

Lenwood Volatility Control Index

Quarterly Performance Report

December 31, 2016



INDEX METHODOLOGIES

Index Methodologies, LLC

Executive Summary

- The fourth quarter of 2016 was a period of rising interest rates in anticipation of the “prospects of corporate tax changes, fiscal stimulus and new trade policy”¹ from the U.S. election results, and the U.S. Federal Reserve finally raised interest rates at its December 2016 meeting. U.S. equity markets turned in good to mixed results for the quarter depending on the benchmark.
- 2016 was a year marked by :
 - 1Q16: Global recession fears, particularly in China, differing global quantitative easing approaches, “Steep drop then sharp rally in risk assets”²
 - 2Q16: “Weak, gradually steadying global economy “², Brexit concerns, Fed rate hikes pushed further out the calendar, volatile financial markets
 - 3Q16: Good economic signals in U.S., U.K., EU and China, quantitative easing’s effectiveness being questioned worldwide, risk asset prices recover
 - 4Q16: “Acceleration in global economic growth”², U.S. elections cause a paradigm shift in outlook, bond yields surge, U.S. dollar increases
- For the fourth quarter of 2016, the Lenwood Volatility Control Index strategy missed out on the strong November equities’ rally as the index was defensively postured from the October equities’ downturn. U.S. Treasury fixed income indices were each negative performers for the entire fourth quarter. As a result, the Lenwood index was down -1.66% for the quarter while the S&P 500 was up 3.82%.
- The Lenwood Volatility Control Index’s 100% rules-based relative strength methodology structures the monthly portfolios according to multiple moving average performance calculations. To that end, the index can occasionally be positioned with more volatile equity portfolios when that asset class suffers downturns. If those downturns are severe enough, the index can be positioned defensively with fixed income and cash asset holdings. Therefore, the Lenwood index missed out on strong equity gains in March, July and November while the portfolio was positioned defensively.
 - **Lenwood Volatility Control Index performance for 2016: -1.66%**
 - **Benchmark 1: S&P 500 Total Return Index for 2016: 11.96%**
 - **Benchmark 2: SPTR (50% Equities) & BCEU1T (50% Fixed Income) for 2016: 7.10%**

Sources: MassMutual Funds “Q4 2016 Markets Review”¹, Fidelity Investments’ “Fourth Quarter 2016 Quarterly Market Update”², JPMorgan “Market Insights: Guide to the Markets”³ as of 12/31/16, U.S. Department of Commerce Bureau of Economic Analysis website, Bloomberg News

