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March 31, 2023

Via Electronic Mail (rule-comments@sec.gov)

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

Re: File No. S7-30-22: Regulation NMS: Minimum Pricing Increments, Access Fees, and Transparency of Better Priced Orders

Dear Ms. Countryman,

Robinhood Financial, LLC and Robinhood Securities, LLC[1] (together, "Robinhood") submit this letter in response to the U.S. Securities and Exchange Commission's ("Commission" or "SEC") recent rule proposal seeking changes to Regulation NMS's minimum pricing increments and access fee caps as well as the acceleration of certain provisions of the SEC's 2020 Market Data Infrastructure ("MDI") Rules (the "Tick Size Proposal").[2] This is one of four rules the SEC has simultaneously proposed to completely restructure the U.S. securities markets (collectively, the "Proposals"). Together, these four rules would transform retail investing by having the government and self-regulatory organizations ("SROs") mandate and then micromanage what fees can be charged, what prices retail investors must receive, where retail investors' trades must be executed, and what information must be provided to investors. The breadth and complexity of these Proposals is unprecedented and unworkable. Moreover, in many areas, the Proposals are based on scant data, secret data, or no data at all. And, in several instances, the SEC openly concedes that they could result in worse prices and more expensive transactions for retail investors and cause retail investors to leave the securities markets.[3]

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[1] Both of these FINRA-member broker-dealers are wholly owned subsidiaries of Robinhood Markets, Inc.

[2] Proposing Release, Regulation NMS: Minimum Pricing Increments, Access Fees, and Transparency of Better Priced Orders, 87 Fed. Reg. 80,266 (Dec. 29, 2022) ("Tick Size Proposing Release").

[3] *E.g.*, Proposing Release, Order Competition Rule, Exchange Act Release No. 96495 (Dec. 14, 2022), 88 Fed. Reg. 128, 221 (Jan. 23, 2023) ("OCR Proposing Release") ("[I]f the Proposal results in the elimination of zero-commission trading, retail trading volume could decline and the overall pool of liquidity could shrink …."); Proposing Release, Regulation Best Execution, Exchange Act Release No. 96496 (Dec. 14, 2022), 88 Fed. Reg. 5440, 5534 (Jan. 27, 2023) ("Reg Best Ex Proposing Release") (potential for worse prices in illiquid securities); Reg Best Ex Proposing Release, 88 Fed. Reg. at 5530, 5533, 5536 (retail investors may be required to pay

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Due to the scope and complexity of the Proposals and the dearth of supporting evidence, the Commission has made it difficult for the public to understand or meaningfully assess the collective impact of the rules, including their costs and negative effects on the marketplace. But one thing is certain: If adopted, they will push us backwards, towards a time when investing was less efficient, less accessible, and less fair. The SEC's Proposals will reverse a recent retail investor revolution, which Robinhood is proud to have facilitated, that allows everyday Americans to build long-term wealth through investing. Robinhood's model has transformed retail investing for the better and saved investors billions of dollars and counting. The innovations we spearheaded in the market, such as commission-free trading, no account minimums, fractional shares, and the first non-employer IRA with a match were possible because for the last fifty years, the SEC did what Congress authorized it to do—it encouraged competitive, innovative, and efficient markets. We now have a highly competitive system that facilitates innovation and is accessible to any individual who wants to participate. As a result, we no longer have a marketplace dominated by the "haves." The historical "have nots"—blue collar workers, women and people of color, young Americans and first-time investors, people from rural communities and inner cities alike, gig economy workers and freelancers—now participate in unprecedented numbers in the U.S. stock market.

Today, Robinhood has over 23 million customers, many of whom are younger and more diverse than yesterday's investors.[4] Our customers hail from every state in the country and are a representative cross-section of America. We're proud of our customer base, but we're not unique. Across the industry, retail-focused broker-dealers followed Robinhood's lead—dropping costly commissions and account minimums—and in the process opened nearly 70 million more accounts by late 2021 as compared to the number

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commissions due to increased transaction costs); Tick Size Proposing Release, 87 Fed. Reg. at 80,280 (pricing increments that are too small can lead to decreased displayed liquidity, added complexity, and increased risk of stepping ahead).

[4] Press Release, Robinhood, Robinhood Markets, Inc. Reports February 2023 Operating Data (Mar. 13, 2023), https://investors.robinhood.com/news/news-details/2023/Robinhood-Markets-Inc.-Reports-February-2023-Operating-Data/default.aspx (23.1 million total funded accounts); Gretchen Howard, *Latinx Investors Are Part of the New Wall Street*, Robinhood: Blog (Oct. 12, 2021), https://blog.robinhood.com/news/2021/10/12/latinx-investors-are-the-new-face-of-wall-street-and-crypto ("We see more than double the industry average of Latinx and Black investors on our platform, and we know that new investors in 2020 were younger and more diverse than experienced investors."); SEC, *Staff Report on Equity and Options Market Structure Conditions in Early 2021*, at 9 (2021), https://www.sec.gov/files/staff-report-equity-options-market-struction-conditions-early-2021.pdf ("Robinhood reported that its average customer is 31 years old and has a median account balance of $240.").

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open in late 2017.[5] This is truly revolutionary progress. As policymakers on both sides of the aisle have long recognized, participating in the securities markets is the best way for individual Americans to generate long-term wealth, reduce our country's persistent income and investing diversity gaps, and drive economic growth. In recent decades, the U.S. securities markets have transformed from a marketplace wholly dominated by a handful of broker-dealers and exchanges that stifled competition, where most Americans could not afford to participate, to today's markets where the cost of trading has never been lower, stock prices have never been better, competition is thriving, and market participation has never been more widespread.

The Commission has historically recognized the importance of investor participation in the markets and taken steps to encourage more efficient markets that work better for the retail investor. Until now. Out of a misguided sense that government mandates should dictate where, how, and at what prices trades may occur, the Commission now proposes to upend the entire structure of today's securities markets with these four proposed rules. While we all agree that the markets must work for the benefit of retail investors, the SEC's complex and unsupported Proposals would not advance this goal. Instead, the Proposals are collectively regressive and would unwind much of the significant progress that has been made to drive costs down and encourage retail investor participation over the past half century. As altered by the Proposals, the customer experience in our markets will be slower, pricier, and less competitive; capital formation will be more difficult for smaller issuers; and increasing costs will likely expel from the market many of those investors who have only recently begun to participate. In other words, the Commission is trying to fix a market that isn't broken—and will break it in the process. For the above and other reasons, certain of the Proposals should be withdrawn in their entirety, and the others must be clarified, modified, and harmonized before they can be adopted.

The SEC's proposed rules can be ranked in order of most reckless and harmful to least intrusive:

- First, with its experimental so-called ***Order Competition Rule*** (or "Proposed OCR"), the SEC would—for retail investors only—revert to the exchange oligopolies that Congress directed it to abolish fifty years ago. The Proposed OCR would force retail orders to a single type of venue (a subset of exchanges) and a single order execution method ("qualified auctions") purportedly because the SEC is concerned that in today's market, retail customers may not get the benefit of *all* market participants (particularly large institutional investors) competing for their orders. But the SEC admits it does not know whether or which parties will

[5] 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* 6 fig.1 (Comm. Print 2022).

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participate in these auctions—in fact, it admits that large institutions may *not* participate.[6] The SEC also admits that auctions could result in worse prices for retail investors.

This radical proposal would cut off retail investors' access (through retail broker-dealers) to the well-developed system of venues that vigorously compete for their order flow and provide best execution and other services. That competition drives venues to improve prices, lower costs, and improve services for retail investors. The upshot of the Proposed OCR would be that retail investors' orders will be forced into government-mandated, centralized marketplaces that, while residing within for-profit corporations, effectively operate as public utilities with regulatory immunity and limited liability if they have technology problems, i.e., there is little recourse if investors are unhappy with the prices they receive due to errors. Indeed, the SEC acknowledges that retail investors could experience slower and less certain trading at worse prices while institutional investors and professional traders will continue to benefit from the competition provided by off-exchange venues and market makers. And that, in turn, will likely breed confusion and frustration, causing many retail investors to lose faith in the markets and stop participating altogether. These extreme, negative consequences are not mere speculation; the SEC admits that the Proposed OCR may drive retail investors out of the market. Further, our review of the Commission's economic analysis demonstrates that instead of saving investors $1.5 billion (which the Commission estimates), the Proposed OCR is likely to cost investors between $2.5 and $3 billion. This rule should be rejected in its entirety.[7]

- Through its proposed ***Regulation Best Execution*** (or "Proposed Reg Best Ex"), the SEC would create unnecessary regulatory obligations that are, at best, redundant because there is already a comprehensive set of best execution standards in place. Existing best execution rules of SROs (including the Financial Industry Regulatory Authority ("FINRA")) not only require broker-dealers to achieve the best price reasonably available for customers, they also require broker-dealers to regularly and rigorously test whether they have done so and subject broker-dealers to SRO examinations for compliance with those rules. While neither

[6] *See* Letter from David Howson, Executive Vice President & Global President, Cboe Global Markets, et al., to Vanessa Countryman, Sec'y, SEC (Mar. 24, 2023), https://www.sec.gov/comments/s7-32-22/s73222-20161714-330556.pdf (group of commenters including institutional investors object to the Proposed OCR and instead support improvements that come from "competitive forces" and "innovative, market-driven solutions").

[7] Notably, one of the exchanges that would be eligible to host qualified auctions has also recommended the Commission not adopt a prescriptive requirement to send retail orders to auctions and instead argued for market-driven innovations and enhancements. Letter from Hope M. Jarkowski, General Counsel, NYSE, to Vanessa Countryman, Sec'y, SEC, at 9 (Mar. 13, 2023), https://www.sec.gov/comments/s7-31-22/s73122-20159561-327567.pdf.

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articulating any weakness in the current regulatory structure nor materially changing the fundamental best execution standard that broker-dealers are already required to follow, Proposed Reg Best Ex makes compliance with those obligations so onerous and expensive that the natural result, as the SEC expressly acknowledges, could change firms' business models, result in fewer retail broker-dealers, and increase fees and costs to retail investors with no evidence of any material additional benefit. This rule should be rejected in its entirety.

- The proposed ***Minimum Pricing Increment (Tick Size), Access Fee, and Transparency Rule*** would (among other things) harmonize and reduce the minimum price increment at which exchanges and other market participants can quote and trade exchange-listed stocks, restricting the increments at which investors can trade. We support sensible changes to tick size, access fees, and market data infrastructure, but believe the current proposal lacks support for the significant changes to market structure that the SEC proposes. The SEC should take a more incremental, data-driven approach and, first, fully implement the MDI Rules, which will make additional information regarding orders available to the marketplace (e.g., new round lot sizes, odd-lot information, and auction information), and therefore help to fill key gaps in publicly available market data, encourage further price improvement, and make more data accessible to investors at lower prices by introducing competition into an otherwise monopolistic data market. Then, the SEC should repropose reasonable and incremental changes to minimum pricing increments. We believe a thoughtful approach would be to: (a) reduce the minimum pricing increments to $0.005 for tick-constrained stocks that would more clearly benefit from narrower tick sizes; (b) allow for a six-to-12-month period to study the effects of these changes on market quality; and, then (c) if warranted after further analysis, consider additional reductions to the minimum pricing increments as well as larger minimum pricing increments for less liquid stocks with naturally wider spreads, providing a mechanism to roll back any changes that, after analysis, decrease market quality. The SEC should also adopt exchange access fee caps that are proportional to the minimum pricing increments based upon existing access fee caps (30% of the tick size). Changes beyond those contemplated here risk increasing price volatility and confusion on the part of investors who may find that they are not receiving the prices they thought they would when they submitted their orders due to rapidly changing quotations.

- Finally, with its proposed ***Disclosure of Order Execution Information*** rule ("Proposed Rule 605"),[8] the Commission would expand reporting entities and expand or modify the types of data that must be disclosed so that broker-dealers

[8] Proposing Release, Disclosure of Order Execution Information, Exchange Act Release No. 96493 (Dec. 14, 2022), 88 Fed. Reg. 3786 (Jan. 20, 2023) ("Rule 605 Proposing Release").

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and their retail customers can better assess the quality of the execution prices they receive. We believe this proposal should be refined, but support adoption of a modified version of the proposal.

The Proposals are also problematic because they overlap in ways that are contradictory, redundant, and mutually exclusive. If the Proposals are implemented and some successfully meet their objectives, others would be unnecessary. For these reasons, none of the Proposals may properly become law without being clarified and reproposed. And while there are certainly opportunities to improve on an already well-functioning marketplace, adopting a complex and interdependent suite of rules that would upend almost every aspect of trading for retail investors would be rash and unsupportable. Instead of proposing a thoughtful, incremental, and data-driven approach to reforming market structure inefficiencies and competitive imbalances, the SEC has taken a "Rube Goldberg machine" approach to rulemaking. This approach appears to be designed to experiment with the retail market—at the expense of retail investors—by implementing multiple solutions to the same alleged problem at once, rushing headlong into unknowable consequences without a plan (or even the ability) to measure the impact of different rules or recalibrate its approach as the market responds.

Because each individual proposal must be considered as both a standalone rule *and* a changeable aspect of a larger structural transformation, we set forth below in **Section I** our comments on the totality of the Commission's plan, including the cumulative effects of adopting multiple rules simultaneously and how each proposed rule would affect and be affected by the others. We then set forth in **Section II** a specific discussion regarding the Tick Size Proposal. Our comments are organized as follows.

I. THE COLLECTIVE IMPACT OF THE PROPOSALS

A. Today's Securities Markets Work Well For Retail Investors.

B. The Proposals Would Upend The Current Industry Practices That Have Worked Well For Investors And Issuers In Multiple Interrelated Ways.

C. The Proposals Violate Federal Law.

D. The SEC Shouldn't Experiment With Retail Investors' Financial Futures: Rulemaking Must Be Data-Driven, Supportable, And Incremental.

II. THE TICK SIZE PROPOSAL WOULD HARM RETAIL INVESTORS AND LACKS ADEQUATE ECONOMIC ANALYSIS

A. The Tick Size Proposal Would Harm Retail Investors.

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B. The SEC Has Failed to Conduct An Adequate Economic Analysis.

C. The SEC Should Reconsider The Tick Size Proposal.

We provide our comments with a number of caveats.

First, it is impossible for us—or anyone—to comment on all the possible permutations that may arise depending on how the Commission chooses to reject, modify, or proceed with the Proposals. Integral to the public's ability to participate in the rulemaking process is the agency's obligation to "reveal the agency's views 'in a concrete and focused form'"[9]—to tell the public what it is *actually* proposing. When an agency's proposal is too nebulous or "open-ended,"[10] "interested parties will not know what to comment on" and will be unable to meaningfully critique the proposal.[11] Here, the Commission's proposals fail to provide the basic notice required by the Administrative Procedure Act because they do not inform the public what the Commission *is actually proposing to adopt*. Even without considering eventual changes that might be made to any individual proposals, given the inconsistencies between the proposals themselves, the Commission cannot conceivably adopt each rule as proposed at the same time. The net effect is that the Commission has failed, at this time, to give the public notice of what combination of rules it reasonably expects to adopt. For this reason alone, the Commission must repropose the rules. The Commission's failure to provide proper notice is exacerbated here by the difficulty of reasonably estimating the compound effect of these interconnected rules in this brief comment period, particularly where the Proposals may overlap, result in contradictory or unpredictable outcomes, or obviate each other.

Second, the Commission consistently underestimates costs and overstates benefits in its flawed economic analyses, often relying on assumptions instead of real data and never providing (or even attempting to provide) a coherent and unified statement about the collective costs and benefits of the total proposed rule set. Furthermore, the Commission fails to adequately incorporate and offset the benefits that the already approved MDI Rules will have once implemented, while simultaneously introducing new costs by scaling back data content and substantially delaying the introduction of competition into the data market relative to the MDI Rules' adopted implementation table. The suite of rules the Commission has proposed as a whole is more complicated, more expensive, and more burdensome than the sum of its parts. If the Commission proposes to change any individual proposal, it is imperative that the industry have another opportunity to comment on how the adjustments or revisions would collectively affect market structure.

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[9] *United Church Bd. for World Ministries v. SEC*, 617 F. Supp. 837, 839 (D.D.C. 1985) (quoting *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 548 (D.C. Cir. 1983)).

[10] *Prometheus Radio Project v. FCC*, 652 F.3d 431, 453 (3d Cir. 2011).

[11] *United Church Bd.*, 617 F. Supp. at 839 (quoting *Small Refiner Lead*, 705 F.2d at 549).

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Third, the short time frame for comment, as well as the lack of transparency around significant CAT data used by the Commission to support its proposals, has precluded market participants like Robinhood from fully testing the Proposals with data, which is particularly necessary given the lack of empirical support the Commission itself has provided. Given that it is impossible for even market professionals to comprehensively study and comment on the rules, certainly retail investors—our customers—cannot be expected to engage meaningfully in this process despite Chair Gensler's calls for retail investor input.[12] We object and request that, after Commission staff work through the voluminous comment file anticipated on these proposals, a more reasonable, incremental and integrated proposal be reproposed with a manageable comment period so that firms and customers can assemble and evaluate the requisite data and meaningfully participate in this process.

In short, for the public to have the notice and opportunity to comment guaranteed by the securities laws and the Administrative Procedure Act, the Commission must put forward a coherent, cohesive proposal. If the requisite data is secret and available only to the Commission, a reasonable period of time must be allowed for others to assemble the requisite data to construct and run the regression analyses and simulations required to reasonably assess this hodgepodge of proposed changes. Further, the Commission does not appear to have considered the market instability it would introduce by requiring financial institutions to implement so many new and confusing infrastructure and technical changes. The Commission's willingness to indulge in widespread experimentation is reckless and directly contrary to decades of Commission action. Since its inception 90 years ago, the Commission has thoughtfully and continuously assessed the fairness and competitiveness of U.S. markets and calibrated its rules based on data and experience.[13] It has never before thrown a large plate of rulemaking spaghetti up against a wall to see what sticks. It should not do so now.

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[12] The SEC's Proposals are a marked departure from its rulemaking process relating to Regulation Best Interest, for example, where the SEC first conducted a study, solicited industry and investor input, proposed a rule with a lengthy comment period, and made adjustments based on those comments. Similarly, when the SEC adopted its last significant market structure changes—Regulation NMS—it first spent five years undertaking "a broad and systematic review to determine how best to keep NMS up-to-date." Final Rule, Regulation NMS, Exchange Act Release No. 51808 (June 9, 2005), 70 Fed. Reg. 37,496, 37,497 (June 29, 2005). Prior to even proposing Regulation NMS, the SEC's review "included multiple public hearings and roundtables, an advisory committee, three concept releases, the issuance of temporary exemptions intended in part to generate useful data on policy alternatives, and a constant dialogue with industry participants and investors." *Id.* This is the type of careful, data-driven approach the SEC should take here.

