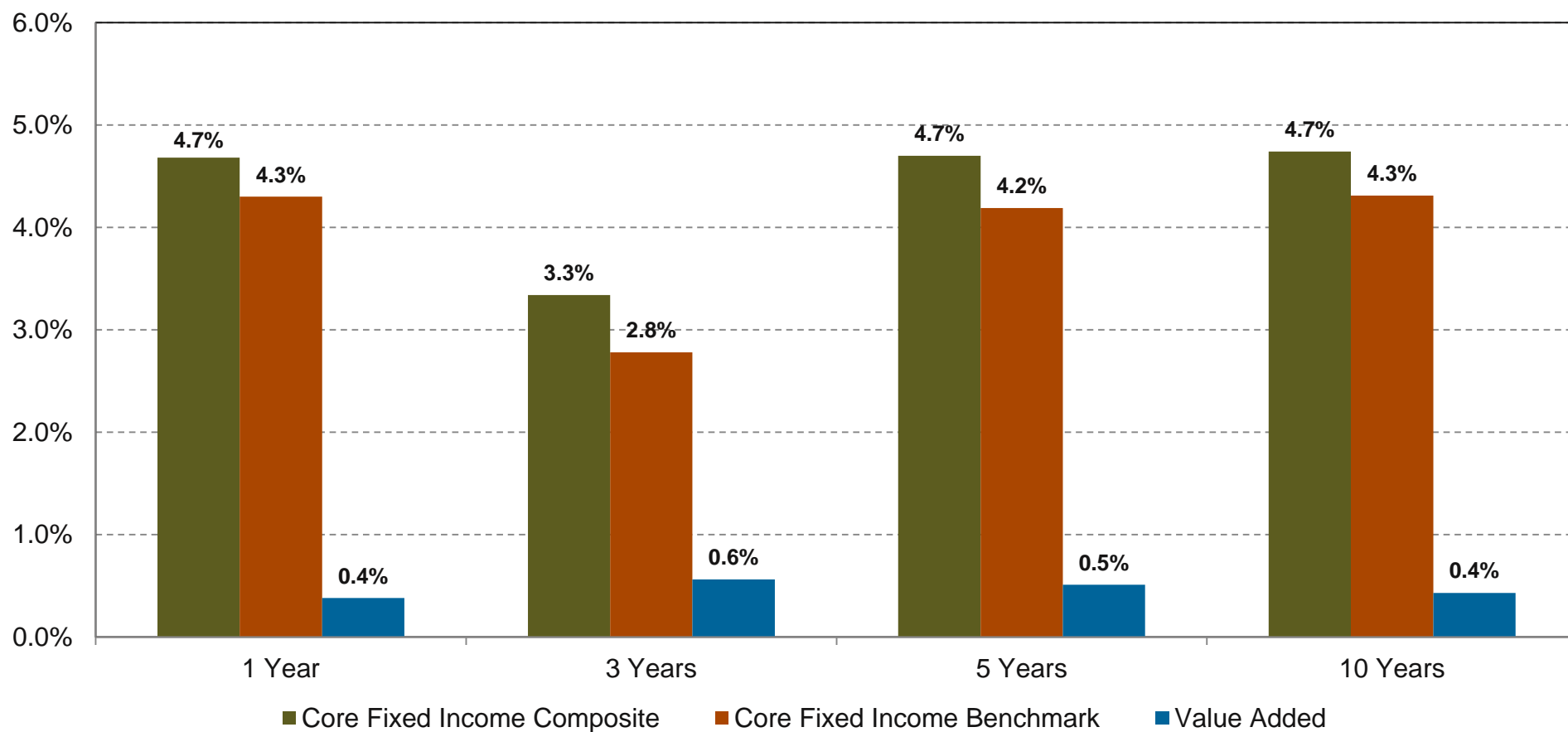
Versus MSCI Frontier Markets Country Capped Index



* "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 (\$8.4 Billion)

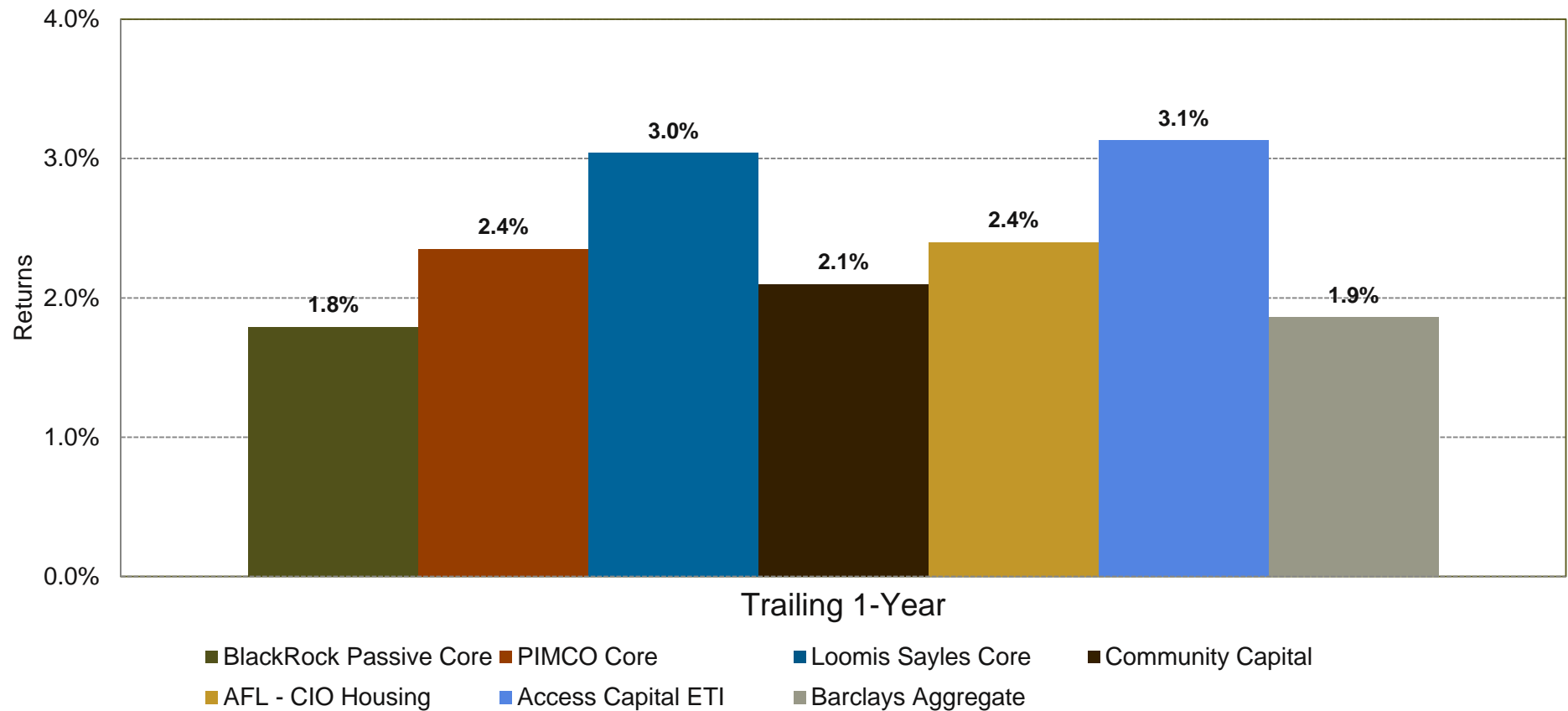
Gross of Fees Performance as of June 30, 2015



PRIT Fixed Income Managers

as of June 30, 2015

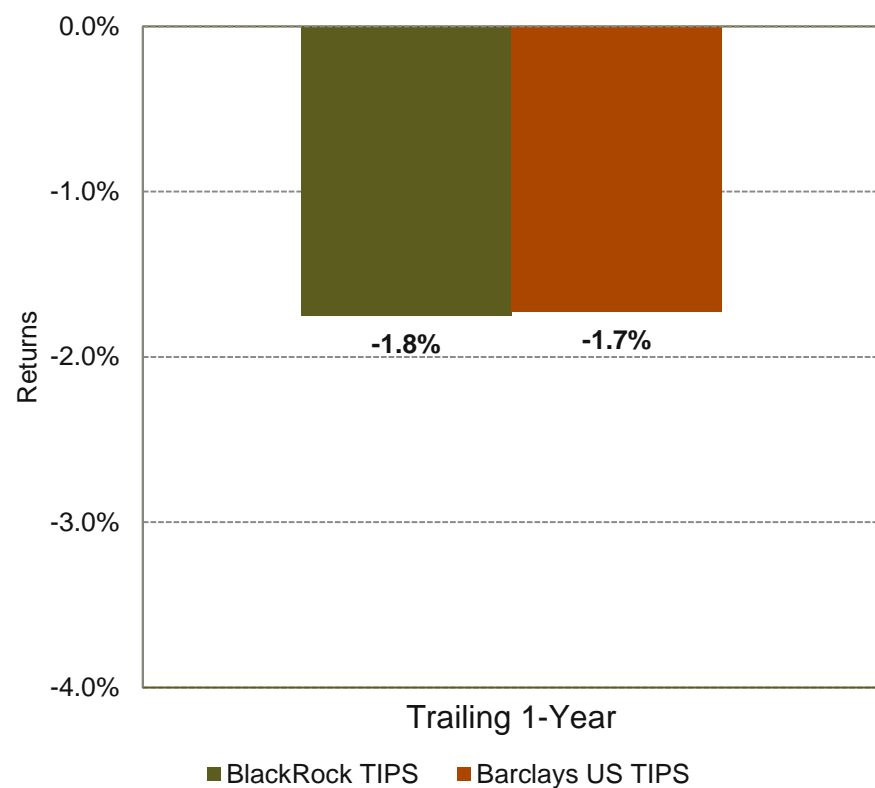
Versus Barclays Aggregate



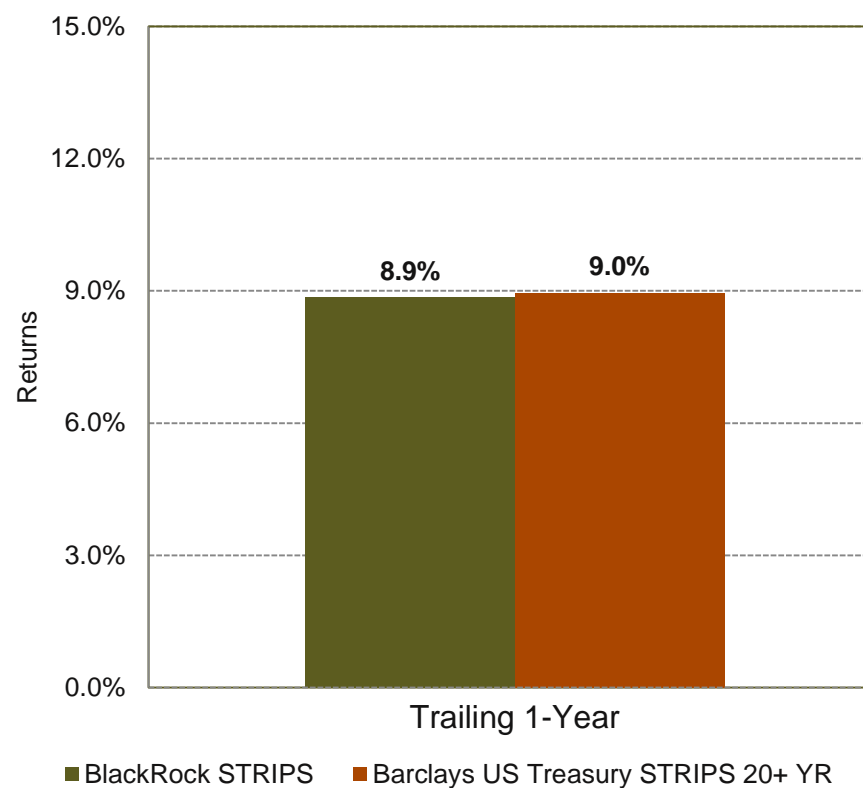
PRIT Fixed Income Managers

as of June 30, 2015

BlackRock Versus Barclays U.S. TIPS



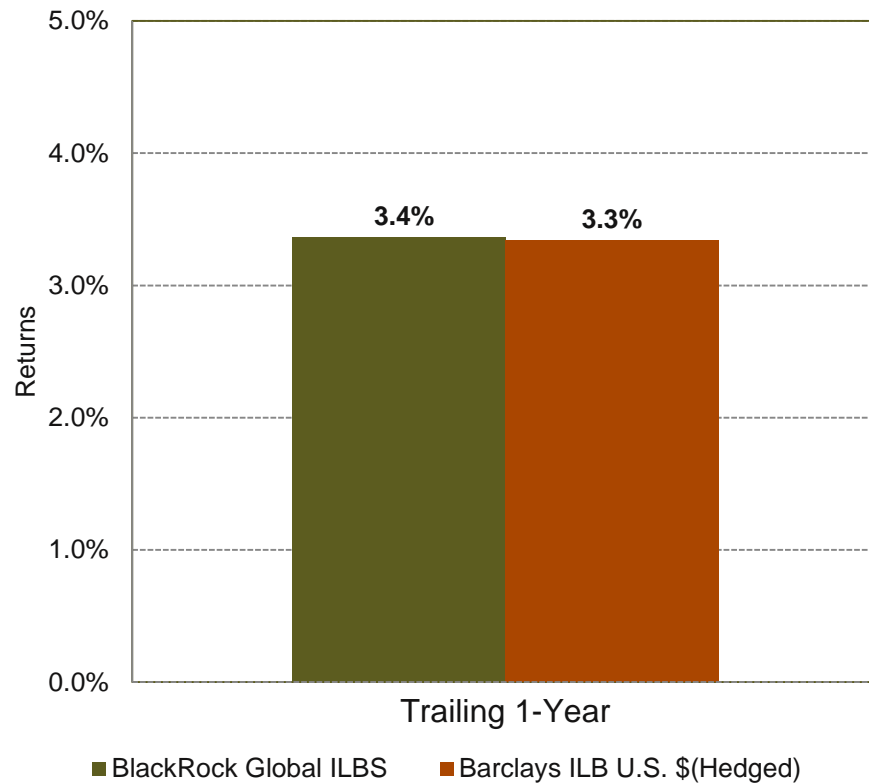
BlackRock STRIPS vs. BC U.S. Treasury STRIPS 20+ Year



PRIT Fixed Income Managers

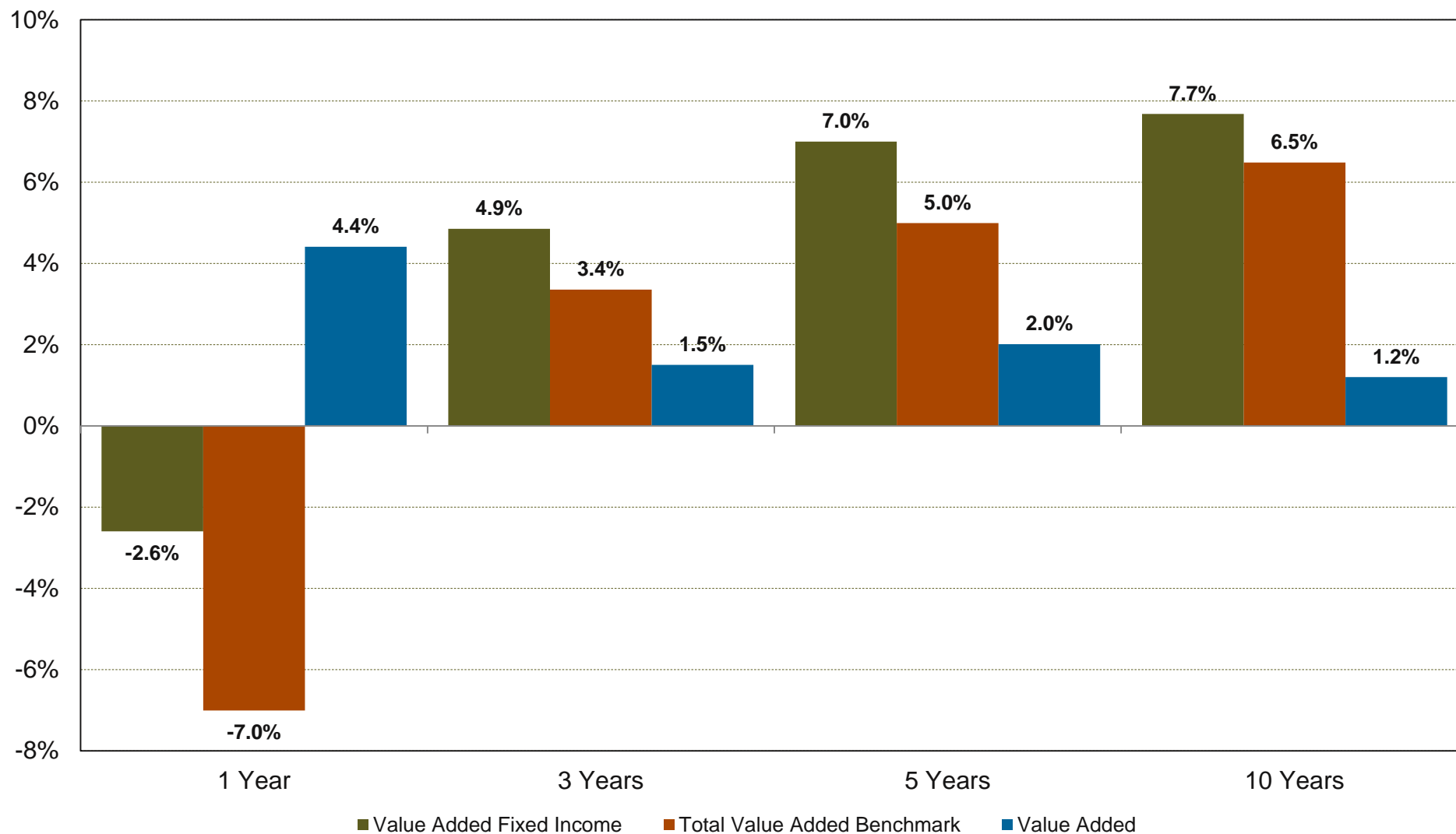
as of June 30, 2015

BlackRock Global vs. Barclays ILB U.S.\$ (Hedged)



PRIT Value Added Fixed Income (\$5.1 Billion)

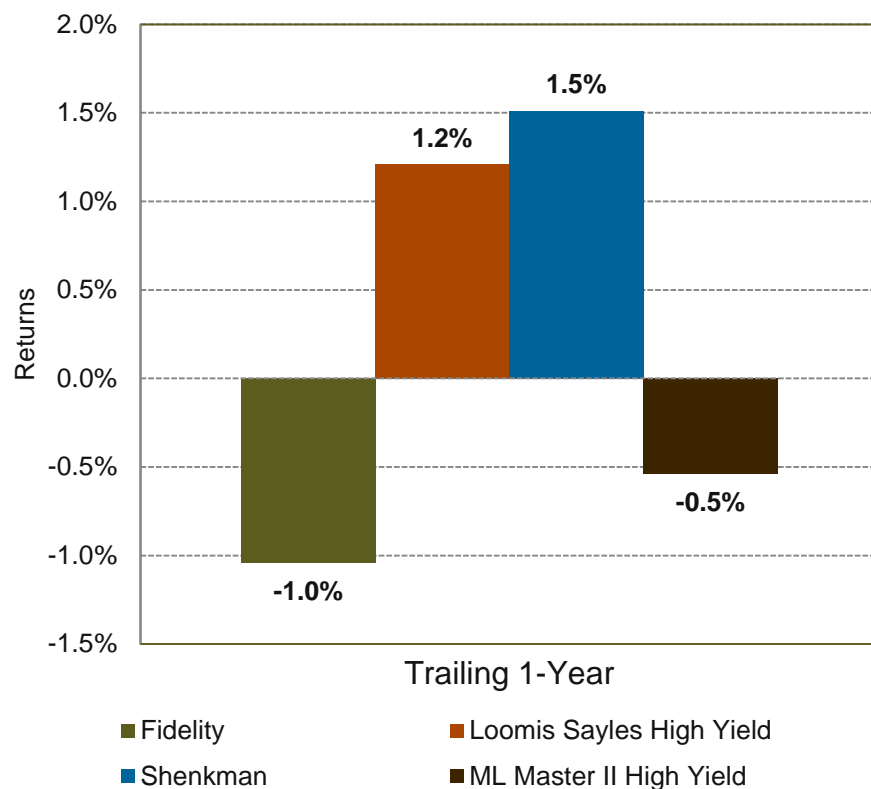
Gross of Fees Performance as of June 30, 2015



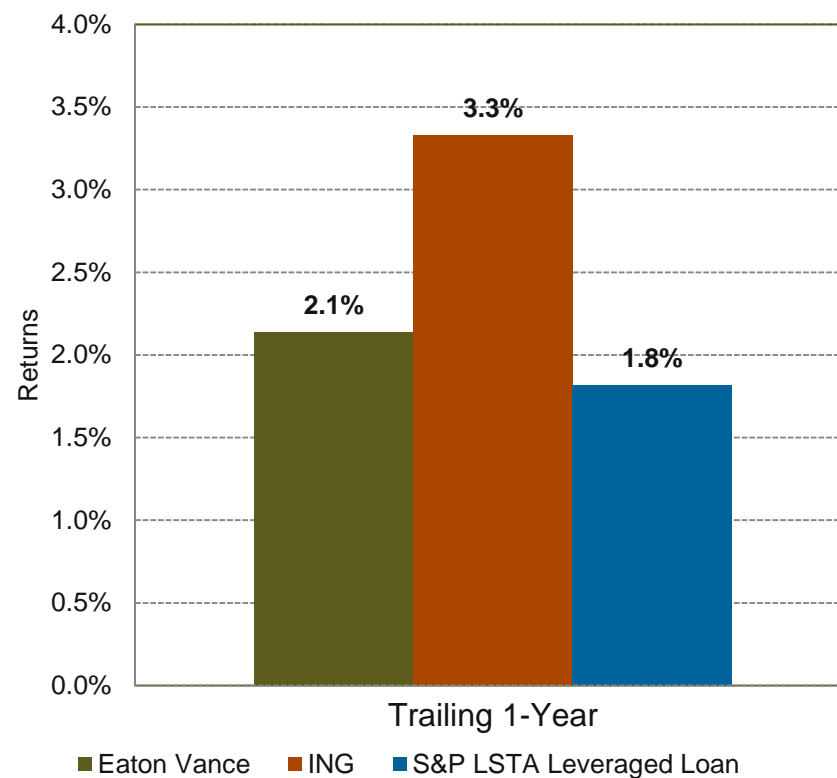
PRIT Value Added Fixed Income Managers

as of June 30, 2015

High Yield Managers vs. ML Master II High Yield



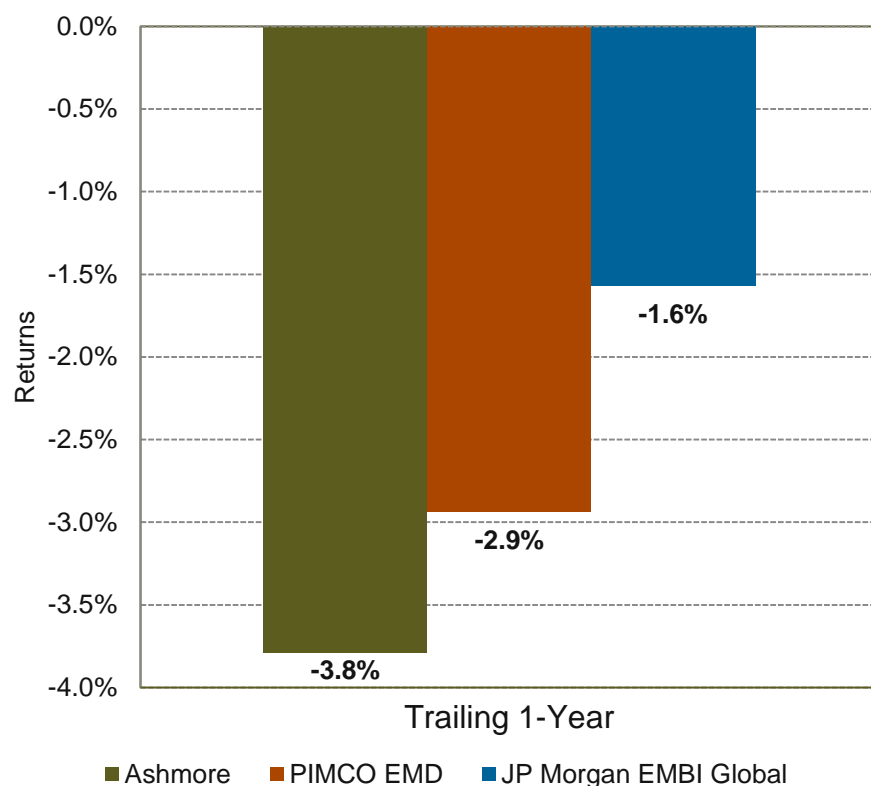
Bank Loan Managers vs. S&P LSTA Leveraged Loan



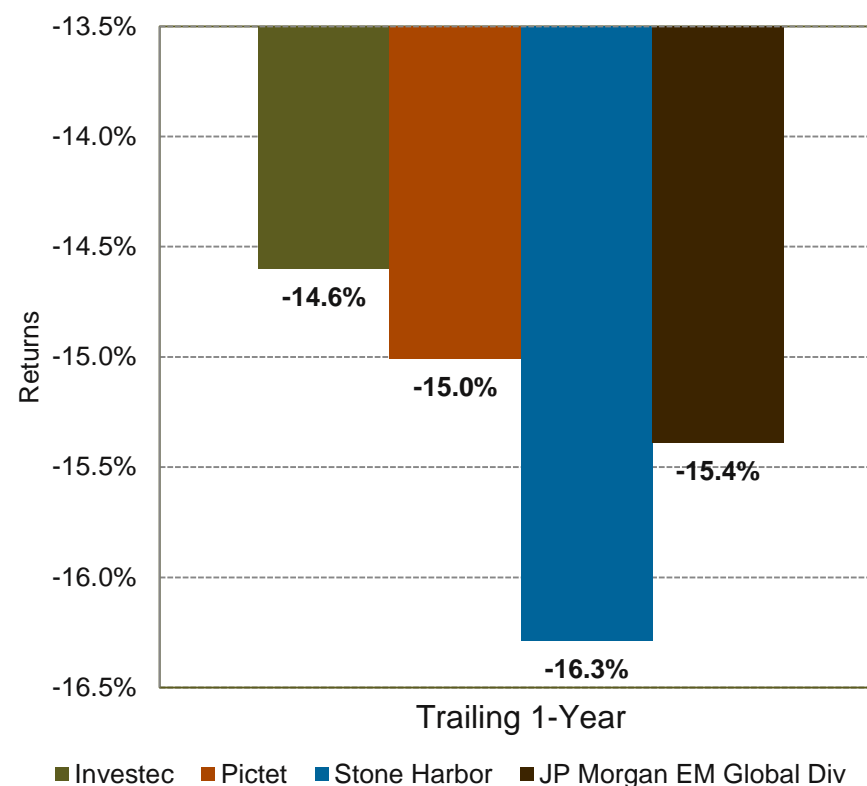
PRIT Value Added Fixed Income Managers

as of June 30, 2015

Emerging Debt Managers vs. JP Morgan EMBI Global



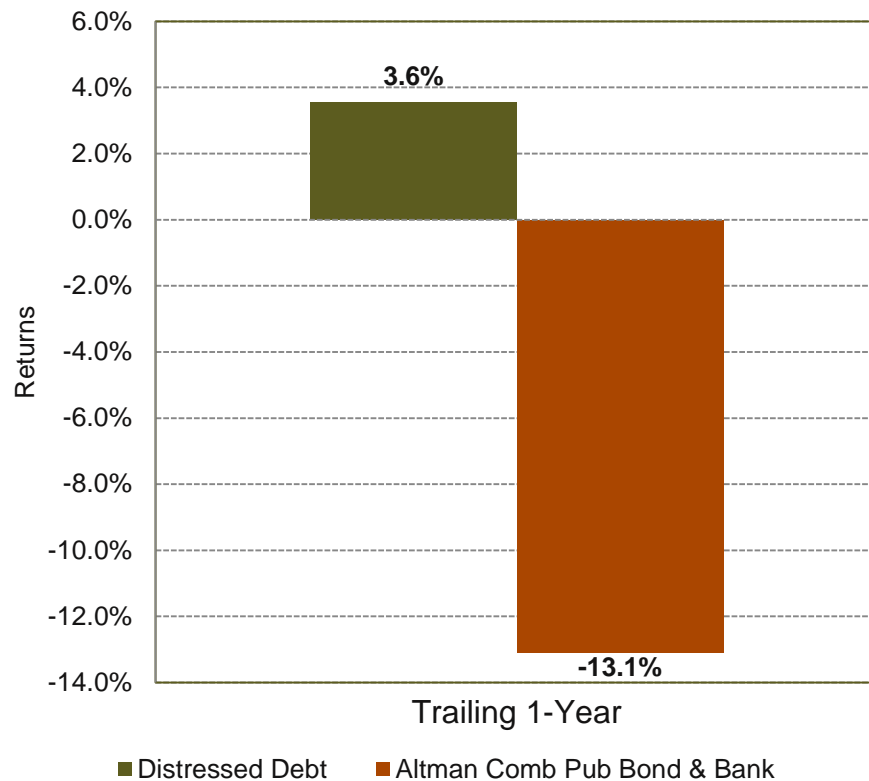
Emerging Markets Debt Local vs. JP Morgan EM Global Diversified



