

May 23, 2023

Vanessa Countryman, Secretary
U.S. Securities and Exchange Commission
100 F Street, NE, Washington, DC 20549-1090

Re: Request for Comment on the Proposed Order Competition Rule (File Number S7-31-22)

Dear Ms. Countryman:

I appreciate the opportunity to comment on the proposed Order Competition Rule (“the Proposal”).

Please note that I write today in my name only. My comments represent only my opinions and not necessarily those of Interactive Brokers, for whom I serve as the lead independent director, any of the mutual funds for which I am a director or trustee, or my employer, USC. Moreover, none of these entities reviewed or limited my comments.

If implemented, the proposal represents the most substantial action the Commission has ever taken to formalize the segmentation of equity markets between retail and other traders. Although the markets have been segmented along these lines for many years, they need not be so. I address this issue below, but first, I discuss the history and economics associated with current retail order handling practices and the proposed auctions.

History and Economics of Current Retail Order Handling Practices

Segmentation of the markets grew significantly when wholesale dealers started to pay for order flow from retail brokers. When such arrangements started, dealers quickly filled marketable customer orders at the National Best Bid or Offer. The customers often obtained quicker executions than they could have at the exchanges or from many NASD dealers trading Nasdaq stocks. The brokers received payment for order flow that they did not pass on directly to their clients. Although the clients received faster executions, they initially did not obtain better prices, and the arrangements were undoubtedly motivated by the brokers’ and wholesalers’ interests in extracting profits from their largely uninformed retail clients. These profits were possible because NBBO spreads were (and remain) wider than the spreads dealers need to charge to obtain normal economic profits when trading with retail trades.

Spreads are wider at exchanges due to adverse selection. Large and well-informed traders often trade anonymously at exchanges, and the dealers and other traders who make markets



lose when trading with such traders. To remain in business, liquidity suppliers widen spreads to recover from other traders what they lose to large and well-informed traders. Trading with smaller and less informed traders at such spreads is thus profitable.

Since then, under pressure from the SEC and, to some small extent, retail traders, brokers have demanded that wholesalers improve prices when filling marketable retail orders sent to them. These price improvements have decreased payments for order flow but have not eliminated them.

Now most large and many small retail brokers send most of their marketable retail orders to wholesalers. Interactive Brokers is the notable exception.

No widely accepted principle, formula, or mechanism specifies how much price improvement wholesalers should provide to individual orders or orders on average. Current best execution standards are unclear on this issue. They generally require that brokers obtain the best available visible prices for the orders that they handle, but they also require that brokers provide high-quality service on other dimensions, such as speed. These poorly defined standards have allowed brokers to accept payments for order flow even though wholesalers would provide better prices if they did not make payments for order flow. These payments have continued even though extraordinarily fast executions are now available at almost all execution venues.

Measuring best execution by comparison to visible prices is also problematic because exchanges and some alternative trading systems often have hidden liquidity standing at better prices than the NBBO prices. Such liquidity may be due to standing limit orders at exchanges that liquidity suppliers choose not to display (“hidden orders”), standing limit orders for size below an even lot (which do not qualify for inclusion in the NBBO but which may represent substantial liquidity in high priced stocks), and standing orders in dark midpoint execution systems. Appreciating the importance of this liquidity is necessary for understanding current best execution standards and why wholesalers are willing to fill retail orders at improved prices.

Submitting immediate-or-cancel (“IOC”) limit orders set at prices inside the spread makes these orders easily found. If such orders fill, the trader gets price improvement relative to the NBBO. If they do not fill, no public record exists of the inquiry. The trader can then fill the order at the NBBO if desired, subject to a slight delay of a few milliseconds, during which time the NBBO may move adversely. However, the probability of an adverse price movement over such a short interval is small for a retail order, and favorable price movements that also may occur reduce the average impact of the delay.

