

About the Index Series

The Cboe S&P 500 Enhanced Growth Index Series (symbol “SPEN”) measures the performance of a portfolio of hypothetical exchange-traded Flexible Exchange® Options (“FLEX® Options”) that are based on the S&P 500 Index.

Each monthly series is designed to track the returns of a hypothetical investment that, over approximately one year, seeks to provide 2x leveraged returns on the appreciation of the S&P 500 Index up to a capped level, while providing one-to-one exposure to any losses due to a decline in the index. The cap is determined on each annual roll date such that there is no premium or discount to enter into the hypothetical investment compared to an investment in the index.

An Enhanced Growth Option Strategy seeks to provide similar downside risks to the S&P 500 Index, but enhanced returns relative to S&P 500 Index in moderate positive return environments. The Cboe S&P 500 Enhanced Growth Index Series was launched on June 24, 2016.

Index Series - Key Highlights

TARGET OUTCOME RETURNS

Part of an outcome-based approach that is designed to target outcomes of specific investment strategies.

ALTERNATIVE SMART BETA

Designed to deliver alpha without the risk of factor underperformance found in traditional smart beta strategies.

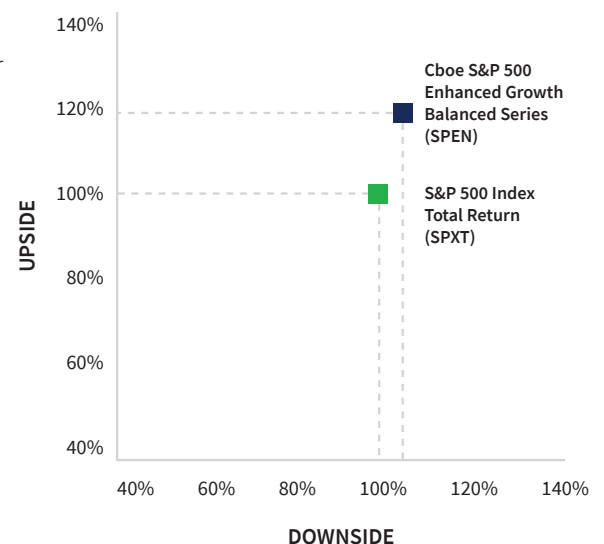
AMPLIFIED UPSIDE

2x S&P 500 Index return feature below the target cap provides upside capture in excess of 100%.

Potential for Better Risk-Adjusted Returns

The S&P 500 Enhanced Growth Index Balanced Series has provided returns over time that capture:

- 119% of the upside of the S&P 500 Index Total Return¹
- 104% of the downside of the S&P 500 Index Total Return²



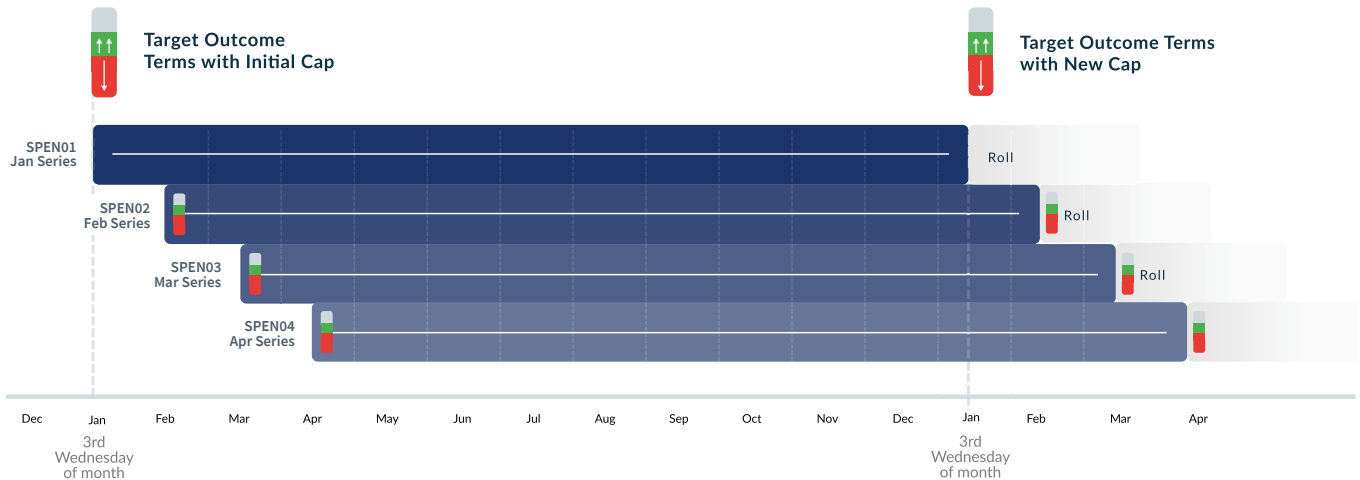
¹ Calculated as the average of ratios of SPEN performance to SPXT performance when positive over a one-year period, rolling daily from 12/30/2005 through 12/31/2018. Excludes periods where the SPXT return was between -1% and 1%.

