

# Lenwood Volatility Control Index

Quarterly Performance Report

September 30, 2019



INDEX METHODOLOGIES

Index Methodologies, LLC

# Executive Summary

- The U.S. Real Gross Domestic Product (GDP) for the second quarter of 2019 rose at an annual rate of 2.0%, in the third estimate, as reported by the Bureau of Economic Analysis on September 26, 2019,<sup>6</sup> confirming the second estimate earlier in the year. The economic data was “mixed amid global trade and political uncertainty”.<sup>1</sup> Positive contributors for the quarter included wages, payroll growth and the strength of the domestic labor market. LPL Research estimates third quarter 2019 GDP at 1.9%<sup>1</sup>.
- The Federal Reserve lowered interest rates twice in the quarter: July 31<sup>st</sup> and September 18<sup>th</sup>, in an effort to be stimulative to the U.S. “late-cycle”<sup>2</sup> economy. Global economic growth has been described as “tepid”<sup>2</sup> and “mature”<sup>2</sup>. PIMCO predicts a “low-growth window of weakness”<sup>7</sup> ahead for the global economy. The trade war is cited over and over among the financial press as a leading factor in facilitating the slowdown.
- For the quarter, U.S. equity markets “outpaced international”<sup>1</sup> as “less risky assets led during the mixed quarter of performance”<sup>2</sup>; large cap bested small cap stocks. Global central bank easing and a slowing global economy, along with lower inflation led interest rates lower and increased bond values, especially in “government bonds”<sup>2</sup>. The S&P 500 (including dividends) increased 1.7% for the quarter. Bonds enjoyed good quarterly performance, returning 2.27% as measured by the Bloomberg Barclays U.S. Aggregate Bond Index.
- The Lenwood Volatility Control Index (LVCI) strategy, utilizing its monthly dynamic asset allocation and quantitative volatility control features, was positioned conservatively in 3Q19 with 50%, 60% and 20% equities portfolio allocations in July, August and September, respectively. LVCI turned in a performance of -0.24% for the quarter, underperforming its benchmark’s return of 2.16%.

Sources: LPL Research’s “Market Insight Quarterly” as of October 2019<sup>1</sup>, Fidelity Investments’ “Fourth Quarter 2019 Quarterly Market Update”<sup>2</sup>, JPMorgan “Market Insights: Guide to the Markets”<sup>3</sup> as of September 30, 2019, Schroder Investment Management’s “Quarterly Markets Review – Q3 2019”<sup>4</sup>, WSJ.com<sup>5</sup>, U.S. Department of Commerce Bureau of Economic Analysis website<sup>6</sup>, PIMCO’s Putting Markets in Perspective 4Q19 as of October 31, 2019<sup>7</sup>.

# LVCI Constituents for July 2019

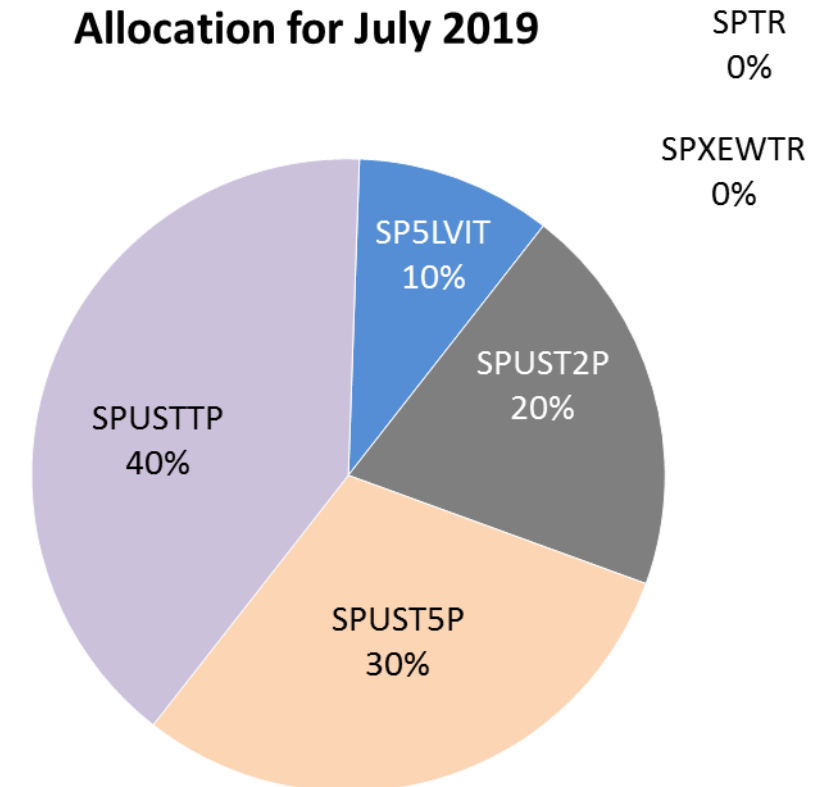
## Universe of LVCI Constituents

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	SPUST2P Index
4	SP5LVIT Index