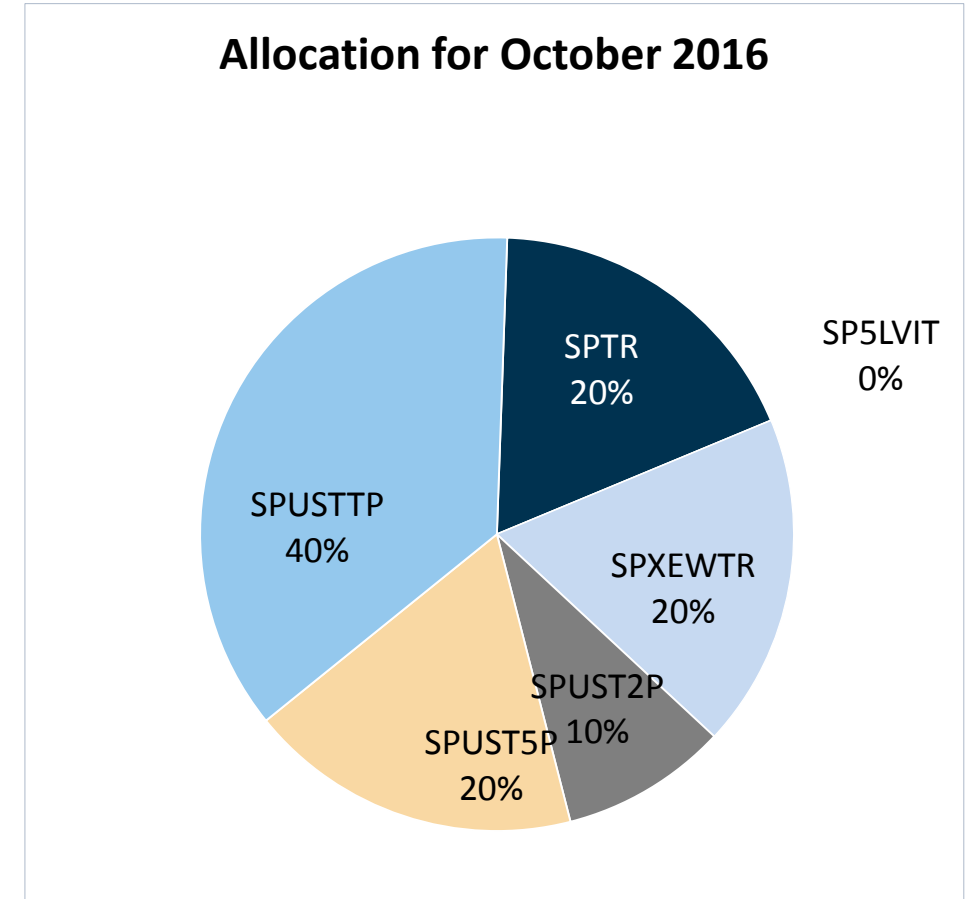
LVCI Constituents for Oct 2016

Universe of LVCI Constituents

Underlying Index	Bloomberg Ticker
S&P 500 Total Return Index	SPTR Index
S&P 500 Low Volatility Total Return Index	SP5LVIT Index
S&P 500 Equal Weight Total Return Index	SPXEWTR Index
S&P 2-Yr U.S. Treasury Note Futures Index ER	SPUST2P Index
S&P 5-Yr U.S Treasury Note Futures Index ER	SPUST5P Index
S&P 10-Yr U.S. Treasury Note Futures Index ER	SPUSTTP Index

Top Four LVCI Constituents with Non-Zero Weight

Rank of Relative Strength	Bloomberg Ticker
1	SPUSTTP Index
2	SPUST5P Index
3	SPXEWTR Index
4	SPUST2P Index



