



# BETTER MARKETS

## By Electronic Submission

March 31, 2023

Vanessa A. Countryman  
Secretary  
Securities and Exchange Commission  
100 F Street NE  
Washington, DC 20549

Re: Proposed Rule – Order Competition Rule  
File Number S7-31-22

Dear Ms. Countryman:

Better Markets<sup>1</sup> appreciates the opportunity to comment on the proposed Order Competition Rule (“the Proposal”).<sup>2</sup> The Proposal promises to introduce much greater competition into equity markets for the benefit of retail investors, who unknowingly fail to receive optimal execution on their securities orders under our current market structure. We applaud the Commission for its extensive work to develop, explain, and justify the Proposal, and we urge the Commission to move forward towards a final version that is largely similar to the Proposal.

## **BACKGROUND**

Retail investors—natural persons trading for their own account—are a vitally important and growing class of participants in the U.S. stock market. With this trend has come an increasing awareness of major inequities facing retail investors as they place their orders to buy and sell stock. The simple fact is that in today’s stock markets, many investors—especially retail investors—are not getting the best available prices for their trades. One reason for this state of affairs is the lack of open and fair competition for orders that retail investors place. Often, those orders are routed not to exchanges but instead to a small cadre of “wholesalers” who execute those orders internally, at prices that are profitable for the firms but not optimal for retail investors. The Proposal seeks

---

<sup>1</sup> Better Markets is a non-profit, non-partisan, and independent organization founded in the wake of the 2008 financial crisis to promote the public interest in the financial markets, support the financial reform of Wall Street, and make our financial system work for all Americans again. Better Markets works with allies—including many in finance—to promote pro-market, pro-business, and pro-growth policies that help build a stronger, safer financial system that protects and promotes Americans’ jobs, savings, retirements, and more.

<sup>2</sup> Order Competition Rule, 88 Fed. Reg. 128 (proposed Jan. 3, 2023) (to be codified at 17 C.F.R. pts. 240, 242) [hereinafter the “Proposal”].

to help remedy this unfairness by requiring retail orders to be routed first to open auctions, where other traders can interact with those orders before they can be executed internally by a wholesaler.

Retail investors largely rely on regulated brokers to convert their trading strategies into executable orders, and, traditionally, these brokers might turn to national exchanges to find suitable counterparties and prices, i.e., liquidity, for their clients' orders. These exchanges are regulated under the Commissions' National Market System ("NMS") rules,<sup>3</sup> the centerpiece of which is the National Best Bid and Offer ("NBBO"). The NBBO represents the leading bid and offer for a particular stock among displayed orders on the national exchanges and is disseminated to market participants throughout security information processors.<sup>4</sup> Commission rules generally require these bids or offers to be priced in increments no smaller than a penny (with exceptions for stocks priced below \$1 per share),<sup>5</sup> and Commission rules also generally prevent "trading through" the NBBO at less favorable prices.<sup>6</sup> The NBBO thus serves as a foundational benchmark for "lit" trading on public exchanges as well as less transparent trading on alternative trading systems ("ATS").

Although the NBBO still serves as a leading market reference point, exchange-based trading has declined in relevance to the routing and execution of retail orders. Instead, an oligopoly of six "wholesaler" firms employing high-frequency algorithmic trading strategies have captured roughly nine-tenths of market orders and marketable limit orders from retail-investor brokers (retail brokers, for short).<sup>7</sup> This oligopoly, in fact, is really a duopoly; Citadel and Virtu, the two largest wholesalers, account for two-thirds of share volume executed by wholesalers.<sup>8</sup>

This group of wholesalers has achieved real market power in large part by offering retail brokers compensation in the form of payment for order flow ("PFOF"), a small amount per share for every order routed to the wholesaler by the broker. While not all retail brokers accept PFOF, the aggregate amount paid by wholesalers to retail brokers climbed dramatically along with the

---

<sup>3</sup> See 17 C.F.R. §§ 242.600–.614 (Regulation NMS).

<sup>4</sup> See *id.* § 242.600(50) (defining "national best bid and national best offer" to mean, "with respect to quotations for an NMS stock, the best bid and best offer for such stock that are calculated and disseminated on a current and continuing basis by a competing consolidator or calculated by a self-aggregator and, for NMS securities other than NMS stocks, the best bid and best offer for such security that are calculated and disseminated on a current and continuing basis by a plan processor pursuant to an effective national market system plan; provided, that in the event two or more market centers transmit to the plan processor, a competing consolidator or a self-aggregator identical bids or offers for an NMS security, the best bid or best offer (as the case may be) shall be determined by ranking all such identical bids or offers (as the case may be) first by size (giving the highest ranking to the bid or offer associated with the largest size), and then by time (giving the highest ranking to the bid or offer received first in time)").

<sup>5</sup> See *id.* § 242.612(a)–(b).

<sup>6</sup> See *id.* § 242.611(a).

<sup>7</sup> See, e.g., Proposal, 88 Fed. Reg. at 178 ("At present, the vast majority of retail orders (over 90% of marketable NMS stock orders) are routed to wholesalers, where they are frequently executed in isolation, on a captive basis.").

<sup>8</sup> See *id.* at 129 ("The wholesaling business is highly concentrated, with two firms capturing approximately 66% of the executed share volume of wholesalers as of the first quarter of 2022.").

growth in retail trading.<sup>9</sup> What do the wholesalers gain from this? In their view, retail investors are generally less informed and use strategies less correlated with each other; as a result, retail orders present less risk to wholesalers or other counterparties of incorporating an informational advantage about the future direction of prices.<sup>10</sup> In market lingo, these orders present less risk of “adverse selection”<sup>11</sup> (although the use of that term presents something of a perversity in this context as applied to retail orders since, as discussed below, it is the *wholesalers* who create a true market failure based on adverse selection).

The net result of the current, PFOF-based market structure is that the wholesaler oligopoly skims off the “cream” of retail order flow that might otherwise go to exchanges, “internalizes” or trades against those orders, captures a favorable spread on the price of that order by quickly completing an opposite order on the same stock, and leaves the rest of the public markets, and particularly institutional investors, with a thinner, riskier pool of liquidity. Nor do many retail orders enjoy the possibility of better prices offered on public exchanges or by institutional investors, since they generally do not interact with those venues or traders.

## **OVERVIEW OF THE PROPOSAL**

The Proposal aims to unwind the wholesalers’ hold on retail order flow and expose that flow to the order-by-order competition of the type that prevails on public exchanges.<sup>12</sup> It does so through the “qualified auction” process.<sup>13</sup> More specifically, the Proposal bars any “restricted competition trading center” from internalizing a “segmented order” for an NMS stock until that order has been submitted to a qualified auction for a minimum period of time.<sup>14</sup> A “restricted competition trading center,” the term intended to capture wholesalers,<sup>15</sup> is defined primarily in terms of what it is not: an “open competition trading center,”<sup>16</sup> a term that can include national securities exchanges or ATS that meet certain information, access, or share-volume requirements.<sup>17</sup> A “segmented order,” in turn, is intended to capture the types of retail orders that

---

<sup>9</sup> CHRISTOPHER SCHWARZ ET AL., THE “ACTUAL RETAIL PRICE” OF EQUITY TRADES 13 (2022) (“[T]he total value of PFOF has sharply increased, more than three-fold since 2019, to \$3.5 billion in 2021. This increase has coincided with an increase in retail trading volume.”).

<sup>10</sup> *See, e.g.*, Proposal, 88 Fed. Reg. at 129.

<sup>11</sup> *See id.*

<sup>12</sup> *See id.* (“Proposed Rule 615 would require that certain orders of individual investors be exposed to competition in fair and open auctions, before such orders could be executed internally by trading centers that restrict order-by-order competition.”).

<sup>13</sup> *See id.* at 243 (to be codified at 17 C.F.R. § 242.600(b)(81) (defining “qualified auction”).

<sup>14</sup> *Id.* at 244 (to be codified at 17 C.F.R. § 242.615(a)).

<sup>15</sup> *See, e.g., id.* at 147 (“Proposed Rule 615 would allow flexibility for broker-dealers, wholesalers, and other restricted competition trading centers in how they comply with the rule.”).

<sup>16</sup> *See id.* at 243 (to be codified at 17 C.F.R. § 242.600(b)(87)) (defining “restricted competition trading center” as “any trading center that is not an open competition trading center and is not a national securities exchange”).

<sup>17</sup> *See id.* (to be codified at 17 C.F.R. § 242.600(64)) (prescribing separate criteria for exchanges and ATS to qualify as an open competition trading center).

are currently diverted from public markets by the wholesaler oligopoly;<sup>18</sup> to that end, the Proposal defines a “segmented order” as an order for the account of or on behalf of a natural person or family that averages less than 40 executed trades in NMS stocks per day (measured over six months).<sup>19</sup>

Qualified auctions must be operated by open competition trading centers.<sup>20</sup> Auctions in these trading centers help reduce the search costs of parties seeking to interact with retail order flow.<sup>21</sup> For the same purpose, the Proposal requires the trading center hosting the auction to disseminate an auction announcement message in consolidated market data under Rule 603.<sup>22</sup> This message will generally identify the trading center, the stock symbol, the buy/sell side of the order, the limit price, and, critically, the identity of the broker originating the segmented order.<sup>23</sup> The auction would accept priced responses for a period lasting between 100 and 300 milliseconds; these responses would not be displayed during the auction and would not be disseminated after its conclusion.<sup>24</sup> The responses would need to be priced at the NBBO midpoint or, for stocks priced at more than \$1.00 per share, in increments no lower than \$0.001; responses for stocks priced below \$1.00 per share could use increments as low as \$0.0001.<sup>25</sup>

Once responses have been received, the host trading center must generally match the segmented order to the response offering the most favorable price for the retail investor.<sup>26</sup> Responses may not be given priority based on the time of receipt or because submitted by the originating broker (or another broker-dealer who routed the order to the auction), the open competition center itself, or any affiliate of either.<sup>27</sup> But, after price, responses for the account of a customer (including an institutional investor) must have priority over those submitted for the account of a broker or dealer.<sup>28</sup> Resting orders at the open competition center may also take priority over qualified auction responses with less favorable prices, and displayed resting orders take priority even over qualified auction responses at the same price (though the reverse is true if the resting order is not displayed).<sup>29</sup> If the auction concludes without the segmented order finding a sufficiently favorable response, a wholesaler (or another broker-dealer) may internalize the

---

<sup>18</sup> *See id.* at 149 (“The intent of the proposed definition is to encompass the marketable orders of individual investors with expected low adverse selection costs that retail brokers currently route to wholesalers for handling and execution.”).

<sup>19</sup> *See id.* at 243 (to be codified at 17 C.F.R. § 242.600(b)(91)).