Adverse price movements in the NBBO are much more likely if a midpoint execution occurs. Such movements are problematic if the midpoint execution is for less than the order size, as the remaining unfilled order size may now trade at less favorable prices. Traders can avoid this problem by attaching all-or-nothing or similar minimum fill size instructions to their IOC orders when searching for hidden liquidity.

These strategies for finding hidden liquidity are easy to implement, and brokers and proprietary traders regularly use them. Moreover, the availability of hidden liquidity helps explain why wholesale dealers are willing to fill retail orders at improved prices.

The availability of hidden liquidity raises the question of whether we should measure best execution for marketable orders against the best visible prices (NBBO) or expect brokers to search for hidden liquidity to find the best available prices, regardless of whether they are displayed. I will comment further on this issue in my comment letter on the SEC's best execution proposal.

Brokers claim that the payments for order flow allow them to provide zero-commission trades and other attractive services to their clients. But, no direct linkage connects payments to commissions, and no mechanism ensures that the traders who submit the orders most profitable to the wholesalers are the traders who obtain commensurate indirect benefits from the payments for order flow. Like all other revenues and costs, these payments flow directly to the broker's bottom line.

Lower commissions increase retail order flows, increasing payments for order flows. Accordingly, some economic linkage does exist between the commissions and the payments.

Brokers argue that, on average, they provide best execution. Still, no one can reliably value the benefits of any extra services the brokers argue they provide by routing to wholesalers, many of whom provide payments for order flow. Regulators thus cannot objectively regulate the provision of best execution.

To some extent, competition for customers forces the brokers to provide services, low commissions, and improved prices that attract customers. But almost no customers can reliably estimate the price improvements they receive from their brokers. And they cannot estimate the price improvements they would receive from other brokers with whom they are not yet doing business. Accordingly, comparison shopping is difficult. Publishing average price improvement statistics would help customers evaluate and choose their brokers. But the averages may poorly reflect the price improvements that customers should receive for easy-to-fill orders versus more difficult orders.

As noted above, wholesalers are willing to fill marketable retail orders because filling such orders exposes them to less risk of loss than filling orders at exchanges. Wholesalers also want to fill retail orders because it allows them to see them. Knowing the trades retail traders want to do helps them predict future price changes. Tens of millions of retail traders trade in response to a limited number of common stimuli, for example, news stories that they read or hear. Since they do not all trade simultaneously, retail traders often tend to be on the same side of the market for a while. When the cumulative impact of their trading moves markets, and it often does, traders who can quickly predict these impacts can profit by trading ahead of orders expected but not yet submitted.

Since the information that wholesalers can extract from retail order flow is valuable, they may offer better prices to obtain these orders if offering price improvement increases the orders sent to them. In extreme cases, wholesalers may trade at zero or even negative effective spreads to obtain exclusive access to order flow information.¹

Wholesale dealers try to protect the information they obtain from filling retail trades by strategically setting their prices. For example, suppose that a wholesaler has promised to provide an average 0.35 cents/share price improvement across many orders. In a market that is 20.00 bid, offered at 20.01, the wholesaler could fill three market sell orders in a row at 20.0035. The three trade reports would appear in the Trade Reporting Facility, where most wholesalers report their trades, and everyone seeing this information could confidently infer that three sell market orders were filled. However, I understand from well-informed sources that dealers often set their trade prices to obfuscate this information. For example, they can trade the first two sell orders at 20.001 and the last sell order at 20.0085. The average price improvement for these three orders will be 0.35 cents, but observers would likely infer that a buy order followed two sell orders. The ability to engage in this strategic behavior increases when the desired average price improvement increases.

The Auction Proposal

I am troubled by the inequitable treatment of marketable retail orders sent to wholesalers under the present system. Fairness requires that brokers be responsible for best execution to their individual clients, not to their clients taken as a group. While cost considerations may have once dictated that brokers lump orders from multiple clients together, I do not see any costs that still justify pooling the order flow in our current electronic markets.