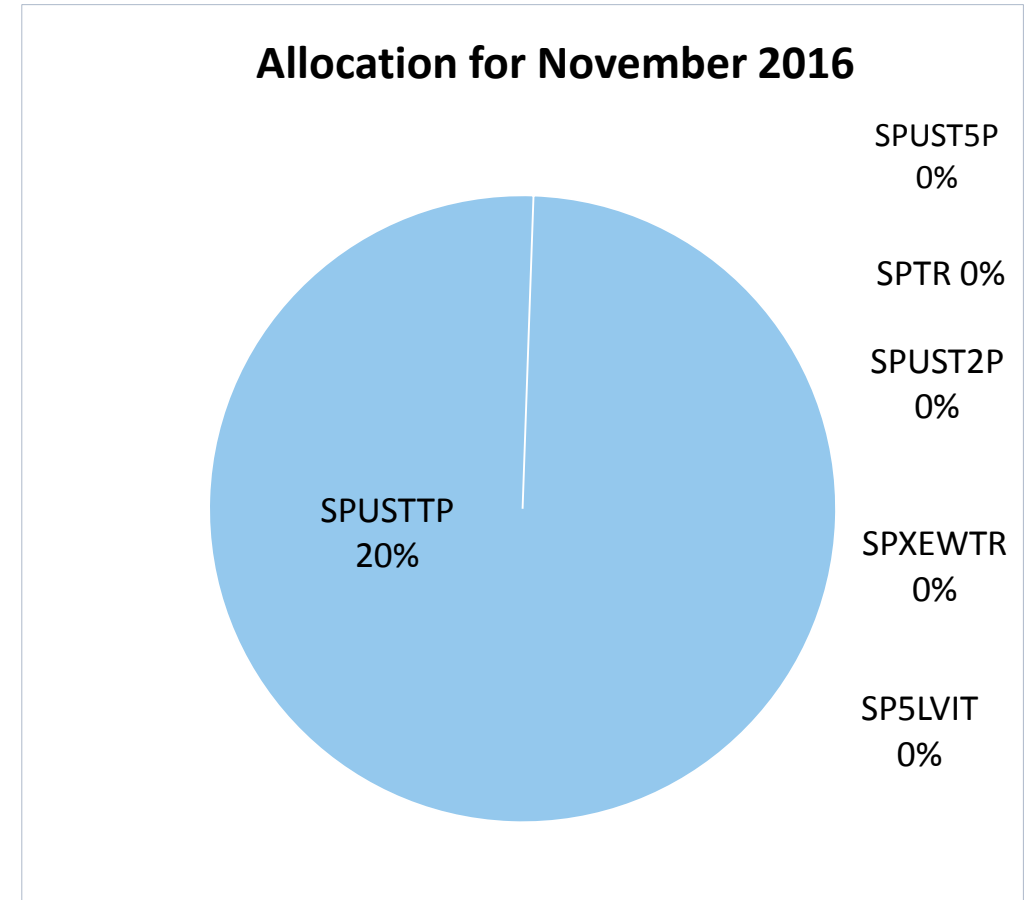
LVCI Constituents for Nov 2016

Universe of LVCI Constituents

Underlying Index	Bloomberg Ticker
S&P 500 Total Return Index	SPTR Index
S&P 500 Low Volatility Total Return Index	SP5LVIT Index
S&P 500 Equal Weight Total Return Index	SPXEWTR Index
S&P 2-Yr U.S. Treasury Note Futures Index ER	SPUST2P Index
S&P 5-Yr U.S Treasury Note Futures Index ER	SPUST5P Index
S&P 10-Yr U.S. Treasury Note Futures Index ER	SPUSTTP Index

Top Four LVCI Constituents with Non-Zero Weight

Rank of Relative Strength	Bloomberg Ticker
1	-
2	-
3	-
4	-



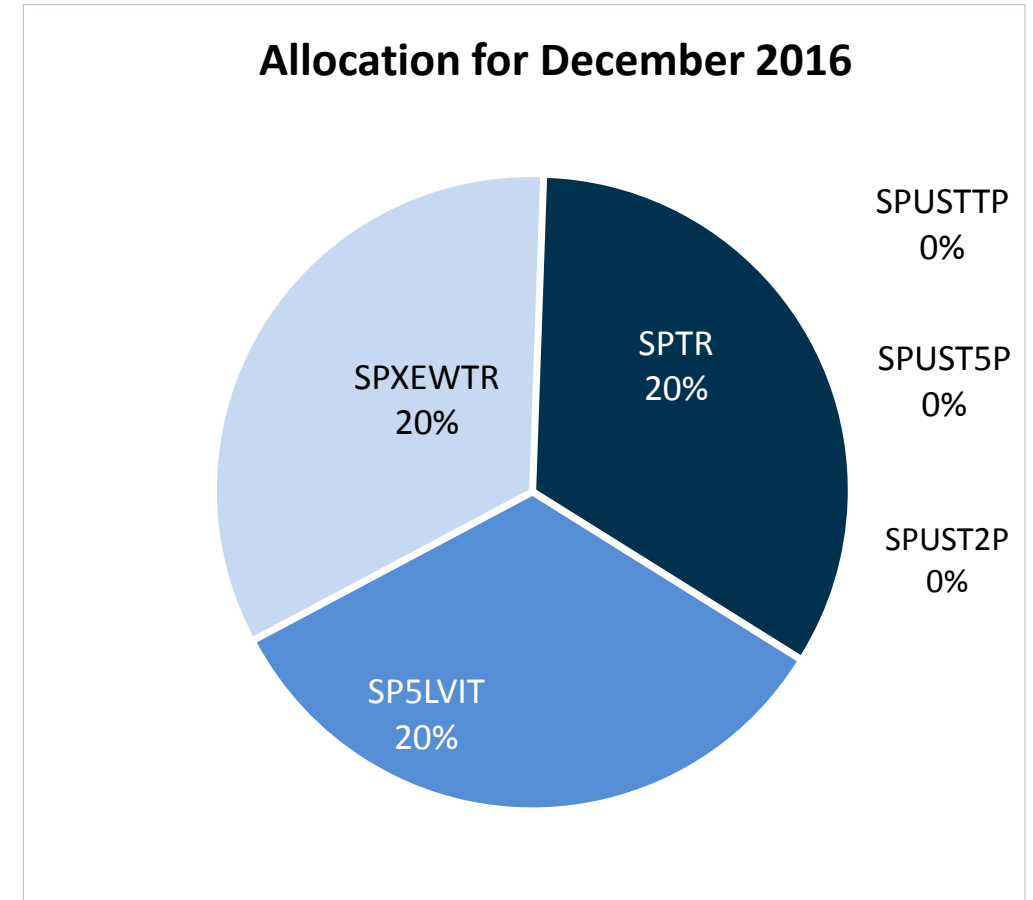
LVCI Constituents for Dec 2016

Universe of LVCI Constituents

Underlying Index	Bloomberg Ticker
S&P 500 Total Return Index	SPTR Index
S&P 500 Low Volatility Total Return Index	SP5LVIT Index
S&P 500 Equal Weight Total Return Index	SPXEWTR Index
S&P 2-Yr U.S. Treasury Note Futures Index ER	SPUST2P Index
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S&P 10-Yr U.S. Treasury Note Futures Index ER	SPUSTTP Index

