

Public Agenda Item #6

Review and Discussion of Investment Performance for Second Calendar Quarter 2016

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ERS Trust Fund Dashboard

Performance

Fund	<u>CYTD</u>	<u>FYTD</u>
Performance:	1.7%	2.2%
Benchmark:	2.8%	3.7%
Excess Return:	-1.1%	-1.5%
3-Yr Tracking error	1.28	

Largest Contributors (quarter):

- Outperformance of the private equity and real estate components
- Outperformance of the absolute return portfolio

Largest Detractors (quarter):

- Underperformance of the strategies within the domestic and international equity components
- Underperformance of the global equity tactical portfolio

Profile

Market Value at 6/30/16:
\$24.7 Billion

Actuarial Accrued Liability 8/31/15:
\$33.9 Billion

Retirees and Beneficiaries 8/31/15:
100,716

Retirement Payments Annually 8/31/15:
\$2.1 Billion

ERS Trust Funding Ratio 8/31/15:
76.3%

Compliance

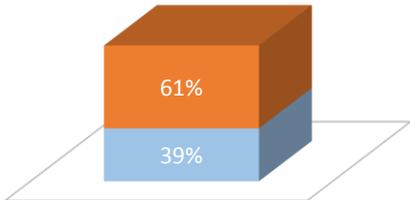
Asset Allocation Compliance: Yes

Tracking Error Compliance: Yes

Investment Policy Compliance: Yes

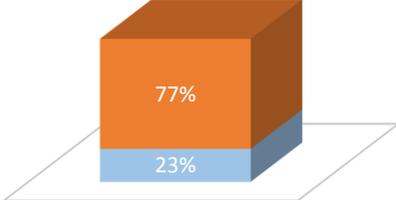
MANAGEMENT

■ External ■ Internal



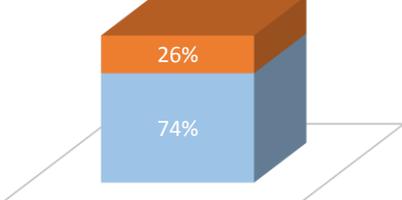
ALLOCATION

■ Risk Reducing ■ Return Seeking



LIQUIDITY

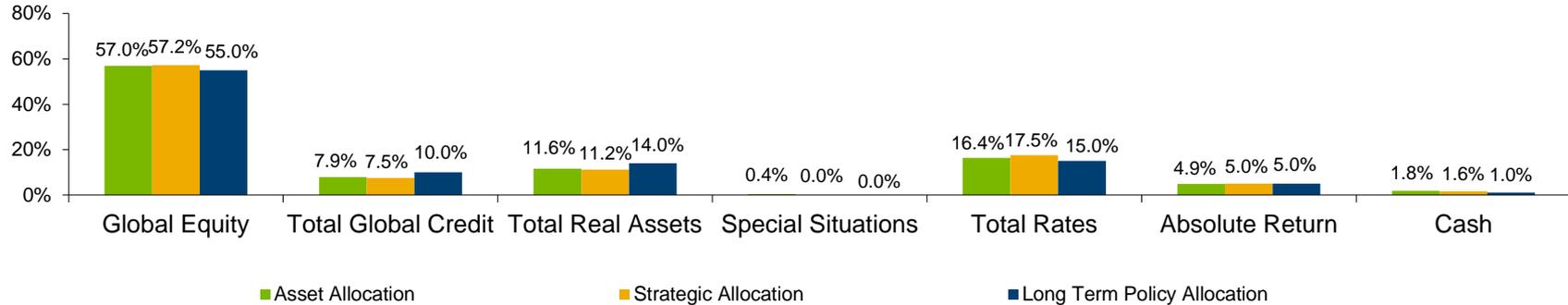
■ Liquid ■ Illiquid



Total Fund: Asset Allocation

	1 Quarter	Fiscal YTD	1 Year
Total Fund			
Beginning Market Value	24,770,637,779	25,177,941,024	25,896,309,479
+ Additions / Withdrawals	-212,054,065	-755,883,016	-967,802,640
+ Investment Earnings	126,620,704	263,146,411	-243,302,421
= Ending Market Value	24,685,204,418	24,685,204,418	24,685,204,418

