

February 8, 2023

Vanessa Countryman Secretary Securities and Exchange Commission 100 F Street, NE Washington, DC 20549-0609

Re: Order Competition Rule, Release No. 34-96495; File No. S7-31-22

Dear Ms. Countryman:

Proof Services LLC ("Proof") appreciates the opportunity to comment on this release concerning how retail orders are handled. As an institutional broker for US equities, we would like to add our thoughts on this topic.

Payment For Order Flow, or PFOF as it is lovingly called, has become a controversial subject in retail trading. Advocates say it produces better prices for retail investors, while opponents lament the conflicts of interest it creates. The proposed Order Competition Rule will probably frustrate both sides of this debate. It doesn't ban payment for order flow outright, as opponents have called for, but it tries pretty hard to make it less attractive. In some ways, the proposed rule represents a compromise, but it is also a fairly stark departure from the market structure that dominates retail trading today.

At a high level, this proposal requires that retail orders be exposed to order-by-order competition before being executed by a wholesaler, with notable exceptions for large orders and midpoint executions. The form of the prescribed competition is new and doesn't quite match existing mechanisms at exchanges for facilitating retail orders. In particular, the "qualified auction" format defined here requires the dissemination of auction info that includes order size, side, the identity of the originating retail broker, and a specified limit price.

We expect that such auctions would result in healthier competition among market makers to execute retail orders, and thus should lead to better average price improvement. This may also make wholesaling arrangements less profitable to the point where PFOF is no longer attractive to the parties involved. Presumably the SEC would not be sad to see this happen. But another apparent goal here — facilitating greater interaction between retail and institutional investors —

may be hindered somewhat by the nature of these auctions and the information leakage that can result from trading in them.

In order to fully explain this viewpoint, we need to develop quite a bit of context first. What usually gets lost in the noise of arguments about PFOF are the nuances of how the needs of retail traders, market makers, and institutional investors (mis)align, and how other market structures could suit these various participants differently. To flesh this out, we'll start by considering today's market structure from a few distinct perspectives.

Where PFOF comes from

Let's start with a market maker's perspective. A market maker's goal is to maintain a balance of trading on both sides — buying low and selling high, capturing the spread as compensation for the risk they hold temporarily. In theory, the spread a market maker offers is a reflection of the risks of adverse selection. The higher the likelihood of prices moving quickly in an adverse direction, the wider the spread a market maker needs to protect their profitability. As a consequence of this, market makers should be willing to offer different prices to traders that represent different risk profiles. A retail trader buying a small number of shares, for example, is less likely to reflect a market-moving trend than an institutional investor, who may ultimately be looking to buy a much greater number of shares. It makes sense, then that a market maker would be willing to narrow their spreads specifically for retail traders, if they can identify retail vs. non-retail orders.

PFOF arrangements, as they exist today between retail brokers and market markers, are a blunt way to facilitate this. A retail broker (such as Robinhood), agrees to send their customers' orders directly to a market maker (such as Citadel), so that the market maker can identify the flow as having a lower risk profile, offer better prices on average for the retail trades than the general market, and also pay the retail broker for the business. Essentially, we can think of this as the market maker (usually called a wholesaler in this context) and the retail broker as divvying up the economic value that is created by the lower risk profile of the retail customers' trading. Some of it goes back to the retail investors in the form of price improvement compared to the general market, while some goes to the retail broker as PFOF, as some stays with the wholesaler as profit. Here, there is some competitive pressure on wholesalers to keep their margins reasonable, as retail brokers may shop around for better deals.

But let's switch perspective now to the retail broker. What incentive do they have to shop for the best deal *for their customers* as opposed to the best deal for themselves? In theory, retail customers could choose their broker based on who provides the most price improvement, but expecting retail customers to track this and respond to it by switching brokers is probably unrealistic. As a result, retail brokers may maximize PFOF or other revenue sources for themselves to the detriment of customers.

In our market system, competition is supposed to be the main mechanism for controlling intermediary profits and delivering economic value back to the end investors. But from the perspective of the retail investor, things here look a little sketchy. First, there's no order-by-order competition among market makers to price each individual trade, just a competition in bulk to strike big deals with wholesalers. This potentially loses some of the economic value already. But furthermore, it's very hard to track how much value is getting kept by wholesalers and how much is being kept by retail brokers, leaving the retail investor with no real recourse. This is the argument for why PFOF is "bad" for retail investors, even though it gets them better prices on average than other investors. It's hard to know just *how much better prices* they could be getting since it's not clear that competition is effectively controlling the profits of retail brokers and wholesalers in our current market structure.