[13] *See, e.g.*, Chair Arthur Levitt, SEC, Speech, Dynamic Markets, Timeless Principles (Sept. 23, 1999), https://www.sec.gov/news/speech/speecharchive/1999/spch295.htm ("The Commission believed then, as we do now, that our role is not to impose or dictate the ultimate

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I. THE COLLECTIVE IMPACT OF THE PROPOSALS

The Proposals must be considered collectively as well as individually. To do that, we address in this Section the collective impact of the Commission's Proposals including:

- How the SEC's efforts, as directed by Congress, have historically encouraged competition and innovation among diverse venues and, as a result of these opportunities to compete for retail order flow, the markets have become more fair and efficient (**Section I.A**);
- How the Commission's four proposed rules would collectively upend the current industry practices that have worked well, resulting in harm to retail investors, smaller issuers, and the U.S. securities markets as a whole (**Section I.B**);
- How the Proposals exceed the SEC's statutory mandate and fail to provide a reasonable or comprehensive economic analysis, and the ways in which federal law prohibits the Commission from taking these discriminatory, anti-competitive, and unsupportable actions (**Section I.C**); and
- How the Commission's Proposals dangerously depart from traditional rulemaking, and why the SEC should continue to adhere to its time-honored incremental, data-driven approach instead of experimenting with the U.S. securities markets and the financial futures of retail investors (**Section I.D**).

A. Today's Securities Markets Work Well For Retail Investors.

Robinhood's mission is to "democratize finance for all" and make the securities markets work better for retail investors. In many ways, this mission has become a reality. The current U.S. market structure model "has delivered significant benefits for retail investors,"[14] as Chair Gensler acknowledged in his swearing-in testimony in 2021.[15] Today:

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structure of markets. Rather, it is to establish, monitor, and uphold the framework that gives competition the space and sustenance to flourish. Markets can then develop according to 'their own genius' for the ultimate benefit of investors.").

[14] Comm'r Mark T. Uyeda, SEC, *Statement on Proposed Rule Regarding Order Competition* (Dec. 14, 2022), https://www.sec.gov/news/statement/uyeda-order-competition-20221214; *see also infra* notes 16-20 and accompanying text.

[15] *Nominations of Gary Gensler and Rohit Chopra: Hearing Before the S. Comm. on Banking, Housing & Urban Affairs*, 117th Cong. 8 (2021) (statement of Gary Gensler, Nominee), https://www.banking.senate.gov/imo/media/doc/Gensler%20Testimony%203-2-21.pdf.

- Retail investors pay dramatically less in commission costs (in most cases, zero) and execution fees than they have in the past, saving investors over $17 billion in the last two years and counting.[16]

- Spreads are tighter than ever.[17] This results in retail investors receiving better prices, more price improvement, and higher investment returns.[18] Robinhood alone has provided $8 billion in price improvement over the past two years.[19]

- Innovation in product offerings and technology have made the securities markets more accessible than ever to retail investors. Retail brokers, and Robinhood in particular, have rolled out products and services that meet the needs and wants of today's retail investors and removed barriers to retail participation in the stock market, such as high-quality, user-friendly trading apps; fractional share trading; accounts with no minimum balances; jargon-free financial education; and access to tools and information previously available only to professional investors.[20]

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[16] S.P. Kothari et al., *Commission Savings and Execution Quality for Retail Trades* 1-2 (Dec. 2, 2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3976300 (finding that "[s]ince the industry adopted Robinhood's zero-commission model in late 2019, retail investors have saved tens of billions in trading commissions, with Robinhood customers alone saving $11.9 billion during 2020-2021"); Samuel Adams & Connor Kasten, *Retail Order Execution Quality under Zero Commissions* 7-8 (Jan. 7, 2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3779474 ("Based on the commission rate for Charles Schwab before the commission cut, $4.95 per trade, and an estimated trade size of 200 shares … the average commission payment per hundred shares was $2.475. … The average payment per hundred shares of marketable and marketable limit orders by Citadel Securities to TD Ameritrade, Charles Schwab, and E*TRADE in January 2020 was $0.14.").

[17] Charles Schwab, *U.S. Equity Market Structure: Order Routing Practices, Considerations, and Opportunities* 6 ex.2 (2022) (bid-ask spread was ~90bps in 1994; now in single digit bps).

[18] OCR Proposing Release, 88 Fed. Reg. at 133 ("The narrower the spreads, the lower the prices at which they will buy and the higher the prices at which they will sell, which translate into lower trading costs and higher investment returns."). *See also* Douglas Chu, CEO, Virtu Financial, Measuring Real Execution Quality, Benefits to Retail are Significantly Understated 2 (Aug. 27, 2021), https://virtu-www.s3.amazonaws.com/uploads/documents/virtu-real-pi_20210827.pdf ("Virtu alone provided over $3B in Real Price Improvement to retail investors in 2020").

[19] S.P. Kothari et al., *Commission Savings and Execution Quality for Retail Trades* 1 (Dec. 2, 2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3976300 (finding that "[d]uring 2020-2021, Robinhood customers benefited from more than $8 billion in price improvement compared to the national best bid and offer prices").

[20] *See* Shane Swanson, *The Impact of Zero Commissions on Retail Trading and Execution* 4 (2020), https://www.greenwich.com/equities/impact-zero-commissions-retail-trading-and-execution ("On the whole, Greenwich Associates finds that retail investors, in fact, have never

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As a result of broker-dealers like Robinhood focusing on increased retail access to the markets, today's retail investors are younger, have smaller account balances, and are more racially and ethnically diverse than they have been in the past.[21] Retail investors opened accounts at record rates in 2020-2021, and today, almost 150 million Americans (approximately 60%) own stocks.[22] Today, there are no wealth or income barriers to opening a brokerage account; investors do not need to maintain an account minimum or pay high upfront fees to a broker to invest and trade. A retail investor can invest without paying a commission, and she can do it all on her mobile phone, with a user-friendly interface that demystifies the financial markets. She can invest any time of day, including after business hours. And the investor has all the information she needs within reach—she doesn't need to hire an expensive broker or adviser who will charge for recommendations or investment advice. Retail investors are able to easily invest because today's markets are fair, fast, transparent, low-cost, and liquid. A retail investor's order generally gets filled immediately in the amount she seeks, at or better than the price she sees on her screen at the time she places her trade.[23]

Due to this increased retail participation in the markets and the emergence of new, lower-cost products and services, retail investors have saved billions for their retirement and other financial goals.[24] This is something policymakers on both sides of the aisle have long desired.[25] But these benefits for retail investors should not be taken for granted;

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had it better. Not only have their commission costs come down to zero, but the services they receive have never been more advanced.").

[21] *See* Mark Lush et al., *Investing 2020: New Accounts and the People Who Opened Them, FINRA Consumer Insights: Money and Investing*, Feb. 2021, at 2, https://www.finrafoundation.org/sites/finrafoundation/files/investing-2020-new-accounts-and-the-people-who-opened-them_1_0.pdf ("[N]ew investment platforms began addressing some of the traditional barriers to investing, such as not knowing how to open an account, limited access to a financial professional, the perception that large sums of money are required to enter the market, and sensitivity to the costs of investing.").

[22] Lydia Saad & Jeffrey M. Jones, *What Percentage of Americans Own Stock?*, Gallup (May 12, 2022), https://news.gallup.com/poll/266807/percentage-americans-owns-stock.aspx.

[23] Market makers often provide retail brokers additional liquidity above and beyond the amount available at the best quoted price. For example, if a retail investor places an order to purchase 300 shares and the best quoted price is 100 shares, market makers provide retail brokers with size improvement and often will fill the 300-share order in its entirety, generally at, or most likely better than, the best quoted price.

[24] For example, investors have had billions of dollars in savings, just by trading lower-cost index products. Sam Potter, *The Indexing Boom Has Saved S&P Investors a Cool $357 Billion*, Bloomberg (July 29, 2021, 11:18 AM), https://www.bloomberg.com/news/articles/2021-07-29/the-indexing-boom-has-saved-s-p-investors-a-cool-357-billion#xj4y7vzkg.

[25] *See, e.g.*, *Oversight of the U.S. Securities and Exchange Commission: Hearing Before the S. Comm. on Banking, Housing, & Urban Affairs*, 117th Cong. 1 (2021) (testimony of Chair Gary

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they are a modern phenomenon and the product of decades of private sector innovation and incremental change guided by Congress and the SEC. Fifty years ago, there were much higher trading costs and much lower levels of retail investor participation. Only about 25 million Americans (12%) owned stock in 1975.[26] Even when a retail investor could access the markets (overcoming obstacles such as minimum account balance requirements), trading itself was expensive due to high broker commissions and high exchange fees.[27] Those commissions and fees were high because of the uncompetitive nature of the industry. Before 1975, broker-dealers were generally required to execute

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Gensler, SEC), https://www.banking.senate.gov/imo/media/doc/Gensler%20Testimony%209-14-21.pdf ("We keep our markets the best in the world through efficiency, transparency, and competition. These features lower the cost of capital for issuers, raise returns for investors, reduce economic rents, and democratize markets."); *Appropriations for Fiscal Year 2020: Hearing before the Subcomm. on Fin. Servs. & Gen. Gov't of S. Comm. on Appropriations*, 116th Cong. 6 (2019) (statement of Chair Jay Clayton, SEC), https://www.govinfo.gov/content/pkg/CHRG-116shrg19104901/pdf/CHRG-116shrg19104901.pdf ("Other countries want to replicate [U.S. retail investor participation] because such broad investor participation in our capital markets is a significant competitive advantage for our economy, and participation in our capital markets has made many Americans' lives better and their retirements more secure."); Chair Mary Jo White, SEC, Speech, Opening Remarks at the Fintech Forum (Nov. 14, 2016), https://www.sec.gov/news/statement/white-opening-remarks-fintech-forum.html ("There is relatively widespread agreement that fintech innovations have the potential to transform key parts of the securities industry—and to do so in ways that could significantly benefit investors and our capital markets."); Chair Mary L. Schapiro, SEC, Speech, Remarks at the Stanford University Law School Directors College (June 20, 2010), https://www.sec.gov/news/speech/2010/spch062010mls.htm ("[I]n an area very near to my heart, how can we increase voter participation by retail investors?"); Chair Arthur Levitt, SEC, Speech, Plain Talk About Online Investing (May 4, 1999), https://www.sec.gov/news/speech/speecharchive/1999/spch274.htm ("All of us are participants in an extraordinary social phenomena. The democratization of our markets is a desirable development which regulators should not frustrate. Our mission is not to prevent losers or to modulate the sometimes mercurial movement of our markets.").

[26] Richard Phalon, *Owners of Stocks Decline by 18.3 Percent Since 1970*, N.Y. Times (Dec. 10, 1975), https://www.nytimes.com/1975/12/10/archives/owners-of-stocks-decline-by-183-percent-since-1970-shareholders.html (25 million Americans owned stock); Bureau of the Census, U.S. Dep't of Com., Series P-25, No. 601, *Current Population Reports: Projections of the Population of the United States: 1975 to 2050* 2 (1975), https://www.census.gov/content/dam/Census/library/publications/1975/demo/p25-601.pdf (total population of approximately 212 million).

[27] *See, e.g.*, Charles M. Jones, *A Century of Stock Market Liquidity and Trading Costs* 2 (May 23, 2002), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=313681 (finding that "average proportional commissions on NYSE stocks climbed steadily from 1925 to the late 1960's and early 1970's to a high of almost 1%").

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trades for their customers on exchanges.[28] The exchanges operated much like public utilities because of the oligopoly they enjoyed. Without competition or with limited competition, exchanges and broker-dealers could impose high costs. And because exchanges are SROs that enjoy immunity from private claims under federal law and rule-based limitations on liability, broker-dealers had limited ability to hold them accountable when retail investors suffered substantial losses due to exchange problems.

1. The Benefits That Retail Investors Enjoy Today Are The Result Of The SEC Encouraging Venue Competition And Eschewing A Centralized Model For Order Execution.

As with any industry that relies on a public utility model for underlying infrastructure, the securities industry was long characterized by lack of incentive to innovate or increase efficiency.[29] Trading in listed securities occurred primarily on the New York Stock Exchange ("NYSE") and, to a lesser extent, the American Stock Exchange ("AMEX").[30] This centralized model (or oligopoly) led to complacency. And this complacency led Congress to conclude in 1975 that "[r]ather than responding to changing investor needs and striving for more efficient ways to perform their essential functions, the principal stock exchanges and the majority of established securities firms appear to have resisted industry modernization and to have been unable or unwilling to respond promptly and effectively to radically altered economic and technological conditions."[31]

Congress addressed the "lack of venue competition" problem by empowering the Commission to facilitate the development of an equity market structure that was more flexible and competitive, and that would be driven by "changing economic circumstances consistent with the public interest" rather than "unnecessary and artificial restraints on competition."[32] Congress conducted extensive hearings, reviewed reports from the SEC, Department of Justice, and industry participants, and recorded over 4,600 pages of

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[28] Jason Zweig, *Lessons of May Day 1975 Ring True Today*, Wall St. J. (Apr. 30, 2015, 11:20 PM), https://www.wsj.com/articles/lessons-of-may-day-1975-ring-true-today-the-intelligent-investor-1430450405; Fred Tomczyk, *Lessons from 40 Years of Mayday on Wall Street: Column*, USA Today (May 1, 2015, 6:32 AM), https://www.usatoday.com/story/opinion/2015/05/01/mayday-anniversary-wall-street-investment-column/26463281/.

[29] Jason Zweig, *Lessons of May Day 1975 Ring True Today*, Wall St. J. (Apr. 30, 2015, 11:20 PM), https://www.wsj.com/articles/lessons-of-may-day-1975-ring-true-today-the-intelligent-investor-1430450405.

[30] In 1972, NYSE accounted for 71.4 percent of trading volume; AMEX accounted for 17.5 percent of trading volume, and smaller regional exchanges and over-the-counter trading collectively accounted for 11.1 percent. H.R. Rep. No. 94-123, at 49-50 (1975).

[31] S. Rep. No. 94-75, at 1 (1975).

[32] H.R. Rep. No. 94-123, at 44.

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testimony from almost 100 witnesses.[33] Coming out of these extensive proceedings, the Securities Acts Amendments of 1975 ("1975 Amendments") laid the groundwork for major market structure changes that occurred over the next several decades. The 1975 Amendments authorized the Commission to facilitate the development of a national market system ("NMS") with the goals of assuring economically efficient trading and fair competition among broker-dealers, exchanges, and other market centers. Most notably, one of the first changes the SEC recognized that it needed to make under its new authority was to eliminate exchanges' oligopoly on order execution by eliminating prohibitions against off-exchange trading. That paved the way for more competition and the emergence of off-exchange markets and market makers.

The Commission did not stop there. The Commission pursued changes and improvements to the NMS, over time and incrementally through studies, pilots, and rulemaking. Many of the changes it made were designed to further enhance competition and break up the virtual oligopoly of the primary exchanges. The Commission's 1996 order handling rules opened the door for quote-based competition between exchanges and off-exchange venues like emergent alternative trading systems ("ATSs"), then known as electronic communications networks, or ECNs.[34] The Commission also eliminated NYSE's prohibition on off-exchange trading in NYSE-listed stocks. At each turn, the Commission's actions increased competition and therefore increased incentives to innovate, drive efficiencies, reduce commissions and fees, and enhance the retail investor's overall experience.

This was not always a certain outcome. There have been instances in the past where the SEC has also considered centralizing the U.S. securities markets. But each time the Commission considered this type of model, it has wisely abandoned such efforts. One such instance was in the early 2000s, when the SEC explored the creation of a centralized limit order book or "CLOB." This centralized framework for market structure, which has troubling similarities to the Commission's Proposed OCR, was never adopted because it reduced the opportunity for markets to compete and failed to strike "the appropriate balance of market competition and order competition."[35] Even the then-Chairman of the Federal Reserve weighed in, noting the dangers when policymakers micromanage the markets:

> We would do well to borrow the advice offered to the medical profession and, first, do no harm. It has never proved wise for

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[33] *Id.* at 45.

[34] Adopting Release, Order Execution Obligations, Exchange Act Release No. 37619A (Sept. 6, 1996), 61 Fed. Reg. 48,290 (Sept. 12, 1996).

[35] *Regulation NMS: The SEC's View: Hearing Before the Subcomm. on Cap. Mkts., Ins. & Gov't Sponsored Enters. of the H. Comm. on Fin. Servs.*, 109th Cong. (2005) (testimony of Chair William H. Donaldson, SEC), https://www.sec.gov/news/testimony/ts031505whd.htm.

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> policymakers to try to direct the evolution of markets, and it strikes me as especially problematic at this juncture. The structure of our equity markets is extraordinarily dynamic; hardly a week goes by that a new trading venue is not announced or an enhancement to an existing system is not trumpeted …. Given the pace of change in our markets, it is difficult to contemplate how a government mandate could be implemented; systems might well be obsolete before we were half-way through the planning process.[36]

The SEC's Division of Market Regulation also recognized in its Market 2000 report the dangers of doing what the SEC is proposing to do today. There, the Division correctly stated that imposing a centralized order execution facility on the markets was not only inconsistent with the SEC's historic approach to rulemaking, but also bad policy:

The determination to refrain from imposing a single structure on the equity markets … is, in many respects, the same judgment the Commission made following enactment of the 1975 Amendments. The Commission could have required the creation of a single order-execution facility or the abrogation of all restraints on competition. Implicitly, the Commission rejected both approaches and, instead, pursued discrete, incremental market improvements. The strength and size of the U.S. equity markets today are testament to the fundamental soundness of the Commission's judgment at that time. The Division continues to believe that the vitality and variability of private-sector solutions to market structure issues justifies a limited Commission role.[37]

When the SEC eventually adopted and then implemented Regulation NMS in 2007, it chose a framework for connecting exchanges and off-exchange market centers together with market data and a trade-through rule. The SEC wisely avoided micromanaging where and how orders could be executed and at what price, and sought to strike a balance between order-by-order competition and venue competition.[38] The result was dramatic. NYSE saw its market share in its listed securities decrease from nearly 80% to approximately 20% as a result of the increased competition from Nasdaq, ECNs, and broker-dealers.[39] These new participants have contributed to lower fees, tighter spreads,

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[36] *Evolution of Our Equity Markets: Hearing Before the S. Comm. on Banking, Hous. & Urban Affs.*, 106th Cong. (2000) (testimony of Chair Alan Greenspan, Federal Reserve Board), https://www.federalreserve.gov/boarddocs/testimony/2000/20000413.htm (cautioning against a CLOB).

