

The Long Option Strategy

Simple directional trading strategies for the beginner

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An option is a beautiful thing. Buy one. When you're correct about the direction of the market, the gains are unlimited. When wrong, your losses are limited. No other trading instrument gives you a better chance of hitting a home run.

Years ago, the conventional wisdom was to sell options, placing time decay on your side. But in recent years, many pundits have made a case for buying options. Lawrence McMillan, the icon of options, wrote in his newsletter *The Options Strategist* about how often stocks make 2nd and 3rd standard deviation moves – more often than they should based on the assumption that stocks follow a lognormal probability distribution. And it's interesting to note that McMillan's only managed fund is chartered to do straddle buying.

Nassim Taleb, in the Sep 2000 issue of *Stocks and Commodities*, wrote how his fund invests constantly in both puts and calls, tolerating the drain of time decay while waiting for the big strike. Nassim loves the non-linear performance curve of an option. And the only way to put this quality of an option in your favor is to be long the option.

Sure, time decay works against your position while the underlying goes nowhere, or takes an excursion in the wrong direction first, but this is an acceptable cost if the option is reasonably priced; that is, when implied volatility is at normal or below normal levels. There is nothing wrong with buying a reasonably priced option.

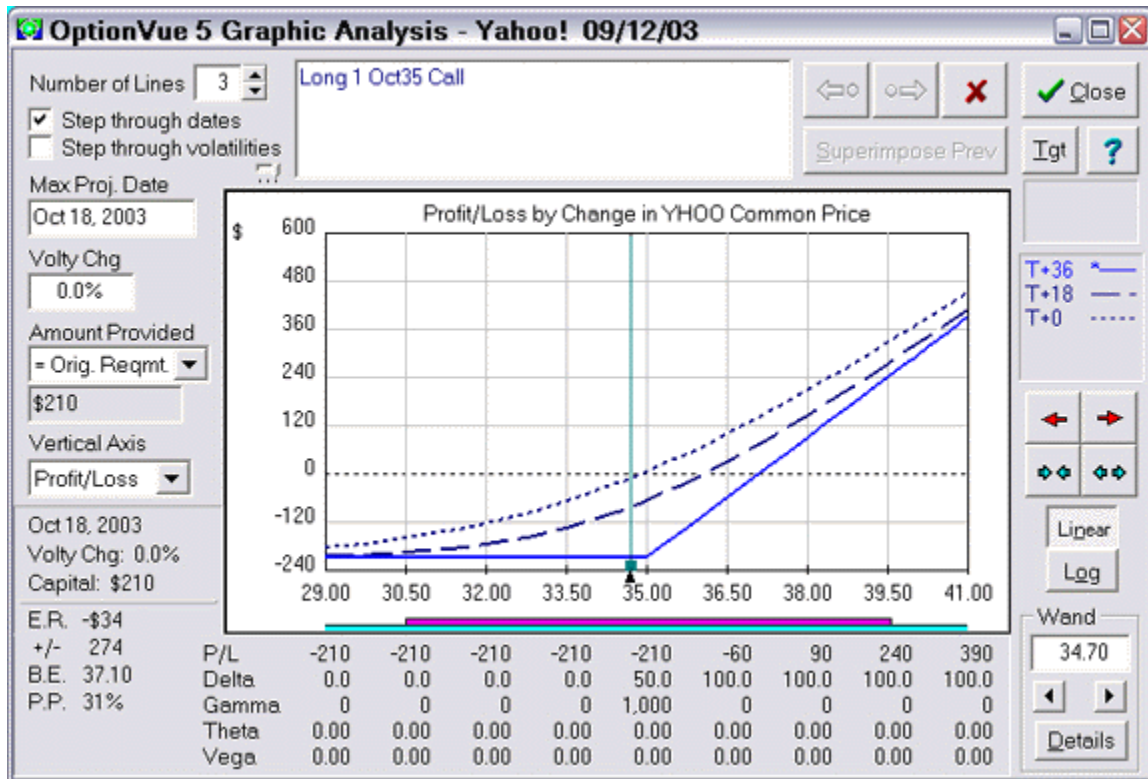
Long Calls

When a call option on stock is purchased, the call option holder controls the stock without actually possessing it, and does so for a fraction of the cost. Therefore the long call is a leveraged up position in comparison with owning the stock itself. If the stock's price goes up just a few percentage points, it is safe to say that its call options will increase by a greater percentage. Some may even double in value.