Employees Retirement System of Texas - Quarterly Asset Allocation Including Risk Management vs. Policy Target as of 6/30/2016

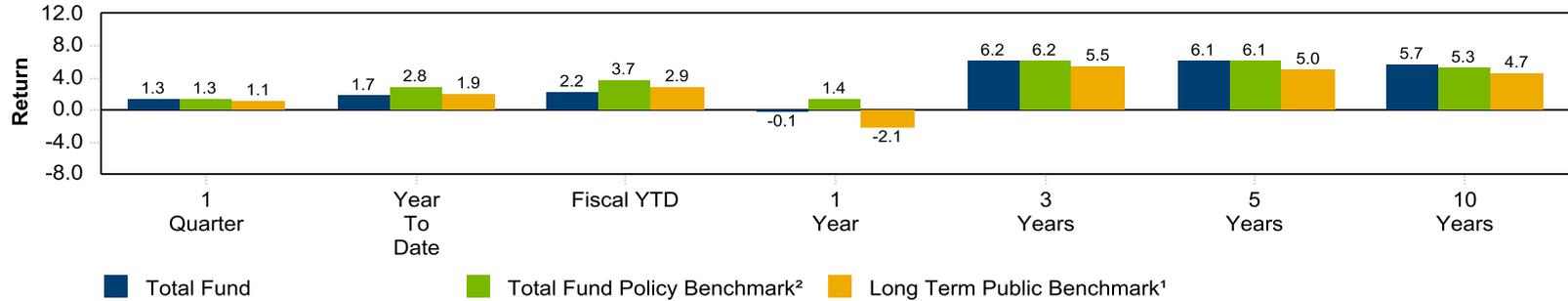


¹ All returns contained in this report are shown net of investment management fees. All returns longer than 1-year are annualized.

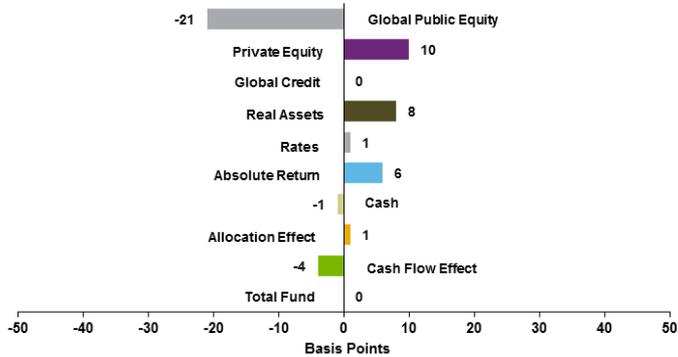
² Source data can be found on pages 5 and 14 of full report.