[37] Div. of Mkt. Regul., SEC, *Market 2000: An Examination of Current Equity Market Developments* 15 (1994) https://www.sec.gov/divisions/marketreg/market2000.pdf.

[38] Final Rule, Regulation NMS, 70 Fed. Reg. at 37,498-99.

[39] Memorandum from SEC Div. of Trading & Markets, to SEC Market Structure Advisory Comm. 11 tbl.2 (April 30, 2015), https://www.sec.gov/spotlight/emsac/memo-rule-611-regulation-

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better prices, and better services for retail customers. They should not now be painted as villains by policymakers, including by Chair Gensler.[40]

2. *Today's Market Structure Enhances Competition Between Market Venues, To The Benefit Of Investors.*

As described above, under the Commission's stewardship, the market has evolved from mandated trading on utility-like exchanges to a competitive landscape in which exchanges compete with each other and with other trading venues. Like most retail brokers, Robinhood can send trades directly to exchanges to be executed or to other broker-dealers called off-exchange market makers or wholesalers, which can directly execute the customer orders or, consistent with their own best execution obligations, send them to exchanges or ATSs or other liquidity providers. Chair Gensler has demonized off-exchange trading[41] and the Commission's Proposals would marginalize or eliminate the role of wholesalers and other off-exchange sources of liquidity. Wholesalers and other off-exchange venues were born, grew, and thrived primarily due to the exchanges' historical failure to innovate and compete. As the market has evolved, off-exchange venues have developed innovations and services to compete against exchanges and other market centers including the following:

- ***Price Improvement.*** When a wholesaler "internalizes" a customer trade (that is, trades directly with the customer from its own inventory), it will provide the retail customer at least the best published price that any member of any exchange is willing to pay—the national best bid and/or offer ("NBBO"). But wholesalers typically go beyond that and provide an even better price. That's known as "price improvement." When Robinhood evaluates where to send new customer orders,

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nms.pdf; *id.* at 12 tbl.4 (percentage of off-exchange executions increased by 21.6% for NYSE-listed stocks and 9.2% for Nasdaq-listed stocks after Rule 611 of Reg NMS was implemented).

[40] *See, e.g.*, *Game Stopped? Who Wins and Loses When Short Sellers, Social Media, and Retail Investors Collide, Part III: Hearing Before the H. Comm. on Fin. Servs.*, 117th Cong. 92 (2021) (testimony of Chair Gary Gensler, SEC) https://www.govinfo.gov/content/pkg/CHRG-117hhrg44837/pdf/CHRG-117hhrg44837.pdf ("The high concentration of retail orders routed to a small number of wholesalers raises a number of questions about market structure. In essence, does this segmentation and related sector concentration best promote fair, orderly, and efficient markets?"); *Game Stopped? Who Wins and Loses When Short Sellers, Social Media, and Retail Investors Collide: Hearing Before the H. Comm. on Fin. Servs.*, 117th Cong. 91 (2021) https://www.govinfo.gov/content/pkg/CHRG-117hhrg43966/pdf/CHRG-117hhrg43966.pdf (statement of Rep. Maxine Waters, Chairwoman, H. Comm. on Fin. Servs.) ("I'm more concerned than ever that some investors are being fleeced, and massive market makers … may pose a systemic threat to the entire system.").

[41] *See, e.g.*, Chair Gary Gensler, SEC, *Statement on Proposal to Enhance Order Competition* (Dec. 14, 2022), https://www.sec.gov/news/statement/gensler-order-competition-20221214.

it analyzes a number of factors including, most importantly, how much price improvement its customers have received from each wholesaler.[42] Wholesalers provide more price improvement in order to compete with exchanges and other venues for more order flow from retail broker-dealers.

- ***Size Improvement and Certain Executions.*** Wholesalers also provide "size improvement" by executing the full size of customers' orders at the best available price, even when the customer's order is larger than the best displayed bid or offer. For example, if a customer wants to buy 150 shares, the best price displayed in the market could be limited to 100 shares. To purchase the remaining 50 shares, the customer would typically have to pay a higher price. But wholesalers often execute the entire 150-share order at the best price displayed in the market, in order to provide "size improvement" and remain competitive with other market venues.

- ***Guaranteed Executions in All Stocks, Including Thinly Traded Stocks.*** Because wholesalers compete with each other and with exchanges, they are incentivized to invest in their relationships with broker-dealers by executing and providing favorable pricing to *all* of the retail broker-dealer's customer orders. When orders for thinly traded or less liquid stocks are sent to exchanges, they may not get executed because there are no willing counterparties to the trade. If they do get executed, they are more likely to experience price "disimprovement," that is, an investor buying a thinly traded stock will pay prices increasingly higher than the NBO as the few counterparties in the market become less and less willing to sell. To compete for order flow, wholesalers are incentivized to internalize orders that would not otherwise get executed or would get executed at deteriorating prices because they are particularly difficult to trade and generally not profitable, such as orders in thinly traded stocks in which fewer market participants want to trade.[43]

This execution model helps explain why Robinhood's customers (and customers at other broker-dealers that route orders to wholesalers for execution) receive the NBBO or better on the vast majority of their orders.[44] In short, off-exchange trading venues provide

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[42] Robinhood does not consider the amount of payment for order flow ("PFOF") as one of these factors because it receives the same PFOF rate from every wholesaler to which it routes.

[43] Ironically, the SEC calls this a "valuable service." *See* OCR Proposing Release, 88 Fed. Reg. at 186 ("[W]holesalers receive order flow from retail brokers that contains variation in quoted spreads and adverse selection risk, wholesalers can target an average level of price improvement across this heterogeneous order flow, resulting in a relatively consistent degree of execution quality.").

[44] *Our Execution Quality*, Robinhood, https://robinhood.com/us/en/about-us/our-execution-quality/ (last visited Mar. 27, 2023) (84.79% of orders receive the NBBO or better).

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benefits to retail broker-dealers and their customers that exchanges do not in order to compete with each other and with exchanges to execute retail investors' trades. These benefits relate not only to price and size improvement but also to speed, certainty, and consistency in executions as well as services like trade corrections for orders entered erroneously by retail customers. And, unlike exchanges, off-exchange venues do not have rule-based limited liability to investors when something goes wrong, such as the "trading glitch" on the NYSE earlier this year, which affected hundreds of stocks.[45] The current market structure incentivizes both order competition and venue competition, as envisioned by the 1975 Amendments and as solidified in Regulation NMS, and retail investors enjoy the benefits of being able to invest easily and at a low cost. The Proposals would upend today's equity markets and reverse much of the progress that the Commission has made in facilitating a competitive, efficient market structure.

B. The Proposals Would Upend The Current Industry Practices That Have Worked Well For Investors And Issuers In Multiple Interrelated Ways.

1. The Proposals Will Harm Retail Investors And Small Companies With Less Actively Traded Securities.

The Proposals ignore the economic realities that govern on- and off-exchange trading and would dismantle the current system of healthy venue competition, which has benefited retail investors and U.S. securities markets more generally. While the full cumulative effect of these four inconsistent and changeable proposed rules is unclear, one thing is certain: Retail investors and issuers, particularly small companies with less actively traded securities, will be worse off than they are today. We summarize these harms below and describe them more fully in our individual letters regarding each of the proposed rules.

As a result of both the ***Proposed OCR*** and ***Proposed Reg Best Ex***, retail investors will:

- Experience delay and uncertainty when placing orders to buy stock;[46]
- Frequently receive worse pricing as a result of delayed order executions and/or the curtailment of broker-dealer judgment on how to execute an order;[47]

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[45] *NYSE Says Manual Error Triggered Major Trading Glitch*, Reuters (Jan. 25, 2023, 11:52 AM), https://www.reuters.com/markets/us/nyse-says-sell-short-restriction-was-triggered-erroneously-2023-01-25/.

[46] The SEC acknowledges that qualified auctions will undermine prompt and certain executions of retail orders by making retail order execution "less streamlined" and introducing "a new layer of intermediation" that indisputably will slow down execution of customer orders. OCR Proposing Release, 88 Fed. Reg. at 226.

[47] To be sure, the SEC concedes in the OCR Proposing Release that some orders will receive worse executions due to slippage and price disimprovement. The SEC acknowledges that

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- Receive even worse pricing for stock trades, especially those stocks of smaller companies that are traded less frequently due to the reduced competition among venues executing retail orders;[48] and

- Experience new or higher costs and other fees to invest and trade, including potentially paying commissions, and have less access to innovative products and services as compliance and transaction costs across the industry rise and some broker-dealers' revenue sources, including payment for order flow ("PFOF") are reduced or eliminated.[49]

The SEC acknowledges that investors generally receive *worse* executions on exchanges than they do today from off-exchange market makers.[50] By marginalizing or eliminating the role of off-exchange market makers, the Proposed OCR and Proposed Reg Best Ex will reduce meaningful competition with exchanges for retail investor order flow and trigger these harmful effects.

Today, broker-dealers like Robinhood are *not* required to send every customer order directly to an exchange. Rather, broker-dealers are required to seek "best execution" for their customers' orders, no matter which venue ultimately executes the order. This discretion to choose the best place to execute a customer's order ultimately benefits the retail customer because it means that broker-dealers like Robinhood can choose among different competing venues—including off-exchange market makers, ATSs, and

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there is no guarantee that a retail order will be filled in full or in part during a qualified auction and, at the same time, slippage may occur because there is the "potential that the NBBO could change while the qualified auction was in process." *Id.* at 214. The SEC also acknowledges that "a segmented order would not have certainty of an execution in a qualified auction at a price equal to the NBBO or better." *Id.* at 147.

[48] *Id.* at 215.

[49] Notably, the SEC acknowledges throughout the release that commissions may return or increase for retail customers as a result of the implementation of Proposed Rule 615. *E.g.*, *id.* at 179 ("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."); *id.* at 216 ("An additional concern is that if the Proposal results in a significant or complete loss of PFOF, then retail brokers would be forced to start charging commissions again for online NMS stock and ETF trades."); *id.* at 218 ("One concern is that the loss of PFOF would cause PFOF brokers, and potentially other discount brokers, to resume charging commissions for online NMS stock trades. Just as PFOF brokers led discount brokers into zero-commission trading in 2019, it is possible they too could lead discount brokers back to charging commissions if they stopped receiving PFOF."); *id.* at 225 ("If wholesalers reduce PFOF or begin charging a fee for routing services, PFOF retail brokers would have to absorb this cost and earn lower profits and/or pass on a share of this cost to their customers.").

[50] *E.g.*, *id.* at 198 tbl.14.

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exchanges—to find the place that will provide the best price reasonably available. The flight of retail orders from exchanges to wholesalers was driven by a multitude of competitive factors as described above, and the primary reason that retail order flow has not returned to exchanges is that exchanges have failed to win back that order flow through competitive pricing, innovation, and service (including protection on errors).

The equity market structure that exists today in the U.S. is the reason why retail investors enjoy exceptional executions and the U.S. securities markets are the most liquid, transparent, and fair markets in the world. Under the SEC's Proposals, this current framework will disappear as retail orders are redirected to newly contrived, experimental auctions operated by SROs. The result is predictable: (1) there will be fewer brokers competing to provide the best executions and services to retail customers; (2) retail investors will no longer be guaranteed speedy and certain executions at the best available price or better; (3) retail investors will no longer be assured of having disputes promptly resolved if there is a glitch or erroneous price; and (4) retail investors will pay more to trade.

There are also numerous flaws in the ***Tick Size Proposal*** that could make the stock market worse for retail investors. First, the SEC's proposal to narrow tick sizes to tenths and fifths of a cent ($0.001 and $0.002, respectively) would likely decrease the available orders (liquidity) at the best displayed bid and offer. Among other things, the Tick Size Proposal could cause "flickering quotations" (where a stock quote rapidly switches back and forth between prices) that would frustrate and confuse investors, who may find that they are not receiving the prices they thought they would when they submitted their orders. This problem will only be made worse by reducing incentives to display trading interest and increasing incentives to engage in "pennying"—whereby quicker market participants can gain trading queue priority and snatch up better-priced orders before other investors by adjusting their bid and offer prices by an economically insignificant amount—increasing trading costs for investors. Second, the proposed changes could harm investors and U.S. markets by forcing them into overall worse execution prices. In particular, the harmonization of quoting and trading increments could leave retail investors with fewer price increments at which market participants are willing to interact with their order flow. Stated differently, by reducing liquidity providers' flexibility to execute investors' orders at prices that are better than their quotes, the Tick Size Proposal would deprive investors of additional price improvement, a stated goal of both the Proposed OCR and Proposed Reg Best Ex. Notwithstanding the harms that the Tick Size Proposal would cause to the markets, it also has the potential to create operational challenges for market participants and to confuse retail investors by unnecessarily complicating how stock trading works.

2. The Proposals Are Both Duplicative And Contradictory.

In addition to harming retail investors and the securities markets overall, the Proposals are problematic from a fundamental rulemaking and process perspective. Each rule, if

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implemented, would change the landscape in ways that could make the other rules unnecessary or redundant. At the same time, the Proposals are contradictory.

For example, the Proposed OCR would—for retail investors only—revert to the exchange utility model that Congress directed the SEC to abolish fifty years ago. Off-exchange market makers would no longer be permitted to immediately execute a customer order at any price at or better than the NBBO unless they can offer the government-mandated midpoint price or better.[51] The "problem" the SEC claims it is trying to solve with the Proposed OCR is that retail investors are not receiving as much price improvement as they theoretically could. As discussed above, this so-called problem may be mitigated at least in part after the SEC's MDI Rules are implemented. The SEC also believes that Proposed Rule 605 would improve execution quality for both individual and institutional investors, in terms of execution prices, speed of execution, size improvement, and fill rates, by increasing competition between firms handling customer orders.[52] This so-called price improvement "problem" also may be moot if the SEC's Tick Size Proposal is implemented. That proposal would substantially reduce the trading increment (by a tenth, a fifth, and a half) which would "enhance the opportunity for [retail investor] orders to receive more favorable prices than they receive in the current market structure," also a key objective in the Proposed OCR. The Tick Size Proposal would also require off-exchange and exchange venues to quote and trade at the same price increments, which could result in greater parity in execution quality. Furthermore, the obligation to route orders to one of the OCR auctions only if a broker is unable to achieve a midpoint price becomes extreme and unrealistic in a market where the minimum tick size is $0.001. In effect, for nearly half of market volume, the combined proposals would require executions at an effective increment of $0.0005. Notably, the Commission does not comment on whether the drastic changes required by the Proposed OCR would still be necessary if more order information is made publicly available after the MDI Rules, Proposed Rule 605, and/or Tick Size Proposal are implemented.

The very same arguments could apply to Proposed Reg Best Ex. Increased disclosure and changes to pricing increments could improve execution quality and render this rule unnecessary. At the same time, the Proposed OCR also could render Proposed Reg Best Ex unnecessary because the Proposed OCR virtually eliminates any discretion a broker-dealer has to handle a retail customer order (and thus any potential conflicts); rather than seeking the best market for a customer order (as Proposed Reg Best Ex would require), broker-dealers would be required to send all retail orders in NMS stocks to a qualified exchange. Through its Proposed Reg Best Ex, the SEC also would change how broker-dealers use the NBBO and measure price improvement to assess execution quality. It would require retail broker-dealers that receive PFOF to incorporate extensive new data

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[51] As another example of the Proposals' engaging in price-setting by mandating midpoint executions, *see* Reg Best Ex Proposing Release, 88 Fed. Reg. at 5460.

[52] Rule 605 Proposing Release, 88 Fed. Reg. at 3832.

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into their decision-making and transform how they decide where to route customer orders. While these decisions by broker-dealers would presumably be significantly impacted by the imposition of mandatory qualified auctions, the SEC fails to analyze or explain how changes to the Proposed OCR would affect Proposed Reg Best Ex, or vice versa.

At the same time, the Proposed OCR is inconsistent with Proposed Reg Best Ex and Proposed Rule 605. For example, both proposed rules identify speed of execution as important criteria for execution quality. However, the Proposed OCR devalues speed as an important metric because this rule would intentionally slow down the execution of retail customer orders and force these orders to venues (i.e., qualified auctions) where there is no certainty that they will be executed at all.

In sum, out of misplaced concern that off-exchange trading and PFOF somehow deprive retail investors of potential price improvement, the Commission's Proposals attempt to do everything, everywhere, all at once. The SEC would try to improve investors' ability to analyze off-exchange trading and vote with their feet (Proposed Rule 605), while also changing how off-exchange venues are required to price customer trades (the Tick Size Proposal), while also making compliance more expensive for certain broker-dealers routing customer orders to off-exchange venues (Proposed Reg Best Ex), while also prohibiting certain types of off-exchange trading with retail investors (the Proposed OCR). Each proposal seeks to address the same alleged problem in a different way, creating multiple redundancies and conflicts. It is not clear where the impact of any one rule might begin and end, making it impossible for the public to make sense of the incoherent set of Proposals and undermining the Commission's attempts at rulemaking. This leaves one to suspect that the Commission itself does not reasonably expect to adopt all of these rules and is effectively hedging its bets or potentially anticipating that one proposal could draw comments that would indirectly be supportive of another. For investors and market participants, this process is needlessly complex, confusing, and possibly misleading.

C. The Proposals Violate Federal Law.

The SEC's Proposals to abruptly and fundamentally transform the structure of the U.S. securities markets are not only bad policy, but they are unlawful because they (1) lack any meaningful cost-benefit analysis and are therefore inconsistent with the SEC's statutory duty to consider their effects; (2) exceed the SEC's statutory authority; and (3) are arbitrary and capricious.

1. The Proposals Independently And Cumulatively Fail To Provide A Reasonable Cost-Benefit Analysis.

The SEC's economic analysis is woefully insufficient. Under Sections 3(f), 11A(a)(1)(c), and 23(a)(2) of the Exchange Act, the SEC has a statutory duty to consider the effect of a new rule on efficiency, competition, and capital formation. More specifically, the SEC is

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required to "consider or determine whether an action is necessary or appropriate in the public interest" and "in addition to the protection of investors, whether the action will promote efficiency, competition, and capital formation."[53] The SEC is not permitted to adopt any rule that "would impose a burden on competition not necessary or appropriate" in furtherance of its mandate.[54] Its "failure to 'apprise itself—and hence the public and the Congress—of the economic consequences of a proposed regulation' makes promulgation of the rule arbitrary and capricious and not in accordance with law."[55] The SEC's analysis falls short in a number of significant ways.

