FINANCIAL INFORMATION FORUM

June 22, 2023

By electronic mail to rule-comments@sec.gov

Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549-1090
Attn: Secretary

Re: File Number S7-29-22: Disclosure of Order Execution Information

Dear Secretary,

The Financial Information Forum ("FIF")[1] appreciates the opportunity to submit this supplemental comment letter on the rule proposal issued by the Securities and Exchange Commission (the "Commission") on Disclosure of Order Execution Information (the "proposed rule").[2] On March 31, 2023, FIF submitted a comment letter on the proposed rule.[3] On May 17 FIF members participated on a videoconference call with Commission representatives to discuss certain recommendations made in the FIF comment letter. FIF members appreciate that Commission representatives reached out to FIF to schedule this call to obtain additional clarity on the issues and questions raised in our prior comment letter. FIF members also appreciate the detailed and thoughtful questions raised by Commission representatives during the call. As discussed during the call, FIF is submitting this supplemental comment letter to clarify and provide additional detail on certain points raised in our prior comment letter.

Introducing firm that routes all of its orders to its clearing firm

FIF made the following recommendation in our prior comment letter:

[1] FIF (www.fif.com) was formed in 1996 to provide a centralized source of information on the implementation issues that impact the securities industry across the order lifecycle. Our participants include broker-dealers, exchanges, back office service bureaus, and market data, regulatory reporting and other technology vendors in the securities industry. Through topic-oriented working groups, FIF participants focus on critical issues and productive solutions to technology developments, regulatory initiatives, and other industry changes.
[2] Securities Exchange Act Release No. 96493 (Dec. 14, 2022), 88 FR 3786 (Jan. 20, 2023) (Disclosure of Order Execution Information) ("Disclosure of Order Execution Information").
[3] Available at https://www.sec.gov/comments/s7-31-22/s73122-20162736-332127.pdf ("Prior FIF Comment Letter").

> FIF members recommend that the Commission provide an exemption from the Rule 605 reporting requirement for an introducing firm that routes all of its customer orders to its clearing firm on a non-directed basis, where the clearing firm makes all routing decisions and the introducing firm does not receive payment for order flow. An additional condition for this exemption would be that the introducing broker has examined the clearing firm's Rule 605 report and does not have reason to believe the clearing firm's report materially misrepresents the introducing broker's order flow.[4]

During the call on May 17, Commission representatives requested clarification from FIF as to the reason for this proposal. The reason for this proposal is to reduce the reporting burden for a smaller firm that is an introducing broker and routes all of its customer orders to its clearing firm on a non-directed basis. Given the proposed condition that an introducing broker would be required to examine the clearing firm's Rule 605 report and not have reason to believe the clearing firm's report materially misrepresents the introducing broker's order flow, the quality of the disclosure should not be impacted.

Stop orders

In our prior comment letter, FIF made the following recommendations relating to reporting for stop orders:

- FIF members agree with the Commission that stop orders should be reported separately from other types of orders.
- The relevant condition for determining whether a stop order is reportable should be whether the stop order is "triggered" or "activated."
- Stop orders should be differentiated in the same manner as other covered orders; in other words each order type (market orders, marketable limit orders, beyond-the-midpoint limit orders and executable non-marketable limit orders) should be further broken-out between stop and non-stop orders.[5]

During our call on May 17, Commission representatives requested confirmation as to certain facts underlying these recommendations. As a follow-up to our discussion on May 17, FIF members confirm that a material percentage of stop orders have a limit price and a material percentage of stop orders do not have a limit price. FIF members also confirm that a material percentage of stop orders are triggered based on a change in the NBBO (in most cases, but not always, the opposite-side quote) and a material percentage of stop orders are triggered based on a change in the last sale price. Finally, FIF members confirm that the concept of the "triggering" of a stop order is clearly understood among industry participants.

[4] Id. at 6.
[5] Id. at 2 and 8-12.

