What is a straddle - Introduction

For those not familiar with the straddle strategy, it is a neutral strategy in options trading that involves the simultaneously buying of a put and a call on the same underlying, strike and expiration. The trade has a limited risk (which is the debit paid for the trade) and unlimited profit potential. If you buy different strikes, the trade is called a strangle.

You execute a straddle trade by simultaneously buying the call and the put. You can leg in by buying calls and puts separately, but it will expose you to directional risk. For example, if both calls and puts are worth $5, you can buy a straddle for $10. If you buy the call first, you become bullish - if the stock moves down, the calls you own will decrease in value, but the puts will be more expensive to buy.

The Options Guide explains straddle:

Long straddle options are unlimited profit, limited risk options trading strategies that are used when the options trader thinks that the underlying securities will experience significant volatility in the near term.

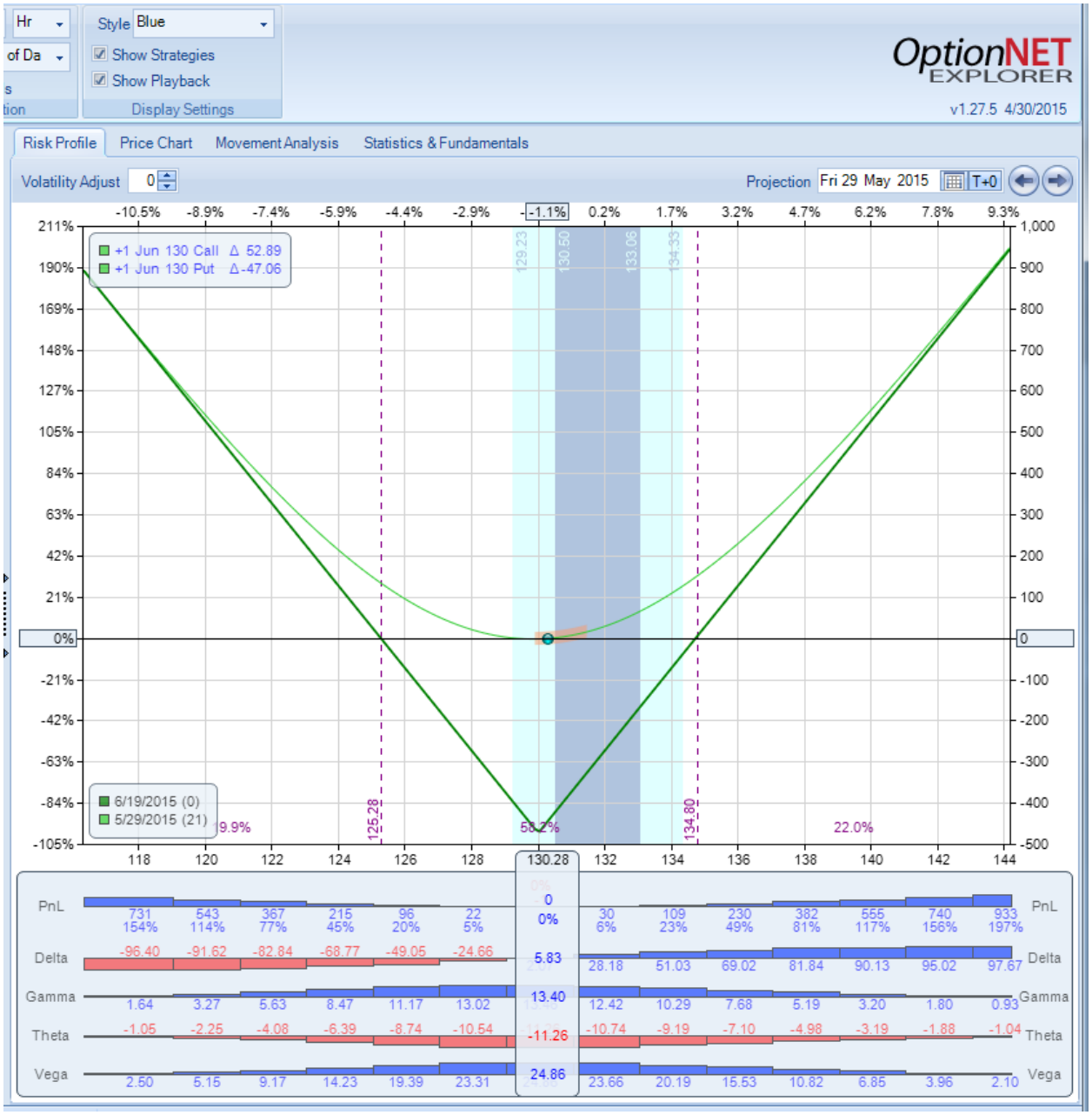
Maximum loss for long straddles occurs when the underlying stock price on expiration date is trading at the strike price of the options bought. At this price, both options expire worthless and the options trader loses the entire initial debit taken to enter the trade.

