TheStreet.com Options Alerts

3 Wealth-Building Options Strategies for independent investors

by Steven Smith

Options allow investors and traders alike to develop myriad approaches to a trade. Someone may want to go long Google, for example, and assume the only way to make that trade is to chase the mother of all momentum stocks higher. But that's where options come into play: They let you access the object of your affection from a different angle and often with a superior risk/reward.

Although there are more strategies than you can shake a stick at, the three below are my favored methods of employing options to play the market, and the single stocks within it. We do speculate and occasionally win or lose big, but we approach trading as a job, and the options pits are the factories. The strategies are the employees, you keep the ones that work and fire the ones that don't. If we want to have a steady and reliable product, we need to come to work every day, turn the machines on and hopefully they spit out a new widget without anyone getting hurt.

So without further ado, here are the three spread trades that every option user should be comfortable with: the vertical spread, the calendar spread, and the butterfly spread. Each has different advantages in its, and ultimately your, favor.

Vertical Spreads

A vertical spread is one of the most versatile tools for making directional-based trades. Because most of the trades in *TheStreet.com Options Alerts* are based on expectations of a price movement in the underlying shares, vertical spreads have been and will continue to be frequently employed.

The strategy is relatively easy to understand, because it has a well-defined risk/reward and can usually be executed in a single transaction at market prices. But these are options, so the strategy is not without its nuances. Therefore, understanding the benefits, drawbacks and, most important, how the pricing behavior under various market conditions will affect the value of a vertical spread, are crucial to the successful application of the vertical spread.

A vertical spread is constructed through the purchase of a call or put option at one strike price and the simultaneous sale of an equal number of contracts with the same expiration date. One can either sell a spread for credit (selling the closer to-the-money or higher-priced option and buying the further out-of-the-money or lower-priced option) or buy a spread for a net debit. In both cases the profit and loss are limited to the differential between the two strike prices, plus or minus the net credit or debit.

To clarify, here's an example of a bullish call spread in XYZ Corp.:

- Buy 10 May XYZ calls with a $50 strike for $5 per contract
- Sell short 10 May XYZ calls with a $60 strike at $2 per contract

The net debit of this position is $3, which is also equal to the maximum loss. The maximum profit is $7.00, which is equal to the difference between strikes minus the net debit (10-7=3).

Many people wonder whether it is better to sell spreads for a credit or buy for a debit. The fact is, when using the same strikes, a call debit spread (bullish) has the exact same risk/reward as selling a put spread for a credit.

Using the example above one would expect to be able to sell the May $60 put and buy the May $50 put for a net credit of $7.00, meaning, just like the call debit spread, both are bullish positions with a maximum risk of $3 realized if the stock fell below $50 at expiration. The maximum gain is $7 if the stock is above $60 at expiration. If the stock is $55 at expiration both positions will be worth $5, meaning both net a $2 profit.

If this price structure did not hold true then it would be a risk-free arbitrage situation -- given the efficient nature of markets, that rarely happens. This is important to understand because it illustrates the concept of the box spread, which is the foundation on which all option prices are built upon. So understanding the relationship is the starting point for using spread strategies.

Once you move away from the box, the risk/reward and pricing behavior *of* credit and debit spreads using *different* strike prices changes greatly, and understanding these *differences* is crucial to choosing the strategy that best aligns with your investment thesis. Before getting to some specifics there are some general rules governing pricing behavior.

The Silence of the Greeks

A vertical spread – again, the simultaneous purchase and sale of related options -- is meant to minimize the impact of two of the most important components of options trading: implied volatility (vega) and time decay (theta), which both affect an option's value. And because you have both a long and a short position in a vertical spread, the effect of the change in the price of the underlying stock (the position's "delta") is also diminished. This muting of the influence of the "Greeks" has both advantages and disadvantages.

The most difficult-to-understand concept of price behavior is that in-the-money (ITM) options and out-of-the-money (OTM) options respond differently to changes in implied volatility.

- An out-of-the money spread's value increases as implied volatility rises and loses value as implied volatility declines.

- An in-the-money spread's value increases as implied volatility declines and loses value as implied volatility increases.

A good way to think about this is that an increase in implied volatility has the same effect as expanding time. The reason longer-dated options have higher premiums is that there is a higher probability of price movement over a longer time period. Consider changes in implied volatility as an artificial means of changing the expiration date. Because all options must expire with a value equal to their intrinsic value, ITM options are worth something, OTM options are worthless. So, a decline in I.V. will more adversely effect an OTM option whose value is solely comprised of extrinsic or time value. This is an important concept in deciding not only whether to use debit or credit spreads but in choosing which strike prices and expiration dates to use.