Top Four LVCI Constituents with Non-Zero Weight

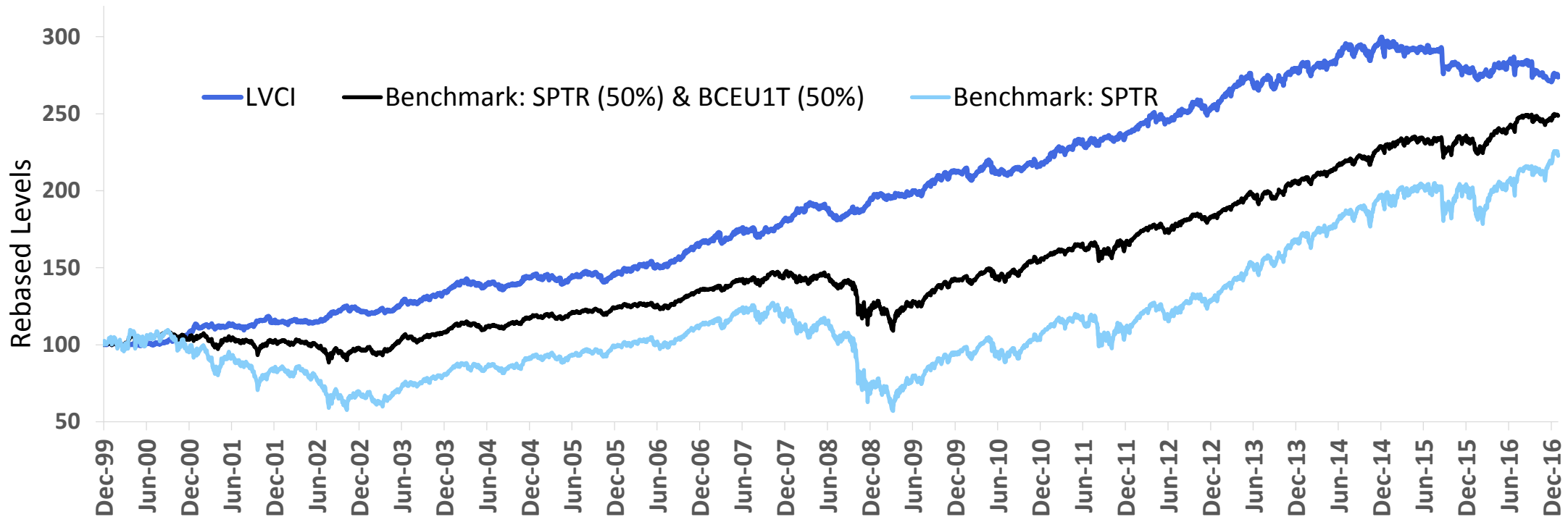
Rank of Relative Strength	Bloomberg Ticker
1	SPXEWTR Index
2	SPTR Index
3	SP5LVIT Index
4	-