## Allocation for July 2019



# LVCI Constituents for August 2019

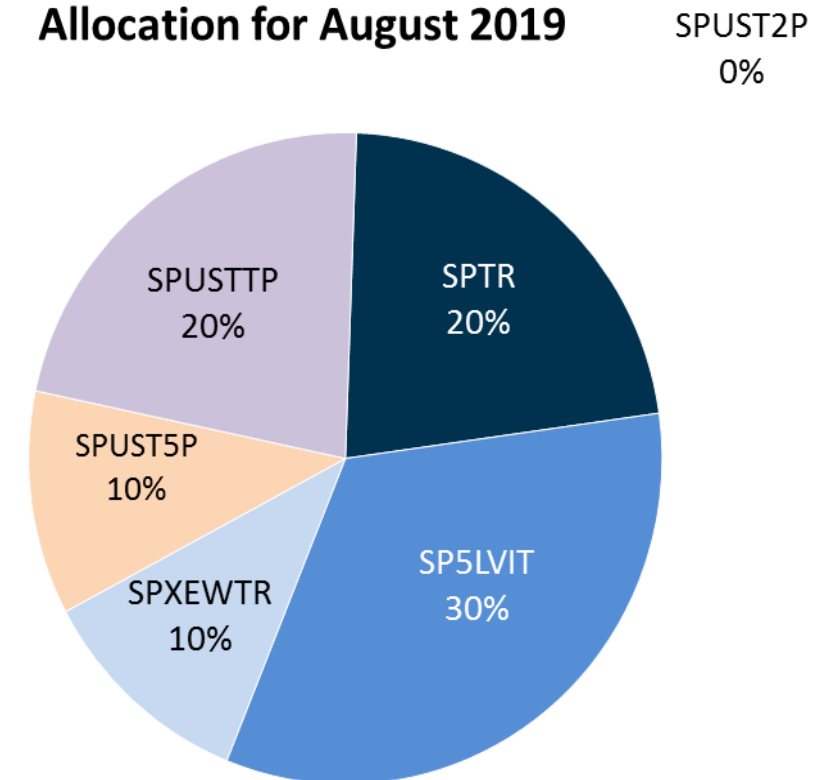
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## Allocation for August 2019



