



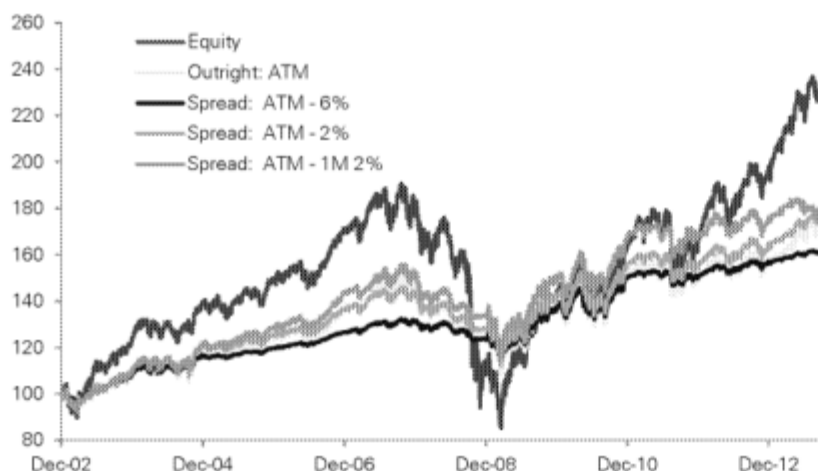
Figure 9: Comparing performance under rising and falling markets: Equity vs. various 36M call option strategies rolled after 24M

	Dec-02 to Oct-07		Oct-07 to Mar-09		Mar-09 to Sep-13		Apr-13 to Sep-13		Dec-02 to Sep-13		
	Return	Volatility	Return	Volatility	Return	Volatility	Return	Volatility	Return	Volatility	Ret/Vol
Equity	13.3%	12.8%	-55.3%	37.8%	22.3%	18.7%	18.9%	11.3%	8.0%	20.3%	39.2%
Outright: ATM	8.3%	10.4%	-22.0%	11.7%	10.3%	11.4%	13.5%	7.9%	5.1%	11.0%	46.2%
Spread: ATM - 6%	5.8%	5.0%	-11.3%	6.7%	8.1%	7.5%	4.5%	2.0%	4.5%	6.4%	70.1%
Spread: ATM - 2%	7.9%	8.6%	-18.1%	9.8%	10.1%	10.3%	10.1%	5.2%	5.3%	9.5%	55.8%
Spread: ATM - 1M 2%	9.1%	9.6%	-20.1%	11.3%	9.8%	10.5%	-3.1%	7.1%	5.5%	10.2%	53.6%

Source: Deutsche Bank, Bloomberg Finance LP

Since the total return (price appreciation + dividends) on the SPX has been positive over the period studied (Dec-02 to Sep-13), the options strategies⁵ studied have underperformed the SPX (see Figure 10). However, after adjusting returns by the level of realized volatility (return/realized volatility) for the entire period, the option strategies had better performance when compared with equity⁶. The lower portfolio volatility of the call strategies is a key attraction for investors who are seeking equity returns but are put off by the typically high volatility of equity portfolios.

Figure 10: Comparing performance of equity with various 36M calls rolled after 24M



Source: Deutsche Bank, Bloomberg Finance LP

In the following section we show results for only a select number of strategies studied. The results are largely consistent across other strategies studied and are available in the Appendix.

Strategies involving selling 1M options to finance the longer-dated ~ATM calls have had higher risk-adjusted returns than equity and outright calls

Strategies involving selling 1M options to finance the longer-dated near-the-money calls have had slightly better performance than outright calls: these had

⁵ Please note that a 6% premium strategy targets trading a strike that nets a total 6% premium for the specific maturity (not annualized). Only the premium for the 1M 2% options are annualized: strikes are chosen corresponding to 2%/12 premium.

⁶ Please see the Appendix for an expanded table of all strategies studied