First, the Commission fails to meaningfully grapple with existing regulatory protections and other regulatory initiatives that have already been adopted, but not yet implemented. The SEC cannot accurately assess any potential increase or decrease in competition, capital formation, or efficiency without fully considering the existing baseline.[56] That baseline includes rules already adopted and slated to be implemented, yet the Commission fails to account for the anticipated impact of pending market infrastructure enhancements. Without doing so, it cannot accurately assess the relative benefit of additional initiatives that might prove to be redundant or even counterproductive after the changes it has already adopted have taken effect. Specifically, the SEC adopted its MDI Rules more than two years ago to enhance the quality and accessibility of market data and address gaps in existing publicly available market data, such as the fact that it only includes pricing information for certain types of orders (e.g., orders of 100 shares or more). The MDI Rules are intended to ameliorate these flaws. Among other things, they would revise the NBBO to redefine round lot, establish a data field for the best available orders smaller than a round lot ("odd lots"), add orders priced outside an exchange's best bid and offer (called "depth of book"), and add orders participating in auctions. These changes are anticipated to inform the Proposals' analyses regarding price improvement for retail customers (including differences in price improvement between on- and off-exchange executions).

The MDI Rules are now law. They are part of the baseline and are intended and expected to improve market data in a manner that, among other things, leads to additional price improvement—something each proposal individually seeks to achieve. Chair Gensler has stated, "The NBBO is designed to aggregate information across different exchanges. I believe there are signs, however, that the NBBO is not a complete enough representation

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[53] 15 U.S.C. § 78c(f).

[54] *Id.* § 78w(a)(2).

[55] *Bus. Roundtable v. SEC*, 647 F.3d 1144, 1148 (D.C. Cir. 2011) (quoting *Chamber of Commerce v. SEC*, 412 F.3d 133, 144 (2005)).

[56] *Am. Equity Inv. Life Ins. Co. v. SEC*, 613 F.3d 166, 178 (D.C. Cir. 2010).

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of the market."[57] Chair Gensler criticizes the NBBO for, among other things, failing to reflect odd lots and being priced (by legal requirement) in pennies and not smaller increments. But these structural deficiencies in existing market data may prevent the NBBO from more fully reflecting market interest, and therefore make it more difficult for broker-dealers and their customers to assess whether they actually received "best" execution. Since the MDI Rules are intended to improve market data to better reflect available trading interest in the market, this might change trading behavior in a way that obviates the need to impose more costly and onerous structural and technical changes on market participants. The Commission cannot assess these potential new rules until the MDI Rules are fully implemented. But the SEC is leapfrogging over the MDI Rules, ignoring how they will improve the NBBO, to remake the entire structure of the equities market. Without even assessing the extent to which the proposed rules would still be necessary after the MDI Rules are fully implemented, the Commission would require market participants to implement extensive technology changes, subscribe to new forms of data, dilute or eliminate the value of off-exchange venues, and introduce the risk of unknowable and unintended consequences.

Second, the Commission does not even attempt to analyze the cumulative costs and benefits of its overlapping and sometimes inconsistent Proposals. The Commission provides its cost-benefit analysis for each specific proposal, but it has not provided a comprehensive analysis. For example, the Commission estimates that Proposed Reg Best Ex will *increase* competition between venues, but its Proposed OCR would *decrease* venue competition by redirecting retail orders to "qualified auctions," which are likely to be run by a small handful of exchanges. Ironically, the Commission would reinstate a centralized model that forces orders to exchanges after Congress and the SEC spent a quarter of a century dismantling a structure that required orders to be executed on exchanges.

Third, the Commission significantly overstates potential benefits and underestimates costs within each rule proposal. For example, the Commission's Proposed OCR estimates that investors could gain $1.5 billion or more in potential price improvement.[58] Not only does this amount to a paltry sum per investor that does not outweigh the costs of the proposal (let alone the cumulative costs of the other proposals), the Commission's premise for this purported $1.5 billion savings is fundamentally flawed. The SEC incorrectly presumes that all money paid to broker-dealers as PFOF will be redirected to retail customers in the form of greater price improvement. This presumption lacks any merit. By the SEC's own admission, there is no guarantee that market participants will participate in qualified auctions and, if they do not participate, investors could receive

[57] Chair Gary Gensler, SEC, Speech, Prepared Remarks at the Global Exchange and FinTech Conference (June 9, 2021), https://www.sec.gov/news/speech/gensler-global-exchange-fintech-2021-06-09.

[58] OCR Proposing Release, 88 Fed. Reg. at 130.

worse prices.[59] The $1.5 billion also assumes that orders sent to qualified auctions will experience slippage, i.e., the offer rising before a buy order can be executed or the bid falling before a sell order can be executed, at the same rate and to the same degree as orders executed off-exchange. This is an exceedingly unlikely assumption; orders executed in or following exchange auctions are more likely to experience a higher degree of slippage,[60] due to both inevitable execution delays and the lack of any obligation by auction participants to interact with retail orders, unlike the guarantees provided by wholesalers. Indeed, our analysis estimated that rather than a $1.5 billion benefit to customers, the Proposed OCR would *cost* customers an estimated $2.5 to $3 billion.[61]

Moreover, the $1.5 billion in *potential, speculative* price improvement is also not a "benefit" when one considers that, today, investors receive a greater amount of certain, predictable price improvement with no commissions. Over the last two years, Robinhood alone has provided $8 billion and counting in price improvement to its retail customers. If the price improvement provided by all other broker-dealers is added with Robinhood's and considered over time, it easily dwarfs $1.5 billion.[62] It is not a "benefit" to retail investors or U.S. markets if the SEC forces them to forfeit a predictable amount of price improvement so that they could, theoretically, sometimes receive a marginally higher amount on certain trades. The SEC's analysis also assumes that the "benefits" of the Proposed OCR will be *on top of* existing price improvement that retail investors receive; it does not sufficiently consider that its Proposals would disrupt the market structure so much that existing price improvement cannot be relied upon to continue at the same levels. It is also not clear how much additional benefit would result from the Proposed OCR's qualified auctions after the implementation of the MDI Rules, Proposed Rule 605, and the Tick Size Proposal.

In its eagerness to vilify off-exchange trading and PFOF, the Commission also significantly underestimates the costs of its Proposals. The Proposals are fueled by a perceived urgency to enhance price improvement because the Commission believes, without support for that belief, that retail customers are being cheated out of additional price improvement opportunities. The Commission is focused, in particular, on why wholesalers do not *always* provide more price improvement—and the Commission has blamed PFOF. However, the Commission already has reviewed this practice numerous

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[59] *Id.* at 214.

[60] *Id.* at 214-15.

[61] *See* Appendix A to the letter we submitted regarding Proposed OCR (File No. S7-31-22).

[62] For example, a study by one wholesaler indicates that they alone provided $3 billion in price and size improvement to retail investors in 2020. Douglas Chu, CEO, Virtu Financial, Measuring Real Execution Quality: Benefits to Retail Are Significantly Understated 2 (Aug. 27, 2021), https://virtu-www.s3.amazonaws.com/uploads/documents/virtu-real-pi_20210827.pdf.

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times, including recently in 2000, 2010, and 2016. Each time, based on data and analysis, the Commission repeatedly decided that PFOF should not be eliminated because of its potential benefits.[63] Rather, PFOF—like trading commissions—may be a conflict that can and should be managed, as with other conflicts, through disclosure and regulation.[64] In fact, a substantial body of research has shown that PFOF does not have a material economic impact on execution quality[65] and, by reducing customer transaction costs, it

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[63] *See, e.g.*, Memorandum from SEC Div. of Trading & Mkts., to Equity Mkt. Structure Advisory Comm. (Jan. 26, 2016), https://www.sec.gov/spotlight/equity-market-structure/issues-affecting-customers-emsac-012616.pdf; Concept Release on Equity Market Structure, Exchange Act Release No. 61358 (Jan. 14, 2010), 75 Fed. Reg. 3593 (Jan. 21, 2010); Off. of Compliance Inspections and Examinations & Off. of Econ. Analysis, SEC, *Special Study: Payment for Order Flow and Internalization in the Options Markets*, https://www.sec.gov/news/studies/ordpay.htm#SUMMARY (Dec. 19, 2000); Final Rule, Payment for Order Flow, Exchange Act Release No. 34902 (Oct. 27, 1994), 59 Fed. Reg. 55,006 (Nov. 2, 1994).

[64] PFOF creates conflicts of interest that must be disclosed and managed—it would not be appropriate for a broker-dealer to route a customer order to a venue that provides worse executions for customers but pays higher PFOF rates to the broker-dealer. *See, e.g.*, Exchange Act Rule 10b-10(d)(8). Robinhood, consistent with industry practice across retail broker-dealers, receives the same PFOF rates from every wholesaler to whom it routes orders. *See also* Jim Swartwout, *Demystifying Payment for Order Flow*, Robinhood (Mar. 4, 2021), https://robinhood.engineering/demystifying-payment-for-order-flow-119581544210.

[65] *See, e.g.*, Christopher Schwarz et al., *The "Actual Retail Price" of Equity Trades* (Sept. 14, 2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4189239 (finding that "[a]cross brokers, variation in PFOF cannot explain the large variation in price execution"); Samuel Adams & Connor Kasten, *Retail Order Execution Quality under Zero Commissions* (Jan. 7, 2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3779474 (suggesting that "the elimination of commissions for retail investors improved execution quality for orders directed to third-party market makers"); Pankaj K. Jain et al., *Trading Volume Shares and Market Quality: Pre- and Post-Zero Commissions* (Dec. 2, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3741470 (finding that "effective spreads decline[d]" after the introduction of zero-commission trading); James J. Angel et al., *Equity Trading in the 21st Century: An Update* (2015), https://www.worldscientific.com/doi/10.1142/S2010139215500020 (stating that "the revenues that brokers obtain from their order flows may be competed away as they lower their commissions and offer greater service to their customers in an attempt to attract their orders. Indeed, evidence exists that suggests that competition among brokers to obtain customer order flow has driven a significant portion of these payments [for order flow] back to retail customers"); Robert H. Battalio et al., *To Pay or Be Paid? The Impact of Taker Fees and Order Flow Inducements on Trading Costs in U.S. Options Markets* (Nov. 3, 2011), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1954119 (In comparing options exchanges that use a maker-taker model to exchanges that use a PFOF model, researchers found that "[f]ocusing solely on execution prices, we find that the cost of liquidity on exchanges utilizing the PFOF model is 80 bps higher than on exchanges utilizing maker-taker pricing. Nevertheless, when taker fees are incorporated into the analysis, the cost of liquidity on the PFOF exchanges is 74 bps lower." (emphasis added)).

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also can improve execution quality. Notably, the Commission acknowledges that PFOF is a cost to the wholesaler, but "is not a cost to investors."[66]

Fourth, although the SEC repeatedly claims that its Proposals "may" have certain effects, the SEC fails to substantiate those predictions "beyond mere speculation."[67] The SEC's claimed "benefits" are unknown. The costs of the Proposals are also wholly unknown to the SEC by its own admission. And where the SEC has recognized costs, its assessment does not fully or accurately factor in all costs. For example, one impact of the Proposals will likely be to eliminate certain widespread, well-functioning market arrangements, such as PFOF, entirely. The SEC's economic analysis, however, does not sufficiently acknowledge, let alone account for the impacts of, such changes.[68] If the SEC wants to eliminate PFOF or other order execution practices that are called into question by the Proposals, like off-exchange execution, it must own up to it and factor those changes into its analysis.

2. The Proposals Exceed The SEC's Statutory Authority.

The Proposals fail at the outset because they exceed the SEC's statutory authority. Like other federal agencies, the SEC "'literally has no power to act … unless and until Congress confers power upon it.'"[69] Here, Congress instructed the SEC to "facilitate" the "establishment of a [NMS] for securities."[70] The Commission, under this authority, is not an "'economic czar' for the development of a national market system,"[71] nor may it "dictate the ultimate configuration of the [NMS] or, through regulatory fiat, force all

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[66] OCR Proposing Release, 88 Fed. Reg. at 206 n.520 ("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.").

[67] *Bus. Roundtable*, 647 F.3d at 1150. For example, the Commission's economic analysis in the OCR Proposing Release is replete with highly speculative language. *E.g.*, OCR Proposing Release, 88 Fed. Reg. at 178 ("While acknowledging there is substantial uncertainty in the eventual outcome, the Commission estimates that qualified auctions as designed by the Proposal would result in additional price improvement for the marketable orders of individual investors that could reduce the average transactions costs of these orders by 0.86 basis points ('bps') to 1.31 bps."); *id.* ("Given this estimate, the Commission preliminarily estimates that the Proposal could potentially result in a total average annual savings").

[68] Proposed Reg Best Ex acknowledges that many broker-dealers may choose to "de-conflict" by ceasing to pay or accept PFOF or other remuneration, but the impact of this is not fully considered by the SEC.

[69] *N.Y. Stock Exch. LLC v. SEC*, 962 F.3d 541, 553 (D.C. Cir. 2020) (quoting *La. Pub. Serv. Comm'n v. FCC*, 476 U.S. 355, 374 (1986)) (alteration in original).

[70] 15 U.S.C. § 78k-1(a)(2).

[71] S. Rep. No. 94-75, at 12 (1975).

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trading into a particular mold."[72] Congress envisioned a more limited role. As Section 11A of the Exchange Act provides, the Commission, in facilitating the establishment of an NMS, may issue certain specific rules to govern the interconnectedness of the various preexisting trading venues—for example, by regulating the "distribution" of "quotations."[73] Neither Section 11A nor any other provision has granted the SEC an unlimited license to rework almost every facet of the equity market's structure, from root to branch. Indeed, if Congress *had* granted the SEC a power of such "vast economic and political significance," it would have said so "clearly,"[74] not scattered that authority across the nearly dozen ancillary provisions the Commission cites throughout its proposals.[75] The SEC's assertion of "unfettered authority" to redraw the U.S. market structure raises serious constitutional concerns, as the Constitution "provides strict rules to ensure that Congress," not a federal agency, "exercises the legislative power."[76] The SEC's authority must be read to avoid unnecessarily triggering such serious constitutional concerns.

According to the Proposals, the SEC states that it is primarily basing its authority on Section 11A of the Exchange Act, but the Commission misapplies Section 11A. The Commission often cites as the source of its authority the general statement of policy objectives in Section 11A(a), but policy objectives do not convey rulemaking authority. The Commission must look to Section 11A(c) for specific delegations of rulemaking authority; however, as already noted, none of those specific grants authorize the market-structure remake the Commission envisions here. This is not to say that the policy objectives are *irrelevant* to the analysis; Congress explicitly constrained the Commission's rulemaking authority by requiring the Commission to exercise that authority "in accordance with [Section 11A's] findings" and "objectives,"[77] but that is just another reason why the Commission's proposals are unlawful. Specifically, Section 11A bars the Commission from taking regulatory action unless it furthers (1) fair competition among broker-dealers, exchanges, and other market centers, and (2) the economically efficient execution of securities transactions. The Proposals contravene both of these objectives. Rather than encourage competition, the Proposals would establish an anti-competitive framework for handling retail orders, picking winners and losers among execution venues, intermediaries, investors, and issuers. Also, rather than encouraging efficient securities transactions, the Proposals would create a system where retail orders could languish

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[72] Development of a National Market System, Exchange Act Release No. 15871 (Mar. 29, 1979), 44 Fed. Reg. 20,360, 20,360 (Apr. 4, 1979).

[73] 15 U.S.C. § 78k-1(c)(1)(A).

[74] *West Virginia v. EPA*, 142 S. Ct. 2587, 2605 (2022) (quoting *Utility Air Regulatory Group v. EPA*, 573 U.S. 302, 324 (2014)).

[75] *See, e.g.*, OCR Proposing Release, 88 Fed. Reg. at 242.

[76] *Jarkesy v. SEC*, 34 F.4th 446, 459 (5th Cir. 2022).

[77] 15 U.S.C. § 78k-1(a)(2).

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unexecuted in auctions, or be executed at an inferior price due to delay and quote volatility, as opposed to receiving immediate executions at or better than the best available price, like they do today. U.S. equity markets work so well for investors of all types today precisely because the SEC has (at least until now) endeavored to strike the appropriate balance between venue competition and order competition.

The Proposals also have the cumulative effect of preferencing exchanges over other venues and market participants. In particular, the Proposed OCR mandates that all broker-dealers route what the SEC considers "profitable order flow" away from off-exchange market makers to qualified auctions. Wholesalers would be prohibited from executing retail investors' orders as principal unless they comply with the limited and impractical exception in that rule—executing orders at a government-set price of the midpoint between the best bid and ask. The Tick Size Proposal's reduction of the minimum pricing increments would make this proposition all the more difficult by spreading trading interest among too many ticks and reducing the available liquidity at the midpoint. The Commission has unabashedly admitted the anticompetitive nature of its proposal: "Qualified auctions could reduce wholesaler market share for the execution of the orders of individual investors, <u>which could result in the transfer of revenue and profit from wholesalers to other market participants</u>" (specifically, exchanges).[78] This admission alone should render the proposal illegitimate.[79]

By forcing retail orders to exchange auctions where there is no liquidity backstop, the SEC's proposal would inflict significant harm on retail investors and create inefficient executions, which is further inconsistent with the Commission's mandate. Rather than recalibrating the delicate balance of power between exchanges and off-exchange venues in a targeted fashion, the SEC would stifle competition from off-exchange trading by dictating that retail order flow be sent to exchanges' qualified auctions.[80] These centralized auctions would likely be run by a small number of exchanges that would be largely unaccountable to the retail investors whose orders they handle. Off-exchange

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[78] OCR Proposing Release, 88 Fed. Reg. at 179. In addition to discriminating against broker-dealers, the SEC would discriminate against certain exchanges by putting up barriers to competition to new entrants that may want to receive retail order flow: "[t]he 1% threshold also would impose a hurdle for a new entrant that wished to register as a national securities exchange to become an open competition trading center." *See id.* at 152.

[79] *Cf.* Comm'r Luis A. Aguilar, SEC, Speech, An Insider's View of the SEC: Principles to Guide Reform (Oct. 15, 2010), https://www.sec.gov/news/speech/2010/spch101510laa.htm ("[A]nother guiding principle is that we must resist creating two-tiered markets or separate standards of protection. This means that we should not carve out areas where, it is thought, certain protections are not necessary, depending upon the investor, the intermediary, or the investment. The fact is there is only one capital market and it is highly integrated.").

[80] Instead of sending orders to exchanges, market makers could execute retail orders at the midpoint of the NBBO but doing so is not practical or economical in all instances.

