March 31, 2023

Submitted electronically via SEC.gov
Vanessa Countryman, Secretary
Securities and Exchange Commission
100 F Street NE
Washington, DC 20549-1090

Re: SEC Market Structure Proposals
(Release Nos. 34-96493, 34-96494, 34-96495, 34-96496;
File Nos. S7–29–22, S7–30–22, S7–31–22, S7–32–22)

Dear Ms. Countryman:

Charles Schwab & Co, Inc.[1] ("Schwab") appreciates the opportunity to provide comments on the four December 14, 2022, proposals (the "Proposals") by the Securities and Exchange Commission (the "Commission") regarding potential changes to numerous aspects of critical equity market structure as well as significant new requirements relating to executions of securities transactions in other markets overseen by the SEC.[2] It is primarily in service of our retail customers and the more than 33.3 million client accounts they hold with us that we are responding to the Proposals and that leads us to strongly urge the Commission to undertake a significantly more measured and thoughtful approach to the changes being contemplated, both

[1] The Charles Schwab Corporation (NYSE: SCHW) is a leading provider of financial services, with 33.3 million active brokerage accounts, 2.2 million corporate retirement plan participants, 1.6 million banking accounts, and $7.8 trillion in client assets as of January 31, 2022. Through its operating subsidiaries, the company provides a full range of wealth management, securities brokerage, banking, asset management, custody, and financial advisory services to individual investors and independent investment advisors. Its broker-dealer subsidiaries, CS&Co, TD Ameritrade, Inc., and TD Ameritrade Clearing, Inc., (members SIPC, https://www.sipc.org), and their affiliates offer a complete range of investment services and products including an extensive selection of mutual funds; financial planning and investment advice; retirement plan and equity compensation plan services; referrals to independent, fee-based investment advisors; and custodial, operational and trading support for independent, fee-based investment advisors through Schwab Advisor Services. Its primary banking subsidiary, Charles Schwab Bank, SSB (member FDIC and an Equal Housing Lender), provides banking and lending services and products. More information is available at https://www.aboutschwab.com.
[2] Exchange Act Release No. 96496, 88 Fed. Reg. 5440 (Jan. 27, 2023) (Regulation Best Execution, or "BE Proposal"); Exchange Act Release No. 96495, 88 Fed. Reg. 128 (Jan. 3, 2023) ("Order Competition Proposal"); Exchange Act Release No. 96494, 87 Fed. Reg. 80266 (Dec. 29, 2022) ("Tick Sizes Proposal"); Exchange Act Release No. 96493, 88 Fed. Reg. 3786 (Jan. 20, 2023) ("Rule 605 Proposal").

individually and in the aggregate, before proceeding.[3]

Today's transparent, competitive U.S. markets are the deepest, most liquid, and most efficient in the world, allowing investors to enjoy narrower spreads, lower transaction costs, and faster execution speeds than ever in history. These market characteristics have long been championed by the SEC in keeping with its longstanding goal of enhancing and protecting the retail investor experience. We are concerned that the calls for change as manifest in these Proposals are obscuring—and, in some cases, even endangering—the benefits that the current ecosystem provides for retail investors, including vastly expanded product offerings, world-class trading platforms that rival those used by investment professionals, no/low-cost trading, and superior execution quality. To the latter point, we estimate that over the next 10 years, the industry, through price and size improvement opportunities afforded under the current market structure, is positioned to provide over $120B of direct benefit exclusively to retail investors compared to a landscape where winners are chosen at the expense of retail investors.[4] We do not want to see these significant tangible benefits put at risk as a result of unnecessary and unproven changes that lack a sound basis in data and show no real promise for improving upon the experience of the retail investors who rely on our markets to help them achieve their long-term investing goals.

Schwab appreciates the effort that has gone into the Proposals and the salutary goals of the Commission, which are to ensure that the markets are efficient, competitive, and transparent. Schwab remains committed to enhancing and protecting the retail investor experience, and we are supportive of several specific changes included within the Proposals, including targeted changes that could increase transparency by enhancing Rule 605 Reports.

Nonetheless, we strongly urge the Commission to undertake a significantly more measured approach to the changes being contemplated, both individually and in the aggregate, before proceeding with final rules, two of which have drawn thoughtful and substantive dissents from two of the five commissioners.

I. Executive Summary

One of the most obvious problems with the Proposals is that the Commission has taken on too much. Instead of proceeding incrementally, one rule at a time, it has proposed four exceedingly complex and interconnected rules all at once.[5] There is no way of predicting, *and the Commission makes no effort to predict*, how the four rules *will affect each other*.[6] Yet each rule will inevitably

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[3] Schwab, along with a broad section of other market participants, has been working with SIFMA on a coordinated industry response, as well as working to address some of the cost-benefit analysis and other assumptions. SIFMA also held an industry roundtable to discuss these Proposals and work across all business models in late 2022. Schwab generally supports the views expressed in the SIFMA letter unless otherwise discussed herein.

[4] *See* Schwab 2022 U.S. Equity Market Structure: Order Routing Practices, Considerations, and Opportunities ("Schwab 2022 Whitepaper") at 15-16, available at https://content.schwab.com/web/retail/public/about-schwab/Schwab-2022-order-routing-whitepaper.pdf.

[5] *See supra* note 2.

[6] In fact, the Commission's Director of the Division of Trading and Markets, Haoxiang Zhu, maintains that the proposed rules each "stand on their own." *December 14, 2022 Open Meeting Part 01* at 1:08:25 – 1:09:00, https://www.youtube.com/watch?v=s9gdfxCoIq4/. This is plainly not the case.

impact the others. As the Securities Industry and Financial Markets Association ("SIFMA") observed in its letter requesting an extension of time to submit comments: "the changes to tick sizes … would significantly impact all the calculations the Commission used in its economic analysis to support the Order Competition Rule Proposal."[7] Yet the Commission "performed no calculations that consider this critical interplay."[8] Moreover, if the Order Competition Proposal and the BE Proposal were adopted as is, a broker-dealer would inevitably have to violate one of them. Best Execution requires brokers to search for liquidity, while the Order Competition Proposal requires brokers to send orders to auctions on exchanges that will not offer maximum liquidity.

Schwab believes the Proposals are premised on an assortment of deeply flawed perceptions about how our markets operate and, if adopted, would endanger the unparalleled benefits they afford U.S. retail investors – including zero commissions, historically tight spreads, and fast and efficient executions in a highly competitive venue dynamic. Individually and together, the Proposals put in jeopardy—without adequately identifying a single fundamental flaw or weakness that needs to be addressed—a system that functions efficiently and advantageously for retail participants, and that continuously improves its ability to provide those investors with optimal conditions to pursue their investing goals. To that end, Schwab earlier joined with Citadel Securities and the New York Stock Exchange to propose to the Commission an incremental approach for modernizing equity market structure.[9]

Equally troubling, the Commission has repeatedly expressed uncertainty regarding the economic consequences of its proposed rules and has recognized that in some instances the proposed rules may be detrimental to the markets and the very retail investors the rules are designed to help.[10] In his dissent from the BE Proposal, Commissioner Uyeda noted that the BE Proposal used the phrase "the Commission believes" seventy-seven times, and that the phrase seemed to be a "regulatory shortcut" for "situations when the Commission has no hard evidence or data," but only "a theoretical concern."[11]

In the same vein, there is a distinct absence of economic data to support many aspects of the Proposals and to support the Commission's analysis of costs versus benefits.[12] Indeed, the

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[7] Letter re: Comment Period Extension on Equity Market Stricture Proposals, from SIFMA to Vanessa Countryman, Secretary, Secs. & Exch. Comm'n 3 (Feb. 8, 2023) ("SIFMA Extension Request"), https://www.sec.gov/comments/s7-31-22/s73122-20156863-325026.pdf.

[8] *Id*.

[9] *See* Letter re: Equity Market Structure Proposals, from NYSE Group, Inc., Charles Schwab & Co., and Citadel Securities to Vanessa Countryman, Secretary, Securities & Exchange Commission (March 6, 2023) ("NYSE, Schwab & Citadel Joint Letter"), https://www.sec.gov/comments/s7-32-22/s73222-20158676-326602.pdf.

[10] *See, e.g.*, Order Competition Proposal, 88 Fed. Reg. at 203 ("The Commission acknowledges considerable uncertainty in the costs and benefits of this rule because the Commission cannot predict how different market participants would adjust their practices in response to this rule."); *see also*, the Best Execution Proposal, where the Commission repeatedly admits uncertainty regarding how implementation of the proposed rule will impact market participants. 88 Fed. Reg. at 5497–98 n.415.

[11] *See* Uyeda Dissent – Best Execution Proposal available at https://www.sec.gov/news/statement/uyeda-best-excution-20221214.

[12] *See*, *e.g*., Best Execution Proposal, 88 Fed. Reg. at 5523 ("Given that the MDI Rules have not yet been implemented, they have not affected market practice and therefore data that would be required for a comprehensive

Commission has not even met its obligation to provide the public with the economic data upon which its proposed rules are based. The Commission repeatedly relies on Consolidated Audit Trail ("CAT") data to support its economic analysis of the Proposals.[13] CAT data is not publicly available and thus public commenters, including Schwab, do not have access to the very data on which the Commission relies.

The Commission's failure to provide the data on which the Proposals rely violates long-established principles of administrative law. As the D.C. Circuit observed in *Connecticut Light & Power Co. v. NRC,* 673 F.2d 525, 530–31 (D.C. Cir. 1982), *cert. denied*, 459 U.S. 835 (1982), "In order to allow for useful criticism, it is especially important for the agency to identify and make available technical studies and data that it has employed in reaching the decisions to propose particular rules. . . . An agency commits serious procedural error when it fails to reveal portions of the technical basis for a proposed rule in time to allow for meaningful commentary."[14] Cases interpreting the Administrative Procedure Act ("APA") require that when the Commission adopts a rule establishing new regulatory standards, even when it labels a rule as a new and untested measure, it must establish that its regulatory action is "necessary or appropriate in the public interest" for the protection of investors and the preservation of orderly markets.[15] The Commission's obligations under the APA is not to engage in guesswork, but to "examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choices it has made."[16] Under the applicable APA standards, the Proposals would be vulnerable to the argument that the agency lacks statutory authority to implement wholly prescriptive rules (Order Competition Proposal and Best Execution Proposal) and that the Proposals, in any event, should be set aside as "arbitrary,

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quantitative analysis of the economic effects in NMS stocks that includes the effects of the MDI Rules is not available. It is possible that the economic effects in NMS stocks relative to the baseline could be different once the MDI Rules are implemented.").

[13] *See, e.g.*, Order Competition Rule, 88 Fed. Reg. at 207 ("Given the broader coverage of the CAT exchange data, the Commission believes that the estimates derived from sample[s] [of]… the CAT data provide a more complete estimate of the realized spreads for marketable orders executed on exchanges than the sample from the Rule 605 data."); Best Execution Proposal, 88 Fed. Reg. at 5496, 5499 & n.422, 5502 & n.427.

[14] *See also Am. Radio Relay League v. FCC*, 524 F.3d 227, 236–37 (D.C. Cir. 2007).

[15] *New York Stock Exchange LLC v. Securities and Exchange Commission*, 962 F.3d 541, 558 (citing 15 U.S.C. § 78c(f)). As the Supreme Court stated in *Motor Vehicle Mfrs. Ass'n of U.S. v. State Farm Mut. Auto. Ins. Co*., 463 U.S. 29, 43 (1983), "[r]ecognizing that policymaking in a complex society must account for uncertainty . . . does not imply that it is sufficient for an agency to merely recite the terms 'substantial uncertainty' as a justification for its actions."

[16] *State Farm*, 463 U.S. at 43. During the Commission's open meeting, Commissioners Peirce and Uyeda expressed concerns regarding the lack of evidence supporting the Order Competition and Best Execution Proposals, observing that it is impossible to predict the Proposals' unintended consequences on a market that is incredibly efficient for retail customers. *See* Commissioner Hester M. Peirce, *Ordering Competition* (Dec. 14, 2022) (Peirce Dissent – Order Competition Proposal), https://www.sec.gov/news/statement/peirce-order-competition-20221214; Commissioner Hester M. Peirce, *Is This The Best Execution We Can Get?* (Dec. 14, 2022) ("Peirce Dissent – Best Execution Proposal"), https://www.sec.gov/news/statement/peirce-best-execution-20221214; Mark T. Uyeda, *Statement on Proposed Rule Regarding Order Competition* (Dec. 14, 2022), https://www.sec.gov/news/statement/uyeda-order-competition-20221214; Uyeda Dissent – Best Execution Proposal. Commissioner Peirce also expressed concerns that the Proposals may be based on an incorrect premise and may cause bigger problems than those they intend to solve. Peirce Dissent – Order Competition Proposal; Peirce Dissent – Best Execution Proposal.

capricious, an abuse of discretion, and not in accordance with law."[17]

In sum, these measures would represent a leap backwards for Schwab's customers and for participants in U.S. markets more generally. They would undermine the hard-won gains that have been achieved on behalf of retail participants and would represent a detriment to competition, efficiency, and the investor experience. We note a few key considerations that our letter addresses in more detail:

- **Order Competition**: Schwab strongly opposes the Order Competition Proposal and urges that it be withdrawn in its entirety. It reflects an unnecessary reimagining of existing U.S. equity market structure, based on untested theories and incomplete or flawed analysis. It would entail a host of damaging consequences for U.S. retail investors and the firms that serve them—slowing down executions, causing a tangible diminishment in price improvement opportunities, and affording time and execution gaps ripe for exploitation and predatory practices by other kinds of market participants. Purported incremental improvements touted by the Commission, even if achievable, are vastly outweighed by the added complexity, actual costs and operational difficulties that would accompany this new approach. The SEC's economic analysis is superficial and flawed in reckoning with these issues, both as it relates to this proposal and its interaction with other proposals. We agree with those who have observed that our markets do not need such fundamental changes, and, at most, the Commission should only undertake a more thoughtful, gradual and incremental approach to pursuing further improvements after better equipping itself with data and more accurately weighing the costs to investors of what it proposes.

