May 26, 2020

Ms. Vanessa Countryman
Secretary
Securities and Exchange Commission
100 F St., NE
Washington, DC 20549-1090

Re: **Proposed Rule on Market Data Infrastructure (Release No. 34-88215; File No. S7-03-20)**

Dear Ms. Countryman:

Charles Schwab & Company, Inc.[1] (Schwab) commends the Securities and Exchange Commission for its proposed rule to reform Equity Market Data Infrastructure (proposal).[2] As a firm that serves retail investors and the professionals and employers who serve them, Schwab has spent more than two decades advocating for structural reform of a market data system that puts Main Street investors at a disadvantage. We welcome the SEC's initiative and offer the comments below in a constructive spirit. Schwab hopes the Commission will move forward on this rulemaking as quickly as possible. We do not believe equity market volatility stemming from the Covid-19 pandemic should cause the SEC to pause this important work.

Executive Summary

- The Main Street investors Schwab serves would see a significant benefit from the addition of depth-of-book and odd lot data to the consolidated data feed. The current feed does not provide sufficient pricing information for a significant portion of the

[1] Charles Schwab & Co., Inc., (member SIPC) is the broker-dealer affiliate of The Charles Schwab Corporation (NYSE: SCHW), a leading provider of financial services, with more than 325 offices and 12.933 million active brokerage accounts, 1.74 million corporate retirement plan participants, 1.4 million banking accounts, and $3.8 trillion in client assets as of December 31, 2019. Through its operating subsidiaries, the company provides a full range of securities brokerage, banking, money management and financial advisory services to individual investors and independent investment advisors. Charles Schwab & Co., Inc. and affiliates offer a complete range of investment services and products including an extensive selection of mutual funds; financial planning and investment advice; retirement plan and equity compensation plan services; referrals to independent fee-based investment advisors; and custodial, operational and trading support for independent, fee-based investment advisors through Schwab Advisor Services.
[22] 85 FR 16726 (March 24, 2020), available at https://www.govinfo.gov/content/pkg/FR-2020-03-24/pdf/2020-03760.pdf.

average one million trades Schwab customers enter every day. The proposed new rule would help fix that deficiency and we urge the Commission to move forward.

- Schwab supports and is encouraged by the SEC's plan to create a competitive market for the consolidated data feed, but cautions that the plan's success depends on transparency in data pricing, including cost information, set by the exchanges through the new Consolidated Data Plan.

- Schwab proposes the SEC revise the proposal to permit self-aggregators to share consolidated data with customers but not with external parties. This will ensure Main Street investors see the same data their broker-dealers see and share in any cost and latency advantages that result from the Commission's proposed changes to the data system.

Market Data Infrastructure Changes Must Benefit the Individual Investor

The SEC is proposing fundamental changes to the content of the consolidated tape, the basic equity market data collected and disseminated by the two exclusive Securities Information Processors (SIP). As prescribed by the current national market system plans, the SIPs are run by committees made up of the national securities exchanges and FINRA (collectively the SROs). At present, the core market data product provides investors with top-of-book quotes and the last sale price in National Market System (NMS) securities. This core data stream is the primary feed for retail investors. Industry participants pointed out during the SEC's market data roundtable in 2018 that this information is not sufficient for any trader – whether classified as retail or institutional – to make an investment decision. Several investment managers said they would not send trading flow to brokers who rely only on SIP data.[3] Instead, institutional investors and traders pay the exchanges for better, faster data feeds in order to meet client demands. With slower, content-poor data for retail investors on the one hand and faster, content-rich data for institutions on the other, the market data infrastructure has fragmented into two tiers – retail and institutional.

This bifurcation in market data can be seen as a consequence of Regulation NMS (Reg. NMS) promulgated by the SEC in 2007 which permitted exchanges to sell proprietary data feeds in addition to the data provided via the consolidated tape. The resulting arrangement has led to what the SEC calls "information asymmetry" between different groups of investors.[4] In fact, the quality gap between the data available to retail investors and other market participants is staggering. This was not the Commission's intended policy outcome when creating Reg. NMS.[5]

To address this asymmetry, the SEC proposal would add more pricing information to the consolidated tape. It would do this by formalizing the term "core data" to include depth-of-book pricing, among other changes. From Schwab's perspective – which is to say from the perspective of Schwab's retail clients and those who serve them – this would be a fundamental

[3] See Day One Transcript of SEC Roundtable on Market Data and Market Access at 58.
[4] See Proposal at 16729.
[5] See Regulation NMS Release No. 34-51808 at 1.

improvement that would expand data access to Main Street investors in a very meaningful way.