But where is the institutional investor in all of this?

There is one more perspective to consider here: the institutional investor. So far they have been sidelined from the action, unable to trade against most retail orders because they are waiting in the larger market, and most retail orders never make it past the wholesalers. In theory, institutional investors may be willing to give retail traders even better prices than any market makers would. This is because they are targeting longer time horizons for investments, and don't expect to make short term profits on their trades. Thus, they may be happy to meet a retail investor at the midpoint of the spread, cutting out the profits of market makers altogether.

It's important though, to examine an institutional investor's motivations more closely. An institutional investor may be trying to establish a substantial position: buying 10% of the average daily volume in a particular stock, for example. Unlike a market maker who is both buy and selling all day, trying to even out, the institutional investor is only buying (or only selling). This amount of activity is typically going to take some time, with the institutional investor picking up some trades here and there, perhaps all day or over multiple days. What the institutional investor wants to avoid is *information leakage*, meaning that they don't want someone to figure out "hey, there's a big buyer in this stock!" while they are in the process of trading. If that happens, the price will likely move and they will have to pay more to buy (or get less for selling).

Because the midpoint of the spread is a place that is unprofitable for market makers to trade on average, one might suspect that institutional investors are present when a lot of midpoint trades are happening. One nice feature of a midpoint trade though, is that its price alone doesn't reveal which side is more urgent or has larger size yet to come. This is similar to the reasoning around institutional investors trading in big blocks with each other — they may alert the market that there are "naturals" present, but if it's on both sides and no one can tell who is bigger or more urgent, it shouldn't move the market price.

Midpoint trading is reasonably common, but of course, there's no guarantee that someone will be willing to trade at the midpoint at the precise moment a retail order enters the market. Market makers exist precisely to fill in such gaps.

So this is the situation the SEC is wading into — a situation where retail investors are getting *some* of the economic value that they are creating for market makers through lower risk trades, but where competitive forces are not sufficient to extract the full value. And sometimes there are institutional investors present in the wider market, willing to trade at the mid potentially if they can do so without substantive information leakage, but these investors are (mostly) not interacting with retail. The ideal world for the retail investor would likely be: they get the midpoint price whenever an institutional investor willing to trade at mid is present, and otherwise they get the best price in an order-by-order competition among market makers who are aware that the order is retail.

The proposed Order Competition Rule

This proposal attempts to create this world by mandating that retail orders be exposed to order-byorder competition. The form of this exposure prohibits internal execution of a retail order by a wholesaler until after the order has been sent to a "qualified auction" that is accessible to all market participants. [There are exceptions here for very large orders, or when the wholesaler is willing to execute at the prevailing midpoint price.] The details of qualified auctions aren't completely prescribed, so there is some wiggle room for enterprising venues to craft different versions, but the basics are spelled out. The timeframe of the auction has to be 100–300 milliseconds. The wholesaler or broker submitting the order has to be identified to everyone, or not knowable to anyone. The order side, size, a specified limit price and other basic info must be disseminated ahead of the auction to alert would-be participants.

If a qualified auction does not produce a trade at the specified limit price or better, then the wholesaler is now free to execute the order internally at that limit price or better itself. This is what makes PFOF and wholesaler arrangements less appealing in this proposed world — the wholesaler can only take the trade at a particular price after everyone else has had an opportunity to match or beat the price. The wholesaler can of course submit a bid to the auction themselves, but their bid is not allowed to be favored over others in any way.

The Possible Consequences

Such qualified auctions do not exist today, but presumably would crop up as offerings at various exchanges and dark pools if this proposed rule were to be adopted. If we imagine a future where most retail orders are routed to such auctions, what kind of outcomes should we expect? One obvious outcome is that it's a lot less attractive to be a wholesaler. In this new world, the role of a wholesaler basically shrinks to a glorified market access provider.

It's reasonable to hope, at least, that retail orders would experience better average pricing through order-by-order competition among market makers. This would be good! It seems less likely though, that institutional investors will or should participate in such auctions to a considerable

extent. In particular, an institutional investor may be less willing to trade at the midpoint through such an auction than they are willing to do today using resting orders on exchanges.

To see why — remember the institutional investor's main goal: avoiding information leakage. Today, when a midpoint trade gets printed on the tape, no information about the participants is made publicly available. It could be a trade between two institutional investors, between two retail investors, between two market makers or prop traders, or any mix of any of these participants. In a qualified auction, however, everyone will know that a particular side of the trade is retail. Thus, it may become slightly easier to infer the side of an institutional investor through such trades when they are present, if they don't blend in with market makers and other proprietary traders. The possible cover of *two* institutional traders on opposite sides meeting at the mid is lost in this scenario, potentially exposing institutional investors to greater information leakage. It may be prudent for institutional investors to be less willing to trade at mid in such settings as a result.

