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Invested in America

March 31, 2023

By Electronic Submission

Vanessa Countryman
Secretary
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington DC 20549

Re: **File No. S7-29-22; Release No. 34-96493; Disclosure of Order Execution Information ("Rule 605 Proposal")**

File No. S7-30-22; Release No. 34-96494; Regulation NMS: Minimum Pricing Increments, Access Fees, and Transparency of Better Priced Orders ("Tick Size Proposal")

File No. S7-32-22; Release No. 34-96496; Regulation Best Execution ("Reg Best Ex")

File No. S7-31-22; Release No. 34-96495; Order Competition Rule ("OCR")

Dear Ms. Countryman:

The Securities Industry and Financial Markets Association ("SIFMA")[1] respectfully submits the following comments on the Rule 605 Proposal, the Tick Size Proposal, Reg Best Ex, and the OCR (the "Proposals") by the U.S. Securities and Exchange Commission ("Commission" or "SEC").[2] SIFMA notes that it is submitting two additional letters related to certain of the Proposals[3] and previously submitted a letter on February 8, 2023 requesting an extension of the comment period as well as requesting that the Commission provide the Consolidated Audit Trail ("CAT") data used to support the Proposals to facilitate meaningful public comment on the Proposals, to which the Commission has not yet responded.[4] SIFMA reiterates its request for these data and an extension of the comment period given the length, complexity and intersections of the Proposals.

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[1] SIFMA is the leading trade association for broker-dealers, investment banks and asset managers operating in the U.S. and global capital markets. On behalf of our industry's one million employees, we advocate on legislation, regulation and business policy affecting retail and institutional investors, equity and fixed income markets and related products and services. We serve as an industry coordinating body to promote fair and orderly markets, informed regulatory compliance, and efficient market operations and resiliency. We also provide a forum for industry policy and professional development. SIFMA, with offices in New York and Washington, D.C., is the U.S. regional member of the Global Financial Markets Association (GFMA). For more information, visit http://www.sifma.org.

[2] Exchange Act Release No. 96496, 88 FR 5440 (Jan. 27, 2023) (Reg Best Ex); Exchange Act Release No. 96495, 88 FR 128 (Jan. 3, 2023) (OCR); Exchange Act Release No. 96494, 87 FR 80266 (Dec. 29, 2022) (Tick Size Proposal); Exchange Act Release No. 96493, 88 FR 3786 (Jan. 20, 2023) (Rule 605 Proposal).

[3] Specifically, a working group of SIFMA members active in fixed income securities has submitted a letter addressing particular concerns of the application of Reg Best Ex to fixed income trading, and the Asset Management Group of SIFMA has also submitted a letter addressing concerns raised by the Proposals from an asset management perspective.

[4] Letter from Ellen Greene, Managing Director, SIFMA, to Vanessa Countryman, Secretary, Commission (Feb. 8, 2023), https://www.sec.gov/comments/s7-31-22/s73122-20156863-325026.pdf ("SIFMA Letter I").

As Chair Gensler has noted, U.S. capital markets remain the "gold standard"[5] and the "largest and most innovative capital markets in the world."[6] Given the depth and breadth of the changes to U.S. market structure set forth in the Proposals, SIFMA believes there is considerable risk that the Proposals could jeopardize rather than enhance our world-leading capital markets, especially if they are adopted/implemented together. Put simply, our world-leading capital markets are not in need of foundational changes and, to the extent that our market structure can be improved, the Commission should pursue an incremental approach to reform. Doing so allows market participants time to adjust to new regulatory requirements, reduce operational risks, and allows both the Commission and the public to assess the efficacy and downsides of a particular change on markets and investors. In contrast, adopting or implementing the Proposals simultaneously (or near simultaneously) would make it impossible to determine which changes to our market structure are beneficial and which may be harmful.

Executive Summary

SIFMA supports the Commission's efforts in trying to improve our markets through greater disclosure, increased transparency and greater competition. Furthering that cause, SIFMA supports the Rule 605 Proposal to enhance disclosure of order execution information by updating Rule 605 subject to certain changes and clarifications that would improve the final rule. Indeed, an expanded Rule 605 should be the foundation of any further rulemaking the Commission contemplates regarding equity market structure. Once an amended Rule 605 is implemented, the Commission will have the data it needs to fully assess market quality and consider whether additional rulemaking is needed and how any such rulemaking should be designed.

As it stands now, however, SIFMA is deeply concerned that the other Proposals are likely to harm markets and create confusion for investors, particularly to the extent that all the Proposals are adopted or implemented at or around the same time. The Commission has not identified a clear market failure that would necessitate the fundamental changes to U.S. market structure that are contemplated by the Proposals. Many of the effects of each Proposal—as well as the cumulative impact of all of the Proposals together—are uncertain. And, the Proposals carry with them tremendous costs (on top of the costs from all of the other Commission rulemakings) that may ultimately be borne by investors, have highly speculative outcomes and, in the case of the OCR, appear directly inconsistent with Securities Exchange Act of 1934 ("Exchange Act").[7] These costs and the economic impacts of the Proposals are detailed in Appendix E, which is an independent report prepared by James A. Overdahl, former Chief Economist of the Commission from 2007 – 2010. Accordingly, although SIFMA supports the general principles undergirding the other three Commission Proposals, including enhancing competition and transparency as well as robust best execution for customers, SIFMA nonetheless does not support the Proposals (excluding the Rule 605 Proposal, subject to SIFMA's comments herein).

The Commission Must Analyze the Intersections of the Proposals to Facilitate Meaningful Public Comment

Notwithstanding our general support for the Rule 605 Proposal, SIFMA has significant concerns with the remaining Proposals, both individually and collectively. In particular, the Commission has provided almost no analysis as to how the Proposals relate to, or would operate with, each other and the anticipated cumulative effects if more than one Proposal is adopted. The public is also unable to

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[5] Gary Gensler, Chair, Commission, Remarks Before the Piper Sandler Global Exchange Conference: Market Structure and the Retail Investor (June 8, 2022), https://www.sec.gov/news/speech/gensler-remarks-piper-sandler-global-exchange-conference-060822.

[6] Gary Gensler, Chair, Commission, Remarks Before the Annual Conference on Financial Market Regulation: A Century with a Gold Standard (May 6, 2022), https://www.sec.gov/news/speech/gensler-acfmr-20220506.

[7] 15 U.S.C. 78k-1(a)(1)(C)(ii)(find 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").

meaningfully provide comment on the Proposals given that substantial portions of the economic analyses by the Commission relied on non-public CAT data that has not yet been made available to the public despite SIFMA's request.[8] The Commission has similarly failed to consider critical operational questions that arise through the intersections of the Proposals if more than one of the Proposals are adopted, and the Proposals have not been supported by robust economic analyses and with reliable, publicly available data. Understanding these intersections and the interoperability of the Proposals is critical to facilitate meaningful public comment on the Proposals.

SIFMA Supports the Rule 605 Proposal Subject to Certain Changes and Clarifications

With respect to the Rule 605 Proposal, SIFMA appreciates the Commission's efforts to increase the transparency available in the equities markets regarding the quality of order executions. As the Commission correctly notes, Rule 605 has not been substantively updated since its adoption in 2000, and equity markets have changed dramatically during this time. While SIFMA generally supports the Commission's approach in the Rule 605 Proposal, SIFMA believes certain changes and clarifications are necessary prior to its adoption. As described in more detail in Appendix A, SIFMA encourages the Commission to require FINRA or the CAT to produce Rule 605 reports on behalf of all broker-dealers. SIFMA has also identified certain operational issues and questions that should be addressed, relating to (1) the manner in which Rule 605 reports would calculate the average effective over quoted spread; (2) the proposed distinction between over-the-counter ("OTC") market makers and single-dealer platform activities; (3) the proposed distinction between broker-dealer and market center activity; (4) the use of Rule 605 reports for evaluating different broker-dealers; and (5) the inclusion of fractional shares in Rule 605 reports.

The Tick Size Proposal Requires Further Analysis before Proceeding

Although SIFMA commends the Commission's efforts to improve trading in tick-constrained stocks, revisit the current minimum pricing increments ("tick sizes"), and reduce the current access fee cap, SIFMA believes that more careful consideration, analysis, and industry input should be gathered prior to proceeding with any adoption of the Tick Size Proposal, including the numerous alternatives suggested by the Commission. SIFMA emphasizes that any modification of the tick size for NMS stocks has significant implications for the trading of such securities, and it is critical that each of these is carefully considered and addressed to mitigate any potentially adverse or unintended consequences. SIFMA generally supports a minimum tick size of $0.005 (*i.e.*, as a quotation increment, but not trading increment) for tick-constrained stocks, but is concerned that the Commission has not established the appropriate methodology for determining which stocks are tick-constrained. SIFMA requests that the Commission further engage with market participants to establish the appropriate methodology for identifying tick-constrained stock that could trade in a $0.005 increment. SIFMA believes that the $0.001 and $0.002 tick sizes are too granular and likely to raise concerns of "pennying," reduced liquidity at the inside quotation, and flickering quotations (among other concerns).

As noted, SIFMA believes that further quantitative analysis is necessary to determine the appropriate methodology for determining which stocks are tick-constrained and what the appropriate tick sizes (and access fee caps) should be to yield the best possible market structure. This can only be done effectively after the implementation and operation of the proposed amendments to Rule 605 to allow the Commission and the public to measure the impact of modified tick sizes and/or access fee caps. Even after the Rule 605 amendments have taken effect, SIFMA believes an incremental and iterative approach to introducing new tick sizes that allows for measurement of whether these changes are beneficial is necessary given many of the uncertainties and the important stakes for issuers and market participants of changes to tick sizes and access fee caps. SIFMA recognizes that it is extremely difficult to predict all of the impacts of

[8] *See infra* Part III (reiterating SIFMA's request for the CAT data relied upon by the Commission in the Proposals pursuant to SIFMA's Freedom of Information Act ("FOIA") request or otherwise by the Commission in an anonymized format).

modified tick sizes and access fee caps, and there is, indeed, no need to do so provided the Commission takes an incremental and scientific approach to these reforms.

SIFMA believes that the proposed harmonization of quoting and trading increments would cause substantial harm to investors by denying price improvement opportunities, particularly to retail investors, that are available today. As detailed in Appendix B, the Tick Size Proposal also leaves unanswered several key operational questions regarding how several important components of today's market structure would operate under the Tick Size Proposal, including: (i) volatile stocks; (ii) stock splits; (iii) initial public offerings; and (iv) the use of intermarket sweep orders. While SIFMA supports lowering access fee caps, we believe the appropriate access fee caps should be tied to the ultimate determination of what the most appropriate tick sizes should be, for which better quantitative analysis is needed. SIFMA also supports the acceleration of variable round lots and inclusion of odd-lot order information as part of consolidated market data, but has concerns with the proposed inclusion of "best-odd lot orders" as part of consolidated market data.

Reg Best Ex Is Unnecessary Because Existing Best Execution Rules Already Function Effectively

While SIFMA strongly endorses the importance of a robust best execution framework to govern broker-dealers' handling of their customer orders, SIFMA cannot support Reg Best Ex and urges the Commission to withdraw or not proceed further with the Proposal. At a foundational level, the Commission has not claimed that the current FINRA and MSRB rules fail to provide customers with best execution. It is therefore entirely unclear why the Commission believes the existing best execution framework may have failed investors and why a Commission-level best execution rule is necessary, particularly in light of the considerable costs it would impose and the potential for negative impacts to customers. To the contrary, SIFMA believes the existing rules work very well to support best execution in today's markets. Introducing a third best execution regime would only bring about unnecessary confusion, complexity, and cost that we believe would likely interfere with broker-dealers' ability to provide best execution. The Commission has not articulated a single quantifiable benefit that would result from the adoption of Reg Best Ex or that would justify the significant costs and burdens to broker-dealers (and, in turn, investors).

Reg Best Ex, which unlike the other Proposals applies beyond just equity markets, does not adequately address differences in the manner in which non-equity securities trade, leading to confusing applications when attempting to fit the various types of securities within the proposed rule and the Commission's detailed guidance. As detailed in Appendix C, SIFMA is most concerned with the extensive, prescriptive obligations established under Reg Best Ex, largely through the Commission's guidance and interpretations in the proposing release, many of which are unclear, ambiguous and could create perverse incentives for broker-dealer order handling. Moreover, the Commission's proposal for broker-dealers to examine additional, immaterial sources of liquidity when their transactions are considered to be "conflicted" creates a misguided and illogical standard for order handling that not only fails to mitigate the alleged conflict, but also would likely result in worse executions for investors through execution delays. This is particularly problematic as Reg Best Ex ultimately eliminates prior regulatory guidance on what factors constitute "best execution" for its customers, and effectively requires a broker to limit its decisions to the single measure of "execution price" across additional (and illiquid) venues. Speed and surety of execution, fees and costs, customer service, and other components of best execution would be severely diminished in importance, even for customers that greatly value these considerations. SIFMA members object to this, and recommend that the Commission honor the longstanding, principles-based approach set forth in the existing regulatory framework for best execution.

The Commission Should Withdraw the OCR Because It Will Harm Both Competition and Retail Investors

Although SIFMA appreciates the Commission's goal of improving executions for retail investors, SIFMA has significant concerns with respect to the OCR, which SIFMA strongly believes may only cause greater harm to retail investors and degrade the efficiency of U.S. equity markets. SIFMA therefore urges the Commission to withdraw or proceed no further with the Proposal. By effectively requiring most segmented orders to execute on an exchange (excluding certain midpoint or better executions), the OCR is inconsistent with Section 11A of Exchange Act and Congress's clear intent in establishing the national market system that the Commission's role is to facilitate, rather than design, innovations in market structure.[9] Rather than promote competition and protect investors and the public interest, the OCR is anticompetitive, placing the heavy thumb of the government on one type of trading center over all others with abundant doubt that the purported benefits would ever be realized.[10] The likely result of commanding by regulatory mandate where certain orders must trade is to reduce competition among trading centers and make markets less efficient and less innovative. As detailed in Appendix D, the Commission has failed to resolve key operational uncertainties and deficiencies in its design of the OCR, including: (i) whether qualified auctions would cease upon a change in the NBBO adverse to the segmented order; (ii) qualified auctions facilitating trading ahead of segmented orders by exposing retail orders to the market; (iii) institutional investor orders would have to be coded as such to comply with execution priority rules, resulting in information leakage and deterring institutional participation in retail auctions; (iv) exchange outages could cause significant harm to segmented orders for which there would be no recourse; and (v) the segmented order definition would indirectly impose requirements on foreign market participants and asset managers. There are also significant flaws in the Commission's economic analysis, including that it: (a) incorrectly assumes that the estimated ~$1.5 billion price improvement shortfall would be "in addition to" price improvement currently received rather than "instead of" price improvement currently received; (b) did not include exchange fees in its estimates; and (c) does not address several economic studies indicating the potential for worse executions for retail orders.

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[9] *See* Appendix D, Item B (explaining how the OCR is inconsistent with the Exchange Act).

[10] *See* Appendix D, Item D.3 (discussing the Commission's acknowledgment of the massive uncertainties that the Proposal would actually result in its purported benefits).

I. Introduction

One of SIFMA's chief concerns with respect to the Proposals, as SIFMA noted in its letter of February 8, 2023, is that the Commission has provided almost no analysis as to how the Proposals relate to, or would operate with, each other and the anticipated cumulative effects on markets, intermediaries and investors if more than one Proposal is adopted.[11] SIFMA's comments on any one Proposal are certain to be different depending on whether or not one or more of the other Proposals are adopted. In order to highlight just some of the interrelationships between and among the Proposals and the challenges these intersections present in providing meaningful comment, SIFMA is providing its comments to the Proposals in a single letter. SIFMA has also included four appendices to this letter which set forth additional comments specific to each of the four Proposals as well as a fifth appendix describing the costs and economic impacts related to the Proposals.

It is unclear why the Commission believes that it need not consider, discuss or analyze the cumulative effects of the Proposals and why it would not serve the public interest and the protection of investors to perform such an intersectional analysis. Doing so would only seem to increase transparency and facilitate better understanding by the public of the Commission's proposed reforms. Notably, Executive Order 13563 (Improving Regulation and Regulatory Review) from 2011 mandates that federal agencies take into account "among other things, and to the extent practicable, the **costs of cumulative**

[11] *See* SIFMA Letter I, *supra* n.4.

regulations."[12] An accompanying Obama Administration memorandum further provided that "[p]ublic participation can and should be used to evaluate the cumulative effects of regulations, for example through active engagement with affected stakeholders **well before the issuance of notices of proposed rulemaking**" and "[c]onsideration of cumulative effects and of opportunities to reduce burdens and to increase net benefits **should be part of the assessment of costs and benefits**."[13] This has not been done here as all four Proposals—each of which interrelates and impacts the others—were proposed on the same day without prior engagement with relevant stakeholders, only a 90-day comment period to review nearly 1,700 pages of proposed rules, and no discussion of how the Commission envisions the Proposals operating together.[14] While the Commission may not be directly subject to this Executive Order as an independent agency, it bears explaining *why* the Commission believes that it need not describe or consider the cumulative effects of these Proposals and why the public would not benefit from such discussion.

When the Commission has adopted a successful rulemaking that has improved market structure for market participants, the Commission has historically engaged with the industry and the public *before* proposing new regulations and has used this engagement to inform its decision-making in a manner that has led to a robust and productive public comment process. However, consistent with the current trend during the Commission's rapid pace of proposed rulemakings as of late, this was not done here.[15] SIFMA strongly

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[12] Executive Order 13563, Improving Regulation and Regulatory Review (2011), https://obamawhitehouse.archives.gov/the-press-office/2011/01/18/executive-order-13563-improving-regulation-and-regulatory-review (emphasis added).

[13] Cass R. Sunstein, Former Administrator, Office of Information and Regulatory Affairs, *Memorandum for the Heads of Executive Departments and Agencies*, at 1-2 (March 20, 2012), https://www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/assets/inforeg/cumulative-effects-guidance.pdf (emphasis added). *See also Centro Legal De La Raza, et. al. v. Executive Office for Immigration Review*, 524 F.Supp.3d 919 (N.D. Cal. 2021) (finding a Department of Justice immigration-related final rule was arbitrary and capricious because the agency failed to consider the cumulative impact of multiple related and interlocking rulemakings and policy changes); *Portland Cement Ass'n v. E.P.A.*,665 F.3d 177, 187 (D.C. Cir. 2011) ("[A]n agency must have a similar obligation to acknowledge and account for a changed regulatory posture the agency creates—especially when the change impacts a contemporaneous and closely related rulemaking.").

[14] The approach taken in promulgating the Proposals stands in stark contrast to the Commission's more inclusive and collaborative approach in proposing Regulation NMS. There, the Commission provided data and methodologies, and had meaningful discussion with the public during Regulation NMS development from October 2002 to June 2005. Regulation NMS underwent a robust discussion beginning with Market Structure Hearings, a *single* proposal with an 87-day comment period, additional public hearings, a supplemental request for comment with a 30-day comment period, a re-proposal with a 30-day comment period and then final adoption.

[15] Many of the dozens of recently proposed and pending Commission rules interact and overlap and have potential cumulative and cross-sector impacts that the Commission has failed to account for or analyze in its cost-benefit analyses. SIFMA believes that the Commission should address these prospective effects and impacts, and provide an opportunity for public comment on its analysis before rushing to impose a loaded amalgam of significant rules on our capital markets without any understanding or appreciation of their net impact. *See* Nera Economic Consulting, Risk of Economic Impacts from the Cumulative Effects of Proposed and Pending SEC Rules (September 2022), https://www.sifma.org/wp-content/uploads/2022/02/2022.10.12-NERA-Slides-Market-Impact-Diagram.pdf (projecting that the cumulative impact would result in reduced market liquidity, and increased risk, borrowing costs and investing costs); Deloitte, The Active Regulatory Agenda (2022), https://www2.deloitte.com/content/dam/Deloitte/us/Documents/Advisory/us-adviosory-deloitte-active-reg-agenda-october.pdf (projecting that the current volume of simultaneous regulatory change may overwhelm regulated firms' resources and staff, negatively impacting firms' balance sheets and their ability to serve their customers, and otherwise cause negative unintended consequences for our financial markets and those who rely on them); and *American Equity Inv. Life Ins. Co. v. SEC*, 613 F.3d 166, 178-79 (D.C. Cir. 2010) (the Commission must articulate the appropriate economic baseline against which to measure the proposed rule's likely economic impact (in terms of potential benefits and costs, including effects on efficiency, competition, and capital formation in the market(s) the rule would affect)).

The only meaningful discussion on equity market structure issues and potential solutions occurred at a series of roundtables sponsored by SIFMA in 2022. *See* discussion topics of the SIFMA Equity Market Structure Roundtable (September 13, 2022), https://www.sifma.org/resources/general/sifma-equity-market-structure-roundtable/; *and* SIFMA Equity Market Structure Roundtable Part II (forthcoming event scheduled for April 18, 2023 to discuss the Proposals), https://events.sifma.org/equity-market-structure-roundtable.

believes that it is more important to get these critical policy decisions impacting our market structure right, rather than adopt and implement changes that do not have the support of the industry and investors, may have significant unintended consequences, and may be difficult (and in all cases costly) to unwind.

SIFMA is also concerned that the Proposals represent a solution in search of a problem, and may consequently only cause problems that could otherwise be avoided. While Chair Gensler has suggested the Proposals are designed as a response to the meme stock events of early 2021,[16] SIFMA emphasizes that the Proposals are inconsistent with the House Financial Services Committee Report on the meme stock events in that they go well beyond any of the regulatory reforms suggested by Congress in that report.[17] While market participants have called for reform in certain areas covered by the Proposals, such as Rule 605 modernization, tick size reform, and lowering access fee caps, SIFMA is concerned that the Commission did not engage with industry participants in crafting these aspects of the Proposals and, as a result, has missed the target on most.[18]

While SIFMA respects and supports the Commission's mandate to continually assess U.S. markets and consider regulatory improvements, SIFMA is unaware of any market failure or industry/public demand for the kind of sudden, holistic change to our market structure that the Commission has proposed, particularly with respect to the OCR. The Commission and its staff contain a wealth of knowledge and experience of our securities markets and are rightly entrusted with the power to determine appropriate regulatory initiatives, subject to public input and the provisions of the Exchange Act. SIFMA urges the Commission to wield this power with the utmost care and to take action where there is clear alignment among market participants and/or at the direction of Congress to implement thoughtful, calibrated and incremental reform to our national market system. It is striking that a cross-section of many different types of market participants have come together to express tremendous concern over the breadth and depth of the Proposals and their collective impact on our market structure and investors.[19] These market participants

[16] Gary Gensler, Chair, Commission, Remarks Before the Piper Sandler Global Exchange Conference: Market Structure and the Retail Investor (June 8, 2022), https://www.sec.gov/news/speech/gensler-remarks-piper-sandler-global-exchange-conference-060822 (stating, in remarks outlining what would become the Proposals, "there isn't a level playing field among different parts of the market: wholesalers, dark pools, and lit exchanges. . . . Last year, during the meme stock events, [off-exchange trading] swelled to a peak of 47 percent. . . . It's not clear, with such market segmentation and concentration, and with an uneven playing field, that our current national market system is as fair and competitive as possible for investors").

[17] *See* Majority Staff of H.R. Comm. On Fin. Servs., 117th Cong., Game Stopped: How the Meme Stock Market Event Exposed Troubling Business Practices, Inadequate Risk Management, and the Need for Legislative and Regulatory Reform 108-117 (Comm. Print 2022), https://democrats-financialservices.house.gov/uploadedfiles/6.22_hfsc_gs.report_hmsmeetbp.irm.nlrf.pdf (making policy recommendations related to manipulative conduct on social media platforms, implementing trading halts in response to concentrated volatility in a limited number of stocks, enhancing supervision of retail brokers, and strengthening capital and liquidity requirements and oversight).

[18] SIFMA has previously prepared and submitted to the Commission recommendations to enhance the current equity market structure, and looks forward to constructively working with the Commission to implement well-designed, beneficial reforms. *See*, *e.g.*, Letter from Theodore R. Lazo, Associate General Counsel, SIFMA, to Brent J. Fields, Secretary, Commission (Mar. 29, 2017), https://www.sifma.org/wp-content/uploads/2017/05/SIFMA-Submits-Comments-to-the-SEC-on-the-EMSAC-Meeting-and-the-Regulatory-Flexibility-Act.pdf; Letter from Theodore R. Lazo, Associate General Counsel, SIFMA, to Mary Jo White, Chair, Commission (Oct. 24, 2014), https://www.sifma.org/wp-content/uploads/2017/05/sifma-submits-comments-to-the-sec-with-recommendations-for-equity-market-structure-reforms.pdf; Letter from Theodore R. Lazo, Associate General Counsel, SIFMA, to Mary Jo White, Chair, Commission (July 31, 2013), https://www.sifma.org/wp-content/uploads/2017/05/sifma-submits-comments-to-the-sec-requesting-a-review-of-the-self-regulatory-structure-of-securities-markets.pdf.

[19] Letter from Michael Blaugrund, COO, NYSE, Jason Clague, Managing Director and Head of Operations, Charles Schwab & Co. and Joseph Mecane, Head of Execution Services, Citadel Securities to Vanessa A. Countryman, Secretary, Commission (March 6, 2023), https://www.sec.gov/comments/s7-32-22/s73222-20158676-326602.pdf; Letter from David Howson, Executive Vice President and Global President, Cboe Global Markets, Nathaniel N. Evarts, Managing Director and Head of Trading, Americas, State Street Global Advisors, Kimberly Russell, Market Structure Specialist Global SPDR Business, State Street Global Advisors, Mehmet Kinak, Global Head of Equity Trading, T. Rowe Price, Todd Lopez,

have also converged around similar recommendations, many of which were discussed at SIFMA's market structure roundtable. SIFMA therefore urges a more cautious and gradual approach to regulatory reform of our market structure.

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This letter is organized as follows: first, as described in Part II below, the Commission did not consider or discuss numerous, critical operational questions—and the associated costs and benefits—that arise through the intersections of the Proposals if more than one of the Proposals are adopted. These operational issues are too consequential and determinative of the ultimate market structure to be addressed without additional opportunity for public comment. The issues identified in this letter cannot be addressed sufficiently through post-adoption FAQs, interpretive guidance in adopting releases or enforcement. Rather, at a minimum, re-proposal with Commission analysis and discussion would be necessary to allow for meaningful public comment and to better inform the public of the market structure that would result from the Proposals.

Second, as described in Part III below, the Proposals have not been supported by robust economic analyses and with reliable, publicly available data. SIFMA has requested that the non-public CAT data and certain other data (as well as formulas and methodologies) relied upon by the Commission in the Proposals be made publicly available (in an anonymized format) and has submitted a request under the Freedom of Information Act to that same end.[20] SIFMA reiterates its request for these data, which are essential to facilitating meaningful public comment on the Proposals, and additional time to consider these data once made available. SIFMA also believes that the economic analyses for the Proposals are, in many cases, based on incorrect assumptions and do not provide sufficient explanation to understand the Commission's methodologies upon which its conclusions and policy prescriptions are based. Additionally, many of the purported benefits of the Proposals are largely theoretical and uncertain, while the costs are grossly understated.

As discussed in Part IV below, SIFMA believes that the Rule 605 Proposal should be adopted, subject to certain changes and clarifications detailed in Appendix A. SIFMA also strongly believes that the Rule 605 Proposal should be implemented first to establish a new baseline for evaluating execution quality before any further changes (*e.g.*, minimum pricing increments) are adopted.

As detailed in Appendix B, while SIFMA generally supports consideration of changes to tick sizes and access fees (as well as certain enhancements to order transparency), SIFMA cannot support the Tick Size Proposal as currently proposed. The Proposal is rigid in its planned implementation, with no clear definition of what defines "success," and it includes no stated plan to assess the effects of one phase (one new tick size increment) before proceeding with the next phase and smaller increments. Without adopting and implementing modifications to Rule 605 first, there will be no way to accurately determine the effects of the Tick Size Proposal. While SIFMA generally supports a reduced tick size for stocks that are appropriately determined to be tick-constrained, SIFMA believes further industry engagement after implementation of the Rule 605 amendments should precede any modifications to tick sizes and access fee caps to help ensure that market participants are appropriately aligned on which stocks are tick-constrained and what the appropriate tick sizes and access fee caps should be to promote the best market structure. SIFMA also believes that harmonizing trading increments with quoting increments under the Tick Size Proposal would harm retail investors.

As detailed in Appendix C, although SIFMA strongly supports robust best execution standards for broker-dealers, SIFMA believes that the existing regulatory framework achieves this goal. SIFMA is

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Americas Head of Execution Services, UBS Securities LLC, Douglas A. Cifu, CEO, Virtu Financial, Inc. to Vanessa Countryman, Secretary, Commission (March 24, 2023) (March 24, 2023), https://www.sec.gov/comments/s7-32-22/s73222-20161714-330556.pdf.

[20] *See* SIFMA Letter I, *supra* n.4.

concerned that the possibility of three overlapping best execution regimes,[21] as well as many of the proposed requirements set forth by the Commission in Reg Best Ex and the guidance detailed in the proposing release, such as the Commission's expectations to assess non-material sources of liquidity for conflicted transactions, would raise significant costs on broker-dealers and cause, for many securities, unnecessary and costly delays in transactions without any clear, quantifiable benefit to customers.

As detailed in Appendix D, while SIFMA supports market structure changes to improve executions and experiences for retail investors, SIFMA cannot endorse the OCR because, among other concerns, it fails to address significant operational questions (such as how the qualified auctions would operate in conjunction with the Order Protection Rule)[22] and because it is wholly speculative whether it would achieve its goals of improving executions for retail investors or enhancing competition. Rather, the OCR is likely to have the opposite effect by harming retail investor executions, such as by facilitating trading ahead of segmented orders, and limiting competition by mandating the venue and manner of execution of segmented orders.

Finally, Appendix E sets forth an independent analysis prepared by James A. Overdahl, former Chief Economist of the Commission from 2007 – 2010, detailing the interactive and cumulative effects of the Proposals.

II. An Integrated Analysis of How the Proposals Impact Each Other Is Necessary to Provide Meaningful Comments

As noted above, SIFMA believes that it cannot meaningfully comment on the Proposals without understanding how the Commission expects the Proposals to interact with each other. The adoption of all of the Proposals would result in a very different market structure relative to the adoption of just one of the Proposals. Director Zhu's statement at the December 14, 2022, opening meeting that the Proposals "stand on their own" is accurate in that the Commission appears to have only considered the costs, benefits and effects of each Proposal as if each Proposal were the only one under consideration.[23] However, given the significant relationships among the changes the Proposal would enact, Chair Gensler's commentary on the Proposals,[24] and portions of economic analysis replicated in multiple proposals,[25] it strains credulity to think the Commission was not viewing these Proposals as each implementing individual components of a larger policy initiative. Moreover, while it is nowhere apparent from the Proposals that the Commission considered their interaction, the Commission solicited comment from the public on all four of the Proposals

[21] As further explained in Appendix C, although FINRA and the MSRB have indicated they intend to harmonize their rules with any Commission best execution rules, it remains unclear how harmonization could be achieved, including how the rules could be consistently enforced with both FINRA and the Commission conducting examinations and enforcement of the rules.

[22] 17 CFR 242.611.

[23] *See* Commission Open Meeting Webcast Archive, 2022.12.14 Open Meeting Part 01 at 1:08:25 – 1:09:00, https://www.youtube.com/watch?v=s9gdfxCoIq4.

[24] *See*, *e.g.*, Gary Gensler, Chair, Commission, Remarks Before the Piper Sandler Global Exchange Conference: Market Structure and the Retail Investor (June 8, 2022), https://www.sec.gov/news/speech/gensler-remarks-piper-sandler-global-exchange-conference-060822 (stating that Chair Gensler "asked staff to take a holistic, cross-market view of how we could update our rules and drive greater efficiencies in our equity markets" and then providing a thorough outline of what would become the Proposals, grouped into categories that align precisely with what would become the four "separate" Commission releases); Equity Market Structure Reform: Office Hours with Gary Gensler (Jan. 17, 2023), https://www.youtube.com/watch?v=jChqhHqcvL0&t=1s ("[T]o modernize our rules for the modern markets, and to make our markets work better for everyone, we put forward four proposals.").

[25] *See infra* Appendix C, Item J.4.

together and included in each glancing references to the other Proposals.[26] The public can only assume that the Commission intends to adopt and implement the Proposals together (or around the same time).

With the possible exception of the Rule 605 Proposal, each Proposal individually represents a substantial and fundamental change to U.S. equity market structure. Consequently, the cumulative effects of multiple, major changes to the market structure compound, making the need for careful analysis of their intersections indispensable. SIFMA shares the concerns of Commissioner Uyeda:

> "[T]he Commission proposed—side-by-side—four complex rules with interrelated effects—and did not even attempt to consider the combined impact of those proposals. Far from being an incremental process, where the Commission and other interested persons could learn from experience before proceeding with reforms, the Commission has launched a shock-and-awe approach with the hope that everything falls into place and – more importantly – improves on the status quo. Whether that will occur is an open question."[27]

Without some analysis and discussion by the Commission of the interrelationship between and among the Proposals, it is unclear how market participants can be expected to form clear opinions on each Proposal. The purported costs, benefits, operational risks, and effects of any one Proposal are <u>certain</u> to change depending on whether one or more of the other Proposals are adopted.

SIFMA has highlighted below just some of the important ways in which the Proposals overlap and interact with each other and for which a detailed discussion by the Commission is necessary to inform the public of the ultimate market structure it proposes and solicit meaningful comment thereon.

A. Reg Best Ex and the OCR

Proposed Reg Best Ex and the OCR have significant overlap and potentially inconsistent mandates that the Commission has not addressed. Under the OCR, broker-dealers would generally be required to route segmented orders to qualified auctions for executions (absent an exception, such as for executions at the midpoint or better). Under Reg Best Ex, broker-dealers would be required, among other things, to implement routing/execution policies and procedures that: (i) assess opportunities for price improvement, including midpoint executions, and (ii) in determining the number and sequencing of markets to be assessed, reasonably balance the likelihood of obtaining better prices with the risk that delay could result in worse prices.[28] To the extent a broker-dealer accepts payment for order flow ("PFOF") with respect to a segmented order, which includes receiving a rebate from an exchange that it does not pass through to the customer such transaction would be considered a "conflicted transaction" under Reg Best Ex, and the broker-dealer would be required to assess a broader range of markets beyond those identified as "material potential liquidity sources."[29]

In reading these requirements together, it appears that the Commission's general expectation with respect to segmented orders is that a broker-dealer should first route such order to try to access midpoint or better liquidity at various venues before routing a segmented order to a qualified auction (for purposes of this letter, "<u>Midpoint before Auction Routing</u>"). If a broker-dealer does not seek potentially available midpoint or better liquidity before routing to a qualified auction, it is possible that the segmented order will miss midpoint or better liquidity on another venue and not receive a better execution in a qualified auction, which could potentially reflect a failure to achieve best execution for the segmented order. Additionally, to

[26] For example, in the Tick Size Proposal, the Commission simply states with respect to the OCR that it "encourages commenters to review that proposal to determine whether it might affect their comments on this proposing release." OCR at n.147.

[27] Mark Uyeda, Commissioner, Commission, Statement on Proposed Rule Regarding Best Execution (Dec. 14, 2022), https://www.sec.gov/news/statement/uyeda-best-excution-20221214.

[28] *See* proposed Rule 1101(a)(2).

[29] *See* proposed Rule 1101(b).

the extent that a segmented order transaction is also a conflicted transaction, there would be even greater reason for the broker-dealer to examine other markets before routing the segmented order to a qualified auction in order to promote compliance with its obligations for conflicted transactions.

To the extent that Midpoint before Auction Routing is how the Commission views these two Proposals operating together as a plain reading of the two Proposals would suggest, this should be made explicitly clear in the Proposals.[30] Fundamentally, it is unclear what the mandate under Reg Best Ex to consider all material sources of liquidity (and non-material sources of liquidity in the case of conflicted transactions) can mean with respect to segmented orders other than an obligation to seek liquidity from additional venues *prior to routing* to a qualified auction. Moreover, discussion and analysis of the following implications that flow from Midpoint before Auction Routing are critical (assuming that Midpoint before Auction Routing is either expected by the Commission or the practical result of the Proposals):

- *Segmented Orders in Qualified Auctions Would Largely Reflect Undesirable Trades* – Segmented orders that arrive in qualified auctions would, in most instances, consist of orders that no other market participants were willing to trade with on any other non-qualified auction trading venue (at least at the midpoint or better). That is, it is only after a broker-dealer routes to multiple dealers or ATSs seeking midpoint or better price improvement and receives none that it would route the order to a qualified auction. If no market participant was willing to trade at the midpoint or better on such other venues, it seems unlikely that the segmented order would receive an execution in a qualified auction. It would be helpful to understand why the Commission believes that it would still be beneficial to send a segmented order to an auction when Reg Best Ex would require that the order be routed to seek out better priced interest before being sent to the qualified auction.[31]

- *Eliminating Potential Trading Counterparties from Participation in the Qualified Auction* – In routing a segmented order to different non-qualified auction venues seeking midpoint or better liquidity, the broker-dealer may be eliminating those counterparties from participating in the qualified auction. Specifically, under proposed Rule 615(f)(2), a broker-dealer with knowledge of where a segmented order is to be routed for execution may not submit an order in a qualified auction that could have priority to trade with the segmented order.[32]

  Additionally, liquidity providers willing to provide midpoint or better executions may only wish to trade with segmented orders from originating broker-dealers whom they know (or liquidity providers may need to know who the originating broker dealer is to, for example, provide PFOF). An originating broker-dealer may be willing to share its identity to a dealer when seeking midpoint or better executions prior to routing to a qualified auction, but may not want (in the interest of its customer) its identity known to all market participants through the qualified auction.[33] Consequently, the originating broker-dealer may face a choice between revealing its identity to a

[30] To the extent that this is not the Commission's expectation of how these two Proposals should be read together, this needs to be clarified and market participants need to be provided with an opportunity to comment on what the Commission's expectations actually are.

[31] As detailed in Appendix D, Item C.6, SIFMA questions the Commission's presumption, for which the Commission does not provide any evidence, that institutional investors would be interested in interacting with segmented orders.

[32] As discussed further in Appendix D, there is considerable ambiguity in this requirement. Assume, for example, a firm receives an immediate-or-cancel segmented order for 500 shares from a firm seeking midpoint or better liquidity and the firm declines to trade with the order. Assume further that the firm does not know where the order is to be routed to next. If the firm sees a qualified auction initiated 20 milliseconds later on an exchange for 500 shares of the same security, it is unclear whether the firm would be permitted to submit an order to the continuous order book of that exchange that could interact with that segmented order.

[33] Under proposed Rule 615(c)(1), the identity of the originating broker must be announced as part of the auction message unless the broker-dealer does not reveal its identity to any person that could potentially trade in the qualified auction.

liquidity provider that may provide the best possible execution consistent with Reg Best Ex or the risk that its identity may be made known to all market participants in a qualified auction (potentially to the detriment of its customer) if it first seeks liquidity from that dealer.

- *Information Leakage* – To the extent a segmented order is routed to multiple non-qualified auction venues prior to a qualified auction, the segmented order will be exposed to many market participants before reaching the auction. This exposure could cause the market to move adversely against the segmented order, as the Commission acknowledges.[34] For example, a partial fill of a segmented order outside of a qualified auction at prices at the midpoint or better will result in a transaction report and may cause the market to move against the segmented order as the originating broker seeks to execute the remaining quantity. An originating broker must therefore balance the mandate of seeking liquidity on additional venues against the potential that seeking liquidity on those venues may cause the market to move against the segmented order.

  On the other hand, if an originating broker elects to route a segmented order directly to a qualified auction (at risk of not having examined additional liquidity sources, particularly if it captures an exchange rebate), the qualified auction itself may cause the market to move adversely against the segmented order. For example, assume the market for stock XYZ is \$10.00 x \$10.03 with 1000 shares on the bid and the offer. Assume an originating broker receives a segmented market order to buy 2000 shares of stock XYZ. Market participants seeing a qualified auction initiate for 2000 shares of XYZ with only 1000 shares available on the offer would now know that 2000 shares ultimately needs to be filled. Rather than participating in the auction, market participants might instead choose to buy shares of XYZ at \$10.00, knowing that—if the auction either (a) does not fill the entire size of the segmented order or (b) does not result in any execution—there is immediately marketable demand for as many 2000 shares of XYZ. A market participant might buy the 1000 shares on the bid with an aim toward immediately selling those shares of XYZ to the segmented order following the auction. Qualified auctions in this regard could facilitate trading ahead of segmented orders.

  In either case, an originating broker must "pick its poison" by either risking potential information leakage from seeking potential liquidity away from a qualified auction to promote compliance with best execution obligations or instead risking information leakage through the qualified auction itself under the OCR.

- *Speed of Execution* – A broker-dealer's best execution responsibilities under proposed Reg Best Ex require consideration of potential delays in execution that could result in worse prices. This could further encourage broker-dealers to seek midpoint or better liquidity on different venues before routing to a qualified auction because of the delays associated with receiving an execution in a qualified auction. Specifically, a qualified auction will take a minimum of 100 milliseconds to result in an execution, to which the following additional latencies must be added: (a) time for announcement of the auction to be reported to the consolidated feed; (b) time to route the order to the qualified auction; and (c) any delays or queuing of auctions in the same security.[35]

  These time considerations must be weighed against the fact that 37% of trades in large ETPs (16% for small ETPs) and 28% of trades in large stocks (25% for small stocks) all occur within 100

[34] Reg Best Ex at n.429 ("Pinging for midpoint liquidity at multiple venues could increase the risk of information leakage or that prices may move, possibly resulting in some market participants canceling midpoint orders they posted.").

