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MARKET STRUCTURE

THE US EQUITY OPTIONS MARKET IS OVERDUE FOR AN UPDATE

Optiver supports open discussion and debate on all market structure topics that would lead to an improvement of the market.

To discuss this paper – or any other market structure topic – reach out to the Optiver Corporate Strategy team at CHI_CorporateStrategy@optiver.us

While equity markets are under the spotlight in the current US equity market structure debate, the reality is that practices common in the equity options market, such as permanent specialist appointments, complicated price improvement mechanisms and asymmetric fees, are an even more significant issue, particularly for retail traders who are forced to pay wider spreads than they would in a truly competitive market.

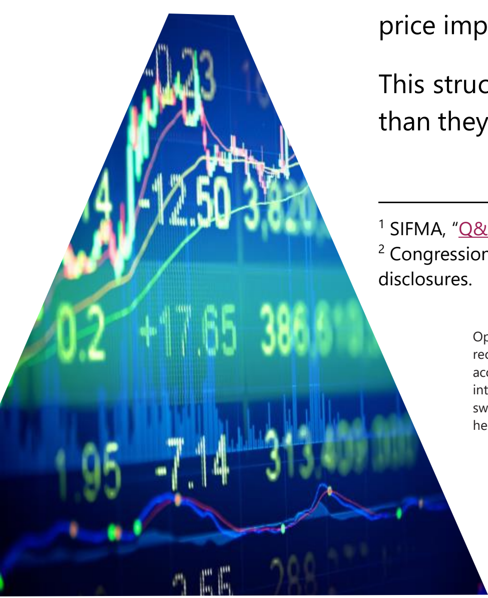
Over the past two years, commission-free trades have become the norm for retail investors using an online broker. What makes this practice possible – and profitable – is a market structure that permits payment for order flow (PFOF). In our opinion, the true price of these "free" trades is the loss of best execution, market transparency and a market that favors wholesaler entities that provide routing and have an affiliated market maker (MM).

Although the PFOF discussion centers on equity markets, an overlooked part of this discussion is that the equity options market functions in the same way. It is generally accepted that options are traded entirely on-exchange in comparison to approximately 52% of US equities[1]. While that is technically true, in practice, the vast majority of retail equity options flow is effectively locked up before it ever reaches an exchange.

This deviates from the "on-exchange and open for competition" narrative our industry promotes. It also inaccurately implies that maximum price improvement has taken place for an order, which in certain aspects the current market structure actually discourages.

While it receives little attention, the majority (61%) of PFOF payments in 2020 – totaling $1.5 billion[2] were related to options - not equities - trading. In addition, "marketing and contra response fees" are essentially another form of PFOF in the equity options space. The exchanges that charge these marketing fees understand the impact they have but are collectively unable to remedy this issue. This further skews the playing field, often forcing MMs without an affiliated wholesaler to pay a premium just for the privilege of providing price improvement for orders on-exchange.

This structure discourages competition and harms retail investors as they pay wider spreads than they would in a fully competitive environment. When wholesalers with an affiliated MM



[1] SIFMA, "Q&A: US Equity Market Structure" accessed June 25, 2021.
[2] Congressional Research Service, "Broker-Dealers and Payment for Order Flow, "April 2, 2021; review of 606 order routing disclosures.

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work with retail brokers, they also have a number of matching models to pick from that limit – or entirely remove – the ability of other market participants to compete for that flow.

Just four wholesalers, all of which have an affiliated MM arm, dominate the market and collectively route an estimated 80%[3] of the retail market. These firms also account for 84% of the specialist appointments on exchanges. Optiver acknowledges the potential benefits that wholesalers with affiliated MMs can provide to retail investors; MMs have the expertise in option pricing while wholesalers provide the infrastructure to execute orders on behalf of retail brokers. This relationship, however, can only deliver the maximum benefit if there is genuine competition for these orders at the exchange level.

This concentration and lack of competitive pricing results from an antiquated market structure for promoting liquidity, competition and transparency. With an effort led by the SEC the market structure can be updated and improved in three key ways.

SPECIALIST APPOINTMENTS

The US equity options market structure has evolved to tilt the playing field in favor of those who have achieved huge scale, not necessarily to those who provide the best prices. While economies of scale are a part of any industry, we have reached the point that healthy competition from new or existing MMs that focus on a handful of option symbols is nearly almost entirely excluded. This is particularly evident by how exchanges reward breadth of coverage over all else for appointments of specialist.

- Specialist appointments that are made in perpetuity and guarantee significant order allocation for wholesalers/MMs who bring flow to an exchange – not necessarily those who provide the best pricing for the market.
- Tiering of MM fees, incentives, and specialist appointment processes should be more focused on rewarding those who make the best markets rather than those who have a routing wholesale arm and are simply present everywhere.
- The Regulation National Market System should be re-evaluated to ensure it incentivizes the correct balance between competition and complexity.

PRICE IMPROVEMENT MECHANISMS

In general, the price improvement mechanisms embedded within exchange matching models give far too much advantage to the wholesalers with an affiliated MM, allowing them to selectively make routing decisions to give themselves the greatest possibility of internalizing orders while minimizing the price improvement they provide.

[3] A review of eight of the options industry's more active broker-dealer's 606 order routing disclosures for the 1st quarter of 2021.

- Conduct a bi-annual review of all price improvement auction models available focusing on: the level of price improvement achieved, fee structures, heightened allocation guarantees and auto-match features. These reviews are designed to ensure that PIMs allow the opportunity for maximum price improvement to be achieved rather than to serve simply as a means of guaranteeing the affiliated MM of a wholesaler interaction on orders.

ASYMMETRIC EXCHANGE FEES

Due to the proliferation of options exchanges[4] there is fierce competition for order flow. That is by no means inherently an issue, but this competition – in conjunction with the leverage that the major wholesalers have by controlling so much of the flow – has resulted in an asymmetric fee schedule.

- Market makers are forced to pay PFOF in the form of marketing fees to the exchanges, which distribute a portion of the fees as a rebate to wholesalers, subsidizing their payments to retail brokers.
- Market makers that provide price improvement over a wholesaler's affiliated MM through the exchange's PIM are often charged an additional fee to trade on an order.
- In the previously mentioned price improvement mechanisms, exchanges would often lose money on transactions if not for the fees charged to the MMs who provide price improvement and often do not have a wholesale arm.

There are a number of ways to improve – and even fix – the equity options market that can lead to a healthier, more transparent and competitive marketplace with better pricing for investors of all sizes. As our industry continues to debate the pros and cons of PFOF, internalization, and related market structures, the equity options market should be included in that discussion.

To learn more about our positions on market structure please visit the Optiver Insights page for our analysis and recommendations. As a firm, we look forward to the dialogue on market structure within the equity options space.

[4] 16 equity options exchanges in the NMS system as of 8/4/2021.

ABOUT OPTIVER

Over thirty-five years ago, Optiver started business as a single trader on the floor of Amsterdam's European Options Exchange. Today, we are a leading technology-driven market maker, with more than 1300 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.