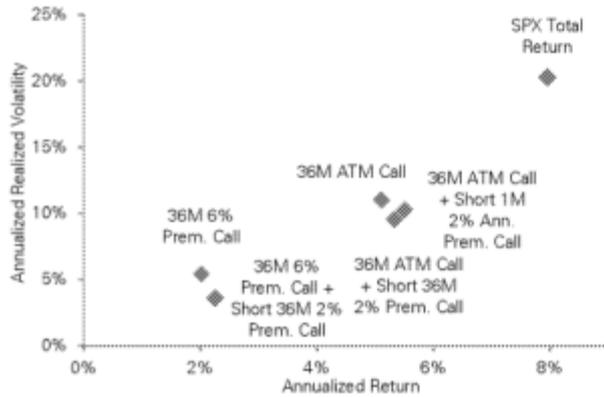slightly higher returns at slightly lower volatility vs. outright calls. However, they did have equivalent to slightly higher volatility than some of the call spread strategies (see Figure 11 and Figure 12).

Figure 11: 36M calls and spreads rolled after 24M, Dec-02 through Sep-13

Source: Deutsche Bank, Bloomberg Finance LP

Figure 12: 18M calls and spreads rolled after 12M, Dec-02 through Sep-13
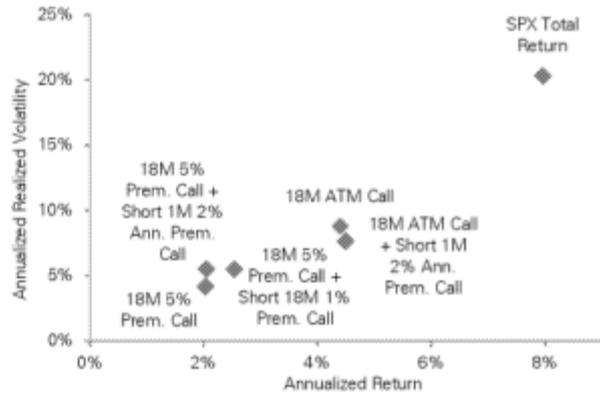
Source: Deutsche Bank, Bloomberg Finance LP

These results are consistent with our previous research showing that implied volatility risk premium is typically rich for short-dated options[7]. That is, 1M implied volatility tends to be higher than 1M realized volatility. So, selling 'expensive' 1M upside call options to finance the purchase of longer-dated calls has generally been attractive.

Strategies selling 1M SPX calls have not performed recently

Looking again at Figure 10 above, strategies selling 1M calls have, not surprisingly, "banked" close to the entire 2% annualized premia only during market downturns (for instance, compare the performance of ATM calls and ATM – 1M 2% calls for the Oct-07 to Mar-09 period in the table). In the rising markets of Dec-02 to Oct-07, these strategies "banked" ~0.8% to 1.2% of the 2% premia depending on the strategy.

However, the bull market between May-09 to Sep-13 saw strategies selling 1M options have lower returns than buying outright calls. This is largely due to the Apr-13 to Sep-13 period, which saw large up and down moves that resulted in large losses from some of the short 1M call that were rolled every month while the long-dated call was up relatively little (see Figure 13).

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[7] Please see The DNA of Overwriting – A US Perspective, 02-Apr-2013, contact salil.aggarwal@db.com