PRIT Value Added Fixed Income Managers

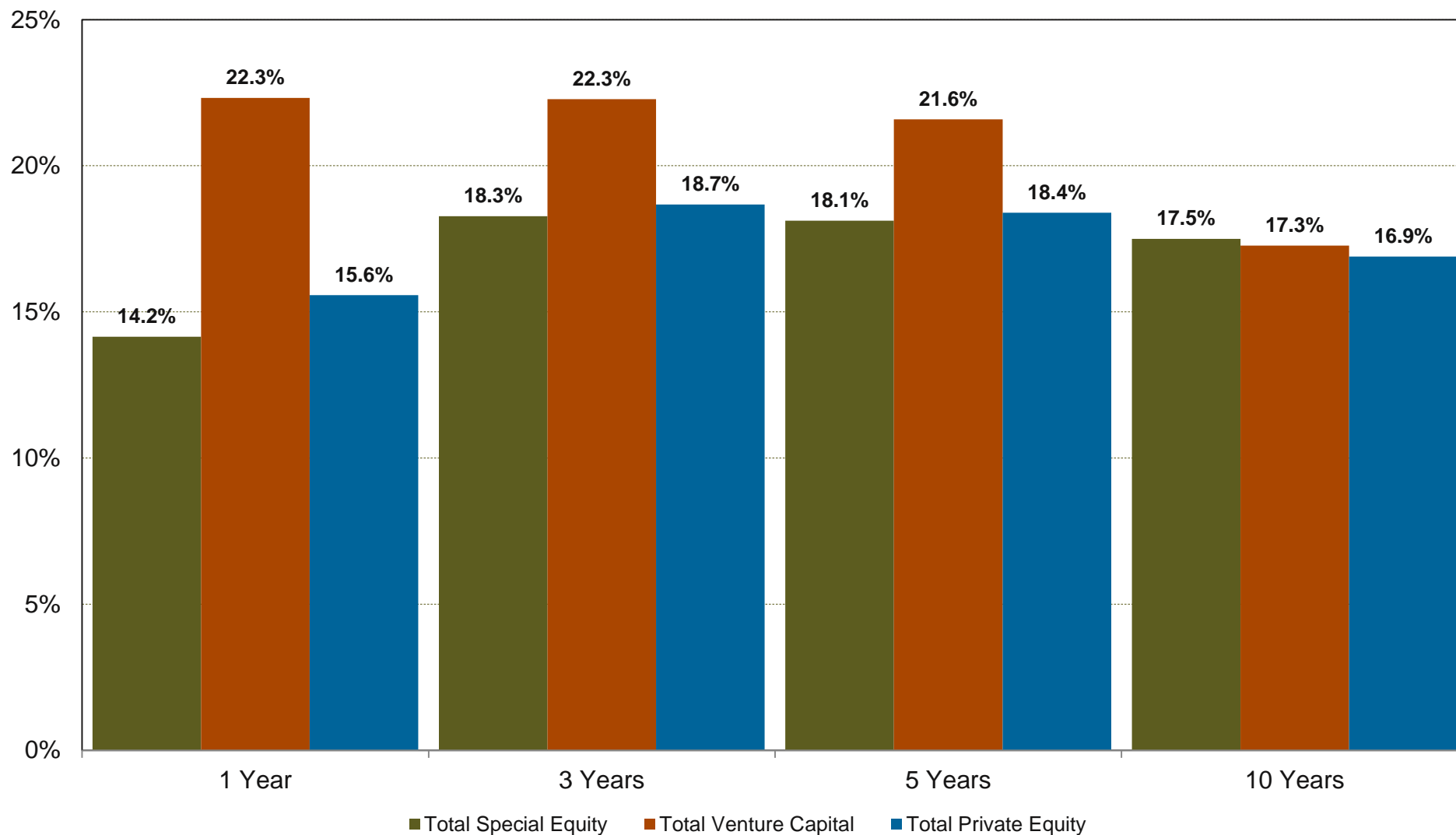
as of June 30, 2015

Distressed Debt vs. Altman Comb Pub Bond & Bank



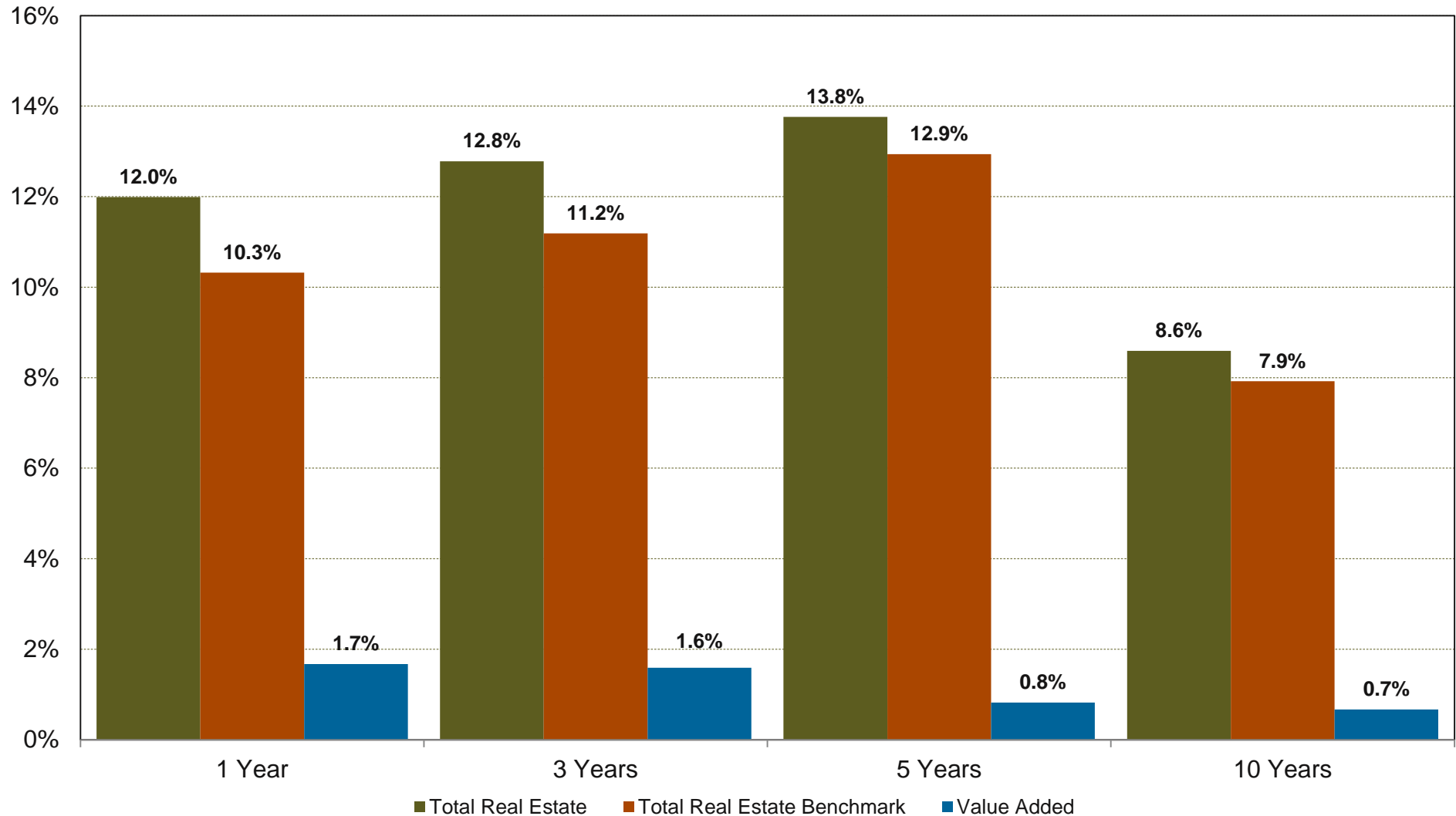
PRIT Private Equity (\$6.9 Billion)

Gross of Fees Performance as of June 30, 2015



PRIT Real Estate (\$6.1 Billion)

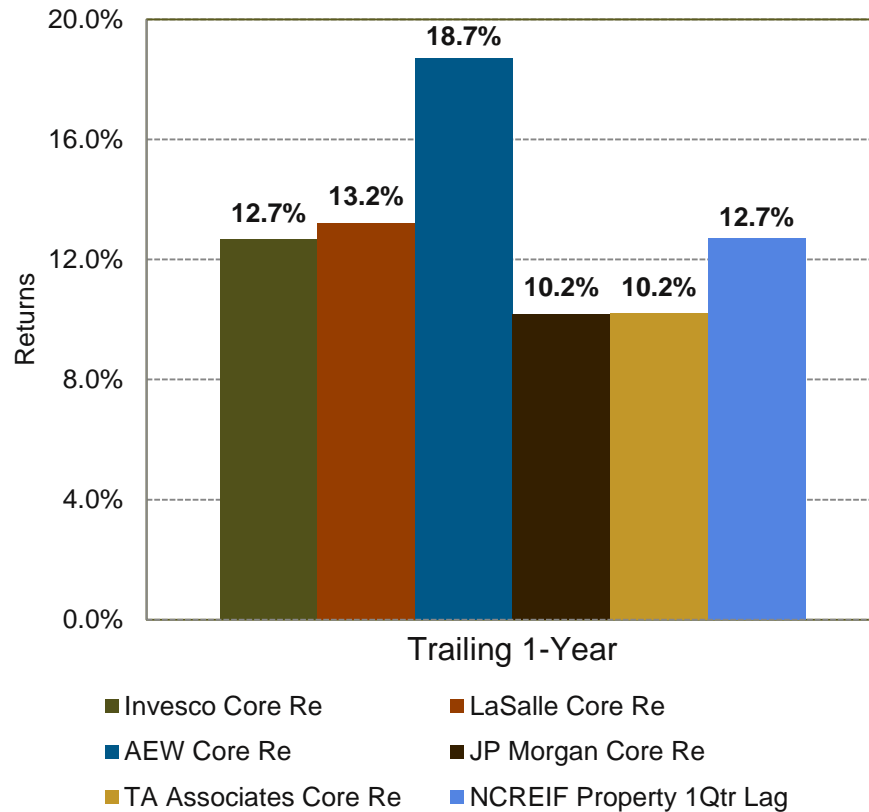
Gross of Fees Performance as of June 30, 2015



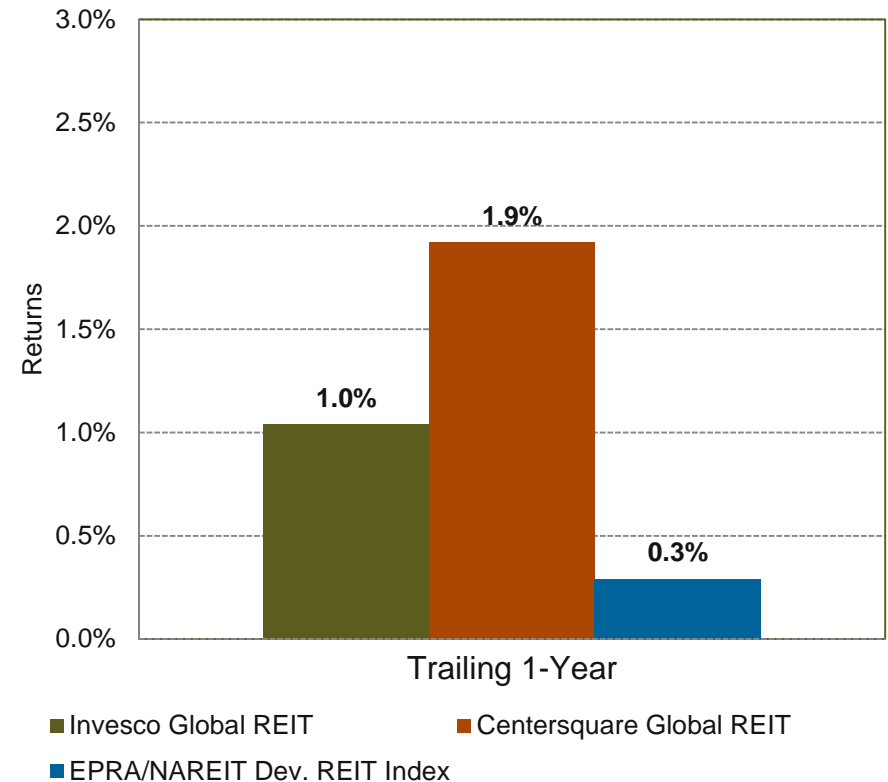
PRIT Real Estate Managers

as of June 30, 2015

Real Estate (SA) vs. NCREIF (One Quarter Lag)

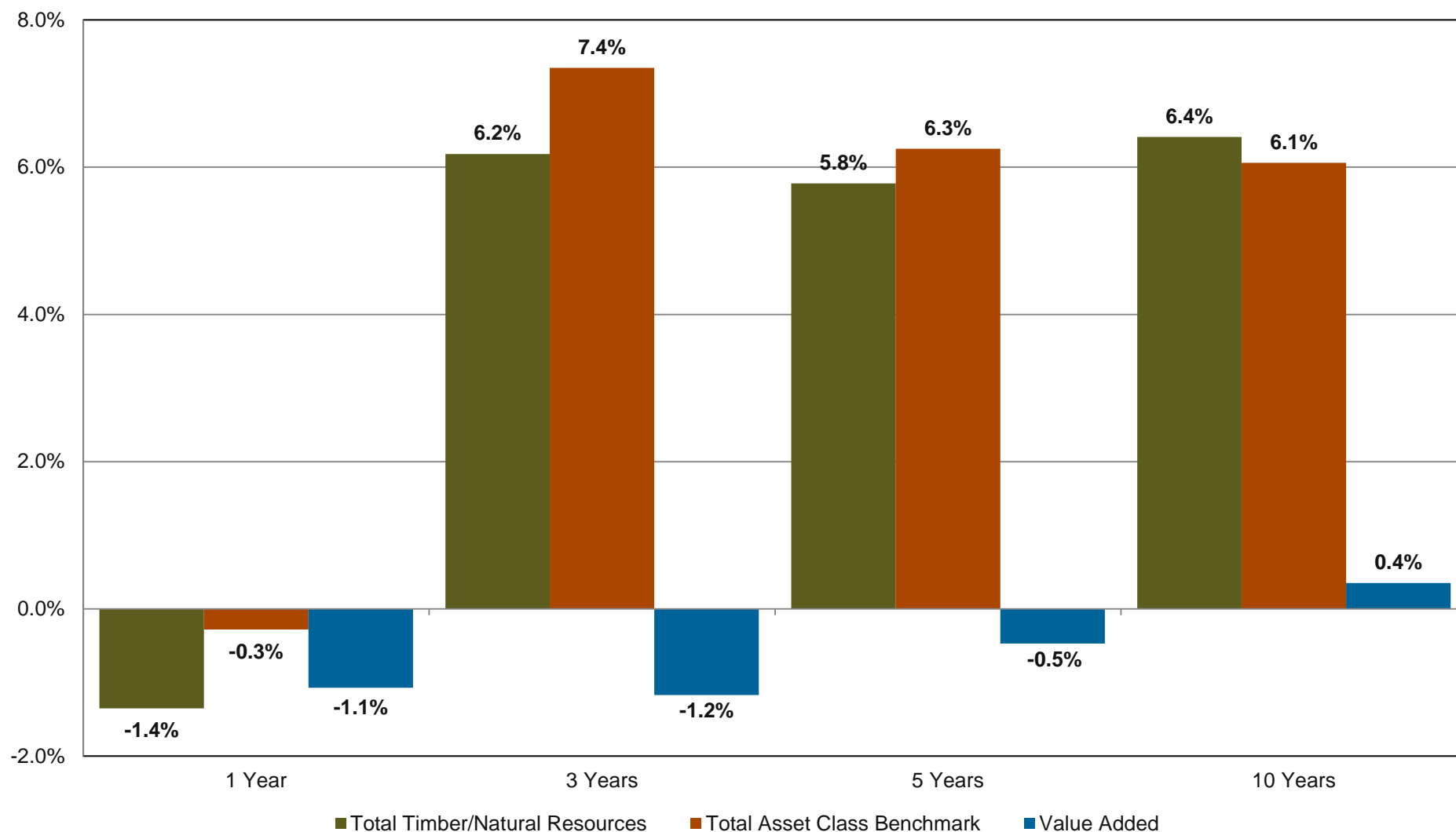


Global REIT Managers vs. EPRA/NAREIT Developed REIT Index



PRIT Timber/Natural Resources (\$2.3 Billion)

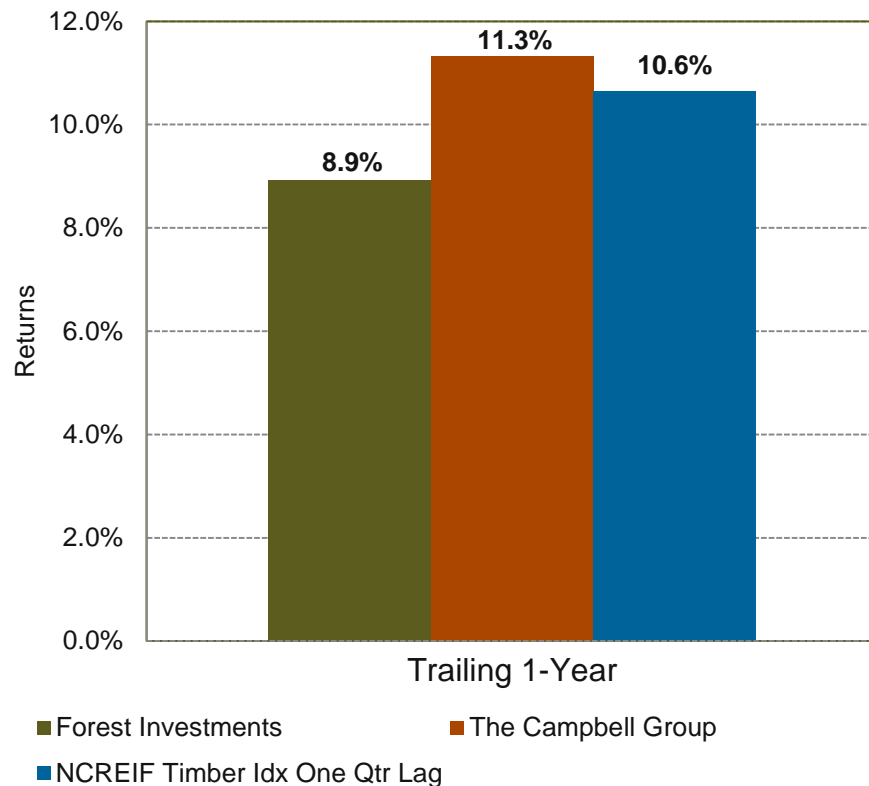
Gross of Fees Performance as of June 30, 2015



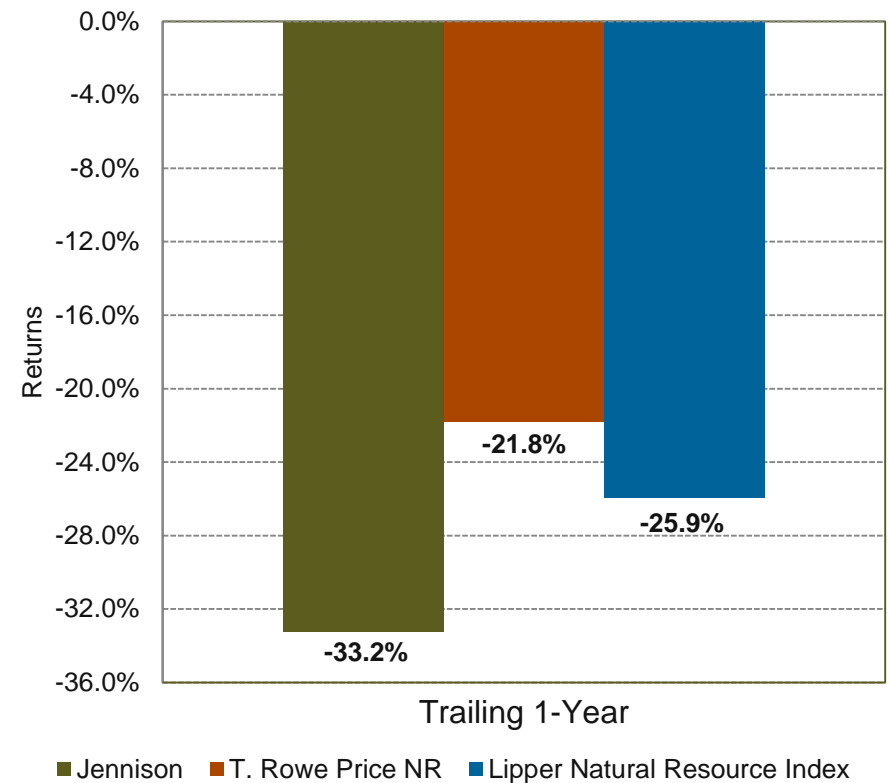
PRIT Timber/Natural Resource Managers

as of June 30, 2015

Timber Managers vs. NCREIF Timber (One Qtr Lag)



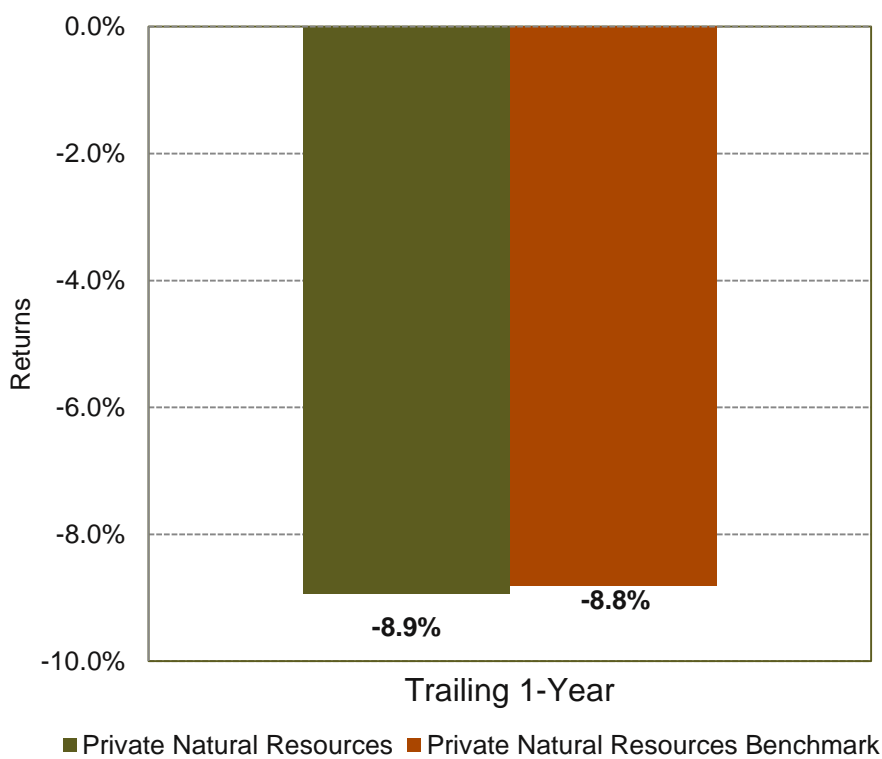
Natural Resources vs. Lipper Natural Resource Index



PRIT Private Natural Resource Managers

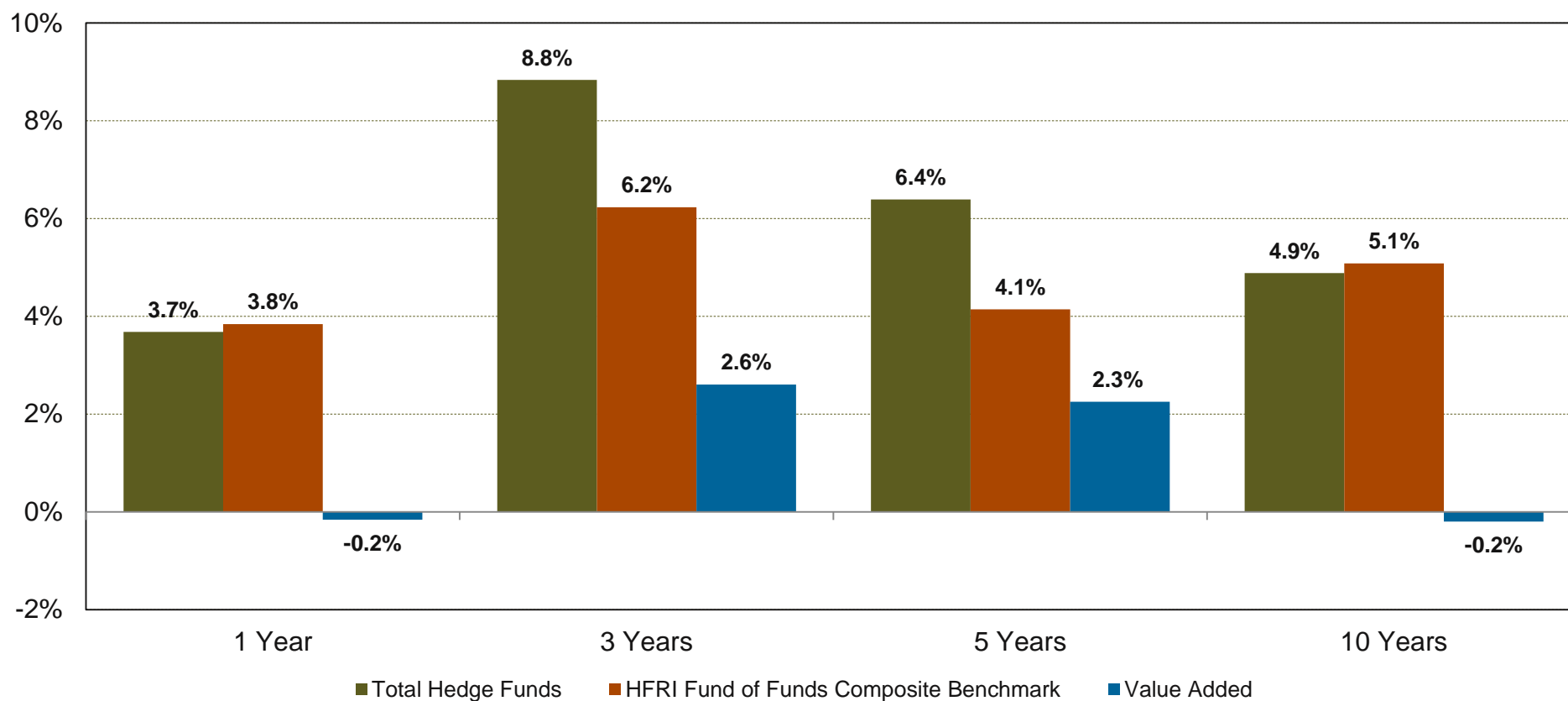
as of June 30, 2015

Private Natural Resources vs. Private Natural Resources Benchmark



PRIT Hedge Funds (\$5.6 Billion)

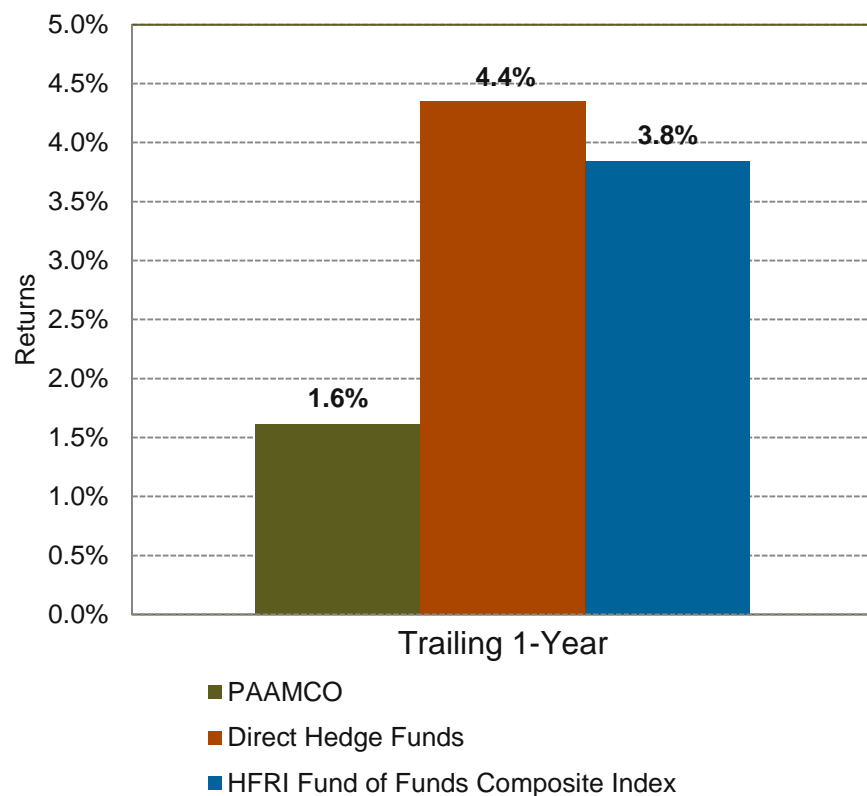
NET of Fees Performance as of June 30, 2015



PRIT Hedge Fund Managers

NET of Fees Performance as of June 30, 2015

Hedge Funds Versus HFRI Fund of Funds Composite Index



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PENSION RESERVES
INVESTMENT
MANAGEMENT BOARD

Appendix C

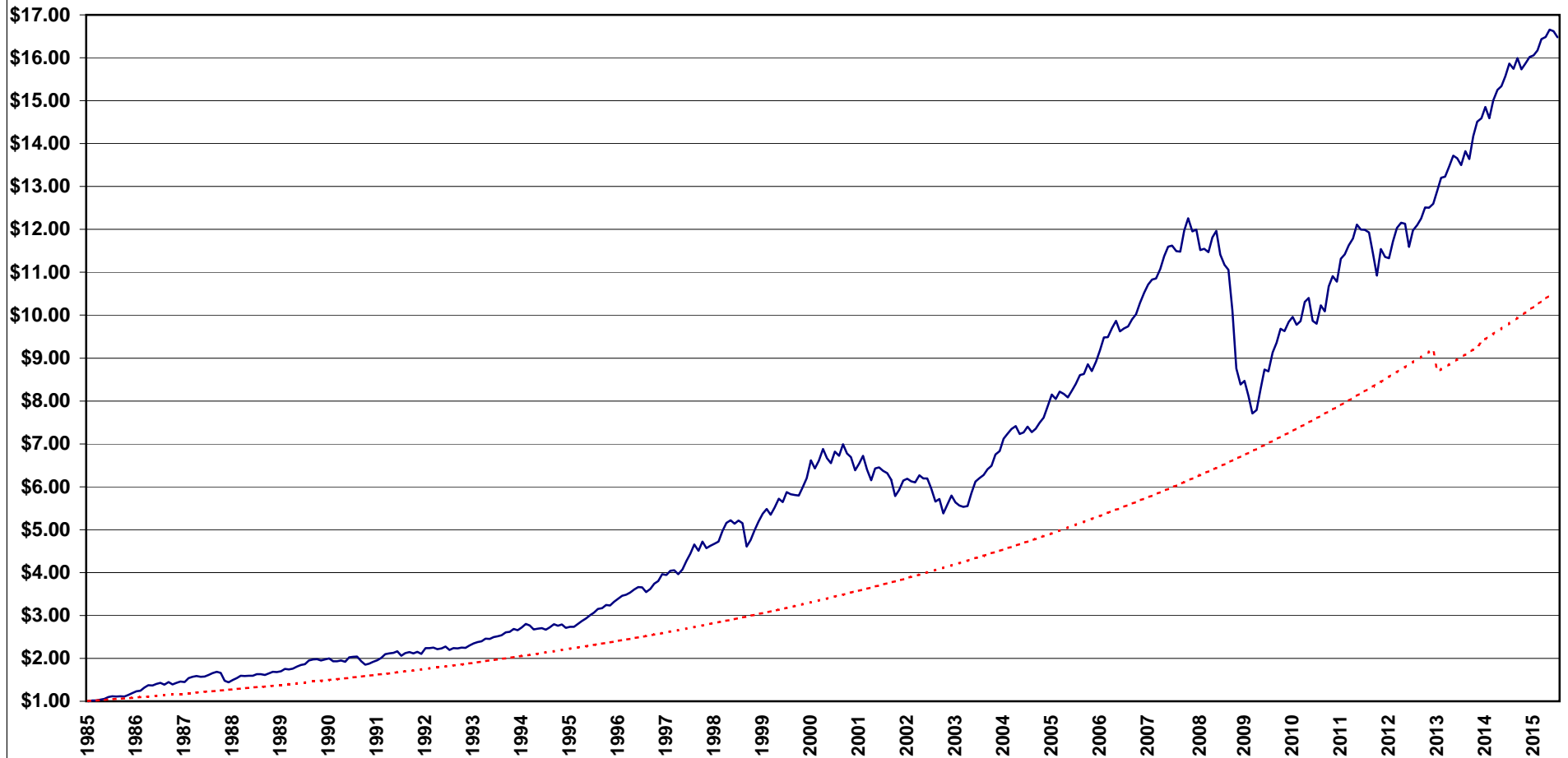
BNY Mellon Gross of Fees Performance Report.
June 30, 2015

*PRIM Board Meeting
Tuesday, August 11, 2015*

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Pension Reserves Investment Management Board
Performance Measurement
June 30, 2015

Growth of a Dollar invested in the PRIT Fund
Monthly, December 31, 1984 to June 30, 2015
\$1.00 invested in the PRIT Fund on January 1, 1985 would have grown to \$16.48 by June 30, 2015



PRIT --- 8.00% Current Actuarial Rate of Return

**PENSION RESERVES INVESTMENT TRUST
SUMMARY OF PLAN PERFORMANCE
RATES OF RETURN (GROSS OF FEES)
Periods Ending June 30, 2015**

	NAV \$ (M)	Target Allocation %	Actual Allocation %	Month	QTD	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Since Inception
GLOBAL EQUITY	26,097,951	42.8%	42.7%	-2.13	0.77	3.61	0.88	13.70	12.68	6.72	5.67
CORE FIXED INCOME	8,377,734	13.0%	13.7%	-3.61	-7.85	-4.29	4.68	3.34	4.70	4.74	7.64
VALUE-ADDED FIXED INCOME	5,053,195	10.0%	8.3%	-0.47	0.75	0.76	-2.60	4.85	7.00	7.68	8.82
PRIVATE EQUITY	6,935,726	10.0%	11.3%	5.49	5.79	9.29	15.57	18.67	18.39	16.89	14.58
REAL ESTATE	6,093,142	10.0%	10.0%	1.76	1.80	5.20	11.99	12.78	13.76	8.59	6.42
TIMBER/NATURAL RESOURCES	2,347,050	4.0%	3.8%	0.09	0.54	-1.09	-1.35	6.18	5.78	6.41	8.11
HEDGE FUNDS (NET OF FEES)	5,575,153	10.0%	9.1%	-1.45	-0.52	2.58	3.68	8.83	6.39	4.88	5.04
PORTFOLIO COMPLETION STRATEGIES	94,882	0.2%	0.2%	-2.40	-8.83	-5.09					-5.09
PORTABLE ALPHA WIND DOWN (NET OF FEES)	32,057	0.0%	0.1%	-3.08	-4.34	-5.37	-4.28	-2.63	-1.88		-5.64
OVERLAY	567,427	0.0%	0.9%	-1.86	-1.56	0.68	2.09				6.59
TOTAL CORE	61,174,316	100%	100%	-0.88	-0.07	2.61	3.87	11.25	10.99	7.00	9.57
<i>INTERIM BENCHMARK (target allocation without private equity benchmark) ¹</i>				-0.92	-0.04	2.94	3.22	10.35	10.30	6.88	10.10
<i>TOTAL CORE BENCHMARK (target allocation with private equity benchmark) ²</i>				-1.37	-0.34	2.57	2.74	9.40	9.31	6.53	9.98
PARTICIPANTS CASH	21,175			0.01	0.04	0.07	0.14	0.14	0.16	1.55	4.02
TEACHERS' AND EMPLOYEES' CASH	48,253			0.01	0.04	0.07	0.13	0.14	0.16	1.29	2.79
TOTAL FUND	61,243,745			-0.88	-0.07	2.61	3.86	11.21	10.95	6.98	9.62