- **Best Execution**: Schwab strongly opposes the BE Proposal. It is a solution in search of a problem, as evidenced by the Commission's requests for insights into how best execution is actually accomplished in today's markets.[18] Schwab, like other broker-dealers, already must seek best execution on behalf of its customers in keeping with existing FINRA and MSRB rules and guidance, and under the watchful oversight of the SEC. To the extent Schwab sends retail orders to other broker-dealers for execution, then they too have best execution obligations in connection with those trades. Ironically, although the Commission touts as its goal strengthening existing best execution obligations on broker-dealers, in its unrelenting push to move trading onto exchanges, the Order Competition

[17] 5 U.S.C. 706(2)(A). In *Business Roundtable v. Securities and Exchange Commission*, 647 F.3d 1144 (D.C. Cir. 2011), the Commission's final rule was vacated where the Commission relied upon insufficient empirical data and discounted costs in favor of benefits.

[18] *See* BE Proposal, 88 Fed. Reg. at 5524 ("[T] the Commission lacks detailed information on broker-dealers' current policies and procedures with respect to best execution standards and order handling practices . . .."). *See also*, *e.g.*, BE Proposal, 88 Fed. Reg. at 5459, 5464 (requesting commenters to describe for the SEC the types of best execution policies and procedures broker-dealers currently have and how such procedures currently address certain aspects of broker-dealers' best execution analyses); BE Proposal, 88 Fed. Reg. at 5474 (asking commenters to explain to the SEC the "frequency and rigor" of broker-dealers' regular execution quality reviews and whether the reviews are documented); BE Proposal, 88 Fed. Reg. at 5479 (soliciting information from commenters for the SEC to understand how introducing brokers currently evaluate the execution quality of their executing brokers, and how introducing brokers address concerns relating to execution quality); BE Proposal, 88 Fed. Reg. at 5480-81 (requesting the commenters explain to the SEC how broker-dealers currently review their best execution policies and procedures, including how frequently reviews are conducted).

Proposal would drive certain retail participants and their orders to venues that owe them no best execution obligation at all. It is but one indication how incomplete and inconsistent these Proposals are in key respects when evaluated individually or in tandem.

- **Rule 605**: Schwab endorses enhancements and updates to the Rule 605 disclosure and reporting regime, but in a more tailored and useful format than proposed. What the Commission has put forward is too complex and will lead to investor confusion. We propose modest, but important, changes to the Rule 605 Proposal to normalize the data and make it easier to compare and contrast firm performance in ways that investors will find useful. We urge that of all of the proposals, at most, the Commission move forward with a modified approach to this proposal. This, in turn, would provide the Commission with better information to determine what, if any, other incremental improvements to eventually pursue. Chair Gensler has suggested that the measuring stick is broken. While we do not agree, it nevertheless seems logical to first fix the measuring stick that all other proposals are leveraging. Then, and only then, will we know if anything else is needed.

- **Tick Size**: Schwab endorses a much more streamlined approach to altering minimum pricing increments, access fees and round lots, as outlined in a letter we submitted with NYSE and Citadel and reinforced below. The letter stated that:

  Consistent with prior proposals from both exchanges and market participants, we recommend reducing the minimum quoting increment to a half-penny for symbols trading at or above $1.00 per share that are tick-constrained to significantly narrow the number of symbols covered in the [Tick Sizes] Proposal. We define "tick-constrained" to mean symbols that have an average quoted spread of 1.1 cents or less and a reasonable amount of available liquidity at the NBBO.

  Separately, we recommend setting a market-wide harmonized trading increment of $.001 for all symbols trading at or above $1.00 per share. In our view, the minimum quoting increment and the minimum trading increment do not need to be the same. With respect to access fees, we recommend a reduction that is proportionate to the proposed reduction in the minimum quoting increment for tick-constrained symbols. This would reduce the current $.0030/share cap to $.0015/share for the symbols with a half-penny minimum quoting increment. Finally, we recommend accelerating implementation of the revised round lot definition, but not the odd lot dissemination on the SIP, as contained in the Commission's Market Data Infrastructure Rule ("MDIR"). We would encourage the Commission to revisit industry comments on the odd lot dissemination before full implementation of MDIR.

Notwithstanding the Commission espousing as its goal making improvements to executions for retail investor orders, the Proposals seem largely designed as a means to shift orders away from wholesalers and on to exchanges and, in doing so, to eliminate off-exchange payment for order flow ("PFOF") while permitting exchanges to continue paying for order flow. The Commission appears prepared to sacrifice many of the benefits now enjoyed by retail

investors to achieve this goal. Indeed, adoption would, in certain key respects, violate Section 11A of the Exchange Act by working directly against competition and the manifold gains from which retail investors currently benefit under today's market structure.

If we look back almost twenty years, before the SEC proceeded with the significant reforms that made up Regulation NMS, the agency spent years engaged in thoughtful analysis of potential changes; rigorous academic studies, roundtables, consultation and input from a wide array of market participants informed that process. Regulation NMS was the culmination of careful thinking and resulted in changes that brought about wide-ranging benefits that U.S. retail investors continue to reap. Unfortunately, that is not the process the SEC has followed in publishing the Proposals we are commenting upon. Even if well intentioned, they generally fail to grapple with many key considerations and data points that are readily available. On behalf of our millions of retail investors and the long-term investment goals they are pursuing, we urge the Commission to take our comments to heart.

II. Order Competition Proposal

Overview

Schwab strongly opposes the Order Competition Proposal and recommends the Commission withdraw it in its entirety. It is a radical and unnecessary re-write of existing equity market structure based on theories supported by flawed analysis, and it threatens a host of damaging consequences for retail investors.

Even if the alleged benefits of the proposal were based on valid economic analysis, these benefits would be more than offset by increased operational costs, increased operational risks, liquidity concerns on thousands of securities, increased market volatility, increased market manipulation, and a host of negative investor experience issues.

In his statement on the Order Competition Proposal, Chair Gensler said that the proposal "would promote competition for the orders of individual investors."[19] We firmly disagree and believe, by contrast, adoption would more likely have the opposite effect, stifling competition and creating constraints and obligations that roll back the clock and create conditions for potential instability—all to the detriment of retail investors and the curtailment of healthy competition. Moreover, the Chair's statement seems to be based on a false premise. The U.S. equity market, as it currently stands, is already fiercely competitive. Non-exchange market centers already face strong competition among incumbents and new market entrants for the orders of retail investors. These market centers constantly vie with each other for retail flow and can win more of it by providing higher levels of execution quality through price improvement and enhanced liquidity. Competition in the wholesaler market is constantly evolving, and in the last few years alone, new entrants have been able to quickly win market share and push incumbents to improve. In addition, for Schwab, there are at least two new entrants in full production this year and two more likely in the near future. Meanwhile, our long-standing counterparties continue to provide excellent execution experience to our clients.

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[19] *See* Public Statement by Chair Gary Gensler, Statement on Proposal to Enhance Order Competition (Dec. 14, 2022) available at https://www.sec.gov/news/statement/gensler-order-competition-20221214.

The Commission would be jettisoning a structure that has evolved organically over a span of 18 years and that functions well and benefits retail investors enormously. By contrast, the Order Competition Proposal, which would expose many retail orders to order-by-order auctions, would introduce an unproven model that market participants handling these retail orders will be obliged to follow, despite the fact that the current model has proven to be a beneficial success for retail investors. The proposal is based on a flawed assumption that this new, unproven, and forced trading protocol will be additive to the current levels of benefits across price, size, and operational efficiency.

The operational challenges alone are simply staggering. This proposed rule is exceedingly cumbersome and complex, and increases the probability of significant direct and collateral harm to retail traders and the overall market in a number of ways outlined below. Additionally, it should be noted that there is nothing to prevent exchanges from proposing their own innovations, including auction mechanisms, enhancements for RLP programs, and other competition-enhancing measures, to seek additional ways to innovate and improve the current market structure. Through the 19b-4 filing and review process, the Commission could evaluate such proposals and, with the assistance of public comment, determine if mechanisms such as intraday auctions of some kind might be beneficial to the market. This is a far more rational way to test opportunities for innovation and new potential avenues to encourage competition.

The Commission Has Overstepped its Statutory Authority

Congress has observed that the purpose of the Exchange Act is "to enhance competition and to allow economic forces, interacting within a fair regulatory field, to arrive at appropriate variations of practices and services." It has emphasized, moreover, that "[n]either the markets themselves nor the broker-dealer participant in these markets should be forced into a single mold. Market centers should compete and evolve according to their own natural genius and all actions to compel uniformity must be measured and justified as necessary to accomplish the salient purposes of the Securities Exchange Act, assure the maintenance of fair and orderly markets and to provide price protection for the orders of investors."[20] The Order Competition Proposal, in addition to its other deficits, takes an unnecessarily prescriptive approach to the markets, essentially ignoring this stated intention by Congress.[21] The Exchange Act additionally forbids the Commission from adopting any "rule or regulation which would impose a burden on competition not necessary or appropriate in furtherance of the purposes of" the securities laws.[22] As such, the Order Competition Proposal is not in accordance with the Commission's statutory responsibilities. Rather, the Commission has decided to pick winners and losers on its own.

Conditions for Retail Investors Have Never Been Better, but the Order Competition Proposal Threatens that Progress

Although the U.S. equity markets are rightfully championed by the SEC and its longstanding goal of enhancing and protecting the retail investor experience, the Order

[20] *See* H.R. Rep. No. 94-123, at 51 (1975).
[21] *See Id*. (emphasis added).
[22] 15 U.S.C. § 78(w)(a)(2).

Competition Proposal places many of the advances that have been achieved over a span of years in serious jeopardy. The implementation of Regulation NMS in 2007 was a watershed moment for the industry as it opened up the exchange-dominated market and encouraged the competition and innovation that characterizes today's structure. Importantly, the changes introduced by the adoption of Regulation NMS were undertaken only after years of extensive consultation and study by the Commission. As a result, the equity markets have seen explosive growth in alternative execution venues (including ATSs and wholesalers) that have added critical competition into the markets. This evolution has significantly improved trading outcomes for investors, and particularly retail investors, through lower trading costs (bid/ask spreads, commissions) and faster execution. In the years since Regulation NMS, the capital markets have further progressed through improved efficiency, speed, and technology. Likewise, there have been important regulatory developments that have enhanced the efficacy of Regulation NMS, but these too have been adopted through a much more measured, data-driven, and thoughtful approach than the Proposals at issue here.

Schwab has worked diligently over its history to improve the ability of retail investors to access the U.S. securities markets and achieve efficient executions at the best available price. Those improvements have come about through Schwab's insistence over years of interactions with other intermediaries (particularly following passage of Regulation NMS) that execution—whether through exchanges, wholesalers, or internalization—be continuously improved upon to meet our customers' needs. It also has never been easier for retail investors to participate in the stock market. Individual investors' share of the equity market trading volume has increased steadily since 2011.[23] According to a 2021 Schwab study[24], 15% of current U.S. stock market investors began to invest in 2020, and over 70% of these new investors plan to hold onto stocks for long-term gain. Those same retail investors can now make zero commission trades almost instantaneously via world class trading platforms and have access to a wealth of information online, which 94% of this study's respondents indicated an interest in doing. Bringing in new investors who can "own their tomorrow" and save for the future is what Schwab is about.