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market centers would be prohibited from competing for retail investors' orders unless they complied with government price-setting terms. The SEC's *de facto* mandate to route to exchanges would reestablish exchanges as quasi-utilities that lack incentive to innovate or compete.[81]

The SEC's Proposed Reg Best Ex also tilts the market in favor of exchanges. Under this rule, nearly every order a wholesaler touches, whether it routes an order to an ATS as riskless principal or internalizes it, will be considered a "conflicted transaction" and subjected to heightened procedures, compliance costs, and evaluation. In contrast, exchanges are not subject to any best execution obligation with regard to retail investors' orders. Orders executed on exchanges will not be considered "conflicted transactions," even though the exchanges also may provide PFOF in the form of rebates and pricing tiers, which raise similar conflicts of interest concerns.

Exchanges are already competitively advantaged today, relative to off-exchange venues. For example, only exchanges can sell and set prices for proprietary data products and related technical infrastructure that broker-dealers must pay for in order to meet their regulatory obligations. The Commission's Proposed OCR would exacerbate this issue by driving all retail trading to exchanges and therefore consolidating all retail market data with the exchanges. The Tick Size Proposal would also increase the exchanges' market power with respect to market data. Combined with the MDI Rules, the Tick Size Proposal would increase the need for broker-dealers to access the exchanges' proprietary depth-of-book market data feeds. The Commission's Proposals do not consider how this monopoly over data and connectivity could affect costs for broker-dealers, but it is plausible that exchanges would exploit this advantage by raising costs. Exchanges are publicly traded companies with a responsibility to make decisions in their shareholders' best interest by increasing profits. As former Commissioner Robert Jackson noted: "[W]e at the SEC have far too often continued to treat the exchanges with the same kid gloves we applied to their not-for-profit ancestors. The result is that, even while one of our fundamental mandates is to encourage competition, the SEC has stood on the sidelines while enormous market power has become concentrated in just a few players."[82] The Commission's Proposals would only further augment exchanges' market power.

Exchanges, to be sure, face some constraints on their ability to compete with off-exchange execution venues. For example, off-exchange market centers and exchanges are generally subject to the same rule prohibiting them from accepting, ranking, or

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[81] In the past, when exchanges were largely government utilities, they were mutualized, not-for profit entities. The idea of quasi-utilities is all the more egregious in today's world where exchanges are generally for-profit, publicly traded companies.

[82] Comm'r Robert J. Jackson Jr., SEC, Speech, Unfair Exchange: The State of America's Stock Markets (Sept. 19, 2018), https://www.sec.gov/news/speech/jackson-unfair-exchange-state-americas-stock-markets.

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displaying orders in increments smaller than a penny.[83] Yet, in practice, while off-exchange venues frequently execute orders in price increments smaller than one penny, exchanges often do not because it is, in the SEC's words, "impractical."[84] It has been argued that this impracticality limits exchanges' ability to compete in terms of providing price improvement; however, this imbalance can be easily corrected through a tailored approach—including changes to existing exchange rules—without throwing the baby out with the bathwater. A tailored approach to addressing these concerns would increase competition and improve market quality by empowering exchanges to compete at the same level as off-exchange market centers rather than reducing off-exchange market centers' ability to compete by imposing unnecessary restrictions or costs. Concentrating more market power at exchanges is particularly anti-competitive because exchanges are protected from liability when there is a problem, as there was earlier this year at the NYSE. On January 24, a technical issue at the NYSE caused wild price swings in its opening auction, resulting in erroneous prices for hundreds of stocks.[85] When events like these occur, investors whose trades were executed at erroneous prices have little recourse against exchanges, which have limited liability to investors whose orders are sent there. When Nasdaq experienced "glitches" during Facebook's 2012 IPO, trading for as many as 30 million shares was affected.[86] By one estimate, Nasdaq's glitch cost investors $500 million, yet it repaid only $62 million when all was said and done.[87] While investors have little recourse against national securities exchanges, non-exchange market centers like market makers are directly accountable to retail broker-dealers because they are incentivized to compete for order flow. Therefore, when a "glitch" impacts a retail investor's order, both the off-exchange market maker and the customer's broker-dealer typically take responsibility for the glitch and make the customer whole. The SEC's anti-competitive Proposals would marginalize both broker-dealers and off-exchange venues, ultimately harming retail investors.

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[83] Some limited exceptions have been made for exchanges' Retail Liquidity Programs to permit them to accept and rank orders in subpenny increments. *Cf.* OCR Proposing Release, 88 Fed. Reg. at 144 & n.151 (citing the SRO rule change approvals for RLPs).

[84] Tick Size Proposing Release, 87 Fed. Reg. at 80,271-72.

[85] Alexander Osipovich, *NYSE Glitch Causes Erroneous Prices in Hundreds of Stocks*, Wall St. J. (Jan. 24, 2023, 7:26 PM), https://www.wsj.com/articles/dozens-of-nyse-stocks-halted-in-opening-minutes-after-wild-price-swings-11674585962.

[86] Jenny Strasburg et al., *Nasdaq's Facebook Problem*, Wall St. J. (May 21, 2012, 8:02 AM), https://www.wsj.com/articles/SB10001424052702303610504577416530447015656.

[87] Josh Constine, *NASDAQ's Glitch Cost Facebook Investors ~$500M. It Will Pay Out Just $62M. IPO Elsewhere*, TechCrunch (Mar. 25, 2013, 2:49 PM), https://techcrunch.com/2013/03/25/ip-oh-my-gosh-all-that-money-just-disappeared.

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3. The Proposals Are Arbitrary And Capricious.

Even apart from the absence of statutory authority, the SEC's Proposals are arbitrary and capricious because they are (1) unnecessary, (2) ineffective and counterproductive, and (3) afford the public no meaningful ability to comment.

First, the SEC proposes these changes without any evidence they are necessary or even supportable. In particular, Proposed OCR and Proposed Reg Best Ex are unnecessary because they are solutions in search of a problem. Retail investors have never had it better; millions of investors trade today with no commissions and no account minimums, have a wider selection of investment opportunities than ever before (for example, through products like fractional shares and access to IPOs), and manage their own finances with intuitive, easy-to-use platforms. The evidence clearly shows that commission-free trading has saved retail investors billions of dollars; that the current markets create opportunities to trade stocks that would otherwise likely be too expensive for retail investors; and that for all types of stocks, retail investors are able to buy lower and sell higher than ever before.[88] The SEC tries to rebut that data only with admissions that it does not know what impact its proposed market transformation would have, cannot predict those impacts, and has no evidence to support the cost-benefit analysis it is required to conduct. Moreover, existing rules and regulations, like existing FINRA best execution Rule 5310, as well as the extensive SEC and FINRA guidance that has developed around best execution, *already* address the topics Proposed Reg Best Ex purportedly attempts to fix. Stated another way, the SEC has not and cannot identify any market failure that cannot be addressed by the existing rule set.

Second, not only are the Proposals unnecessary, they will create harmful, counterproductive consequences, as the combined impact of the rules will introduce delay and uncertainty into retail order execution, and drive up costs for retail investors. The combined costs of the proposed rules are extensive. The Proposals will make markets less competitive, investing more expensive, and capital formation more difficult for smaller issuers. Market competition will decrease as a result of the combined impact of

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[88] *See, e.g.*, S.P. Kothari et al., *Commission Savings and Execution Quality for Retail Trades* 1 (Dec. 2, 2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3976300 ("PFOF has saved retail investors billions in unnecessary fees by allowing broker-dealers like Robinhood to eliminate trading commissions. We also find that retail investors, and especially Robinhood customers, have enjoyed substantial price improvements on trades executed off-exchange and that off-exchange retail trades generally experience better execution quality than trades of similar sizes on public exchanges."); James Angel et al., *Equity Trading in the 21st Century* 5 (USC Marshall Sch. Bus., Working Paper FBE 09-10, 2010), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1584026 (finding that virtually every measurable dimension of U.S. equity market quality has improved—generally finding that execution speeds and retail commissions have fallen; bid-ask spreads have fallen and remain low; and market depth has increased).

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the proposed best execution and order competition rules which will, among other things, impose the Commission's politicized view on what is best for retail customers, rather than allowing competitive forces to reveal, as they already have, what customers actually value—low-cost trading through retail broker-dealers that are able to offer superior services and consistent, high quality executions as a result of the current market structure.

The Proposed OCR and Proposed Reg Best Ex also threaten capital formation, especially for less actively traded securities, which tend to be the securities of smaller companies, by reducing customers' ability to have orders in those securities executed at advantageous prices, thus further draining liquidity for these companies, as described above. And the markets will be less efficient because, among other reasons: (1) many of the currently proposed rules are duplicative of or substantially overlap with existing rules; (2) the proposed auctions intentionally introduce delay and an additional layer of intermediation into the execution of retail orders; and (3) the rules threaten the role of off-exchange trading, which has contributed to huge efficiencies for retail investors in recent decades.

Finally, and as noted above, the Proposals fail to afford the public proper notice and a meaningful ability to comment. The issues reflected in the SEC's proposal are not just ones of substance, but of process. The SEC is doing too much too quickly, leaving neither the public nor the SEC itself the time needed to develop thoughtful, data-driven, and properly tailored proposed rules. The overlapping, interlocking and foundational nature of all of the changes the SEC proposes to make—coupled with the uncertainty as to which provisions will or will not make the final cut—exacerbates the problem, as no one reasonably knows what the final suite of rules will look like and how they will interact in an already interconnected and complex market structure environment. The SEC needs to return to the drawing board, work with the industry and investors on developing a more concrete, reasonable proposal, and then reopen the comment period.

D. The SEC Shouldn't Experiment With Retail Investors' Financial Futures: Rulemaking Must Be Data-Driven, Supportable, And Incremental.

Robinhood stands with retail investors and is always in favor of enhancing the markets for their benefit. We pioneered zero-commission, no-account-minimums trading, as well as other products and services that have opened the markets up to millions of new investors. We provide high quality education and training. We are committed to the democratization of finance for all, not just the wealthy. But the Proposals, as a whole and in some cases individually, would not make the market better for retail investors. The specific flaws in each rule are set forth below and in our separate letters regarding each of the other Proposals. Apart from these substantive flaws, there are process flaws, as discussed above, that make the Proposals unlawful. Rather than taking the necessary time to engage in rulemaking based on a methodical, data-driven approach, the SEC's

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rulemaking appears to be based on a political agenda, unsupported speculation and theories.

This is not surprising based on the Inspector General's report on the SEC's recent management and performance challenges. As that report observed, the aggressive agenda that has characterized *this* SEC has had a negative effect on rule proposals:

> We met with managers from the SEC's divisions of Trading and Markets, Investment Management, Corporation Finance, and Economic and Risk Analysis, some of whom raised concerns about increased risks and difficulties managing resources and other mission-related work because of the increase in the SEC's rulemaking activities. For example, some reported … difficulties hiring individuals with rulemaking experience. In the interim, managers reported relying on detailees, in some cases with little or no experience in rulemaking. Others told us that they may have not received as much feedback during the rulemaking process, either as a result of shortened timelines during the drafting process or because of shortened public comment periods. … [S]ome believed that the more aggressive agenda—particularly as it relates to high-profile rules that significantly impact external stakeholders—potentially (1) limits the time available for staff research and analysis, and (2) increases litigation risk.[89]

This is not acceptable and shouldn't be the case. The SEC historically has been data-driven and methodical. This is a basic tenet of SEC rulemaking that has been long recognized by SEC Commissioners and should not be controversial.[90] As aptly noted by Commissioner

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[89] Off. of Inspector Gen., SEC, *The Inspector General's Statement on the SEC's Management and Performance Challenges* 3 (2022), https://www.sec.gov/files/inspector-generals-statement-sec-mgmt-and-perf-challenges-october-2022.pdf (emphasis added).

[90] *See, e.g.*, Comm'r Luis A. Aguilar, SEC, Speech, Exemplifying Fundamentals—Back to Basics (Mar. 28, 2011) https://www.sec.gov/news/speech/2011/spch032811laa.htm ("A regulator must possess expertise that is informed by current, accurate data and must exercise judgment that is grounded in the mission of the institution and service to the public at large."); Chair Mary Jo White, SEC, Keynote Address: Securities Traders Association 83rd Annual Market Structure Conference, Equity Market Structure in 2016 and for the Future (Sept. 14, 2016), https://www.sec.gov/news/speech/white-equity-market-structure-2016-09-14 (touting the Commission's "deliberate, data-driven process to assess … more fundamental changes to equity market structure" because "[b]road changes to this market structure—especially those executed precipitously or without adequate data—can have serious unintended consequences for investors and issuers as their impact is fully realized, sometimes years down the road"); Comm'r Robert J. Jackson, Jr., SEC, *Statement on the Proposed Transaction Fee Pilot for NMS Stocks* (Mar. 14, 2018), https://www.sec.gov/news/statement/statement-johnson-open-meeting-nms-2018-03-14 ("More broadly, targeted pilot programs—particularly in complex areas like this one [i.e., how fees and rebates affect order routing], where intuitions are strong but evidence is scant—are and should continue to be a critical part

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Aguilar, when it comes to rulemaking and market structure, "[k]nowledge is always better than speculation."[91] The carelessness with which the SEC has proposed this massive transformation, cloaked in 1,600 pages of technical jargon, is antithetical to sound public policy. Rather than rushing to implement multiple, significant rule changes with unknown and likely severe consequences, we join commenters representing a variety of market participants in urging the SEC to take a thoughtful and incremental approach to market structure reform.[92] Anything different would be an irresponsible and unlawful experiment with retail investors' finances.

At Robinhood, we agree that the markets have evolved for the better for retail investors, thanks to greater competition among market centers and trading venues that have flourished since Congress and the SEC eliminated the exchange oligopoly 50 years ago. This elimination has allowed market makers and other trading venues to compete against exchanges to provide the best executions for retail investors. Notwithstanding these gains, we agree there are certain improvements that can be made to further benefit retail investors and allow exchanges to better compete with off-exchange execution venues. Accordingly, we support the following, data-driven approach to enhancing market structure:

- First, fully implement the MDI Rules.

- Second, enhance the current order execution disclosures required by SEC Rules 605 and 606. Our comment letter regarding Proposed Rule 605 identifies specific changes the SEC should make to its proposed rule.

- Third, repropose the Tick Size Proposal with a minimum pricing increment of \$0.005 for tick-constrained stocks, and adopt exchange access fee caps that are proportional to the minimum pricing increments based upon existing access fee caps, as outlined herein.

These are improvements that can and should be made through a methodical, study-backed and data-driven approach. Unfortunately, the changes that the SEC has proposed

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of our rulemaking effort. They allow us to generate valuable data to determine whether and how rulemakings might benefit investors—and to carefully tailor them to investors' needs.").

[91] Comm'r Luis A. Aguilar, SEC, *U.S. Equity Market Structure: Making Our Markets Work Better for Investors* (May 11, 2015), https://www.sec.gov/news/statement/us-equity-market-structure.

[92] *E.g.*, Letter from Hope M. Jarkowski, General Counsel, NYSE, to Vanessa Countryman, Sec'y, SEC (Mar. 13, 2023), https://www.sec.gov/comments/s7-31-22/s73122-20159561-327567.pdf; Letter from David Howson, Executive Vice President & Global President, Cboe Global Markets, et al., to Vanessa Countryman, Sec'y, SEC (Mar. 24, 2023), https://www.sec.gov/comments/s7-32-22/s73222-20161714-330556.pdf.

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are neither methodical nor driven by study or data, resulting in serious flaws. Rather, the SEC's sweeping Proposals, based on speculation and theory rather than data and analysis, will harm investors and the markets by introducing an unprecedented level of instability and uncertainty into the world's largest, most stable, and most accessible markets. As former Commissioner Aguilar aptly stated, "new regulatory regimes and rules promulgated by the SEC must have real and verifiable investor protections."[93] These Proposals do not come close to that standard.

II. THE TICK SIZE PROPOSAL WOULD HARM RETAIL INVESTORS AND LACKS ADEQUATE ECONOMIC ANALYSIS

Robinhood supports regulatory and industry efforts that make our market structure work better for retail investors. But we are concerned that the Tick Size Proposal—which will lead to significant changes in how thousands of stocks are quoted and traded—will not have this effect, and, in fact, likely will make markets worse for investors by creating greater price volatility, flickering and inaccessible bids and offers, less liquidity, fewer opportunities for price improvement, and higher trading costs. The Tick Size Proposal also has the potential to create operational challenges for market participants and to confuse retail investors by unnecessarily complicating how stock trading works. Adding to this concern, the SEC has failed to conduct an adequate economic analysis of the Tick Size Proposal. The SEC also has failed altogether to assess the combined effect of implementing the Tick Size Proposal alongside the Commission's other proposed market structure rule changes, which would radically transform U.S. equity market structure for the worse, potentially breaking it in the process.

We discuss below: (A) why the Tick Size Proposal, as currently drafted, could make markets worse for retail investors; (B) why the SEC has failed to conduct an adequate economic analysis; and (C) why the SEC should follow an alternative and incremental approach in making tick size changes based on actual data, rather than forcing untested, unsupported, and speculative changes on the market.

A. The Tick Size Proposal Would Harm Retail Investors.

We are concerned that, as designed, the Tick Size Proposal would make markets worse for retail investors, stripping them of many benefits they enjoy today and introducing additional costs and complexity. The Tick Size Proposal is likely to create operational challenges for broker-dealers and other market participants and to confuse investors by unnecessarily complicating how the markets work. To this end, the Tick Size Proposal

[93] Comm'r Luis A. Aguilar, SEC, Speech, An Insider's View of the SEC: Principles to Guide Reform (Oct. 15, 2010), https://www.sec.gov/news/speech/2010/spch101510laa.htm.

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seeks to make <u>three</u> significant changes to market structure, simultaneously, through rule changes to Regulation NMS:

1. The Tick Size Proposal would change "tick sizes"—the minimum pricing increments at which NMS stocks are quoted—to variable increments ranging from $0.01 to as small as $0.001, depending on the stock's time-weighted average quoted spread during a specified one-month evaluation period. Stocks would be reevaluated quarterly to assign a new tick size. Currently, Rule 612 under Regulation NMS restricts most stocks to quoting in pricing increments no smaller than $0.01 on exchanges. In some cases, those stocks can be traded on exchanges at smaller increments through exchanges' retail liquidity programs ("RLPs") or off exchange in the OTC market because executing trades is not subject to the $0.01 minimum limitation. The Tick Size Proposal also would apply Rule 612's minimum pricing increments to trading as well as quoting, generally prohibiting trading at prices using increments smaller than the available quoted increments, with some exceptions, and prohibiting price improvement in increments smaller than $0.001 that wholesalers can sometimes provide today. This means that retail investors would be deprived of price improvement opportunities because the SEC would prevent broker-dealers from pricing and executing their sell (or buy) orders at a price that is higher (or lower) than the SEC's fixed priced increment.