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending June 30, 2015												
	NAV \$ (M)	%	Month	QTD	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
DOMESTIC EQUITY												
INTECH	886,396	1.4%	-2.60	-1.02	1.97	9.74	18.26	18.02		8.14	7.69	1/31/2006
PIMCO DOMESTIC	926,182	1.5%	-2.06	0.16	1.61	7.48	18.13	18.51		8.19	7.46	2/28/2006
SSGA S&P 500	7,367,985	12.0%	-1.93	0.23	1.21	7.36	17.46			17.69	17.56	12/31/2011
CLOSED PORTFOLIOS	-	0.0%										
TOTAL LARGE CAP MANAGERS	9,180,563	15.0%	-2.01	0.09	1.32	7.63	17.62	19.35	8.72	7.44	6.76	7/31/1997
S&P 500			-1.94	0.28	1.23	7.42	17.31	17.34	7.89			
SUMMIT CREEK	212,092	0.3%	3.42	1.74	6.92	9.08				17.46	19.20	5/31/2013
RUSSELL 2000 GROWTH			1.34	1.98	8.74	12.34						
FRONTIER	182,870	0.3%	0.84	-0.12	2.54	0.35				13.95	11.53	5/31/2013
HUBER	258,487	0.4%	-0.27	0.82	-0.28	-11.60				3.98	11.53	5/31/2013
TOTAL SMALL CAP VALUE	441,356	0.7%	0.19	0.43	0.87	-7.01				7.64	11.53	5/31/2013
RUSSELL 2000 VALUE			0.13	-1.20	0.76	0.78						
RIVERBRIDGE	167,014	0.3%	2.88	2.87	4.82	10.52				14.40	18.54	5/31/2013
RUSSELL 2500 GROWTH			-0.33	0.61	8.09	11.30						
SOUTHERNSUN	155,016	0.3%	-2.82	-2.11	4.51	-3.92				15.34	15.10	5/31/2013
SSGA R2500	1,589,947	2.6%	-0.68	-0.36	4.69	5.88	18.42			17.90	18.07	12/31/2011
TOTAL SMID CAP CORE	1,744,963	2.9%	-0.87	-0.52	4.68	4.93	18.41			17.89	18.07	12/31/2011
RUSSELL 2500			-0.69	-0.34	4.81	5.92	18.66					
TOTAL SMALL/SMID CAP EQUITY	2,565,425	4.2%	-0.11	0.04	4.19	3.31	17.51			17.14	18.01	12/31/2011
70.5% RUSSELL 2500/5.5% RUSSELL 2500 GROWTH/6.5% RUSSELL 2000 GROWTH/17.5% RUSSELL 2000 VALUE ³			-0.40	-0.29	4.53	5.71	18.58					
CLOSED PORTFOLIOS	0	0.0%										
DOMESTIC EQUITY CASH	(636)	0.0%										
TOTAL DOMESTIC EQUITY	11,745,353	19.2%	-1.59	0.11	1.95	6.75	17.64	17.41	6.86	10.42	10.67	2/28/1985
ASSET CLASS BENCHMARK: 78.9% S&P 500/14.88% RUSSELL 2500/1.16% RUSSELL 2500 GROWTH/1.37% RUSSELL 2000 GROWTH/3.69% RUSSELL 2000 VALUE ⁴			-1.61	0.17	1.94	7.12	17.59	17.45	7.74			

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending June 30, 2015												
	NAV \$ (M)	%	Month	QTD	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
INTERNATIONAL EQUITY												
SSGA WORLD EX-US	5,154,161	8.4%	-2.59	1.05	5.14	-4.47	12.17	9.76	5.75	6.30	5.81	3/31/1992
<i>CUSTOM MSCI WORLD EX-US IMI NET DIVS⁵</i>			-2.64	0.87	4.78	-5.15	11.51	9.17	5.12			
MARATHON ASSET MANAGEMENT	2,468,187	4.0%	-2.07	3.12	9.40	0.02	15.06	12.23	8.73	8.97	4.83	10/31/1996
BAILLIE GIFFORD	1,815,041	3.0%	-2.55	0.93	7.18	-1.40	13.14	11.44	7.52	8.42	6.23	8/31/2004
MONDRIAN INVESTMENT	794,660	1.3%	-2.81	0.09	5.49	-3.57	12.81	10.46		1.39	0.69	6/30/2008
FIS	108,145	0.2%	-2.71	1.60	6.71	-2.81				4.97	3.40	10/31/2013
SSGA TRANSITION INTERNATIONAL EQUITY	-	0.0%										
CLOSED PORTFOLIOS	17	0.0%										
INTERNATIONAL EQUITY CASH	1,097	0.0%										
<i>CUSTOM MSCI EAFE STANDARD INDEX NET DIVS⁶</i>			-2.81	0.51	5.45	-4.25	12.06	9.47	5.11			
TOTAL INTERNATIONAL EQUITY	10,341,307	16.9%	-2.48	1.46	6.57	-2.76	13.10	10.76	6.22	8.18	6.65	7/31/1986
<i>ASSET CLASS BENCHMARK: 50% CUSTOM MSCI WORLD EX-US IMI NET DIVS, 50% CUSTOM MSCI EAFE STANDARD INDEX NET DIVS⁷</i>			-2.73	0.69	5.11	-4.54	11.74	9.31	5.18			
EMERGING MARKETS EQUITY												
SSGA EMERGING MKTS	1,038,913	1.7%	-2.81	1.19	3.83	-3.66	4.74	4.32		2.22	1.89	5/31/2010
<i>CUSTOM MSCI EM IMI NET DIVS⁸</i>			-2.87	1.11	3.62	-3.83	4.57	3.99				
AQR EMERGING	483,909	0.8%	-3.08	0.10						-1.63	-0.73	3/31/2015
BAILLIE GIFFORD EMM	561,314	0.9%	-3.39	-0.33						-2.56	-0.73	3/31/2015
DRIEHAUS CAPITAL	586,818	1.0%	-2.17	1.48						0.55	-0.73	3/31/2015
HARDING LOEVNER	373,989	0.6%	-1.30	1.00						-0.97	-0.73	3/31/2015
PZENA INV	505,836	0.8%	-3.85	2.69						-0.15	-0.73	3/31/2015
EMERGING MARKETS TRANSITION	65,348	0.1%										
TOTAL EMERGING MARKETS CORE	2,577,214	4.2%	-2.83	1.00	-0.09	-8.09	3.22	3.03	6.85	9.53	5.46	2/28/1990
<i>CUSTOM MSCI EM STANDARD INDEX NET DIVS⁹</i>			-2.60	0.58	2.89	-4.48	4.07	3.82	8.25			
CLOSED PORTFOLIOS	77	0.0%										
EMERGING MARKETS CASH	1,473	0.0%										
ACADIAN	145,923	0.2%	-4.00	1.71	6.83	2.28	19.33			15.93	5.42	5/31/2012
WASATCH	106,088	0.2%	-2.65	3.14	4.36	1.99	6.76			3.78	5.42	5/31/2012
TOTAL EMERGING MARKETS SMALL CAP	252,011	0.4%	-3.44	2.31	5.78	1.86	10.79			7.66	5.42	5/31/2012
<i>CUSTOM MSCI EM SMALL CAP NET DIVS¹⁰</i>			-4.45	4.59	8.42	0.49	8.03					
ACADIAN FRONTIER	39,991	0.1%	-1.08	4.20						4.20	0.33	4/30/2015
CITY OF LONDON	101,613	0.2%	0.09	3.87						2.99	2.24	2/28/2015
TOTAL FRONTIER	141,604	0.2%	-0.25	3.80						2.92	2.24	2/28/2015
<i>CUSTOM MSCI FRONTIER MKTS COUNTRY CAPPED INDEX NET DIVS</i>			-0.04	0.33								
TOTAL EMERGING MARKETS	4,011,292	6.6%	-2.77	1.27	1.62	-5.85	4.23	4.11	7.31	9.71	5.50	2/28/1990
<i>ASSET CLASS BENCHMARK¹¹</i>			-2.71	1.03	3.52	-3.92	4.54	3.97	8.34			
TOTAL GLOBAL EQUITY¹²	26,097,951	42.7%	-2.13	0.77	3.61	0.88	13.70	12.68	6.72	5.67	4.69	1/31/2001
<i>ASSET CLASS BENCHMARK: 44% DOMESTIC EQUITY BM/40% INTERNATIONAL EQUITY BM/16% EMERGING MARKETS BM¹³</i>			-2.23	0.56	3.52	0.69	13.20	12.05	6.45			

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending June 30, 2015												
	NAV \$ (M)	%	Month	QTD	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
DOMESTIC INVESTMENT GRADE FIXED INCOME												
BLACKROCK PASSIVE	508,665	0.8%	-1.12	-1.74	-0.20	1.79	1.82	3.40	4.52	5.63	5.64	6/30/1995
PIMCO CORE	788,245	1.3%	-0.67	-1.12	0.35	2.35	2.67	3.82	5.31	7.35	6.41	9/30/1990
LOOMIS SAYLES CORE	1,120,762	1.8%	-0.93	-1.32	0.71	3.04	3.58	4.96	5.31	7.51	6.52	5/31/1990
COMMUNITY CAPITAL MANAGEMENT	27,595	0.0%	-0.80	-1.11	0.42	2.10	2.15	3.16		4.86	5.04	7/31/2006
AFL - CIO HOUSING INVESTMENT	124,473	0.2%	-0.93	-1.15	0.47	2.40	2.00	3.61		5.08	4.85	8/31/2007
ACCESS CAPITAL - ETI	102,668	0.2%	-0.53	-0.31	0.94	3.13	2.57	3.32	4.45	4.37	4.32	4/30/2004
TOTAL AGGREGATE ¹⁴	2,672,408	4.4%	-0.87	-1.29	0.45	2.58	2.55	3.89	4.80	5.75	5.36	7/31/1999
BARCLAYS CAPITAL AGGREGATE			-1.09	-1.68	-0.10	1.86	1.83	3.35	4.44			
BLACKROCK - STRIPS	3,860,954	6.3%	-6.39	-14.29	-9.52	8.85				13.82	13.75	4/30/2014
BC US TREASURY STRIPS 20+ YR INDEX			-6.41	-14.32	-9.57	8.95						
CLOSED PORTFOLIOS	1	0.0%										
FIXED INCOME CASH	2	0.0%										
TOTAL DOMESTIC INVESTMENT GRADE FIXED INCOME	6,533,365	10.7%	-4.21	-9.27	-5.47	5.40	3.87	4.80	5.29	6.09	5.64	7/31/1999
DOMESTIC INVESTMENT GRADE FIXED INCOME BM ¹⁵			-4.31	-9.43	-5.70	4.92	3.25	4.21	4.88			
INFLATION-LINKED FIXED INCOME												
BLACKROCK - TIPS	594,742	1.0%	-0.96	-1.06	0.41	-1.75	-0.77	3.29	4.11	5.55	5.61	4/30/2001
BARCLAYS CAPITAL US TIPS			-0.97	-1.06	0.34	-1.73	-0.76	3.29	4.14			
BLACKROCK ILBs	1,249,627	2.0%	-1.68	-2.93	0.07	3.36	2.42	4.58		1.00	0.49	10/31/2005
CLOSED PORTFOLIOS	-	0.0%										
TOTAL ILBs	1,249,627	2.0%	-1.68	-2.93	0.07	3.36	2.42	4.58		0.84	0.49	10/31/2005
BC LB US\$ HEDGED ¹⁶			-1.65	-2.51	-0.16	3.34	1.88	4.24				
TOTAL INFLATION-LINKED FIXED INCOME	1,844,369	3.0%	-1.45	-2.34	0.18	1.66	1.35	4.21	1.50	3.67	1.30	4/30/2001
33% BC US TIPS/67% BC ILB US\$ HEDGED ¹⁷			-1.43	-2.03	0.01	1.65	1.01	3.94	1.27			
TOTAL CORE FIXED INCOME	8,377,734	13.7%	-3.61	-7.85	-4.29	4.68	3.34	4.70	4.74	7.64	7.07	9/30/1985
ASSET CLASS BENCHMARK ¹⁸			-3.69	-7.93	-4.51	4.30	2.78	4.19	4.31			

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending June 30, 2015												
	NAV \$ (M)	%	Month	QTD	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
PRIVATE EQUITY												
SPECIAL EQUITY	20,109	0.0%	-1.42	-1.44	8.42	26.42	18.28	18.57	14.93	14.98		9/30/1986
SPECIAL EQUITY - 2000	26,278	0.0%	10.30	10.60	13.45	39.55	26.24	19.15	19.00	16.41		2/29/2000
SPECIAL EQUITY - 2001	58,975	0.1%	1.94	2.51	11.71	9.04	20.22	16.11	21.00	20.59		4/30/2001
SPECIAL EQUITY - 2002	5,931	0.0%	8.19	9.69	5.27	1.26	10.69	25.53	24.32	18.08		7/31/2002
SPECIAL EQUITY - 2003	93,532	0.2%	2.61	2.93	1.93	11.24	10.73	11.67	17.35	16.11		7/31/2003
SPECIAL EQUITY - 2004	79,432	0.1%	7.07	7.73	14.67	15.56	21.12	21.65	14.44	12.85		7/31/2004
SPECIAL EQUITY - 2005	462,544	0.8%	3.62	3.93	6.68	12.84	16.60	17.93	11.92	11.81		6/30/2005
SPECIAL EQUITY - 2006	664,031	1.1%	6.92	7.09	5.88	12.05	17.42	18.36		5.74		4/30/2006
SPECIAL EQUITY - 2007	916,868	1.5%	6.30	7.18	5.68	7.71	15.93	15.96		7.57		7/31/2007
SPECIAL EQUITY - 2008	917,470	1.5%	7.25	7.47	9.62	17.99	23.68	21.79		9.52		4/30/2008
SPECIAL EQUITY - 2009	240,603	0.4%	6.59	6.72	12.68	27.70	25.57	17.09		10.62		8/31/2009
SPECIAL EQUITY - 2010	499,110	0.8%	4.74	4.77	6.05	13.57	16.59			4.75		1/31/2011
SPECIAL EQUITY - 2011	555,383	0.9%	9.74	9.66	19.04	27.87	17.18			-27.66		7/31/2011
SPECIAL EQUITY - 2012	241,373	0.4%	8.51	10.54	6.03	3.98				-14.25		8/31/2012
SPECIAL EQUITY - 2013	160,564	0.3%	4.63	4.50	3.37	0.56				3.82		6/30/2013
SPECIAL EQUITY - 2014	145,969	0.2%	2.42	1.21	-0.36	-7.38				-13.52		5/31/2014
SPECIAL EQUITY - 2015	46,354	0.1%	-1.04	-3.45						-3.45		3/31/2015
TOTAL SPECIAL EQUITY	5,134,525	8.4%	6.26	6.57	8.14	14.15	18.27	18.12	17.50	16.19		9/30/1986
VENTURE CAPITAL	14,025	0.0%	-3.08	-3.03	6.54	12.51	11.65	9.71	16.24	11.50		4/30/1986
VENTURE CAPITAL - 2000	68,032	0.1%	0.46	0.45	2.68	-4.56	8.70	10.79	10.61	6.28		2/29/2000
VENTURE CAPITAL - 2001	39,196	0.1%	-0.19	-0.05	5.91	6.77	9.81	10.78	13.44	12.35		2/28/2001
VENTURE CAPITAL - 2002	14,160	0.0%	-1.82	-1.82	0.66	6.09	4.81	3.02	0.20	0.01		4/30/2003
VENTURE CAPITAL - 2003	31,565	0.1%	18.51	18.67	22.57	23.63	33.87	23.00	14.19	13.61		2/29/2004
VENTURE CAPITAL - 2004	36,050	0.1%	0.22	0.22	30.03	-12.10	21.24	42.02	27.85	26.14		2/28/2005
VENTURE CAPITAL - 2005	120,090	0.2%	3.88	3.89	17.70	32.81	21.54	19.53	11.93	11.17		3/31/2005
VENTURE CAPITAL - 2006	137,004	0.2%	-2.04	-2.16	7.35	17.23	16.61	17.97		11.21		4/30/2006
VENTURE CAPITAL - 2007	193,133	0.3%	5.65	5.66	7.98	24.53	22.46	26.75		16.67		4/30/2007
VENTURE CAPITAL - 2008	31,510	0.1%	1.82	1.82	6.25	27.95	29.36	39.69		25.01		7/31/2008
VENTURE CAPITAL - 2009	248,306	0.4%	3.47	3.42	13.32	24.68	24.56	19.36		12.56		8/31/2009
VENTURE CAPITAL - 2010	266,451	0.4%	0.54	0.56	29.77	38.08	36.73	19.64		17.42		4/30/2010
VENTURE CAPITAL - 2011	87,853	0.1%	13.26	13.58	17.79	27.51	22.68			12.97		2/28/2011
VENTURE CAPITAL - 2012	206,058	0.3%	8.16	10.54	16.47	28.97	22.66			11.29		5/31/2012
VENTURE CAPITAL - 2013	41,821	0.1%	2.44	2.44	8.36	8.83				3.56		6/30/2013
VENTURE CAPITAL - 2014	43,818	0.1%	4.72	4.40	3.03	-2.37				-3.40		6/30/2014
VENTURE CAPITAL - 2015	1,372	0.0%	-8.89	-8.89						-9.01		3/31/2015
TOTAL VENTURE CAPITAL	1,580,445	2.6%	3.64	3.91	14.55	22.32	22.28	21.59	17.27	13.04		4/30/1986
PRIVATE EQUITY CASH	220,756	0.4%										
TOTAL PRIVATE EQUITY	6,935,726	11.3%	5.49	5.79	9.29	15.57	18.67	18.39	16.89	14.58	17.11	4/30/1986
ASSET CLASS BENCHMARK ²⁴			5.49	5.79	9.29	15.57	18.67	18.39	16.89			
7 YEAR ANNUALIZED RETURN PE ²⁵			0.92	2.65	5.23	10.97	12.61	14.55		14.86	7.64	7/31/2007
7 YEAR ANNUALIZED RUSSELL 3000 +3% ²⁶			1.00	2.87	5.81	10.93	9.31	8.53				

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending June 30, 2015												
	NAV \$ (M)	%	Month	QTD	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
PRIVATE REAL ESTATE												
CORE												
INVESCO CORE	1,115,216	1.8%	0.77	1.52	2.71	12.66	13.21	14.61	8.96	9.91	9.73	5/31/1995
LASALLE	1,556,639	2.5%	3.53	4.23	6.82	13.22	13.46	14.82	9.10	10.49	9.66	1/31/1995
AEW	988,716	1.6%	3.90	4.92	8.19	18.72	14.36			14.65	12.49	1/31/2011
JP MORGAN	754,954	1.2%	1.91	2.65	5.38	10.19	8.97	12.94	6.13	10.48	9.08	9/30/2000
TA ASSOCIATES	1,109,776	1.8%	2.27	3.07	6.51	10.20	10.31	11.59	7.91	8.89	9.08	9/30/2000
CLOSED PORTFOLIOS	-	0.0%										
TOTAL CORE ACCOUNTS	5,525,301	9.0%	2.56	3.35	5.95	12.87	12.02	13.32	8.40	9.96	9.70	12/31/1994
PORTFOLIO DEBT												
CLOSED PORTFOLIOS	(999,907)	-1.6%										
	-	0.0%										
TOTAL SEPARATE ACCOUNTS - LEVERAGED	4,525,394	7.4%	3.21	4.08	6.84	15.33				15.29	12.10	2/28/2013
NON-CORE												
NON-CORE	409,972	0.7%	2.48	2.83	6.31	14.15	15.34			11.88	11.48	1/31/2012
NON-CORE (ETI EXCLUDED)	409,972	0.7%	2.48	2.83	6.31	14.15	15.34			11.88	11.48	1/31/2012
ETI (PARTNERSHIPS)												
CANYON JOHNSON II	5,519	0.0%	-0.42	-0.42	1.09	5.06	-2.45	-2.50	-4.75	-4.67	8.61	5/31/2005
INTERCONT IV	1,036	0.0%	28.66	28.66	22.15	51.21	19.37	14.72	-1.36	-1.36	8.39	7/31/2005
NEW BOSTON URBAN I	7,450	0.0%	1.85	1.85	-2.33	0.12	3.63	4.38		-4.49	7.02	12/31/2006
TOTAL ETI ACCOUNTS	14,005	0.0%	2.52	2.52	0.14	6.57	2.24	2.09	-4.85	-4.77	8.61	5/31/2005
TOTAL NON-CORE	423,977	0.7%	2.48	2.82	6.07	13.87	11.90	7.10	-2.54	-2.50	8.61	5/31/2005
TOTAL PRIVATE REAL ESTATE²⁷	4,949,370	8.1%	3.15	3.97	6.77	15.26	13.97	14.43	9.45	10.99	9.66	11/30/1994
<i>NCREIF PROPERTY ONE QTR LAG</i>												
			3.57	3.57	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 June 30, 2015												
	NAV \$ (M)	%	Month	QTD	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
PUBLIC REAL ESTATE (REITS)												
INVESCO GLOBAL REIT	264,037	0.4%	-3.73	-6.61	-2.64	1.04	9.97			9.33	8.76	5/31/2012
CENTERSQUARE GLOBAL REIT	753,455	1.2%	-3.84	-6.50	-2.04	1.92	9.98			9.31	8.76	5/31/2012
INVESCO TRANSITION	144,325	0.2%	-3.72	-6.59	-2.71					-0.77	-0.04	8/31/2014
TOTAL GLOBAL REITS	1,161,818	1.9%	-3.80	-6.54	-2.30	0.91	9.45			8.73	8.76	5/31/2012
FTSE EPRA NAREIT DEVELOPED NET TOTAL RETURN			-3.90	-6.73	-2.87	0.29	9.37					
CLOSED PORTFOLIOS	27											
REIT CASH	25	0.0%										
TOTAL REITS	1,161,870	1.9%	-3.79	-6.53	-2.28	0.94	9.46	12.42	5.34	9.62	8.18	6/30/1998
100% FTSE EPRA NAREIT DEVELOPED NET TOTAL RETURN ²⁸			-3.90	-6.73	-2.87	0.29	9.37	12.47	4.96			
REAL ESTATE LEVERAGE CASH	(94)	0.0%										
CORE REAL ESTATE CASH	(18,004)	0.0%										
REAL ESTATE TRANSITION	0	0.0%										
TOTAL CORE ACCOUNT	6,093,142	10.0%	1.76	1.80	5.20	11.99	12.78	13.76	8.59	10.67	9.84	12/31/1994
TOTAL REAL ESTATE	6,093,142	10.0%	1.76	1.80	5.20	11.99	12.78	13.76	8.59	6.42	7.94	1/31/1986
ASSET CLASS BENCHMARK: 80% NCREIF PROPERTY ONE QTR LAG/20% FTSE EPRA NAREIT DEVELOPED NET TOTAL RETURN ²⁹			2.08	1.47	4.81	10.32	11.19	12.94	7.92			

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending June 30, 2015												
	NAV \$ (M)	%	Month	QTD	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
TIMBER												
FOREST INVESTMENTS	1,109,273	1.8%	0.36	0.36	1.45	8.92	9.38	6.46	7.38	7.67	7.43	1/31/2002
THE CAMPBELL GROUP	549,695	0.9%	4.42	4.48	3.36	11.32	9.19			7.54	8.10	11/30/2011
TIMBER CASH	36,715	0.1%										
TOTAL TIMBER	1,695,683	2.8%	1.67	1.69	2.08	9.69	9.42	6.51	8.74	9.85	7.43	1/31/2002
<i>NCREIF TIMBER INDEX ONE QTR LAG ³⁰</i>			<i>1.75</i>	<i>1.75</i>	<i>7.88</i>	<i>10.64</i>	<i>9.80</i>	<i>6.20</i>	<i>8.60</i>			
NATURAL RESOURCES - PUBLIC												
JENNISON	188,502	0.3%	-4.50	-1.69	-3.23	-33.23	-1.06	0.42		-5.21	-7.17	7/31/2008
T. ROWE PRICE NR	193,291	0.3%	-4.70	-2.69	-3.26	-21.80	5.10	5.70		-3.93	-7.17	7/31/2008
PUBLIC NATURAL RESOURCES CASH	1	0.0%										
TOTAL NATURAL RESOURCES PUBLIC	381,794	0.6%	-4.60	-2.20	-3.24	-27.90	1.86	3.04		-4.52	-7.17	7/31/2008
<i>LIPPER NATURAL RESOURCES GLOBAL FUND INDEX</i>			<i>-4.61</i>	<i>-1.06</i>	<i>-2.23</i>	<i>-25.93</i>	<i>0.81</i>	<i>1.80</i>				
NATURAL RESOURCES- PRIVATE												
NATURAL RESOURCES- PRIVATE	269,793	0.4%	-2.61	-2.49	-14.58	-8.94	-4.46	4.71		1.54	1.09	8/31/2008
PRIVATE NATURAL RESOURCES CASH	(219)	0.0%										
TOTAL NATURAL RESOURCES PRIVATE	269,573	0.4%	-2.60	-2.48	-14.51	-8.81	-4.34	4.84		1.09	1.09	8/31/2008
<i>BENCHMARK - NAT. RES. PRIVATE ³¹</i>			<i>-2.60</i>	<i>-2.48</i>	<i>-14.51</i>	<i>-8.81</i>	<i>-4.34</i>	<i>4.84</i>				
TOTAL TIMBER/NATURAL RESOURCES	2,347,050	3.8%	0.09	0.54	-1.09	-1.35	6.18	5.78	6.41	8.11	5.56	1/31/2002
<i>ASSET CLASS BENCHMARK ³²</i>			<i>0.16</i>	<i>0.84</i>	<i>3.21</i>	<i>-0.28</i>	<i>7.35</i>	<i>6.25</i>	<i>6.06</i>			

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending June 30, 2015												
	NAV \$ (M)	%	Month	QTD	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
HEDGE FUNDS (NET OF FEES)												
ARDEN HFOF LIQUIDATION	52,532	0.1%	-0.23	1.69	2.46	2.43				7.18		10/31/2012
IVY LIQUIDATION	4,692	0.0%	-1.67	1.12	2.92	12.83	6.89	2.92		2.92		3/31/2009
PAAMCO	1,210,770	2.0%	-0.85	0.77	3.27	1.61	9.67	6.42	5.57	5.39	5.17	8/31/2004
100% HFRI FUND OF FUNDS COMPOSITE INDEX ³³			-1.17	0.09	2.58	3.84	6.23	4.14	5.08			
DIRECT HEDGE FUNDS	4,056,051	6.6%	-1.71	-1.03	2.31	4.35	8.78			7.45	5.06	11/30/2011
HFRI FUND OF FUNDS COMPOSITE INDEX ³⁴			-1.17	0.09	2.58	3.84	6.23					
HEDGE FUND CASH	251,108	0.4%										
TOTAL HEDGE FUNDS (NET OF FEES)	5,575,153	9.1%	-1.45	-0.52	2.58	3.68	8.83	6.39	4.88	5.04	5.17	7/31/2004
ASSET CLASS BENCHMARK:												
HFRI FUND OF FUNDS COMPOSITE INDEX ³⁵			-1.17	0.09	2.58	3.84	6.23	4.14	5.08			
PORTFOLIO COMPLETION STRATEGIES	94,882	0.2%	-2.40	-8.83	-5.09					-5.09	1.58	1/31/2015
PORTFOLIO COMPLETION STRATEGIES COMPOSITE INDEX ³⁶			0.26	0.79	1.58							

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending June 30, 2015												
	NAV \$ (M)	%	Month	QTD	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
PORTABLE ALPHA WIND DOWN (NET OF FEES)												
AUSTIN CAPITAL	1,597	0.0%	0.02	0.65	0.44	1.55	-11.68	-10.92		-9.84	-0.57	9/30/2008
CRESTLINE	11,223	0.0%	-6.70	-7.76	-9.59	-5.96	-2.60	-0.21		0.73	-0.06	9/30/2006
STRATEGIC	15,385	0.0%	-0.54	-2.15	-2.45	-3.96	-0.50	-1.51		-0.64	-0.35	10/31/2006
TOTAL FUND OF FUNDS (NET OF FEES)	28,205	0.0%	-3.15	-4.41	-5.45	-4.38	-2.66	-1.81		-0.57	-0.06	9/30/2006
CLOSED PORTFOLIOS	-	0.0%										
PORTABLE ALPHA CASH	3,852	0.0%										
TOTAL PORTABLE ALPHA WIND DOWN (NET OF FEES)	32,057	0.1%	-3.08	-4.34	-5.37	-4.28	-2.63	-1.88		-5.64	-0.06	9/30/2006
ASSET CLASS BENCHMARK: HFRI FUND OF FUNDS COMPOSITE INDEX ³⁷												
			-1.17	0.09	2.58	3.84	6.23	4.14				
OVERLAY												
CLIFTON	168,947	0.3%	-2.74	-2.38	0.85	1.90				8.02	8.02	10/31/2013
OVERLAY CASH	398,480	0.7%										
TOTAL OVERLAY	567,427	0.9%	-1.86	-1.56	0.68	2.09				6.59	6.59	10/31/2013
ASSET CLASS BENCHMARK ³⁸												
			-1.86	-1.56	0.68	2.09						

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending June 30, 2015												
	NAV \$ (M)	%	Month	QTD	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
TOTAL CORE	61,174,316	99.9%	-0.88	-0.07	2.61	3.87	11.25	10.99	7.00	9.57		2/28/1985
CASH FUND												
PARTICIPANTS' CASH (NET OF FEES)	21,175	0.0%	0.01	0.04	0.07	0.14	0.14	0.16	1.55	4.02	3.85	7/31/1985
<i>MERRILL LYNCH 90 DAY T BILL</i>			<i>0.00</i>	<i>0.01</i>	<i>0.01</i>	<i>0.02</i>	<i>0.06</i>	<i>0.08</i>	<i>1.42</i>			
MASS STATE TEACHERS CASH (NET OF FEES)	25,844	0.0%	0.01	0.04	0.07	0.13	0.14	0.15	1.30	2.62	2.63	7/31/1996
MASS STATE EMPLOYEES CASH (NET OF FEES)	22,408	0.0%	0.01	0.04	0.07	0.13	0.14	0.16	1.30	2.62	2.63	7/31/1996
<i>MERRILL LYNCH 90 DAY T BILL</i> ³⁹			<i>0.00</i>	<i>0.01</i>	<i>0.01</i>	<i>0.02</i>	<i>0.06</i>	<i>0.08</i>	<i>1.55</i>			
TEACHERS' AND EMPLOYEES' CASH	48,253	0.1%	0.01	0.04	0.07	0.13	0.14	0.16	1.29	2.79		7/31/1996
TOTAL FUND	61,243,745	100.0%	-0.88	-0.07	2.61	3.86	11.21	10.95	6.98	9.62		1/31/1985
POLICY RETURN ⁴⁰			-1.36	-0.41	2.18	3.39	10.58	10.56	7.19	9.69		
<i>TOTAL CORE BENCHMARK</i>			<i>-1.37</i>	<i>-0.34</i>	<i>2.57</i>	<i>2.74</i>	<i>9.40</i>	<i>9.31</i>	<i>6.53</i>	<i>9.98</i>		

PENSION RESERVES INVESTMENT TRUST
FOOTNOTES
RATES OF RETURN
Periods Ending June 30, 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.

**PENSION RESERVES INVESTMENT TRUST
BENCHMARK/COMPOSITE FOOTNOTES
RATES OF RETURN
Periods Ending June 30, 2015**

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)

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 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 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 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.

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%

**PENSION RESERVES INVESTMENT TRUST
BENCHMARK/COMPOSITE FOOTNOTES
RATES OF RETURN
Periods Ending June 30, 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 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.
June 30, 2015

*PRIM Board Meeting
Tuesday, August 11, 2015*

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June 30, 2015



Massachusetts Pension Reserves

Investment Management Board

**Investment Measurement Service
Monthly Review**

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.

