

# Lenwood Volatility Control Index

Quarterly Performance Report

December 31, 2017



INDEX METHODOLOGIES

Index Methodologies, LLC

# Executive Summary

- The U.S. Gross Domestic Product (GDP) for the third quarter of 2017 “increased at an annual rate of 3.2%”<sup>1</sup> and was “better-than-expected”<sup>5</sup>, noted as the “second consecutive quarter over 3.0%”<sup>1</sup>. “Bloomberg economists’ consensus forecast for fourth quarter GDP stood at 2.7%”<sup>1</sup> while we await economic data from the fourth quarter but encouraging news on consumer spending has emerged already that indicates “the strongest increase in holiday retail sales since 2011”.<sup>1</sup>
- The U.S. economic environment and performance has been described as a “Goldilocks” scenario by numerous market commentators. The fourth quarter presented “robust corporate earnings, particularly from the technology sector”<sup>5</sup>. Fidelity Investments speaks of the “Most Synchronized Global Expansion in Years”<sup>2</sup> noting that “Low-Volatility Fundamentals Created Ideal Market Backdrop”<sup>2</sup>. Regarding the business cycle aspect, Fidelity pinpoints that the “U.S. Economy a Mix of Mid- and Late-Cycle Dynamics”<sup>2</sup>. The December federal tax cut legislation is expected to add “0.25-0.50%”<sup>1</sup> to 2018 GDP forecasts. Labor markets continue to tighten with wage increases mounting – all indicative of building inflation expectations.
- This economic backdrop set the stage for robust U.S. equity markets’ performance whereby the S&P 500 (including dividends) increased 6.64% for the quarter while finishing the year up 21.83%. Bonds, meanwhile, increased 0.4% as measured by the Bloomberg Barclays U.S. Aggregate Bond Index for the quarter while finishing the year up 3.5%.
- The Lenwood Volatility Control Index strategy also experienced robust performance of 6.05% for the quarter and rounded out 2017 up 15.47%. The monthly systematic portfolios were dominated by equities (80% in October, 90% in both November and December). The index continues to be a top-quartile performer in the U.S. fixed index annuity industry in 2017.

Sources: LPL Research’s “Market Insight Quarterly” as of 1/11/18<sup>1</sup>, Fidelity Investments’ “Fourth Quarter 2017 Quarterly Market Update”<sup>2</sup>, JPMorgan “Market Insights: Guide to the Markets”<sup>3</sup> as of 12/31/17, “Quarter-End Insight: Morningstar’s Take on the Fourth Quarter” as of 1/2/18<sup>4</sup>, Schroder Investment Management’s “Quarterly Markets Review – Q4 2017”<sup>5</sup>, U.S. Department of Commerce Bureau of Economic Analysis website.