# LVCI Constituents for September 2019



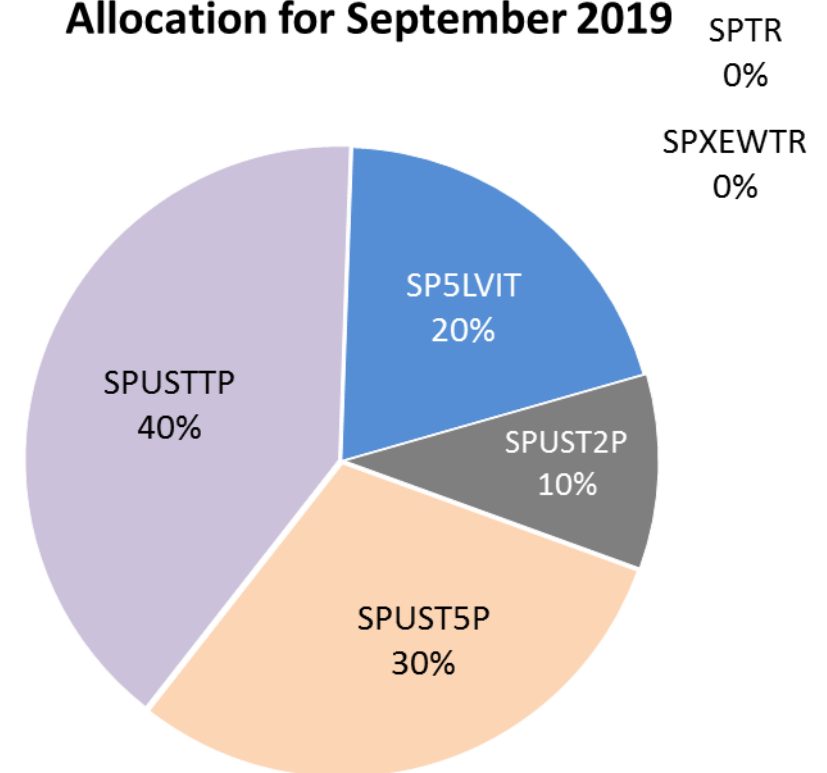
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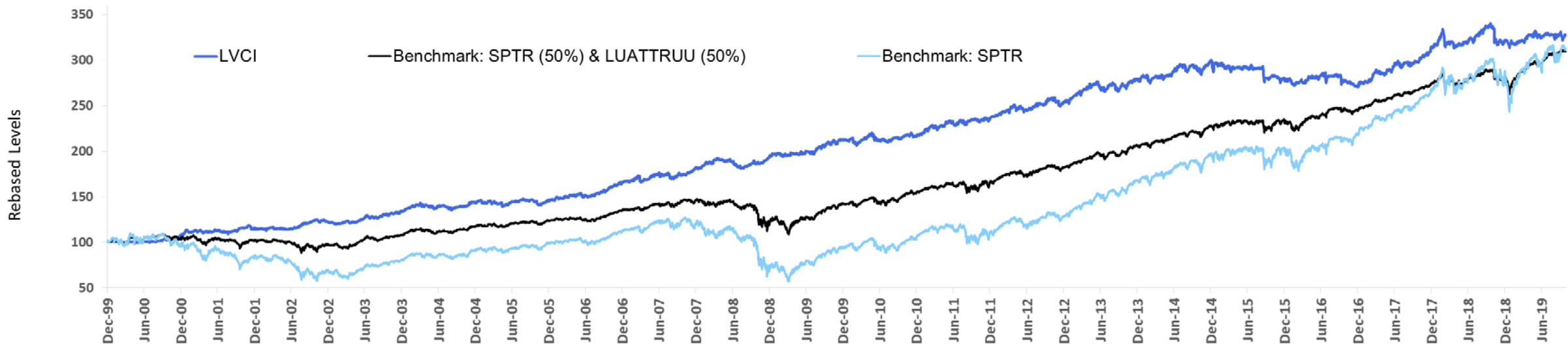
## Allocation for September 2019



# Historical Performance of LVCI vs. Benchmarks

(December 01, 1999 – Sep 30, 2019)\*

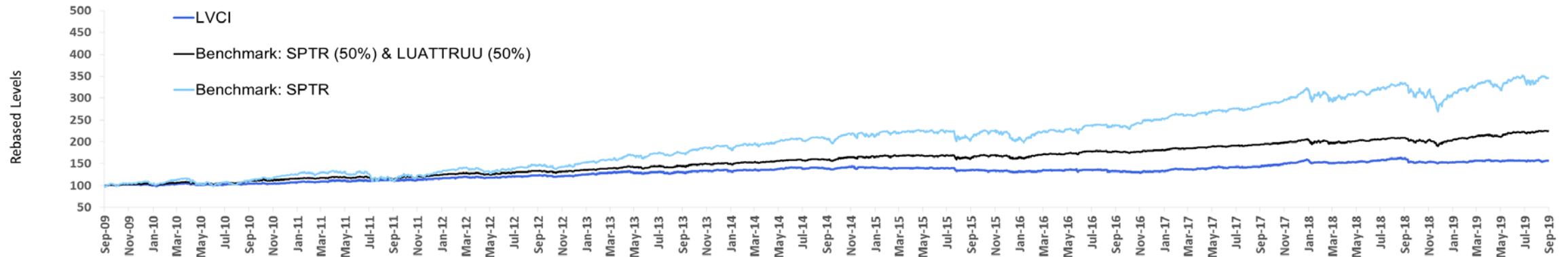
	Annualized Return	Standard Deviation	Sharpe Ratio	Crisis drawdown (Oct 2007 to Oct 2008)
LVCI	6.16%	6.02%	1.02	-5.99%
Benchmark: SPTR (50%) & BCEU1T (50%)	5.88%	8.93%	0.66	-20.93%
Benchmark: SPTR	5.91%	19.02%	0.31	-44.55%