<sup>20</sup> *Id.* at 244 (to be codified at 17 C.F.R. § 242.615(a)).

<sup>21</sup> *See id.* at 178 (“Qualified auctions would act as a coordination mechanism and make the submitters of these resting midpoint orders aware there was an individual investor order they could potentially trade with.”).

<sup>22</sup> *See id.* at 244 (to be codified at 17 C.F.R. § 242.615(c)(1)(i)).

<sup>23</sup> *Id.* The Proposal does allow the originating broker to withhold its identity if it certifies that it has written policies designed to ensure that its identity will not be disclosed to auction participants. *See id.* (to be codified at 17 C.F.R. § 242.615(c)(1)(iii)).

<sup>24</sup> *Id.* (to be codified at 17 C.F.R. § 242.615(c)(2)).

<sup>25</sup> *Id.* (to be codified at 17 C.F.R. § 242.615(c)(3)).

<sup>26</sup> *See id.* (to be codified at 17 C.F.R. § 242.615(c)(5)(i)) (“The highest priced auction responses to buy and the lowest priced auction responses to sell shall have priority of execution.”).

<sup>27</sup> *See id.* at 244–45 (to be codified at 17 C.F.R. § 242.615(c)(5)(iii)–(iv)).

<sup>28</sup> *Id.* at 244 (to be codified at 17 C.F.R. § 242.615(c)(5)(ii)).

<sup>29</sup> *See id.* at 245 (to be codified at 17 C.F.R. § 242.615(c)(5)(v)).

segmented order at a price at least as favorable as the limit price under which it was submitted to the auction, and the wholesaler or other executing party must do so “as soon as reasonably possible.”<sup>30</sup>

The Proposal also restricts the financial incentives that the open competition trading center may impose for auction participation.<sup>31</sup> In particular, no trading center may impose a fee for the submission of an auction response, and the fee for executing on that response may not exceed \$0.0005 per share for responses priced at \$1.00 or more per share.<sup>32</sup> Rebates—whether for response submission or execution—also may not exceed \$0.0005 per share for responses priced at \$1.00 or more per share.<sup>33</sup> The trading center must provide rebates at the same rate for all qualified auctions and all auction responses.<sup>34</sup>

While the qualified auction process is generally mandatory for segmented orders, the Proposal does allow some exceptions.<sup>35</sup> These exceptions include: segmented orders received when no open trading competition centers are operating qualified auctions for such orders;<sup>36</sup> the value of the segmented order is \$200,000 or higher (based on the NBBO midpoint when the order is received);<sup>37</sup> the retail investor set the limit price for the segmented order beyond the NBBO midpoint;<sup>38</sup> and fractional shares.<sup>39</sup> The Proposal also allows wholesalers or other broker-dealers to internalize a segmented order without a qualified auction so long as it does so at a price equal to or more favorable for the segmented order than the NBBO midpoint.<sup>40</sup>

## **SUMMARY OF COMMENTS**

The Proposal aims to protect the interests of retail investors; that is the appropriate focus from both statutory and policy perspectives. Investor protection is a common theme throughout the Exchange Act provisions under which the Proposal has been developed. Just as importantly, the economic well-being of retail investors is the bedrock of the Exchange Act’s other goals.

The current structure of the U.S. equity markets impedes all of those goals, especially investor protection. Largely thanks to PFOF, the wholesaler oligopoly has managed to create at

---

<sup>30</sup> *Id.* at 244 (to be codified at 17 C.F.R. § 242.615(a)) (“If the segmented order is not executed in the qualified auction, a restricted competition trading center may, as soon as reasonably possible, execute the segmented order internally at a price that is equal to or more favorable for the segmented order than the specified limit price in the qualified auction.”).

<sup>31</sup> *See id.* (to be codified at 17 C.F.R. § 242.615(c)(4)).

<sup>32</sup> *See id.* For auction responses priced at less than \$1.00 per share, the trading center may not impose execution fees above 0.05% (per share) of the response price. *Id.*

<sup>33</sup> *See id.* Again, for auction responses priced at less than \$1.00 per share, the trading center may not provide execution rebates above 0.05% (per share) of the response price or 0.05% of the segmented order.

<sup>34</sup> *See id.*

<sup>35</sup> *See id.* (to be codified at 17 C.F.R. § 242.615(b)).

<sup>36</sup> *See id.* (to be codified at 17 C.F.R. § 242.615(b)(1)).

<sup>37</sup> *See id.* (to be codified at 17 C.F.R. § 242.615(b)(2)).

<sup>38</sup> *See id.* (to be codified at 17 C.F.R. § 242.615(b)(4)).

<sup>39</sup> *See id.* (to be codified at 17 C.F.R. § 242.615(b)(5)).

<sup>40</sup> *See id.* (to be codified at 17 C.F.R. § 242.615(b)(3)).

least three market failures that accrue to their benefit. The Proposal would rightly address the conditions that allow these failures to persist:

- **Principal-Agent Problems:** PFOF and other wholesaler inducements drive a wedge between the interests of retail investors and the routing or execution decisions of their brokers. These practices distort competition for retail order flow, to the detriment of retail investors. The Proposal would force retail brokers to provide their customers with more competitive routing and execution via the auctions.
- **Adverse Selection:** By locking up large swathes of retail order flow, the major wholesalers deprive the rest of the equity market, including public exchanges and their participants, of vital information about order flow and pricing. The wholesalers then leverage this information asymmetry to their advantage against the public markets; the result is a classic case of adverse selection. The Proposal would mitigate these problems by giving all market participants more equal access to retail order flow through the auctions.
- **Systemic Risk:** The wholesaler incumbents have achieved sufficient market concentration that even minor disruptions to their operations or financial positions might create systemic harm. In other words, they have imposed yet another negative externality on the wider equity markets. The Proposal can reduce or remove that market power, size, and dominance by routing a large percentage of retail order flow to auctions where they are subject to true order-by-order competition.

The wholesaler oligopoly will undoubtedly respond that they currently provide “price improvement” to captive retail flow. But any such price improvement is clearly sub-optimal. Not only do wholesalers measure it against the baseline of the NBBO—which reflects depressed competition caused by the wholesalers—but they fail to account for other, less visible sources of liquidity that would likely give retail investors better outcomes. The illusory nature of *status quo* price improvement, in fact, has been confirmed by recent empirical work.

The incumbents that profit from PFOF and reduced competition are likely to offer other criticisms of the Proposal. We expect that they will claim that the Proposal will actually harm investors through the return of retail brokerage commissions or reduced liquidity in the market for certain smaller stocks. The Commission should not allow these assertions to dissuade it from moving forward with the Proposal. Up-front broker commissions are unlikely to return, despite the self-serving claims of some of the least reputable industry actors. And incumbent concerns about liquidity simply ignore the many structural incentives the Proposal uses to enhance order-by-order competition—especially to the benefit of institutional investors who approach order flow differently than wholesalers or other market makers.

The firms reaping profits from the current oligopoly will also assuredly fault the Commission for insufficient economic analysis; we fully expect these voices to demand some deeper cost-benefit analysis of the Proposal. But the Commission has already justified the Proposal on the back of an impressively thorough assessment of economic consequences, largely

through quantitative projections that show enormous savings to retail investors. This work goes far beyond the statutory requirements of the Exchange Act.

We offer, however, an important refinement to the Proposal. The Proposal would allow wholesalers to proceed with immediate internalization, without a qualified auction, if they execute a retail order at the NBBO midpoint. While this outcome might improve on current wholesaler executions, it is far from clear that it would match the results of true, open competition. We therefore urge the Commission to reconsider the assumptions behind this aspect of the Proposal.

As a final point, we explain why the comment period has been more than sufficient to allow for meaningful input from the public and all stakeholders and to satisfy federal law. Industry incumbents might already be complaining about the need for more time, but the Commission’s formal and *de facto* notice of the Proposal have already been as generous as that for nearly any other major rulemaking.

## **COMMENTS**

### **I. The status quo harms retail investors and impedes the objectives of the Exchange Act.**

#### **A. Protection of retail investors sits at the heart of the Commission’s statutory mandate.**

“Section 11A of the amended Securities Exchange Act . . . grants the Commission broad power to establish a national market system for the trading of securities.”<sup>41</sup> In exercising this power the Commission must “act with ‘due regard for the public interest, the protection of investors, and the maintenance of fair and orderly markets.’”<sup>42</sup> Congress found that these goals would be served by targeting several objectives: the “economically efficient execution of securities transactions;” “fair competition among brokers and dealers, among exchange markets, and between exchange markets and markets other than exchange markets;” and “the availability to brokers, dealers, and investors of information with respect to quotations for and transactions in securities,” among others.<sup>43</sup> Congress also directed the Commission to consider, as part of the public interest, “in addition to the protection of investors, whether the action will promote efficiency, competition, and capital formation.”<sup>44</sup>

The number and diversity of these objectives tends to obscure a central necessary feature. As past Chair Mary Jo White has explained, each of these statutory goals ultimately:

circles back to the first – to protect investors – because if our markets are not fair and safe, they will not attract investors to provide the capital companies are

---

<sup>41</sup> *Nasdaq Stock Mkt. LLC v. SEC*, 34 F.4th 1105, 1106 (D.C. Cir. 2022) (citing 15 U.S.C. § 78k-1(a)(2)).

<sup>42</sup> *Id.* at 1111 (quoting 15 U.S.C. § 78k-1(a)(2)).

<sup>43</sup> 15 U.S.C. § 78k-1(a)(1)(C)(i)–(iii).

<sup>44</sup> *Id.* § 78c(f).

seeking. . . . The retail investor must be a constant focus of the SEC – if we fail to serve and safeguard the retail investor, we have not fulfilled our mission.<sup>45</sup>

In fact, the centrality of investor protection has only grown as “[t]he past few years saw an unprecedented surge in retail investor securities trading at major discount broker-dealers such as Robinhood, Charles Schwab, TD Ameritrade, and E\*Trade.”<sup>46</sup> The market failures that have worsened alongside this growth, moreover, pose a unique risk of undermining public confidence in the U.S. capital markets.<sup>47</sup> Left unchecked, the loss of retail investor confidence threatens to undermine not just direct retail trading but also the heavy investor reliance on indirect investment through retirement accounts, mutual funds, or other means, with all the attendant consequences for capital formation. At least anecdotal evidence indicates, for instance, that a sense of “rigged” capital markets” might push retail investors into the open arms of cryptocurrencies or other unproductive gambles.<sup>48</sup>

## **B. The U.S. equity market is currently subject to multiple layers of market failure that harm retail investors, efficiency, and competition.**

The Commission acts squarely within its Section 11A authority where it addresses securities market failures.<sup>49</sup> The secondary market for U.S. equities evinces three such failures caused by wholesaler practices. First, wholesalers strike agreements with retail brokers designed to drive a wedge between the interests of those brokers and their clients—a conflict of interest that compromises the agent’s duty to its principal and creates a classic principal-agent problem.<sup>50</sup> Second, by capturing and internalizing the flow of retail orders, wholesalers create a deeply uncompetitive market, deprive other non-retail participants of critical information, and expose them to much greater risk of adverse selection. This second market failure compounds the harm done to retail investors and the wider efficiency of the equity market. Third, the anti-competitive

---

<sup>45</sup> Mary Jo White, Chair, Sec. & Exch. Comm’n, Remarks Before the Consumer Federation of America 2014 Consumer Assembly: Protecting the Retail Investor (Mar. 21, 2014),

<https://www.sec.gov/news/speech/mjw-speech-032114-protecting-retail-investor>.

