



September 20, 2021

VIA ELECTRONIC DELIVERY

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

RE: Petition for Rulemaking to Amend SEC Rule 605

Dear Ms. Countryman:

Virtu Financial, Inc. (“Virtu”)¹ respectfully submits this petition for rulemaking pursuant to Rule 192(a) of the Securities and Exchange Commission’s (“Commission” or “SEC”) Rules of Practice² to request that the Commission amend SEC Rule 605 of Regulation NMS (“Rule 605”)³ to provide investors with greater transparency and enhanced, critical information about execution quality.

Background

Rule 605 was originally adopted in November 2000 as Rule 11Ac1-5 under the Securities Exchange Act of 1934 to “increase the visibility of execution quality of the U.S. securities markets for public investors.”⁴ In 2005, Rule 11Ac1-5 was redesignated as Rule 605 with the adoption of Regulation NMS.⁵ Rule 605 requires “market centers” that trade National Market System securities to make available standardized, monthly reports containing statistical information about “covered order” executions.

The SEC’s adoption of Rule 11-Ac1-5 arose out of an extended inquiry conducted by the Commission to study market fragmentation – the trading of orders in multiple locations without interaction among those orders. In the adopting release, the SEC explained that the primary structural component linking market centers (including exchanges, market makers, and electronic communications networks) is the consolidated public quote. The Commission observed, however,

¹ Virtu is a leading financial firm that leverages cutting edge technology to deliver liquidity to the global markets and innovative, transparent trading solutions to its clients. Virtu operates as a market maker across numerous exchanges in the U.S. and is a member of all U.S. registered stock exchanges. Virtu’s market structure expertise, broad diversification, and execution technology enables it to provide competitive bids and offers in over 25,000 securities, at over 235 venues, in 36 countries worldwide. As such, Virtu broadly supports innovation and enhancements to transparency and fairness which enhance liquidity to the benefit of all marketplace participants.

² 17 CFR § 201.192(a).

³ 17 CFR § 242.605 (Disclosure of order execution information).

⁴ Securities Exchange Act Release No. 43590 (November 17, 2000), 65 FR 75414 (December 1, 2000).

⁵ Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496 (June 29, 2005).

that this centralized source of information “may convey an inaccurate impression of the significant extent to which the quality of order execution can vary across different market centers.”⁶ Importantly, the Commission noted at that time that, “[a]t present, few market centers provide detailed public disclosure concerning their execution quality. Rule 11Ac1-5 will assure that all market centers publicly disclose, on a monthly basis, basic standardized information concerning their handling and execution of orders.”⁷

The Commission viewed the rule as a way to drive competition in a fragmented marketplace by empowering investors with more information about execution quality:

In a fragmented market structure with many different market centers trading the same security, the order routing decision is critically important, both to the individual investor whose order is routed and to the efficiency of the market structure as a whole. The decision must be well-informed and fully subject to competitive forces. Currently, given the lack of comparable public information on execution quality, retail investors may conclude that the most rational strategy is simply to opt for a broker-dealer that offers the lowest commission and a fast execution. As a result, there may be limited opportunities for market participants to compete on their ability to obtain the best prices for these investor orders. By increasing the visibility of order execution and routing practices, the rules adopted today are intended to empower market forces with the means to achieve a more competitive and efficient national market system for public investors.⁸

However, in the two decades since the rule was first adopted, it has become clear that the disclosures required by Rule 605 no longer encompass all of the factors that may be important to market participants in evaluating the execution quality offered by a particular market center. **The current 605 methodology, which originally was intended to normalize execution quality data to create useful statistical comparisons between market centers, no longer does that.** The NBBO-based benchmark used by the current Rule 605 is an incomplete measuring stick. Bucketing orders solely by share size yields skewed comparisons. And critical information about “size improvement” and execution quality statistics for odd lots, large lots, and many important order types are not required to be reported under the current rule set. Improving these metrics is essential for a market participant to quantitatively and qualitatively assess whether any particular broker-dealer obtained the most favorable terms under the circumstances for customer orders.

As described below in greater detail, Virtu believes that the shortcomings of Rule 605 can and should be addressed through modest rule amendments that we believe would be embraced by the industry and would greatly benefit all investors by improving the data available for assessing execution quality and making investment decisions. Specifically, we recommend the following enhancements to Rule 605:

⁶ *Supra* n. 4.

⁷ *Id.*

⁸ *Id.*

“Size” Improvement

Under the current market structure, wholesalers fiercely compete against each other and other liquidity sources, including exchanges and ATSS, to deliver superior price improvement to their customers. Wholesalers fill marketable orders at prices typically better than the national best bid or best offer (“NBBO”), regardless of the quantity of shares displayed at the NBBO price. When an order is filled at a price that is better than the NBBO price, we refer to this as “price improvement” (“PI”) and a market center’s PI is reflected in its Rule 605 report today.