² Calculated as the average of ratios of SPEN performance to SPXT performance when negative over a one-year period, rolling daily from 12/30/2005 through 12/31/2018. Excludes periods where the SPXT return was between -1% and 1%.

Monthly and Balanced Series

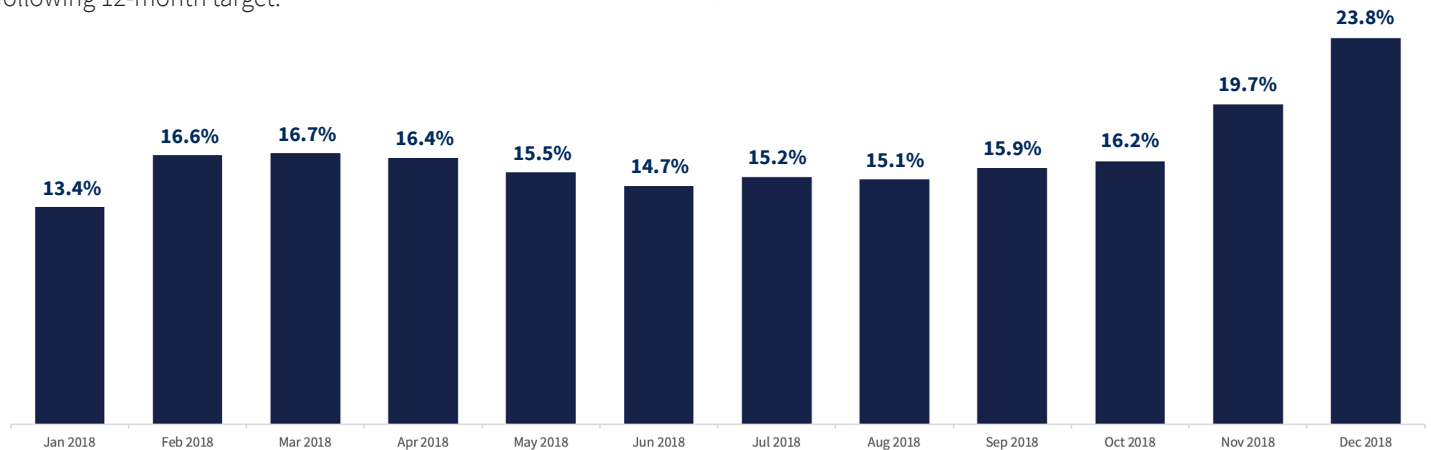
Monthly Series

Each of the 12 monthly series replicates the target returns of the Enhanced Growth Strategy between roll dates on the third Wednesday of the month.



Capped Levels for Monthly Series

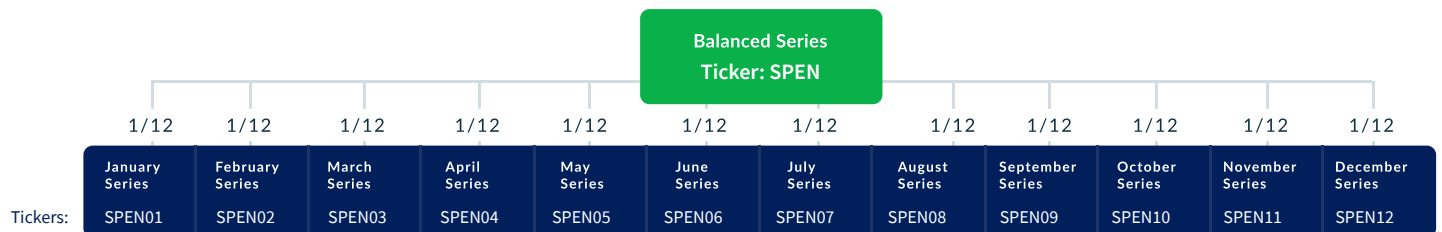
Each series capped level provides the cap for a 12-month expiration, e.g., Jan. 2018 cap expires Jan. 2019, and then reinvests for the following 12-month target.