<sup>46</sup> GARY SHORTER, CONG. RSCH. SERV., PAYMENT FOR ORDER FLOW: THE SEC PROPOSES REFORMS 1 (2023),

<https://crsreports.congress.gov/product/pdf/IF/IF12332>.

<sup>47</sup> *See Game Stopped? Who Wins and Loses When Short Sellers, Social Media, and Retail Investors Collide, Part II: Hearing Before the H. Comm. on Fin. Servs.*, 117th Cong. 4 (2021) (statement of Dennis Kelleher, CEO, Better Markets, Inc.) [hereinafter “Kelleher Testimony”],

<https://bettermarkets.org/sites/default/files/Kelleher%20HFSC%20Testimony%20GameStop%20Hearing%203-17-2021%20FINAL%20%282%29.pdf>.

<sup>48</sup> *See generally* Patrick McConlogue, ‘Market Battleship’: Why It’s Rigged and How DeFi Can Help, COINDESK (Sept. 14, 2021), <https://www.coindesk.com/markets/2021/02/10/market-battleship-why-its-rigged-and-how-defi-can-help/>.

<sup>49</sup> *See, e.g., Nasdaq Stock Mkt. LLC v. SEC*, 34 F.4th 1105, 1108 (D.C. Cir. 2022) (explaining that the Commission justified the Market Data Infrastructure Rule under Section 11A by targeting information asymmetries between market participants).

<sup>50</sup> *See, e.g.,* Michael C. Jensen & William H. Mecklin, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECON. 308–09 (1976).



effects of wholesaler practices expose the entire equity markets to the negative externality of systemic disruption if even one key wholesaler fails.

1. *PFOF creates powerful principal-agent problems.*

A broker serves as the agent of the retail investor client, who reasonably expects that the broker will act for her benefit.<sup>51</sup> Unfortunately, this principal-agent relationship can be undermined by conflicts of interest, including those created by the broker's "receipt of third-party compensation," and the Commission has therefore at times indicated its belief that "material conflicts of interest associated with the broker-dealer relationship need to be well understood by the retail customer and, in some cases, mitigated or eliminated."<sup>52</sup>

The wholesaler oligopoly has found a strong tool for creating just those types of conflicts: payment for order flow.<sup>53</sup> PFOF most commonly takes the form of rebates paid to the retail broker in return for retail order flow routed to the wholesaler.<sup>54</sup> But, properly conceived, PFOF can also take many different forms as non-monetary or "soft dollar" compensation,<sup>55</sup> including "research, clearance, custody, products or services; reciprocal agreements for the provision of order flow; adjustment of a broker or dealer's unfavorable trading errors; offers to participate as underwriter in public offerings; stock loans or shared interest accrued thereon."<sup>56</sup> All of these methods give the retail broker an incentive to push retail orders to the wholesaler providing PFOF.

In whatever form it takes, PFOF risks a severe principal-agent problem. Retail brokers, notwithstanding their nominal duties to provide "best execution" to retail clients,<sup>57</sup> will inevitably tend to route their orders not to "lit" trading on national exchanges but to the wholesalers who provide the richest compensation.<sup>58</sup> In other words, the retail broker will act to maximize its own profits rather than secure the best possible execution for the investor client.

---

<sup>51</sup> See, e.g., Regulation Best Interest, 83 Fed. Reg. 21,574, 21,577 (proposed May 9, 2018).

<sup>52</sup> *Id.* at 21,577.

<sup>53</sup> See, e.g., BETTER MARKETS, PAYMENT FOR ORDER FLOW: HOW WALL STREET COSTS MAIN STREET INVESTORS BILLIONS OF DOLLARS THROUGH KICKBACKS AND PREFERENTIAL ROUTING OF CUSTOMER ORDERS 1 (2021), [https://www.bettermarkets.org/sites/default/files/documents/Better\\_Markets\\_Payment\\_for\\_Order\\_Flow\\_Loing\\_02-21-2021.pdf](https://www.bettermarkets.org/sites/default/files/documents/Better_Markets_Payment_for_Order_Flow_Loing_02-21-2021.pdf).

<sup>54</sup> See, e.g., *id.*; SHORTER, *supra* note 46, at 1.

<sup>55</sup> See Allen Ferrell, *A Proposal for Solving the "Payment For Order Flow" Problem*, 74 S. CAL. L. REV. 1027, 1044 (2001) ("Cash payments are not the only kind of side payments dealers can offer brokers in exchange for order flow. Dealers also offer brokers soft-dollar payments, such as sharing investment research or providing clearance services, in exchange for order flow. Sometimes the consideration for routed order flow is order flow itself. A broker-dealer will send order flow to another broker-dealer for execution in return for that broker-dealer returning the favor.").

<sup>56</sup> 17 C.F.R. § 240.10b-10(d)(8) (defining "payment for order flow").

<sup>57</sup> For the infirmities in the current "best execution" standard imposed by FINRA rules, see our comment letter on the Commission's Regulation Best Execution proposal (File No. S7-32-22), which we incorporate herein by reference.

<sup>58</sup> Kelleher Testimony, *supra* note 47, at 9–15; BETTER MARKETS, PAYMENT FOR ORDER FLOW, *supra* note 53, at 1–4.

Publicly available data suggests that the incentives of PFOF have a real influence on order routing. Over the last few years, PFOF payments have soared into the billions of dollars.<sup>59</sup> This surge in payment has, to no one's surprise, coincided with increasing capture of marketable retail flow by the wholesaler oligopoly, particularly the largest two wholesalers.<sup>60</sup> And while direct PFOF compensation has had some recent retreat in total volume,<sup>61</sup> recent history indicates that it will only return with force once the volume of retail trading resumes its climb.<sup>62</sup>

There is also unmistakable evidence that some PFOF harms retail investors by undermining the fidelity of their broker agents. Nowhere is this harm clearer than with Robinhood Financial, LLC.<sup>63</sup> As recounted in the findings of the Commission's remedial order, Robinhood—including its senior personnel—consciously pursued PFOF remuneration at the expense of optimal price improvement for its retail customers.<sup>64</sup> Robinhood did not pass on this PFOF directly to customers. Worse, Robinhood deliberately hid this scheme from its customers,<sup>65</sup> most of whom were undoubtedly ignorant of PFOF-based order routing and its implications. The Commission estimated that Robinhood ultimately cost retail investors tens of millions of dollars in price improvement over a period of less than three years—*net of any up-front commissions avoided by those same investors through using Robinhood*.<sup>66</sup>

The Robinhood scandal is a particularly salient and egregious example of PFOF-driven market failure. But no one should assume that it is the only such case. After all, Robinhood's misconduct took years to uncover, and other PFOF-driven brokers might simply prove better at covering their tracks. The incentives for broker-agents to betray their investor-principals will persist as long as PFOF payments do, too.<sup>67</sup>

That expectation, in fact, is shared by principals at retail brokers willing to speak candidly.<sup>68</sup> And even the largest wholesaler once acknowledged that “the practice of payment

---

<sup>59</sup> See SCHWARZ ET AL., *supra* note 9, at 13 (“[T]he total value of PFOF has sharply increased, more than three-fold since 2019, to \$3.5 billion in 2021.”); Kelleher Testimony, *supra* note 47, at 10 (“PFOF across all retail broker-dealers in 2020 was reportedly at least \$2.6 billion.”).

<sup>60</sup> See Proposal, 88 Fed. Reg. at 184, 184 tbl. 3 (“Table 3 reflects that wholesalers dominate the business of providing market access for retail brokers and indicates that PFOF is a factor in retail broker routing decisions.”).

<sup>61</sup> See, e.g., Katherine Doherty & Lydia Beyoud, *Why Payment for Order Flow Made Trades Free But Left SEC Skeptical*, BLOOMBERG (Dec. 17, 2022) (“Equities payments, roughly 30% of the total, are on target to hit \$0.9 billion for 2022”), <https://www.bloomberg.com/news/articles/2022-07-05/why-sec-s-targeting-stock-payment-for-order-flow-quicktake?sref=mQvUqJZj>.

<sup>62</sup> See SCHWARZ ET AL., *supra* note 9, at 13.

<sup>63</sup> See Kelleher Testimony, *supra* note 47, at 10–11; see generally Robinhood Fin., LLC, Securities Act Release No. 10906, Exchange Act Release No. 90694, 2020 WL 7482170 (Dec. 17, 2020) [hereinafter “Robinhood Order”].

<sup>64</sup> See Robinhood Order, *supra* note 63, ¶¶ 1–7, 19–30.

<sup>65</sup> See, e.g., *id.* ¶¶ 3–4, 6, 15–17, 31–42.

<sup>66</sup> *Id.* ¶ 42.

<sup>67</sup> See Kelleher Testimony, *supra* note 47, at 10–12.

<sup>68</sup> See Stanislav Dogoplov, *Off-Exchange Market Makers and Their Best Execution Obligations: An Evolving Mixture of Market Reform, Regulatory Enforcement, and Litigation*, 17 N.Y.U. J. L. & BUS. 477,

for order flow creates serious conflicts of interest and should be banned.”<sup>69</sup> Two keen observers from Yale University have thus summed up the harm from this aspect of the current market structure: “Individual investors suffer, both from having their orders sold without receiving any of the proceeds and from having their orders executed in ways that benefit the intermediary and not the client.”<sup>70</sup>

Unfortunately, retail investors are not well-positioned to correct this market failure on their own. Professor Alan Ferrell explains:

Evaluating the quality of competing brokerage products . . . is often far more difficult [than comparing broker commission rates]. While it is true that investors can easily judge brokers by certain criteria, such as ease of access to account information, determining whether an order has received the best possible price is far more involved. It may very well be prohibitively expensive for many small investors to acquire the necessary expertise and information to make a meaningful judgment about whether a broker has sent their orders to the appropriate market. Indeed, many small investors are probably unaware that they are uninformed.<sup>71</sup>

Indeed, one empirical study confirms that “small investors” are simply unequipped to monitor their brokers for optimal price execution.<sup>72</sup> Professor Ferrell notes that “[t]his failure to monitor brokerage quality is consistent with growing empirical evidence that noninstitutional investors often do not have even a basic understanding of how financial markets work.”<sup>73</sup> For these reasons, there is little reason to think that increased disclosures alone will remedy inherent conflicts of interest from PFOF; adding to the complexity of these disclosures and the difficulty of their interpretation will only further overwhelm retail investors (if they ever know such disclosures exist).