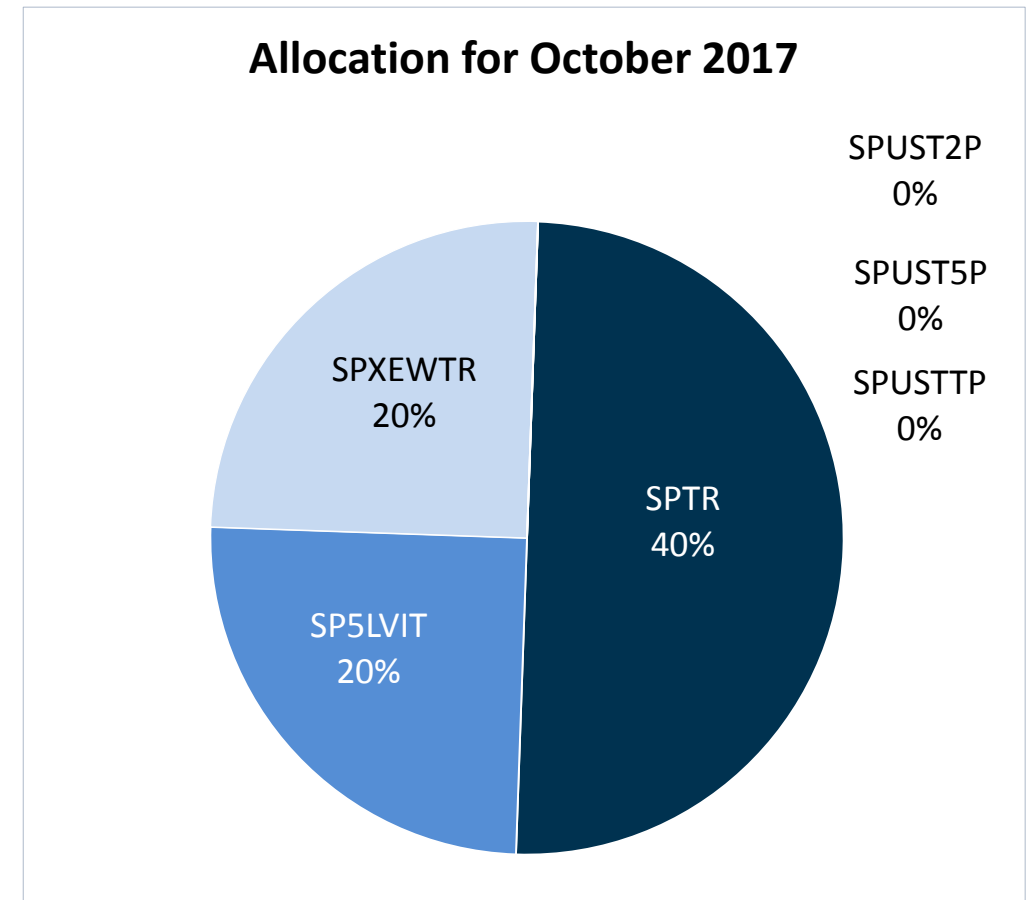
# LVCI Constituents for October 2017

## 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	SPTR Index
2	SPXEWTR Index
3	SP5LVIT Index
4	-



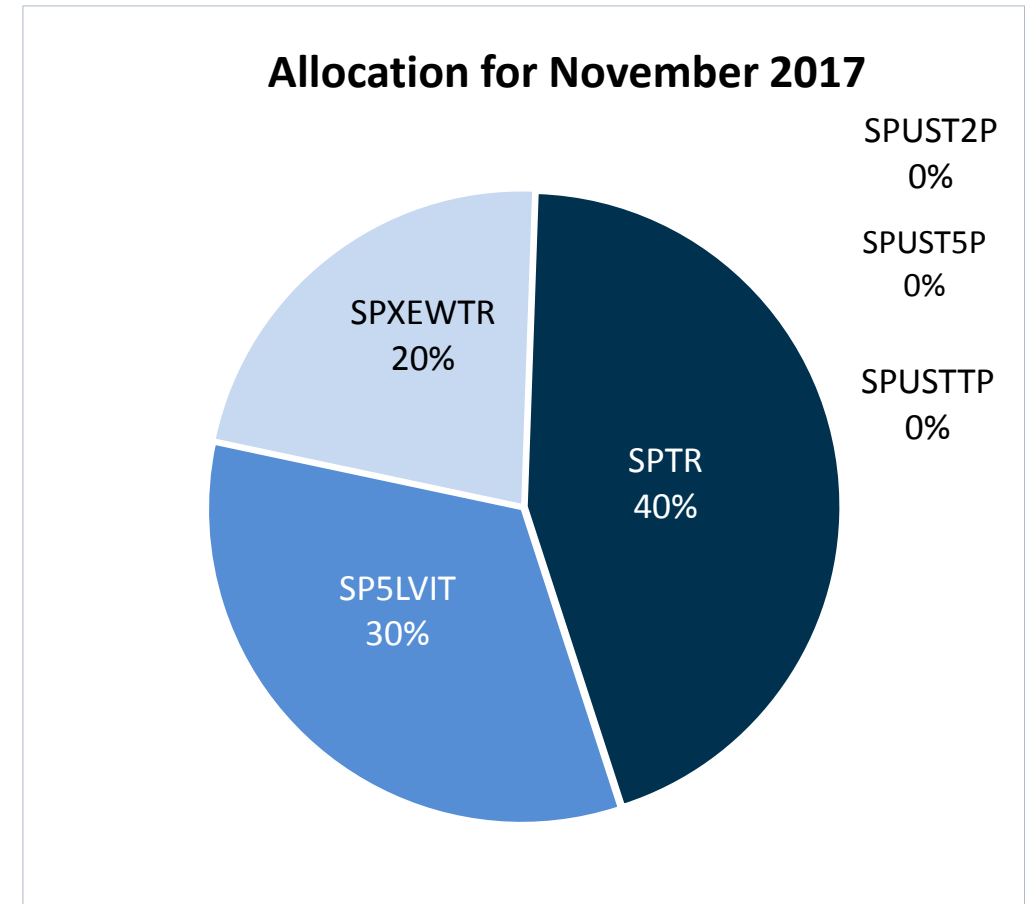