Other important characteristics of this strategy are limited risk and unlimited potential. An option buyer can only lose the amount paid for the option; nothing more. At the same time, the profit potential is theoretically unlimited. A call option's value rises without limit as the price of the underlying goes up.

The qualities of leverage, limited risk, and unlimited potential make call option buying attractive for speculators looking for a quick move to the upside. I say "quick" because the option buyer's enemy is time decay. Each day the option loses some of its value. For this reason call buying works best when the speculator is working in a short time frame, expecting a move to happen within a few days at the most.

The performance graph for the Long Call below clearly shows the limited risk and unlimited potential for this strategy:



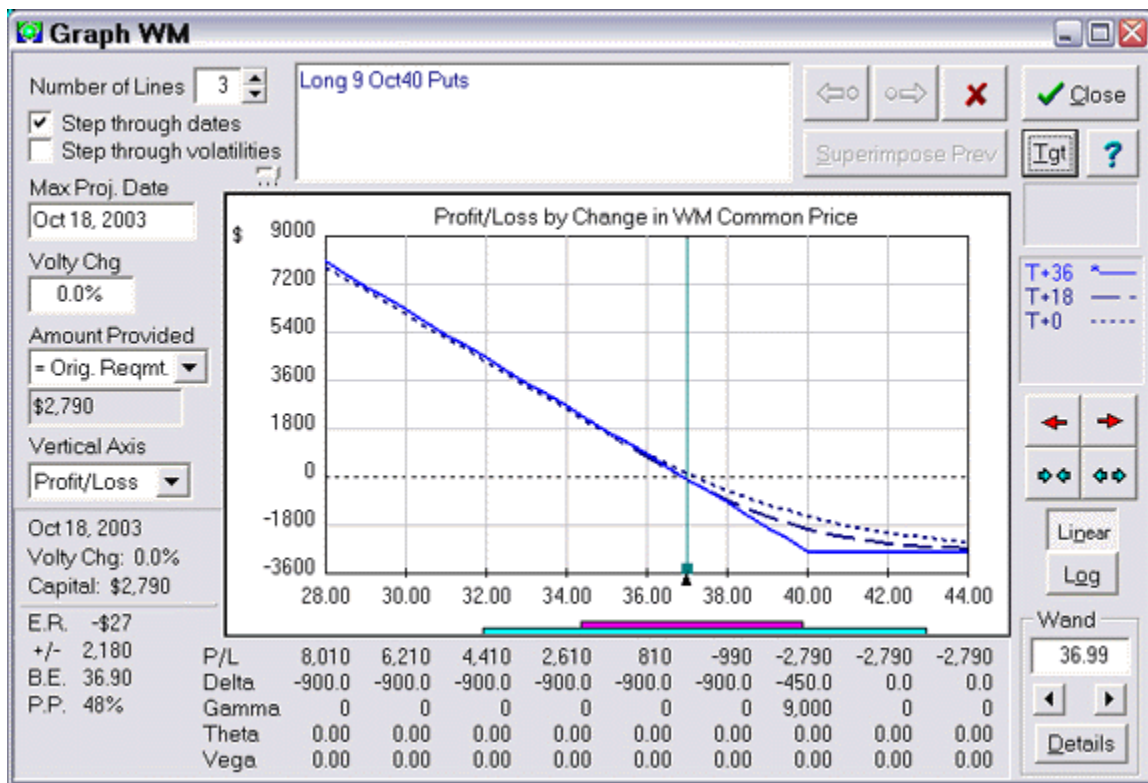
The three lines illustrate how time decay affects the position. The dotted line represents the long call's theoretical performance as of today, the solid line represents the performance at expiration (the final day of trading), and the dashed line represents the performance of this option midway between today and expiration.