INVESTOPEDIA explains straddle:

Straddles are a good strategy to pursue if an investor believes that a stock's price will move significantly, but is unsure as to which direction. The stock price must move significantly if the investor is to make a profit. Should only a small movement in price occur in either direction, the investor will experience a loss. As a result, a straddle is extremely risky to perform. Additionally, on stocks that are expected to jump, the market tends to price options at a higher premium, which ultimately reduces the expected payoff should the stock move significantly.

Example

With AAPL currently trading at $130.28, you could buy AAPL straddle by buying 130 put and 130 call. This is how the P/L chart would look like:



How straddles make or lose money

A straddle is vega positive, gamma positive and theta negative trade. That means that all other factors equal, the straddle will lose money every day due to the time decay, and the loss will accelerate as we get closer to expiration. For the straddle to make money, one of the two things (or both) has to happen:

1. The stock has to move (no matter which direction).
2. The IV (Implied Volatility) has to increase.

A straddle works based on the premise that both call and put options have unlimited profit potential but limited loss. While one leg of the straddle losses up to its limit, the other leg continues to gain as long as the underlying stock rises, resulting in an overall profit. When the stock moves, one of the options will gain value faster than the other option will lose, so the overall trade will make money. If this happens, the trade can be close before expiration for a profit.

In many cases IV increase can also produce nice gains since both options will increase in value as a result from increased IV.

When to use a straddle

Straddles are a good strategy to pursue if you believe that a stock's price will move significantly, but unsure as to which direction. Another case is if you believe that IV of the options will increase - for example, before a significant event like earnings. IV (Implied Volatility) usually increases sharply a few days before earnings, and the increase should compensate for the negative theta. If the stock moves before earnings, the position can be sold for a profit or rolled to new strikes. **This is one of my favorite strategies that we use in our model portfolio for consistent gains.**

Many traders like to buy straddles before earnings and hold them through earnings hoping for a big move. While it can work sometimes, personally I don't like it. The reason is that over time the options tend to overprice the potential move. Those options experience huge volatility drop the day after the earnings are announced. In most cases, this drop erases most of the gains, even if the stock had a substantial move.

Buying a straddle before earnings

Few year ago, I came across an excellent book by Jeff Augen, "The Volatility Edge in Options Trading". One of the strategies described in the book is called "Exploiting Earnings - Associated Rising Volatility". Here is how it works:

1. Find a stock with a history of big post-earnings moves.
2. Buy a strangle for this stock about 7-14 days before earnings.
3. Sell just before the earnings are announced.

IV (Implied Volatility) usually increases sharply a few days before earnings, and the increase should compensate for the negative theta. If the stock moves before earnings, the position can be sold for a profit or rolled to new strikes.

Like every strategy, the devil is in details. The following questions need to be answered:

1. Which stocks should be used? I tend to trade stocks with post-earnings moves of at least 5-7% in the last four earnings cycles.
2. When to buy? IV starts to rise as early as three weeks before earnings for some stocks and just a few days before earnings for others. Buy too early and negative theta will kill the trade. Buy too late and you might miss the big portion of the IV increase. I found that 5-7 days usually works the best.
3. Which strikes to buy? If you go far OTM (Out of The Money), you get big gains if the stock moves before earnings. But if the stock doesn't move, closer to the money strikes might be a better choice.

Under normal conditions, a straddle or a strangle trade requires a big and quick move in the underlying. If the move doesn't happen, the negative theta will kill the trade. In case of the pre-earnings strangle, the negative theta is neutralized, at least partially, by increasing IV. In some cases, the theta is larger than the IV increase and the trade is a loser. However, the losses in most cases are relatively small. Typical loss is around 7-10%, in some rare cases it might reach 20-25%. But the winners far outpace the losers and the strategy is overall profitable.

Market environment also plays a role in the strategy performance. The strategy performs the best in a volatile environment when stocks move a lot. If none of the stocks move, most of the trades would be around breakeven or small winners. Fortunately, over time, stocks do move. In fact, big chunk of the gains come from stock movement and not IV increases. The IV increase just helps the trade not to lose in case the stock doesn't move.