Schwab believes that the Order Competition Proposal would jeopardize billions in price improvement realized on behalf of retail trading for a set of illusory benefits. Looking forward, Schwab estimates the industry-wide benefits provided to retail order flow from off-exchange wholesalers to be in excess of $50B over the next 10 years[25]—and if size improvement is included, retail investors will save at least $120B compared to exchange-only fills.[26] The Commission claims the Order Competition Proposal will provide $1.5 billion in benefits, but this is based on invalid economic analysis, as we will detail below. The Commission apparently does

[23] BNY Mellon, *The Rise of Retail Traders* (November 2021) available at https://www.bnymellonwealth.com/insights/the-rise-of-retail-traders.html.
[24] Charles Schwab Corporation, *The Rise of the Investor Generation* (2021) available at https://www.aboutschwab.com/generation-investor-study-2021.
[25] $4.5B was the 2021 gross price improvement received by retail as retrieved from Bloomberg's aggregation of relevant Rule 605 reports. The Virtu study, and corroborating analysis by Schwab, suggests that Rule 605 reports omit at least 14% of price improvement by their exclusions of odd lots, oversize, and short sale orders. Therefore, the price improvement figure is adjusted up to $5B.
[26] Virtu estimated size improvement value to be ~2x the net price improvement value. Applying this increase to the $3.7B in 2021 retail net price improvement gives us $7.4B in size improvement, or $74B over ten years. This value added to the $50B in gross price improvement gives us $124B extrapolated over 10 years.

not fully understand (or at least acknowledge) the reasons for and the likelihood of attendant costs rising in response to the changes it is proposing. There is a significant amount of retail investors' investments on the line that could be jeopardized by switching to an unproven auction system.

Currently, Schwab and other industry participants are able to benefit from a frictionless operation with wholesalers that has developed over time, with immediate executions at prices that are at or better than the NBBO 90% of the time.[27] This is due in part to years of competition among wholesalers who provide price improvement to retail customer orders. Notwithstanding these tangible benefits, the Commission is seeking to force many retail customer orders to exchanges rather than have them executed more quickly, efficiently, and likely at better prices through wholesalers.[28] The switch to exchange auctions would completely upend the current model and add unneeded complexity. No execution venue currently offers an auction model like the one the Commission is proposing to mandate, meaning it would need to be built from scratch or expanded markedly from the aggregated auctions that are presently used. This could have many unintended and deleterious consequences that the Commission has evidently not considered. In addition, the Commission has premised its ideas in respect of this and other proposals relying on non-public CAT data so no one else can validate the methods, calculations, or integrity of the data the SEC has employed.[29] We believe the Commission should make the data set publicly available so industry participants can evaluate the Commission's claims more accurately, and most certainly should not proceed with the rulemaking until the data have been reviewed and assessed by industry participants and other interested persons.

The Commission Has not Demonstrated a Problem to Justify a Market Structure Overhaul

Today's transparent and competitive U.S. equity markets allow investors to enjoy narrow spreads, low transaction costs, and fast execution speeds. While there remain opportunities to improve this market even further, we are concerned some calls for reform are obscuring the benefits of the current ecosystem to individual investors, which include expansive product offerings, world-class trading platforms that rival those used by investment professionals, no/low-cost trading, and superior execution quality due to intentionally designed segmentation in our markets. To the latter point, our clients receive a midpoint fill on over 50% of their market orders. The Commission's analysis also highlighted that 46% of marketable shares internalized by wholesalers received midpoint or better.

The Commission Failed to Perform a Valid Economic Analysis

The Commission performed several flawed economic analyses that we will comment on further on below. First, the midpoint analysis does not match market participant experience.

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[27] *See* Schwab 2022 Whitepaper at 14, available at https://content.schwab.com/web/retail/public/about-schwab/Schwab-2022-order-routing-whitepaper.pdf.
[28] Although the Order Competition Proposal ostensibly provides certain ATSs with the ability to conduct auctions, the practical reality is that no ATSs qualify to operate auctions.
[29] We understand that SIFMA has submitted a request under the Freedom of Information Act requesting the non-public CAT data that the Commission relied on in the Proposals. We urge the Commission to share this data. https://www.sifma.org/resources/submissions/information-regarding-the-data-relied-upon-by-the-commission-in-proposing-certain-commission-rulemaking-related-to-market-structure/.

Second, the competitive shortfall analysis is flawed because it compares order flow datasets that are not similar. Third, the dataset and algorithm used by the SEC to identify "retail orders" for the quote-fading analysis were flawed.

Midpoint Analysis

The Commission believes that the opportunity for better prices exists for individual investors. The Commission's analysis asserts that 75% of shares on orders routed to wholesalers that did not receive a midpoint fill could have received a midpoint fill by interacting with midpoint peg orders. The Commission does admit that this liquidity is dispersed across exchanges and ATSs, and would be difficult or impossible to access but theorizes that the proposed auctions would serve as a "coordination mechanism" to allow midpoint order submitters and individual investors to interact. The problem is this theorizing does not align with reality. The release states only 8.78% of shares from marketable orders routed to exchanges receive any price improvement. A significant percentage of liquidity-seeking orders routed to an exchange are IOC (immediate or cancel) orders seeking midpoint opportunities so we would expect a higher percentage of midpoint executions if liquidity existed. Further, Schwab performed a routing initiative with one of the two major listing exchanges for common stocks—with the benefit of a retail liquidity program—and found that, in practice, only an insignificant level of midpoint liquidity was available on the exchange.

Competitive Shortfall Analysis

The Commission has estimated the total annual savings to individual investors from adoption of the Order Competition Proposal would be $1.1 billion to $2.3 billion (popularly referred to as a $1.5 billion annual shortfall). However, flawed assumptions contribute to this calculation. To calculate this supposed shortfall, the Commission uses the difference between wholesaler and exchange realized half-spreads[30] (expressed in basis points and normalized by order variables like stock and order size) on marketable limit orders and concludes this is the shortfall individual investors experience in price improvement due to "lack of competition." However, this analysis is invalid. First, realized spread is not a good proxy for liquidity provider profits because it is purely theoretical and does not equate to profits achieved by wholesalers, as acknowledged by the Commission.[31] Second, orders sent to wholesalers and orders routed to exchanges are comparing apples to oranges in that orders sent to wholesalers are typically larger, routable market orders whereas orders routed to exchanges tend to be immediate-or-cancel (IOC) limit orders of smaller size coming from institutions that are intended only to take liquidity at the midpoint or the far touch of the NBBO. As the SEC's own Table 5 illustrates, market orders and IOC orders lead to different results in terms of execution quality, price impact, and realized spreads.

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[30] "Realized half-spread" is calculated by comparing execution prices with the NBBO midpoint, rather than the relevant NBB or NBO, a short time period after the execution of a marketable order. "Effective half-spread" is the half-spread actually paid by a marketable order and is calculated by comparing execution prices with the NBBO at the time of order receipt.
[31] *See e.g.*, Order Competition Proposal at n.515 ("There is also uncertainty in these estimates because of limitations in using the realized spreads to measure the trading profits earned by liquidity suppliers.").

In confirmation of our observations, Schwab performed a liquidity-seeking initiative with a major listing exchange in an effort to access exchange liquidity by routing orders to the exchange's retail liquidity program. During this initiative, Schwab confirmed that wholesaler marketable execution quality surpassed exchange marketable execution quality on every metric, whether measuring price improvement frequency, total price improvement, or marketable fill rates.[32]

Among other things, the data demonstrated that (1) orders routed to wholesalers had a greater percentage of shares price improved (94.25% for wholesalers vs. 60.24% for the exchange); (2) market orders routed to wholesalers had 4 times the amount of price improvement per share ($0.012 for wholesalers vs. ($0.003 for the exchange); and (3) wholesalers provided much greater liquidity than exchanges. Effective/Quoted ("E/Q") Ratio – which compares the average effective spread (the spread reflecting the execution price) – is interpreted on a scale where a zero indicates an average fill at the midpoint of the best bid and offer, a 100 indicates an average fill at the best displayed price, and a number above 100 indicates an average fill worse than the best displayed price (i.e., lower is better). For the exchange, on orders between 2,000 and 4,999 shares the E/Q was 180.13 (compared to wholesalers' 28.96) and on orders between 5,000 and 9,999 shares the E/Q was 274.16 (compared to wholesalers' 62.75). Therefore, the exchange could not provide the necessary price improvement or liquidity to properly handle retail orders. At the same time, the data showed that wholesalers have much lower realized spreads than exchanges with respect to our order flow, which is predominately market orders. This finding was intuitive to an industry practitioner but runs contrary to the core of the Commission's economic analysis. Interestingly, the Commission did have data on market orders consistent with the Schwab finding but decided to ignore it and use marketable limit orders instead.[33] Additionally, while it is true that the liquidity-taker affects realized spreads, so does the liquidity-provider.

A close relative to realized spread is price impact. As defined in the Order Competition Proposal, price impact is measured as the difference between the midpoint of the NBBO at the time of the trade and the midpoint of the NBBO at a specified time (e.g., one minute or five minutes) after the time of the trade. Price impact can also be calculated by subtracting realized half-spread from effective half-spread.[34] The Commission assumes that price impact is a function of the adverse selection of the liquidity-taker, but not of the liquidity-provider. Unlike the Commission, Schwab has data to calculate the price impact of similar orders routed to both wholesalers and exchanges, therefore controlling for liquidity-taker adverse selection. For

[32] Analysis included market orders sized 1 to 9,999 shares.
[33] Schwab is still analyzing data from the liquidity seeking initiative, and evaluating its impact on the Commission's economic analysis, for each of the four proposals. Schwab plans to submit additional analysis of the liquidity seeking initiative as part of the economic analysis it is conducting. Unfortunately, the comment period was too short for that economic analysis to be completed in time to accompany this submission. Schwab asked the Commission for an extension of the comment period for all four rules to permit Schwab's economic analysis to be completed. Letter re: Extension of Time Period for Submission of Comments on Four Equity Market Structure Proposals, from Jason Clague Managing Director, Head of Operations, Charles Schwab to Vanessa Countryman, Secretary, Securities & Exchange Commission (March 22, 2023), https://www.sec.gov/comments/s7-29-22/s72922-20161184-329888.pdf. However, the Commission has not responded to that request, and with the impending deadline for filing, we presume the request has been denied.
[34] *See supra* note 30.

Schwab's analysis, we used the metrics contained within Table 5 of the release and compared market order executions both off-exchange and on-exchange. We found that exchange trades had *2.5 times* the price impact as wholesalers on the same order flow, opposite of the Commission's analysis.[35] And if comparing market order executions both on and off-exchange demonstrates that the Commission's analysis of price impact and realized spread is flawed, then its premise that realized spread represents a "competitive shortfall" is equally flawed.

Wholesalers Reduce the Price Impact of Retail Orders on the Market

Over 20% of Schwab customer orders are larger than the size reflected on the NBBO. As shown in the Schwab equity market structure white paper, wholesalers provide on average 5 times the liquidity of what is displayed on the NBBO when such orders are routed.[36] Wholesalers, therefore, mute the price impact on orders that would otherwise be expected to move the market. Interestingly, even on orders smaller than the quoted size, Schwab saw greater price impact from orders routed to exchanges compared to orders routed to wholesalers.[37] This outcome is attributable to the bilateral wholesaler relationship, as well as due to interactions with orders containing less adverse selection risk.

As noted above and discussed more extensively in our White Paper, wholesalers provide significantly greater liquidity than exchanges.[38] The benefits of off-exchange wholesalers are even more pronounced during times of extreme volatility and wider quoted spreads. Our data shows that wholesalers have a lower variance in outcomes compared to exchanges.[39]

Accountability in Bilateral Relationships

The inherent accountability in today's bilateral relationships between retail brokers and wholesalers compels wholesalers to execute orders in volatile and one-directional markets at similar prices relative to the NBBO as they do on orders during calm markets. For example, Jeff Starr, Senior Vice President at Charles Schwab, explained during the 2022 SIFMA (Securities Industry Financial Markets Association) Equity Market Structure Roundtable that the August 2022 individual investor trading frenzy in BBBY did not result in worse execution quality on BBBY compared to prior days. In fact, the E/Q ratio on that day was substantially similar to what was normally seen on that stock.[40] This is despite wholesalers reportedly suffering trading losses as a result. Venue competition that exists today results in high levels of execution quality on every symbol, every day, lest a wholesaler lose order flow to a competitor. This dynamic is totally absent from the proposed auctions where no accountability exists to provide liquidity

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[35] During the life of the initiative, the effective half-spread in basis points for the exchange and wholesalers was 3.07 and 1.17, the realized half-spread in basis points was 2.47 and 0.93, and the price impact in basis points was 0.60 and 0.24, respectively.
[36] *See* Schwab 2022 Whitepaper at 14, available at https://www.aboutschwab.com/schwab-whitepaper-us-equity-market-structure.
[37] *See* Schwab 2022 Whitepaper at 15, available at https://www.aboutschwab.com/schwab-whitepaper-us-equity-market-structure.
[38] *See* Schwab 2022 Whitepaper at 15 (describing 2021 numbers of an estimated $5B in price improvement and $7B in size improvement, for a total of $12B or $120B over ten years).
[39] *See* Schwab 2022 Whitepaper at 17.
[40] *SIFMA Equity Market Structure Roundtable* (Sept. 13, 2022), available at https://events.sifma.org/equity-market-structure-roundtable.

during times of market stress.

For decades, exchanges have provided benefits to certain market participants in exchange for obligations to maintain an orderly market during market stress. Prior academic studies, available at the Commission's website, have found that this arrangement is positive, as supply and demand is known to have its limits in maintaining a stable market.[41] Although specialists, DMMs (Designated Market Makers), LMMs (Lead Market Makers), and SLPs (Supplemental Liquidity Providers) make money from their services over time, they also sustain losses at times when they are obligated to provide liquidity. We would argue that the wholesaler arrangement provides even stronger incentives to protect investors than any specialist program ever has while being much less concentrated. Again, the lack of consideration the Commission has given to the effects of replacing the wholesaler accountability model with the auction no-accountability model necessarily means that the Commission has simply not done their duty to perform a sufficient economic analysis.