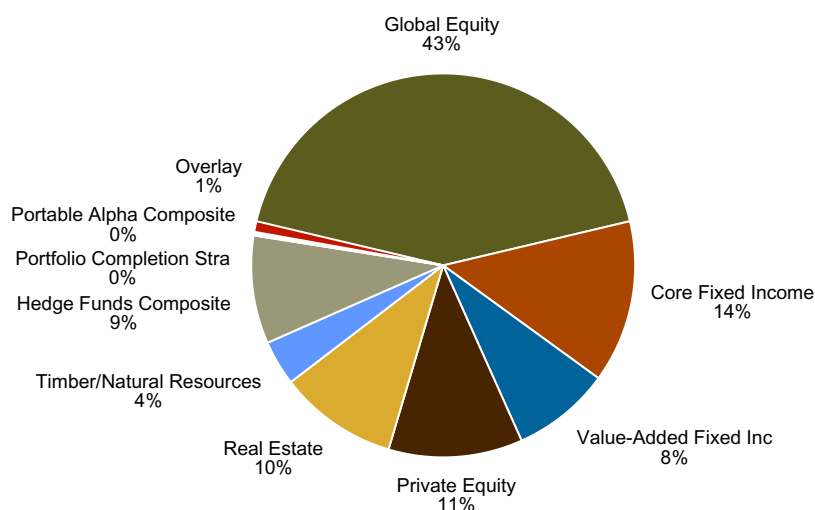
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June 30, 2015

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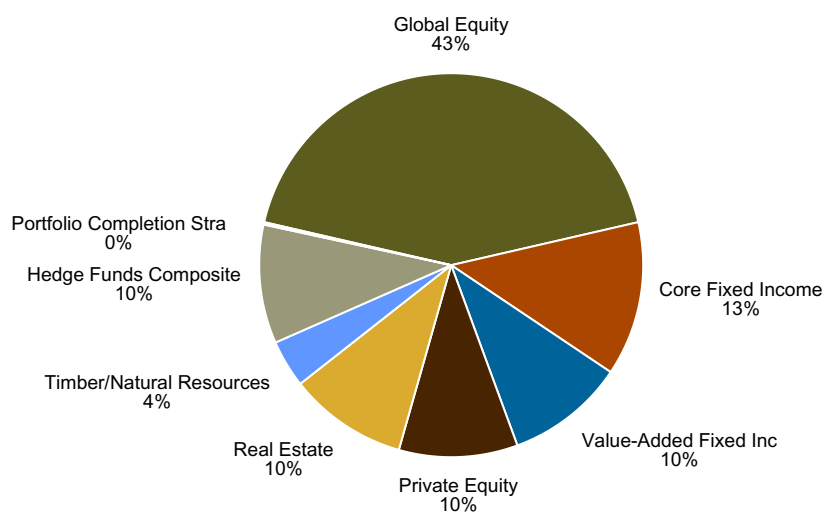
Actual vs Target Asset Allocation

The first chart below shows the Fund's asset allocation as of June 30, 2015. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

Actual Asset Allocation



Target Asset Allocation



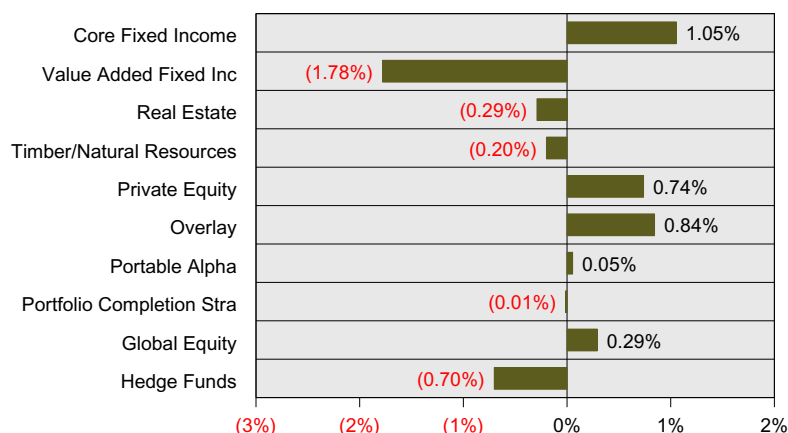
Asset Class	\$000s Actual	Percent Actual	Percent Target	Percent Difference	\$000s Difference
Global Equity	26,097,951	42.7%	42.8%	(0.1%)	(84,656)
Core Fixed Income	8,377,734	13.7%	13.0%	0.7%	425,072
Value-Added Fixed Inc	5,053,195	8.3%	10.0%	(1.7%)	(1,064,237)
Private Equity	6,935,726	11.3%	10.0%	1.3%	818,294
Real Estate	6,093,142	10.0%	10.0%	0.0%	(24,289)
Timber/Natural Resources	2,347,050	3.8%	4.0%	(0.2%)	(99,922)
Hedge Funds Composite	5,575,153	9.1%	10.0%	(0.9%)	(542,279)
Portfolio Completion Stra	94,882	0.2%	0.2%	0.0%	(27,466)
Portable Alpha Composite	32,057	0.1%	0.0%	0.1%	32,057
Overlay	567,427	0.9%	0.0%	0.9%	567,427
Total	61,174,316	100.0%	100.0%		

*Current Month Target Performance is calculated using monthly rebalancing.

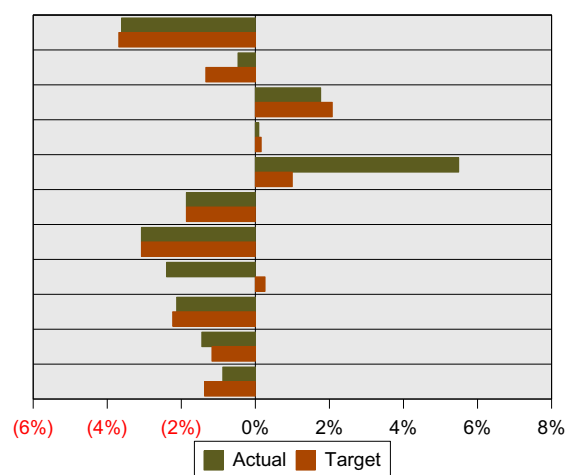
Monthly Total Fund Relative Attribution - June 30, 2015

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.

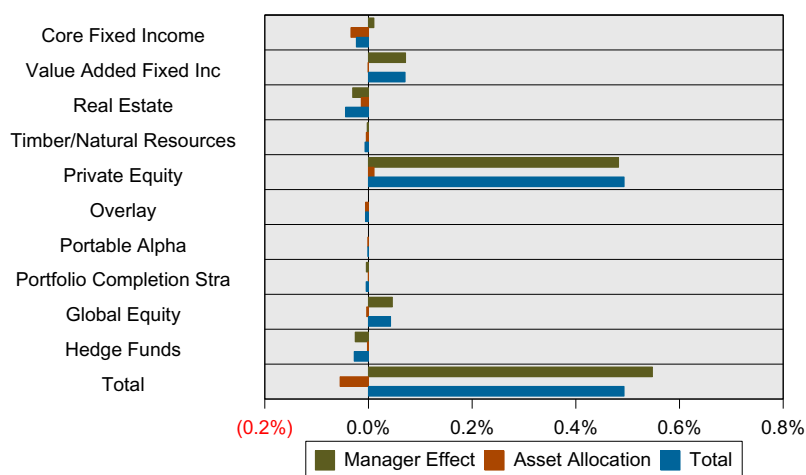
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Month ended June 30, 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%	(3.61%)	(3.69%)	0.01%	(0.03%)	(0.02%)
Value Added Fixed Inc	8%	10%	(0.47%)	(1.34%)	0.07%	(0.00%)	0.07%
Real Estate	10%	10%	1.76%	2.08%	(0.03%)	(0.01%)	(0.04%)
Timber/Natural Resources	4%	4%	0.09%	0.16%	(0.00%)	(0.00%)	(0.01%)
Private Equity	11%	10%	5.49%	1.00%	0.48%	0.01%	0.49%
Overlay	1%	0%	(1.86%)	(1.86%)	0.00%	(0.01%)	(0.01%)
Portable Alpha	0%	0%	(3.08%)	(3.08%)	0.00%	(0.00%)	(0.00%)
Portfolio Completion Stra	0%	0%	(2.40%)	(2.40%)	(0.00%)	(0.00%)	(0.00%)
Global Equity	43%	43%	(2.13%)	(2.23%)	0.05%	(0.00%)	0.04%
Hedge Funds	9%	10%	(1.45%)	(1.17%)	(0.03%)	(0.00%)	(0.03%)

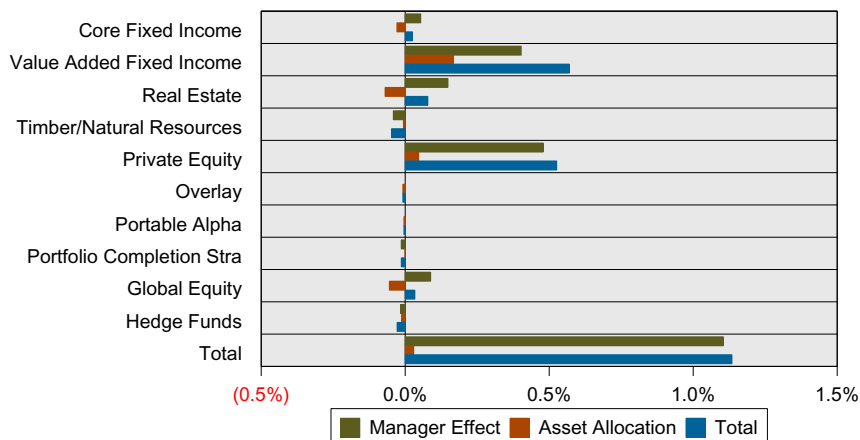
Total **(0.88%) = (1.37%) + 0.55% + (0.05%)** **0.49%**

* Current Month Target = 42.8% 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 0.2% MassPRIM-Portfolio Completion Stat B.
Attribution is run on Gross returns.

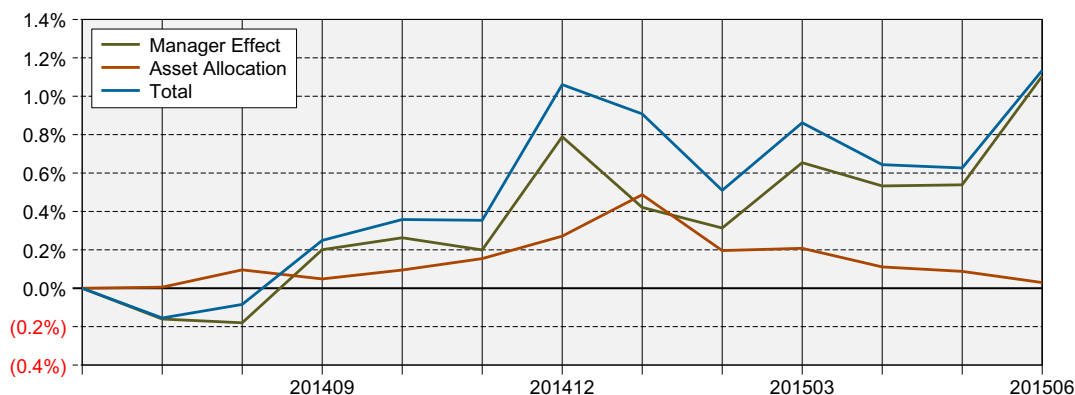
Cumulative Total Fund Relative Attribution - June 30, 2015

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

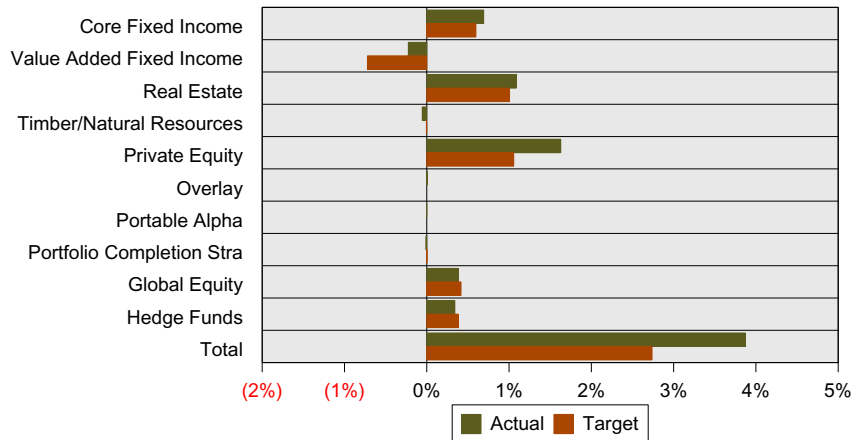
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Core Fixed Income	15%	13%	4.68%	4.30%	0.05%	(0.03%)	0.03%
Value Added Fixed Income	8%	10%	(2.60%)	(7.01%)	0.40%	0.17%	0.57%
Real Estate	9%	10%	11.99%	10.31%	0.15%	(0.07%)	0.08%
Timber/Natural Resources	4%	4%	(1.35%)	(0.28%)	(0.04%)	(0.01%)	(0.05%)
Private Equity	11%	10%	15.57%	10.93%	0.48%	0.05%	0.53%
Overlay	1%	0%	2.09%	2.09%	0.00%	(0.01%)	(0.01%)
Portable Alpha	0%	0%	(4.27%)	(4.27%)	0.00%	(0.00%)	(0.00%)
Portfolio Completion Stra	0%	0%	(5.09%)	1.58%	(0.01%)	0.00%	(0.01%)
Global Equity	42%	43%	0.88%	0.69%	0.09%	(0.05%)	0.03%
Hedge Funds	9%	10%	3.68%	3.84%	(0.02%)	(0.01%)	(0.03%)
Total			3.87%	2.74%	1.10%	0.03%	1.13%

* Current Month Target = 42.8% 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 0.2% MassPRIM-Portfolio Completion Stat B.
Attribution is run on Gross returns.

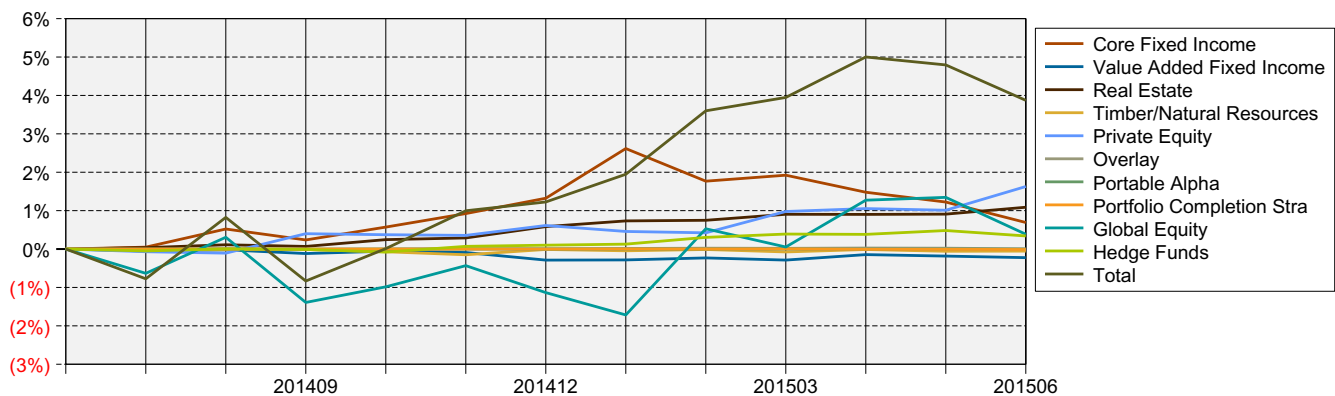
Cumulative Total Fund Absolute Attribution - June 30, 2015

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%	4.68%	0.69%	13%	4.30%	0.60%	0.09%
Value Added Fixed Income	8%	(2.60%)	(0.22%)	10%	(7.01%)	(0.72%)	0.50%
Real Estate	9%	11.99%	1.09%	10%	10.31%	1.01%	0.08%
Timber/Natural Resources	4%	(1.35%)	(0.05%)	4%	(0.28%)	(0.00%)	(0.05%)
Private Equity	11%	15.57%	1.63%	10%	10.93%	1.06%	0.57%
Overlay	1%	2.09%	0.01%	0%	2.09%	0.00%	0.01%
Portable Alpha	0%	(4.27%)	(0.00%)	0%	(4.27%)	0.00%	(0.00%)
Portfolio Completion Stra	0%	(5.09%)	(0.01%)	0%	1.58%	0.00%	(0.01%)
Global Equity	42%	0.88%	0.39%	43%	0.69%	0.42%	(0.03%)
Hedge Funds	9%	3.68%	0.34%	10%	3.84%	0.39%	(0.04%)

Total Fund Return 3.87%

Target Return 2.74%

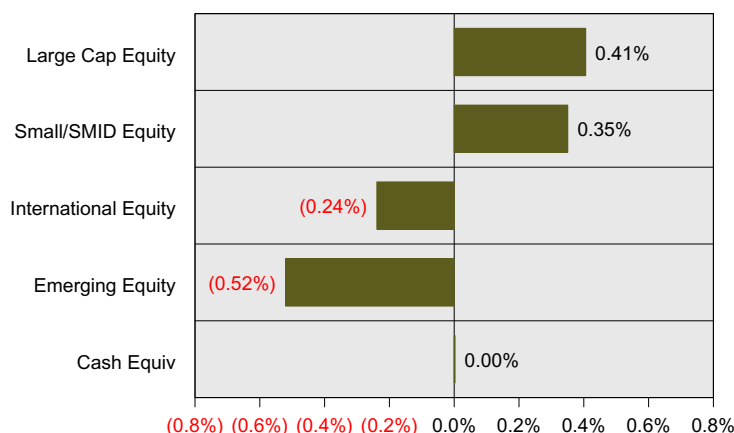
1.13%

* Current Month Target = 42.8% 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 0.2% MassPRIM-Portfolio Completion Stat B.
Attribution is run on Gross returns.

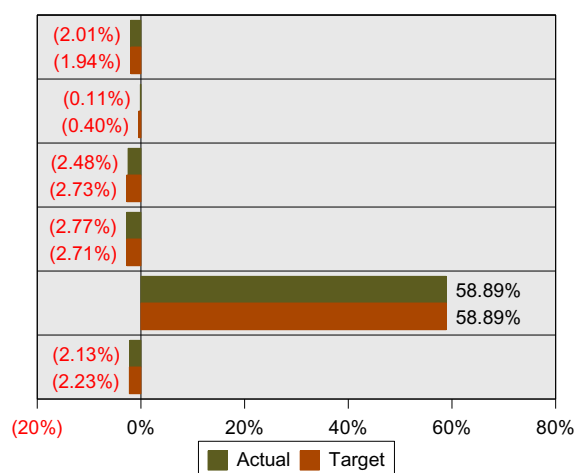
Monthly Total Fund Relative Attribution - June 30, 2015

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.

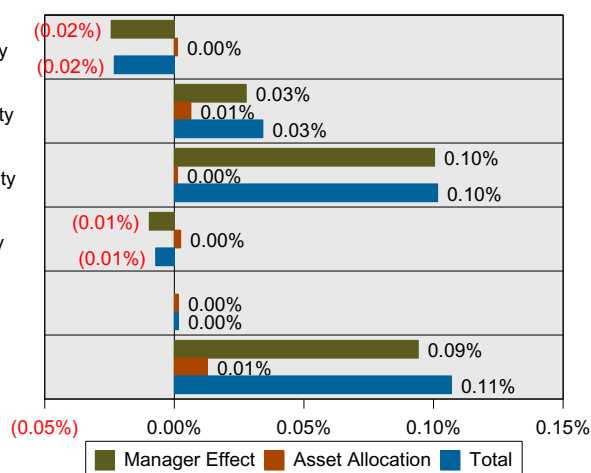
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Month ended June 30, 2015

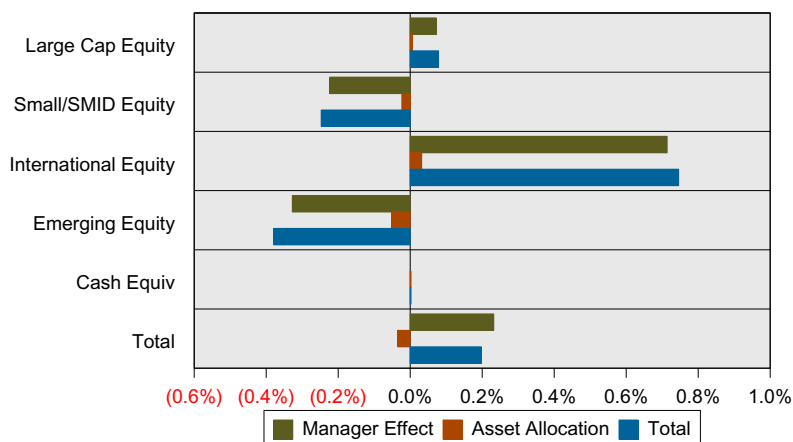
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	35%	35%	(2.01%)	(1.94%)	(0.02%)	0.00%	(0.02%)
Small/SMID Equity	10%	9%	(0.11%)	(0.40%)	0.03%	0.01%	0.03%
International Equity	40%	40%	(2.48%)	(2.73%)	0.10%	0.00%	0.10%
Emerging Equity	15%	16%	(2.77%)	(2.71%)	(0.01%)	0.00%	(0.01%)
Cash Equiv	0%	0%	58.89%	58.89%	0.00%	0.00%	0.00%
Total			(2.13%)	(2.23%)	+ 0.09%	+ 0.01%	0.11%

* 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.

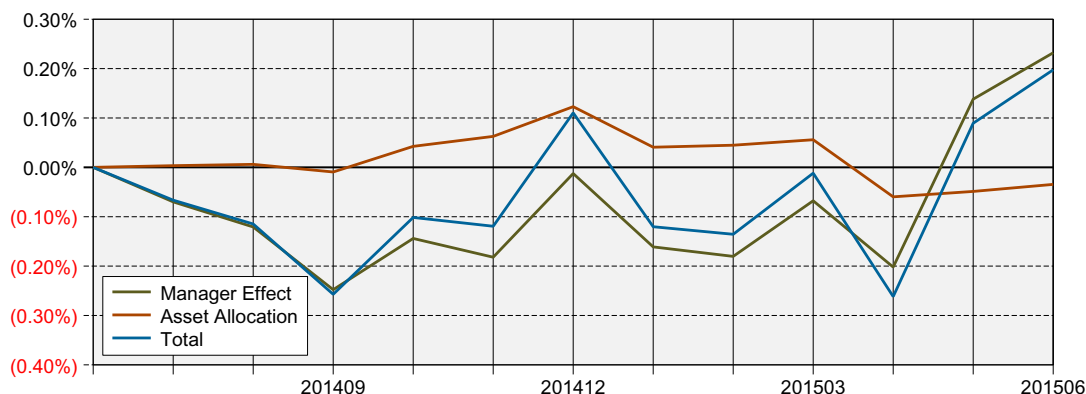
Cumulative Total Fund Relative Attribution - June 30, 2015

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

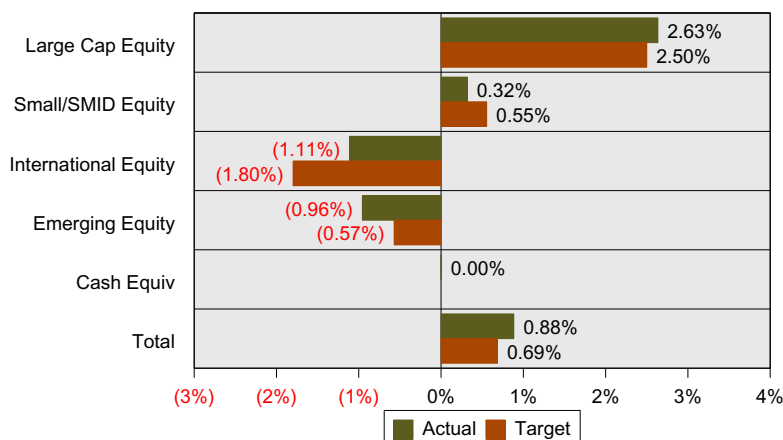
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	36%	35%	7.63%	7.42%	0.07%	0.01%	0.08%
Small/SMID Equity	10%	9%	3.31%	5.71%	(0.22%)	(0.02%)	(0.25%)
International Equity	39%	40%	(2.76%)	(4.54%)	0.71%	0.03%	0.75%
Emerging Equity	16%	16%	(5.85%)	(3.92%)	(0.33%)	(0.05%)	(0.38%)
Cash Equiv	0%	0%	143.63%	143.63%	0.00%	0.00%	0.00%
Total			0.88%	0.69%	+ 0.23%	+ (0.03%)	0.20%

* 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.

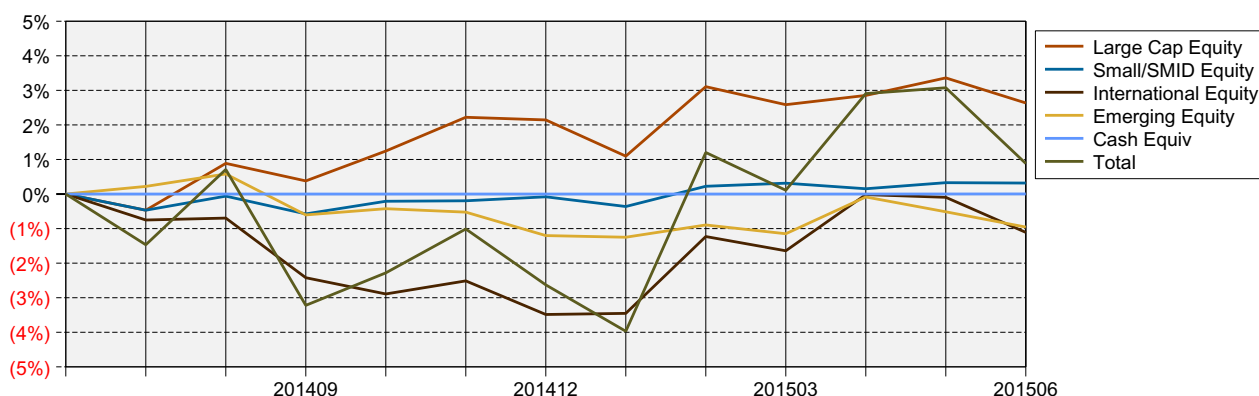
Cumulative Total Fund Absolute Attribution - June 30, 2015

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%	7.63%	2.63%	35%	7.42%	2.50%	0.14%
Small/SMID Equity	10%	3.31%	0.32%	9%	5.71%	0.55%	(0.24%)
International Equity	39%	(2.76%)	(1.11%)	40%	(4.54%)	(1.80%)	0.69%
Emerging Equity	16%	(5.85%)	(0.96%)	16%	(3.92%)	(0.57%)	(0.39%)
Cash Equiv	0%	143.63%	0.00%	0%	143.63%	0.00%	0.00%
Total Fund Return			0.88%	Target Return			0.69%
							0.20%

* 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

	June 30, 2015		May 31, 2015	
	Market Value	% of Total Fund	Market Value	% of Total Fund
Total Global Equity	\$26,097,951,300	42.61%	\$26,665,650,381	42.99%
Intech	886,396,382	1.45%	909,713,970	1.47%
PIMCO Stock Plus	926,181,873	1.51%	945,928,544	1.53%
SSgA S&P 500	7,367,984,710	12.03%	7,512,709,151	12.11%
Summit Creek SCG	212,091,555	0.35%	205,227,720	0.33%
Frontier SCV	182,869,503	0.30%	181,475,747	0.29%
Huber SCV	258,486,774	0.42%	259,460,658	0.42%
Riverbridge SMIDG	167,014,402	0.27%	162,438,682	0.26%
SouthernSun SMID	155,016,477	0.25%	159,605,654	0.26%
SSgA Russell 2500	1,589,946,661	2.60%	1,600,801,268	2.58%
Domestic Equity Closed Portfolios	138	0.00%	48	0.00%
Domestic Eq. Cash	-635,771	(0.00%)	-771,340	(0.00%)
SSgA World ex-US	5,154,160,650	8.42%	5,291,456,065	8.53%
Marathon Asset Mgmt	2,468,186,814	4.03%	2,519,146,739	4.06%
Baillie Gifford	1,815,041,445	2.96%	1,861,849,956	3.00%
Mondrian Investment Partners	794,659,875	1.30%	817,906,805	1.32%
FIS	108,144,844	0.18%	111,052,506	0.18%
International Equity Cash	1,096,532	0.00%	1,158,498	0.00%
SSgA Emerging Markets	1,038,912,981	1.70%	1,068,951,062	1.72%
AQR Emerging	483,908,791	0.79%	499,308,445	0.81%
Baillie Gifford EMM	561,314,237	0.92%	581,037,403	0.94%
Driehaud Capital	586,818,276	0.96%	599,709,024	0.97%
Harding Loevner	373,988,940	0.61%	379,145,682	0.61%
Pzena Inv	505,835,575	0.83%	526,361,298	0.85%
Acadian EM SC	145,922,623	0.24%	152,146,314	0.25%
Wasatch EM SC	106,088,128	0.17%	109,076,802	0.18%
City of London EM	101,612,966	0.17%	101,583,919	0.16%
Emerging Markets Transition	65,348,252	0.11%	83,528,712	0.13%
Emerging Markets Cash	1,473,494	0.00%	100,908	0.00%
Core Fixed Income	\$8,377,733,753	13.68%	\$8,692,106,880	14.01%
Blackrock Passive (Core)	508,664,708	0.83%	514,412,033	0.83%
PIMCO (Core)	788,245,144	1.29%	793,649,466	1.28%
Loomis Sayles Core Corporate	1,120,761,762	1.83%	1,131,035,616	1.82%
Blackrock STRIPS	3,860,953,727	6.30%	4,124,599,412	6.65%
Blackrock TIPS	594,741,796	0.97%	600,496,606	0.97%
Blackrock Global ILBs	1,249,627,424	2.04%	1,271,123,390	2.05%
Access Capital/Merrill Lnch ETI	102,668,105	0.17%	103,268,611	0.17%
Community Capital Management	27,594,945	0.05%	27,797,693	0.04%
AFL-CIO Housing Investor Trust	124,472,968	0.20%	125,651,875	0.20%
Core FI Closed Portfolios	752	0.00%	766	0.00%
Core Fixed Cash	2,423	0.00%	71,411	0.00%
Value Added Fixed Income	\$5,053,194,500	8.25%	\$5,095,617,563	8.22%
Fidelity (High Yield)	317,432,969	0.52%	321,489,620	0.52%
Loomis Sayles High Yield	327,944,082	0.54%	331,828,833	0.54%
Shenkman	303,062,767	0.49%	307,226,292	0.50%
FI Distressed Debt Cash	-428,389	(0.00%)	12,894,994	0.02%
FI High Yield Debt Cash	62,985	0.00%	94,711	0.00%
Eaton Vance Bank Loans	470,542,790	0.77%	472,724,497	0.76%
ING Bank Loans	465,830,540	0.76%	466,890,942	0.75%
Ashmore Emerging Markets Debt	489,951,301	0.80%	498,991,843	0.80%
PIMCO Emerging Debt	307,387,207	0.50%	313,590,560	0.51%
Investec EM Debt	283,814,173	0.46%	289,129,533	0.47%
Pictet EM Debt	455,284,572	0.74%	461,518,401	0.74%
Stone Harbor EM Debt	281,557,879	0.46%	285,814,739	0.46%
Distressed Debt Portfolio	1,350,751,623	2.21%	1,333,422,598	2.15%

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

	June 30, 2015		May 31, 2015	
	Market Value	% of Total Fund	Market Value	% of Total Fund
Private Equity	\$6,935,726,050	11.32%	\$6,712,295,422	10.82%
Special Equity	20,109,378	0.03%	20,399,522	0.03%
Special Equity 2000	26,277,508	0.04%	30,000,618	0.05%
Special Equity 2001	58,974,950	0.10%	61,171,369	0.10%
Special Equity 2002	5,931,014	0.01%	5,482,245	0.01%
Special Equity 2003	93,532,161	0.15%	108,849,940	0.18%
Special Equity 2004	79,431,783	0.13%	77,501,935	0.12%
Special Equity 2005	462,543,919	0.76%	456,471,753	0.74%
Special Equity 2006	664,031,231	1.08%	657,454,278	1.06%
Special Equity 2007	916,867,633	1.50%	901,219,484	1.45%
Special Equity 2008	917,469,664	1.50%	882,284,468	1.42%
Special Equity 2009	240,603,028	0.39%	236,910,420	0.38%
Special Equity 2010	499,110,262	0.81%	477,781,188	0.77%
Special Equity 2011	555,382,871	0.91%	545,485,936	0.88%
Special Equity 2012	241,373,337	0.39%	206,124,986	0.33%
Special Equity 2013	160,563,600	0.26%	131,787,073	0.21%
Special Equity 2014	145,969,106	0.24%	137,644,536	0.22%
Special Equity 2015	46,353,727	0.08%	41,346,675	0.07%
Venture Capital	14,025,229	0.02%	14,471,167	0.02%
Venture Capital 2000	68,031,856	0.11%	69,744,514	0.11%
Venture Capital 2001	39,196,486	0.06%	40,159,310	0.06%
Venture Capital 2002	14,159,907	0.02%	14,465,187	0.02%
Venture Capital 2003	31,565,111	0.05%	28,464,435	0.05%
Venture Capital 2004	36,050,216	0.06%	37,008,440	0.06%
Venture Capital 2005	120,089,920	0.20%	117,519,755	0.19%
Venture Capital 2006	137,004,347	0.22%	145,111,750	0.23%
Venture Capital 2007	193,133,428	0.32%	183,529,433	0.30%
Venture Capital 2008	31,509,807	0.05%	31,031,037	0.05%
Venture Capital 2009	248,305,506	0.41%	235,720,641	0.38%
Venture Capital 2010	266,451,442	0.44%	264,526,230	0.43%
Venture Capital 2011	87,853,219	0.14%	81,570,418	0.13%
Venture Capital 2012	206,057,612	0.34%	188,173,035	0.30%
Venture Capital 2013	41,821,323	0.07%	37,988,588	0.06%
Venture Capital 2014	43,817,868	0.07%	38,646,335	0.06%
Venture Capital 2015	1,371,814	0.00%	625,000	0.00%
Private Equity Cash	220,755,804	0.36%	205,623,743	0.33%
Real Estate	\$6,093,142,272	9.95%	\$6,010,397,024	9.69%
Invesco Core	1,115,216,044	1.82%	1,115,351,551	1.80%
LaSalle Core	1,556,639,446	2.54%	1,513,153,141	2.44%
AEW Core	988,715,767	1.61%	958,522,798	1.55%
JP Morgan I.M.	754,953,656	1.23%	682,322,337	1.10%
TA Associates	1,109,776,283	1.81%	1,088,659,828	1.76%
Core Real Estate Portfolio Debt	-999,907,266	(1.63%)	-1,004,112,597	(1.62%)
Canyon-Johnson II	5,518,556	0.01%	5,561,675	0.01%
Intercontinental IV	1,035,695	0.00%	811,307	0.00%
New Boston Urban I	7,450,445	0.01%	7,328,757	0.01%
Non Core 2011	409,971,817	0.67%	413,438,159	0.67%
INVESCO Global REIT	264,037,448	0.43%	274,051,732	0.44%
CenterSquare Global REIT	753,455,466	1.23%	783,095,084	1.26%
EII (INVESCO TRAN)	144,324,777	0.24%	149,526,657	0.24%
RREEF/European Investors Tran	27,313	0.00%	27,317	0.00%
Real Estate Leverage Cash	-94,266	(0.00%)	-65,629	(0.00%)
REIT Cash	24,811	0.00%	39,775	0.00%
Core Real Estate Cash	-18,003,720	(0.03%)	22,685,129	0.04%