Would you like to rent your options for free?

I would like to explain the "underneath" of this strategy.

Let's take a step back. When someone starts trading options, the first and most simple strategy is just buying calls (if you are bullish) or puts (if you are bearish). However, when doing that, you must be right three times: on the direction of the move, the size of the move and the timing. Be wrong just in one of them - and you lose money. You will also find out very quickly that options are a wasting asset. They lose value every day. If the stock doesn't move, the option is losing value. If it moves but not fast enough, it is losing value as well. It is called a negative theta. You can read more about the options Greeks here.

Another factor having a great impact on options value is IV (Implied Volatility). Rising IV will increase the option value, falling IV will decrease it. For volatile stocks, IV usually becomes extremely inflated as the earnings approach and collapses just after the announcement. This is why if you buy calls or puts before earnings and hold them through the announcement, you might still lose money even if the stock moves in the right direction.

Having said that, I would like to achieve the following three goals when trading options:

1. Not to bet on the direction of the stock.
2. To minimize the effect of the time decay.
3. To take advantage of the rising IV.

The strategy of buying a strangle (or a straddle) before earnings fits all three parameters. First of all, since I'm buying both calls and puts, I'm not betting on the direction of the stock. Second, I'm holding for a very short period of time, so the impact of the time decay is minimal. Third, since I'm buying a few days before earnings, the IV in most cases will rise into earnings. However, I will be selling just before the announcement, so the options will not suffer from the IV collapse.

Now, few scenarios are possible.

1. The IV increase is not enough to offset the negative theta and the stock doesn't move. In this case the trade will probably be a small loser. However, since the theta will be at least partially offset by the rising IV, the loss is likely to be in the 7-10% range. It is very unlikely to lose more than 10-15% on those trades if held 2-5 days.
2. The IV increase offsets the negative theta and the stock doesn't move. In this case, depending on the size of the IV increase, the gains are likely to be in the 5-20% range. In some rare cases, the IV increase will be dramatic enough to

produce 30-40% gains. For example, AAPL strangle could be purchased on Friday before October 2011 earnings and sold the following Monday for 32% gain.

3. The IV goes up followed by the stock movement. This is where the strategy really shines. It could bring few very significant winners. For example, when Google moved 7% in the first few day of July 2011, a strangle produced a 178% gain. In the same cycle, Apple's 3% move was enough to produce a 102% gain. In August 2011 when VIX jumped from 20 to 45 in a few days, I had the Disney DIS strangle and few other trades doubled in a matter of two days.

This is why I call those trades "renting a strangle/straddle for free" (or almost free). Even under the most unfavorable conditions, your loss is usually limited to 7-10%. But if you get a decent IV increase and/or a stock movement, the gains could be much higher.

Another big advantage of this strategy is the fact that it is not exposed to the gaps in the stock prices - in fact, it benefits from them. So you cannot suddenly find yourself down 30-50%. You can always control the losses and limit them.

Selection of strikes and expiration

I would like to start the trade as delta neutral as possible. That usually happens when the stock trades close to the strike. If the stock starts to move from the strike, I will usually roll the trade to stay delta neutral. To be clear, rolling is not critical - it just helps us to stay delta neutral. In case you did not roll and the stock continues moving in the same direction, you can actually have higher gains. But if the stock reverses, you will be in better position if you rolled.

I usually select expiration at least two weeks from the earnings, to reduce the negative theta. The further the expiration, the more conservative the trade is. Going with closer expiration increases both the risk (negative theta) and the reward (positive gamma). If you expect the stock to move, going with closer expiration might be a better trade. Higher positive gamma means higher gains if the stock moves. But if it doesn't, you will need bigger IV spike to offset the negative theta. In a low IV environment, further expiration tends to produce better results.

Profit Target and Stop Loss

My typical profit target on straddles is 10-15%. I might increase it in more volatile markets. I usually don't set a stop loss on a straddle. The reason is that the upcoming earnings will usually set a floor under the price of the straddle. Typically those trades don't lose more than 5-10%. I believe our biggest loss on a straddle was around 25%, and only handful of them have lost more than 20% since inception.

The biggest risk of those trades is pre-announcement. If a company pre-announces earnings before the planned date, the IV of the options will collapse and the straddle can be a big loser. However, pre-announcement usually means that the results will be not as expected, which in most cases causes the stock to move. So most of the time, the loss will not be too high, especially if there is still more than two weeks to expiration. But this is a risk that needs to be considered.

As a rule, I will always close those trade before earnings.