---

497 (2021) (“As opined by an industry insider, ‘Brokers that extract the best price improvement for their customers necessarily forgo some hefty payments that other brokers get for sending their order flows to market makers. ‘The market makers are not both going to pay you a lot for order flow and then turn around and provide your customers with a high level of price improvement,’ says Gregg Murphy, Fidelity Brokerage’s senior vice president for trading.”); *see id.* at 499 (“an executive of a leading retail brokerage firm gave a rather problematic description of different tiers of ‘best execution’ offered by that firm . . . ‘If it’s IBKR Lite with zero commissions we do what the other brokers do, we send them off to a market maker just like everybody else and there’s payment for order flow that comes back and you may not get as good of an execution . . . . If its [sic] IBKR Pro you’ll get better execution.”).

<sup>69</sup> Nick Waters, *Remedying the Negative Effects of Equity Market Order Flow Decentralization on Retail Investors*, 16 OHIO ST. BUS. L.J. 368, 392 (2022) (“Additionally, in 2004, Citadel Securities LLC, which is currently one of the largest payers for the order flow of retail investors, commented on an SEC PFOF regulation proposal saying, ‘the practice of payment for order flow creates serious conflicts of interest and should be banned’ and called the practice anti-competitive and bad for price discovery.”).

<sup>70</sup> Jonathan Macey & David Swensen, Opinion, *The Cure for Stock-Market Fragmentation: More Exchanges*, WALL ST. J., May 31, 2015, <https://www.wsj.com/articles/the-cure-for-stock-market-fragmentation-more-exchanges-1433109068>.

<sup>71</sup> Ferrell, *supra* note 55, at 1048.

<sup>72</sup> *Id.* at 1049.

<sup>73</sup> *Id.* at 1050.

It is true that, viewing the market as a whole, at least one study (Schwarz et al.) has failed to identify a tight causal link between PFOF and foregone price improvement.<sup>74</sup> However, we see reasons to doubt this aspect of the Schwarz study. First, as the Commission itself notes in the Proposal, this study includes a much smaller cross-section of retail brokers than that in the Proposal's economic analysis,<sup>75</sup> nor does this study necessarily control for the perceived adverse selection risk of a particular broker.<sup>76</sup>

Second, while the study appears to have estimated PFOF from Rule 606 reports,<sup>77</sup> it is not clear that even these reports capture or accurately quantify the full suite of non-monetary compensation that a wholesaler might provide, in line with the regulatory definition of PFOF.<sup>78</sup> If, for instance, the reports do not completely capture the value of services provided to a retail broker in lieu of rebates or direct outlays, then the Schwarz study likely fails to capture important variations in PFOF received by retail brokers.

Third, the Schwarz finding might be an artifact of comparing PFOF and price improvement variance on a per-share basis.<sup>79</sup> It might well be the case that PFOF in the form of rebates or direct cash outlays are calculated and paid on a per-share basis; in such a case, one might reasonably expect variation in these outlays to explain variation in routing decisions, and thus price improvement, on an order-by-order basis. However, we see no reason to expect "soft dollar" forms of PFOF to be paid on a per-share or per-order basis.<sup>80</sup>

---

<sup>74</sup> See SCHWARZ ET AL., *supra* note 9, at 26.

<sup>75</sup> See Proposal, 88 Fed. Reg. at 197 n.455.

<sup>76</sup> See *Id.* at 197 n.456.

<sup>77</sup> See SCHWARZ ET AL., *supra* note 9, at 47 tbl. III.

<sup>78</sup> Compare 17 C.F.R. § 242.606(a)(1)(iii) (requiring "the net aggregate amount of any payment for order flow received, payment from any profit-sharing relationship received, transaction fees paid, and transaction rebates received, both as a total dollar amount and per share"), and 17 C.F.R. § 242.606(a)(1)(iv) ("a description of any arrangement for payment for order flow and any profit-sharing relationship and a description of any terms of such arrangements, written or oral, that may influence a broker's or dealer's order routing decision"), with 17 C.F.R. § 240.10b-10(d)(8) (defining potential forms of PFOF).

<sup>79</sup> See SCHWARZ ET AL., *supra* note 9, at 26, 52 tbl. VII.

<sup>80</sup> For example, if soft dollar compensation instead changes on an institutional basis (i.e., by retail broker), then this form of PFOF might not naturally produce variation that easily tracks price improvement at the level of individual shares or orders. In fact, this is exactly what one would expect if market participants assess the adverse-selection risk of a retail order using the identity of the originating broker, just as the preponderance of evidence indicates. But there is no obvious reason why these other forms of PFOF would vary closely with fluctuations in shares or orders. Similarly, the true relationship between PFOF and price improvement might be obscured by principal-agent problems within the retail broker institutions. Suppose, as an example, that a senior executive at a retail broker might claim credit for negotiating PFOF compensation in a single deal with a wholesaler, but she would have little claim to bringing in a large, diffuse number of retail trader commissions. She might leverage the lumpier, more salient nature of PFOF to bargain for her own higher compensation, even if client price improvement suffers after the fact. These internal incentive problems might then explain why PFOF in fact drives routing practices and, ultimately, price improvement even if, as Schwarz et al. suggest, the magnitude of aggregate PFOF is simply too small to explain the full variation in price improvement from a purely mathematical sense.

2. *The current market structure creates severe concentration, information asymmetry, and adverse selection.*

The market failures of the current structure do not stop at the level of the individual retail broker. Collectively, the diversionary effect of PFOF pushes retail flow away from lit exchanges to the wholesaler oligopoly.<sup>81</sup> The dominant wholesalers internally execute those retail orders they see as most attractive.<sup>82</sup> They can then send on only the least desirable retail orders to lit exchanges or other venues, perhaps under the inducement of rebates or payments from those exchanges.<sup>83</sup>

This practice results in several wider harms to the efficiency and competition of U.S. equity markets. First, it eviscerates fair competition among brokers, exchanges, and market makers—a central statutory goal.<sup>84</sup> By separating retail broker routing decisions from the interests of their customers, a tiny number of dominant wholesalers have created an oligopolistic market in which no competition occurs for an individual order.<sup>85</sup> This market now well exceeds objective, widely used measures for high concentration,<sup>86</sup> and the recent growth in that concentration would have triggered serious antitrust scrutiny if effectuated through an acquisition.<sup>87</sup> In other words, the market has become deeply anti-competitive.<sup>88</sup> Challenging the incumbency of a few dominant players in such a market is fully consistent with the statutory goal of promoting competition.<sup>89</sup>

Second, and relatedly, the wholesaler oligopoly deprives public markets, institutional investors, and even other market makers of access to retail order flow. This deprivation directly reduces liquidity and widens spreads on those exchanges.<sup>90</sup> Furthermore, their ability to capture

---

<sup>81</sup> See Kelleher Testimony, *supra* note 47, at 13; BETTER MARKETS, PAYMENT FOR ORDER FLOW, *supra* note 53, at 5.

<sup>82</sup> See Waters, *supra* note 69, at 394–95; HITESH MITTAL & KATHRYN BERKOW, THE GOOD, THE BAD & THE UGLY OF PAYMENT FOR ORDER FLOW 11 (2021), <https://bestexresearch.com/the-good-the-bad-the-ugly-of-payment-for-order-flow/>; see also Proposal, 88 Fed. Reg. at 186 (“[W]holesalers internalize over 90% of the executed dollar value in NMS stocks from the marketable order flow routed to them by retail brokers . . . . [T]he marketable NMS stock orders wholesalers choose to internalize have less adverse selection risk: orders that wholesalers execute in a principal capacity have a price impact of 0.9 bps, compared to a price impact of 4.6 bps for those executed via other methods.”).

<sup>83</sup> See Waters, *supra* note 69, at 394–95; MITTAL & BERKOW, *supra* note 82, at 11; Kelleher Testimony, *supra* note 47, at 13–14; BETTER MARKETS, PAYMENT FOR ORDER FLOW, *supra* note 53, at 5.

<sup>84</sup> 15 U.S.C. § 78k-1(a)(1)(C)(ii).

<sup>85</sup> See Waters, *supra* note 69, at 394–95.

<sup>86</sup> See EDWIN HU & DERMOT MURPHY, COMPETITION FOR RETAIL ORDER FLOW AND MARKET QUALITY 4 (2022) (noting a Herfindahl-Hirschman Index score of 2,900 in 2021, compared to a threshold of 2,500 for highly concentrated markets under federal guidelines), [https://papers.ssrn.com/sol3/Delivery.cfm/SSRN\\_ID4240039\\_code1778503.pdf?abstractid=4070056&mirid=1](https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID4240039_code1778503.pdf?abstractid=4070056&mirid=1).

<sup>87</sup> See *id.* (noting a 450-point HHI increase in the wholesaler internalization market between 2018 and 2021, 250 points above the threshold for concern in federal merger-review concerns)].

<sup>88</sup> See Waters, *supra* note 69, at 395.

<sup>89</sup> Cf. *Bloomberg L.P. v. SEC*, 45 F.4th 462, 475 (D.C. Cir. 2022) (rejecting an argument that a new data service violates the Exchange Act because it “will displace incumbent data vendors”).

<sup>90</sup> See Kelleher Testimony, *supra* note 47, at 13–14; BETTER MARKETS, PAYMENT FOR ORDER FLOW, *supra* note 53, at 5.

a large share of retail flow gives the dominant wholesalers a large informational advantage over the rest of the market; they have not only a unique view into the broker originating the retail order (a key aspect for attributing risk) but also a view into the larger patterns or trends in aggregate retail order flow.<sup>91</sup> This is a classic form of information asymmetry, another market failure justifying intervention. One expert observer has deftly summarized the impact on competition and efficiency from this information asymmetry:

[M]arket makers with private information clearly have an edge over other market makers, as they can price quotes more efficiently than others. For example, if based on private information, a market maker believes the price is going down, they will quote their bid on public exchanges below the NBB, and other market makers and limit order providers will face disproportionately higher adverse selection when their orders execute at the NBB price. Over time, this [information asymmetry] can put [non-wholesaler] market makers relying exclusively on public information out of business and increase concentration among a small selection of market makers on public exchanges. . . . Thus, asymmetric information among liquidity providers reduces competition in public markets and leads to a higher NBBO spread, increasing costs for all investors.<sup>92</sup>

The Commission is certainly aware of these malign impacts and addresses them throughout the Proposal. However, we submit that the Proposal’s treatment of the information asymmetry is incomplete in one respect. While it might be true that all market participants face some adverse selection risk when confronted with an unfilled order to sell or buy stock,<sup>93</sup> the situation facing public exchange participants is qualitatively different. The wholesaler oligopoly itself adversely selects the retail order flow that is allowed to proceed to public exchanges and the wider market, and the Commission should consider this form of adverse selection as a distinct market failure justifying intervention under Sections 11A and 3(f).