Order size categories

In our prior comment letter, FIF members recommended that orders be broken-out into the following categories within each notional value range because orders in each of these categories have distinct execution characteristics (including within any range of notional values):

- Round lot without fractional component
- Round lot with fractional component
- Odd-lot without fractional component
- Odd-lot with fractional component
- Fractional (less than one share).[6]

Accordingly, FIF members proposed that each of these five categories be reported for each notional value range. If these five categories are separately reported for each notional value range, FIF members do not believe that reporting based on the number of shares would provide any material value for market participants.

Commission representatives asked how FIF members would propose for mixed lot orders to be categorized. FIF members propose that a mixed lot order be categorized in the same manner as a round lot order. In other words, the first category above would include round lot and mixed lot orders without a fractional component, and the second category above would include round lot and mixed lot orders with a fractional component.

Reporting time to execution for marketable orders that exceed the size of the protected quotation

In our prior comment letter, FIF identified various concerns with reporting time to execution when the size of the customer's order exceeds the size of the opposite-side best bid or offer. FIF noted that firms that receive marketable orders that are larger relative to the opposite-side displayed NBBO quantity would show a longer time to execution as compared with firms that receive marketable orders that are smaller relative to the opposite-side displayed NBBO quantity. This means that reported performance would be impacted by factors that do not reflect a true comparison of the execution performance across firms.[7]

FIF members proposed two potential solutions to address this concern: FIF members proposed as a first solution that the time to execution period should only consider the portion of an order that is marketable at the time of order receipt. FIF members proposed as a second solution that a firm should only count towards the time to execution the period during which an order is marketable.[8] After further discussion of this issue with Commission representatives and subsequent discussion among FIF members, FIF members recommend that the time to execution statistic for a marketable order should only consider time to execution for shares executed by a reporting firm during the time period prior to

[6] Id. at 16.
[7] Id. at 17-18.
[8] Id. at 18.

the order first becoming unmarketable. The following scenario illustrates why FIF members are proposing this approach:

- A broker-dealer receives a limit order from a customer to purchase 2,000 shares
- The limit order has a limit price of $40.05
- At the time of order receipt, the NBBO is $40.00-$40.05, and there are 2,000 shares displayed at the best offer price
- Another broker-dealer lifts the 2,000 shares
- After the execution, the broker-dealer posts the 2,000 unexecuted shares at $40.05, and the NBBO changes to $40.05-$40.06
- The market starts to trade higher with the NBB above $40.05 for several hours
- After several hours, $40.05 becomes the NBB, and another market participant executes against the 2,000 shares.

This scenario illustrates how a broker-dealer's time to execution could be distorted when a marketable order becomes unmarketable. To address this scenario, FIF members recommend that the time to execution statistic for a marketable order should only consider time to execution for shares executed by a reporting firm during the time period prior to the order first becoming unmarketable.

Statistic that size improvement should be measured against

In our prior comment letter, FIF wrote in support of the Commission's proposal for size improvement statistics. FIF wrote as follows with respect to this proposal:

> FIF members believe that size improvement should be measured against the full displayed size (at the opposite side of the NBBO as of the time of order receipt (for marketable group orders) or time the order becomes executable (for non-marketable group orders) in the same manner that other statistics in the report, such as effective spreads, are measured. FIF members do not agree with the Commission's proposal to measure size improvement based on the number of shares available at the time of execution when all other metrics in the Rule 605 report are based on the time of order receipt or the time an order becomes executable.[9]

The following scenarios illustrate why FIF members support measuring size improvement against the full displayed size at the time of order receipt rather than at the time of execution.

Scenario 1

- A broker-dealer receives a limit order from a customer to purchase 1,000 shares
- The limit order has a limit price of $40.05
- At the time of order receipt, the NBBO is $40.00-$40.05, and there are 400 shares displayed at the best offer price

[9] Id. at 20.

- The broker-dealer executes against the 400 shares
- After the execution, 600 additional shares are displayed at the offer at $40.05
- The broker-dealer executes against the 600 shares.