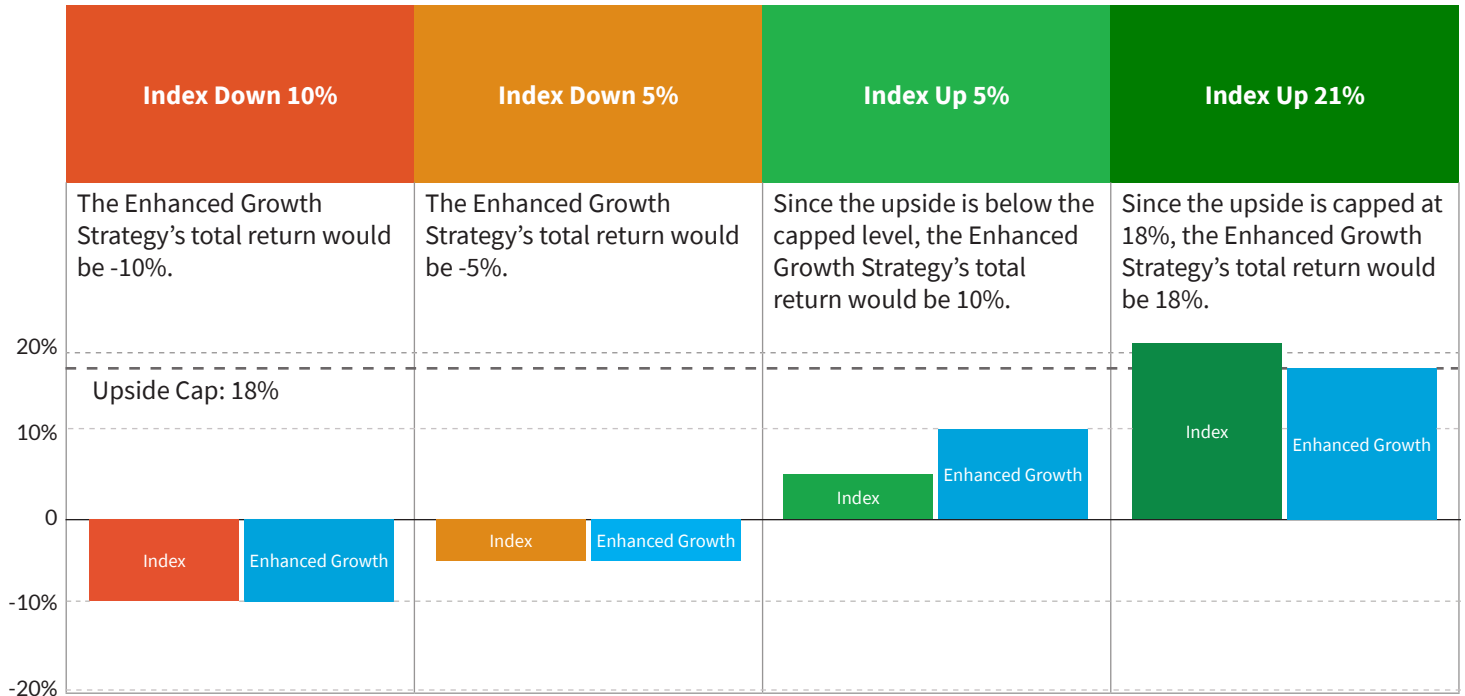
As of December 31, 2018

Balanced Series

The balanced series is a composite of the 12 monthly series, where each monthly series is allocated on an equal weight basis at each monthly roll date. The balanced series does not provide the target returns of the Enhanced Growth Strategy, but instead the average of the monthly series of the annual Enhanced Growth Strategy.