*3. The dominance of retail order flow by a small number of wholesalers creates systemic risk.*

The current market structure has resulted in a severe concentration of retail order execution by a small oligopoly of wholesalers,<sup>94</sup> and, even then, just two firms, Citadel and Virtu, have captured the lion’s share among the wholesalers.<sup>95</sup> This concentration of critical market services in two firms is a recipe for systemic risk, a serious negative externality. As Better Markets has explained to a U.S. Senate Committee, “any significant disruption to [a wholesaler] like Citadel Securities or Virtu Financial would shake markets and could quite possibly cause significant,

---

<sup>91</sup> See Proposal, 88 Fed. Reg. at 186, 186 n.406, 238; MITTAL & BERKOW, *supra* note 82, at 14; BETTER MARKETS, PAYMENT FOR ORDER FLOW, *supra* note 53, at 5.

<sup>92</sup> MITTAL & BERKOW, *supra* note 82, at 14.

<sup>93</sup> See, e.g., Proposal, 88 Fed. Reg. at 129.

<sup>94</sup> See *id.* (“Broker-dealers route more than 90% of marketable orders of individual investors in NMS stocks to a small group of six off-exchange dealers, often referred to as ‘wholesalers.’”).

<sup>95</sup> See *id.* (“The wholesaling business is highly concentrated, with two firms capturing approximately 66% of the executed share volume of wholesalers as of the first quarter of 2022.”).

widespread dislocations in many securities, if not ignite a catastrophe.”<sup>96</sup> Even a disruption to their operations might not be necessary; as the case of Knight Capital illustrates, even small programming errors in high-speed wholesaler algorithms can give rise to a systemic event.<sup>97</sup> The Commission should keep in mind that even entities as large and sophisticated as Citadel are not immune to failure, as Citadel’s near-brush with a collapse in 2008 demonstrates.<sup>98</sup>

### C. The “price improvement” provided by the current market structure is illusory.

To justify the current market structure, the dominant wholesalers or their captive brokers tend to claim “price improvement” when executing retail orders,<sup>99</sup> and the Proposal recognizes that market incumbents have asserted these claims.<sup>100</sup> But as the Proposal also recognizes, “[p]rice improvement . . . is not the same as competitive order execution.”<sup>101</sup> And there are compelling reasons to see the wholesalers’ proclaimed price improvement as inferior to the price improvement available in a truly competitive market.

For starters, the incumbents’ (and current rules’) baseline for price improvement is the NBBO,<sup>102</sup> namely, “for buy orders, execution at a price lower than the national best offer at the time of order receipt and, for sell orders, execution at a price higher than the national best bid at the time of order receipt.”<sup>103</sup> But the NBBO reflects the spread on public exchanges,<sup>104</sup> and it therefore reflects, in the form of an artificially wide spread, the information asymmetry and adverse selection caused by wholesaler diversion of retail flow away from lit exchanges.<sup>105</sup> One technical

---

<sup>96</sup> Kelleher Testimony, *supra* note 47, at 12.

<sup>97</sup> *Id.* at 13.

<sup>98</sup> See Rob Copeland, *Citadel’s Ken Griffin Leaves 2008 Tumble Far Behind*, WALL ST. J., Aug. 3, 2015, (“Nearly seven years after standing at the brink of collapse during the financial crisis, amid heavy losses and a struggle to build an investment bank, Chicago-based Citadel has crawled back near the top of the hedge-fund heap.”), <https://www.wsj.com/articles/citadels-ken-griffin-leaves-2008-tumble-far-behind-1438655887>.

<sup>99</sup> See *Price Improvement*, CHARLES SCHWAB & CO. (2023), <https://www.schwab.com/execution-quality/price-improvement>; DOUG CIFU, VIRTU, STATEMENT TO SEC INVESTOR ADVISORY COMMITTEE MEETING 2 (2021) (“For example, under the current model, wholesalers fill marketable orders at prices typically better than the NBBO – regardless of the quantity of shares displayed and available at the NBBO. When an order is filled at a price that is better than the NBBO, we refer to this as price improvement (or ‘PI’).”), <https://www.sec.gov/comments/265-28/26528-8901053-242178.pdf>.

<sup>100</sup> See, e.g., Proposal, 88 Fed. Reg. at 129 (“The primary benefit of segmentation for individual investors is that it can provide an opportunity for their low-cost orders to be executed at better prices than those generally available on national securities exchanges, a practice known as ‘price improvement.’”).

<sup>101</sup> *Id.*

<sup>102</sup> See, e.g., *Price Improvement*, CHARLES SCHWAB & CO. (2023) (“Price improvement (PI) occurs when your orders are executed at better prices than the best quoted market price, known as the National Best Bid and Offer, or more commonly, NBBO.”), <https://www.schwab.com/execution-quality/price-improvement>.

<sup>103</sup> 17 C.F.R. § 242.600(b)(36) (“Executed with price improvement means, for buy orders, execution at a price lower than the national best offer at the time of order receipt and, for sell orders, execution at a price higher than the national best bid at the time of order receipt.”).

<sup>104</sup> See, e.g., Kelleher Testimony, *supra* note 47, at 16.

<sup>105</sup> See MITTAL & BERKOW, *supra* note 82, at 11 (“[T]he price improvement statistics touted by wholesalers and retail brokers [are] overestimated because . . . they . . . rely on the assumption that the NBBO spread itself would remain constant if retail flow moved to public markets.”).

analysis estimates that the current wholesaler oligopoly widens the NBBO by over 25%.<sup>106</sup> Clearly, then, the incumbents are claiming credit for reaching a bar that their own actions have dramatically lowered—to the detriment of retail investors. The Commission has correctly discerned that wholesaler price improvement statistics would likely look much worse if the oligopoly was forced to digest the less desirable order flow as well.<sup>107</sup>

The use of the NBBO as the baseline for price improvement smuggles in other advantages for the wholesalers, too. By directly executing outside of national exchanges (and ATS), the incumbents need not follow tick size constraints imposed on bids and orders.<sup>108</sup> Wholesalers are thus able to offer nominal price improvement purely as regulatory arbitrage, and Commission data suggests that this tactic might account for nearly a fifth of the shares receiving this improvement.<sup>109</sup>

At the same time, the NBBO omits even on-exchange trades through hidden orders.<sup>110</sup> Hidden orders account for up to 20% of the daily volume for some stocks and often reflect significantly better prices than the NBBO;<sup>111</sup> on some exchanges, hidden orders have accounted for roughly 40% of volume at times.<sup>112</sup> Routing a retail order to an ATS, where similarly unseen liquidity might exist at the NBBO midpoint, would also reflect a higher baseline than the NBBO itself.<sup>113</sup> Finally, the NBBO does not capture odd lot orders even though such orders are “extremely common” for certain stocks<sup>114</sup> and regularly improving upon the NBBO.<sup>115</sup>

It should be unsurprising, then, that much recent empirical work finds that the incumbents’ proclaimed price improvement is at best wildly inconsistent and more likely sub-optimal.<sup>116</sup> The costs to retail traders in foregone price improvement likely runs in the billions of dollars per

---

<sup>106</sup> See *id.* at 11–13 (“If retail volume were traded on exchanges instead of being received directly by wholesalers, . . . the expected reduction in adverse selection would be over 25%, implying that the NBBO spreads would decline proportionally given their linear relationship—also by over 25%.”).

<sup>107</sup> See Proposal, 88 Fed. Reg. at 197 n.456.

<sup>108</sup> See 17 C.F.R. § 242.612(a).

<sup>109</sup> See Proposal, 88 Fed. Reg. at 192 (“[W]holesalers also offer less than 0.1 cents price improvement to approximately 18.6% of shares that they execute. Wholesalers execute more than 65% of shares at sub-penny prices, with over 40% of shares being executed at prices with four decimal points (i.e., the fourth decimal place is not equal to zero).”).

<sup>110</sup> See, e.g., Kelleher Testimony, *supra* note 47, at 15–16.

<sup>111</sup> See MITTAL & BERKOW, *supra* note 82, at 8–9.

<sup>112</sup> See Kelleher Testimony, *supra* note 47, at 15.

<sup>113</sup> See MITTAL & BERKOW, *supra* note 82, at 8.

<sup>114</sup> *Id.* at 8.

<sup>115</sup> Kelleher Testimony, *supra* note 47, at 16.

<sup>116</sup> See HU & MURPHY, *supra* note 86, at 3–6; SCHWARZ ET AL., *supra* note 9, at 3–5; MITTAL & BERKOW, *supra* note 82, at .



year.<sup>117</sup> This is exactly the result one should expect given the structural pressures of PFOF incentives to ignore optimal routing and the market power of the wholesaler oligopoly.<sup>118</sup>

Lastly, we note that some wholesalers claim not only price improvement but also an improvement in the “size” of retail orders.<sup>119</sup> Wholesalers define this “size improvement” as fulfilling a retail order at or for a price better than the NBBO when the order is larger in the number of shares than are available at the NBBO.<sup>120</sup> But, as with price improvement, this supposed benefit has only been measured against the present or past NBBO;<sup>121</sup> it assume liquidity available under the current market structure, which is subject to severe information asymmetry and adverse selection *caused by the wholesaler oligopoly*. More specifically, the Commission should expect the degree or depth of liquidity to change once NBBO spreads improve under the Proposal as existing market failures are removed.

## **II. Industry criticisms of the Proposal lack merit.**

The Commission concludes that the Proposal should provide retail investors with an additional \$1.1 to \$2.3 billion per year in additional price improvement.<sup>122</sup> This conclusion tracks well with technical estimates from independent experts using similar data and methods.<sup>123</sup> Thus, “[t]he reproducibility of the results supports both studies, conducted independently using different data sources, different methodologies, and different time periods.”<sup>124</sup> And the same independent experts project that the Proposal would save institutional investors an additional \$1.86 billion per year over and above any benefits to retail investors—for total social benefits over \$3.5 billion per year.<sup>125</sup>

Nonetheless, some industry incumbents have already started to raise objections to the Proposal and the threatened loss of their market power. None of these objections should dissuade the Commission from finalizing the core mandates of the Proposal. Before turning to their details,

---

<sup>117</sup> See SCHWARZ ET AL., *supra* note 9, at 25 (“So, for every 1 bp of price execution difference, the annual cost to retail traders is \$2.8 billion. In that context, our observed execution differences are economically very large.”); see also HU & MURPHY, *supra* note 86, at 40 (“[Our results suggest that market concentration within the internalization space is detrimental to market quality. Furthermore, our results suggest that reducing barriers to entry to internalize retail order flow could save investors billions of dollars in transactions costs.”]).