[35] There is considerable ambiguity regarding whether an open competition trading center could run multiple auctions in the same security at the same time or whether queuing would be required to only allow a single auction for each security at any given time, as discussed further in Appendix D, Item C(1). Assuming queuing of auctions would occur, there would be no way to determine how long the queue was for a potential qualified auction.

milliseconds or less.[36] It would therefore seem that, for many segmented orders that it may be take less time to route to venues other than a qualified auction first. Additionally, given that the OCR permits exchanges to provide rebates in qualified auctions, many segmented orders will be "conflicted transactions" thereby requiring broker-dealers to consider other, immaterial liquidity sources—including in advance of sending the retail order to an auction.

Clarification on these intersections and the Commission's expectations of market participants related thereto are indispensable. Given the magnitude of these questions, SIFMA cannot see a path towards adoption of either Proposal without soliciting further comment on these potential interactions.

B. Rule 605 Proposal, the OCR, and Reg Best Ex

Under the Rule 605 Proposal, the Commission would require broker-dealers that introduce or carry at least 100,000 customer accounts to become subject to reporting under Rule 605. According to the Commission, the purpose of this requirement is to promote competition among customer-facing broker-dealers and "enhance transparency by providing investors with information that they could use to compare the execution quality provided by customer-facing broker-dealers."[37] The Commission believes that investors reviewing the Rule 605 reports of these large broker-dealers could better evaluate broker-dealers' handling of their orders and the increased competition could "lead to faster executions, better price improvement, and a shift in order flow to those broker-dealers offering the best execution quality for their customers."[38] Additionally, under the Rule 605 Proposal, large broker-dealers "would not be required to separately report on or otherwise distinguish orders routed to qualified auctions from other types of orders routed away for execution."[39]

Although not clearly described by the Commission, it appears from the foregoing that the purpose of large broker-dealers' Rule 605 reports with respect to segmented order handling would be primarily to show: (1) whether a broker-dealer routed to the qualified auctions that provided the best executions; and (2) attempts at routing the order to venues other than qualified auctions to potentially seek midpoint or better liquidity before routing to a qualified auction.

This raises several important issues, including investor confusion in particular, with respect to how Rule 605 reports are evaluated. First, the time-to-execution metric is very likely to be skewed because of the requirement to route segmented orders to a qualified auction under the OCR as well as any expectations of Midpoint before Auction Routing under Reg Best Ex. For example, consider three possible routing scenarios for a segmented order:

1. <u>Unsuccessful Midpoint before Auction Routing</u> – Broker A attempts to find midpoint liquidity at several venues, and, finding none, routes the segmented order to a qualified auction.
2. <u>Direct to Auction Routing</u> – Broker B determines not to seek midpoint liquidity for the segmented order, so it routes directly to a qualified auction.
3. <u>Successful Midpoint before Auction Routing</u> – Broker C pursues Midpoint before Auction Routing, and successfully finds midpoint liquidity to fill the segmented order.

In the above scenarios, Broker C is going to have by far the best time-to-execution metrics in its Rule 605 reports than Brokers A and B by a factor of 27, because, according to the Commission, the median time-to-execution for orders internalized by wholesalers is 3.6 milliseconds[40] while a qualified auction will last at

[36] *See* Commission, Division of Trading and Markets, Data Visualizations, Conditional Frequency for Q4 2022 at 100millisecond duration, https://www.sec.gov/marketstructure/datavis/quotelife_etp_sm.html#.ZADbj3bMI2w.

[37] Rule 605 Proposal at 3795.

[38] *Id*. at 3796.

[39] *Id*. at 3802.

[40] *See infra* n.241.

least 100 milliseconds (ignoring any time to route to the qualified auction and any queuing delays). Broker B will have much better time-to-execution metrics in its Rule 605 report than Broker A because Broker A has additional time spent routing to various market centers before ending up in an auction. As described above in Part II(A), however, Broker B may be at risk of having violated Reg Best Ex because it did not pursue potential midpoint or better liquidity prior to routing the segmented order to the qualified auction. Broker A will have the worst time-to-execution metrics notwithstanding that it did everything that it possibly could to try to obtain the best possible price for the segmented order by seeking midpoint liquidity first, unluckily finding none, and then complying with the OCR.

The intersection of these three Proposals creates perverse incentives for broker-dealers in making routing determinations, none of which have been discussed by the Commission. Specifically, a broker-dealer is incentivized to take the chance of seeking midpoint or better liquidity because if it does so, it will have vastly greater time-to-execution metrics *and* will have obtained a favorable price for its order. At the same time, because midpoint liquidity is not displayed, there is no certainty that midpoint liquidity will be found, which will result in the worst outcome in terms of the time-to-execution metric. And, while the middle path of routing directly to a qualified auction strikes a balance between these two choices, the broker-dealer would be at risk for not having sought potential midpoint liquidity prior to routing to the qualified auction.

Second, while one of the key purposes of the Rule 605 Proposal is to provide retail investors with more transparency in order to allow them to make informed decisions about the execution quality at different broker-dealers, the OCR and Reg Best Ex appear to restrict investors' choices by dictating market structure outcomes by imposing requirements that will reduce market competition. For example, a broker-dealer seeking to qualify for the introducing broker exemption under Reg Best Ex may only route its orders to a single executing broker-dealer. And, under the OCR, broker-dealers would be required to route segmented orders to qualified auctions (subject to Midpoint before Auction Routing).

The mandate to route to qualified auctions is particularly problematic because the execution quality received from the qualified auction will be largely out of the control of the broker-dealer. Consequently, Rule 605 reports for large broker-dealers may not accurately reflect the overall execution quality and reliability of a broker-dealer for segmented orders, in part, because broker-dealers will be required to route orders to comply with the OCR, rather than by making routing decisions based on the brokers understanding of markets and market conditions. For example, assume that the three most recent fills in stock XYZ occurred at exchange 1's qualified auction, so a large broker-dealer (subject to Rule 605 reporting) routes a segmented order to that auction. However, other broker-dealers made a similar decision for orders in stock XYZ resulting in a long queue for the broker-dealer's order to be auctioned. The large broker-dealer would have no way of knowing the length of the queue, so, notwithstanding that it made (in its view) the best routing decision to a qualified auction for that segmented order, it will pay a significant (and indeterminable) penalty in terms of time-to-execution for having routed to that auction. Assume further that the market participants providing liquidity in the exchange 1's qualified auction have exhausted their interest by the time the broker's order is auctioned. The broker-dealer may not receive any execution and will have to route to another venue, further exacerbating its poor time-to-execution metrics. In this regard, routing to qualified auctions is rather unlike routing today (*i.e.*, in the absence of the OCR) whereby a broker-dealer can better predict where it will receive fills by either executing against displayed quotations, sending non-displayed orders to ATSs, or through a pattern or practice of executing orders against dealers with reliable fill-rates.

In sum, the Commission believes that Rule 605 reports should be used to compare execution quality across different large broker-dealers notwithstanding that such broker-dealers will have very little control over the execution quality they receive in a particular qualified auction. If investors are going to use Rule 605 reports to compare different broker-dealers as the Commission suggests, it seems plausible that an investor may believe, for example, that large broker-dealer A's execution quality is worse relative to large broker-dealer B, notwithstanding that it was simply the result of unfavorable qualified auction executions or auction queuing delays outside of the control of large broker-dealer A. Similarly, the superior performance based on Rule 605 reports of large broker-dealer B relative to A may not be the result of any actual better routing or execution procedures of B relative to A. The Commission has not discussed or considered the costs and benefits in any of these three Proposals of the implications of holding broker-dealers to account for execution quality that they cannot control or how Rule 605 reports could be modified to mitigate these concerns, such as through investor education, excluding segmented orders, separately categorizing segmented orders, or adjusting time-to-execution metrics.

C. Tick Size Proposal and the OCR

As noted in SIFMA's February 8, 2023, comment letter, the proposed changes to tick sizes the Commission has put forth in its Tick Size Proposal would significantly impact all the calculations the Commission used in its economic analysis to support the OCR Proposal. That is, both the economic baseline and the estimated economic effects described by the Commission are based on the assumption of a market structure in which trades generally occur in full penny increments.

As just one example, the Commission notes in the Tick Size Proposal that "[a]ll else equal, reducing the tick size could narrow the spread"[41] and further estimates that for a majority of the stocks reviewed by the Commission, "the [Commission's] analysis indicates a decrease in realized spreads across all specifications."[42] At the same time, in the OCR, the Commission relies to a significant degree on data indicating that "orders handled by wholesalers have higher realized spreads" than orders executed on an exchange (other than market orders).[43] If the Commission were to implement the Tick Size Proposal, the Commission's analyses in the OCR using realized spreads—including the Commission's formula for estimating the $1.5 billion annual "competitive shortfall,"[44] of which realized spreads is a key component—would need to be adjusted to account for the reduction in realized spreads for a majority of stocks.

In other words, the Commission believes that, if the Tick Size Proposal were implemented, realized spreads would narrow for most stocks. At the same time, the Commission estimates that retail investors could receive an additional $1.5 billion in price improvement under the OCR based in large measure on the Commission's analysis of realized spreads today. Therefore, if both Proposals are implemented, then realized spreads would be reduced under the Tick Size Proposal and the Commission's estimate of the $1.5 billion shortfall would need to be adjusted accordingly.[45] The Commission has performed no calculations that consider this critical interplay, or even acknowledged this interrelationship.

Additionally, the Tick Size Proposal also purports to level the playing field between exchanges and ATSs relative to wholesalers through harmonizing quoting and trading increments by better facilitating exchanges' ability to execute orders in sub-penny increments.[46] At the same time, the Commission makes clear that the OCR "would likely cause wholesalers and some retail brokers to incur significant adjustment

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[41] Tick Size Proposal at 80317.

[42] *Id*. at 80321. The Commission makes this statement with respect to stocks in "bin 1" which are "stocks with quoted spreads ($0.00, $0.06)." *Id.* at n.551. Based on the Commission's estimates in Table 4 of the Tick Size Proposal, this includes 5,937 stocks, with 5,571 stocks having quoted spreads greater than $0.06 (and consequently excluded from bin 1).

[43] OCR at 188.

[44] The Commission describes the competitive shortfall as "the potential additional price improvement (and reduction in transaction costs) that the marketable orders of individual investors would receive from having their order being exposed to greater competition among liquidity suppliers in qualified auctions, as the difference in the realized spreads between marketable orders executed on exchanges and individual investor marketable orders that were executed after being routed to wholesalers." *Id*. at 206.

[45] There are additional significant questions around the Commission's competitive shortfall estimate including that it fails to account for exchange fees and that the estimate assumes that the competitive shortfall would be "on top of" rather than "instead of" the price improvement currently received.

[46] Tick Size Proposal at 80336 ("This coupled with the fact that OTC market makers would be restricted to the same minimum trading increment as exchanges and ATSs would help level the competitive playing field between exchanges/ATSs and off-exchange dealers when it comes to attracting retail order flow.").

costs to their operations, as well as a possible decline in profitability."[47] It is unclear whether the Commission's view is that the OCR and the Tick Size Proposal *together* would level the playing field between wholesalers and exchanges, or if the Tick Size Proposal would, on its own, level the playing field. If the Tick Size Proposal would level the playing field independent of the OCR and the OCR would likely cause a decline in profitability to wholesalers and significant adjustments to their business structures, it begs the question of whether the Commission's new market structure would create an *uneven* playing field in favor of exchanges. Whatever the Commission's views or intentions on this may be, they must be made clear so that the public can understand and comment on the envisioned market structure.

Similarly, the Tick Size Proposal also proposes to harmonize quoting and trading increments (*i.e.*, by prohibiting effecting trades in an increment other than the tick size for the stock) for the stated purpose of leveling the playing field between market centers.[48] At the same time, under the OCR, qualified auctions would operate with a trading increment of $0.001 for all segmented orders, even where the stock may have a tick size other than $0.001 (*i.e.*, $0.002, $0.005, or $0.01). As a result, the two Proposals together would create an *unlevel* playing field for market centers, which is the exact opposite of the stated goal of the Tick Size Proposal.[49]

D. Rule 605 Proposal and Economic Analyses of Other Proposals

The economic analyses of each of the Proposals rely in part on current execution quality reports under Rule 605 of Regulation NMS. However, the Commission acknowledges in the Rule 605 Proposal that the Rule 605 metrics are deficient and in need of enhancements.[50] It is unclear, therefore, the extent to which the Commission's analyses that use Rule 605 reports under the Tick Size Proposal, Reg Best Ex, and the OCR can be considered reliable.

For example, the Commission acknowledges in the Rule 605 Proposal that Rule 605 reports would benefit from a size improvement metric. According to the Commission, a size improvement metric in Rule 605 reports would help address market participants' concerns of finding sources of liquidity for larger-sized orders.[51] At the same time, the Commission makes no attempt to evaluate size improvement as part of the OCR, nor does the Commission even acknowledge that the Rule 605 reports used to support the Commission's analysis in the OCR do not contain a size improvement metric and how that might impact its analysis.

Whether or not the OCR would result in size improvement for segmented orders is left unanswered. That is, it is unclear to what extent submitting orders to qualified auctions under the OCR would result in the same or different levels of size improvement for segmented orders. Most retail investors are likely to prefer $0.005 of price improvement on a 500 share order over $0.01 on 100 shares of its order with the remaining 400 shares receiving no price improvement. Given that the Commission believes size

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[47] OCR at 179.

[48] *See infra* Appendix B, Item D for further discussion of SIFMA's concerns related to harmonizing quoting and trading increments.

[49] For example, under the Tick Size Proposal, a stock with a tick size of $0.005 could generally only trade OTC in increments of $0.005, which is the same increment at which it could quote and trade on exchanges. However, that same order executing in an exchange's qualified auction could trade in increments of $0.001.

[50] Rule 605 Proposal at 3830 ("[T]he utility of Rule 605 reports has been eroded, which has limited the Rule's ability to address the market failures identified in the Adopting Release [of Rule 605's predecessor in 2000]. . . . [T]he metrics currently required to be reported by Rule 605 are no longer as useful for comparing execution quality across market centers as they were when Rule 605 was adopted, and other metrics that would be useful for this purpose are not currently included in reporting requirements, which limits the current benefits of Rule 605 for promoting competition among market centers and improving execution quality for all types of investors.").

[51] *Id*. at 3718 ("The Commission believes that the use of size improvement statistics could help address these concerns by providing users of the statistics with information relating to which market centers and broker-dealers are more likely to be able to fill larger-sized orders at or better than the NBBO.").

improvement is important enough to include in Rule 605 reports, it should at the very least be considered in connection with the OCR.

While the Commission appears to have tried to mitigate some of the limitations of using Rule 605 data by supplementing its analyses with CAT data, the Commission does not appear to have tried to use CAT data to evaluate size improvement under the OCR. As noted, CAT data are also not available to the public and cannot therefore be evaluated by the public in its review and consideration of the Proposals.

Finally, a recent academic study indicates that the proposed changes to Rule 605 may increase reported price improvement by up to five times the currently reported figures that the Commission uses in its economic analyses.[52] Specifically, under the Rule 605 Proposal, covered orders would be expanded to include non-exempt short sales, odd lots, and (as noted) a size improvement metric. The Battalio Study found, based on a review of Rule 605 data and proprietary data provided by one or more wholesalers for the month of May 2022, that when short sales, odd lots, and a size improvement metric are included—consistent with the changes put forward in the Rule 605 Proposal—price improvement per month as reported under Rule 605 increases from $81.2 million to $388 million.[53] If it is true that price improvement statistics of wholesalers would increase as a result of the Commission adopting the proposed changes to Rule 605, such an increase would matter significantly for ,and could materially change the conclusions of, the Commission's economic analyses in the other Proposals, in particular the OCR and Reg Best Ex. For example, the $1.5 billion competitive shortfall in the OCR's economic analysis is the Commission's estimate of future investor benefits compared to a baseline scenario that measures investor benefits using currently reported figures under Rule 605. But if, as the Battalio Study shows, price improvement figures as currently measured by Rule 605 significantly understate current investor benefits, the Commission's $1.5 billion figure likely overestimates future investor benefits. The Commission's estimate of the price improvement that investors may receive under the OCR lacks validity unless it is compared to the amount of price improvement that investors are actually receive today. Although the Battalio Study was published in December 2022 and therefore could not have been included in the Commission's economic analyses for the Proposals, the Commission could have used CAT data to construct its own estimate of the actual price improvement that investors receive today, incorporating the changes that it proposes in the Rule 605 Proposal. The Battalio Study also underscores the need to adopt amendments to Rule 605 to obtain a clear picture of today's markets, which should be a prerequisite for the Commission to assess whether and what additional market structure changes may be warranted.

E. The Rule 605 Proposal and the Tick Size Proposal

The Commission does not appear to have considered the impact of variable tick sizes for securities on market participants' ability to compare execution quality over several months. For example, assume that in January, a stock trades with a tick size of $0.002. Under the proposed harmonization of quoting and trading increments under the Tick Size Proposal, market participants could only provide price improvement in an increment of at least $0.002. Assume that during the month of March, time-weighted average quoted spread for the stock widens to $0.05, resulting in the stock being assigned a new tick size of $0.01 for Q2 of that year and price improvement only being permitted in increments of $0.01. However, assume further that in April and for the rest of Q2, the stock returns to a narrower spread of $0.01 commensurate with its $0.002 tick size. Market participants will be unlikely to provide price improvement of a full $0.01 when the spread on the stock is itself $0.01.

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[52] Robert H. Battalio, Robert Jennings, *Why do Brokers who do not Charge Payment for Order Flow Route Marketable Orders to Wholesalers?* (Dec. 14, 2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4304124 ("Battalio Study").

[53] *Id.* at 19 ("Together, fully internalized and fully externalized orders adjusting for size improvement, odd lots, and short sells increases the Rule 605 defined price improvement from $81.2 million to $223.3 million, a 2.75-fold increase."). The Battalio study notes in footnote 25 that depending on how size improvement is calculated, the amount of price improvement is as high as $388 million for May 2022, which would be a five-fold increase. *Id.*

The impact on Rule 605 reports would be that the stock would appear to receive good execution quality during most of Q1 and poor execution quality during Q2. There would likely be almost no price improvement for the stock during Q2 until its tick size is recalibrated for Q3. This raises concerns about the ability to compare the execution quality for the stock across multiple months. While the impact on the execution quality of the stock may impact market centers and broker-dealers reporting under 605 in the same manner, there is a significant possibility of investor confusion when comparing Rule 605 reports across several months. SIFMA believes that this interplay should be considered by the Commission and that there should be some mechanism by which investors are informed of how to interpret Rule 605 reports in these situations.

F. Impact on Consolidated Market Data, Capacity Costs and the CAT

SIFMA is concerned about the cumulative impact of the Proposals on consolidated market data, capacity costs and CAT data requirements, in particular with respect to the OCR and the Tick Size Proposal. For example, under the OCR, auction messages would be disseminated as part of consolidated market data. However, the Commission does not appear to have provided any analysis as to the impact this might have on consolidated market data, such as the estimated number of auctions that would occur throughout the day and the impact such additional information might have on increasing the latency of consolidated market data relative to exchange proprietary market data feeds. One of the primary goals of the Commission's Market Data Infrastructure ("MDI") rules was to make consolidated market data more competitive, both in terms of the content and latency, with exchange proprietary market data.[54] These goals could be potentially undermined depending on the anticipated volume and frequency of qualified auction messages.

Similarly, by reducing the minimum pricing increments for quotations under the Tick Size Proposal, there would be significantly more quotation increments within a penny-wide spread for a given security. This would significantly increase the capacity requirements for market participants to process these additional quotation messages (and auction messages in the case of the OCR). For example, a stock that currently trades at a penny increment (*e.g.*, \$10.00 x \$10.01) has just two quotation increments in a penny wide spread. If that same stock would now trade with an increment of \$0.001 under the Tick Size Proposal, there would be 10 trading increments between the price points of \$10.00 x \$10.01. Under the Commission's MDI rules, consolidated market data would include five levels of depth-of-book data. As a result, once the MDI rules are implemented (and in the absence of the Tick Size Proposal), consolidated market data would show liquidity for the stock from \$9.96 to \$10.05. With the Tick Size Proposal, consolidated market data under the MDI rules would only show depth-of-book data between \$10.00 and \$10.01, thus providing no pricing information in consolidated market data below \$10.00 and above \$10.01. This would potentially provide significantly less overall pricing and liquidity data in the consolidated feed to market participants, which is a core objective of the MDI rules.

The Commission does not appear to have considered the impact of these Proposals on the quality, utility, and latency of consolidated market data and the cumulative impact of both Proposals together, including the extent to which the Proposals may undermine certain of the Commission's goals in adopting the MDI rules. Moreover, all of the qualified auction messages (including auction responses) under the OCR will presumably need to be included as part of CAT data, as will all of the quotations at increasingly granular pricing increments under the Tick Size Proposal. To the extent broker-dealers are expected to pursue Midpoint before Auction routing, these orders routed to many different venues (including immaterial sources of liquidity where the transaction is "conflicted") would further increase the amount of information and messages related to trading. The potential costs of each Proposal, both individually and cumulatively, on CAT data resources and the capacity of market participants' systems and records should be made clear.

[54] Exchange Act Release No. 90610, 86 FR 18596, 18638-39 (Apr. 9, 2021).

III. The Economic Analyses Raise Significant Concerns Including the Use of Private CAT Data by the Commission that is Necessary to Meaningfully Comment on the Proposals

As articulated in SIFMA's previous comment letter of February 8, 2023, the non-public CAT data and related information (including pertaining to the Commission's methodology, is necessary for the public to provide meaningful comment on the Proposals.[55] SIFMA has also submitted FOIA request pertaining to this data (appended to SIFMA's earlier comment letter). Courts have made it abundantly clear that "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."[56] SIFMA urges the Commission to provide such data in accordance with SIFMA's FOIA request to help facilitate the public's review of the Proposals.

Aside from the need for CAT data, there are significant issues with the Commission's economic analyses related to several of the Proposals.

A. **Reg Best Ex** – The Commission: (i) does not identify a market failure that would be addressed by Reg Best Ex; (ii) does not identify a single quantifiable benefit that could result from Reg Best Ex, and consequently fails to weigh the estimated costs against such benefit; (iii) appears to re-use large portions of the economic analysis for the OCR; and (iv) grossly underestimates the costs and burdens associated with Reg Best Ex.

B. **OCR** – The Commission: (i) fails to account for highly relevant considerations such as size improvement provided by wholesalers; (ii) uses unreliable realized spread calculations to conclude that better executions are achieved on exchanges relative to wholesalers and does not perform an apples-to-apples comparison of wholesaler versus exchange executions based on realized spreads; (iii) bases its estimated $1.5 billion competitive shortfall on wholly untenable assumptions; (iv) does not acknowledge that by the Commission's own assumptions, executions would be worse for at least some broker-dealers if the OCR is adopted; (v) fails to analyze the impact of the OCR on thinly traded securities; and (vi) fails to address numerous, highly relevant academic studies.

C. **Tick Size Proposal** – The Commission does not: (i) provide any quantitative basis for why it chose the access fee caps that it did; (ii) consider the amount of access fees as a percentage of the quoted spread; and (iii) account for the impact of Trading Activity ("TAF") fees.

Each of these issues are described in greater detail in the final section of the relevant Appendix for each Proposal.

IV. The Commission Should Pursue a Gradual and Staggered Approach to Any Adoption of the Proposals with Amendments to Rule 605 Occurring First

SIFMA generally supports the Rule 605 Proposal, subject to certain changes described in Appendix A. Notwithstanding SIFMA's concerns regarding the other three Proposals and belief that the Commission should withdraw or proceed no further with the OCR and Reg Best Ex, to the extent that any of the Proposals are adopted, SIFMA believes that the Rule 605 Proposal should be adopted first to establish a new baseline to evaluate the impact of the other Proposals. Without doing so, there will be no way to effectively evaluate the impact of each of the other Proposals or their constituent components.

Adopting a staggered and gradual approach is ultimately the core of the scientific method—to isolate independent variables to be able to determine cause and effect relationships. If each of the Proposals are adopted or implemented together, and one of the Proposals (or one component of one Proposal) causes an undesirable effect, neither the Commission nor the public will be able to determine the exact cause. To

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[55] *See* SIFMA Letter I, *supra* n.4.

[56] *Connecticut Light & Power Co. v. NRC*, 673 F.2d 525, 530-31 (D.C. Cir. 1982); *see also, Am. Med. Ass'n v. Reno,* 57 F.3d 1129, 1133 (D.C. Cir. 1995).

the extent the Commission does not believe this to be true, it should explain why it believes that implementing multiple fundamental changes to the equity market structure simultaneously will nonetheless allow the Commission and the public to identify the effect of specific variables.

On the contrary, if the Commission were to insist on implementing multiple of the Proposals at the (nearly) same time, and if there are any ill effects observed, then it may be extremely difficult to discern which of the Proposals is the culprit, in order to unwind the harm. As industry practitioners well know, best practices for risk mitigation demand that any large change implementation must have clearly defined rollback criteria and procedures. If the changes prove ineffective or undesirable, it could take years to pivot back to the previous market structure or to correct the problematic market structure all the while discouraging investors' confidence in our capital markets.

Additionally, SIFMA believes that a gradual approach to reform is particularly important given the Commission's acknowledgement of the numerous uncertainties about the effects and consequences of the Proposals. For example, in the OCR, the Commission states that it "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."[57] Similarly, in the Tick Size Proposal, the Commission stated that "requiring trades to occur at the minimum pricing increment would have uncertain net effects on total price improvement, which is the primary mechanism for the economic effects of a trading increment."[58] In light of the considerable uncertainties of many of the potential effects of the Proposals (both individually and collectively), SIFMA urges the Commission to pursue a gradual implementation of the Proposals.

The reason the Rule 605 Proposal should be adopted first is to improve the baseline metrics for measuring execution quality. The Commission acknowledges that Rule 605 needs to be modernized and enhanced in order to more appropriately measure execution quality in light of changes in the markets over the past two decades since Rule 605's initial adoption. If the execution quality metrics under current Rule 605 are not appropriately tailored to measure execution quality in today's markets, it follows that enhancements to Rule 605 should be adopted first to establish a new baseline to evaluate execution quality. Once the improved execution quality metrics have been implemented, these metrics can be used to evaluate the efficacy and utility of subsequent changes to our market structure, such as changes to minimum pricing increments or the impact of qualified auctions for segmented orders.

V. Conclusion

SIFMA hopes that the Commission carefully considers the comments set forth above and in the accompanying appendices. SIFMA believes that a gradual approach to implementing market structure reforms should be the guiding light to mitigate potential unintended consequences and allow time to evaluate the efficacy of reforms. Accordingly, SIFMA urges the Commission <u>not</u> to implement these Proposals together and instead adopt amendments to Rule 605 (with our recommendations) before proceeding with consideration of any other Proposals following industry input and commentary.

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Sincerely,

Ellen Greene

Ellen Greene
Managing Director, Equity and Options Market Structure
SIFMA

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[57] OCR at 203.

[58] Tick Size Proposal at 80325.

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

Appendix A – Rule 605 Proposal

A. Overview of Key Considerations

SIFMA appreciates the Commission's efforts to increase the transparency available in the equities markets regarding the quality of order executions. Rule 605 has been a valuable feature of the equities markets and provides investors the ability to make informed decisions about where to send their orders, while at the same time facilitating competition among market centers for the execution of those orders. As the Commission correctly notes, Rule 605 has not been substantively updated since its adoption, while the markets have changed dramatically during this time. Accordingly, SIFMA generally supports the much needed updates the Commission has proposed in the Rule 605 Proposal. However, SIFMA believes the Commission should make certain changes and clarifications to the Rule 605 Proposal prior to its adoption.

As described in more detail in Part IV of the main letter above, SIFMA strongly believes any proposed reforms to Rule 605 should be adopted and operated for a meaningful period of time (*i.e.*, one to two years) before considering any additional changes to the current market structure. This observation period would establish a new informational baseline that the Commission and market participants can use to evaluate the state of the markets and determine whether market structure modifications are necessary. The Rule 605 reforms would also allow for any future modifications to market structure, to the extent necessary, to be properly measured for effectiveness and impact compared to the new baseline.

Additionally, SIFMA encourages the Commission to require FINRA CAT to produce Rule 605 reports on behalf of all broker-dealers in order to ensure the standardization of data reported, reduce burdens and complexity on broker-dealers, centralize where Rule 605 data can be obtained, and generally increase regulatory efficiencies in the markets.

Finally, SIFMA has identified certain operational issues and questions raised by the Rule 605 Proposal that SIFMA believes should be addressed. These relate to (1) the manner in which Rule 605 reports would calculate the average effective over quoted spread ("E/Q"); (2) the proposed distinction between OTC market makers and single-dealer platform activities; (3) the proposed distinction between broker-dealer and market center activity; (4) the use of Rule 605 reports for evaluation purposes; and (5) the inclusion of fractional shares in Rule 605 reports. These issues are discussed in more detail below, along with some additional recommended improvements to the Rule 605 Proposal.

B. SIFMA Supports Amendments to Rule 605 and Encourages Their Adoption Before Any Other Proposals

SIFMA applauds the Commission for proposing much-needed changes to enhance and modernize the data included in Rule 605 reports and to make such data more useful for market participants. In particular, SIFMA generally supports the Commission's proposed inclusion of the size improvement metric and odd-lot data, and the creation of separate order categories for immediate-or-cancel orders, non-marketable limit orders, and stop orders. SIFMA believes that the enhancements to Rule 605 data would not only improve order execution information available for market participants to make trading and order routing decisions, but would also provide a better ability for the Commission and the public to measure the need for additional rulemaking, as well as the actual effects of any subsequently adopted rules. Updating Rule 605 reports is also likely to reveal that retail investors receive significantly more price improvement than currently estimated by the Commission using today's Rule 605 reports, which would be critical information to inform future rulemaking.[59] As a result, and as noted previously in Part IV, SIFMA strongly believes the Commission should adopt amendments to Rule 605 *before* considering any of the other Proposals.[60] However, several aspects of the Rule 605 Proposal need additional clarity or could be

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[59] *See supra* n. 52 – 53 and accompanying text.

[60] *See supra* Part IV. *See also* Hester Peirce, Commissioner, Commission, Statement on Disclosure of Order Execution Information (Dec. 14, 2022), https://www.sec.gov/news/statement/peirce-order-execution-20221214 ("I also look forward to

improved before its adoption. Accordingly, the Commission should resolve the following operational and interpretive questions with industry engagement and input before considering the Rule 605 Proposal's adoption.

C. FINRA or CAT Should Be Leveraged to Produce Rule 605 Reports

Over the past several years, the industry has undertaken significant expense and investment to create and support the CAT, operated by FINRA. As a result, FINRA (or FINRA CAT, LLC) currently has all of the data elements that would be necessary to produce Rule 605 reports, including the additional data elements under the Rule 605 Proposal. This information is already collected and maintained in a consolidated manner and could be efficiently leveraged for the purpose of producing Rule 605 reports.

Utilizing FINRA/CAT, as an independent agent, to produce Rule 605 reports would eliminate any incentive for a broker-dealer to report its execution quality metrics in a more favorable light, serving the Commission's broader policy goal of reducing conflicts of interest while simultaneously reducing the regulatory reporting burdens on broker-dealers and saving market participants from substantial costs. It would also facilitate the Commission's stated goal of better enabling market center and broker-dealer execution quality comparisons by maintaining a centralized location for all Rule 605 reports to be examined by market participants (and made available to the Commission for examination purposes).[61]

Using FINRA/CAT to produce Rule 605 reports would also ensure that all Rule 605 reports are calculated in precisely the same manner, ensuring uniformity, and making the reports more reliable, informative, and comparable. As with any new regulation, but particularly with one as technically detailed as Rule 605, interpretive questions can arise with respect to how market participants should perform certain calculations prescribed by the data collection requirements of the rule.[62] While the Commission can clarify questions related to the mechanics of Rule 605 reports in an adopting release or through post-adoption FAQs, it will take time and lessons learned following implementation to resolve many interpretive differences. Additional questions may continue to develop over time as markets and data practices evolve. To the extent different approaches to resolving these questions are adopted by different firms, it will lead to variations in Rule 605 data reports, which will correspondingly limit the ability of the reports to facilitate comparisons across different market centers (and, under the Rule 605 Proposal, large broker-dealers). This also presents regulatory risks to market centers, and broker-dealers new to Rule 605 reporting, that may face enforcement risk to the extent they adopt an incorrect, even if reasonable, interpretation of Rule 605's new requirements and inadvertently produce the wrong data. All of these issues would be largely mitigated if FINRA/CAT were to assume responsibility for producing Rule 605 reports at a reasonable and appropriate cost to industry members.[63]

To the extent FINRA/CAT are not utilized to produce Rule 605 reports, the Commission or FINRA should be required to provide a publicly available data template that specifies *exactly* how a market center or broker-dealer's Rule 605 reports should be produced.[64] Doing so would establish a standardized metric

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hearing whether it would make sense to allow these changes to take effect before moving forward with some of the more fundamental changes we are proposing today.").

[61] SIFMA also believes that if FINRA or FINRA CAT were to assume responsibility for producing Rule 605 reports, it would be important to allow broker-dealers some flexibility to be able to provide some context on their websites related to their Rule 605 report to help facilitate public understanding of the data.

[62] The industry has experienced this with the adoption of reforms to Rule 606 in 2018, where the expectations of the Commission post-adoption have differed significantly from both what was proposed and what was adopted.

[63] If the Commission agrees to utilize FINRA/CAT to produce Rule 605 reports, SIFMA suggests that the Commission also consider whether a review process would be beneficial by which firms could challenge the data produced if a potential inaccuracy or inconsistency is identified. SIFMA believes that a uniform and efficient review process would be an important quality control given the role of execution quality data in order routing determinations.

[64] For example, to examine a broker-dealer for compliance with Rule 605, we expect that FINRA would program its own version of a broker-dealer's Rule 605 report using the broker-dealer's raw data in order to identify any discrepancies between

consistent with regulators' expectations and reduce any regulatory risks reporting entities may face from having to make independent interpretations of various reporting requirements. And, to the extent Rule 605 does not employ FINRA/CAT to prepare all Rule 605 reports, but FINRA nevertheless prepares its own Rule 605 data with respect to an individual firm for regulatory purposes, FINRA should be required to make its version of the report available to the relevant firm.

Regardless of how the Commission determines to facilitate the production of Rule 605 reports, the Commission should provide for an implementation period of, at minimum, one year and ideally two years following adoption of the Rule 605 Proposal to allow for the industry, SROs, and the Commission to ensure that revised Rule 605 reports are produced in a consistent way.

D. Summary Reports and the Proposed Average E/Q Calculation

The Rule 605 Proposal would require market centers and broker-dealers to calculate the average E/Q for each stock and include an aggregated E/Q measure in their monthly summary reports. Specifically, firms would be required to compute the average E/Q by dividing effective spread by quoted spread for each transaction and then averaging that over the month, weighted by number of shares. SIFMA believes that the more appropriate method to calculate average E/Q is to use *spread-weighting*, which is the method currently used by the industry. Accordingly, the Rule 605 Proposal should be amended to require that spread-weighting be used to compute average E/Q rather than share-weighting.[65]

The use of spread-weighting to compute average E/Q provides advantages over a share-weighting calculation. Using the share-weighting formula would tend to weigh sub-dollar stocks more heavily as opposed to stocks that have the widest spreads. This could allow a firm to manipulate its average E/Q by adjusting the type of stocks for which it provides better price-improvement. Using a spread-weighting formula would preserve the relationship between price improvement in dollars and E/Q—the firm's E/Q would therefore remain the same regardless of how the firm distributes its price improvement among different stocks. For example, the use of share-weighting to compute E/Q would incentivize providing price improvement to lower-priced, higher-volume orders over higher-priced, lower-volume orders, while using spread-weighting would treat both categories equally. As a result, using spread-weighting would better facilitate comparisons across different market centers and broker-dealers and would minimize broker-dealers' incentives to game the statistical measurements utilized by the Commission.

Moreover, the Commission appears to have used *notional*-weighting rather than share-weighting in its own analysis regarding the E/Q ratio.[66] It appears that the Commission has proposed a share-weighting metric that it did not find sufficiently useful for purposes of its own analysis. The Commission should therefore be amenable to considering more useful alternatives in any final rule adoption. While SIFMA expresses a preference for using the industry standard spread-weighting methodology, at a minimum the Commission should gather appropriate data to identify the material differences between alternative weighting methods and then provide a principled basis for selecting only one.

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the broker-dealer's prepared report and FINRA's expectations of the rule's requirements. Accordingly, SIFMA asks that FINRA be required to make the code underlying its report preparation public in order to allow firms to align with regulatory expectations and ensure fairness among firms subject to and examined for compliance with Rule 605.

[65] The Commission is correct in its observation that "E/Q is already often-used and well-understood by industry participants." Rule 605 Proposal at 3817. Despite this observation, however, the Commission has proposed using a calculation of E/Q that is different from that which is currently used by industry participants.

[66] *See* Rule 605 Proposal at n.610 ("E/Q ratio is the weighted average of the ratio of each transaction's effective spread divided by its quoted spread at the time of order receipt. . . . Weighted averages are calculated by calculating the share weighted value at the individual stock level over the sample (i.e., weighting at the stock level based on the number of shares executed for transactions in the individual stock) and then weighting across stocks based on their total dollar transaction volume during the sample period (i.e., using the stock's total dollar trading volume as the weight when averaging the share weighted average stock values).").

E. The Proposed Distinction Between OTC Market Makers and Single Dealer Platform ("SDPs") Requires Clarification

The Commission proposes that separate Rule 605 reports be required for OTC market making activities and SDP activities, but the Rule 605 Proposal provides no formal definition of a SDP. The Commission simply states that: "Wholesalers and other OTC market makers either execute orders themselves or instead further route the orders to other venues. An SDP always acts as the counterparty to any trade that occurs on the SDP."[67] Distinguishing between OTC market makers and SDPs introduces numerous interpretive questions regarding how certain firms should produce Rule 605 reports. For example:

- Is the Commission suggesting that an SDP is a type of OTC market maker and therefore a market center? If not, on what basis would an SDP be subject to Rule 605, assuming it does not introduce or carry 100,000 or more customer accounts?
- Would an SDP be considered an OTC market maker for purposes of any other rule? If so, what is the basis for the distinction to treat them separately for purposes of the Rule 605 Proposal?
- Is the Commission assuming that an SDP only accepts IOC orders? If so, assume there is an OTC market maker (*i.e.*, a broker-dealer that also routes to other destinations) that accepts both IOC orders and orders that can be routed to another venue. Would all IOC orders be treated as SDP activity or should all of the activity be considered activity of an OTC market maker? If so, what is the basis for that determination?
- Under what circumstances can an SDP be considered to be embedded within an ATS (such as when an SDP can be specifically targeted within an ATS by IOC or FOK orders)?
- Would SDP activity include orders received both from a client (whether or not a broker-dealer) and from internal smart order routers?

These clarifications are essential to comprehend the proposed guidance, particularly since there is no current or proposed formal definition of a SDP in Commission rules.

F. The Proposed Distinction Between Broker-Dealer Activity and Market Center Activity Requires Clarification

The Commission also proposes that separate Rule 605 reports be required for transactions effected as a market center and transactions for which a firm acted as a broker-dealer. The distinction between these different activities, however, is similarly unclear and creates significant confusion as to how a firm should group different transactions. For example:

- If a firm is an OTC market maker and introduces or carries 100,000+ customer accounts, how should the firm determine which orders to report as broker-dealer trades versus those executed as a market center?
- If a firm engages in a mixed capacity trade involving both a portion executed as agent and a portion executed as principal, would this order need to be bifurcated between the two reports?
- If a firm trades in a riskless principal capacity, but the transaction was part of its internal broker-dealer business and not its OTC market making business, should the firm nonetheless attribute the riskless principal trade to its market center Rule 605 report? The Commission only discusses a market center engaging in riskless principal transactions,[68] but it seems possible that a non-market center might transact on a riskless principal basis as well.

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[67] *Id*. at n.215.

[68] *See* Rule 605 Proposal at 3819.

There are certain to be significantly more (and more granular) questions that arise with respect to different types of orders and order handling scenarios. This reality further underscores the tremendous efficiencies to be gained through FINRA/CAT producing Rule 605 reports rather than broker-dealers. In such case, the Commission and FINRA, with an opportunity for industry input, could resolve these questions as they arise.

G. The Use of Rule 605 Reports by Retail Investors to Evaluate Broker-Dealers

1. Qualified Auctions Pursuant to the OCR

If every retail broker-dealer is required to route segmented orders to qualified auctions pursuant to the OCR, it is unclear why these broker-dealers should report Rule 605 data for these segmented orders. Retail broker-dealers would not be competing in the same manner they do today when executing segmented orders, as the Commission will have prescribed that such orders must execute through a qualified auction. Accordingly, the execution quality received for such orders will in many cases depend on the quality of the individual qualified auction, rather than the actions taken by the originating broker-dealer (as explained further below). Therefore, it would be more efficient for investors and market participants to have a single Rule 605 report that evaluates all qualified auctions.