There are reasons a wholesaler may provide better average execution quality to a retail broker's clients than the average adverse selection of their clients' order flow suggests, all of which hinge on the bilateral relationship between the retail broker and wholesaler. In accordance with their best execution obligations, retail brokers evaluate the execution quality of execution venues over time. Schwab complies with these obligations by establishing routing allocations based on this historical performance. Wholesalers, in turn, have their own best execution obligations as a broker-dealer, and thus provide enhanced price improvement and size improvement to try to earn more order flow. Unlike broker-dealers, exchanges have no best execution obligation, nor does an auction participant have a best execution obligation for the order being presented in the auction. The Order Competition Proposal thus mandates that a broker-dealer with an obligation to execute the order in the best available market give up the order to a process that lacks this protection and increases the likelihood that, if not filled at the auction, the order will receive worse execution. The proposed auctions simply cannot incentivize the kind of accountability that has benefited so many retail investors.

Quote Fading Analysis

Likewise, the Commission's cost analysis on quote fading is insufficient. Similar to the realized spread analysis, the Commission used incorrect assumptions on an insufficient dataset. Even though the Commission could identify which orders came from a retail firm by using CAT data, it chose to use NYSE TAQ data along with an algorithm known for its shortcomings in correctly identifying retail order flow. A study by Professor Robert Battalio highlights that the algorithm used by the SEC to identify "retail orders" has two flaws: (1) it falsely identifies institutional trades as retail, and (2) it identifies only a subset of actual retail trades. Further, the paper concluded that "the annualized cost of adverse movements… ranges from $1.73 billion to $1.88 billion."[42] This is the more conservative of their cost estimates and is still greater than the

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[41] Amber Anand and Kumar Venkataraman, *Should Exchanges Impose Market Maker Obligations?* (March 2013) available at https://www.sec.gov/divisions/riskfin/seminar/venkataraman0313.pdf.
[42] *See* Robert H. Battalio and Robert H. Jennings, *On the Potential Cost of Mandating Qualified Auctions for Marketable Retail Orders*, (March 28, 2023) available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4403047.

Commission's supposed $1.5 billion in benefit from the proposal.

Further, flashing order interest through an auction will invariably lead to increased quote-fading beyond what the Commission can quantify. For example, there is nothing in the Order Competition Proposal that can prevent market participants from cancelling their orders on exchanges when auction messages start queuing up on one side of the market, but before the trades are consummated.[43] This is especially problematic in auctions that fail to result in a complete fill, and in illiquid securities, which make up about half of all NMS stocks.[44]

Volatility and Liquidity Problems for Small Cap Stocks and Small Companies

The Commission has also failed to adequately consider how the Order Competition Proposal would lead to increased volatility and less liquidity for small company stocks. About half of NMS equity securities (approximately 6,000 securities) could be considered illiquid as they average fewer than 100,000 shares traded per day. Still, the securities remain popular with retail clients. Illiquid stocks of small companies tend to have wider spreads, fewer trades, and more concentrated quoting activity, meaning this Proposal could limit future capital formation for small companies.[45] Today, high levels of execution quality are achieved across all orders by wholesalers so the volatility concerns imbedded in the Order Competition Proposal are an unnecessary impediment to order execution quality. Therefore, for its effect on trading in small company stocks the Order Competition Proposal likewise fails in the Commission's goal to maintain fair, orderly, and efficient markets.

The Order Competition Proposal Presents Significant Operational Risk That Would Adversely Affect the Equity Markets

Not only is the Commission's price impact analysis flawed when comparing exchanges and wholesalers, the Commission is also planning to create an auction system with no predecessor model to rely on. Consequently, the Commission's analysis of the impact of auctions is entirely speculative and rests on faulty assumptions. When the Commission adopted Regulation NMS, after years of industry engagement, including concept releases, the SEC had experience to draw on and evidence to support the contention that the changes it was making to the regulation of the equity markets would actually work. For the Order Competition Proposal, while some exchanges hold opening and closing auctions, and even mid-day crosses, no exchanges proceed with an auction for individual orders operated on a continuous basis throughout the day in anything approaching the manner or scale contemplated by the Order Competition Proposal, which would require millions of auctions daily. The capacity for the listing exchanges to undertake such a function on a continuous basis is severely in doubt and, indeed, at least two major exchange families have joined comment letters opposing the Order

[43] One potential scenario: an order arrives at the auction, is flashed as a Schwab order, whereupon a market maker/HFT sees the price and takes the offer on the book in front of the auction knowing that the auction order is likely to return.

[44] Approximately 6,000 NMS stocks had an average daily share volume of less than 100,000 shares in the second half of 2022.

[45] Office of Analytics and Research, Division of Trading and Markets, U.S. Securities and Exchange Commission, *Empirical Analysis of Liquidity Demographics and Market Quality For Thinly-Traded NMS Stocks*, (Apr. 10, 2018) https://www.sec.gov/files/thinly_traded_eqs_data_summary.pdf.

Competition Proposal.[46] Experience has shown that there have been major problems through the years just with opening auctions, and if there are issues, an alternative is needed if an auction is unable to open. Now, the SEC is proposing to impose order-by-order auctions on the entire U.S. stock market during trading hours. This will be extremely complex and almost certainly lead to similar failures. Most importantly, everyone will bear the costs of auction failures—most of all retail investors.

Operational Challenges are Daunting, Dangerous, and Come at Great Risk

The movement to such auctions also presupposes a significant amount of programming and testing, and alteration to established mechanisms for accessing liquidity. These will take a long time to build out. Once built and configured (a process that will itself take tremendous resources and time), Schwab is deeply concerned about ongoing operational challenges associated with exchanges conducting multiple auctions throughout the day. We have seen instances of exchange auction failures, most notably at the opening of trading. These "glitches" cause significant losses to investors and create a difficult process for recovery attempts with exchanges often claiming limited immunity. These concerns compound if millions of these auctions are occurring each day and routing to these auctions is a regulatory requirement.

Any widespread operational failures could lead to extremely harmful consequences for investors because, currently, for-profit exchanges assert broad claims of immunity from civil liability when they fail in the performance of their responsibilities.[47] Schwab is concerned that if required to use an auction process, which most likely means sending orders through exchanges, Schwab and similarly situated market participants stand in danger of seeing significant harm to their retail clients. Failed trades can cause substantial losses for retail investors, and it would not be in investors' interests for the exchanges to be able to continue to shelter behind immunity from civil liability. All too often, broker-dealers have had to be responsible for losses due to auction glitches by exchanges.

Even if the auction process works as proposed, when an auction fails to produce a filled order ("failed auction"), the order will kick back to the broker or wholesaler who routed the order. Then the broker or wholesaler needs to decide whether to (1) reprice the order for another auction, (2) send it to the continuous market of a trading center that had just failed to produce a fill in the auction or (3) execute the order internally. All of these options, which by definition are available only after a failed auction, carry outcomes that harm the retail investor. Once an order is submitted to an auction that fails, the likelihood that the market moves away from the order increases; the order will not get the midpoint and will either be resubmitted to another auction or directly to the order book of an exchange. In either case, it is a terrible outcome from the client's vantage. When you reprice, the market may accept it, but the market is quickly moving away

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[46] NYSE, Schwab & Citadel Joint Letter; Letter re: Equity Market Structure Proposals, from Cboe Global Markets, State Street Global Advisors, T. Rowe Price, UBS Securities LLC, and Virtu Financial, Inc. to Vanessa Countryman, Secretary, Securities & Exchange Commission (March 24, 2023), https://www.sec.gov/comments/s7-32-22/s73222-20161714-330556.pdf.

[47] Whether trading is a regulatory responsibility is an open question. Monitoring of trading on an exchange is unquestionably a regulatory activity. Arguably, executing orders that match is by contrast business activity. *See, e.g.*, *In the Matter of Facebook, Inc. IPO Securities and Derivative Litigation*, Fed. Sec. L. Rep. ¶97,769, (SDNY Dec. 12, 2013).

from this order. Since the order's price and size have now been broadcast and failed, this will harm the client. This will be dramatically different than what currently happens.

Numerous Other Concerns Require Consideration Before the Commission Determines Whether to Proceed

Beyond the incorrect or uninformed assumptions underlying various premises of the proposal, there are various additional flaws with the proposal that raise numerous concerns, only several of the most significant of which are outlined below.

Picking Winners and Losers

The proposal appears to be based largely on a misplaced desire to drive retail order flow to lit exchange markets rather than to be executed through wholesalers or other non-exchange sources of liquidity, or the belief that unless a retail customer's order is executed at the midpoint of the NBBO, the client has not achieved the best possible price improvement. The Commission has decided to pick winners and losers as the two main exchange groups typically control a greater percentage of market share on exchange than the overall off-exchange market, much less the top two or three wholesalers.[48] In this regard, we further note that that the Commission is statutorily directed to use its authority under the Exchange Act to facilitate the establishment of a national market system for securities in accordance with Congressional findings that it is in the public interest and appropriate for the protection of investors and the maintenance of fair and orderly markets to assure "fair competition among brokers and dealers, among exchange markets, and between exchange markets and markets other than exchange markets." [49]

Other Costs and Consequences Have Not Been Adequately Tallied

In respect of each of these and other concerns, it is critical that the Commission explain its rationale and intentions much more clearly. Similarly, it is extremely difficult to quantify the impact of the Order Competition Proposal, and the SEC has not made a serious attempt to do so in the rule's accompanying cost-benefit analysis. Currently, the Order Competition Proposal reads as a construct to destroy the expectations and norms of the market that exists now. Retail investors would greatly benefit from an explanation from the Commission about how the Commission plans to more accurately quantify the benefits and count the real costs before seeking to advance the proposal into a rule.

The Order Competition Proposal is Inter-Related with the Other Proposals, a Fact Ignored

[48] For example, on March 15, 2023, the combined NYSE & NASDAQ market share stood at 40.23%. Trades reported to the TRFs represented 37.8% of daily volume. *See* https://www.cboe.com/us/equities/market_share/. We note that the Commission is statutorily directed to use its authority under the Exchange Act to facilitate the establishment of a national market system for securities in accordance with Congressional findings that it is in the public interest and appropriate for the protection of investors and the maintenance of fair and orderly markets to assure "fair competition among brokers and dealers, among exchange markets, and between exchange markets and markets other than exchange markets."

[49] *See* Securities Exchange Act Secs. 11A(a)(1)(C)(ii), 11A(a)(2).

by the Commission in Each Proposal and Collectively Among the Proposals

The Commission has failed to analyze how the Order Competition Proposal and the other three proposals will interact with each other. Chair Gensler has repeatedly stated that all four proposals stand on their own as individual proposals, and each could be advanced as solo proposals, even if none of the others is approved. We strongly disagree. The Proposals are extremely intertwined, and the impact of the four proposals on each other was not discussed in enough detail, if at all. The Commission's decision to publish each proposal separately has put the Commission itself, and commenters, in an impossible situation of attempting to quantify the effects of a proposal, much less the costs, without knowing whether any, all, or some (and if some, which) of the other proposals will also be adopted.

Foremost, the Order Competition Proposal does not adequately address how auctions should factor into a firm's best execution considerations. The Order Competition Proposal calls into question whether FINRA Rule 5310, FINRA's Best Execution rule, will apply (or what effect the requirement for wholesalers to first route a segmented order to an auction would have on a broker-dealer's best execution obligation or the Commission's proposed new best execution rules). Currently, we know wholesalers generally execute retail orders at prices that are at least as good (and often better) as those that could be achieved by routing to an exchange. Mandating routing a segmented order to an exchange for an auction would mean the order is bypassing fast, guaranteed execution at a price better than the NBBO for a price the customer might not get and likely guaranteeing that, if the auction fails, the customer's order will be executed at a price worse than what would have been initially achieved without the route to the auction venue. Essentially, the Commission is interposing a new regulatory obligation (auctions) into an existing regulatory obligation (best execution) that likely subverts the existing obligation. Best Execution is a fiduciary duty, which should supersede auctions that often may result in worse prices for a customer's order. The SEC asserts in the Order Competition Proposal that they believe the auction proposals are additive. As proposed, however, the Commission's proposal is far from additive: it will create a completely new system with many significant complexities while jeopardizing $120B in benefits to retail investors in the hope of a marginal and unlikely modest improvement.

III. Best Execution Proposal

Overview

Schwab strongly opposes proposed Regulation Best Execution ("the BE Proposal") and recommends the Commission withdraw it. We strongly support the principle of best execution, and FINRA's and the MSRB's best execution rules, and related notices and guidance, have served to protect investors for many decades. Broker-dealers are and have been subject to best execution obligations for decades and have been carefully overseen by the SEC and FINRA when they have failed to live up to these regulatory expectations. Simply put, the BE Proposal is either duplicative of existing duties or, where it seeks to depart from well-articulated existing obligations, represents a serious threat to current retail order handling practices and one that would not provide commensurate benefits to investors or overall improvements to how markets

function. Likewise, we are concerned that the BE Proposal, with overly prescriptive and impractical requirements for managing a new category of so-called "conflicted transactions" may unnecessarily disrupt decades of market progress for investors. Finally, if despite our urging the Commission proceeds with the Order Competition Proposal, the Commission should focus its attention on providing further clarification and refinement, to inform how best execution obligations should be fulfilled. As it stands, the Commission's proposals leave market participants in a quagmire and a quandary.