<sup>118</sup> See HU & MURPHY, *supra* note 86, at 4–7.

<sup>119</sup> See CIFU, *supra* note 99, at 2.

<sup>120</sup> See *id.*

<sup>121</sup> See *id.*

<sup>122</sup> See Proposal, 88 Fed. Reg. at 209, 209 tbl. 19 (providing estimates for competitive shortfall under different retail volume scenarios based on CAT data).

<sup>123</sup> See HITESH MITTAL, IS THE ORDER COMPETITION RULE A WINDFALL FOR INVESTORS? 3–5 (2023) (comparing BestEx’s estimate of \$1.70 billion in annual retail investors savings and the SEC’s comparable estimates), ; see also SCHWARZ ET AL., *supra* note 9, at 35 (estimating \$2 billion in annual retail investor savings for every extra basis point of price improvement); HU & MURPHY, *supra* note 86, at 11–19 (estimating that retail investors would see spreads decline by 25% if retail flow moved to exchanges, plus “[a]dditional reduction in spreads would come from reduced information asymmetry”).

<sup>124</sup> MITTAL, *supra* note 123, at 5.

<sup>125</sup> *Id.*

we note two background principles that should color the Commission’s view of such objections. First, such claims must be rejected unless they ultimately can be substantiated with credible, objective, and persuasive facts and arguments, beyond mere speculation. Second, these claims should also be viewed against market incumbents’ long history of inflating concerns about the impact of regulation—regulation that ultimately has allowed the financial services industry to become and remain among the most profitable enterprises in human history.

**A. The Commission should severely discount claims retail investors will face net harm from higher up-front commissions.**

Perhaps the most infamous market incumbent—Robinhood—has already made public suggestions that the Proposal might force retail brokers to raise commissions.<sup>126</sup> These suggestions are, as other commentators have already noted, entirely self-serving,<sup>127</sup> and the Commission should give them little weight in its consideration of a final rule. These claims are particularly galling given Robinhood’s history. Again, the Commission found, as part of an enforcement action imposing a \$65 million penalty, that Robinhood’s deceptive practices cost retail investors over \$34 million in lost price improvement—“even after netting the approximately \$5 per-order commission costs [competing] broker-dealers were charging at the time.”<sup>128</sup>

Still, voices more reputable than Robinhood have made similar claims about the risk of higher commissions.<sup>129</sup> But even these claims are demonstrably flawed, for at least two reasons. First, they are founded on nothing more than an observation that commissions have recently declined—and an assumption that nearly any reduction in revenue for retail brokers, including lost PFOF revenue, must be passed on as higher commissions.<sup>130</sup> But as explained in the Proposal,<sup>131</sup> the commission rates observed in the current market are a function of overall *competition*, not merely a direct, one-to-one reflection of broker costs.

And the market for retail broker services is sufficiently competitive that commissions have fallen even for brokers that do not receive meaningful PFOF (even if the wholesaler market is not

---

<sup>126</sup> See Alexander Osipovich, *Robinhood Hits Back at SEC, Warns of Threat to Zero-Commission Trading*, WALL ST. J., Feb. 7, 2023, (“We’ll do everything in our power’ to ensure that Robinhood doesn’t start charging commissions, [Robinhood Chief Brokerage Officer Steve] Quirk said. But other brokers might be forced to revive commissions, he added.”), <https://www.wsj.com/articles/robinhood-hits-back-at-sec-warns-of-threat-to-zero-commission-trading-11675747896>.

<sup>127</sup> See *id.* (“Others doubt that the SEC’s plans could revive commissions, dismissing such claims as self-serving and alarmist. ‘Any brokers seeking to impose new costs will likely face stiff competition from brokers that have already figured out how to not take PFOF or charge commissions,’ said Tyler Gellasch, president of Healthy Markets Association, an investor group.”).

<sup>128</sup> Robinhood Order, *supra* note 63, ¶ 42.

<sup>129</sup> See Letter from Andrew N. Vollmer, Mercatus Ctr., to Sec. & Exch. Comm’n at 6 (Feb. 27, 2023) (“The Proposal assumed that, to participate in auctions, wholesalers would reduce PFOF now paid to retail brokers . . . . To replace the receipt of PFOF, retail brokers might start charging retail customers commissions again or start charging other fees for execution services.”).

<sup>130</sup> See *id.*

<sup>131</sup> See Proposal, 88 Fed. Reg. at 216 (“[T]he majority of retail brokers receive relatively little or no PFOF, and yet they have nevertheless successfully managed to support commission-free trading through their other revenue-generating lines of business.”).

competitive).<sup>132</sup> Brokers compete for retail investors on more dimensions than commission costs alone (though, sadly, not nearly enough on true price improvement).<sup>133</sup> Even Robinhood’s Chief Brokerage Officer explained (while working at TD Ameritrade only a few years ago) “that there is more to investing than just free commissions. He argue[d] that TD Ameritrade offers more services and advice than many of its rivals to help people who have questions about what types of stocks and ETFs to buy.”<sup>134</sup> His counterpart at E\*Trade agreed, “Price really hasn’t been a competitive differentiator for some time, and we have always believed it’s about the customer experience more than anything else.”<sup>135</sup> And broker competition has gotten so “intense” that more firms have *entered* the market despite prevailing commissions near zero.<sup>136</sup> Unsurprisingly, then, Fitch Ratings, Inc., a neutral market observer, believes the return of higher commissions is “unlikely” due to the Proposal.<sup>137</sup>

Second, even if commissions do increase as PFOF is constrained, they would come with the benefit of heightened transparency. If investors are going to pay a price for the execution of their orders either through commissions or inflated execution prices associated with PFOF, they are entitled to an honest description of the nature of those costs. Making the true costs of trading clearer to retail investors will help them more carefully select their retail broker, and thus the market for retail brokerage services should only become more competitive.

#### **B. Industry concerns about liquidity or cross-subsidization are overstated.**

Critics of the Proposal have also asserted that the auction mandate will not produce the predicted benefits, based in part on their belief that liquidity providers, particularly institutional investors, will not participate with enough frequency.<sup>138</sup> These assertions are misplaced. Institutional investors will have strong incentives to participate.

---

<sup>132</sup> *See Id.*

<sup>133</sup> *See* Paul R. La Monica, *Online stock trading is free now. What that means for E-Trade and Charles Schwab*, CNN (Oct. 8, 2019), <https://www.cnn.com/2019/10/07/investing/online-brokers-zero-commissions/index.html>.

<sup>134</sup> *Id.*

<sup>135</sup> *Id.* (quoting “Alice Milligan, chief customer officer for E-Trade, in an e-mail to CNN Business”).

<sup>136</sup> *See* Kirsten Chang, *Battle for client assets heats up as brokers cut fees to zero*, CNBC (Oct. 13, 2019) (“Competition is getting more intense by the minute. J.P. Morgan Securities recently launched its own free stock-trading platform, “You Invest,” and Bank of America rolled out its discount brokerage arm, Merrill Edge, back in 2010, which provides clients with commission-free trades through its Preferred Rewards program.”), <https://www.cnbc.com/2019/10/13/battle-for-client-assets-heats-up-as-brokers-cut-fees-to-zero.html>.

<sup>137</sup> *Proposed SEC Trading Regs May Aid Exchanges, Pressure Retail Brokers*, FITCH RATINGS (Dec. 19, 2022), <https://www.fitchratings.com/research/non-bank-financial-institutions/proposed-sec-trading-regs-may-aid-exchanges-pressure-retail-brokers-19-12-2022>.

<sup>138</sup> *See* Letter from Andrew N. Vollmer, *supra* note 129, at 6 (“The Proposal assumed the auction system would attract new liquidity providers to compete to trade with orders from retail investors.<sup>35</sup> That assumption is entirely speculative. Institutional investors might have a variety of reasons, such as the damage from information leakage, for not participating in auctions.”)].

Most obviously, institutional investors stand to enjoy the prospect of trading with lower-risk retail orders compared to current exchange liquidity,<sup>139</sup> and we should expect institutional investors to participate more fully through both auctions and resting orders once the Proposal unwinds the current information asymmetry and adverse selection favoring the wholesaler oligopoly.<sup>140</sup> Indeed, as an empirical fact, institutional investors, as compared to wholesalers, are considerably more willing to interact with retail orders for reasons other than profiting on advantageous spreads—one reason why the Commission can expect higher price improvement from the Proposal.<sup>141</sup>

The Proposal's mandate for auction message dissemination should also reduce search costs for institutional investors scouring various market centers for retail orders.<sup>142</sup> To all of these incentives, the Proposal adds execution priority rules that would favor institutional investors over broker-dealers,<sup>143</sup> provide fair opportunities for their resting orders to interact with retail flow subject to an auction,<sup>144</sup> and remove time-based priority for market makers relying on latency advantages.<sup>145</sup> Exchanges or ATSS hosting auctions could, and likely would, develop further rules

---

<sup>139</sup> See, e.g., Hitesh Mittal, *Who's More Competitive: Wholesalers or Exchanges?*, TRADERS MAGAZINE (Jan. 23, 2023) (“Institutional investors will clearly benefit from the ability to interact with the less toxic retail order flow that is largely captive to wholesalers today . . .”), [https://www.tradersmagazine.com/am/whos-more-competitive-wholesalers-or-exchanges/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=whos-more-competitive-wholesalers-or-exchanges](https://www.tradersmagazine.com/am/whos-more-competitive-wholesalers-or-exchanges/?utm_source=rss&utm_medium=rss&utm_campaign=whos-more-competitive-wholesalers-or-exchanges).

<sup>140</sup> See MITTAL & BERKOW, *supra* note 82, at 14 (explaining that the information asymmetry “may also reduce the incentives for institutional execution algorithms to provide liquidity using limit orders, as the earned spread benefit declines after accounting for adverse selection and execution risks increases as limit orders are less likely to fill”).