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

# 10 Years Performance of LVCI vs. Benchmarks

(Sep 30, 2009 – Sep 30, 2019)\*



## Returns for the period ending September 30, 2019\*\*

	MTD	QTD	YTD	One year	Since inception*
LVCI	-0.38%	-0.24%	2.76%	-2.76%	6.16%
Benchmark: SPTR (50%) & LUATTRUU (50%)	0.52%	2.16%	14.22%	7.57%	5.88%
Benchmark: SPTR	1.87%	1.70%	20.55%	4.25%	5.91%

\*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 – September 30, 2019*				
	Annualized Return	Standard Deviation	Sharpe Ratio	Crisis drawdown (Oct 2007 to Oct 2008)
LVCI	6.16%	6.02%	1.02	-5.99%
SPTR	5.91%	19.02%	0.31	-44.55%
SP5LVIT	10.38%	13.99%	0.74	-31.38%
SPXEWTR	9.17%	20.20%	0.45	-48.42%
SPUST2P	1.26%	1.53%	0.82	-2.36%
SPUST5P	2.90%	3.87%	0.75	-5.06%
SPUSTTP	4.08%	5.98%	0.68	-5.95%

Returns for the period ending September 30, 2019**					
	MTD	QTD	YTD	One year	Since Inception*
LVCI	-0.38%	-0.24%	2.76%	-2.76%	6.16%
SPTR	1.87%	1.70%	20.55%	4.25%	5.91%
SP5LVIT	2.20%	5.80%	26.46%	19.86%	10.38%
SPXEWTR	3.11%	0.77%	20.10%	3.40%	9.17%
SPUST2P	-0.29%	-0.09%	0.87%	1.64%	1.26%
SPUST5P	-0.69%	0.46%	3.18%	5.26%	2.90%
SPUSTTP	-1.06%	1.32%	5.71%	8.72%	4.08%

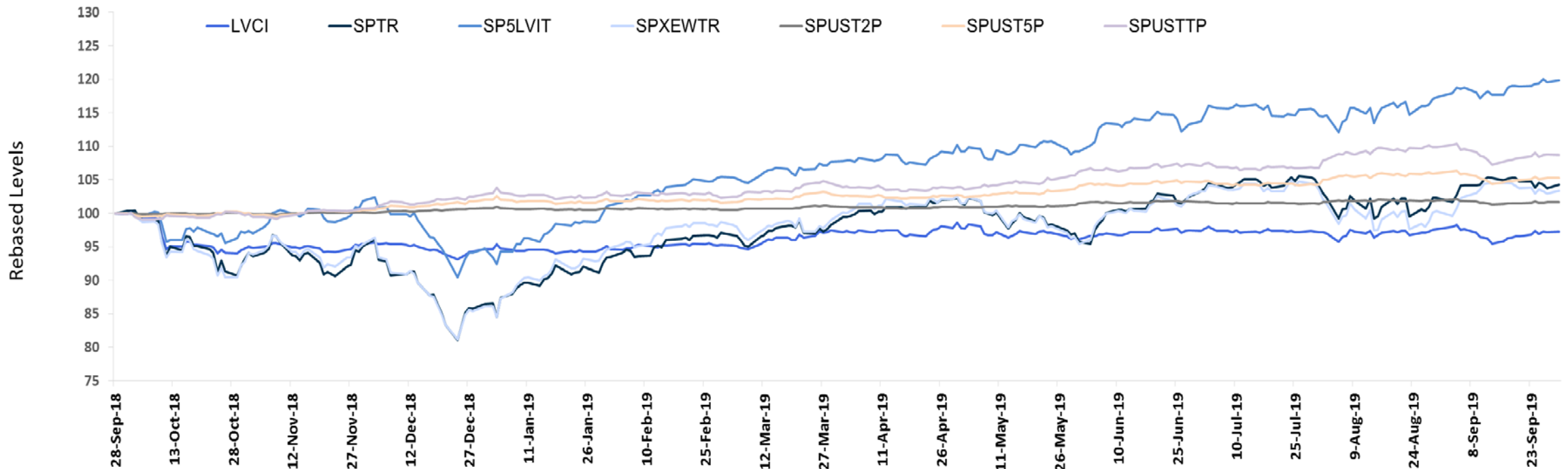
\*Simulated performance period: December 01, 1999 to May 27, 2014; Actual performance period: May 28, 2014 onwards

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



# 1 Year Performance of LVCI vs. Constituents

(September 28, 2018 – September 30, 2019)



# 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