In this scenario, under the reporting proposed in the proposed rule, the broker-dealer would report as follows:

- Number of shares of covered orders: 1,000
- Full displayed size of protected bid or offer (as applicable) at time of execution: 1,000.[10]

In this scenario, under the reporting proposed by FIF members, the broker-dealer would report as follows:

- Number of shares of covered orders: 1,000
- Full displayed size of protected bid or offer (as applicable) at time of order receipt: 400.

The purpose for reporting size improvement relative to 400 shares in this scenario is to allow market participants to differentiate between the following two scenarios:

- Broker-dealer receives order for 1,000 shares and there are 1,000 shares displayed at the opposite-side best bid or offer
- Broker-dealer receives order for 1,000 shares and there are 400 shares displayed at the opposite-side best bid or offer.

In the scenario where there are 400 shares displayed, where the customer order oversizes the NBBO, the customer order, as a result of this oversizing, could experience a delayed execution, a reduced number of shares executed, or reduced price improvement. The approach proposed by FIF members would reflect this oversizing and thereby provide for a more accurate comparison across brokers that receive customer orders that, on average, oversize the NBBO by different percentages. In contrast, the approach proposed in the proposed rule does not reflect this oversizing in common scenarios like the one above.

Scenario 2 (first four steps are the same as Scenario 1)

- A broker-dealer receives a limit order from a customer to purchase 1,000 shares
- The limit order has a limit price of $40.06
- At the time of order receipt, the NBBO is $40.00-$40.05, and there are 400 shares displayed at the best offer price
- The broker-dealer executes against the 400 shares

[10] Though not expressly stated in the proposed rule, FIF members assume that in a scenario involving multiple executions the Commission would require adding the displayed size at the time of each execution. If the Commission is instead proposing that the displayed size for only one execution be counted, that approach also would not accurately reflect size improvement.

- After the execution, the NBBO changes to $40.00-$40.06, and there are 600 shares displayed at the offer at $40.06
- The broker-dealer executes against the 600 shares.

In this scenario, under the reporting proposed in the proposed rule, the broker-dealer would report as follows:

- Number of shares of covered orders: 1,000
- Full displayed size of protected bid or offer (as applicable) at time of execution: 1,000.[11]

In this scenario, under the reporting proposed by FIF members, the broker-dealer would report as follows:

- Number of shares of covered orders: 1,000
- Full displayed size of protected bid or offer (as applicable) at time of order receipt: 400.

The broker-dealer in this scenario would report price disimprovement even though the broker-dealer executed all shares at the opposite-side best offer. The approach proposed in the proposed rule would not reflect this fact and would unfairly compare a broker-dealer that executes 1,000 shares when 1,000 shares are displayed at the opposite-side NBBO to a broker-dealer that executes 1,000 shares when 400 shares are displayed at the opposite-side NBBO. The approach proposed by FIF members, like the approach proposed in the proposed rule, would require the broker-dealer to report price disimprovement but would also include in the Rule 605 report the necessary data to reflect that the broke-dealer received an order that oversized the opposite-side NBBO. It should be noted more generally that under the approach proposed in the proposed rule a broker-dealer that executes against the displayed opposite-side quote could never show size improvement.

Scenario 3

- A broker-dealer receives a limit order from a customer to purchase 1,000 shares
- The limit order has a limit price of $40.05
- At the time of order receipt, the NBBO is $40.00-$40.05, and there are 1,000 shares displayed at the best offer price
- Because of an issue with the broker-dealer's system, the broker-dealer is delayed in executing the customer order
- Another buyer lifts 900 shares at the offer price of $40.05
- There are now 100 shares displayed at the best offer
- The broker-dealer routes the 1,000 share order to a wholesaler, and the wholesaler executes the order.

[11] Though not expressly stated in the proposed rule, FIF members assume that in a scenario involving multiple executions the Commission would require adding the displayed size at the time of each execution. If the Commission is instead proposing that the displayed size for only one execution be counted, that approach also would not accurately reflect size improvement.