As proposed, the Rule 605 Proposal would not require broker-dealers to separately indicate in their 605 reports which of their orders were routed to a qualified auction. However, exchanges and NMS Stock ATSs operating a qualified auction would be required to separately indicate the orders that executed in an auction because, as the Commission notes, orders executed in a qualified auction may have different execution quality statistics from other orders and the time to execution statistics (due to the mandated time period of the qualified auction) may be systematically different for segmented orders as compared to other orders.[69] Based on the Commission's reasoning, it would seem that a broker-dealer's Rule 605 execution quality metrics might be skewed based on the performance and speed of the underlying auction, as well as the number of segmented orders the broker-dealer handles. For example, a broker-dealer with only a small number of segmented orders would likely have a faster time to execution than a broker-dealer with a larger proportion of its volume consisting of segmented orders. SIFMA does not believe it is appropriate to attribute this execution metric to the originating broker-dealers subject to Rule 605 reporting, because the broker-dealer had to route these segmented orders to a qualified auction.[70] The Commission's analysis has not contemplated how this would impact large broker-dealers given that segmented orders would account for a large portion of their order flow. Nor has the Commission clearly explained the disparate treatment under the OCR by excluding segmented orders executed in a qualified auction from the regular 605 reports of market centers that operate a qualified auction and why the Commission's concerns with respect to these market centers do not similarly apply to other market centers or large broker-dealers.

2. It Remains Unclear That Broker-Dealers' Rule 605 Reports Would Increase Competition

The Commission claims that requiring larger broker-dealers to prepare Rule 605 reports will increase competition by allowing market participants to evaluate and compare broker-dealers' execution quality. At the same time, the Commission states that differences in certain execution quality statistics for broker-dealers as compared to market centers "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."[71] According to the Commission, "these differences are well-known and taken into

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[69] *Id*. at 3801-02.

[70] In other words, an originating broker-dealer is ultimately at the mercy of the qualified auction's execution quality and preestablished delay period. While a broker-dealer can make reasonable determinations as to which qualified auction may be the best to route to, the quality of executions received in a qualified auction is likely to vary based on facts and circumstances, such as any queuing delays, market conditions, and the number of interested responders at a given time. In this regard, qualified auctions executions are not a reliable indicator of the execution quality of a particular broker-dealer relative to executions for which a broker-dealer may freely choose where it wants to route its orders among all trading centers.

[71] Rule 605 Proposal at 3800.

account by market participants when evaluating execution quality stats."[72] SIFMA does not understand on what basis the Commission believes that these differences in business models are well-known by market participants for purposes of evaluating execution quality statistics. This assumption is particularly confounding when thinking about retail investors that may be evaluating execution quality differences. Moreover, if differences in reported execution quality statistics are reflective of different business models rather than *actual* differences in execution quality, SIFMA is concerned that producing Rule 605 statistics (particularly in the summary reports most likely to be used by retail investors) without accounting for different broker-dealer business models could lead investors to make incorrect decisions regarding broker-dealer selection.

The Commission further suggests that the use of larger broker-dealers' Rule 605 reports to evaluate the execution quality of competing broker-dealers could lead to shifts in order flow from one broker-dealer to another, thus improving overall execution quality.[73] However, the Commission relies on circular logic to make this point and does not consider all possibilities. In particular, the Commission does not account for any potential negative effects on execution quality caused by the shifting of order flow itself. For example, if customers shift their order flow from Firm A to Firm B because of perceived better execution quality at Firm B, then the customers of Firm B are unlikely to receive better execution quality, and may receive worse execution quality. This is because all order flow has now migrated to Firm B—that is, Firm B would now receive all of the order flow from Firm A that received less favorable execution quality. The customers of Firm B would not receive better execution quality because they were already receiving higher execution quality; instead, they may lose some of that execution quality in relative terms if the flow from Firm A improves its execution quality, or the flow from Firm A may not receive any improvement as the reason for their lower execution quality could be that some broker-dealers simply have more adverse order selection. In addition, to the extent order flow was consolidated among a smaller number of firms due to perceived differences in execution quality, this could drive some broker-dealers out of business, reducing competition in the market and ultimately harming overall execution quality. Additionally, it may not be clear to customers of Firm A why Firm A's execution quality (as reported on a 605 report) is worse than Firm B's on a relative basis. Differences in execution quality could be the result of a myriad of factors, including the customers the two different brokers serve and the equities the customers trade.

3. *The Commission Should Provide for Investor Education on Rule 605 Reports*

If, however, the Commission believes that retail investors will use proposed Rule 605 summary reports to inform their broker-dealer selections, it is critical that the Commission ensure retail investors can sufficiently understand the information in those reports and how to use that information correctly. Otherwise, there is a risk that retail investors may misinterpret the data and not make an appropriately informed decision. Accordingly, SIFMA strongly encourages the Commission to develop a plan to provide retail investors with sufficient educational resources to understand the information in Rule 605 summary reports and how such information can be used to inform their investment decisions. SIFMA reminds the Commission that the industry has expended significant effort and resources to ensure that retail investors have access to educational materials and support necessary to best inform their use of broker-dealer services. However, the Commission is now proposing the new summary reports as tools for investors and is therefore in the best position to explain their meaning and provide the appropriate resources for retail investors to understand their intended use.

As the Commission is aware, Rule 605 data can present differently among firms with different customer bases and correspondingly different types of order flow. For example, quoted spread statistics for one firm may look very different from those of another firm that has more order flow and a larger percentage of fractional share trading, while not corresponding to any difference in actual execution quality. Without appropriately accounting for the difference in the nature of these firms' order flow, investors may

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[72] *Id*. at 3800.

[73] *Id*. at 3796.

misinterpret the data and make suboptimal decisions as a result. While the Commission should consider the greatest extent to which this data can be normalized, it should also ensure that investors understand how to interpret varying data in order to facilitate the most accurate cross-comparisons between broker-dealers' execution quality. One possible means to work towards this goal could be to allow firms an opportunity to provide a statement in their Rule 605 report explaining how to contextualize the report based on the nature of the particular firm's order flow.

H. The Requirement to Produce Rule 605 Reports for Fractional Shares Should Be Eliminated

SIFMA urges the Commission to eliminate the proposed requirement to separately categorize orders for fractional shares in Rule 605 reports. The Rule 605 Proposal contemplates these orders as only those for an execution of less than a single share, as odd lot and mixed lot orders would be reported separately. Given the *de minimis* quantity of shares, SIFMA believes this information is of limited value to investors. There is also no clear way to execute fractional shares in a purely agency capacity.[74] As a result, to the extent fractional share orders are required to be included in Rule 605 reports, any broker-dealer, even a small broker-dealer, that wanted to facilitate a fractional share order for its customer would be considered a market center for purposes of Rule 605. Accordingly, there would be no way to facilitate fractional share trades for customers unless a firm complies with Rule 605 for such orders. This would harm smaller broker-dealers by creating a barrier to entry to support fractional share programs, which are popular among retail investors.

Additionally, much of today's market infrastructure does not yet support fractional share trading and would need to be updated to account for fractional share trading and facilitate the ability for firms to produce Rule 605 reports for such orders. For example, FINRA does not currently have a mechanism to report fractional share trades, because all of these trades are rounded up today.[75] However, the Commission is proposing to require that broker-dealers separately publish execution quality statistics for fractional shares. The costs to fully modify this infrastructure would be high compared to the minimal benefit of including fractional share reporting. These costs would only be compounded to the extent the Commission adopts other market structure changes at the same time as the Rule 605 Proposal.

I. Additional Improvements to the Rule 605 Proposal

In addition to the suggestions and requests for clarifications described above, SIFMA supports removing the realized spread calculations included in the Rule 605 Proposal's reporting requirements. SIFMA is concerned that this data element is being misused in the Rule 605 Proposal as a proxy for certain firm profits, such as by the Commission in the OCR Proposal, which SIFMA does not believe is an appropriate measurement. The Commission also has not provided a rational basis for its method of

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[74] Ultimately, fractional share interests represent a notation of a broker-dealer's books and records allocating a fraction of the share to the customer and the remainder to the broker-dealer (or another customer – *e.g.*, if two customers each hold 0.5 shares). Because fractional share interests are notations on a broker-dealer's books and records, principal transactions are ultimately inevitable. For example, assume a broker-dealer has two customers each with 0.5 shares of XYZ and that the broker-dealer holds no proprietary position in XYZ. Assume customer 1 decides to sell its 0.5 shares but customer 2 does not. There is no clear mechanism by which a broker-dealer can sell 0.5 shares as agent in the market. Consequently, many fractional share programs operate by having the broker-dealer maintain a continuous inventory of one to two shares of eligible securities with which they can combine a customer's fractional share interest to facilitate whole share executions. In the example above, a broker-dealer might buy the 0.5 shares from the customer and then sell a whole share interest in the market.

[75] *See* FINRA Trade Reporting FAQs, https://www.finra.org/filing-reporting/market-transparency-reporting/trade-reporting-faq ("**Q101.14**: How should a trade for a fractional number of shares, for example, 100.5 shares, be reported? **A101.14**: When reporting a trade for a fractional number of shares, firms should delete the fraction and report the whole number, except if the whole number would be 0 (zero). If the whole number would be 0, firms should round up to 1. Thus, for example, for a trade of 100.5 shares, the reported quantity would be 100. Trade reports with a share quantity containing a decimal or a fraction will be rejected. (See also, e.g., OATS FAQ T69.)").

calibrating the realized spread time frames (*i.e.*, 15 seconds and one minute). In particular, while the Commission attempts to utilize realized spread as a proxy for liquidity provider profitability in its analysis of the proposed timeframes, the Commission has not appropriately analyzed inventory turnover, which is necessary to convey relevant meaning to the analysis.[76] The Commission acknowledges that, to precisely capture its intended purpose, the metric would "align[] with the amount of time an average liquidity provider holds onto the inventory positions established from providing liquidity" but then states that this time period is "not easily observable."[77] Accordingly, because the Commission lacks the metric it needs to determine an appropriately useful realized spread time frame, the proposed 15 second and one minute time frames are arbitrary with respect to inventory turnover. While the concept of realized spread may be meaningful, SIFMA does not believe a one-size-fits-all metric can work—market participants all have different views as to what time period(s) is appropriate to measure realized spread, and this can also vary based on the specific symbol and type of order flow involved. For example, because retail investor orders are typically executed within milliseconds, pricing information 15 seconds and one minute after execution is unlikely to provide much, if any, value.

SIFMA would also support revising the Rule 605 Proposal to utilize notional buckets for the order size categorizations in Rule 605 reports instead of, or in addition to, using the number of round lots as proposed. And if the Commission does use round lots, round lots and odd lots should be distinguished through a separate flag in the reports. SIFMA is concerned that the modified round lot definition, the implementation time of which remains unclear, remains too diverse to provide meaningful information about order sizes. For example, under the new round lot definition, an order for one round lot can range from $100 to $250,000. SIFMA is also concerned that utilizing the new round lot sizes can introduce confusion and complexity to the extent a stock moves between different round lot sizes. Accordingly, SIFMA recommends that the Commission calculate appropriately informative notional size buckets to be proposed for the order size categorizations.[78]

Finally, SIFMA believes that any execution quality metrics that measure price improvement by utilizing a comparison to the best odd-lot price should be removed from the Rule 605 Proposal. SIFMA is concerned that any such metric will yield misleading information because it ignores the size of the order as compared to the size available at the odd-lot price. As a result, using the best odd-lot price as a benchmark could mislead an investor into thinking they could have received that price for their entire order, when in reality there was only enough size at that price for a small portion of the total order.

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[76] The realized spread calculation assumes that liquidity providers exit each position in a costless manner at the end of a fixed period. In reality, liquidity providers hold positions for varying periods depending on market making, hedging strategies, and market conditions.

[77] Rule 605 Proposal at 3854.

[78] For example, the Commission could use the following notional buckets: (1) $1 - $999; (2) $999 - $4,999; (3) $5,000 - $19,999; (4) $20,000 - $49,999; (5) $50,000 to $500,000. *See* letter to Brett Redfearn, Director, SEC Division of Trading & Markets, from Christopher Bok, Financial Information Forum, dated January 30, 2019, https://www.sec.gov/comments/s7-02-10/s70210-5002077-182848.pdf (FIF Rule 605 Modernization Recommendations).

Appendix B – Tick Size Proposal

A. Overview of Key Concerns and Considerations

SIFMA commends the Commission's interest in seeking to improve trading for stocks that are, in fact, tick-constrained and generally supports the Commission revisiting the "one-size fits all" minimum pricing increment and a reduction of the outdated access fee cap of 30 mils. SIFMA supports a tick size of $0.005 for tick-constrained stocks, but is concerned that the Commission has not established the appropriate methodology for determining which stocks are tick-constrained. Additional industry input and analysis is necessary to establish the appropriate universe of tick-constrained stocks that would be eligible for the reduced tick size of $0.005. Modifying the tick size for NMS stocks has significant implications for the trading of such securities, and it is critical that each of these is carefully considered and addressed to mitigate any potentially adverse or unintended consequences of the Tick Size Proposal. SIFMA is eager to engage with the Commission to constructively consider the appropriate methodology to determine tick-constrained stocks as well as to address the other important considerations that remain unresolved in the Tick Size Proposal, as detailed below. SIFMA reiterates the importance of updating execution quality metrics through the Rule 605 Proposal well before modifying tick sizes and access fee caps in order to provide the Commission and the public with the means to appropriately measure the impact of modified tick sizes on our market structure.

SIFMA believes that an incremental and iterative approach to modifying tick sizes and access fee caps with feedback mechanisms designed to measure the success or failure of each iteration is the most prudent course of action, in particular with the benefit of updated Rule 605 reporting metrics to establish a new baseline measure of execution quality. As proposed, the modified tick sizes would impact more than 80% of the share volume in NMS stocks trading today with unpredictable effects.[79] Once implemented, changes to tick sizes and access fee caps would be difficult and costly to reverse if early evidence reflects that the changes are causing more harm than benefit. Taking a gradual and iterative approach with well-defined measures of success or failure and with the ability to unwind changes based on those measurements would best ensure that the Commission and industry are able to calibrate tick sizes and access fee caps to promote the best market structure possible.

SIFMA's key considerations and comments on the Tick Size Proposal, each discussed more fully below, are as follows:

- SIFMA supports a tick size of $0.005 for tick-constrained stocks (as a quoting increment but not trading increment), but believes the Commission has not established the correct methodology for determining tick-constrained stocks.
- SIFMA believes that the $0.001 and $0.002 tick sizes are too granular and that the overall tick size and access fee structure is overly complex.
- The key motivations behind the tick size components of the Tick Size Proposal are to improve trading for tick-constrained stocks and to level the playing field among different trading centers.
    - These goals, however, do not inform what the appropriate tick sizes should actually be, and the Commission has provided almost no quantitative analysis as to what the appropriate tick sizes should be.
    - Such analysis is imperative to mitigate potentially adverse effects from the Tick Size Proposal.

[79] Tick Size Proposal at 80308 (Table 4).

- For this same reason, the numerous alternatives set forth in the Tick Size Proposal should not be adopted without more careful consideration and analysis of what stocks are tick-constrained.

- Harmonizing trading increments with the proposed quoting increments would harm investors by denying price improvement to investors and retail investors in particular.
    - Exchanges perform different function in the marketplace relative to broker-dealers, and, as such, there are compelling reasons why quoting and trading increments should not be harmonized.

- Key operational questions need to be addressed regarding how several important components of today's market structure would operate under the Tick Size Proposal if adopted, including: (i) volatile stocks; (ii) stock splits; (iii) initial public offerings ("IPOs"); (iv) the use of intermarket sweep orders ("ISOs"); and (v) displaying locked/crossed markets as a result of including the proposed "best odd-lot" orders as part of consolidated market data.

- SIFMA supports lowering access fee caps, but believes that the appropriate access fee caps should be tied to the ultimate determination of what the most appropriate tick sizes should be, for which quantitative analysis is needed (as noted above).

- SIFMA supports the acceleration of variable round lots and inclusion of odd-lot order information as part of consolidated market data, but has concerns with the proposed "best-odd lot" orders, in particular with respect to investor confusion and ISO routing.

B. The Tick Size Proposal Would Introduce Untested Complexity and Tick Sizes That Are Too Granular

SIFMA has previously voiced support for considering modified tick sizes for certain securities and lowered access fee caps. SIFMA appreciates the Commission's efforts to improve these aspects of market structure, but encourages the Commission to proceed with caution given how difficult it is to predict the outcomes. SIFMA strongly believes more careful consideration and analysis are necessary—including addressing SIFMA's comments in this letter—to ensure that any adopted tick size levels and access fee caps promote the best national market system possible. SIFMA supports a reduced tick size (*i.e.*, quotation increment, but not trading increment) of $0.005 for tick-constrained stocks (and no smaller tick sizes), but believes that greater discussion and engagement with industry to determine the universe of tick-constrained stocks (*e.g.*, via a Commission-led round table, as has traditionally preceded rulemakings of this significance) and implementation of the Rule 605 Proposal should precede any adoption of modified tick sizes and access fee caps. SIFMA believes that a careful and thoughtful approach toward potential adoption of these important aspects of our market structure must be the guiding light and urges the Commission to seek greater industry input before proceeding with any adoption. SIFMA also cautions against adopting one of the many alternative approaches considered by the Commission without *carefully* considering the costs, benefits and trade-offs presented by such alternative relative to the current Tick Size Proposal, and providing the opportunity for the public to consider the same.

Among SIFMA's concerns is the complexity that the Tick Size Proposal would introduce to our efficient and well-performing equity market structure. The Tick Size Proposal would make dynamic three components of trading that are static today: (i) tick sizes; (ii) access fees; and (iii) round lots. Exacerbating this complication, tick sizes would adjust quarterly, while round lots would change monthly. Tick sizes would be based on average quoted spread, while round lots are based on a stock's price. Introducing these changes—particularly on top of other significant changes to the market structure including the OCR, Reg Best Ex, and the Rule 605 Proposal—increases operational risk and can cause investor confusion, particularly where there are sudden changes in the price of a security (as explained below). Furthering the likelihood of operational risk and investor confusion would be the contemporaneous transition to quotations being based on the number of shares rounded to the nearest round lot, rather than based on round lots as they are today. Broker-dealers will be required under the Tick Size Proposal to update their systems to appropriately account for all three of these variable changes, which carries inherent risks (and costs) of inadvertent errors relative to today's environment where each of these variables is static.

SIFMA also believes that the proposed $0.001 and $0.002 tick sizes are too granular and would make the costs of queue jumping (or "pennying") negligible, reintroducing concerns for which Rule 612 was initially adopted. In other words, allowing quotations in this granular of an increment would make the cost of stepping ahead of another order too inexpensive and will deter market participants from providing liquidity due to the risk that their liquidity provision will be abused as a price discovery mechanism and then stepped ahead of for an economically insignificant amount.[80] This may, as the Commission acknowledges, disproportionately harm less sophisticated investors that may be slower to respond to changes in quotations.[81] Pennying would also reduce the value of a protected quotation. Accordingly, while SIFMA recognizes the potential benefits of introducing more granular tick sizes to tick-constrained securities, SIFMA is concerned that insufficient consideration has been given to the potential for these deleterious effects, for which Rule 612 was initially established, if the Tick Size Proposal were adopted, particularly at the proposed $0.001 and $0.002 tick sizes.

The introduction of overly granular tick sizes will also increase the fragmentation of available liquidity, reducing the size available at the best quoted prices.[82] For example, assume the NBBO is $10.00 x $10.01 and there are 1000 shares available at the NBB of $10.00. If the tick size was reduced to $0.005, any shares willing to increase their bid and establish a new NBB of $10.005 would today be among the 1000 shares at the previous NBB of $10.00, but some shares would likely remain at $10.00, decreasing the size available at the new NBB. The effect would be to disperse liquidity across more tick sizes, reducing liquidity at the top-of-book, a fact also acknowledged by the Commission in adopting Reg NMS.[83] This fragmentation and reduced liquidity at the quoted spread statistics for one ach tick size would only compound as the tick size becomes more granular (*e.g.*, $0.002 or $0.001). SIFMA believes that a tick size of $0.005 would be less likely to result in fragmented liquidity relative to the more granular tick sizes of $0.002 and $0.001 and would be an appropriate tick size for tick-constrained stocks (subject to establishing the correct methodology for determining which stocks are tick-constrained).

The proposed tick sizes of $0.001 and $0.002 are also likely to exacerbate flickering quotations. In adopting Reg NMS, the Commission noted concerns that "[f]lickering quotations that can result from widespread sub-penny pricing could make it more difficult for broker-dealers to satisfy their best execution obligations and other regulatory responsibilities."[84] While quote flickering is possible at any given tick size, SIFMA believes that the $0.001 and $0.002 tick sizes would likely result in greater quote flickering through pennying because there would be less economic risk associated with setting a new NBBO. In approving the exchanges' retail liquidity programs ("RLPs") in 2019, the Commission noted that because

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[80] The Commission appropriately acknowledges this risk: "a smaller tick fragments liquidity in the order book into more price levels, which can increase complexity and the incidence of pennying —which could harm liquidity." *Id*. at 80316.

[81] *Id*. at 80317 ("The risk of being pennied could discourage liquidity provision, particularly by market participants that are slower to respond to changes in market conditions, and could increase trading costs for these investors.").

[82] *See* James Angel et al., *Equity Trading in the 21st Century*, at 49-50 (Marshall Rsch. Paper Series, Working Paper FBE 09-10, 2010) (August 8, 2015) (finding that decreased tick sizes will lower both bid-ask spreads and displayed sizes, and expressing concern with the effect of too small a minimum price variation on order display and transaction costs of large traders); O'Hara, M., G. Saar, and Z. Zhong, 2014. *Relative tick size and the trading environment*. Working Paper. Cornell University (October 18, 2018) at 3, (finding decreases in aggregate quoted depth) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2463360.

[83] Exchange Act Release No. 51808, 70 FR 37496, 37552 (June 29, 2005) ("Reg NMS Adopting Release") ("Widespread sub-penny quoting could decrease market depth (i.e., the number of shares available at the NBBO) and lead to higher transaction costs, particularly for institutional investors (such as pension funds and mutual funds) that are more likely to place large orders. These higher transaction costs would likely be passed on to retail investors whose assets are managed by the institutions.").

[84] *Id.*

"sub-penny prices [in the RLP] will not be disseminated through the consolidated quotation data stream, which should avoid quote flickering and its reduced depth at the inside quotation."[85] It is curious why these concerns appear to have been relevant just four years ago, but that now the Commission seems to believe that the "[a]dvancements in technology since 2005 should reduce flickering quotes concerns."[86] In any case, SIFMA believes that it is at the very least unclear that the concerns of flickering quotations would be fully mitigated by current technology at the proposed tick sizes of $0.001 and $0.002.

C. Analysis of the Appropriate Tick Size for Tick-Constrained Securities Is Necessary to Make Informed Policy Determinations

SIFMA believes that a more robust analysis is necessary to evaluate the most appropriate tick sizes for purposes of achieving the best balance between available liquidity at the inside quotation versus narrower spreads. Appropriately balancing these competing considerations would help ensure that the Commission achieves the best national market system possible through modification of tick sizes.

The Commission's analysis reasonably concludes that reducing tick sizes for tick-constrained stocks may improve market quality for such stocks. However, even if one or more of the Commission's proposed tick sizes is ultimately appropriate, the Commission's stated reasons for selecting the $0.005, $0.002, and $0.001 tick sizes are not tied to any consideration of whether they would, in fact, be the best tick-sizes for the stocks to which those tick sizes would apply. The Commission claims these tick sizes were selected in part because "many investors will have familiarity with, or an awareness of, trades that occur in these specific increments" because these are the increments in which price improvement is commonly provided today.[87] The Commission further claims that it selected these tick sizes because:

> "the proposed amendments to rule 612 are designed to: (1) correlate the Time Weighted Average Quoted Spread to the minimum pricing increments, which limits the number of potential price points within the spread, which, in turn, should mitigate the loss of liquidity that can occur when the minimum tick size is reduced and the number of pricing increments increases; and (2) preserve meaningful price improvement for the majority of NMS stocks that would trade at minimum pricing increments that are $0.005 or less."[88]

These observations do not equate to an appropriate consideration of whether $0.005, $0.002, and $0.001 are in fact the appropriate tick sizes for the securities to which they would be applied. The Commission notes that while some market participants have suggested reducing tick sizes to just $0.005 for tick-constrained stocks, "the Commission believes that many stocks that currently trade with an average quoted spread of $0.011 could continue to be tick-constrained if the minimum pricing increment for such stocks were only reduced to $0.005."[89] The Commission does not provide any explanation for this belief. Thus, notwithstanding SIFMA's general support of a tick size of $0.005 for stocks that are appropriately considered to be tick-constrained, SIFMA believes further explanation and analysis is needed to support the modified tick sizes, including a $0.005 tick size.

In the Commission's economic analysis, the Commission primarily focuses on data from the Tick Size Pilot, which studied the impact of increasing tick sizes for thinly traded securities, rather than reducing tick sizes for tick-constrained securities. The Commission extrapolates from Tick Size Pilot data and analysis that because market quality improved for certain stocks when the tick size was reduced from the $0.05 tick (where they had just 1-2 ticks intra-spread) to a $0.01 tick, "trading in an approximate 1–10 tick

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[85] *See e.g.*, Exchange Act Release No. 85160, 84 FR 5754, 5782 (Feb. 22, 2019).

[86] Tick Size Proposal at 80279.

[87] *Id*. at 80281.

[88] *Id*.

[89] *Id*.

range intraspread provided a superior environment to trading in a 1–2 ticks intra spread range."[90] Even if this statement is true and the Tick Size Pilot data is a reliable proxy for the impact of smaller tick sizes on tick-constrained stocks, this still does not explain why $0.005, $0.002, and $0.001 are the appropriate tick-sizes.

The logic underlying this analysis based on the Tick Size Pilot data is also flawed. The Tick Size Pilot harmed liquidity and raised investor trading costs by increasing the minimum quoting increment from one cent to five cents. Then, when the minimum quoting increment reverted to one cent at the end of the pilot, it follows that liquidity conditions for these stocks meaningfully improved. The Commission now asserts that this result supports the Tick Size Proposal, but if anything, the outcome of the Tick Size Pilot shows that careful calibration of tick sizes is required and needs to take into account metrics other than quoted spread. SIFMA also notes that the Tick Size Pilot ultimately cost investors nearly $1 billion while experimenting with only 3.5% of total market volume.[91] Here, the Tick Size Proposal would impact over 80% of the share volume of NMS stocks based on the Commission's methodology for determining tick-constrained stocks based solely on weighted average quoted spread. SIFMA therefore implores the Commission to exercise care to avoid a similar costly mistake, which costs could double if the Commission and industry need to revert back to (or otherwise recalibrate) the adopted tick sizes.

Additionally, while the Commission acknowledges that "fragmenting of the order book reduces the displayed liquidity at the NBBO,"[92] the Commission does not analyze the impact of this fragmentation of liquidity at the inside quotation at the proposed pricing increment levels. Rather, the Commission's analysis focuses instead on improved market quality arising from "reducing the tick size constraints that prevent spreads from narrowing."[93] SIFMA believes more consideration and analysis of the impact of reduced quotation size at the NBBO is warranted given the potential harmful effect reduced tick sizes could have on liquidity.

D. Harmonizing Quoting and Trading Increments Would Harm Investors Through Reduced Opportunities for Price Improvement

Under the Tick Size Proposal, the Commission would harmonize quoting and trading increments (*i.e.,* restrict executions from occurring at pricing increments other than the proposed quoting increments). The Commission's stated intent in harmonizing quoting and trading increments is to "help level the competitive playing field between exchanges/ATSs and off-exchange dealers when it comes to attracting retail order flow."[94] According to the Commission, "such a development would put competitive pressure on OTC market makers to price improve trades because exchanges and other ATSs would have an increased ability to potentially innovate and compete for retail orders with wholesalers."[95] The Commission acknowledges that this proposed harmonization would "have uncertain net effects on total price improvement, which is the primary mechanism for the economic effects of a trading increment."[96]

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[90] *Id*. at 80322 ("In conclusion, the analysis provided here suggests that, for stocks that were limited to just 1–2 ticks intra-spread by the $0.05 tick, the reduction to a $0.01 tick provided an improved trading environment. Thus, trading in an approximate 1–10 tick range intraspread provided a superior environment to trading in a 1–2 ticks intra spread range.").

[91] Bill Alpert, *Congress' Failed Stock Market Experiment Cost Investors $900 Million*, Barron's (Sept. 14, 2018), https://www.barrons.com/articles/sec-tick-size-pilot-program-1536961160.

[92] Tick Size Proposal at 80318.

[93] *Id*. at 80316.

[94] *Id*. at 80336. *See also id*. at 80274 ("The proposed amendments to rule 612 would level the competitive playing field in this regard by requiring market participants, regardless of trading venue, to offer price improvement to investor orders in the same minimum pricing increments, unlike today where OTC market makers are able to offer investor orders price improvement in smaller pricing increments compared to their exchange and ATS counterparts.").

[95] *Id*. at 80336.

[96] *Id*. at 80325.

SIFMA believes that the proposed harmonization of quoting and trading increments: (1) would harm investors by denying them potential price improvement and (2) fails to account for differences in the roles and functions of different market participants. As noted earlier in Part II.C, SIFMA also believes that the impact of the proposed harmonization of quoting and trading increments must be considered in conjunction with the OCR to facilitate meaningful comment and analysis on both Proposals.

1. Harmonizing Quoting and Trading Increments Would Not Level Any Playing Field But Would Harm Investors by Limiting Potential Price Improvement

As a threshold matter, it is inaccurate to say that there is an unequal playing field between and among exchanges/ATSs and off-exchange dealers.[97] All of these market participants are currently subject (absent an exemption) to the same prohibition under Rule 612 of Reg NMS from displaying, ranking, or accepting from any person a bid or offer in a sub-penny increment. Exchanges, in fact, have exemptive relief that off-exchange dealers do not have that allows exchanges to accept and rank orders in sub-penny increments in connection with their RLPs.[98] A broker-dealer operator of an NMS Stock ATS could presumably pursue similar exemptive relief from the Commission to facilitate executions of retail orders.

It is therefore quite possible to quote and trade in subpenny increments on exchanges and there seems little reason why this could not similarly occur on NMS Stock ATSs. However, the Commission should consider the reasons why more sub-penny executions are not actually *occurring* on exchange venues, such as through RLPs, before limiting wholesalers' ability to provide price improvement to the orders they receive.[99] The Tick Size Proposal would consequently bring all market participants down to the lowest common denominator simply because some market participants have been more successful than others in providing price improvement to their customers' orders, which only inures to the benefit of those customers. That is, because wholesalers have consistently provided the most price improvement to customer orders (orders that were routed to them based on the best execution analyses of originating broker-dealers), the Commission apparently believes that these broker-dealers should be limited to providing the more limited price improvement that other market centers provide. Moreover, if the minimum quoting increment is an important driver of off-exchange trading, exchanges should be providing better execution quality in stocks that are *not* constrained by the minimum quoting increment, but that is not the case.[100]

SIFMA is deeply concerned that this policy choice ignores the consideration that should matter most to the Commission: preserving price improvement opportunities for investors' orders. In addition, the Commission has not articulated a single quantifiable benefit to investors that would result from this component of the Tick Size Proposal and has been able to muster only that the proposed harmonization would have "uncertain" effects on price improvement. The Commission should not implement a policy if it imposes significant costs on investors by stultifying opportunities for broker-dealers to provide price improvement and where it fails to offer any clear benefits.

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[97] It is similarly inaccurate to say that "the ability of OTC market makers to trade more readily in finer increments (i.e., offering sub-penny price improvement over the displayed quote) compared to the trading on exchanges and ATS has contributed to the increased percentage of executions that occur off-exchange." *Id*. at 80268. As described above in SIFMA's comments to the OCR, the percentage of executions has remained at approximately 60% since 2010. *See supra* n. 198 – 201 and accompanying text.

[98] Tick Size Proposal at 80271.

[99] *See supra* n. 205– 206 and accompanying text discussing RLPs and how they could become more competitive.

[100] *See* Market Lens: Unlevel Playing Field? What 605s Can Tell Us About Tick Sizes, Citadel Securities (Sept. 8, 2022), https://www.citadelsecurities.com/wp-content/uploads/sites/2/2022/09/Market-Lens-September-2022.pdf. SIFMA is not aware of any additional research on this specific topic, and while acknowledged by the Commission in a footnote, the implications of this fact are not discussed in the Tick Size Proposal.

2. Exchanges/ATSs Perform Different Roles and Undertake Different Responsibilities

The Commission's consideration with respect to harmonizing quoting and trading increments fails to appreciate distinctions in the role and responsibilities of broker-dealers relative to exchanges and ATSs. Specifically, exchanges and ATSs are systems that bring together the orders of multiple buyers and sellers to find potential trade counterparties. Exchanges and ATSs therefore must queue, display and/or rank orders for execution in accordance with their execution priority structures. The current prohibition on sub-penny quoting is designed for the specific purpose of preventing queue jumping by an economically insignificant amount, to prevent quote flickering and decreasing liquidity depth at the inside quote.[101] These concerns do not apply to subpenny executions. The Commission acknowledged this explicitly in adopting Reg NMS:

> "Sub-penny executions do not cause quote flickering and do not decrease depth at the inside quotation. Nor do they require the same systems capacity as would sub-penny quoting. In addition, sub-penny executions due to price improvement are generally beneficial to retail investors."[102]

It is therefore unclear why, given that the Commission is eliminating subpenny quoting restrictions, the Commission would go a step further by constraining sub-penny executions to the proposed quoting increments. The Commission should articulate why it believes that leveling the playing field through harmonized quoting and trading increments is more important than the benefits to retail investors that arise from subpenny price improvement, particularly where none of the policy concerns of quote flickering, queue jumping, and decreased depth at the inside quote are implicated.

More importantly, exchanges do not undertake *any* responsibility for ensuring the best execution of the orders that they receive.[103] In contrast, broker-dealers are at all times subject to best execution responsibilities when handling a customer order and have no need, upon receipt of an order, to queue, display and/or rank orders that they may wish to execute as principal. As a result, broker-dealers are able to provide price improvement by executing orders in subpenny increments. Because broker-dealers have a duty of best execution for every order they receive, it is appropriate to allow them to execute orders at the best possible terms that they can. Restricting this ability to equalize the best available prices off-exchange versus on exchanges/ATSs would only artificially constrain price improvement opportunities and appears inconsistent with the goals of achieving best execution for investors' orders.

E. The Stated Rationale for the Proposed Access Fees Caps Is Highly Problematic

Similar to the comments above regarding tick sizes, the Commission did not conduct an analysis to determine the most appropriate access fee cap levels to create the best possible national market system. While the Commission appropriately recognized that tick sizes and access fees are linked with each other, the Commission proposed two distinct access fee caps (rather than four to correspond to the four proposed tick sizes) based on the stated rationale that it would avoid introducing "unnecessary complexity into the national market system"[104] and "two proposed access fee caps would allow trading centers largely to maintain their current net capture rate and not impair the agency market business models . . . ."[105] While SIFMA is sensitive to potential concerns about complexity, the Commission does not appear to have discussed the implications of having access fee caps that are not linked to each tick size given the interrelationship between tick sizes and access fees. SIFMA believes that setting access fee caps, or

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[101] Tick Size Proposal at 80271.

[102] Reg NMS Adopting Release, *supra* n. 83, at 37556.

[103] SIFMA acknowledges that the broker-dealer operator of an ATS has best execution obligations for customer orders that it handles.

[104] Tick Size Proposal at 80291.

[105] *Id*. at 80269. The Commission also noted that "[i]f the Commission adopted a flat $0.0005 access fee cap regardless of the minimum pricing increment, it would potentially impair certain agency market business models because such a fee level would not allow certain markets to maintain their current net capture rates." *Id*. at 80291.

designing any aspect of market structure, specifically to preserve or protect existing exchange fee models is an inappropriate policy rationale. The appropriate consideration should be for the Commission to consider what access fee caps would yield the best and most efficient market structure for *all* market participants, even if that may result in changes to market participants' existing business models or cut into their bottom lines.[106] To be clear, SIFMA does not object to the Commission considering the *impact* its proposed rulemakings will have on different market participants' existing business models, but the *preservation* of a specific market participant's existing business model in and of itself should not be a basis on which to set policy that impacts all market participants. SIFMA believes that the Commission should consider and propose, with appropriate analysis, what it believes to be the most appropriate access fee caps to promote the best national market system. To the extent that such analysis yields access fee caps that preserve exchanges' current net capture rates, such outcome should only be an ancillary consequence of the Commission's policy determination rooted in furthering the purposes of the Exchange Act.

Finally, as with tick sizes, SIFMA believes that an iterative and gradual approach to access fee caps should guide any changes to access fee caps with mechanisms to measure success or failure. It is difficult to predict what the impact of modified access fee caps would be, so each step of these reforms should be rolled out very carefully. SIFMA believes that any modifications to access fee caps should not be made simultaneously with other changes so that the Commission and industry can discern each cause/effect relationship separately and scientifically.

F. Methodology for Determining Minimum Pricing Increments

SIFMA has two primary concerns with the Commission's proposed methodology for determining tick sizes, each of which are discussed below. SIFMA welcomes further engagement with the industry to help determine the appropriate methodology for identifying tick-constrained stocks to which appropriate calibrated tick sizes (and access fee caps) would be applied. Even among the exchange studies considered and cited by the Commission, there is no uniform methodology for how to best identify tick-constrained stocks, and we therefore believe further industry engagement would further the public interest and the protection of investors.[107]

1. *The Methodology for Determining Tick-Constrained Stocks Should Address Analysis of the Ratio of Quote-Size-to-Trade-Size and Daily Notional Turnover Ratio*

SIFMA believes that the proposed methodology for determining which NMS stocks are tick-constrained should consider the ratio of quote-size-to-trade size ("Quote-Trade Ratio")[108] and daily notional turnover ("Notional Turnover Ratio").[109] As Cboe noted in its proposed revisions to tick sizes, the Quote-Trade Ratio is "an objective signal that shows even though there is an abundance of liquidity, the current $0.01 tick constraint disincentivizes investors to cross the spread due to high costs, resulting in a lack of trade executions."[110] Cboe notes that the Notional Turnover Ratio provides "an objective signal because it focuses the tick-reduction effort on high turnover securities that would benefit from the ability to be traded

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[106] The stated rationale here stands in stark contrast to the OCR wherein the Commission expressly acknowledged significant disruption to the business models of wholesalers and retail broker-dealers without any concern for preserving such business models.

[107] *See* Tick Size Proposal at 80274 - 76.

[108] According to Cboe, the quote-size-to-trade-size ratio calculates the daily average of each security's inside quote-size-to-trade-size ratio. Cboe Proposes Tick-Reduction Framework to Ensure Market Structure Benefits All Investors, https://www.cboe.com/insights/posts/cboe-proposes-tick-reduction-framework-to-ensure-market-structure-benefits-all-investors/ ("Cboe Tick Size Proposal").

[109] According to Cboe, the notional turnover ratio calculates the daily average of each security's notional value traded divided by its daily market capitalization. *See id.*

[110] *Id.*

in finer increments."[111] Incorporating these two components into Cboe's methodology, Cboe found that only 67 stocks should be considered tick-constrained.[112]

SIFMA believes that Cboe's methodology could represent a more rational approach to determining which stocks are tick-constrained and that the Commission should consider the Quote-Trade Ratio and Notional Turnover Ratio as part of its methodology. At a minimum, the Commission should explain why these metrics were excluded from the Commission's methodology for determining the universe of tick-constrained stocks. This is of critical importance because, without establishing and implementing the most appropriate methodology to determine whether a stock is tick-constrained, the problems with overly granular tick sizes will be magnified and the proposed changes to tick sizes will not reduce effective spreads.

2. Negative Impacts on Similarly Situated Issuers

The variable tick sizes could negatively impact issuers that are similar to each other. For example, if one issuer (Issuer A) has a time-weighted average quoted spread during the review period that is $0.016 and a similar issuer (Issuer B) has a time-weighted average quoted spread of $0.017 during the review period, Issuer A will have a tick size of $0.002 for the next quarter while Issuer B would have a tick size of $0.005 for the same quarter. The narrower tick sizes for Issuer A could attract more liquidity to Issuer A's stock and less liquidity to Issuer B's stock. Once Issuer A's stock attracts more liquidity, its spreads could potentially narrow further, perpetuating a cycle in which Issuer B's shares are unable to catchup to Issuer A. This possibility could arise in particular among similar exchange-traded products ("ETPs"). SIFMA notes that similar concerns were expressed in comments to the Commission's proposed Transaction Fee Pilot where the tick size would remain static during the pilot period but only access fee caps would change.[113] SIFMA believes that a fulsome discussion and analysis of the potential impact of varying tick sizes and access fees on issuers is necessary to facilitate meaningful public comment on the Tick Size Proposal.

G. The Tick Size Proposal Would Make Consolidated Market Data Less Competitive with Exchange Proprietary Data

SIFMA is concerned that the proposed ticks sizes—in particular the $0.001 and $0.002 tick sizes—would make consolidated market data significantly less competitive with exchange proprietary market data feeds, undermining the goals of the Commission's yet-to-be-implemented MDI rules. Under the Commission's MDI rules, consolidated market data would include five levels of depth of book data. As discussed in Part II.F of this letter, at an increment of a $0.01 today, for a stock trading at $10.00 x $10.01, consolidated market data (once the MDI rules are implemented) would show prices and depth of liquidity from $9.95 to $10.06. If that same stock traded in a $0.001 increment, the stock might only show 10 levels of liquidity all between $10.00 x $10.01. And, as noted above, the finer tick sizes are likely to each display less liquidity at each pricing increment.