Why I don't hold through earnings

Some people would argue that selling before earnings is premature. Why not to hold through earnings, hoping for a big move?

The problem is you are not the only one knowing that earnings are coming. Everyone knows that those stocks move a lot after earnings, and everyone bids those options. Following the laws of supply and demand, those options become very expensive before earnings. The IV (Implied Volatility) jumps to the roof. The next day the IV crashes to the normal levels and the options trade much cheaper.

For example, holding straddles on stocks like AMZN or NFLX could be very profitable during some of the last cycles. However, we have to remember that those stocks experienced much larger moves than their average move in the last few cycles. Chances are this is not going to happen every cycle. There is no reliable way to predict those events. The big question is the long term expectancy of the strategy. It is very important to understand that for the strategy to make money it is not enough for the stock to move. It has to move more than the markets expect. In some cases, even a 15-20% move might not be enough to generate a profit.

Some people might argue that if the trade is not profitable the same day, you can continue holding or selling only the winning side till the stock moves in the right direction. It can work under certain conditions. For example, if you followed the specific stock in the last few cycles and noticed some patterns, such as the stock continuously moving in the same direction for a few days after beating the estimates. Another example is holding the calls when the general market is in uptrend (or downtrend for the puts). However, it has nothing to do with the original strategy. From the minute you decide to hold that trade, you are no longer using the original strategy. If the stock didn’t move enough to generate a profit, you must be ready to make a judgment call by selling one side and taking a directional bet. This might work for some people, but the pure performance of the strategy can be measured only by looking at a one day change of the strangle or the straddle (buying a day before earnings, selling the next day).

The bottom line:

Over time the options tend to overprice the potential move. Those options experience huge volatility drop the day after the earnings are announced. In most cases, this drop erases most of the gains, even if the stock had a substantial move.

Jeff Augen, a successful options trader and author of six books, agrees:

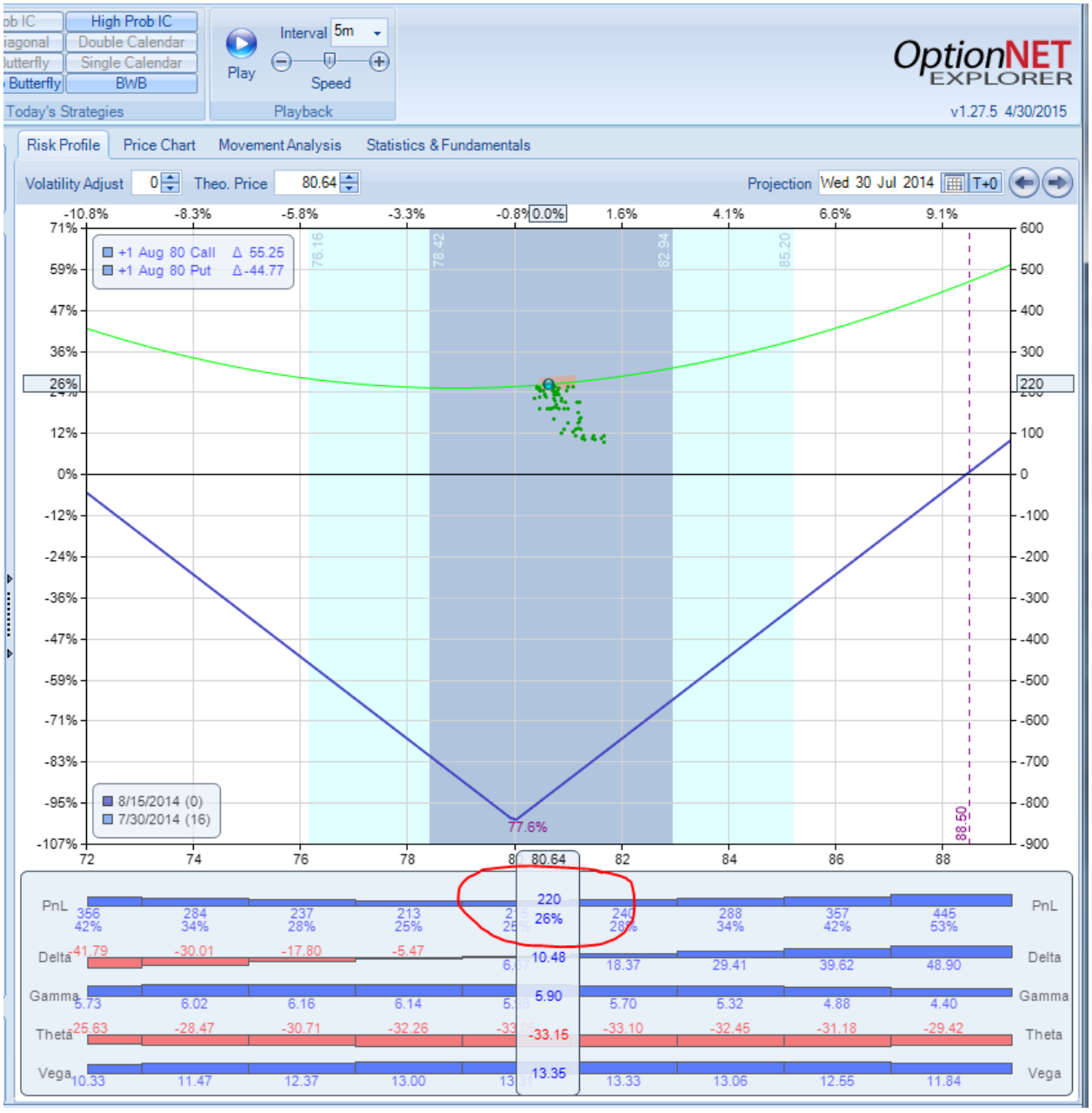
“There are many examples of extraordinary large earnings-related price spikes that are not reflected in pre-announcement prices. Unfortunately, there is no reliable method for predicting such an event. The opposite case is much more common – pre-earnings option prices tend to exaggerate the risk by anticipating the largest possible spike.”