In this scenario, under the reporting proposed in the proposed rule, the broker-dealer would report as follows:

- Number of shares of covered orders: 1,000
- Full displayed size of protected bid or offer (as applicable) at time of execution: 100.

In this scenario, under the reporting proposed by FIF members, the broker-dealer would report as follows:

- Number of shares of covered orders: 1,000
- Full displayed size of protected bid or offer (as applicable) at time of order receipt: 1,000.

In this scenario, the broker-dealer has not provided any size improvement but, based on the approach proposed in the proposed rule, the broker-dealer would report 1,000% (10 for 1) size improvement. The approach proposed by FIF members in this scenario would report 0% size improvement, which correctly reflects that the broker-dealer did not provide size improvement.

Reporting the average, median and 99th percentile periods

The prior FIF comment letter included the following recommendation:

> FIF members recommend an alternative approach to the reporting of the median and 99th percentile statistics because market participants and other firms analyzing Rule 605 data cannot aggregate these statistics across different symbols and order type categories. As discussed above, considering that a Rule 605 report could have hundreds of thousands of rows, the ability to aggregate data across different symbols and order type categories is essential to meaningfully interpret and make decisions based on this data.
>
> FIF members recommend as an alternative to reporting median and 99th percentile statistics that a firm report its share-weighted average time to execution without adjusting for outliers (as proposed by the Commission), and separately report its share-weighted average time to execution with an adjustment for outliers. This would provide for two share-weighted average numbers for each row in the Rule 605 report that could be aggregated with other rows in the report. There are various approaches that the Commission could take to exclude outliers. For example, the share-weighted average time to execution that is adjusted for outliers could exclude the one percent of orders with the longest time to execution.[12]

The following example illustrates the comments above. In this example, a firm has executions in two stocks: ABC and DEF. Assume the executions are for the same combination of order size, order type, etc.

[12] Prior FIF Comment Letter, at 21-22.

The numbers represent units of time (for example, they could represent milliseconds). Each number represents the average execution time for a specific order. Assume all orders have the same share quantity.

- ABC: 2, 4, 4, 5, 6, 6, 7, 8, 9, 10
- DEF: 1, 2, 3, 7, 8.

The average execution time for ABC is 6.1; the average execution time for DEF is 4.2. A person analyzing the Rule 605 report could calculate the actual weighted average execution time for ABC and DEF aggregated: 5.467 (double-weighting ABC).

The median execution time for ABC is 6; the median execution time for DEF is 3. The median execution time for the full set of executions is 6. A person analyzing the Rule 605 report could not calculate the actual median execution time for ABC and DEF aggregated. A person analyzing the report could calculate a hypothetical median execution time of 5 for this aggregation (by double-weighting ABC), but this would be different from the actual median execution time for this aggregation (which is 6).

The 99th percentile execution time for ABC is 10; the 99th percentile execution time for DEF is 8. The 99th percentile execution time for the full set of executions is 10. A person analyzing the Rule 605 report could not calculate this actual 99th percentile execution time for ABC and DEF aggregated. A person analyzing the report could calculate a hypothetical 99th percentile execution time of 9.333 for ABC and DEF aggregated (by double-weighting ABC), but this would not be the actual 99th percentile execution time for this aggregation.

FIF members propose reporting for each row (i) the mean time to execution, and (ii) the mean time to execution with the top 1% of executions removed. With this data a person analyzing the report could calculate the actual aggregated mean of 5.467 (82 / 15) and the actual aggregated mean with the top 1% of executions removed from each row: 4.923 (64 / 13). Given the small number of executions in this example, the effect of removing the top 1% of executions from each row is overstated relative to what would be the normal effect.

More generally, FIF members believe it should be a fundamental principle for the Rule 605 report that a person using the report should be able to aggregate data across rows in the report without having access to the underlying data for each individual row. A person analyzing the (a)(1) report could not compute a median aggregated across multiple rows without having access to the underlying data for each row. Accordingly, the median statistic is not scalable and should be excluded from the report.