In short, the BE Proposal is the proverbial solution in search of a problem—a problem the Commission seems to be feverishly attempting to create by even requesting commenters explain to it how best execution currently functions.[50]

Rather than seeking to improve upon existing best execution obligations, the BE Proposal appears designed to accomplish similar unstated and unaddressed goals to the proposed Order Competition Proposal, including effectively eliminating PFOF and wholesaler internalization. But rather than address this issue and the attendant costs and consequences head on, the SEC uses the unassailable aims of "best execution" as a means to achieve its goals. Like the Order Competition Proposal, the BE Proposal represents a highly impactful change to how markets currently (and quite beneficially for retail investors) function and one the Commission seems to be attacking indirectly rather than directly by imposing obligations on paying or receiving PFOF (or on internalization in general) at a level that makes it functionally impossible for them to continue in their current form. More fundamentally, the BE Proposal fails to document a particular market failure it is trying to address. The BE Proposal includes no clear quantitative analysis of the costs and benefits accompanying the proposed changes it contemplates (and none at all with respect to its significant impact on fixed income markets), making it hard to demonstrate that any purported benefits would outweigh its substantial costs.

While the BE Proposal is styled as a best execution proposal, it fails to account for all of the elements of best execution—including size, speed and willingness to cure errors—while focusing almost solely on price. This is in direct contradiction to the SEC's and FINRA's historical position that best execution is not (and should not be) a price-only test. As the SEC has frequently noted in the past, best execution is about more than just price. The BE Proposal, however, focuses mainly on price, ignoring other key elements of best execution. FINRA highlights eight different considerations for execution quality, including price improvement and disimprovement, likelihood of execution of limit orders, speed, order size, transaction costs, customer needs and expectations, and existence of internalization or PFOF. By focusing almost

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[50] *See* BE Proposal, 88 Fed. Reg. at 5524 ("[T] the Commission lacks detailed information on broker-dealers' current policies and procedures with respect to best execution standards and order handling practices . . ..."). *See also*, *e.g.*, BE Proposal, 88 Fed. Reg. at 5459, 5464 (requesting commenters to describe for the SEC the types of best execution policies and procedures broker-dealers currently have and how such procedures currently address certain aspects of broker-dealers' best execution analyses); BE Proposal, 88 Fed. Reg. at 5474 (asking commenters to explain to the SEC the "frequency and rigor" of broker-dealers' regular execution quality reviews and whether the reviews are documented); BE Proposal, 88 Fed. Reg. at 5479 (soliciting information from commenters for the SEC to understand how introducing brokers currently evaluate the execution quality of their executing brokers, and how introducing brokers address concerns relating to execution quality); BE Proposal, 88 Fed. Reg. at 5480-81 (requesting the commenters explain to the SEC how broker-dealers currently review their best execution policies and procedures, including how frequently reviews are conducted).

solely on price, the SEC ignores other key factors that can significantly impact investor orders. For example, if under the BE Proposal we are required to search among venues that purport to offer better prices but serve as sources of only immaterial amounts of available liquidity, this process would inevitably delay executions, possibly create information leakage about orders, and inspire quote fading and movement of the midpoint. Moreover, in distilling best execution to price, it also runs the risk of leading to consolidation and concentration of execution venues, as there will be no means for venues to differentiate at any given time. All of these outcomes are predictable and deleterious results are likely to accompany approval of the BE Proposal.

Although the SEC and FINRA routinely conduct examinations and bring enforcement cases against broker-dealers that have failed to meet best execution obligations, the BE Proposal would, for the first time, establish a best execution standard under SEC rules for broker-dealers trading in all securities, including equities, options, fixed-income, and even crypto asset securities. Although FINRA's existing best execution rule applies across a spectrum of different securities (except municipal securities, which are covered by the MSRB's rule), the BE Proposal layers additional detailed policy and procedure obligations on firms but fails to address the fact that non-equity securities (and even equity securities other than stocks, such as standardized options) trade differently than equity securities, making it unclear how broker-dealers would comply in those other settings with these new specific obligations. This is perhaps most pronounced in the Commission declaring that any customer order a broker-dealer executes as principal *or riskless principal* is "conflicted," which effectively designates the entirety of the fixed income markets as conflicted.[51] As discussed in more detail below, the proposed handling of "conflicted transactions" is entirely unworkable from a practical standpoint and would degrade severely the quality of client executions. In particular, we describe below why riskless principal trades should be excluded from the conflicted transaction definition. Furthermore, the BE Proposal requires a level of detail in the best execution data that currently does not exist for many types of securities.

The BE Proposal would cause Schwab's retail customers to receive worse execution quality than under the current system (and, as discussed above, certainly if the Order Competition Proposal is adopted as well). Notwithstanding the Commission's assertion that many broker-dealers would be unlikely to reintroduce trading commissions due to competition in the retail market, we believe commissions at some firms would likely return if the BE Proposal is implemented in its current form, particularly if the BE Proposal effectively eliminates PFOF as a source of revenue for those firms. This result would almost certainly more than offset any potential incremental price improvement retail orders may receive, while making the market less accessible to many households and planning for their financial future more uncertain, thereby harming the very retail investors the SEC claims to protect. Likewise, fixed income markups and markdowns would also likely increase. As the National Association of Securities Professionals noted in its comment letter, "perhaps at no point in the history of our country have

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[51] We note that, in almost every other context, including an SEC proposal published on the same day as the BE Proposal, regulators have recognized that riskless principal transactions are effectively agency trades, not principal trades. *See* Rule 605 Proposal, 88 Fed. Reg. at 3871 (proposing "that market centers should include riskless principal trades in the category of trades executed away from the market center [because this approach] would increase transparency about internalization by wholesalers, as information on the extent to which wholesalers internalize order flow is currently obscured by the inclusion of riskless principal trades into the category of trades executed at, rather than away from, the market center"); *see also* BE Proposal, 88 Fed. Reg. at 5464.

Americans from all backgrounds taken a more active role to improve their financial lives, including participating in the stock market. By most accounts, retail investors today are able to trade and invest easily and at very low cost. The recent gains in retail investor participation, particularly among lower income and diverse Americans should be promoted by the SEC and the industry as a whole."[52]

Finally, the Exchange Act requires that the Commission consider "the impact any… rule or regulation would have on competition." The Commission cannot promulgate any "rule or regulation which would impose a burden on competition not necessary or appropriate in furtherance of the purposes of" the securities laws.[53] And, whenever the Commission is engaged in rulemaking, it is "required to consider or determine whether an action is necessary or appropriate in the public interest;" and whether the rule "will promote efficiency, competition, and capital formation."[54] Overly prescriptive rules such as Best Execution Proposal plainly do not meet these statutory requirements. Further, under the APA, the Commission is required to "examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choices made."[55] The Best Execution Proposal, however, includes no clear quantitative analysis of the costs and benefits accompanying the proposed changes it contemplates (and none at all with respect to its significant impact on fixed income markets), making it hard to demonstrate that any purported benefits would outweigh its substantial costs.

Key Concerns

Achieving zero commissions for retail equity investors in 2019 was the culmination of five decades of progress among Schwab and others in the industry and came about due to intense competition to drive down trading costs for investors. For many start-up firms, this competition was enabled by their ability to generate revenue through the receipt of PFOF, a practice the Commission has reviewed (and continued to allow) many times since the 1990s.[56] PFOF practice has developed in the context of broader economic considerations: it comes from the wholesaler's risk premium and not at the expense of price improvement to clients.[57] Moreover, it has enabled firms like Schwab to move to commission-free trading for equities. The increase in retail investor participation ever since Schwab led the industry toward commission-free online trading of equities has allowed millions more individuals to take control of their financial futures and instilled greater confidence in the financial markets. It would be a mistake—and an irrevocably damaging one—to move to a market structure that could require brokers to

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[52] National Association of Securities Professionals, *Comment Letter on SEC Equity Market Structure Proposals* at 1 (Feb. 28, 2023) available at https://www.sec.gov/comments/s7-31-22/s73122-20158251-326339.pdf.
[53] 15 U.S.C. § 78(w)(a)(2).
[54] 15 U.S.C. § 78c(f); 15 U.S.C. § 80a-2(c).
[55] *Motor Vehicle Mfrs. Ass'n of U.S. Inc. v. State Farm Mut. Auto Ins. Co*., 463 U.S. at 43 (citation omitted).
[56] The Commission has been considering PFOF, and the conflicts it presents, for decades. Each time, the Commission has properly concluded that the benefits of allowing it to continue (if properly disclosed) are greater than the costs of prohibiting it. *See* Securities and Exchange Commission, Office of Compliance Inspections and Examinations, Office of Economic Analysis, *Special Study: Payment for Order Flow and Internalization in the Options Markets* (December 2000) available at https://www.sec.gov/news/studies/ordpay.htm.
[57] Letter re: Proposed Regulation Best Execution, from Professors Christopher Schwarz and Philippe Jorion, University of California, Irvine, to Vanessa Countryman, Secretary, Secs. & Exch. Comm'n (March 29, 2023), https://www.sec.gov/comments/s7-32-22/s73222-20161913-330740.pdf.

reintroduce explicit trading fees that could reduce retail investor participation in the markets by returning to the days where any gains could be offset by trading costs. Potential additional sub-penny price improvement that the BE Proposal seeks to achieve (which itself is speculative at best) simply does not offset the reintroduction of commissions in any meaningful sense. The BE Proposal risks setting the industry back significantly in maintaining such an environment. The BE Proposal fails to acknowledge the simple economic reality that broker-dealers (like any business) must generate revenue, and the BE Proposal creates perverse incentives for broker-dealers, by effectively eliminating PFOF, which will in turn encourage (or force) many broker-dealers to return to the prior method of earning revenue via commissions, which in turn will carry costs that are borne by retail investors. If the Commission no longer approves of PFOF, a practice that has been in place for decades and subject to examination by the SEC and FINRA throughout that time, then the agency should take straightforward steps to ban it, instead of essentially banning it through the BE Proposal without explicitly saying (or doing the necessary cost-benefit analysis that would entail) that this is its purpose.

The Commission's cost benefit justification for the BE Proposal is unsound; it merely borrows heavily from the Order Competition Proposal's deficient economic analysis, which provides data primarily on equity market trades, despite the fact that the BE Proposal would also apply to all securities. This is incorrect as the non-equity markets are all extremely different from each other and from the equity markets, making an analysis of data on each specific market all the more important before considering proceeding with such a significant proposal. As noted above, the Commission also has asked in a comment for the industry to explain how best execution is accomplished.[58] If the Commission does not know this before publishing the BE Proposal, then the SEC should step back from or at least radically rethink what it is doing and speak with market participants before moving forward with such an impactful rule. The Commission's proposed "fix" that reflects that it did not first understand the problem (or indeed whether there even is one), needs to be addressed.

Schwab is also concerned that the SEC is considering transforming a best execution violation into a per se antifraud violation. This would cause a chilling effect on the market as it would represent a significant overreach in the deployment of the antifraud provisions of the Exchange Act. The Commission already has antifraud jurisdiction and can bring best execution cases under its existing authority.[59] The SEC does not ever make the claim that the current best execution requirements that exist for broker-dealers are not doing the job, making it unclear why this proposal is even necessary, especially since the SEC has never brought any action against FINRA for failing to pursue best execution cases. If the SEC has an issue with how FINRA has been enforcing its best execution rule or concerns with the rule itself, the SEC should have made FINRA change its ways. This, however, has never occurred in the 30 years that FINRA has had guidance in place setting forth best execution expectations for broker-dealers and seems unlikely to be the case given that FINRA has included best execution in its exam priorities or findings letters for at least the last five consecutive years.

Fixed Income Securities Warrant Much More Nuanced Consideration

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[58] *See supra* note 18.
[59] *See* BE Proposal, 88 Fed. Reg. at 5485, FNs 289 and 292.