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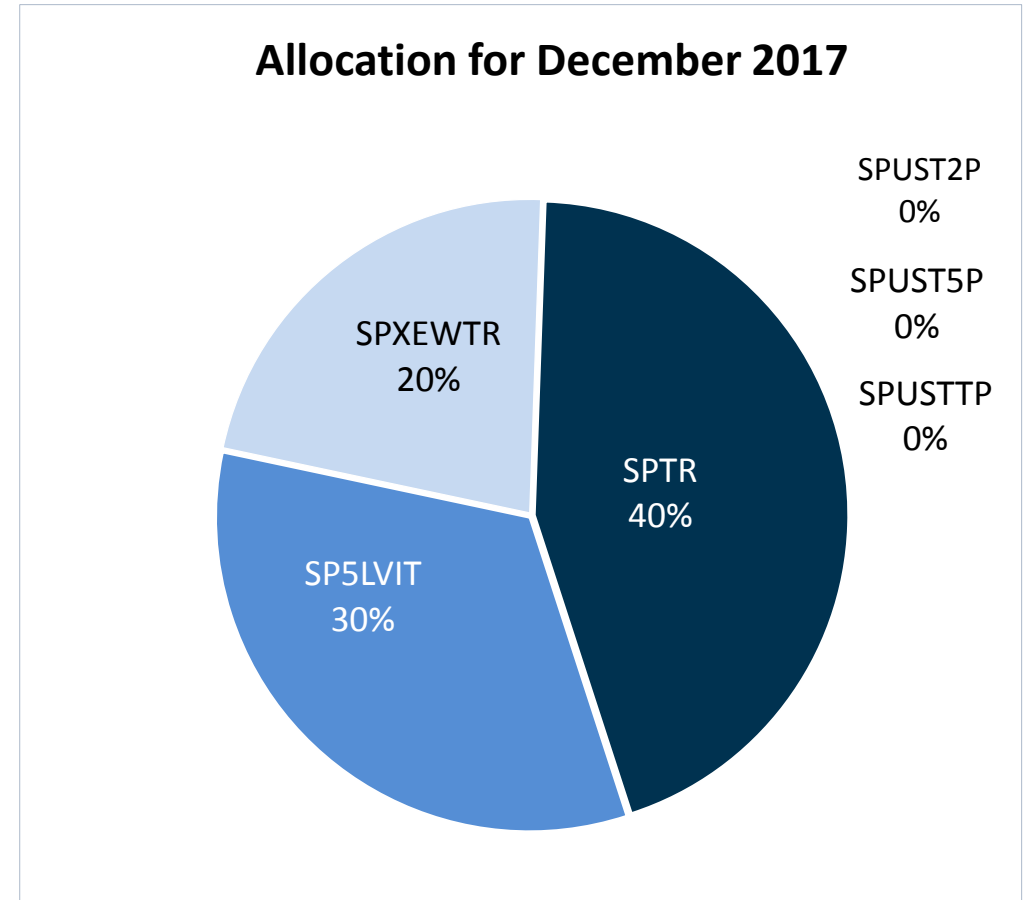
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## Top Four LVCI Constituents with Non-Zero Weight