Total Fund: Performance

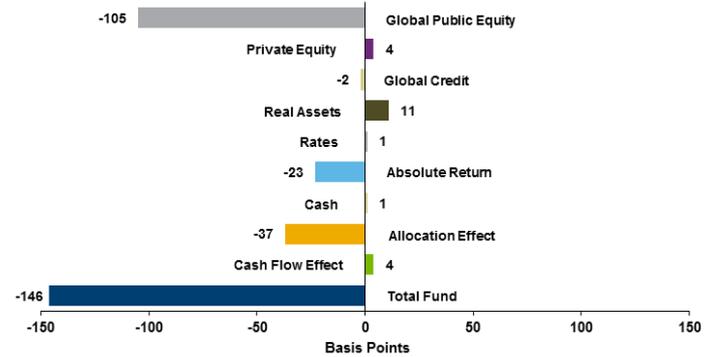
Return Summary



Total Fund Attribution Analysis
3 Months Ending 6/30/16



Total Fund Attribution Analysis
1 Year Ending 6/30/16

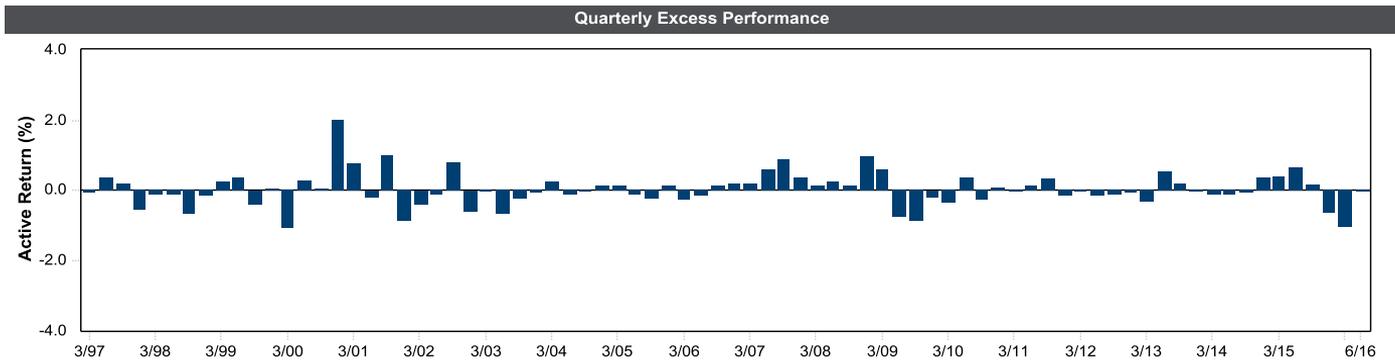
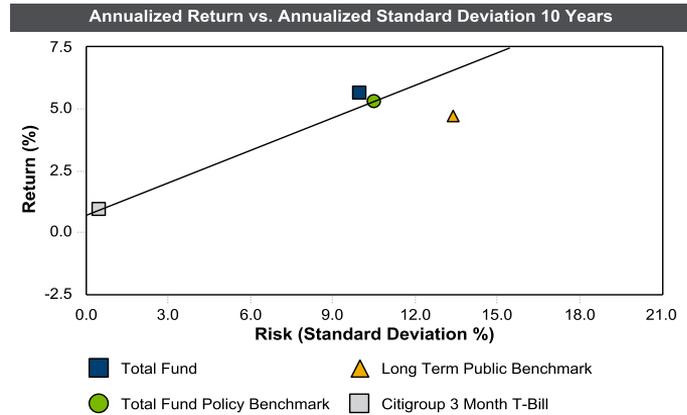
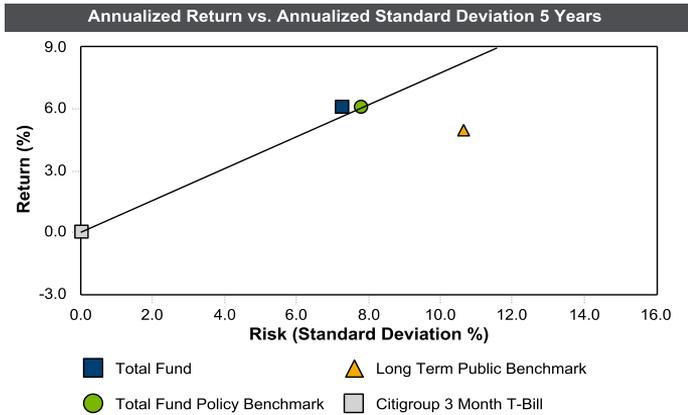


¹The Long Term Public Benchmark is a combination of 79% MSCI ACW IMI and 21% Barclays Intermediate Treasury Index.

²A detailed description of the Policy Index as of 6/30/2016 is provided in the appendix of the full report.

³Source data can be found on pages 4 and 6 of full report.