Risking Less to Make More Less Frequently (and vice versa)

A quick comparison between buying an OTM spread for a debit and selling an OTM spread for a debit will be helpful for setting the framework.

For example, with the Spyder Trust (SPY:Amex) trading at $129, the May $131/133 call spread can be bought for a net debit of 60 cents, giving it a maximum profit of $1.40. The May put credit spread with the same strikes (sell the $133 put, buy the $131 put) can be sold for a net credit of $1.35 (which is also the maximum profit) giving it a similar 65 cents risk. They are essentially the same position and will produce the same profit/loss for any given price of the SPY. This is the box spread discussed above.

But the equidistant out-of-the-money credit spread -- selling the $128 put and buying the $126 put -- generates a credit of just 55 cents (which is the maximum profit) and has a maximum loss of $1.45 per spread. But the maximum profit of the credit spread can be achieved if the Spyders close at any price above $128 at expiration. This means that even if the ETF declines by 1%, this erstwhile bullish position still achieves its maximum profit. Compare this to the call debit spread, which has a breakeven point of $131.40, or a 1% rally just to break even, and a move above $133 at expiration to realize the maximum profit.

The trade-off you face in almost any option position is higher reward for lower probability of profit or higher risk for more frequent if smaller profits.

Let's cut to the chase and go look at some scenarios and choose which spread we think would be appropriate.

If you believe a stock's price is likely to remain above a certain price, but don't foresee a big price gain, it makes sense to either buy an ITM call spread or sell an OTM put credit spread. Again, these will be two sides of the same box. Because a decrease in volatility (which equates to an acceleration of time decay) benefits these positions, one would usually look at shorter-dated options.

If you expect a fairly decent-sized price move, it makes sense to buy an OTM spread for a net debit, or of course sell an ITM credit spread. In this case one might use options with at least 60 days remaining to allow for time for your directional thesis to play out.

The action in Juniper earlier this year provides an example of how to use a basic vertical spread to benefit from an increase in price. On Jan. 12 the stock was trading at $21.60, and we bought the January $20/$22.50 call spread for a net debit of $1.45. On Jan. 18, with the stock trading at $22.20, we sold the spread for a net credit of $2.10 for a profit of 65 cents. We were able to net a profit of 65 cents on a 60-cent stock move thanks to using an at-the-money spread. The spread's value benefited from time decay as the ITM $20 call held its value while OTM $22.50 call suffered an acceleration of time decay as expiration approached.

Calendar Spreads: Time is Money. Sometimes.

One of the most important concepts to understand before trading options is that options are a wasting asset, meaning they decay over time.

The time decay, or theta, of an option can be harnessed to create positions that use the clock to your advantage. The calendar spread, which is also known as a time or horizontal spread, is one of the best, and most straightforward, strategies for getting the power of the clock behind your back.

A long calendar spread consists of selling a call (or put) and simultaneously buying an equal number of contracts of an option that has the same strike price, but a different expiration date. A short calendar spread has you buying the front-month and selling the later dated option, but I want to focus on being long these time spreads.

Are Flat Markets Your Friend?

Bulls and bears alike can use the calendar spread, using puts and calls, respectively.
The rationale behind this is that while the two options are offsetting, meaning you aren't likely to make or lose money in the short term, the time value of a front-month call will decay faster than the time value of a back-month call. Theta is defined on a slope, meaning time decay accelerates as expiration approaches. Therefore, the value of the spread can increase in a flat market, and equally important, the position's delta increases as time moves forward.

Here are a couple of basic concepts about the pricing behavior of a calendar spread to keep in mind when looking at long calendar spreads:

Advantages:

- They benefit from time decay.
- The downside is limited to the cost of the spread.
- It is best used when you expect a flat price or an increase in implied volatility.

Disadvantages:

- Profit is limited over the near-term.
- A sharp move in price that pushes the spread into or out of the money has a negative impact on the value of the spread.
- A decline in implied volatility has negative impact on the value of the spread.

With the above in mind, it becomes understandable why many people feel the optimal application of a calendar spread would be to use at-the-money options on a stock with a narrow trading range and a low implied volatility.

Of all the strikes on a particular stock, an at-the-money option is the highest-priced option that has no intrinsic value, and offers the richest premiums that are ripe for harvesting time decay. In theory, you can just put on some at-the-money calendar spreads, wait four weeks and earn an easy 3%-5% for the month. Then do it again. And again for as many monthly cycles are left until the options you own are set to expire.