2. The proposal would adjust the existing cap on fees to access displayed quotations on exchanges. Current Rule 610 of Regulation NMS prohibits exchanges from charging fees in excess of 30 mils per share (i.e., $0.003 per share) to access and trade against protected quotations. The Tick Size Proposal would reduce the access fee caps for trading on exchanges from 30 mils per share for most stocks to a variable amount of either 10 mils or 5 mils per share (i.e., $0.001 or $0.0005 per share, respectively) depending on the stock's variable minimum tick size, as determined by the SEC's mandated tick sizes. The Tick Size Proposal also would require exchanges to make the amounts of all fees and rebates determinable at the time an order is executed. Today, exchanges calculate fees and rebates at the end of the calendar month based upon a member's aggregate volume, which makes it difficult to assess the full cost of a transaction at the time of execution.

3. The Tick Size Proposal would accelerate select provisions of the MDI Rules, departing from the Commission's adopted implementation timeline. The SEC adopted the MDI Rules in 2020 to modernize market data infrastructure, expand the content of market data available to market participants, and foster competition in the provision of market data, but the SEC has yet to implement these rules. In particular, the Tick Size Proposal would accelerate implementation of certain provisions of the MDI Rules that would create four different definitions of "round lot," would generate new market data on odd lots (orders smaller than

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a round lot), and would require the inclusion of odd lot market information in NMS "core data," including data identifying the best available odd-lot orders. The Tick Size Proposal would not, however, implement key aspects of the MDI Rules critical to their efficacy, such as provisions (1) requiring dissemination of depth of book data (i.e., limit orders at prices outside of the bid and offer) and auction information, and (2) allowing new entrants to disseminate consolidated stock market data, which would enhance competition and reduce costs. Today, depth of book data is not included in core data. At the same time, this market information has become increasingly important and will become even more important to investors if the Tick Size Proposal is adopted. This information is available only on individual exchanges' proprietary data feeds; interested market participants must purchase these feeds from exchanges at a premium. Under SEC regulation, exchanges have a monopoly on this market data.[94] The introduction of competing consolidators, as contemplated by the MDI Rules, would break the exchange monopoly on market data dissemination, which in turn, would increase availability and reduce costs for all market participants, including investors.

There are numerous flaws with the Tick Size Proposal that will harm retail investors and the U.S. markets. First, the proposed changes to tick size could harm investors and U.S. markets by causing an exponential increase in "flickering quotations," in which a stock quote rapidly switches back and forth between prices. Stocks that do not have sufficient liquidity at the best displayed bid and offer may experience flickering quotations because the available shares at those prices will be exhausted more quickly, causing the bid and offer to change more frequently. Narrowing tick sizes to subpenny increments exacerbates this problem by creating substantially more price points across which larger orders will be distributed. This will reduce the quantity of shares available at any given price, reduce the duration of the best bids and offers, and, therefore, reduce the probability that investor orders will be executed at the price(s) that they observe. In particular, narrowing the minimum tick size by a multiple of ten will decrease the available shares at the best displayed bid and offer by a correlated amount.[95] Additionally, studies

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[94] *See* Comm'r Robert J. Jackson, Jr., SEC, *Statement on Reforming Stock Exchange Governance* (Jan. 8, 2020) https://www.sec.gov/news/public-statement/statement-jackson-open-meeting-2020-01-08 ("America's stock markets are riven by a fundamental conflict of interest: exchanges both operate public data feeds and profit from selling superior private ones." "[E]xchanges have no economic reason to produce robust public data on stock prices …."); *see also* Final Rule, Market Data Infrastructure, 86 Fed. Reg. 18,596, 18,603 (Apr. 9, 2021) ("The Commission believes the fostering of a competitive environment and enabling the introduction of new market forces into the collection, consolidation, and dissemination process through a decentralized consolidation model will help to deliver consolidated market data to market participants in a more timely, efficient, and cost-effective manner than the current centralized consolidation model.").

[95] *See, e.g.*, *Assessment of the Plan to Implement a Tick Size Pilot Program* (July 3, 2018) (last revised Aug. 2, 2018), https://www.sec.gov/files/TICK%20PILOT%20ASSESSMENT%20FINAL

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have found that order cancellation rates increase with narrower tick sizes.[96] Flickering quotations also complicate broker-dealer routing decisions and hinder their ability to get the best prices for investors because they may obfuscate which market has the best available prices. As a result, the Tick Size Proposal has the potential to disrupt markets, causing retail investors to lose trust in the system and prompting many to stop participating altogether.

The proposed changes to tick size also are one-sided, solely focusing on reducing tick sizes. There is evidence that certain higher priced stocks could achieve better prices and tighter spreads with wider ticks, yet the Tick Size Proposal provides only for increasingly smaller tick sizes.[97] The Commission does not adequately grapple with the opposite end of the spectrum, where stocks with wider spreads may benefit from pricing increments greater than $0.01. This category of stocks includes many names popular with retail investors, like Google, Amazon, and Tesla. A tick-widening framework for such securities

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%20Aug%202.pdf at 11-14 (showing that the wider tick sizes for the test groups resulted in more size displayed at the inside, as well as at other price points, than for the control group, we can infer that the opposite would be true for smaller tick sizes); SEC Staff, *Report to Congress on Decimalization* (July 2012) (hereinafter SEC Staff, *Report to Congress*), https://www.sec.gov/files/decimalization-072012.pdf at 8 ("Numerous studies have found that, on average, both quoted and effective spreads declined with the advent of decimalization (e.g., Chakravarty, Harris, and Wood (2001); Bacidore, Battalio, and Jennings (2003); Bessembinder (2003))"); Yashar H. Barardehi et al., *Tick Sizes and Market Quality: Revisiting the Tick Size Pilot* (Nov. 28, 2022) (hereinafter Barardehi et al., *Tick Sizes and Market Quality*), https://www.sec.gov/files/dera_wp_ticksize-pilot-revisit.pdf at 3 ("Consistent with prior studies we find that a wider tick size is associated with increased depth at the NBBO.").

[96] *See, e.g., supra* note 95, Barardehi et al., *Tick Sizes and Market Quality* at 1 ("For stocks with very wide spreads [$0.15 or more], a larger tick size [$0.05] could improve market quality by mitigating undercutting and complexity concerns. Indeed this pattern is exactly what we observe."); Maureen O'Hara et al., *Relative Tick Size and the Trading Environment* (Oct. 2015), https://www.cicfconf.org/sites/default/files/paper_138.pdf at 3 (finding that "with a larger relative tick size … that HFT market makers' strategies are more aggressive: they leave limit orders in the book longer and they increase their undercutting of resting limit orders in the book, thereby improving prices. This results in liquidity being less 'fleeting' than it is for smaller relative tick stocks."); Jeffrey Bacidore et al., *Order Submission Strategies, Liquidity Supply, and Trading in Pennies on the New York Stock Exchange*, 6 J. FIN. MARKETS 337 (2003) (finding an increase in the limit order cancellation rate after decimalization was implemented).

[97] *See, e.g.,* Nasdaq, *Intelligent Ticks, A Blueprint for a Better Tomorrow*, https://www.nasdaq.com/docs/2019/12/16/Intelligent-Ticks.pdf ("Nasdaq Proposal") (finding that high-priced stocks that trade with wider spreads "increase[ ] investor costs, usage of odd-lots, flickering quotations, non-displayed trading that doesn't support price discovery, and price instability" and that "outbidding becomes so inexpensive that time priority becomes essentially non-existent" and "[destroys] the reward and incentive to post passive liquidity and diminishing price discovery").

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is featured in several industry proposals, which suggest that such an approach would help to optimize the tick size for higher priced stocks with wider spreads.[98] This, in turn, would narrow bid-ask spreads for these issues, putting more money in the pockets of asset owners, who primarily consume liquidity when buying and selling stocks. We are concerned that failure to consider larger increments for certain higher priced stocks could produce worse outcomes for investors by harming market and execution quality for those stocks. The Commission also would introduce a "too many ticks" problem for many stocks by proposing a number of intra-spread ticks (approximately 3-8 ticks) that conflicts with a large body of industry and academic study regarding the optimal number of ticks (approximately 1.5-4 ticks) without strong empirical support.[99] For similar reasons, the Commission's view of which stocks are "tick constrained" and would benefit from smaller pricing increments is inconsistent with several alternative approaches formulated by experts.[100] Accordingly, we would expect that any changes to tick size should reflect data-driven consideration of wider ticks for higher priced stocks and reevaluation of the optimal number of ticks to determine which stocks are presently tick constrained.

Second, the Tick Size Proposal would harm investors and U.S. markets by resulting in fewer opportunities for price improvement at economically significant increments. In particular, the harmonization of quoting and trading increments would leave retail investors with fewer price increments at which market participants are willing to interact with their order flow and provide price improvement. Stated differently, by reducing liquidity providers' flexibility to execute investors' orders at prices that are better than their quotes, the Tick Size Proposal would deprive investors of additional price improvement opportunities. We do not believe that the Commission has established a sufficient basis for standardization of the permissible quoting and trading increments and question whether the Commission exceeds its statutory authority in seeking to limit permissible trading increments. There are strong reasons why these increments should not be the same and why the trading increment should be lower than the quoting

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[98] *See, e.g.*, Nasdaq Proposal; Cboe, *Cboe Proposes Tick-Reduction Framework to Ensure Market Structure Benefits All Investors* (Sept. 22, 2022), https://www.cboe.com/insights/posts/cboe-proposes-tick-reduction-framework-to-ensure-market-structure-benefits-all-investors/ ("Cboe Proposal").

[99] Indeed, the SEC states its belief that "empirical guidance … is not clear as to which regime produces better market quality outcomes" yet many industry participants and academics that have studied similar data do not favor the SEC's approach. Tick Size Proposing Release, 87 Fed. Reg. at 80,317. *See* Phil Mackintosh, *Research on What Ticks Make Spreads Trade Best*, Nasdaq (Mar. 2, 2023), https://www.nasdaq.com/articles/the-tick-spreads-that-help-stocks-trade-best.

[100] The SEC purports that "In the first 5 months of 2022 approximately 56% of share volume transacted in NMS stocks was considered to be tick-constrained while an additional 16% traded in stocks that was considered to be near-tick-constrained." Tick Size Proposing Release, 87 Fed. Reg. at 80,305.

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increment. In many cases, harmonization of quoting and trading could result in worse execution prices for investors as well as decreased liquidity where market participants refuse to execute at or improve upon the midpoint at available trading increments, particularly when combined with the Proposed OCR that would mandate many retail orders go to auction unless they are executed at the midpoint or better. (We discuss an example of how this concern would materialize in Section C.3 below.).

Third, the Tick Size Proposal could lead to higher transaction costs for investors. As stated above, the Tick Size Proposal will reduce the number of shares (or available liquidity) at the best displayed bid and offer. Narrowing tick sizes also dramatically reduces the cost and increases the prevalence of "pennying" or "subpennying" (i.e., "stepping ahead" of exposed trading interest by what was then seen as "an economically insignificant amount"),[101] which the Commission acknowledges "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."[102] Such smaller tick sizes would also result in a combination of smaller trades and more trades in executing individual orders. This can be expected to result in significantly greater message traffic and additional bandwidth requirements for both data and market access for broker-dealers, which will entail additional infrastructure costs. Additionally, the access fee caps would represent a relative cost increase for investors in the smallest proposed tick sizes, in some cases, contributing to the very tick constraints that the Commission seeks to resolve with the Tick Size Proposal. This means it will cost investors more to trade certain stocks on an exchange and investors may receive worse execution quality as a result of the consequences of higher relative fees and rebates.

Finally, the Tick Size Proposal would be operationally difficult for market participants to implement and could confuse investors, particularly among the many other changes proposed by the Commission. The Tick Size Proposal is unduly complex and, in any event, is more complex than alternative proposals supported by industry experts, particularly when paired with the Commission's other market structure proposals.[103] The Tick Size Proposal includes five different pricing increments with three different potential fees that would be recalculated quarterly and changed overnight. The proposed implementation period provides little time to adjust to these drastic changes, giving only five quarters after which the rules would be fully implemented without any sort of ongoing review to

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[101] Adopting Release, Regulation NMS, 70 Fed. Reg. 37,496, 37,553 (June 29, 2005).

[102] Tick Size Proposing Release at 80,317.

[103] *See, e.g.*, Cboe Proposal; Nasdaq Proposal; Adrian Griffiths, *The Tick Size Debate, Revisited*, MEMX (Jan. 2022), https://memx.com/wp-content/uploads/MEMX_MSR_Tick-Constrained-Securities-2_03b.pdf ("MEMX Proposal"); Citadel Securities, *Enhancing Competition, Transparency and Resiliency in U.S. Financial Markets*, (May 2021) https://fe7a500fc6adae9c30fb.b-cdn.net/wp-content/uploads/2021/05/EnhancingCompetitionTransparencyandResiliencyinUSFinancialMarkets.pdf ("Citadel Proposal").

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assess their impact on the market or how market participants are faring in meeting the Tick Size Proposal's requirements. The Tick Size Proposal also would selectively accelerate the implementation of certain of the MDI Rules that would complicate things further, as market participants adjust to the new round lot and odd lot conventions. Market participants will struggle to keep up with the pace of change. For these same reasons, we are concerned that the Tick Size Proposal would be confusing to retail investors. Investors may question why the prices they received for a stock may have changed overnight and why they are not receiving the same or similar execution quality that they received on orders executed the day before.

It should go without saying that equity market structure is complex. The systems that make up market structure are deeply interrelated and sensitive to change. As a result, there is significant potential for unintended collateral consequences when making modifications to how the markets operate, especially at this level of granularity. The SEC's Tick Size Proposal would compound the complexity already present in market structure and would risk introducing negative externalities and operational risk where the proposed changes do not reconcile with today's market dynamics. These changes risk damaging our markets and harming retail investors.

B. The SEC Has Failed To Conduct An Adequate Economic Analysis.

Each of the three rule changes to Regulation NMS represents a significant change in the way that stocks are quoted and traded. Robinhood agrees that there are ways that U.S. market structure can and should be enhanced; however, the Tick Size Proposal goes too far and would not achieve the SEC's statutory objective of "efficient, competitive, fair and orderly markets."[104] To this end, there are less disruptive and drastic changes the SEC could propose that would achieve benefits without the potentially significant negative consequences associated with the Tick Size Proposal. For example, the Tick Size Proposal would make the potential minimum tick size 10 times smaller than it is today—this is a significant change that would impact quoting and trading activity. Without clear empirical support, the Commission has not established an adequate basis for such a change. Although the Commission would implement the changes to tick size over five quarters, there is no opportunity provided to analyze market quality and investor experience at each step and assess how the phased-in changes have impacted the market before moving on with the next implementation phase. A well-designed tick size implementation plan should present opportunities to assess the changes that are being made to determine whether those changes, or any further changes, are appropriate.

Adding to this concern, the SEC has failed to conduct an adequate economic analysis of the Tick Size Proposal or the combined effect of implementing each of the pending market structure rule proposals at the same time. The Commission's economic analysis is largely

[104] 15 U.S.C. § 78k-1.

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based on speculation rather than comprehensive data or facts. The Commission acknowledges in its economic analysis that:

> [B]ecause the Commission does not have, and in certain cases does not believe it can reasonably obtain, data that may inform the Commission on certain economic effects, the Commission is unable to quantify certain economic effects. Further, even in cases where the Commission has data, it is not practicable to quantify certain economic effects due to the number and type of assumptions necessary, which render any such quantification unreliable.[105]

The Commission is left to assume how the Tick Size Proposal will play out without the benefit of data to test its hypotheses and support its conclusions. At numerous points in the Tick Size Proposing Release, the SEC admits that the potential consequences of the Tick Size Proposal are, in many respects, uncertain, and the SEC assumes, rather than verifies, that positive results will be achieved by its proposed changes.[106] While obtaining certainty of a positive outcome may not be possible in many cases, the Commission can and needs to do more to ensure that changes to the markets are made incrementally and responsibly.

In addition to largely being based on piecemeal data or a lack of any data at all, the Commission's economic analysis falls short because it fails to adequately consider the effects of the Tick Size Proposal on message traffic or price discovery. The Commission acknowledges some increased costs but declines to estimate the impact on message traffic or the associated costs in connection with the proposed changes to tick size, despite finding that the acceleration of the odd lot provisions of the MDI Rules alone were projected to "result in a 35% increase in the amount of quotation traffic sent to the SIPs each day, as well as a 35% increase in the quotation messages generated during peak periods."[107] The potential costs that this increased message traffic would have is only exacerbated by the lack of competing consolidators to introduce competition to the market for disseminated market data—a measure that the Commission concludes "could

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[105] Tick Size Proposing Release, 87 Fed. Reg. at 80,303.

[106] *See, e.g.*, *id.* (disclaiming the economic analysis en masse for lack of sufficient data or inability to quantify the economic effects of the Proposal); *id.* at 80,280 (the SEC is unable to estimate how many stocks would fall within the $0.001 tick size tier); *id.* at 80,336 (the SEC cannot predict the type of innovation that exchanges and alternative trading systems may design to attract retail order flow, assuming that a "more level playing field" increases the likelihood that such innovation could occur).

[107] *Id.* at 80,334 n.628, 80,301 n.413; *see also* Final Rule, Market Data Infrastructure, 86 Fed. Reg. at Section V (discussing how increases in message traffic can lead to increased costs for market participants paying for SIP and exchange connectivity and proprietary data products).

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reduce the expected benefits of the MDI Rules."[108] The Commission further concludes without support that the proposed changes to tick size "would promote price discovery and price competition" despite potentially contraindicative findings relating to tick sizes that are too narrow.[109]

The SEC also fails to consider the impact of other adopted and proposed rule changes impacting market structure. For example, the Commission's analysis of the Tick Size Proposal does not consider the potential benefits of implementing Rule 605 amendments or the full MDI Rules on bid and offer spreads and execution quality. The Commission has lauded the MDI Rules' potential to "increase transparency," achieve "better order execution," "lower costs," and "lead to better investment decisions and increased market efficiency," but has not allowed itself and the marketplace the opportunity to experience or assess the impact of those rules.[110] Without implementing the MDI Rules in full, the Commission's cost-benefit analysis for the other two parts of the Tick Size Proposal and its other market structure proposals is undermined. The Commission cannot observe the effects of an unimplemented rule, some of which are intended to achieve the very same objectives of the Commission's current proposals. Implementation of the MDI Rules would therefore likely mute any potential benefits of or weaken the case for the additional costs associated with the Tick Size Proposal or the Commission's other pending market structure proposals. The Commission already has expressed concerns that it cannot quantify the impact of this Tick Size Proposal and its other proposed rulemakings. Data provided under the MDI Rules and an amended Rule 605, as discussed in our other comment letters, could help the Commission conduct a more meaningful analysis. At minimum, the Commission is obligated to consider the fully implemented MDI Rules as part of the "baseline" against which the asserted need for this new rule, and its impact, are assessed. Anything less is legal error.[111]

And, notably, the Tick Size Proposal does not consider the overall impact of the Proposed OCR. For example, the Commission states that "the Commission does not expect the

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[108] Tick Size Proposing Release, 87 Fed. Reg. at 80,330.