It is unacceptable for the Commission to apply the same proposed principles to fixed income as to other securities, particularly equities, as the characteristics and trading qualities of these securities are drastically different. The BE Proposal is deficient when applied to the fixed income market and reflects the Commission's failure to engage with market participants in advance of publishing the Proposals or to consider the substantial effects the BE Proposal would have on a market that, unlike the equity markets, is dealer-driven. The definition of "conflicted transaction" would include essentially all fixed income trades as the fixed income market is primarily a dealer market.[60] This fact alone renders the cost analysis performed by the Commission grossly underinclusive, where the Commission makes no allowances for systems development, connectivity charges and costs for additional trading personnel to address the conflicted transactions requirement. The idea of having to seek out additional potential venues in the fixed income context does not reflect market reality and can often work *against* achieving best execution for a customer's order—facts recognized by both FINRA and the MSRB when publishing guidance on their respective best execution rules to fixed income trading.[61] Adding more routing destinations does not create an ability to access greater liquidity in the fixed income market because these venues often display duplicative quotes of dealers who are already advertising on a connected ATS. Moreover, mandating that firms check additional venues that have not historically provided liquidity seems only to require chasing potential (and unlikely) pricing opportunities and to ignore other traditional best execution factors, such as likelihood of execution, speed of execution, risk of information leakage, and transaction costs.[62] The Commission failed to address the paucity of reliable data which firms can obtain in performing a regular and rigorous review in the fixed income context. If the Commission does proceed with some form of this proposal, which we strongly urge against, then at the very least it should make clear that a firm does not face strict liability for not getting the best price for every order if some liquidity source is later determined to have a better price.

For example, with respect to fixed income trading, the Schwab platform is extremely open in nature, and competitive pricing practices are inherent on the platform. For most fixed income products in the secondary market, clients pay $1/bond which is disclosed in our published pricing schedule. Consistent with existing SRO guidance, we follow the principles of best execution today, including the use of daily systems and practices designed to obtain the best possible executions for our clients as they are trading, as well as a regular and rigorous periodic review of our order routing and execution policies (when possible, given the lack of standardized data across the fixed income marketplace). Trade commissions and execution costs have never been lower, nor has the client experience ever been better. Therefore, it is unclear why the Commission seeks to advance this proposal and introduce crippling compliance costs into fixed

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[60] Under the BE Proposal, a "conflicted transaction" occurs when a broker-dealer (1) executes an order as principal, including as a riskless principal, (2) routes an order to an affiliate for execution, or (3) provides or receives payment for order flow, including exchange rebates (88 Fed. Reg. at 5464).
[61] *See* FINRA RN 15-46 ("Although a firm should generally seek out other sources of pricing information or potential liquidity when little or none is otherwise available, which may include obtaining quotations from other sources (e.g., other firms with which the firm previously has traded in the security), FINRA recognizes that, in other instances, obtaining quotations from multiple sources could adversely affect execution quality due to delays in execution or other factors."); *See* MSRB Implementation Guidance on MSRB Rule G-18.
[62] Moreover, the burden a firm would face in determining not to route to or query each and every venue is significant given the ability for a regulator to challenge each decision in hindsight.

income order handling.

Riskless Principal Trades Warrant More Nuanced Consideration

As suggested above, Schwab believes the SEC needs to more thoughtfully assess how to address executions by different types of venues in the BE Proposal. In particular, riskless principal trades should be excluded from the conflicted transaction definition. The Commission's proposed treatment elevates form over substance, since a riskless principal trade is essentially an agency trade in a noncentralized dealer market and is attended already by significant protections. Riskless principal trading is already subject to careful oversight so that clients can receive a "clean" yield on their trade, and understand what their return is going to be, inclusive of all costs.[63] Through the Markup Disclosure rule, transparency for those costs already exists. The economic study cited by the Commission did not analyze riskless principal trades and thus cannot constitute support for the conclusion. Indeed, the study cited by the Commission is quite deficient in its analysis and dubious in its assertions, and should be closely scrutinized in terms of the support it purports to lend for why riskless principal trades should be subject to higher scrutiny under the BE Proposal.[64]

The Commission has not demonstrated that the alleged conflicts in conflicted transactions have any actual negative impact on client executions. When Schwab customers execute against a Schwab principal quote in our trading system, it is because Schwab is the best priced offering. Schwab's salesforce is not incentivized to recommend inventory over other bonds, and we do not make routing decisions based on markups. Schwab's customers should not be forced to purchase bonds from a third party at a higher price. It is also unclear why the Commission believes customers would obtain better trade execution from another firm with no ongoing relationship with the client—giving them motivation to extract as much profit as possible in this one transaction—than it would from the firm holding the client account. The Commission has failed to demonstrate any evidence on this point.

No evidence exists that order execution quality suffers when trading against principal or when PFOF is used. If anything, the opposite makes more sense because of scrutiny to which such activity is already subject.

The BE Proposal Needlessly Upends the Way Conflicted Transactions Are Managed

The BE Proposal would be extremely burdensome for wholesalers and retail brokers engaging in so-called "conflicted transactions" for or with retail customers given the

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[63] Schwab provides clients with a transparent fixed transaction fee schedule of $1/bond (available online in our pricing guide) for most secondary market fixed income investments.

[64] *See* BE Proposal, 88 Fed. Reg. at 5446, 5464 at FNs. 66 and 182;
John M. Griffin, Nicholas Hirschey, Samuel Kruger, *Do Municipal Bond Dealers Give their Customers 'Fair and Reasonable' Pricing?* JOURNAL OF FINANCE, FORTHCOMING, (Aug. 4, 2022) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4181062. Without rehashing the paper's four "findings" (see p. 1) or the arguments laid out in support, we note among its deficiencies that the paper seems to conflate bond trading characteristics (compensation, disclosures, buy and hold strategies, mark up practices) with those prevalent in the equity trading, and offer odd observations that suggest a lack of understanding as to how such markets function. By contrast, we note that even the Department of Labor in adopting its fiduciary rule, aptly recognized that riskless principal trades should be treated as agency trades for purposes of determining the applicable standard of care.

unreasonable breadth of the definition. As proposed, the term "conflicted transactions" would encapsulate a significant number of transactions handled for a retail investor (and, as discussed above, effectively all transactions involving fixed income securities) and include a transaction in which a broker-dealer provides or receives PFOF or exchange rebates. Indeed, every limit order posted on an exchange which is executed and receives a rebate (PFOF) will be considered a conflicted transaction. This will require retail brokers to track executions on other markets to see if a more timely execution could have occurred—for every single limit order. The Commission has failed to make clear how a broker-dealer would document conflicted transaction compliance without doing so on an order-by-order basis, which even the SEC has noted would be too costly to comply with.[65] The Commission appears again to be targeting wholesalers and benefiting exchanges, despite evidence that wholesalers provide more price and size improvement for retail investors.

Schwab Already Carefully Manages Conflicts of Interest

Schwab already uses a number of approaches to manage conflicts of interest, without layering on another best execution rule—particularly when existing best execution requirements apply to *all* customer orders, even so-called "conflicted" ones. Like other market participants, we design our own mitigants to police conflicts of interest (e.g., no rep or client incentive to choose our inventory over another dealer's and automatic best-price routing regardless of source). Rather than creating a prescriptive set of rules, it is better for firms to identify, assess, and mitigate their conflicts from a more principles-based framework. This is something that Schwab and similarly situated firms have done for years under existing guidance and regulatory oversight.

We estimate that for fixed income activity alone, the proposed requirement under the Conflicted Transaction standard to make and keep records showing the checking of additional markets would cost us over $11.5 million annually in personnel and systems, again, for just a portion of our overall business. It would force us to turn back the clock to a pre-automation era where costs to clients were much higher and outcomes much worse. Additional costs of the conflicted transaction definition include delays or non-fills of client orders. Due to the routing process that would be inherent in the new best execution process, it will lead to an overwhelmed system, unexecuted client orders, and trades at worse prices. Clients may prefer immediacy in orders in order to avoid such risks, especially when the benefit, if it exists at all, would be very small.

The Proposal's Outline of Board-Related Requirements Is Burdensome and Unnecessary

As set forth in the BE Proposal, the requirement for the Board of the company to review order routing will be incredibly burdensome and would be attended by very limited benefits. This requirement would in effect bring the Board into the management of the company—something that is not the Board's role. Asking the Board to certify that these numbers are correct on a frequent basis will open corporate boards up to new liability and take valuable time away from other responsibilities that already require thoughtful attention. For a company like Schwab, forcibly elevating best execution metrics to the full Board is impractical on several levels. It

[65] BE Proposal, 88 Fed. Reg. at 5539.

assumes the full Board has the requisite expertise to evaluate such information and for those members that do not have such expertise, it obligates them to become proficient in this area to avoid potential liability.

While boards and management hold close ties to one another, their duties and responsibilities are distinctly different. Proposed Rule 1102 would require that a broker-dealer at least annually review and assess the design and overall effectiveness of its best execution policies and procedures, including its order handling practices. The broker-dealer would have to prepare a written report detailing the results of such review and assessment, including a description of all deficiencies found and any plan to address deficiencies, and the report would have to be presented to "the broker-dealer's board of directors (or equivalent governing body)."

As a threshold matter, references in the proposing release and proposed rule language to "the broker-dealer's board of directors (or equivalent governing body)" create ambiguity over whether the proposed requirements would apply to the board of the broker-dealer entity itself, the board of the broker-dealer's ultimate parent, or even a management level committee with significant oversight responsibility. Especially in the context of a large, complex financial services institution, the applicability of such requirements at the parent board level or to a parent level management committee would be highly inappropriate and counterproductive by imposing oversight responsibilities on board or committee members who, by virtue of their parent level role in many cases would have no involvement in the business or supervision of the broker-dealer entity and would likely lack experience with the proposed reporting. With respect to boards in general, the proposed reporting and review requirements entail burdensome operational level duties that would distract from directors' core governance responsibilities. Although, as we address next, these concerns will be just as valid with respect to subsidiary-level boards, they are even more problematic at the parent level. Thus, if any duties were to extend to a broker-dealer's "governing body," such requirements should be expressly limited to the governing body of the broker-dealer entity itself, and only to the extent a broker-dealer is not organized as a corporation with a board of directors, to the managing members of such entity.

In any case, the proposed reporting and review responsibilities are incompatible with board responsibilities generally and would be more appropriate and effective at the level of a broker-dealer's senior most executive rather than its board of directors. The proposed reporting and review requirement contradicts long standing governance principles distinguishing between management's responsibility for the day to day operation of the business and the board's responsibility for establishing strategy and values, monitoring financial performance, installing executive management, and overseeing risk management and internal controls.[66] Involving board members in the operation of a broker-dealer's business undermines effective governance by distracting the board from these critical oversight functions and creating uncertainty as to supervision and management responsibilities as between the board and management. Regulatory guidance acknowledges the importance of maintaining the distinction between management and

[66] See, e.g., The Clearing House, The Role of the Board of Directors in Promoting Effective Governance and Safety and Soundness for Large U.S. Banking Organizations, at p. 6 (May 05, 2016) (TCH Report): "This distinction is particularly critical in the context of the board of directors of a large U.S. banking organization as it navigates a confluence of fiduciary responsibilities under state law, requirements under federal banking law, as well as supervisory expectations and mandates of regulators (which typically include a number of U.S. and non-U.S. regulatory bodies for a large banking organization operating in multiple jurisdictions".

board responsibilities,[67] and regulators themselves have warned against the inclination of government agencies to impose management level responsibilities on bank directors and the risk of diverting boards from their core governance responsibilities.[68]

Beyond just blurring the line between the board's oversight role and traditional management responsibilities, Proposed Rule 1102 contradicts longstanding principles of supervision in broker-dealer regulation. The proposed reporting and review requirement – and certainly any additional responsibility for policy approvals – imposes direct supervisory responsibilities on board members and thus exposes them to increased regulatory and civil liability. In recognition of the distinction between management and board responsibilities, FINRA rules recognize that a broker-dealer's board members, absent other involvement in the business, are not deemed to have supervisory responsibilities per se and are thus not subject to registration and licensing.[69] Expanding board duties to include involvement in order routing operations and compliance beyond the board's basic oversight role risks subjecting board members to FINRA's registration regime and makes it more challenging for broker-dealers to attract board members, especially in view of the attendant regulatory exposure and litigation risk.

Unlike those representatives with responsibility for supervision of order routing at the management level, board members are far less likely to have the requisite expertise to evaluate the matters and data encompassed by the proposed reporting requirement. Inserting such individuals in the chain of supervision thus risks undermining the Commission's goal of enhancing a broker-dealer's compliance with best execution.

In analogous contexts, such as Chief Executive Officer ("CEO") compliance certification for broker-dealers,[70] and certifications by public company CEOs and Chief Financial Officers of the effectiveness of disclosure controls and internal control over financial reporting,[71] the Commission has deemed it appropriate to assign ultimate responsibility to a registrant's senior most executives and has not extended such management level responsibilities to those with responsibility for an entity's governance. To the extent that the Commission continues to believe

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[67] See, for example, examiner guidance from the Federal Reserve Board that the board of a member bank "should delegate the day-to-day routine of conducting the bank's business to its officers and employees . . . ." FRB Commercial Bank Examination Manual, Section 5000, as cited in TCH Report, supra note 65.

[68] See, e.g., Speech by Governor Daniel K. Tarullo at the Association of American Law Schools 2014 Midyear Meeting, Washington, D.C. (June 9, 2014): "There are many important regulatory requirements applicable to large financial firms. Boards must of course be aware of those requirements and must help ensure that good corporate compliance systems are in place. But it has perhaps become a little too reflexive a reaction on the part of regulators to jump from the observation that a regulation is important to the conclusion that the board must certify compliance through its own processes. [Regulators] should probably be somewhat more selective in creating the regulatory checklist for board compliance and regular consideration . . . the failure to discriminate among [MRAs] is almost surely distracting from strategic and risk-related analyses and oversight by boards," as cited in TCH Report, supra." A 2015 International Monetary Fund report likewise highlighted this risk – see United States Financial Sector Assessment Program, Detailed Assessment of Observance of the Basel Core Principles for Effective Banking Supervision (April 2015) IMF Country Report No. 15/89, as cited in TCH Report, supra note 65.