The problem is that few stocks remain flat indefinitely, and a price move that occurs too soon or is too large has a negative effect on the position's value. Also, rolling a calendar position forward every month means you need to be right every month. A calendar spread could be set up selling the front month and then buying a LEAP or option with 12 months remaining; the intent of rolling the position each month is really like establishing 11 separate calendar spreads. But that is 11 different times you need to be right that the stock price will be relatively flat and volatility will remain firm. Again, the value of the calendar spread declines as it moves further into or out of the money.

If using an at-the-money calendar spread, my suggestion would be to buy an option that has three months remaining and sell an option with at least three weeks remaining. For example, assume it is May 1 -- buy the July option and sell the May option. The three-month option you buy won't see much time decay for another four weeks. The near-term option you sell is just hitting the steep part of theta's slope. This allows you take maximum advantage of the different rates of time decay right off bat. It will also allow you, if the conditions seem right, to do *one* more cycle of selling. Hopefully you will have then realized a reasonable profit. If you think the name still warrants more calendar spreads then look at the selling August and buying October options.

The Way I Use 'Em

What I like to do on calendar spreads is start with a directional bias or market opinion. I then use out-of-the-money options to establish a very low-cost calendar spread. Remember, as calendar spreads move out of the money, they lose value. This gives me three ways to profit: off a directional move in which the stock moves toward my strike price; an increase in volatility, which also benefits the position; and time decay, which still benefits the position, although to a lesser degree.

Let's use a recent trade from the newsletter that covers several of the above-mentioned topics.

On Jan. 23, with shares of American Express (AXP:NYSE) trading at $51, we established a calendar spread by selling 30 of the February $52.50 calls and buying 30 of the April $52.50 calls for a net debit of 90 cents for the spread. The total cost and risk was $2,700 for the 30-contract position. What follows are the trades, adjustments, and finally the exit of the position.

Feb. 15 -- Sold half the position (15 contracts) for a net credit of $1.30, a 40-cent profit. Shares of AXP rose from $51 to $53 during that three-week time period. So the position benefited from both getting closer to the money and some time decay.

Feb. 17 -- The balance of the 15 April calls expired worthless. The position is now just outright long 15 April calls, which have an effective cost basis of 50 cents. I'm applying the 40 cents from the half-closed position, because we don't talk about dollar profits or losses on positions until the whole position is closed.

Feb. 23 -- Shares of AXP have now risen to $55 per share, and it's time make some adjustments. I roll the long April $52.50 calls up to the $55 strike for a net credit of $1.65. This takes money off the table and maintains upside exposure.

Feb. 27 -- It looks like shares are stalling near $55, so I sell the 15 March $55 calls at 80 cents. This creates a March/April at-the-money calendar spread.

March 24 -- The March $55 calls expire worthless, as shares of AXP finish at $53.20 on the expiration. So that's 80 cents we collected. The portfolio is still long 15 April $55 calls.

March 28 -- Shares of AXP close below $53 per share, the stop we had set for exiting the position. We sell the April $55 calls at 40 cents. The position is closed. All told, it produced a profit of $1,775 over the two-month holding period.

Spend the time walking through that position. It illustrates that many options strategies, especially those that are hedged or are attempting to benefit from time decay, take a lot of work and produce only relatively modest gains. Remember, the position's initial risk was $2,700, so the return on investment was 37%. Although I believe that is great for a two-month period, I know many people want or expect that options are trades that give triple-digit returns in a matter of days. Not this newsletter.

Butterfly Spreads: A Low-Cost Position That Can Turn Hugely Profitable

A butterfly spread is a three-strike position. There are two basic types of butterflies: short and long. The short butterfly involves selling the outside strikes and purchasing the inside. Its maximum profit is equal to the net premium collected, and is realized if the underlying asset is below the lowest strike or above the highest strike at expiration.

The spread's construction requires the sale (or purchase) of two identical options, together with the purchase (or sale) of one option with the immediately higher strike, and one option with an immediately lower strike. All options must be the same type and have the same expiration date. One way to think of butterflies is as a combination of two vertical spreads -- one bullish and one bearish, with a common middle strike.

The name is undoubtedly derived from its structure of a midsection and two equidistant outside pieces, creating a profit/loss diagram with two "wings." Being a bit of a romantic, however, I like to think it refers to a position that starts off as essentially neutral and, without touching it during most of its lifespan, has the potential of emerging as a beautifully profitable position.

The long butterfly consists of buying the outside pieces and selling the inside. Here I will focus on the long form of the butterfly, which I tend to use almost exclusively. The maximum profit of the long butterfly is the value of the long spread minus the premium paid, and it is realized if the underlying settles at the middle strike on expiration.