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

	June 30, 2015		May 31, 2015	
	Market Value	% of Total Fund	Market Value	% of Total Fund
Timber/Natural Resources	\$2,347,050,322	3.83%	\$2,349,993,430	3.79%
Forest Investment Associates	1,109,272,886	1.81%	1,132,443,566	1.83%
The Campbell Group	549,694,971	0.90%	539,881,753	0.87%
Timber Cash	36,714,907	0.06%	38,662	0.00%
Jennison Natural Resources	188,501,646	0.31%	197,466,767	0.32%
T Rowe Natural Resources	193,291,066	0.32%	202,645,944	0.33%
Public Natural Resources Cash	1,485	0.00%	3,338	0.00%
Private Natural Resources	269,792,600	0.44%	277,759,599	0.45%
Private Natural Resources Cash	-219,239	(0.00%)	-246,200	(0.00%)
Portfolio Completion Strategy	\$94,882,180	0.15%	\$97,219,239	0.16%
Portfolio Completion Strategy	94,882,180	0.15%	97,219,239	0.16%
Hedge Funds	\$5,575,152,724	9.10%	\$5,848,562,865	9.43%
Arden HFOF (Liquidating)	52,531,717	0.09%	59,667,408	0.10%
Ivy (Liquidating)	4,692,340	0.01%	5,887,420	0.01%
PAAMCO	1,210,769,665	1.98%	1,471,838,187	2.37%
Direct Hedge Funds	4,056,051,431	6.62%	4,311,150,473	6.95%
Hedge Fund Cash	251,107,571	0.41%	19,377	0.00%
Portable Alpha	\$32,056,768	0.05%	\$33,105,468	0.05%
Austin Capital Management	1,596,713	0.00%	1,596,326	0.00%
Crestline Advisors	11,223,216	0.02%	14,250,495	0.02%
Strategic Investment	15,384,770	0.03%	17,225,990	0.03%
Portable Alpha Cash	3,852,069	0.01%	32,657	0.00%
Total Overlay	\$567,426,575	0.93%	\$465,938,648	0.75%
Clifton Overlay	168,947,006	0.28%	192,350,286	0.31%
Overlay Cash	398,479,569	0.65%	273,588,362	0.44%
Participant Cash	21,175,315	0.03%	14,991,513	0.02%
Teachers and Employees Cash	48,252,787	0.08%	37,779,467	0.06%
Total Fund	\$61,243,744,546	100.0%	\$62,023,657,900	100.0%

Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended June 30, 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 June 30, 2015

	Last Month	Last 12 Months	Last 36 Months	Last 60 Months
Total Fund ex-cash (Core)	(0.88%)	3.87%	11.25%	10.99%
Interim Benchmark (1)	(0.92%)	3.22%	10.35%	10.30%
Total Core Bechmark (2)	(1.37%)	2.74%	9.40%	9.31%
Global Equity	(2.13%)	0.88%	13.70%	12.68%
Global Equity Benchmark (13)	(2.23%)	0.69%	13.20%	12.05%
Core Fixed Income	(3.61%)	4.68%	3.34%	4.70%
Core Fixed-Income Bench (18)	(3.69%)	4.30%	2.78%	4.19%
Value-Added Fixed Income	(0.47%)	(2.60%)	4.85%	7.00%
Value-Added Benchmark (23)	(1.34%)	(7.01%)	3.36%	4.99%
Private Equity	5.49%	15.57%	18.67%	18.39%
Private Equity Benchmark (24)	5.49%	15.57%	18.67%	18.39%
Private Equity Benchmark (26)	1.00%	10.93%	9.31%	8.53%
Real Estate	1.76%	11.99%	12.78%	13.76%
Real Estate Benchmark (29)	2.08%	10.31%	11.19%	12.94%
Timber/Natural Resources	0.09%	(1.35%)	6.18%	5.78%
Timber/Natural Benchmark (32)	0.16%	(0.28%)	7.35%	6.25%
Portfolio Completion Strategy	(2.40%)	-	-	-
Portfolio Completion Benchmark (36)	0.26%	-	-	-
Hedge Funds	(1.45%)	3.68%	8.83%	6.39%
Hedge Funds Benchmark (35)	(1.17%)	3.84%	6.23%	4.14%
Portable Alpha	(3.08%)	(4.27%)	(2.63%)	(1.88%)
Portable Alpha Benchmark (37)	(1.17%)	3.84%	6.23%	4.14%
Total Overlay	(1.86%)	2.09%	-	-
Total Overlay Benchmark (38)	(1.86%)	2.09%	-	-
Participant Cash	0.01%	0.14%	0.14%	0.16%
Teachers and Employees Cash	0.01%	0.13%	0.14%	0.16%
Merrill Lynch 90 Day Tbill (39)	0.00%	0.02%	0.06%	0.08%
Total Fund	(0.88%)	3.86%	11.21%	10.95%
Interim Benchmark (1)	(0.92%)	3.22%	10.35%	10.30%
Total Core Bechmark (2)	(1.37%)	2.74%	9.40%	9.31%

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 June 30, 2015, with the distribution as of May 31, 2015.

Asset Distribution Across Investment Managers

	June 30, 2015		May 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
Domestic Equity	\$11,745,352,704	45.00%	\$11,936,592,437	44.76%
Large Cap	\$9,180,562,966	35.18%	\$9,368,353,618	35.13%
Intech	886,396,382	3.40%	909,713,970	3.41%
PIMCO Stock Plus	926,181,873	3.55%	945,928,544	3.55%
SSgA S&P 500	7,367,984,710	28.23%	7,512,709,151	28.17%
Small/SMID Cap Core	\$2,565,425,371	9.83%	\$2,569,009,728	9.63%
Small Cap Growth				
Summit Creek SCG	212,091,555	0.81%	205,227,720	0.77%
Small Cap Value	\$441,356,277	1.69%	\$440,936,405	1.65%
Frontier SCV	182,869,503	0.70%	181,475,747	0.68%
Huber SCV	258,486,774	0.99%	259,460,658	0.97%
SMID Growth				
Riverbridge SMIDG	167,014,402	0.64%	162,438,682	0.61%
SMID Cap Core	\$1,744,963,138	6.69%	\$1,760,406,922	6.60%
SouthernSun SMID	155,016,477	0.59%	159,605,654	0.60%
SSgA Russell 2500	1,589,946,661	6.09%	1,600,801,268	6.00%
Domestic Equity Closed Portfolios	138	0.00%	48	0.00%
Domestic Eq. Cash	-635,771	(0.00%)	-771,340	(0.00%)
International Equity	\$10,341,306,709	39.62%	\$10,602,586,852	39.76%
SSgA World ex-US	5,154,160,650	19.75%	5,291,456,065	19.84%
Marathon Asset Mgmt	2,468,186,814	9.46%	2,519,146,739	9.45%
Baillie Gifford	1,815,041,445	6.95%	1,861,849,956	6.98%
Mondrian Investment Partners	794,659,875	3.04%	817,906,805	3.07%
FIS	108,144,844	0.41%	111,052,506	0.42%
International Equity Cash	1,096,532	0.00%	1,158,498	0.00%
Emerging Markets	\$4,011,291,888	15.37%	\$4,126,471,092	15.47%
Acadian Frontier	39,991,098	0.15%	25,478,937	0.10%
SSgA Emerging Markets	1,038,912,981	3.98%	1,068,951,062	4.01%
AQR Emerging	483,908,791	1.85%	499,308,445	1.87%
Baillie Gifford EMM	561,314,237	2.15%	581,037,403	2.18%
Driehaud Capital	586,818,276	2.25%	599,709,024	2.25%
Harding Loevner	373,988,940	1.43%	379,145,682	1.42%
Pzena Inv	505,835,575	1.94%	526,361,298	1.97%
Acadian EM SC	145,922,623	0.56%	152,146,314	0.57%
Wasatch EM SC	106,088,128	0.41%	109,076,802	0.41%
City of London EM	101,612,966	0.39%	101,583,919	0.38%
Emerging Markets Transition	65,348,252	0.25%	83,528,712	0.31%
Emerging Markets Cash	1,473,494	0.01%	100,908	0.00%
Total Global Equity	\$26,097,951,300	100.0%	\$26,665,650,381	100.0%

Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended June 30, 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 June 30, 2015

	Last Month	Last 12 Months	Last 36 Months	Last 60 Months
Domestic Equity	(1.59%)	6.75%	17.64%	17.41%
Domestic Equity Benchmark (4)	(4.31%)	4.92%	3.25%	4.21%
Large Cap	(2.01%)	7.63%	17.62%	19.35%
Intech	(2.60%)	9.74%	18.26%	18.02%
PIMCO Stock Plus	(2.06%)	7.48%	18.13%	18.51%
SSgA S&P 500	(1.93%)	7.36%	17.46%	-
S&P 500 Index	(1.94%)	7.42%	17.31%	17.34%
Small/SMID Cap Core	(0.11%)	3.31%	17.51%	-
Small/SMID Benchmark (3)	(0.40%)	5.71%	18.58%	-
Small Cap Growth				
Summit Creek SCG	3.42%	9.08%	-	-
Russell 2000 Growth Index	1.34%	12.34%	20.11%	19.33%
Small Cap Value	0.19%	(7.01%)	-	-
Frontier SCV	0.84%	0.35%	-	-
Huber SCV	(0.27%)	(11.60%)	-	-
Russell 2000 Value Index	0.13%	0.78%	15.50%	14.81%
SMID Cap Growth				
Riverbridge SMIDG	2.88%	10.52%	-	-
Russell 2500 Growth Index	(0.33%)	11.30%	20.35%	19.55%
SMID Cap Core	(0.87%)	4.93%	18.41%	-
SouthernSun SMID	(2.82%)	(3.92%)	-	-
SSgA Russell 2500	(0.68%)	5.88%	18.42%	-
Russell 2500 Index	(0.69%)	5.92%	18.66%	17.85%
International Equity	(2.48%)	(2.76%)	13.10%	10.76%
International Equity Benchmark (7)	(2.73%)	(4.54%)	11.74%	9.31%
SSgA World ex-US	(2.59%)	(4.47%)	12.17%	9.76%
International Equity Benchmark (5)	(2.64%)	(5.15%)	11.51%	9.17%
Marathon Asset Mgmt	(2.07%)	0.02%	15.06%	12.23%
Baillie Gifford	(2.55%)	(1.40%)	13.14%	11.44%
Mondrian Investment Partners	(2.81%)	(3.57%)	12.81%	10.46%
FIS	(2.71%)	(2.81%)	-	-
International Equity Benchmark (6)	(2.81%)	(4.25%)	12.06%	9.47%
Emerging Markets	(2.77%)	(5.85%)	4.23%	4.11%
EM Benchmark (8)	(2.71%)	(3.92%)	4.54%	3.97%
SSgA Emerging Markets	(2.81%)	(3.66%)	4.74%	4.32%
CUSTOM MSCI EM IMI NET DIVS (8)	(2.87%)	(3.83%)	4.57%	3.99%
AQR Emerging	(3.08%)	-	-	-
Baillie Gifford EMM	(3.39%)	-	-	-
Driehaud Capital	(2.17%)	-	-	-
Harding Loevner	(1.30%)	-	-	-
Pzena Inv	(3.85%)	-	-	-
Custom MSCI EM STANDARD INDEX (9)	(2.60%)	(4.48%)	4.07%	3.82%
Emerging Markets Small Cap	(3.44%)	1.86%	10.79%	-
Acadian EM SC	(4.00%)	2.28%	19.33%	-
Wasatch EM SC	(2.65%)	1.99%	6.76%	-
Custom MSCI Emer Mkt SC (10)	(4.45%)	0.50%	8.03%	-
Total Frontier	(0.25%)	-	-	-
Acadian Frontier	(1.08%)	-	-	-
City of London EM	0.09%	-	-	-
Custom MSCI Frontier Mkt Capped Net	(0.04%)	-	-	-
Global Equity (12)	(2.13%)	0.88%	13.70%	12.68%
Global Equity Benchmark (13)	(2.23%)	0.69%	13.20%	12.05%

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 June 30, 2015, with the distribution as of May 31, 2015.

Asset Distribution Across Investment Managers

	June 30, 2015		May 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
Domestic Investment Grade Fixed Income	\$6,533,364,533	77.98%	\$6,820,486,884	78.47%
Total Aggregate	\$2,674,434,526	31.92%	\$2,698,095,695	31.04%
Blackrock Passive (Core)	508,664,708	6.07%	514,412,033	5.92%
PIMCO (Core)	788,245,144	9.41%	793,649,466	9.13%
Loomis Sayles Core Corporate	1,120,761,762	13.38%	1,131,035,616	13.01%
Access Capital/Merrill Lynch ETI	102,668,105	1.23%	103,268,611	1.19%
Community Capital Management	27,594,945	0.33%	27,797,693	0.32%
AFL-CIO Housing Investor Trust	124,472,968	1.49%	125,651,875	1.45%
Blackrock STRIPS	\$3,861,204,716	46.09%	\$4,124,797,065	47.45%
TIPS & ILBs Fixed Income	\$1,844,369,220	22.02%	\$1,871,619,996	21.53%
Blackrock TIPS	594,741,796	7.10%	600,496,606	6.91%
Blackrock Global ILBs	1,249,627,424	14.92%	1,271,123,390	14.62%
Core Fixed Cash	2,423	0.00%	71,411	0.00%
Core FI Closed Portfolios	752	0.00%	766	0.00%
Core Fixed Income	\$8,377,733,753	100.0%	\$8,692,106,880	100.0%

Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended June 30, 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 June 30, 2015

	Last Month	Last 12 Months	Last 36 Months	Last 60 Months
Domestic Investment Grade Fixed Income	(4.21%)	5.40%	3.88%	4.79%
Domestic Invest Grade Fixed (15)	(4.31%)	4.92%	3.25%	4.21%
Total Aggregate (14)	(0.87%)	2.59%	2.55%	3.89%
Blackrock Passive (Core)	(1.12%)	1.79%	1.81%	3.40%
PIMCO (Core)	(0.67%)	2.35%	2.67%	3.82%
Loomis Sayles Core Corporate	(0.93%)	3.04%	3.58%	4.96%
Community Capital Management	(0.80%)	2.10%	2.15%	3.16%
AFL-CIO Housing Investor Trust	(0.93%)	2.40%	2.00%	3.61%
Access Capital/Merrill Lynch ETI	(0.53%)	3.13%	2.57%	3.32%
Barclays Aggregate Index	(1.09%)	1.86%	1.83%	3.35%
Blackrock STRIPS	(6.39%)	8.85%	-	-
Barclays US Strip 20+ Idx	(6.41%)	8.95%	0.76%	9.04%
TIPS & ILBs Fixed Income	(1.45%)	1.66%	1.35%	4.21%
33% BC Tips/67% BC ILB Hedged (17)	(1.43%)	1.65%	1.01%	3.94%
Blackrock TIPS	(0.96%)	(1.75%)	(0.77%)	3.29%
Barclays US TIPS Index	(0.97%)	(1.73%)	(0.76%)	3.29%
Blackrock Global ILBs	(1.68%)	3.36%	2.42%	4.58%
BC ILB US Hedged (16)	(1.65%)	3.34%	1.88%	4.24%
Core Fixed Income	(3.61%)	4.68%	3.34%	4.70%
Core Fixed-Income Bench (18)	(3.69%)	4.30%	2.78%	4.19%

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 June 30, 2015, with the distribution as of May 31, 2015.

Asset Distribution Across Investment Managers

	June 30, 2015		May 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
Total High Yield	\$948,502,803	18.77%	\$960,639,455	18.85%
Pyramis (High Yield)	317,432,969	6.28%	321,489,620	6.31%
Loomis Sayles High Yield	327,944,082	6.49%	331,828,833	6.51%
Shenkman	303,062,767	6.00%	307,226,292	6.03%
FI High Yield Debt Cash	62,985	0.00%	94,711	0.00%
Total Bank Loans	\$936,373,330	18.53%	\$939,615,440	18.44%
Eaton Vance Bank Loans	470,542,790	9.31%	472,724,497	9.28%
ING Bank Loans	465,830,540	9.22%	466,890,942	9.16%
Total Emerging Debt	\$797,338,508	15.78%	\$812,582,403	15.95%
Ashmore Emerging Markets Debt	489,951,301	9.70%	498,991,843	9.79%
PIMCO Emerging	307,387,207	6.08%	313,590,560	6.15%
Total EM Debt - Local	\$1,020,656,624	20.20%	\$1,036,462,673	20.34%
Investec	283,814,173	5.62%	289,129,533	5.67%
Pictet	455,284,572	9.01%	461,518,401	9.06%
Stone Harbor	281,557,879	5.57%	285,814,739	5.61%
Distressed Debt Portfolio	1,350,751,623	26.73%	1,333,422,598	26.17%
Distressed Debt Cash	-428,389	(0.01%)	12,894,994	0.25%
Value Added Fixed Income	\$5,053,194,500	100.0%	\$5,095,617,563	100.0%

Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended June 30, 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 June 30, 2015

	Last Month	Last 12 Months	Last 36 Months	Last 60 Months
Total High Yield	(1.29%)	0.56%	7.45%	9.22%
Pyramis (High Yield)	(1.32%)	(1.04%)	7.26%	9.52%
Loomis Sayles High Yield	(1.24%)	1.21%	8.76%	10.11%
Shenkman	(1.32%)	1.51%	6.28%	7.96%
ML Master II HY Benchmark (19)	(1.52%)	(0.54%)	6.80%	8.38%
Total Bank Loans	(0.31%)	2.73%	5.10%	5.80%
Eaton Vance Bank Loans	(0.41%)	2.14%	4.34%	5.25%
ING Bank Loans	(0.20%)	3.33%	5.86%	6.37%
S&P/LSTA Leveraged Loan	(0.42%)	1.82%	4.89%	5.45%
Total Emerging Debt	(1.84%)	(3.46%)	3.10%	6.37%
Ashmore Emerging Markets Debt	(1.78%)	(3.79%)	3.08%	6.54%
PIMCO Emerging	(1.95%)	(2.94%)	3.13%	6.11%
JPM EMBI Global	(1.69%)	(1.57%)	3.44%	6.52%
Total EM Debt - Local	(1.48%)	(15.25%)	(4.25%)	-
Investec	(1.79%)	(14.60%)	(3.16%)	-
Pictet	(1.31%)	(15.01%)	(4.36%)	-
Stone Harbor	(1.44%)	(16.29%)	(5.20%)	-
JPM GBI EM GI Diversified	(1.22%)	(15.39%)	(3.78%)	0.94%
Public Value-Add Fixed Income	(1.22%)	(4.72%)	2.43%	5.40%
Public VAFI BM (19)	(1.19%)	(4.77%)	2.42%	5.26%
Distressed Debt Portfolio	1.63%	3.55%	12.12%	11.64%
Altman Benchmark (21)	(1.73%)	(13.09%)	5.53%	4.99%
Value Added Fixed Income (22)	(0.47%)	(2.60%)	4.85%	7.00%
Value-Added Benchmark (23)	(1.34%)	(7.01%)	3.36%	4.99%

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 June 30, 2015, with the distribution as of May 31, 2015.

Asset Distribution Across Investment Managers

	June 30, 2015		May 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
Total Special Equity	\$5,134,525,173	74.03%	\$4,977,916,426	74.16%
Special Equity	20,109,378	0.29%	20,399,522	0.30%
Special Equity 2000	26,277,508	0.38%	30,000,618	0.45%
Special Equity 2001	58,974,950	0.85%	61,171,369	0.91%
Special Equity 2002	5,931,014	0.09%	5,482,245	0.08%
Special Equity 2003	93,532,161	1.35%	108,849,940	1.62%
Special Equity 2004	79,431,783	1.15%	77,501,935	1.15%
Special Equity 2005	462,543,919	6.67%	456,471,753	6.80%
Special Equity 2006	664,031,231	9.57%	657,454,278	9.79%
Special Equity 2007	916,867,633	13.22%	901,219,484	13.43%
Special Equity 2008	917,469,664	13.23%	882,284,468	13.14%
Special Equity 2009	240,603,028	3.47%	236,910,420	3.53%
Special Equity 2010	499,110,262	7.20%	477,781,188	7.12%
Special Equity 2011	555,382,871	8.01%	545,485,936	8.13%
Special Equity 2012	241,373,337	3.48%	206,124,986	3.07%
Special Equity 2013	160,563,600	2.32%	131,787,073	1.96%
Special Equity 2014	145,969,106	2.10%	137,644,536	2.05%
Special Equity 2015	46,353,727	0.67%	41,346,675	0.62%
Total Venture Capital	\$1,580,445,091	22.79%	\$1,528,755,274	22.78%
Venture Capital	14,025,229	0.20%	14,471,167	0.22%
Venture Capital 2000	68,031,856	0.98%	69,744,514	1.04%
Venture Capital 2001	39,196,486	0.57%	40,159,310	0.60%
Venture Capital 2002	14,159,907	0.20%	14,465,187	0.22%
Venture Capital 2003	31,565,111	0.46%	28,464,435	0.42%
Venture Capital 2004	36,050,216	0.52%	37,008,440	0.55%
Venture Capital 2005	120,089,920	1.73%	117,519,755	1.75%
Venture Capital 2006	137,004,347	1.98%	145,111,750	2.16%
Venture Capital 2007	193,133,428	2.78%	183,529,433	2.73%
Venture Capital 2008	31,509,807	0.45%	31,031,037	0.46%
Venture Capital 2009	248,305,506	3.58%	235,720,641	3.51%
Venture Capital 2010	266,451,442	3.84%	264,526,230	3.94%
Venture Capital 2011	87,853,219	1.27%	81,570,418	1.22%
Venture Capital 2012	206,057,612	2.97%	188,173,035	2.80%
Venture Capital 2013	41,821,323	0.60%	37,988,588	0.57%
Venture Capital 2014	43,817,868	0.63%	38,646,335	0.58%
Venture Capital 2015	1,371,814	0.02%	625,000	0.01%
Private Equity Cash	220,755,804	3.18%	205,623,743	3.06%
Private Equity	\$6,935,726,050	100.0%	\$6,712,295,422	100.0%

Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended June 30, 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 June 30, 2015

	Last Month	Last 12 Months	Last 36 Months	Last 60 Months
Total Special Equity	6.26%	14.15%	18.27%	18.12%
Special Equity	(1.42%)	26.42%	18.28%	18.57%
Special Equity 2000	10.30%	39.55%	26.24%	19.15%
Special Equity 2001	1.94%	9.04%	20.22%	16.11%
Special Equity 2002	8.19%	1.26%	10.69%	25.53%
Special Equity 2003	2.61%	11.24%	10.73%	11.67%
Special Equity 2004	7.07%	15.56%	21.12%	21.65%
Special Equity 2005	3.62%	12.84%	16.60%	17.93%
Special Equity 2006	6.92%	12.05%	17.42%	18.36%
Special Equity 2007	6.30%	7.71%	15.93%	15.96%
Special Equity 2008	7.25%	17.99%	23.68%	21.79%
Special Equity 2009	6.59%	27.70%	25.57%	17.09%
Special Equity 2010	4.74%	13.57%	16.59%	-
Special Equity 2011	9.74%	27.87%	17.18%	-
Special Equity 2012	8.51%	3.98%	-	-
Special Equity 2013	4.63%	0.56%	-	-
Special Equity 2014	2.42%	(7.38%)	-	-
Special Equity 2015	(1.04%)	-	-	-
Total Venture Capital	3.64%	22.32%	22.28%	21.59%
Venture Capital	(3.08%)	12.51%	11.65%	9.71%
Venture Capital 2000	0.46%	(4.56%)	8.70%	10.79%
Venture Capital 2001	(0.19%)	6.77%	9.81%	10.78%
Venture Capital 2002	(1.82%)	6.09%	4.81%	3.02%
Venture Capital 2003	18.51%	23.63%	33.87%	23.00%
Venture Capital 2004	0.22%	(12.10%)	21.24%	42.02%
Venture Capital 2005	3.88%	32.81%	21.54%	19.53%
Venture Capital 2006	(2.04%)	17.23%	16.61%	17.97%
Venture Capital 2007	5.65%	24.52%	22.46%	26.75%
Venture Capital 2008	1.82%	27.95%	29.36%	39.69%
Venture Capital 2009	3.47%	24.68%	24.56%	19.36%
Venture Capital 2010	0.54%	38.08%	36.73%	19.64%
Venture Capital 2011	13.26%	27.51%	22.68%	-
Venture Capital 2012	8.16%	28.97%	22.66%	-
Venture Capital 2013	2.44%	8.83%	-	-
Venture Capital 2014	4.72%	(2.37%)	-	-
Venture Capital 2015	(8.89%)	-	-	-
Private Equity	5.49%	15.57%	18.67%	18.39%
Private Equity Benchmark (24)	5.49%	15.57%	18.67%	18.39%
Private Equity Benchmark (26)	1.00%	10.93%	9.31%	8.53%

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 June 30, 2015, with the distribution as of May 31, 2015.

Asset Distribution Across Investment Managers

	June 30, 2015		May 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
Private Real Estate	\$4,949,370,442	81.23%	\$4,781,036,955	79.55%
Private Core Real Estate	\$5,525,301,196	90.68%	\$5,358,009,654	89.15%
Invesco Core	1,115,216,044	18.30%	1,115,351,551	18.56%
LaSalle Core	1,556,639,446	25.55%	1,513,153,141	25.18%
AEW Core	988,715,767	16.23%	958,522,798	15.95%
JP Morgan I.M.	754,953,656	12.39%	682,322,337	11.35%
TA Associates	1,109,776,283	18.21%	1,088,659,828	18.11%
Core Real Estate Debt	-999,907,266	(16.41%)	-1,004,112,597	(16.71%)
Total Non-Core	\$402,813,307	6.61%	\$427,139,898	7.11%
Total ETI	\$14,004,696	0.23%	\$13,701,739	0.23%
Canyon-Johnson II	5,518,556	0.09%	5,561,675	0.09%
Intercontinental IV	1,035,695	0.02%	811,307	0.01%
New Boston Urban I	7,450,445	0.12%	7,328,757	0.12%
Non Core 2011	409,971,817	6.73%	413,438,159	6.88%
Total REITs	\$1,161,869,814	19.07%	\$1,206,740,566	20.08%
Global REITS	\$1,630,928,038	26.77%	\$1,208,812,103	20.11%
INVESCO Global REIT	264,037,448	4.33%	274,051,732	4.56%
CenterSquare Global REIT	753,455,466	12.37%	783,095,084	13.03%
EII (INVESCO TRAN)	144,324,777	2.37%	149,526,657	2.49%
RREEF/European Investors Tran	27,313	0.00%	27,317	0.00%
REIT Cash	24,811	0.00%	39,775	0.00%
Real Estate Leverage Cash	-94,266	(0.00%)	-65,629	(0.00%)
Core Real Estate Cash	-18,003,720	(0.30%)	22,685,129	0.38%
Total Real Estate	\$6,093,142,272	100.0%	\$6,010,397,024	100.0%

Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended June 30, 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 June 30, 2015

	Last Month	Last 12 Months	Last 36 Months	Last 60 Months
Total Private Real Estate (27)	3.15%	15.26%	13.97%	14.43%
Private Core Real Estate	2.56%	12.87%	12.02%	13.32%
Invesco Core	0.77%	12.66%	13.21%	14.61%
LaSalle Core	3.53%	13.22%	13.46%	14.82%
AEW Core	3.90%	18.72%	14.36%	-
JP Morgan I.M.	1.91%	10.19%	8.97%	12.94%
TA Associates	2.27%	10.20%	10.31%	11.59%
NCREIF Property 1Q Lag	3.57%	12.72%	11.47%	12.75%
Total Non-Core Real Estate	2.48%	13.87%	11.90%	7.10%
ETI (Partnerships)	2.52%	6.57%	2.24%	2.09%
Canyon-Johnson II	(0.42%)	5.06%	(2.45%)	(2.50%)
Intercontinental IV	28.66%	51.21%	19.37%	14.72%
New Boston Urban I	1.85%	0.12%	3.63%	4.38%
Non Core 2011	2.48%	14.15%	15.34%	-
NCREIF Property 1Q Lag	3.57%	12.72%	11.47%	12.75%
Total REITs	(3.79%)	0.94%	9.46%	12.42%
REIT Benchmark (28)	(3.90%)	0.29%	9.37%	12.47%
Global REITS	(3.80%)	0.91%	9.45%	-
INVESCO Global REIT	(3.73%)	1.04%	9.97%	-
CenterSquare Global REIT	(3.84%)	1.92%	9.98%	-
EII (INVESCO TRAN)	(3.72%)	-	-	-
EPRA/NAREIT Dev Net Total Idx	(3.90%)	0.28%	9.37%	-
Real Estate	1.76%	11.99%	12.78%	13.76%
Real Estate Benchmark (29)	2.08%	10.31%	11.19%	12.94%

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 June 30, 2015, with the distribution as of May 31, 2015.

Asset Distribution Across Investment Managers

	June 30, 2015		May 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
Total Timber	\$1,695,682,764	72.25%	\$1,672,363,982	71.16%
Forest Investment Associates	1,109,272,886	47.26%	1,132,443,566	48.19%
The Campbell Group	549,694,971	23.42%	539,881,753	22.97%
Timber Cash	36,714,907	1.56%	38,662	0.00%
Natural Resources - Public	\$381,794,197	16.27%	\$400,116,049	17.03%
Jennison Natural Resources	188,501,646	8.03%	197,466,767	8.40%
T. Rowe Natural Resources	193,291,066	8.24%	202,645,944	8.62%
Public Natural Resources Cash	1,485	0.00%	3,338	0.00%
Natural Resources - Private	\$269,573,361	11.49%	\$277,513,399	11.81%
Private Natural Resources	269,792,600	11.49%	277,759,599	11.82%
Private Natural Resources Cash	-219,239	(0.01%)	-246,200	(0.01%)
Total Timber/Natural Resources	\$2,347,050,322	100.0%	\$2,349,993,430	100.0%

Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended June 30, 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 June 30, 2015

	Last Month	Last 12 Months	Last 36 Months	Last 60 Months
Total Timber	1.67%	9.69%	9.42%	6.51%
Forest Investment Associates	0.36%	8.92%	9.38%	6.46%
The Campbell Group	4.42%	11.32%	9.19%	-
NCREIF Timber Index 1 Qtr Lag (30)	1.75%	10.64%	9.80%	6.20%
Natural Resources Public	(4.60%)	(27.90%)	1.86%	3.04%
Jennison Natural Resources	(4.50%)	(33.23%)	(1.06%)	0.42%
T. Rowe Natural Resources	(4.70%)	(21.80%)	5.10%	5.70%
Lipper Gbl Nat Res Idx	(4.61%)	(25.93%)	0.80%	1.79%
Total Natural Resources Private	(2.60%)	(8.81%)	(4.34%)	4.84%
Private Natural Resources	(2.61%)	(8.94%)	(4.46%)	4.71%
Natural Resource Private Bench (31)	(2.60%)	(8.81%)	(4.34%)	4.84%
Timber/Natural Resources	0.09%	(1.35%)	6.18%	5.78%
Timber/Natural Benchmark (32)	0.16%	(0.28%)	7.35%	6.25%

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 June 30, 2015, with the distribution as of May 31, 2015.

Asset Distribution Across Investment Managers

	June 30, 2015		May 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
Portfolio Completion Strategy	94,882,180	100.00%	97,219,239	100.00%
Total Portfolio Completion Strategy	\$94,882,180	100.0%	\$97,219,239	100.0%

Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended June 30, 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 June 30, 2015

	Last Month	Last 12 Months	Last 36 Months	Last 60 Months
Portfolio Completion Strategy	(2.40%)	-	-	-
Total Portfolio Completion Strategy	(2.40%)	-	-	-
Total Portfolio Completion BM (35)	0.26%	-	-	-

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 June 30, 2015, with the distribution as of May 31, 2015.

Asset Distribution Across Investment Managers

	June 30, 2015		May 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
Arden HFOF (Liquidating)	52,531,717	0.94%	59,667,408	1.02%
Ivy (Liquidating)	4,692,340	0.08%	5,887,420	0.10%
PAAMCO	1,210,769,665	21.72%	1,471,838,187	25.17%
Direct Hedge Funds	4,056,051,431	72.75%	4,311,150,473	73.71%
Hedge Fund Cash	251,107,571	4.50%	19,377	0.00%
Hedge Funds Composite	\$5,575,152,724	100.0%	\$5,848,562,865	100.0%

Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended June 30, 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 June 30, 2015

	Last Month	Last 12 Months	Last 36 Months	Last 60 Months
Arden HFOF (Liquidating)	(0.23%)	2.43%	-	-
Ivy Liquidating	(1.67%)	12.83%	6.89%	2.92%
PAAMCO	(0.85%)	1.61%	9.67%	6.42%
HFRI Composite Index (32)	(1.17%)	3.84%	6.23%	4.14%
Direct Hedge Funds	(1.71%)	4.35%	8.78%	-
HFRI Composite Index (33)	(1.17%)	3.84%	6.23%	-
Hedge Funds	(1.45%)	3.68%	8.83%	6.39%
Total Hedge Funds Benchmark (34)	(1.17%)	3.84%	6.23%	4.14%

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 June 30, 2015, with the distribution as of May 31, 2015.

