The D-Limit Order Type of IEX Has My Support

By John J. Lothian

Most of you know I prefer markets that are listed. You also know I prefer markets that are not dark. I also prefer markets that have many and a multitude of participants, in numbers and size. These are all features of a proposal from IEX before the SEC for its D-Limit order type. Thus, it was not a surprise to me when representatives from IEX asked me to take a look at the order type, the proposal and the arguments for and against.

D-Limit is a new innovative order type aimed at protecting lit markets from predatory market behavior tied to latency arbitrage strategies. Fighting latency arbitrage strategies is what helped create IEX and their speed bump.

The D-Limit Order is an artificial intelligence order type that protects displayed lit orders from being picked off by latency arbitrage players. The D-Limit Order aims to benefit displayed equity market quotes with better prices, larger displayed sizes and more competition among liquidity providers. I like all of that, and regulators and legislators should too. Innovations that promote liquidity and transparency by encouraging market participants to display their trading interest are good innovations in my book.

The race for speed superiority in trading to be able to take advantage of latency arbitrage has created decreased liquidity in the lit equities markets. In pit trading terms, this means you are faster in picking off traders on the other side of the pit who are unaware that the price changed in another part of the pit. The end effect is these losing traders' liquidity disappears over time.

Because some traders have this speed advantage, those market makers who post liquidity are essentially offering a free option to the speed traders. And market makers are smart, so they don't want to offer free options. The result of this free optionality created by speed advantages is less average depth of market in key markets like the SPY over the last several years. And the average depth of market has gotten worse this spring.

This has ramifications for liquidity in the futures markets as well. We have seen a sharp drop off in displayed liquidity in the emini S&P as well recently.

So what does the D-Limit Order do? It uses machine learning to predict when a price change is about to occur. The fastest traders, using machine learning - or artificial intelligence (AI), as it is also known - know first when prices are going to change. A D-Limit order can update a minimum price value (MPV) at the exchange level in order not to be picked off by the faster traders. The D-Limit order allows traders to uniformly use an exchange-created artificial intelligence tool to

fight high frequency trading firms' artificial intelligence tools. D-Limit is fighting fire with fire, so to speak.

The IEX D-Limit order uses something called the "crumbling quote indicator" (CQI). IEX says that the CQI is "on" less than 1% of the day, and 24% of the trades occur when it is "on." That means a lot of action is happening when prices are unstable and the CQI is at work protecting traders using the D-Limit or a pegged order type of some kind.

Pegged order types include the D-peg and the P-peg. Think of a pegged order as one that is connected to an index, say the National Best Bid and Offer Index, rather than the prices of one particular equities exchange. Traders will peg an order to the index and add a level of some kind. That might be adding a limited flexibility to an offer price in order to guarantee a filled order, or maybe something less like a midpoint order.

> Discretionary Peg (D-Peg) is a non-displayed order type that is priced at the less aggressive of one (1) Minimum Price Variant (MPV, $0.01 for most stocks) lower (higher) than the NBB (NBO) for buy (sell) orders or the order's limit price. D-Peg orders passively rest on the IEX order book while seeking to access liquidity at a more aggressive price up to the midpoint of the National Best Bid or Offer (NBBO), except when the IEX Signal determines that the quote is unstable or "crumbling."
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> IEX's Primary Peg is a non-displayed order type which extends the protections of D-Peg and the IEX Signal to trading at the NBB for buys and NBO for sells. IEX Primary Peg orders rest on the order book 1 minimum price-variant (MPV, $0.01 for most stocks) lower than the NBB for buy orders and 1 MPV higher than the NBO for sell orders. They exercise discretion to trade at the NBB or NBO when the quote is stable, but stay booked 1 MPV away from the NBBO during a crumbling quote, as determined by the IEX Signal.

The D-Limit might not be the end-all to the lit liquidity issues, but it is a step in the right direction. And maybe it can stem the tide of market-making firms leaving the industry, or even encourage some to come into it.

We have seen many prominent market making firms over the last 10 years decide to close up shop or sell out. Where is Sun Trading? Gone - they are part of Hudson River Trading. They used to be 5% of the daily equity volume, according to an interview I did with a senior executive 10 years ago.

Where is Timber Hill? The proprietary trading arm of Timber Hill is now part of Two Sigma.

Where is Knight Capital? They merged with GETCO to form KCG Holdings, which is now part of Virtu.

Where is RGM Advisors? They are now part of DRW.

You get the idea. We need to rebuild the liquidity in these markets by increasing the number and size of the participants in them. We need to help level the playing field so all the trades and the marbles don't roll the same way most every time. We need to build a diversity of liquidity providers and fight the concentration of trading power that is occurring in the fastest trading firms.

The best markets have all the things the D-Limit order seeks to bring. We need to have the SEC approve the D-LImit order type and give it a chance to prove itself.

I respectfully urge the Securities and Exchange Commission to approve this innovative proposal. If you agree with me, I encourage you to file your own letter with the SEC in support of IEX's D-Limit orders.