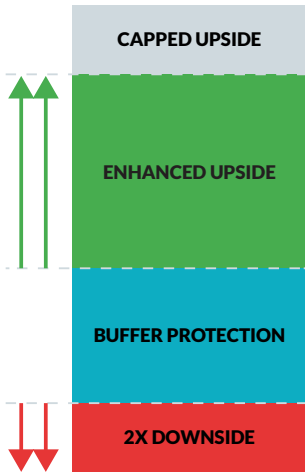


# CBOE S&P 500 ENHANCE AND BUFFER INDEX

## ABOUT THE INDEX



The Cboe S&P 500 Enhance and Buffer Index (the “Index”) is designed to provide target outcome returns linked to the US large-capitalization stock market. The Index measures the performance of a portfolio of exchange-traded Flexible Exchange® Options (“FLEX® Options”) that are based on the S&P 500® Index. The Index is designed to track the returns of an investment that has two components:

1. The payout from the FLEX Options, which provides, over a period of approximately one month:
  - Two times enhanced returns on appreciation of the S&P 500 up to a capped level of 5.0%
  - Buffer protection against the first 3.5% of losses, and
  - Two times enhanced exposure on losses of more than 3.5%.
2. The net premium, which is the sum of the premiums paid for or received from the FLEX Options on each monthly roll date.

## INDEX - KEY HIGHLIGHTS

### TARGET OUTCOME RETURNS

Part of an outcome-based approach that is designed to target return payoffs based on the price return of the underlying index.

### ALTERNATIVE SMART BETA

Designed to outperform the S&P 500 over a range of upside and downside price returns without the risk of factor underperformance found in traditional smart beta strategies.

### AMPLIFIED UPSIDE AND BUFFERED DOWNSIDE

2x S&P 500 monthly returns up to 5% cap. Buffer protection against first 3.5% of the losses.

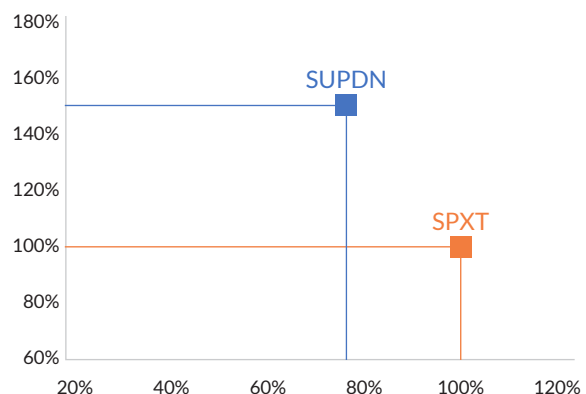
### BETTER RISK-ADJUSTED RETURNS

The Cboe S&P 500 Enhance and Buffer Index (ticker: SUPDN) has provided returns over time that capture:

- **154.62%** of the upside of the S&P 500 Total Return Index (ticker: SPXT)<sup>1</sup>
- **78.11%** of the downside of the SPXT<sup>2</sup>