Long Puts

The put option buyer gains the right to sell stock without actually possessing it, and does so for a fraction of the cost of shorting the stock itself. Buying a put is a highly leveraged bearish position. If the stock price goes down just a few percentage points, its put options will increase by a greater percentage. Some may even double in value.

Like the Long Call, the Long Put has the characteristics of limited risk and unlimited potential. An option buyer can lose the amount paid for the option; nothing more. At the same time, the profit potential is theoretically unlimited. A put option's value rises without limit as the price of the underlying goes down.

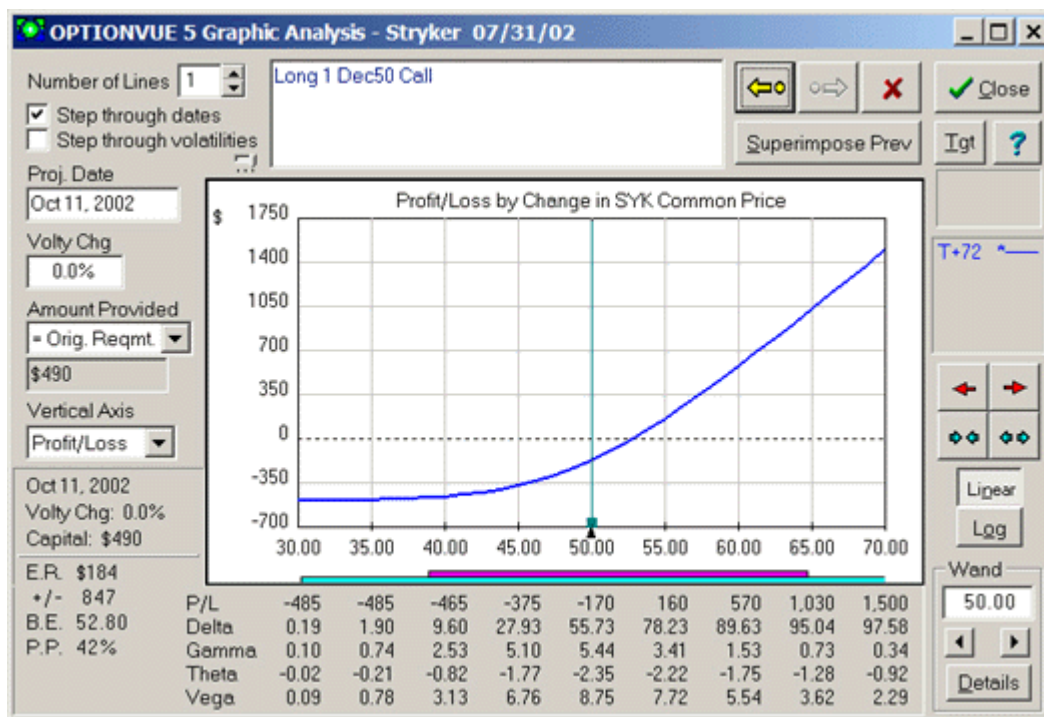
The performance graph for the Long Put on Washington Mutual, one of the currently recommended trades in the OptionVue Research model portfolio, illustrates the limited risk and unlimited potential for this strategy:



The qualities of leverage, limited risk, and unlimited potential make put option buying attractive for speculators looking for a quick move to the downside. Again, the three different lines clearly show that an option buyer's enemy is time decay, so put buying works best when the speculator is looking for a move to happen fairly quickly.

The Advantage of Non-linear Performance

Prior to expiration, an option's profit/loss profile is a gentle curve, bending the most in the middle, and flattening in either direction – kind of like a bent steel bar. On one end the curve flattens out into a 45 degree angle. This is when the option is deep in the money. In the other direction the curve approaches a zero degree angle. This is when the option is far out-of-the-money. The figure below shows the familiar profile of an at-the-money call option purchase halfway to the expiration date:



An at-the-money option is at its maximum inflection point. From there, as the underlying moves in the desired direction, your position makes money faster and faster. For example, the first point the underlying moves in your direction, the option gains perhaps 0.5 point. The next point the underlying moves in your direction, the option gains perhaps 0.55 point. And so on, until when the option is deep in the money, it moves point for point with the underlying.

