

Trade profit depends on what you do after the trade, not when you make it. That's probably even more true with options. By introducing various techniques for protecting profit, we lay the groundwork for more sophisticated methods of trade management.

## Understanding options

BY ROBERT STEELMAN AND SANDRINA MAYELA

Options are the least understood and most misused financial instrument. Their value inflates and deflates many times during the day, reflecting traders' expectations of future price moves. But expectations are hard to judge, and the intricacies resulting from that make them financially dangerous to the uninitiated.

A popular trade is to buy options where the underlying contract is expected to move. By definition, however, those options are always out of the money. Although the argument for this trade is that it's low risk because you can only lose the premium, that's exactly what happens about 90% of the time.

Let's explore ways to pocket some of those losses and review some important hedging tactics that protect a position from an unlimited loss scenario. This will provide the background needed to understand the more complex strategies we will cover in future articles.

### HOW TO LOSE—BI6

Generally the price of out-of-the-money options is fairly low but can zoom up should the underlying make a right

move. That's why option buying is so popular. But there's one catch.

To profit from such a trade, you need to be right on the direction, size and timeliness of the move.

By comparison, to profit from an out-right futures trade, you just need to get right the direction of the move. Furthermore, because you already spent some money for the option, your profitability point is farther out than the option's strike price.

In a nutshell, a trading method based on simply buying out-of-the-money options likely will drain your trading account, perhaps slowly, but certainly. You might get lucky with a blockbuster trade or two, but ultimately your trading account will fade away.

### WHAT ABOUT SELLING?

With selling, the odds are on your side at least in terms of the percentage of winning trades you can expect. To profit you need to predict where the underlying futures contract will not move within a certain time frame.

In option selling, two distinctly different strategies can be employed. The simplest is to assume no directional

bias and sell option strikes far enough on each side of the market that the underlying most likely won't hit either in the given time.

Then, you would either wait for the option to expire worthless or buy it back for a fraction of the selling price once most of the value of the option is gone. The risk of this trade is potentially unlimited losses.

If you have a directional bias, say bearish, you would sell a call option that is nearly in-the-money. If the market stays where it is or moves lower, the premium is yours. You also face unlimited losses with this strategy.

Although the unlimited loss potential of these trades is indeed discouraging, the strategy still deserves a point-by-point comparison with a straight short futures trade (see "Options vs. futures," right).

### OPTIONS AS PROXIES

The options in the above examples have no intrinsic value. Their value is composed entirely of time and volatility premium. This is what identifies them as out-of-the-money options.

However, you also can employ

options that have both intrinsic and extrinsic value in your trades. To drive this point home, we will consider options that are primarily intrinsic — deep in-the-money options.

One way to look at this is to understand that the higher the intrinsic value of the option, the higher the delta. Delta is the ratio of price change of the option to the price change of the underlying.

For example, say that a trading strategy calls for a long position in S&P 500 E-mini futures. At the time, the futures were trading around 1421. The easiest trade would be to buy the futures outright. An alternative would be to buy a 1400 call option. At the time, this call option cost 25 points, or \$1,250, and had a delta around 0.9.

"Trade specs" (below) demonstrates the benefits of in-the-money options as proxies of the underlying. They include:

- **Less risk:** The risk is the price paid for the option.
- **Lower capital requirement:** Trading the outright futures, the margin is \$3,800; buying the option costs \$1,250.
- **More liberal stops:** The risk of not taking a stop has been reduced, because the trade doesn't face a potential wipeout should the underlying make an extremely adverse move.

Of course, trading with options instead of the futures has its drawbacks too:

- Profit is somewhat reduced.
- This technique can be used only in liquid markets. The in-the-money strikes have to be available and fairly actively traded.

## FACING UNLIMITED LOSSES

At times, like anything else, short option positions will move against you. Theoretical loss is unlimited for the calls and full value of the contract for puts — that is, from the price at entry to zero. The value of the majority of contracts is so large that maximum short-put loss is basically unlimited.

This is a scary prospect and leads many traders to avoid selling options.

The simplest way to deal with a short option trade moving against you is to simply buy it back, like any other position. Most likely you will encounter a loss and lose the possibility of successful recovery. It wouldn't be uncommon for the underlying to turn around and start moving in a favorable direction.

All this said, there are sensible situations where buying the option back is warranted. One strategy is to buy the option back if it has reached the strike and it can be bought back for about the same amount it was sold for. In this case, the trade books a breakeven or a small loss at most, but it's spared the excitement of resorting to riskier hedging maneuvers.

## OPTIONS VS. FUTURES

In most circumstances the short call option is no more risky than the short futures position. Both face theoretically unlimited losses. However, in practice the loss can be managed exactly the same with either.

	Short position with the future	Short call position
<b>Market moves lower:</b>	Maximum benefits reaped	Pocket the premium
<b>Market stays same:</b>	Breakeven	Pocket the premium
<b>Market moves higher:</b>	Incur a loss from entry to the point of exit	Also incur the loss from entry to exit, but it is softened by the received premium.