The result is likely to increase demand for exchange proprietary market data and make it extremely difficult for broker-dealers to trade competitively relying solely on consolidated market data. The Commission acknowledges that this is likely to occur, noting that, because fragmenting the order book across more granular tick sizes reduces displayed liquidity at the NBBO, the Tick Size Proposal would "temporarily reduce the information about liquidity available in the market for market participants who do

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[111] *Id.*

[112] Tick Size Proposal at 80277.

[113] *See e.g.*, Letter from Susan M. Olson, General Counsel, Investment Company Institute, to Brent J. Fields, Secretary, Commission, re: Transaction Fee Pilot far NMS Stocks (File Number S7-05-18) at 4 (May 23, 2018), https://www.sec.gov/comments/s7-05-18/s70518-3696206-162389.pdf ("If competing ETPs are in different test groups-and market quality varies among the test groups-investors might migrate toward products in the test groups with better market quality. This arbitrary result would tilt the playing field in favor of ETPs that happen to be assigned-at random-to test groups that perform better at the expense of other products.").

not receive depth of book information from proprietary data feeds."[114] The Commission further acknowledges that, even after the implementation of the MDI rules, the Tick Size Proposal "could result in more market participants purchasing depth of book data from either competing consolidators or exchanges than in the absence of the proposal."[115] These concerns underscore why the proposed $0.001 and $0.002 tick size are too granular. Modified tick sizes should not, by themselves, be a key driver for why market participants may need to purchase costly exchange proprietary market data products when they might otherwise be able to use consolidated market data, even after the MDI rules are implemented.

Additionally, the Tick Size Proposal would require that the number of shares at each price level be displayed at the round lot level, replacing the current methodology of quoting in lots. The representation of shares at the round lot level would not provide odd lot information at a given price and would decrease the utility of consolidated market data relative to exchange proprietary feeds.[116] For example, if there are 370 shares displayed at a price level (in a 100-share round lot security), the Commission would require under the Tick Size Proposal that this be displayed at the nearest round lot of 300 shares. The exchange proprietary data feeds would, however, display 370 shares. This aspect of the Tick Size Proposal further undermines the Commission's efforts under the MDI rules to make consolidated market data more competitive with exchange proprietary feeds and democratize core market data. SIFMA believes that consolidated market data should reflect the total number of shares at each round lot price level.

H. Operational Concerns

SIFMA believes that the Tick Size Proposal raises a number of significant operational concerns that need to be addressed and for which further industry comment is necessary to evaluate the pros and cons of how they might be handled. These operational concerns include the following:

1. *Stock Splits* – The Commission has not addressed how stock splits should be accounted for with respect to tick sizes. For example, it is unclear if both stocks in a stock split would continue to have the same tick sizes.

2. *IPOs* – Similarly, it's unclear what tick size a stock that undergoes an IPO would be assigned. To the extent that the initial tick size could be variable across different exchanges, this could lead to arbitrage of issuers choosing the exchange that offers the most favorable initial tick size.

   These concerns related to the appropriate tick size for stock splits and IPOs further highlight the risks associated with the proposed $0.001 and $0.002 tick sizes. If, for example, a stock is assigned an unsuitable tick size of $0.001 when the more appropriate tick size would have been $0.01, the impact on the stock would be a mistake by a factor of 10. At a tick size of $0.005, the mistake would only be by a factor of two.

3. *Manning Rule (FINRA Rule 5320)* – FINRA Rule 5320 generally prohibits a broker-dealer from trading ahead of a customer order unless an exception applies, such as where a broker-dealer provides price improvement to the order. These price improvement thresholds are currently keyed off of a penny per share. These price improvement threshold would need to be recalibrated to account for more granular tick sizes.

   To the extent that the minimum quoting increment is reduced by the Commission for certain stocks, SIFMA urges the Commission to direct FINRA to update the minimum price improvement

[114] Tick Size Proposal at 80318. The Commission further states that "Having less information about available liquidity could make it more difficult, more complex, and more expensive to locate shares for larger trades and to manage liquidity provision strategies. For those who do not currently receive depth of book data or those who would otherwise not purchase depth of book data from competing consolidators, the proposal could increase the demand to purchase depth of book data." *Id.*

[115] *Id.*

[116] *Id*. at 80299 – 80300.

standards exception to the Manning Rule (FINRA Rule 5320) in an equivalent manner, as requiring $0.01 of price improvement for stocks that are quoted in increments as low as $0.001 would greatly increase the cost and complexity of compliance, and may disincentivize the handling of certain customer limit orders.[117]

4. *CAT Data* – As discussed in Part II.F of this letter, the Commission did not consider the impact of the Tick Size Proposal on CAT data. All orders, cancels, and modifications must be recorded as part of the CAT, which could potentially cause CAT to consume more resources and increase expenses for market participants.

5. *Volatile Stocks* – The Tick Size Proposal does not account for situations where a low-priced stock (*e.g.*, sub $1.00) suddenly jumps to a higher price (*e.g.*, $8.00). Such a stock would continue to have a pricing increment of $0.001 for the rest of the quarter even though the stock is now trading at $8.00 with a potentially wider spread. In other words, whenever a stock rapidly moves from being tick-constrained to no longer being tick-constrained, there will be a delay in recalibrating the stock to a more appropriate pricing increment.[118]

   SIFMA believes that some sort of process or disclosure should be in place to mitigate these situations, particularly to help prevent investor confusion. One potential solution would be a disclosure to investors to inform them that, even though the stock has a spread of $0.04, the stock is still quoted in increments of $0.001.

6. *ISOs* – The Commission should provide clarifying guidance with respect to expectations when market participants use ISOs to clear protected quotations given the proposed inclusion of best odd-lot orders in consolidated market data. Specifically, it's unclear if market participants would be expected to clear the best odd-lot orders as part of ISO routing, notwithstanding that the odd-lot orders are not protected quotations.

7. *Best Odd-Lot Orders and Locked/Crossed Markets* – The inclusion of the proposed best odd-lot order to buy and to sell as part of consolidated market data could result in the display of locked or crossed quotations. For example, in a stock with a 100 share round lot, the NBBO could be $10.00 x $10.01, but there could be a post-only odd-lot order for 50 shares on the bid at $10.01 and a post-only odd-lot order of 50 shares at the offer to sell at $10.00, resulting in the display of a crossed market.[119]

   Calculating and publishing an odd-lot NBBO risks creating significant investor confusion due to the appearance that a new benchmark is being established even though odd-lots are treated differently than round-lots under Commission regulations. Rather than taking steps to prevent unnecessary investor confusion, the Commission encourages it by suggesting that the odd-lot NBBO is a "standard benchmark" that could be used by investors "to measure the amount of price

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[117] FINRA Rule 5320.06 protects customer limit orders by allowing a firm to execute a proprietary order at a price that could fill an unexecuted customer limit order provided that the firm gives price improvement to the customer limit order. This minimum amount of price improvement is currently set at one cent for customer limit orders of greater than or equal to $1.00 in NMS stocks (in order to equal the minimum quoting increment).

[118] The Commission acknowledges this possibility of rapidly moving from tick-constrained to not tick-constrained in the context of reverse stock splits: "When a stock undergoes a reverse split its share price goes up, the current penny tick is lower as a fraction of the share price, implying that in economic terms, the stock could go from being tick-constrained to nontick-constrained." Tick Size Proposal at 80318.

[119] SIFMA acknowledges that this same possibility could occur under the MDI rules once implemented, but continues to have lingering concerns of potential investor confusion even under the MDI rules. *See* Exchange Act Release No. 90610, 86 FR 18596, 18755 (April 9, 2021) ("As a result of the final amendments, information on all odd-lot quotes priced at or better than the NBBO will now be included in expanded core data, and these locked and crossed odd-lot orders will now be visible to subscribers of expanded core data that chose to receive odd-lot information. The economic effects of having these locked or crossed quotes visible to market participants who receive this data will be minor.").

improvement they receive for the execution of their orders."[120] The odd-lot NBBO is not a standard benchmark, since the size associated with these quotes will vary greatly as opposed to the actual NBBO, which always represents a round-lot.

8. *Good-Till-Canceled ("GTC") Orders and Stop Orders* – SIFMA believes that it would be helpful for the Commission to provide clarifying guidance regarding how broker-dealers should handle GTC orders and stop orders when there is a change to the pricing increment for the security. To the extent the Commission believes that GTC and stop orders would be unaffected by any change to a stock's tick size, such guidance would be helpful.

I. Acceleration of Round Lot/Odd Lot Order Data and the Market Data Infrastructure Rules

SIFMA supports acceleration of the changes adopted as part of the MDI rules to modify round lots based on the price of a security as well as the inclusion of odd-lot order data as part of consolidated market data. However, SIFMA is concerned that the Commission has not taken sufficient steps to ensure the timely implementation of the full set of MDI rules and transition from an exclusive SIP model to a competing consolidator model. SIFMA urges the Commission to ensure that the SROs develop an appropriate NMS plan for consolidated market data and fee structure so that market participants can benefit from the full implementation of the MDI rules. No action appears to have been taken by the Commission since September 2022 when the Commission disapproved the proposed fees and amendments to the current NMS plans for consolidated market data.[121]

As noted in Part II.F of this letter, the Proposals—in particular the OCR and the Tick Size Proposal—would have the effect of increasing demand for exchange proprietary market data products (*e.g.*, to facilitate timely participation in qualified auctions or to have visibility of quotations outside of a penny-wide spread for stocks with subpenny tick sizes). These proposed changes would make it even more important to have consolidated market data products that are more competitive with exchange proprietary data products. Accordingly, SIFMA believes that acceleration of the round lots and odd-lot order data as part of the Tick Size Proposal should not be viewed as a substitute for full implementation of the MDI rules.

J. There Are Significant Gaps in the Commission's Economic Analysis

SIFMA is concerned about several important gaps in the Commission's economic analysis of the Tick Size Proposal. First, the Commission did not discuss or consider the potential impact of the Tick Size Proposal on Trading Activity Fees as a proportion of the spread of a security.

Second, SIFMA is concerned that the Commission did not provide any quantitative basis for why it selected the proposed access fees of $0.0005 and $0.001. It was, in part, the arbitrary selection of access fees and the absence of any quantitative analysis that prompted the D.C. Circuit to rule against the implementation of the Commission's Transaction Fee Pilot.[122] The proposed access fees are particularly

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[120] Tick Size Proposal at 80270.

[121] *See e.g.*, Exchange Act Release No. 95851, 87 FR 58613 (Sept. 27, 2022); Exchange Act Release No. 95850, 87 FR 58560 (Sept. 27, 2022). The most recent action appears to be a letter submitted by the CTA/UTP Advisory Committee urging the Commission to issue an order requiring the exchanges and FINRA to proceed with establishing a new NMS plan and the roll out of the MDI rules. *See* Letter from CTA/UTP Advisory Committee to Chair Gensler and Commissioners, Commission re: Proposed Rule, Market Data Infrastructure (File No. S7-03-20) (Oct. 10, 2022), https://www.sec.gov/comments/s7-03-20/s70320-20146068-311090.pdf.

[122] *New York Stock Exchange et al v. SEC*, No. 19-1042 (D.C. Cir. 2020) ("In applying the arbitrary-and-capricious standard of review, we must assure ourselves that an agency has 'examine[d] the relevant data and articulate[d] a satisfactory explanation for its action including a rational connection between the facts found and the choice made.' *Motor Vehicle Mfrs. Ass'n of U.S. v. State Farm Mut. Auto. Ins. Co. (State Farm)*, 463 U.S. 29, 43 (1983) (internal quotation marks omitted). We have also made it clear that the SEC has a 'statutory obligation to determine as best it can the economic implications of [a proposed] rule.' Chamber of Commerce of *U.S. v. SEC*, 412 F.3d 133, 143 (D.C. Cir. 2005); *see also Bus. Roundtable v.*

problematic when considered as a percentage of the tick size and the potential distortive effect on trading where the access fee is too large a percentage of the tick size. Specifically, under the Tick Size Proposal, the amount of an access fees as a percentage of the tick size would increase significantly for securities trading at certain pricing increments. A security today has an access fee cap of 30% of the tick size,[123] while under the Tick Size Proposal, this could increase to 50% of the tick size.[124] The Commission explicitly acknowledges in the Tick Size Proposal that it is important to consider access fees as a proportion of the tick size:

> "[T]he Commission believes the current access fee caps should be recalibrated to ensure that they do not represent an outsized portion of the displayed quotations. A reduction in the minimum pricing increment without reducing the access fee caps could permit fees to become a higher percentage of the minimum pricing increment, which could potentially undermine price transparency and exacerbate the other concerns with maker-taker fees . . . ."[125]

Notwithstanding this acknowledgement, the Commission did not analyze or discuss the impact of the proposed access fee caps as a percentage of the tick size in its economic analysis. As discussed above in Appendix B, Item E, that apparent motivation for these access fees is to ensure that exchanges are able to continue to maintain their current business model and to avoid overly complex fee schedules. SIFMA believes that a meaningful quantitative analysis of access fees largely irrespective of the impact on exchange business models or fee schedules is necessary. SIFMA urges the Commission to exercise caution in modifying access fees as a percentage of the current tick size beyond the 20% that exists today.

SEC, 647 F.3d 1144, 1148 (D.C. Cir. 2011)."), https://www.cadc.uscourts.gov/internet/opinions.nsf/BE5AD5AD3C00644085258900537163/$file/19-1042-1847356.pdf.

[123] ($0.003/$0.01) x 100 = 30%.

[124] For example, a stock with a tick size of $0.002 would have an access fee of $0.001. ($0.001/$0.002) x 100 = 50%.

[125] Tick Size Proposal at 80290.

Appendix C – Regulation Best Execution

A. Overview of Key Concerns

SIFMA strongly endorses the importance of a robust best execution process for broker-dealers' handling of customer orders in order to provide customers with the best terms reasonably available. In order to have well-functioning capital markets, it is important that investors understand that when they entrust broker-dealers with an order, those brokers will seek to provide their customers with the best outcome reasonably available. SIFMA commends the Commission for recognizing this important principle and for supporting the concept of having a strong, effective, and reasonably tailored rule to achieve this goal. SIFMA also broadly supports the principles relied on by the Commission in Reg Best Ex—increasing market efficiency, promoting competition, reducing costs, mitigating potential conflicts of interest, and recognizing the differences among types of market participants. These principles that we both share have also long been recognized by FINRA and the MSRB and exist today in these SROs' best execution rules, which have continued to function very well for investors.

Notwithstanding our shared view of the foundational principles underlying an effective best execution regime, SIFMA does not believe Reg Best Ex can provide sufficient benefit to overcome its significant flaws, and therefore cannot support its adoption and requests that the Commission withdraw or proceed no further with the Proposal. Reg Best Ex would establish an unworkable standard for the review of conflicted transactions, would be unduly burdensome for retail broker-dealers and wholesalers, and fails to account for significant operational issues and questions. The Commission appears to have designed the conflicted transactions requirements to intentionally target transactions involving wholesalers, with the potential effect of making it more costly if not commercially unviable to continue engaging in a wholesaler business, a business that today provides some of the best price improvement opportunities retail customers have ever experienced. The consequences of this would not only negatively impact retail execution quality but would make it more costly for retail broker-dealers to operate without the ability to leverage the services and resources wholesalers can provide. SIFMA also has significant concerns that the prescriptive obligations established under Reg Best Ex, largely through the Commission's guidance and interpretations in the proposing release, are unclear and ambiguous, and could create perverse incentives for broker-dealer order handling. Reg Best Ex also does not adequately address differences in the manner in which non-equity securities trade, leading to confusing applications when attempting to fit the various types of securities within the proposed rule and detailed guidance outlined in the Reg Best Ex proposing release.

Fundamentally, Reg Best Ex fails to identify a market failure supporting the need for a Commission-level best execution rule. That is, the Commission has not established, or even claimed, that the current FINRA and MSRB rules fail to provide customers with best execution, and SIFMA believes the rules work very well. In fact, the Commission appears to lack a fully informed view about what broker-dealers already do to comply with their best execution obligations[126] and has astutely acknowledged that it "cannot ascertain the extent to which [the] benefits [of Reg Best Ex] would be realized."[127] SIFMA emphasizes again that it supports a robust best execution standard, but SIFMA continues to believe that best execution is achieved through the current SRO framework. To the extent the Commission identifies an evidence-based failure in achieving best execution, SIFMA would support appropriately tailored adjustments to remedy such defects under the existing SRO framework. To the extent the Commission wishes to further examine the current best execution regime, SIFMA supports broader industry and regulatory discussions and collaboration. However, as discussed in greater detail below, SIFMA cannot support the adoption of proposed Reg Best Ex, which we believe is unworkable, unnecessary, and duplicative.

[126] *See infra* notes 139 and 182.

[127] Reg Best Ex at 5523.

B. The Commission Has Failed to Identify a Market Failure or Demonstrate Meaningful Benefits of Reg Best Ex

As the Commission emphasizes repeatedly in the Reg Best Ex proposing release, both FINRA and the MSRB currently have rules and guidance, enforced by FINRA, governing the best execution of customer orders in securities.[128] SIFMA supports a robust best execution framework and believes the current best execution rules provide this. The Commission highlights the longstanding history of these rules and the ways in which the rules have been supplemented by detailed guidance over the years to maintain a robust best execution standard.[129] Yet nowhere in the Commission's 439-page proposing release does the Commission claim that customers are not receiving best execution for their orders under the existing regime. To the extent the Commission is able to identify any specific deficiencies in these best execution rules, SIFMA believes that the appropriate mechanism to remedy such concerns would be for the Commission to employ its oversight authority to work with FINRA and the MSRB to amend the current rules or provide additional published guidance related to the current rules.[130] Adding a new regulation to an already effective regime potentially puts customers' current execution quality at risk and subjects market participants to unnecessary costs, without any guarantee of improving the status quo.

Moreover, the Reg Best Ex proposing release itself acknowledges that the Commission can and has brought its own enforcement actions for violations of the best execution standard that involve fraud. While the Commission claims that a broader application of its cease and desist, and disgorgement, authority would be a benefit of Reg Best Ex, it does not clearly state that its current enforcement ability, as well as FINRA's and the MSRB's existing regulatory authority, is insufficient to address potential violations of best execution.[131] In addition, the Commission already has the authority to enforce FINRA and MSRB rules under Section 19(g)(2) of the Exchange Act.[132] The Commission has not made any claim that FINRA, which has the authority to issue cease and desist orders and disgorgement for violations of FINRA and MSRB rules,[133] has failed to enforce best execution requirements. Nor has the Commission specified why, in addition to its current ability to enforce FINRA and MSRB rules and directly enforce best execution cases involving fraud, cease and desist and engorgement authority are needed to enforce best execution. In

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[128] The Commission itself was responsible for approving these rules and, when approving FINRA's Rule 5310, stated that the rule would "enhance investor protection and promote just and equitable principles of trade" and "ensure that all members are aware of their [best execution] obligations." Exchange Act Release No. 65895, at 7 (Dec. 5, 2011).

[129] As the Commission highlights in its proposing release, the SROs have continued to be transparent about the operation and priorities of their best execution regimes, and have updated the rules and interpretations "to account for changes in market practices and market structure, and to account for new technologies and new data available to broker-dealers." Reg Best Ex at 5444. *See also*, *e.g.*, FINRA Regulatory Notices 21-23 (June 23, 2021), 21-12 (Mar. 18, 2021), 18-29 (Sept. 12, 2018), 15-46 (Nov. 2015), and 09-58 (Oct. 2009); NASD Notices to Members 01-22 (Apr. 2001), 00-42 (June 2000), and 99-12 (Feb. 1999); MSRB Implementation Guidance on MSRB Rule G-18, on Best Execution (updated as of Feb. 7, 2019).

[130] SIFMA notes that this is an approach that has routinely been employed with successful outcomes. *See*, *e.g.*, Arthur Levitt, Chairman, Commission, Remarks at the Media Studies Center: The Importance of Transparency in America's Debt Market, Remarks by (Sept. 9, 1998), https://www.sec.gov/news/speech/speecharchive/1998/spch218.htm (calling for increased price transparency in the corporate debt market, which led to the development of FINRA's TRACE); Mary Jo White, Chair, Commission, Remarks at the Sandler O'Neill & Partners, L.P. Global Exchange and Brokerage Conference: Enhancing Our Equity Market Structure, Remarks by (June 5, 2014), https://www.sec.gov/news/speech/2014-spch060514mjw (requesting for the national securities exchanges to consider rule changes to clarify the nature and operation of their order types).

[131] Under Section 19(h) of the Exchange Act, the Commission can bring an action against an SRO for failure to adequately regulate its members, and the Commission's examination staff already "inspects SROs' regulatory programs to evaluate whether the SROs are effectively monitoring for violations of SRO rules and the Exchange Act by broker-dealers and properly citing broker-dealers for violations." Commission Staff Study on Investment Advisers and Broker-Dealers A-16 (Jan. 2011), https://www.sec.gov/news/studies/2011/913studyfinal.pdf.

[132] 15 U.S.C. 78s(g)(2).

[133] *See* FINRA Rule 8310(a). *See also* FINRA Rule 9800 Series.

other words, SIFMA believes that the Commission should identify a best execution violation that it could not have brought under its existing authority.

Taken together, the Commission has not identified any problem with the current market that requires additional regulatory intervention. The Commission's own guidance provides that an economic analysis of proposed rulemaking should include "a statement of the need for the proposed action,"[134] which does not appear to have been made in Reg Best Ex. Courts have similarly made clear, such as in the case of the Commission's failed Transaction Fee Pilot, that regulation is generally only appropriate to address identified problems:

> "Normally, unless an agency's authorizing statute says otherwise, an agency regulation must be designed to address identified problems. *See Mendoza v. Perez*, 754 F.3d 1002, 1021 (D.C. Cir. 2014) (holding that "[a] rule is legislative if it supplements a statute, adopts a new position inconsistent with existing regulations, or otherwise effects a substantive change in existing law or policy"). **Rules are not adopted in search of regulatory problems to solve; they are adopted to correct problems with existing regulatory requirements that an agency has delegated authority to address**."[135]

SIFMA reiterates that we believe the current SRO rules, as approved by the Commission, are working as designed. Given that the Commission has oversight authority over each of these SROs and their best execution rules, the Commission has ample opportunity and power to intervene and uphold the best execution standards to the extent it has concerns about ineffective SRO enforcement.[136] The Commission also has the ability to work with the SROs to amend their rules, as described above, and even has the power pursuant to Section 19(c) of the Exchange Act to directly amend the SRO rules to the extent it has concerns about a deficiency in the rules themselves. Neither of these scenarios appears to be the case, however, and in any event neither equates to a market failure that justifies the imposition of a redundant, costly regulatory regime.

Worse yet, Reg Best Ex fails to identify a single quantitative benefit that would result from Reg Best Ex's adoption and merely alludes to speculative, potential benefits to "investor protection" that may arise through potential changes to order routing.[137] Without any quantifiable benefits, the only thing of which the Commission and the public can be certain is that Reg Best Ex will impose considerable costs (even under the Commission's grossly understated estimates), which costs may ultimately be borne by customers.[138] While imagining these speculative benefits, the Commission simultaneously purports to be

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[134] Current Guidance on Economic Analysis in SEC Rulemakings, Memorandum from Commission RSFI and OGC to Staff of the Rulewriting Divisions and Offices (Mar. 16, 2012), https://www.sec.gov/divisions/riskfin/rsfi_guidance_econ_analy_secrulemaking.pdf.

[135] *New York Stock Exchange et al v. SEC*, No. 19-1042 (D.C. Cir. 2020) (emphasis added).

[136] The Commission, in fact, has previously asserted that although a Commission claim alleging that a broker-dealer failed to exercise reasonable diligence in obtaining the best price, *without overt fraud as an element*, has not been tested in court, other Commission pronouncements have suggested that such a claim is viable. *See* SEC Division of Market Regulation, Market 2000: An Examination of Current Equity Market Developments V-17 n.10 (Jan. 1994), https://www.sec.gov/divisions/marketreg/market2000.pdf ("Market 2000 Release") (citing *Lesko v. Merrill Lynch, Pierce, Fenner & Smith*, No. C-78-1740 (N.D. Ohio, June 22, 1979), dismissed per settlement, Jan 14, 1980).

[137] *See*, *e.g.*, Reg Best Ex at 5524 ("The Commission preliminarily believes that the proposal would enhance investor protection and improve retail customer order execution quality to the extent that the proposal improves broker-dealers' order handling practices."). If retail order execution quality could be enhanced through Reg Best Ex, there should be some means by which the Commission could quantify such benefit, which the Commission has not done.

[138] *See id*. at 5545-47. The Commission estimates across all firms that would be subject to Reg Best Ex initial hourly burdens of 312,031 hours and costs of $46.25 million and ongoing hourly burdens and costs of 391,577 hours and $11.32 million per year. These estimates massively understate the actual costs for a variety of reasons including, for example, that there are not effective ways to identify the counterfactual scenarios of executions a firm could have received had the firm routed to another executing broker-dealer. In calculating these estimates, the Commission appears to assume that some meaningful portion of broker-dealers will have existing policies and procedures that "already substantially address the

unaware of current best execution practices, claiming that "[t]he Commission lacks detailed information on broker-dealers' current policies and procedures with respect to best execution standards and order handling practices."[139] This suggests that the Commission has not conducted a sufficient analysis to determine that an additional best execution rule is necessary and would improve the status quo.

If the Commission has concerns about best execution in today's market environment, SIFMA would have preferred an approach that started with a clear identification of a market failure followed by FINRA and the MSRB requesting comment on possible updates to their rules, if necessary, to address any policy gaps identified by the Commission and the SROs. The Commission should be aware of the problem it is attempting to solve before imposing a costly new set of rules on market participants without any clear benefits.

The Commission has also not reconciled its current proposal with its own prior statements on best execution. In particular, the Commission's staff previously determined that it would "not [be] appropriate to promulgate a rule requiring uniform application of best execution principles based solely on price to differing market structures."[140] Although this statement was made in the context of a very different market environment, the Commission was considering some of the very same issues that exist today, including the impact of PFOF, while applying longstanding Exchange Act principles first designed in 1934. Yet, the Commission is now proposing to do exactly what it strictly advised against without explaining what present conditions have since changed its mind. The Commission staff further advised against "propos[ing] a best execution rule or issu[ing] an interpretative release establishing a single test of best execution," suggesting instead that "the specific practices raising best execution issues continue to be addressed in the context of the current market structure."[141]

C. Overlapping Best Execution Rules of the Commission, FINRA, and MSRB Create Enormous Burdens on Broker-Dealers

The Commission indicates that Reg Best Ex would simply be additive to the existing best execution framework operated by FINRA and the MSRB. However, this assumption is far from clear and vastly underestimates the difficulties this would impose. The Commission appears to contemplate that broker-dealers would be subject to all three best execution frameworks and that broker-dealers should comply with the highest obligation applicable under each of the rules.[142] However, the Commission did not adequately consider the costs of being subject to three different best execution regimes. For example, broker-dealers would face increased uncertainty in examinations and enforcement due to potentially different interpretations of the same rule by different regulators. There are also costs associated with simply determining which of the three regulatory requirements may be the most stringent in a particular context—costs that do not appear to have been considered in Reg Best Ex. Moreover, broker-dealers would have to tailor their best execution compliance to ensure they are meeting the differing components of each rule.

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requirements of [Reg Best Ex]," thereby only needing to make "limited updates to their policies and procedures to meet the additional obligations specified in [Reg Best Ex]." *See id.* at 5544. Yet, at the same time, the Commission claims to lack information about what current best execution policies and procedures might entail. *See infra* note 139.

[139] *Id*. at 5524. *See also*, *e.g.*, *id*. at 5459, 5464 (requesting commenters to describe for the Commission 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); 5474 (asking commenters to explain to the Commission the "frequency and rigor" of broker-dealers' regular execution quality reviews and whether the reviews are documented); 5479 (soliciting information from commenters for the Commission to understand how introducing brokers currently evaluate the execution quality of their executing brokers, and how introducing brokers address concerns relating to execution quality); and 5480-81 (requesting the commenters explain to the Commission how broker-dealers currently review their best execution policies and procedures, including how frequently reviews are conducted).

[140] Market 2000 Release at V-3.

[141] *Id*.

[142] *See* Reg Best Ex at 5451 & n.109.

While FINRA and the MSRB have indicated that they would harmonize with Reg Best Ex if adopted,[143] it is unclear what harmonization would actually mean, and would not resolve potential interpretive differences among the multiple regulators. Harmonization in this space is not as simple as the FINRA and MSRB letter appear to assume. FINRA has longstanding experience enforcing its and the MSRB's best execution rules, along with an established examination process. FINRA, however, will have to come up with its own understanding of the Commission's rule and guidance. It is unlikely that the Commission would have, or plan to expend, the resources to examine for best execution to the same extent FINRA does today, so the Commission will very likely rely on FINRA for much of the front-line examinations and enforcement. Accordingly, there is certain to be a disconnect between the standards applied by the Commission's examiners as compared to those applied by FINRA's examiners, which could lead to discriminatory outcomes. Moreover, it is unclear whether (and how) FINRA would abandon its longstanding guidance related to best execution[144] and follow solely the guidance in a Commission Adopting Release instead.[145] The industry should not have to comment on Reg Best Ex or await adoption and enforcement of a final rule without clear answers to these foundational questions.

At a minimum, SIFMA believes that Reg Best Ex should be amended to provide greater clarity that, consistent with FINRA Rule 5310.04, the duty to provide best execution only arises when an order is routed to a broker-dealer "for the purpose of order handling and execution." Consistent with the longstanding precedent defining the contours of the duty of best execution, FINRA Rule 5310.04 makes clear that the duty of best execution does not apply to a dealer who is not acting on behalf of a counterparty and is rather acting solely as buyer or seller in a transaction. To the extent the Commission moves forward with Reg Best Ex, the Commission should avoid introducing unnecessary uncertainty and include all of the text of FINRA Rule 5310.04 in any final rule.

D. Reg Best Ex Lacks Significant Clarity and Creates Ambiguous Obligations

While Reg Best Ex's rule text (excluding the conflicted transactions components) sets forth what appears to be a relatively workable set of requirements that in some ways appear to allow for broker-dealers to make facts and circumstances based determinations to achieve best execution as they do today, the Reg Best Ex proposing release contains very detailed and unattainable suggestions on the expectations of the Commission as to the specific ways in which broker-dealers would be expected to comply with Reg Best Ex. At a minimum, these diverging explanations create ambiguity and confusion, making it difficult for market participants to discern the appropriate standard and to provide meaningful comment on Reg Best Ex. Based on SIFMA members' experience, the "guidance" in the proposing release will become the standard to which all market participants are held.

These suggestions are presented without clear, definitive standards, which makes it further likely that enforcement of the rule would lead to additional undefined "requirements" that broker-dealers will not be able to anticipate. At the same time, the Commission's suggestions are so prescriptive that they would eliminate much of the discretion broker-dealers need to apply the best execution standard to the variety of asset classes they handle and the ever-changing range of market conditions they face. Ultimately, the Reg

[143] *See* Letter from Marcia E. Asquith, Corporate Secretary, FINRA, and Ronald W. Smith, Corporate Secretary, MSRB to Vanessa Countryman, Secretary, Commission (Feb. 7, 2023), *available at* https://www.sec.gov/comments/s7-32-22/s73222-20156788-324933.pdf.

[144] *See*, *e.g.*, FINRA Regulatory Notice 15-46.

[145] For example, FINRA requires an order-by-order execution quality review for principal transactions while the Commission has proposed only a regular and rigorous review standard – would FINRA conform to the Commission or maintain its additional order-by-order requirement? If FINRA does not conform, FINRA members could be subject to both an order-by-order and a regular and rigorous review of execution quality for principal transactions.

Best Ex rule text prescribes one set of purported requirements, while the Commission's discussion of Reg Best Ex in the proposing release communicates an entirely different set of requirements.[146]

E. Reg Best Ex Does Not Adequately Consider Differences in the Markets for Other Securities

Reg Best Ex is broad in scope and would apply to transactions in all securities, but does not contain sufficient clarity as to how broker-dealers could comply with the proposed requirements with respect to many types of securities. While the proposed requirements are least unclear with respect to the equity markets, strongly suggesting that Reg Best Ex was designed primarily with equity markets in mind, attempting to apply Reg Best Ex to other asset classes raises significant questions given major differences in the market structure for those securities. For example, due to varying market structures and trading practices, the data and information for many different types of securities do not exist in a way that would allow for best execution analyses to the level of detail prescribed by the guidance in the Reg Best Ex proposing release.[147] This puts broker-dealers in an impossible position of being required to perform an analysis for which they don't have the necessary inputs. This problem is further compounded by Reg Best Ex's conflicted transactions requirements, which would require broker-dealers to seek out information beyond what is reasonably available and, in many markets, may not exist.

To briefly illustrate, and as detailed in the Fixed Income Letter, fixed income markets trade very differently than equities, and although the Commission attempts to shoehorn the fixed income market structure into its guidance, there remain many aspects of Reg Best Ex that are difficult to square with the fixed income markets. As another example, restricted securities would also be subject to Reg Best Ex, yet these are highly illiquid and there often are no venues offering pricing information and trading opportunities.[148] It is entirely unclear, for instance, how a broker-dealer selling a restricted security as principal or riskless principal could even determine a broader range of markets for such security as a conflicted transaction. At the same time, crypto asset securities have a substantial amount of liquidity, although much of it is available in international markets (many of which may be in unregulated jurisdictions) or through autonomous mechanisms, such as automated market makers. Reading the rule and relevant guidance, it would appear that the Commission would expect a firm to access international markets to the extent they are material sources of liquidity that may have the best price for a crypto asset security.

The key point is that the Commission claims it is proposing a principles-based standard to accommodate varying facts and circumstances while at the same time providing prescriptive guidance of its expectations—which, based on our experience is unequivocally the standard to which firms will be held—

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[146] As an example of the Commission turning a general policies and procedures requirement into a specific requirement, *see* Reg Best Ex at 5460 ("For a retail broker-dealer in NMS stocks, its policies and procedures for the best market determination could include assessments of any assurances from a wholesaler that certain orders routed by the retail broker-dealer to the wholesaler would be guaranteed midpoint executions by the wholesaler or otherwise exposed to opportunities for midpoint executions. If midpoint executions were not guaranteed by a wholesaler, a retail broker-dealer's policies and procedures could provide for assessments of whether customer orders would best be executed with midpoint liquidity that may be available on an exchange, ATS, or other market. Following an assessment of the opportunities for midpoint executions, a broker-dealer's policies and procedures could provide for an assessment of whether other price improvement opportunities might be available, such as from wholesalers, from resting liquidity between the best bid and offer on exchanges, through auctions, or otherwise."). These are very specific "could" statements that change the entire impact of Reg Best Ex to extent these are in fact the expected standards.

[147] For example, the Commission's guidance suggests that a material potential liquidity source "could include" midpoint liquidity. *See id*. at 5457. However, midpoint liquidity is non-displayed and often available on ATSs, which do not make market data widely available. To fully examine for all available midpoint liquidity, a broker-dealer would have to ping every venue, adding significant risk of information leakage and execution delay. In addition, there is not reliable, accessible real-time data available for illiquid or restricted securities. With respect to fixed income markets, as described in more detail in the Fixed Income Letter, there are no industry-wide sources of quotation data and individual venues vary widely in the extent to which they save quotation data.

[148] 17 CFR 230.144(a)(3) (defining restricted securities).

and yet this guidance is incomplete, having failed to address key differences among different types of securities.

F. Reg Best Ex Would Create Perverse Incentives for Broker-Dealers Handling Orders

In several ways, the prescriptive requirements set forth by Reg Best Ex would provide incentives for broker-dealers to act in suboptimal ways while handling orders. For example, Reg Best Ex's emphasis on price and seeking better prices for individual orders appears to establish an expectation that broker-dealers provide price improvement on every customer trade. Notwithstanding the difficulty in consistently measuring price improvement and important order execution considerations other than price, this apparent expectation could dampen the incentive to quote aggressively as market makers and executing brokers may pull back their quotes in anticipation of providing price improvement on every order. For example, if retail broker-dealers are generally expected to seek price improvement on every order they route to the market, and executing broker-dealers are aware of this expectation, executing brokers may quote less aggressively in anticipation of providing price improvement to orders routed to them. This outcome could negatively impact overall market liquidity causing spreads to widen. The Commission specifically acknowledges that this might occur in options markets, but it seems equally plausible in other markets such as equities.[149]

A second way in which Reg Best Ex may negatively impact order handling is through execution delays and information leakage from sourcing better prices on different markets. Reg Best Ex is designed to push firms to examine more sources of liquidity to find the best price, and to examine even more sources of liquidity if a transaction is considered conflicted. Although the Commission correctly proposed a provision encouraging broker-dealers to consider whether delay in execution could negatively impact the customer's price, Reg Best Ex does not adequately explain *how* the Commission expects a broker-dealer to balance the risk of delay with Reg Best Ex's requirements to seek out more (and better-priced) liquidity for each order. Along the same lines, Reg Best Ex does not consider the diminishing returns and associated costs in a continued search for better-priced liquidity, particularly after most material liquidity sources have been considered. Specifically, continuously pinging additional venues in search of better-priced liquidity can give rise to information leakage and untimely executions where the market may move against the order. Other than providing a glancing acknowledgment of this risk, the Commission provides no analysis or meaningful discussion of the tradeoff between price improvement and execution speed.[150] Broker-dealers currently conduct regular best execution reviews to determine what venues are material sources of liquidity based on a comprehensive analysis of factors that are relevant to the execution quality for customer orders.[151] Attempting to compel a broker-dealer to examine more liquidity sources after it has already exercised its best judgment as to which sources to access is arbitrary and capricious and will not improve customer execution quality. Rather it may harm customer execution quality.[152]

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[149] The Commission even specifically acknowledges this possibility with respect to options markets, although it would be similarly plausible for equities. Reg Best Ex at 5534 ("In addition to the costs discussed above, the Commission preliminarily believes that in the market for listed options, the NBBO spreads set by resting best displayed liquidity could be wider and the depths at the best market prices could be thinner because of the increasing order flow segmentation under the proposal. Specifically, liquidity providers could deploy less capital to provide the resting displayed liquidity in the limit order books in favor of price improvement auctions or price improving inside the NBBO. . . . Less capital from liquidity suppliers would make the liquidity in order books thinner and potentially widen the NBBO.").

[150] *Id*. at n.429 ("Pinging for midpoint liquidity at multiple venues could increase the risk of information leakage or that prices may move, possibly resulting in some market participants canceling midpoint orders they posted.").

[151] SIFMA believes that the ability of broker-dealers to conduct this analysis will only improve to the extent the Commission adopts the Rule 605 Proposal, subject to SIFMA's recommendations in Appendix A.

[152] When approving FINRA's current best execution rule, the Commission simultaneously approved FINRA's removal of the "Three Quote Rule" on the basis that its requirements were "overly prescriptive and can often result in unnecessary delay in the execution of a customer's order or impose requirements that do not benefit the customer." Exchange Act Release No. 65895, at 4 (Dec. 5, 2011). The Commission concurred with FINRA's assessment at the time, stating that the rule's removal would "promote just and equitable principles of trade and . . . protect investors and the public interest" while ensuring that best execution obligations would still apply to these orders. *Id.* at 9. Almost exactly eleven years later, the Commission

A third way in which Reg Best Ex may negatively distort order handling practices is with respect to seeking midpoint liquidity. The Commission appears to expect that broker-dealers access substantial amounts of midpoint liquidity identified by the Commission.[153] This is unrealistic. Midpoint liquidity is, by definition, non-displayed, meaning that broker-dealers are unable to observe or assess midpoint liquidity on a market center's order book. The only way to identify non-displayed liquidity is for a broker-dealer to route customer orders to each venue trading a security to attempt to receive an execution at the midpoint. Not only may this practice lead to worse executions for certain customer orders where midpoint liquidity is not found, but pinging for midpoint liquidity risks information leakage that could negatively move the market for the customer orders as a whole, as acknowledged by the Commission.[154] Regulators will always be able to identify potential midpoint liquidity after the fact that could have been executed against, notwithstanding that such liquidity was non-displayed and that a broker-dealer may have had good reasons for not routing blindly to the venue that had such midpoint liquidity. Moreover, it is unrealistic to assume that, just because *some* midpoint liquidity existed when an order is executed, the execution quality of the *full size* of the order would improve if it sought that liquidity.[155] This post-hoc view of where midpoint non-displayed liquidity exists will always give rise to the possibility of a claim by a regulator of a potential best execution violation if this expectation is adopted under Reg Best Ex, resulting in incalculable costs to broker-dealers from having to recreate their view of the market at the time a (typically automated) routing decision was made to explain why, for example, a firm did not route to a particular ATS or exchange in search of that midpoint liquidity.

