## Beware markets exhibiting low volatility and complacency

Beware markets exhibiting low volatility and complacency. As markets rise steadily, investors with profits can protect their profits by buying put options. They tend to do this at key technical levels on broad market indices. Option counterparties do two things. They either act as middlemen, selling puts to investors seeking protection and buying puts from investors who seek to earn a premium and gain some positive delta exposure to the market. The net delta or exposure that they cannot match up, they need to hedge by trading in the underlying instruments that the options refer to.

Consider when the investor community is net long protection, or net long puts on the market. A long put position is one of positive gamma, or convexity. Option counterparties are therefore net short gamma or convexity. Their hedging strategy involves selling the underlying market when it falls and buying the underlying market when it rises. To further illustrate this, note that if the market is net long puts, the option hedgers must be net short puts. A short put is a long stock and a short call. A short call is hedged by buying at higher levels and selling at lower levels. The expected trading loss is the option premium.

Thus, if a market has been rising steadily and investors have been sufficiently careful to lock in some of their profits with put protection, it creates net gamma at important levels in the market. The gamma at these levels simply implies that the market cannot settle at these levels, they either rise above it or they fall below it but they cannot linger for long at those levels. It looks like 2050 was such a level on the S&P, as was 2000. And there are other important levels. As the market rose, investors would have bought protection at 1850. As we get to those levels, the gamma will cause the market to either rebound sharply, or fall sharply, but is unlikely to loiter at that level.