## TRADE SPECS

These are the different scenarios encountered by a futures trade and an options trade if the market moves with it or against it.

### Position taken:

Outright futures purchase  
1400 Call option

### Price or margin requirement:

About \$3,800 margin requirement.  
No margin; paid outright 25 points or \$1,250. This is \$1,050 of intrinsic value and \$200 of extrinsic value.

### Risk:

The risk is undetermined because the stop may or may not get filled at the designated price. Theoretical risk is the full value of the contract at the purchase price.  
Practical risk is whenever the position is exited.  
Can't lose more than the purchase price. Practical risk is analogous to the underlying futures, whenever the position is exited.

### The signal is correct and futures move up:

The profit is the difference between the entry and exit prices.  
This entry was 1421 and the exit was 1440.50. Total profit is 19.50 points.  
For every one-point increase in the futures value, the value of the option price will increase 0.9 points. The ratio will improve as the option moves more into-the-money and also loses time value.  
The option was bought for 25 points and sold for 41, for a total profit of 16 points.

### The signal is incorrect and the futures move down:

The loss is the difference between the entry and exit prices. A reasonable stop would have been at 1409.50 for an 11-point loss.  
As the underlying moves adversely, the delta decreases. Assume the stop is based on the futures breaching 1409.50. For the option, the loss likely would be below 10 points because of the decreasing delta. However, the additional benefit is that the risk of not exiting and seeing if the signal works out would be about 15 points (\$750). This is the estimated value of the 1400 call with prices about 10 points above it.

As "Out of hogs" (below) demonstrates, this can be the right choice to make. In this situation the trade was filled while the price of the underlying continued with an adverse move. As the charts shows, the hogs price at expiration was about two points below the 56 put sold, which is an \$800 loss. By buying back the option the loss on the trade was reduced from \$800 to \$50.

However, there will be situations when you get out and then the underlying turns around. Through time, it pays to have a consistent policy of taking certain actions when certain events occur rather than chasing after luck — or what worked last time.

Still, there will be situations when simply buying the option back will put a big hole in an account balance. Usually

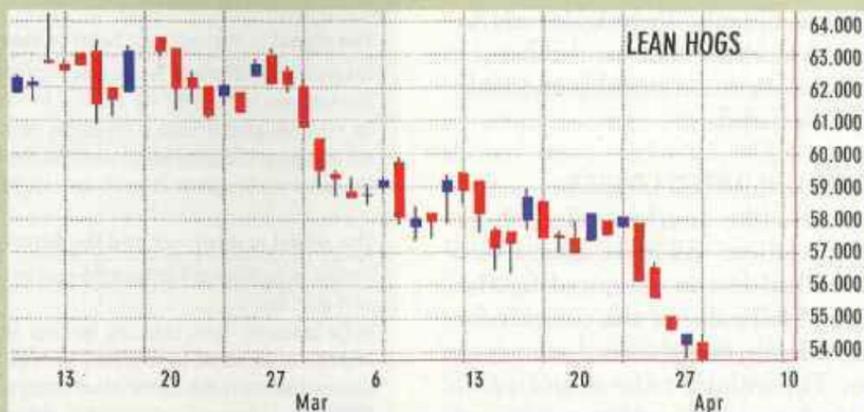
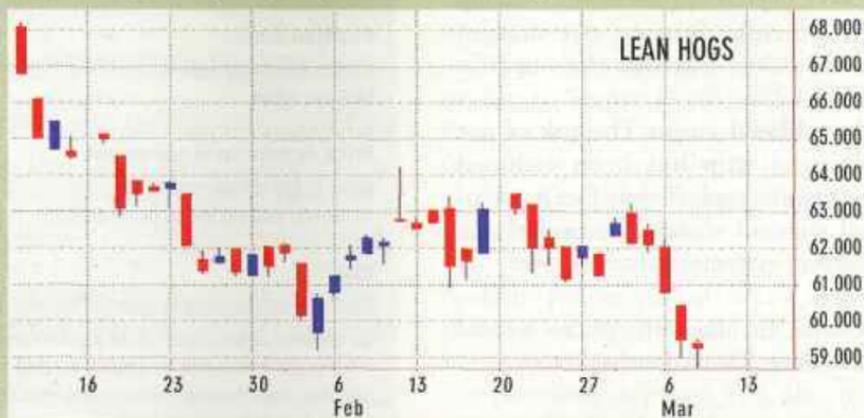
this occurs when implied volatility balloons and spooks the market. In the next installment, we will examine more complex management scenarios, such as exiting via a spread that buys an option strike further from the money, increasing exposure by selling further away strikes, selling options on the other side of the market or managing the trade with the underlying. <sup>i</sup>FM

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## OUT OF HOGS

On March 8, 2006, after a heavy sell off in lean hogs, the 56 put options could have been sold for \$270. After the move, the market expected a bounce or at least some leveling off. Instead, lean hogs kept dropping. However, the options still were priced near \$270 thanks to time decay. Consequently, they could have been bought back at \$320.



Source: TradeStation