Asset Distribution Across Investment Managers

	June 30, 2015		May 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
Portable Alpha	\$28,204,699	87.98%	\$33,072,811	99.90%
Austin Capital Management	1,596,713	4.98%	1,596,326	4.82%
Crestline Advisors	11,223,216	35.01%	14,250,495	43.05%
Strategic Investment	15,384,770	47.99%	17,225,990	52.03%
Portable Alpha Cash	3,852,069	12.02%	32,657	0.10%
Total Portable Alpha Wind Down	\$32,056,768	100.0%	\$33,105,468	100.0%

Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended June 30, 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 June 30, 2015

	Last Month	Last 12 Months	Last 36 Months	Last 60 Months
Portable Alpha	(3.15%)	(4.38%)	(2.66%)	(1.81%)
Austin Capital Management	0.02%	1.55%	(11.68%)	(10.92%)
Crestline Advisors	(6.70%)	(5.96%)	(2.60%)	(0.21%)
Strategic Investment	(0.54%)	(3.96%)	(0.50%)	(1.51%)
Total Portable Alpha	(3.08%)	(4.27%)	(2.63%)	(1.88%)
Portable Alpha Benchmark (35)	(1.17%)	3.84%	6.23%	4.14%

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 June 30, 2015, with the distribution as of May 31, 2015.

Asset Distribution Across Investment Managers

	June 30, 2015		May 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
Clifton Overlay	168,947,006	29.77%	192,350,286	41.28%
Overlay Cash	398,479,569	70.23%	273,588,362	58.72%
Total Overlay	\$567,426,575	100.0%	\$465,938,648	100.0%

Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended June 30, 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 June 30, 2015

	Last Month	Last 12 Months	Last 36 Months	Last 60 Months
Clifton Overlay	(2.74%)	1.90%	-	-
Total Overlay	(1.86%)	2.09%	-	-
Total Overlay Benchmark (36)	(1.86%)	2.09%	-	-

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

(27) ML 90 Day T-Bill + 4% through 12/31/2009; currently 60% HFRI Fund of Funds Conservative Index/20% HFRI Relative Value Total Index/20% HFRI Equity Market Neutral Index. (HFRI indices - Flash returns are used through 12/31/11. Current returns reflect most up to date performance and are subject to change)

(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)

(29) ML 90 Day T-Bill + 4% through 12/31/2009; currently 60% HFRI Fund of Funds Conservative Index/40% HFRI Event Driven Distressed/Restructuring 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.

Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended June 30, 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 June 30, 2015

	Last Month	Last 12 Months	Last 36 Months	Last 60 Months
Clifton Overlay	(2.74%)	1.90%	-	-
Total Overlay	(1.86%)	2.09%	-	-
Total Overlay Benchmark (36)	(1.86%)	2.09%	-	-

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

(27) ML 90 Day T-Bill + 4% through 12/31/2009; currently 60% HFRI Fund of Funds Conservative Index/20% HFRI Relative Value Total Index/20% HFRI Equity Market Neutral Index. (HFRI indices - Flash returns are used through 12/31/11. Current returns reflect most up to date performance and are subject to change)

(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)

(29) ML 90 Day T-Bill + 4% through 12/31/2009; currently 60% HFRI Fund of Funds Conservative Index/40% HFRI Event Driven Distressed/Restructuring 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.



PENSION RESERVES
INVESTMENT
MANAGEMENT BOARD

Appendix E

PRIT Fund Performance & Public Markets Performance Detail.
June 30, 2015

*PRIM Board Meeting
Tuesday, August 11, 2015*

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PRIT Fund Performance & Public Markets Performance Detail

Presentation to the PRIM Board

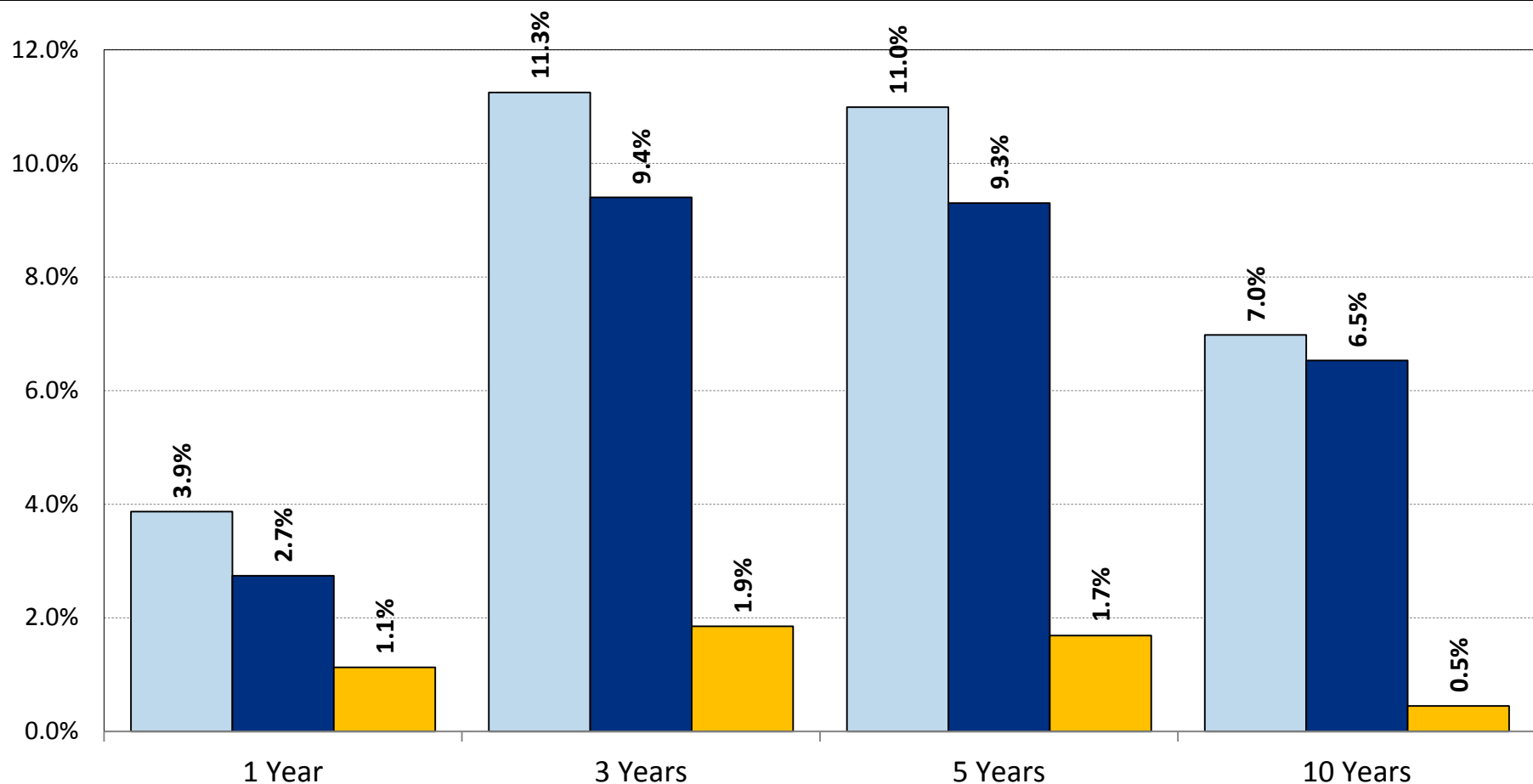
August 11, 2015

***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 June 30, 2015



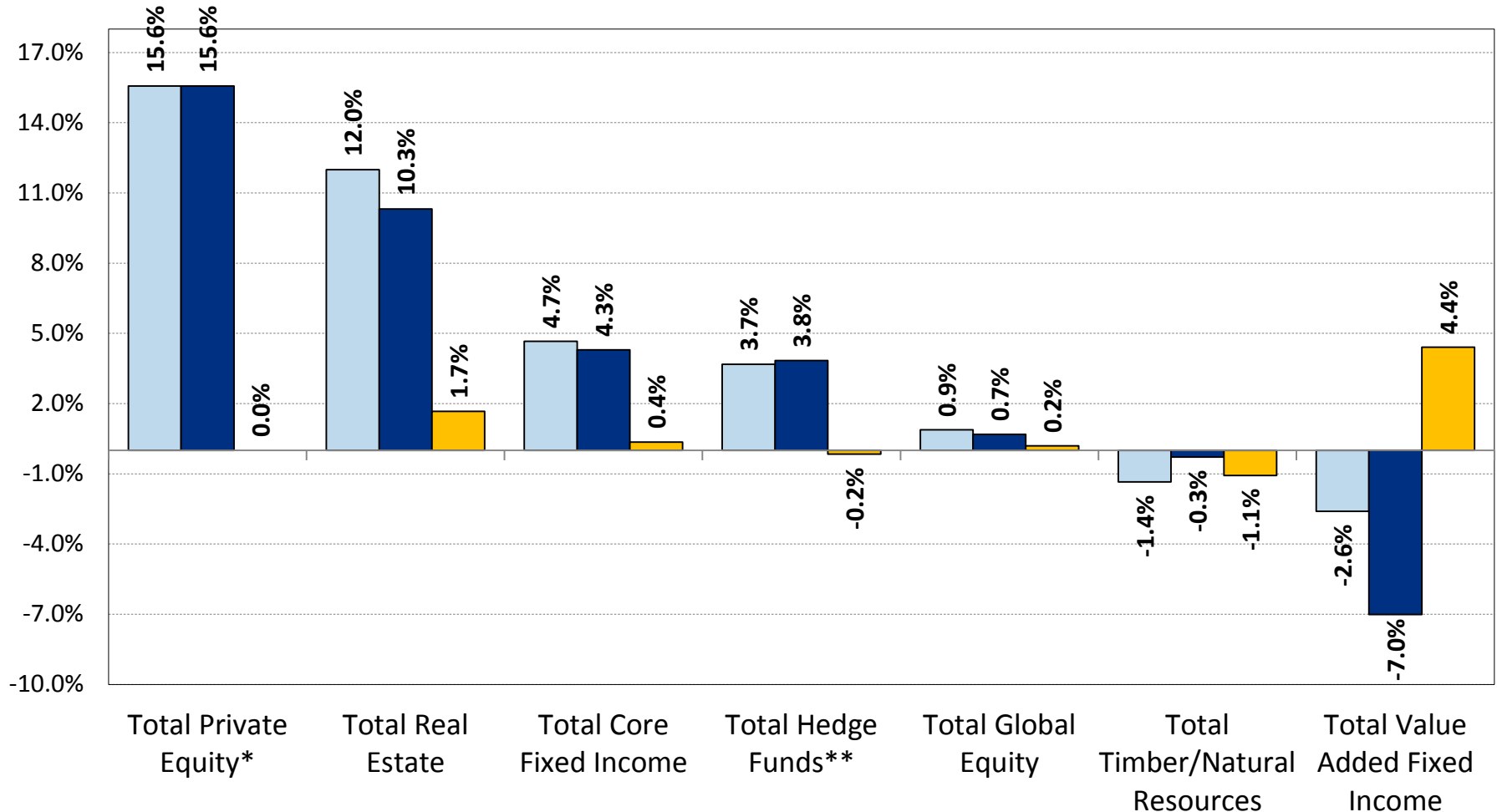
Total Core Benchmark includes private equity benchmark.
Source: Mellon. Totals may not add due to rounding.

■ Total Fund Return ■ Total Core Benchmark ■ Value Added



PRIT Asset Class Performance (Gross of Fees)

One Year Ended June 30, 2015



*Benchmark is actual performance.

**Hedge Fund returns are net of fees.

Source: Mellon. Totals may not add due to rounding.

Asset Class

Benchmark

Value Added



PRIT Asset Class Performance (Gross of Fees)

Annualized Returns as of June 30, 2015

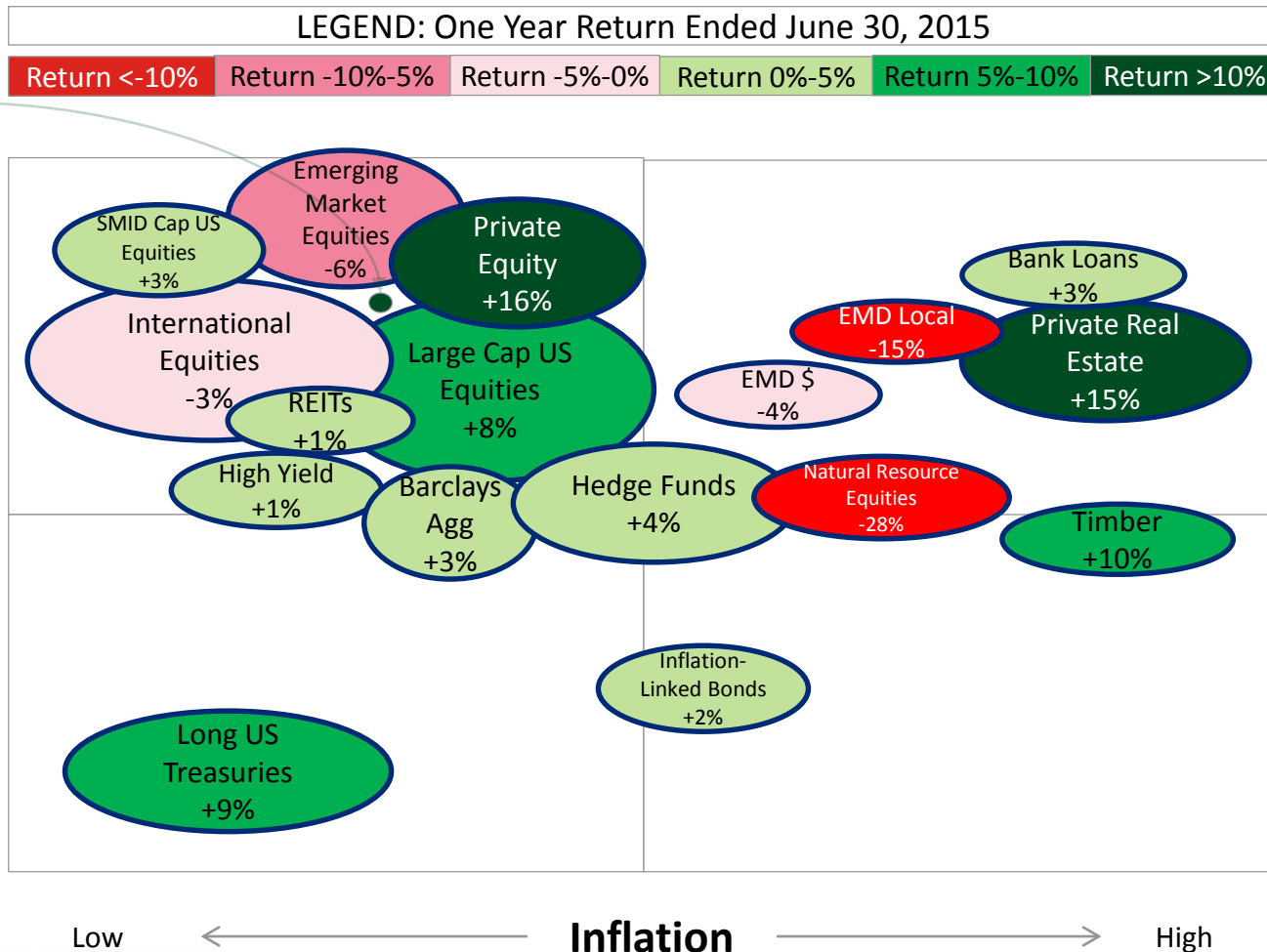
1 Year	3 Year	5 Year	10 Year
Private Equity 15.6%	Private Equity 18.7%	Private Equity 18.4%	Private Equity 16.9%
Real Estate 12.0%	Global Equity 13.7%	Real Estate 13.8%	Real Estate 8.6%
Core Fixed Income 4.7%	Real Estate 12.8%	Global Equity 12.7%	Value-Added Fixed Income 7.7%
Hedge Funds 3.7%	Hedge Funds 8.8%	Value-Added Fixed Income 7.0%	Global Equity 6.7%
Global Equity 0.9%	Timber / Natural Resources 6.2%	Hedge Funds 6.4%	Timber / Natural Resources 6.4%
Timber / Natural Resources (1.3%)	Value-Added Fixed Income 4.9%	Timber / Natural Resources 5.8%	Hedge Funds 4.9%
Value-Added Fixed Income (2.6%)	Core Fixed Income 3.3%	Core Fixed Income 4.7%	Core Fixed Income 4.7%

Hedge fund returns are net of fees.



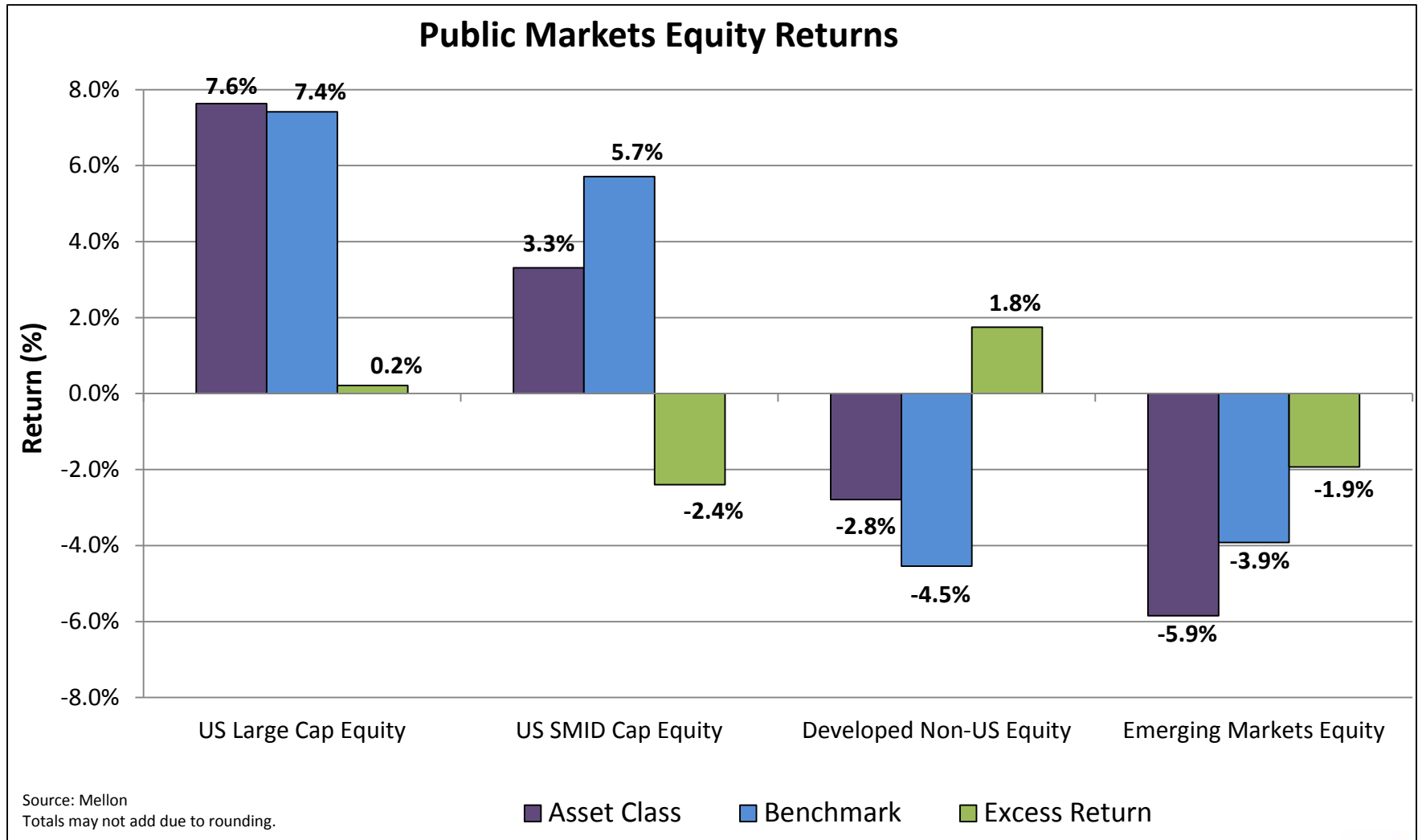
Asset Classes & Regimes – One Year Ended June 30, 2015

- ❑ GDP Growth: +2.9%
- ❑ CPI: +1.7%
- ❑ 30yr yields: -24 bps



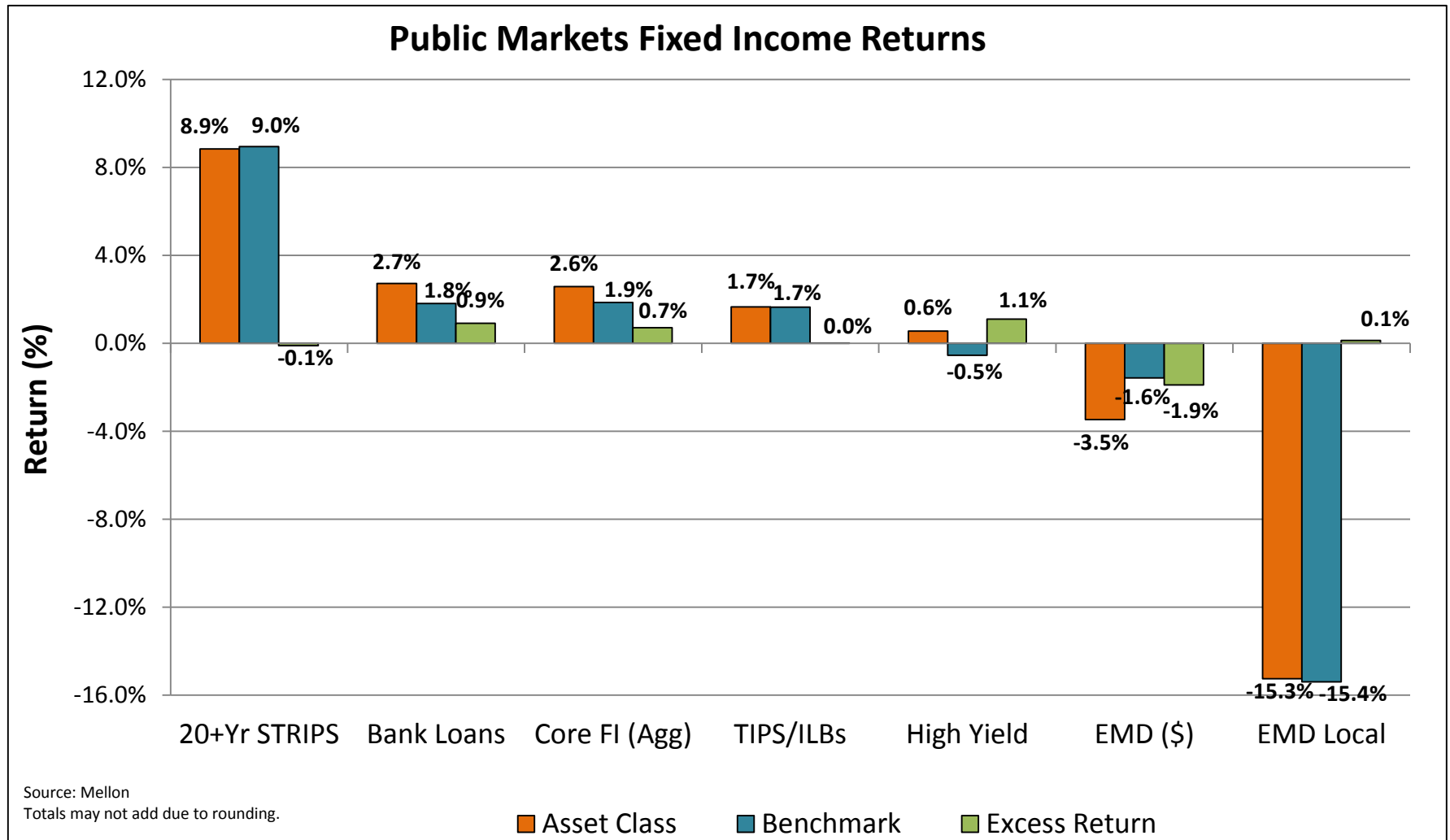
Public Markets Performance – Equities (42.7% of PRIT Fund)

One Year Ended June 30, 2015

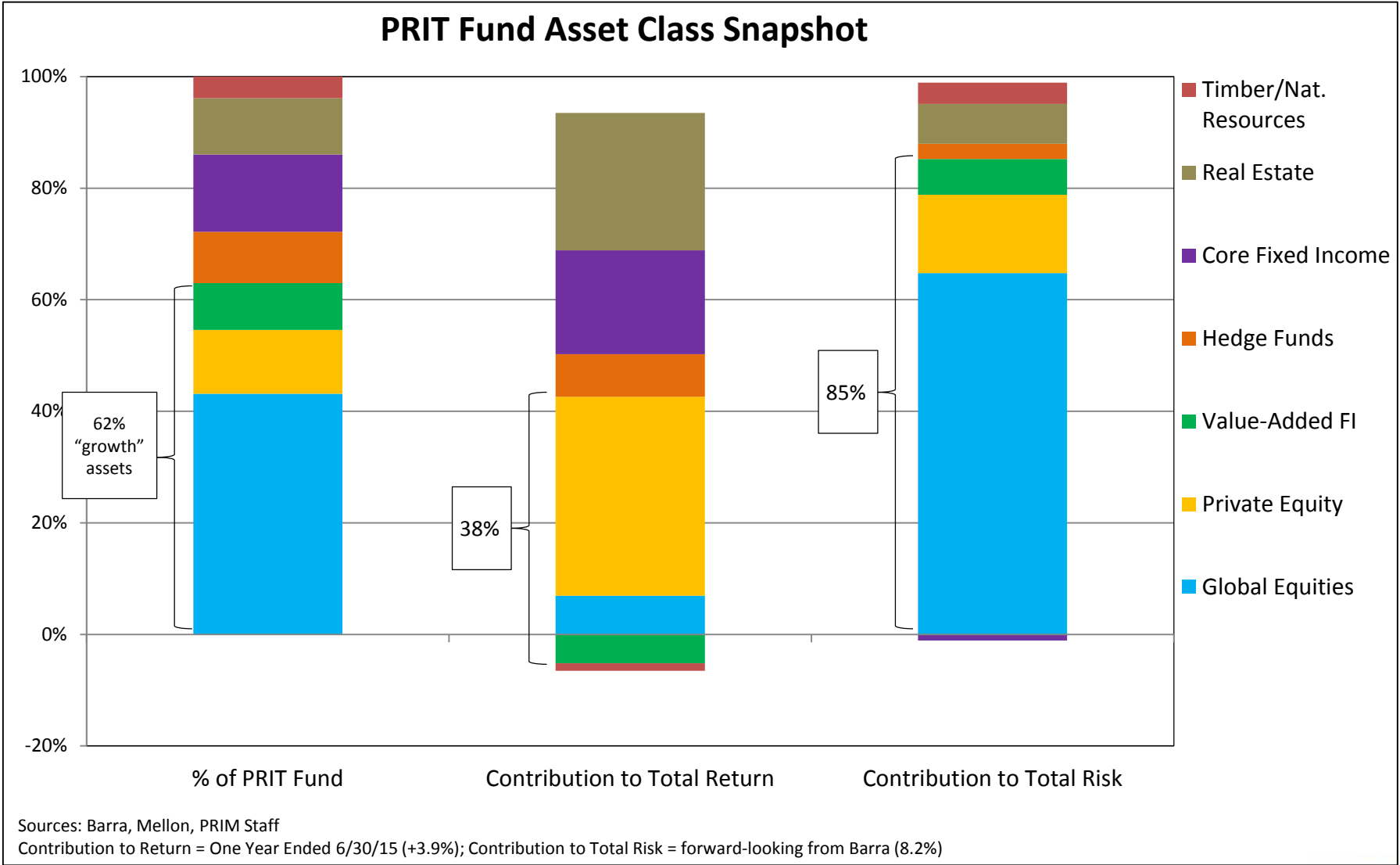


Public Markets Performance – Fixed Income (19.8% of PRIT Fund)

One Year Ended June 30, 2015



Appendix: Overall PRIT Fund – Risk & Return





PENSION RESERVES
INVESTMENT
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Appendix F

Investment Research Update: Foreign Currency Hedging.

*PRIM Board Meeting
Tuesday, August 11, 2015*

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PENSION RESERVES
INVESTMENT
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Foreign Currency Hedging Research

***Presentation to PRIM Board
August 11, 2015***

By: Andre Clapp, Ph.D, CFA & Sarah Samuels, CFA

***Deborah B. Goldberg, Treasurer and Receiver General, Chair
Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer***



Foreign Currency (FX) Hedging: Scope of Research

Why hedge?	1)	Volatility (risk) reduction
	2)	Return enhancement
	3)	Removing the currency translation effect

Why focus on Developed Market (DM) currencies, and not Emerging Markets (EM)?

Over time, exposure to EM currencies has added significant value, 3.2% per year over the last 15 years, unlike DM currencies. Hedging EM currencies is prohibitively costly because of the large forward premiums that must be paid by the hedger, 4% per year today.

ASSET	\$ VALUE	% of PRIT
Developed Market Equity	\$10.65B	17%
20% of Private Equity	\$1.25B	2%
Total	\$11.9B	19%



FX Hedging: Summary of Findings

- ❑ Hedging FX may not add much value in terms of risk/return.
 - a) Return reduction greater than 1% per year since 1973.
 - b) Volatility reduction not that large.
- ❑ Cash losses can be significant on short time periods, requiring forced selling.
 - a) Quarterly losses can exceed \$1.5 billion, and must be paid in cash.
- ❑ Large monthly/quarterly cash flows are generated, creating:
 - a) Forced selling or buying of assets.
 - b) Associated transaction costs.
 - c) Need for structures to deal with cash flows.
- ❑ Costs and risks associated with hedging:
 - a) Transaction costs and fees that cannot be recouped.
 - b) Risk/cost of forced selling in a down market to cover hedging losses.
 - c) Counterparty and operational risks.
 - d) Accounting/financial reporting requirements.
 - e) Monitoring of positions and exposures.

RECOMMENDATION: Based on our analysis, it is difficult to make a strong argument in favor of currency hedging.



Hedging FX May Not Add Much Value in Terms of Risk/Return

1973-2014

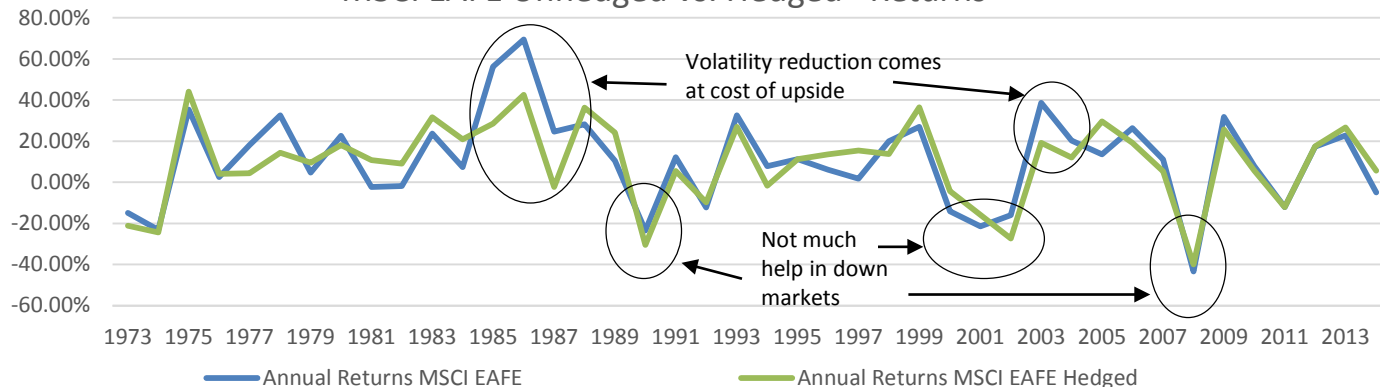
	MSCI EAFE	MSCI EAFE Hedged	Reduction
Annualized Total Return	8.5%	7.5%*	-12%
Annual Risk (Standard Deviation)	22.2%	19.9%	-10%

Sources: MSCI, Bloomberg, NEPC, PRIM Staff .

*Gross of trading costs and fees associated with FX hedging.

- ❑ Since 1973, hedging EAFE currencies has reduced returns by over 1% per year.
- ❑ The reduction in volatility does not make up for the reduction in return, and reduces the Sharpe ratio.
- ❑ The decision to hedge FX should be viewed in the context of the overall PRIT Fund.
 - The volatility of the Developed Non-US Equity portfolio can be diversified with other less correlated investments.
 - However, the loss of return cannot be recouped.

