

PRIM Executive Director and Chief Investment Officer Michael G. Trotsky, CFA, provided the following information to the PRIM Board at its February 24, 2021, meeting:

Market and PRIT Fund Performance

As of December 31, 2020, the PRIT Fund stood at \$87 billion, an all-time high, with a calendar year gain of 12.6% (12.1% net of fees). Following a weak first half in the financial markets caused by the onset of the COVID pandemic and its associated economic damage, the second half return rebounded strongly. For the six-month period ending December 31, 2020, the PRIT Fund returned 16.6%, the largest six-month return in PRIM's history, surpassing the previous high of 15.7% in June of 1986. The relative return for the six-month period is also the strongest in PRIM's entire history, with the PRIT Fund outperforming its benchmark, net of fees, by 388 basis points for the six-month period ending December 31, 2020.

For calendar year 2020, the PRIT Fund gained 12.1%, net of fees, outperforming its benchmark by 132 basis points. This return equates to an investment gain of \$9.6 billion, approximately \$1 billion above our benchmark return. All major asset classes had positive returns for the year led by Private Equity with a 24.5% return, Global Equity with a 15.7% return, and Core Fixed Income with a 12.0% return. The PRIT Fund continues to perform well in both up and down markets – down markets like the March quarter where the Fund performed admirably, but also in up markets like in the September and December quarters. Net outflows to pay benefits were approximately \$1.5 billion during the year.

In recent months, market participants frequently looked beyond near-term bad news such as increases in positive tests and COVID-related deaths; logistical problems delivering the vaccines; and emergent variants of the virus to the bright spots in economic data such as continuing GDP growth; a rise in US industrial production; and a very healthy housing market. However, the clampdown on business and social activities over the holiday period led to a slight deceleration in economic activity more recently. For example, in January, the ISM manufacturing index was weaker than expected, new unemployment claims were still running close to 800,000 a week, and retail sales fell about 1%, missing forecasts. January marked the third

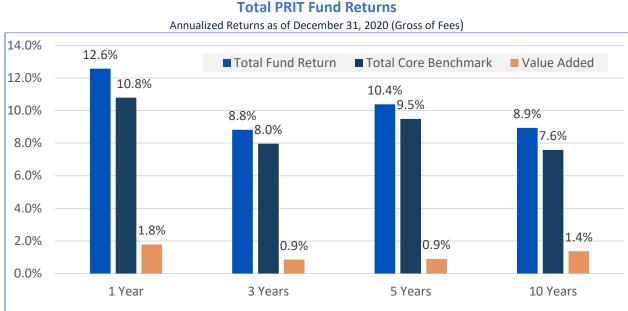
consecutive month of declines in consumption, starting after the last stimulus checks were exhausted in early autumn. Even these near-term issues have not been enough to stop staggeringly strong markets, mostly due to a few hopeful new developments including: 1) the new administration is promoting a new \$1.9 trillion stimulus package, which is viewed as good news for the economy, at least in the near term; 2) a new, more centralized federal response to the virus is expected to finally curtail it; and 3) signals that the Federal Reserve and the Department of the Treasury will work closely together and continue to be accommodative under the new Treasury Secretary, Janet Yellen.

There is still much economic, political, and public health uncertainty to monitor, and recently we witnessed new market dynamics as retail investors, fueled by social media, began to congregate to move markets, or more accurately, to move individual stocks in a stampede fashion without regard to underlying fundamentals. There are many factors at play – economic, political, public health, behavioral, and social -- and we believe that these influences may result in continuing market volatility. As a result, we completed the 2021 asset allocation analysis with a recommendation to make no material changes. PRIM's asset allocation model uses internally developed, quantitative techniques, which maximize the probability of achieving our dual objective: a 7.15% long-term return and no drawdowns of more than 20% over a 3-year period. We believe our current asset allocation policy will position the PRIT Fund to perform well in various market conditions and outcomes.

PRIT Fund Performance

- For the one-year ended December 31, 2020, the PRIT Fund was up 12.6%, (12.1% net), outperforming the total core benchmark of 10.8% by 178 basis points (132 bps net).
 - This equates to an investment gain of \$9.6 billion, net of fees.
 - This equates to \$1.0 billion of value above the benchmark return, net of fees.
- Net total outflows to pay benefits for the one-year ended December 31, 2020, were approximately \$1.5 billion.