The proposed retail order auctions would solve the equity issues I identified above. Accordingly, I support the proposal. If adopted, each order would be treated separately, easy-to-execute orders would obtain more price improvement, and more difficult orders would get less. Payments for order flow would end, and with it, the agency problems associated with payments for order flow.

If commissions rise as a consequence, they will more closely represent the actual cost of brokerage services, which will help investors make better-informed trading decisions. Unsophisticated investors regrettably too often underestimate trading costs when they pay zero commissions. They often are unaware that they incur hidden transaction costs that they cannot identify or estimate. Consequently, they probably trade more often than suits their financial health. It is contrary to the public interest to maintain a system that fools retail traders into believing trading is less costly than it is.

¹ For a buy order, the effective spread is twice the difference between the trade price and the midpoint of the quoted spread. For a sell order, it twice the difference between the spread midpoint and the trade price.

Building systems to accommodate these auctions will not be particularly expensive. The brokers' routing costs to a new destination will be low—they already regularly route orders to multiple destinations. When the auctions are implemented, they simply may route to existing destinations with a new data flag requesting a retail auction.

The entities conducting the auctions will have to write new code, but the code should not present significant challenges for entities that already conduct real-time auctions. The actual auction mechanism will be simple to write. More complex, but still relatively easy, will be the information systems that allow liquidity suppliers to know that auctions are available and that allow them to submit orders and receive reports. These are all standard exchange functions that are well-known and, thus, easily implemented.

Some Details

The SEC should minimize the time between the initiation of an auction and its close. Liquidity suppliers need to know as quickly as possible whether their bids (or offers) have won so that they can manage their inventories. The auction period should be long enough for all potential electronic traders to participate meaningfully. The information about the auctions must be available to eligible participant, participants must have reasonable time to decide electronically whether to offer liquidity, and enough time to transmit their bids and offers.

The necessary time for these functions depends on whether the SEC expects all participants to collocate their servers with the auction service providers' servers. In this case, the auction period need only be about 1-10 milliseconds.

Alternatively, the SEC may want the auctions to be available to all participants regardless of where in the U.S. they put their servers. If the latter, time must be allowed for communications where the speed of light becomes a significant issue. This will require 50-100 milliseconds.

I favor the latter approach. The longer auction period is still trivial compared to the rate of trade information events occurring for most securities. I do not want the SEC to impose the costly burden of collocation on entities willing to supply liquidity.

The SEC should be aware that the fastest participants in the auction system will try to take whatever hidden (and visible) liquidity is available throughout the national market system that anyone could use to profitably fill the incoming retail orders or offset the risk of filling those orders. The resulting race is undesirable because it ensures that only the fastest proprietary traders will be competitive bidders in these new auctions.

Accordingly, I recommend that the SEC prohibit all traders who see the auctions from acting on auction information unless they win the auction. Enforcing this restriction will require that traders build walls in their code, and the SEC (or its contractors) must be able to examine

proprietary trading code. This restriction will also encourage liquidity suppliers to offer better prices so that they can exploit the information they learn from the order flow.

The SEC must also ensure that proprietary traders and exchanges do not create many auction systems that will fragment the markets. We have seen this problem in the options markets for OCC-cleared options that generally must trade on exchanges. The proliferation of exchanges giving substantial privileges to designated dealers has created a system where dealers can effectively internalize option market order flow through captured exchanges. To prevent this problem, auction service providers should not be allowed to provide special privileges (or impose special responsibilities) on any liquidity supplier.

Likewise, the auction providers also should not be allowed to rebate fees to brokers or liquidity suppliers. Allowing such rebates would open new hidden pipelines of revenue that are not in the public interest.

The Big Picture Issue

As noted in my introduction, implementing the proposed retail auctions would formalize the segregation of equity markets between retail and other traders. Removing retail order flow from the exchange markets has already weakened those markets and increased spreads. Proponents of segregation argue that it is fair because retail traders are not as well-informed as other traders. The segmentation benefits retail traders by giving them better prices.