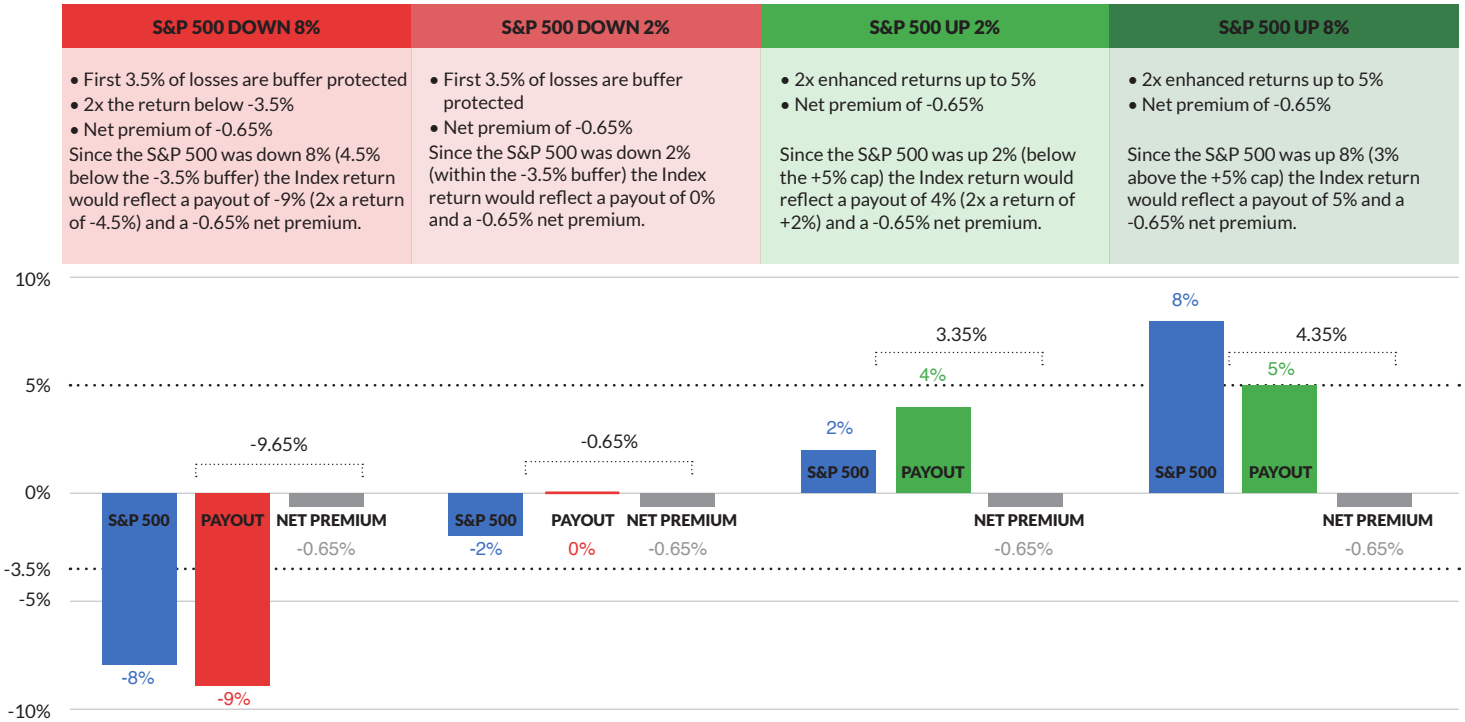
<sup>1</sup> Calculated as the average of ratios of SUPDN performance to SPXT performance when positive over a one-year period, rolling daily from 12/30/2005 through 11/30/2017. Excludes periods where the SPXT return was between -1% and 1%.

<sup>2</sup> Calculated as the average of ratios of SUPDN performance to SPXT performance when negative over a one-year period, rolling daily from 12/30/2005 through 11/30/2017. Excludes periods where the SPXT return was between -1% and 1%.



## ENHANCED AND BUFFERED STRATEGY: ILLUSTRATION OF HOW IT WORKS

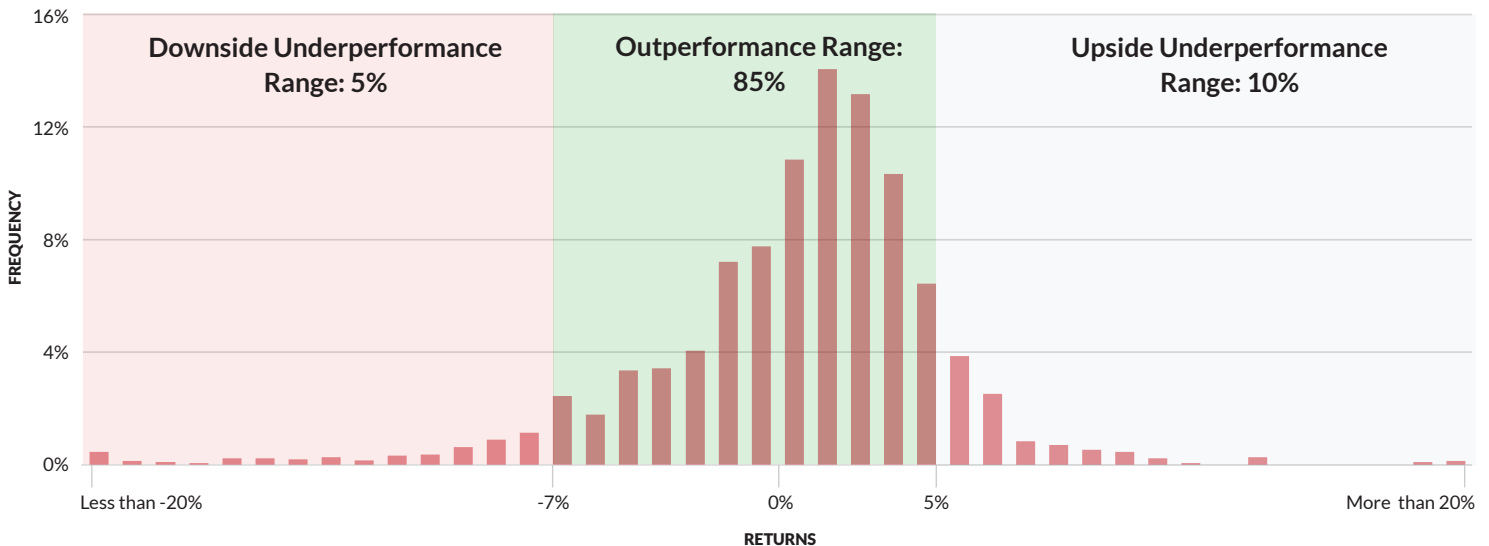
The strategy's performance is based on the price return of the S&P 500 over a period of one month, assuming a net premium of -0.65%.