<sup>141</sup> See Hitesh Mittal, *Who's More Competitive: Wholesalers or Exchanges?*, TRADERS MAGAZINE (Jan. 23, 2023) (“[I]nstitutional investors are also liquidity providers on exchanges because they use execution algorithms that place limit orders as a strategy to defray the cost associated with putting on a larger, longer-term position. . . . Since institutional investors’ trading costs are covered by the larger goals of their overall investment positions, they’re aiming only to reduce those costs on average. . . . And that’s great news for retail investors who should be compensated for the low toxicity in their flow.”), [https://www.tradersmagazine.com/am/whos-more-competitive-wholesalers-or-exchanges/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=whos-more-competitive-wholesalers-or-exchanges](https://www.tradersmagazine.com/am/whos-more-competitive-wholesalers-or-exchanges/?utm_source=rss&utm_medium=rss&utm_campaign=whos-more-competitive-wholesalers-or-exchanges); see also MITTAL, *supra* note 123, at 3–4 (explaining that realized spreads on exchanges are negative because institutional investors still find it profitable to provide liquidity so long as realized spreads are higher than negative 50% of the quoted spread)].

<sup>142</sup> See Proposal, 88 Fed. Reg. at 210 (“The qualified auction message would act as a coordination mechanism and would make the broker-dealers that handle the orders resting at the NBBO midpoint on exchanges and NMS Stock ATSS aware there was a segmented order they could trade against.”).

<sup>143</sup> See *id.* at 159 (“[O]ne of the prescribed execution priority requirements for qualified auctions in paragraph (c)(5) of Proposed Rule 615 is that the auction responses of customers, including institutional investors, would have priority over the auction responses of broker-dealers at the same price . . .”); see also *id.* at 244 (to be codified at 17 C.F.R. § 242.600(c)(5)(ii)).

<sup>144</sup> See *id.* at 160 (“orders resting on the continuous order book of the open competition trading center operating the qualified auction, whether displayed or undisplayed, would have priority over auction responses at a less favorable price for the segmented order.”); see also *id.* at 245 (to be codified at 17 C.F.R. § 242.600(c)(5)(v)).

<sup>145</sup> See *id.* at 160 (“Prohibiting time priority for equally priced auction responses eliminates the incentive for a speed race that otherwise could reward market participants with resources to spend the most on

to incentivize greater institutional investor interaction with the increased retail order flow unleashed by the Proposal.<sup>146</sup> Better yet, entire new auction-based market center platforms have begun to emerge and appear ready to adapt to the Proposal’s competition mandate.<sup>147</sup>

For many of these same reasons, a leading technical expert that advises institutional investors on execution—and thus knows them very well—believes it reasonable to assume that institutional investors will provide liquidity to half of the retail orders sent to auctions.<sup>148</sup> Even that conservative assumption would reflect a dramatic improvement on the status quo.

Finally, some critics assert that the current market structure is necessary to support liquidity for smaller, thinly traded stocks.<sup>149</sup> They specifically claim that wholesaler incumbents find less profit in internalizing such stocks and must cross-subsidize their execution with profits from internalizing more liquid stocks. By no means is it self-evident that this assertion, if true, would justify a system in which the wholesaler oligopoly extracts *economic* profits by capturing the choicest retail order flow. Almost by definition, less frequently traded stocks matter less to investors.

But the assertion itself is also suspect. Studies suggest instead that, “when internalization profits are concentrated among a small number of market-makers, then internalization profit are less likely to cross-subsidize on-exchange liquidity and reduce fragility.”<sup>150</sup> In any event, the incumbent wholesalers do not necessarily capture or internalize all order flow from retail brokers now and have incentives now to send the lease profitable flow on to other parties. And even wholesalers might find the smallest stocks to be more attractive once the Commission implements related reforms on tick sizes. At worst, the cross-subsidization theory might be a reason to add a

---

sophisticated, low-latency trading systems and connectivity.”); *see also id.* at 244 (to be codified at 17 C.F.R. § 242.600(c)(5)(iii)).

<sup>146</sup> *See id.* (“Proposed Rule 615 allows flexibility for open competition trading centers in a variety of other contexts.”).

<sup>147</sup> *See* Dan Barnes, *SEC’s proposals create competitive opportunities*, FI-DESK (Dec. 21, 2022) (“Vlad Khandros, CEO of equity alternative trading system (ATS) OneChronos says proposals which disrupt current market practices can create valuable competition in the equity space. ‘The auction proposal is particularly interesting for OneChronos, as our model is competitive auctions,’ he says. ‘The goal of the auctions is specifically to maximise the notional price improvement. So, uniquely, time is not a factor in the allocation, where most venues have price/time priority. That is what the SEC the auction proposals are trying to get away from.’”), <https://www.fi-desk.com/secs-proposals-create-competitive-opportunities/>; *see also* Katherine Doherty, *BMO and Jefferies Sign On to Platform Bringing AI Auctions to Stocks*, BLOOMBERG (June 30, 2022) (describing the OneChronos auction-based platform), <https://www.bloomberg.com/news/articles/2022-06-30/new-trading-platform-onechronos-brings-ai-auctions-to-stocks?sref=mQvUqJZj>.

<sup>148</sup> MITTAL, *supra* note 123, at 5 (“We believe it is reasonable to assume that retail investors’ orders will interact with institutional investors 50% of the time through this mechanism.”)].

<sup>149</sup> *See* Letter from Andrew N. Vollmer, *supra* note 129, at 5 (citing THOMAS ERNST ET AL., WOULD ORDER-BY-ORDER AUCTIONS BE COMPETITIVE? 3 (Dec. 13, 2022), <https://ssrn.com/abstract=4300505>).

<sup>150</sup> Hu & Murphy, *supra* note 86, at 7.

designated liquidity provider mechanism to the Proposal, a possibility already raised by the Commission.<sup>151</sup>

### C. The economic analysis in the Proposal more than satisfies the Commission’s statutory duty under Section 3(f).

Industry opponents of new SEC rules frequently claim that they fail a cost-benefit test and specifically that they will prove too costly. The Proposal (and likely the other three accompanying market structure reforms) will inevitably be subject to these attacks. As a general matter, however, these arguments are unfounded, both legally and factually. They distort the Commission’s legal obligation to conduct economic analysis; they exaggerate the alleged costs and burdens of compliance with the new rules; and they downplay if not ignore the enormous benefits that the rules will confer, both individually and as part of a collection of rules that will work together to achieve market reforms. But this strategy should not sway the Commission or persuade it to dilute the much-needed reforms in the Proposal. Throughout the rulemaking process, the Commission must be guided above all by the public interest and the protection of investors as it considers the economic impact of its rules, not by concerns over the costs of regulation imposed on industry.

As we have explained repeatedly, under the securities laws, the Commission has no statutory duty to conduct a cost-benefit analysis.<sup>152</sup> In reality, its far more limited obligation is simply to consider, “*in addition to the protection of investors*, whether the action will promote efficiency, competition, and capital formation.”<sup>153</sup> The Supreme Court has long recognized that statutorily mandated considerations “imply wide areas of judgment and therefore of discretion” as an agency fulfills its statutory duty.”<sup>154</sup>

The Commission easily cleared this bar. The Proposal includes nearly fifty pages of analysis of its economic consequences (including, although *not* legally required, its potential costs

---

<sup>151</sup> See Proposal, 88 Fed. Reg. at 234 (examining a regulatory alternative of qualified auctions with designated liquidity providers as backstops, “particularly in less liquid securities where there may be a higher chance that no liquidity suppliers bid in the auctions”).

<sup>152</sup> For example, in 2012 we issued a report examining and exposing the largely successful attempt to foist more stringent cost-benefit analysis requirements upon the SEC, even though the securities laws include no such mandate. See BETTER MARKETS, SETTING THE RECORD STRAIGHT ON COST-BENEFIT ANALYSIS AND FINANCIAL REFORM AT THE SEC (2012), <https://www.bettermarkets.org/sites/default/files/Setting%20The%20Record%20Straight.pdf>; see also BETTER MARKETS, COST-BENEFIT ANALYSIS IN CONSUMER AND INVESTOR PROTECTION REGULATION: AN OVERVIEW AND UPDATE (Dec. 8, 2020), [https://bettermarkets.org/sites/default/files/Better\\_Markets\\_WhitePaper\\_CBA\\_Consumer\\_Investor\\_Investor\\_Protection\\_Dec-2020.pdf](https://bettermarkets.org/sites/default/files/Better_Markets_WhitePaper_CBA_Consumer_Investor_Investor_Protection_Dec-2020.pdf). More recently, we issued a comprehensive analysis on the use of cost-benefit analysis in financial regulation. See generally STEPHEN W. HALL, THE ONGOING USE AND ABUSE OF COST-BENEFIT ANALYSIS IN FINANCIAL REGULATION (2023), [https://bettermarkets.org/wp-content/uploads/2023/03/BetterMarkets\\_Report\\_Cost\\_Benefit\\_Analysis\\_03-2023.pdf](https://bettermarkets.org/wp-content/uploads/2023/03/BetterMarkets_Report_Cost_Benefit_Analysis_03-2023.pdf). We incorporate these by reference as if fully set forth herein.

<sup>153</sup> 15 U.S.C. § 78c(f) (emphasis added).

<sup>154</sup> *Sec’y of Agric. v. Cent. Roig Ref. Co.*, 338 U.S. 604, 611 (1950).

and benefits) over a range of conditions and scenarios.<sup>155</sup> Much of this work in the Proposal incorporates formal quantitative analysis.<sup>156</sup> Ultimately, the SEC reasonably determined that the Proposal would promote efficiency, competition, and capital formation.<sup>157</sup> Thus, the SEC has more than fully discharged its statutory duty with regard to economic analysis.

At times, the Proposal notes that its economic analysis entails some uncertainty<sup>158</sup> or incorporates qualitative analysis.<sup>159</sup> These are appropriate observations about the inevitable difficulties surrounding attempts at quantitative cost-benefit analysis; they are not failings of the Commission that suggest any legal infirmities in the Proposal itself. As the D.C. Circuit has explained, the Commission is not required “to measure the immeasurable” and need not “conduct a rigorous, quantitative economic analysis unless the statute explicitly directs it to do so”—a burden that Congress never saw fit to impose on the Commission.<sup>160</sup>

### **III. The Commission should reconsider the exception for midpoint execution.**

The Proposal allows wholesalers or other restricted competition trading centers to avoid the qualified auction process through one of several exceptions. Most notably, a wholesaler may immediately internalize a segmented order, prior to any auction, if it executes that order at the NBBO midpoint or better; for convenience, we refer to this as the “midpoint execution” exception.<sup>161</sup> We fail to see a sufficient justification for this exception in the Proposal.

For the midpoint-execution exception, the Commission claims that “submission of a segmented order to a qualified auction would not be necessary to obtain a competitive price for such order.”<sup>162</sup> This claim appears to be predicated on the Commission’s view of an “idealized competitive market” where “trades would occur at the midpoint and neither side would pay the spread.”<sup>163</sup> Similarly, the Proposal suggests that the midpoint reflects the absolute upper bound of

---

<sup>155</sup> See Proposal, 88 Fed. Reg. at 178–226. Note that even the formal analysis of economic effects in Part VII of the Proposal omits the similarly extensive review of potential costs in the Paperwork Reduction Act analysis of Part VI.