It's hard to guess how the various tradeoffs here would ultimately play out — to what extent is the potential information leakage "worth it" in order to get a midpoint fill? How many market makers will end up participating in these auctions, and how much better (or worse?) will the prices for retail trades actually be? And if executing trades as a wholesaler and receiving PFOF as a retail broker become less profitable in this world (which is part of the point), will the difference just be charged to the end investor in a different way? Perhaps via the re-emergence of retail trading fees? This may not be a bad thing. Trading fees are more transparent to consumers than missed price improvement, and so are better subject to competitive forces, and they can also help discourage retail investors from trading more frequently than benefits their purposes. Hence acting as a little bit of friction against gamification by retail brokers.

Some Possible Alternatives

It can be helpful to compare this to alternative proposals that the SEC may consider. Exchanges already have ways for retail orders to be identified and treated specially by market makers, called retail liquidity programs (RLPs). The details differ across exchanges, but they typically allow market participants (including market makers and institutional investors) to submit orders that will interact solely or distinctly with retail-identified orders. Such orders operate on the continuous books of the exchanges, rather than executing via auctions. It seems that such existing mechanisms can deliver a similar benefit to retail investors through order-by-order competition among market makers and institutional investors.

This makes it a bit mysterious that the SEC is proposing an entirely new mechanism of qualified auctions instead, especially considering that it has a potential information-leakage problem baked into the new definition. What is the auction element supposed to achieve here that the current retail programs at exchanges do not? This is discussed in a footnote on page 306:

"From the perspectives of other market participants, e.g., institutional investors, qualified auctions would provide a superior means, relative to RLPs, for these participants to directly interact with retail orders. This is the case because (1) unlike RLPs, qualified auctions require that characteristics of the order are communicated to bidders, including its price, size, and the name of the underlying retail broker; and (2) qualified auctions would allow market participants to interact with a substantially larger and more persistent pool of segmented retail order flow, relative to that available through RLPs. However the Commission acknowledges that the loss of RLP services may adversely impact market participants that may currently supply liquidity through existing RLPs but would not be fast enough to submit an auction response to a qualified auction message."

The second reason here is a bit circular. The SEC is expecting qualified auctions to have more flow than RLPs currently do because they are mandating that flow be sent to qualified auctions before it can be internalized by a wholesaler. If they mandated that such flow be sent to RLPs instead, then presumably RLPs would gain the same advantage. The first reason is more fundamental — the SEC is pointing out that a broker/wholesaler routing a retail order to an RLP on an exchange can still potentially compete to execute that flow with an information advantage, since they know additional details like the identity of the originating retail broker. Hence the qualified auction rules are an attempt reduce information asymmetries. The SEC also calls out that lack of time priority is a core distinction between qualified auctions and limit order books, so presumably they are concerned that wholesalers may try to game the time priority nature of LOBs in order to gain some kind of advantage, or they just generally want it to be possible for participants to react to auction announcements, rather than having to rest orders and wait for retail flow to come in.

Conclusion

When we take all of this together — that the SEC wants an auction mechanism that allows notsuper-fast participants to have a chance to react and compete to execute against retail orders, and wants to flatten any information asymmetries among participants (including the submitting wholesaler), it sounds like a good world for retail investors, exchanges, and market makers who are not currently dominating as wholesalers. Probably retail investors would get more price improvement. Exchanges would get a higher market share. And the competition to make markets for retail would be healthier.

Despite it being talked about extensively in the proposal, what's much less clear is what this would mean for institutional investors. Today, if a broker submits a retail order to an exchange and it trades at the NBBO midpoint against a resting institutional order, that broker will know that one particular side of the trade was retail, but the wider market will not. In a world of qualified auctions, institutional participants would potentially suffer greater information leakage for midpoint trades in these auctions. However, these are currently trades that institutional investors have essentially no opportunity to interact with, so having more opportunity is presumably helpful rather than harmful, as long as tradeoffs are managed appropriately. This is perhaps a strange idea, but one way the SEC proposal could be tweaked to reduce information leakage for institutional investors would be to omit side from the order attributes that are mandated to be

exposed in auction messages. If side was not exposed, then the auctions' specified limit prices would have to be expressed on both sides, e.g. by using the same percentage of price improvement on each side. This is antithetical to the goal of reducing information asymmetry as much as possible, but it's a possible tradeoff worth considering.

Sincerely,

Allison Bishop

President of Proof Trading