Ultimately, Reg Best Ex's emphasis on seeking midpoint liquidity and examining all material sources of liquidity to find the best price, as well as immaterial sources if the transaction is conflicted, takes away a broker-dealer's professional judgment and introduces a significant risk of price disimprovement, information leakage, and quote fade, each of which would only harm customers. Firms need the ability to exercise judgment in these circumstances without the fear of overzealous examiners, as the data available in our fast-moving markets is never so complete or unambiguous that the extent of a firm's reasonable diligence can be distilled into a workable rule. To the extent that it is the Commission's intention to mandate additional searches for liquidity and override the discretion of broker-dealers, however, the Commission needs to make explicit in its rule how much will be deemed enough. Otherwise, broker-dealers will be exposed to unnecessary regulatory risk that limits their ability to exercise their judgment based on the facts and circumstances of a particular order handling situation to determine how to best balance price improvement with the risk of undue delay. As Reg Best Ex currently stands, the Commission seems to assume that a better price is perpetually out there waiting to be found by the most diligent hunter with only negligible risk of adverse outcomes from performing such searches.

Reg Best Ex would also have the effect of cutting out, or at least placing substantial roadblocks in the way of, wholesalers' ability to facilitate customer executions for retail broker-dealers. Wholesalers currently operate a business model that provides valuable order handling and execution services for retail

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appears to be moving in the opposite direction by proposing a new overly prescriptive rule that will lead to unnecessary delay without an obvious benefit to the customer.

[153] Reg Best Ex at 5445 ("For stocks priced higher than $30, it appears that for between 60–93% of the shares executed by the wholesaler in a principal capacity at a price less favorable than the NBBO midpoint there was midpoint liquidity that was available on exchanges and ATSs at the time the wholesaler executed the order."); Proposed Rule 1101(a)(2)(i) ("[T]he broker or dealer will determine the best market and make routing or execution decisions for customer orders that it receives by: (i) Assessing reasonably accessible and timely information with respect to the best displayed prices, opportunities for price improvement, *including midpoint executions*, and order exposure opportunities that may result in the most favorable price . . . ." (emphasis added)). At the same time, the Commission acknowledges that wholesalers provide customers with the midpoint or better for nearly half of the customer orders they execute in a principal capacity. *See* Reg Best Ex at n.55.

[154] *See supra* note 150.

[155] *See infra* notes 183-185 and accompanying text (discussing the limitations on midpoint liquidity considered in the Commission's economic analysis).

broker-dealers at substantially low cost. Wholesalers have developed the technology and expertise to source order flow in the fastest and most efficient ways possible, providing low costs to retail broker-dealers and the best price improvement opportunities available to retail customers. Nevertheless, the Commission seems intent on disrupting this effective business model. Unfortunately, the consequences of doing so would not only negatively impact the excellent execution quality retail investors receive today, but would make it more costly for retail broker-dealers to operate without the ability to efficiently leverage the services and resources wholesalers can provide. For example, if wholesalers continue to operate in their current role, the Commission's conflicted transactions requirements would effectively require retail broker-dealers to make significant investments in the technology and infrastructure needed to satisfy to the Commission that they "did more" in terms of seeking potential liquidity before determining that routing to a wholesaler may be the best market for their customer orders. This would entail developing and maintaining a smart order router, paying for all of their own market data and connectivity, and then examining all these markets before determining that routing to the wholesaler was the best option. Imposing this added cost is entirely unnecessary and inefficient, and would upend today's well-functioning market environment.

G. The Proposed Requirements for Conflicted Transactions Are Arbitrary, Capricious, and Should Be Abandoned

1. The Conceptual Design Is Irrational, Arbitrary, and Lacks a Reasonable Relationship to the Purported Problem

SIFMA supports the Commission's desire to mitigate conflicts of interest in the marketplace and to protect customers from being negatively impacted by a broker-dealer's decision to prioritize its own interests over those of its customers. However, the current best execution rules already address conflict scenarios and provide that PFOF and other conflicts cannot be allowed to interfere with a broker-dealer's duty of best execution.[156] And, while the Commission has generally taken a productive approach to address conflicts in the securities markets, either through removing the conflict directly or requiring appropriate disclosure of the conflict, the heightened requirements imposed by Reg Best Ex to examine additional, non-material venues in the case of "conflicted transactions" are arbitrary and capricious, and would not advance the Commission's legitimate interest of mitigating conflicts of interest in order handling practices.

In particular, the "solution" selected by the Commission to require broker-dealers to look at additional, *immaterial* venues, is irrational and does nothing to address the alleged conflict. The Commission itself appears to inadvertently stumble over this design flaw by inconsistently describing the rationale for seeking additional immaterial sources of liquidity for conflicted transactions. For example, at one point the Commission claims the conflicted transactions requirements will assist customers with "fewer resources for evaluating the best execution practices of their broker-dealers" and "the impact of their broker-dealers' conflicted transactions."[157] But this aspect of Reg Best Ex is allegedly designed to "help *broker-dealers* to comply with the proposed best execution standard,"[158] not to help customers evaluate best execution practices.

Moreover, the Commission has elected to apply the requirements for conflicted transactions to an arbitrary list of specified types of conflicts (*i.e.*, principal executions, riskless principal transactions, and

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[156] *See*, *e.g.*, FINRA Rule 5310.09(b)(8) (requiring firms to consider internalization and payment for order flow arrangements in their regular reviews of execution quality); FINRA Regulatory Notice 15-46, at 6 (stating that "the possibility of obtaining price improvement on an order is a heightened consideration when the broker-dealer is receiving payment for order flow" and "a firm should carefully evaluate its receipt of payment for order flow and the impact of such practices on execution quality"); FINRA Regulatory Notice 21-23, at 4 (providing that "it is especially important . . . to determine that customers are receiving the best price and execution quality opportunities notwithstanding the payment for order flow" and "inducements such as payment for order flow and internalization may not be taken into account in analyzing market quality").

[157] Reg Best Ex at 5465.

[158] *Id*. (emphasis added).

orders involving PFOF). While reasonable minds could debate the extent to which any of these categories presents a material conflict, the Commission has provided no basis for calling out these specific conflicts and excluding potentially other relevant conflicts. For example, similar conflicts to those identified by the Commission could arise if a broker-dealer were to route an order to a venue with lower fees than another venue or to a venue that is not an affiliate but in which the broker-dealer has an interest.[159]

More importantly, however, the Commission's proposed requirements for conflicted transactions are entirely disconnected from the problems they purport to solve. If the best execution standard for nonconflicted transactions is to consider all potential *material* sources of liquidity, then presumably a conflicted broker-dealer would fail that standard if it fails to consider all material sources of liquidity before executing an order in a conflicted manner. Compelling the broker-dealer to look at additional, *immaterial* sources of liquidity does nothing to address the perceived conflict because, to the extent a better price than the conflicted transaction is available, it would almost certainly be available at a *material* source of liquidity and not an immaterial one. In other words, it seems highly unlikely that seeking immaterial liquidity sources would do anything to improve the execution of the conflicted order, which is likely to receive an execution at a material source of liquidity, and may also result in a worse execution resulting from execution delays in seeking out immaterial liquidity sources. While the Commission may claim that it has proposed "more robust"[160] conflicted transactions requirements, the reality is that the Commission has arbitrarily named various conflicts that it *perceives* to be a problem,[161] and then blindly decreed that if broker-dealers just "do more," that problem will go away. Accordingly, the conflicted transactions obligations impose an arbitrary and capricious cost on conflicted broker-dealers, akin to a "punishment" for having a perceived conflict, that does nothing to remediate any concerns related to the perceived conflict. Even more perversely, to the extent that a broker-dealer is forced to incur costs to comply with this aspect of Reg Best Ex, the broker-dealer's customers may end up sharing these costs through higher transaction fees and diminished broker-dealer services. In the best case scenario, searching for additional immaterial sources of liquidity is likely to result in execution delays with no commensurate benefit to the customer given that an immaterial source of liquidity will be unlikely to have better liquidity than material sources of liquidity.

2. *The Requirements to Access Additional Immaterial Venues Are Vague, Unworkable, and Impose Significant Costs*

SIFMA is further concerned that the proposed requirements are vague and lack clarity as to when a broker-dealer will have done enough to satisfy its obligations. The Commission does not clearly explain what other venues firms should look at for conflicted transactions (which vary depending on the type of security)[162] and, while the Commission purports to provide broker-dealers with the ability to exercise some judgment, that is difficult for firms to do as these additional venues will not be *material* sources of liquidity. Accordingly, a firm has no basis to judge what type of venues the Commission may expect the firm to be

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[159] Compare Reg Best Ex with Regulation Best Interest, which defines a conflict of interest more broadly as "an interest that might incline a broker, dealer, or a natural person who is an associated person of a broker or dealer —consciously or unconsciously—to make a recommendation that is not disinterested." 17 CFR 240.15*l*-1(b)(3).

[160] Reg Best Ex at 5465.

[161] While the Commission is correct to say these "new requirements" are not currently required by FINRA or the MSRB, the Commission ignores the fact that existing rules already address conflict scenarios and the Commission has failed to demonstrate or explain why those rules are not adequately remediating such conflicts. *See supra* note 156.

[162] For example, the Commission purports to provides some examples in certain cases as to what a broker-dealer *might* do, such as to evaluate in the options markets "whether any price improvement auctions may provide an opportunity to execute a customer order at a price that is better than the displayed best bid and offer" (although it is unclear why this would not have been part of a broker-dealer's initial calculus as a potential material liquidity source). *See* Reg Best Ex at 5470. In other cases, the Commission simply provides vague suggestions to look at venues that were not considered in the broker-dealer's initial analysis of potential material liquidity sources. *See id.* at 5469. The Commission's guidance here is far from clear, nor does it provide any indication as to what practices might be *sufficient* for purposes of this perplexing requirement.

looking for during this additional step. Reg Best Ex also does not provide any kind of safe harbor to put an end to a potentially never-ending review. There will seemingly always be one more venue that a broker-dealer could have looked at, subjecting otherwise compliant firms to the risk of a violation of the conflicted transaction requirements, even where that firm objectively achieved best execution for its customer order. And as described above, the imperfect nature of today's market information in our fast-paced markets renders it unlikely that a workable rule could prescribe the extent of a firm's reasonable diligence, a problem only compounded by the even more onerous conflicted transactions regime.

The puzzling design of this aspect of Reg Best Ex could also cause broker-dealers engaged in conflicted transactions to miss better sources of available liquidity already considered while unnecessarily spending additional time and expense seeking out venues unlikely to have better prices. There is also insufficient market data or information available to effectively evaluate many additional venues, further contributing to this delay and introducing a new risk of adding unreliable information to the equation.[163] The Commission does not adequately consider all the costs to investors of compelling their broker-dealers to examine more venues, which may arise through information leakage, slower executions, fading liquidity, and the direct costs of accessing and assessing additional sources of liquidity. It can be expensive to connect to individual venues and a particularly unnecessary expenditure when that venue is an immaterial source of liquidity.[164] These issues are compounded during volatile market conditions,[165] when broker-dealers typically have to look at fewer markets in order to move quickly to execute trades at the best prevailing price. However, the requirement for conflicted broker-dealers to look at more markets creates a conflicting imperative without clear guidance as to how firms should appropriately balance a timely execution versus examining more markets. These costs would fall disproportionately on smaller firms, which would be contrary to the Commission's Exchange Act Section 3(f) mandate to promote efficiency and encourage competition. And the potential benefits are illusory.

While not explicitly proposing a prohibition, Reg Best Ex not so subtly appears to discourage broker-dealers from receiving PFOF by imposing the additional obligations for conflicted transactions. To the extent Reg Best Ex would reduce the receipt of PFOF, it could raise trading costs for investors by removing a key source of revenue for some broker-dealers that may have to be recouped in some capacity. The Commission itself acknowledged that Reg Best Ex's costs "could be passed through to customers in the form of higher commissions or reduced services"[166] and simply states that this is unlikely because the market for retail services is "competitive," without providing analysis of how the costs could otherwise be addressed.[167] But if a source of current revenue is eliminated, economic forces in a competitive market will dictate that revenue must be recovered from another source or else the firm will allocate resources elsewhere, expend fewer resources on innovations that might benefit customers, or leave the market. Reducing the number of firms offering order handling services will only reduce competition, again contrary to the Commission's statutory mandate.

Even if firms do not elect to recover this lost revenue through a return to commissions, it's possible that investors could end up footing the bill in other ways for a firm to remain in business (*e.g.*, account opening fees or additional margin fees), or charges for valuable brokerage services that are provided at no

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[163] *See supra* note 147.

[164] Firms will also subject themselves and their customers to additional cybersecurity risks with little attendant benefit to the extent they are compelled to access venues that are less reliable, less trustworthy, and otherwise immaterial.

[165] During such conditions, prices may move against a customer's order very rapidly. Volatile conditions, such as during the onset of the COVID-19 pandemic, meme stock events, or other significant market events, are becoming ever more common in our markets and broker-dealers need to be able to use their expertise to navigate order handling during such conditions.

[166] Reg Best Ex at 5482-83.

[167] *See also* Hester Peirce, Commissioner, Commission, Is This the Best Execution We Can Get? (Dec. 14, 2022), https://www.sec.gov/news/statement/peirce-best-execution-20221214 ("Why is withholding price improvement from the customer worse than charging the customer a (likely higher) commission?").

cost today. Reg Best Ex's unnecessary costs would also impede broker-dealers' ability to innovate and develop, provide, and maintain enhanced products and services for their clients. These avoidable outcomes would certainly not improve the overall retail investor experience, which is better than it has ever been and has led to such high main street investor participation in our markets.

SIFMA is also highly concerned that the conflicted transactions aspect of Reg Best Ex will impose significant burdens and costs on many more market participants than were fully estimated and considered by the Commission. Given that exchange rebates received by a broker-dealer would be included in the PFOF that would make a transaction conflicted, the vast majority of equities and options broker-dealer is likely to be subject to the conflicted transactions requirements. The Commission provides no analysis as to the feasibility for broker-dealers—even for those who do not receive PFOF—of losing the benefit of exchange-rebates. The Commission also does not provide a reasoned explanation for considering exchange rebates as "payments" that create a conflict, given that the rebates are not optional (and, for that matter, were all the subject of fee filings blessed by the Commission).[168] In the equities market in particular, all transactions routed to qualified auctions under the Commission's separate OCR are likely to be considered conflicted transactions, unless there is a qualified auction available that does <u>not</u> offer any potential rebates or volume-based discounts. However, the requirement to consider additional venues in this case appears to be in direct conflict with the Commission's mandate to send these orders to a qualified auction for execution.[169] While the Commission claims that there are reasonably accessible paths to avoid the conflicted transaction requirements, SIFMA finds that suggestion vague and unconvincing. The reality is that any such paths to avoid engaging in any conflicted transactions would be very difficult for most firms, particularly in certain types of securities like fixed income, and the vast majority of firms may need to engage in conflicted transactions in at least some circumstances.[170]

3. *The Documentation Requirement Necessarily Imposes an Onerous Order-by-Order Obligation*

While the Commission claims that it is not prescribing a particular method by which broker-dealers must document their compliance with best execution for conflicted transactions, it suggests that broker-dealers need to demonstrate the basis and information relied on for a determination that their conflicted transactions comply with the standard. The Commission does not contemplate that best execution compliance for conflicted transactions must be documented on an order-by-order basis, because according to the Commission, this would be too costly. However, the Commission elsewhere suggests that a broker-dealer could comply with the requirement by "document[ing] the prices received from those markets that it checked."[171] It is therefore unclear what actual standard the Commission intends to impose for conflicted transaction documentation and how a broker-dealer might document its compliance without doing so order-by-order, an endeavor the Commission itself has admitted is an overly burdensome cost.

[168] While the Commission states that a transaction will not be conflicted if all PFOF, including exchange rebates, for a customer order from a particular market is passed through to the customer and the broker-dealer retains no part of the PFOF associated with that order, the Commission assumes without analysis that this could be easily accomplished. The reality is that attempting to accurately pass through individual rebates received on executions to customers for every transaction is a very difficult, costly, and complex exercise to pursue.

[169] *See supra* notes 28 - 30 and accompanying text.

[170] For example, trades out of an error account to benefit a customer are done as principal transactions, yet the Commission does not provide any carve out.

[171] Reg Best Ex at 5468.

4. The Standard Would Scope in Common Trading Activities That Are Incompatible with Its Requirements

A number of agency-only broker-dealers engage in limited principal activity for the sole purpose of facilitating fractional order interests of their clients.[172] Yet, solely because of this limited principal trading activity, which necessarily involves less than a single share, these broker-dealers would become subject to the heightened obligations applicable to conflicted transactions. This appears to be a completely unnecessary burden on these broker-dealers to have to examine additional liquidity sources given that a broker-dealer could not even route the fractional share portion of an order to any such venue.[173]

Additionally, while a paired order brought to an options exchange price improvement auction would be considered a conflicted transaction because the customer order is matched against principal interest, it is unclear why such an order should be considered a conflicted transaction given that it is exposed to other market participants. The broker-dealer initiating the auction could lose the entire order to better-priced interest solicited during the auction and will only receive a principal execution if the broker-dealer's price remains equal to or better than the best-priced responses. Any portion of the customer order executed as principal, therefore, would be matching or exceeding the price that any other market participant would have been willing to provide for that order.

It is also difficult to contemplate how a broker-dealer utilizing a price improvement auction in the options market could possibly satisfy its obligation to consider additional venues beyond those viewed as material potential liquidity sources. The price improvement auction is a *material* liquidity source by which the broker-dealer must seek available liquidity. However, the broker-dealer cannot seek liquidity without submitting a paired order to the auction, which in the options market must be *guaranteed* by the initiating broker, and cannot be canceled or modified once the auction begins. Consequently, a broker-dealer *cannot* consider any additional sources of liquidity beyond what it is able to source through responses to the auction, because once the auction is initiated the broker-dealer is *required* to execute the order at the initiating price or against any better priced interest received during the auction. This is yet another example of Reg Best Ex being designed in a manner that does not fully contemplate the varying market structures and rules applicable to different asset classes that broker-dealers execute customer orders for today.

A common business practice involves utilizing an affiliated broker-dealer solely for routing (not executing) orders for its retail broker affiliate. This would render the retail broker's transactions conflicted under the rigid design of Reg Best Ex, despite there being no basis to consider these conflicted transactions given that transactions under this structure do not raise the concerns identified by the Commission in the proposal. Finally, to the extent the requirements for conflicted transactions are adopted in any final rule, a broker-dealer's principal trades for an error account need to be excluded.

H. Order-by-Order Review or Regular and Rigorous

The Commission does not specify whether a broker-dealer's regular reviews of execution quality must be on an order-by-order basis as compared to a regular and rigorous review, and whether this should vary depending on the particular circumstances. At the same time, the Commission acknowledges that FINRA's guidance indicates that order-by-order review should be conducted for principal transactions.[174] It therefore remains unclear what the actual standard would be, whether this would vary between conflicted

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[172] For example, rather than placing an order for a particular number of shares, a client may wish to invest $1,000 in a $23.00 priced stock. This would require the broker-dealer to execute the order for 43.48 shares, and the broker-dealer would have to act in a principal capacity to execute the fractional component of this order. This is because there is no clear way to execute fractional shares in a purely agency capacity, because a fractional share interest is ultimately just a notation on the books and records of the introducing broker-dealer.

[173] To the extent the Commission believes fractional share transactions are available solely through agency routing, the Commission should articulate how this can be done.

[174] *See* Reg Best Ex at 5473 n.219.

and non-conflicted transactions despite the fact that conflicted transactions are already subject to a separate documentation requirement, and whether this aspect of the proposed rule would be consistently enforced.

Relatedly, the Reg Best Ex rule text states that the execution quality reviews must be conducted no less frequently than quarterly. However, the Commission makes statements in the Reg Best Ex proposing release suggesting that some broker-dealers may determine that a more frequent review is appropriate. It therefore appears as if the Commission may attempt to enforce the rule more strictly than it has proposed. The Commission should specify the exact standard it intends to enforce—otherwise Reg Best Ex is ambiguous and could lead to unfairly discriminatory enforcement.

I. Introducing Broker Exemption

SIFMA commends the Commission for recognizing the different business models and resource levels of introducing brokers and proposing a carveout that would subject such brokers to a lighter policies and procedures-based obligation. However, the manner in which the Commission has proposed this carveout is unnecessarily limiting for several reasons. First, because the exemption would require that the introducing broker enter into an arrangement with a *single* executing broker that agrees to execute all the introducing broker's customer trades in an agency capacity, Reg Best Ex would limit the ability of introducing firms to use multiple executing brokers. This requirement is unduly limiting and without support. Allowing introducing brokers to utilize multiple executing brokers introduces competition among those executing brokers and serves as a hedge against any issue experienced by any one executing broker-dealer.[175] Such an arrangement allows introducing brokers to better measure the execution quality of their various executing brokers and redirect order flow accordingly in order to attain the best prices for their customer orders – a fundamental component of best execution.

Second, the introducing broker exemption should be available to segments of a broker-dealer's business for which it acts solely as an introducing broker. Some broker-dealers are structured in a manner such that one segment of order flow may be handled as an introducing broker, while the broker-dealer provides execution and routing services to all other segments of the broker-dealer's business. As one example, a broker-dealer may act as an executing broker for all order flow received from institutional and wealth management clients, while it may act as an introducing broker in its robo-advisory business, where it has entered into a clearing agreement with a third party broker-dealer that has full discretion as to where to execute robo-advisory orders. Under the proposed introducing broker exemption, it is unclear whether such a broker-dealer would be able to rely on the introducing broker exception for the segment of its business where it acts as an introducing broker because the exemption requires that *all* of the broker-dealer's orders must be routed to an unaffiliated broker-dealer. In order to avail itself of the introducing broker exemption, therefore, it would have to consider eliminating the introducing broker portion of its business or establish a new broker-dealer specific to solely the introducing broker activities, which would add substantial, unnecessary cost. SIFMA sees no reason why the introducing broker exemption should not apply to any aspect of a broker-dealer's business where it, in fact, acts as an introducing broker pursuant to a clearing agreement that gives the executing broker full discretion on routing decisions. Assuming no payment for order flow is received, there would appear to be no conflict of interest for those transactions routed to a third-party executing broker-dealer.

Third, SIFMA believes that the requirement that an introducing broker not carry customer accounts is arbitrary and not all necessary. Under proposed Rule 1101(d)(1), an introducing broker may not carry customer accounts or hold customer assets. The only reason given for this requirement is that the

[175] For example, under the Commission's proposal, an introducing broker would be required to consolidate all its risk in a single executing broker. If that executing broker experiences a systems issue or otherwise becomes unavailable, the introducing broker could not conduct its business for its customers. Utilizing more than one executing broker allows introducing brokers to smooth their risk exposure in these situations.

Commission believes that introducing brokers do not typically carry customer accounts.[176] The Commission's explanation suggests that broker-dealers that carry customer accounts or hold customer assets are assumed to have discretion over how their customer orders are handled or executed. This is not the case, and there are some firms that carry customer accounts while not acting as an executing broker-dealer.[177] There is nothing inherent about carrying customer accounts that should preclude a firm from being considered an introducing broker-dealer. Consistent with our comments immediately above, SIFMA believes that the introducing broker exemption should be available to any broker-dealer where that broker-dealer is, in fact, acting as an introducing broker.

Fourth, the proposed introducing broker exemption is unduly limiting in prohibiting an affiliate from acting as the executing broker-dealer. Specifically, a condition under proposed Rule 1101(d)(2) is that the executing broker be "unaffiliated" with the introducing broker. Many firms are organized today to have a customer-facing introducing broker-dealer that routes all orders to an affiliated executing broker-dealer.[178] SIFMA believes that firms should have the opportunity to use their affiliate as the executing broker-dealer under the proposed introducing broker exception provided that all other conditions of the introducing broker exception are met, subject to SIFMA's concerns described below regarding the impracticability of comparing executions an introducing broker could have received from another executing broker-dealer. Under Reg Best Ex, an affiliated broker-dealer would have even greater incentive to provide best execution knowing that it could potentially lose the order flow from its affiliate to the extent that the introducing broker is required to periodically review executions that it could have received from another executing broker-dealer. Additionally, preventing affiliated executing brokers from acting as such limits competition arbitrarily, particularly when the Commission has not provided any evidence indicating that a broker-dealer routing to its affiliated executing broker-dealer is not providing best execution today.

Additionally, the Commission should also revisit and more clearly define the terms "introducing broker" and "executing broker" for purposes of Reg Best Ex.[179] These terms are commonly used in different scenarios with different meanings and imprecise definitions (as well as a lack of comparison to existing definitions) and will introduce confusion to market participants. In addition, requiring an introducing broker to use an executing broker that does not execute the orders in a principal capacity unnecessarily adds transaction costs by intermediating yet another broker-dealer into the execution chain. The added costs of such intermediation are particularly inefficient for securities that trade primarily in a principal or riskless principal capacity.[180]

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[176] Reg Best Ex at 5475 ("This proposed condition is designed to identify those broker-dealers that do not handle or execute customer orders and therefore need to enter into arrangements with other broker-dealers to provide those services.").

[177] This might occur, for example, in the case of robo-advisers whereby a broker-dealer affiliated with an investment adviser might carry the customer accounts but route all advisory orders to a third party executing broker-dealer.

[178] Notably, these introducing brokers today have best execution obligations to ensure that their affiliated executing broker-dealers are achieving best execution for orders routed to them. By limiting the introducing broker exemption to only where a broker-dealer uses an unaffiliated third party broker-dealer (rather than also allowing an affiliate) seems to suggest that the Commission believes introducing broker-dealers routing to an affiliated executing broker-dealer may not be achieving best execution for their customer orders currently due to this affiliation. If that is the case, the Commission should explain, and provide evidence for, why the Commission believes that routing to an affiliate prevents an introducing firm from achieving best execution.

[179] For example, while the Commission has proposed a separate definition for "introducing broker," the Commission has proposed to define the term "executing broker" *within* that defined term, rather than clearly defining each term independently.

[180] For example, when an introducing broker routes its customer order to its executing broker, the executing broker cannot transact in a riskless principal capacity without jeopardizing the "introducing broker" status of the introducing broker, so the executing broker would have to route the agency order to another broker-dealer that trades in a principal or riskless principal capacity.

Finally, although Reg Best Ex would require an introducing broker to compare its executing broker's execution quality against that which might be obtained from other executing brokers, there is currently no mechanism or data resources that would allow for such a comparison. As described above, because Reg Best Ex would limit an introducing broker's relationship exclusively to a single executing broker, the introducing broker would not be able to send test orders to other executing brokers to effectuate a comparable execution quality analysis.[181] Even if Reg Best Ex spurred the development of data resources that could facilitate the comparison of executing brokers, there would be significant costs associated with switching executing brokers and potentially having to switch back. Because many introducing brokers already typically have fewer resources than larger broker-dealers, these costs would impose a barrier to entry and would likely exceed any marginal benefit to execution quality, yet again contrary to the Commission's Exchange Act Section 3(f) mandate to promote efficiency and encourage competition. It would be significantly more efficient to allow introducing brokers to maintain multiple executing broker relationships, whereby they could shift order flow as a result of execution quality analyses rather than having to fully connect and reconnect to various executing brokers as contemplated by Reg Best Ex.

J. The Commission's Economic Analysis Is Significantly Flawed

1. The Commission Does Not Provide an Accurate and Comprehensive Economic Baseline

Regardless of the outcome of the functional operational and policy considerations attendant to Reg Best Ex, as described above, SIFMA feels strongly that the Commission has not satisfied its responsibility to perform a thorough and complete economic analysis of Reg Best Ex. As a threshold matter, the Commission appears uncertain about what broker-dealers currently do to comply with their best execution obligations.[182] It is surprising that the Commission cannot describe this with better certainty—not only because it is necessary to establish an economic baseline but also in light of the Commission's oversight responsibilities. The Commission has oversight and examination authority over broker-dealers and FINRA, and also has the authority to enforce compliance with FINRA's rules. The Commission should not have to make assumptions or rely on commenters to supply information about broker-dealers' current best execution practices—if the Commission does not have this information, it can easily acquire it directly or through FINRA. The Commission should not be proposing rulemaking without a clear understanding of the present state of the market it is attempting to regulate.

In establishing its economic baseline, the Commission makes a sweeping assumption about its data observation that 75% of orders internalized at prices worse than midpoint could have executed at the midpoint, a conclusion that is not supported. The Commission did not fully consider the possibility of tiering, minimum size execution requirements, or other factors that might prevent these orders from receiving a midpoint execution.[183] The Commission acknowledges that wholesalers would be unable to identify this midpoint interest without pinging multiple venues and that doing so could cause prices to move adversely to the customer order. However, the Commission only addresses this important fact in a footnote and does not attempt to quantify its impact, which would likely be to significantly decrease the

[181] Even if test orders were allowed, these may not be reliable indicators of how an executing broker-dealer would perform in the ordinary course, particularly given that the prospective executing broker-dealer would have incentives to provide even better executions on orders it believes are test orders.

[182] *See supra* note 139. Additionally, the baseline discussion in the economic analysis makes assumptions about what broker-dealers currently do to comply with best execution rules by describing the requirements of FINRA's rule and statements in FINRA guidance and describing things broker-dealers *may* do, rather than considering any actual best execution practices or procedures, information that would be available to both the Commission and FINRA. The Commission also claims to be unaware of the extent to which broker-dealers maintain documentation on their transactions. *See* Reg Best Ex at 5523 n.535.

[183] For example, many resting midpoint institutional orders have a minimum size requirement that would rule out interaction with most retail orders.

Commission's prior estimate.[184] This analysis is also performed considering aggregated interest over the observation period and thereby fails to consider whether available midpoint liquidity for an individual execution would have been an improvement over the internalized price.[185]

2. *The Commission Does Not Provide an Accurate and Comprehensive Assessment of Reg Best Ex's Costs*

The Commission's economic analysis quantifies various costs to market participants but does not provide an adequate basis for how these costs were identified. In addition, the Commission provides a number of direct costs to implement Reg Best Ex, but does not sufficiently consider the indirect, economic costs of Reg Best Ex once actually implemented.[186] Instead, the Commission claims this amount cannot be estimated—but an estimate is necessary to adequately compare the costs to any potential benefits. Moreover, the economic analysis of Reg Best Ex's implementation costs does not even seem to be consistent with the PRA costs separately estimated by the Commission.[187] The cost analysis also does not identify the potential costs individual firms will incur to comply with Reg Best Ex, a cost that is necessary to fully consider the potential effects of Reg Best Ex on brokers' commission rates. The economic analysis also does not consider costs that many retail brokers would have to incur to develop smart order routers or establish trading desks to comply with the additional specific requirements of Reg Best Ex that go beyond current FINRA or MSRB requirements. These costs would be *substantial* and are not quantified in any way.

While the Commission (imprecisely) estimates that "many" of its estimated 2,440 retail broker-dealers are likely to qualify as conflicted and 225 such broker-dealers would remain conflicted if Reg Best Ex were adopted, the Commission provides no estimate of the total number of likely conflicted *transactions* (or an estimated percentage of total transactions that would be considered conflicted transactions). The conflicted transactions requirements, however, would apply on a transaction-by-transaction basis (*e.g.*, a broker-dealer that engaged in many conflicted transactions would incur significantly more costs than one that engaged in few conflicted transactions). Accordingly, without an estimate of the number of transactions that might be subject to these onerous obligations, the Commission cannot have possibly reliably estimated or analyzed the true costs of Reg Best Ex.

3. *The Commission Cannot Identify Measurable Benefits and Fails to Weigh the Calculated Costs Against Any Benefits*

Compounding the fact that the Commission has identified significant costs that would be incurred as a result of Reg Best Ex, and failed to quantify all such costs, the Commission does not provide any quantitative, measurable benefits to demonstrate that Reg Best Ex would be appropriate in light of those costs. While the cost discussion presents substantial negative burdens resulting from Reg Best Ex, the Commission only claims some *potential* positives, while also acknowledging that it "cannot ascertain the extent to which these benefits would be realized."[188] In certain cases, the Commission even acknowledges

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[184] Reg Best Ex at n.429 ("Pinging for midpoint liquidity at multiple venues could increase the risk of information leakage or that prices may move, possibly resulting in some market participants canceling midpoint orders they posted.").

[185] For example, if a wholesaler internalizes a 100 share order when 25 shares are available at the midpoint, the price improvement provided for the total 100 shares may be a better overall result than sending the 100 share order to the midpoint venue, receiving 25 shares at midpoint and then 75 shares at a worse price.

[186] To take just one example, it is unclear what an introducing broker would use to compare its executions against those of another executing broker and what the costs of doing so would be.

[187] For example, the economic analysis states that implementation costs are likely overstated because broker-dealers may already have policies and procedures that comply with Reg Best Ex. *See* Reg Best Ex at 5531. However, the implementation costs presented in the PRA appear to already assume that at least some broker-dealers *do* have policies and procedures that may substantially comply with Reg Best Ex. *See id*. at 5544.

[188] *Id*. at 5523.

that any benefits may be small.[189] For example, the Commission states that it is unaware how many introducing brokers would need to make adjustments to their executing brokers and simply states that any adjustments "could improve" execution quality.[190] The Commission also states it is unaware how individual broker-dealers would adjust their business models and if conflicts would be reduced, but that a reduction in conflicts "could improve" prices received.[191] The Commission has also failed to include any affirmative statement that they have determined the uncertain potential benefits to outweigh the actual costs and uncertainties, or that they have even conducted any kind of balanced analysis that could answer this critical question.

4. The Commission Appears to Reuse Its Economic Analysis of the Order Competition Rule Proposal

Finally, large swaths of the economic analysis appear to have been copied directly from the Commission's separately proposed OCR with little modification.[192] If Reg Best Ex "stands on its own" as Director Zhu suggested,[193] it is difficult to understand how the Commission may have performed a fully independent, robust economic analysis of Reg Best Ex when it appears to be reusing work that was prepared as an analysis of a separate, allegedly unconnected proposal. A substantial portion of this overlap appears to be in describing the economic baseline, which SIFMA acknowledges could give rise to some overlap between the two Proposals, but nevertheless belies the suggestion that each Proposal can be viewed as standing on its own. Moreover, after describing the economic baseline in Reg Best Ex, the Commission makes no effort or attempt to reference back to the anticipated effects of Reg Best Ex as they relate to the economic baseline. Consequently, even if there is good reason to reuse significant parts of the OCR's economic analysis in Reg Best Ex, the Commission has failed to meaningfully analyze the costs, benefits and effects of Reg Best Ex against the economic baseline.

Each of the aforementioned concerns raises serious questions regarding the adequacy of the Commission's economic analysis, particularly in light of past judicial decisions, such as *Business Roundtable, et al. v. SEC*, No. 10-1305 (D.C. Cir. 2011) (finding that the Commission acted arbitrarily and capriciously where the Commission "inconsistently and opportunistically framed the costs and benefits of the rule; failed adequately to quantify the certain costs or to explain why those costs could not be quantified; neglected to support its predictive judgments; contradicted itself; and failed to respond to substantial problems raised by commenters").

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[189] *See id*. at 5525 (claiming benefits of documenting conflicted transactions may be small since most of the relevant data is available through public and regulatory data).

[190] *See id*. at 5524.

[191] *Id*.

[192] *Compare* Reg Best Ex at 5488-5511 *with* OCR at 181-200.

[193] *See* Commission Open Meeting Webcast Archive, 2022.12.14 Open Meeting Part 02 at 1:56:15 – 1:56:18, https://www.youtube.com/watch?v=N0stDLkwBF0 (statement of Commission Division of Trading and Markets Director Haoxiang Zhu).

Appendix D – Order Competition Rule

A. Summary of Key Concerns and Comments

SIFMA has significant concerns with respect to the OCR and believes that the Commission should withdraw or proceed no further with the Proposal. While SIFMA appreciates the Commission's goal of improving executions for retail investors, it is not clear that the Proposal would accomplish this aim and may, in fact, cause greater harm to retail investors. The OCR is, with great respect for the considerable work by Commission staff, incomplete in its design, unlikely to realize its objectives, and inconsistent with the Exchange Act. A summary of the key issues, explained in greater detail below, are as follows:

- The OCR is built on a faulty premise that there is not vigorous competition for retail orders routed to wholesalers pursuant to best execution obligations and that other trading centers are not capable of competing for this order flow.
- By effectively requiring segmented orders to execute on an exchange (unless executed at the midpoint or better), the OCR is inconsistent with the Exchange Act and Congress's clear intent in establishing the National Market System.
- The OCR is also inconsistent with the Exchange Act because it would harm competition among trading centers and make markets less efficient by mandating where certain orders must trade.
- There are significant gaps in the design of the OCR including: (i) whether qualified auctions would cease upon a change in the NBBO adverse to the segmented order and the implications thereof; (ii) qualified auctions would facilitate trading ahead of segmented orders by exposing their orders to the market; (iii) exchange outages could cause significant harm to segmented orders for which there would be no recourse; (iv) the segmented order definition would indirectly impose requirements on foreign market participants and asset managers; and (v) institutional investor orders would have to be coded as such to comply with execution priority rules, resulting in information leakage and deterring institutional participation in retail auctions.
- There are significant flaws in the Commission's economic analysis including that: (i) the Commission incorrectly assumes that the estimated ~$1.5 billion shortfall would be "in addition to" price improvement currently received rather than "instead of" price improvement currently received; (ii) it did not include exchange fees in its estimates; and (iii) it does not address several economic studies indicating the potential for worse executions for retail orders.

SIFMA believes that the Commission should consider less disruptive mechanisms for enhancing competition for the execution of retail orders, such as by revisiting exchange RLPs, rather than mandating that retail orders be routed to qualified auctions. The Commission has already provided exchanges with relief (*i.e.*, to segment retail order flow and execute in increments as granular as $0.001) to make exchanges more competitive with wholesalers for the execution of retail orders. The Commission notes that RLPs have not been very successful in attracting retail orders, but does not consider the reasons why RLPs have not been successful, notwithstanding the relief already provided by the Commission.[194] At a minimum, as part of the economic analysis, the Commission should have fully analyzed why the RLP programs have not met the goals for which they were intended before proceeding to propose a completely new mechanism that may suffer from the same (or additional) issues. Based on such analyses, there may be reforms to RLPs that could be made to enhance the competitiveness of exchange RLPs, which could enhance competition for the execution of retail orders. Changes to exchange RLPs to potentially increase the scope of the retail orders eligible to participate in exchange RLPs and further opportunities for price and size improvement for retail orders could be explored as in lieu of mandating an auction construct for retail orders.

[194] Reg Best Ex at 186-187.

B. The Order Competition Rule Is Inconsistent with the Exchange Act and Would Harm Competition among Trading Centers

SIFMA is deeply concerned that the OCR would dictate the specific manner in which particular types of orders (*i.e.*, segmented orders) would have to execute. Until the OCR, the national market structure has been designed to facilitate but not design innovations in market structure. Market centers have been allowed to innovate and compete with each other without the Commission mandating where or how an equities transaction must execute, such as an auction.

Indeed, one of the explicit requirements of the national market system was to remove restrictions on where broker-dealers could effect transactions in a security.[195] Pursuant to Section 11A(c)(4), the Commission adopted Rules 19c-1 and 19c-3, which generally prohibit an exchange from adopting rules that would prevent its members from transacting in a security listed on that exchange (or admitted to unlisted trading privileges) on another market, including over-the-counter.[196] Prior to the 1975 Exchange Act amendments and Rules 19c-1 and 19c-3, many exchanges restricted the ability of their members to trade securities listed on their exchange on any other marketplace. The OCR would reverse this trend by requiring that segmented orders *must* seek an execution through a qualified auction on an exchange unless they are executed at particular price points (*i.e.*, at the midpoint or better).[197]

SIFMA does not believe that a regulatory intervention to mandate the manner of executing orders on behalf of natural persons through qualified auctions is either necessary or appropriate in the public interest or for the protection of investors, and believes it would harm competition among trading centers. Accordingly, as explained below, SIFMA believes that the OCR is inconsistent with Section 11A of the Exchange Act and would, contrary to the Commission's admirable goals, harm competition.

Finally, as noted by the Commission, exchanges today execute nearly 60% of all transactions in NMS stocks.[198] This is relatively consistent with volumes measured 13 years ago in the Commission's 2010 Equity Market Structure Concept Release, where the Commission stated that exchanges represent 63.8% of executed share volume,[199] and Commission estimates of approximately 30% of share volume executed off-exchange in 2013-2014.[200] This suggests that competitive forces have generally prevented any one type of trading center (*i.e.*, dealer, ATS, exchange) from taking a significantly greater market share from any other. It bears explaining why the Commission believes that there are not robust competitive

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[195] 15 U.S.C. 78k-1(c)(4).

[196] 17 CFR 240.19c-1 and 17 CFR 240.19c-3.

[197] As explained below, for all practical purposes, qualified auctions would have to be operated by an exchange notwithstanding that an NMS Stock ATS could in theory operate a qualified auction. As a practical matter, few (if any) ATSs will be able to meet the 1% volume threshold required to operate a qualified auction and would need to radically change their business model in order to operate a qualified auction.

[198] OCR Proposal at 132 and 181 (Table 1).

[199] Exchange Act Release No. 61358, 75 FR 3593, 3597-98 (January 21, 2010) ("Equity Market Structure Concept Release").