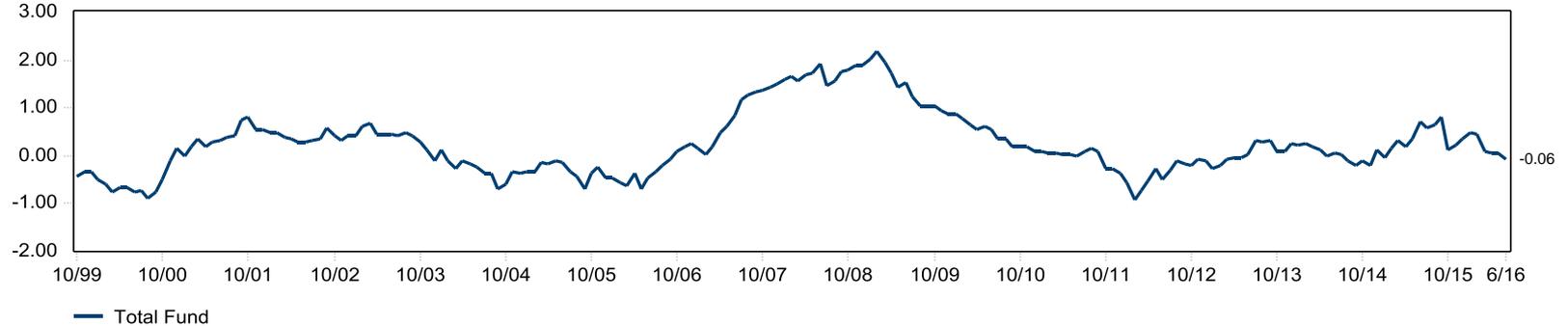
Total Fund: Risk



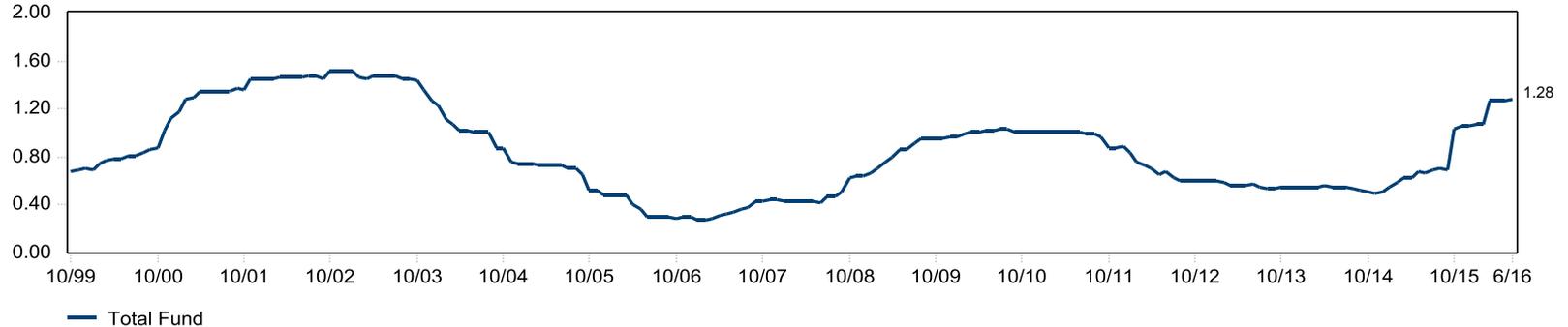
¹ Source data can be found on page 6 and 13 of full report.

Total Fund: Rolling Information Ratio and Tracking Error (36 months)