On the other hand, if the underlying moves against you, your position loses money slower and slower as the curve flattens out.

Which option to buy?

The question of which option to buy is a good one, because options with different strike prices and duration will respond in widely varying degrees to price movements of the underlying and other conditions.

An out-of-the-money option has higher leverage. So if the underlying makes a swift, sizable, and immediate move in your favor, an out-of-the-money option does the best job of multiplying your money. However, if this move does not quickly materialize, the out-of-the-money option's performance is bound to disappoint.

At-the-money and in-the-money options move better with the underlying because their delta is greater. The delta of an at-the-money option is typically around 50 – meaning that a one-point move in the underlying translates into a ½ point move for the option. In-the-money options have deltas approaching 100; thus they move almost point-for-point with their underlying.

While in-the-money options best track their underlying, they are more expensive, lowering your leverage. And they can be less liquid, increasing your transaction costs. On the positive side, in-the-money options have a lower time premium component, so their time decay is slower. So you might be more comfortable using an in-the-money option when you want to allow several days or even weeks for the underlying to move.

Often the best balance of leverage, cost and liquidity can be found using just-in-the-money options. That is my personal favorite for positions I plan on holding 1 – 5 days.

As for duration, a good rule of thumb is to buy an option with at least twice the remaining life as the maximum length of time you plan on holding the position, although this can be relaxed for deep in-the-money options where time decay is not a significant factor.

Sometimes an option does not respond predictably to a price change in the underlying. What trader has not experienced the frustration of seeing his stock move several points and his option move very little?

While this can happen because the trader has bought an option that is too far out-of-the-money, it is more likely due to a drop in implied volatility – something that can happen at any time but very often happens when a stock is advancing.

Usually, when a stock advances, it exhibits less and less volatility (as measured by percentage daily price swings). Professional options traders know this, and they gradually lower the volatilities they use in their option pricing models as the price of the stock goes up. This works against call prices as the stock goes up, with the net result, sometimes, of the call options gaining just a little.

In contrast, as stock prices fall, implied volatilities increase and this helps put buyers. This cause/effect relationship between stock prices and implied volatilities is called constant elasticity of volatility (or CEV for short). To draw an analogy with distance running, CEV is like having the wind at your back if you're a put buyer, but like having the wind in your face if you're a call buyer.

What is a bullish trader to do?

To counter the CEV effect, you can lean towards using more in-the-money options. Deeper in-the-money options have a lower time premium, so a volatility reduction hurts less. Another thing to consider is simply buying the stock. Remember, the stock has zero time premium, and great liquidity! Of course, this gives you less leverage, even if buying the stock on margin, but it's worth considering.

Finally, in addition to buying just-in-the-money calls you can also sell out-of-the-money calls, entering into a vertical debit spread. This lowers your cost, and volatility risk is effectively cancelled out by adding the short leg. However, a spread behaves differently from a simple purchase. Reaping the full benefit from a spread requires having the anticipated exit date coincide with the expiration date of the options. For example, if the nearby expiration is 14 days away and your expected holding time is 14 days, a spread might be perfect. But if the nearby expiration is 21 days away and your expected holding time is 5 days, the simple call purchase might be better.

Good options analysis software like OptionVue 5 will show that a simple option purchase makes more money than a spread or other option strategy, albeit with greater variance, when projecting a holding period of 1 – 10 days, even when including the CEV effect.

Finally, good discipline dictates that the trader set objectives and stops. These should be decided and written down the moment the position is opened. If the underlying moves in the desired direction, these should be re-evaluated and adjusted upward at intervals. I have no advice on how to set objectives and stops, or when to adjust them; only that you should set them and obey them. Traders must settle on a system that works for them.