[200] Laura Tuttle, Division of Economic and Risk Analysis, Commission, *Alternative Trading Systems: Description of ATS Trading in National Market System Stocks*, at 2 ("ATSs execute an estimated 11.31% of NMS dollar volume, and 12.12% of NMS share volume"), https://www.sec.gov/files/marketstructure/research/alternative-trading-systems-march-2014.pdf; Laura Tuttle, Division of Economic and Risk Analysis, Commission, OTC Trading: Description of Non-ATS OTC Trading in National Market System Stocks, at 2 ("(18.75% of share volume) of NMS stocks is executed OTC without the involvement of an ATS"), https://www.sec.gov/files/marketstructure/research/otc_trading_march_2014.pdf.

forces at play in today's markets and why a government mandate designed to increase exchanges' share volume is necessary and appropriate in the public interest and for the protection of investors.[201]

1. The OCR Is Built on a Faulty Premise That There Is No Competition for the Execution of Retail/Segmented Orders

The Commission's evaluation of competitive dynamics for the execution of retail/segmented orders is based on a faulty premise – namely that there is not competition for retail orders today because the vast majority are routed to a small number of wholesalers. To the contrary, wholesalers compete vigorously with each other and with exchanges' RLPs in order to provide the best execution quality for these orders. The Commission appears to believe that there can only be competition for a retail/segmented order when that order is exposed through an auction. This is simply not true—the determination of which trading center to route an order for execution, including an available auction, is determined today by competitive forces. Prescribing an auction as the sole means of execution for these orders will only reduce, rather than enhance, competition, contrary to the Commission's Exchange Act Section 3(f) mandate to promote efficiency and encourage competition.

Moreover, broker-dealers today have a duty of best execution (apart from proposed Reg Best Ex) that requires them to seek the best available prices and execution opportunities for their customer orders. Many broker-dealers have determined, specifically pursuant to and in fulfillment of these best execution responsibilities, that the best available market for retail/segmented orders has been to route most to the various wholesalers competing for these executions. If better opportunities are available for retail order executions, such opportunities would be attained in order to comply with a firm's best execution responsibilities, not via additional mandated participation in auctions. Qualified auctions would instead interfere with a broker-dealer's best execution practices by subverting their order handling decision with a regulatory mandate.

Meanwhile, the Commission appears to express concern that individual investor orders are being routed to a "small group" of six wholesalers, a market that is allegedly "highly concentrated" because two wholesalers account for 66% of wholesalers' total volume in NMS stocks.[202] However, while there may be 16 registered equities exchanges trading NMS stocks, these exchanges are controlled by only seven distinct exchange groups, and three of these groups account for ~88% of exchanges' total volume in NMS stocks.[203] It is both puzzling and incongruent with the Commission's own economic analysis that, if the Commission is so concerned with market concentration, it intends to force retail investor order flow into a market segment that is drastically more concentrated than the competitive markets available today.

Further, the Commission has not identified barriers to entry that prevent exchanges, ATSs, or other dealers from seeking to execute retail order flow—*i.e.*, there is open competition among trading centers to attract retail order flow. There is nothing to prevent a new or existing broker-dealer from seeking to compete against the current wholesalers.[204] The competitive nature of the wholesaler market is also self-evident as evidenced by the entry of several new firms in recent years. There is similarly nothing to prevent exchanges or ATSs from modifying their services to attract additional retail/segmented order flow,

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[201] In the 1975 Amendments, Congress also noted that its Subcommittee on Commerce and Finance "found that the third market has proved to be a valuable competitive force in the marketplace, and, accordingly, rejected proposals that all trading in listed securities be confined to exchange markets." House Report No. 94-123 at 91.

[202] OCR Proposal at 6-7; n.372.

[203] *See* Cboe, U.S. Equities Market Volume Summary, https://www.cboe.com/us/equities/market_share/ (month-to-date data calculated on March 22, 2023).

[204] A recent academic study also found that "retail brokers appear to be controlling execution quality by routing to wholesalers who require lower compensation for liquidity generation." Dyhrberg, Anne Haubo and Shkilko, Andriy and Werner, Ingrid M., The Retail Execution Quality Landscape (Dec. 12, 2022) at 6, https://ssrn.com/abstract=4313095 ("Dyhrberg Study").

particularly given that RLPs have exemptive relief from Rule 612 to allow an exchange to accept and rank subpenny orders.[205]

For example, the Commission acknowledges that exchanges' RLPs execute only a small share of individual investor trading volume, which the Commission believes may be the result of (a) retail brokers' lack of direct access to exchanges offering RLPs, (b) high costs of indirect access to RLPs as compared to routing to wholesalers, and (c) a lack of incentive for wholesalers to on-route retail orders they receive to RLPs.[206] None of these possibilities reflect insurmountable hurdles for an exchange to compete with wholesalers, much less demand a disruptive regulatory intervention to require retail orders to be routed to qualified auctions on exchanges. It is unclear why exchanges could not find ways to lower the costs of indirect access to RLPs or offer incentives to attract retail broker-dealers to become members or wholesalers to route orders to exchange RLPs. RLPs could potentially also be designed to operate qualified auctions (without mandating orders be sent to them). To the extent such RLP qualified auctions would in fact result in better executions for retail/segmented orders as the Commission believes, broker-dealers' existing best execution obligations, not to mention natural competitive forces, would compel the routing of retail orders to such auctions.

All of these possibilities remain open and available within the existing market structure. That is, there is ample opportunity under today's market structure for trading centers other than wholesalers to compete for retail order flow. It is therefore unclear why government-mandated routing of retail/segmented orders to trading centers where they might not otherwise be routed is necessary or appropriate for the protection of investors or the public interest.

2. The OCR Is Inconsistent with Section 11A Because It Would Harm Competition among Trading Centers

One of the core purposes and mandates of the national market system is to assure "fair competition among brokers and dealers, among exchange markets, and between exchange markets and markets other than exchange markets."[207] The OCR would hinder fair competition among trading centers by mandating that all segmented orders, unless executed at the midpoint or better, be routed to qualified auctions operated by exchanges.[208] Exchanges would be guaranteed to receive most, if not all, segmented orders (or at least the first opportunity to execute such orders), which would discourage other trading centers from competing vigorously with each other and innovating. Exchanges already have a number of competitive advantages over other trading centers including regulatory immunity as SROs, limitations on liability, the ability to effect market structure changes through NMS plan governance, and through other means.[209]

In establishing the National Market System through the 1975 amendments to the Exchange Act, Congress made explicit that the goal was to allow trading centers to experiment and compete with each other without requiring any particular "mold" for execution:

> The objective is to enhance competition and to allow economic forces, interacting within a fair regulatory field, to arrive at appropriate variations of practices and services. ***Neither 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

[205] OCR at n.151.

[206] *Id*. at 187.

[207] 15 U.S.C 78k-1(a)(1)(C)(ii).

[208] *See* Appendix D, Item B(3) (explaining why, for practical purposes, qualified auctions would only operate on exchanges).

[209] *See e.g.*, *Intercontinental Exchange, Inc. et al v. SEC*, No. 20-1470 (D.C. Cir 2022) (affirming a Commission final order requiring NYSE to neutralize a latency advantage it provided to its affiliate, ICE Data Services Wireless LLC, for the provision of exchange connectivity and market data by allowing the affiliate to connect to a pole on the premises of the exchange that was inaccessible to other market participants).

> purposes of the Securities Exchange Act, assure the maintenance of fair and orderly markets and to provide price protection for the orders of investors.[210]

Congress further stated that "[t]he bill does not attempt to give definition to a national market system. ***Nor is it either feasible or desirable for the Commission or any other agency of the government to predetermine and require a particular structure***."[211] Congress also expressed significant skepticism regarding regulatory intervention, favoring open competition over regulation that imposes barriers to competition.[212] SIFMA is concerned that the OCR would force the execution of segmented orders into a single mold or predetermined structure that could ultimately harm the execution of segmented orders by, among other reasons, facilitating trading ahead of these orders through exposure in qualified auctions, potentially denying them the price improvement they receive today, and delaying their execution due to the response periods of the mandated qualified auctions. Contrary to Congress's express guidance that competition should operate as the guiding force, the OCR would impose regulation onto the efficiently operating National Market System, well beyond the scope of the enumerated areas where regulation should govern.

3. *The OCR Is Inconsistent with Section 11A(c)(3) of the Exchange Act by Effectively Prohibiting Segmented Orders from Executing Off-Exchange*

The OCR would effectively require segmented orders to participate in qualified auctions on an exchange, notwithstanding that the OCR would allow for an NMS Stock ATS to operate a qualified auction. The Commission states that no NMS Stock ATS today would meet the 1% volume threshold to permit it to operate a qualified auction and that only one out of 32 NMS Stock ATSs executes 5% or more of the volume of a single NMS Stock.[213] The Commission states that it believes that "few ATSs would operate qualified auctions, either because it would be difficult for new ATSs to meet the requirements to run qualified auctions or because the requirements of operating a qualified auction would be incompatible with the business models of most currently operating ATSs."[214] The Commission further acknowledges that "ATSs would have to make significant adjustments to their business models (especially with regards to segmenting customer orders and displaying quotes) in order to meet these requirements" and "new ATSs

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[210] House Report No. 94-123 at 51 (emphasis added).

[211] *Id.* at 1 (emphasis added).

[212] *Id.* at 47 ("The Subcommittee finds that in the economic areas affecting the securities industry, competition, rather than regulation, should be the guiding force. We have proposed . . . to abolish the fixed minimum commission rate system; to open up membership on registered national securities exchanges to all registered broker-dealers who meet applicable capital and competency requirements; to prohibit boycotts such as New York Stock Exchange rule 394 and to provide for competition among market makers, including specialists. We find that at least in these areas competition, rather than regulation, should control. This still leaves for regulation those areas such as the supervising and imposing of standards of professional competence; the administration of fair and equitable principles of trade for the protection of investors; the regulation and discipline of members for fraudulent or manipulative practices; and the imposition of standards of financial responsibility and the policing of compliance with those standards.").

[213] OCR at n.279 ("While currently no NMS Stock ATS would qualify as an Open Competition Trading Center, there is currently one NMS Stock ATS that discloses that it crosses the 5% volume threshold for fair access under Regulation ATS for securities that are available for trading on its platform."). Any NMS Stock ATS that may wish to operate a qualified auction would face significant barriers to entry requiring a near complete change to their business model and undertaking enormous new compliance obligations including, among other things: (i) compliance with Regulation SCI (the costs for which the Commission did not include in its economic analysis or burden estimates); (ii) compliance with the fair access requirements of Rule 301(b)(5) by allowing any broker-dealer to become a subscriber; (iii) transforming it entire business model to a displayed model and in compliance with Rule 603 of Regulation NMS; (iv) accessing and streaming quotations to FINRA's ADF, which no broker-dealer currently uses; and (v) obtaining 1% overall execution volume in NMS stocks.

[214] *Id*. at 219.

that could meet the other requirements might find it difficult to achieve 1% market share of trading volume in four out of six months without being able to concurrently operate a qualified auction."[215]

For all practical purposes, therefore, the OCR would mandate that market participants attempt to execute a segmented order on an exchange unless it can be executed at a particular price (*i.e.*, the midpoint or better). This would, at minimum, be true at the time the OCR is implemented, and it would only be upon an NMS Stock ATS completely changing its business model and obtaining 1% overall volume in NMS stocks—which, according to the Commission, no NMS Stock ATS has ever done—without the benefit of any segmented order flow (other than segmented orders that may result in no execution on an exchange qualified auction) that qualified auctions could occur otherwise than on an exchange.

Accordingly, the OCR appears to implicate Section 11A(c)(3) of the Exchange Act, which specifies the circumstances and requirements under which the Commission may prohibit broker-dealers from effecting transactions otherwise than on a national securities exchange.[216] As noted, the OCR would prohibit a broker-dealer from effecting a segmented order transaction in an NMS stock otherwise than on an exchange's qualified auction unless the transaction occurs at a specific price (*i.e.*, at the NBBO midpoint or better) or fails to execute on an exchange's qualified auction. The Commission may only establish such a rule where, among other things, the Commission finds that transactions off-exchange affect the fairness or orderliness of the markets in a manner contrary to the public interest or the protection of investors. The Commission has made no such finding here. Such a finding may prove difficult for the OCR because one of the primary effects of the OCR would be for retail orders to subsidize exchange fees.[217]

Congress made explicitly clear in establishing the National Market System that the Commission's authority in this space is a "fail-safe mechanism for coping with significant market dislocations and distortions should they occur which threaten investors and the maintenance of fair and orderly markets.[218] Congress further emphasized that this authority "***may be used only as the last resort***."[219] Accordingly, the Commission carries a heavy burden to demonstrate why it believes that the fairness and orderliness of transactions in segmented orders is impacted by their execution off-exchange. The mere facts that NMS Stock ATSs could, in theory, operate qualified auctions or that segmented orders could execute off-exchange if they fail to receive an execution on-exchange or at certain price points do not negate the Commission's effective prohibition of executing segmented orders off-exchange.

C. The OCR Fails to Consider or Address Numerous, Critical Operational Questions and Issues

SIFMA is concerned that the OCR has not addressed numerous, significant questions related to how the OCR would operate as well as the attendant costs and benefits of such issues. It is consequently unclear exactly what market structure the Commission is proposing. SIFMA urges the Commission to withdraw or proceed no further with the OCR. Short of that, given the magnitude of these operational questions and

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[215] *Id*. SIFMA also notes that the design of the OCR and the 1% NMS stock volume requirement to operate a qualified auction would also harm competition among new or small national securities exchanges which would similarly be required to obtain 1% market share without the opportunity to facilitate executions in segmented orders (other than after a segmented order failed to receive an execution through another exchange's qualified auction).

[216] 15 U.S.C. 78k-1(c)(3).

[217] Part of the Commission's design of the OCR is to ensure that exchanges maintain their current "net capture" rate in facilitating auctions for segmented orders. *See* OCR Proposal at 159-160. In justifying these fees, the Commission states that "market participants that benefit from the opportunity to trade with [retail] orders, with their low adverse selection costs, would pay the [exchange] for that trading service." *Id.* at 159. These fees for the opportunity to participate with segmented orders is strikingly similar to PFOF, which the Commission repeatedly criticizes, only that the fees for qualified auctions will benefit exchanges.

[218] House Report No. 94-123 at 92 (internal quotation marks omitted).

[219] *Id.*(emphasis added).

issues, SIFMA believes that re-proposal of the OCR after having addressed these matters would be the only path toward any potential adoption of the OCR to allow the public to provide meaningful comment.

1. Changes to the NBBO during an Auction

The OCR fails to consider what should occur if there is a change in the NBBO during the duration of a qualified auction and how qualified auctions would accord with the Order Protection Rule. To illustrate, consider the following example:

- The NBBO for stock XYZ is $9.99 x $10.02.
- A broker-dealer initiates a 200 millisecond qualified auction for a 500 share segmented order to sell XYZ at a price of $10.01.
- After 100 milliseconds of the qualified auction have elapsed, the NBBO for stock XYZ moves to $10.02 x $10.04 posted on another exchange.[220]
- During the auction up until the 100-millisecond point, assume that there were two broker-dealer responders offering to fill the order for its full size at $10.01.

If the qualified auction is to continue when the NBBO moves, any execution of the segmented order would still be required to comply with the Order Protection Rule.[221] Executing the segmented order to sell at $10.01 would trade through the new NBB of $10.02. Had the segmented order been routed to execute against the new NBB of $10.02, the segmented order would sell for $5 higher than if it is sold through the qualified auction. It is, of course, possible that during the remaining 100 milliseconds that other market participants submit orders to the auction at more favorable prices (*e.g.*, $10.03), but there is no guarantee of that happening. If no better-priced auction responses arrive during the remaining time in the auction, the segmented order would suffer an additional 100 milliseconds of delay in execution. During that time, the order could have, for example, been routed to execute against the new NBB of $10.02, or it may miss the opportunity to trade at $10.02 while it waits for the auction to conclude.

Accordingly, the disposition of the segmented order in this case raises several questions/issues:

a. Cancel or Continue

It is unclear whether the Commission expects the qualified auction to cancel, potentially delaying execution of the order, or continue with the hope that better-priced auction responses arrive. In the options markets, which operate various price improvement auctions for single-leg and complex options orders, auctions typically cease upon a change to the best bid or offer.[222] Under the OCR, there could conceivably be at least 16 different auctions occurring simultaneously in a single, one on each exchange. To the extent an open competition trading center could operate simultaneous auctions in a security—another important question left unanswered by the Commission—there could be several times this number of qualified auctions for any given security.

As a result, to the extent the Commission does contemplate early termination of qualified auctions due to changes in the NBBO, the Commission needs to consider the costs, benefits, and effects of auctions terminating early. In this regard, it would be critical to understand, among other things:

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[220] Notably, the same issues would arise where the NBBO moves while a qualified auction is waiting for dissemination of the auction initiation message to the consolidated data feed as well as where segmented orders may queue to initiate a qualified auction.

[221] OCR at n.250 ("Trades executed in qualified auctions would not qualify for an exception from the trade-through requirements of Rule 611 of Regulation NMS . . . .").

[222] *See e.g.*, Nasdaq ISE Options Rule 3, Section 13(c)(5) ("The [auction] exposure period will automatically terminate . . . (ii) any time the Exchange best bid or offer improves beyond the price of the Crossing Transaction on the same side of the market as the Agency Order ; or (iii) any time there is a trading halt on the Exchange in the affected series.").

- How many changes to the NBBO occur on average within 100 – 300 milliseconds and whether these vary depending on different types of stocks (*e.g.*, small-cap, large cap, ETPs *etc.*) to understand how frequently auctions may terminate early;
- How long the Commission expects it would take for an auction initiation message to be disseminated to the consolidated feed and how many changes to the NBBO might occur during this time period;
- How many auctions the Commission believes might occur at a given time – *e.g.*, how many individual orders in a stock that would be segmented orders under the OCR execute on different trading centers at the same time (and any differences among different types of securities)—in order to understand how many auctions the Commission estimates might occur at a given time interval (*e.g.*, how many each second) and in the aggregate on a given trading day.

b. Execution against the New NBB

If the Commission believes that auctions should be canceled, it's unclear if this would allow for a segmented order to be executed against the new NBBO. Under the OCR, the Commission suggests that if a qualified auction does not result in an execution, one option is for the broker-dealer to route the order to execute against a resting order on an exchange continuous limit order book.[223] It is unclear if the early termination of an auction would allow for routing to a resting quotation—*e.g.*, the new NBB in the example above. If so, presumably that would mean that most, if not all, of the orders in auctions that were terminated early would race to execute against the new NBB of $10.02. Only a few such orders would win this race (depending on the size of the new NBB quote), leaving open the question of how orders that did not win the race would be handled. The NBB for stock XYZ might fall to $10.01 or back to $9.99, at which point, such segmented orders would have participated in an auction that terminated early, and routed to execute against a better-priced quotation without success, only to be left unexecuted with the original market conditions restored.

The Commission has not discussed the potential impact of these delays to the execution of segmented orders.

c. Modifying Quotations

Under proposed Rule 615(f)(2) of the OCR, a broker-dealer with knowledge of where a segmented order would be routed is prohibited from submitting an order to the continuous order book of an open competition trading center/exchange if that order could have priority to trade with a segmented order. If an originating broker routes a segmented order to a dealer that declines to execute that order (at the midpoint of NBBO or better consistent with proposed Rule 615), it is unclear if the dealer would be in any way restricted in its ability to modify its quotations to the extent such changes to quotations might cause the segmented order to terminate early.

Using the example above, assume that the originating broker routed the segmented order as an IOC order to a market maker for potential execution at the midpoint or better before submitting the order to a qualified auction. Assume further that the Commission intends to mirror options exchange auctions and to terminate auctions early in the event of a change in the NBBO adverse to a segmented order during a qualified auction. Assume that the dealer declines to trade with the segmented order, but has no further knowledge of where the order will be routed. Finally, assume that a qualified auction initiates for the order on exchange 1 a few milliseconds after the market maker declines to trade with it. The following questions are left unanswered:

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[223] OCR at 148 ("[T]he wholesaler could route the order directly to an open competition trading center or national securities exchange . . . for an immediate execution on its continuous order book.").

- Can the market maker submit an order (or modify an existing order) on exchange 1's limit order book that would give it priority to trade with the segmented order given that it did not know exactly where the segmented order would be routed?[224]

- Can the market maker change its quotations in a manner that might cause the qualified auction to end early? Assume, for example, that the market maker had quotations in XYZ on both the bid and the offer at $9.99 x $10.02 on an away exchange. Assume that the market maker receives executions against its offer quote at $10.02 and observes the market moving up to $10.04. During the first few milliseconds of the qualified auction, the market maker then revises its bid price to $10.02 to follow the market, causing the auction to terminate early.

  Under options exchange rules related to auctions, a pattern or practice of submitting orders that cause an auction to terminate early is considered a violation of just and equitable principles of trade.[225] To the extent that the Commission were to take a similar approach to say that market makers cannot submit or modify quotations in a manner that would cause a qualified auction to terminate early, this would appear to cause significant disruptions to regular and continuous trading. The result would appear to be one of the following:

  - Market makers will refuse to receive any orders for potential midpoint or better liquidity before an order is sent to a qualified auction to avoid any limitation on their ability to modify quotes as market circumstances may require. This would appear to eliminate an important source of potential liquidity for segmented orders by effectively denying segmented orders opportunities for price improvement outside of a qualified auction.

  - Market makers will widen their displayed quotations so that modifications to their quotations will be less likely to cause a qualified auction to terminate early. This would appear to cause spreads to widen, which may in turn negatively impact market quality overall, including for retail investors' segmented orders.

Each of the above questions and issue are fundamental to the operation of the OCR within the current market structure and require detailed consideration.

2. *Trading Ahead of Segmented Orders*

As described in Part II.A, a significant concern with requiring qualified auctions for segmented orders is that it could result in information leakage of customer demand, and in turn facilitate trading ahead of segmented orders. This is particularly the case where the size of a segmented order exceeds the size of the available quotation.

For example, assume the market for stock XYZ is $10.00 x $10.05 with 1000 shares on the bid and the offer. Assume an originating broker receives a segmented market order to buy 2000 shares of stock XYZ. Market participants seeing a qualified auction initiate for 2000 shares of XYZ with only 1000 shares available on the offer would now know that 2000 shares ultimately need to be filled. Rather than

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[224] Notably, the market maker would be incentivized to submit an order to the limit order book rather than participate in the auction because orders in the limit order book at the conclusion of the auction—regardless of when those orders were submitted to the limit order book—have priority over auction responses, as described in Appendix D, Item C(12) below. *See* proposed Rule 615(c)(5)(v). This creates a perverse incentive for all potential auction responders to submit orders to the limit order book rather than as auction responses.

[225] *See e.g.*, Nasdaq ISE Options Rule 3, Section 13.01 ("It shall be considered conduct inconsistent with just and equitable principles of trade for any Member to enter orders, quotes, Agency Orders, Counter-Side Orders or Improvement Orders for the purpose of disrupting or manipulating the Price Improvement Mechanism."); Cboe Rule 5.33.03 ("A pattern or practice of submitting orders that cause a COA to conclude early will be deemed conduct inconsistent with just and equitable principles of trade and a violation of Rule 8.1.").

participating in the auction, market participants might instead choose to buy shares of XYZ at $10.00, knowing that—if the auction either (a) does not fill the entire size of the segmented order or (b) does not result in any execution (*i.e.*, no market participant is willing to trade at the midpoint or better)—there is immediately marketable demand for as many as 2000 shares of XYZ. A market participant might buy the 1000 shares on the bid with an aim toward immediately selling those shares of XYZ to the segmented order following the auction. Qualified auctions in this regard could facilitate trading ahead of retail investors' orders.

The OCR does not consider these incentives, which could result in substantial harm to segmented orders. The OCR is unlike auctions in options markets whereby the order is paired with a contra-side order from the broker-dealer bringing the order to the exchange. Thus, in options auctions, the customer order is already guaranteed a fill at the specified price. Here, because there is not guaranteed fill in the auction, market participants incentives with respect to interacting with the auctioned segmented order differ significantly.

3. Information Leakage Arising from Identifying Non-Segmented Order Customer Orders (i.e., Institutional Orders)

Under the qualified auction priority rules set forth in proposed Rule 615(c)(5)(ii), orders from customers would have priority over orders from non-broker-dealers at a given price point in interacting with a segmented order.[226] The Commission contemplates these customer orders as those of institutional investors.[227]

The Commission has not described or accounted for the costs and implications associated with implementing this priority hierarchy as well as the potential chilling effect this would have for institutional investor participation in qualified auctions. Specifically, in order to facilitate non-broker-dealer customer order priority in qualified auctions, broker-dealers would not only need to identify customer orders that constitute segmented orders, but would also be required to identify customer orders that are not segmented orders as well as orders from other broker-dealers. Presumably, the OCR would be implemented by having all orders routed to exchanges coded as (a) segmented order; (b) non-segmented customer order; and (c) broker-dealer order.

As a result, the Commission's cost and burden estimates are widely underestimated because these coding and order account segmentation requirements will apply to all broker-dealers and not just broker-dealers that handle segmented orders. Specifically, the Commission estimates that only 157 broker-dealers carry public customer accounts[228] and that only these 157 broker-dealers would have burdens associated

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[226] Proposed Rule 615(c)(5)(ii) specifies that customer priority applies to auction responses, but it is unclear whether this customer priority logic would extend to orders resting in the continuous order book at the end of the qualified auction, which book orders would have priority over auction responses. If customer order priority does <u>not</u> extend to orders in the continuous book, then a broker-dealer could take priority over any institutional investor's auction response at a given price by submitting an order to the continuous order book rather than submitting an auction response. Additionally, if customer priority does not extend to orders in the continuous order book, then where there is both an institutional order and a broker-dealer order resting on the book at the end of an auction, the priority among those two orders would be based only on time, which would appear to undermine the goal of providing customer priority as well as increasing opportunities for institutional investors to interact with retail orders. Given the incentives this creates for broker-dealers in responding to auctions to arbitrarily take priority over customer orders, SIFMA assumes for purposes of this letter that the Commission intends for customer priority to extend to orders resting in the continuous order book at the conclusion of a qualified auction (rather than just qualified auction responses). To the extent this assumption is incorrect, SIFMA believes it would be helpful to understand why. *See also supra* Appendix D, Item C(9)(iii) (discussing questions around whether a segmented order could be submitted as a response to a qualified auction in a segmented order on the opposite side of the market).

[227] OCR at 224 ("Under paragraph (c)(5)(ii) of the proposed rule, if an institutional investor and a wholesaler (broker-dealer) were bidding the same price in a qualified auction, the investor would have execution priority. As such, all else constant, institutional investors would win qualified auctions when competing with wholesalers.").

[228] *Id*. at 169.

with coding orders routed to qualified auctions. To the contrary, every broker-dealer handling any order routed to an exchange or open competition trading center—whether such order is a segmented order or not—would have costs and burdens associated with marking orders as for the account of a non-segmented order customer or broker-dealer. At a minimum, the Commission's costs and burden estimates must be revised to address the following:

- For all broker-dealers (including the 157 that carry customer accounts) that could route orders to an open competition trading center, identification of and applying coding logic to non-segmented order customer orders and broker-dealer orders;
- For all broker-dealers, identification of and applying coding logic to segmented orders, non-segmented customer orders, and broker-dealer orders for foreign market participants;
- For all foreign market participants, the extent to which they would effectively be required to separately identify segmented orders (including transaction counting requirements for identifying segmented orders), non-segmented customer orders, and foreign broker-dealer orders in order to provide such information to U.S. broker-dealers to facilitate U.S. broker-dealers' compliance with the OCR;
- For all investment advisers on whose behalf a broker-dealer may route an order to an exchange or open competition trading center, the identification of segmented orders and non-customer segmented orders in order to provide such information to U.S. broker-dealers to facilitate U.S. broker-dealers' compliance with the OCR.

The Commission does not appear to have considered the implications of identifying all non-segmented order customer orders (*i.e.*, institutional orders) as such when routed to an exchange or open competition trading center. The Commission acknowledges in the OCR the significant concerns of institutional investors with respect to "information leakage" or "slippage" arising from trading on displayed markets, which may reveal investors' trading strategies or intentions.[229] The Commission also proposed Rule 615(c)(2) to prohibit the display of qualified auction responses in order to prevent potential information leakage of an institutional investor's order.[230] However, inherent in the design of the OCR is that all institutional orders would need to be identified as such when routed to an exchange.

The coding of institutional orders as such (*i.e.*, as non-segmented order customer orders) gives rise to at least two sources of information leakage for institutional investors. First, every broker-dealer that handles an institutional investor's order that is routed to an exchange or open competition trading center would be aware that it is an institutional order. This is not the case today. For example, an institutional investor may route an order to an affiliated broker-dealer who then routes that order to another broker-dealer for further routing/execution. While the affiliated broker-dealer knows that the order is for an institutional investor, the second, executing broker-dealer would not. This would have to change under the OCR, as the executing broker-dealer would need to mark the institutional order as such if routing to an exchange to ensure that the order is afforded appropriate execution priority to the extent it may interact with a segmented order in a qualified auction.

Second, because of institutional investors' anathema to potential information leakage and because the OCR would necessitate coding of their orders as such (*i.e.*, as non-segmented order customer orders), institutional investors will be significantly less likely to submit orders that are routed to exchanges/open competition trading centers or participate in qualified auctions at all. Consequently, many institutional investors' orders are likely to be routed away from exchanges to ATSs or other trading centers for

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[229] *See id*. at 131 ("One means for institutional investors to minimize slippage is to limit 'information leakage' concerning the unexecuted portions of their large parent orders by closely controlling the impact of the execution of their child orders on market prices.").

[230] *Id*. at 164 (soliciting comment on whether proposed Rule 615(c)(2) would "sufficiently mitigate the possibility of information leakage for participants in a qualified auction").

execution. This would undermine one of the stated goals of the OCR of facilitating institutional investors' trading with retail customers, and could also result in greater concentration of institutional investor orders away from exchanges. That is, there would be information leakage arising from concentrating institutional investors' orders in the off-exchange markets. Any trades by a market participant on an exchange could be reasonably expected not to reflect institutional investors' order interest while trades in the off-exchange markets could be more likely to reflect institutional investors' trading interest. The Commission explicitly acknowledges this possibility:

> "For example, in the most extreme case, if virtually all individual investor orders are routed to and executed in qualified auctions, market participants would be able to identify nearly all other off-exchange transactions as institutional trades. This may result in additional costs to institutional investors related to information leakage . . . ."[231]

In sum, what the Commission does not appear to have considered is that in order to effect the qualified auction priority structure, all institutional investor orders would need to be identified as such on the front-end of routing to exchanges, which would in turn manifest information leakage concerns of such magnitude that institutional investors will be highly unlikely to route orders to exchanges or participate in qualified auctions, thus negating one of the key purposes of the OCR.

Finally, to the extent that some form of the OCR is implemented, SIFMA believes that exchanges and open competition trading centers should be required to adopt and implement uniform coding logic for identifying segmented orders, non-segmented order customer orders, and broker-dealer orders (as well as any other order origin codes that might be necessary). In options trading, orders must be coded and marked when routed to an options exchange. However, options exchanges each adopt different FIX tags for identifying an order of a particular type.[232] This creates completely unnecessary operational costs and risks for broker-dealers who must translate the origin code of each order they receive into the appropriate origin code for the exchange to which the order is to be routed. Each options exchange may separately update or modify these FIX tags, which broker-dealers must keep track of for every options exchange and update their systems accordingly. SIFMA believes, therefore, that any origin code marking regime adopted as part of the OCR should require that the exchanges coordinate to establish uniform origin coding tags to reduce these unnecessary burdens. SIFMA also urges the Commission to require options exchanges to similarly establish uniform origin coding tags for the same reason.

4. Extraterritorial Application of Identifying Segmented Orders

The OCR does not address the full scope of the proposed requirement to identify all orders as segmented orders, particularly with respect to orders from foreign customers. To illustrate, consider a U.S. broker-dealer that receives orders from a foreign broker-dealer (whether affiliated or unaffiliated).

Under proposed Rule 615(e), an originating broker must implement policies and procedures to identify orders of customers as segmented orders and may not route a segmented order without also identifying the order as a segmented order to the routing destination. The definition of an originating broker is not limited to a U.S. broker-dealer, and includes any broker-dealer with responsibility for handling a customer order, including monitoring or opening the customer account.[233] Presumably, therefore, the Commission intends for this requirement to extend to all foreign broker-dealers that may route orders to a U.S. broker-dealer for execution. To the extent this is the Commission's view, it is critical that the

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[231] OCR at n.549.

[232] For example, one exchange may require the use of FIX tag 10 to identify a customer order and FIX tag 20 to identify a professional customer order, while another exchange may use FIX tags 8 and 12 for these same origin codes, respectively.

[233] *See* proposed Rule 600(b)(69) ("Originating broker means any broker with responsibility for handling a customer account, including, but not limited to, opening and monitoring the customer account and accepting and transmitting orders for the customer account.").

Commission make this clear and discuss the relevant costs, benefits and effects of this, including the authority for and implications of the extraterritorial application of the OCR.

SIFMA believes that there are significant challenges presented by applying the OCR extraterritorially to orders from foreign broker-dealers and foreign market participants. First, all foreign broker-dealers or foreign market participants (*e.g.*, a foreign asset manager) (collectively "foreign market participants") on behalf of whom a U.S. broker-dealer may effect a transaction would now be required to: (a) identify segmented orders to the U.S. broker-dealer to allow the U.S. broker-dealer to comply with the OCR; and (b) count and continuously monitor the average daily number of trades for each customer account. Foreign market participants may be subject to differing requirements in their local jurisdiction with respect to their relative knowledge of whether an account is for a natural person or not. For example, it might be unclear under the regulatory requirements of a foreign jurisdiction whether a legal entity is or is not ultimately for the benefit of a natural person or a group of related family members.

Similarly, with respect to counting transactions, it's unclear if trades made by a foreign customer in a foreign jurisdiction would count for purposes of evaluating whether or not orders from that customer meet the definition of a segmented order. Or, perhaps the Commission intends only to count trades placed by the foreign customer in U.S. markets. In either case, there may be many instances where a foreign market participant places trades with multiple U.S. broker-dealers. If, for example, a foreign market participant on behalf of a foreign natural person routes over the preceding six months 25 orders per day to U.S. broker-dealer A and 25 orders per day to U.S. broker-dealer B, the cumulative number of trades on behalf of that foreign customer would disqualify those orders from being counted as segmented orders. However, without requiring the foreign market participant to count these trades across all routed orders (and potentially inclusive of orders of the foreign customer in non-U.S. markets), it is unclear how a U.S. broker-dealer could know whether or not the order should be treated as a segmented order.

Most, if not all, carrying agreements between U.S. broker-dealers to support trading on behalf of foreign market participants and their customers occur through an omnibus clearing agreement where the U.S. carrying broker is not aware of the underlying foreign customers. It would create enormous costs to redesign these arrangements to establish fully disclosed clearing arrangements and doing so would potentially subject U.S. broker-dealers to regulatory requirements in the foreign jurisdiction that are typically allocated to the foreign market participant, such as know-your-customer, suitability and anti-money laundering requirements. Even if a U.S. broker-dealer does know the identity of the underlying foreign customers, it would not have insight into all of the foreign customers trades for purposes of counting the average daily number of transactions, as described above.

In this regard, the ultimate effect of the OCR as proposed would appear to be: (a) imposing all costs associated with the identification of segmented orders on foreign market participants, which may deter their willingness to transact in U.S. markets or spur them to seek alternative means of exposure to U.S. markets (*e.g.*, foreign equivalents to American Depository Receipts for U.S.-listed companies); or (b) deterring U.S. broker-dealers from supporting transactions from foreign market participants because U.S. broker-dealers will not be able to reliably assure whether an order is a segmented order or not. In either case, the effect would be to hinder access by foreign investors to U.S. markets, potentially denying significant foreign direct investment in U.S.-listed companies. The Commission needs to explain its expectations with respect to the OCR and foreign market participants and the related costs, benefits, and effects of its determinations.

5. Identifying Segmented Orders

Even aside from the issues related to foreign market participants above, there is also significant ambiguity in how a broker-dealer would determine whether an account is for the benefit of a natural person and how a broker-dealer should count the average daily number of trades in NMS stocks.

For example, assume that an investment adviser manages, with full trading discretion, 100 accounts, all on behalf of natural persons, and the adviser pursues an active strategy involving a daily average of 50 trades in NMS stocks for half of these accounts and a less active strategy involving a daily average of 10 trades in NMS stocks for the other half of these accounts. As a result, the investment adviser's average daily number of trades is 60. It is unclear under the OCR whether this means that all of the accounts managed by the investment adviser should not be considered segmented orders as the adviser's overall average daily number of trades is greater than 40. Alternatively, only the accounts with the less active trading strategy might be considered segmented orders, while the more active strategy should not. If that is the case, the implication would be that investment advisers would need to separately count the trades made on behalf of each of its accounts. Given that all trades are on behalf of the accounts of natural persons—those for whom the OCR is designed to benefit—it is unclear what the justification would be for treating some customers as segmented orders while others are not where all trading discretion has been yielded to a professional investment adviser.

An additional transaction counting question arises in the opposite direction where an investment adviser may make a smaller number of trades but allocates shares to different accounts. Assume in the example above that an investment adviser makes a single, large purchase of an NMS stock and allocates the shares to its 100 different managed accounts. It is unclear if this would count as a single trade for purposes of segmented order transaction counting, or whether this counts as 100 trades by the investment adviser. The ultimate question in this case is under what circumstances should the trades of the investment adviser be the relevant transaction counting metric versus the trades of the underlying accounts.

Further complicating this picture is the fact that investment advisers frequently use multiple broker-dealers to support their trading. As a result, broker-dealer A may only see an average daily number of 10 trades from the investment adviser in the example above while broker-dealer B may see an average daily number of 50 trades from the investment adviser. Without the investment adviser providing the requisite information to all of its executing broker-dealers to determine which orders should be considered as segmented orders, this may cause broker-dealer A to route all orders received from the adviser as segmented orders while broker-dealer B handles orders from the adviser as non-segmented orders.

However the Commission views these questions that have not been addressed in the OCR, it would appear that investment advisers with natural person accounts would likely need their own policies and procedures to (a) identify and distinguish natural person accounts from those that are not part of natural person accounts, and (b) count trades on behalf of those natural person accounts. The impact and costs of these requirements have not been identified or discussed in the OCR and have significant implications for investment advisers and all market participants.

Other questions related to how the Commission expects market participants to count the average daily number of trades also arise under the OCR. For example, if an account for a natural person averages above 40 trades per day for each of the previous six months, and in month seven, the average falls below 40 trades per day, it is unclear if this means that orders from that account would be considered to be segmented orders for at least the next six months, even if the account's average daily number of trades in months eight through thirteen average, for example*,* 100 daily trades.

6. *It Is Unlikely That There Will Be More Competition for Executing Against Segmented Orders*

While the Commission believes that auctioned orders would benefit from increased competition on exchanges—such as by allowing institutional investors to execute against such orders—the Commission offers no evidence to indicate that institutional investors want to interact with segmented orders or would be able to respond to the proposed qualified auctions.

Institutional investors are unlikely to risk potential information leakage regarding their trading interest for the opportunity to interact with small retail orders. As detailed in Appendix D, Item C(3), the OCR qualified auction priority rules would necessarily require identification of an institutional investor's order as a non-segmented order customer order, which is very likely to dissuade institutional orders being sent to exchanges.

It is also not clear that institutional investors would be capable of interacting with such orders without substantial investment in their infrastructure given that qualified auctions will have a duration of only 100 – 300 milliseconds, operate in increments of $0.001 and likely involve millions of auctions in thousands of symbols across multiple exchanges.[234] Only the most sophisticated market participants will be capable of participating in such auctions, most likely resulting in the same dealers that today execute most retail orders continuing to do so except, under the OCR, on an exchange and at higher costs (associated with connecting to and transacting on exchanges). This would also equate to an arbitrary transfer of wealth to exchanges, as they would be able to recoup fees for operating an auction as well as potentially increased connectivity and data revenue, the costs of which would likely ultimately be passed on to end investors in some form.

Additionally, if institutional investors stand ready to provide responses to qualified auctions, there's a risk they could be considered dealers if the Commission were to adopt its proposed further definition of "as part of a regular business" in the definition of a "dealer."[235] This may further disincentivize institutional investors from participating in these auctions. SIFMA believes that the OCR requires greater substantiation that institutional investors both desire and have the capability to trade with segmented orders, particularly given the concerns of information leakage.

The OCR may, in fact, reduce opportunities for institutional investors to interact with retail orders given these strategic, technological and regulatory constraints. The Commission finds that today, wholesalers route approximately 20% of total share volume to external venues for execution.[236] Institutional investors have the opportunity to interact with those retail orders on exchanges and ATSs, including through ATS midpoint and exchange RLPs (through broker-dealer members eligible to participate in RLPs). The Commission appears to expect that institutional investors that might today place midpoint liquidity on ATSs would instead submit those as qualified auction responses (or to exchange order books). For the reasons noted above, this seems highly unlikely to occur and, subject to the Commission's clarifications around Midpoint before Auction Routing, there could be fewer retail/segmented orders routed to ATSs, resulting in fewer opportunities for institutional investors to interact with retail order flow.

7. Exchange Outages or Failures

The OCR does not address how segmented orders would be executed in the event that an exchange experiences a systems outage or failure. The recent systems outage on January 24, 2023, on NYSE, highlights the need for clear Commission guidance and disposition on exchange outages. In that case, at least 4,300 trades in 251 different stocks were impacted.[237] NYSE is only providing restitution of 60 cents for each dollar of losses for certain orders directly impacted by the outage.[238] Many market participants that

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[234] Conversely, prescribing auction time frames of 100 – 300 milliseconds could prove to be too long a time period for the broker-dealers that would be most likely to participate in qualified auctions as the speed of markets continues to evolve. The prudent course of action may to let the market determine what the appropriate duration of auctions should be.