PI is one of the key metrics used in Rule 605 reports to determine a market center’s execution quality; however, PI – as defined by the current Rule 605 – is incomplete and does not fully reflect market centers’ performance.

The single biggest shortcoming of the current Rule 605 is that it does not reflect any benefits received by retail investors on orders that outsize the NBBO. An order outsizes the NBBO when it is for *more shares* than are displayed at the NBBO – *e.g.*, when a retail order for 4,000 shares is filled by a market center when the NBBO only shows 700 shares, and all 4,000 shares are filled at or better than the NBBO price (which was only for 700 shares). When this happens, we call it “Size Improvement” because the market center (or wholesaler) is providing liquidity in the size necessary to completely fill the retail order. Size Improvement provides massive benefits to retail investors – typically about 2 times greater than PI benefits because it happens very frequently – indeed, approximately 45% of shares (and 54% of the value traded) filled by Virtu in 2020 were from orders that outsized the NBBO.⁹ Unfortunately, Size Improvement is not reflected in current Rule 605 reports.

Taken together, this combination of “price” and “size” improvement provided by wholesalers – which we refer to collectively as real price improvement (or “Real PI”) – more accurately reflects the true benefits received by retail investors. According to Virtu’s estimate, retail investors received nearly \$11 billion of Real PI industry-wide in 2020 alone, approximately \$7 billion of which came from Size Improvement.¹⁰ At Virtu, in 2020 we provided over \$3 billion in Real PI to retail orders, through a combination of (i) “price improvement” by trading at prices better than the NBBO price and (ii) “size improvement” in the form of transactions executed for share quantities greater than shares displayed at the NBBO, but at prices at or better than the NBBO price.

Retail investors received this benefit because their orders were routed to wholesalers (like Virtu) by retail brokers that incentivize wholesalers to compete against each other and against exchanges and ATSS to provide superior execution quality. In total, Real PI benefits are about 3 times greater than the price improvement benefit alone that is reported under the current Rule 605

⁹ Virtu Second Quarter 2021 Earnings Presentation at slide 35, available at https://s21.q4cdn.com/422114427/files/doc_financials/2021/q2/VIRT_2021.Q2-Supplemental-Earnings-Presentation-vF2.pdf.

¹⁰ Estimated Real PI of almost \$11 billion derived by applying 3x factor to price improvement statistics reported industry-wide in Rule 605 reports for 2020.

because the current Rule 605 reports ignore the substantial benefits of “size improvement” by implicitly assuming the availability of infinite shares at the NBBO price.

The regulatory framework that has governed our capital markets for nearly 90 years is premised on comprehensive disclosures by market participants that promote competition and enable investors to make informed decisions. Virtu strongly believes that today’s retail investors deserve more complete execution quality reports that provide transparency about the amount of both price improvement as well as size improvement that their orders are receiving.

Specifically, Virtu respectfully petitions the SEC to amend Rule 605:

1. To require market centers to report size improvement metrics in their monthly Rule 605 Reports.

Updated Rule 605 - NBBO Benchmark / Definition of Covered Orders

Virtu believes that Rule 605 reporting would be more complete if market participants could assess execution quality by comparing the fill prices on their orders to a reference benchmark that includes all displayed liquidity on exchanges, including resting odd lots that are visible in market data feeds. In addition, Virtu recommends that either Regulation NMS or the Joint-SRO Reporting Plans should be revised so that statistics reported under Rule 605 include executed orders from 1 share to 99 shares. In addition, the block order exemption for the exclusion of orders greater than 9,999 shares should be revisited.¹¹

When the reporting formats were first developed, it was reasonable to report in share buckets of 100-499 shares, 500-1,999 shares, 2,000-4,999 shares, and greater than 5,000 shares.¹² However, given the advances in technology that have dramatically increased the number of participants in the market, together with the fact that many issuers have moved away from stock splits and allowed their stock prices generally to dramatically increase, there are many more odd lot orders that currently are not reflected in the aggregate Rule 605 statistics. According to a recent NASDAQ analysis, over the past nine years the proportion of odd-lot trades has roughly tripled, and in high priced stocks, odd lots have increased to 70% of all trades.¹³ Similarly, while orders greater than 9,999 shares may comprise a relatively small number of total orders, when viewed through the lens of total shares they comprise a meaningful amount of the total share volume, however these orders are not currently reflected in the aggregate Rule 605 statistics. The exclusion of odd lot orders and large block orders from execution quality statistics deprives investors of critical data about their orders executed on competing market centers.

Consider this. For purposes of reporting overall effective/quoted statistics in the 5,000-9,999 share bucket at a market center, all orders for 5,000 to 9,999 shares, including a 5,000 share

¹¹ Orders with special handling instructions should continue to be excluded from the definition of covered orders contained in SEC Rule 600, such as those with “not held” instructions.

¹² With the block order exemption, the bucket for orders greater than 5,000 shares effectively made this a bucket for 5,000 shares to 9,999 shares.

