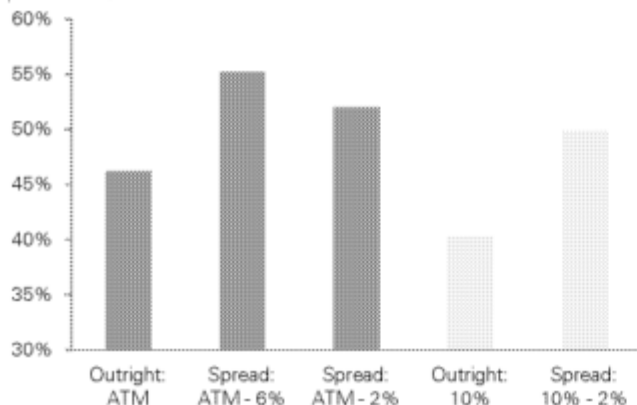


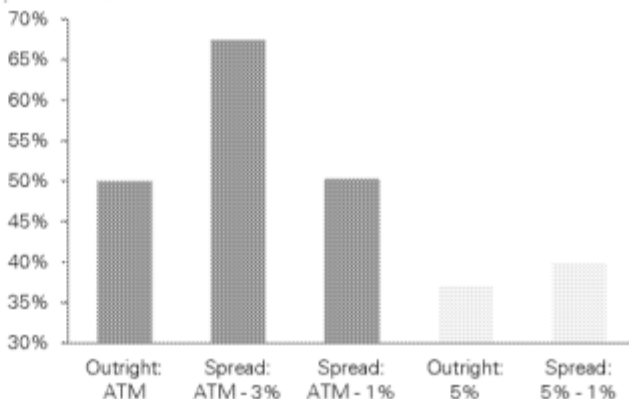


Figure 19: Annualized returns/realized volatility for 36M calls and spreads rolled after 24M, Call spread notional scaled by delta



Source: Deutsche Bank

Figure 20: Annualized returns/realized volatility for 18M calls and spreads rolled after 12M, Call spread notional scaled by delta



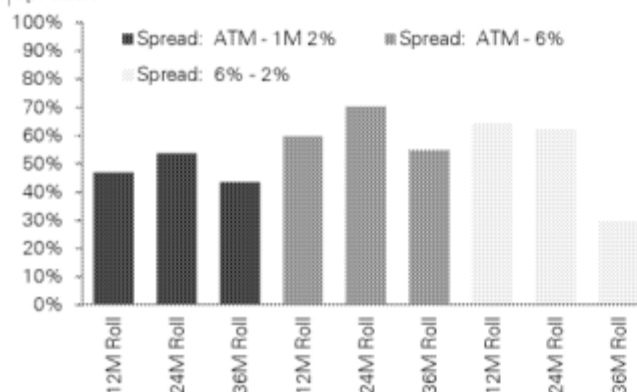
Source: Deutsche Bank

Roll prior to expiry

Figure 21 and Figure 22 show that rolling the call spread position before expiry would have generally (but not always) resulted in higher risk-adjusted returns, across many different strategies⁸. Rolling prior to expiry allows you to reduce the negative effects of time decay, since shorter-dated options lose their time value quickly.

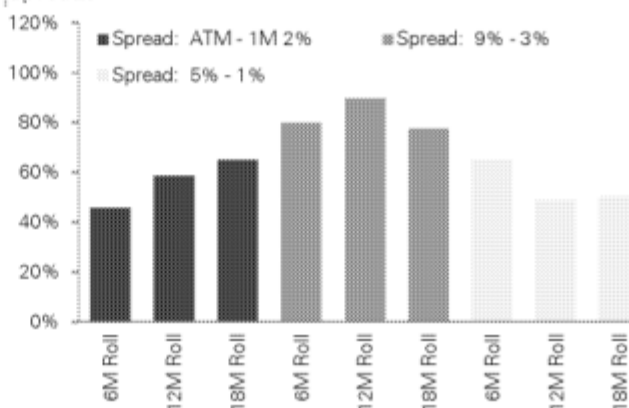
Rolling early also allows you to re-strike the calls, which is especially important for options that have become far out-of-the-money. Rolling will rebalance the delta exposure higher in these cases. However, note that rolling early will result in higher transactions cost.

Figure 21: Annualized returns/realized volatility for 36M spreads



Source: Deutsche Bank

Figure 22: Annualized returns/realized volatility for 18M spreads



Source: Deutsche Bank

⁸ Results for rolling prior to expiry hold for outright calls as well