Depth-of-Book

SEC: *Should depth-of-book data be included in the proposed definition of core data?*

Schwab believes providing depth-of-book data on the consolidated feed will give Main Street investors a critical look at market sentiment with regard to an individual security and pricing information for the size of the order they want to place. In the first quarter of 2020, Schwab received on average one million equity orders a day from its clients. The vast majority of these orders were placed by self-directed investors through our digital channels without talking to a registered representative. Based on our data, at least 30 percent of those orders exceeded the typical 100 share size included in today's core data in the consolidated quote. For those investors, the core data failed to provide them with sufficient pricing information to determine whether to place a market or limit order, what price to seek with a limit order or whether to break their order into parts. This is unlike professional traders trading at the same time in the same securities who have depth-of-book information to assess the current quality and direction of the market for that security. So instead of a market data system that encourages retail investor confidence in the fairness and transparency of the market leading to the placement of well-informed retail limit orders thereby adding to the liquidity of the overall system, today's system instead creates information asymmetry and uncertainty.

The Court of Appeals for the D.C. Circuit provided an example of the value of depth of book data in NetCoalition v SEC, 615 F.3rd 525, 530-31. (D.C. Cir. 2010):

> *Assume an investor wants to make an offer to sell 3,000 shares of company XYZ. The best bid price reflected in the core data at NYSE Arca for XYZ is 1,000 shares at $10. The investor knows he can sell up to 1,000 shares at $10 but he does not know at what price his remaining 2,000 shares will sell until after his order is placed. This is where depth-of-book data comes in. Assume further that NYSE Arca's depth-of-book data tells the investor that, apart from the best bid price from the core data, an additional 1,000 shares of XYZ are available at the next price level of $9.99 and yet another 1,000 shares at $9.98. Before he places his order, then, he knows that his 3,000-share sale will fetch $29,970 (the sum of 3,000 shares sold in three 1,000-share blocks at $10, $9.99, or $9.98 each). Lower liquidity i.e., fewer shares of XYZ available at or near $10 will result in a lower total sale price. It is in this sense that depth-of-book data "is useful primarily as background information on liquidity outside the best prices.*

The present lack of depth-of-book data in the consolidated feed is a disservice to Main Street particularly when the advent of decimalization 20 years ago led to a reduction in price transparency as the depth displayed became spread over a greater number of price points.[6] With depth-of-book information, Schwab customers are likely to post more limit orders and have a better sense whether to move or hold a resting limit order. Schwab believes that empowering investors with better information promotes investment success and levels the competitive landscape for all investors.

[6] See Proposal at 16751.

Based on our decades of serving retail investors, Schwab knows adding five layers of depth to the consolidated feed as proposed will result in a more transparent and fair market leading to greater retail investor confidence and participation and ultimately liquidity that will benefit the market as a whole.

Odd Lot Data

SEC: *Should odd-lot quotation data that is not currently reflected in SIP data be incorporated into core data, as proposed, and, if so, what is the best way to do so?*

The proposal would also include prices for some odd-lot orders (those for 100 or fewer shares) to the definition of core data. Over time, a growing number of companies have resisted stock splits and allowed their share prices to rise in some cases well beyond $1,000. With such a multiple, retail investors tend to trade in lots smaller than 100 shares. This generally means retail investors cannot see whether their limit orders are posted, whether they set the best bid or offer in a security or whether there is interest between the best bid and offer that would interact with their market or marketable limit order. The SEC is seeking to include these prices in the new consolidated data feed. Schwab believes this will be a significant improvement in market transparency.

The SEC proposed a tier structure that would establish at what order size and price threshold an odd lot would be redefined as a round lot and so included in the consolidated tape as core data. Schwab believes the terms of the proposed five-level structure would lead to unnecessary operational complexity. Based on the percentage of odd lot orders received at different pricing levels, in order to make a balanced distribution, and maintain simplicity with a limited number of tiers, Schwab recommends defining round lot shares as: 100 shares for securities priced up to $50, 20 shares for securities priced between $50.01 and $500, 2 shares for securities priced from $500.01 and higher.

While the new round lot definitions would capture more data for the new consolidated feed, only orders of 100 shares or more would be subject to the order protection rule (OPR) under the proposal. This would create a national best bid and offer (NBBO) that is distinct from the protected best bid and offer (PBBO) and would leave broker-dealers with uncertainty over order routing and data display decisions. Schwab believes this would be a bad outcome and one that confuses investors. Distinguishing between NBBO and PBBO is needless complexity that will serve little investor protective purpose. Schwab believes a better outcome would be where the newly defined round lots are subject to the OPR.