[109] *Id.* at 80,279; *but see, e.g.*, 80,276 (referencing the Nasdaq Proposal, which found that "a tick size that is too small can result in increased volatility and less price competition which impairs price discovery").

[110] *Id.* at 80,331. The Commission's claim that this postponement is due to "implementation delays" is disingenuous insofar as the delay is a result of the Commission's failure to proceed with the approved order changing NMS Plan Governance, which would have resolved any such delay. *See* Order Directing the Exchanges and the Financial Industry Regulatory Authority to Submit a New National Market System Plan Regarding Consolidated Equity Market Data, 85 Fed. Reg. 28,702 (May 13, 2020); *see also* Joint Industry Plan; Order Approving, as Modified, a National Market System Plan Regarding Consolidated Equity Market Data, 86 Fed. Reg. 44,142 (Aug. 11, 2021).

[111] *See Am. Equity Inv. Life Ins. Co. v. SEC*, 613 F.3d 166, 178 (D.C. Cir. 2010).

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proposal to lead to a significant reduction in retail orders routed to wholesalers." [112] At the same time, in the proposing release for the Proposed OCR, the SEC admits that its proposal would reduce wholesalers' profits, which could result in a potential reduction in the number of wholesalers and would likely change the nature of the economic relationship between wholesalers and retail brokers, as well as the width and breadth of prices wholesalers would quote in public markets.[113] These statements are incongruous if the Commission intends to adopt its full market structure rulemaking package. The Commission cannot selectively rely upon or ignore the impact of one of its proposals when making judgments about another. Instead, it must consider the overall impact of all its proposals, including how they might interact. Otherwise, investors could find themselves with worse execution quality and increased costs.

Finally, many aspects of the Tick Size Proposal lack sufficient justification for a departure from existing market practice or the many reasonable alternatives suggested by the SEC or other industry members. For example, the Commission acknowledges that several market participants suggested that tick sizes decrease to only $0.005 increments[114]; however, the Tick Size Proposal would create tick sizes that go well beyond those proposed by an array of industry experts—not only to $0.005 but also $0.002 and $0.001. The impact of these drastic changes is uncertain; and although the Commission speculates about their potential effects, it does not provide adequate support for these tick sizes. As we have noted, these proposed changes to tick size are not the result of extensive public engagement, roundtables, or a pilot program; instead, they reflect a Commission that has taken it upon itself to largely ignore public discourse, expert reports, and its own economists,[115] and instead to rely on its own judgment, however uninformed. To make matters worse, the Commission concedes that it cannot even estimate the number of stocks that would fall within the $0.001 tier, and therefore does not understand the extent to which these changes will impact the stock market.[116]

C. The SEC Should Reconsider The Tick Size Proposal.

The Commission has proposed an aggressive, radical rulemaking agenda that exceeds the Commission's legal authority and lacks careful, data-driven analysis. Lack of authority aside, the Commission also is rushing to implement multiple, significant rule changes simultaneously with unknown and potentially severe negative consequences. The Commission should take a different approach. It should pursue a methodical, incremental approach that is backed by study and actual data if it is to make the markets work better

[112] Tick Size Proposing Release, 87 Fed. Reg. at 80,338.

[113] OCR Proposing Release, 88 Fed. Reg. at 217-218.

[114] *See, e.g.*, Nasdaq Proposal; Cboe Proposal; MEMX Proposal; Citadel Proposal.

[115] *See supra* note 95, Barardehi et al., *Tick Sizes and Market Quality*.

[116] *See* Tick Size Proposing Release, 87 Fed. Reg. at 80,280.

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for retail investors. Anything different would be irresponsible and significantly break from well-established precedent. There is no crisis identified that warrants such aggressive speculation and experimentation where the financial health of everyday investors is at stake. When acting responsibly, the SEC has tools at its disposal to test its hypotheses before implementing them. For the sake of our customers and retail investors nationwide, we urge the Commission to consider these alternatives before adopting wholesale changes that would upend today's markets.

With the objective of making the markets fairer and more transparent for retail investors, Robinhood would support changes to the current market structure that are based on actual data and analysis *and* where this data and analysis shows the proposed changes will, in fact, benefit retail investors. More specifically, Robinhood would support the following more incremental, but still substantial, approach:

- First, fully implement amendments to Rule 605 and the MDI Rules, as adopted, according to the Commission's clear implementation timeline;
- Second, repropose reasonable and incremental changes to minimum pricing increments. We believe a thoughtful approach would be to: (a) reduce the minimum pricing increments to $0.005 for tick-constrained stocks that would more clearly benefit from narrower tick sizes; (b) allow for a six-to-12-month period to study the effects of these changes on market quality; and, then (c) if warranted after further analysis, consider additional reductions to the minimum pricing increments as well as larger minimum pricing increments for less liquid stocks with naturally wider spreads, providing a mechanism to roll back any changes that, after analysis, decrease market quality; and
- Third, adopt exchange access fee caps that are proportional to the minimum pricing increments based upon existing access fee caps (30% of the tick size).

An incremental, data-driven approach is the responsible way to regulate in an environment where any change could have widespread and uncertain consequences and the requisite data is unavailable. The SEC should seek to undertake a deliberate process that provides it with ample time and data to review and to establish support for its more aggressive proposed changes, and mitigates the risk of getting something wrong for the sake of getting things done. If it appears that these initial measures have not achieved the promise of efficient, competitive, fair, and orderly markets after fully studying their impact on quotation activity and order execution quality, only then would it be appropriate for the SEC to consider additional changes.

1. *The SEC Should Fully Implement The MDI Rules Before Making Any More Significant Changes To Market Structure.*

The MDI Rules offer numerous benefits that would help investors navigate today's stock market, balance the competitive landscape between exchanges and other market

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participants, and aid the Commission in achieving its goal of attaining efficient, competitive, fair and orderly markets. As the Commission has identified, the character of the stock market has changed since Regulation NMS was adopted. Quoted spreads across stocks are narrower today than ever, resulting in less publicly available market data due to the absence of depth at the inside of the NBBO and lack of depth of book data in NMS core data. And, since the consolidated tape began reporting odd-lot trades in 2013[117], odd-lot trades have grown to encompass more than half of the stock market's average daily share volume and make up a significant portion of trading in higher priced stocks.[118] This means that existing public market data feeds do not disseminate information about orders that at times make up more than half of the stock market, and market participants may no longer possess all the information they need to make informed decisions.

Odd-lot order information can provide investors with useful data points regarding what orders are available in the market with which the investors' orders can interact so that the investors can better understand what order terms to submit and measure the amount of price improvement they receive on their orders. In adopting the MDI Rules, the Commission observed, and industry commenters agreed, that: "Information on odd-lot quotes can help with the optimal placement and routing of orders across markets. Odd-lot quotation data can help market participants improve trading strategies and lower execution costs by allowing them to take advantage of odd-lot quotes that are available at prices better than the NBBO, possibly on a different exchange than where the NBBO is located. Odd-lot quotation data can also help market participants place limit orders at prices at or inside the NBBO."[119]

The new definition of "round lot" similarly will bring new and additional data about orders of less than 100 shares into NMS core data and Rule 605 reports by introducing multiple tiers ranging from 1 to 100 shares for what constitutes a round lot (now, generally 100 shares) and will increase the scope of protected quotations for purposes of the order protection rule's requirements to seek to prevent trade-throughs because, unlike odd lots, each round lot order is a protected bid or offer. Among other things, the Commission

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[117] *See, e.g.*, Herbert Lash, *Odd-Lot Trades Add 3 Percent Volume to Consolidated Tape*, REUTERS (Dec. 10, 2013), https://www.reuters.com/article/us-exchanges-oddlots/odd-lot-trades-add-3-percent-volume-to-consolidated-tape-idUKBRE9B916Z20131210.

[118] *See* Tick Size Proposing Release, 87 Fed. Reg. at 80,296 n.365 (highlighting that per the SEC's MIDAS analytics tool, "the daily exchange odd-lot rate (i.e., the number of exchange odd-lot trades as a proportion of the number of all exchange trades) for all corporate stocks ranged from approximately 52% to 64% of trades and the daily exchange odd-lot rate for all ETPs ranged from 33% to 46% of trades in 2021. More recently, in June 2022, the daily exchange odd-lot rate for all corporate stocks averaged 65% and reached almost 41% for all ETPs in the same period.").

[119] Final Rule, Market Data Infrastructure, 86 Fed. Reg. at 18,730.

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identified that the introduction of new round lots would result in greater transparency, tighter spreads, and better priced executions for investors.[120]

Odd-lot information and new round lots, however, are only one small piece of the puzzle. As clearly conveyed in the adopting release for the MDI Rules, market participants today also need access to depth of book and auction information, which is currently only available from costly proprietary data products exclusively offered by exchanges. Displayed size at the inside market (i.e., at or within the NBBO) is substantially reduced with smaller trading increments. With smaller trading increments, investors will see a narrower NBBO spread, but they will have access to less order information overall without depth of book data. With less size at the inside market, there is a less complete view of market imbalances and a material reduction of the value of core data, which currently only include information about the "top of book" (i.e., the highest bid and lowest offer available). This dynamic has been recognized by the Commission for years post decimalization and is referenced in the adopting release for the MDI Rules as part of why depth of book data, which would provide information about quotation sizes at each of the next five prices above and below the NBBO, was necessary.[121] In addition, depending upon what approach to minimum pricing increments is adopted, including depth of book data at only five levels in core data may no longer be enough and certainly will not cover the order interest expected for five levels at a subpenny pricing increment. Effectively, this will reduce the amount and utility of market information in core data provided to investors.

In addition to depth of book data, auction information, which was also included in the approved MDI Rules, also is extremely important to investors. As the Commission stated:

> [T]he Commission believes that auction information should be included in core data to promote more informed and effective participation in auctions by market participants and to potentially broaden the range of market participants who participate in auctions, enhancing auction liquidity and price discovery. Specifically, the Commission believes that auction information, such as order imbalances and indicative prices, helps market participants determine whether to participate in auctions, how to trade leading up to an auction, and how to best place their trading interest into an

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[120] *Id.* at 18,742-47.

[121] *See, e.g.*, *id.* at 18,606 ("[I]n 2001, decimalization reduced the increment of trading from fractions to pennies and resulted in a reduction in the size of liquidity at the best prices, commonly referred to as the 'top of book.' The reduction in displayed order interest at the best bid or offer means liquidity is layered across multiple price levels, which makes depth of book information necessary for many market participants and trading systems to trade in an informed and effective manner.").

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> auction. Finally, the Commission agrees that recent market wide circuit breaker halts, which occurred after the Commission's issuance of the Proposing Release, further underscore the need for auction information to be included in core data so that information related to the reopening auctions that occur after such halts is broadly disseminated to market participants, promoting more informed participation in these auctions.[122]

Robinhood views the full implementation of the MDI Rules as a necessary first step for any significant changes to market structure. Those Rules' requirements, whether fully implemented or not, are also an indispensable component of the "baseline" against which this proposal must be measured and justified. Therefore, the Commission should implement and assess the impact of approved rules already on its books before moving on to the next "solution" and imposing additional costs on investors. Also, by accelerating only certain parts of the MDI Rules and abandoning the MDI Rules' well-reasoned implementation timeline, the Commission is flouting its prior economic and cost-benefit analysis. There were good reasons for the multi-phase implementation period that was approved by the Commission, including "to avoid unnecessary stress on the functioning of the market, and to avoid unnecessary and duplicative programming and development by the existing exclusive SIPs, SROs, and other market participants."[123] The Commission also noted the phased approach "establishes finite time limits for the steps in the transition process based on discrete periods of time from key implementation milestones, which addresses comments regarding the uncertainty around the details of the proposed transition period."[124] Acceleration of the MDI Rules, particularly only select parts of the MDI Rules, runs contrary to the Commission's own reasoning for the phased implementation period and its statutory duty under the Administrative Procedure Act.[125]

2. *Any Tick Size Change Should Be Incremental And Subject To Evaluation Prior To Further Changes.*

Robinhood, among many others, has been a proponent of tick size reform for NMS stocks that receive potentially inferior prices due to a suboptimal minimum pricing increment. Rule 612 imposes a minimum pricing increment of $0.01 for displaying, ranking, or accepting quotations in any NMS stock priced equal to or greater than $1.00.[126] This increment was adopted in 2005 to deter subpennying. However, this concern is less

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[122] *Id.* at 18,631.

[123] *Id*. at 18,699.

[124] *Id.*

[125] *See Nat'l Ass'n of Mfrs. v. SEC*, 2022 WL 16727731 (W.D. Tex. Sept. 28, 2022) (holding that the Commission violated the APA by declining to enforce a rule's compliance date).

[126] 17 C.F.R. § 242.612.

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relevant in today's markets for those stocks that are demonstrably tick constrained at a $0.01 increment. And the result of being restricted to a $0.01 increment for all stocks is that it deprives investors of better prices because market participants may be willing to quote at tighter, subpenny spreads. The Commission has proposed a significant change to tick sizes, introducing increasingly smaller variable tick sizes as small as $0.001 all at once. The Commission's proposed approach not only is inconsistent with our view of how tick size reform should be managed responsibly but also is inconsistent with the broader industry's views.

Part of the disconnect between the Tick Size Proposal and various other proposals is what set of stocks would benefit from different tick sizes and what tick sizes would be appropriate for those different sets of stocks. While the industry and Commission have not found common ground on the right apportionment of stocks that would benefit from different tick sizes, there is consensus that at least *some* stocks today would benefit from tick sizes smaller than $0.01. Some industry proposals also would suggest that at least some stocks would benefit from tick sizes larger than $0.01. However, it is important to select the right tick size for the right set of stocks; otherwise, investors could bear the costs that accompany suboptimal tick sizes.

Tick size policy must be carefully designed to facilitate efficient capital allocation, price discovery, and capital formation. Finding the correct tick size is a delicate balancing act: while reducing tick sizes may benefit investors in some stocks, selecting the wrong tick size can harm investors. On the one hand, a tick size that is too large can harm market quality by: (1) reducing liquidity; (2) impairing price discovery; (3) generating longer queues in limit order books and increasing opportunity costs; and (4) increasing adverse selection risk for slower liquidity providers by facilitating "sniping"[127] by speedier market participants trying to establish time priority when they cannot establish price priority.[128]

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[127] "Sniping" occurs when prices move against a quote and a very fast market participant executes the now stale quote before the quote submitter can cancel the now stale quote.

[128] *See, e.g.*, Rui Albequerque et al., *The Price Effects of Liquidity Shocks: A Study of the SEC's Tick Size Experiment*, 138 J. Fin. Econ. 700, 701-02 (Dec. 2020), https://www.sciencedirect.com/science/article/pii/S0304405X20301884?via%3Dihub (In evaluating stocks with larger tick sizes under the Tick Size Pilot Program, "liquidity decreases for all stocks as proxied by a variety of measures: quoted spreads, effective spreads, and price impact increase and trading volume decreases as compared to stocks in the control group after the increase in tick size." "We find that the treated stocks experience higher pricing error and higher price delay … consistent with a decrease in price efficiency."); Maureen O'Hara et al., *Relative Tick Size and the Trading Environment* (Oct. 10, 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2463360 ("In a tick-constrained (tick-unconstrained) environment, larger relative ticks result in greater (less) depth, which is consistent with greater adverse selection coming from increased undercutting of limit orders by informed HFT market makers." "[Larger relative tick sizes also] result[] in a longer queue of limit orders at the best prices in the limit order book."); Autorité des Marchés Financiers, *MiFID II: Impact of the New Tick Size Regime* (Mar. 2018)

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On the other hand, a tick size that is too small can harm market quality by: (1) increasing the risk of penny or subpenny jumping; (2) reducing liquidity at the best bid or offer; and (3) leading to more canceled orders, lower order execution rates, and flickering quotations.[129] These can all artificially inflate spreads, raising trading costs and harming execution quality. This is a bad outcome for investors.

Although it is clear that tick sizes could be better optimized from the one-size-fits-all approach in use today, we do not believe that the Commission's proposed variable minimum tick sizes strike the right balance. The Commission submits the proposed changes to tick size without any pilot program, roundtable, or open public engagement. Because the Commission has not presented sufficient evidence to support its Tick Size Proposal, we support a narrowing of tick sizes, but only to a $0.005 for tick-constrained stocks, as has been recommended in multiple industry studies, absent further study and analysis. Further, it is imperative that the Commission modifies and improves the flawed methodology it used to determine what stocks are tick constrained and would benefit from smaller tick sizes. To go beyond the smaller, incremental changes that those proposals suggest without clear evidence that the Tick Size Proposal will benefit investors would, for too many securities, result in many of the negative externalities associated with reducing tick sizes without the corollary positive benefits.

(hereinafter Autorité des Marchés Financiers, *MiFID II: Impact*), https://www.amf-france.org/sites/institutionnel/files/contenu_simple/lettre_ou_cahier/risques_tendances/MiFID%20II%20Impact%20of%20the%20New%20Tick%20Size%20Regime.pdf ("[T]oo large a tick size (i.e., a spread that is equivalent to a low number of ticks) increases the passive execution latency and can discourage investors from placing orders in the book."); Khalil Dayr & Mathieu Rosenbaum, *Large Tick Assets: Implicit Spread and Optimal Tick Size* (June 4, 2015), https://www.worldscientific.com/doi/10.1142/S2382626615500033 ("a tick value which is too large prevents the price from moving freely according to the views of market participants whose valuation accuracy for the asset is smaller than one tick").

[129] *See, e.g.*, Sida Li et al., *Who Provides Liquidity, and When?*, 141 J. Fin. Econ. 968 (2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2902984 (finding that wider tick sizes reduce liquidity, encourage the speed race among high-frequency traders, and allocate resources to latency reduction); Anne Haubo Dyhrberg et al., *When Bigger Is Better: The Impact of a Tiny Tick Size on Undercutting Behavior* (June 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3194932 (Examining a cryptocurrency market with infinitesimal tick sizes and finding that "economically insignificant tick sizes encourage undercutting behavior, harming market quality" and that "[i]ncreasing tiny tick sizes reduces undercutting behavior, increasing liquidity provision and quoted depth, reducing transactions costs for both institutional and retail-sized trades while simultaneously decreasing short-term volatility."); *supra* note 128, Autorité des Marchés Financiers, *MiFID II: Impact* ("If the tick size is too small (i.e. a spread equivalent to a high number of ticks), the outbidding cost is no longer significant (it costs next to nothing to outbid) and liquidity does not aggregate effectively as there are too many increments of possible prices. Insertions, modifications and cancellations of orders are therefore more frequent, affecting book legibility and price formation.").