## DISTRIBUTION OF MONTHLY ROLLING PRICE RETURNS OF THE S&P 500 (DEC. 30, 2005 - NOV. 30, 2017)

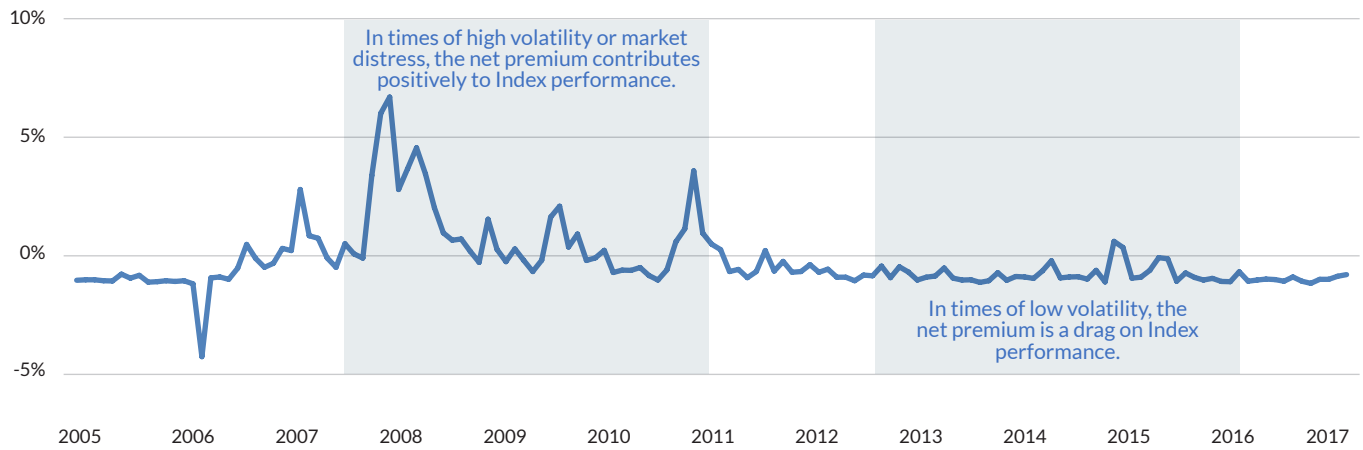
### OUTPERFORMANCE RANGE

85% of the monthly returns of the S&P 500 Price Return Index are between -7% and +5%. In this range, the payout outperforms the S&P 500 price returns.



*Underperformance and outperformance of the strategy relative to the S&P 500 Index ignores the impact of net premium.*