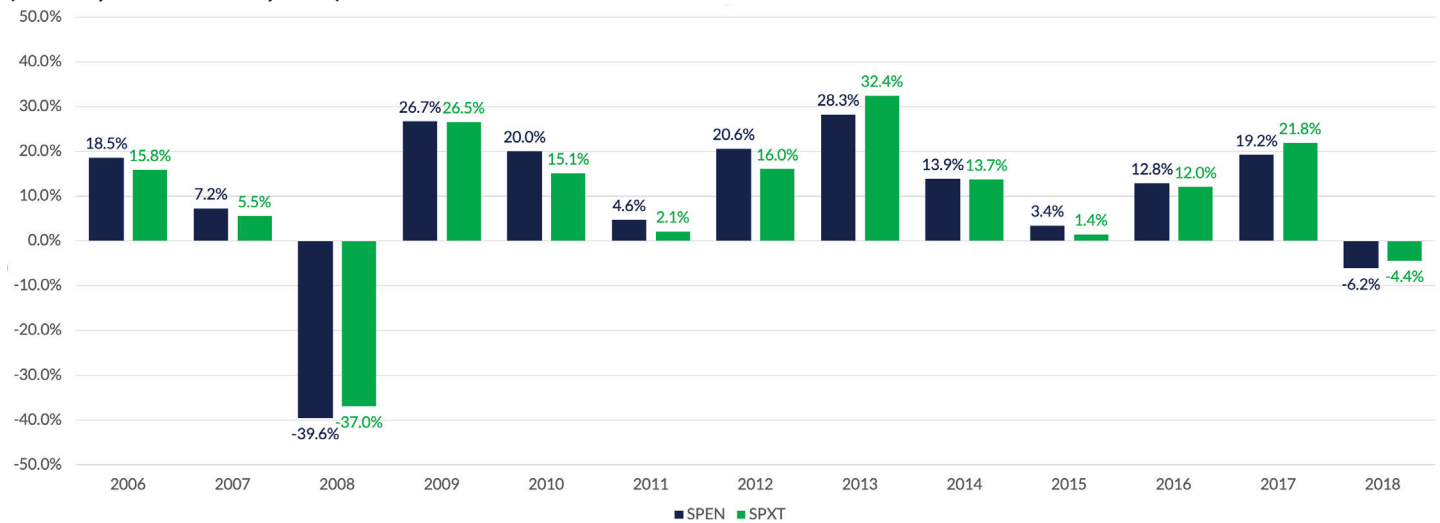
Enhanced Growth: An Illustration of How It Works



Note: Only the monthly series seeks to replicate target outcomes of the Enhanced Growth Strategy.

Index Calendar Returns Against The S&P 500 Index Total Return

(Dec. 30, 2005 - Dec. 31, 2018)

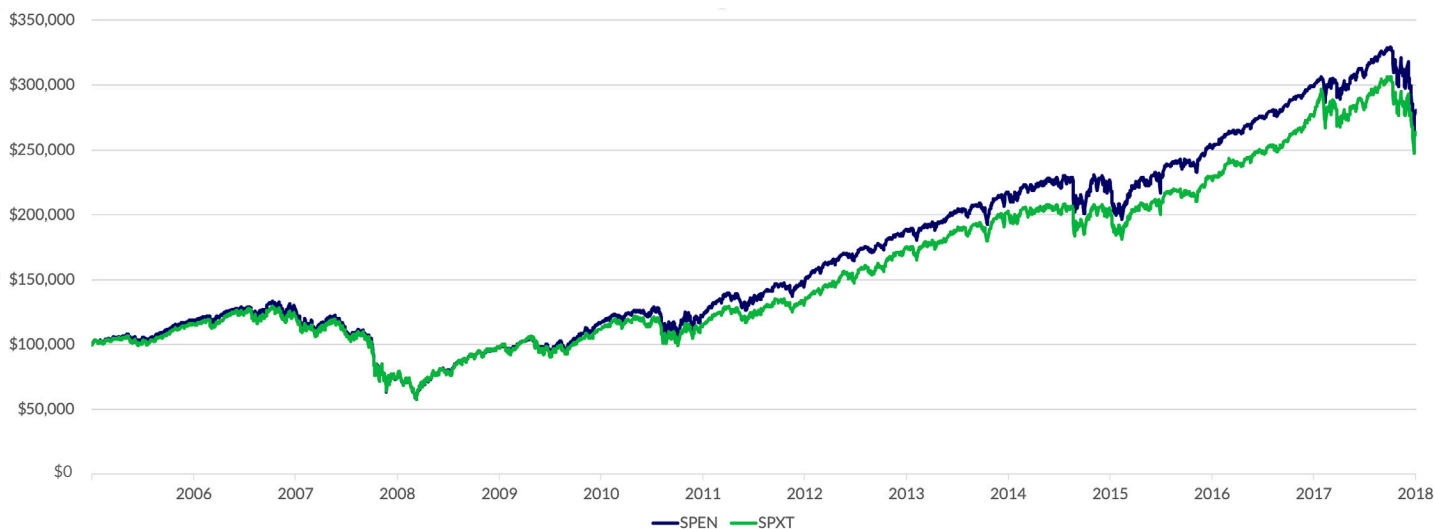


As of December 31, 2018

Index Series Performance

(Dec. 30, 2005 - Dec. 31, 2018)