<sup>156</sup> See, e.g., *id.* at 198 (“Table 15 displays regression results from Commission CAT retail analysis of NMS Common stock and ETF orders. The regression tests whether there is a statistically significant relationship between execution quality and the amount of PFOF a broker-dealer receives and includes several individual stock- and market-level controls as well as the retail broker’s average price impact and size (as measured by percent of executed individual investor dollar volume).”).

<sup>157</sup> See *id.* at 221–26.

<sup>158</sup> See, e.g., *id.* at 178 (“While acknowledging there is substantial uncertainty in the eventual outcome, the Commission estimates that qualified auctions as designed by the Proposal would result in additional price improvement for the marketable orders of individual investors that could reduce the average transactions costs of these orders by 0.86 basis points (‘bps’) to 1.31 bps.”).

<sup>159</sup> See, e.g., *id.* at 179 (“The Commission is providing both a qualitative assessment and quantified estimates of the potential economic effects of the Proposal where feasible.”).

<sup>160</sup> *Lindeen v. SEC*, 825 F.3d 646, 658 (D.C. Cir. 2016) (citing *Nat’l Ass’n of Mfrs. v. SEC*, 748 F.3d 359, 369 (D.C. Cir. 2014), *overruled on other grounds by Am. Meat Inst. v. U.S. Dep’t of Agric.*, 760 F.3d 18, 22–23 (D.C. Cir. 2014) (en banc)).

<sup>161</sup> See Proposal, 88 Fed. Reg. at 244 (to be codified at 17 C.F.R. § 242.615(b)(3)).

<sup>162</sup> *Id.* at 156.

<sup>163</sup> *Id.* at 181.

competition for retail orders because market makers would earn zero realized spread; the same market makers would have no incentive to accept a negative realized spread that might reflect a more favorable price for retail investors.<sup>164</sup>

We submit that the Commission’s view is mistaken. The midpoint does not reflect an unbreachable theoretical limit on competition for retail orders. Available evidence indicates that institutional investors and market makers have different tolerances for realized spreads; while the latter’s business model depends on some profit from a spread, and thus would not permit prices more favorable than the midpoint, institutional investors appear willing to accept *negative* realized spreads.<sup>165</sup> At least some retail investors, in fact, manage to fill orders for which they set limit prices more favorable than the NBBO,<sup>166</sup> so such orders must be able to attract some willing counterparties. Thus, while midpoint execution might be “favorable” in comparison to most current wholesaler price improvement,<sup>167</sup> it would not necessarily reflect the most favorable outcome based on the greatest competition for retail order flow.

And even if the midpoint were truly a hard constraint on competition for retail orders, it would still not follow that a final rule should include the midpoint exception. Institutional investors routinely use midpoint-based limit orders,<sup>168</sup> and there is no obvious reason why the Commission should prefer to maintain a status quo market structure that makes those orders second-class to wholesaler internalization, even if both are at the midpoint. Finalizing the current exception would mean depriving institutional investors of considerable opportunity to interact with retail flow; the Proposal indicates that wholesalers execute nearly one-third of their marketable retail order flow at the midpoint.<sup>169</sup> The better course, we think, is to eliminate the exception for midpoint execution.

#### **IV. The comment period has been more than sufficient.**

We understand that some entities with vested interests in the current market structure have already complained that the formal comment period of 87 days is too short to allow substantive comment.<sup>170</sup> In fact, some of these same entities raised their complaints while still filing comments on the Proposal well in advance of the March 31st deadline.<sup>171</sup> The Commission should consider these complaints meritless.

The Administrative Procedure Act (“APA”) requires the agency to “give interested persons an opportunity to participate in the rule making through submission of written data, views, or

---

<sup>164</sup> See *id.* at 225 n.667.

<sup>165</sup> See MITTAL, *supra* note 123, at 3–4.

<sup>166</sup> See Proposal, 88 Fed. Reg. at 236 (providing statistics on execution of “beyond-the-midpoint non-marketable orders”).

<sup>167</sup> *Id.* at 131.

<sup>168</sup> See *id.* at 134, 157.

<sup>169</sup> See *id.* at 193 tbl.7, 196 tbl. 10.

<sup>170</sup> See, e.g., Letter from Ellen Green, Sec. Indus. & Fin. Mkts., to Vanessa Countryman, Sec’y, Sec. & Exch. Comm’n, at 2, 4 (Feb. 8, 2023) (on file with the Sec. & Exch. Comm’n).

<sup>171</sup> See *id.*



arguments.”<sup>172</sup> “There is no requirement concerning how many days the [agency] must allow for comment or that the [agency] must re-open the comment period at the request of one of the participants.”<sup>173</sup> In fact, federal courts are barred from second-guessing an agency’s decision on the length of a comment period “absent extraordinary circumstances.”<sup>174</sup> Nothing suggests extraordinary circumstances here.

In any case, the comment period for this Proposal was ample. The Commission announced and released the Proposal on December 14, 2022,<sup>175</sup> and it set the comment deadline as the later of March 31, 2023, or 60 days following publication in the *Federal Register*. The Proposal was published in the *Federal Register* on January 3, 2023, fixing the actual comment deadline as March 31<sup>st</sup>. Thus, the industry and all other stakeholders had 87 days from publication in the *Federal Register* in which to evaluate the Proposal and offer comments. And, of course, the formal comment period understates the time from which interested parties “had actually received notice” of the Commission’s Proposal—which was a full 107 days prior to the comment deadline.<sup>176</sup> Chair Gensler even outlined the core concepts behind the Proposal as early as June 2022.<sup>177</sup>

This was a generous comment period by any measure. For example, the Proposal’s comment period runs roughly twice the 45-day length of many other proposed rules from the Commission,<sup>178</sup> and federal courts have almost “uniformly upheld comment periods of 45 days or less.”<sup>179</sup> In addition, the Proposal’s comment period substantially exceeded the presumptive comment period of 60 days for rules issued by the executive branch agencies subject to Executive Order 12,866.<sup>180</sup>

The sufficiency of this notice is also apparent from its results. As of March 29, 2023, the Commission’s website lists no fewer than 3,600 public comments submitted on the Proposal,<sup>181</sup> including many from industry. Perhaps more impressive is that academics or industry experts have published at least five technical studies relevant to the Proposal’s essential mechanisms and

---

<sup>172</sup> 5 U.S.C. § 553(c).

<sup>173</sup> *Phillips Petroleum Co. v. EPA*, 803 F.2d 545, 559 (10th Cir. 1986).

<sup>174</sup> *Id.* (citing *Vt. Yankee Nuclear Power Corp. v. Nat. Res. Def. Council, Inc.*, 435 U.S. 519, 524 (1978)).

<sup>175</sup> See SEC. & EXCH. COMM’N, SEC PROPOSES RULE TO ENHANCE COMPETITION FOR INDIVIDUAL INVESTOR ORDER EXECUTION (Dec. 14, 2022), <https://www.sec.gov/news/press-release/2022-225>.

<sup>176</sup> *Omnipoint Corp. v. FCC*, 78 F.3d 620, 629 (D.C. Cir. 1996).

<sup>177</sup> Gary Gensler, Chair, Sec. & Exch. Comm’n, Remarks Before the Piper Sander Global Exchange Conference: “Market Structure and the Retail Investor” (June 8, 2022),

<https://www.sec.gov/news/speech/gensler-remarks-piper-sandler-global-exchange-conference-060822>.

<sup>178</sup> See, e.g., Outsourcing by Investment Advisers, 87 Fed. Reg. 68,816, 68,816 (proposed Nov. 16, 2022) (setting comments due 41 days after the date of publication in the *Federal Register*).

<sup>179</sup> *Phillips Petroleum Co.*, 803 F.2d at 559 (citing *Conn. Light & Power Co. v. Nuclear Regul. Comm’n*, 673 F.2d 525, 534 (D.C. Cir. 1982) (sustaining a 30-day comment period); *N. Am. Van Lines v. ICC*, 666 F.2d 1087, 1092 (7th Cir. 1981) (sustaining a 45-day comment period)).

<sup>180</sup> See Exec. Order No. 12,866, 58 Fed. Reg. 51,735 (Oct. 4, 1993) (section 6(a)(1)).

<sup>181</sup> See *Order Competition Rule*, SEC (last visited March 29, 2023), <https://www.sec.gov/comments/s7-31-22/s73122.htm>.

premises since Chair Gensler laid out his views in mid-2022,<sup>182</sup> not to mention countless articles and opinion pieces in the financial and legal trade press.<sup>183</sup> The sum of this public input and deliberation in response to the Proposal is strong evidence that no interested party has suffered meaningful prejudice from the current comment period<sup>184</sup>—which, again, is already longer than a vast number of other proposed rules.

Nor can opponents of the Proposal simply bootstrap their objections by asserting that they might conduct more studies after March 31st. The Commission routinely meets with interested parties after the close of the comment period and prior to a final rule, and there is no reason to expect that it will not continue to do so here.

## CONCLUSION

We appreciate the Commission’s consideration of our comments.

Sincerely,



Stephen W. Hall  
Legal Director and Securities Specialist

Houston Shaner  
Senior Counsel

Better Markets, Inc.  
1825 K Street, NW  
Suite 1080  
Washington, DC 20006  
(202) 618-6464

[shall@bettermarkets.org](mailto:shall@bettermarkets.org)

---

<sup>182</sup> See generally THOMAS ERNST ET AL., WOULD ORDER-BY-ORDER AUCTIONS BE COMPETITIVE? (2023); MITTAL, *supra* note 123; ROBERT BATTALIO & ROBERT JENNINGS, WHY DO BROKERS WHO DO NOT CHARGE PAYMENT FOR ORDER FLOW ROUTE MARKETABLE ORDERS TO WHOLESALERS? (2022); BRADFORD LEVY, PRICE IMPROVEMENT AND PAYMENT FOR ORDER FLOW: EVIDENCE FROM A RANDOMIZED CONTROLLED TRIAL (2022); Hu & Murphy, *supra* note 86; SCHWARZ ET AL., *supra* note 9.

<sup>183</sup> See, e.g., Justin Chretien, *SEC’s Order Competition Rule is Regulation by Speculation*, LAW360 (Mar. 3, 2023), <https://www.law360.com/articles/1581938/print?section=securities>.

<sup>184</sup> See *Omnipoint Corp.*, 78 F.3d at 630 (ruling out prejudicial error under 5 U.S.C. § 706 where the agency “received 45 comments and 42 letters addressing its proposed rule” and “reviewed the comments received and took them into account in its decision”).

[hshaner@bettermarkets.org](mailto:hshaner@bettermarkets.org)

<http://www.bettermarkets.org>