Historical Performance of LVCI vs. Benchmarks

(December 01, 1999 – December 30, 2016)*

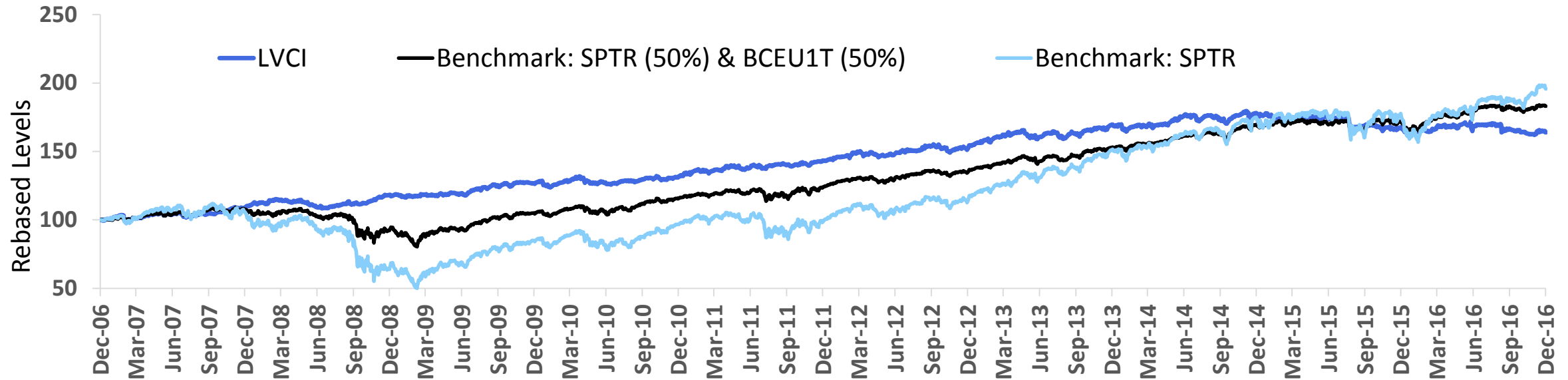
	Annualized Return	Standard Deviation	Sharpe Ratio	Crisis drawdown (Oct 2007 to Oct 2008)
LVCI	6.07%	5.98%	1.02	-5.99%
Benchmark: SPTR (50%) & BCEU1T (50%)	5.47%	9.29%	0.59	-20.90%
Benchmark: SPTR	-11.27%	71.12%	-0.16	-44.55%



*Simulated performance period: December 01, 1999 to May 27, 2014; Actual performance period: May 28, 2014 onwards

10 Years Performance of LVCI vs. Benchmarks

(December 30, 2006 – December 30, 2016)*



Returns for the period ending December 30, 2016**					
	MTD	QTD	YTD	One year	Since inception*
LVCI	0.92%	-1.45%	-1.66%	-1.98%	6.07%
Benchmark: SPTR (50%) & BCEU1T (50%)	0.94%	0.22%	7.10%	6.71%	5.47%
Benchmark: SPTR	1.98%	3.82%	11.96%	10.91%	4.79%

*Simulated performance period: December 01, 1999 to May 27, 2014; Actual performance period: May 28, 2014 onwards

**Returns for MTD, QTD, YTD and One year; Annualized returns for the period 'Since Inception'

Performance: LVCI vs. Constituents



X METHODOLOGIES

Historical Performance for the Period: December 01, 1999 – December 30, 2016*				
	Annualized Return	Standard Deviation	Sharpe Ratio	Crisis drawdown (Oct 2007 to Oct 2008)
LVCI	6.07%	5.98%	1.02	-5.99%
SPTR	4.79%	19.82%	0.24	-44.55%
SP5LVIT	9.56%	14.54%	0.66	-31.38%
SPXEWTR	8.95%	21.18%	0.42	-48.42%
SPUST2P	1.46%	1.60%	0.91	-2.36%
SPUST5P	3.22%	4.05%	0.80	-5.06%
SPUSTTP	4.40%	6.25%	0.70	-5.95%