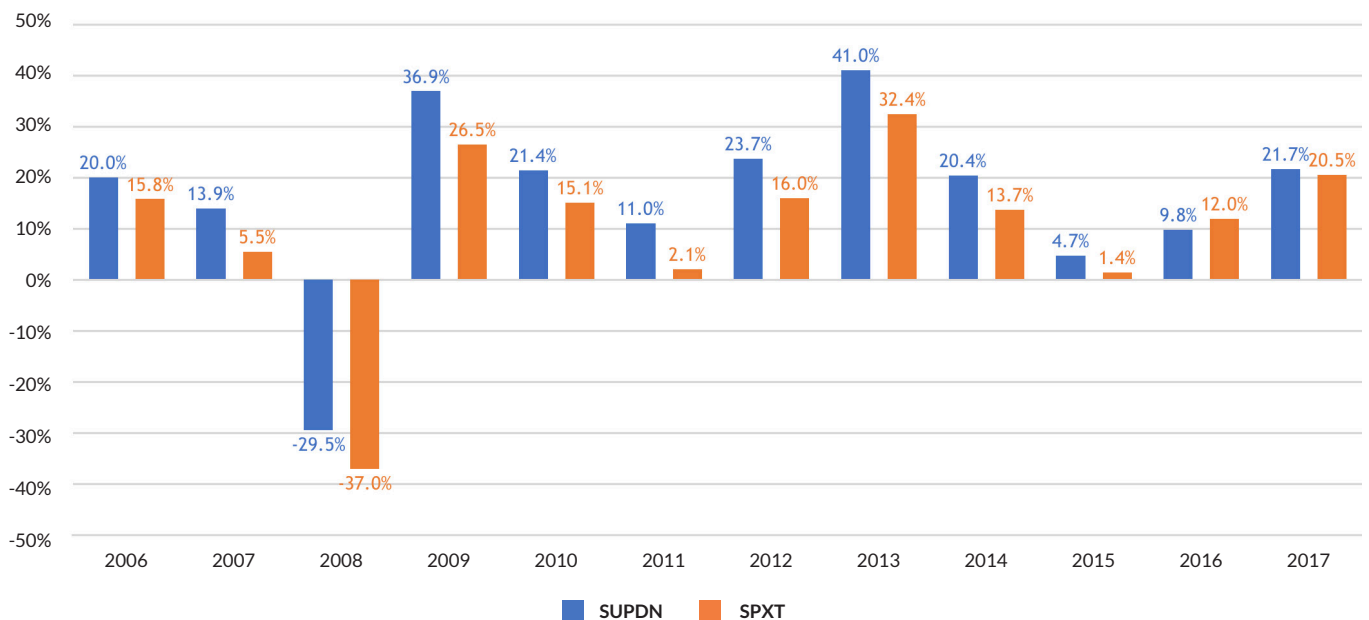
## NET PREMIUMS (MONTHLY, DEC. 30, 2005 - NOV. 30, 2017)



Generally, in times of market stress and elevated volatility, the net premium contributes positively to Index returns. Conversely, in times of low volatility, the net premium is a drag on returns.

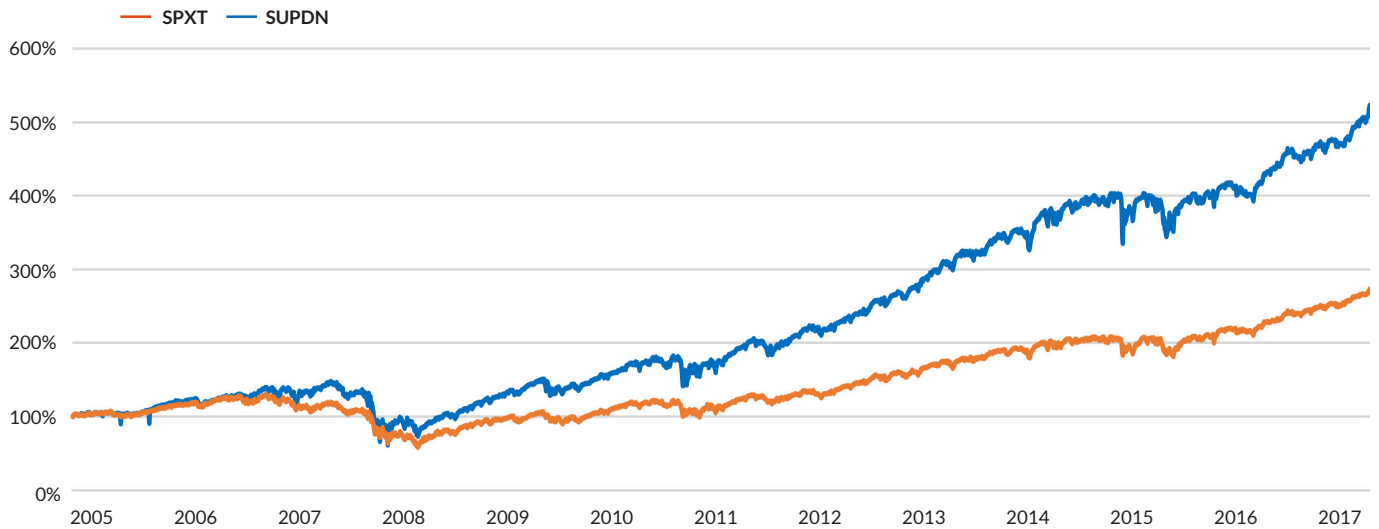
## INDEX CALENDAR YEAR RETURNS (AS OF NOV. 30, 2017)

