Optiver

Insights

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MARKET STRUCTURE

The verdict is in for Eurex's passive liquidity protection.

We applaud Eurex's move to roll out passive liquidity protection in EURO STOXX 50 Index options starting 10 October. Eurex's PLP, or an asymmetric speed bump, remains an effective form of liquidity protection in certain options markets. Three years after the exchange unveiled PLP, competition at the top of the order book has increased and liquidity has improved. Accordingly, we encourage Eurex to expand it to other options classes, namely fixed income options.

Picture this: A liquidity provider (LP) is busily posting quotes in hundreds of options contracts, across thousands of tenors and strikes. News breaks, and markets start to move. As the LP seeks to amend or cancel its rapidly aging quotes, liquidity takers storm in and "pick off" the LP's quotes, causing it to retreat. When the LP returns – if it returns at all – it quotes with wider spreads or less liquidity, hurting investors' ability to trade.

This is precisely the type of scenario that passive liquidity protection (PLP) was designed for. A (short) delay that the exchange applies to the processing of aggressing orders, PLP is aimed at levelling the structural disadvantage faced by liquidity providers.

While it's been used across various markets, liquidity protection is particularly vital for a healthy market structure in options. LPs in options post prices in potentially thousands of tenors and strikes. That means when markets move, LPs become highly vulnerable. Often, they can only send one cancel or amend message at a time. Liquidity takers in contrast can target the liquidity provider's quotes via more than one path, with limited risk should they fail.

When liquidity providers are unable to protect themselves from adverse selection, markets deteriorate. LPs end up widening their spreads, showing less liquidity or simply exiting the market. This was the situation Eurex tackled with PLP beginning in June 2019. Responding to the concerns of market participants, the exchange introduced a time penalty of 1.5 milliseconds on aggressive orders in DAX Index options (subsequently reduced to 1.0 millisecond) and a delay of 3 milliseconds for certain single-stock options.

We at Optiver were cautiously optimistic about PLP at the time. While we support passive liquidity protections, the design and parameters of such protections are paramount. After all, what's helpful to liquidity providers could prove onerous for liquidity takers, potentially driving them out of the market.

Liquidity takers for instance might no longer be willing to do certain trades if the delay leads to a loss of control over their orders. If they're unable to cancel orders in the deferral queue, it may result in dissatisfaction with the price at the time of trade. A large delay on aggressive orders could also offer liquidity providers free optionality, to pick and choose when to cancel or amend orders. The guiding principle should be for both buyer and seller to be happy with the price at the time of the trade.

The results of Eurex's PLP measures speak for themselves. According to the exchange, latency arbitrage in DAX options dropped following the introduction of PLP, competition at the top of the order book increased and liquidity as measured by bid-ask spread and offered size all improved. That's a win for end investors.

We feel Eurex's liquidity protection is an ongoing success, maintaining a healthy balance between liquidity provision and liquidity taking. Not only do we support the exchange's introduction of PLP to EURO STOXX 50 Index options, we encourage Eurex to activate passive liquidity protection in remaining option asset classes, namely fixed-income options.

Another simple and potentially effective form of liquidity protection would be a fast and efficient mass cancel mechanism. In general, we feel that liquidity protection should add as little complexity to the market as possible. So the mechanism would have to be easy to implement and able to be utilised by all market participants.

Healthy order books are key to meeting the demands of end investors. It's becoming increasingly clear that passive liquidity protection is helpful – not hurtful – to this.

Have feedback? Reach out to the Optiver Corporate Strategy team at AMS_CorporateStrategy@optiver.com

Further reading.

- Eurex's whitepaper on passive liquidity protection.
- A case study from the exchange on PLP in DAX Index options.
- Our previous paper on PLP.

About Optiver.

Optiver is a global market maker with offices in Amsterdam, London, Chicago, Austin, Sydney, Shanghai, Hong Kong, Singapore and Taipei. Over thirty-five years ago, we started business as a single trader on the floor of Amsterdam's European Options Exchange. Today, we are a leading liquidity provider, with more than 1,600 employees in offices around the world, united in our commitment to improve the market by competitive pricing, execution and thorough risk management. By providing liquidity on multiple exchanges across the world in various financial instruments we participate in the safeguarding of healthy and efficient markets. We provide liquidity to financial markets using our own capital, at our own risk, trading a wide range of products: listed derivatives, cash equities, ETFs, bonds and foreign currencies.