But segregation hurts well-informed traders whose research efforts help ensure that prices reflect values. We have a strong interest in having informative prices because, in our market-oriented economy, they help ensure efficient capital allocation. Informative prices also help ensure that uninformed buyers do not buy at prices substantially above fundamental values or sell at prices substantially below fundamental values.

Since informative prices are essential to our economy, the SEC should consider whether the short-term benefits that retail traders obtain from price discrimination in their favor are worth the additional burden (increased liquidity costs) that removing them from exchange markets imposes upon well-informed traders. The SEC also should consider whether retail traders benefit substantially from trading at prices that would be more informative if everyone traded in exchange markets.

Note further that making the auctions available to institutional liquidity suppliers would remove additional order flow from the exchange markets. Their removal would further degrade exchange markets contrary to the public interest.

Finally, no principle suggests that only retail order flow should escape anonymous exchange markets. Uninformed institutional investors can strongly argue that they also should benefit

from price discrimination. The markets will further fragment if we allow them to avoid trading with better-informed traders.

The benefits to the economy of informed trading depend on the nature of the information that informed traders collect. If the information is mainly public information that all informed traders commonly seek, the economy does not need many informed traders to make prices informative. In this case, whether the liquidity in the exchange markets is sufficient to support the efforts of ten informed traders or only five does not matter much because they all do the same thing. The economy would be better off with fewer informed traders consuming fewer resources to produce duplicate information.

But if informed traders must work hard to obtain insights unique to each informed trader, more informed traders will produce more informed prices as each learns different aspects of fundamental value.

The information that informed traders collect has both attributes. Much of it is common to all informed traders and is easily analyzed so that many informed traders come to the same conclusions. But much information is difficult to collect, and much publicly available data is subject to varying interpretations, so more informed traders seeking value will increase the information in prices.

Although difficult to quantify, the issues I raise here are significant and fully supported by well-accepted economic theory. The fact that our markets are the most liquid and price informative in the world should not blind us to the possibility that they could be even better.

But the SEC must decide for whom they should be most liquid. Should we favor retail traders, many of whom trade for entertainment, or informed traders whose private efforts to profit produce informative prices that help prevent uninformed traders from trading on the wrong side of value and, more importantly, help make capital allocation efficient?

I believe that the markets are much more fragmented than they should be. The fragmentation supports intermediaries engaged in various forms of arbitrage and dealing. They help buyers find sellers who arrive at different places at different times. But fragmentation also allows agency problems to exist in the shadows of complexity. The resources these intermediaries consume in their businesses and the profits they extract from the markets are burdens associated with market fragmentation.

I favor consolidating our markets to better organize the competition among traders for best price and reduce intermediation costs. But such consolidation decreases the competition among market centers seeking to host the competition for best price. This second competition has benefitted the economy by destroying effective monopolies that certain exchanges and dealer networks had over trading in the past.

Unfortunately, most policies that favor competition for best price tend to hurt the competition among market centers and vice versa. Accordingly, policymakers must choose between the two competitions. Over the last 40 years, the SEC favored competition among market centers as new technologies decreased intermediation costs. But those technologies have matured. As a result, policymakers should now think more about the competition for best price.

That said, forcing retail order flow into exchange markets is not politically viable. So we must examine second-best solutions.

The exposure of retail orders to more liquidity suppliers through the proposed auctions will improve the competition for price for retail traders. Accordingly, I strongly favor the proposal, subject to the abovementioned concerns about fees, fair access, and uses of information obtained from the auctions.

Please do not hesitate to contact me if I can further assist the Commission with these issues.

Sincerely,



Larry Harris
Fred V. Keenan Chair in Finance
USC Marshall School of Business

cc:

The Honorable Gary Gensler, Chairman
Mr. Haoxiang Zhu, Director, Division of Trading and Markets
Ms. Jessica Wachter, Chief Economist and Director, Division of Economic and Risk
Analysis