Information Ratio (Excess Return Ratio)¹



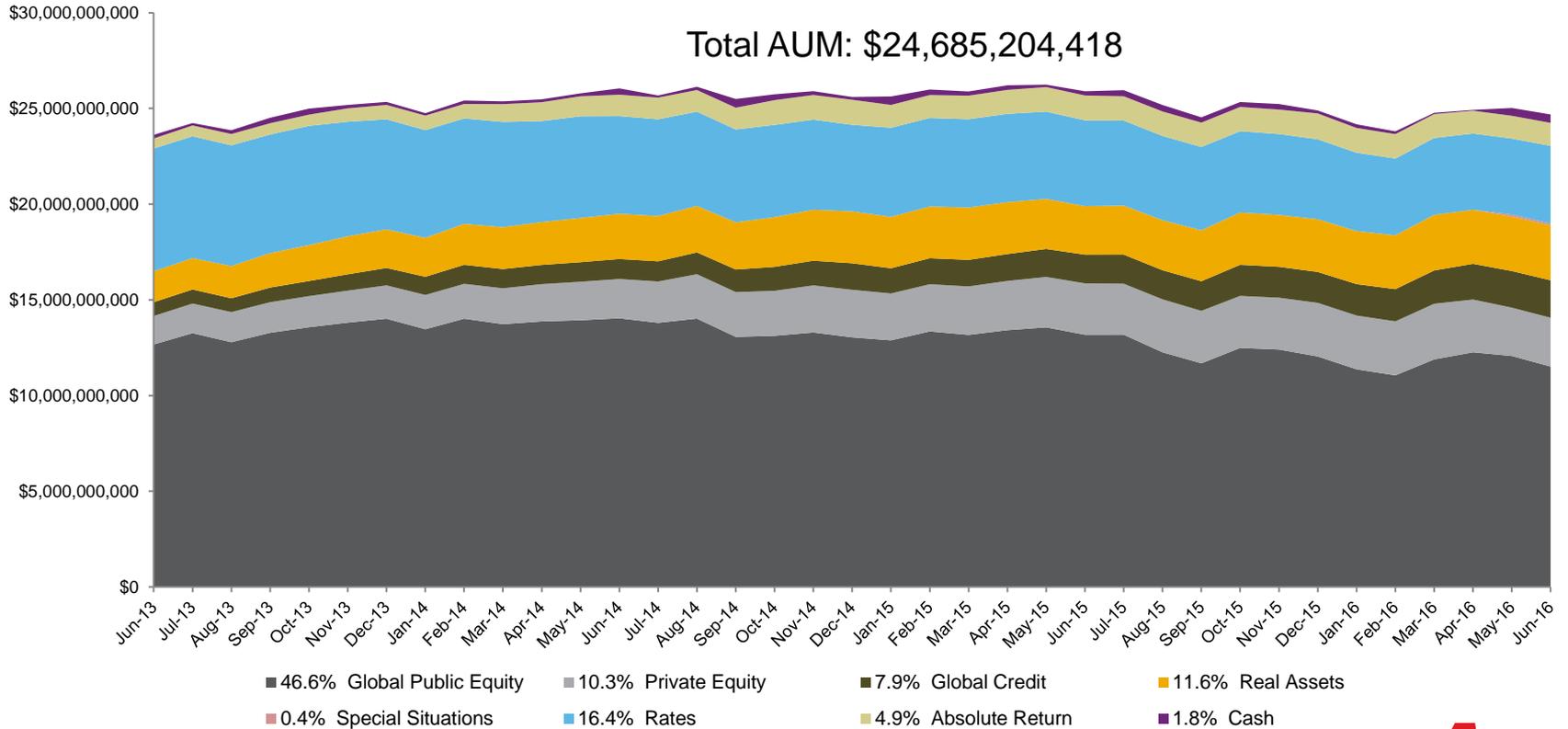
Tracking Error²



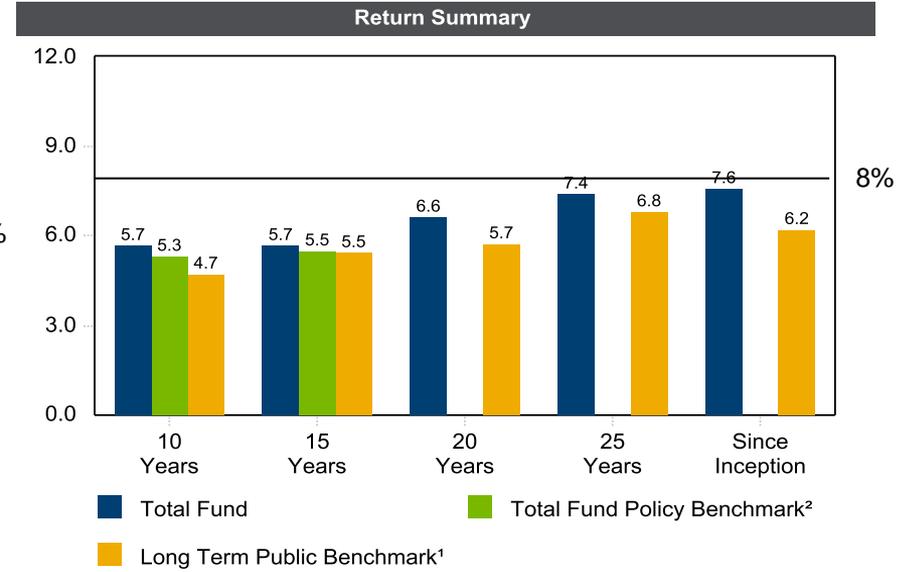
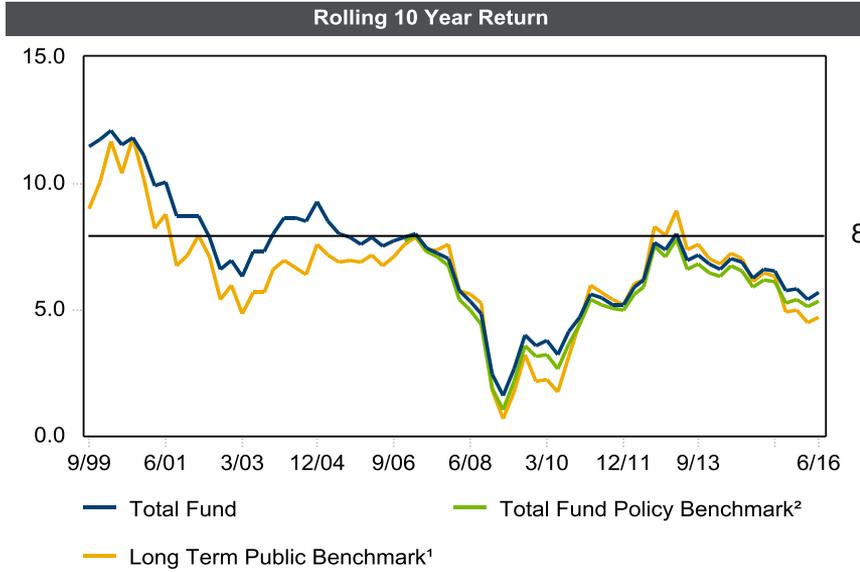
¹ Measured by dividing the active rate of return by the tracking error. The higher the Information Ratio, the more value-added contribution by the manager.

² A measure of the standard deviation of a portfolio's performance relative to the performance of an appropriate market benchmark.