[235] *See* Exchange Act Release No. 94524, 87 FR 23054 (April 18, 2022) (the "Dealer-Trader Proposal"). As discussed further in Appendix D, Item C(12), given the Commission's proposed priority logic for auctions, institutional investors would be incentivized to submit orders to the continuous order book rather than as auction responses in order to gain auction priority at a given price point. This could result in an institutional investor seeking to interact with segmented orders providing orders at or near the NBBO (or setting the new NBBO), raising the likelihood that they would be considered a dealer under the Dealer-Trader Proposal. Even though one of the Commission's goals in the OCR is to facilitate institutional investors' interaction with retail/segmented orders, doing so routinely could trigger registration obligations for institutional investors and, in turn, result in less institutional investor interaction with retail/segmented orders.

[236] OCR at 186.

[237] *See* Sebastian Moss, *NYSE Outage and Market Swings Blamed on Human Error Impacting Disaster Recovery System* (January 26, 2023), https://www.datacenterdynamics.com/en/news/nyse-outage-and-market-swings-blamed-on-human-error-impacting-disaster-recovery-system/.

[238] Reuters, *NYSE Plans to Compensate Brokerage Claims after Glitch* (February 6, 2023), https://www.reuters.com/markets/us/nyse-plans-compensate-brokerage-claims-after-glitch-2023-02-07.

routed orders to NYSE during the outage did not receive an acknowledgement from NYSE, causing them to route these orders to other exchanges or to off-exchange venues where they received unfavorable prices for those orders. No compensation has been offered for any of these trades occurring away from NYSE, notwithstanding that these unfavorable executions occurred only as a result of the NYSE outage and inability to conduct an opening auction. In contrast, wholesalers today provide a variety of ancillary customer services to retail orders, such as adjusting trades to accommodate client requests and resolve trade errors. Exchanges do not. These benefits to retail investors provided by wholesalers would be lost under the OCR, which the Commission has not acknowledged in the Proposal.

SIFMA believes that exchanges should be liable for any systems outages or disruptions that may impact a segmented order routed to that exchange, and not be permitted to hide behind their limitation on liability.[239] Under the OCR, broker-dealers would be obligated to route most segmented orders to qualified auctions (*e.g*., where the order is not priced more aggressively than the midpoint and/or where there are not fast market conditions). As broker-dealers could not, in these circumstances, have elected to route their order elsewhere (other than to another trading center operating a qualified auction), SIFMA believes that exchanges should be fully liable for any losses arising through their handling of a segmented order. Exchanges should not be allowed to rest behind their regulatory immunity in the event of a systems disruption where the Commission *requires* that orders be sent to those exchanges. Moreover, any ATS that operates a qualified auction would not have the benefit of regulatory immunity in the event of a systems outage or disruption. Accordingly, it would be unfair, anti-competitive and arbitrary to have the broker-dealer operator of an ATS operating a qualified auction be fully exposed to potential liability while exchanges are not, again contrary to the Commission's Exchange Act Section 3(f) mandate to promote efficiency and encourage competition.

8. Outages of the Securities Information Processors ("SIPs")

The Commission has also not addressed how segmented orders should be handled when there is a SIP outage. Under the OCR, messages indicating the initiation of an auction would be required to be disseminated in consolidated market data via the SIPs. To the extent there is a SIP outage, it would not seem possible for market participants to receive notice of when auctions commenced, or to which qualified auction a segmented order should be routed. It would seem that qualified auctions would not be able to operate in such circumstances until the SIP(s) has been restored to normal operation. The Commission needs to make clear whether, and under what circumstances, a segmented order may be executed during a SIP outage, including where it may execute and at what prices.

Additionally, under the MDI rules, once implemented, competing consolidators will operate as the new SIPs. Assume that there are five competing consolidators, each with 20% market share for the distribution of consolidated market data. If one or two of these competing consolidators experiences an outage (*i.e.*, 20% or 40% of the recipients of consolidated market data are no longer receiving such data), it is unclear if qualified auctions and segmented order executions would continue as proposed. It is likewise unclear how a firm would be expected to handle a segmented order when its competing consolidator is unable to deliver consolidated market data, even while the consolidated feeds for most other market participants experience no issues.

9. Concurrent vs. Successive Auctions on a Single Exchange

As previously noted, a key operational question unaddressed in the OCR is whether an exchange can operate multiple qualified auctions in a given security at the same time ("Concurrent Auctions") or just a single auction per security at a given time ("Successive Auctions"). The Commission states that the OCR is designed to provide flexibility by not specifying whether "an open competition trading center may or may

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[239] *See e.g.*, NYSE Rule 8.100(f) Limitation of Liability of the Exchange; Cboe BZX Rule 11.16 (LIMITATION OF LIABILITY).

not simultaneously operate multiple qualified auctions for the same NMS stock."[240] SIFMA believes that this question is of too great a significance to be left unaddressed in the OCR because the different outcomes would materially impact the resulting market structure, as detailed below:

i. Concurrent Auctions – to illustrate some of the issues with concurrent auctions, consider the following example:

Assume the NBBO for stock XYZ is $10.00 x $10.05.

- Assume exchange A initiates an auction to buy 100 of stock XYZ at $10.03 at T1 (Auction 1).
- 10 milliseconds later, exchange A initiates another auction to buy 100 of stock XYZ also at $10.03 (Auction 2).
- 10 milliseconds later, exchange A initiates another auction to buy 100 of stock XYZ at $10.**04** (Auction 3). The initial price is one cent higher than Auctions 1 and 2.

The following questions/issues arise to the extent Concurrent Auctions are contemplated:

- If no market participants provided responses to Auction 1, but they do provide responses to Auction 2, the segmented order in Auction 1 will go unfilled while the segmented order in Auction 2 is filled, notwithstanding that these auctions are identical and Auction 1 occurred first in time.
  - Would the Commission expect responses to Auction 2 to be allocated to Auction 1? If there is excess of responsive order interest from Auction 2, could only the excess be allocated to Auction 1 (or vice versa)?
- Conversely, if identical, concurrent auctions are permitted, all of the responsive interest may be allocated to Auction 1, leaving Auction 2 with potentially no interest. As a result, Auction 2 could then be executed off-exchange, but would have been unnecessarily delayed an execution and subject to price risk.
  - Broker-dealers making routing decisions would have no way of determining how best to route to an exchange supporting Concurrent Auctions because of the risk that all the liquidity may go to another auction initiated first (or even second) in time.
- Once Auction 3 commences, market participants may be more willing to sell to that segmented order because it is at a higher price. This would incentivize those who responded to Auction 1 or Auction 2 to cancel their responses and resubmit to Auction 3, potentially resulting in no executions in Auctions 1 and 2.
  - Because the price of segmented orders initiating an auction would be widely disseminated as part of consolidated market data, market participants would have an incentive to initiate new auctions at a more attractive price to take liquidity from ongoing auctions.
  - That is, upon seeing either Auction 1 or 2 initiate, a broker-dealer—seeking to get the best execution for its customer's order in the same security—has incentives to price its order in Auction 3 in a manner that would take responsive liquidity sent to Auctions 1 and 2 for its own segmented order (for purposes of this letter "Auction Price Jumping"). Indeed, when an automated trading system is determining how to price a qualified auction order, it would base that decision

[240] OCR at 161.

in part on the prices it sees in Auctions 1 and 2. This will be a perpetual risk for a broker-dealer anytime it looks to initiate a qualified auction.

- If Auctions 1 and 2 result in no fill, the broker-dealers that initiated Auctions 1 and 2 would then either have to determine whether to initiate a new auction (at the same or a different price point) or route to execute against a resting quotation or to receive a fill from another trading center, which options may result in significant execution delays.[241] If a new auction is initiated, the broker-dealer is subject to the same risk of another auction being initiated at a more attractive price, resulting in the same loop occurring again. If the broker-dealer routes to another trading center, such as an ATS or OTC market maker, it may not receive the price improvement that the Commission hopes it will receive through the OCR not because of a lack of interest in providing price improvement to that order but rather because a concurrent auction at a more attractive price (Auction 3) redirected auction responses to that later-in-time auction, ultimately undermining the goals of the OCR. All the while, the price of markets may move, causing even greater harm to the segmented order through execution delays.
- Conceivably, exchanges could implement rules prohibiting a market participant from canceling an auction response once submitted. However, this would likely deter market participants from participating in auctions if they would not have any ability to cancel their auction responses based on their needs, which may deter anyone from providing liquidity to qualified auctions.
- Put simply, SIFMA believes that the Commission should address concerns related to Auction Price Jumping. Notably, while Auction Price Jumping could occur across different exchanges (*e.g.*, a broker-dealer cancels an auction response on exchange A to in turn submit that same response to a more favorable auction on exchange B), the issue is more pronounced on a single exchange operating concurrent auctions where market participants could more readily move their responsive order interest to a different concurrent auction.

ii. <u>Successive Auctions</u> – the key question that arises with respect to Successive Auctions is that segmented orders will be required to queue and wait their turn for their qualified auction to commence.

(a) Given the requirement under Reg Best Ex to consider the timeliness of a possible execution, routing to a qualified auction with a long queue could be viewed as not achieving best execution.

(b) Market participants would need some mechanism to understand how long a queue might be at a particular qualified auction to be able to make informed decisions about alternative routing destinations.

[241] This result stands in stark contrast with how these three retail orders would execute today, which is that all of these orders (assuming they are marketable) would most likely receive an execution for their entire size in less than 5 milliseconds with a 90% chance of receiving price improvement. *See id*. at 196 (noting that the median time to execution for wholesaler executions is 3.6 milliseconds), 186 (noting that 90% of the dollar volume and 80% of the share volume of orders executed by wholesalers are internalized) *and* 193 (noting that wholesalers provide price improvement to 89.95% of all marketable orders). At a minimum, the OCR would delay executions for the median retail marketable order internalized today by at least 28 times (for a 100-millisecond auction) without *any* certainty of receiving price improvement through a qualified auction.

(c) This would seem to require dissemination of the length of each queue as part of consolidated market data, which would add additional latency to the consolidated feeds, making them less competitive with exchange proprietary feeds.

iii. Contra-Side Segmented Orders Submitted to an Auction – An additional question that is unclear under the OCR (under both the Concurrent and Successive Auction models) is the extent to which a segmented order on the opposite side of the market could be submitted in response to a qualified auction.

(a) To illustrate, assume in the example described above for Concurrent Auctions that, 10 milliseconds after Auction 3 begins, exchange A initiates another auction to **sell** 100 of stock XYZ also at $10.02 (Auction 4).

(b) Auction 4 involves a segmented order that is on the opposite side of the market and at a price that is marketable against the segmented orders in Auctions 1, 2, and 3. It is unclear in this circumstance if:

- the Auction 4 segmented order could be submitted as a response to Auctions 1 through 3; or
- the segmented orders in Auctions 1 – 3 could interact with Auction 4 to the extent they are not filled through their own qualified auctions.

(c) The OCR contemplates in the qualified auction priority rules that customer orders at a given price point would have priority over non-customer orders, but it is not clear whether this could potentially include segmented orders.[242] In either case, even if a segmented order could be submitted in response to an auction for another segmented order, it's unclear when a broker-dealer should initiate its own auction for a segmented order or have it participate as a response to another qualified auction.

(d) To the extent that exchange rules would determine when a segmented order could participate as a response to a qualified auction of another segmented order (*i.e.*, item (b) noted immediately above would be possible), the mechanics would need to be carefully considered as well as the potential negative impact on a customer's segmented order.

- For example, if Auction 1 ends without an execution, would an exchange be allowed to submit the Auction 1 segmented order to Auction 4 before sending it back to the originating broker-dealer? Or would it be up to the broker-dealer to decide?
- If the order in Auction 4 receives price improvement (*e.g.*, buy interest at $10.04 for 100 shares), the Auction 1 segmented order would no longer be marketable against the Auction 4 segmented order, and would now have been further delayed by participating in Auction 1 as well as Auction 4 (*i.e.*, by at least an additional 40 milliseconds).

(e) These questions highlight the fact that exchanges do not undertake the same responsibilities—in particularly with respect to best execution for the orders executed on an exchange—as broker-dealers. That is, an exchange has an incentive to design its qualified auction to allow for the unexecuted Auction 1 sell order to be submitted to Auction 4 (after it does not receive an execution in its own auction) in order to maximize the number of transactions occurring on its

[242] *See* proposed Rule 615(c)(5)(ii).

platform. However, this may not be in the best interest of the Auction 1 segmented order. It also appears more akin to an order handling function than a traditional exchange function. Nothing in the OCR appears to contemplate any undertaking by the exchanges to evaluate whether and when a qualified auction may or may not be appropriate for a segmented order and to take appropriate action in the best interests of a segmented order.

10. Impact on Consolidated Market Data and CAT Data

As described in Part II.F, the Commission has not analyzed the anticipated effects of the OCR on consolidated market data and SIPs that could arise through the dissemination of qualified auction information in consolidated market data feeds and the impact on increased latency or capacity constraints. As noted, these could have the effect of increasing the demand for proprietary market data feeds relative to consolidated market data feeds, thereby undermining the Commission's goals in the MDI rules.

Similarly, the Commission has also not analyzed the anticipated effect and associated costs of recording auction announcements, responses, and other auction information for purposes of the CAT.

11. Increased Demand for Exchange Proprietary Feeds over the Consolidated Feeds

Given the proposed duration of qualified auctions (100 – 300 milliseconds), the OCR is likely to increase demand for exchange proprietary data feeds in order to more timely receive notice of and respond to a qualified auction. This is likely to competitively harm competing consolidators relative to exchanges and runs directly contrary to the goals of the MDI rules. It will also raise costs for investors. For example, if an institutional investor wants to trade in qualified auctions competitively, relying solely on the SIP could put it at a disadvantage. Co-located firms and those with faster access to more complete market data will have more time to consider whether to submit an auction response or modify an auction response. The costs and effects have not been considered in the OCR.

12. Resting Order Priority in Qualified Auctions

Under proposed Rule 615(c)(5)(v), displayed orders on an exchange's continuous order book would have execution priority in a qualified auction at a given price point over responses submitted to an auction. As proposed, there is no requirement that an order on the continuous book must have been resting on the order book before the qualified auction begins.

As a result, the structure of the OCR would incentivize those interested in trading against a segmented order to submit an order to the limit order book rather than as an auction response in order to provide better execution priority at the conclusion of the auction.[243] The likely result would be for all market participants interested in trading with a segmented order in a qualified auction sending displayed orders to the exchange conducting the qualified auction rather than as responses to the qualified auction. This in turn may cause liquidity that might otherwise be used to fill the segmented order going to other market participants that trade against the continuous order book or result in flickering quotations. To illustrate, consider the following example:

- The NBBO for stock XYZ is $10.00 x $10.05.
- A broker-dealer initiates a qualified auction to buy 100 shares of XYZ at $10.03.
- Assume broker-dealer A and broker-dealer B both want to submit responsive interest to the segmented order at $10.03 for its full size.

[243] At the same time, allowing auction responses to be priced in increments of $0.001 undermines the purpose of providing priority to displayed orders resting in the order book when those posting displayed orders cannot for stocks with a tick size greater than $0.001.

- Knowing that orders in the continuous book have priority over auction responses, both A and B have an incentive to post orders to the continuous book rather than as auction responses.
- If A and/or B submit sell orders to the exchange at $10.03, these orders will set the new NBO. Setting the new NBO may attract other market participants to execute against the new NBO. To the extent that occurs (*i.e.*, other market participants execute against the new NBO of $10.03 before the qualified auction concludes), trading interest that was intended to interact with the segmented order would go to other market participants which, in many cases, may not be segmented orders.
- However, if broker-dealers A and B intend to interact only with the segmented order, they may elect to submit their offers to the continuous order book (establishing the new NBO at $10.03) at the last possible moment before the qualified auction ends in order to maximize the chances of obtaining execution priority in the qualified auction while minimizing the chances of their orders being executed outside of the auction.
- If A and B time the submission of their limit orders in this manner, the result would likely be that the NBO for stock XYZ would change for a very brief time, followed by the execution of A's and/or B's orders in the qualified auction. This also puts A and B in a race condition, whereby the OCR has enabled the fastest of the two market participants to win the ability to execute in full against the segmented order.

As discussed in Appendix D, Item C(1) above, changes to the NBBO could result in the early termination of other ongoing exchange auctions, to the extent exchanges adopt rules providing for such or the Commission adopts an amended OCR. In this case, the change to the NBO would not be for the purpose of establishing a new NBO, but rather for purposes of interacting with a segmented order in qualified auctions. As a result, qualified auctions in stock XYZ on other exchanges/open competition trading centers in XYZ may be required to terminate early to prevent a trade through from occurring (*e.g.*, a qualified auction to sell XYZ with an initiation price of $10.04). The implications of this qualified auction priority structure do not appear to have been considered by the Commission.

13. Additional Concerns with the Proposed Priority Logic

The OCR priority logic would give execution priority at a given price point to customer orders over broker-dealer orders at a given price point pursuant to proposed Rule 615(c)(5). Given that this priority logic favors certain types of investors over others and displayed versus non-displayed liquidity, rather than the standard price/time priority model, the OCR may discourage participation in qualified auctions by different types of market participants. For example, broker-dealers and market makers may be discouraged from participating in a qualified auction because they will always lose to non-broker-dealer order interest. To the extent broker-dealers and market makers are discouraged from participating in auctions, the likelihood of auction failures will increase. This may even discourage firms from registering as broker-dealers.

14. Institutional Orders Where a Broker-Dealer Knows the Routing Destination of a Segmented Order

Under proposed Rule 615(f)(2), a broker-dealer that has knowledge of where a segmented order is to be routed is prohibited from submitting an order, or enabling an order to be submitted by any other person, to the continuous order book of the destination that could have priority to trade with the segmented order. The stated purpose of this requirement is to prevent gaming of qualified auctions by broker-dealers who may have knowledge of when and where a qualified auction may occur.[244]

Absent an exception for where a broker-dealer establishes appropriate information barriers and/or aggregation units, SIFMA is concerned that this structure will inappropriately limit a broker-dealer's ability

[244] OCR at 161.

to post institutional or retail orders on exchanges' continuous limit order books. For example, assume a broker-dealer handles both retail/segmented orders and institutional orders. To the extent the broker-dealer would be deemed to have knowledge of where each segmented order it handles would be routed (*i.e.*, to a qualified auction), that broker-dealer could not submit a contra-side institutional or retail order (*i.e.*, marketable against the segmented order) to the continuous limit order book of the exchange to which any segmented order is routed under the OCR to the extent such order might interact with the auctioned order. This would create a massive issue for a broker-dealer handling both institutional and retail order flow. It would also impact the retail and institutional orders the broker-dealer owes best execution to if such orders cannot be posted on the continuous books of exchanges that choose to also run qualified auctions.

To ease these constraints (and notwithstanding SIFMA's more general concerns regarding the OCR and request that the OCR not be adopted at all), SIFMA believes that the Commission should allow for broker-dealers to establish information barriers between its segmented order business and its unrelated business of posting retail and institutional orders on the continuous books of exchanges so that the broker-dealer can route such orders (consistent with its duty of best execution) without having to consider its handling of each segmented order. Absent such a "no-knowledge" exception, there is likely to be a negative impact to displayed liquidity overall as broker-dealers would effectively be unable to display retail and institutional orders on an exchange simply because they are deemed to have knowledge of also sending a segmented order to the exchange's qualified auction.

15. Stock-Option Orders

The OCR does not address how stock-option orders (*i.e.*, the stock leg of a stock-option order) that would constitute a segmented order should be handled. Stock-option orders trade at a net price with the execution of each leg contingent on the other. That is, when a broker-dealer or market maker provides a quotation on a stock-option order, it provides its quotation as the combined price of both the stock leg and the options leg. Submitting the stock leg of a stock-option order (where the stock leg constitutes a segmented order) to a qualified auction would significantly disrupt the manner in which stock-option orders trade today. The same would apply to any qualified contingent trades ("QCT") under options exchange rules (to the extent the stock leg was a segmented order and for less than $200,000). SIFMA believes that an exception for stock-option orders and QCT trades from the requirements of the OCR would be appropriate and necessary to allow the market for these transactions to continue.

16. Intentional Access Delay Mechanisms

The OCR has also not addressed how intentional access delays, such as the 350-microsecond access delay operated by IEX, would operate under the OCR and whether such exchanges would be permitted to operate qualified auctions subject to an intentional access delay. It is unclear, for example, if auction responses would be subject to an intentional access delay or whether the dissemination of information that an auction would begin would be subject to intentional access delays, as well as how the intentional access delay would interact with the auction response time. For example, if an auction with a response time of 100 milliseconds was operated on an exchange with a 350-microsecond access delay:

- Would the auction begin at the time the originating order made it through the access delay and into the exchange's system, or at the time the auction message made it out of the exchange's system and the access delay?
- Would a response that reached the exchange's gateway at exactly 100 milliseconds (but had not yet traversed the access delay) be processed, or would the response have to be submitted 350 microseconds prior to 100 milliseconds to be timely received?

D. The Commission's Economic Analysis Is Significantly Flawed

SIFMA has major concerns with the Commission's economic analysis for the OCR. As a threshold matter, the economic analysis does not account for the associated costs, benefits and effects associated with the operational issues identified above in Appendix D, Item C. Additionally, the OCR appears to rest on the faulty premise that retail orders either are not receiving good executions today and/or that the OCR will be able to improve those executions. The Commission states that "marketable orders routed to wholesalers appear to have higher fill rates, lower effective spreads, and lower E/Q ratios,"[245] yet then appears to ignore these findings in pursuit of transforming today's equity market structure for highly speculative benefits.[246]

1. The Commission's Economic Baseline and Assumptions Are Flawed

The Commission's economic baseline and ensuing economic analysis are significantly flawed because, among other things, the Commission massively understates price improvement provided by wholesalers by failing to consider size improvement provided by wholesalers and is premised on several false or unsupported assumptions, including that wholesalers only route orders away that they view as undesirable and that institutional investors want to trade with retail investor orders.

First, as noted in Part II.D, the Battalio Study found, based on a review of Rule 605 data and proprietary data provided by one or more wholesalers for the month of May 2022, that when short sales, odd lots, and a size improvement metric are included—consistent with the changes put forward in the Rule 605 Proposal—price improvement per month as reported under Rule 605 increases from $81.2 million to $388 million.[247] The Battalio Study further found that "wholesalers' price improvement rate advantage increases with order size" and that "over 52% of the total shares traded by the wholesaler(s) are from orders with a size exceeding the quoted size."[248] According to the study "the estimated value of this 'size improvement,' which is not recognized by Rule 605 reports, more than doubles the dollar amount of price improvement provided by the wholesaler(s) for internalized orders."[249] The Commission's economic analysis does not consider size improvement provided by wholesalers and whether segmented orders would continue to receive size improvement under the OCR, notwithstanding that the Commission proposes to include a size improvement metric in Rule 605 reports.

Second, contrary to the findings in the Commission's economic analysis regarding exchanges providing better executions than wholesalers, the Battalio Study found markedly different results:

> "Ignoring access fees on exchanges, we find that seemingly identical trades received better prices from the wholesaler(s) in over 68% of the comparisons and equivalent prices in another 19% of the comparisons. When exchange fees are included, the wholesaler(s) win almost 91% of the time."[250]

Third, the Commission premises the OCR on the assumption that wholesalers route orders to exchanges only where the orders have high adverse selection (as measured by effective spread), and internalize all orders with low adverse selection.[251] This is a false assumption, as demonstrated by the very high fill rates

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[245] *Id*. at 186.

[246] *Id*. at 206 ("The Commission acknowledges that there is considerable uncertainty in these [competitive shortfall] estimates.").

[247] Battalio study, *supra* n.52 at 19 ("Together, fully internalized and fully externalized orders adjusting for size improvement, odd lots, and short sells increases the Rule 605 defined price improvement from $81.2 million to $223.3 million, a 2.75-fold increase."). The Battalio study notes in footnote 25 that depending on how size improvement is calculated, the amount of price improvement is as high as $388 million for May 2022, which would be a five-fold increase. *Id.*

[248] *Id.* at 4-5.

[249] *Id.* at 5. The Battalio Study found that "[t]ogether, fully internalized and fully externalized orders adjusting for size improvement, odd lots, and short sells increases the Rule 605 defined price improvement from $81.2 million to $223.3 million, a 2.75-fold increase." *Id.* at 20. However, as the authors point out in Footnote 25, the total price improvement that they estimate from the data-providing wholesaler(s) is $388 million, not $223.3 million, which means that the increase over $81.2 million is actually closer to a **five-fold** increase in price improvement.

[250] *Id.* at 1. SIFMA notes that the study examined "proprietary marketable order flow data from one or more wholesaler(s) for May 2022." *Id.*

[251] OCR at 129.

(99+%) provided by wholesalers to clients.[252] Competitive pressure among wholesalers competing for order flow from introducing broker-dealers drives these high fill rates and provide size improvement to these orders, even for undesirable trades. Under the OCR, there would be no such guarantee or competitive pressure on wholesalers to provide liquidity to segmented orders. Rather, market makers would have the opportunity to "cherry-pick" the segmented order trades that they found most advantageous to trade against in qualified auctions. In this regard, the OCR would appear to result in higher adverse selection of segmented orders as there is no competitive pressure to compel market makers to execute against undesirable trades.

Conceivably, other market participants, such as institutional investors, could fill this liquidity and size improvement gap to the extent they routinely trade in qualified auctions. However, as previously noted, the Commission provides no evidence that institutional investors are interested in trading with segmented orders. As described in Appendix D, Item C(3) and (6) above, institutional orders are highly unlikely to participate in qualified auctions given the technological constraints of responding to 100 – 300 millisecond auctions as well as the significant concerns of information leakage that are inherent in the OCR.

2. The Commission's Use of Realized Spread Calculations Are Unreliable

In the OCR, the Commission relies on realized spread as a proxy to determine wholesalers' profits on trades.[253] This use of realized spreads is purely theoretical and does not equate to profits achieved by wholesalers, as acknowledged by the Commission.[254] Moreover, the Commission proposes in the Rule 605 Proposal to change how realized spreads are calculated by measuring average realized spread at intervals of 15 seconds and one minute after the time of execution from the current five-minute interval.[255] The obvious implication of proposing these changes to realized spreads under Rule 605 is that the current realized spread metrics are unreliable. The Commission does not address these considerations in its use of realized spreads for purposes of the OCR.

SIFMA believes the Commission's use of realized spreads—the foundational metric upon which the competitive shortfall is based—in the OCR is unwarranted for several additional reasons. First, the realized spread metric does not consider the actual exit trade. Realized spread assumes that liquidity providers exit each position in a costless manner at the end of a fixed period, and is therefore highly dependent on the time horizon used to make the calculation. Recent academic research has found that, as a result of setting a uniform turn-around time, realized spread does not serve as an accurate proxy for liquidity provider profits at all.[256] Specifically, "mismeasurement in the estimates of profits using realized spread (with a common [time horizon] for all trades) can be large."[257] Second, realized spread does not account for fixed or variable costs, such as trading infrastructure, personnel, exchange memberships, and market data, regulatory, and transaction fees (including fees, rebates, and PFOF). Third, realized spread cannot compare a large "parent" order with smaller "child" orders. Wholesaler execution quality data is reported at the "parent" order level. However, exchanges typically receive "child" orders to access specific price levels as part of executing an oversized order (whether from a retail or non-retail investor). Fourth, realized spread measures the NBBO, which is more likely to be affected by on-exchange executions. By

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[252] *See e.g.*, Battalio Study, supra n.52, at 3 (noting fill rates for Fidelity and Schwab of 99.15% and 99.1% respectively for marketable orders between 100 and 499 shares).

[253] OCR at 188 ("Realized spreads are a proxy for the potential economic profit that liquidity suppliers may earn on a trade").

[254] *See e.g.*, *id*. 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.").

[255] Rule 605 Proposal at 3815.

[256] Yang, Lingyan and Lohr, Ariel, *The Profitability of Liquidity Provision* (Feb. 13, 2022) at 9, https://ssrn.com/abstract=4033802 ("Yang Study"). This study is only cited in a single footnote in the Proposal. OCR at n.428.

[257] Yang Study at 9.

focusing on the degree to which the midpoint of the NBBO moves, realized spread contains another inherent bias that skews the results in favor of on-exchange executions. This is because an on-exchange execution can move the NBBO all by itself. Fifth, academic research has found that retail investors trade when spreads are wider, which means that a wholesaler can provide significant amounts of price improvement but still end up with a larger realized spread than an on-exchange execution.[258]

Additionally, the Commission does not engage in an apples-to-apples comparison to evaluate executions for segmented orders. For example, the Commission conflates market orders and marketable limit orders in performing its analysis and concluding that realized spreads are higher for retail customers. Specifically, the Commission acknowledges that market orders are a more reliable proxy to determine orders from individual investors (*i.e.*, retail orders) and that limit orders typically represent orders of other market participants.[259] Solely looking at market orders, therefore would provide a better proxy for segmented orders. Yet, the Commission then combines market orders with marketable limit orders for purposes of its analysis. If market orders are examined alone (*i.e.*, without marketable limit orders), Table 5 indicates that realized spreads are higher on exchanges relative to wholesalers (2.40 for exchanges and 0.39 for wholesalers). Moreover, the Commission acknowledges that 79% of dollar volume in marketable flow from retail orders comes from pure market orders.[260] It is only when the Commission combines marketable limit orders with market orders (*i.e.*, combining non-retail orders with retail orders), that the Commission is able to arrive at its conclusion that realized spreads are higher for wholesaler executions relative to exchanges.

3. *The Competitive Shortfall Estimate of $1.5 Billion in Additional Price Improvement to Investors Is Illusory*

The Commission estimates that the forgone price improvement for segmented orders under the current market structure results in a $1.5 billion "competitive shortfall."[261] SIFMA believes that this estimate cannot in any way be considered a reliable estimate or potential benefit of the OCR given the significant uncertainties of how investor behavior will change in response to the OCR. The Commission's own statements in the OCR provide no confidence that the OCR would have the effect of providing investors with this amount, and instead would suggest that the OCR could result in higher costs for investors through commissions and increased trading costs:

- "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."[262]
- "It is unknown whether the current industry practice of routing nearly all retail order flow to wholesalers would persist were the Commission to adopt this rule, because wholesalers might charge for this service and retail brokers might find it more profitable to develop their own routing services."[263]

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[258] Dyhrberg Study, *supra* n.204, at 6.

[259] OCR at 188 ("Additionally, the results in Table 5 show that approximately 79% of the executed dollar volume in marketable orders handled by wholesalers are market orders. The Commission believes that these outcomes reflect the heavy utilization of market orders for NMS stocks by individual investors whose orders are primarily handled by wholesalers, contrary to the heavy utilization of limit orders by other market participants.").

[260] *Id.*

[261] *Id*. at 130 ("Based on an analysis of trading data from the wholesalers and national securities exchanges in the first quarter of 2022, the competitive shortfall is estimated to be approximately 1.08 basis points per dollar traded by wholesalers or 1.08 cents for every $100 traded, with an estimated total annual competitive shortfall of $1.5 billion.").

[262] *Id*. at 208.

[263] *Id*.

- "The Commission acknowledges considerable uncertainty in the costs that would arise from Proposed Rule 615, due to whether the current market practice of routing through wholesalers would persist."[264]
- "There may also be an increase in trading costs for retail broker customers that carry greater adverse selection risks and individual investors whose orders would not meet the definition of a segmented order because they averaged 40 or more daily trades in NMS stocks over the six preceding calendar months."[265]
- "The Proposal could also result in costs to individual investors, such as some retail brokers potentially resuming charging commissions for NMS stock trades, although the likelihood of this may be low."[266]
- "While acknowledging there is substantial uncertainty in the eventual outcome, the Commission estimates that qualified auctions as designed by the Proposal would result in additional price improvement for the marketable orders of individual investors that could reduce the average transactions costs of these orders by 0.86 basis points (''bps'') to 1.31 bps."[267]

The OCR and the $1.5 billion competitive shortfall are consequently premised on the many "uncertain" outcomes, including that market participants will continue to act as they do today. In other words, for the competitive shortfall to be actualized into ~$1.5 billion, all market participants would need to continue to act exactly as they do today—in particular that wholesalers will continue to be willing to provide price improvement at current levels and that liquidity from other market participants (that are fast enough to participate in 300-millisecond auctions) will provide additional price improvement (net of exchange transaction, connectivity and market data fees) to segmented orders.

SIFMA believes that these assumptions that market participants will largely act the same is untenable, particularly when the OCR is combined with the numerous other changes to the market structure set forth in the Proposals. The competitive shortfall is more likely to be price improvement received "instead of" rather than "in addition to" the price improvement they receive today.

Moreover, there are at least three evident methodological falls in the competitive shortfall estimate:

1. *Inflating total market volume* – The Commission estimates total 2022 market volume by multiplying Q1 2022 volume by four. However, actual 2022 market volume was significantly lower. Using actual 2022 market volume reduces the purported differential by almost $300 million.
2. *Inflating the estimated volume of retail orders that will be sent to an auction* – The OCR requires retail marketable orders that are not internalized at midpoint or better to be sent to an auction. However, the Commission includes many more retail orders, such as retail orders that receive midpoint or better and non-marketable limit orders, to inflate the purported savings to retail investors.
3. *Correcting for the Commission by only adjusting the figures for PFOF on-exchange (i.e. exchange rebates), but not off-exchange* – The Commission arrives at the final purported profitability differential by adjusting for PFOF when calculating on-exchange liquidity provider profitability, but not doing so for wholesalers.

These common-sense adjustments *alone* reduce the purported $1.5 billion in savings to approximately $383 million.

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[264] *Id*. at 179.

[265] *Id*.

[266] *Id*.

[267] *Id*. at 178.

4. The OCR Would Result in Worse Executions for at Least Some Broker-Dealers

The Commission states in the OCR that wholesalers provide different quality executions for different broker-dealers.[268] Assuming for the sake of argument that this is true, this means that if all retail broker-dealers are now required to route segmented orders to a qualified auction, some broker-dealers will receive, on average, worse executions than they do today. That is, for all segmented orders executed in auctions, all retail broker-dealers will now receive the average level of price improvement provided by qualified auctions. To the extent that a broker-dealer today receives greater price improvement than what the auctions will provide, such broker-dealers will receive less price improvement than if the rule was not adopted. SIFMA believes that the implications of some retail broker-dealers' order flow being worse off than it is today requires careful consideration.

5. The Impact on Thinly-Traded Securities

The Commission did not provide any analysis on whether the proposed qualified auctions would be likely to improve executions and price improvement for thinly traded securities. While wholesalers agree to execute these orders and provide high fill rates, thinly-traded securities by definition have less interest among market participants. To the extent the Commission believes that executions for thinly-traded securities would be the same as for all other securities, the Commission should make clear its reasons for so believing.

6. The Commission Should Consider the Findings in Several Academic Studies

SIFMA believes that the Commission may have overlooked a number of relevant academic studies, the findings of which cast significant doubt that the benefits of the OCR would be realized. These include the studies set forth below. SIFMA acknowledges that certain of these studies were published after the Commission promulgated the Proposals and that the Commission could not have reviewed certain of them.

- **Would Order-by-Order Auctions Be Competitive?** *Ernst (University of Maryland) and Spatt (Carnegie Mellon)* (last revised March 9, 2023)[269]

  KEY FINDINGS

  - Retail investors can be worse off in the switch to order-by-order auctions, particularly in times of high volatility or in illiquid stocks, when market participants could opt not to provide any liquidity in the auction.
  - Auctions have less competition than the [current wholesale] system.
  - Market makers obtain higher profits in the auction relative to the [current wholesale] system.

- **The Retail Execution Quality Landscape,** *Dyhrberg, Shkilko (Wilfrid Laurier) and Werner (Ohio State)* (last revised March 17, 2023)[270]

  KEY FINDINGS

  - Wholesalers provide ~$1 billion of price improvement per month.
  - Retail brokers reward wholesalers that offer lower liquidity costs with more order flow.
  - The largest two wholesalers charge the lowest liquidity costs.

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[268] *Id*. at 186 ("Table 12 shows significant variation in average price impacts across retail brokers. Because wholesalers know which retail brokers sent them the order, they can use that information in combination with other information to make internalization and pricing decisions.").

[269] This study is available here: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4300505.

[270] This study is available here: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4313095.

- Neither a new wholesaler entry nor an increase in retail broker bargaining power reduces liquidity costs charged by wholesalers – demonstrating that wholesaling is highly competitive.

- **Why do Brokers who do not Charge Payment for Order Flow Route Marketable Orders to Wholesalers?** *Battalio (Notre Dame) and Jennings (Indiana University)* (December 28, 2022)[271]

  KEY FINDINGS

  - Retail brokers route orders to wholesalers because the wholesalers provide better execution quality than what the brokers can otherwise obtain from exchanges – almost 91% of the time.
  - Wholesalers provide significantly more value to retail investors than what is reported by Rule 605.

- **Commission Savings and Execution Quality for Retail Trades**, *Kothari, So (MIT) Johnson (UT Austin)* (December 6, 2021)[272]

  KEY FINDINGS

  - Market-wide savings from zero commissions is over $17 billion in 2020 and 2021.
  - Robinhood customers benefited from more than $8 billion in price improvement compared to the NBBO prices.
  - This study examines commission savings and execution quality for off-exchange retail trades and comparable on-exchange trades.
  - Using both public and private order and execution data, the study debunks some commonly held misconceptions about PFOF.

- **Schwab Whitepaper: U.S. Equity Market Structure - Order Routing Practices, Considerations, and Opportunities**, *Charles Schwab* (Q2 2022)[273]

  KEY FINDINGS

  - Schwab estimates the industry-wide benefits provided to retail order flow from off-exchange wholesalers to be in excess of $50 billion over the next 10 years — and at least $120 billion if the value of size improvement is included.
  - Schwab routes based on execution quality, not PFOF.
  - Comparing the wholesaling and PFOF practices in the U.S. to other markets is misleading.

- **Cross-subsidizing liquidity**; *Foley (Macquarie), Liu (Sydney) Malinova (McMaster), Park (Toronto), Shkilko (Wilfrid Laurier)* (January 5, 2023)[274]

  KEY FINDINGS

  - In modern markets, liquidity supply is dominated by endogenous liquidity providers, who tend to focus on the most profitable securities – those of large, frequently-traded firms. Securities of thousands of smaller firms are often neglected and remain relatively illiquid.

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[271] This study is available here: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4304124.

[272] This study is available here: https://papers.ssrn.com/sol3/Papers.cfm?abstract_id=3976300.

[273] This study is available here: https://content.schwab.com/web/retail/public/about-schwab/Schwab-2022-order-routing-whitepaper.pdf.

[274] This study is available here: https://www.wlu.ca/academics/faculties/lazaridis-school-of-business-and-economics/faculty-profiles/andriy-shkilko/cross-subsidization-of-liquidity.pdf.

The study examines a recent initiative by the Toronto Stock Exchange that aims to improve small stock liquidity by bundling market making assignments in large and small stocks.

- The data show that such bundling significantly reduces trading costs in small stocks without harming large stocks.
- Cross-subsidization emerges as a vital channel for liquidity improvement

- **Impact of the Dark Rule Amendments**, *IIROC*[275]

BACKGROUND / KEY FINDINGS

- On October 15, 2012, IIROC implemented its dark trading rules (UMIR 6.6) which required that dark trading (including off-exchange trading and on-exchange trading with hidden/dark orders) occur at a price that is either (a) at the midpoint or (b) at least 1 tick better than the NBBO. If the order size is either (i) >5000 shares AND >$30k or (ii) for more than $100k, then constraints (a) and (b) do not apply. Note: this rule does not apply to odd lots; the minimum size requirement for (i) did not include the "AND >$30k" text when it was initially adopted.
- A few years later, IIROC did a study to analyze the impact of this change and noted the following in its report: "Of particular interest is the retail group, which benefits from price improvement in dark markets in the pre period and which subsequently moves to the lit markets. While we find active retail flow experiences moderately significant increased transaction costs (as measured by effective spreads) in the post period, the total retail flow, active and passive combined, does not show increased costs. The benefits, on the other hand, largely accrue to high frequency passive liquidity providers." (emphasis added).

- **On the Potential Cost of Mandating Qualified Auction for Marketable Retail Orders**, *Battalio (Notre Dame) and Jennings (Indiana University)* (March 28, 2023)[276]

KEY FINDINGS

- The percentage of executed shares in marketable orders for which the midquote moves against the retail investor rises from 13.46% at 25 milliseconds after order receipt time, to 19.22% at 100 milliseconds, and to 22.37% at 300 milliseconds. This compares to SEC fade probabilities of 1.8% at 25 milliseconds, to 2.8% at 100 milliseconds, and to 4.6% at 300 milliseconds obtained for their sample of trades identified as retail trades by the Boehmer et al. algorithm (*e.g.*, the BJZZ algorithm).
- Expected fade costs for orders measured using midquote moves against the retail investor are 3 to 7.8 times larger than the SEC's estimate.
- When price improvement is considered, the potential cost of failed auctions estimated using 300 millisecond mark-out quotes is higher than the $2 billion upper bound estimate of the potential benefits of successful auctions.
- The authors estimate that the annualized cost of adverse movements computed 100 milliseconds after orders are received by wholesaler(s), which is the duration of the shortest proposed auction, ranges from $1.73 billion to $1.88 billion. When the authors use the length of the longest proposed auction, the annualized cost ranges from $2.17 billion to $2.55 billion.

