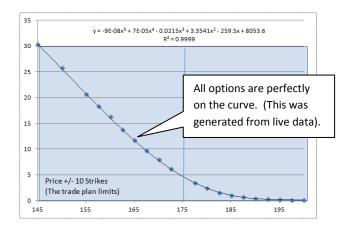
## Fair Value Limits for Option Trades

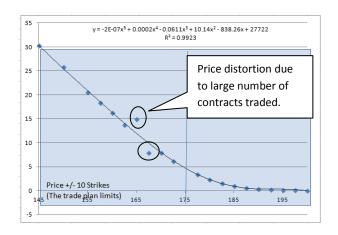
by Ed Downs August 2018

When an order for a large # of contracts hits the market, the Market Makers will move ASK up and BID down and execute at those prices. The results in a huge, immediate loss. A Limit needs to be established at a "fair" price, as indicated by the current option market on that security.

The idea is that, even if an order for 1,000 contracts hits a market where average volume is 10, if the Limit is at a fair price, the trade will execute slowly as the market is able to digest the trade. While it is possible that all contracts will not be filled, that is far better than getting killed on the trade!



Specific Options where demand is high on a spread.



## Calculating FMV:

To calculate where the options should be trading, all Strikes for the same expiration date are put through an n-order regression to determine the equation of the FMV Curve, representing current Fair Value for any Strike price at a given expiration.

In the case of a spread, the options must be evaluated individually and a Spread Limit set as the Fair Value Spread Limit – using prices on the curve – not the current market prices.

The curve to the left shows what can happen when a large number of contracts hits the market with a Market Order. In this 186/178 Debit Spread both Calls are affected, causing the Spread itself to cost much more than it should. After the trade is filled, the market returns to normal prices. We want to force it to do that or simply not fill the trade.

- 1. Fair Market Value (FMV) Limits now implemented!
  - Perform regression on all strike prices for a given expiration to calculate the curve.
  - The LIMIT for the Spread will be based on where price would fall on the graph.
  - Set as X% Above Fair Value and Below Fair Value (or current price if better).
- 2. Limit Adjustment (not yet implemented) helps assure the trade is entered or exited.)
  - Limits are adjusted every N Multi-Leg Order ▼ Time in Force GTC ▼ Enable Order Type: Limit ▼ Periods in Force: 0 seconds based on Limit Level: 0.00 Limit Units: Percent ▾ Offset: Above Fair Value ▾ re-calculating the FMV Limit Adjustment: Move 0.00 Every 0.00 Max 0.00 Secs Percent curve, within a time limit.

If Every 0.00 Secs is specified, the feature is disabled. The **Every N.NN Secs** can be global (in tools options) rather than in the Trade Plan. At the Max, the Order will be converted to Market (a check box may be added for this choice). This Limit Adjustment feature will be available soon.