Simple Agenda for Complex Options

By Rachel Koning Beals

The International Securities Exchange formed an unusual partnership in September that indicates the growing interest in improving the way complex orders are traded in the U.S options market, with more use of technology to aggregate liquidity and automate execution.

The exchange announced on Sept. 20 that it will provide marketing and user support for Spread Crawler, an electronic trading tool developed by MEB Options, a Chicago-based options broker. The tool is designed to simplify the process for executing complex orders by scanning spread order book data across six U.S. options exchanges and automatically alerting its users whenever an open order fits that end-user's pre-defined preferences.

Historically that type of trade was executed manually on exchange floors or by phone, but increasingly brokers, exchanges and technology firms are offering tools that automate the process. That in turn is bringing more volume to the exchanges. ISE officials say complex orders now account for 40% of the exchange's volume, and point to a number of technological improvements as factors in encouraging that type of trading.

Challenges for Traders

Complex orders are difficult to value let alone trade, but they are popular with retail and institutional investors who are pursuing certain trading strategies. Some lean on spreads to hedge stock moves, perhaps with a collar that limits downside in the underlying security and caps potential upside. Others aim to earn income in a low-interest-rate climate with covered calls. Straddles, strangles, buy-writes, butterfly spreads are all increasingly popular multi-leg strategies among skilled options investors.

Because complex orders often involve four parts or more, it is challenging to execute the entire trade simultaneously. To address that problem, a number of exchanges have developed separate order books for complex orders as well as new functionalities to improve the odds of filling complex orders.

In addition, a number of firms provide tools for aggregating liquidity across multiple exchanges. Jim Michuda, chief executive officer of Wolverine Execution Services, explained that there is no inter-market linkage for spreads. Like a number of other firms in this field, WEX offers routing technology that helps customers respond to offers and post their own offers across multiple exchanges. In effect, these firms are using technology to replicate what in-the-flesh brokers used to do—shop around each part of a complex trade until filled.

One side effect of this trend is that it helped fuel TD Ameritrade's purchase of online brokerage platform thinkorswim and Charles Schwab's acquisition of optionsXpress. These smaller firms were pioneers in bringing multi-leg spread trading to their customers and the larger firms wanted that toe-hold without having to build from scratch, said industry insiders.

Decade of Change

ISE and the Chicago Board Options Exchange are generally viewed as leaders in complex order volume, according to several brokers interviewed for this article. Four other exchanges operate complex order books: CBOE's C2 platform, NYSE Euronext's Amex and Arca, and Nasdaq OMX PHLX. Brokers typically use complex order books for small orders of no more than 20 or 30 contracts, while sending larger orders to exchange floors.

The CBOE, which first opened its COBWeb in 2005, has seen complex order business grow significantly over the years. Although the exchange would not provide a complex order book volume breakdown, an executive with MEB Options said the business has grown enormously. "A few years ago, I saw 250,000 to maybe 500,000, complex orders a day on the CBOE and now it's upwards of 7 million a day," said Jason Stamer, MEB's director of business development.

ISE first offered electronic complex orders in 2002. At that time, a spread order lived entirely on its own, sitting on a virtual bulletin board and broadcast to exchange members for any takers, with no interaction with the regular order book and no involvement by professional liquidity providers, according to Boris Ilyevsky, ISE's managing director. ISE began "legging in" complex orders in 2004, a move urged by online brokerages such as optionsXpress.

Stitching the Market Together

Complex options strategies include multiple strike prices and expirations, which can make it difficult for them to be established as a single position simultaneously. Investors lean on "legging" or trading each position individually to help them potentially squeeze out better prices, but that can add to transaction costs and one missed fill on one leg can sink the whole transaction. That encourages retail online brokerages to feature complex orders through the ease of a single ticket.

Peter Bottini, vice president of trading at optionsXpress, said complex orders account for over a third of the firm's options trading business. And those customers want faster, easier execution, and a higher fill percentage. Last August the firm introduced a new order type called "walk limit" to address that demand. The order type works with trades with two to four legs, including call spreads, put spreads, straddles, strangles, calendar spreads, and diagonals. The advantage for traders is that it automatically modifies spread orders to obtain better pricing.

How does it work? The walk limit defaults its starting price at the midpoint between bid and ask, then gradually steps toward the national best bid or offer bid or ask price (depending on whether it's a debit or credit spread) every two seconds. A walk limit order will not fill the order outside the original spread's NBBO bid or ask. The process will take a maximum of 11 steps, canceling and replacing the original limit order every two seconds that it remains unfilled.

WEX offers software called "Spread Agent" that is designed for institutional investors that trade options spreads and options-equity spreads. It reveals the multitude of backstops and data flow necessary to ensure spread-trade management: synthetic market-making; safeguards against exceeding user-defined position limits by working the spread and the reverse spread simultaneously; spread entrance and egress points; leg slip adjustment; and cleaning up open positions.

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MEB's Stamer explained that his firm's Spread Crawler tool does not require software, just a regular instant message account. Stamer added that the ability to customize the filters within the tool is emblematic of the increasing sophistication of spread traders and the need to compete with the speed of algorithms. Users can filter with parameters dictated by over 25 strategies or by specific symbol or industry group, by strike price, expiration date, and edge. Views can be arranged by strategy or leg-by-leg detail. Customers include hedge funds, market makers, inter-dealer brokers, and investment banks.

Exchanges Mirroring Brokerages

The exchanges are also getting in the enhancement game. Earlier this year, ISE launched implied order functionality for its complex order book, syncing interaction between the complex order book and its regular order book, which it says has tightened spreads. The new functionality displays liquidity from ISE's complex order book on the regular order book published to the Options Price Reporting Authority. An implied order is automatically created if the limit price of a multi-legged order can match or improve the ISE bid or offer when another leg of the complex order is paired against a resting order or quote. For the system to generate an implied order, the net price of the multi-legged order must be satisfied when both legs are filled on the regular book.

"For the first time, a multi-leg order is not just sitting on the book, but a spread order that is mid-market gets implied into the individual legs and leans on the opposing quote," said ISE's Ilyevsky. Of total outright complex order volume, seven percent of daily transactions are now done via implied orders, Ilyevsky said. "The implied order mechanism increases the fill rate for the end customer. Without it, that mid-market order may have sat there."

At Amex Options, about 250,000 contracts per day, or 5% of its total options volume, went through its complex order book last fall, up from about 1% at the beginning of 2012. Amy Farnstrom, head of product strategy for U.S. options at NYSE Euronext, said the exchange expects to begin offering in the first quarter the ability to handle complex orders with one leg being comprised of a stock. Farnstrom said Amex and Arca's linkage with the New York Stock Exchange will give those platforms an advantage over other U.S. options exchanges because of easier order flow between the options side and the stock side under the same umbrella.

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