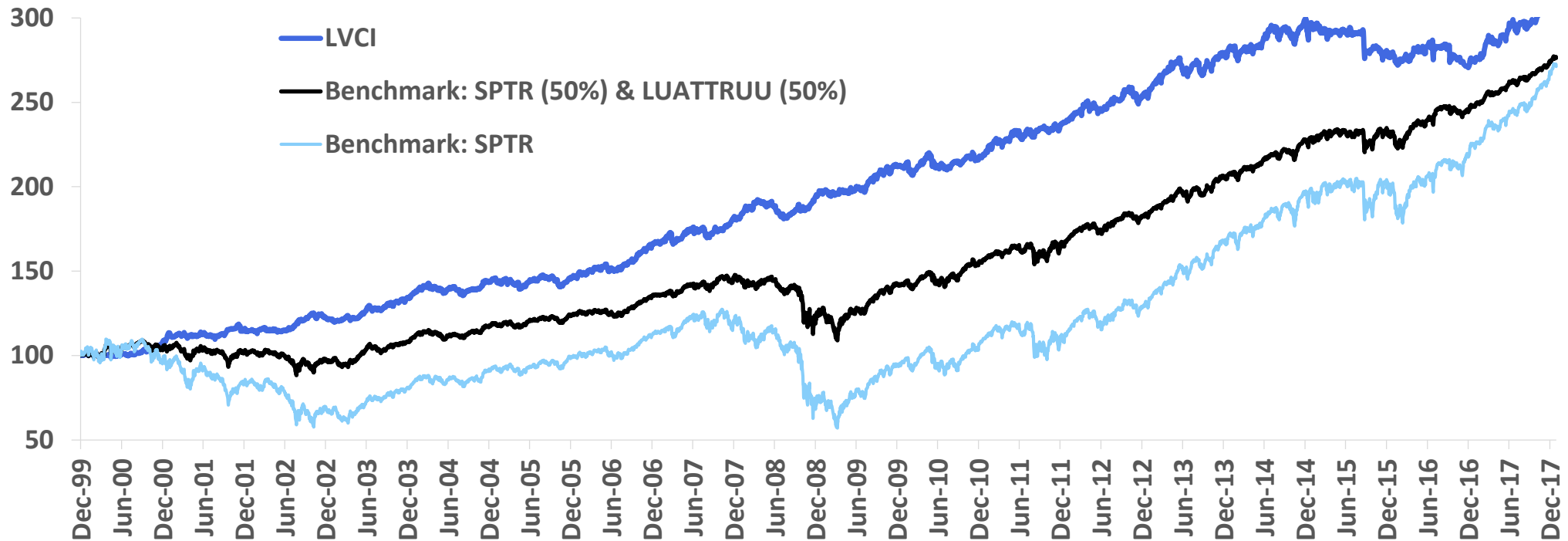
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## Historical Performance of LVCI vs. Benchmarks

(December 01, 1999 – December 29, 2017)\*

	Annualized Return	Standard Deviation	Sharpe Ratio	Crisis drawdown (Oct 2007 to Oct 2008)
LVCI	6.57%	5.95%	1.10	-5.99%
Benchmark: SPTR (50%) & LUATTRUU (50%)	5.78%	9.08%	0.64	-20.93%
Benchmark: SPTR	5.67%	19.32%	0.29	-44.55%