The following charts summarize the PRIT Fund performance for the period ending December 31, 2020:

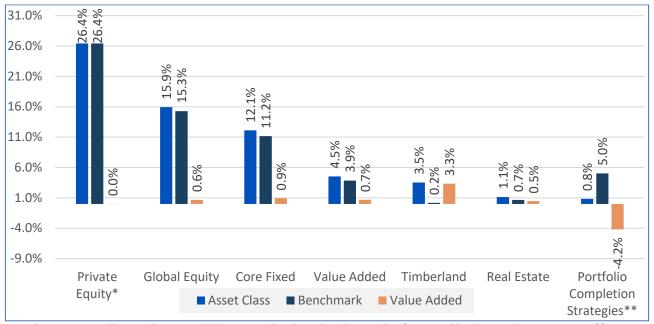


Source: BNY Mellon. Total Core Benchmark includes private equity benchmark.

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PRIT Asset Class Performance Vs. Benchmark

One Year Ended December 31, 2020 (Gross of Fees)



^{*} Source: BNY Mellon. Totals may not add due to rounding. * Benchmark is actual performance. ** Hedge Funds returns are net of fees.

PRIT Fund Periodic Table of Returns by Asset Class

(Gross of Fees) as of December 31, 2020

1 Year	3 Year	5 Year	10 Year
PRIVATE EQUITY	PRIVATE EQUITY	PRIVATE EQUITY	PRIVATE EQUITY
26.4%	21.0%	20.2%	19.1%
GLOBAL EQUITY	GLOBAL EQUITY	GLOBAL EQUITY	REAL ESTATE
15.9%	9.7%	12.5%	9.7%
CORE FIXED INCOME 12.1%	CORE FIXED INCOME 7.4%	VALUE-ADDED FIXED INCOME 6.9%	GLOBAL EQUITY 9.6%
VALUE-ADDED FIXED INCOME 4.5%	REAL ESTATE 5.9%	REAL ESTATE 6.9%	VALUE-ADDED FIXED INCOME 5.7%
TIMBER 3.5%	VALUE-ADDED FIXED INCOME 4.8%	CORE FIXED INCOME 6.3%	CORE FIXED INCOME 5.5%
REAL ESTATE	TIMBER	TIMBER	TIMBER
1.1%	2.4%	4.4%	4.7%
PCS	PCS	PCS	PCS
0.8%	2.0%	3.6%	4.0%

Source: BNY Mellon. Returns as of December 31, 2020.



Organizational Updates

On January 14, 2021, Governor Baker signed into law Chapter 358 of the Acts of 2020, "An Act Enabling Partnerships for Growth". Section 14 of Chapter 358 includes a provision to increase the diversity of PRIM's investment managers and contractors to at least 20% and increase access for minorities, women, and disabled investment managers and business partners. Treasurer Goldberg strongly advocated for this initiative and worked directly with Representative Chynah Tyler and Senator Paul Feeney, who filed the bill.

We believe the new legislation is a continuation of the important diversity and inclusion work PRIM has been doing to further increase access for minorities, women, and people with disabilities. The new law sets goals and formalizes procedures and reporting requirements. PRIM is currently developing an implementation plan with David Gurtz, Deputy Chief Investment Officer, leading the effort.

The PRIM Board approved **Phillip H. Perelmuter** as the newest member of PRIM's Investment Committee at the February Board meeting. Phil, who was nominated by Treasurer Goldberg, recently retired from Wellington Management after 25 years. For 11 years, he served as one of the firm's three Managing Partners in addition to his roles as a Portfolio Manager, the Director of Investment Research, and the Head of EMEA during a 5-year assignment in London. Before joining Wellington, Phil worked in Institutional Sales at CS First Boston and as a Financial Advisor at Merrill Lynch. Phil graduated magna cum laude from Princeton University and has an M.B.A. from Harvard Business School. He has served as a member of the UK Diversity Project's CEO Advisory Board and the Advisory Committee of the Boston Latino Legacy Fund, and currently serves on the National Board of the Posse Foundation. Phil is the son of Cuban immigrants and was born and raised in the Little Havana section of Miami, Florida. He and his wife currently live in Needham and have three adult children.