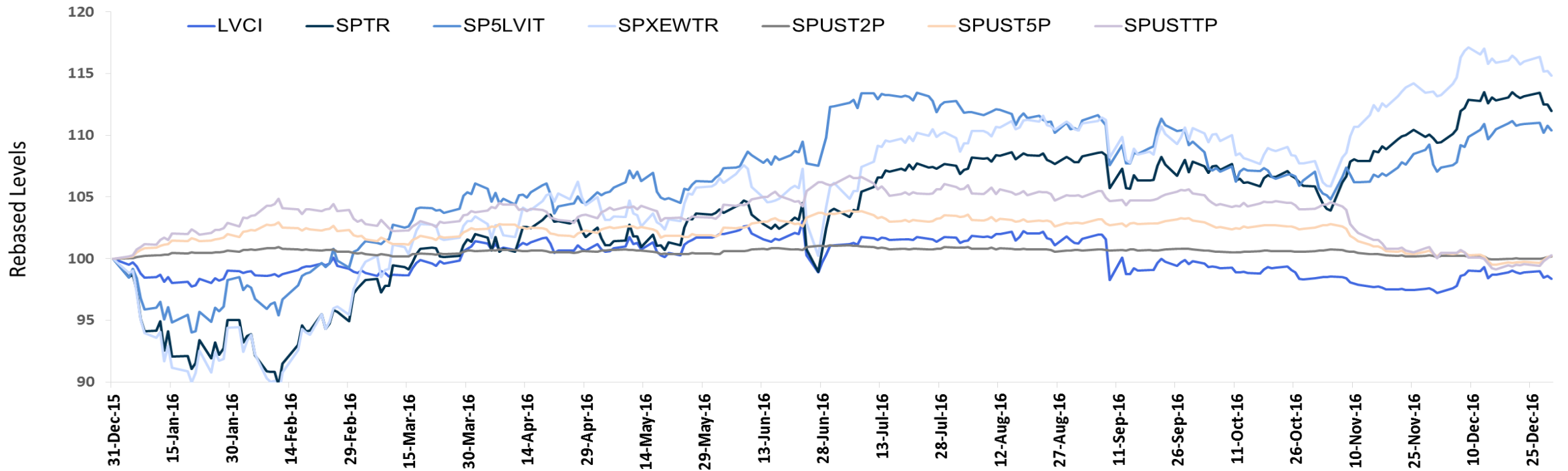
Returns for the period ending December 30, 2016**					
	MTD	QTD	YTD	One year	Since Inception*
LVCI	0.92%	-1.45%	-1.66%	-1.98%	6.07%
SPTR	1.98%	3.82%	11.96%	10.91%	4.79%
SP5LVIT	2.57%	0.80%	10.37%	9.17%	9.56%
SPXEWTR	1.12%	3.83%	14.80%	14.01%	8.95%
SPUST2P	-0.05%	-0.59%	0.16%	0.18%	1.46%
SPUST5P	-0.16%	-2.78%	0.24%	0.37%	3.22%
SPUSTTP	-0.19%	-4.72%	0.29%	0.53%	4.40%

*Simulated performance period: December 01, 1999 to May 27, 2014; Actual performance period: May 28, 2014 onwards

**Returns for MTD, QTD, YTD and One year; Annualized returns for the period 'Since Inception'

1 Year Performance of LVCI vs. Constituents

(December 30, 2015 – December 30, 2016)



Disclaimer

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Performance

Simulated Operating History

The Index will be first calculated on a live basis on or around the Live Date and therefore lacks actual historical performance. The Calculation Agent and the Sponsor have retrospectively calculated the closing levels of the Index from the Base Date to but excluding the Live Date. However, because the Index will not be calculated before the Live Date, all such retrospective closing levels are simulated and must be considered hypothetical and illustrative only.

Simulated data prior to the Live Date may be constructed using certain procedures that vary from the procedures used to calculate the Index following its establishment and on the basis of certain assumptions that may not apply in the future. Although these assumptions are considered reasonable or necessary, the variations used in producing simulated historical data from those used to calculate the Index going forward could produce variations in returns of indeterminate direction and amount.

In particular, simulated history for the period from December 31, 1991 to one day prior to Live Date was constructed in two parts: from December 31, 1991 to December 1, 1999 bond futures with Bloomberg tickers TU1 Comdty, FV1 Comdty and TY1 comdty are used. To make the simulated history more representative, from December 2, 1999 to one day prior to Live Date, S&P excess return bond indices with Bloomberg tickers SPUST2P Index, SPUST5P Index, and SPUSTTP Index are used. December 1, 1999 is the earliest date for which S&P excess return indices are available.

To generate live Index Levels US Treasury Note Futures indices with Bloomberg tickers SPUST2P Index, SPUST5P Index, and SPUSTTP Index shall be used as the underlyings.

The actual performance of the Index may be materially different from the results presented in any Simulated Operating History relating to the Index. Past performance should not be considered indicative of future performance.

Future Index Performance

No assurance can be given that the strategies employed by the Calculation Agent and/or the Sponsor will be successful or that the return on the Index, as demonstrated by the Simulated Operating History, will continue in the future. The Simulated Operating History should not be considered indicative of future performance of the Index as markets are unpredictable.

There can be no assurance that the Index will generate positive returns or outperform any benchmark index or alternative strategy.

For the period using Bloomberg rolled futures, the following Bloomberg settings are used: Prices “Ratio”, Adjusted “2”, Days “Relative to First Notice”.



LVCI Methodology