Cboe S&P 500 Enhanced Growth Index Balanced Series performance and comparison to the S&P 500 Index Total Return (SPXT).



Annualized returns of the Cboe Enhanced Growth Index Balanced Series and comparison to the S&P 500 Index Total Return and annualized historical volatility.

| | SPEN INDEX | | SPXT INDEX | | Return Difference |
|-----------------------|---------------|-----------------------|---------------|-----------------------|-------------------|
| | Annual Return | Historical Volatility | Annual Return | Historical Volatility | |
| 2018 | -6.19% | | -4.38% | | -1.80% |
| 1 YEAR | -6.19% | 10.53% | -4.38% | 17.03% | -1.80% |
| 3 YEAR | 8.06% | 10.68% | 9.26% | 12.99% | -1.20% |
| 5 YEAR | 8.24% | 12.26% | 8.49% | 13.23% | -0.26% |
| 10 YEAR | 13.83% | 16.43% | 13.12% | 16.64% | 0.72% |
| SINCE 12/30/05 | 8.26% | 19.13% | 7.75% | 19.24% | 0.51% |

As of December 31, 2018

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. The information in the document is provided for general education and information purposes only. No statement within this document should be construed as a recommendation to buy or sell a security or to provide investment advice. The Cboe S&P 500 Enhanced Growth Index Series is designed to represent a proposed hypothetical options strategy. Investors attempting to replicate the Cboe S&P 500 Enhanced Growth Index Series should discuss with their advisors possible timing and liquidity issues. Like many passive benchmarks, the Cboe S&P 500 Enhanced Growth Index Series does not take into account significant factors such as transaction costs and taxes. Transaction costs and taxes for strategies such as the Cboe S&P 500 Enhanced Growth Index Series could be significantly higher than transaction costs for a passive strategy of buying and holding stocks. Investors should consult their tax advisor as to how taxes affect the outcome of contemplated options transactions. Trading FLEX options may not be suitable for all options-qualified investors; FLEX options strategies should only be considered by investors with extensive prior options trading experience. Past performance does not guarantee future results. All information for the Index prior to its launch date is backtested to calculate how the Index might have performed based on the methodology that was in effect on the launch date. Backtested performance information is purely hypothetical and is provided in this paper solely for informational purposes. Backtested 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 calculates and disseminates the Cboe S&P 500 Enhanced Growth Index Series. Supporting documentation on any claims, comparisons, statistics and other technical data in this document is available from Cboe upon request. The methodology of the Cboe S&P 500 Enhanced Growth Index Series is the property of Chicago Board Option Exchange, Incorporated (Cboe). Cboe®, Chicago Board Option Exchange®, FLEX® and Flexible Exchange® are registered trademarks, and Cboe S&P 500 Enhanced Growth Index Series is a service mark of Cboe. S&P® and S&P500® are registered trademarks of Standard and Poor's Financial Services, LLC (S&P) and are licensed for use by Cboe. Financial products based on S&P indices are not sponsored, endorsed, sold or promoted by S&P, and S&P makes no representation regarding the advisability of investing in such products. All other trademarks and service marks are the property of their respective owners. The Cboe S&P 500 Enhanced Growth Index Series and all other information provided by Cboe and its affiliates and their respective directors, officers, employees, agents, representatives and third-party providers of information (the "Parties") in connection with the Cboe S&P 500 Enhanced Growth Index Series (collectively "Data") are presented "as is" and without representations or warranties of any kind. The Parties shall not be liable for loss or damage, direct, indirect or consequential, arising from any use of the Data or action taken in reliance upon the Data. Redistribution, reproduction and/or photocopying in whole or in part are prohibited without the written permission of Cboe. © 2019 Cboe. All rights reserved.