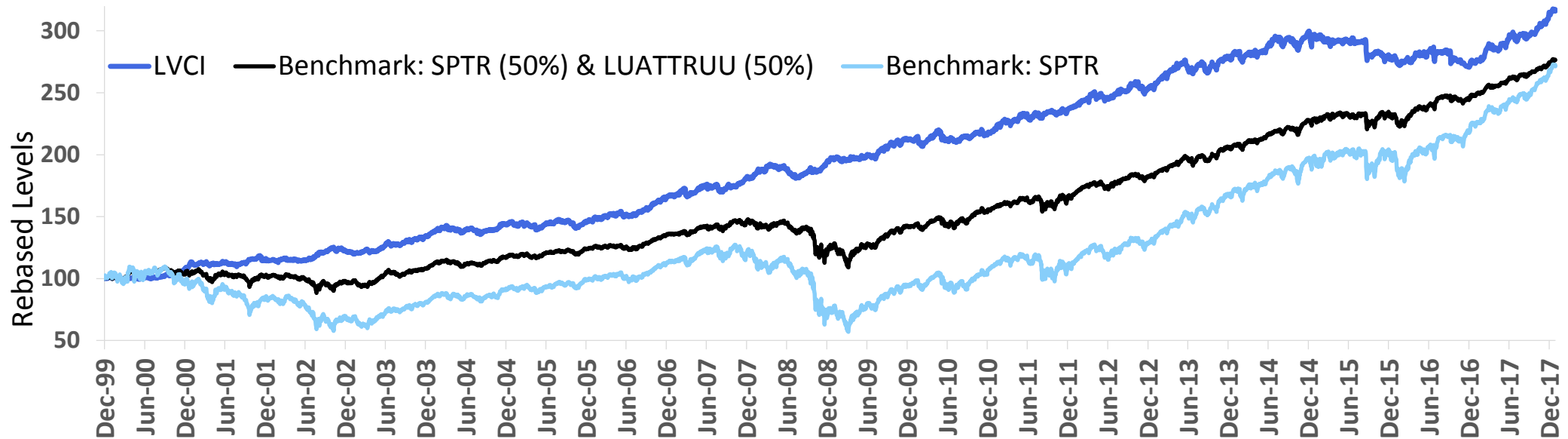


\*Simulated performance period: December 01, 1999 to May 27, 2014; Actual performance period: May 28, 2014 onwards

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# 10 Years Performance of LVCI vs. Benchmarks

(December 31, 2007 – December 29, 2017)\*



Returns for the period ending December 29, 2017**					
	MTD	QTD	YTD	One year	Since inception*
LVCI	0.32%	6.05%	15.47%	15.19%	6.57%
Benchmark: SPTR (50%) & LUATTRUU (50%)	0.71%	3.31%	11.74%	11.61%	5.78%
Benchmark: SPTR	1.11%	6.64%	21.83%	21.27%	5.67%

\*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



Historical Performance for the Period: December 01, 1999 – December 29, 2017*					
	Annualized Return	Standard Deviation	Sharpe Ratio	Crisis drawdown (Oct 2007 to Oct 2008)	
LVCI	6.57%	5.95%	1.10	-5.99%	
SPTR	5.67%	19.32%	0.29	-44.55%	
SP5LVIT	9.98%	14.19%	0.70	-31.38%	
SPXEWTR	9.48%	20.65%	0.46	-48.42%	
SPUST2P	1.35%	1.57%	0.86	-2.36%	
SPUST5P	3.03%	3.97%	0.76	-5.06%	
SPUSTTP	4.21%	6.14%	0.69	-5.95%	

Returns for the period ending December 29, 2017**						
	MTD	QTD	YTD	One year	Since Inception*	
LVCI	0.32%	6.05%	15.47%	15.19%	6.57%	
SPTR	1.11%	6.64%	21.83%	21.27%	5.67%	
SP5LVIT	-1.12%	4.65%	17.41%	16.99%	9.98%	
SPXEWTR	1.18%	6.22%	18.90%	18.46%	9.48%	
SPUST2P	-0.13%	-0.56%	-0.52%	-0.49%	1.35%	
SPUST5P	-0.16%	-0.98%	-0.15%	-0.01%	3.03%	
SPUSTTP	0.00%	-0.82%	0.87%	1.15%	4.21%	