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As the Commission has acknowledged, there have been multiple industry efforts to reevaluate tick size and propose alternatives to the existing framework.[130] Some of these proposals have garnered sizable industry support and align on certain aspects of tick size reform. In line with these industry proposals, Robinhood believes that a $0.005 pricing increment for tick-constrained stocks—a framework common to several industry proposals—would be a good starting point to address issues with the existing tick size framework. The Commission seeks to go too far at once with its proposal for minimum pricing increments of $0.001 and $0.002. Such significant changes should be made only after the Commission has had the opportunity to assess how the $0.005 increment impacts market quality and finds further support to establish smaller than $0.005 pricing increments. For this, we recommend a period of no less than six to 12 months to collect data on the $0.005 increment, after which the Commission can reassess whether even smaller tick sizes are appropriate.

The Commission also should explore a tick-widening framework for higher-priced stocks that may experience a "too many ticks" problem at a $0.01 increment. Both the Nasdaq Proposal and the Cboe Proposal suggest that spreads are artificially wide on both sides of the tick spectrum and that, by optimizing the tick size on both ends, investors can obtain better execution quality and markets can operate more efficiently. The Commission too quickly dismisses—without sufficient analysis—the potential for a tick-widening framework to improve execution quality for certain stocks. The Commission has failed to convincingly articulate why its approach is better and less costly than existing industry proposals.

Additionally, the Tick Size Proposal, and any subsequent changes to tick size, should include a clear path to pause or reverse course if there are any material unexpected negative impacts. At present, the Tick Size Proposal does not offer a mitigation plan if things do not work out as expected. Considering the level of uncertainty at play, we would expect any tenable tick size proposal to include a defined path for dialing back any changes that result in significant negative consequences.

Past studies and pilot programs clearly demonstrate why it is reckless to adopt significant changes to market structure without rigorous analysis. The SEC's Tick Size Pilot Program in 2016 is one such example. There, after running a pilot, the SEC decided not to adopt any of its proposed changes due to overwhelmingly negative findings within each of the test groups.[131] And that was for only one additional tick size that at the time had

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[130] *See, e.g.*, Cboe Proposal; Citadel Proposal; MEMX Proposal; Nasdaq Proposal.

[131] *See generally* SEC, *Tick Size Pilot Program*, https://www.sec.gov/ticksizepilot (last modified Sept. 7, 2018); *see also* Pragma, *SEC Tick-Size Pilot Cost Investors Over US$300 Million* (Sept. 7, 2018), https://www.pragmatrading.com/wp-content/uploads/2018/09/SEC-Tick-Size-Pilot-cost-investors-over-US300-million.pdf; *see also supra* note 95, SEC Staff, *Report to*

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significant support. These lessons are especially important if the Commission's hypothesized solutions fail to produce a positive result, such as in the 2016 Tick Size Pilot Program. Without adequate data and rigorous analysis to support its changes to tick size, the SEC would be unnecessarily experimenting with the stability and liquidity of U.S. equity markets as well as retail investors' financial futures.

3. Trading And Quoting Increments Should Not Be Harmonized.

Robinhood does not support the Commission's proposal to harmonize the trading increments with quoting increments. The Tick Size Proposal would amend Rule 612 to establish a minimum trading increment—both for on-exchange and off-exchange trading—that is the same as the Commission's proposed variable minimum quoting increment applicable to a stock. Such a change would have an adverse effect on market quality, reduce price improvement opportunities (and worsen resultant prices received by investors), substitute the Commission's own judgment for that of two contracting parties, and unreasonably prioritize exchanges over other market centers and investors. Effectively, the SEC would prevent investors from obtaining the best available prices by instituting this requirement and would foreclose price improvement opportunities for investors at a smaller increment then would ever be warranted for a minimum quoting increment, for all the reasons discussed above. Moreover, it is not clear that the Commission has sufficient legal basis to propose this change. Accordingly, the Commission should abandon this aspect of the Tick Size Proposal.

There is little to no empirical research that suggests that the optimal quoting increment is also the optimal trading increment. Harmonizing the two is an example of the Commission's rush to regulate without doing the work to understand the resultant harm. Not only is there no persuasive reason to make the trading and quoting increment the same, but there are also strong reasons that the trading increment should be smaller than the quoting increment. Harmonizing the quoting increment and trading increment would substantially harm market quality by increasing the risk that the negative externalities associated with excessively small quoting increments will manifest. For example, as we have described in this letter, the prevalence of flickering quotes, subpenny jumping, and degradation of the displayed NBBO increases with quoting increments that are too small. However, there is no support for the contention that these issues occur as a result of having smaller trading increments. Additionally, harmonization, by eliminating superior prices in smaller trading increments from the market, would significantly reduce price improvement opportunities available to investors. This is even more obvious considering the need to consider wider tick sizes, as discussed above: while certain stocks may warrant a wider quoting increment, e.g., $0.05, it is unlikely that anyone would suggest a

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Congress (examining the effects of decimalization on initial public offerings and small and middle capitalization companies).

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harmonized trading increment of $0.05. There is simply no persuasive reason to tie one to the other in this way.

The Commission cites a "more level playing field" for exchanges and off-exchange market centers as the basis for this change—namely, other over-the-counter market centers will execute orders in price increments that exchanges and ATSs "cannot practically provide."[132] Yet, there is no clearly articulated reason for why this is the case besides its "impracticality." Rule 612 makes no prohibition on permissible trading increments off *or on* exchange. Accordingly, if exchanges want to compete for this order flow by providing additional price improvement in smaller increments, they are welcome to do so without the Commission's intervention. The Commission and the exchanges themselves are the sole barriers preventing exchanges from establishing more practical mechanisms to permit smaller trading increments that an investor may otherwise find off-exchange. Like off-exchange venues, exchanges offer midpoint executions at subpenny increments. Many exchanges already operate RLPs that can execute certain orders in subpenny increments, i.e., $0.001.[133] The Commission also identifies that "RLPs have not attracted a significant volume of retail order flow"[134] such that the imbalance between retail order flow routed to exchanges and off-exchange market centers continues to favor off-exchange trading. Without fully exploring the set of competitive reasons why this has been the market-driven result, the Commission now seeks to resolve this imbalance by putting its thumb on the scale to prioritize exchanges. Off-exchange market makers have been a key source of market innovation, in many cases providing better execution quality and customer services than exchanges and consequently receiving more order flow than exchanges. To "level the playing field," the Commission would interfere with contracting parties that may seek alternative and better pricing terms, including, if they desire, executions at smaller increments. In effect, the Commission would strip market participants of the ability to achieve the best executions available to them.

Furthermore, we question whether the Commission possesses the statutory authority to mandate a universal trading increment because it does not act with a grant of Congressional authority. Congress delegated to the Commission the authority to

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[132] Tick Size Proposing Release, 87 Fed. Reg. at 80,336, 80,283.

[133] *See, e.g.*, NYSE Rule 107C; Securities Exchange Act Release No. 67,347 (July 3, 2012), 77 Fed. Reg. 40,673 (July 10, 2012) (approving RLPs on a pilot basis for NYSE and NYSE Amex and granting Rule 612 exemption) (NYSE RLP Approval Order); CBOE BYX Rule 11.24; Securities Exchange Act Release No. 68,303 (Nov. 27, 2012), 77 Fed. Reg. 71,652 (Dec. 3, 2012) (CBOE BYX Retail Pilot Program Approval Order); Nasdaq BX Rule 4780; Securities Exchange Act Release No. 73,702 (Nov. 28, 2014), 79 Fed. Reg. 72,049 (Dec. 4, 2014) (NASDAQ BX Retail Pilot Program Approval Order).

[134] Tick Size Proposing Release, 87 Fed. Reg. at 80,272.

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regulate, among other things, the transmission of "orders" between trading centers[135]—that is, *quoting* increments. The Commission, to be sure, asserts that its proposal is, in part, aimed as "assur[ing] equal regulation of all markets,"[136] but the Commission does not currently regulate trading increments other than through its oversight of SRO rulemakings.[137] Instead, the Commission is instilled with the authority to "facilitate" the establishment of a national market system but not to *dictate* a particular market model.[138] The Commission should tread carefully when it proposes rules that do not align with a grant of authority from Congress. Congress is well aware of how to grant the Commission statutory authority where it sees fit. In fact, Congress explicitly granted to the Commission the authority to designate a minimum increment for quoting and trading of emerging growth companies in Section 11A(b)(6) of the Exchange Act. However, nowhere else in Section 11A—the relevant legal basis upon which the Commission advances the Tick Size Proposal—or in the Exchange Act more generally, does Congress grant the Commission the authority to mandate a universal trading increment that would apply both to on-exchange and off-exchange trading. The Commission's proposed universal trading increment therefore sits upon a shaky foundation. An obligation to assure equal regulation is not a grant of authority to regulate matters not committed to the Commission elsewhere in the statute—particularly not a matter as sensitive and controversial as price regulation.

If, however, the Commission is not persuaded to set aside this piece of the Tick Size Proposal and instead seeks to set a trading increment for on-exchange and off-exchange trading, we would urge the Commission not to harmonize that trading increment with the quoting increment. Notwithstanding our disagreement with setting a minimum trading increment, a more reasonable alternative in lieu of the Tick Size Proposal would be to set a $0.001 trading increment regardless of the minimum quoting increment. We believe that setting the increments in that manner would provide a better market environment for investors than harmonizing the two increments because it preserves price

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[135] 15 U.S.C. § 78k-1(c)(1)(E).

[136] *Id.* § 78k-1(c)(1)(F).

[137] *See* Tick Size Proposing Release, 87 Fed. Reg. at 80,339 ("The Commission could amend rule 612 to apply only to accepting, ranking, and quoting but not to trading—reflecting the current baseline application of rule 612.").

[138] *See* Chairman Arthur Levitt, SEC, Speech, The National Market System: A Vision That Endures (Jan. 8, 2001), https://www.sec.gov/news/speech/spch453.htm ("Prudence is critical as we consider changes to a market system that must never cease to function, day in and day out, for the benefit of America's investors—not for any one institution or interest. And that prudence extends to the Commission's role. The SEC's objective or function is not to dictate a particular market model, but rather, to allow the natural interplay of market forces to shape markets according to the demands of investors.").

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improvement opportunities and lessens the many adverse impacts that excessively small quoting increments can cause.

The Commission's misguided desire to couple the minimum quoting and trading increments has resulted in a proposal with, in some cases, excessively small quoting increments that leads to one set of problems and, in other cases, excessively wide trading increments that leads to another set of problems. At this stage, it is not clear that liquidity providers who are compensated based on spread capture, like wholesalers, would be willing to execute a significant amount of order volume at a midpoint price. As a result, coupling the quoting and trading increment could eliminate investor access to better prices. For example, using a $0.005 increment under the coupled model, assume an investor wants to sell a stock with a best displayed bid of $10.010 and offer of $10.030. Under the Tick Size Proposal, without crossing the spread, the order could be executed at one of three potential increments between the bid and offer: $10.015, $10.02, or $10.025. However, it is possible that no one would be willing to purchase the stock at or above the midpoint price (i.e., $10.015). This means that, if the order is executed at all given the decreased amount of liquidity at that midpoint price, the investor will receive a price of $10.015 per share for her sale under the Tick Size Proposal. This is a worse price than what she could receive today. Today, a market maker could purchase her stock at a number of better prices per share, including $10.016, $10.017, $10.018, $10.019, $10.020, $10.021, $10.022, $10.023, $10.024, $10.025, $10.026, $10.027, $10.028, or $10.029 per share, or at smaller $0.0001 increments. Under the Tick Size Proposal, a market center would be prohibited from providing liquidity at these prices. This is a bad deal for investors.

Taking away these trading increments not only will prevent investors from receiving better prices, it also will reduce available liquidity within the NBBO. As a result, investors may receive even worse prices due to the unwillingness of market participants to execute trades at the remaining few trading increments. By opening the trading increment to $0.001, the Commission could preserve opportunities for market centers to provide liquidity at multiple available increments without potentially disrupting quoting activity in the broader market.

4. ***Access Fee Caps Should Be Tied To Tick Size At The Current Proportion Of 30%.***

Robinhood supports lowering costs and barriers to entry for investors to trade on exchanges. The Tick Size Proposal would amend Rule 610 to replace existing access fee caps of 30 mils per share for most stocks with variable access fee caps tied to the applicable minimum pricing increments and ranging from 10 mils or 5 mils per share. By limiting the fees exchanges can charge, the Tick Size Proposal also would place a de facto cap on the rebates that exchanges can offer. If exchanges can provide a fee structure that is competitive with off-exchange trading, investors might benefit from lower costs and

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increased transparency on lit markets. The Tick Size Proposal, however, is problematic because it would not establish access fee caps proportional to the Commission's proposed tick sizes at the two smallest increments. As a result, under the Tick Size Proposal, there would be a relative fee *increase* in stocks quoting and trading at the smallest tick sizes because exchanges typically charge the maximum access fees possible (i.e., $0.001, the cost would be 50% of the tick size). As proposed, that fee increase would be applicable to nearly half of total market volume.[139] To avoid this outcome, the Commission should adopt access fee caps that are proportional to the applicable tick sizes based upon existing caps (30% of the tick size).

Investors generally benefit from having low fees. An effective increase in the access fee caps for trading in stocks with the smallest tick sizes would introduce additional costs for investors and would push exchanges to be less competitive compared to off-exchange venues, just like the proposal to harmonize trading increments with quoting increments would cause off-exchange market makers to be less competitive. The net effect would be to decrease overall competition among venues and to drive up costs for investors, hindering the Commission's goal to resolve the imbalances between on-exchange and off-exchange trading. The Commission has recognized that there is evidence that "transaction-based fees and rebates have likely caused some order flow to migrate from exchanges to off-exchange trading centers, such as ATSs, in order to avoid high access fees levied by some exchanges."[140] The Commission also has identified potential issues that a high fee, high rebate environment can cause in the proposing release for its Transaction Fee Pilot:

> [B]roker-dealer- may route orders to exchanges that have the best quoted prices but are suboptimal for customers in other ways because orders are either less likely or take longer to execute.[141]
>
> [C]ustomer orders… are [] more likely to face adverse selection when executed.[142]
>
> [E]xchange[s may be limited in their ability] to generate a liquidity externality because these high rebates could draw order flow to

[139] *See* Tick Size Proposing Release, 87 Fed. Reg. at 80,280 ("While the Commission cannot estimate the number of these stocks that would have a Time Weighted Average Quoted Spread of $0.008 or less due to the $0.01 minimum pricing increment, the Commission estimates that 1,707 stocks, which make up an estimated 64% of share volume, and represent 37.9% of estimated dollar volume, have average spreads that are less than $0.016.").

[140] Proposing Release, Transaction Fee Pilot for NMS Stocks, 83 Fed. Reg. 13,008, 13,069 (Mar. 26, 2018).

[141] *Id.* at 13,041-42.

[142] *Id.* at 13,042.

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> exchanges with low execution quality, despite the availability of higher execution quality on other trading centers. This behavior may fragment order flow.[143]

While the Commission states that "the current system of fees and rebates … can narrow spreads in certain instances,"[144] higher fees and rebates relative to tick size can create suboptimal market conditions that are one cause of the tick constraints that the Commission seeks to alleviate. Under the "maker-taker" model, liquidity providers are incentivized to provide liquidity by receiving a rebate, and liquidity takers are disincentivized to take it paying a fee. In a high fee, high rebate environment, fees and rebates capture a larger percentage of the spread. This leads to tick constraints as the incentives to provide liquidity become much greater than the incentives to take it. The Commission states that "reducing the profit that can be earned by providing liquidity could induce some market participants that specialize in liquidity provision to reduce participation in such stocks."[145] For stocks with narrow spreads that are currently tick-constrained, the Commission acknowledges that "this would likely improve market quality because it would reduce fill times, fill rates, and queue lengths on maker-taker exchanges due to less competition to provide liquidity."[146] Creating a relative increase in fees, as the Tick Size Proposal would do, could lead to additional tick constraints as well as some of the same issues that the Commission observed in proposing the Transaction Fee Pilot that we identify above.[147]

Accordingly, Robinhood is opposed to the Commission increasing existing access fee caps, when considered proportionate to the tick size, when it should, if anything, propose lowering access fees for all tick sizes to drive exchanges to compete with off-exchange venues. Like off-exchange venues, exchanges have their own fee and rebate structures which raise potential conflicts of interest. But unlike the Commission's approach to PFOF provided by wholesalers, it does not seek to eliminate PFOF provided by exchanges in the form of rebates. Exchanges should be incentivized to adopt fee structures that are more competitive with those of off-exchange market centers and mitigate potential conflicts of interest relating to order routing decisions that arise in high fee, high rebate environments that can impact overall execution quality. For that reason, we believe that

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[143] *Id.*

[144] Tick Size Proposing Release, 87 Fed. Reg. at 80,347.

[145] *Id.*

[146] *Id.*

[147] On the other side of the spectrum (i.e., stocks with wider spreads), this represents less of a problem because the fees and rebates are such a small fraction of the spread that they do not operate as significant incentives or disincentives to make or take liquidity. The Commission notes as much in the Tick Size Proposing Release. *See id.*

the Commission should tie access fee caps to be consistently proportional to the applicable tick size at the current proportion of 30%.

* * *

Robinhood appreciates the opportunity to comment on the Tick Size Proposal. We want to make sure that our equity market structure works to benefit retail investors. However, the Tick Size Proposal would not accomplish that goal. The Tick Size Proposal would reimagine our equity market structure by making drastic changes to the ways in which quoting and trading work today, adding unnecessary complexity to an already-complex system without a sufficient basis for those changes. The Commission's rushed approach to the Tick Size Proposal risks unintended collateral consequences that could impair market function and harm investors. We believe that a more incremental approach would be better. Therefore, the Commission should repropose the Tick Size Proposal as we recommend, by incorporating less drastic changes to market structure and providing additional time for the Commission to evaluate how those changes and any additional changes to market structure may impact the market and investors. Accordingly, the MDI Rules, amendments to Rule 605 (or Rule 606), and our modified tick size recommendation should be implemented and allowed to take effect before any more drastic, onerous rules—namely, Proposed Reg Best Ex and the Proposed OCR—are reevaluated.

Please contact Robinhood's Deputy General Counsel, Lucas Moskowitz, at [redacted] if you have any questions or comments.

Sincerely,

DocuSigned by:
Steve Quirk
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Steve Quirk
Chief Brokerage Officer
Robinhood Markets