The same analysis applies for the Commission's proposal to require reporting of the 99th percentile time to execution for each row, as this statistic also could not be aggregated across rows without access to the underlying data. FIF members agree with the Commission's reasoning for proposing this 99th percentile statistic and believe that the objective that the Commission seeks to attain (to allow users to "… better understand whether and to what extent the time to execution within a particular category is

affected by outlier values"[13]) can be more directly achieved by requiring firms to report the mean time to execution for each row with the top 1% of executions removed. The approach proposed by FIF members also would allow for aggregation across rows.

More generally, FIF members agree with the Commission's objective to allow users to better understand the impact of outlier values on time to execution. Order management systems often have functionality to automatically reject, or alternatively to pause, orders that exceed specified risk limits. If an order is paused, a firm employee could be required to review the order to determine whether to accept or reject the order. If the employee accepts the order, there could be a significant delay in execution time as compared to orders that are processed without such delays. This could distort the time to execution reported by a firm. This also would be unfair to firms that are more rigorous in applying risk controls and could disincentivize firms from applying risk controls. This scenario is one illustration of why it is important to provide a reported statistic for time to execution that excludes outliers.

Proposed summary report

FIF members would like to clarify that the FIF comment letter does not represent either support for, or opposition to, the Commission's proposed summary report. The focus of the FIF comment letter is on the implementation details of the proposed summary report. In other words, assuming that the Commission intends to require a summary report, what is the most appropriate set of data to be presented in the report and how can the Commission ensure the most equitable presentation of this data across broker-dealers with different order flow characteristics (for example: across broker-dealers that receive orders that, on average, oversize the opposite-side displayed bid or offer by different percentages; or across broker-dealers that receive orders that, on average, have different price impacts). FIF is primarily focused on the implementation details and impacts of adopted and proposed rules.

Adding share weighted-average midpoint to the (a)(1) report to enable aggregation without access to the underlying data

In the prior FIF comment letter, FIF members recommended the following:

> FIF members recommend that the Commission add a column to the (a)(1) report that would report the share-weighted average midpoint for each row. With this statistic, a person could derive the denominator for the share-weighted average percentage price improvement calculation (and the average percentage effective spread and average percentage quoted spread discussed below).[14]

As a follow-up to our May 17 discussion, FIF is providing additional detail on this recommendation. FIF members believe it should be a fundamental principle for the Rule 605 report that any data in the summary report be derivable from the data in the (a)(1) report without access to the underlying data for

[13] Disclosure of Order Execution Information, at 3813.
[14] Id. at 29.

each row in the (a)(1) report. One important advantage of this approach is that it would allow market participants to calculate the statistics in the summary report for any subset of rows in the (a)(1) report.

In the prior FIF comment letter, FIF members presented the following equation for calculating share weighted average percentage price improvement ("SWAPPI") for the summary report[15]:

$$SWAPPI = \frac{\sum_{i=1}^{n}[PI\ per\ share * number\ of\ shares\ executed]_i}{\sum_{i=1}^{n}[midpoint * number\ of\ shares\ executed]_i}$$

A firm could calculate the SWAPPI for the summary report in one step. With this approach, "i" would represent each individual execution, "PI" would represent the price improvement for each individual execution, and "midpoint" would represent the midpoint of the NBBO at the time of order receipt for each individual execution.

Alternatively, a firm could perform this same calculation in two steps (and achieve the same result), with aggregation first performed at the row level and then aggregation performed across rows. With this second approach, a reporting firm would generate the following two statistics for each row:

- Average price improvement per share (total price improvement divided by number of shares executed)
- Average midpoint per share.

The first statistic can be derived from the data already proposed by the Commission. As quoted above, FIF members recommended in the prior FIF comment letter that the second statistic be added to the (a)(1) report. This share-weight average midpoint statistic ("SWAM") can be calculated as follows for each row in the (a)(1) report ("i" represents each execution; "midpoint' represents the midpoint of the NBBO at the time of order receipt):

$$SWAM = \frac{\sum_{i=1}^{n}[midpoint *\ number\ of\ shares\ executed]_i}{number\ of\ shares\ executed}$$

A firm could then calculate the SWAPPI based on the SWAPPI equation above, except that "i" would represent each row in the report, "PI" would represent the share-weighted average price improvement for each row, and "midpoint" would represent the weighted average midpoint for each row.