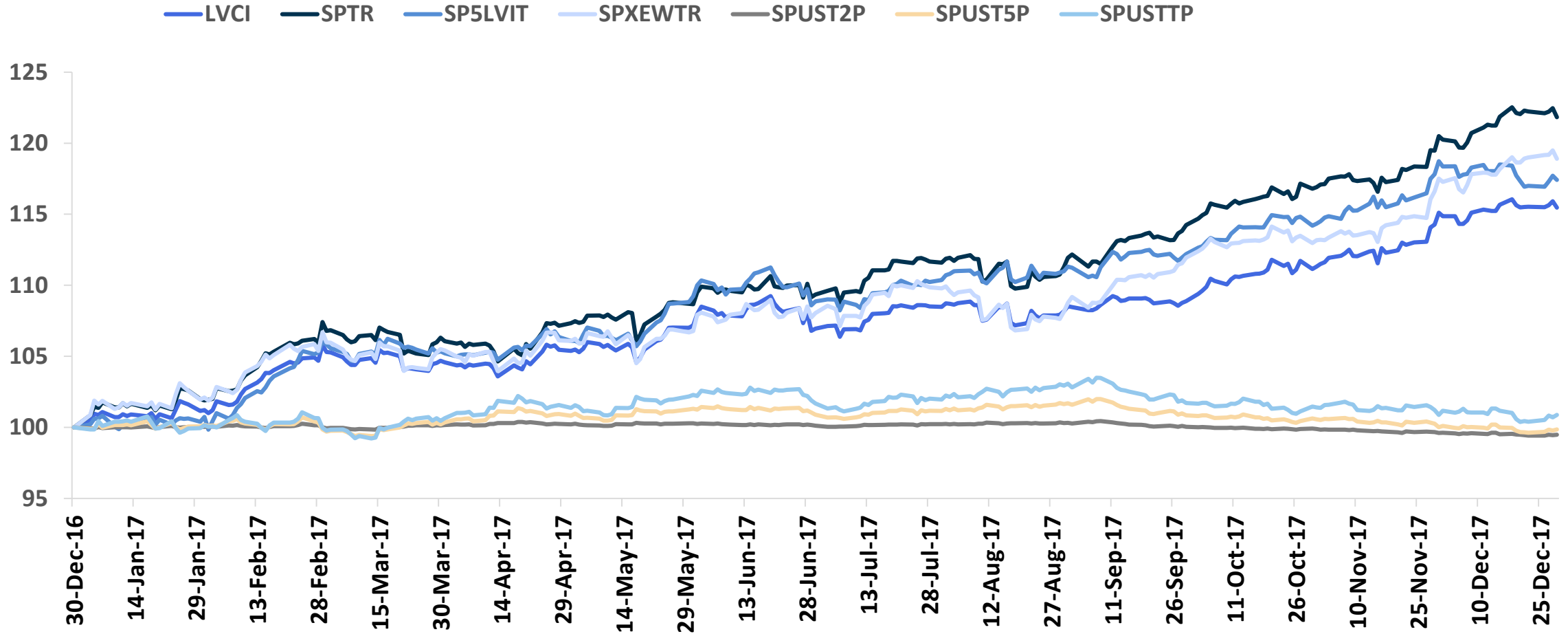
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\*\*Returns for MTD, QTD, YTD and One year; Annualized returns for the period 'Since Inception'



# 1 Year Performance of LVCI vs. Constituents

(December 31, 2016 – December 29, 2017)



# Disclaimer

Index Methodologies, LLC (“IM”) owns all rights to the Lenwood Volatility Control Index™, including the index methodology that enables the Lenwood Volatility Control Index™. IM developed and maintains, and is solely responsible for, the methodology used by Lenwood Volatility Control Index™. IM does not sponsor, endorse, promote or sell any annuity contract or other investment product that provides or attempts to provide a return based on returns of the Lenwood Volatility Control Index™. Any decision to invest in such an annuity contract or other investment product should not be made in reliance on any statements set forth herein, but rather should only be made after carefully considering the risks detailed in the materials prepared by or on behalf of the issuer of such contract or product. “Lenwood Volatility Control Index™” and “Index Methodologies™” are trademarks of Index Methodologies, LLC.

# 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