¹³ Phil Mackintosh, NASDAQ Chief Economist, *Odd Facts About Odd Lots* (Apr. 2021), available at <https://www.nasdaq.com/articles/odd-facts-about-odd-lots-2021-04-22>.

order of Amazon with a notional value of \$17.3 million and a 5,000 share order of Jet Blue with a notional value of just \$76,000, are aggregated together. However, because as a general matter, the Rule 605 buckets are notional value weighted, it would take many multiples of the 5,000 share JetBlue orders to equal the notional value of a single Amazon 5,000 share order. It is clear that bucketing orders solely based on share sizes is no longer an effective tool for measuring execution quality. To address this deficiency, the SEC should update the definition of covered orders to include both odd lots and orders of 10,000 or more shares, and should add notional “value traded” buckets to the metrics that are required to be reported, with a reasonable notional “cap” to prevent large size orders from skewing the analysis.

Notably, a number of other market participants and commentators have identified similar deficiencies in the current Rule 605 construct and called for similar reforms. Indeed, just last week, NASDAQ’s Chief Economist published an article pointing out how the dramatic increase of odd lot orders in recent years has led to disproportionate comparisons in the existing share buckets, and suggesting a “reset” of Rule 605 to include notional value grouping of orders.¹⁴ Similarly, an academic study by a professor at the UC Berkley School of Law published earlier this year concluded that the current regulatory treatment of odd lot trades and quotes may impair the execution quality of marketable odd lot orders, and advocated “for a substantial update to Rule 605 to, among other things, require trade execution statistics for small-sized orders.”¹⁵ The Financial Information Forum made similar arguments in a comment letter submitted to the SEC, asserting that “the scope of covered orders and the granularity of reporting pursuant to Rule 605 should be expanded to better reflect current market structure.”¹⁶

Finally, the existing definition of covered order excludes a number of order types that is critical to a complete assessment of execution quality – including short sales, stop orders, and pre-market orders. The exclusion of these order types limits the universe of orders reported by Rule 605 and therefore the execution quality provided to these excluded orders (via price and size improvement) is not reflected in Rule 605 reports. However, many retail brokers include these orders when measuring the execution quality provided market centers, including Virtu and other wholesalers. Virtu believes that fills of these orders should be included in Rule 605 reports filed with the Commission, and that they should be reported independently of other order types.

Specifically, Virtu respectfully petitions the SEC to amend Rule 605 to:

- 2. Use a benchmark price that reflects the equivalent size of shares – including depth of book quotes and odd lot quotes;**
- 3. Update definition of Covered Orders to include**
 - a. Odd lot orders;**
 - b. Orders for 10,000 shares and above;**

¹⁴ Phil Mackintosh, NASDAQ Chief Economist, *Would 605 Work Better in Dollars?* (Sept. 16, 2021), available at <https://www.nasdaq.com/articles/would-605-work-better-in-dollars-2021-09-16>.

¹⁵ Robert P. Bartlett, III, Professor, UC Berkeley School of Law, *Modernizing Odd Lot Trading* (May 19, 2021), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3849763.

¹⁶ Financial Information Forum, *Letter to Brett Redfearn, Director of Division of Trading and Markets* (Jan. 30, 2019), available at <https://www.sec.gov/comments/s7-02-10/s70210-5002077-182848.pdf>.

- c. Other order types (short, stop, pre-mkt), reported independently of each other; and
4. Add notional “value traded” order size buckets, with a reasonable notional “cap” to prevent large size orders from skewing the analysis.

Conclusion:

In conclusion, we believe that these 4 enhancements to Rule 605 will continue to drive competition and empower investors with more information and transparency about execution quality.

SEC Statutory Authority

The SEC has statutory authority to make the amendments described above. Pursuant to Section 11A(a)(2), the Commission was directed by Congress to establish a national market system for securities to meet the Congressional objectives set forth in Section 11A(a)(1)(C), including the finding that it is in the public interest and appropriate for the protection of investors and the maintenance of fair and orderly market to assure (1) economically efficient execution of securities transactions, (2) fair competition among brokers and dealers, among exchange markets, between exchange markets and markets other than exchange markets, and (3) the practicability of brokers executing investors’ orders in the best market. Virtu believes that the proposed amendments to Rule 605 specifically achieve these Congressional objectives set forth in Section 11A.

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Virtu appreciates the opportunity to submit this petition for rulemaking and respectfully requests that the Commission act on it promptly. If the Commission or Staff have any questions, or if we can be of assistance in any way, please contact Thomas Merritt, Deputy General Counsel.

Respectfully submitted,



Douglas A. Cifu
Chief Executive Officer

cc: The Honorable Gary Gensler, Chair
The Honorable Hester M. Peirce, Commissioner
The Honorable Elad L. Roisman, Commissioner
The Honorable Allison H. Lee, Commissioner
The Honorable Caroline A. Crenshaw, Commissioner

David Saltiel, Acting Director, Division of Trading and Markets