It doesn’t necessarily mean that the strategy cannot work and produce great results. However, in most cases, you should be prepared to hold beyond the earnings day, in which case the performance will be impacted by many other factors, such as your trading skills, general market conditions etc.

Test Case #1

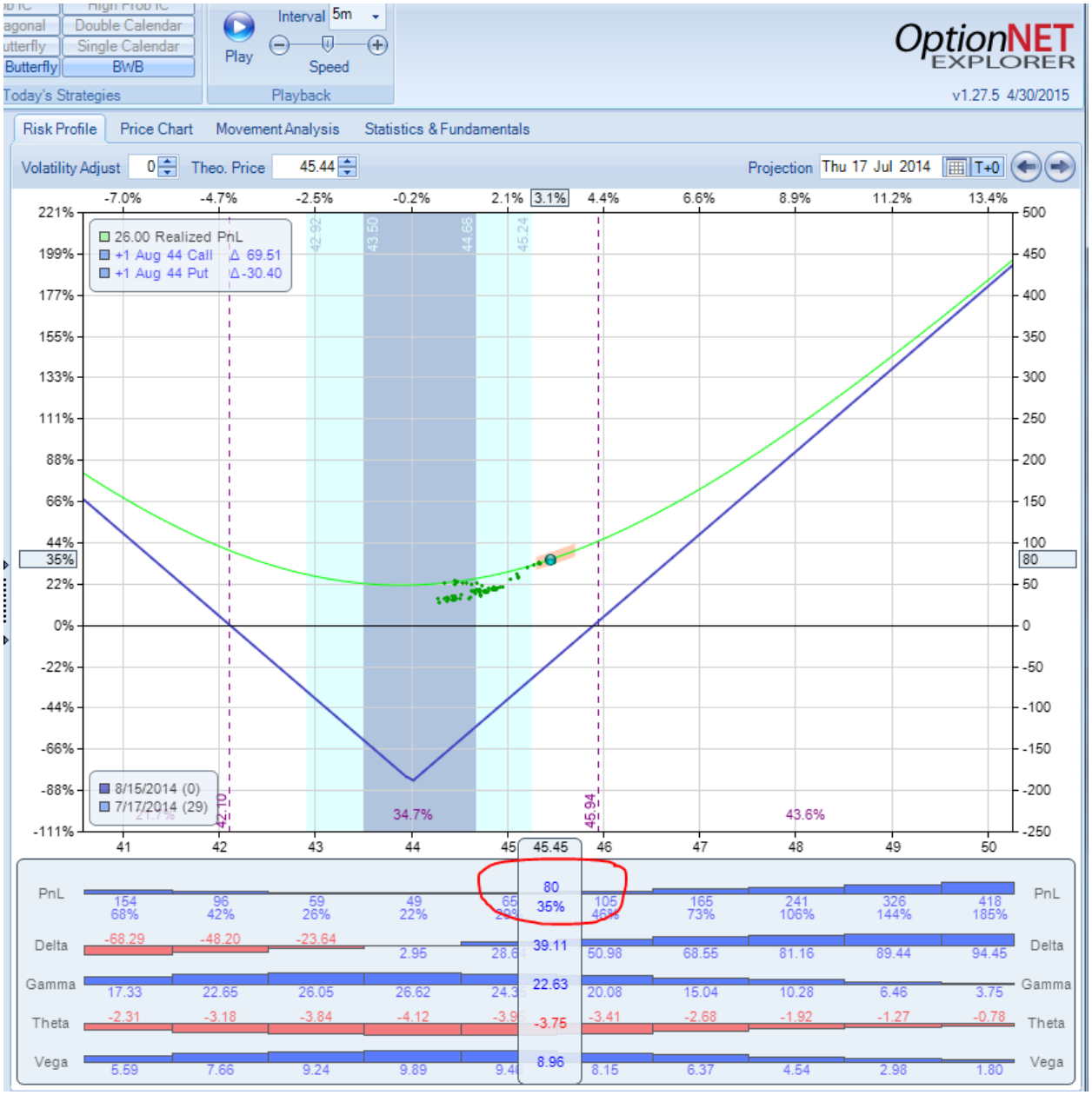
On July 28, 2014 we purchased EXPE 80 straddle expiring in 18 days. We paid $8.45 for the trade. The IV of the options was around 59%.

