# Long Staddles, Back Spreads & Gamma Scalping

Gamma scalping is an appropriate strategy for a volatile individual stock, during an uncertain time when big price movements and unexpected events are more common. Current examples of a volatile industry include commodity related stocks, large machine manufactures, solar power and some bio tech stocks. A long premium position composed of long calls and puts, executed delta neutral, where price movements are advantageous, an increased volatility is expected can be profitable. Market makers in the 80's and 90's used this strategy when options were listed on NASD stocks because the wild intraday price movement allowed them to trade stock versus their gamma and option position. If you like scalping gamma execute your straddle early in the week so the price action benefits your strategy immediately. Scalp stock as your delta indicates to pay for the decaying options.

Stocks trading in penny increments have decreased the intraday price movement, reducing the popularity and profitability of this strategy. Trading in an out of long premium position based on an underlings price movements can still be used to anticipate an upcoming event and defend against the unexpected.

## ***Earnings plays***

A stock that has a recent history of gap price movement after earnings is a great example of an instance when gamma scalping works.  A stock that made a big gap price movement on recent earning will have traders conditioned this time around for a similar movement. Volatility will surly remain firm as earning approach so long volatility will actually appreciate. Buy calls and puts delta neutral and day after day notice the volatility increase as earning approach and trade stock versus your deltas.  You can also sell the appropriate amount of options to be delta neutral at the end of the day.  Determine the appropriate quantity of long options versus the profits to carry going into the earnings announcement only if you dare. After earnings volatility will "get crushed" you must have at least pared down the position.

## ***News Driven Stocks***

A stock that has new product news for example a genome or bio-tech or other drug stock news can create giant volatility swings. Buy the volatility leading up to the event and scalp stock when your

Greeks indicate. Names like CAT, DE, MOS and FCX have had momentum and big price move potential. Other unexpected news driven names include ADRs', oil related names, genomics and retailers.

## ***Gamma / Theta Ratio***

The gamma you get from a long premium position ought to be greater than the theta you spend daily on that gamma. The gamma theta ratio ought to be greater than 1 and preferable closer to 5 to 1. If your long calls and puts get you 500 gamma and your spending 2000$ for the privilege, it will be difficult to scalp an earn 2000$ a day. Because of the bad gamma/theta ration most stocks over 100$ per share will be eliminated rite away. A better example contains a stock priced 15 to 50 with volatilities between 20 and 70. A classic example is gamma of 500 and theta that's 80$ a day.

## ***Scalping Rules***

Trading stock vesus your delta is the fun in scalping your gamma. Understand that long gamma always changes your delta advantageously providing profitable opportunities to scalp stock versus this derivative position. For example, you buy 10 calls and 10 puts on Solar Semiconductor (ticker symbol SS$) a 30$ stock with a 40 volatility. The position gives you 300 gamma and it costs you 100$ a day in theta. When the stock moves from 30 to 31 the long gamma will make the position 300 deltas long. You'll want to adjust your position to flatten your delta, profit from this price movement and position yourself for the next move. Sell out an appropriate number of your calls to flatten your position. You'll have profited from the call sale and "lived to fight another day", repositioned yourself for the next day and the next price movement. A "rule of thumb" is to flatten your delta when you delta is equal to or greater than your gamma. Another rule is to flatten out at the end of the day to delta neutral or zero deltas.

## ***Manage the Greeks***

The risk management of this strategy is done "managing your Greeks." You must thoroughly understand how the gamma, theta, Vega and delta change with price movement and volatility changes. A long premium your position provides opportunity to scalp stock with every price movement. Supply and demand for options will change the volatility daily and it's implicit you recognize the change. Gamma will increase as expiration approaches because an option will either be stock or just air. Theta will happen daily and you must plan your strategy and understand the daily decay versus a change in volatility. Managing a long premium means tracking the changes over time and recognizing when and how to buy and sell stock versus the Greeks.

## ***QSL Example***

Bought 10 April 20 calls for 1.30$ and 10 April 20 puts for 1.25$ in Quetar's National Oil Reserve Savings and Loan. QSL common=20.06 and it traded on the NASD exchange as an ADR in the US but is listed on the Middle East exchange as well. You execute this position on Friday March 13. The volatility is 31 currently and last earnings it spiked to 45. QSL is having it's annual share holders meeting next week where the CEO will disclose how much Bear Sterns stock he purchased in 2007, and give earnings guidance for the full year. QSL common stock is down from 40 in the last six months. We have 300 gamma, 50$ a day in theta, 102 Vega, and 14 deltas. Our strategy was to buy premium because the upcoming events would move the stock significantly.

The weekend of March 14th Barron's cover story described how the Sultan of "The Sands" casino in Macau now owns a 10% stake in bank and had recently upped his stake from 4%. The bullish article drove QSL stock to 21.72 on the open on Monday March 16th at the open and the volatility to 40. Our position is 500 deltas long and we sell out 4 of our long calls to flatten our delta to zero. Our gamma has been reduced to 225, our theta is less too because we reduced our position and because we moved away from 20$. Vega in this example has worked our way also because Volatility increased with the excitement generated by the news, and the gap price movement.

The day of QSLs' annual share holders meeting CEO disclosed in his "infinite wisdom", he invested 1.2 billion of the company's money in BSC stock at 100$ per share. He's currently at the Mayo clinic having his head examined and has turned over the day-to-day operation to his son a NASA rocket scientist. QSL stock is trading 7.32 after the news and your position is 1000 delta short and almost no gamma, so you decide to sell your puts and calls and close the position.

## ***Firm Volatility Environment***

Gamma scalping should be used when a price movement is anticipated within a reasonable time period. If you buy premium you need a price movement within a 14 to 21 day period or the long premium will likely decay quicker than you can scalp. You'd prefer to but the premium on a Monday, Tuesday or Wednesday, so you'll have the current week to scalp. You'll need to closely monitor your Greeks to determines where the moneys gone or going. Market makers and traders who inventory options for a living use this strategy because they follow the price movement of the stock closely and you should too.

A long premium position is good when news driven stocks have moved previously and will probably move again as events unfold. Volatile industries, evolving companies in the news when earnings or product development or future revenue steams are in question describe the “suspects” that “fit the description”.

You should be available to monitor long premium positions closely because they are constantly melting. Understanding why a long premium position is working means recognizing how your Greeks change as time and the underlying moves.

## ***Conclusion***

The nature of stocks that trade in penny increments has changed the landscape for gamma scalping. But long premium is an “un-defendable position” meaning it anticipates gap price movement on therefore is profitable in uncertain times.

Paper-trade this strategy several times before you actually use it. Long premium can make you feel like the, “King of the World”, because you profit from price movement up or down.