[69] See NASD Notice to Members 99-49 (June 1, 1999).

[70] See SEC Release 34-50347, Self-Regulatory Organizations; Order Approving Proposed Rule Change and Amendments Nos. 1 and 2 hereto by the National Association of Securities Dealers, Inc. Relating to Chief Executive Officer Certification and Designation of Chief Compliance Officer (September 10, 2004).

[71] See Release Nos. 33-8124, 34-46427, Certification of Disclosure in Companies' Quarterly and Annual Reports (August 28, 2002).

that a reporting and review requirement remains essential from a compliance standpoint, it should rely on the extensive and established CEO certification workflow that firms must already maintain for compliance and control purposes.

When each entity directs its attention towards its own duties and responsibilities, the framework works like clockwork. The Board should not be expected to be involved in the management of specific regulatory risk controls. A CEO certification workflow exists to certify the risk control environment for the firm and its thorough, well-designed workflow.

At Most, Mandate Additional Disclosure Instead of the Best Execution Proposal

Although it categorically believes the Commission should not proceed with the BE Proposal, Schwab would offer an alternative recommendation. Since accessible and usable disclosures are central to the Commission's mission of protecting investors, the improvements to the Rule 605 reports, which we comment on below, should be enough to allow investors to assess whether they would like to proceed with a broker-dealer that uses PFOF or not. There are already brokers who choose to not pay PFOF, giving retail investors a choice and allowing competition for clients to exist around PFOF. Instead of another Best Execution rule, Schwab would support additional transparency measures relating to receipt or payment of PFOF in connection with equity and options trades. We believe that estimated PFOF, as well as price improvement, should be shown to clients on an order by order basis to allow clients to more thoroughly understand what happens in the execution of their orders. Currently, price improvement is shown for equity and options trades, and estimated PFOF could be noted along with price improvement. This would serve a similar function to the BE Proposal, without eliminating PFOF by allowing retail investors to choose whether they want to work with a broker-dealer who receives PFOF or does not. It would also lead to more competition on PFOF rates, making it an easier metric for brokers to compete on.

As a retail broker operating under the fundamental principle of putting clients first, Schwab also would be supportive of a cap on order routing revenue rates. This would fulfill the SEC's objective of protecting retail investors by ensuring PFOF rates do not become excessive or lead to distortive effects. We note that there is already a precedent for this type of a cap, as Rule 610 of Reg. NMS limits the fees that any trading center can charge for accessing its protected quotations to no more than $0.003 per share. Importantly, however, as opposed to a flat dollar cap on order routing revenue rates, we would advocate for a mandated permissible ratio of order routing as a 'percent of spread' to account for differences in client types and order flow composition between different brokers.

We know that other broker-dealers have used different models for collecting PFOF. For example, other firms have accepted an ~80/20 split between order routing revenue and price improvement, a departure from the more typical ~20/80 split for other retail brokers. We would also advocate for brokers to level order routing revenue rates across liquidity provider partners that brokers are connected to in order to manage potential conflicts of interest. This practice is already core to Schwab's current order routing strategy as it forces us to route client orders to the market centers that provide us the best execution quality (as opposed to the highest order routing revenue rates). We believe that having the SEC mandate this requirement for all brokers would further mitigate potential conflicts of interest involved with the practice of order routing.

The Commission Should Continue to Allow PFOF Because it Helps Firms Deliver Tangible Benefits to Retail Investors

At its core, the BE Proposal seems to aim to completely eliminate PFOF and both wholesaler and retail broker internalization. As the Commission concludes, the BE Proposal is "likely to reduce the share of retail customer order flow that is internalized."[72] The Commission is clearly indicating that it wants to reduce retail trading off-exchange. If PFOF does decrease (or is eliminated) this would necessarily increase overall trading costs for retail investors. The SEC has acknowledged this, noting that the rule's costs could be passed on to retail investors, but the SEC ignores the fact that this would defeat much of the rule's purpose. As Commissioner Peirce asked, "Why is withholding price improvement from the customer worse than charging the customer a (likely higher) commission?"[73] PFOF is already not permitted to interfere with a firm's duty of best execution.[74] This makes further regulation of PFOF unnecessary and confusing as FINRA is already clear on how firms are expected to handle PFOF. Some studies, which the Commission does not adequately address, have indicated no correlation exists between execution quality and PFOF.[75] One of these studies, "The 'Actual Retail Price' of Equity Trades" by Christopher Schwarz, et. al., studied trades the authors made with five different brokers at six different wholesalers. Two of the brokers offered equity market orders without PFOF, and the other three collected PFOF for equity market orders. The experiment generated about 85,000 trades and the experiment found that the "two brokers with no PFOF have worse price execution on our trades than one of the brokers with PFOF." Additionally, the PFOF payment ranged from $0.001 to $0.002 per share—an insignificant amount as compared to the price improvement of the brokers, which averaged between $0.03 and $0.08 per share.[76] And these results are not alone in showing the benefits of a system that includes PFOF. After the U.K. effectively banned order routing revenue in May 2012, a CFA Institute study[77] showed that that the ability for retail-sized orders to receive midpoint execution declined from 8.6% of trades to 1.8% of trades (in comparison, over 50% of Schwab's market orders receive midpoint execution). Furthermore, there were increases in both the percent of trades executed worse than the best bid/offer, and quoted spreads on small-cap stocks. This deterioration of market quality occurred even though market volatility had reduced from the pre-ban to post-ban period. In December of 2022, European Union Member States rejected plans to ban brokers from earning PFOF.

While some market participants believe that the U.K.'s lack of price improvement is evidence of an efficient market because everyone is treated equally, we see it as a market that prevents the efficient allocation of resources. As discussed previously, retail order flow is

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[72] BE Proposal, 88 Fed. Reg. at 5530.
[73] See Public Statement by Commissioner Hester M. Peirce, Is This The Best Execution We Can Get? (Dec. 14, 2022) available at https://www.sec.gov/news/statement/peirce-best-execution-20221214.
[74] See FINRA Notices 15-46, 21-23; *See* Securities and Exchange Commission, Office of Compliance Inspections and Examinations, Office of Economic Analysis, *Special Study: Payment for Order Flow and Internalization in the Options Markets* (December 2000) available at https://www.sec.gov/news/studies/ordpay.htm.
[75] Christopher Schwarz, et. al. *The 'Actual Retail Price' of Equity Trades* (Aug. 17, 2022) at 3 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4189239.
[76] Christopher Schwarz, et. al. *The 'Actual Retail Price' of Equity Trades* (Aug. 17, 2022) at 3 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4189239.
[77] CFA Institute, Payment for Order Flow in the United Kingdom (June 2016) https://www.cfainstitute.org/-/media/documents/article/position-paper/payment-for-order-flow-united-kingdom.ashx.

inherently less risky and therefore retail investors should be allowed to participate in the natural economic benefit of better prices, as compared to what non-retail order flow receives. The current U.S. market structure allows for this, which enables Schwab to produce excellent order execution outcomes for our clients, in part through investments in continuous improvements to its trading systems and customer experience. In practice, jurisdictions that have banned PFOF have not seen the improved executions for retail orders that the Commission seems to assume will result from the BE Proposal.

IV. Rule 605 Proposal

Overview

The current disclosure requirements in Rule 605 are in need of updating, and the industry has worked together recently to carefully consider the optimal ways to improve the reports created under the rule, including through the Financial Industry Forum ("FIF").[78] Like many in the industry, we had hoped to see the Commission take on board more from the FIF letter as a practical set of steps to improve upon Rule 605 disclosure. More broadly, we strongly support enhancing execution quality disclosure, and thus support features of the Rule 605 Proposal the Commission has offered up, provided account is taken of the thoughtful feedback market participants are providing. Comprehensive and accurate data is critical to enabling both regulators and market participants to assess the impact of any other changes made to current market structure. The Rule 605 Proposal amends order execution disclosure rules under Regulation NMS Rule 605, expands the entities subject to the rule, changes order categorization and modifies required information reports, with the goal of improving the ability of participants to compare execution quality across market centers and brokers. Rule 605 is in need of a refresh, and Schwab supports many of the proposed Rule 605 Amendments modified by the comments noted below.

Key Concerns Warrant Change or Clarification Before Proceeding with 605 Enhancements

Notwithstanding Schwab's general support for enhancements to Rule 605 reporting, we have a number of key concerns about the Rule 605 Proposal, including the following:

Use of Summary Data

Key to the Commission's Rule 605 Proposal is an amendment to adopt a new summary report pursuant to Rule 605(a)(2) ("Summary Report") that can be accessed and read by market participants and investors. Regarding the proposed Summary Report, the Commission states: "This change would increase competition among broker-dealers that accept customer orders for execution by providing information that market participants can use to evaluate and compare broker-dealers' execution quality. This could lead to faster executions, better price improvement, and a shift in order flow to those broker-dealers offering the best execution quality

[78] Financial Information Forum, *Comment on Rule 605 Modernization Recommendations* (January 30, 2019) available at https://www.sec.gov/comments/s7-02-10/s70210-5002077-182848.pdf.

for their customers." Schwab agrees with the intent of enhanced disclosure. However, the reporting, as proposed, fails to allow for an apples-to-apples comparison, which directly subverts the Commission's stated goals.

As proposed, the Summary Report fails to allow individual investors to make meaningful comparisons between brokers. As one example, the E/Q ratio (defined above) is a very common metric used within the industry to judge execution quality, as it does a good job of providing a normalized comparison of price improvement relative to the price improvement opportunity. The price improvement opportunity is represented by the quoted spread. The best price that could reasonably be expected by an investor is midpoint between the NBBO, which results in an E/Q of zero, while a fill at the far touch results in an E/Q of 100. When the industry calculates an aggregate E/Q across orders, it uses a spread-weighted approach, which allows one to preserve the ability to back out the total amount of price improvement if one also knows the effective spread and number of shares traded. The Commission is proposing to calculate an E/Q for each order, and then share-weighting E/Q from there. This method, however, loses the intelligibility of E/Q by detaching from it the ability to understand it in the context of the opportunity for price improvement. In today's market structure, wholesalers provide retail investor orders with discretionary price improvement, which is defined as price improvement provided on a principal basis above what can be expected from executing an agency or riskless principal trade. These discretionary price improvement dollars are fungible, meaning they can be allocated to any order one chooses. The Commission's proposed share-weighting of E/Q will result in the perverse incentive to provide more price improvement on narrow spread securities and less price improvement on wide-spread securities, a result that runs contrary to what one should expect. Wholesalers providing less price improvement could achieve a better E/Q as compared to the industry standard spread-weighted approach. The Commission would immediately see the error in the spread-weighted approach if it showed both effective spread and quoted spread in the summary report, and then allowed individuals to compute their own E/Q from those two numbers. This is, in fact, what Schwab proposes.

Table 15 of the Order Competition Proposal shows that, among other factors, Price Impact and Quoted Spread have a strong relationship with E/Q. Price Impact can be calculated as the difference between the Effective Half-Spread and the Realized Half-Spread. Percentage Effective Spread is already included in the summary report, and Percentage Realized Spread can easily be added to the summary report from the (a)(1) report (technically there are two realized spread metrics. We propose using the 15 second variety since it is more relevant for high-volume securities that individual investors trade more frequently). From this, people can easily calculate Price Impact.

Ideally, we would want to have quoted spread, effective spread, and realized spread (all share-weighted) in the summary report, because from this one can calculate E/Q and Price Impact. Neither of these metrics are well understood by individual investors, but if we were already prepared to educate investors on E/Q, then we can also educate them on the meaning of Price Impact.

The Summary Report Should Be Derivable from the Rule 605(a)(1) Report

There should be a logical consistency between the Summary Report and its more granular companion, the Rule 605(a)(1) report. Unfortunately, as proposed, this consistency does not exist. For example, if one wanted to aggregate the Percentage Effective Spread from the Rule 605(a)(1) report, and compare it to the Summary Report, one would come up with different numbers. The reason is that notional order value (midpoint of NBBO times shares) does not exist as a field in the (a)(1) report. This is needed because the denominator of Percentage Effective Spread is notional value.

Additionally, no definition exists in the proposal for the Summary Report metric Average Percentage Price Improvement Per Order. Perhaps one could assume that this is the sum total price improvement divided by the sum total notional value. If that is the case, then this is another metric that cannot be derived from the (a)(1) report. However, the words "per order" do not make sense in this context, so the Commission's intent is far from clear.

