



## The Compelling Case for Long-Dated SPX Calls

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The current combination of low volatility levels and embedded protection makes longer-dated call strategies attractive to position for further equity appreciation. With call premia near decade-long lows, upside options offer benefits compared to long equity positions or can be used to safely enhance core cash equity holdings. In this note we examine the pricing drivers of SPX 18- to 36-month expiry call options and compare historical returns of different strategies and to outright equity. Broadly, call strategies have exhibited better risk-adjusted returns than holding a cash position in the SPX index.

Long-dated calls on the SPX index are priced attractively

There are two main drivers of long-dated call premia, both of which help make pricing compelling right now

- Long-dated SPX spot implied volatility is extremely low. The depressed rates volatility and low correlation between rates and equities create further downward pressure on the implied volatility of the SPX forward
- The SPX forward itself is depressed vs. the spot level. The currently low level of interest rates and relatively high implied dividend yields have resulted in negative carry costs and have pressured the SPX forward, which makes the option premia appear low optically

Choosing a long-dated call strategy: findings from our 10-year backtest

- We find that call spreads tended to have the highest risk-adjusted returns among the strategies studied.
- Strategies involving selling 1M options to finance the longer-dated calls have performed better than equity and outright calls. These results are consistent with our previous research showing that implied volatility risk-premium is typically rich for short-dated options. However, short 1M options underperform in strongly rallying markets, such as the SPX this year.
- Rolling a long call (spread) position before expiry would have generally (but not always) resulted in higher risk-adjusted returns. Rolling prior to expiry reduces the negative effects of time decay, since shorter-dated options lose time value quickly

Sensitivity of call premia and relative magnitude of risks

While delta is the main driver of call P/L longer-dated options have a higher exposure to other risks. We compare the impact on current SPX call premium from changes in spot, time, implied volatility, rates, and dividend yields.

Risks headline

The loss from a long option or long option spread position is limited to the net premium paid. Please note that hypothetical backtest results are neither an indicator nor a guarantee of future returns.

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