As discussed in the prior FIF comment letter, this midpoint statistic also would be used for calculating the share-weighted average percentage effective spread (which is proposed in the proposing release), the share-weighted average percentage quoted spread (which FIF members have proposed to add to the summary report),[16] and the share weighted-average realized spread (which FIF members also have proposed to add to the summary report).[17]

[15] Ibid.
[16] Ibid.
[17] Id. at 32.

As an alternative to weighted-average midpoint, the Commission could require reporting of the weighted-average notional value for executed shares, with notional value representing for each execution the number of shares executed multiplied by the mid-point at the time of order receipt.

Average order size

FIF members request that the discussion of average order size on page 30 of the prior FIF comment letter be replaced with the discussion in this section. Specifically, FIF members recommend that average order size in shares for the summary report be calculated (for the covered orders that must be reported in the summary report) by dividing the aggregate number of shares of covered orders by the number of orders.

FIF members also recommend adding to the (a)(1) report the aggregate notional value of covered orders for each row. The notional value of a covered order would be obtained by multiplying the number of shares by the midpoint at the time of order receipt. FIF members also recommend adding average order size in notional value to the summary report. This statistic can be calculated by a reporting firm (for the covered orders that must be reported in the summary report) by dividing the aggregate notional value of covered orders by the number of orders.

Conforming Rule 605 to future regulatory changes

In December 2020 the Commission updated Regulation NMS to include certain depth of book, odd-lot and other market data as consolidated market data that the exchanges and FINRA are required to make available to competing consolidators.[18] These changes have not yet been implemented. In December 2022 the Commission proposed a requirement for the national market system plans for the dissemination of consolidated market data to include certain odd-lot quote data.[19] It is important for the Commission to conform Rule 605 reporting requirements to these and similar future regulatory changes if and when the Commission implements these future regulatory changes.

Recommendation for re-proposal

FIF members strongly recommend that the Commission reissue the rule proposal on Disclosure of Order Execution Information after incorporating comments from FIF and other market participants. This would allow for one final review by market participants to ensure that the final rule achieves the Commission's intended purpose. While FIF members have attempted to provide detailed input on the rule proposal, it is likely that FIF members and other market participants could identify additional enhancements to the proposed Rule 605 reporting upon review of a revised written rule proposal. FIF members note that 4 ½ years after the Commission's adoption of amendments to Rule 606(a),[20] there is still lack of clarity as to

[18] Securities Exchange Act Release No. 90610 (Dec. 9, 2020), 86 FR 18596 (Apr. 9, 2021) (Market Data Infrastructure); 17 CFR §§242.600(b)(19), 242.600(b)(21) and 242.603(b)(3).
[19] Securities Exchange Act Release No. 96494 (Dec. 4, 2022), 87 FR 80266 (Dec. 29, 2022) (Regulation NMS: Minimum Pricing Increments, Access Fees, and Transparency of Better Priced Orders); Proposed Rule 603(b)(3).
[20] Securities Exchange Act Release No. 84528 (Nov. 28, 2018), 83 FR 58338 (Nov. 19, 2018) (Disclosure of Order Handling Information).

how firms are required to report under Rule 606(a). Re-issuing the rule proposal would help to mitigate this risk for the Commission's rule proposal on Disclosure of Order Execution Information and reduce the number of FAQs that would need to be published subsequent to any rule adoption.

* * * * *

FIF appreciates the opportunity to comment on the Commission's rule proposal on Disclosure of Order Execution Information. If you would like clarification on any of the items discussed in this letter or would like to discuss further, please contact me at howard.meyerson@fif.com.

Very truly yours,

/s/ Howard Meyerson

Howard Meyerson
Managing Director, Financial Information Forum