Schwab believes the OPR should be extended to any new round lot sizes established by the proposal. With Reg. NMS, the SEC found that price protection encourages limit orders as it increases the likelihood an investor will receive execution—which will foster confidence in the market.[7] In the first quarter of 2020, a total of 1.87 million, or 23 percent, of Schwab customers' limit orders for stocks priced higher than $100 are for fewer than 100 shares and so would remain unprotected under the proposed rule. In order to provide protection for limit orders that

[7] Regulation NMS. Release No. 34-5108; File No. S7-10-04 at 36.

will be considered round lots in the new proposal, we urge the Commission to extend the OPR to the new round lots. In addition to encouraging more limit orders in high-priced stocks from Main Street investors it will also ensure the OPR would continue to apply to the NBBO quotes, as it does today.

Auction Imbalance Information

SEC: *Should auction information be included in the proposed definition of core data?*

Schwab agrees with the SEC's conclusions on the increasing significance of auctions as part of the trading day. The growth of passive investing and exchange-traded funds (ETF) has contributed to the growth in auctions relative to other trading. As the SEC points out, however, only a small portion of auction information is included in the consolidated tape. The proposed definition of consolidated market data would include auction information generated by exchanges in their auction processes making it part of the new consolidated feed. We support this addition to core data.

Success of Competing Consolidator Proposal Depends on Data Price Transparency

The SEC is attempting to inject competition and pricing discipline into the market for consolidated data with its proposal to create new data dissemination channels. The exclusive SIP monopoly would be replaced by competing consolidators that may offer a variety of data options in addition to the consolidated feed mandated by the SEC's proposal. Market participants could use the competing consolidator that best meets their needs in terms of price, location and data products, according to the proposal. The SEC says competition among the competing consolidators will lead to improvements in latency, cost and resiliency.

The fees competing consolidators would pay to the SROs for their data will be set by the new Consolidated Data Plan (CDP) authorized by a recent Commission order. When finalized, the CDP will take the place of the two existing national market system plans that currently run the SIPs. We appreciate that under the rules of the CDP, for the first time, non-SRO representatives will participate in the approval of market data fees—though the exchanges will still hold a two-thirds majority of the vote. At present, market data prices are determined solely by exchanges so this is an encouraging step toward transparency and fairness. At the same time, Schwab believes it also important the SROs themselves are held to a standard similar to that of public utilities whose data fees are set on a cost-plus bases. In its ruling in *NetCoalition v. SEC*, the court made it clear that when exchanges are providing data over which they have exclusive control, they are considered "exclusive processors" [8] under the Exchange Act and must function in a neutral matter with respect to fees.[9] In reviewing a challenge of the SEC's approval of certain proprietary data product fees, the Court found that, "[W]here a self-regulatory organization or organizations utilize an exclusive processor, that processor takes on certain of the characteristics of a public utility and should be regulated accordingly.[10] It is Schwab's hope the cost-plus approach to fee determination will be more transparent than what has become the

[8] 15 U.S.C. § 78c(a)(22)(B)

[9] 1975 U.S.C.C.A.N. at 324

[10] NetCoalition v SEC, 615 F.3rd 525 (D.C. Cir. 2010).

nebulous standard under "fair and reasonable" that is subject to ongoing litigation. The SEC's decentralized approach to data dissemination depends on the ability of the CDP to operate fairly and transparently. Competing consolidators are unlikely to commit to a business without confidence the prices charged for the direct SRO feeds do not put them in a competitive disadvantage.

The Commission clearly expects several entrants into the competing consolidator space and Schwab hopes this is the case. We note, however, that if competitive forces fail to materialize and drive down fees for consolidated data, the final rules should enable the Commission to review CDP fees for fairness, reasonableness, and the absence of discriminatory pricing as required under Securities Exchange Act Section 11A. Otherwise Schwab's Main Street investors risk a high cost to pay for equal access to the equity market data.[11]

The SEC Should Permit Self Aggregators to Share Core Data with Clients

To encourage competition among the competing consolidators, enable retail investor access to data with the least amount of latency without additional cost, and allow broker-dealers to share with their customers the same view of the same core data, we urge the Commission to allow self-aggregators to display for no fee to their customers their self-aggregated core data.