Michael Bailey left PRIM at the end of January to take a position at Fidelity Investments. We wish Michael well in his new position, and we are grateful to him for his service to PRIM and the Commonwealth. While PRIM has had several strong contributors through the years, Michael's contribution to PRIM was exceptional. During his eight-year tenure at PRIM, he cemented PRIM's legacy as having the top Private Equity portfolio in the country. He is a gentleman, an exemplary employee, and role model at PRIM, and will be sorely missed.

Michael McGirr was promoted to Director of Private Equity - Senior Investment Officer to replace Michael Bailey. Michael has been an outstanding member of PRIM's Private Equity team for seven years, and we are fortunate to have such a strong member of the team to take over and ensure continuity. Michael has consistently been one of the highest-performing and most valued employees at PRIM; he is highly respected by his colleagues and the entire private equity industry. He and the team established and built a rigorous, consistent investment process to guide private equity portfolio construction and manager selection. In addition to his daily responsibilities managing some of PRIM's most important Private Equity relationships and sourcing new ideas, Michael has been leading PRIM's Private Equity's cutting-edge research. Michael also was responsible for managing Sarah Zatoonian and Eliza Haynes, two Investment Analysts on PRIM's Private Equity team, and he has mentored several PRIM summer interns.

Michael joined PRIM in April of 2014 from Bain Capital in Boston, where he was an investment manager. Prior to Bain, Michael worked at the Minnesota State Board of Investment, where he was a portfolio manager of an alternative investment portfolio with \$9 billion in assets. After graduating with a Bachelor of Science in Finance from the University of Richmond, Michael began his career as a professional baseball player where he was a pitcher in the Oakland Athletics system. He later earned a Master of Business Administration from the Johnson Graduate School of Management at Cornell University. Michael is a Chartered Financial Analyst (CFA), a member of the CFA Society Boston, and a member of the Institutional Limited Partners Association



(ILPA) Content Committee. In 2018, Treasurer Deborah Goldberg awarded Michael the Commonwealth Citation for Outstanding Performance. Michael lives with his wife and three daughters in Winchester. We congratulate Michael McGirr, and thank Michael Bailey, and wish him well.

New Employee

Shannon Ericson joined the Risk team last month as a Senior Investment Officer reporting to Jay Leu. Shannon brings to PRIM over 20 years of investment industry experience, including 15 years with LMCG Investments as a quantitative portfolio manager in developed international and emerging market equities. Prior to that, Shannon served as a quantitative analyst in international equities at Evergreen Investments and Independence International Associates. Most recently, Shannon was an asset allocation portfolio manager at Brighthouse Financial. Shannon earned a Bachelor of Science in Finance from Bentley College and an MBA from Bentley College. Shannon also holds the Chartered Financial Analyst (CFA) designation. We are very excited to have Shannon join the team.

Retirement

Paul Todisco, PRIM's legendary head of Client Services, is retiring at the end of March. Paul is a very special individual who has been dedicated to serving the public for almost forty years, including 31 years with PRIM. Paul played an integral role in developing the PRIM Board's modern client service program, including his work on the legislation that created the highly successful "Segmentation" investment program, which allowed local retirement systems to invest in the PRIT Fund's individual asset class sleeves as an alternative to investing in the total PRIT Fund. Paul also served as the Executive Director of the Health Care Security Trust, and as the Research Director and Staff Supervisor at the MA State Legislature Joint Senate and House committee on Public Service.

We will sorely miss Paul's historical knowledge of PRIM; there is simply nobody who has Paul's total recall of all facts and matters related to PRIM. He has an uncanny memory for the people, laws, events, and dates that have shaped PRIM. He is our resident historian with a steel-trap memory for all things PRIM. He also set the standard for superior client service and can often be heard saying, "if it's worth doing, it's worth doing well."

In addition to being a tremendous asset to PRIM, Paul is also an extraordinary person. He is always gracious and never loses his temper or his sense of humor. His warm and generous spirit makes everyone feel welcome and important at PRIM. His knowledge, hard work, character, charm, and integrity have helped guide us all through thick and thin.

We want to congratulate Paul on a brilliant career and thank him for his years of service, his friendship, and his total dedication to PRIM's success. We will be renaming a conference room in his honor, which will remind all those who enter to aspire to the same level of excellence that Paul did. While we are sad to say goodbye, we are very happy for Paul because the best is yet to come, and he absolutely deserves a wonderful retirement. We will all miss Paul -- very, very much.

PRIM Board Actions

Strategy Group

Research – Asset Allocation Recommendation

The PRIM Board approved the 2021 asset allocation recommendation.