CBOE S&P 500 ENHANCE AND BUFFER INDEX (SUPDN) COMPARED TO S&P 500 TOTAL RETURN INDEX (SPXT)



## INDEX PERFORMANCE (DEC. 30, 2005 - NOV. 30, 2017)

### CBOE S&P 500 ENHANCE AND BUFFER INDEX (SUPDN) COMPARED TO S&P 500 TOTAL RETURN INDEX (SPXT)



### RETURN AND RISK

	SUPDN INDEX			SPXT INDEX		
	Annual Return	Historical Volatility	Return/Risk	Annual Return	Historical Volatility	Return/Risk
<b>YTD AS OF 11/30/2017</b>	<b>21.73%</b>			<b>20.49%</b>		
<b>1 YEAR</b>	<b>24.84%</b>	<b>8.04%</b>	<b>3.09</b>	<b>22.87%</b>	<b>6.87%</b>	<b>3.33</b>
<b>3 YEAR</b>	<b>11.75%</b>	<b>15.81%</b>	<b>0.74</b>	<b>11.16%</b>	<b>12.55%</b>	<b>0.89</b>
<b>5 YEAR</b>	<b>19.06%</b>	<b>14.21%</b>	<b>1.34</b>	<b>15.74%</b>	<b>11.96%</b>	<b>1.32</b>
<b>10 YEAR</b>	<b>14.38%</b>	<b>29.97%</b>	<b>0.48</b>	<b>8.30%</b>	<b>20.47%</b>	<b>0.41</b>
<b>SINCE 12/30/2005</b>	<b>14.87%</b>	<b>29.53%</b>	<b>0.50</b>	<b>8.79%</b>	<b>19.48%</b>	<b>0.45</b>

Options involve risk and are not suitable for all investors. Prior to buying or selling an option, a person must receive a copy of Characteristics and Risks of Standardized Options. Copies are available from your broker or from The Options Clearing Corporation at [www.theocc.com](http://www.theocc.com). The Cboe S&P 500 Enhance and Buffer Index (the "Index") is designed to represent a proposed hypothetical yield protection strategy. Like many passive indexes, the Index does not take into account significant factors such as transaction costs and taxes and, because of factors such as these, many or most investors should be expected to underperform passive indexes. In the construction of the Index, the options are assumed to be purchased and sold at a certain price on the last business day of the month. However, there is no guarantee that all investors will be able to buy or sell at this price, and investors attempting to replicate the Index should discuss with their brokers possible timing and liquidity issues. This paper contains index performance data based on back-testing, i.e., calculations of how the index might have performed prior to launch. Back-tested performance information is purely hypothetical and is provided in this paper solely for informational purposes. Back-tested performance does not represent actual performance and should not be interpreted as an indication of actual performance. No representation is being made that any investment will or is likely to achieve a performance record similar to that shown. It is not possible to invest directly in an index. Cboe Exchange, Inc. calculates and disseminates the Index. The information in this paper is provided for general education and information purposes only. No statement within this paper should be construed as a recommendation to buy or sell a security or to provide investment advice. Your use of, and access to, this paper is subject to the Terms and Conditions for Use of Cboe Websites located at <http://www.cboe.com/common/termsconditions.aspx>. The methodology of the Index is the property of Cboe Exchange, Inc. Cboe®, FLEX® and Flexible Exchange® are registered trademarks, and SUPDN<sup>SM</sup> is a service mark of Cboe Exchange, Inc. S&P 500® is a registered trademark of Standard & Poor's Financial Services, LLC and has been licensed for use by Cboe Exchange, Inc. Financial products based on S&P indices are not sponsored, endorsed, sold or promoted by Standard & Poor's, and Standard & Poor's makes no representation regarding the advisability of investing in such products. © 2017 Cboe Exchange, Inc. All rights reserved.