The proposal permits certain proprietary-trading broker-dealers, called self-aggregators, to calculate their own NBBOs by purchasing data feeds directly from the exchanges in order to reduce latency and include specific market data products in the quote feeds they create.[12] The proposal notes that proprietary firms have been synthesizing their own consolidated quotation feed for their own use and would permit them to continue to do so without having to register as a competing consolidator. Schwab believes the opportunity to better serve Main Street investors by disintermediating competing consolidators should extend to all broker-dealers, not just proprietary traders. The business of providing retail brokerage services today is intertwined with technological competence and interconnected with other financial services providers. There are no longer technological reasons forcing brokers to rely on a third-party data aggregator. That said, if competing consolidators create a core product that saves Schwab and our customers time and money without adding much latency, then Schwab would certainly consider what product is in our and our customers' best interest. This will only enhance the appropriate incentives for competing consolidators and supports a true market-based approach for reform. Accordingly, Schwab asks that the SEC consider revising the proposal to permit all broker-dealers the option to become a self-aggregator as long as the data it consolidates is shared with customers only on a not-for-profit, and non-redistribution basis.[13]

---

[11] Schwab also notes that if the proposed rule is successful in attracting several competing consolidators it will create new questions for investors and brokers. If each consolidator offers a different version of the NBBO that would include both unprotected and protected quotes, how will the market judge execution quality? Will efforts to improve execution quality disclosures be limited? We urge the Commission to address these questions in its final rule.

[12] See Proposal at 16790.

[13] Similar to today, broker-dealers contractually can prohibit their customers from redistributing the data and can monitor their data usage to make sure this does not happen.

Schwab sees no compelling reason to force a broker that wants to provide market data to its own clients to register as a competing consolidator and take on the associated burdens, such as creating, archiving and publicly reporting specified data points and filing an application using the proposed Form Competing Consolidator[14]. The costs associated with such an effort are likely prohibitive and do not appear to be justified for a relatively straightforward pass-through of data taken from exchanges. There certainly should not be any requirement to comply with Regulations SCI since such brokers are not holding themselves out as any sort of "public utility" and instead are providing information services only to its own client base.

The obligations of the existing Vendor Display Rule provide sufficient protection to the clients of a self-aggregator since the broker providing a stock's quotes and transaction data must furnish, "in an equivalent manner, a consolidated display for such stock."[15] Broker-dealers acting as self-aggregators could be examined and reviewed by their regulators for compliance. This provides protection that broker-dealer customers are receiving a quality market data product. We therefore urge the Commission to amend the rule proposal to permit brokers acting as self-aggregators to provide market data to their own clients as noted above. In the event competing consolidators do not emerge to drive down market data fees as anticipated, this approach provides a way to bring data fee improvements and cost savings to retail investors. It would also promote investor confidence to see this industry reform benefitting Main Street investors and not just those of professional traders.

If brokers are not allowed to share consolidated data with their customers as self-aggregators, Schwab believes proprietary traders and high frequency firms would add to their significant data cost advantage over retail investors. The two-tier data system would be preserved. Such a policy outcome seems at odds with the stated goal of the proposed rule – to reform the market data infrastructure.

Conclusion

Schwab welcomes the SEC's interest in reforming the equity market data infrastructure and encourages the Commission not to extend the comment period or delay consideration of its rule proposal. Under Reg. NMS, the equity market data infrastructure evolved into a two-tiered system that put individual investors at a relative disadvantage. The proposed rule seeks to reverse this dynamic by adding several levels of quotes to the tape and creating a methodology for adding odd lot prices as well. Individual investors would clearly benefit from the addition of depth of book and Schwab strongly supports the change. We are concerned, however, the proposed treatment of odd lots would lead to a level of complexity that would not be offset by a corresponding benefit.

---

[14] See Proposal at 16784.

[15] The Proposal essentially acknowledges that, due to latency and transmission issues, any actual quotation delivered or created by a Competing Consolidator or Self Aggregator in a specific stock at a particular moment in time will likely differ from that of the SIP, or each other. Thus, perfect equivalence with the SIP quote cannot be standard to determine compliance with the Vendor Display Rule. Rather, Schwab believes that the appropriate standard is that brokers must maintain and enforce adequate systems, procedures and personnel as part of an overall effort which is reasonable designed to provide consolidated market data to their clients.

We commend the SEC's efforts to create a more competitive market place for basic market data with competing consolidators and self-aggregators. As stated above, however, retail investors will remain at a disadvantage under the proposal. We encourage the SEC to change its rule proposal to permit self-aggregators to share consolidated data with customers.

We appreciate the opportunity to comment on the proposed order to create a new equity market data plan and thank the Commission for its consideration of the views we express above. If you have any questions regarding this letter, please contact Jeffrey T. Brown on [redacted].

Sincerely,

Jeffrey T. Brown
Senior Vice President
Legislative and Regulatory Affairs
Charles Schwab & Co., Inc.

cc: The Honorable Jay Clayton
The Honorable Hester M. Peirce
The Honorable Elad L. Roisman
The Honorable Allison Herren Lee

Brett Redfearn, Director
Division of Trading and Markets