PRIM's asset allocation framework seeks to identify the optimal mix of available investment strategies to maximize the probability of achieving the dual mandate (objective) of meeting the required actuarial rate of return (7.15%) with an acceptable drawdown risk (not more than 20%). PRIM's asset allocation provides approved asset class target ranges. Any actual weighting within these approved asset class target ranges is considered acceptable and within the asset allocation policy.

As shown in the table below, the 2021 asset allocation recommendation represents no major changes to our prior year's recommendation. Our recommendation includes a 1% increase in the Private Equity target range (10%-16% to 11%-17%) and a 1% decrease in the Portfolio Completion Strategies target range (8%-14% to 7%-13%). The small increase in the Private Equity range is aligned with our multi-year effort to slowly increase the allocation as Private Equity increases the probability of achieving our dual objective. The small decrease in the Portfolio Completion Strategies range reflects the practical challenge of allocating capital to this asset class.

Proposed Asset Allocation Range			
US Equity ¹	21.2%		
Int'l Equities ²	11.8%		
Emerging Int'l Equities ²	5.0%		
Hedged Equity ³	1.0%		
Global Equity		34% - 44%	
Core Bonds	7.0%		
Short-Term Fixed Income ⁴	1.0%		
20+ Yr. Treasury STRIPS	3.0%		
TIPS/ILBs	4.0%		
Core Fixed Income		12% - 18%	
Value-Added Fixed Income ⁵		5% - 11%	
Private Equity		11% - 17%	
Real Estate ⁶		7% - 13%	
Timberland ⁷		1% - 7%	
Portfolio Completion (PCS) ⁸		7% - 13%	
Total Fund Expected Return 9			

12/31/20 Asset Class Assumptions			
10 Yr. Expected Return	30 Yr. Expected Return		
5.5%	6.4%		
5.9%	6.6%		
7.6%	8.4%		
4.8%	5.7%		
1.4%	2.7%		
1.4%	2.9%		
0.4%	1.7%		
1.0%	2.1%		
4.8%	6.2%		
9.6%	10.2%		
4.8%	6.0%		
5.4%	6.6%		
4.0%	5.2%		
5.8%	6.8%		

Source: NEPC. Asset Class Assumptions.

Public Markets

Other Credit Opportunities: Berkshire Multifamily Debt Fund III

The PRIM Board approved a commitment of up to \$150 million to Berkshire Multifamily Debt Fund III (the "Fund") as part of the Other Credit Opportunities allocation. This is Berkshire's second fund of similar strategy. PRIM invested in the prior fund: Berkshire Multifamily Debt Fund II. The recommendation would upsize PRIM's commitment from \$54.5 million in the previous fund to \$150 million for the subject fund. The Fund's focus will be investments in subordinated bonds, known as B-piece bonds, of Freddie Mac multifamily loan securitizations.



Private Equity

JMI Equity Fund X, L.P.

The PRIM Board approved a commitment of up to \$100 million to JMI Equity Fund X, L.P. ("Fund X" or "JMI X"). JMI will target growth-stage companies based in North America that provide software and technology-enabled services. PRIM has invested in one prior JMI Equity ("JMI") fund. JMI is led by eight senior investment professionals with an average tenure of 17 years at the firm. Nearly all JMI's prior funds are in the first or second quartiles in Private Equity industry peer performance rankings.

Thomas H. Lee Equity Fund IX, L.P.

The PRIM Board approved a commitment of up to \$200 million to Thomas H. Lee Equity Fund IX, L.P. ("Fund IX"). PRIM has invested in seven prior Thomas H. Lee Partners ("THL") funds. THL's senior team has worked together for an average of 19 years. The firm is an established private equity manager and will primarily make investments in North American middle-market companies across the firm's core sectors of healthcare, technology & business services, and financial services.

Real Estate

The PRIM Board approved the 2021 Real Estate and Timberland Internal Management Plan.

Finance and Administration

The PRIM Board approved the 2021 custom policy enhancements to PRIM's Custom Proxy Voting Guidelines proposed by Treasurer Deborah B. Goldberg.

The Client Services team -- Francesco Daniele and Emily Green – will continue to meet with the retirement boards of PRIM's member retirement systems throughout the year. To schedule a visit, please contact Francesco at fdaniele@mapension.com, or Emily at egreen@mapension.com, or call 617-946-8401. We look forward to seeing you soon.