Two days later, the IV of the options jumped to 73% and we sold the straddle at $9.85, for 16.6% gain. An hour later, IV reached 80%, and the straddle could be sold for 26% gain. The stock itself moved less than 1%.



Test Case #2

On June 24, 2014, we purchased MSFT $42 straddle expiring in August. We were able to roll the straddle twice, and finally closed it on July 17 for 35.4% gain. In this case, most of the gains came from the stock movement.



Conclusion

Buying a straddle or a strangle few days before earnings can be a very profitable strategy if used properly. Of course the devil is in the details. There are many moving parts to this strategy:

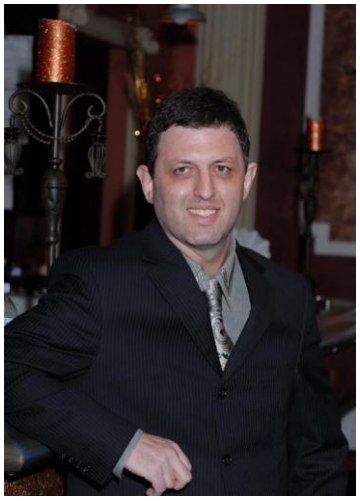
1. When to enter?
2. Which stocks to use?
3. How to manage the position?
4. When to take profits?

And much more. But overall, this strategy has been working very well for us.

Here is an example how this strategy performed during the August 2011 crisis:

08/09/11	08/20/11	11 Days	CRM strangle	41.5%
08/09/11	08/17/11	8 Days	NTAP strangle	19.0%
08/03/11	08/08/11	5 Days	DIS strangle	107.1%
08/0311	08/08/11	5 Days	HPQ strangle	109.7%
08/03/11	08/08/11	5 Days	CRM strangle	101.7%
08/03/11	08/08/11	5 Days	NTAP strangle	104.5%
07/27/11	08/03/11	7 Days	GRMN strangle	20.1%
07/27/11	08/03/11	7 Days	DNDN strangle	82.3%
07/27/11	08/04/11	8 Days	CF strangle	19.0%
07/27/11	08/08/11	12 Days	RL strangle	124.2%

About the Presenter



Kim Klaiman is a full time options trader. He is a founder of steadyoptions.com - options education and trade ideas, earnings trades and non-directional options strategies. Kim has been trading stocks and options for more than 10 years. He likes to trade variety of non-directional trades with low correlation to limit the total portfolio risk. Kim wrote over 100 articles for Seeking Alpha. He started the SteadyOptions educational forum after numerous requests from his Seeking Alpha readers, to share his experience and trading ideas. Kim holds a BSc degree in Computer Science. He lives in Toronto, Canada. You can follow him on Google+ and Twitter.

steadyoptions.com is a combination of a high quality education and actionable trade ideas. Our style is non-directional trading. We aim for steady and consistent gains with a high winning ratio and limited risk. Our focus is on trading Earnings-Associated Implied Volatility rise, Iron Condors, Calendar spreads etc. Our performance is based on real fills, not hypothetical performance.

You can see our full performance here.

If you want to learn how to use the straddle strategy (and many other profitable strategies):

Start Your Free Trial