ERS Asset Allocation Evolution



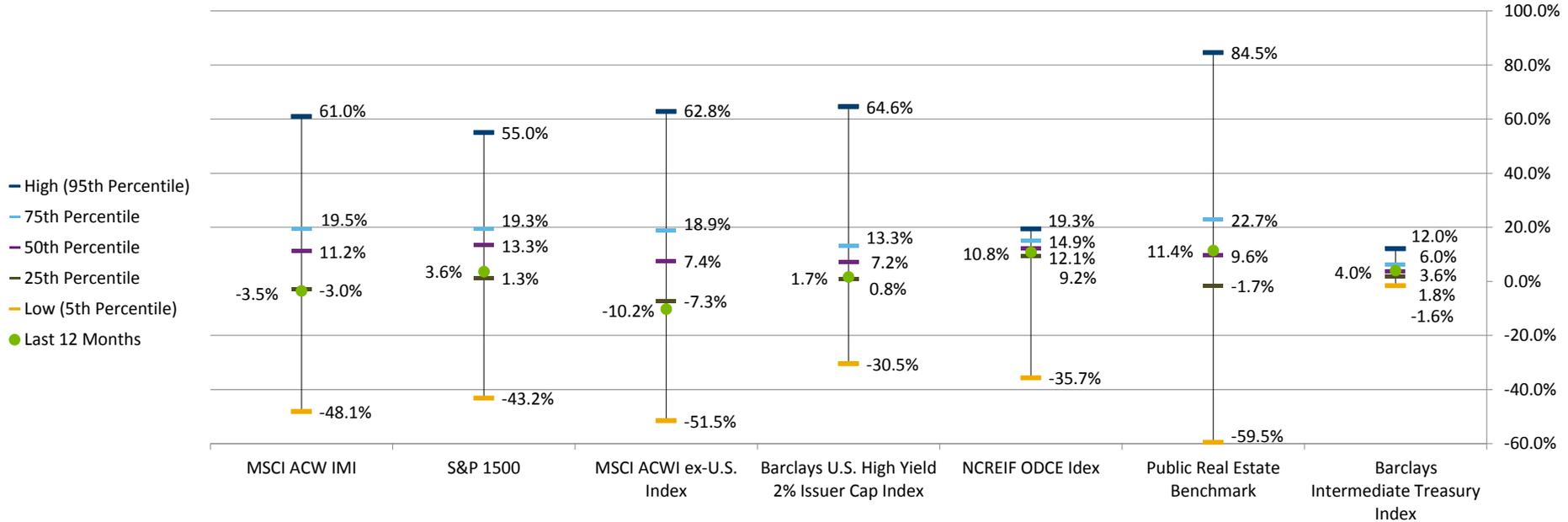
Long Term Investment Results



¹The Long Term Public Benchmark is a combination of 79% MSCI ACW IMI and 21% Barclays Intermediate Treasury Index.

²The Total Fund Policy Benchmark has an inception date of 11/30/1996.

Rolling 12-Month Capital Market Returns (10 Years ending 6/30/16)



- The chart above depicts the dispersion of rolling 12 month returns of various capital markets over the last 10 years.

Brexit



Post Brexit: 5 business days (June 24 – 30)

Equity market indices (local currency)					Currencies & Commodities		
Region	Index	% Change	Index	% Change	Currency	Rate	% Change
UK	FTSE 100	3%	FTSE 250	-6%	\$ per €	1.11	-2%
Americas	US (DJIA)	-1%	US (Nasdaq)	-2%	\$ per £	1.34	-10%
	Canada	0%	Brazil	0%	£ per €	0.83	8%
Europe	Germany	-6%	France	-5%	Yen per \$	103	-3%
	Spain	-8%	Italy	-10%	Sfr per €	1.08	0%
	Ireland	-11%	Netherlands	-3%	Oil WTI \$	49	-3%
	Sweden	NaN%	Switzerland	0%	Gold \$	1,321	4%
RoW	Japan	-4%	Hong Kong	-2%	Key to Changes		
	China	2%	South Korea	-1%	Price s		
	Australia	-1%	South Africa	-3%	Fall > 5% pa		
Global	FTSE All World \$	-2%	FTSE Multinational	-2%	Fall of 5% or less		
					Increase		
					Source: Financial Times		
					NaN%: Not published		

Summary Analysis

- Public equity underperformance has been the largest detractor from Total Fund results during the trailing 12 month period.
 - Public equity accounted for 105 bps of Total Fund underperformance of -146 bps.
 - Over the trailing 12 months ending December 2015, the S&P 1500 outperformed 75% of the managers in the active management universe (SPIVA® U.S. Scorecard).
- Actual allocations continue to be in line with the strategic targets and are substantially on their way to the long-term policy targets set in the 2012 asset liability study.
- Longer term investment results have been positive, the Total Fund has produced nominal and risk adjusted returns superior to the benchmark and the Long Term Public Benchmark over the five and ten year period.
- The Total Fund has also meaningfully outperformed the Long Term Public Benchmark over all longer-term trailing periods.
- Diversification has been effective, the Total Fund Policy Benchmark has produced a return superior to the Long Term Public Benchmark at a meaningfully lower level of risk (volatility) over the trailing five and ten year period.

Questions?