MSCI EAFE Unhedged vs. Hedged* Returns



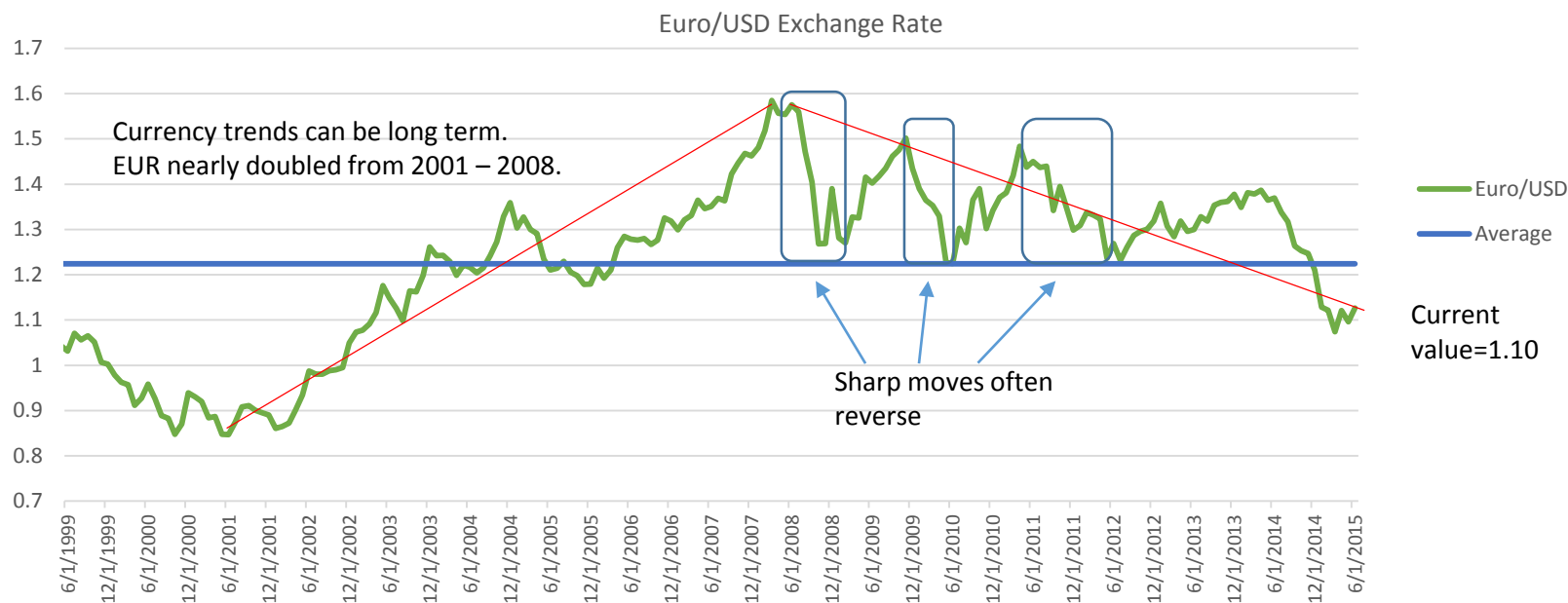
Sources: MSCI, Bloomberg, NEPC, PRIM Staff.

*From 1/1973 – 11/1988, EAFE Hedged returns are not available, and EAFE Local returns are used as a proxy.



Counter-Argument: We “Know” the USD Will Appreciate

- ❑ In order to argue for a currency hedge, one really needs to take a *macro perspective*.
 1. Japan and Europe have much more serious debt problems than the U.S.
 2. Demographics are much better in the U.S. than Japan or Europe.
 3. The USD has been in a strengthening trend since 2008. USD trends typically last 7-10 years.
- ❑ However, these factors may already be priced in. Purchasing Power Parity indicates the USD is overvalued. SSGA has a fair value for the Euro/USD of 1.29, and the Economist’s “Big Mac Index” recently indicated 1.35.



Sources: FactSet, PRIM Staff.



Cash Drawdowns/Losses Can Be Significant

EAFE Hedge since 1973 on \$11.9B portfolio				
	1m	3m	1y	3y
MAX LOSS (m)	\$ (1,192)	\$ (1,760)	\$ (3,517)	\$ (5,741)
MAX GAIN (m)	\$ 1,127	\$ 1,638	\$ 2,309	\$ 4,355

Sources: MSCI, Bloomberg, NEPC, PRIM Staff.

❑ Based on data since 1973, and assuming a full currency hedge:

- Monthly losses can exceed \$1 billion.
- Quarterly losses can exceed \$1.5 billion.
- Annual losses can exceed \$3 billion.
- Three year losses can exceed \$5 billion.

❑ Examples of historical losses:

- | | | | |
|------------------|------------------------------|-----------|------------------------------|
| ▪ Q3 2010 | Hedge loss = -8.5% (\$1.0B) | Q2 2002 | Hedge loss = -9.9% (\$1.2B) |
| ▪ 11/08 to 11/09 | Hedge loss = -14.1% (\$1.7B) | 2003 | Hedge loss = -14.7% (\$1.8B) |
| ▪ 2002-2004 | Hedge loss = -31.6% (\$3.8B) | 1985-1987 | Hedge loss = -48.3% (\$5.7B) |



Large Cash Flows Can Be Generated

Average Transaction Costs Due to Hedge Cash Flows: 1973 - 2014

MONTHLY		QUARTERLY	
Total Cost	Cost	Total Cost	Cost
Since 1973	per year	Since 1973	per year
\$ 350m	\$ 8.2m	\$ 220m	\$ 5.2m

Sources: MSCI, Bloomberg, NEPC, PRIM Staff.

- ❑ These calculations are based on the following assumptions:
 - Gains/losses on the currency hedge would be sourced from/invested in the public markets portfolio.
 - Estimated transaction cost for the public markets portfolio is 30 bps (source: Harbor Analytics).
- ❑ Since 1973, transaction costs related to currency hedging cash flows, assuming a quarterly rebalance, averaged \$5.2 million per year, but could be larger during any given time period.
- ❑ For example, Q3 '08 – Q2 '09 had a total of \$2.6B in cash flows with a transaction cost of \$7.7m.
- ❑ These transaction costs cannot be recouped.
- ❑ **Counter-Argument**
 - A large pool of cash could be held and equitized in the overlay account to collateralize possible losses from the currency hedge.
 - We estimate this collateral pool might need to be as large as \$2 billion.
 - This solution has a number of problems, including EAFE futures are not available at this scale, and there are still significant costs and risks (overlay management fee, futures transaction costs, allocating capital away from value-adding, high conviction managers).



Costs & Risks Associated with FX Hedging

- ❑ Costs:
 - Transaction costs.
 - Management fees.

- ❑ Risks:
 - Forced selling in down markets, or forced buying in up markets.
 - Counterparty risk.
 - Operational risk.
 - Accounting and financial reporting requirements.
 - Monitoring of positions and exposures.



FX Hedging: Conclusions

- ❑ Hedging FX may not add much value in terms of risk/return.
- ❑ Volatility reduction from FX hedging has come at the cost of reduced upside, but has not helped much on the downside.
- ❑ Cash losses can be significant requiring forced selling, possibly in down markets.
- ❑ Large monthly/quarterly cash flows are generated creating transaction costs.
- ❑ Costs and risks associated with hedging:
 - a) Forced selling or buying.
 - b) Transaction costs and fees that cannot be recouped.
 - c) Counterparty and operational risks.
 - d) Accounting/financial reporting requirements.
 - e) Monitoring of positions and exposures.

RECOMMENDATION: Based on our analysis, it is difficult to make a strong argument for currency hedging.



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PENSION RESERVES
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Appendix G

Real Estate and Timberland Portfolio Report.
June 30, 2015

*PRIM Board Meeting
Tuesday, August 11, 2015*

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PENSION RESERVES
INVESTMENT
MANAGEMENT BOARD

Real Estate and Timberland Portfolio Report

***By Timothy V. Schlitzer, CRE
Senior Investment Officer
Director of Real Estate and Timberland Investments***

Presentation to the PRIM Board

August 11, 2015

***Deborah B. Goldberg, Treasurer and Receiver General, Chair
Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer***



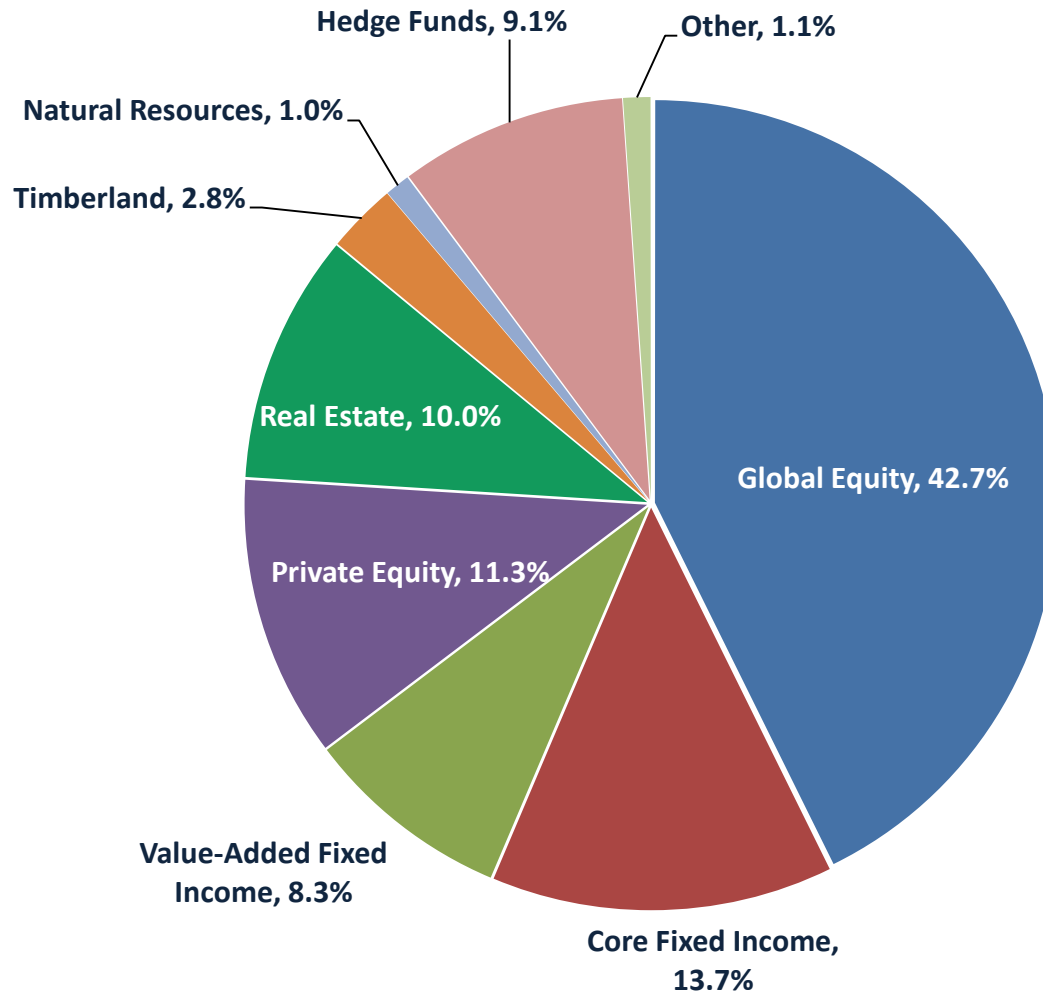
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<u>Sections</u>	<u>Pages</u>
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2. Private Real Estate Portfolio	6-9
3. Non-Core Real Estate	10-11
4. Real Estate Securities (REITs) Portfolio	12-14
5. Timberland Portfolio	15-21

Portfolio Overview

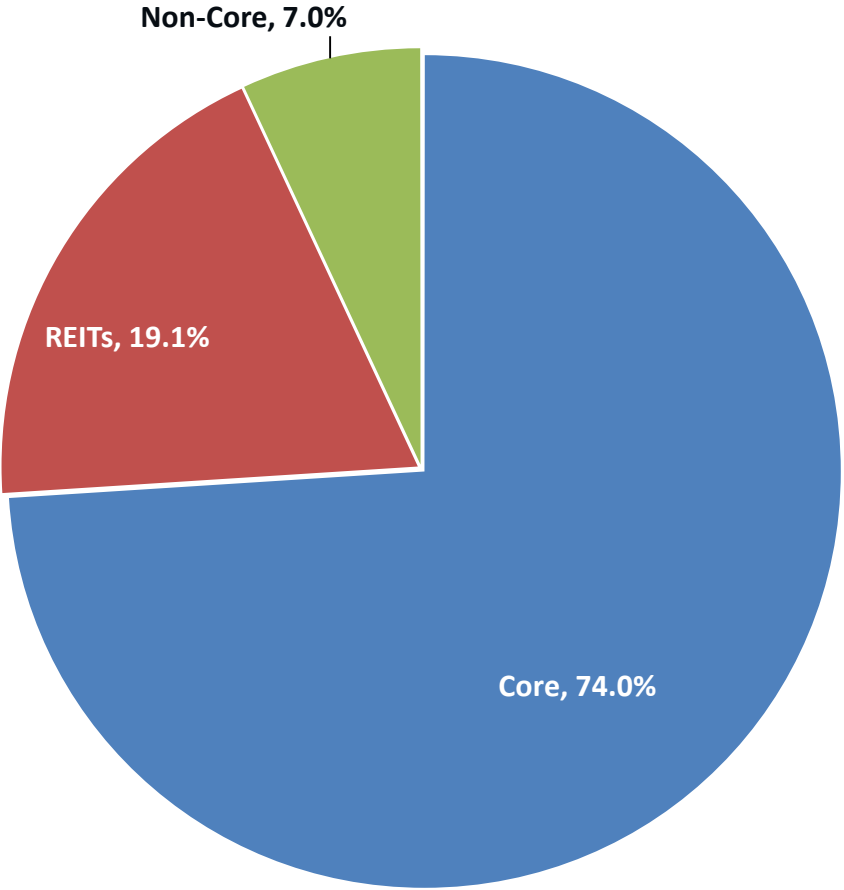


PRIT Asset Allocation

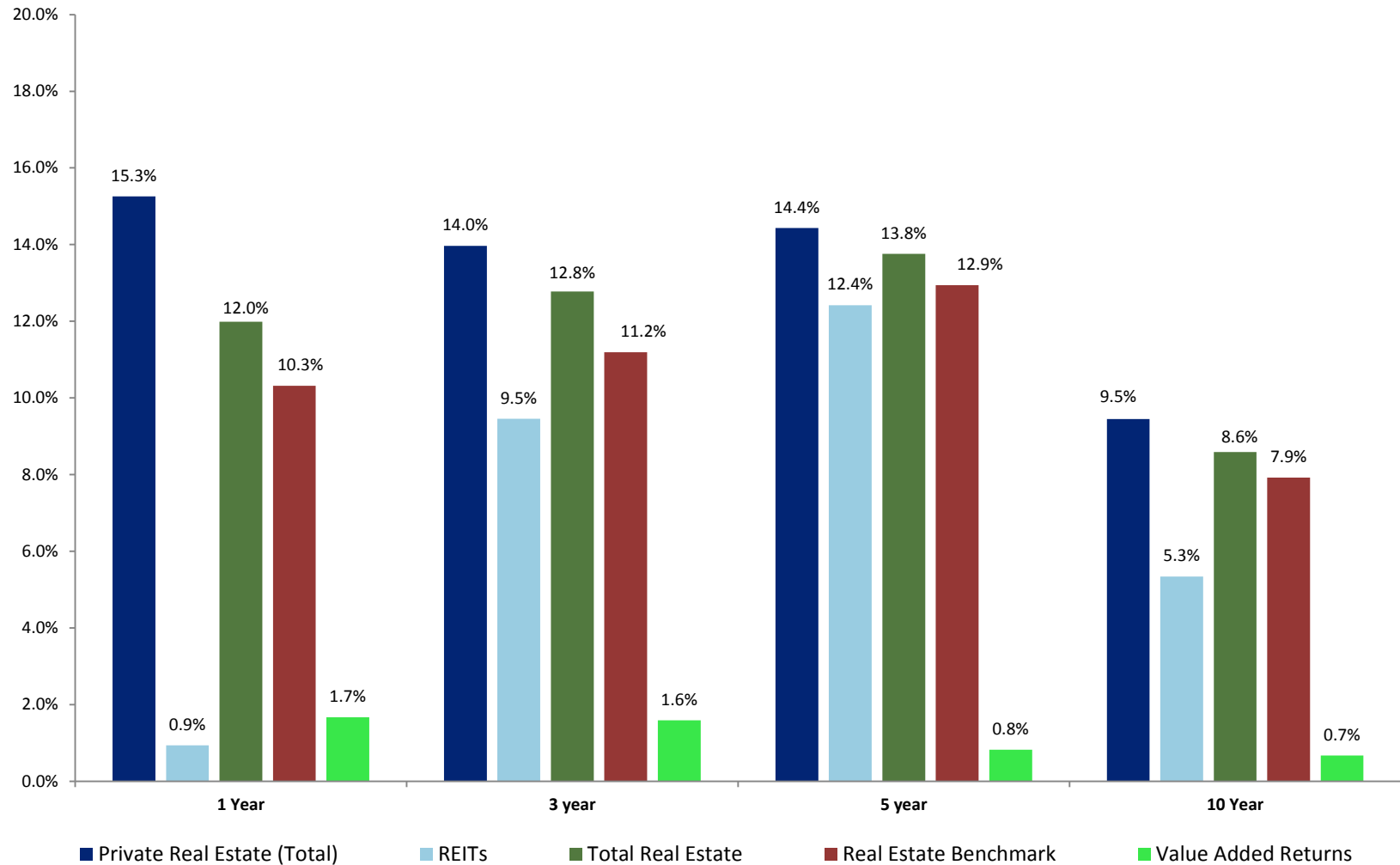


Real Estate Asset Allocation

Targets	
Core	70%
Non-Core	10%
REITs	20%



Total Real Estate Performance



Private Real Estate Portfolio



Manager Performance

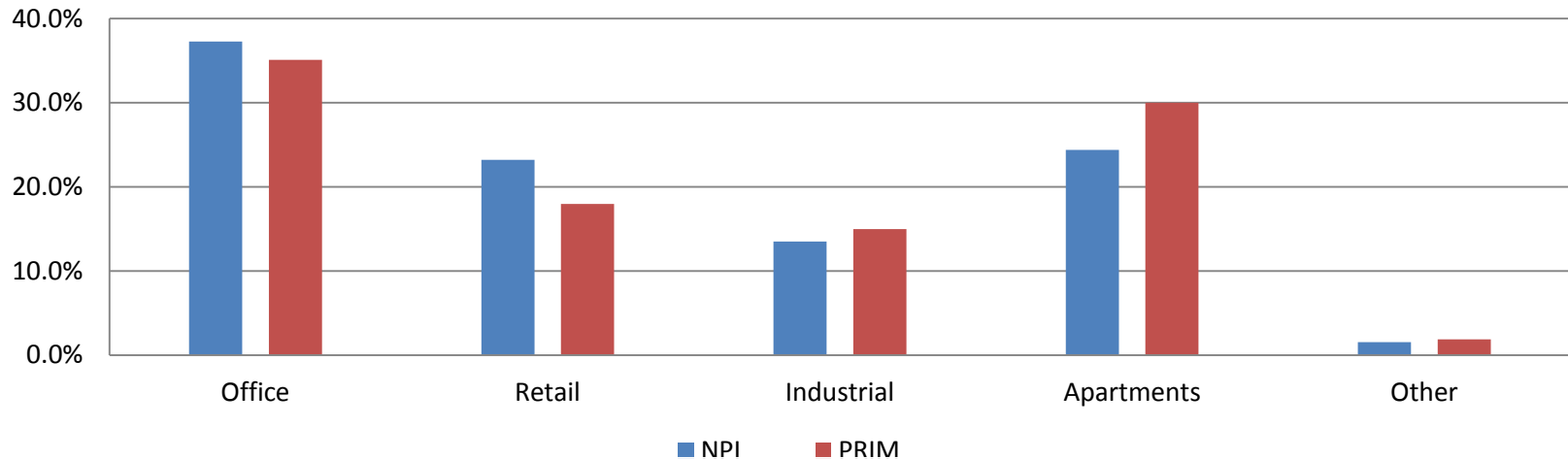
Separate Accounts	1 year	3 years	5 years	10 years	ITD
AEW	18.7%	14.4%			14.7%
<i>Excess Return</i>	6.0%	2.9%			2.2%
LaSalle	13.2%	13.5%	14.8%	9.1%	10.5%
<i>Excess Return</i>	0.5%	2.0%	2.1%	0.7%	0.8%
TA	10.2%	10.3%	11.6%	7.9%	8.9%
<i>Excess Return</i>	-2.5%	-1.2%	-1.2%	-0.5%	-0.2%
Invesco	12.7%	13.2%	14.6%	9.0%	9.9%
<i>Excess Return</i>	-0.1%	1.7%	1.9%	0.6%	0.2%
J.P. Morgan	10.2%	9.0%	12.9%	6.1%	10.5%
<i>Excess Return</i>	-2.5%	-2.5%	0.2%	-2.3%	1.4%
Total Core Composite	12.9%	12.0%	13.3%	8.4%	10.0%
<i>Excess Return</i>	0.2%	0.6%	0.6%	0.0%	0.3%
Total Core Composite Leveraged	15.3%				15.3%
<i>Excess Return</i>	2.6%				3.2%
NCREIF Property Index (Quarter Lag)	12.7%	11.5%	12.8%	8.4%	

* Green Box: Positive Relative Return. Red Box: Negative Relative Return

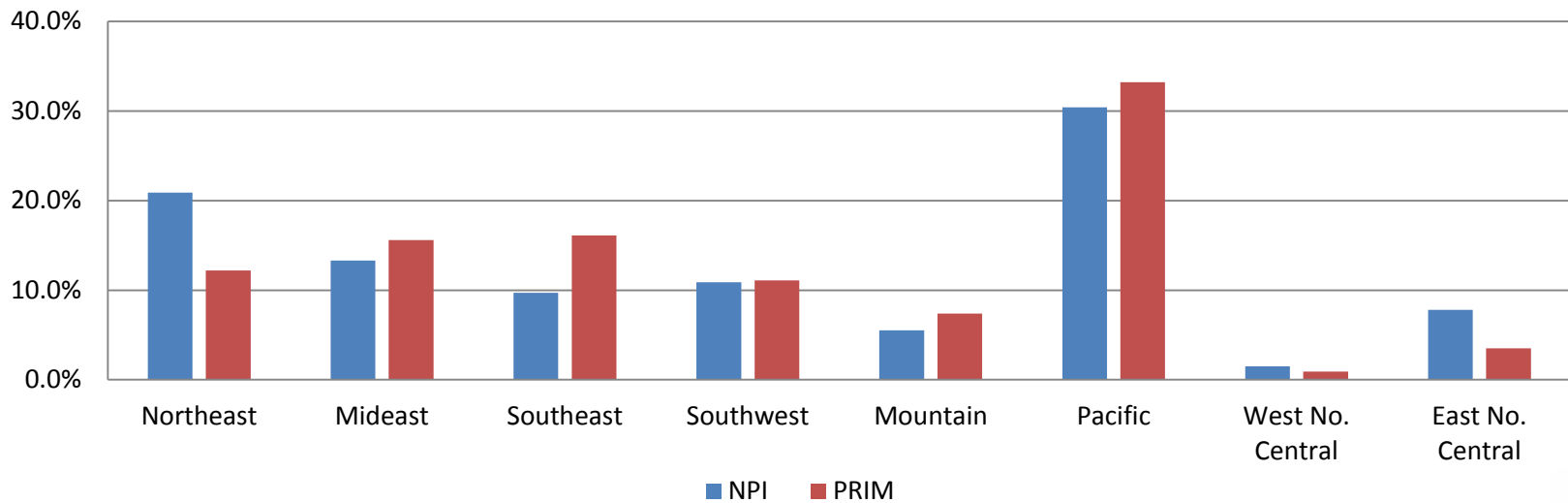


Exposure

Property Type Exposure

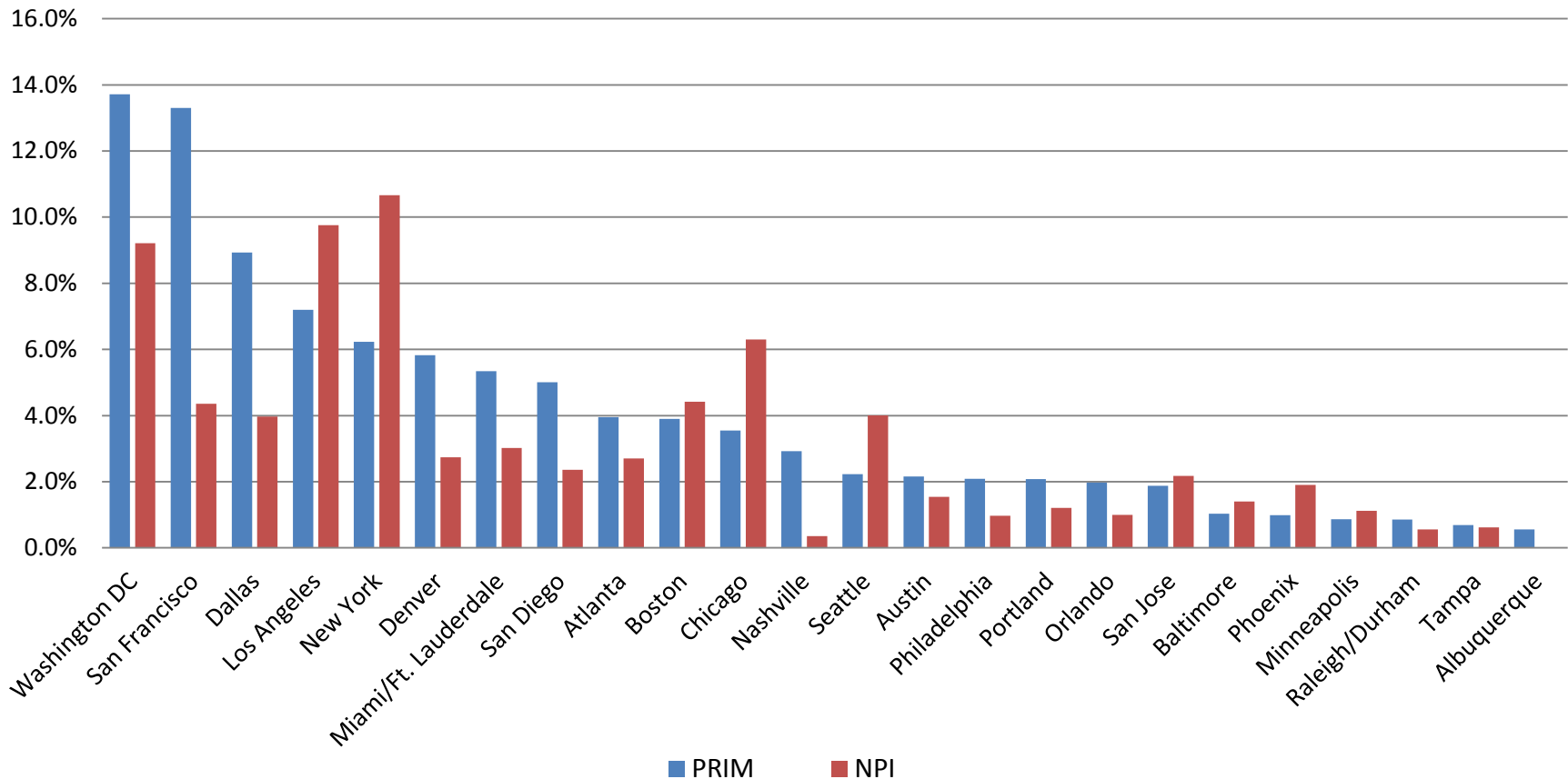


Regional Exposure



Exposure by MSA

Ranked by PRIM Exposure



■ PRIM

■ NPI



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%	-9.8%
Canyon Johnson	5.1%	-2.5%	-2.5%	-4.7%
<i>Excess Return</i>	-7.7%	-13.9%	-15.3%	-13.3%
New Boston	0.1%	3.6%	4.4%	-4.5%
<i>Excess Return</i>	-12.6%	-7.8%	-8.4%	-11.5%
Non Core (Ex. ETI)*	14.2%	15.3%		11.9%
<i>Excess Return</i>	1.4%	3.9%		0.4%
NCREIF Property Index (Quarter lag)	12.7%	11.5%	12.8%	

Green Box: Positive Relative Return; Red Box: Negative Relative Return

**Reflects J-curve impact of development projects*



Real Estate Securities (REITs) Portfolio

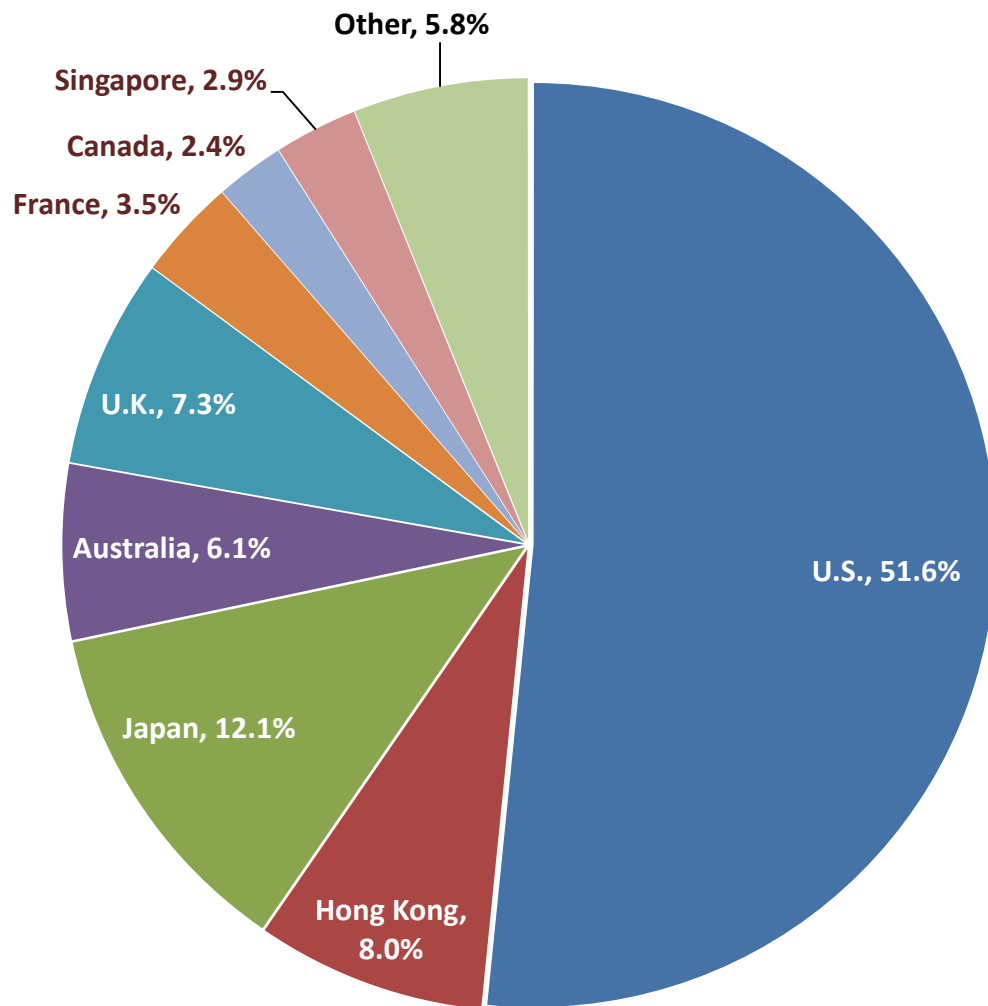


Manager Performance & Top Holdings

REITs Performance					
Global REITs	Month	1 year	3 years	5 years	ITD
Invesco	-3.7%	1.0%	10.0%		9.3%
Excess Return	0.2%	0.8%	0.6%		0.6%
CenterSquare	-3.8%	1.9%	10.0%		9.3%
Excess Return	0.1%	1.6%	0.6%		0.6%
Invesco Takeover	-3.7%				-0.8%
Excess Return	0.2%				-0.8%
EPRA NAREIT Developed	-3.9%	0.3%	9.4%		
* Green Box: Positive Relative Return; Red Box: Negative Relative Return.					
Total REITs	Month	1 year	3 years	5 years	ITD
Total REITs Composite	-3.8%	0.9%	9.5%	12.4%	9.6%
Excess Return	0.1%	0.7%	0.1%	-0.1%	1.4%
Total REITs Benchmark	-3.9%	0.3%	9.4%	12.5%	8.2%