Non-Marketable Limit Orders ("NMLOs")

The 605(a)(1) report's beyond-the-midpoint limit order category adds unnecessary complexity, as it is not a large category today, and will become de minimis with the Market Data Infrastructure ("MDI") round lot definitions (and if the Commission's tick proposal is adopted). Retail investors are less able to compete with market professionals on the quote with narrow quoted spreads and granular tick increments. This will result in fewer NMLOs, and even fewer beyond-the-midpoint limit orders. We have come to these conclusions by studying the use of NMLOs across symbols of varying quoted spreads. Therefore, beyond-the-midpoint limit orders should be collapsed within the NMLO category. The Commission argues that beyond-the-midpoint orders have both characteristics of marketable orders and NMLOs. However, the fact that the limit order's price between the midpoint and far touch (exclusive) is a variable controlled by the individual investor—and is responsible for some of its "price improvement"—would create statistics related to marketable orders that cannot be compared across market centers and brokers.

The Commission should exclude NMLOs entered outside normal hours, as these will likely skew the statistics. Frequently, the first quote after opening is wide and not representative of the quote when the primary exchange opens. Many orders deemed NMLOs by this benchmark will likely fill as soon as the primary exchange opens. Therefore, including these orders will skew the NMLO stats and lead to difficult comparisons between brokers. Including NMLOs entered outside market hours may be akin to including stop market orders in the market order category, as they are filled under very different circumstances from the other orders in the category.

Additionally, the execution speed metric for marketable limit orders should be limited to the size available at the best protected quote at the far touch. This will ensure that orders larger than the quoted size that take out the best price and then are reflected for the balance don't skew the statistics.

Order Size Categories

Rather than using round lot definitions under the MDI Rule, a more robust approach for the order size categories (and one promoted by FIF) would be to use notional size categories. Some problems with the proposed round lot size bucket are as follows. First, the process for assigning the number of shares per round lot per security is not dynamic enough to make this a meaningful delineation. The price of a stock can vary dramatically in the three-month period in which the round lot size is set. So, if the intent is to approximate the notional order size by the round lot category, the intent will frequently fail reality. Second, after the size of an order has achieved round lot status, there is no intrinsic difference in the size of the order until it reaches 10,000 shares or $200,000. Therefore, bucketing by round lots has no application to the broader market structure. Third, with notional size categories, a natural breakpoint between size categories exists at $200,000. Specifically, we suggest that a size bucket of $200,000 and greater, while of limited value, could exist within the 605(a)(1) report, while that size bucket is excluded from the Summary Report. The Commission itself has demonstrated by its analysis that if the intent is to meaningfully compare broker-dealers' execution quality, efforts must be made to normalize order flow variables.

Order Route Time, Not Order Receipt Time

Schwab believes any Summary Report should use Order Route Time, not Order Receipt Time, for nonmarket centers in Rule 605 reports, to allow for the fact that broker-dealers perform necessary review activities following receipt of the order but prior to routing the order. Current Rule 605 reports require that the order receipt time be the benchmark time for determining marketability and quote-based metrics. This standard is appropriate for evaluating market centers; however, order receipt time is not an appropriate trigger for non-market center reporting venues who will be required to provide reporting under the proposal.

Retail brokers like Schwab use route time to compare the execution quality of the venues routed to for execution. This practice will not change if the proposal is adopted and implemented. Therefore, requiring a different benchmark for Rule 605 reporting that cannot be used in any other best execution context creates additional burdens on retail brokers.

Additionally, the use of order receipt time rather than route time will result in some execution quality statistics like execution speed not being fairly represented in the reports due to outliers caused by market access review activities. Brokers are required to have market access controls in place, and some brokers' order flow requires more orders to pass through a review queue than others. This is an especially important issue for the Summary Report, which only requires execution speed to be measured as a share-weighted average. By nature, larger share orders will be more likely to be sent to a review queue, and due to their size have a disproportionate negative impact on average execution speed. Consequently, using order receipt time could create a perverse incentive for firms to diminish time spent on necessary reviews in an effort to improve execution speed statistics.

If the Commission's goal is to provide individual investors with the information needed to fairly evaluate brokers' execution quality, then route time instead of receipt time should be the benchmark for non-market centers in Rule 605 reports.

Exclude Stop Orders

The Summary Report should exclude stop orders. The definition of executable stop order runs counter to how stop orders actually become executable. FINRA Rule 5350 defines a stop order as "an order to buy (or sell) that becomes a market order to buy (or sell) when a transaction occurs at or above (below) the stop price." Broker-dealers may elect to trigger a stop order in a different fashion but are prevented from calling it a "stop order." The most common other trigger condition on a sell stop is the bid, but very rarely do equity sell stop orders trigger off the ask. An alternative approach would be for the Commission to consider a stop order "executable" when the order's condition has been met. However, this will create additional complexity.

Stop orders can have three distinct behaviors after they are triggered—market order, marketable limit order, or non-marketable limit order. The correct way to include these orders would be to create three separate categories of stop orders reflecting these triggers; however, this will create too much complexity, so stop orders should be excluded.

Exclude Best Available Displayed Price

The Summary Report should exclude Best Available Displayed Price because this metric is only relevant in a small number of occasions and would only add unnecessary complexity to the report. The Commission proposes adding five metrics using "best available displayed price". However, the Commission cited a recent academic working paper showing that odd-lots offer better prices than the NBBO 18% of the time for bids and 16% of the time for offers. Further, when the MDI's new round lot definitions take effect, the percent of the time "best available price" differs from the NBBO will be even smaller. If it is only relevant a small part of the time, and it fails to provide context into how many shares are included in the price or how many shares the order was for, the "best available displayed price" metrics will border on being meaningless and add unnecessary complexity to the report.

The Rule 605 Proposal Is Inter-Related with the Others, a Point Ignored by the Commission in Each Proposal

Overlapping dependencies across the other recently published proposals, as well as the previously approved but not implemented MDI rule, risks creating and presenting data in a way that will lead to incorrect conclusions. The Commission acknowledges that Rule 605 needs a size improvement metric, but this is not considered in the economic analysis of the proposed Order Competition Rule, thus making it unclear if the Order Competition Rule would make size improvement the same, better, or worse than wholesalers currently do.

Schwab questions whether the requirement that broker-dealers report under Rule 605 will allow market participants to compare execution quality among broker-dealers in a meaningful way. We agree with the SEC's observation that differences in broker-dealers' 605 reports "may be more reflective of differences in business models rather than effectiveness in achieving execution quality for covered orders because of differences in order handling practices."[79] As

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[79] Rule 605 Proposal, 88 Fed. Reg. at 3800.

discussed above, this difference could be pronounced for certain statistics such as E/Q. If differences in E/Q are a result of different business models employed across firms rather than actual differences in E/Q among comparable business models, providing this information in a way that appears to be—but is not—an apples-to-apples comparison would create investor confusion rather than provide useful information on which to base decisions.

V. Reg NMS: Tick Sizes Proposal

Overview

Schwab would support at most a meaningful subcategory of ideas put forward in the Tick Sizes Proposal. Schwab has four main recommendations, as detailed in the joint comment letter with the New York Stock Exchange and Citadel Securities, which we incorporate here by reference.[80] This proposal raises numerous concerns, including that it would (i) permit sophisticated traders to jump to the front of the queue at economically insignificant costs, (ii) reduce profits wholesalers can pass along as price improvement to retail investors, (iii) dilute the value of market data, and (iv) generate complaints from retail investors.

Reducing the Minimum Quoting Increment

Schwab believes that some improvements can be made for tick constrained securities, but even then, the Commission should take a much more streamlined and analytical approach than has been proposed. We recommend reducing the minimum quoting increment to a half-penny for symbols trading at or above $1.00 per share that are tick-constrained and thus to significantly narrow the number of symbols covered in the Proposal. We define "tick-constrained" to mean symbols that have an average quoted spread of 1.1 cents or less and a reasonable amount of available liquidity at the NBBO. Further compression should only be considered if certain securities become constrained again.

Setting a Market-Wide Harmonized Trading Increment

We recommend setting a market-wide harmonized trading increment of $.001 for all symbols trading at or above $1.00 per share. In our view, the minimum quoting increment and the minimum trading increment should not be the same. Requiring that trading increments be the same as quoting increments would harm investors and deny them potential opportunities for price improvement.

Proportionate Reduction in Access Fees

With respect to access fees, we recommend a reduction that is proportionate to the proposed reduction in the minimum quoting increment for tick-constrained symbols. This would reduce the current $.0030/share cap to $.0015/share for the symbols with a half-penny minimum quoting increment.

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[80] NYSE, Schwab & Citadel Joint Letter.

Accelerating Implementation of the Round Lot Definition

We recommend accelerating implementation of the revised round lot definition, but not odd lot dissemination on the SIP, as contained in the Commission's MDI Rule. Disseminating odd lot quotes on the SIP could lead investors to expect prices that are not available.

In addition, Schwab is concerned that the long overdue implementation of broader market data reforms, like depth of book, competing consolidators, and governance, which are designed to and hold the promise of actually being of benefit to retail investors, will be undermined by re-scheduling the reforms set forth in the MDI adopting release. These reforms were unanimously approved and upheld in court. If the Commission instead chooses not to implement these reforms from the MDI rule it will be picking winners and losers without demonstrating any need to change from the current plan. Unfortunately, if the Commission continues with this plan, the losers will be retail investors.

Key Concerns

In addition to the four recommendations from the joint comment letter, Schwab notes briefly a number of other concerns about the Tick Sizes Proposal. Schwab endorses the concerns raised in the SIFMA letter on Tick Sizes, and repeats a number of the key concerns below for emphasis.

Queue Jumping

Schwab is concerned the proposed 1/10th and 2/10th tick sizes are too granular. Such fine increments make the costs of queue jumping negligible and will disperse liquidity among numerous tick sizes, reducing the amount of liquidity at the top quote.

Economic Analysis of Access Fees

The economic analysis on access fees is severely lacking for the Tick Sizes Proposal. As Commissioner Peirce noted in her statement on Tick Sizes, "public input will be essential to thinking through whether the reduction in access fee caps is calibrated at the right level."[81] All of the Proposals have an issue with a lack of meaningful public data, and Tick Sizes is no different. Under the Tick Sizes Proposal, the amount of access fees as a percentage of the quotation would increase significantly for securities trading at certain pricing increments. Today, Regulation NMS establishes an access fee cap of 30% of the quote, and the Tick Sizes Proposal increases the cap to 50% of the quote. The rationale provided by the Commission for this change is to allow for trading centers to "maintain their current net capture rate and not impair the agency market business models."[82] It is not the Commission's role to ensure that trading centers "maintain their current net capture rate." Moreover, the Commission has specifically focused on eliminating PFOF for retail brokers, thereby impacting their revenue

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[81] *See* Public Statement by Commissioner Hester M. Peirce, *Statement on Proposal to Amend Rules Governing Access Fees and Tick Sizes and to Accelerate Certain Market Data Changes* (Dec. 14, 2022) available at https://www.sec.gov/news/statement/peirce-tick-size-20221214.
[82] Tick Sizes Proposal, 87 Fed. Reg. at 80290.

stream which may only be replaced by explicit commissions. Yet, the Commission seems intent to protect the PFOF earned by exchanges. The Commission's statutory obligation is to assess what access fee rates should be in order to achieve the goals of the national market system. Similarly, the Commission failed to consider what the most appropriate tick size(s) should be for purposes of achieving the goals established by Congress in the Exchange Act. Instead, as is the case with many of the Proposals, the Commission appears only to have assessed current exchange fee models and fixated on the perceived imbalance between OTC markets and exchange markets, which led the Commission to propose that the trading increment and quoting increments need to be harmonized to "correct" the imbalance.

More broadly, the Tick Sizes Proposal should, together with the Commission's other proposals, be thought of in the context of a more holistic reevaluation of market structure—or equity market structure, more particularly.

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Aside from potential Rule 605 enhancements and certain aspects of the Tick Sizes Proposal, the approach offered up in these four Proposals presents an assortment of incomplete thinking and ideas that require far more diligence and nuance before they are put forward as realistic potential changes to the current market structure. The Order Competition Proposal represents a significant step backwards for retail investors, and like the BE Proposal, seems not only a solution in search of a problem, but presents a grave danger to the incredible progress that has been made on behalf of retail investors over the past two decades. We would welcome a more inductive and nuanced conversation around the ideas (and evidently the concerns) that form the basis for each of the Proposals, as we are always happy to promote initiatives that improve the experience of retail customers. We likewise want to engage in productive initiatives that will improve our markets and outcomes for investors, driven by data and calibrated to reduce unintended consequences. Each of these proposals is based on data that assumes no other changes are made. A far more prudent approach would be for the SEC to implement the changes to Rule 605 and evaluate the state of the market before proceeding further. Pursuing all these changes at once prevents any meaningful analysis of their collective impact on markets and deviates from the SEC's long standing practice of carefully weighing the economic effects of its rulemaking.

Schwab greatly appreciates the opportunity to submit this comment letter on the Proposals. If you have any questions or require additional information, please do not hesitate to contact us.

Sincerely,

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The Charles Schwab Corporation

Cc: The Hon. Gary Gensler, Chair
The Hon. Hester M. Peirce, Commissioner
The Hon. Caroline A. Crenshaw, Commissioner
The Hon. Mark T. Uyeda, Commissioner
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