[275] This study is available here: http://www.regulatorwatch.com/wp-content/uploads/2015/05/Impact-of-Dark-Rule-Amendment.pdf.

[276] This study is available here: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4403047.

Appendix E

Interactive and Cumulative Effects of the SEC's Proposed Market Structure Rules

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March 31, 2023

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Table of Contents

I. Executive Summary

1. The purpose of this report is to address the interactive and cumulative effects of the four market structure rules recently proposed by the United States Securities and Exchange Commission (the "SEC" or the "Commission") (jointly, the "Proposed Rules") entitled "Order Competition Rule," "Regulation NMS: Minimum Pricing Increments, Access Fees, and Transparency of Better Priced Orders" ("Tick Size Rule"), "Regulation Best Execution" ("Best Execution Rule"), and "Disclosure of Order Execution Information" ("Disclosure Rule"),[1] as well as the implementation of the final Market Data Infrastructure ("MDI") Rules.[2] This report has been prepared with the hope that it will assist the Commission in its deliberations on the likely economic effects of the Proposed Rules.

2. I have formed my views based on the Commission's protocol for conducting economic analysis in rulemaking[3] and my own experience in assessing the economic impact of federal rules over the past 30 years, including my experience as the Commission's Chief Economist from 2007 to 2010. In my role as Chief Economist, I directed the Commission's process for assessing the likely economic impact of proposed rules and rule changes.

3. Based on my review of the Proposed Rules and my own experience, it is my opinion that the Commission fails to fully consider all aspects of its proposed regulatory actions by failing to meaningfully address the significant interactive and cumulative effects of the different Proposed Rules. Specifically, in the individual proposals for each of the four Proposed Rules, the Commission attempts to describe the economic effects that each proposal could have on equity markets in isolation, including on market participants, trading venues, and measures of market quality. However, the Commission has failed to consider that the individual Proposed Rules largely affect the same aspects of equity markets, and nowhere in the Proposed Rules does the Commission consider the joint economic effects of its proposals.

4. These overlooked joint economic effects include effects on the price improvement and execution quality retail investors receive under today's market structure, the routing

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[1] "Order Competition Rule," Release No. 34-96495, December 14, 2022; "Regulation NMS: Minimum Pricing Increments, Access Fees, and Transparency of Better Priced Orders," Release No. 34-96494, December 14, 2022; "Regulation Best Execution," Release No. 34-96496, December 14, 2022; "Disclosure of Order Execution Information," Release No. 34-96493, December 14, 2022.

[2] "Market Data Infrastructure," Release No. 34-90610, December 9, 2020.

[3] "Memorandum To: Staff of the Rulewriting Divisions and Offices From: RSFI and OGC Re: Current Guidance on Economic Analysis in SEC Rulemakings," March 16, 2012 ("Memorandum on Current Guidance on Economic Analysis in SEC Rulemakings").

decisions of broker-dealers, the businesses of wholesalers and broker-dealers, and market liquidity and stability. By overlooking these joint effects, the Commission's economic analysis likely overstates the purported benefits and likely understates the costs of its proposals. As a result of this incomplete economic analysis, the Commission has failed to demonstrate a reasoned basis for exercising its rulemaking authority and has failed to meet its obligation under Section 3(f) of the Exchange Act to consider whether a proposed regulatory action will promote efficiency, competition, and capital formation.[4]

II. Market Structure Regulation Proposals Should Be Evaluated Comprehensively and Consider Interactions Between Proposals

5. Today's interrelated financial markets can be viewed as inherently complex systems, with tightly coupled functions performed by market participants who by themselves are complex entities, and whose interactions are critically interdependent.[5] Regulating such interconnected markets can easily lead to harmful unintended consequences, because additional regulation can add more complexity to an already complex system.[6]

6. In fact, the SEC has long recognized the complexity of market structure and the potential risks associated with making piecemeal changes to market structure regulations. In several instances, SEC commissioners, or Chairs of the Commission, have argued that any changes to market structure should be done cautiously and only after a comprehensive, holistic review aimed at understanding the potential for unintended consequences arising because of the tightly coupled interactions between various features of market structure.

7. For example, in 2018 then-SEC Chair Jay Clayton acknowledged that the Commission needed to take a "holistic approach to market structure that recognizes the interrelationships among regulations, products and [investor] behavior."[7] Chair Clayton highlighted that the SEC needed to take a comprehensive approach to regulation and evaluate

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[4] Order Competition Rule, p. 178.

[5] Richard Bookstaber, "A Demon of Our Own Design," John Wiley & Sons, Inc., 2007, New Jersey, p. 144. "Tight coupling means that components of a process are critically interdependent; they are linked with little room for error or time for recalibration or adjustment. … The tight coupling in financial markets comes from the nonstop information flow and unquenchable demand for instant liquidity."

[6] Richard Bookstaber, "A Demon of Our Own Design," John Wiley & Sons, Inc., 2007, New Jersey, p. 146. "But trying to regulate a market entangled by complexity can lead to unintended consequences, compounding crises rather than extinguishing them because the safeguards add even more complexity, which in turn feeds more failure."

[7] SEC Chairman Jay Clayton, "Remarks at the Equity Market Structure Symposium Sponsored by the University of Chicago and the STA Foundation," April 10, 2018, available at https://www.sec.gov/news/speech/speech-clayton-2018-04-10, accessed on March 18, 2023.

how various market participants, including exchanges, brokers, and trading firms, interact with one another.

8. In a 2016 speech, then-SEC Chair Mary Jo White emphasized the importance of taking a comprehensive approach to market structure reform, rather than making piecemeal changes, in order to avoid unintended consequences and to ensure that any rule changes adopted benefit investors and the market as a whole. Specifically, she emphasized that "the Commission's review must be both comprehensive and nimble, constantly testing existing assumptions, regulations, and market practices, while remaining poised to act quickly on issues that immediate attention can address."[8] Chair White also publicly stated that optimizing the structure of financial markets is a process that requires the Commission "to act with both care and intensity," and "to carefully consider changes ... where the impact on [investor and issuer] interests is far less clear and the data to support competing perspectives is lacking or conflicting."[9]

9. In addition, in 2015 the SEC's Equity Market Structure Advisory Committee recommended that market structure issues be addressed "in a holistic fashion and not in isolation."[10] The Committee members also agreed that any recommendations "must take into account the possibility of unintended consequences and the associated risks."[11] Moreover, the SEC's Guidance on Economic Analysis prescribes a comprehensive economic analysis,[12] which is also the case when multiple proposed rules address the same aspects of equity markets, even if those proposed rules are split into separate proposals. The Guidance does not preclude considering the impact of multiple proposals issued simultaneously.

10. With the Proposed Rules, the SEC is proposing a far-reaching re-design of the market for NMS stocks, affecting all aspects of equity markets, including market participants (e.g., retail customers, institutional customers, broker-dealers, and wholesalers), trading venues (e.g., exchanges and alternative trading systems ("ATSs")), and measures of market quality (e.g., market liquidity, trading costs, price volatility, price discovery, and more). Given the

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[8] SEC Chair Mary Jo White, "Equity Market Structure in 2016 and for the Future," Keynote Address at the Security Traders Association's 83rd Annual Market Structure Conference in Washington, D.C., September 14, 2016, available at https://www.sec.gov/news/speech/white-equity-market-structure-2016-09-14, accessed on March 18, 2023 ("Equity Market Structure in 2016 and for the Future").

[9] Equity Market Structure in 2016 and for the Future.

[10] U.S. Securities and Exchange Commission, Equity Market Structure Advisory Committee Meeting, May 13, 2015, available at https://www.sifma.org/resources/general/sec-equity-market-structure-advisory-committee-meeting/, accessed on March 18, 2023 ("Equity Market Structure Advisory Committee Meeting").

[11] Equity Market Structure Advisory Committee Meeting.

[12] Memorandum on Current Guidance on Economic Analysis in SEC Rulemakings.

close coupling between all these aspects, careful analyses informed by high quality data are a prerequisite for understanding the likely economic impact of the Proposed Rules. For example, a sequential implementation of the Proposed Rules, starting with the arguably least invasive Disclosure Rule, would allow for revising the baseline used in the economic analyses of the other proposed rules.

11. This report does not consider the economic analysis conducted by the Commission in each of the Proposed Rules in isolation but focuses instead on whether the Commission's economic analysis has appropriately identified and accounted for the interactive and cumulative effects of the Proposed Rules.

III. Overview of the Proposed Rules

12. On December 14, 2022, the Commission issued for public comment four sets of proposed rules regarding (1) the routing and execution of retail orders for NMS stocks, (2) minimum pricing increments for NMS stocks, access to quotations, and the transparency of better priced orders, (3) best execution standards, and (4) disclosures of order execution information.

13. With the Order Competition Rule, the Commission proposes "a new rule, Proposed Rule 615 of Regulation NMS, … [which] would require that certain orders of individual investors be exposed to competition in fair and open auctions, before such orders could be executed internally by trading centers that restrict order-by-order competition."[13] The Commission contends that "opening up individual investor orders to order-by-order competition would lead to significantly better prices for those investors," estimating that the forgone price improvement leads to a total annual "competitive shortfall of $1.5 billion."[14] In general, the Commission expects that the proposed rule would "promote a more competitive, transparent, and efficient market structure for NMS stocks, with resulting benefits to investors."[15]

14. The Commission also claims that certain "aspects of Regulation NMS need to be updated in light of the current trading environment"[16] and suggests in the Tick Size Rule proposal that (1) rule 612 should be updated by reducing the minimum pricing increment for

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[13] Order Competition Rule, pp. 5–6.
[14] Order Competition Rule, pp. 9–10.
[15] Order Competition Rule, p. 5.
[16] Tick Size Rule, p. 8.

certain NMS stocks and applying those increments to the quoting and trading of NMS stocks,[17] (2) the access fee caps contained in rule 610 should be reduced together with the reduction of the minimum pricing increments and exchanges should be required to make the amount of all fees and rebates determinable at the time of execution,[18] and that (3) the implementation of some of the MDI Rules should be accelerated.[19]

15. With the Best Execution Rule, the Commission proposes to "establish … a best execution standard for broker-dealers" which would "require broker-dealers to establish, maintain, and enforce written policies and procedures reasonably designed to comply with that best execution standard." Furthermore, "for retail customer transactions that present conflicts of interest, such as payment for order flow or internalization, that could create incentives for a broker-dealer to be less diligent in its search for better executions … [the proposed rule] would require the broker-dealer's policies and procedures to address how it will comply with the best execution standard in light of such conflicts."[20]

16. Finally, with the Disclosure Rule, the Commission proposes "to update the requirements to disclose order execution information under Rule 605" in a way that it "would require broker-dealers with a larger number of customers … to prepare execution quality reports, would capture execution quality information for more order types and sizes, and would require time-based metrics to be recorded at a more granular level that reflects current market speed."[21] In a consensus proposal, market participants from distinct aspects of the U.S. equities market have already expressed strong support for the Disclosure Rule, noting that comprehensive and accurate data is critical to enabling regulators and market participants to evaluate any other changes made to the current market structure.[22]

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[17] Tick Size Rule, pp. 8, 14.
[18] Tick Size Rule, pp. 8, 18.
[19] Tick Size Rule, p. 10.
[20] Best Execution Rule, p. 8.
[21] Disclosure Rule, pp. 5–6.
[22] "Re: Equity Market Structure Proposals (File Numbers S7-29-22, S7-30-22, S7-31-22, and S7-32-22)," NYSE, Charles Schwab & Co., Citadel Securities, March 6, 2023, available at https://www.citadelsecurities.com/wp-content/uploads/sites/2/2023/03/Joint-Consensus-Position-Letter-to-the-SEC-March-6-2023.pdf

IV. The Commission Fails to Identify Important Areas of Overlap Between the Proposed Rules and Fails to Consider this Overlap in Its Economic Analyses

17. When the Commission engages in rulemaking, it is required under Section 3(f) of the Exchange Act to consider whether a proposed regulatory action will promote efficiency, competition, and capital formation.[23] To adequately conduct this assessment, the Commission must consider all interactive and cumulative effects between a proposed regulatory action and other proposed or pending rules.

18. However, in the case of the Proposed Rules, the Commission only identifies the individual economic effects each of the rules may have in isolation and fails to identify important areas of overlap. The Commission's failure to consider the areas of overlap and associated joint economic effects of the Proposed Rules is at odds with its own view that the Proposed Rules may, each individually, largely affect the same aspects of equity markets, including the economics of liquidity provision, spreads (particularly for retail investors), and costs (particularly for wholesalers).

19. The Commission has openly acknowledged that there is substantial uncertainty as to the effects of the Proposed Rules,[24] and simply "encourage[d] commenters to review [the proposals] to determine whether [they] might affect their comments on [any one] proposing release."[25]

20. To highlight the deficiencies in the SEC's economic analysis with respect to overlapping, interactive, and cumulative effects, Section IV.A below focuses on the Order Competition Rule and identifies examples of the pairwise overlap between this rule and each of the other proposed rules. Section IV.B then describes how the interactive and cumulative effects resulting from the overlap between the Proposed Rules might specifically impact the economic analysis for the Order Competition Rule. While Sections IV.A and IV.B, by way of example, specifically focus on pairwise overlap with respect to the Order Competition Rule, the Commission fails to consider all other pairwise overlap with respect to the Tick Size Rule, Best Execution Rule, and Disclosure Rule, in addition to the joint overlap between all of the Proposed Rules.

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[23] Order Competition Rule, p. 178.
[24] See, e.g., Order Competition Rule, p. 180.
[25] See, e.g., Order Competition Rule, footnote 98.

A. The Commission Fails to Identify Important Areas of Overlap Between the Proposed Rules

21. This section focuses on the Order Competition Rule and identifies examples of the pairwise overlap between this rule and each of the other proposed rules.

1. The Commission fails to recognize important areas of overlap between the Order Competition Rule and the Disclosure Rule.

22. The Commission argues that the Disclosure Rule "would better promote competition among market centers and broker-dealers on the basis of execution quality and ultimately improve the efficiency of securities transactions."[26] The Commission's economic analysis of the Disclosure Rule purports to show how the Disclosure Rule could impact routing decisions of broker-dealers and might directly impact the business of wholesalers, the business of broker-dealers, and the execution quality of retail orders. However, notwithstanding the market's broad support for the Disclosure Rule (see above in Section III) and thereby the high likelihood of it being implemented (potentially taking into account technical feedback from market participants), the Commission has not considered any of the likely economic effects of the Disclosure Rule in formulating the baseline for evaluating the Order Competition Rule.

23. For example, the language of the Order Competition Rule fails to acknowledge the Commission's separate claim that the Disclosure Rule will already (1) provide retail investors with execution quality information on retail brokers to better inform their execution decision,[27] and (2) increase transparency on wholesalers' trade internalization practices, thereby potentially revealing differences in execution quality between wholesalers that primarily internalize order flow and other trading centers.[28] The Commission does not

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[26] Disclosure Rule, p. 6.

[27] Disclosure Rule, p. 354 (footnotes omitted). "If market participants have access to more (and/or more relevant) information that improves their ability to compare execution quality across reporting entities, this would further promote competition between reporting entities on the basis of execution quality, resulting in improvements in execution quality for investors. Such information includes the proposed amendments expanding and modernizing order size and order type categories … as well as the proposed amendments modifying the calculation of realized spreads."

[28] Disclosure Rule, p. 342 (footnotes omitted). "[T]he proposed amendment specifying that market centers should include riskless principal trades in the category of trades executed away from the market center would increase transparency about internalization by wholesalers" and "[m]arket participants would be more informed about potential differences in execution quality between wholesalers that largely internalize order flow as compared to those whose orders are subject to competition from other interested parties quoting on external market centers."

consider how these effects would be incorporated into the baseline for evaluating the market structure reforms proposed in the Order Competition Rule. Properly incorporating the effects of the Disclosure Rule into the baseline for evaluating the Order Competition Rule could lead the Commission to revise its analysis of the likely economic impact of the market structure reforms proposed in the Order Competition Rule.

24. The Commission further claims that increased transparency under the Disclosure Rule may make broker-dealers less likely to route orders based on payment relationships and/or fees and rebates (to the extent these led to lower execution quality).[29] While the Commission's claim appears to ignore that FINRA guidance already prohibits payment relationships to interfere with best execution obligations,[30] if the claim is nonetheless true, the Disclosure Rule could impact the business between broker-dealers and wholesalers in ways the Order Competition Rule also seeks to.

2. The Commission fails to recognize important areas of overlap between the Order Competition Rule and the Tick Size Rule.

25. With the Tick Size Rule, the Commission proposes to implement a subset of various new rules related to (a) the minimum pricing increments for certain NMS stocks, (b) access to quotations, as well as (c) the acceleration of the implementation of certain parts of the MDI Rules.[31] The Commission's economic analysis in the Tick Size Rule purports to show how this proposed rule might impact routing decisions of broker-dealers and may directly impact the business of wholesalers, the business of broker-dealers, and the execution quality of retail orders. However, the Commission's economic analysis of the Order Competition Rule does not take any of these interactive and cumulative effects into account. For example, while the Commission claims that the Tick Size Rule may lead to reduced transaction costs for investors and may change how market participants quote,[32] the economic analysis the

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[29] Disclosure Rule, p. 388. "[I]ncreased transparency and competition on the basis of execution quality, and subsequent scrutiny by customers and other market participants, might make broker-dealers less likely to route orders based on payment relationships and/or fees and rebates."

[30] FINRA, Regulatory Notice 21-23, June 23, 2021, available at https://www.finra.org/rules-guidance/notices/21-23, accessed on March 27, 2023.

[31] See Section III.B.

[32] Tick Size Rule, p. 14. "The Commission believes that the proposed variable minimum pricing increments would … reduce transaction costs for many stocks without harming the displayed liquidity in, and execution quality of, NMS stocks that may be higher priced and/or trade with wider spreads. In addition, the Commission is proposing to apply the amended rule 612 minimum pricing increments to the quoting and trading of NMS stocks in order to promote fair competition and equal regulation between trading in the OTC market and trading on exchanges and ATSs, particularly as it relates to retail order flow."

Commission relies on in the Order Competition Rule are based on metrics calculated in the isolated present environment that do not consider the impact of those effects. Thereby the Commission likely overstates the purported benefits of the Order Competition Rule if it were to be implemented jointly with the Tick Size Rule.

a) Minimum Pricing Increments

26. The Order Competition Rule does not consider the Commission's claim that the proposed rules addressing the minimum pricing increments of certain NMS stocks (as included in the Tick Size Rule) may by themselves lead to increased competition for executing retail orders between wholesalers and other trading venues, such as exchanges and ATSs. In fact, it seems that the Commission is trying to address the same issues in the Tick Size Rule and in the Order Competition Rule, though using a different approach, stating that it is "seeking to address concerns about the competitive dynamic between exchanges/ATSs and OTC market makers because the ability of OTC market makers to more readily trade in finer sub-penny increments than exchanges and ATSs factors into the increasing percentage of equity volume that is executed off-exchange."[33]

27. Under the proposed Tick Size Rule, the Commission asserts that allowing all trading venues to offer price improvement to investor orders in the same minimum pricing increments may result in increased competition for order flow based on price. The Commission does not, however, incorporate these claimed effects in the economic analysis of the Order Competition Rule, which is based on price improvement estimates and realized spreads calculated in the present environment of tick sizes and access fees.[34]

b) Access to Quotations

28. The Order Competition Rule does not consider that the proposed rules relating to access to quotations (as included in the Tick Size Rule) may directly impact the routing decisions of broker-dealers and thus the order flow that is currently routed to wholesalers and other trading venues. For example, under the proposed quotation access rules, the

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[33] Tick Size Rule, p. 33.

[34] Tick Size Rule, p. 34. "The proposed amendments to rule 612 would level the competitive playing field in this regard by requiring market participants, regardless of trading venue, to offer price improvement to investor orders in the same minimum pricing increments, unlike today where OTC market makers are able to offer investor orders price improvement in smaller pricing increments compared to their exchange and ATS counterparts."

Commission expects that lowering access fee caps would lower the total amount of access fees collected and rebates distributed, which in turn would reduce any distortions between those fees and rebates on order routing.[35] To the extent that orders are currently routed to wholesalers because of those distortions, the reduction of access fees may reduce the order flow routed to wholesalers. The Commission argues that "[r]educed access fees could increase the amount of volume routed to exchanges compared to off exchange … causing some order flow that was previously directed off exchange to avoid high fees to revert to exchanges."[36] Furthermore, the Commission claims that "[c]ertainty about the cost of transactions at the time of trade could help broker-dealers make better order routing decisions."[37] Broker-dealers revising their routing decisions may generally impact the order flow currently routed to wholesalers and other trading venues.

c) Transparency of Better Priced Orders

29. Finally, the Order Competition Rule does not acknowledge that the proposed acceleration of the implementation of parts of the MDI Rules, such as the inclusion of odd-lot information in the NMS data and the reduction of round-lot sizes for some stocks (as included in the Tick Size Rule), might by themselves increase the competition for order flow between wholesalers and other trading venues. For example, a narrower NBBO spread as the result of the proposed updates to round-lot sizes or the visibility of odd-lot liquidity within the NBBO spread could incentivize broker-dealers to route orders to the relevant exchanges or ATSs that display those quotes.[38] This effect could impact the order flow currently routed to wholesalers in the absence of the proposed Order Competition Rule.

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[35] Tick Size Rule, p. 148 (footnotes omitted). "The Commission expects that the proposed amendments to rule 610, which would lower the access fee caps, would also lower transaction costs and promote market efficiency. Lowering the access fee caps would lower the total amount of access fees collected and rebates distributed, reducing, though not eliminating, any distortionary effects of exchange rebates on order routing and likely improving market efficiency. The reduction in access fees would lower transaction costs for liquidity demanders."

[36] Tick Size Rule, pp. 150–151.

[37] Tick Size Rule, p. 108.

[38] Tick Size Rule, p. 260. "The acceleration of the inclusion of odd-lot information in the NMS data along with the implementation of the MDI Rules round lot definition might lead to increased competition between exchanges and ATSs and OTC market makers, including wholesalers. NMS stocks priced greater than $250.00 would be expected to benefit sooner from a tighter NBBO, thereby increasing the competitiveness of the best displayed protected quotes, following the proposed accelerated implementation of the round lot definition. A greater visibility of more competitively priced odd-lot orders with the NBBO could increase the competitive position of exchanges and ATSs and attract greater order-flow." See also, Tick Size Rule, pp. 120, 143.

3. The Commission fails to recognize important areas of overlap between the Order Competition Rule and the Best Execution Rule.

30. As discussed above, the Commission asserts that the Best Execution Rule would "result in vigorous efforts by broker-dealers to achieve best execution, including in situations where broker-dealers have order handling conflicts of interest with retail customers."[39] With this assertion, the Commission does not appear to consider to what extent market participants already follow the proposed rules, which may significantly reduce the effects of the Best Execution Rule. Setting that aside, the Commission's economic analysis in the Best Execution Rule purports to show how the proposed Best Execution Rule in isolation might impact the execution quality of retail orders, yet the baseline in the economic analysis of the Order Competition Rule does not take any of this into account.

31. Specifically, the Order Competition Rule prescribes that broker-dealers generally route segmented orders to qualified auctions,[40] thereby removing to some extent the discretion broker-dealers have when seeking best execution. Given that segmented orders in qualified auctions may largely consist of undesirable trades (as those segmented orders that are executed at the NBBO midpoint or better do not have to be routed to qualified auctions first[41]), it is unclear how likely these orders would be to be executed in the qualified auction and how the auction prices would compare to execution prices at which the orders could have been filled otherwise. The Order Competition Rule fails to consider these fundamental interactive and cumulative effects with the Best Execution Rule.

32. Further, the Order Competition Rule fails to acknowledge the effects asserted by the Commission in its Best Execution Rule on broker-dealers' order handling practices. To comply with the prescriptions of the Best Execution Rule, broker-dealers relying on payment for order flow from wholesalers may change their order handling practices. To the extent that those broker-dealers will route orders to venues that either do not provide payment for order flow or even charge for providing liquidity, broker-dealers' profitability may be adversely

[39] Best Execution Rule, p. 7.

[40] Order Competition Rule, p. 68 (footnote omitted). "[T]he rule's core competition requirement … states that a restricted competition trading center shall not execute a segmented order internally until after a broker-dealer has exposed such order to competition at a specified limit price in a qualified auction operated by an open competition trading center."

[41] Order Competition Rule, p. 102. "The third exception … is for segmented orders that are executed by a restricted competition trading center at a price that is equal to the NBBO midpoint or more favorable for the segmented order. … In such circumstances, the submission of a segmented order to a qualified auction would not be necessary to obtain a competitive price for such order."

impacted, which could be passed through to customers in the form of higher commissions or reduced services.[42]

B. The Commission's Economic Analyses Fail to Consider the Interactive and Cumulative Effects of the Proposed Rules

33. The SEC's failure to identify important areas of substantive overlap between the Order Competition Rule and the other proposed rules implies that the economic analysis in the Order Competition Rule does not account for the relevant joint economic effects of the Proposed Rules. In fact, the Commission expressly states that the baseline of its economic analysis in the Order Competition Rule only considers "the **existing routing practices and execution quality** for the marketable orders of individual investors, the **current state of interactions** between institutional investors and the orders of individual investors, and the **current business practices** of retail brokers,"[43] thus expressly ignoring the pairwise and joint interactive effects of the other proposed rules. As a result of this flawed baseline, the Commission simply does not know whether it is likely that the Order Competition Rule will "promote efficiency, competition, and capital formation" or whether it would "impose a burden on competition that is not necessary or appropriate."[44]

34. Focusing on just three key examples for illustrative purposes, this section highlights how the SECs' failure to identify areas of overlap between the Proposed Rules affects the economic analysis in the Order Competition Rule. The examples included here are limited to (1) the Commission's analysis of "competitive shortfall," (2) the Commission's failure to appropriately consider the pending implementation of the MDI Rules, and (3) the Commission's cost estimates. However, the Commission's failure to identify overlaps between the Proposed Rules affects most, if not all, aspects of the economic analysis in the Order Competition Rule, including, e.g., the competitive standing of wholesalers, exchanges, and ATSs, the interaction between institutional investors and retail orders, various measures of execution quality, how investors and broker-dealers access the market, liquidity, price discovery, etc.

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[42] Best Execution Rule, p. 316. "To the extent broker-dealers that receive PFOF change their order handling practices to comply with the heightened standards in the proposal, these changes are likely to reduce the profitability of their business model because the orders they are routing may be more likely to be executed on venues that charge for providing liquidity, or do not provide compensation for order flow, or that provide compensation that is less than what these broker-dealers could realize by internalizing order flow, or routing elsewhere under existing procedures."

[43] Order Competition Rule, p. 184 (emphasis added).

[44] Order Competition Rule, p. 178.

35. Finally, while the discussion in this section focuses on the Order Competition Rule to illustrate the deficiencies in the Commission's economic analysis, the economic analyses of the other proposed rules are similarly flawed because of the Commission's failure to address the multi-way overlap between the Proposed Rules.

1. The Commission's estimate of "competitive shortfall" that motivates the Order Competition Rule fails to consider the interactive and cumulative effects of the other proposed rules.

36. As discussed above in Section III, the Commission motivates its Order Competition Rule by estimating an annual "competitive shortfall" of $1.5 billion.[45] The Commission estimates the "competitive shortfall rate" as "the difference in the realized spreads between marketable orders executed on exchanges and individual investor marketable orders that were executed after being routed to wholesalers, after adjusting for exchange rebates that are currently paid to liquidity suppliers on exchanges, as well as for fees (5 mils) that would potentially be charged to liquidity suppliers in qualified auctions."[46] The "average annual total competitive shortfall" is then estimated "by multiplying the competitive shortfall rate by an estimate of the total annual dollar volume of segmented orders that could potentially participate in qualified auctions."[47] However, the Commission's estimate is flawed in several material respects, including because it does not consider any impact deriving from the other proposed rules.

37. First, the Commission fails to show that realized spreads are an appropriate proxy for profitability or "competitive shortfall." The Commission itself acknowledges that "[r]ealized spreads do not measure the actual trading profits that market makers earn from supplying liquidity" because they do not consider the actual exit trade or any differences in inventory holding periods for different market makers.[48] The Commission also acknowledges that realized spreads do not consider any fixed or variable costs of the executing venue, such as costs for trading infrastructure, personnel, exchange memberships, market data, as well as

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[45] Order Competition Rule, p. 10. See also, Order Competition Rule, Table 19.

[46] Order Competition Rule, pp. 262–263 (footnotes omitted). The Commission states that orders that were executed after being routed to wholesalers "included marketable orders that the wholesalers internalized and also marketable orders that were routed to wholesalers and then executed on a riskless principal or rerouted to another venue and executed on an agency basis." Furthermore, the Commission "does not adjust wholesaler realized spreads for the PFOF they pay to retail brokers because PFOF, while a cost to wholesalers, is not a cost to investors." Order Competition Rule, footnote 520.

[47] Order Competition Rule, p. 268.

[48] Order Competition Rule, footnote 426.

regulatory compliance costs and transaction fees (including fees, rebates, and payment for order flow).[49] Despite acknowledging these deficiencies, the Commission does not consider any other potential measures of "competitive shortfall" besides realized spreads. This contradicts the Commission's analyses in the Best Execution Rule and Tick Size Rule, where the Commission considers a range of execution quality metrics.[50]

38. Second, the Commission fails to acknowledge the impact of the other proposed rules on several of the inputs for its estimation of "competitive shortfall" in the Order Competition Rule, including: (1) realized spreads of orders executed on exchanges and of orders executed after being routed to wholesalers, (2) exchange rebates, and (3) the dollar volume of segmented orders that could participate in qualified auctions. For example, the Commission does not consider that realized spreads might change significantly because of both the Tick Size Rule and Disclosure Rule.[51] Similarly, the Commission does not consider in its estimation of "competitive shortfall" how its estimates of exchange rebates may change if access fee caps are lowered, as proposed in the Tick Size Rule.[52] The lowering of access fee caps may also reduce any "distortionary effects" of those fees and rebates on order routing,[53] and, in turn, a change in the set of retail orders routed to exchanges and wholesalers may impact the Commission's estimates of realized spreads. Taken together, these examples illustrate how the Commission's failure to consider these interactive and cumulative effects render its estimate of the total competitive shortfall in the Order Competition Rule highly uncertain, leaving it with no reasoned basis for proposing the Order Competition Rule.

2. The Commission fails to appropriately consider the pending implementation of the MDI Rules.

39. The MDI Rules were adopted by the Commission in 2020 but have not yet been implemented.[54] The rules will modify the current regulatory structure by enhancing (1) the

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[49] Order Competition Rule, footnote 426. See also, Order Competition Rule, footnote 432.
[50] Best Execution Rule, pp. 132–134; Tick Size Rule, Table 9.
[51] The Commission argues that the Tick Size Rule would allow all trading venues to offer price improvement to investor orders in the same minimum pricing increments, resulting in an increased competition for order flow based on price. See Tick Size Rule, p. 34. The Commission also believes that the Disclosure Rule "would improve execution quality in terms of execution prices by increasing the extent to which reporting entities seek out executions at prices better than the NBBO; i.e., increasing the extent to which market centers execute order with price improvement, and/or increasing the extent to which broker-dealers route to market centers offering price improvement." Disclosure Rule, pp. 356–357.
[52] Tick Size Rule, p. 148.
[53] Tick Size Rule, p. 148.
[54] Order Competition Rule, p. 39.

content of consolidated market data and (2) the provision of that data by adopting a new decentralized model that will replaces the centralized securities information processors ("SIPs") that currently collect and disseminate consolidated market data.[55] Specifically, after the implementation of the MDI Rules, the consolidated market data will include "information about better-priced quotations in higher priced stocks" through the implementation of smaller round-lot sizes for certain NMS stocks and through the inclusion of odd-lot information, "information about quotations that are outside of the best-priced quotations," and "information about orders that are participating in auctions."[56]

40. While discussing the potential effects of the MDI Rules on the economic baseline in the Order Competition Rule, the Commission fails to provide any appropriate analysis of the interactive and cumulative effects between the Order Competition Rule and the MDI Rules. The same is true for the Commission's discussion of the operation of the Order Competition Rule, which ignores likely interactive and cumulative effects of the MDI Rules too.

a) The Commission's characterization of the economic baseline in the Order Competition Rule fails to appropriately consider the pending implementation of the MDI Rules.

41. The Commission purports to provide "an assessment of the potential effects that the implementation of the MDI Rules could have on the baseline estimations"[57] in Section VII.B.7 of the Order Competition Rule proposal. In fact, the Commission acknowledges that "[i]t is possible that the baseline (and therefore the economic effects relative to the baseline) could be different once the MDI Rules are implemented."[58] However, beyond these broad acknowledgements, the Commission fails to provide specific analyses and quantifications of the effects the MDI Rules may have on the economic baseline in the Order Competition Rule, which increases the uncertainty in the Commission's economic analysis. Examples of the Commission's broad acknowledgements pertaining to the effects of the MDI Rules that are not incorporated in the Commission's economic baseline for the Order Competition Rule include allowing for the possibility that the implementation of the MDI Rules could:

[55] Order Competition Rule, pp. 16, 39–42.
[56] Order Competition Rule, pp. 41–42.
[57] Order Competition Rule, p. 247.
[58] Order Competition Rule, p. 248.

- Affect statistics provided in the baseline, including execution quality statistics such as effective spreads, price improvement, or size improvement.[59]
- Result "in a higher number of odd-lot trades," attracting "more trading interest from market participants that previously did not have access to this information."[60]
- Impact "broker-dealers' order routing practices."[61] Specifically, the Commission acknowledges that the additional information contained in consolidated market data would allow market participants that rely only on data disseminated by SIPs "to make more informed order routing decisions."[62] While not directly addressing the impact this might have on the order flow currently routed to wholesalers, the Commission argues that this effect might reduce transaction costs and increase execution quality.[63]
- Result "in differences in the baseline competitive standing among different trading venues."[64] The Commission argues that the new information about better-priced quotations might impact order flow, as market participants might take advantage of better-priced quotes.[65]
- Affect the performance of order types offered by exchanges and ATSs that are based on the NBBO, by changes in the definition of the NBBO.[66] The Commission also claims that "wholesalers' competitive standing in terms of the execution quality offered particularly to individual investor orders" may be affected by a narrower NBBO by making it more difficult to provide the same price improvement and other execution quality metrics as under the current situation.[67]

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[59] Order Competition Rule, pp. 248–249.
[60] Order Competition Rule, p. 250.
[61] Order Competition Rule, p. 250.
[62] Order Competition Rule, p. 250.
[63] Order Competition Rule, p. 250.
[64] Order Competition Rule, p. 250.
[65] Order Competition Rule, pp. 250–251 (footnote omitted). "First, for stocks with prices greater than $250, the Commission anticipated that the new definition of round lots may affect order flows as market participants who rely on consolidated data will be aware of quotes at better prices that are currently in odd-lot sizes, and these may not be on the same trading venues as the one that has the best 100 share quote. Similarly, it anticipated that adding information on odd-lot quotes priced at or better than the NBBO to expanded core data may cause changes to order flow as market participants take advantage of newly visible quotes."
[66] Order Competition Rule, p. 251. "Second, exchanges and ATSs have a number of order types that are based on the national best bid and offer, and so the Commission anticipated that the changes in the NBBO caused by the new round lot definitions may affect how these order types perform and could also affect other orders with which they interact."
[67] Order Competition Rule, pp. 251–252 (footnotes omitted). "Third, the Commission anticipated that, as the NBBO narrows for securities in the smaller round lot tiers, it may become more difficult for the retail execution business of wholesalers to provide price improvement and other execution quality metrics at levels similar to those provided under a 100 share round lot definition. To the extent that wholesalers are held to the same price improvement standards by retail brokers in a narrower spread environment, the wholesalers' profits from

42. Considering the many ways in which the MDI Rules may impact the relevant economic baseline for the Order Competition Rule, the Commission's failure to capture them represents an important deficiency in the economic analysis applied to the Order Competition Rule.

b) The Commission's characterization of the operation of the Order Competition Rule fails to appropriately consider the pending implementation of the MDI Rules.

43. The Commission states that it "does not believe that the subsequent implementation of the MDI Rules would substantially affect the operation of [the Order Competition Rule]."[68] While the Commission appears to provide support for its assessment in Section III.B.1.b.ii. of the Order Competition Rule proposal, it does not provide any specific analyses and quantifications of the effects (or lack thereof) of the MDI Rules on the operation of the Order Competition Rule.

44. For example, the Commission asserts that:

- The additional information in the consolidated market data under the MDI Rules "is unlikely to affect wholesaler's and retail brokers' evaluation of best execution" because wholesalers are already expected "to use a more complete set of quotation information … than will be available in the expanded MDI data" and retail brokers use wholesalers as executing brokers.[69] However, the Commission fails to consider how broker-dealers that currently rely on data disseminated by the SIPs may change their routing behavior after the implementation of the MDI Rules, and to what extent such change might impact the order flow currently routed to wholesalers.
- Most retail investors would rely on their broker-dealers for execution of their orders, and that only more sophisticated retail investors may process the enhanced quoting information introduced with the MDI Rules and self-direct their orders to trading centers that display better-priced quotations.[70] However, the Commission fails to

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execution individual investor orders might decline, and to make up for lower revenue per order filled in a narrower spread environment, wholesalers may respond by changing how they conduct their business in a way that may affect retail brokers. … [T]his may impact wholesalers' competitive standing in terms of the execution quality offered particularly to individual investor orders."

[68] Order Competition Rule, p. 44.

[69] Order Competition Rule, pp. 47–48.

[70] Order Competition Rule, pp. 48–49. "[R]etail investors will need to direct their own orders to the particular trading center that is displaying a better-priced quotation. As stated in the MDI Adopting Release, however, most retail investors rely on their broker-dealers for execution of their orders, and the additional quotation

consider that retail investors might review the execution quality of their orders ex-post and may hold their broker-dealer accountable if the broker-dealer could have routed their orders to trading venues that would have offered better-priced quotes.

- Smaller round-lot sizes for certain NMS stocks, as established in the MDI Rules, "could narrow the NBBO as a public benchmark for the execution quality of the marketable orders for individual investors."[71] However, the Commission asserts that the revised round-lot sizes would not affect the NBBO spread for the great majority of NMS stocks, and would not affect the NBBO spread for most of the trading day for the remaining stocks.[72] Citing the MDI Adopting Release, the Commission argues that it would be "'uncertain' whether the execution quality that retail investors receive from wholesalers would change if the NBBO spread narrows because the effect 'would depend on how the change in the NBBO compared to the current price improvement offered by wholesalers,' as well as on 'changes in the degree of price improvement wholesalers will offer in stocks with tighter NBBOs, which is uncertain."[73] However, the Commission does not provide any further analysis of the interactive and cumulative effects of the revised round-lot definitions on the business of wholesalers, on the routing behavior of broker-dealers, and ultimately on the execution quality of retail orders.

45. Considering the many ways in which the MDI Rules may impact the implementation of the Order Competition Rule, the Commission's failure to quantify these impacts represents an important deficiency in its assessment of the operation of the Order Competition Rule.

3. By failing to address the interactive and cumulative effects of the Proposed Rules, the Commission's estimate of the costs associated with the Order Competition Rule is likely too low.

46. While the Order Competition Rule proposal includes a discussion of likely costs associated with the proposed rules, the Commission fails to comprehensively consider the potential unintended effects that may occur from the interaction costs, including the ones

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information will likely be used by more sophisticated retail investors that are able to process quotation information and self-direct their orders."

71 Order Competition Rule, p. 50.

72 Order Competition Rule, pp. 50–51. "[T]he great majority of NMS stocks and their volume would not be affected by the narrowing of the NBBO benchmark that will result from the new round lot definition in the MDI Rules. … [E]ven for the 1.5% of NMS stocks that will be affected by the revised round lot definition, NBBO spreads were estimated to remain unaffected for [sic] most of the trading day."

73 Order Competition Rule, pp. 52–53.

discussed herein, resulting from the full slate of rules being issued simultaneously (i.e., "knock-on effects"). In simultaneous rulemakings, the Commission is proposing several rules that will directly impact the economics of liquidity provision, especially for wholesalers. The Commission cannot consider these rules in isolation because there are potential costs of regulatory accumulation, the many forms of which Mandel and Carew (2013) define.[74]

47. One type of regulatory accumulation is the interaction between regulations, in which "[m]ultiple regulations can interact in obvious or non-obvious ways that raise costs for businesses."[75] Yet, in the Order Competition Rule, the Commission does not consider the potential impact on wholesalers' business models of any of the proposed rules in the context of the other proposed rules that may also impact those businesses, such as the Tick Size Rule, Best Execution Rule, and Disclosure Rule discussed above.

48. Further, by only considering these proposed rules in isolation, the Commission is not providing a comprehensive picture of compliance costs and other direct costs. However, these costs will aggregate with the costs of other proposed rules which impact wholesalers. All these costs must be considered jointly for the Commission to demonstrate that it has a reasoned basis for the Proposed Rules.

Respectfully submitted,

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[74] Michael Mandel and Diana G. Carew, "Regulatory Improvement Commission: A Politically-Viable Approach to U.S. Regulatory Reform," *Progressive Policy Institute*, May 2013 ("Mandel and Carew (2013)"), pp. 1–3.
[75] Mandel and Carew (2013), p. 3.