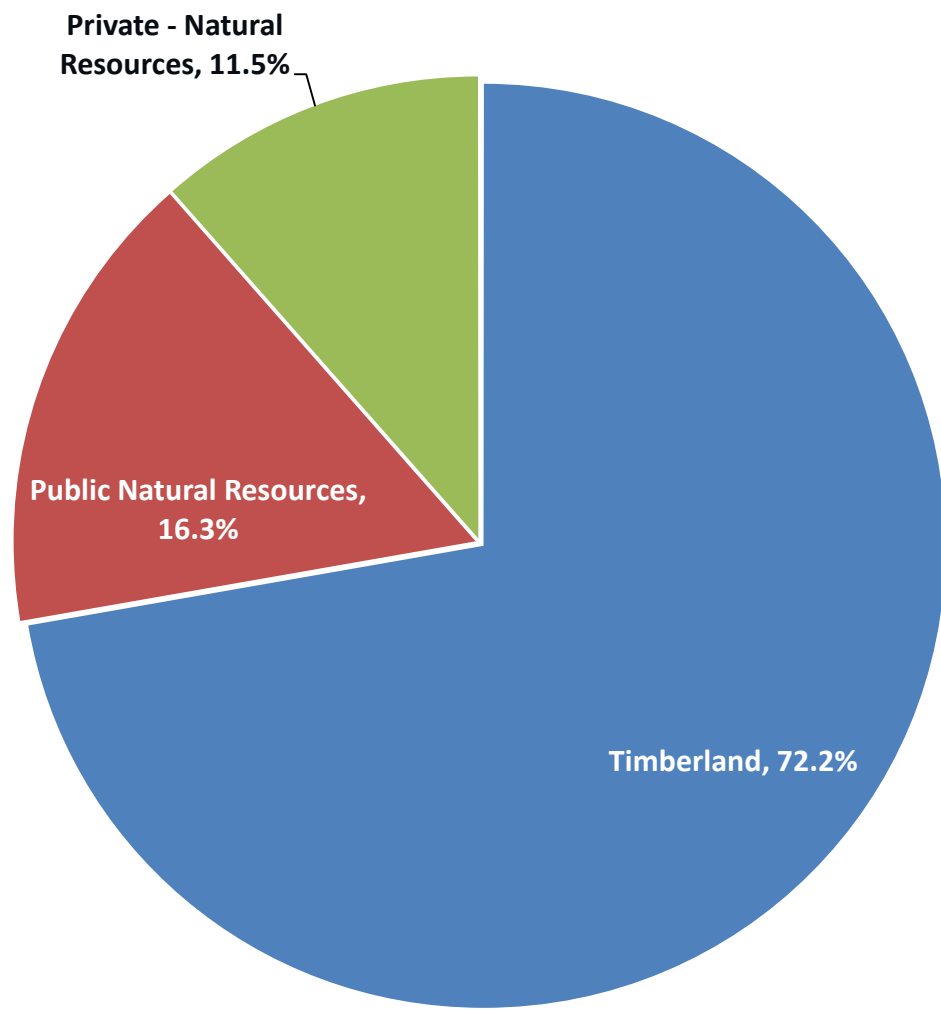
REITs Exposure by Country



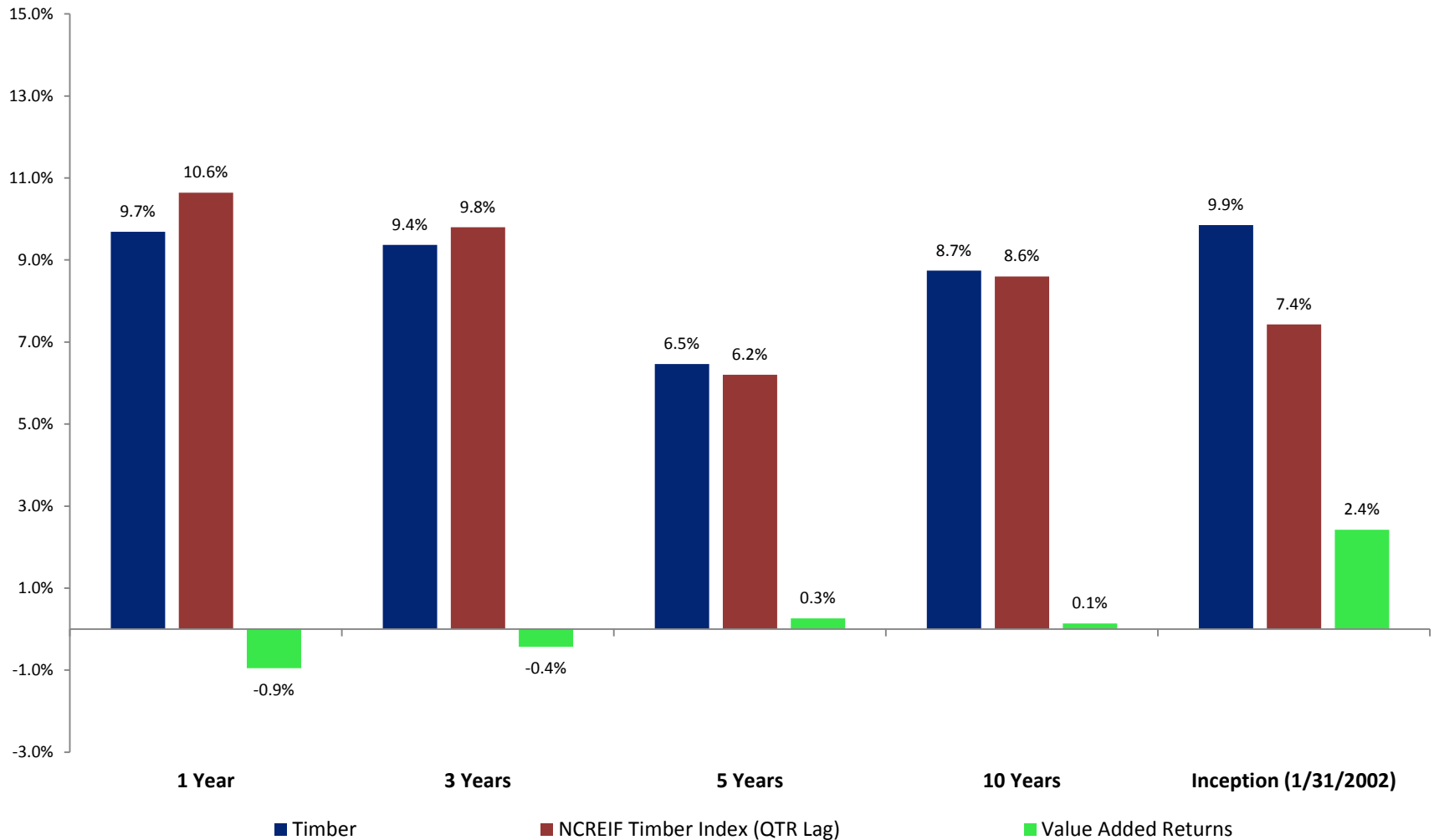
Timberland Portfolio



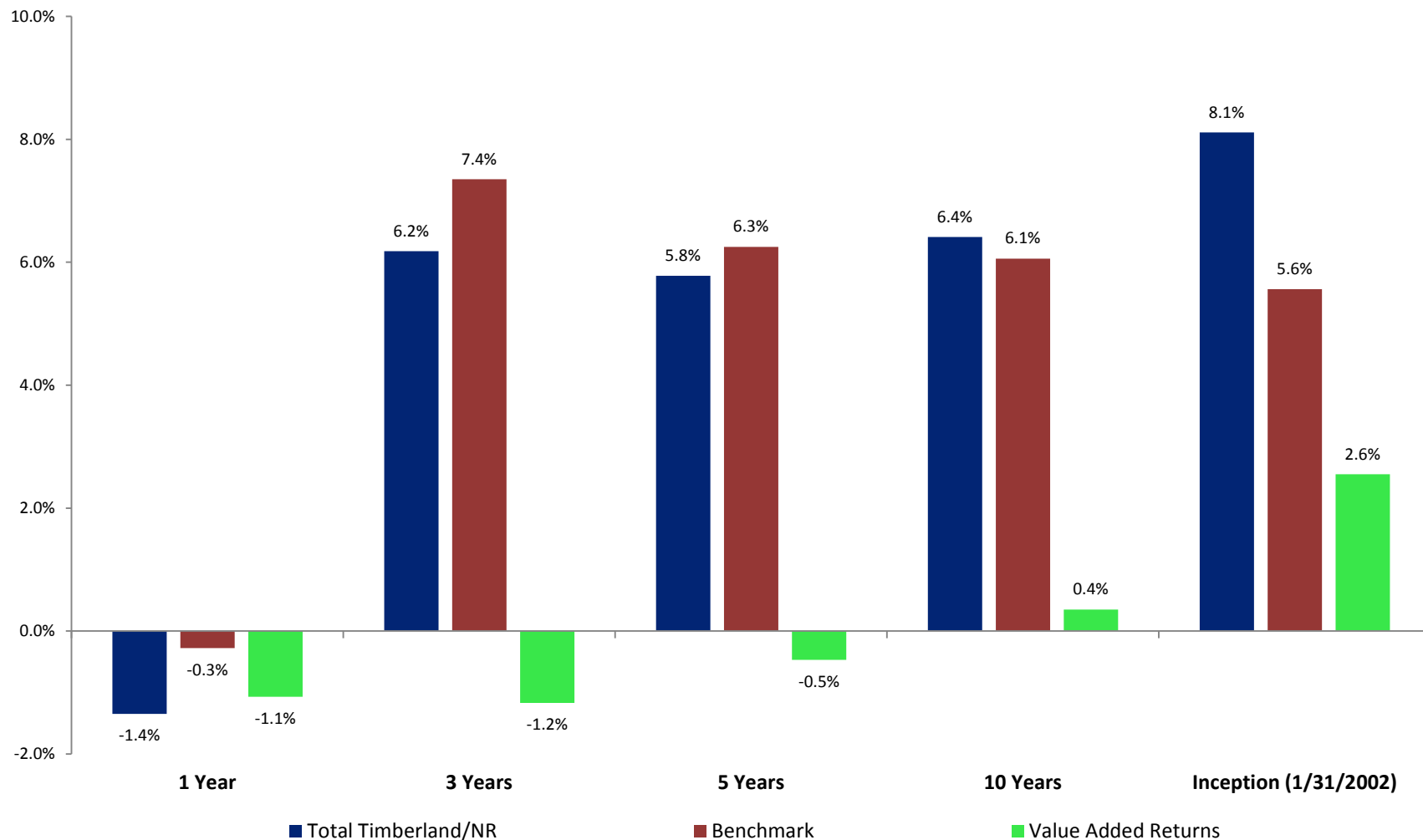
Natural Resources Allocation



Timberland Performance



Total Timberland/Natural Resources Performance



Manager Performance

Timberland	1 year	3 years	5 years	ITD
FIA	8.9%	9.4%	6.5%	7.7%
Excess Return vs. NTI	-1.7%	-0.4%	0.3%	0.2%
CG	11.3%	9.2%		7.5%
Excess Return vs. NTI	0.7%	-0.6%		-0.6%
Total Timber Composite	9.7%	9.4%	6.5%	9.9%
Excess Return vs. NTI	-0.9%	-0.4%	0.3%	2.4%
NCREIF Timber Index (Quarter Lag)	10.6%	9.8%	6.2%	

* Green Box: Positive Relative Return; Red Box: Negative Relative Return.

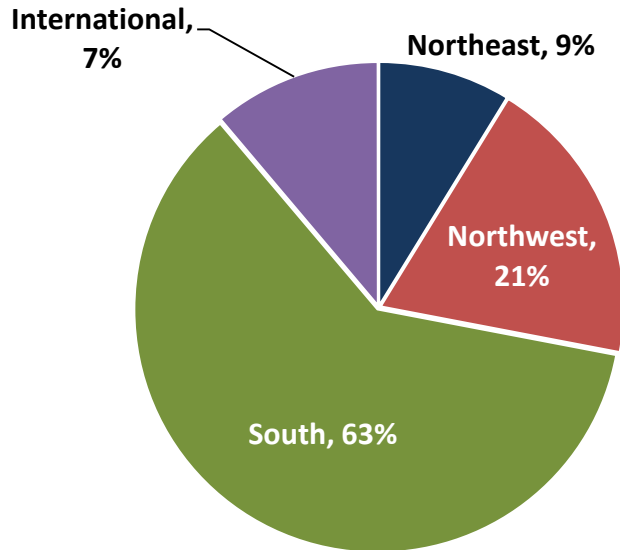
Natural Resources	1 year	3 years	5 years	ITD
Jennison	-33.2%	-1.1%	0.4%	-5.2%
Excess Return	-7.3%	-1.9%	-1.4%	2.0%
T. Rowe Price	-21.8%	5.1%	5.7%	-3.9%
Excess Return	4.1%	4.3%	3.9%	3.2%
Total Composite	-27.9%	1.9%	3.0%	-4.5%
Excess Return	-2.0%	1.1%	1.2%	2.7%
Lipper Natural Resources Global Fund Index	-25.9%	0.8%	1.8%	

* Green Box: Positive Relative Return; Red Box: Negative Relative Return.

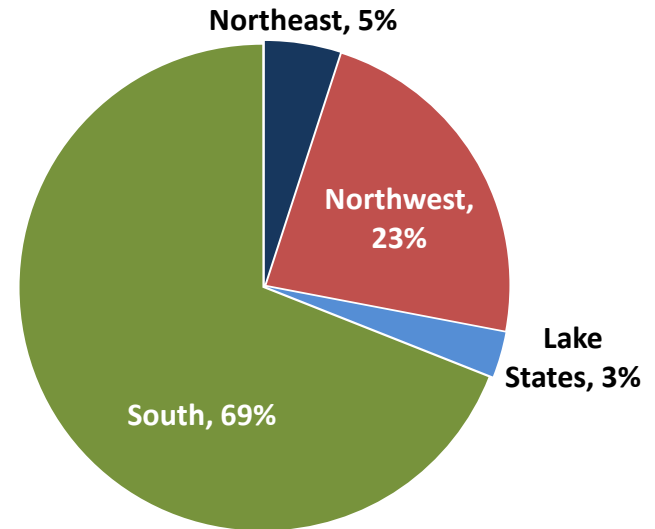


Exposure to Timberland by Region

Regional Exposure

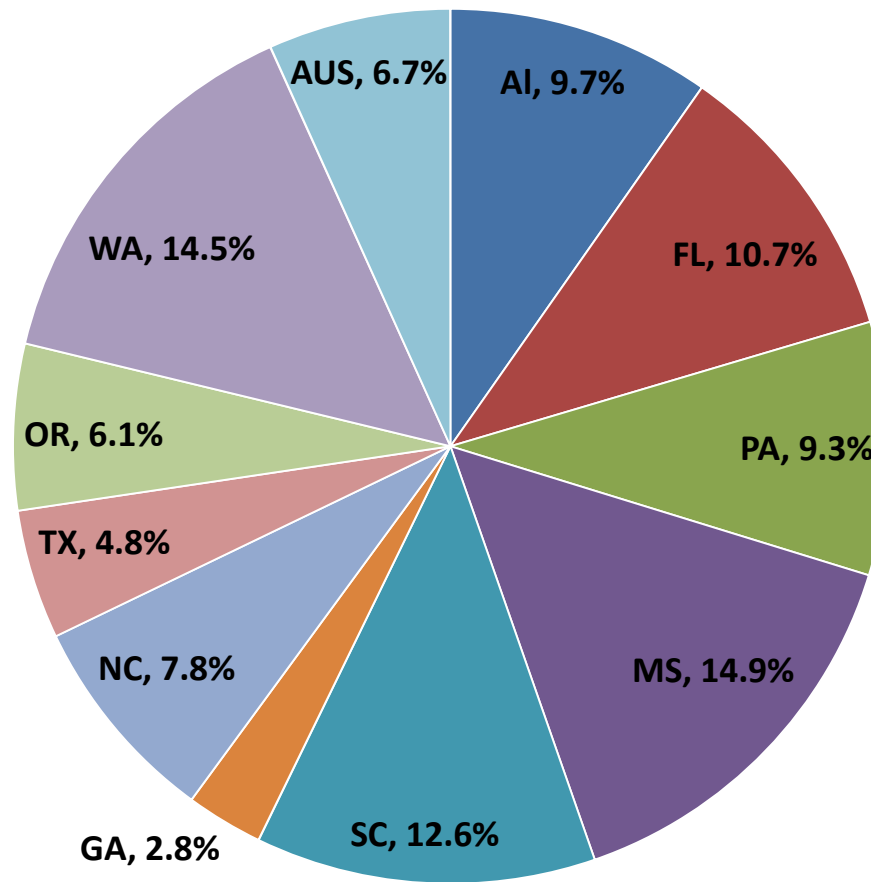


Benchmark



Exposure to Timberland by State

State/Region Exposure





PENSION RESERVES
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Appendix H

Timber RFQ Evaluation Report.

*PRIM Board Meeting
Tuesday, August 11, 2015*

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<p style="text-align: center;">PENSION RESERVES INVESTMENT MANAGEMENT BOARD Timberland Appraisal Services</p>

Responses to RFQ

PRIM issued a Request for Qualifications (“RFQ”) for timberland appraisal services on June 15, 2015. The purpose of the RFQ is to update PRIM’s list of approved timberland appraisal firms. Firms selected as a result of this RFQ will be eligible to competitively bid for appraisal assignments that are scheduled to occur over the next three years (2015 to 2017). The search was advertised in Pension & Investments and was posted on PRIM’s Web site. Responses to the RFQ were due by 3:00 p.m. ET on June 30, 2015. Eight responses were submitted by the deadline.

Evaluation Committee

The Evaluation Committee members are as follows:

1. David Gurtz, Interim CFO & COO
2. John La Cara, Senior Investment Officer
3. Dr. Jack Lutz, Real Estate and Timber Committee
4. Tim Schlitzer, Senior Investment Officer
5. Dan Stenger, Consultant, The Townsend Group

Summary of Respondents

1. Forecon, Inc. (“Forecon”) provides multiple services in the forestry and natural resources industry, including appraisal services, geographic information systems, timber sales administration, and land management services. The firm was incorporated in 1976 as the successor to C.H. Bauer, which was previously established in 1954. Forecon maintains six locations throughout three states (New York, Pennsylvania and West Virginia) and employs approximately 43 employees. The firm’s appraisal history has been in the Northeast and South. The appraisal department consists of three people that include two certified appraisers. The appraisers for PRIM would be Chuck Alexander, who is director of appraisal services and John Gifford, the firm’s vice president. Combined, Messrs. Alexander and Gifford possess approximately 50 years of appraisal experience with an expertise in hardwoods. Forecon has been engaged by other institutional entities, including GMO, Bank of America and FIA. Forecon is currently on PRIM’s approved list of appraisal firms.
2. Larson & McGowin, Inc. (“L&M”) dates back to 1938 as a firm that conducted timber cruises and consulting services for large land owners during the development of the forest industry in the U.S. South. L&M currently operate from eight locations throughout Texas, Georgia, Alabama, Arkansas and Louisiana. In addition to appraisal services they provide a full range of land management services including harvest planning, reforestation planning, timber sales preparation, intensive pine management, and wood basin studies. Mr. L. Alexander McCall, Executive Vice President, and Mr. Robert Foster, President, are designated for PRIM’s assignments. Mr. McCall is active in a number of professional organizations and is registered as a Forester and a Licensed Real Property Appraiser. Additionally, he has served as an expert witness on numerous

occasions regarding the negotiation of leases and other real property issues. Mr. Foster leads the company's Appraisal Services Group and has extensive experience in land management operations auditing. Mr. Foster is also registered as a Forester and a Licensed Real Property Appraiser. L&M have performed valuation services for other large investors, such as Plum Creek, Rice University and The Forestland Group. L&M has not responded to past RFQ issued by PRIM, thus it is not on PRIM's list of approved appraisal firms.

3. Legacy Appraisal Services, LLC ("Legacy"), based in High Springs, FL, provides timberland and rural property valuation services across the U.S. and South America. Legacy specializes in consulting, due diligence and the valuation of large timberland ownerships with diverse structures. This includes partial interests, conservation easements, mitigation banks and properties with other various forms of encumbrances. Legacy's focus is primarily in the Southeast and specializes in pine timberlands. Legacy values millions of acres of timberland each year for TIMOs, REITs, direct investors and agricultural lenders. Legacy staff includes three full time appraisers who are all State Certified General Appraisers. The team is led by Scott Brodbeck, MAI. Legacy's clients include Hancock Timber, Molpus, Resource Management Service and Campbell Global. Legacy is currently on PRIM's approved list of appraisal firms.
4. Mason, Bruce & Girard, Inc. ("MB&G") is a full service natural resources consulting company with 50 employees and was established in 1921. MB&G maintains offices in California, Idaho, Colorado, and is headquartered in Portland, Oregon. MB&G's business lines include property management, forest inventory and biometrics, timber cruising, and appraisals. Over the past five years, MB&G has completed timberland appraisal assignments totaling 9.4 million acres that are worth more than \$26 billion dollars. The appraiser that would be assigned to PRIM is Roger Lord, Principal. Mr. Lord is a State Certified General Real Estate Appraiser in Oregon, Washington, and Idaho and has also appraised timberlands in Montana, California, and British Columbia. He has over 29 years of experience in forest economics and policy analysis, fiber supply analysis, timberland appraisal and investment analysis, and short and long term forest management planning. MB&G has performed assignments for Brookfield Timber Management, FIA, Molpus, and Hancock Timber. MB&G is currently on PRIM's approved list of appraisal firms.
5. Sizemore & Sizemore, Inc. ("Sizemore") was established in 1949 and employs 18 people in Alabama, including five appraisers. Sizemore is primarily focused in the U.S. South and specializes in valuations services, growth and yield projections, wood flows, cash flows, harvest scheduling, and timber supply agreements. The firm is regularly involved with large timberland acquisitions and dispositions activity on behalf of the timber industry, TIMOs, and high-net-worth individuals. The appraisers responsible for PRIM's assignments would be Jack Fillingham, Chairman of Sizemore; Steve Burak, Ph.D., Richard Pinkowski, Jr., Susanna Fillingham, and Seth Fillingham. Sizemore has performed assignments for Molpus, Hancock Timber and Campbell Global. Sizemore is currently on PRIM's approved list of appraisal firms.
6. Sterling Consulting, LLC ("Sterling") was formed in 2009 by Mr. Sterling Brothers. Sterling Brothers is a Certified General Appraiser and Forester. Sterling provides land and timber appraisals and investment analysis throughout the U.S. Sterling has also provided clients with acquisition and disposition consulting in real estate transactions

and provided expert witness testimony. Sterling has performed assignments for Hancock Timber, FIA and Molpus. Sterling is currently on PRIM's approved list of appraisers.

7. TerraSource Valuation, LLC ("TSV") was founded in 2005 by Mr. Jeff Wikle and Mr. Phil Bailey. Combined they have thirty-seven years of timberland valuation experience. TSV offers valuation consulting services to professional timberland investors, including timberland due diligence analysis and certified appraisals, timber price indexes, conservation easement valuations and portfolio tract valuations. Located in the North Carolina, TSV has many years of southern pine and bottomland hardwood valuation experience. TSV also has a unique, well-recognized valuation niche in the more complex natural hardwood forests located throughout the U.S. East, particularly Appalachia. Having performed many projects in international locations, TSV has competency with eucalyptus, teak, mahogany, pine plantations and tropical broadleaf forests. TSV has also performed appraisal work for other large investors, such as Plum Creek, RMK, and Molpus Group. TSV is currently on PRIM's list of approved appraisers.
8. The Healy Company, LLP ("Healy") is located in Beaverton, Oregon and specializes in valuing timberlands in the U.S. West. Healy was originally started in 1992 and is currently owned by Mr. Martin Healy, Jr. and Mr. Charles Barber. Healy employs approximately five to seven people who specialize in timberland appraisals. Messrs. Healy and Barber would be the designated appraisers for PRIM's engagement. Healy's list of clients include Hancock Timber, GMO, Campbell Global and FIA. Healy is currently on PRIM's list of approved appraisers.

Search Process

Ten firms responded to the RFQ. Two firms (American Forest Management and Sewall) submitted a response after the submission deadline and were not given further consideration. Responses were evaluated based on each firm's relevant qualifications and experience, knowledge of timberland valuations and appraisals, quality of RFQ response, quality of the proposed team, and references - particularly from PRIM's timberland investment managers (FIA and Campbell Global). Seven of the responding firms are currently on PRIM's list of approved appraisal firms. Accordingly, given PRIM's familiarity with these seven firms, experience with past assignments and feedback from FIA and Campbell Global, they were considered qualified to remain on PRIM's list.

The last respondent (L&M) was invited to interview with members of the Evaluation Committee via a conference call on July 8, 2015. Subsequent to the call it was determined that L&M demonstrated the necessary qualifications required by PRIM to provide appraisal services.

Timberland Appraisal Services Recommendation

The Evaluation Committee recommends that all eight responding firms be placed on PRIM's list of approved timberland appraisers. Each firm will be eligible to bid on timberland appraisal assignments that are scheduled to occur for calendar years ending 2015, 2016 and 2017. The firms are as follows:

1. Forecon Inc.
2. Larson & McGowin, Inc.
3. Legacy Appraisal Services, LLC

4. Mason Bruce & Girard, Inc.
5. Sizemore & Sizemore, Inc.
6. Sterling Consulting, LLC
7. Terra Source Valuation, LLC
8. The Healy Company.



PENSION RESERVES
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Appendix I

TTG Timber RFQ Recommendation.

*PRIM Board Meeting
Tuesday, August 11, 2015*

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M E M O R A N D U M

TO: Tim Schlitzer, Senior Investment Officer, Real Estate and Timberland Massachusetts Pension Reserves Investment Management Board ("PRIM")

FROM: The Townsend Group

SUBJECT: Timberland Appraisal RFQ

DATE: July 13, 2015

CC: John LaCara, Investment Officer, Real Estate and Timberland PRIM

Massachusetts PRIM issued an RFQ for timberland appraisal services with initial responses due back on June 30th. Ten responses were received in total and included:

- Forecon
- MB&G
- The Healy Company
- Legacy Appraisal Services
- Sterling Consulting
- Sizemore & Sizemore
- Larson and McGowin
- Sewall
- Terrasource Valuations
- American Forest Mgmt

Two responses were declined as they were received after the response deadline including:

- Sewall
- American Forest Mgmt

Each of the firms met the RFQ's requirements and therefore qualified for inclusion. Following an initial review of the RFQ responses by PRIM's Search Committee, phone interviews were scheduled with those firms that PRIM didn't have prior engagements and included:

- Larson and McGowin

The interview covered multiple points on the appraisal firms and included:

- Location of appraisal expertise
- Representative client list
- Overview of team and certified appraisal personnel
- Quantity of engagements completed in prior years
- Capacity to complete engagements in the current year
- Overview of appraisal process and discount rate assumptions
- Expected changes in staffing

Following the call, Larson and McGowin was included on the approved list of timberland appraisers.

Townsend recommends that all eight firms be included on PRIM's approved list of timberland appraisers. This designation will allow each of these firms to bid on appraisal work for the calendar years of 2015-17. It is expected that a review of changes at each of the respondent firms would be completed at the time of bid submission to assure the firms selected continue to meet PRIM's requirements.



PENSION RESERVES
INVESTMENT
MANAGEMENT BOARD

Appendix J

Due Diligence Travel, Trustee and Staff Fiduciary Education, and Professional Development.

*PRIM Board Meeting
Tuesday, August 11, 2015*

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PRIM BOARD

Due Diligence Travel, Trustee and Staff Fiduciary Education, and Professional Development
FY 2015

<i>Dates</i>	<i>Name</i>	<i>Organization</i>	<i>Location</i>	<i>Due Diligence Travel</i>	<i>Staff Development</i>
4/20/15-4/23/15	Michael Bailey	Investor Roundtable and Oaktree Capital/Crescent Capital	Los Angeles, CA	1,001.46	836.87
6/23/15-6/24/15	Michael Bailey	TowerBrook Annual Meeting	New York City, NY	781.81	
	Total Michael Bailey			1,783.27	836.87
3/23/15-3/24/15	Andre Clapp	Marathon Client Lunch and Dinner/Pzena	New York, NY	931.26	
3/31/2015	Andre Clapp	Meeting at Arowstreet	Boston, MA	26.95	
4/8/2015	Andre Clapp	BSAS Seminar, "Forklore of Finance"	Boston, MA		40.00
6/9/15-6/14/15	Andre Clapp	Meeting with several managers/Ashmore Emerging Market Conference	London, UK	2,049.64	2,049.65
	Total Andre Clapp			3,007.85	2,089.65
6/17/15-6/19/15	Anthony Falzone	FTF Senior Delegate Roundtable	Newport, RI		815.69
	Total Anthony Falzone			-	815.69
5/4/15-5/5/15	David Gurtz	ISRP Conference	Cambridge, MA		515.40
5/14/2015	David Gurtz	Presenter at KPMG Hedge Fund Conference	Boston, MA		22.40
	Total David Gurtz			-	537.80
6/11/2015	Ellen Hennessy	NSCP Compliance Forum	Boston, MA		149.00
	Total Ellen Hennessy			-	149.00
4/22/15-4/23/15	Peony Keve	Vista Equity Partners /KPS /Orbi Med meeting	New York City, NY	1,184.58	
4/28/15-4/30/15	Peony Keve	GTCR 2015 Annual Meeting and Odyssey	Chicago, IL / New York City, NY	1,281.96	
4/30/2015	Peony Keve	WAVE Healthcare Panel	Boston, MA		26.90
5/11/15-5/14/15	Peony Keve	Hellman & Friedman/Soffinnova Ventures and Canvas Venture	San Francisco, CA / Menlo Park, CA	2,066.57	
6/3/2015	Peony Keve	Orbmed	New York City, NY	259.74	
	Total Peony Keve			4,792.85	26.90
3/1/15-3/4/15	John LaCara	Citi Real Estate Conference	Hollywood, FL	1,083.86	
4/28/2015	John LaCara	AEW and LaSalle	Hoboken, NJ	599.37	
6/8/15-6/9/15	John LaCara	Silver Creek	Atlanta, GA	761.32	
6/16/15-6/18/15	John LaCara	Campbell Group and Silver Creek	Portland, OR / Seattle, WA	1,804.64	
	Total John LaCara			4,249.19	-
4/28/15-4/29/15	Matthew Liposky	BNY Mellon CGNP Client Advisory Board	New York City, NY		773.76
	Total Matthew Liposky			-	773.76
6/2/15 & 6/11/15	Izzy Markov	CPE courses and material	Boston, MA		398.00
	Total Izzy Markov			-	398.00
2/11/15-2/13/15	Erin McCafferty	TA Associates Advisory Board Meeting	Boston, MA	193.87	
4/15/2015	Erin McCafferty	Gores	Beverly Hills, CA	830.97	
4/19/15-4/23/15	Erin McCafferty	Index, Montagu	London, UK and Switzerland	5,556.61	
5/10/15-5/18/15	Erin McCafferty	Several Managers	New York City, NY	943.50	
5/29/2015	Erin McCafferty	Several Managers	New York City, NY	817.77	
6/10-6/13/15	Erin McCafferty	Rhone Annual and Advisory Board Meeting	Amsterdam, Holland	3,569.29	
6/15/15-6/17/15	Erin McCafferty	RFK Compass Conference	Hyannisport, MA		257.89
6/22/15-6/24/15	Erin McCafferty	KKR Annual Meeting	Palos Verdes, CA	1,750.18	
	Total Erin McCafferty			13,662.19	257.89
2/15/2015	Michael McGirr	BSAS Seminar	Boston, MA		55.60
3/9/15-3/19/15	Michael McGirr	Nordic, CarVal, GSO and Inflexion	London, UK	4,491.31	
2/16/15-2/18/15	Michael McGirr	CarVal and Blackstone	Minneapolis, MN / New York, NY	2,198.99	
4/16/15-4/16/15	Michael McGirr	GSO Annual and Olympus meeting	Stamford, CT / New York, NY	873.93	
4/22/15-4/23/15	Michael McGirr	ACON and Spark meetings	Washington, D.C. / New York City, NY	1,898.28	
4/29/15-5/8/15	Michael McGirr	AG Conference	London, UK		4,568.69
	Total Michael McGirr			9,462.51	4,624.29
3/20/15-3/23/15	Eric Nierenberg	Meeting with Blackgold	Houston, TX	526.98	
4/1/15-4/2/15	Eric Nierenberg	Arden	New York City, NY	762.44	

4/7/15-4/9/15	Eric Nierenberg	Peer meetings	Atlanta, GA	1,321.93	
4/26/15-4/29/15	Eric Nierenberg	Global Agriculture Investing and Arden	Chicago, IL /New York City,NY	854.27	854.28
5/5/2015	Eric Nierenberg	400 Capital and Mann Quantitative Summitt	New York City, NY	221.30	221.29
6/18/15-6/19/15	Eric Nierenberg	Carter Borden Investing Forum and Arden	New York City, NY	1,415.98	
	Total Eric Nierenberg			5,102.90	1,075.57
5/4/15-5/5/15	Donald Payne	ISRP Conference	Boston, MA		520.93
6/1/2015	Donald Payne	CFA registration and material	Boston, MA		1,621.34
	Total Donald Payne			-	2,142.27
4/8/2015	Sarah Samuels	BSAS Seminar, "Forklore of Finance"	Boston, MA		40.00
4 /15/15-4/17/15	Sarah Samuels	CIO Summit	New York City, NY		1,653.03
5/11/15-5/13/15	Sarah Samuels	Citi Conference and Appollo Annual Meeting	New York City, NY	775.39	1,789.60
5/19/2015	Sarah Samuels	RFK Compass Conference	Hyannisport,MA		1,181.58
	Total Sarah Samuels			#REF!	4,664.21
4/28/2015	Timothy Schlitzer	AEW and LaSalle	Hoboken,NJ	587.56	
6/8/15-6/9/15	Timothy Schlitzer	Silver Creek	Atlanta, GA	1,025.15	
6/16/15-6/18/15	Timothy Schlitzer	Campbell Group and Silver Creek	Portland,OR / Seattle, WA	2,966.50	
	Total Tim Schlitzer			4,579.21	#REF!
6/23/15-6/25/15	Chris Supple	NAPPA Attorney's 2015 Annual Meeting	Austin, TX		1,636.08
	Total Chris Supple			-	1,636.08
5/4/15-5/6/15	Michael Trotsky	Mann Quantiative Summit - Speaker	New York City, NY		728.18
5/19/2015	Michael Trotsky	QWAFAFEW Meeting, "Sheep in Wolves' Clothing"	Boston, MA		30.00
6/30/2015	Michael Trotsky	Highfields Meeting	Boston, MA	23.15	
	Total Michael Trotsky			23.15	758.18