A typical long butterfly on XYZ Corp. might be constructed this way:

- Long 1 May $50 call at $1.00
- Short 2 May $55 calls at 50 cents
- Long 1 May $60 call at 25 cents

The net cost of the position is 25 cents per contract. This is also the maximum loss or risk if shares of XYX are below $50 and above $60 on the May expiration date. The maximum profit is $4.75 cents (the difference between strikes minus the cost) and is realized if shares of XYZ are at $55 on expiration.

What Happens in the Cocoon, Stays in the Cocoon

Butterflies are sometimes known as vacation positions because you can put one on and walk away. This probably stems from the nature of their pricing behavior.

The butterfly's value is nearly immune to changes in implied volatility, time and even the price of the underlying asset. That means the spread's value (and position's delta) will remain relatively neutral regardless of the underlying asset's price movement or changes in volatility. That begins

to change when there are less than two weeks remaining until expiration.

At that point, delta begins to increase, and the position's value can expand or contract as the price of the underlying rises and falls. The advantage of having a position that is basically immune to changes in the variables is that it does not require much monitoring or frequent adjustments. The disadvantage is that profits cannot be realized until the final week or days prior to expiration.

In sum, long butterflies are best applied during relatively flat or narrow markets or establishing the midpoints at price levels, such as support or resistance levels, which might act as price magnets heading into options expiration.

My attraction to butterflies is that they provide a low-maintenance strategy with a limited risk/reward profile that isn't altered by a change in implied volatilities. It is a position that can be established for a minimum cost but has an attractive return, usually on the order of risk of $1 to make $4 per contract. Depending on the price level and timing, it can be used as a platform for trading other positions against.

A recent trade provides a good example of some of the concepts.

On April 3, with the Spyder Trust (SPY:Amex) trading at $129.80, we established two skip-strike butterfly spreads, using both puts and calls. Let's focus on the call side:

The position consisted of:

- Long 10 April $130 calls,
- Short 30 April $132 calls,
- Long 20 April $133 calls.

Please notice that rather than the standard 1 x 2 x 1 construction using consecutive strike prices, I used a 1 x 3 x 2 construction and "skipped" a strike between the first leg and short middle body. But the total numbers of long and short options remained equal, meaning this is a fully covered position with limited risk. The advantage of the "skip strike" is that it can usually be done for the same net debit but expands the range in which a profit can be realized.

The standard butterfly of long 10 April $130 calls/short 20 $131 calls/long 10 $132 calls would have had a cost of 35 cents at the time. The maximum profit potential would have been 65 cents (difference between strikes minus cost) if SPY were at $131 at expiration -- a 1:2 risk reward.

By comparison, the skip-strike fly cost 40 cents but had a maximum profit of $1.60 if the SPY is at $132 at expiration. For an extra nickel, or 15% greater risk, the position's risk/reward profile improves nearly 100%. The new maximum profit of $1.60 is nearly four times the cost or maximum loss.

I don't want to complicate this example, but it will help explain the upcoming adjustment. At the same time, I had established a skip-strike fly in the Spyder puts, going long 20 April $128s, short 60 $125s and long 40 $125s for a net debit of just 20 cents. The maximum profit of $1.80 per contract is therefore realized if the Spyders are at $126 on expiration day. Obviously, the profitability of these two positions is mutually exclusive, and both realize maximum loss if the SPY is between $128 and $130 on expiration.

On April 12, the Spyder dropped to 1286 and we used this decline to expand the profit zone of the position at minimal extra cost. The adjustment consisted of rolling down the long $130 calls to the $129 strike on a 1x2 basis. We bought five $129 calls and sold 10 $130 calls.

The new position looked like this:

- Long 5 April $129 calls
- Short 30 April $132 calls
- Long 35 April $133 calls.

Note that we bought an additional five $133 calls for a nickel just to keep the numbers straight, and the position is limited risk in nature.

When the market rallied a few days later, we executed a similar adjustment to the put side, creating a 129/126/125 skip-strike put spread for just another nickel. Both positions share the $129 strike, meaning we narrowed the break-even points, or the area in which we could incur a loss, to justify the combined cost of the two positions; in this case that is $700, making $128.70 and $130.20 the break-even points. Now we just waited to see where the Spyders would land. On the April 21 expiration, the ETF closed at $131.15, giving the position a net profit of $820, an 85% return over the five-week holding period.

Building Butterfly Case

As you become more comfortable and use more complicated strategies, butterflies might become the foundation on which most of your option positions are built. Many professional traders and market-makers will establish butterfly spreads across a multitude of strike prices as an inexpensive way to build an inventory of vertical spreads. They can use price swings to harvest profits by buying back inside pieces when they are cheap or using the long wings as protection against a large price swing.